Maxxam
A Bureau Veritas Group Company

Your Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Your C.O.C. #: 657877-01-01

Attention: Report - 160900764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2018/04/27
Report #: R5093989
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B887445
Received: 2018/04/18, 08:30

Sample Matrix: Water
Samples Received: 10

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	9	N/A	2018/04/24	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	10	2018/04/19	2018/04/23	CAM SOP-00301	EPA 8270 m
Acidity (CaCO3) in water (1)	4	N/A	2018/04/25		SM 22 2310
Alkalinity	4	N/A	2018/04/20	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	4	N/A	2018/04/23	CAM SOP-00102	APHA 4500-CO2 D
1,3-Dichloropropene Sum	3	N/A	2018/04/20		EPA 8260C m
1,3-Dichloropropene Sum	1	N/A	2018/04/23		EPA 8260C m
Chloride by Automated Colourimetry	3	N/A	2018/04/22	CAM SOP-00463	EPA 325.2 m
Chloride by Automated Colourimetry	1	N/A	2018/04/23	CAM SOP-00463	EPA 325.2 m
Conductivity	3	N/A	2018/04/20	CAM SOP-00414	SM 23 2510 m
Conductivity	1	N/A	2018/04/26	CAM SOP-00414	SM 23 2510 m
Chromium (VI) in Water	4	N/A	2018/04/23	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	4	N/A	2018/04/20	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (2)	4	N/A	2018/04/20	CAM SOP-00446	SM 23 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (3)	4	2018/04/20	2018/04/21	CAM SOP-00316	CCME PHC-CWS m
Fluoride	4	2018/04/19	2018/04/20	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	4	N/A	2018/04/20	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	3	2018/04/20	2018/04/20	CAM SOP-00453	EPA 7470A m
Mercury	1	2018/04/24	2018/04/24	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	3	N/A	2018/04/19	CAM SOP-00447	EPA 6020B m
Dissolved Metals by ICPMS	1	N/A	2018/04/26	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	4	N/A	2018/04/23		
Anion and Cation Sum	4	N/A	2018/04/23		
Total Ammonia-N	4	N/A	2018/04/24	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (4)	2	N/A	2018/04/20	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Nitrate (NO3) and Nitrite (NO2) in Water (4)	2	N/A	2018/04/21	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	2	2018/04/19	2018/04/20	CAM SOP-00309	EPA 8082A m
Polychlorinated Biphenyl in Water	2	2018/04/20	2018/04/20	CAM SOP-00309	EPA 8082A m
pH	4	N/A	2018/04/20	CAM SOP-00413	SM 4500H+ B m

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

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Sample Matrix: Water
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Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Orthophosphate	3	N/A	2018/04/20	CAM SOP-00461	EPA 365.1 m
Orthophosphate	1	N/A	2018/04/22	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	4	N/A	2018/04/23		
Sat. pH and Langelier Index (@ 4C)	4	N/A	2018/04/23		
Sulphate by Automated Colourimetry	3	N/A	2018/04/20	CAM SOP-00464	EPA 375.4 m
Sulphate by Automated Colourimetry	1	N/A	2018/04/23	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	4	N/A	2018/04/23		
Total Dissolved Solids	4	2018/04/23	2018/04/23	CAM SOP-00428	SM 23 2540C m
Total Organic Carbon (TOC) (5)	4	N/A	2018/04/23	CAM SOP-00446	SM 23 5310B m
Total Suspended Solids	3	2018/04/23	2018/04/23	CAM SOP-00428	SM 23 2540D m
Total Suspended Solids	1	2018/04/24	2018/04/24	CAM SOP-00428	SM 23 2540D m
Turbidity	4	N/A	2018/04/19	CAM SOP-00417	SM 23 2130 B m
Volatile Organic Compounds and F1 PHCs	3	N/A	2018/04/20	CAM SOP-00230	EPA 8260C m
Volatile Organic Compounds and F1 PHCs	1	N/A	2018/04/21	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.

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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.

Encryption Key

Ronklin Gracian
Project Manager
27 Apr 2018 13:36:30

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.

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Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		GME303			GME303		
Sampling Date		2018/04/17 12:50			2018/04/17 12:50		
COC Number		657877-01-01			657877-01-01		
	UNITS	**WG-160900764-20180417-RD01**	**RDL**	**QC Batch**	**WG-160900764-20180417-RD01 Lab-Dup**	**RDL**	**QC Batch**
Calculated Parameters							
Anion Sum	me/L	2.34	N/A	5489570			
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	89	1.0	5489568			
Calculated TDS	mg/L	130	1.0	5489573			
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.4	1.0	5489568			
Cation Sum	me/L	2.19	N/A	5489570			
Hardness (CaCO3)	mg/L	17	1.0	5491020			
Ion Balance (% Difference)	%	NC	N/A	5489331			
Langelier Index (@ 20C)	N/A	-0.550		5489571			
Langelier Index (@ 4C)	N/A	-0.800		5489572			
Saturation pH (@ 20C)	N/A	8.77		5489571			
Saturation pH (@ 4C)	N/A	9.02		5489572			
Inorganics							
Total Ammonia-N	mg/L	<0.050	0.050	5496749	<0.050	0.050	5496749
Conductivity	umho/cm	230	1.0	5492799	220	1.0	5492799
Dissolved Organic Carbon	mg/L	0.86	0.50	5492700			
Orthophosphate (P)	mg/L	0.026	0.010	5492820	0.022	0.010	5492820
pH	pH	8.22		5492795	8.30		5492795
Dissolved Sulphate (SO4)	mg/L	19	1.0	5492819	19	1.0	5492819
Alkalinity (Total as CaCO3)	mg/L	90	1.0	5492793	91	1.0	5492793
Dissolved Chloride (Cl)	mg/L	2.1	1.0	5492814	2.1	1.0	5492814
Nitrite (N)	mg/L	<0.010	0.010	5491942			
Nitrate (N)	mg/L	<0.10	0.10	5491942			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	5491942			
Metals							
Dissolved Aluminum (Al)	mg/L	0.073	0.0050	5492431			
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	5492431			
Dissolved Arsenic (As)	mg/L	0.0029	0.0010	5492431			
Dissolved Barium (Ba)	mg/L	0.0071	0.0020	5492431			
Dissolved Beryllium (Be)	mg/L	<0.00050	0.00050	5492431			

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

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RCAP - COMPREHENSIVE (WATER)

Maxxam ID		GME303			GME303		
Sampling Date		2018/04/17 12:50			2018/04/17 12:50		
COC Number		657877-01-01			657877-01-01		
	UNITS	**WG-160900764-20180417-RD01**	**RDL**	**QC Batch**	**WG-160900764-20180417-RD01 Lab-Dup**	**RDL**	**QC Batch**
Dissolved Boron (B)	mg/L	0.23	0.010	5492431			
Dissolved Cadmium (Cd)	mg/L	<0.00010	0.00010	5492431			
Dissolved Calcium (Ca)	mg/L	4.3	0.20	5492431			
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	5492431			
Dissolved Cobalt (Co)	mg/L	<0.00050	0.00050	5492431			
Dissolved Copper (Cu)	mg/L	0.0013	0.0010	5492431			
Dissolved Iron (Fe)	mg/L	<0.10	0.10	5492431			
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	5492431			
Dissolved Magnesium (Mg)	mg/L	1.4	0.050	5492431			
Dissolved Manganese (Mn)	mg/L	<0.0020	0.0020	5492431			
Dissolved Molybdenum (Mo)	mg/L	0.0073	0.00050	5492431			
Dissolved Nickel (Ni)	mg/L	<0.0010	0.0010	5492431			
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	5492431			
Dissolved Potassium (K)	mg/L	0.61	0.20	5492431			
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	5492431			
Dissolved Silicon (Si)	mg/L	3.1	0.050	5492431			
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	5492431			
Dissolved Sodium (Na)	mg/L	42	0.10	5492431			
Dissolved Strontium (Sr)	mg/L	0.091	0.0010	5492431			
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	5492431			
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	5492431			
Dissolved Uranium (U)	mg/L	0.00060	0.00010	5492431			
Dissolved Vanadium (V)	mg/L	0.0011	0.00050	5492431			
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	5492431			
Dissolved Zirconium (Zr)	mg/L	<0.0010	0.0010	5492431			

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Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		GME305		GME307		
Sampling Date		2018/04/17 11:33		2018/04/17 14:34		
COC Number		657877-01-01		657877-01-01		
	UNITS	**WG-160900764-20180417-RD02**	**QC Batch**	**WG-160900764-20180417-RD03**	**RDL**	**QC Batch**
Calculated Parameters						
Anion Sum	me/L	8.92	5489570	8.94	N/A	5489570
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	290	5489568	410	1.0	5489568
Calculated TDS	mg/L	480	5489573	330	1.0	5489573
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.3	5489568	13	1.0	5489568
Cation Sum	me/L	8.38	5489570	2.24	N/A	5489570
Hardness (CaCO3)	mg/L	360	5491020	20	1.0	5491020
Ion Balance (% Difference)	%	3.10	5489331	59.9	N/A	5489331
Langelier Index (@ 20C)	N/A	0.801	5489571	0.398		5489571
Langelier Index (@ 4C)	N/A	0.553	5489572	0.150		5489572
Saturation pH (@ 20C)	N/A	6.88	5489571	8.15		5489571
Saturation pH (@ 4C)	N/A	7.13	5489572	8.39		5489572
Inorganics						
Total Ammonia-N	mg/L	<0.050	5496398	<0.050	0.050	5496390
Conductivity	umho/cm	840	5492799	240	1.0	5501523
Dissolved Organic Carbon	mg/L	0.97	5492700	1.6	0.50	5492700
Orthophosphate (P)	mg/L	<0.010	5494207	<0.010	0.010	5492820
pH	pH	7.68	5492795	8.54		5492795
Dissolved Sulphate (SO4)	mg/L	46	5494205	14	1.0	5492819
Alkalinity (Total as CaCO3)	mg/L	290	5492793	420	1.0	5492793
Dissolved Chloride (Cl)	mg/L	62	5494187	5.2	1.0	5492814
Nitrite (N)	mg/L	<0.010	5492668	<0.010	0.010	5492666
Nitrate (N)	mg/L	4.83	5492668	<0.10	0.10	5492666
Nitrate + Nitrite (N)	mg/L	4.83	5492668	<0.10	0.10	5492666
Metals						
Dissolved Aluminum (Al)	mg/L	<0.0050	5492431	0.024	0.0050	5502322
Dissolved Antimony (Sb)	mg/L	<0.00050	5492431	<0.00050	0.00050	5502322
Dissolved Arsenic (As)	mg/L	<0.0010	5492431	0.0019	0.0010	5502322
Dissolved Barium (Ba)	mg/L	0.057	5492431	0.0050	0.0020	5502322
Dissolved Beryllium (Be)	mg/L	<0.00050	5492431	<0.00050	0.00050	5502322
Dissolved Boron (B)	mg/L	0.025	5492431	0.20	0.010	5502322

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RCAP - COMPREHENSIVE (WATER)

Maxxam ID		GME305		GME307		
Sampling Date		2018/04/17 11:33		2018/04/17 14:34		
COC Number		657877-01-01		657877-01-01		
	UNITS	**WG-160900764-20180417-RD02**	**QC Batch**	**WG-160900764-20180417-RD03**	**RDL**	**QC Batch**
Dissolved Cadmium (Cd)	mg/L	<0.00010	5492431	<0.00010	0.00010	5502322
Dissolved Calcium (Ca)	mg/L	130	5492431	4.7	0.20	5502322
Dissolved Chromium (Cr)	mg/L	<0.0050	5492431	<0.0050	0.0050	5502322
Dissolved Cobalt (Co)	mg/L	<0.00050	5492431	<0.00050	0.00050	5502322
Dissolved Copper (Cu)	mg/L	<0.0010	5492431	<0.0010	0.0010	5502322
Dissolved Iron (Fe)	mg/L	<0.10	5492431	<0.10	0.10	5502322
Dissolved Lead (Pb)	mg/L	<0.00050	5492431	<0.00050	0.00050	5502322
Dissolved Magnesium (Mg)	mg/L	9.3	5492431	1.9	0.050	5502322
Dissolved Manganese (Mn)	mg/L	<0.0020	5492431	<0.0020	0.0020	5502322
Dissolved Molybdenum (Mo)	mg/L	<0.00050	5492431	0.0041	0.00050	5502322
Dissolved Nickel (Ni)	mg/L	<0.0010	5492431	<0.0010	0.0010	5502322
Dissolved Phosphorus (P)	mg/L	<0.10	5492431	<0.10	0.10	5502322
Dissolved Potassium (K)	mg/L	1.0	5492431	0.44	0.20	5502322
Dissolved Selenium (Se)	mg/L	<0.0020	5492431	<0.0020	0.0020	5502322
Dissolved Silicon (Si)	mg/L	4.2	5492431	3.3	0.050	5502322
Dissolved Silver (Ag)	mg/L	<0.00010	5492431	<0.00010	0.00010	5502322
Dissolved Sodium (Na)	mg/L	26	5492431	42	0.10	5502322
Dissolved Strontium (Sr)	mg/L	0.26	5492431	0.10	0.0010	5502322
Dissolved Thallium (Tl)	mg/L	<0.000050	5492431	<0.000050	0.000050	5502322
Dissolved Titanium (Ti)	mg/L	<0.0050	5492431	<0.0050	0.0050	5502322
Dissolved Uranium (U)	mg/L	0.00047	5492431	0.00042	0.00010	5502322
Dissolved Vanadium (V)	mg/L	<0.00050	5492431	<0.00050	0.00050	5502322
Dissolved Zinc (Zn)	mg/L	<0.0050	5492431	<0.0050	0.0050	5502322
Dissolved Zirconium (Zr)	mg/L	<0.0010	5492431	<0.0010	0.0010	5502322

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Sampler Initials: RD

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		GME309		
Sampling Date		2018/04/17 15:03		
COC Number		657877-01-01		
	UNITS	**WG-160900764-20180417-RD04**	**RDL**	**QC Batch**
Calculated Parameters				
Anion Sum	me/L	9.70	N/A	5489570
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	310	1.0	5489568
Calculated TDS	mg/L	520	1.0	5489573
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.6	1.0	5489568
Cation Sum	me/L	8.94	N/A	5489570
Hardness (CaCO3)	mg/L	390	1.0	5491020
Ion Balance (% Difference)	%	4.08	N/A	5489331
Langelier Index (@ 20C)	N/A	0.889		5489571
Langelier Index (@ 4C)	N/A	0.640		5489572
Saturation pH (@ 20C)	N/A	6.83		5489571
Saturation pH (@ 4C)	N/A	7.08		5489572
Inorganics				
Total Ammonia-N	mg/L	<0.050	0.050	5496390
Conductivity	umho/cm	920	1.0	5492799
Dissolved Organic Carbon	mg/L	1.0	0.50	5492700
Orthophosphate (P)	mg/L	<0.010	0.010	5492820
pH	pH	7.72		5492795
Dissolved Sulphate (SO4)	mg/L	47	1.0	5492819
Alkalinity (Total as CaCO3)	mg/L	320	1.0	5492793
Dissolved Chloride (Cl)	mg/L	74	1.0	5492814
Nitrite (N)	mg/L	<0.010	0.010	5492666
Nitrate (N)	mg/L	4.28	0.10	5492666
Nitrate + Nitrite (N)	mg/L	4.28	0.10	5492666
Metals				
Dissolved Aluminum (Al)	mg/L	<0.0050	0.0050	5492431
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	5492431
Dissolved Arsenic (As)	mg/L	<0.0010	0.0010	5492431
Dissolved Barium (Ba)	mg/L	0.040	0.0020	5492431
Dissolved Beryllium (Be)	mg/L	<0.00050	0.00050	5492431
Dissolved Boron (B)	mg/L	<0.010	0.010	5492431

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

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		GME309		
Sampling Date		2018/04/17 15:03		
COC Number		657877-01-01		
	UNITS	**WG-160900764-20180417-RD04**	**RDL**	**QC Batch**
Dissolved Cadmium (Cd)	mg/L	<0.00010	0.00010	5492431
Dissolved Calcium (Ca)	mg/L	140	0.20	5492431
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	5492431
Dissolved Cobalt (Co)	mg/L	<0.00050	0.00050	5492431
Dissolved Copper (Cu)	mg/L	0.0021	0.0010	5492431
Dissolved Iron (Fe)	mg/L	<0.10	0.10	5492431
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	5492431
Dissolved Magnesium (Mg)	mg/L	12	0.050	5492431
Dissolved Manganese (Mn)	mg/L	<0.0020	0.0020	5492431
Dissolved Molybdenum (Mo)	mg/L	<0.00050	0.00050	5492431
Dissolved Nickel (Ni)	mg/L	<0.0010	0.0010	5492431
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	5492431
Dissolved Potassium (K)	mg/L	1.1	0.20	5492431
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	5492431
Dissolved Silicon (Si)	mg/L	4.8	0.050	5492431
Dissolved Silver (Ag)	mg/L	<0.00010	0.00010	5492431
Dissolved Sodium (Na)	mg/L	26	0.10	5492431
Dissolved Strontium (Sr)	mg/L	0.26	0.0010	5492431
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	5492431
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	5492431
Dissolved Uranium (U)	mg/L	0.00065	0.00010	5492431
Dissolved Vanadium (V)	mg/L	<0.00050	0.00050	5492431
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	5492431
Dissolved Zirconium (Zr)	mg/L	<0.0010	0.0010	5492431

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Maxxam ID		GME303			GME303		
Sampling Date		2018/04/17 12:50			2018/04/17 12:50		
COC Number		657877-01-01			657877-01-01		
	UNITS	**WG-160900764-20180417-RD01**	**RDL**	**QC Batch**	**WG-160900764-20180417-RD01 Lab-Dup**	**RDL**	**QC Batch**
Inorganics							
Acidity	mg/L	<5.0	5.0	5500182			
Total Dissolved Solids	mg/L	140	10	5497038			
Fluoride (F-)	mg/L	1.5	0.10	5492800	1.5	0.10	5492800
Total Organic Carbon (TOC)	mg/L	0.96	0.50	5496415			
Total Suspended Solids	mg/L	<10	10	5496423	<10	10	5496423
Turbidity	NTU	2.6	0.1	5490444			
WAD Cyanide (Free)	ug/L	<1	1	5493468			

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

Maxxam ID		GME305			GME305		
Sampling Date		2018/04/17 11:33			2018/04/17 11:33		
COC Number		657877-01-01			657877-01-01		
	UNITS	**WG-160900764-20180417-RD02**	**RDL**	**QC Batch**	**WG-160900764-20180417-RD02 Lab-Dup**	**RDL**	**QC Batch**
Inorganics							
Acidity	mg/L	21	5.0	5500182	23	5.0	5500182
Total Dissolved Solids	mg/L	470	10	5497038			
Fluoride (F-)	mg/L	<0.10	0.10	5492800			
Total Organic Carbon (TOC)	mg/L	1.0	0.50	5496415			
Total Suspended Solids	mg/L	<10	10	5496423			
Turbidity	NTU	5.8	0.1	5492686			
WAD Cyanide (Free)	ug/L	<1	1	5493468			

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

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

RESULTS OF ANALYSES OF WATER

Maxxam ID		GME307		GME309		
Sampling Date		2018/04/17 14:34		2018/04/17 15:03		
COC Number		657877-01-01		657877-01-01		
	UNITS	**WG-160900764-20180417-RD03**	**QC Batch**	**WG-160900764-20180417-RD04**	**RDL**	**QC Batch**
Inorganics						
Acidity	mg/L	<5.0	5500182	21	5.0	5500182
Total Dissolved Solids	mg/L	400	5497038	490	10	5497038
Fluoride (F-)	mg/L	1.3	5492800	<0.10	0.10	5492800
Total Organic Carbon (TOC)	mg/L	2.5	5496415	0.99	0.50	5496415
Total Suspended Solids	mg/L	420	5497827	20	10	5496423
Turbidity	NTU	1400	5492686	13	0.1	5492686
WAD Cyanide (Free)	ug/L	<1	5493468	<1	1	5493468

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		GME303		GME305	GME307		
Sampling Date		2018/04/17 12:50		2018/04/17 11:33	2018/04/17 14:34		
COC Number		657877-01-01		657877-01-01	657877-01-01		
	UNITS	**WG-160900764-20180417-RD01**	**QC Batch**	**WG-160900764-20180417-RD02**	**WG-160900764-20180417-RD03**	**RDL**	**QC Batch**
Metals							
Chromium (VI)	ug/L	<0.50	5492577	1.1	<0.50	0.50	5490607
Mercury (Hg)	ug/L	<0.1	5497806	<0.1	<0.1	0.1	5493459

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		GME309		
Sampling Date		2018/04/17 15:03		
COC Number		657877-01-01		
	UNITS	**WG-160900764-20180417-RD04**	**RDL**	**QC Batch**
Metals				
Chromium (VI)	ug/L	0.67	0.50	5490607
Mercury (Hg)	ug/L	<0.1	0.1	5493459

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

O.REG 153 PCBS (WATER)

Maxxam ID		GME303	GME303	GME305		
Sampling Date		2018/04/17 12:50	2018/04/17 12:50	2018/04/17 11:33		
COC Number		657877-01-01	657877-01-01	657877-01-01		
	UNITS	**WG-160900764-20180417-RD01**	**WG-160900764-20180417-RD01 Lab-Dup**	**WG-160900764-20180417-RD02**	**RDL**	**QC Batch**
PCBs						
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	0.05	5494136
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	0.05	5494136
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	0.05	5494136
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	0.05	5494136
Total PCB	ug/L	<0.05	<0.05	<0.05	0.05	5494136
Surrogate Recovery (%)						
Decachlorobiphenyl	%	83	98	79		5494136

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

Maxxam ID		GME307	GME309		
Sampling Date		2018/04/17 14:34	2018/04/17 15:03		
COC Number		657877-01-01	657877-01-01		
	UNITS	**WG-160900764-20180417-RD03**	**WG-160900764-20180417-RD04**	**RDL**	**QC Batch**
PCBs					
Aroclor 1242	ug/L	<0.05	<0.05	0.05	5492745
Aroclor 1248	ug/L	<0.05	<0.05	0.05	5492745
Aroclor 1254	ug/L	<0.05	<0.05	0.05	5492745
Aroclor 1260	ug/L	<0.05	<0.05	0.05	5492745
Total PCB	ug/L	<0.05	<0.05	0.05	5492745
Surrogate Recovery (%)					
Decachlorobiphenyl	%	88	122		5492745

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

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

Maxxam ID		GME303		GME305		
Sampling Date		2018/04/17 12:50		2018/04/17 11:33		
COC Number		657877-01-01		657877-01-01		
	UNITS	**WG-160900764-20180417-RD01**	**QC Batch**	**WG-160900764-20180417-RD02**	**RDL**	**QC Batch**
Calculated Parameters						
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	5490643	<0.50	0.50	5490643
Volatile Organics						
Acetone (2-Propanone)	ug/L	<10	5491544	<10	10	5491540
Benzene	ug/L	<0.20	5491544	<0.20	0.20	5491540
Bromodichloromethane	ug/L	<0.50	5491544	<0.50	0.50	5491540
Bromoform	ug/L	<1.0	5491544	<1.0	1.0	5491540
Bromomethane	ug/L	<0.50	5491544	<0.50	0.50	5491540
Carbon Tetrachloride	ug/L	<0.20	5491544	<0.20	0.20	5491540
Chlorobenzene	ug/L	<0.20	5491544	<0.20	0.20	5491540
Chloroform	ug/L	<0.20	5491544	<0.20	0.20	5491540
Dibromochloromethane	ug/L	<0.50	5491544	<0.50	0.50	5491540
1,2-Dichlorobenzene	ug/L	<0.50	5491544	<0.50	0.50	5491540
1,3-Dichlorobenzene	ug/L	<0.50	5491544	<0.50	0.50	5491540
1,4-Dichlorobenzene	ug/L	<0.50	5491544	<0.50	0.50	5491540
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	5491544	<1.0	1.0	5491540
1,1-Dichloroethane	ug/L	<0.20	5491544	<0.20	0.20	5491540
1,2-Dichloroethane	ug/L	<0.50	5491544	<0.50	0.50	5491540
1,1-Dichloroethylene	ug/L	<0.20	5491544	<0.20	0.20	5491540
cis-1,2-Dichloroethylene	ug/L	<0.50	5491544	<0.50	0.50	5491540
trans-1,2-Dichloroethylene	ug/L	<0.50	5491544	<0.50	0.50	5491540
1,2-Dichloropropane	ug/L	<0.20	5491544	<0.20	0.20	5491540
cis-1,3-Dichloropropene	ug/L	<0.30	5491544	<0.30	0.30	5491540
trans-1,3-Dichloropropene	ug/L	<0.40	5491544	<0.40	0.40	5491540
Ethylbenzene	ug/L	<0.20	5491544	<0.20	0.20	5491540
Ethylene Dibromide	ug/L	<0.20	5491544	<0.20	0.20	5491540
Hexane	ug/L	<1.0	5491544	<1.0	1.0	5491540
Methylene Chloride(Dichloromethane)	ug/L	<2.0	5491544	<2.0	2.0	5491540
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	5491544	<10	10	5491540
Methyl Isobutyl Ketone	ug/L	<5.0	5491544	<5.0	5.0	5491540
Methyl t-butyl ether (MTBE)	ug/L	<0.50	5491544	<0.50	0.50	5491540

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

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

Maxxam ID		GME303		GME305		
Sampling Date		2018/04/17 12:50		2018/04/17 11:33		
COC Number		657877-01-01		657877-01-01		
	UNITS	**WG-160900764-20180417-RD01**	**QC Batch**	**WG-160900764-20180417-RD02**	**RDL**	**QC Batch**
Styrene	ug/L	<0.50	5491544	<0.50	0.50	5491540
1,1,1,2-Tetrachloroethane	ug/L	<0.50	5491544	<0.50	0.50	5491540
1,1,2,2-Tetrachloroethane	ug/L	<0.50	5491544	<0.50	0.50	5491540
Tetrachloroethylene	ug/L	<0.20	5491544	<0.20	0.20	5491540
Toluene	ug/L	<0.20	5491544	<0.20	0.20	5491540
1,1,1-Trichloroethane	ug/L	<0.20	5491544	<0.20	0.20	5491540
1,1,2-Trichloroethane	ug/L	<0.50	5491544	<0.50	0.50	5491540
Trichloroethylene	ug/L	<0.20	5491544	<0.20	0.20	5491540
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	5491544	<0.50	0.50	5491540
Vinyl Chloride	ug/L	<0.20	5491544	<0.20	0.20	5491540
p+m-Xylene	ug/L	<0.20	5491544	<0.20	0.20	5491540
o-Xylene	ug/L	<0.20	5491544	<0.20	0.20	5491540
Total Xylenes	ug/L	<0.20	5491544	<0.20	0.20	5491540
F1 (C6-C10)	ug/L	<25	5491544	<25	25	5491540
F1 (C6-C10) - BTEX	ug/L	<25	5491544	<25	25	5491540
F2-F4 Hydrocarbons						
F2 (C10-C16 Hydrocarbons)	ug/L	<100	5493653	<100	100	5493653
F3 (C16-C34 Hydrocarbons)	ug/L	<200	5493653	<200	200	5493653
F4 (C34-C50 Hydrocarbons)	ug/L	<200	5493653	<200	200	5493653
Reached Baseline at C50	ug/L	Yes	5493653	Yes		5493653
Surrogate Recovery (%)						
o-Terphenyl	%	102	5493653	102		5493653
4-Bromofluorobenzene	%	92	5491544	93		5491540
D4-1,2-Dichloroethane	%	101	5491544	103		5491540
D8-Toluene	%	102	5491544	103		5491540

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

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

Maxxam ID		GME305			GME307	GME309		
Sampling Date		2018/04/17 11:33			2018/04/17 14:34	2018/04/17 15:03		
COC Number		657877-01-01			657877-01-01	657877-01-01		
	UNITS	**WG-160900764-20180417-RD02 Lab-Dup**	**RDL**	**QC Batch**	**WG-160900764-20180417-RD03**	**WG-160900764-20180417-RD04**	**RDL**	**QC Batch**
Calculated Parameters								
1,3-Dichloropropene (cis+trans)	ug/L				<0.50	<0.50	0.50	5490643
Volatile Organics								
Acetone (2-Propanone)	ug/L				<10	<10	10	5491540
Benzene	ug/L				<0.20	<0.20	0.20	5491540
Bromodichloromethane	ug/L				<0.50	<0.50	0.50	5491540
Bromoform	ug/L				<1.0	<1.0	1.0	5491540
Bromomethane	ug/L				<0.50	<0.50	0.50	5491540
Carbon Tetrachloride	ug/L				<0.20	<0.20	0.20	5491540
Chlorobenzene	ug/L				<0.20	<0.20	0.20	5491540
Chloroform	ug/L				<0.20	<0.20	0.20	5491540
Dibromochloromethane	ug/L				<0.50	<0.50	0.50	5491540
1,2-Dichlorobenzene	ug/L				<0.50	<0.50	0.50	5491540
1,3-Dichlorobenzene	ug/L				<0.50	<0.50	0.50	5491540
1,4-Dichlorobenzene	ug/L				<0.50	<0.50	0.50	5491540
Dichlorodifluoromethane (FREON 12)	ug/L				<1.0	<1.0	1.0	5491540
1,1-Dichloroethane	ug/L				<0.20	<0.20	0.20	5491540
1,2-Dichloroethane	ug/L				<0.50	<0.50	0.50	5491540
1,1-Dichloroethylene	ug/L				<0.20	<0.20	0.20	5491540
cis-1,2-Dichloroethylene	ug/L				<0.50	<0.50	0.50	5491540
trans-1,2-Dichloroethylene	ug/L				<0.50	<0.50	0.50	5491540
1,2-Dichloropropane	ug/L				<0.20	<0.20	0.20	5491540
cis-1,3-Dichloropropene	ug/L				<0.30	<0.30	0.30	5491540
trans-1,3-Dichloropropene	ug/L				<0.40	<0.40	0.40	5491540
Ethylbenzene	ug/L				<0.20	<0.20	0.20	5491540
Ethylene Dibromide	ug/L				<0.20	<0.20	0.20	5491540
Hexane	ug/L				<1.0	<1.0	1.0	5491540
Methylene Chloride(Dichloromethane)	ug/L				<2.0	<2.0	2.0	5491540
Methyl Ethyl Ketone (2-Butanone)	ug/L				<10	<10	10	5491540
Methyl Isobutyl Ketone	ug/L				<5.0	<5.0	5.0	5491540
Methyl t-butyl ether (MTBE)	ug/L				<0.50	<0.50	0.50	5491540

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

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Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

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

Maxxam ID		GME305			GME307	GME309		
Sampling Date		2018/04/17 11:33			2018/04/17 14:34	2018/04/17 15:03		
COC Number		657877-01-01			657877-01-01	657877-01-01		
	UNITS	**WG-160900764-20180417-RD02 Lab-Dup**	**RDL**	**QC Batch**	**WG-160900764-20180417-RD03**	**WG-160900764-20180417-RD04**	**RDL**	**QC Batch**
Styrene	ug/L				<0.50	<0.50	0.50	5491540
1,1,1,2-Tetrachloroethane	ug/L				<0.50	<0.50	0.50	5491540
1,1,2,2-Tetrachloroethane	ug/L				<0.50	<0.50	0.50	5491540
Tetrachloroethylene	ug/L				<0.20	<0.20	0.20	5491540
Toluene	ug/L				<0.20	<0.20	0.20	5491540
1,1,1-Trichloroethane	ug/L				<0.20	<0.20	0.20	5491540
1,1,2-Trichloroethane	ug/L				<0.50	<0.50	0.50	5491540
Trichloroethylene	ug/L				<0.20	<0.20	0.20	5491540
Trichlorofluoromethane (FREON 11)	ug/L				<0.50	<0.50	0.50	5491540
Vinyl Chloride	ug/L				<0.20	<0.20	0.20	5491540
p+m-Xylene	ug/L				<0.20	<0.20	0.20	5491540
o-Xylene	ug/L				<0.20	<0.20	0.20	5491540
Total Xylenes	ug/L				<0.20	<0.20	0.20	5491540
F1 (C6-C10)	ug/L				<25	<25	25	5491540
F1 (C6-C10) - BTEX	ug/L				<25	<25	25	5491540
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	5493653	<100	<100	100	5493653
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	5493653	<200	<200	200	5493653
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	5493653	<200	<200	200	5493653
Reached Baseline at C50	ug/L	Yes		5493653	Yes	Yes		5493653
Surrogate Recovery (%)								
o-Terphenyl	%	103		5493653	101	101		5493653
4-Bromofluorobenzene	%				91	94		5491540
D4-1,2-Dichloroethane	%				102	103		5491540
D8-Toluene	%				101	101		5491540

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

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		GME303	GME304	GME305	GME306		
Sampling Date		2018/04/17 12:50	2018/04/17 12:50	2018/04/17 11:33	2018/04/17 11:33		
COC Number		657877-01-01	657877-01-01	657877-01-01	657877-01-01		
	UNITS	**WG-160900764-20180417-RD01**	**WG-160900764-20180417-RD01A**	**WG-160900764-20180417-RD02**	**WG-160900764-20180417-RD02A**	**RDL**	**QC Batch**
Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5493085
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5493085
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5493085
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5493085
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5493085
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5493085
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5493085
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5493085
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	5493085
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		GME303	GME304	GME305	GME306		
Sampling Date		2018/04/17 12:50	2018/04/17 12:50	2018/04/17 11:33	2018/04/17 11:33		
COC Number		657877-01-01	657877-01-01	657877-01-01	657877-01-01		
	UNITS	**WG-160900764-20180417-RD01**	**WG-160900764-20180417-RD01A**	**WG-160900764-20180417-RD02**	**WG-160900764-20180417-RD02A**	**RDL**	**QC Batch**
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5493085
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5493085
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5490012
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	83	74	46 (1)	58		5493085
2-Fluorobiphenyl	%	72	62	50	57		5493085
D14-Terphenyl (FS)	%	106	10 (1)	105	6.0 (1)		5493085
D5-Nitrobenzene	%	66	58	42 (1)	53		5493085

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.

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		GME307	GME308	GME309	GME310		
Sampling Date		2018/04/17 14:34	2018/04/17 14:34	2018/04/17 15:03	2018/04/17 15:03		
COC Number		657877-01-01	657877-01-01	657877-01-01	657877-01-01		
	UNITS	**WG-160900764-20180417-RD03**	**WG-160900764-20180417-RD03A**	**WG-160900764-20180417-RD04**	**WG-160900764-20180417-RD04A**	**RDL**	**QC Batch**
Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5493085
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5493085
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5493085
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5493085
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5493085
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5493085
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5493085
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5493085
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	5493085
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		GME307	GME308	GME309	GME310		
Sampling Date		2018/04/17 14:34	2018/04/17 14:34	2018/04/17 15:03	2018/04/17 15:03		
COC Number		657877-01-01	657877-01-01	657877-01-01	657877-01-01		
	UNITS	**WG-160900764-20180417-RD03**	**WG-160900764-20180417-RD03A**	**WG-160900764-20180417-RD04**	**WG-160900764-20180417-RD04A**	**RDL**	**QC Batch**
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5493085
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5493085
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5493085
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5493085
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5493085
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5490012
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	40 (1)	44 (1)	42 (1)	78		5493085
2-Fluorobiphenyl	%	88	54	68	74		5493085
D14-Terphenyl (FS)	%	111	9.3 (1)	108	9.3 (1)		5493085
D5-Nitrobenzene	%	77	60	61	65		5493085

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.

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		GMH815			GMH816		
Sampling Date		2018/04/17			2018/04/17		
COC Number		657877-01-01			657877-01-01		
	UNITS	**FILTERED BLANK**	**RDL**	**QC Batch**	**FILTERED SPIKE**	**RDL**	**QC Batch**
Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	0.1	5493085	64	1	5493085
1-Methylnaphthalene	ug/L	<0.2	0.2	5493085	76	1	5493085
2,4,5-Trichlorophenol	ug/L	<0.2	0.2	5493085	100	1	5493085
2,4,6-Trichlorophenol	ug/L	<0.2	0.2	5493085	94	1	5493085
2,4-Dichlorophenol	ug/L	<0.1	0.1	5493085	84	1	5493085
2,4-Dimethylphenol	ug/L	<0.5	0.5	5493085	29 (1)	1	5493085
2,4-Dinitrophenol	ug/L	<2	2	5493085	120	1	5493085
2,4-Dinitrotoluene	ug/L	<0.3	0.3	5493085	92	1	5493085
2,6-Dinitrotoluene	ug/L	<0.3	0.3	5493085	91	1	5493085
2-Chlorophenol	ug/L	<0.1	0.1	5493085	70	1	5493085
2-Methylnaphthalene	ug/L	<0.2	0.2	5493085	73	1	5493085
3,3'-Dichlorobenzidine	ug/L	<0.5	0.5	5493085	84	1	5493085
Acenaphthene	ug/L	<0.2	0.2	5493085	88	1	5493085
Acenaphthylene	ug/L	<0.2	0.2	5493085	88	1	5493085
Anthracene	ug/L	<0.05	0.05	5493085	39 (1)	1	5493085
Benzo(a)anthracene	ug/L	<0.05	0.05	5493085	15 (1)	1	5493085
Benzo(a)pyrene	ug/L	<0.01	0.01	5493085	9 (1)	1	5493085
Benzo(b/j)fluoranthene	ug/L	<0.05	0.05	5493085	12 (1)	1	5493085
Benzo(g,h,i)perylene	ug/L	<0.05	0.05	5493085	6 (1)	1	5493085
Benzo(k)fluoranthene	ug/L	<0.05	0.05	5493085	13 (1)	1	5493085
Biphenyl	ug/L	<0.1	0.1	5493085	72	1	5493085
Bis(2-chloroethyl)ether	ug/L	<0.5	0.5	5493085	78	1	5493085
Bis(2-chloroisopropyl)ether	ug/L	<0.5	0.5	5493085	77	1	5493085
Bis(2-ethylhexyl)phthalate	ug/L	<1	1	5493085	13 (1)	1	5493085
Chrysene	ug/L	<0.05	0.05	5493085	13 (1)	1	5493085
Dibenz(a,h)anthracene	ug/L	<0.1	0.1	5493085	5 (1)	1	5493085
Diethyl phthalate	ug/L	<0.1	0.1	5493085	95	1	5493085
Dimethyl phthalate	ug/L	<0.1	0.1	5493085	87	1	5493085
Fluoranthene	ug/L	<0.2	0.2	5493085	47 (1)	1	5493085

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.

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		GMH815			GMH816		
Sampling Date		2018/04/17			2018/04/17		
COC Number		657877-01-01			657877-01-01		
	UNITS	**FILTERED BLANK**	**RDL**	**QC Batch**	**FILTERED SPIKE**	**RDL**	**QC Batch**
Fluorene	ug/L	<0.2	0.2	5493085	80	1	5493085
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	0.1	5493085	5 (1)	1	5493085
Naphthalene	ug/L	<0.2	0.2	5493085	76	1	5493085
p-Chloroaniline	ug/L	<1	1	5493085	61	1	5493085
Pentachlorophenol	ug/L	<0.1	0.1	5493085	95	1	5493085
Phenanthrene	ug/L	<0.1	0.1	5493085	66	1	5493085
Phenol	ug/L	<0.5	0.5	5493085	33	1	5493085
Pyrene	ug/L	<0.05	0.05	5493085	43 (1)	1	5493085
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	0.28	5490012			
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	73		5493085	98		5493085
2-Fluorobiphenyl	%	57		5493085	73		5493085
D14-Terphenyl (FS)	%	7.5 (2)		5493085	57		5493085
D5-Nitrobenzene	%	49 (2)		5493085	75		5493085

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.

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

TEST SUMMARY

Maxxam ID: GME303
Sample ID: WG-160900764-20180417-RD01
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5490012	N/A	2018/04/24	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5493085	2018/04/19	2018/04/23	Milijana Avramovic
Acidity (CaCO3) in water	MT	5500182	N/A	2018/04/25	Brent Boudreau
Alkalinity	AT	5492793	N/A	2018/04/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5489568	N/A	2018/04/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5490643	N/A	2018/04/23	Automated Statchk
Chloride by Automated Colourimetry	KONE	5492814	N/A	2018/04/22	Deonarine Ramnarine
Conductivity	AT	5492799	N/A	2018/04/20	Surinder Rai
Chromium (VI) in Water	IC	5492577	N/A	2018/04/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5493468	N/A	2018/04/20	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5492700	N/A	2018/04/20	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5493653	2018/04/20	2018/04/21	Zhiyue (Frank) Zhu
Fluoride	ISE	5492800	2018/04/19	2018/04/20	Surinder Rai
Hardness (calculated as CaCO3)		5491020	N/A	2018/04/20	Automated Statchk
Mercury	CV/AA	5497806	2018/04/24	2018/04/24	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5492431	N/A	2018/04/19	Thao Nguyen
Ion Balance (% Difference)	CALC	5489331	N/A	2018/04/23	Automated Statchk
Anion and Cation Sum	CALC	5489570	N/A	2018/04/23	Automated Statchk
Total Ammonia-N	LACH/NH4	5496749	N/A	2018/04/24	Parminder Sangha
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5491942	N/A	2018/04/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5494136	2018/04/20	2018/04/20	Dawn Alarie
pH	AT	5492795	N/A	2018/04/20	Surinder Rai
Orthophosphate	KONE	5492820	N/A	2018/04/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5489571	N/A	2018/04/23	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5489572	N/A	2018/04/23	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5492819	N/A	2018/04/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5489573	N/A	2018/04/23	Automated Statchk
Total Dissolved Solids	BAL	5497038	2018/04/23	2018/04/23	Shivani Desai
Total Organic Carbon (TOC)	TOCV/NDIR	5496415	N/A	2018/04/23	Anastasia Hamanov
Total Suspended Solids	BAL	5496423	2018/04/23	2018/04/23	Fang Wang
Turbidity	AT	5490444	N/A	2018/04/19	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5491544	N/A	2018/04/21	Anna Gabrielyan

Maxxam ID: GME303 Dup
Sample ID: WG-160900764-20180417-RD01
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	5492793	N/A	2018/04/20	Surinder Rai
Chloride by Automated Colourimetry	KONE	5492814	N/A	2018/04/22	Deonarine Ramnarine
Conductivity	AT	5492799	N/A	2018/04/20	Surinder Rai
Fluoride	ISE	5492800	2018/04/19	2018/04/20	Surinder Rai
Total Ammonia-N	LACH/NH4	5496749	N/A	2018/04/24	Parminder Sangha
Polychlorinated Biphenyl in Water	GC/ECD	5494136	2018/04/20	2018/04/20	Dawn Alarie

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

TEST SUMMARY

Maxxam ID: GME303 Dup
Sample ID: WG-160900764-20180417-RD01
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH	AT	5492795	N/A	2018/04/20	Surinder Rai
Orthophosphate	KONE	5492820	N/A	2018/04/20	Alina Dobreanu
Sulphate by Automated Colourimetry	KONE	5492819	N/A	2018/04/20	Alina Dobreanu
Total Suspended Solids	BAL	5496423	2018/04/23	2018/04/23	Fang Wang

Maxxam ID: GME304
Sample ID: WG-160900764-20180417-RD01A
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5490012	N/A	2018/04/24	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5493085	2018/04/19	2018/04/23	Milijana Avramovic

Maxxam ID: GME305
Sample ID: WG-160900764-20180417-RD02
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5490012	N/A	2018/04/24	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5493085	2018/04/19	2018/04/23	Milijana Avramovic
Acidity (CaCO3) in water	MT	5500182	N/A	2018/04/25	Brent Boudreau
Alkalinity	AT	5492793	N/A	2018/04/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5489568	N/A	2018/04/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5490643	N/A	2018/04/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	5494187	N/A	2018/04/23	Deonarine Ramnarine
Conductivity	AT	5492799	N/A	2018/04/20	Surinder Rai
Chromium (VI) in Water	IC	5490607	N/A	2018/04/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5493468	N/A	2018/04/20	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5492700	N/A	2018/04/20	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5493653	2018/04/20	2018/04/21	Zhiyue (Frank) Zhu
Fluoride	ISE	5492800	2018/04/19	2018/04/20	Surinder Rai
Hardness (calculated as CaCO3)		5491020	N/A	2018/04/20	Automated Statchk
Mercury	CV/AA	5493459	2018/04/20	2018/04/20	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5492431	N/A	2018/04/19	Thao Nguyen
Ion Balance (% Difference)	CALC	5489331	N/A	2018/04/23	Automated Statchk
Anion and Cation Sum	CALC	5489570	N/A	2018/04/23	Automated Statchk
Total Ammonia-N	LACH/NH4	5496398	N/A	2018/04/24	Parminder Sangha
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5492668	N/A	2018/04/21	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5494136	2018/04/20	2018/04/20	Dawn Alarie
pH	AT	5492795	N/A	2018/04/20	Surinder Rai
Orthophosphate	KONE	5494207	N/A	2018/04/22	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5489571	N/A	2018/04/23	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5489572	N/A	2018/04/23	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5494205	N/A	2018/04/23	Deonarine Ramnarine

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

TEST SUMMARY

Maxxam ID: GME305
Sample ID: WG-160900764-20180417-RD02
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Dissolved Solids (TDS calc)	CALC	5489573	N/A	2018/04/23	Automated Statchk
Total Dissolved Solids	BAL	5497038	2018/04/23	2018/04/23	Shivani Desai
Total Organic Carbon (TOC)	TOCV/NDIR	5496415	N/A	2018/04/23	Anastasia Hamanov
Total Suspended Solids	BAL	5496423	2018/04/23	2018/04/23	Fang Wang
Turbidity	AT	5492686	N/A	2018/04/19	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5491540	N/A	2018/04/20	Denis Reid

Maxxam ID: GME305 Dup
Sample ID: WG-160900764-20180417-RD02
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	5500182	N/A	2018/04/25	Brent Boudreau
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5493653	2018/04/20	2018/04/21	Zhiyue (Frank) Zhu

Maxxam ID: GME306
Sample ID: WG-160900764-20180417-RD02A
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5490012	N/A	2018/04/24	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5493085	2018/04/19	2018/04/23	Milijana Avramovic

Maxxam ID: GME307
Sample ID: WG-160900764-20180417-RD03
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5490012	N/A	2018/04/24	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5493085	2018/04/19	2018/04/23	Milijana Avramovic
Acidity (CaCO3) in water	MT	5500182	N/A	2018/04/25	Brent Boudreau
Alkalinity	AT	5492793	N/A	2018/04/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5489568	N/A	2018/04/23	Ewa Pranjic
1,3-Dichloropropene Sum	CALC	5490643	N/A	2018/04/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	5492814	N/A	2018/04/22	Deonarine Ramnarine
Conductivity	AT	5501523	N/A	2018/04/26	Surinder Rai
Chromium (VI) in Water	IC	5490607	N/A	2018/04/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5493468	N/A	2018/04/20	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5492700	N/A	2018/04/20	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5493653	2018/04/20	2018/04/21	Zhiyue (Frank) Zhu
Fluoride	ISE	5492800	2018/04/19	2018/04/20	Surinder Rai
Hardness (calculated as CaCO3)		5491020	N/A	2018/04/20	Automated Statchk
Mercury	CV/AA	5493459	2018/04/20	2018/04/20	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5502322	N/A	2018/04/26	Thao Nguyen

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

TEST SUMMARY

Maxxam ID: GME307
Sample ID: WG-160900764-20180417-RD03
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Ion Balance (% Difference)	CALC	5489331	N/A	2018/04/23	Automated Statchk
Anion and Cation Sum	CALC	5489570	N/A	2018/04/23	Automated Statchk
Total Ammonia-N	LACH/NH4	5496390	N/A	2018/04/24	Parminder Sangha
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5492666	N/A	2018/04/20	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5492745	2018/04/19	2018/04/20	Sarah Huang
pH	AT	5492795	N/A	2018/04/20	Surinder Rai
Orthophosphate	KONE	5492820	N/A	2018/04/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5489571	N/A	2018/04/23	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5489572	N/A	2018/04/23	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5492819	N/A	2018/04/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5489573	N/A	2018/04/23	Automated Statchk
Total Dissolved Solids	BAL	5497038	2018/04/23	2018/04/23	Shivani Desai
Total Organic Carbon (TOC)	TOCV/NDIR	5496415	N/A	2018/04/23	Anastasia Hamanov
Total Suspended Solids	BAL	5497827	2018/04/24	2018/04/24	Fang Wang
Turbidity	AT	5492686	N/A	2018/04/19	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5491540	N/A	2018/04/20	Denis Reid

Maxxam ID: GME308
Sample ID: WG-160900764-20180417-RD03A
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5490012	N/A	2018/04/24	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5493085	2018/04/19	2018/04/23	Milijana Avramovic

Maxxam ID: GME309
Sample ID: WG-160900764-20180417-RD04
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5490012	N/A	2018/04/24	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5493085	2018/04/19	2018/04/23	Milijana Avramovic
Acidity (CaCO3) in water	MT	5500182	N/A	2018/04/25	Brent Boudreau
Alkalinity	AT	5492793	N/A	2018/04/20	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5489568	N/A	2018/04/23	Automated Statchk
1,3-Dichloropropene Sum	CALC	5490643	N/A	2018/04/20	Automated Statchk
Chloride by Automated Colourimetry	KONE	5492814	N/A	2018/04/22	Deonarine Ramnarine
Conductivity	AT	5492799	N/A	2018/04/20	Surinder Rai
Chromium (VI) in Water	IC	5490607	N/A	2018/04/23	Lang Le
Free (WAD) Cyanide	SKAL/CN	5493468	N/A	2018/04/20	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5492700	N/A	2018/04/20	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5493653	2018/04/20	2018/04/21	Zhiyue (Frank) Zhu
Fluoride	ISE	5492800	2018/04/19	2018/04/20	Surinder Rai
Hardness (calculated as CaCO3)		5491020	N/A	2018/04/20	Automated Statchk

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

TEST SUMMARY

Maxxam ID: GME309
Sample ID: WG-160900764-20180417-RD04
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Mercury	CV/AA	5493459	2018/04/20	2018/04/20	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5492431	N/A	2018/04/19	Thao Nguyen
Ion Balance (% Difference)	CALC	5489331	N/A	2018/04/23	Automated Statchk
Anion and Cation Sum	CALC	5489570	N/A	2018/04/23	Automated Statchk
Total Ammonia-N	LACH/NH4	5496390	N/A	2018/04/24	Parminder Sangha
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5492666	N/A	2018/04/20	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5492745	2018/04/19	2018/04/20	Sarah Huang
pH	AT	5492795	N/A	2018/04/20	Surinder Rai
Orthophosphate	KONE	5492820	N/A	2018/04/20	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5489571	N/A	2018/04/23	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5489572	N/A	2018/04/23	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5492819	N/A	2018/04/20	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5489573	N/A	2018/04/23	Automated Statchk
Total Dissolved Solids	BAL	5497038	2018/04/23	2018/04/23	Shivani Desai
Total Organic Carbon (TOC)	TOCV/NDIR	5496415	N/A	2018/04/23	Anastasia Hamanov
Total Suspended Solids	BAL	5496423	2018/04/23	2018/04/23	Fang Wang
Turbidity	AT	5492686	N/A	2018/04/19	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5491540	N/A	2018/04/20	Denis Reid

Maxxam ID: GME310
Sample ID: WG-160900764-20180417-RD04A
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5490012	N/A	2018/04/24	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5493085	2018/04/19	2018/04/23	Milijana Avramovic

Maxxam ID: GMH815
Sample ID: FILTERED BLANK
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5490012	N/A	2018/04/24	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5493085	2018/04/19	2018/04/23	Milijana Avramovic

Maxxam ID: GMH816
Sample ID: FILTERED SPIKE
Matrix: Water

Collected: 2018/04/17
Shipped:
Received: 2018/04/18

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
ABN Compounds in Water by SIM GC/MS	GC/MS	5493085	2018/04/19	2018/04/23	Milijana Avramovic

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

GENERAL COMMENTS

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

Package 1	2.3°C
Package 2	3.0°C
Package 3	3.3°C
Package 4	2.7°C

Sample GME303 [WG-160900764-20180417-RD01] : ortho-Phosphate > Total Phosphorus: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample GME305 [WG-160900764-20180417-RD02] : Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Sample GME307 [WG-160900764-20180417-RD03] : Elevated ion balance was confirmed by re-analysis of anions and cations.

Sample GME309 [WG-160900764-20180417-RD04] : 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 GMH816 [FILTERED SPIKE] : ABN analysis: Data are reported as percentage recoveries.

Results relate only to the items tested.

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Maxxam Job #: B887445
Report Date: 2018/04/27

QUALITY ASSURANCE REPORT

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5491540	4-Bromofluorobenzene	2018/04/20	101	70 - 130	98	70 - 130	96	%				
5491540	D4-1,2-Dichloroethane	2018/04/20	103	70 - 130	101	70 - 130	101	%				
5491540	D8-Toluene	2018/04/20	99	70 - 130	102	70 - 130	102	%				
5491544	4-Bromofluorobenzene	2018/04/21	99	70 - 130	99	70 - 130	91	%				
5491544	D4-1,2-Dichloroethane	2018/04/21	101	70 - 130	99	70 - 130	99	%				
5491544	D8-Toluene	2018/04/21	102	70 - 130	102	70 - 130	103	%				
5492745	Decachlorobiphenyl	2018/04/20	121	60 - 130	75	60 - 130	89	%				
5493085	2,4,6-Tribromophenol	2018/04/23			97	50 - 130	53	%				
5493085	2-Fluorobiphenyl	2018/04/23			75	50 - 130	88	%				
5493085	D14-Terphenyl (FS)	2018/04/23			110	50 - 130	106	%				
5493085	D5-Nitrobenzene	2018/04/23			77	50 - 130	79	%				
5493653	o-Terphenyl	2018/04/20	106	60 - 130	104	60 - 130	101	%				
5494136	Decachlorobiphenyl	2018/04/20	92	60 - 130	94	60 - 130	90	%				
5490444	Turbidity	2018/04/19			100	85 - 115	<0.1	NTU	NC	20		
5490607	Chromium (VI)	2018/04/23	98	80 - 120	97	80 - 120	<0.50	ug/L	NC	20		
5491540	1,1,1,2-Tetrachloroethane	2018/04/20	97	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5491540	1,1,1-Trichloroethane	2018/04/20	95	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5491540	1,1,2,2-Tetrachloroethane	2018/04/20	100	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
5491540	1,1,2-Trichloroethane	2018/04/20	100	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
5491540	1,1-Dichloroethane	2018/04/20	97	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5491540	1,1-Dichloroethylene	2018/04/20	95	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5491540	1,2-Dichlorobenzene	2018/04/20	95	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
5491540	1,2-Dichloroethane	2018/04/20	99	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5491540	1,2-Dichloropropane	2018/04/20	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5491540	1,3-Dichlorobenzene	2018/04/20	99	70 - 130	103	70 - 130	<0.50	ug/L	NC	30		
5491540	1,4-Dichlorobenzene	2018/04/20	107	70 - 130	110	70 - 130	<0.50	ug/L	NC	30		
5491540	Acetone (2-Propanone)	2018/04/20	103	60 - 140	95	60 - 140	<10	ug/L	NC	30		
5491540	Benzene	2018/04/20	96	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5491540	Bromodichloromethane	2018/04/20	97	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
5491540	Bromoform	2018/04/20	97	70 - 130	96	70 - 130	<1.0	ug/L	NC	30		
5491540	Bromomethane	2018/04/20	93	60 - 140	91	60 - 140	<0.50	ug/L	NC	30		

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Maxxam Job #: B887445
Report Date: 2018/04/27

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5491540	Carbon Tetrachloride	2018/04/20	95	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
5491540	Chlorobenzene	2018/04/20	94	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
5491540	Chloroform	2018/04/20	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5491540	cis-1,2-Dichloroethylene	2018/04/20	98	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5491540	cis-1,3-Dichloropropene	2018/04/20	96	70 - 130	92	70 - 130	<0.30	ug/L	NC	30		
5491540	Dibromochloromethane	2018/04/20	98	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5491540	Dichlorodifluoromethane (FREON 12)	2018/04/20	91	60 - 140	93	60 - 140	<1.0	ug/L	NC	30		
5491540	Ethylbenzene	2018/04/20	94	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5491540	Ethylene Dibromide	2018/04/20	100	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
5491540	F1 (C6-C10) - BTEX	2018/04/20					<25	ug/L	NC	30		
5491540	F1 (C6-C10)	2018/04/20	105	60 - 140	96	60 - 140	<25	ug/L	NC	30		
5491540	Hexane	2018/04/20	93	70 - 130	94	70 - 130	<1.0	ug/L	NC	30		
5491540	Methyl Ethyl Ketone (2-Butanone)	2018/04/20	104	60 - 140	99	60 - 140	<10	ug/L	NC	30		
5491540	Methyl Isobutyl Ketone	2018/04/20	94	70 - 130	91	70 - 130	<5.0	ug/L	NC	30		
5491540	Methyl t-butyl ether (MTBE)	2018/04/20	98	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5491540	Methylene Chloride(Dichloromethane)	2018/04/20	100	70 - 130	100	70 - 130	<2.0	ug/L	NC	30		
5491540	o-Xylene	2018/04/20	97	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
5491540	p+m-Xylene	2018/04/20	94	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5491540	Styrene	2018/04/20	97	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5491540	Tetrachloroethylene	2018/04/20	92	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5491540	Toluene	2018/04/20	93	70 - 130	94	70 - 130	<0.20	ug/L	3.4	30		
5491540	Total Xylenes	2018/04/20					<0.20	ug/L	NC	30		
5491540	trans-1,2-Dichloroethylene	2018/04/20	92	70 - 130	92	70 - 130	<0.50	ug/L	NC	30		
5491540	trans-1,3-Dichloropropene	2018/04/20	95	70 - 130	90	70 - 130	<0.40	ug/L	NC	30		
5491540	Trichloroethylene	2018/04/20	95	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5491540	Trichlorofluoromethane (FREON 11)	2018/04/20	96	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5491540	Vinyl Chloride	2018/04/20	171 (1)	70 - 130	91	70 - 130	<0.20	ug/L	NC	30		
5491544	1,1,1,2-Tetrachloroethane	2018/04/21	101	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5491544	1,1,1-Trichloroethane	2018/04/21	101	70 - 130	101	70 - 130	<0.20	ug/L	NC	30		
5491544	1,1,2,2-Tetrachloroethane	2018/04/21	103	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5491544	1,1,2-Trichloroethane	2018/04/21	103	70 - 130	101	70 - 130	<0.50	ug/L	NC	30		

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QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5491544	1,1-Dichloroethane	2018/04/21	99	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
5491544	1,1-Dichloroethylene	2018/04/21	101	70 - 130	103	70 - 130	<0.20	ug/L	NC	30		
5491544	1,2-Dichlorobenzene	2018/04/21	107	70 - 130	104	70 - 130	<0.50	ug/L	NC	30		
5491544	1,2-Dichloroethane	2018/04/21	101	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5491544	1,2-Dichloropropane	2018/04/21	97	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5491544	1,3-Dichlorobenzene	2018/04/21	113	70 - 130	111	70 - 130	<0.50	ug/L	NC	30		
5491544	1,4-Dichlorobenzene	2018/04/21	114	70 - 130	111	70 - 130	<0.50	ug/L	NC	30		
5491544	Acetone (2-Propanone)	2018/04/21	106	60 - 140	99	60 - 140	<10	ug/L	NC	30		
5491544	Benzene	2018/04/21	97	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
5491544	Bromodichloromethane	2018/04/21	100	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5491544	Bromoform	2018/04/21	97	70 - 130	95	70 - 130	<1.0	ug/L	NC	30		
5491544	Bromomethane	2018/04/21	94	60 - 140	95	60 - 140	<0.50	ug/L	NC	30		
5491544	Carbon Tetrachloride	2018/04/21	99	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
5491544	Chlorobenzene	2018/04/21	100	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
5491544	Chloroform	2018/04/21	99	70 - 130	98	70 - 130	<0.20	ug/L	1.7	30		
5491544	cis-1,2-Dichloroethylene	2018/04/21	100	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5491544	cis-1,3-Dichloropropene	2018/04/21	104	70 - 130	102	70 - 130	<0.30	ug/L	NC	30		
5491544	Dibromochloromethane	2018/04/21	93	70 - 130	92	70 - 130	<0.50	ug/L	NC	30		
5491544	Dichlorodifluoromethane (FREON 12)	2018/04/21	68	60 - 140	74	60 - 140	<1.0	ug/L	NC	30		
5491544	Ethylbenzene	2018/04/21	103	70 - 130	103	70 - 130	<0.20	ug/L	NC	30		
5491544	Ethylene Dibromide	2018/04/21	102	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
5491544	F1 (C6-C10) - BTEX	2018/04/21					<25	ug/L	NC	30		
5491544	F1 (C6-C10)	2018/04/21	103	60 - 140	103	60 - 140	<25	ug/L	NC	30		
5491544	Hexane	2018/04/21	96	70 - 130	97	70 - 130	<1.0	ug/L	NC	30		
5491544	Methyl Ethyl Ketone (2-Butanone)	2018/04/21	102	60 - 140	97	60 - 140	<10	ug/L	NC	30		
5491544	Methyl Isobutyl Ketone	2018/04/21	99	70 - 130	95	70 - 130	<5.0	ug/L	NC	30		
5491544	Methyl t-butyl ether (MTBE)	2018/04/21	98	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5491544	Methylene Chloride(Dichloromethane)	2018/04/21	102	70 - 130	102	70 - 130	<2.0	ug/L	NC	30		
5491544	o-Xylene	2018/04/21	100	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
5491544	p+m-Xylene	2018/04/21	104	70 - 130	105	70 - 130	<0.20	ug/L	NC	30		
5491544	Styrene	2018/04/21	103	70 - 130	103	70 - 130	<0.50	ug/L	NC	30		

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QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5491544	Tetrachloroethylene	2018/04/21	101	70 - 130	102	70 - 130	<0.20	ug/L	NC	30		
5491544	Toluene	2018/04/21	97	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
5491544	Total Xylenes	2018/04/21					<0.20	ug/L	NC	30		
5491544	trans-1,2-Dichloroethylene	2018/04/21	98	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5491544	trans-1,3-Dichloropropene	2018/04/21	107	70 - 130	106	70 - 130	<0.40	ug/L	NC	30		
5491544	Trichloroethylene	2018/04/21	100	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
5491544	Trichlorofluoromethane (FREON 11)	2018/04/21	97	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
5491544	Vinyl Chloride	2018/04/21	145 (2)	70 - 130	90	70 - 130	<0.20	ug/L	NC	30		
5491942	Nitrate (N)	2018/04/21	100	80 - 120	102	80 - 120	<0.10	mg/L	NC	20		
5491942	Nitrite (N)	2018/04/21	100	80 - 120	101	80 - 120	<0.010	mg/L	NC	20		
5492431	Dissolved Aluminum (Al)	2018/04/19	97	80 - 120	97	80 - 120	<0.0050	mg/L				
5492431	Dissolved Antimony (Sb)	2018/04/19	103	80 - 120	102	80 - 120	<0.00050	mg/L	NC	20		
5492431	Dissolved Arsenic (As)	2018/04/19	99	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
5492431	Dissolved Barium (Ba)	2018/04/19	100	80 - 120	100	80 - 120	<0.0020	mg/L	0.94	20		
5492431	Dissolved Beryllium (Be)	2018/04/19	101	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20		
5492431	Dissolved Boron (B)	2018/04/19	96	80 - 120	97	80 - 120	<0.010	mg/L	4.9	20		
5492431	Dissolved Cadmium (Cd)	2018/04/19	101	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
5492431	Dissolved Calcium (Ca)	2018/04/19	NC	80 - 120	97	80 - 120	<0.20	mg/L				
5492431	Dissolved Chromium (Cr)	2018/04/19	97	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
5492431	Dissolved Cobalt (Co)	2018/04/19	97	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
5492431	Dissolved Copper (Cu)	2018/04/19	98	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
5492431	Dissolved Iron (Fe)	2018/04/19	100	80 - 120	101	80 - 120	<0.10	mg/L				
5492431	Dissolved Lead (Pb)	2018/04/19	97	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
5492431	Dissolved Magnesium (Mg)	2018/04/19	NC	80 - 120	100	80 - 120	<0.050	mg/L				
5492431	Dissolved Manganese (Mn)	2018/04/19	98	80 - 120	100	80 - 120	<0.0020	mg/L				
5492431	Dissolved Molybdenum (Mo)	2018/04/19	102	80 - 120	101	80 - 120	<0.00050	mg/L	NC	20		
5492431	Dissolved Nickel (Ni)	2018/04/19	96	80 - 120	100	80 - 120	<0.0010	mg/L	NC	20		
5492431	Dissolved Phosphorus (P)	2018/04/19	104	80 - 120	107	80 - 120	<0.10	mg/L				
5492431	Dissolved Potassium (K)	2018/04/19	100	80 - 120	99	80 - 120	<0.20	mg/L				
5492431	Dissolved Selenium (Se)	2018/04/19	98	80 - 120	98	80 - 120	<0.0020	mg/L	NC	20		
5492431	Dissolved Silicon (Si)	2018/04/19	96	80 - 120	95	80 - 120	<0.050	mg/L				

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QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5492431	Dissolved Silver (Ag)	2018/04/19	98	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
5492431	Dissolved Sodium (Na)	2018/04/19	NC	80 - 120	100	80 - 120	<0.10	mg/L	0.62	20		
5492431	Dissolved Strontium (Sr)	2018/04/19	97	80 - 120	98	80 - 120	<0.0010	mg/L				
5492431	Dissolved Thallium (Tl)	2018/04/19	96	80 - 120	98	80 - 120	<0.000050	mg/L	NC	20		
5492431	Dissolved Titanium (Ti)	2018/04/19	96	80 - 120	95	80 - 120	<0.0050	mg/L				
5492431	Dissolved Uranium (U)	2018/04/19	98	80 - 120	99	80 - 120	<0.00010	mg/L	2.7	20		
5492431	Dissolved Vanadium (V)	2018/04/19	100	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
5492431	Dissolved Zinc (Zn)	2018/04/19	98	80 - 120	101	80 - 120	<0.0050	mg/L	NC	20		
5492431	Dissolved Zirconium (Zr)	2018/04/19	103	80 - 120	101	80 - 120	<0.0010	mg/L				
5492577	Chromium (VI)	2018/04/23	97	80 - 120	99	80 - 120	<0.50	ug/L	NC	20		
5492666	Nitrate (N)	2018/04/20	101	80 - 120	101	80 - 120	<0.10	mg/L	7.7	20		
5492666	Nitrite (N)	2018/04/20	103	80 - 120	103	80 - 120	<0.010	mg/L	NC	20		
5492668	Nitrate (N)	2018/04/21	100	80 - 120	97	80 - 120	<0.10	mg/L	2.6	20		
5492668	Nitrite (N)	2018/04/21	102	80 - 120	95	80 - 120	<0.010	mg/L	NC	20		
5492686	Turbidity	2018/04/19			101	85 - 115	<0.1	NTU	1.0	20		
5492700	Dissolved Organic Carbon	2018/04/20	94	80 - 120	99	80 - 120	<0.50	mg/L	1.2	20		
5492745	Aroclor 1242	2018/04/20					<0.05	ug/L	NC	30		
5492745	Aroclor 1248	2018/04/20					<0.05	ug/L	NC	30		
5492745	Aroclor 1254	2018/04/20					<0.05	ug/L	NC	30		
5492745	Aroclor 1260	2018/04/20	121	60 - 130	72	60 - 130	<0.05	ug/L	NC	30		
5492745	Total PCB	2018/04/20	121	60 - 130	72	60 - 130	<0.05	ug/L	NC	40		
5492793	Alkalinity (Total as CaCO3)	2018/04/20			96	85 - 115	<1.0	mg/L	0.51	20		
5492795	pH	2018/04/20			102	98 - 103			0.99	N/A		
5492799	Conductivity	2018/04/20			101	85 - 115	<1.0	umho/cm	0.44	25		
5492800	Fluoride (F-)	2018/04/20	105	80 - 120	102	80 - 120	<0.10	mg/L	0.47	20		
5492814	Dissolved Chloride (Cl)	2018/04/22	115	80 - 120	103	80 - 120	<1.0	mg/L	2.4	20		
5492819	Dissolved Sulphate (SO4)	2018/04/20	84	75 - 125	103	80 - 120	<1.0	mg/L	1.1	20		
5492820	Orthophosphate (P)	2018/04/20	114	75 - 125	100	80 - 120	<0.010	mg/L	17	25		
5493085	1,2,4-Trichlorobenzene	2018/04/23			72	40 - 130	<0.1	ug/L	14	30		
5493085	1-Methylnaphthalene	2018/04/23			78	50 - 130	<0.2	ug/L	13	30		

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QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5493085	2,4,5-Trichlorophenol	2018/04/23			99	50 - 130	<0.2	ug/L	9.8	30		
5493085	2,4,6-Trichlorophenol	2018/04/23			92	50 - 130	<0.2	ug/L	11	30		
5493085	2,4-Dichlorophenol	2018/04/23			85	50 - 130	<0.1	ug/L	9.0	30		
5493085	2,4-Dimethylphenol	2018/04/23			36	30 - 130	<0.5	ug/L	17	30		
5493085	2,4-Dinitrophenol	2018/04/23			126	30 - 130	<2	ug/L	1.6	30		
5493085	2,4-Dinitrotoluene	2018/04/23			93	50 - 130	<0.3	ug/L	0.47	30		
5493085	2,6-Dinitrotoluene	2018/04/23			91	50 - 130	<0.3	ug/L	4.9	30		
5493085	2-Chlorophenol	2018/04/23			73	50 - 130	<0.1	ug/L	12	30		
5493085	2-Methylnaphthalene	2018/04/23			77	50 - 130	<0.2	ug/L	13	30		
5493085	3,3'-Dichlorobenzidine	2018/04/23			93	30 - 130	<0.5	ug/L	8.6	30		
5493085	Acenaphthene	2018/04/23			91	50 - 130	<0.2	ug/L	11	30		
5493085	Acenaphthylene	2018/04/23			88	50 - 130	<0.2	ug/L	11	30		
5493085	Anthracene	2018/04/23			90	50 - 130	<0.05	ug/L	2.8	30		
5493085	Benzo(a)anthracene	2018/04/23			106	50 - 130	<0.05	ug/L	0.14	30		
5493085	Benzo(a)pyrene	2018/04/23			103	50 - 130	<0.01	ug/L	0.63	30		
5493085	Benzo(b/j)fluoranthene	2018/04/23			107	50 - 130	<0.05	ug/L	3.7	30		
5493085	Benzo(g,h,i)perylene	2018/04/23			100	50 - 130	<0.05	ug/L	4.4	30		
5493085	Benzo(k)fluoranthene	2018/04/23			108	50 - 130	<0.05	ug/L	7.3	30		
5493085	Biphenyl	2018/04/23			76	50 - 130	<0.1	ug/L	11	30		
5493085	Bis(2-chloroethyl)ether	2018/04/23			79	50 - 130	<0.5	ug/L	11	30		
5493085	Bis(2-chloroisopropyl)ether	2018/04/23			80	50 - 130	<0.5	ug/L	12	30		
5493085	Bis(2-ethylhexyl)phthalate	2018/04/23			106	50 - 130	<1	ug/L	2.2	30		
5493085	Chrysene	2018/04/23			110	50 - 130	<0.05	ug/L	0.29	30		
5493085	Dibenz(a,h)anthracene	2018/04/23			95	50 - 130	<0.1	ug/L	3.9	30		
5493085	Diethyl phthalate	2018/04/23			97	50 - 130	<0.1	ug/L	1.7	30		
5493085	Dimethyl phthalate	2018/04/23			95	50 - 130	<0.1	ug/L	5.9	30		
5493085	Fluoranthene	2018/04/23			104	50 - 130	<0.2	ug/L	0.18	30		
5493085	Fluorene	2018/04/23			92	50 - 130	<0.2	ug/L	8.2	30		
5493085	Indeno(1,2,3-cd)pyrene	2018/04/23			89	50 - 130	<0.1	ug/L	3.0	30		
5493085	Naphthalene	2018/04/23			77	50 - 130	<0.2	ug/L	14	30		
5493085	p-Chloroaniline	2018/04/23			60	30 - 130	<1	ug/L	0.050	30		

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Maxxam Job #: B887445
Report Date: 2018/04/27

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5493085	Pentachlorophenol	2018/04/23			86	50 - 130	<0.1	ug/L	1.8	30		
5493085	Phenanthrene	2018/04/23			94	50 - 130	<0.1	ug/L	1.7	30		
5493085	Phenol	2018/04/23			34	30 - 130	<0.5	ug/L	12	30		
5493085	Pyrene	2018/04/23			108	50 - 130	<0.05	ug/L	0.13	30		
5493459	Mercury (Hg)	2018/04/20	102	75 - 125	97	80 - 120	<0.1	ug/L	NC	20		
5493468	WAD Cyanide (Free)	2018/04/20	104	80 - 120	103	80 - 120	<1	ug/L	NC	20		
5493653	F2 (C10-C16 Hydrocarbons)	2018/04/21	110	50 - 130	105	60 - 130	<100	ug/L	NC	30		
5493653	F3 (C16-C34 Hydrocarbons)	2018/04/21	117	50 - 130	113	60 - 130	<200	ug/L	NC	30		
5493653	F4 (C34-C50 Hydrocarbons)	2018/04/21	111	50 - 130	106	60 - 130	<200	ug/L	NC	30		
5494136	Aroclor 1242	2018/04/20					<0.05	ug/L	NC	30		
5494136	Aroclor 1248	2018/04/20					<0.05	ug/L	NC	30		
5494136	Aroclor 1254	2018/04/20					<0.05	ug/L	NC	30		
5494136	Aroclor 1260	2018/04/20	84	60 - 130	79	60 - 130	<0.05	ug/L	NC	30		
5494136	Total PCB	2018/04/20	84	60 - 130	79	60 - 130	<0.05	ug/L	NC	40		
5494187	Dissolved Chloride (Cl)	2018/04/23	106	80 - 120	104	80 - 120	<1.0	mg/L	0.47	20		
5494205	Dissolved Sulphate (SO4)	2018/04/23	NC	75 - 125	106	80 - 120	<1.0	mg/L	0.068	20		
5494207	Orthophosphate (P)	2018/04/22	118	75 - 125	102	80 - 120	<0.010	mg/L	NC	25		
5496390	Total Ammonia-N	2018/04/24	95	75 - 125	101	80 - 120	<0.050	mg/L	NC	20		
5496398	Total Ammonia-N	2018/04/24	96	75 - 125	100	80 - 120	<0.050	mg/L	NC	20		
5496415	Total Organic Carbon (TOC)	2018/04/23	95	80 - 120	97	80 - 120	<0.50	mg/L	3.8	20		
5496423	Total Suspended Solids	2018/04/23					<10	mg/L	NC	25	98	85 - 115
5496749	Total Ammonia-N	2018/04/24	94	75 - 125	100	80 - 120	<0.050	mg/L	NC	20		
5497038	Total Dissolved Solids	2018/04/23					<10	mg/L	0	25	98	90 - 110
5497806	Mercury (Hg)	2018/04/24	108	75 - 125	98	80 - 120	<0.1	ug/L	NC	20		
5497827	Total Suspended Solids	2018/04/24					<10	mg/L	NC	25	96	85 - 115
5500182	Acidity	2018/04/25	96	80 - 120	102	80 - 120	<5.0	mg/L	8.1	25		
5501523	Conductivity	2018/04/26			101	85 - 115	<1.0	umho/cm	0.53	25		
5502322	Dissolved Aluminum (Al)	2018/04/26	97	80 - 120	99	80 - 120	<0.0050	mg/L	NC	20		
5502322	Dissolved Antimony (Sb)	2018/04/26	102	80 - 120	102	80 - 120	<0.00050	mg/L				
5502322	Dissolved Arsenic (As)	2018/04/26	100	80 - 120	99	80 - 120	<0.0010	mg/L				

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A Bureau Veritas Group Company

Maxxam Job #: B887445
Report Date: 2018/04/27

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5502322	Dissolved Barium (Ba)	2018/04/26	99	80 - 120	102	80 - 120	<0.0020	mg/L				
5502322	Dissolved Beryllium (Be)	2018/04/26	99	80 - 120	100	80 - 120	<0.00050	mg/L				
5502322	Dissolved Boron (B)	2018/04/26	98	80 - 120	98	80 - 120	<0.010	mg/L	1.6	20		
5502322	Dissolved Cadmium (Cd)	2018/04/26	99	80 - 120	99	80 - 120	<0.00010	mg/L	NC	20		
5502322	Dissolved Calcium (Ca)	2018/04/26	NC	80 - 120	102	80 - 120	<0.20	mg/L	0.89	20		
5502322	Dissolved Chromium (Cr)	2018/04/26	98	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
5502322	Dissolved Cobalt (Co)	2018/04/26	98	80 - 120	99	80 - 120	<0.00050	mg/L				
5502322	Dissolved Copper (Cu)	2018/04/26	99	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20		
5502322	Dissolved Iron (Fe)	2018/04/26	100	80 - 120	102	80 - 120	<0.10	mg/L	NC	20		
5502322	Dissolved Lead (Pb)	2018/04/26	96	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
5502322	Dissolved Magnesium (Mg)	2018/04/26	NC	80 - 120	100	80 - 120	<0.050	mg/L	0.18	20		
5502322	Dissolved Manganese (Mn)	2018/04/26	98	80 - 120	99	80 - 120	<0.0020	mg/L	0.81	20		
5502322	Dissolved Molybdenum (Mo)	2018/04/26	103	80 - 120	101	80 - 120	<0.00050	mg/L				
5502322	Dissolved Nickel (Ni)	2018/04/26	97	80 - 120	99	80 - 120	<0.0010	mg/L				
5502322	Dissolved Phosphorus (P)	2018/04/26	105	80 - 120	113	80 - 120	<0.10	mg/L				
5502322	Dissolved Potassium (K)	2018/04/26	98	80 - 120	100	80 - 120	<0.20	mg/L	3.2	20		
5502322	Dissolved Selenium (Se)	2018/04/26	100	80 - 120	101	80 - 120	<0.0020	mg/L				
5502322	Dissolved Silicon (Si)	2018/04/26	95	80 - 120	98	80 - 120	<0.050	mg/L				
5502322	Dissolved Silver (Ag)	2018/04/26	99	80 - 120	99	80 - 120	<0.00010	mg/L				
5502322	Dissolved Sodium (Na)	2018/04/26	97	80 - 120	99	80 - 120	<0.10	mg/L	0.56	20		
5502322	Dissolved Strontium (Sr)	2018/04/26	NC	80 - 120	97	80 - 120	<0.0010	mg/L				
5502322	Dissolved Thallium (Tl)	2018/04/26	96	80 - 120	96	80 - 120	<0.000050	mg/L				
5502322	Dissolved Titanium (Ti)	2018/04/26	102	80 - 120	103	80 - 120	<0.0050	mg/L				
5502322	Dissolved Uranium (U)	2018/04/26	99	80 - 120	98	80 - 120	<0.00010	mg/L				
5502322	Dissolved Vanadium (V)	2018/04/26	101	80 - 120	100	80 - 120	<0.00050	mg/L				
5502322	Dissolved Zinc (Zn)	2018/04/26	97	80 - 120	99	80 - 120	<0.0050	mg/L	NC	20		

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Maxxam Job #: B887445
Report Date: 2018/04/27

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5502322	Dissolved Zirconium (Zr)	2018/04/26	103	80 - 120	102	80 - 120	<0.0010	mg/L				

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 above the upper control limit for the matrix spike. The recovery was in control for the Spiked Blank. This may represent a high bias in some results for this specific analyte. For results that were not detected (ND), this potential bias has no impact.

(2) The recovery was above the upper control limit for the matrix spike. The recovery was in control for the Spiked Blank. This may represent a high bias in some results for this specific analyte. For results that were not detected (ND), this potential bias has no impact.

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Maxxam Job #: B887445
Report Date: 2018/04/27

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WELL
Sampler Initials: RD

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 Service Specialist

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

Gina Thompson, Inorganics General Chemistry Supervisor

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.

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ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

Page	CHAIN OF CUSTODY #
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COOLER OBSERVATIONS:

MAXXAM JOB#: B887445

COOLER ID	CUSTODY SEAL PRESENT (YES / NO)	CUSTODY SEAL INTACT (YES / NO)	ICE PRESENT (YES / NO)	TEMP 1	TEMP 2	TEMP 3
1	✓ /	✓ /	✓ /	-1	4	5
2	✓ /	✓ /	✓ /	0	2	1
3	✓ /	✓ /	✓ /	3	1	4
4	✓ /	✓ /	✓ /	1	-1	0
5	✓ /	✓ /	✓ /	5	-1	2

COOLER ID	CUSTODY SEAL PRESENT (YES / NO)	CUSTODY SEAL INTACT (YES / NO)	ICE PRESENT (YES / NO)	TEMP 1	TEMP 2	TEMP 3

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
[signature]	Gurnk	2018/04/12	12:38

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ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY # C# 657877-01-01

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COOLER OBSERVATIONS:

MAXXAM JOB#: B887445

	YES	NO	COOLER ID			
CUSTODY SEAL						
PRESENT	✓		TEMP	2 (1)	2 (2)	3 (3)
INTACT	✓					
ICE PRESENT	✓					
CUSTODY SEAL						
PRESENT	✓		TEMP	3 (1)	3 (2)	3 (3)
INTACT	✓					
ICE PRESENT	✓					
CUSTODY SEAL						
PRESENT	✓		TEMP	4 (1)	3 (2)	3 (3)
INTACT	✓					
ICE PRESENT	✓					
CUSTODY SEAL						
PRESENT	✓		TEMP	3 (1)	2 (2)	3 (3)
INTACT	✓					
ICE PRESENT	✓					
CUSTODY SEAL						
PRESENT			TEMP	(1)	(2)	(3)
INTACT						
ICE PRESENT						
CUSTODY SEAL						
PRESENT			TEMP	(1)	(2)	(3)
INTACT						
ICE PRESENT						
CUSTODY SEAL						
PRESENT			TEMP	(1)	(2)	(3)
INTACT						
ICE PRESENT						
CUSTODY SEAL						
PRESENT			TEMP	(1)	(2)	(3)
INTACT						
ICE PRESENT						
CUSTODY SEAL						
PRESENT			TEMP	(1)	(2)	(3)
INTACT						
ICE PRESENT						

	YES	NO	COOLER ID			
CUSTODY SEAL						
PRESENT			TEMP	(1)	(2)	(3)
INTACT						
ICE PRESENT						
CUSTODY SEAL						
PRESENT			TEMP	(1)	(2)	(3)
INTACT						
ICE PRESENT						
CUSTODY SEAL						
PRESENT			TEMP	(1)	(2)	(3)
INTACT						
ICE PRESENT						
CUSTODY SEAL						
PRESENT			TEMP	(1)	(2)	(3)
INTACT						
ICE PRESENT						
CUSTODY SEAL						
PRESENT			TEMP	(1)	(2)	(3)
INTACT						
ICE PRESENT						
CUSTODY SEAL						
PRESENT			TEMP	(1)	(2)	(3)
INTACT						
ICE PRESENT						
CUSTODY SEAL						
PRESENT			TEMP	(1)	(2)	(3)
INTACT						
ICE PRESENT						
CUSTODY SEAL						
PRESENT			TEMP	(1)	(2)	(3)
INTACT						
ICE PRESENT						

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
BRENDA WOODWARD	Brenda Woodward	2018/04/18	08:30

18-Apr-18 08:30
Deepthi Shaji
B887445

URE ENV-902

Presence of Visible Particulate/Sediment

Maxxam Analytics
CAM FCD-01013/5
Page 1 of 1

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

Bottle Types

			Inorganics					Organics											Hydrocarbons							Volatiles				Other
	Sample ID	All	CrVI	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	F4G	VOC Vial 1	VOC Vial 2	VOC Vial 3	VOC Vial 4	
1	WG-16900764-20180417-RD03	15																												
2																														
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														

Comments: except DISM, NCMC and chrom VI bottles.

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) Pardeep / Pardeep K. Pareed

IMMEDIATE ATTENTION

Maxxam

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

STAT

18-Apr-18 08:30
Deepthi Shaji
B887445

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Only:

Bottle Order #: 857877

URE ENV-902

COC #: C#657877-01-01

Project Manager: Deepthi Shaji

INVOICE INFORMATION:		REPORT INFORMATION(if differs from invoice):		PROJECT INFORMATION:	
Company Name:	#9197 Stantec Consulting Ltd	Company Name:	#18379 Stantec Consulting Ltd	Quotation #:	B48218
Contact Name:	Accounts Payable	Contact Name:	Report - 160900764	Task #:	200.500
Address:	300 Hagey Blvd Suite 100	Address:		Project #:	160900764
	Waterloo ON N2L 0A4		ON	Profit Centre:	1609
Phone:	(519) 579-4410 x Fax: (519) 579-6733 x	Phone:	Fax:	Site #:	Clarington TS - Monitoring Wel
Email:	accounts.payable.invoices@stantec.com	Email:	aaron.warkentin@stantec.com, jamie.koch@stantec.co	Sampled By:	Ryan Dag

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

Regulation 153 (2011): [X] Table 1 [ ] Table 2 [ ] Table 3 [ ] Table ___ [ ] Res/Park [ ] Ind/Comm [ ] Agri/Other [ ] Medium/Fine [ ] Coarse [ ] For RSC

Other Regulations: [ ] CCME [ ] Reg 558 [ ] MISA [ ] PWQO [ ] Other ___ [ ] Sanitary Sewer Bylaw [ ] Storm Sewer Bylaw Municipality ___

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

Regular (Standard) TAT: [X]
(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): Metals (Hg/Cr VI)	Acidity	Cr (VI) & Free CN	Fluoride & Turbidity	Mercury & TOC	TDS & TSS	RCAp - Comprehensive - Field Filter	Reg 153 PCBs	Reg 153 VOCs & F1-F4	SVOCs	Lab Filtered SVOCs	# of Bottles	Comments
1		WG-160900764-201804 17-RD01	April 17/18	1250	GW	Y	X	X	X	X	X	X	X	X	X		18	
2		WG-160900764-201804 17-RD01A		1250	GW	Y										X	2	
3		WG-160900764-201804 17-RD02		1133	GW	Y	X	X	X	X	X	X	X	X	X		18	
4		WG-160900764-201804 17-RD02A		1133	GW	Y										X	2	
5		WG-160900764-201804 17-RD03		1434	GW	Y	X	X	X	X	X	X	X	X	X		18	
6		WG-160900764-201804 17-RD03A		1434	GW	Y										X	2	
7		WG-160900764-201804 17-RD04		1503	GW	Y	X	X	X	X	X	X	X	X	X		18	
8		WG-160900764-201804 17-RD04A		1503	GW	Y										X	2	
9		WG-160900764-201804___			GW													
10		WG-160900764-201804___			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			
	18/04/17	1900	[illegible]	18/04/18	08:30		Time Sensitive	Temperature (°C) on Recei	Custody Seal Present	Yes
			[illegible]	18/04/18	12:12			See ACTR	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

See ACTR

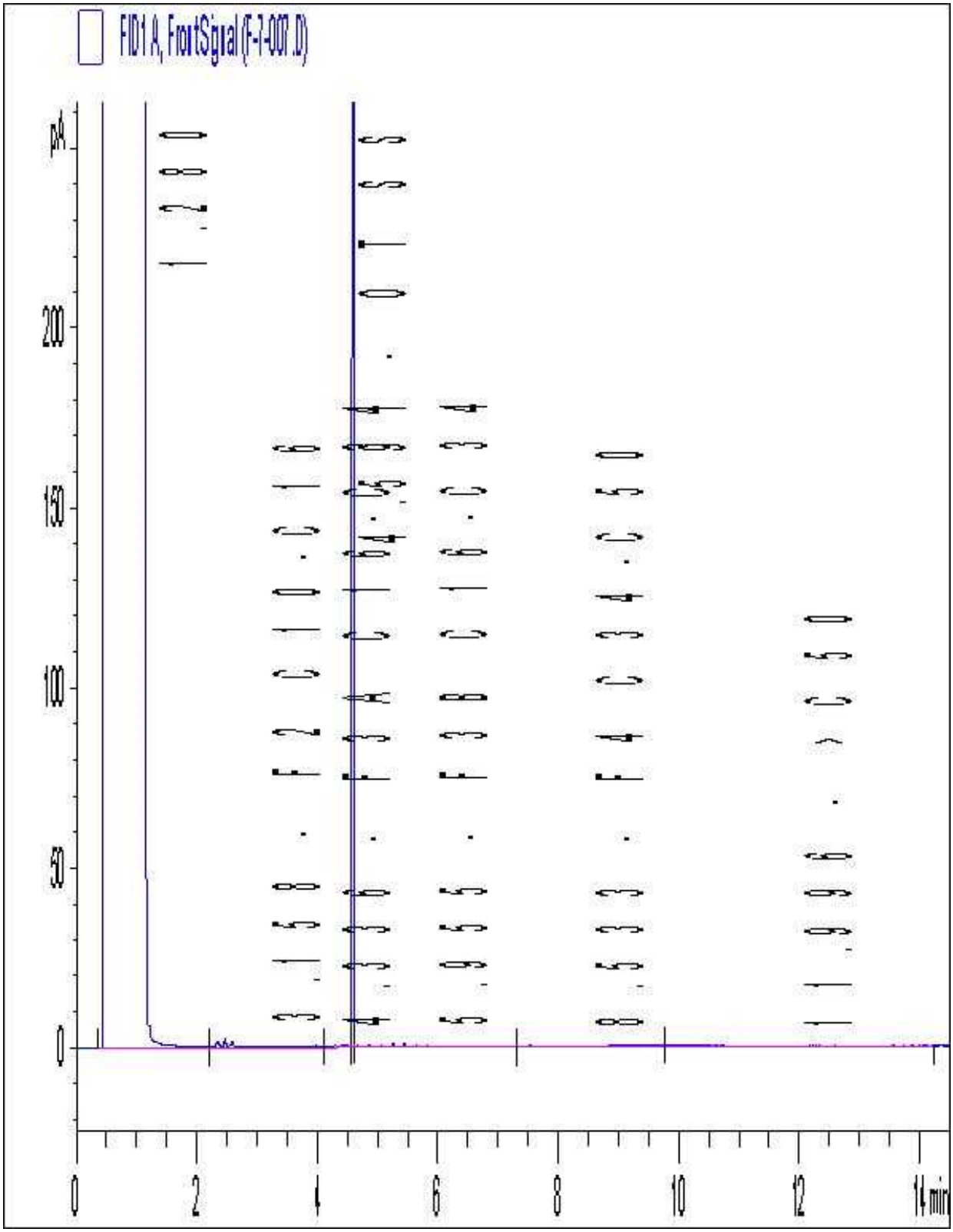
REC'D IN PORT HOPE
MWH 430 793

Maxxam Analytics International Corporation o/a Maxxam Analytics

Maxxam Job #: B887445
Report Date: 2018/04/27
Maxxam Sample: GME303

Stantec Consulting Ltd
Client Project #: 160900764
Project name: CLARINGTON TS - MONITORING WELL
Client ID: WG-160900764-20180417-RD01

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

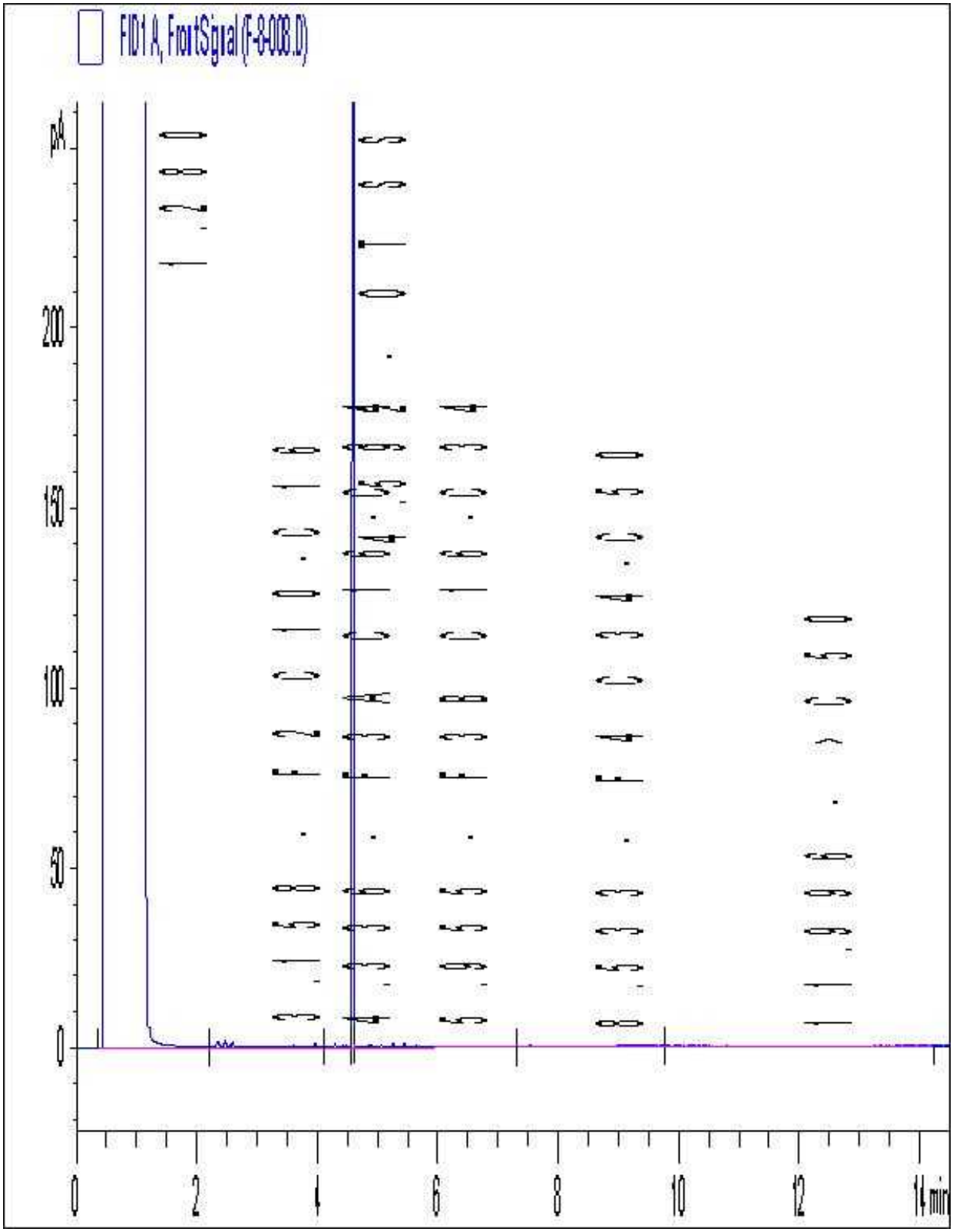


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B887445
Report Date: 2018/04/27
Maxxam Sample: GME305

Stantec Consulting Ltd
Client Project #: 160900764
Project name: CLARINGTON TS - MONITORING WELL
Client ID: WG-160900764-20180417-RD02

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

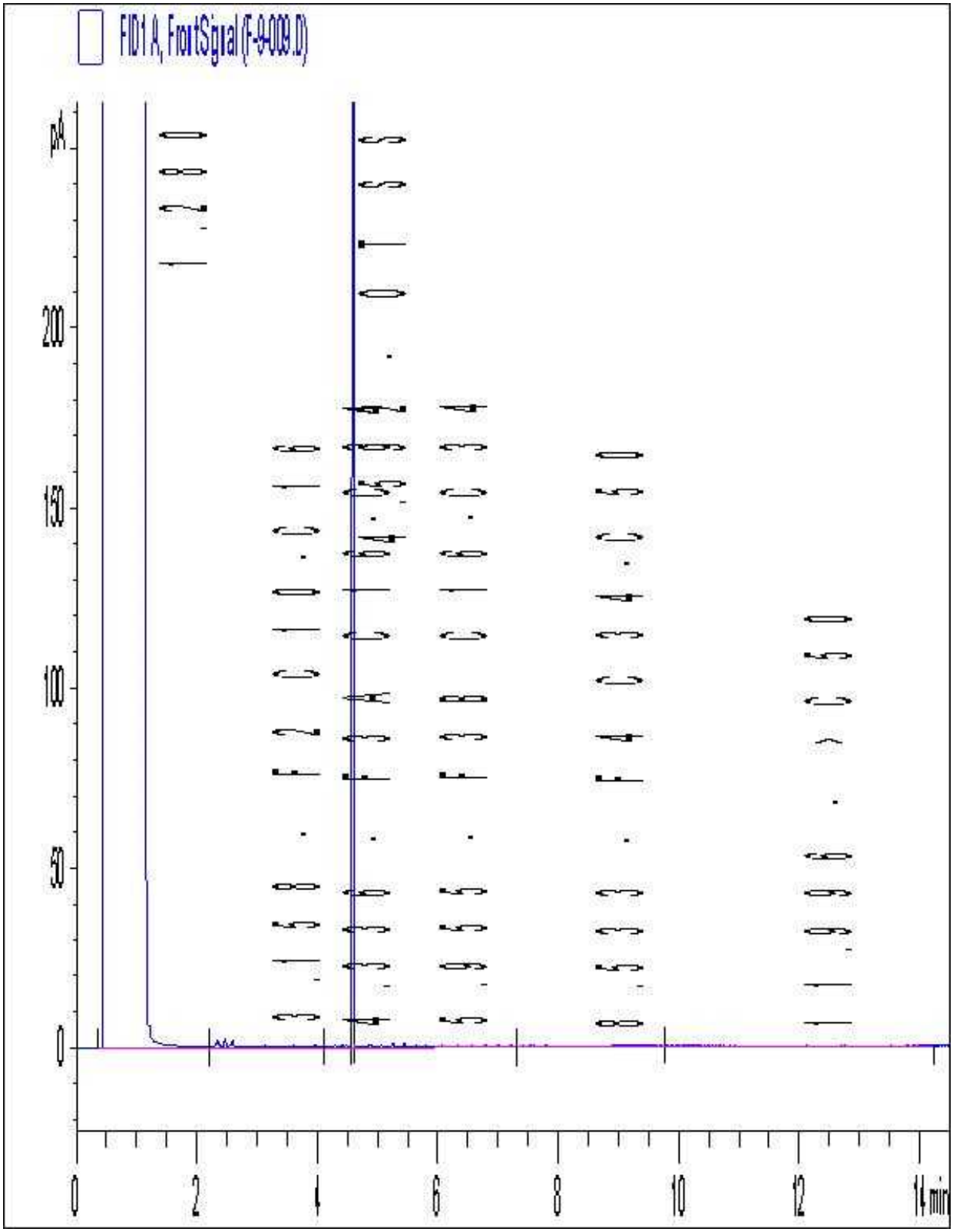


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B887445
Report Date: 2018/04/27
Maxxam Sample: GME305 Lab-Dup

Stantec Consulting Ltd
Client Project #: 160900764
Project name: CLARINGTON TS - MONITORING WELL
Client ID: WG-160900764-20180417-RD02

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

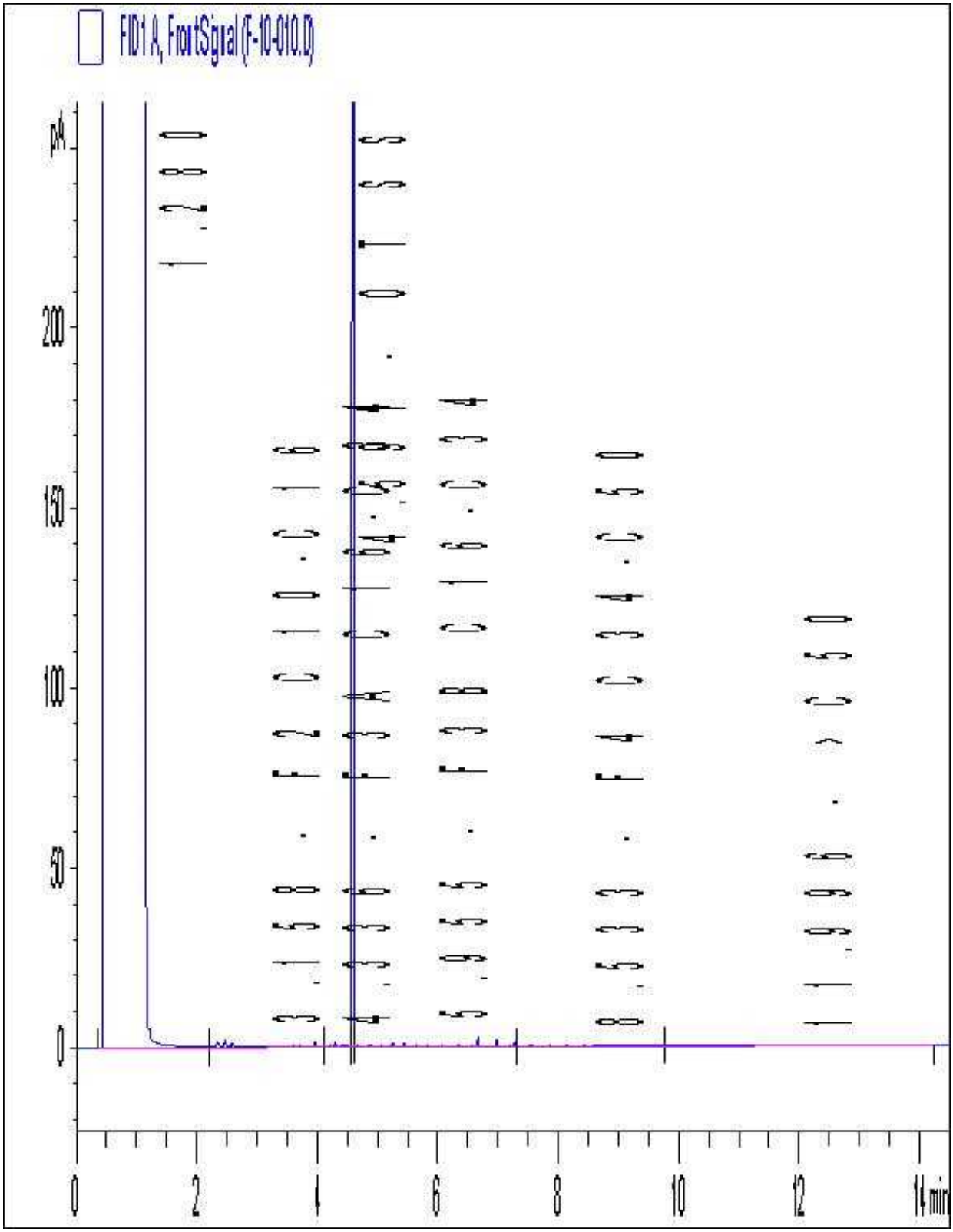


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B887445
Report Date: 2018/04/27
Maxxam Sample: GME307

Stantec Consulting Ltd
Client Project #: 160900764
Project name: CLARINGTON TS - MONITORING WELL
Client ID: WG-160900764-20180417-RD03

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

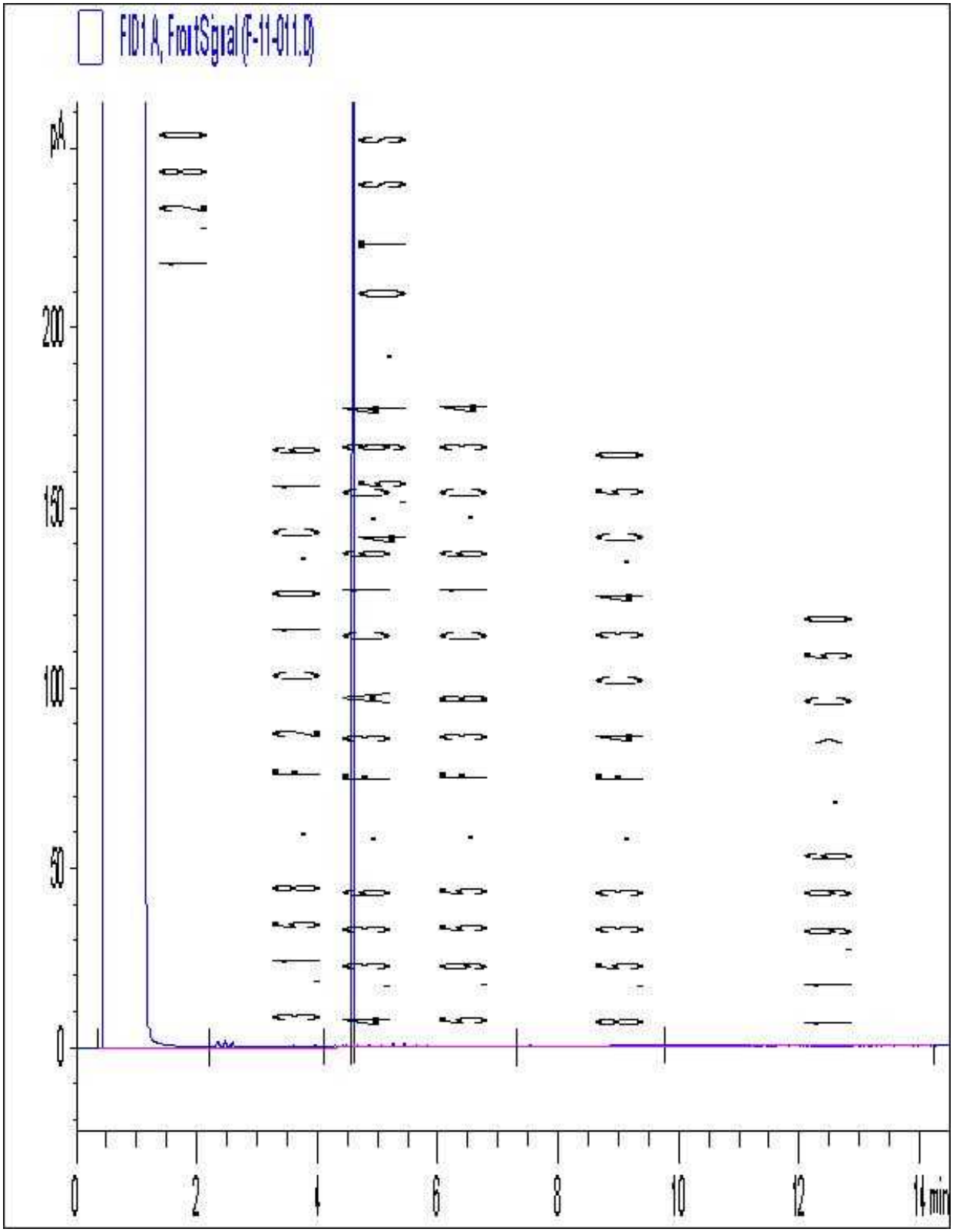


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B887445
Report Date: 2018/04/27
Maxxam Sample: GME309

Stantec Consulting Ltd
Client Project #: 160900764
Project name: CLARINGTON TS - MONITORING WELL
Client ID: WG-160900764-20180417-RD04

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.