Maxxam
A Bureau Veritas Group Company

Your Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
Your C.O.C. #: 686533-01-01

Attention: Report - 160900764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2018/10/18
Report #: R5445905
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B8Q8068
Received: 2018/10/11, 08:30

Sample Matrix: Water
Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	12	N/A	2018/10/17	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	12	2018/10/15	2018/10/17	CAM SOP-00301	EPA 8270 m
Acidity (CaCO3) in water (1)	5	N/A	2018/10/17		SM 22 2310
Alkalinity	5	N/A	2018/10/13	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	5	N/A	2018/10/15	CAM SOP-00102	APHA 4500-CO2 D
1,3-Dichloropropene Sum	5	N/A	2018/10/16		EPA 8260C m
Chloride by Automated Colourimetry	5	N/A	2018/10/12	CAM SOP-00463	EPA 325.2 m
Conductivity	5	N/A	2018/10/13	CAM SOP-00414	SM 23 2510 m
Chromium (VI) in Water	5	N/A	2018/10/16	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	2	N/A	2018/10/12	CAM SOP-00457	OMOE E3015 m
Free (WAD) Cyanide	3	N/A	2018/10/15	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (2)	4	N/A	2018/10/13	CAM SOP-00446	SM 23 5310 B m
Dissolved Organic Carbon (DOC) (2)	1	N/A	2018/10/14	CAM SOP-00446	SM 23 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (3)	5	2018/10/12	2018/10/15	CAM SOP-00316	CCME PHC-CWS m
Fluoride	5	2018/10/11	2018/10/13	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	5	N/A	2018/10/17	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	3	2018/10/16	2018/10/16	CAM SOP-00453	EPA 7470A m
Mercury	2	2018/10/16	2018/10/17	CAM SOP-00453	EPA 7470A m
Dissolved Metals by ICPMS	5	N/A	2018/10/16	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	5	N/A	2018/10/17		
Anion and Cation Sum	5	N/A	2018/10/17		
Total Ammonia-N	5	N/A	2018/10/17	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (4)	2	N/A	2018/10/13	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Nitrate (NO3) and Nitrite (NO2) in Water (4)	3	N/A	2018/10/15	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	1	2018/10/13	2018/10/14	CAM SOP-00309	EPA 8082A m
Polychlorinated Biphenyl in Water	4	2018/10/15	2018/10/16	CAM SOP-00309	EPA 8082A m
pH	5	N/A	2018/10/13	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	5	N/A	2018/10/15	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	5	N/A	2018/10/17		

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

Maxxam
A Bureau Veritas Group Company

Your Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
Your C.O.C. #: 686533-01-01

Attention: Report - 160900764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2018/10/18
Report #: R5445905
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B8Q8068
Received: 2018/10/11, 08:30

Sample Matrix: Water
Samples Received: 12

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Sat. pH and Langelier Index (@ 4C)	5	N/A	2018/10/17		
Sulphate by Automated Colourimetry	5	N/A	2018/10/12	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	5	N/A	2018/10/17		
Total Dissolved Solids	5	2018/10/15	2018/10/16	CAM SOP-00428	SM 23 2540C m
Total Organic Carbon (TOC) (5)	5	N/A	2018/10/13	CAM SOP-00446	SM 23 5310B m
Total Suspended Solids	5	2018/10/13	2018/10/15	CAM SOP-00428	SM 23 2540D m
Turbidity	2	N/A	2018/10/11	CAM SOP-00417	SM 23 2130 B m
Turbidity	3	N/A	2018/10/12	CAM SOP-00417	SM 23 2130 B m
Volatile Organic Compounds and F1 PHCs	5	N/A	2018/10/15	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. Where applicable, unless otherwise noted, Measurement Uncertainty has not been accounted for when stating conformity to the referenced standard.

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. Maxxam is not responsible for the accuracy or any data impacts, that result from the information provided by the customer or their agent.

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. When sampling is not conducted by Maxxam, results relate to the supplied samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

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

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

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

Maxxam
A Bureau Veritas Group Company

Your Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
Your C.O.C. #: 686533-01-01

Attention: Report - 160900764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2018/10/18
Report #: R5445905
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B8Q8068
Received: 2018/10/11, 08:30

(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

Colby Coutu
Project Manager Assistant
18 Oct 2018 12:27:27

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Ronklin Gracian, Project Manager
Email: RGracian@maxxam.ca
Phone# (905) 817-5700
==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation 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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		HZK189	HZK191		HZK193		
Sampling Date		2018/10/10 10:00	2018/10/10 10:24		2018/10/10 12:20		
COC Number		686533-01-01	686533-01-01		686533-01-01		
	UNITS	**WG-160900764-20181010-KR04**	**WG-160900764-20181010-KR03**	**QC Batch**	**WG-160900764-20181010-KR05**	**RDL**	**QC Batch**
Calculated Parameters							
Anion Sum	me/L	7.19	11.3	5778186	8.02	N/A	5778186
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	130	370	5777770	230	1.0	5777770
Calculated TDS	mg/L	450	620	5777517	430	1.0	5777517
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.5	1.4	5777770	2.0	1.0	5777770
Cation Sum	me/L	7.18	11.4	5778186	7.95	N/A	5778186
Hardness (CaCO3)	mg/L	140	520	5777516	340	1.0	5777516
Ion Balance (% Difference)	%	0.0700	0.810	5778185	0.440	N/A	5778185
Langelier Index (@ 20C)	N/A	0.242	0.888	5777792	0.690		5777792
Langelier Index (@ 4C)	N/A	-0.00700	0.641	5777793	0.442		5777793
Saturation pH (@ 20C)	N/A	7.84	6.71	5777792	7.27		5777792
Saturation pH (@ 4C)	N/A	8.09	6.95	5777793	7.52		5777793
Inorganics							
Total Ammonia-N	mg/L	0.056	0.064	5780567	<0.050	0.050	5780572
Conductivity	umho/cm	700	1000	5779036	750	1.0	5779036
Dissolved Organic Carbon	mg/L	1.0	1.9	5779338	0.80	0.50	5778889
Orthophosphate (P)	mg/L	<0.010	<0.010	5779337	0.049	0.010	5779337
pH	pH	8.08	7.59	5779042	7.96		5779042
Dissolved Sulphate (SO4)	mg/L	210	120	5779335	70	1.0	5779335
Alkalinity (Total as CaCO3)	mg/L	130	370	5779012	230	1.0	5779012
Dissolved Chloride (Cl-)	mg/L	7.4	48	5779330	68	1.0	5779330
Nitrite (N)	mg/L	<0.010	<0.010	5779342	<0.010	0.010	5779045
Nitrate (N)	mg/L	0.11	0.32	5779342	0.39	0.10	5779045
Nitrate + Nitrite (N)	mg/L	0.11	0.32	5779342	0.39	0.10	5779045
Metals							
Dissolved Aluminum (Al)	mg/L	<0.0050	<0.0050	5779839	<0.0050	0.0050	5779839
Dissolved Antimony (Sb)	mg/L	<0.00050	<0.00050	5779839	<0.00050	0.00050	5779839
Dissolved Arsenic (As)	mg/L	<0.0010	<0.0010	5779839	<0.0010	0.0010	5779839
Dissolved Barium (Ba)	mg/L	0.021	0.17	5779839	0.060	0.0020	5779839
Dissolved Beryllium (Be)	mg/L	<0.00050	<0.00050	5779839	<0.00050	0.00050	5779839
Dissolved Boron (B)	mg/L	0.30	0.092	5779839	0.074	0.010	5779839

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

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		HZK189	HZK191		HZK193		
Sampling Date		2018/10/10 10:00	2018/10/10 10:24		2018/10/10 12:20		
COC Number		686533-01-01	686533-01-01		686533-01-01		
	UNITS	**WG-160900764-20181010-KR04**	**WG-160900764-20181010-KR03**	**QC Batch**	**WG-160900764-20181010-KR05**	**RDL**	**QC Batch**
Dissolved Cadmium (Cd)	mg/L	<0.00010	<0.00010	5779839	<0.00010	0.00010	5779839
Dissolved Calcium (Ca)	mg/L	31	170	5779839	65	0.20	5779839
Dissolved Chromium (Cr)	mg/L	<0.0050	<0.0050	5779839	<0.0050	0.0050	5779839
Dissolved Cobalt (Co)	mg/L	<0.00050	<0.00050	5779839	<0.00050	0.00050	5779839
Dissolved Copper (Cu)	mg/L	<0.0010	<0.0010	5779839	<0.0010	0.0010	5779839
Dissolved Iron (Fe)	mg/L	<0.10	<0.10	5779839	<0.10	0.10	5779839
Dissolved Lead (Pb)	mg/L	<0.00050	<0.00050	5779839	<0.00050	0.00050	5779839
Dissolved Magnesium (Mg)	mg/L	15	23	5779839	43	0.050	5779839
Dissolved Manganese (Mn)	mg/L	<0.0020	0.0078	5779839	0.0065	0.0020	5779839
Dissolved Molybdenum (Mo)	mg/L	0.12	<0.00050	5779839	0.0059	0.00050	5779839
Dissolved Nickel (Ni)	mg/L	<0.0010	<0.0010	5779839	<0.0010	0.0010	5779839
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	5779839	<0.10	0.10	5779839
Dissolved Potassium (K)	mg/L	3.2	1.9	5779839	5.1	0.20	5779839
Dissolved Selenium (Se)	mg/L	<0.0020	<0.0020	5779839	<0.0020	0.0020	5779839
Dissolved Silicon (Si)	mg/L	3.2	6.4	5779839	5.9	0.050	5779839
Dissolved Silver (Ag)	mg/L	<0.00010	<0.00010	5779839	<0.00010	0.00010	5779839
Dissolved Sodium (Na)	mg/L	100	24	5779839	23	0.10	5779839
Dissolved Strontium (Sr)	mg/L	0.74	0.76	5779839	0.91	0.0010	5779839
Dissolved Thallium (Tl)	mg/L	<0.000050	<0.000050	5779839	<0.000050	0.000050	5779839
Dissolved Titanium (Ti)	mg/L	<0.0050	<0.0050	5779839	<0.0050	0.0050	5779839
Dissolved Uranium (U)	mg/L	0.0023	0.00090	5779839	0.0032	0.00010	5779839
Dissolved Vanadium (V)	mg/L	<0.00050	<0.00050	5779839	0.00074	0.00050	5779839
Dissolved Zinc (Zn)	mg/L	<0.0050	<0.0050	5779839	<0.0050	0.0050	5779839
Dissolved Zirconium (Zr)	mg/L	<0.0010	<0.0010	5779839	<0.0010	0.0010	5779839

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		HZK195		HZK197		
Sampling Date		2018/10/10 16:30		2018/10/10 16:23		
COC Number		686533-01-01		686533-01-01		
	UNITS	**WG-160900764-20181010-KR06**	**QC Batch**	**WG-160900764-20181010-KR07**	**RDL**	**QC Batch**
Calculated Parameters						
Anion Sum	me/L	2.11	5778186	4.60	N/A	5778186
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	94	5777770	200	1.0	5777770
Calculated TDS	mg/L	120	5777517	240	1.0	5777517
Carb. Alkalinity (calc. as CaCO3)	mg/L	2.0	5777770	2.0	1.0	5777770
Cation Sum	me/L	2.04	5778186	4.36	N/A	5778186
Hardness (CaCO3)	mg/L	44	5777516	190	1.0	5777516
Ion Balance (% Difference)	%	NC	5778185	2.67	N/A	5778185
Langelier Index (@ 20C)	N/A	-0.0500	5777792	0.428		5777792
Langelier Index (@ 4C)	N/A	-0.302	5777793	0.178		5777793
Saturation pH (@ 20C)	N/A	8.40	5777792	7.61		5777792
Saturation pH (@ 4C)	N/A	8.65	5777793	7.86		5777793
Inorganics						
Total Ammonia-N	mg/L	0.079	5780567	0.15	0.050	5780572
Conductivity	umho/cm	190	5779036	400	1.0	5779036
Dissolved Organic Carbon	mg/L	0.74	5779338	0.78	0.50	5779338
Orthophosphate (P)	mg/L	<0.010	5779337	<0.010	0.010	5779337
pH	pH	8.35	5779042	8.04		5779042
Dissolved Sulphate (SO4)	mg/L	5.3	5779335	22	1.0	5779335
Alkalinity (Total as CaCO3)	mg/L	96	5779012	200	1.0	5779012
Dissolved Chloride (Cl-)	mg/L	1.0	5779330	4.4	1.0	5779330
Nitrite (N)	mg/L	<0.010	5779045	0.020	0.010	5779342
Nitrate (N)	mg/L	<0.10	5779045	<0.10	0.10	5779342
Nitrate + Nitrite (N)	mg/L	<0.10	5779045	<0.10	0.10	5779342
Metals						
Dissolved Aluminum (Al)	mg/L	0.0072	5779839	<0.0050	0.0050	5779839
Dissolved Antimony (Sb)	mg/L	<0.00050	5779839	<0.00050	0.00050	5779839
Dissolved Arsenic (As)	mg/L	<0.0010	5779839	<0.0010	0.0010	5779839
Dissolved Barium (Ba)	mg/L	0.020	5779839	0.075	0.0020	5779839
Dissolved Beryllium (Be)	mg/L	<0.00050	5779839	<0.00050	0.00050	5779839
Dissolved Boron (B)	mg/L	0.12	5779839	0.047	0.010	5779839

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

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

RCAP - COMPREHENSIVE (WATER)

Maxxam ID		HZK195		HZK197		
Sampling Date		2018/10/10 16:30		2018/10/10 16:23		
COC Number		686533-01-01		686533-01-01		
	UNITS	**WG-160900764-20181010-KR06**	**QC Batch**	**WG-160900764-20181010-KR07**	**RDL**	**QC Batch**
Dissolved Cadmium (Cd)	mg/L	<0.00010	5779839	<0.00010	0.00010	5779839
Dissolved Calcium (Ca)	mg/L	8.9	5779839	30	0.20	5779839
Dissolved Chromium (Cr)	mg/L	<0.0050	5779839	<0.0050	0.0050	5779839
Dissolved Cobalt (Co)	mg/L	<0.00050	5779839	<0.00050	0.00050	5779839
Dissolved Copper (Cu)	mg/L	<0.0010	5779839	<0.0010	0.0010	5779839
Dissolved Iron (Fe)	mg/L	<0.10	5779839	<0.10	0.10	5779839
Dissolved Lead (Pb)	mg/L	<0.00050	5779839	<0.00050	0.00050	5779839
Dissolved Magnesium (Mg)	mg/L	5.4	5779839	28	0.050	5779839
Dissolved Manganese (Mn)	mg/L	0.0035	5779839	0.057	0.0020	5779839
Dissolved Molybdenum (Mo)	mg/L	0.0035	5779839	0.0016	0.00050	5779839
Dissolved Nickel (Ni)	mg/L	<0.0010	5779839	<0.0010	0.0010	5779839
Dissolved Phosphorus (P)	mg/L	<0.10	5779839	<0.10	0.10	5779839
Dissolved Potassium (K)	mg/L	1.8	5779839	2.1	0.20	5779839
Dissolved Selenium (Se)	mg/L	<0.0020	5779839	<0.0020	0.0020	5779839
Dissolved Silicon (Si)	mg/L	4.7	5779839	8.8	0.050	5779839
Dissolved Silver (Ag)	mg/L	<0.00010	5779839	<0.00010	0.00010	5779839
Dissolved Sodium (Na)	mg/L	25	5779839	10	0.10	5779839
Dissolved Strontium (Sr)	mg/L	0.28	5779839	0.63	0.0010	5779839
Dissolved Thallium (Tl)	mg/L	<0.000050	5779839	<0.000050	0.000050	5779839
Dissolved Titanium (Ti)	mg/L	<0.0050	5779839	<0.0050	0.0050	5779839
Dissolved Uranium (U)	mg/L	<0.00010	5779839	0.00024	0.00010	5779839
Dissolved Vanadium (V)	mg/L	<0.00050	5779839	<0.00050	0.00050	5779839
Dissolved Zinc (Zn)	mg/L	<0.0050	5779839	<0.0050	0.0050	5779839
Dissolved Zirconium (Zr)	mg/L	<0.0010	5779839	<0.0010	0.0010	5779839

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

RESULTS OF ANALYSES OF WATER

Maxxam ID		HZK189			HZK189		
Sampling Date		2018/10/10 10:00			2018/10/10 10:00		
COC Number		686533-01-01			686533-01-01		
	UNITS	**WG-160900764-20181010-KR04**	**RDL**	**QC Batch**	**WG-160900764-20181010-KR04 Lab-Dup**	**RDL**	**QC Batch**
Inorganics							
Acidity	mg/L	<5.0	5.0	5787226			
Total Dissolved Solids	mg/L	410	10	5783158			
Fluoride (F-)	mg/L	0.64	0.10	5779039			
Total Organic Carbon (TOC)	mg/L	2.5	0.50	5780436			
Total Suspended Solids	mg/L	500	10	5780504			
Turbidity	NTU	13	0.1	5778875			
WAD Cyanide (Free)	ug/L	<1	1	5783527	<1	1	5783527

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

Maxxam ID		HZK191			HZK191		
Sampling Date		2018/10/10 10:24			2018/10/10 10:24		
COC Number		686533-01-01			686533-01-01		
	UNITS	**WG-160900764-20181010-KR03**	**RDL**	**QC Batch**	**WG-160900764-20181010-KR03 Lab-Dup**	**RDL**	**QC Batch**
Inorganics							
Acidity	mg/L	55	5.0	5787226			
Total Dissolved Solids	mg/L	670	10	5783158	640	10	5783158
Fluoride (F-)	mg/L	0.13	0.10	5779039			
Total Organic Carbon (TOC)	mg/L	1.9	0.50	5780436			
Total Suspended Solids	mg/L	<10	10	5780504			
Turbidity	NTU	2.5	0.1	5778969			
WAD Cyanide (Free)	ug/L	<1	1	5780017			

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

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

RESULTS OF ANALYSES OF WATER

Maxxam ID		HZK193		HZK195			HZK195		
Sampling Date		2018/10/10 12:20		2018/10/10 16:30			2018/10/10 16:30		
COC Number		686533-01-01		686533-01-01			686533-01-01		
	UNITS	**WG-160900764-20181010-KR05**	**QC Batch**	**WG-160900764-20181010-KR06**	**RDL**	**QC Batch**	**WG-160900764-20181010-KR06 Lab-Dup**	**RDL**	**QC Batch**
Inorganics									
Acidity	mg/L	9.6	5787226	<5.0	5.0	5787592	<5.0	5.0	5787592
Total Dissolved Solids	mg/L	405	5783158	80	10	5783158			
Fluoride (F-)	mg/L	0.25	5779039	0.69	0.10	5779039			
Total Organic Carbon (TOC)	mg/L	0.87	5780436	0.90	0.50	5780436			
Total Suspended Solids	mg/L	<10	5780504	<10	10	5780504			
Turbidity	NTU	0.6	5778969	38	0.1	5778969			
WAD Cyanide (Free)	ug/L	<1	5783527	<1	1	5780017			

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

Maxxam ID		HZK197		
Sampling Date		2018/10/10 16:23		
COC Number		686533-01-01		
	UNITS	**WG-160900764-20181010-KR07**	**RDL**	**QC Batch**
Inorganics				
Acidity	mg/L	6.2	5.0	5787592
Total Dissolved Solids	mg/L	205	10	5783158
Fluoride (F-)	mg/L	0.27	0.10	5779039
Total Organic Carbon (TOC)	mg/L	0.96	0.50	5780436
Total Suspended Solids	mg/L	44	10	5780504
Turbidity	NTU	56	0.1	5778875
WAD Cyanide (Free)	ug/L	<1	1	5783527

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		HZK189		HZK191	HZK193		
Sampling Date		2018/10/10 10:00		2018/10/10 10:24	2018/10/10 12:20		
COC Number		686533-01-01		686533-01-01	686533-01-01		
	UNITS	**WG-160900764-20181010-KR04**	**QC Batch**	**WG-160900764-20181010-KR03**	**WG-160900764-20181010-KR05**	**RDL**	**QC Batch**
Metals							
Chromium (VI)	ug/L	<0.50	5779274	<0.50	1.6	0.50	5779274
Mercury (Hg)	ug/L	<0.1	5785167	<0.1	<0.1	0.1	5785671

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		HZK195	HZK197		
Sampling Date		2018/10/10 16:30	2018/10/10 16:23		
COC Number		686533-01-01	686533-01-01		
	UNITS	**WG-160900764-20181010-KR06**	**WG-160900764-20181010-KR07**	**RDL**	**QC Batch**
Metals					
Chromium (VI)	ug/L	<0.50	<0.50	0.50	5779274
Mercury (Hg)	ug/L	<0.1	<0.1	0.1	5785167

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

O.REG 153 PCBS (WATER)

Maxxam ID		HZK189	HZK191	HZK193		
Sampling Date		2018/10/10 10:00	2018/10/10 10:24	2018/10/10 12:20		
COC Number		686533-01-01	686533-01-01	686533-01-01		
	UNITS	**WG-160900764-20181010-KR04**	**WG-160900764-20181010-KR03**	**WG-160900764-20181010-KR05**	**RDL**	**QC Batch**
PCBs						
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	0.05	5783776
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	0.05	5783776
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	0.05	5783776
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	0.05	5783776
Total PCB	ug/L	<0.05	<0.05	<0.05	0.05	5783776
Surrogate Recovery (%)						
Decachlorobiphenyl	%	106	99	110		5783776

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Maxxam ID		HZK195		HZK197		
Sampling Date		2018/10/10 16:30		2018/10/10 16:23		
COC Number		686533-01-01		686533-01-01		
	UNITS	**WG-160900764-20181010-KR06**	**QC Batch**	**WG-160900764-20181010-KR07**	**RDL**	**QC Batch**
PCBs						
Aroclor 1242	ug/L	<0.05	5782043	<0.05	0.05	5783776
Aroclor 1248	ug/L	<0.05	5782043	<0.05	0.05	5783776
Aroclor 1254	ug/L	<0.05	5782043	<0.05	0.05	5783776
Aroclor 1260	ug/L	<0.05	5782043	<0.05	0.05	5783776
Total PCB	ug/L	<0.05	5782043	<0.05	0.05	5783776
Surrogate Recovery (%)						
Decachlorobiphenyl	%	64	5782043	112		5783776

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

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

Maxxam ID		HZK189	HZK191			HZK191		
Sampling Date		2018/10/10 10:00	2018/10/10 10:24			2018/10/10 10:24		
COC Number		686533-01-01	686533-01-01			686533-01-01		
	UNITS	**WG-160900764-20181010-KR04**	**WG-160900764-20181010-KR03**	**RDL**	**QC Batch**	**WG-160900764-20181010-KR03 Lab-Dup**	**RDL**	**QC Batch**
Calculated Parameters								
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	0.50	5777305			
Volatile Organics								
Acetone (2-Propanone)	ug/L	<10	<10	10	5778343			
Benzene	ug/L	<0.20	<0.20	0.20	5778343			
Bromodichloromethane	ug/L	<0.50	<0.50	0.50	5778343			
Bromoform	ug/L	<1.0	<1.0	1.0	5778343			
Bromomethane	ug/L	<0.50	<0.50	0.50	5778343			
Carbon Tetrachloride	ug/L	<0.20	<0.20	0.20	5778343			
Chlorobenzene	ug/L	<0.20	<0.20	0.20	5778343			
Chloroform	ug/L	<0.20	<0.20	0.20	5778343			
Dibromochloromethane	ug/L	<0.50	<0.50	0.50	5778343			
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	5778343			
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	5778343			
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	0.50	5778343			
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	1.0	5778343			
1,1-Dichloroethane	ug/L	<0.20	<0.20	0.20	5778343			
1,2-Dichloroethane	ug/L	<0.50	<0.50	0.50	5778343			
1,1-Dichloroethylene	ug/L	<0.20	<0.20	0.20	5778343			
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	5778343			
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	0.50	5778343			
1,2-Dichloropropane	ug/L	<0.20	<0.20	0.20	5778343			
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	0.30	5778343			
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	0.40	5778343			
Ethylbenzene	ug/L	<0.20	<0.20	0.20	5778343			
Ethylene Dibromide	ug/L	<0.20	<0.20	0.20	5778343			
Hexane	ug/L	<1.0	<1.0	1.0	5778343			
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	2.0	5778343			
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	10	5778343			
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	5.0	5778343			
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	0.50	5778343			

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

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

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

Maxxam ID		HZK189	HZK191			HZK191		
Sampling Date		2018/10/10 10:00	2018/10/10 10:24			2018/10/10 10:24		
COC Number		686533-01-01	686533-01-01			686533-01-01		
	UNITS	**WG-160900764-20181010-KR04**	**WG-160900764-20181010-KR03**	**RDL**	**QC Batch**	**WG-160900764-20181010-KR03 Lab-Dup**	**RDL**	**QC Batch**
Styrene	ug/L	<0.50	<0.50	0.50	5778343			
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	5778343			
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	0.50	5778343			
Tetrachloroethylene	ug/L	<0.20	<0.20	0.20	5778343			
Toluene	ug/L	<0.20	<0.20	0.20	5778343			
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	0.20	5778343			
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	0.50	5778343			
Trichloroethylene	ug/L	<0.20	<0.20	0.20	5778343			
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	0.50	5778343			
Vinyl Chloride	ug/L	<0.20	<0.20	0.20	5778343			
p+m-Xylene	ug/L	<0.20	<0.20	0.20	5778343			
o-Xylene	ug/L	<0.20	<0.20	0.20	5778343			
Total Xylenes	ug/L	<0.20	<0.20	0.20	5778343			
F1 (C6-C10)	ug/L	<25	<25	25	5778343			
F1 (C6-C10) - BTEX	ug/L	<25	<25	25	5778343			
F2-F4 Hydrocarbons								
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	100	5780921	<100	100	5780921
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	200	5780921	<200	200	5780921
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	200	5780921	<200	200	5780921
Reached Baseline at C50	ug/L	Yes	Yes		5780921	Yes		5780921
Surrogate Recovery (%)								
o-Terphenyl	%	94	94		5780921	95		5780921
4-Bromofluorobenzene	%	96	94		5778343			
D4-1,2-Dichloroethane	%	101	101		5778343			
D8-Toluene	%	98	99		5778343			

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

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

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

Maxxam ID		HZK193	HZK195		HZK197		
Sampling Date		2018/10/10 12:20	2018/10/10 16:30		2018/10/10 16:23		
COC Number		686533-01-01	686533-01-01		686533-01-01		
	UNITS	**WG-160900764-20181010-KR05**	**WG-160900764-20181010-KR06**	**QC Batch**	**WG-160900764-20181010-KR07**	**RDL**	**QC Batch**
Calculated Parameters							
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	<0.50	5777305	<0.50	0.50	5778334
Volatile Organics							
Acetone (2-Propanone)	ug/L	<10	<10	5778343	<10	10	5778343
Benzene	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
Bromodichloromethane	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
Bromoform	ug/L	<1.0	<1.0	5778343	<1.0	1.0	5778343
Bromomethane	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
Carbon Tetrachloride	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
Chlorobenzene	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
Chloroform	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
Dibromochloromethane	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
1,2-Dichlorobenzene	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
1,3-Dichlorobenzene	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
1,4-Dichlorobenzene	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	<1.0	5778343	<1.0	1.0	5778343
1,1-Dichloroethane	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
1,2-Dichloroethane	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
1,1-Dichloroethylene	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
cis-1,2-Dichloroethylene	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
trans-1,2-Dichloroethylene	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
1,2-Dichloropropane	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
cis-1,3-Dichloropropene	ug/L	<0.30	<0.30	5778343	<0.30	0.30	5778343
trans-1,3-Dichloropropene	ug/L	<0.40	<0.40	5778343	<0.40	0.40	5778343
Ethylbenzene	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
Ethylene Dibromide	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
Hexane	ug/L	<1.0	<1.0	5778343	<1.0	1.0	5778343
Methylene Chloride(Dichloromethane)	ug/L	<2.0	<2.0	5778343	<2.0	2.0	5778343
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	<10	5778343	<10	10	5778343
Methyl Isobutyl Ketone	ug/L	<5.0	<5.0	5778343	<5.0	5.0	5778343
Methyl t-butyl ether (MTBE)	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

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

Maxxam ID		HZK193	HZK195		HZK197		
Sampling Date		2018/10/10 12:20	2018/10/10 16:30		2018/10/10 16:23		
COC Number		686533-01-01	686533-01-01		686533-01-01		
	UNITS	**WG-160900764-20181010-KR05**	**WG-160900764-20181010-KR06**	**QC Batch**	**WG-160900764-20181010-KR07**	**RDL**	**QC Batch**
Styrene	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
1,1,1,2-Tetrachloroethane	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
1,1,2,2-Tetrachloroethane	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
Tetrachloroethylene	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
Toluene	ug/L	<0.20	0.21	5778343	<0.20	0.20	5778343
1,1,1-Trichloroethane	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
1,1,2-Trichloroethane	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
Trichloroethylene	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	<0.50	5778343	<0.50	0.50	5778343
Vinyl Chloride	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
p+m-Xylene	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
o-Xylene	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
Total Xylenes	ug/L	<0.20	<0.20	5778343	<0.20	0.20	5778343
F1 (C6-C10)	ug/L	<25	<25	5778343	<25	25	5778343
F1 (C6-C10) - BTEX	ug/L	<25	<25	5778343	<25	25	5778343
F2-F4 Hydrocarbons							
F2 (C10-C16 Hydrocarbons)	ug/L	<100	<100	5780921	<100	100	5780921
F3 (C16-C34 Hydrocarbons)	ug/L	<200	<200	5780921	<200	200	5780921
F4 (C34-C50 Hydrocarbons)	ug/L	<200	<200	5780921	<200	200	5780921
Reached Baseline at C50	ug/L	Yes	Yes	5780921	Yes		5780921
Surrogate Recovery (%)							
o-Terphenyl	%	95	95	5780921	95		5780921
4-Bromofluorobenzene	%	94	94	5778343	95		5778343
D4-1,2-Dichloroethane	%	102	102	5778343	102		5778343
D8-Toluene	%	99	99	5778343	99		5778343

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		HZK189		HZK190	HZK191		
Sampling Date		2018/10/10 10:00		2018/10/10 10:00	2018/10/10 10:24		
COC Number		686533-01-01		686533-01-01	686533-01-01		
	UNITS	**WG-160900764-20181010-KR04**	**QC Batch**	**WG-160900764-20181010-KR04A**	**WG-160900764-20181010-KR03**	**RDL**	**QC Batch**
Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	5784196	<0.1	<0.1	0.1	5784196
1-Methylnaphthalene	ug/L	<0.2	5784196	<0.2	<0.2	0.2	5784196
2,4,5-Trichlorophenol	ug/L	<0.2	5784196	<0.2	<0.2	0.2	5784196
2,4,6-Trichlorophenol	ug/L	<0.2	5784196	<0.2	<0.2	0.2	5784196
2,4-Dichlorophenol	ug/L	<0.1	5784196	<0.1	<0.1	0.1	5784196
2,4-Dimethylphenol	ug/L	<0.5	5784196	<0.5	<0.5	0.5	5784196
2,4-Dinitrophenol	ug/L	<2	5784196	<2	<2	2	5784196
2,4-Dinitrotoluene	ug/L	<0.3	5784196	<0.3	<0.3	0.3	5784196
2,6-Dinitrotoluene	ug/L	<0.3	5784196	<0.3	<0.3	0.3	5784196
2-Chlorophenol	ug/L	<0.1	5784196	<0.1	<0.1	0.1	5784196
2-Methylnaphthalene	ug/L	<0.2	5784196	<0.2	<0.2	0.2	5784196
3,3'-Dichlorobenzidine	ug/L	<0.5	5784196	<0.5	<0.5	0.5	5784196
Acenaphthene	ug/L	<0.2	5784196	<0.2	<0.2	0.2	5784196
Acenaphthylene	ug/L	<0.2	5784196	<0.2	<0.2	0.2	5784196
Anthracene	ug/L	<0.05	5784196	<0.05	<0.05	0.05	5784196
Benzo(a)anthracene	ug/L	<0.05	5784196	<0.05	<0.05	0.05	5784196
Benzo(a)pyrene	ug/L	<0.01	5784196	<0.01	<0.01	0.01	5784196
Benzo(b/j)fluoranthene	ug/L	<0.05	5784196	<0.05	<0.05	0.05	5784196
Benzo(g,h,i)perylene	ug/L	<0.05	5784196	<0.05	<0.05	0.05	5784196
Benzo(k)fluoranthene	ug/L	<0.05	5784196	<0.05	<0.05	0.05	5784196
Biphenyl	ug/L	<0.1	5784196	<0.1	<0.1	0.1	5784196
Bis(2-chloroethyl)ether	ug/L	<0.5	5784196	<0.5	<0.5	0.5	5784196
Bis(2-chloroisopropyl)ether	ug/L	<0.5	5784196	<0.5	<0.5	0.5	5784196
Bis(2-ethylhexyl)phthalate	ug/L	<1	5784196	<1	<1	1	5784196
Chrysene	ug/L	<0.05	5784196	<0.05	<0.05	0.05	5784196
Dibenz(a,h)anthracene	ug/L	<0.1	5784196	<0.1	<0.1	0.1	5784196
Diethyl phthalate	ug/L	<0.1	5784196	<0.1	<0.1	0.1	5784196
Dimethyl phthalate	ug/L	<0.1	5784196	<0.1	<0.1	0.1	5784196
Fluoranthene	ug/L	<0.2	5784196	<0.2	<0.2	0.2	5784196
Fluorene	ug/L	<0.2	5784196	<0.2	<0.2	0.2	5784196

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		HZK189		HZK190	HZK191		
Sampling Date		2018/10/10 10:00		2018/10/10 10:00	2018/10/10 10:24		
COC Number		686533-01-01		686533-01-01	686533-01-01		
	UNITS	**WG-160900764-20181010-KR04**	**QC Batch**	**WG-160900764-20181010-KR04A**	**WG-160900764-20181010-KR03**	**RDL**	**QC Batch**
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	5784196	<0.1	<0.1	0.1	5784196
Naphthalene	ug/L	<0.2	5784196	<0.2	<0.2	0.2	5784196
p-Chloroaniline	ug/L	<1	5784196	<1	<1	1	5784196
Pentachlorophenol	ug/L	<0.1	5784196	<0.1	<0.1	0.1	5784196
Phenanthrene	ug/L	<0.1	5784196	<0.1	<0.1	0.1	5784196
Phenol	ug/L	<0.5	5784196	<0.5	<0.5	0.5	5784196
Pyrene	ug/L	<0.05	5784196	<0.05	<0.05	0.05	5784196
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	5777304	<0.28	<0.28	0.28	5778333
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	91	5784196	78	54		5784196
2-Fluorobiphenyl	%	69	5784196	68	57		5784196
D14-Terphenyl (FS)	%	94	5784196	7.0 (1)	94		5784196
D5-Nitrobenzene	%	72	5784196	73	59		5784196

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.

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		HZK192	HZK193	HZK194	HZK195		
Sampling Date		2018/10/10 10:24	2018/10/10 12:20	2018/10/10 12:20	2018/10/10 16:30		
COC Number		686533-01-01	686533-01-01	686533-01-01	686533-01-01		
	UNITS	**WG-160900764-20181010-KR03A**	**WG-160900764-20181010-KR05**	**WG-160900764-20181010-KR05A**	**WG-160900764-20181010-KR06**	**RDL**	**QC Batch**
Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5784196
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5784196
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5784196
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5784196
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5784196
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5784196
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5784196
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5784196
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	5784196
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		HZK192	HZK193	HZK194	HZK195		
Sampling Date		2018/10/10 10:24	2018/10/10 12:20	2018/10/10 12:20	2018/10/10 16:30		
COC Number		686533-01-01	686533-01-01	686533-01-01	686533-01-01		
	UNITS	**WG-160900764-20181010-KR03A**	**WG-160900764-20181010-KR05**	**WG-160900764-20181010-KR05A**	**WG-160900764-20181010-KR06**	**RDL**	**QC Batch**
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5784196
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5784196
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5778333
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	71	73	90	51		5784196
2-Fluorobiphenyl	%	67	68	74	59		5784196
D14-Terphenyl (FS)	%	8.3 (1)	91	7.3 (1)	95		5784196
D5-Nitrobenzene	%	71	68	77	58		5784196

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.

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		HZK196	HZK197	HZK198	HZL465		
Sampling Date		2018/10/10 16:30	2018/10/10 16:23	2018/10/10 16:23	2018/10/10		
COC Number		686533-01-01	686533-01-01	686533-01-01	686533-01-01		
	UNITS	**WG-160900764-20181010-KR06A**	**WG-160900764-20181010-KR07**	**WG-160900764-20181010-KR07A**	**FILTERED BLANK**	**RDL**	**QC Batch**
Semivolatile Organics							
1,2,4-Trichlorobenzene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
1-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
2,4,5-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
2,4,6-Trichlorophenol	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
2,4-Dichlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
2,4-Dimethylphenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5784196
2,4-Dinitrophenol	ug/L	<2	<2	<2	<2	2	5784196
2,4-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5784196
2,6-Dinitrotoluene	ug/L	<0.3	<0.3	<0.3	<0.3	0.3	5784196
2-Chlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
2-Methylnaphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
3,3'-Dichlorobenzidine	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5784196
Acenaphthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
Acenaphthylene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
Anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Benzo(a)anthracene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Benzo(a)pyrene	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5784196
Benzo(b/j)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Benzo(g,h,i)perylene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Benzo(k)fluoranthene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Biphenyl	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Bis(2-chloroethyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5784196
Bis(2-chloroisopropyl)ether	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5784196
Bis(2-ethylhexyl)phthalate	ug/L	<1	<1	<1	<1	1	5784196
Chrysene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Dibenz(a,h)anthracene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Diethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Dimethyl phthalate	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Fluoranthene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
Fluorene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		HZK196	HZK197	HZK198	HZL465		
Sampling Date		2018/10/10 16:30	2018/10/10 16:23	2018/10/10 16:23	2018/10/10		
COC Number		686533-01-01	686533-01-01	686533-01-01	686533-01-01		
	UNITS	**WG-160900764-20181010-KR06A**	**WG-160900764-20181010-KR07**	**WG-160900764-20181010-KR07A**	**FILTERED BLANK**	**RDL**	**QC Batch**
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Naphthalene	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5784196
p-Chloroaniline	ug/L	<1	<1	<1	<1	1	5784196
Pentachlorophenol	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Phenanthrene	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5784196
Phenol	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5784196
Pyrene	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	5784196
Calculated Parameters							
Methylnaphthalene, 2-(1-)	ug/L	<0.28	<0.28	<0.28	<0.28	0.28	5778333
Surrogate Recovery (%)							
2,4,6-Tribromophenol	%	45 (1)	68	71	74		5784196
2-Fluorobiphenyl	%	54	73	60	69		5784196
D14-Terphenyl (FS)	%	11 (1)	94	8.0 (1)	8.6 (1)		5784196
D5-Nitrobenzene	%	57	74	63	72		5784196

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.

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		HZL466		
Sampling Date		2018/10/10		
COC Number		686533-01-01		
	UNITS	**FILTERED SPIKE**	**RDL**	**QC Batch**
Semivolatile Organics				
1,2,4-Trichlorobenzene	ug/L	47 (1)	1	5784196
1-Methylnaphthalene	ug/L	70	1	5784196
2,4,5-Trichlorophenol	ug/L	71	1	5784196
2,4,6-Trichlorophenol	ug/L	66	1	5784196
2,4-Dichlorophenol	ug/L	68	1	5784196
2,4-Dimethylphenol	ug/L	54	1	5784196
2,4-Dinitrophenol	ug/L	78	1	5784196
2,4-Dinitrotoluene	ug/L	79	1	5784196
2,6-Dinitrotoluene	ug/L	74	1	5784196
2-Chlorophenol	ug/L	59	1	5784196
2-Methylnaphthalene	ug/L	66	1	5784196
3,3'-Dichlorobenzidine	ug/L	42	1	5784196
Acenaphthene	ug/L	67	1	5784196
Acenaphthylene	ug/L	68	1	5784196
Anthracene	ug/L	27 (1)	1	5784196
Benzo(a)anthracene	ug/L	12 (1)	1	5784196
Benzo(a)pyrene	ug/L	8 (1)	1	5784196
Benzo(b/j)fluoranthene	ug/L	9 (1)	1	5784196
Benzo(g,h,i)perylene	ug/L	7 (1)	1	5784196
Benzo(k)fluoranthene	ug/L	9 (1)	1	5784196
Biphenyl	ug/L	65	1	5784196
Bis(2-chloroethyl)ether	ug/L	59	1	5784196
Bis(2-chloroisopropyl)ether	ug/L	65	1	5784196
Bis(2-ethylhexyl)phthalate	ug/L	7 (1)	1	5784196
Chrysene	ug/L	11 (1)	1	5784196
Dibenz(a,h)anthracene	ug/L	7 (1)	1	5784196
Diethyl phthalate	ug/L	88	1	5784196
Dimethyl phthalate	ug/L	82	1	5784196

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.

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		HZL466		
Sampling Date		2018/10/10		
COC Number		686533-01-01		
	UNITS	**FILTERED SPIKE**	**RDL**	**QC Batch**
Fluoranthene	ug/L	32 (1)	1	5784196
Fluorene	ug/L	51	1	5784196
Indeno(1,2,3-cd)pyrene	ug/L	7 (1)	1	5784196
Naphthalene	ug/L	78	1	5784196
p-Chloroaniline	ug/L	31	1	5784196
Pentachlorophenol	ug/L	82	1	5784196
Phenanthrene	ug/L	44 (1)	1	5784196
Phenol	ug/L	26 (1)	1	5784196
Pyrene	ug/L	27 (1)	1	5784196
Calculated Parameters				
Methylnaphthalene, 2-(1-)	ug/L	140	1.4	5778333
Surrogate Recovery (%)				
2,4,6-Tribromophenol	%	87		5784196
2-Fluorobiphenyl	%	51		5784196
D14-Terphenyl (FS)	%	21 (2)		5784196
D5-Nitrobenzene	%	69		5784196

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.

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

TEST SUMMARY

Maxxam ID: HZK189
Sample ID: WG-160900764-20181010-KR04
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5777304	N/A	2018/10/17	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5784196	2018/10/15	2018/10/17	Milijana Avramovic
Acidity (CaCO3) in water	MT	5787226	N/A	2018/10/17	Brent Boudreau
Alkalinity	AT	5779012	N/A	2018/10/13	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5777770	N/A	2018/10/15	Automated Statchk
1,3-Dichloropropene Sum	CALC	5777305	N/A	2018/10/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	5779330	N/A	2018/10/12	Deonarine Ramnarine
Conductivity	AT	5779036	N/A	2018/10/13	Surinder Rai
Chromium (VI) in Water	IC	5779274	N/A	2018/10/16	Lang Le
Free (WAD) Cyanide	SKAL/CN	5783527	N/A	2018/10/15	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5779338	N/A	2018/10/13	Nimarta Singh
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5780921	2018/10/12	2018/10/15	Dorina Popa
Fluoride	ISE	5779039	2018/10/11	2018/10/13	Surinder Rai
Hardness (calculated as CaCO3)		5777516	N/A	2018/10/17	Automated Statchk
Mercury	CV/AA	5785167	2018/10/16	2018/10/16	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5779839	N/A	2018/10/16	Arefa Dabhad
Ion Balance (% Difference)	CALC	5778185	N/A	2018/10/17	Automated Statchk
Anion and Cation Sum	CALC	5778186	N/A	2018/10/17	Automated Statchk
Total Ammonia-N	LACH/NH4	5780567	N/A	2018/10/17	Chandra Nandlal
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5779342	N/A	2018/10/15	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5783776	2018/10/15	2018/10/16	Svitlana Shaula
pH	AT	5779042	N/A	2018/10/13	Surinder Rai
Orthophosphate	KONE	5779337	N/A	2018/10/15	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5777792	N/A	2018/10/17	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5777793	N/A	2018/10/17	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5779335	N/A	2018/10/12	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5777517	N/A	2018/10/17	Automated Statchk
Total Dissolved Solids	BAL	5783158	2018/10/15	2018/10/16	Jingwei (Alvin) Shi
Total Organic Carbon (TOC)	TOCV/NDIR	5780436	N/A	2018/10/13	Nimarta Singh
Total Suspended Solids	BAL	5780504	2018/10/13	2018/10/15	Mandeep Kaur
Turbidity	AT	5778875	N/A	2018/10/11	Barbara Kalbasi Esfahani
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5778343	N/A	2018/10/15	Yang (Philip) Yu

Maxxam ID: HZK189 Dup
Sample ID: WG-160900764-20181010-KR04
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Free (WAD) Cyanide	SKAL/CN	5783527	N/A	2018/10/15	Louise Harding

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

TEST SUMMARY

Maxxam ID: HZK190
Sample ID: WG-160900764-20181010-KR04A
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5778333	N/A	2018/10/17	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5784196	2018/10/15	2018/10/17	Milijana Avramovic

Maxxam ID: HZK191
Sample ID: WG-160900764-20181010-KR03
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5778333	N/A	2018/10/17	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5784196	2018/10/15	2018/10/17	Milijana Avramovic
Acidity (CaCO3) in water	MT	5787226	N/A	2018/10/17	Brent Boudreau
Alkalinity	AT	5779012	N/A	2018/10/13	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5777770	N/A	2018/10/15	Automated Statchk
1,3-Dichloropropene Sum	CALC	5777305	N/A	2018/10/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	5779330	N/A	2018/10/12	Deonarine Ramnarine
Conductivity	AT	5779036	N/A	2018/10/13	Surinder Rai
Chromium (VI) in Water	IC	5779274	N/A	2018/10/16	Lang Le
Free (WAD) Cyanide	SKAL/CN	5780017	N/A	2018/10/12	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5779338	N/A	2018/10/13	Nimarta Singh
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5780921	2018/10/12	2018/10/15	Dorina Popa
Fluoride	ISE	5779039	2018/10/11	2018/10/13	Surinder Rai
Hardness (calculated as CaCO3)		5777516	N/A	2018/10/17	Automated Statchk
Mercury	CV/AA	5785671	2018/10/16	2018/10/17	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5779839	N/A	2018/10/16	Arefa Dabhad
Ion Balance (% Difference)	CALC	5778185	N/A	2018/10/17	Automated Statchk
Anion and Cation Sum	CALC	5778186	N/A	2018/10/17	Automated Statchk
Total Ammonia-N	LACH/NH4	5780567	N/A	2018/10/17	Chandra Nandlal
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5779342	N/A	2018/10/15	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5783776	2018/10/15	2018/10/16	Svitlana Shaula
pH	AT	5779042	N/A	2018/10/13	Surinder Rai
Orthophosphate	KONE	5779337	N/A	2018/10/15	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5777792	N/A	2018/10/17	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5777793	N/A	2018/10/17	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5779335	N/A	2018/10/12	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5777517	N/A	2018/10/17	Automated Statchk
Total Dissolved Solids	BAL	5783158	2018/10/15	2018/10/16	Jingwei (Alvin) Shi
Total Organic Carbon (TOC)	TOCV/NDIR	5780436	N/A	2018/10/13	Nimarta Singh
Total Suspended Solids	BAL	5780504	2018/10/13	2018/10/15	Mandeep Kaur
Turbidity	AT	5778969	N/A	2018/10/12	Barbara Kalbasi Esfahani
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5778343	N/A	2018/10/15	Yang (Philip) Yu

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

TEST SUMMARY

Maxxam ID: HZK191 Dup
Sample ID: WG-160900764-20181010-KR03
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5780921	2018/10/12	2018/10/15	Dorina Popa
Total Dissolved Solids	BAL	5783158	2018/10/15	2018/10/16	Jingwei (Alvin) Shi

Maxxam ID: HZK192
Sample ID: WG-160900764-20181010-KR03A
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5778333	N/A	2018/10/17	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5784196	2018/10/15	2018/10/17	Milijana Avramovic

Maxxam ID: HZK193
Sample ID: WG-160900764-20181010-KR05
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5778333	N/A	2018/10/17	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5784196	2018/10/15	2018/10/17	Milijana Avramovic
Acidity (CaCO3) in water	MT	5787226	N/A	2018/10/17	Brent Boudreau
Alkalinity	AT	5779012	N/A	2018/10/13	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5777770	N/A	2018/10/15	Automated Statchk
1,3-Dichloropropene Sum	CALC	5777305	N/A	2018/10/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	5779330	N/A	2018/10/12	Deonarine Ramnarine
Conductivity	AT	5779036	N/A	2018/10/13	Surinder Rai
Chromium (VI) in Water	IC	5779274	N/A	2018/10/16	Lang Le
Free (WAD) Cyanide	SKAL/CN	5783527	N/A	2018/10/15	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5778889	N/A	2018/10/14	Nimarta Singh
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5780921	2018/10/12	2018/10/15	Dorina Popa
Fluoride	ISE	5779039	2018/10/11	2018/10/13	Surinder Rai
Hardness (calculated as CaCO3)		5777516	N/A	2018/10/17	Automated Statchk
Mercury	CV/AA	5785671	2018/10/16	2018/10/17	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5779839	N/A	2018/10/16	Arefa Dabhad
Ion Balance (% Difference)	CALC	5778185	N/A	2018/10/17	Automated Statchk
Anion and Cation Sum	CALC	5778186	N/A	2018/10/17	Automated Statchk
Total Ammonia-N	LACH/NH4	5780572	N/A	2018/10/17	Chandra Nandlal
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5779045	N/A	2018/10/13	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5783776	2018/10/15	2018/10/16	Svitlana Shaula
pH	AT	5779042	N/A	2018/10/13	Surinder Rai
Orthophosphate	KONE	5779337	N/A	2018/10/15	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5777792	N/A	2018/10/17	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5777793	N/A	2018/10/17	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5779335	N/A	2018/10/12	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5777517	N/A	2018/10/17	Automated Statchk
Total Dissolved Solids	BAL	5783158	2018/10/15	2018/10/16	Jingwei (Alvin) Shi

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

TEST SUMMARY

Maxxam ID: HZK193
Sample ID: WG-160900764-20181010-KR05
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Organic Carbon (TOC)	TOCV/NDIR	5780436	N/A	2018/10/13	Nimarta Singh
Total Suspended Solids	BAL	5780504	2018/10/13	2018/10/15	Mandeep Kaur
Turbidity	AT	5778969	N/A	2018/10/12	Barbara Kalbasi Esfahani
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5778343	N/A	2018/10/15	Yang (Philip) Yu

Maxxam ID: HZK194
Sample ID: WG-160900764-20181010-KR05A
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5778333	N/A	2018/10/17	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5784196	2018/10/15	2018/10/17	Milijana Avramovic

Maxxam ID: HZK195
Sample ID: WG-160900764-20181010-KR06
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5778333	N/A	2018/10/17	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5784196	2018/10/15	2018/10/17	Milijana Avramovic
Acidity (CaCO3) in water	MT	5787592	N/A	2018/10/17	Brent Boudreau
Alkalinity	AT	5779012	N/A	2018/10/13	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5777770	N/A	2018/10/15	Automated Statchk
1,3-Dichloropropene Sum	CALC	5777305	N/A	2018/10/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	5779330	N/A	2018/10/12	Deonarine Ramnarine
Conductivity	AT	5779036	N/A	2018/10/13	Surinder Rai
Chromium (VI) in Water	IC	5779274	N/A	2018/10/16	Lang Le
Free (WAD) Cyanide	SKAL/CN	5780017	N/A	2018/10/12	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5779338	N/A	2018/10/13	Nimarta Singh
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5780921	2018/10/12	2018/10/15	Dorina Popa
Fluoride	ISE	5779039	2018/10/11	2018/10/13	Surinder Rai
Hardness (calculated as CaCO3)		5777516	N/A	2018/10/17	Automated Statchk
Mercury	CV/AA	5785167	2018/10/16	2018/10/16	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5779839	N/A	2018/10/16	Arefa Dabhad
Ion Balance (% Difference)	CALC	5778185	N/A	2018/10/17	Automated Statchk
Anion and Cation Sum	CALC	5778186	N/A	2018/10/17	Automated Statchk
Total Ammonia-N	LACH/NH4	5780567	N/A	2018/10/17	Chandra Nandlal
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5779045	N/A	2018/10/13	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5782043	2018/10/13	2018/10/14	Svitlana Shaula
pH	AT	5779042	N/A	2018/10/13	Surinder Rai
Orthophosphate	KONE	5779337	N/A	2018/10/15	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5777792	N/A	2018/10/17	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5777793	N/A	2018/10/17	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5779335	N/A	2018/10/12	Alina Dobreanu

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

TEST SUMMARY

Maxxam ID: HZK195
Sample ID: WG-160900764-20181010-KR06
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Dissolved Solids (TDS calc)	CALC	5777517	N/A	2018/10/17	Automated Statchk
Total Dissolved Solids	BAL	5783158	2018/10/15	2018/10/16	Jingwei (Alvin) Shi
Total Organic Carbon (TOC)	TOCV/NDIR	5780436	N/A	2018/10/13	Nimarta Singh
Total Suspended Solids	BAL	5780504	2018/10/13	2018/10/15	Mandeep Kaur
Turbidity	AT	5778969	N/A	2018/10/12	Barbara Kalbasi Esfahani
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5778343	N/A	2018/10/15	Yang (Philip) Yu

Maxxam ID: HZK195 Dup
Sample ID: WG-160900764-20181010-KR06
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Acidity (CaCO3) in water	MT	5787592	N/A	2018/10/17	Brent Boudreau

Maxxam ID: HZK196
Sample ID: WG-160900764-20181010-KR06A
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5778333	N/A	2018/10/17	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5784196	2018/10/15	2018/10/17	Milijana Avramovic

Maxxam ID: HZK197
Sample ID: WG-160900764-20181010-KR07
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5778333	N/A	2018/10/17	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5784196	2018/10/15	2018/10/17	Milijana Avramovic
Acidity (CaCO3) in water	MT	5787592	N/A	2018/10/17	Brent Boudreau
Alkalinity	AT	5779012	N/A	2018/10/13	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5777770	N/A	2018/10/15	Automated Statchk
1,3-Dichloropropene Sum	CALC	5778334	N/A	2018/10/16	Automated Statchk
Chloride by Automated Colourimetry	KONE	5779330	N/A	2018/10/12	Deonarine Ramnarine
Conductivity	AT	5779036	N/A	2018/10/13	Surinder Rai
Chromium (VI) in Water	IC	5779274	N/A	2018/10/16	Lang Le
Free (WAD) Cyanide	SKAL/CN	5783527	N/A	2018/10/15	Louise Harding
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5779338	N/A	2018/10/13	Nimarta Singh
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5780921	2018/10/12	2018/10/15	Dorina Popa
Fluoride	ISE	5779039	2018/10/11	2018/10/13	Surinder Rai
Hardness (calculated as CaCO3)		5777516	N/A	2018/10/17	Automated Statchk
Mercury	CV/AA	5785167	2018/10/16	2018/10/16	Ron Morrison
Dissolved Metals by ICPMS	ICP/MS	5779839	N/A	2018/10/16	Arefa Dabhad
Ion Balance (% Difference)	CALC	5778185	N/A	2018/10/17	Automated Statchk

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

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

TEST SUMMARY

Maxxam ID: HZK197
Sample ID: WG-160900764-20181010-KR07
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Anion and Cation Sum	CALC	5778186	N/A	2018/10/17	Automated Statchk
Total Ammonia-N	LACH/NH4	5780572	N/A	2018/10/17	Chandra Nandlal
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5779342	N/A	2018/10/15	Chandra Nandlal
Polychlorinated Biphenyl in Water	GC/ECD	5783776	2018/10/15	2018/10/16	Svitlana Shaula
pH	AT	5779042	N/A	2018/10/13	Surinder Rai
Orthophosphate	KONE	5779337	N/A	2018/10/15	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5777792	N/A	2018/10/17	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5777793	N/A	2018/10/17	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5779335	N/A	2018/10/12	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5777517	N/A	2018/10/17	Automated Statchk
Total Dissolved Solids	BAL	5783158	2018/10/15	2018/10/16	Jingwei (Alvin) Shi
Total Organic Carbon (TOC)	TOCV/NDIR	5780436	N/A	2018/10/13	Nimarta Singh
Total Suspended Solids	BAL	5780504	2018/10/13	2018/10/15	Mandeep Kaur
Turbidity	AT	5778875	N/A	2018/10/11	Barbara Kalbasi Esfahani
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5778343	N/A	2018/10/15	Yang (Philip) Yu

Maxxam ID: HZK198
Sample ID: WG-160900764-20181010-KR07A
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5778333	N/A	2018/10/17	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5784196	2018/10/15	2018/10/17	Milijana Avramovic

Maxxam ID: HZL465
Sample ID: FILTERED BLANK
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5778333	N/A	2018/10/17	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5784196	2018/10/15	2018/10/17	Milijana Avramovic

Maxxam ID: HZL466
Sample ID: FILTERED SPIKE
Matrix: Water

Collected: 2018/10/10
Shipped:
Received: 2018/10/11

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5778333	N/A	2018/10/17	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5784196	2018/10/15	2018/10/17	Milijana Avramovic

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

GENERAL COMMENTS

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

Package 1	10.3°C
Package 2	9.0°C
Package 3	4.0°C
Package 4	2.3°C
Package 5	5.3°C
Package 6	4.0°C
Package 7	7.0°C
Package 8	6.3°C
Package 9	7.3°C
Package 10	9.7°C
Package 11	9.0°C
Package 12	9.3°C
Package 13	7.3°C
Package 14	6.3°C
Package 15	6.0°C
Package 16	9.0°C
Package 17	11.0°C

Sample HZK190 [WG-160900764-20181010-KR04A] : ABNSIM-W: Sample was filtered prior to the extraction as per the client's recommendation.

Sample HZK192 [WG-160900764-20181010-KR03A] : ABNSIM-W: Sample was filtered prior to the extraction as per the client's recommendation.

Sample HZK193 [WG-160900764-20181010-KR05] : ortho-Phosphate > Total Phosphorus: 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 HZK194 [WG-160900764-20181010-KR05A] : ABNSIM-W: Sample was filtered prior to the extraction as per the client's recommendation.

Sample HZK196 [WG-160900764-20181010-KR06A] : ABNSIM-W: Sample was filtered prior to the extraction as per the client's recommendation.

Sample HZK198 [WG-160900764-20181010-KR07A] : ABNSIM-W: Sample was filtered prior to the extraction as per the client's recommendation.

Sample HZL465 [FILTERED BLANK] : ABNSIM-W: Sample was filtered prior to the extraction as per the client's recommendation.

Sample HZL466 [FILTERED SPIKE] : ABN Analysis: Sample was filtered prior to the extraction as per the client's recommendation. Data are reported as percentage recoveries.

Results relate only to the items tested.

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

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

QUALITY ASSURANCE REPORT

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
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
5778343	4-Bromofluorobenzene	2018/10/15	98	70 - 130	100	70 - 130	125	%				
5778343	D4-1,2-Dichloroethane	2018/10/15	99	70 - 130	99	70 - 130	97	%				
5778343	D8-Toluene	2018/10/15	102	70 - 130	100	70 - 130	101	%				
5780921	o-Terphenyl	2018/10/15	100	60 - 130	102	60 - 130	95	%				
5782043	Decachlorobiphenyl	2018/10/13	53 (1)	60 - 130	64	60 - 130	64	%				
5783776	Decachlorobiphenyl	2018/10/15	108	60 - 130	99	60 - 130	118	%				
5784196	2,4,6-Tribromophenol	2018/10/17	96	50 - 130	95	50 - 130	73	%				
5784196	2-Fluorobiphenyl	2018/10/17	67	50 - 130	56	50 - 130	69	%				
5784196	D14-Terphenyl (FS)	2018/10/17	93	50 - 130	92	50 - 130	94	%				
5784196	D5-Nitrobenzene	2018/10/17	76	50 - 130	69	50 - 130	75	%				
5778343	1,1,1,2-Tetrachloroethane	2018/10/15	101	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
5778343	1,1,1-Trichloroethane	2018/10/15	102	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
5778343	1,1,2,2-Tetrachloroethane	2018/10/15	97	70 - 130	92	70 - 130	<0.50	ug/L	NC	30		
5778343	1,1,2-Trichloroethane	2018/10/15	102	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
5778343	1,1-Dichloroethane	2018/10/15	100	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
5778343	1,1-Dichloroethylene	2018/10/15	100	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
5778343	1,2-Dichlorobenzene	2018/10/15	100	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
5778343	1,2-Dichloroethane	2018/10/15	98	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
5778343	1,2-Dichloropropane	2018/10/15	99	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
5778343	1,3-Dichlorobenzene	2018/10/15	103	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5778343	1,4-Dichlorobenzene	2018/10/15	103	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5778343	Acetone (2-Propanone)	2018/10/15	98	60 - 140	101	60 - 140	<10	ug/L	NC	30		
5778343	Benzene	2018/10/15	99	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
5778343	Bromodichloromethane	2018/10/15	98	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
5778343	Bromoform	2018/10/15	94	70 - 130	86	70 - 130	<1.0	ug/L	NC	30		
5778343	Bromomethane	2018/10/15	102	60 - 140	98	60 - 140	<0.50	ug/L	NC	30		
5778343	Carbon Tetrachloride	2018/10/15	99	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
5778343	Chlorobenzene	2018/10/15	100	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5778343	Chloroform	2018/10/15	100	70 - 130	98	70 - 130	<0.20	ug/L	NC	30		
5778343	cis-1,2-Dichloroethylene	2018/10/15	100	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5778343	cis-1,3-Dichloropropene	2018/10/15	95	70 - 130	90	70 - 130	<0.30	ug/L	NC	30		

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

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
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
5778343	Dibromochloromethane	2018/10/15	97	70 - 130	90	70 - 130	<0.50	ug/L	NC	30		
5778343	Dichlorodifluoromethane (FREON 12)	2018/10/15	97	60 - 140	98	60 - 140	<1.0	ug/L	NC	30		
5778343	Ethylbenzene	2018/10/15	100	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
5778343	Ethylene Dibromide	2018/10/15	99	70 - 130	92	70 - 130	<0.20	ug/L	NC	30		
5778343	F1 (C6-C10) - BTEX	2018/10/15					<25	ug/L	NC	30		
5778343	F1 (C6-C10)	2018/10/15	90	60 - 140	95	60 - 140	<25	ug/L	NC	30		
5778343	Hexane	2018/10/15	100	70 - 130	100	70 - 130	<1.0	ug/L	NC	30		
5778343	Methyl Ethyl Ketone (2-Butanone)	2018/10/15	95	60 - 140	93	60 - 140	<10	ug/L	NC	30		
5778343	Methyl Isobutyl Ketone	2018/10/15	88	70 - 130	84	70 - 130	<5.0	ug/L	NC	30		
5778343	Methyl t-butyl ether (MTBE)	2018/10/15	94	70 - 130	92	70 - 130	<0.50	ug/L	NC	30		
5778343	Methylene Chloride(Dichloromethane)	2018/10/15	102	70 - 130	100	70 - 130	<2.0	ug/L	NC	30		
5778343	o-Xylene	2018/10/15	97	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
5778343	p+m-Xylene	2018/10/15	97	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
5778343	Styrene	2018/10/15	96	70 - 130	91	70 - 130	<0.50	ug/L	NC	30		
5778343	Tetrachloroethylene	2018/10/15	104	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
5778343	Toluene	2018/10/15	101	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5778343	Total Xylenes	2018/10/15					<0.20	ug/L	NC	30		
5778343	trans-1,2-Dichloroethylene	2018/10/15	100	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5778343	trans-1,3-Dichloropropene	2018/10/15	102	70 - 130	90	70 - 130	<0.40	ug/L	NC	30		
5778343	Trichloroethylene	2018/10/15	100	70 - 130	100	70 - 130	<0.20	ug/L	NC	30		
5778343	Trichlorofluoromethane (FREON 11)	2018/10/15	101	70 - 130	102	70 - 130	<0.50	ug/L	NC	30		
5778343	Vinyl Chloride	2018/10/15	97	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
5778875	Turbidity	2018/10/11			101	85 - 115	<0.1	NTU	5.3	20		
5778889	Dissolved Organic Carbon	2018/10/13	97	80 - 120	101	80 - 120	<0.50	mg/L	0.43	20		
5778969	Turbidity	2018/10/12			101	85 - 115	<0.1	NTU	0.39	20		
5779012	Alkalinity (Total as CaCO3)	2018/10/13			97	85 - 115	<1.0	mg/L	0.73	20		
5779036	Conductivity	2018/10/13			101	85 - 115	<1.0	umho/cm	0.56	25		
5779039	Fluoride (F-)	2018/10/13	97	80 - 120	95	80 - 120	<0.10	mg/L	NC	20		
5779042	pH	2018/10/13			101	98 - 103			0.48	N/A		
5779045	Nitrate (N)	2018/10/13	101	80 - 120	105	80 - 120	<0.10	mg/L	NC	20		

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

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
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
5779045	Nitrite (N)	2018/10/13	105	80 - 120	107	80 - 120	<0.010	mg/L	NC	20		
5779274	Chromium (VI)	2018/10/16	103	80 - 120	103	80 - 120	<0.50	ug/L	3.9	20		
5779330	Dissolved Chloride (Cl-)	2018/10/12	NC	80 - 120	101	80 - 120	<1.0	mg/L	2.0	20		
5779335	Dissolved Sulphate (SO4)	2018/10/12	NC	75 - 125	101	80 - 120	<1.0	mg/L	0.60	20		
5779337	Orthophosphate (P)	2018/10/15	95	75 - 125	100	80 - 120	<0.010	mg/L	4.3	25		
5779338	Dissolved Organic Carbon	2018/10/13	95	80 - 120	96	80 - 120	<0.50	mg/L	0.19	20		
5779342	Nitrate (N)	2018/10/15	90	80 - 120	101	80 - 120	<0.10	mg/L	0.046	20		
5779342	Nitrite (N)	2018/10/15	101	80 - 120	103	80 - 120	<0.010	mg/L	NC	20		
5779839	Dissolved Aluminum (Al)	2018/10/16	100	80 - 120	100	80 - 120	<0.0050	mg/L				
5779839	Dissolved Antimony (Sb)	2018/10/16	109	80 - 120	102	80 - 120	<0.00050	mg/L				
5779839	Dissolved Arsenic (As)	2018/10/16	106	80 - 120	101	80 - 120	<0.0010	mg/L				
5779839	Dissolved Barium (Ba)	2018/10/16	101	80 - 120	100	80 - 120	<0.0020	mg/L	2.9	20		
5779839	Dissolved Beryllium (Be)	2018/10/16	106	80 - 120	102	80 - 120	<0.00050	mg/L				
5779839	Dissolved Boron (B)	2018/10/16	102	80 - 120	103	80 - 120	<0.010	mg/L				
5779839	Dissolved Cadmium (Cd)	2018/10/16	106	80 - 120	101	80 - 120	<0.00010	mg/L				
5779839	Dissolved Calcium (Ca)	2018/10/16	NC	80 - 120	100	80 - 120	<0.20	mg/L	0.56	20		
5779839	Dissolved Chromium (Cr)	2018/10/16	101	80 - 120	98	80 - 120	<0.0050	mg/L				
5779839	Dissolved Cobalt (Co)	2018/10/16	103	80 - 120	101	80 - 120	<0.00050	mg/L				
5779839	Dissolved Copper (Cu)	2018/10/16	102	80 - 120	102	80 - 120	<0.0010	mg/L	NC	20		
5779839	Dissolved Iron (Fe)	2018/10/16	107	80 - 120	103	80 - 120	<0.10	mg/L	3.0	20		
5779839	Dissolved Lead (Pb)	2018/10/16	100	80 - 120	99	80 - 120	<0.00050	mg/L				
5779839	Dissolved Magnesium (Mg)	2018/10/16	103	80 - 120	106	80 - 120	<0.050	mg/L	3.7	20		
5779839	Dissolved Manganese (Mn)	2018/10/16	103	80 - 120	102	80 - 120	<0.0020	mg/L	4.7	20		
5779839	Dissolved Molybdenum (Mo)	2018/10/16	102	80 - 120	97	80 - 120	<0.00050	mg/L				
5779839	Dissolved Nickel (Ni)	2018/10/16	100	80 - 120	100	80 - 120	<0.0010	mg/L				
5779839	Dissolved Phosphorus (P)	2018/10/16	106	80 - 120	113	80 - 120	<0.10	mg/L				
5779839	Dissolved Potassium (K)	2018/10/16	108	80 - 120	104	80 - 120	<0.20	mg/L	2.2	20		
5779839	Dissolved Selenium (Se)	2018/10/16	102	80 - 120	102	80 - 120	<0.0020	mg/L				
5779839	Dissolved Silicon (Si)	2018/10/16	98	80 - 120	104	80 - 120	<0.050	mg/L	2.5	20		
5779839	Dissolved Silver (Ag)	2018/10/16	106	80 - 120	101	80 - 120	<0.00010	mg/L				
5779839	Dissolved Sodium (Na)	2018/10/16	103	80 - 120	101	80 - 120	<0.10	mg/L	0.16	20		

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

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
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
5779839	Dissolved Strontium (Sr)	2018/10/16	104	80 - 120	102	80 - 120	<0.0010	mg/L	2.4	20		
5779839	Dissolved Thallium (Tl)	2018/10/16	103	80 - 120	101	80 - 120	<0.000050	mg/L				
5779839	Dissolved Titanium (Ti)	2018/10/16	104	80 - 120	102	80 - 120	<0.0050	mg/L				
5779839	Dissolved Uranium (U)	2018/10/16	103	80 - 120	100	80 - 120	<0.00010	mg/L				
5779839	Dissolved Vanadium (V)	2018/10/16	103	80 - 120	100	80 - 120	<0.00050	mg/L				
5779839	Dissolved Zinc (Zn)	2018/10/16	104	80 - 120	102	80 - 120	<0.0050	mg/L	NC	20		
5779839	Dissolved Zirconium (Zr)	2018/10/16	106	80 - 120	101	80 - 120	<0.0010	mg/L				
5780017	WAD Cyanide (Free)	2018/10/12	98	80 - 120	97	80 - 120	<1	ug/L	NC	20		
5780436	Total Organic Carbon (TOC)	2018/10/13	98	80 - 120	100	80 - 120	<0.50	mg/L	0.073	20		
5780504	Total Suspended Solids	2018/10/15					<10	mg/L	NC	25	100	85 - 115
5780567	Total Ammonia-N	2018/10/17	94	75 - 125	96	80 - 120	<0.050	mg/L	NC	20		
5780572	Total Ammonia-N	2018/10/17	93	75 - 125	95	80 - 120	<0.050	mg/L	NC	20		
5780921	F2 (C10-C16 Hydrocarbons)	2018/10/15	99	50 - 130	88	60 - 130	<100	ug/L	NC	30		
5780921	F3 (C16-C34 Hydrocarbons)	2018/10/15	103	50 - 130	97	60 - 130	<200	ug/L	NC	30		
5780921	F4 (C34-C50 Hydrocarbons)	2018/10/15	99	50 - 130	94	60 - 130	<200	ug/L	NC	30		
5782043	Aroclor 1242	2018/10/13					<0.05	ug/L	NC	30		
5782043	Aroclor 1248	2018/10/13					<0.05	ug/L	NC	30		
5782043	Aroclor 1254	2018/10/13					<0.05	ug/L	NC	30		
5782043	Aroclor 1260	2018/10/13	75	60 - 130	79	60 - 130	<0.05	ug/L	NC	30		
5782043	Total PCB	2018/10/13	75	60 - 130	79	60 - 130	<0.05	ug/L	NC	40		
5783158	Total Dissolved Solids	2018/10/16					<10	mg/L	4.6	25	98	90 - 110
5783527	WAD Cyanide (Free)	2018/10/15	101	80 - 120	103	80 - 120	<1	ug/L	NC	20		
5783776	Aroclor 1242	2018/10/16					<0.05	ug/L	NC	30		
5783776	Aroclor 1248	2018/10/16					<0.05	ug/L	NC	30		
5783776	Aroclor 1254	2018/10/16					<0.05	ug/L	NC	30		
5783776	Aroclor 1260	2018/10/16	110	60 - 130	87	60 - 130	<0.05	ug/L	NC	30		
5783776	Total PCB	2018/10/16	110	60 - 130	87	60 - 130	<0.05	ug/L	NC	40		
5784196	1,2,4-Trichlorobenzene	2018/10/17	63	50 - 130	54	50 - 130	<0.1	ug/L	NC	30		
5784196	1-Methylnaphthalene	2018/10/17	82	50 - 130	75	50 - 130	<0.2	ug/L	NC	30		
5784196	2,4,5-Trichlorophenol	2018/10/17	80	50 - 130	76	50 - 130	<0.2	ug/L	NC	30		
5784196	2,4,6-Trichlorophenol	2018/10/17	72	50 - 130	69	50 - 130	<0.2	ug/L	NC	30		

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

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
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
5784196	2,4-Dichlorophenol	2018/10/17	76	50 - 130	67	50 - 130	<0.1	ug/L	NC	30		
5784196	2,4-Dimethylphenol	2018/10/17	27 (2)	30 - 130	56	30 - 130	<0.5	ug/L	NC	30		
5784196	2,4-Dinitrophenol	2018/10/17	115	30 - 130	129	30 - 130	<2	ug/L	NC	30		
5784196	2,4-Dinitrotoluene	2018/10/17	88	50 - 130	93	50 - 130	<0.3	ug/L	NC	30		
5784196	2,6-Dinitrotoluene	2018/10/17	81	50 - 130	83	50 - 130	<0.3	ug/L	NC	30		
5784196	2-Chlorophenol	2018/10/17	63	50 - 130	62	50 - 130	<0.1	ug/L	NC	30		
5784196	2-Methylnaphthalene	2018/10/17	79	50 - 130	71	50 - 130	<0.2	ug/L	NC	30		
5784196	3,3'-Dichlorobenzidine	2018/10/17	38	30 - 130	96	30 - 130	<0.5	ug/L	NC	30		
5784196	Acenaphthene	2018/10/17	81	50 - 130	78	50 - 130	<0.2	ug/L	NC	30		
5784196	Acenaphthylene	2018/10/17	79	50 - 130	76	50 - 130	<0.2	ug/L	NC	30		
5784196	Anthracene	2018/10/17	81	50 - 130	83	50 - 130	<0.05	ug/L	NC	30		
5784196	Benzo(a)anthracene	2018/10/17	90	50 - 130	93	50 - 130	<0.05	ug/L	NC	30		
5784196	Benzo(a)pyrene	2018/10/17	91	50 - 130	93	50 - 130	<0.01	ug/L	NC	30		
5784196	Benzo(b/j)fluoranthene	2018/10/17	90	50 - 130	92	50 - 130	<0.05	ug/L	NC	30		
5784196	Benzo(g,h,i)perylene	2018/10/17	91	50 - 130	93	50 - 130	<0.05	ug/L	NC	30		
5784196	Benzo(k)fluoranthene	2018/10/17	95	50 - 130	93	50 - 130	<0.05	ug/L	NC	30		
5784196	Biphenyl	2018/10/17	79	50 - 130	73	50 - 130	<0.1	ug/L	NC	30		
5784196	Bis(2-chloroethyl)ether	2018/10/17	65	50 - 130	58	50 - 130	<0.5	ug/L	NC	30		
5784196	Bis(2-chloroisopropyl)ether	2018/10/17	73	50 - 130	65	50 - 130	<0.5	ug/L	NC	30		
5784196	Bis(2-ethylhexyl)phthalate	2018/10/17	89	50 - 130	88	50 - 130	<1	ug/L	NC	30		
5784196	Chrysene	2018/10/17	96	50 - 130	97	50 - 130	<0.05	ug/L	NC	30		
5784196	Dibenz(a,h)anthracene	2018/10/17	95	50 - 130	97	50 - 130	<0.1	ug/L	NC	30		
5784196	Diethyl phthalate	2018/10/17	97	50 - 130	98	50 - 130	<0.1	ug/L	NC	30		
5784196	Dimethyl phthalate	2018/10/17	95	50 - 130	94	50 - 130	<0.1	ug/L	NC	30		
5784196	Fluoranthene	2018/10/17	96	50 - 130	98	50 - 130	<0.2	ug/L	NC	30		
5784196	Fluorene	2018/10/17	76	50 - 130	88	50 - 130	<0.2	ug/L	NC	30		
5784196	Indeno(1,2,3-cd)pyrene	2018/10/17	92	50 - 130	94	50 - 130	<0.1	ug/L	NC	30		
5784196	Naphthalene	2018/10/17	91	50 - 130	83	50 - 130	<0.2	ug/L	NC	30		
5784196	p-Chloroaniline	2018/10/17	47	30 - 130	74	30 - 130	<1	ug/L	NC	30		
5784196	Pentachlorophenol	2018/10/17	98	50 - 130	90	50 - 130	<0.1	ug/L	NC	30		
5784196	Phenanthrene	2018/10/17	87	50 - 130	87	50 - 130	<0.1	ug/L	NC	30		

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

Maxxam
A Bureau Veritas Group Company

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
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
5784196	Phenol	2018/10/17	28 (2)	30 - 130	29 (2)	30 - 130	<0.5	ug/L	NC	30		
5784196	Pyrene	2018/10/17	91	50 - 130	94	50 - 130	<0.05	ug/L	NC	30		
5785167	Mercury (Hg)	2018/10/16	94	75 - 125	100	80 - 120	<0.1	ug/L	NC	20		
5785671	Mercury (Hg)	2018/10/17	89	75 - 125	92	80 - 120	<0.1	ug/L	NC	20		
5787226	Acidity	2018/10/17	87	80 - 120	101	80 - 120	<5.0	mg/L	4.3	25		
5787592	Acidity	2018/10/17	87	80 - 120	101	80 - 120	<5.0	mg/L	NC	25		

N/A = Not Applicable

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

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

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

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

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

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

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

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

(1) The Surrogate recovery was below the acceptance criteria as stipulated by Ontario Regulation 153, however, this recovery is still within Maxxam's performance based criteria. Results reported with surrogate recoveries within this range are still valid but may have an associated low bias.

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

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

Maxxam Job #: B8Q8068
Report Date: 2018/10/18

Stantec Consulting Ltd
Client Project #: 160900764
Site Location: CLARINGTON TS - MONITORING WEL
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).

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.

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

14 total - stantec

Maxxam
A Bureau Veritas Group Company

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
Page 1 of 1	
Page 1 of 1	
Page 1 of 1	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	

COOLER OBSERVATIONS:

MAXXAM JOB#: B8Q8068

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	10	11	10
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	8	9	10
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	4	6	2
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	3	2	2
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	6	4	4
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	2	4	6
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	8	6	2
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	6	7	6
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	8	7	7
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	10	10	9
INTACT	X			1	2	3
ICE PRESENT	X					

CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	10	9	9
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	8	9	11
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	8	7	7
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	7	6	6
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	5	7	6
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	10	9	8
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT	X		TEMP	10	11	12
INTACT	X			1	2	3
ICE PRESENT	X					
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL	YES	NO	COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
Jwoodward	jennawoodward	2018/10/11	09:00

Maxxam
A Bureau Veritas Group Company

ADDITIONAL COOLER TEMPERATURE RECORD

CHAIN-OF-CUSTODY RECORD

CHAIN OF CUSTODY #	
Page 1 of 1	686533-01-01
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	
Page ___ of ___	

COOLER OBSERVATIONS:

MAXXAM JOB#: B848068

	YES	NO				
CUSTODY SEAL			COOLER ID 1			
PRESENT		✓	TEMP	9	11	7
INTACT				1	2	3
ICE PRESENT	✓					
CUSTODY SEAL			COOLER ID 2			
PRESENT		✓	TEMP	10	7	6
INTACT				1	2	3
ICE PRESENT	✓					
CUSTODY SEAL			COOLER ID 3			
PRESENT		✓	TEMP	10	4	4
INTACT				1	2	3
ICE PRESENT	✓					
CUSTODY SEAL			COOLER ID 4			
PRESENT		✓	TEMP	7	3	8
INTACT				1	2	3
ICE PRESENT	✓					
CUSTODY SEAL			COOLER ID 5			
PRESENT		✓	TEMP	7	6	4
INTACT				1	2	3
ICE PRESENT	✓					
CUSTODY SEAL			COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL			COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL			COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL			COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL			COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL			COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL			COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL			COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						
CUSTODY SEAL			COOLER ID			
PRESENT			TEMP			
INTACT				1	2	3
ICE PRESENT						

RECEIVED BY (SIGN & PRINT)		DATE (YYYY/MM/DD)	TIME (HH:MM)
Val	VLADA MARKEVICH	2018/10/11	12:13

Maxxam
A Bureau Veritas Group Company

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

STANTEC CHAIN OF CUSTODY RECORD

Page 1 of 1

INVOICE INFORMATION:		REPORT INFORMATION(if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#9197 Stantec Consulting Ltd	Company Name:	#18379 Stantec Consulting Ltd	Quotation #:	B48218	Maxxam Job #:	Bottle Order #:
Contact Name:	Accounts Payable	Contact Name:	Report - 160900764	Task #:	200.500		686533
Address:	300 Hagey Blvd Suite 100	Address:		Project #:	160900764	COC #:	Project Manager:
	Waterloo ON N2L 0A4		ON	Profit Centre:	1609	C#686533-01-01	Ronklin Gracian
Phone:	(519) 579-4410 Fax: (519) 579-6733	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 Day		

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

Regulation 153 (2011): ☒ Table 1 ☐ Res/Park ☐ Medium/Fine; ☐ Table 2 ☐ Ind/Comm ☐ Coarse; ☐ Table 3 ☐ Agri/Other ☐ For RSC; ☐ Table ___

Other Regulations: ☐ CCME ☐ Sanitary Sewer Bylaw; ☐ Reg 558. ☐ Storm Sewer Bylaw; ☐ MISA Municipality ___; ☐ PWQO; ☐ Other ___

Special Instructions

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

Field Filtered (please circle): Metals / Hg / Cr(VI)

ANALYSIS REQUESTED (PLEASE BE SPECIFIC)

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

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

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

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (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-160900764-201810 10 KR04	Oct 10/18	10:00	GW	Y	X	X	X	X	X	X	X	X	X		18	Analyze as per quote.
2		WG-160900764-201810 10 KR07A		10:20	GW											X	2	
3		WG-160900764-201810 10 -KR03		10:24	GW		X	X	X	X	X	X	X	X	X		18	
4		WG-160900764-201810 10 -KR03A		10:24	GW											X	2	
5		WG-160900764-201810 10 -KR05		12:20	GW		X	X	X	X	X	X	X	X	X		18	
6		WG-160900764-201810 10 -KR05A		12:20	GW											X	2	
7		WG-160900764-201810 10 -KR06		16:30	GW		X	X	X	X	X	X	X	X	X		18	
8		WG-160900764-201810 10 -KR06A		16:30	GW											X	2	
9		WG-160900764-201810 10 -KR07		16:23	GW		X	X	X	X	X	X	X	X	X		18	
10		WG-160900764-201810 10 -KR07A		16:23	GW											X	2	

11-Oct-18 08:30
Ronklin Gracian
B8Q8068
URE ENV-1241
REC'D IN PORT HOPE

* RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time	# jars used and not submitted	Laboratory Use Only				
JAMIE KOCH	18/10/10	2055	[illegible]	18/10/11	08:30		Time Sensitive	Temperature (°C) on Recei	Custody Seal	Yes	No
			for Beer / Rosseen / [illegible]	2018/10/11	12:13			See AFTR	Present	X	
									Intact	Y	

* 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

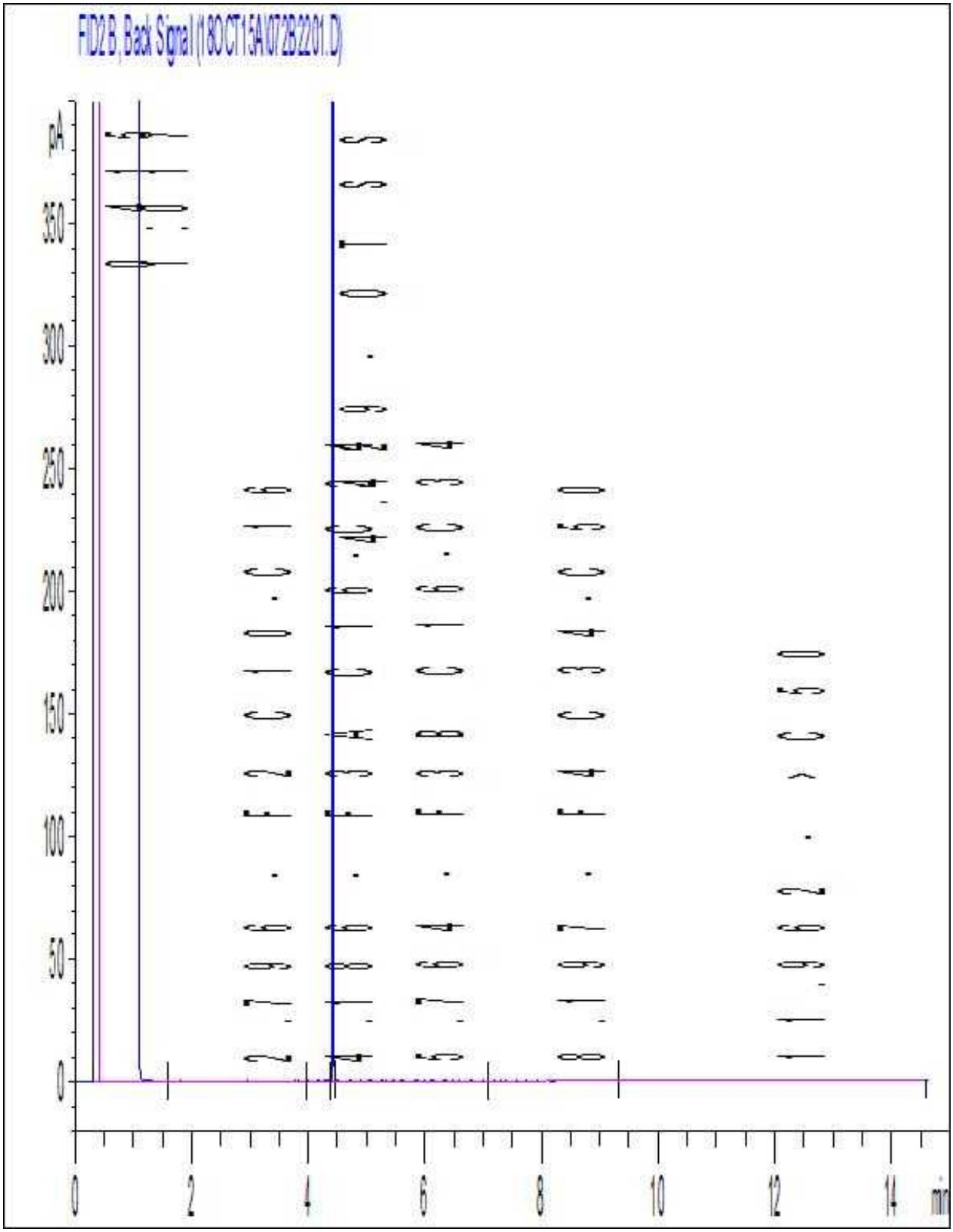
Ref to ACTR 5 MWH31563

Maxxam Analytics International Corporation o/a Maxxam Analytics

Maxxam Job #: B8Q8068
Report Date: 2018/10/18
Maxxam Sample: HZK189

Stantec Consulting Ltd
Client Project #: 160900764
Project name: CLARINGTON TS - MONITORING WEL
Client ID: WG-160900764-20181010-KR04

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

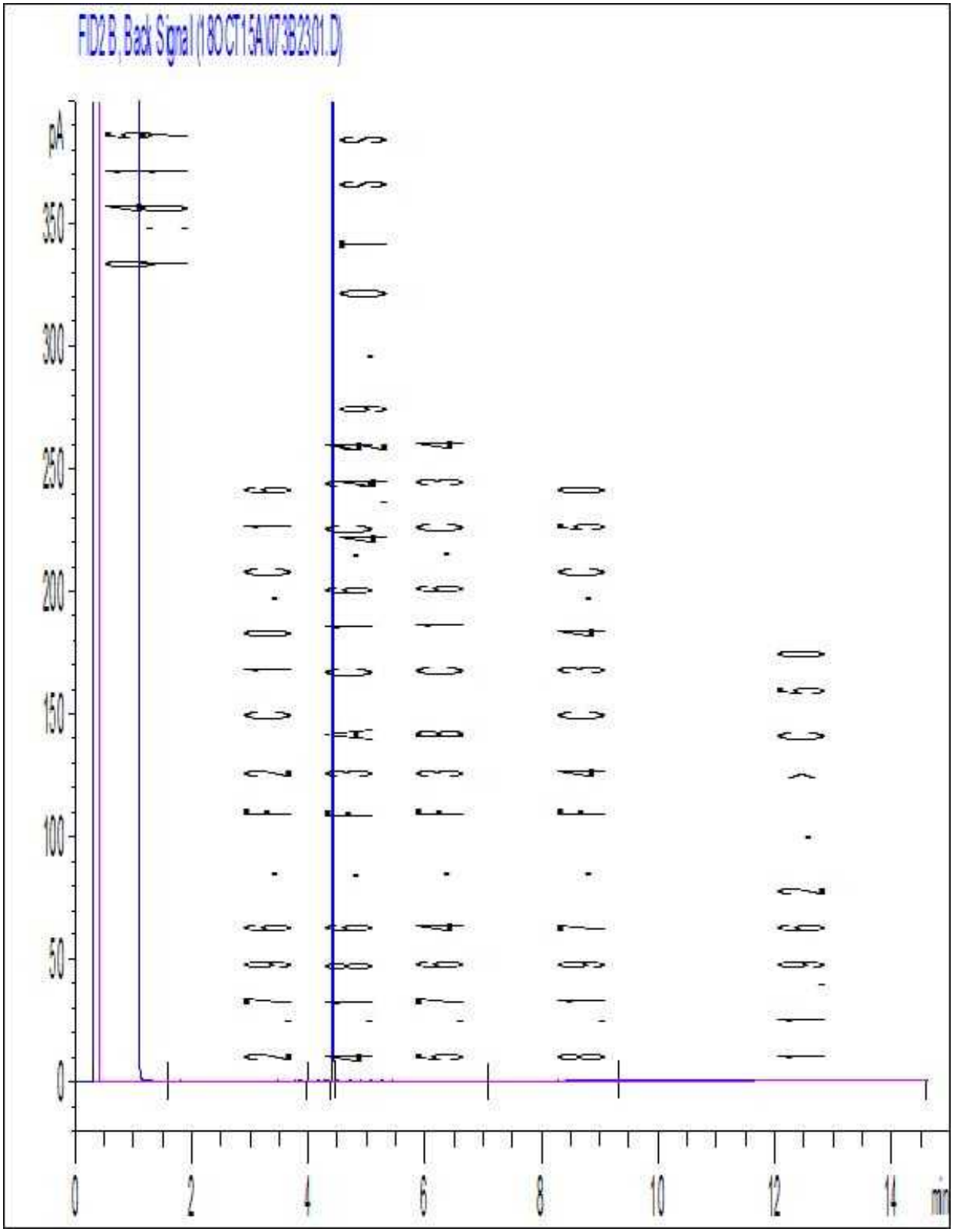


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B8Q8068
Report Date: 2018/10/18
Maxxam Sample: HZK191

Stantec Consulting Ltd
Client Project #: 160900764
Project name: CLARINGTON TS - MONITORING WEL
Client ID: WG-160900764-20181010-KR03

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

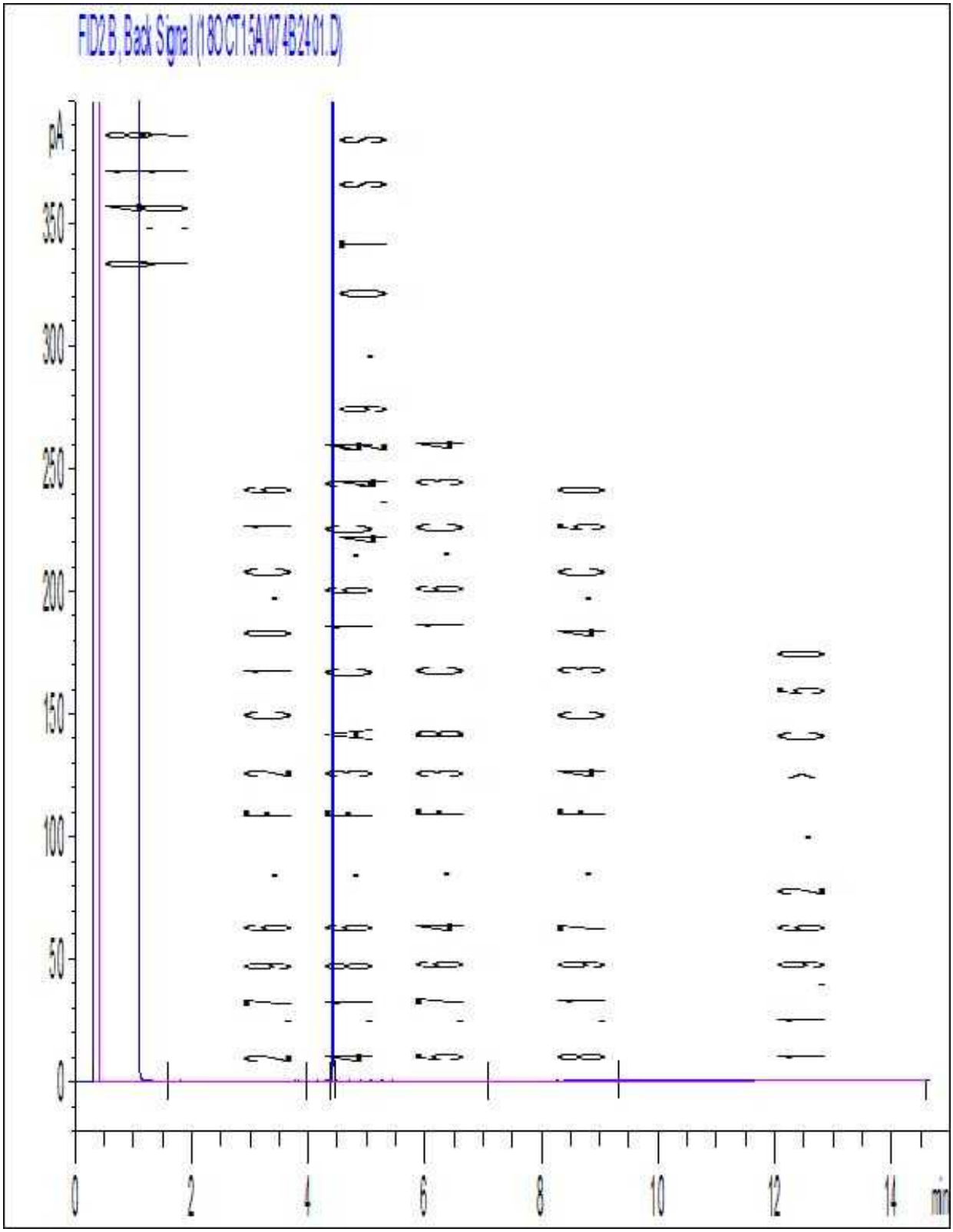


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B8Q8068
Report Date: 2018/10/18
Maxxam Sample: HZK191 Lab-Dup

Stantec Consulting Ltd
Client Project #: 160900764
Project name: CLARINGTON TS - MONITORING WEL
Client ID: WG-160900764-20181010-KR03

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

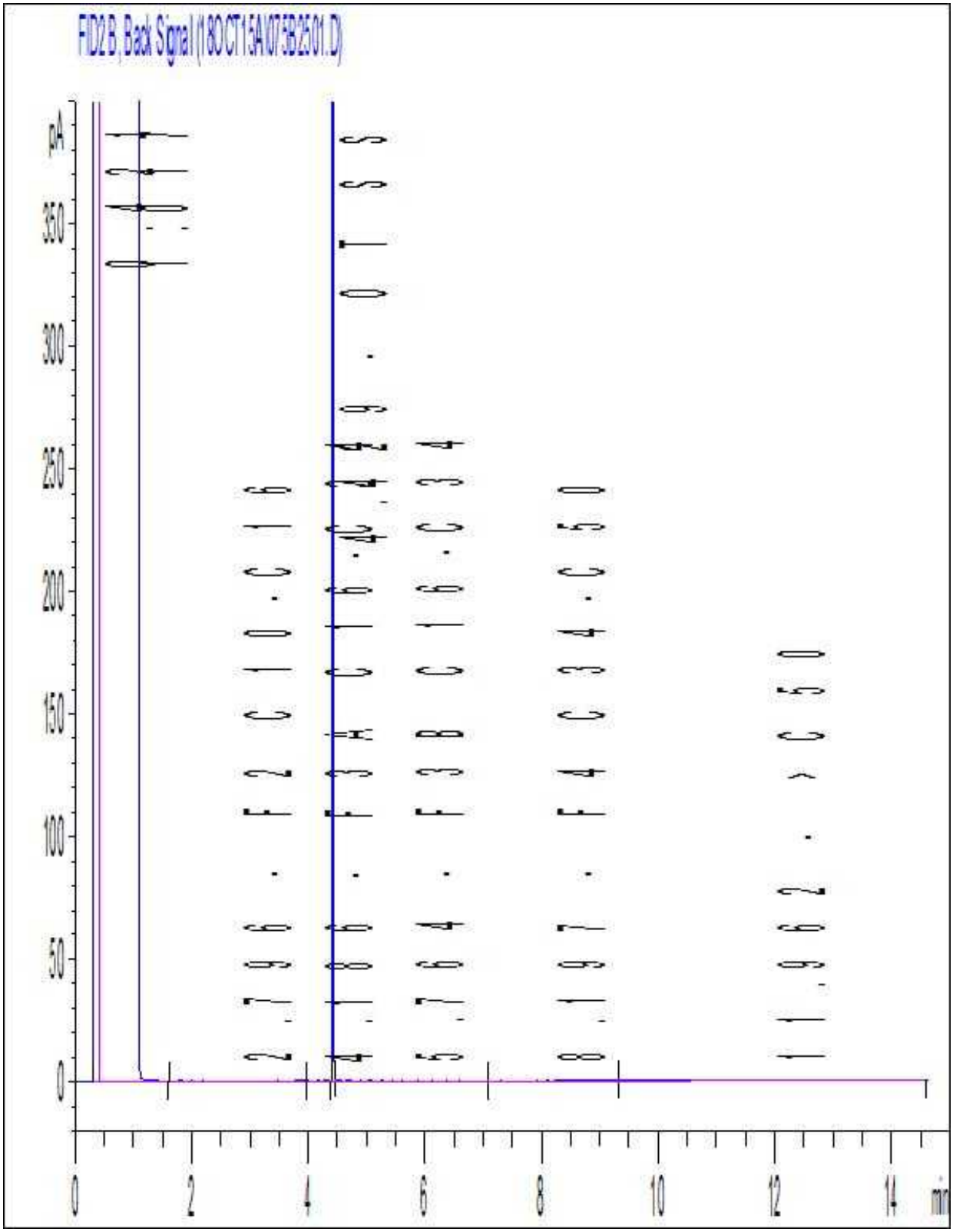


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B8Q8068
Report Date: 2018/10/18
Maxxam Sample: HZK193

Stantec Consulting Ltd
Client Project #: 160900764
Project name: CLARINGTON TS - MONITORING WEL
Client ID: WG-160900764-20181010-KR05

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

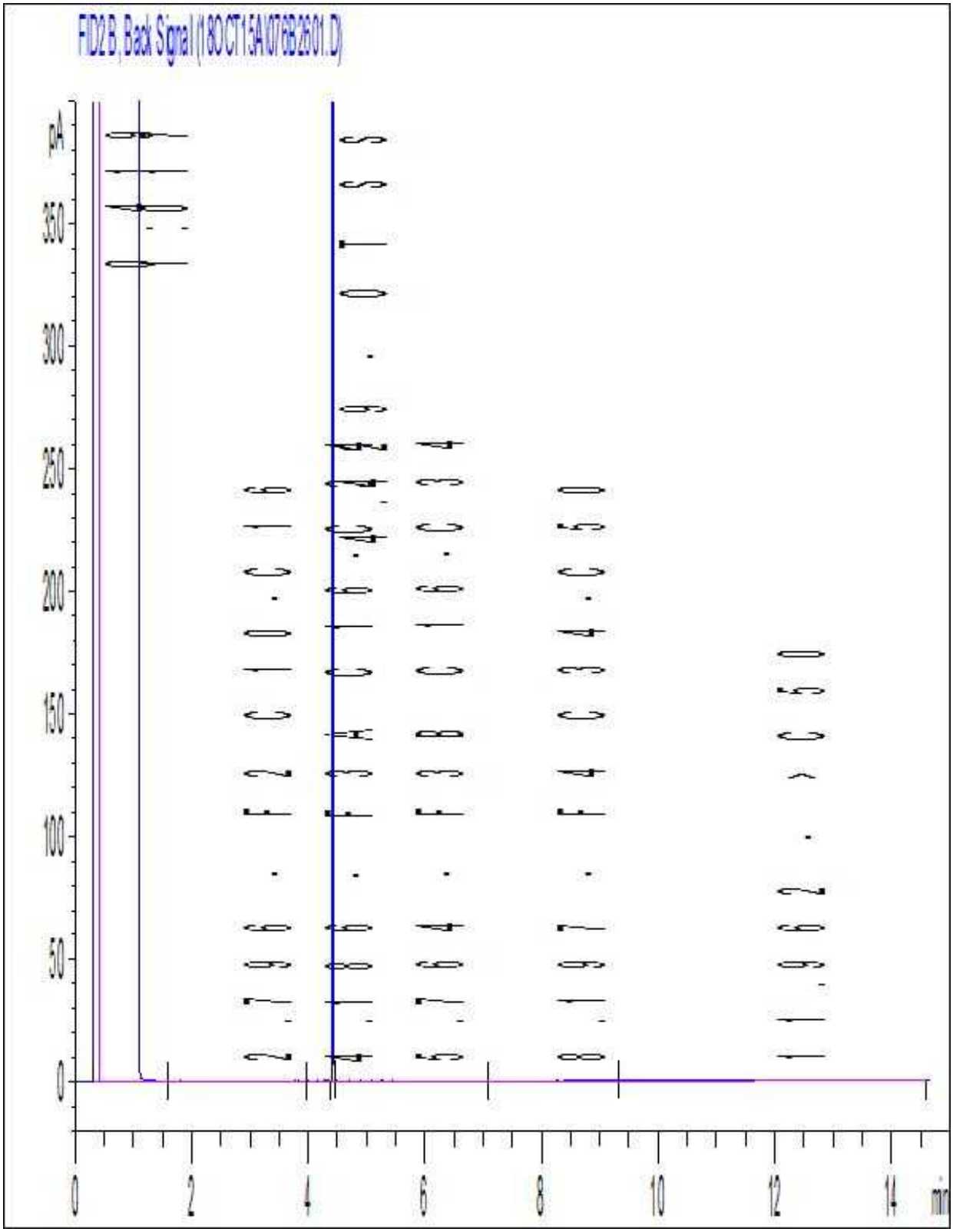


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B8Q8068
Report Date: 2018/10/18
Maxxam Sample: HZK195

Stantec Consulting Ltd
Client Project #: 160900764
Project name: CLARINGTON TS - MONITORING WEL
Client ID: WG-160900764-20181010-KR06

Petroleum Hydrocarbons F2-F4 in Water Chromatogram

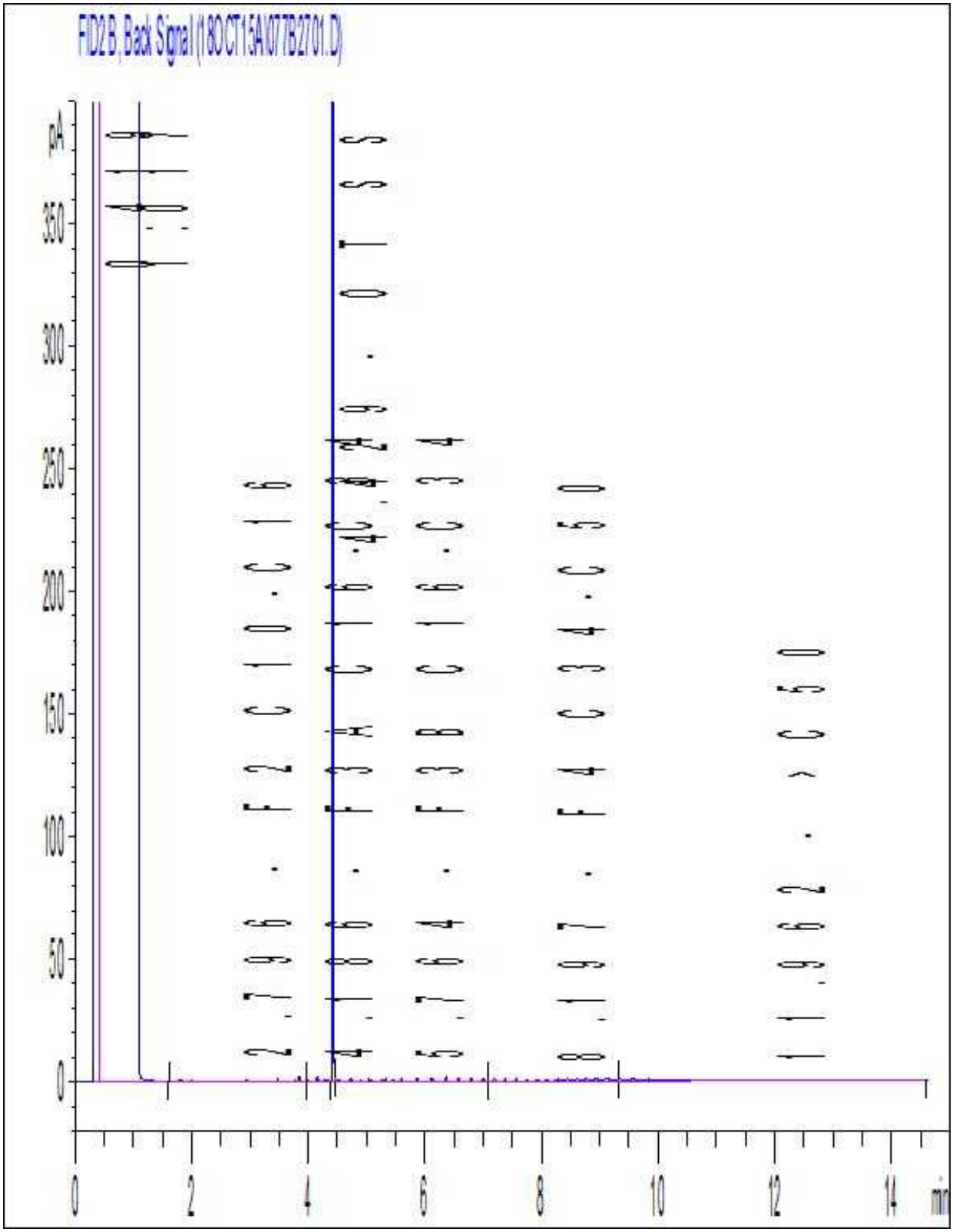


Note: This information is provided for reference purposes only. Should detailed chemist interpretation or fingerprinting be required, please contact the laboratory.

Maxxam Job #: B8Q8068
Report Date: 2018/10/18
Maxxam Sample: HZK197

Stantec Consulting Ltd
Client Project #: 160900764
Project name: CLARINGTON TS - MONITORING WEL
Client ID: WG-160900764-20181010-KR07

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.