Maxxam
A Bureau Veritas Group Company

Your Project #: 160900764
Site Location: CLARINGTON-PRIVATE WELL
Your C.O.C. #: 113471

Attention: Report - 160900764

Stantec Consulting Ltd
Clarington
ON
Canada

Report Date: 2018/05/10
Report #: R5122443
Version: 1 - Final

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B8A2432
Received: 2018/05/03, 14:18

Sample Matrix: Water
Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Methylnaphthalene Sum	1	N/A	2018/05/07	CAM SOP-00301	EPA 8270D m
ABN Compounds in Water by SIM GC/MS	1	2018/05/05	2018/05/07	CAM SOP-00301	EPA 8270 m
Acidity (CaCO3) in water (1)	1	N/A	2018/05/09		SM 22 2310
Alkalinity	1	N/A	2018/05/09	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	1	N/A	2018/05/09	CAM SOP-00102	APHA 4500-CO2 D
1,3-Dichloropropene Sum	1	N/A	2018/05/09		EPA 8260C m
Chloride by Automated Colourimetry	1	N/A	2018/05/07	CAM SOP-00463	EPA 325.2 m
Conductivity	1	N/A	2018/05/09	CAM SOP-00414	SM 23 2510 m
Chromium (VI) in Water	1	N/A	2018/05/07	CAM SOP-00436	EPA 7199 m
Free (WAD) Cyanide	1	N/A	2018/05/07	CAM SOP-00457	OMOE E3015 m
Dissolved Organic Carbon (DOC) (2)	1	N/A	2018/05/05	CAM SOP-00446	SM 23 5310 B m
Petroleum Hydrocarbons F2-F4 in Water (3)	1	2018/05/07	2018/05/08	CAM SOP-00316	CCME PHC-CWS m
Fluoride	1	2018/05/08	2018/05/09	CAM SOP-00449	SM 23 4500-F C m
Hardness (calculated as CaCO3)	1	N/A	2018/05/08	CAM SOP 00102/00408/00447	SM 2340 B
Mercury	1	2018/05/09	2018/05/09	CAM SOP-00453	EPA 7470A m
Metals Analysis by ICPMS (as received) (4)	1	N/A	2018/05/07	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	1	N/A	2018/05/09		
Anion and Cation Sum	1	N/A	2018/05/09		
Total Coliforms/ E. coli, CFU/100mL	1	N/A	2018/05/03	CAM SOP-00551	MOE E3407
Total Ammonia-N	1	N/A	2018/05/09	CAM SOP-00441	EPA GS I-2522-90 m
Nitrate (NO3) and Nitrite (NO2) in Water (5)	1	N/A	2018/05/07	CAM SOP-00440	SM 23 4500-NO3I/NO2B
Polychlorinated Biphenyl in Water	1	2018/05/05	2018/05/07	CAM SOP-00309	EPA 8082A m
pH	1	N/A	2018/05/09	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	1	N/A	2018/05/07	CAM SOP-00461	EPA 365.1 m
Sat. pH and Langelier Index (@ 20C)	1	N/A	2018/05/09		
Sat. pH and Langelier Index (@ 4C)	1	N/A	2018/05/09		
Sulphate by Automated Colourimetry	1	N/A	2018/05/07	CAM SOP-00464	EPA 375.4 m
Total Dissolved Solids (TDS calc)	1	N/A	2018/05/09		
Total Dissolved Solids	1	2018/05/08	2018/05/08	CAM SOP-00428	SM 23 2540C m

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Samples Received: 1

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Reference
Total Organic Carbon (TOC) (6)	1	N/A	2018/05/08	CAM SOP-00446	SM 23 5310B m
Total Suspended Solids	1	2018/05/08	2018/05/08	CAM SOP-00428	SM 23 2540D m
Turbidity	1	N/A	2018/05/04	CAM SOP-00417	SM 23 2130 B m
Volatile Organic Compounds and F1 PHCs	1	N/A	2018/05/08	CAM SOP-00230	EPA 8260C m

Remarks:

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

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

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

Solid sample results, except biota, are based on dry weight unless otherwise indicated. Organic analyses are not recovery corrected except for isotope dilution methods.
Results relate to samples tested.
This Certificate shall not be reproduced except in full, without the written approval of the laboratory.

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

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

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

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Encryption Key

Ronklin Gracian
Project Manager
10 May 2018 15:07:55

Please direct all questions regarding this Certificate of Analysis to your Project Manager.
Deepthi Shaji, Project Manager
Email: dshaji@maxxam.ca
Phone# (905)817-5700 Ext:5807
==========
Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

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

RCAP - COMPREHENSIVE (DRINKING WATER)

Maxxam ID		GPK260			GPK260		
Sampling Date		2018/05/03 12:15			2018/05/03 12:15		
COC Number		113471			113471		
	UNITS	**WG-160900764-20180503-RD02**	**RDL**	**QC Batch**	**WG-160900764-20180503-RD02 Lab-Dup**	**RDL**	**QC Batch**
Calculated Parameters							
Anion Sum	me/L	7.31	N/A	5514225			
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	280	1.0	5513220			
Calculated TDS	mg/L	400	1.0	5513691			
Carb. Alkalinity (calc. as CaCO3)	mg/L	3.0	1.0	5513220			
Cation Sum	me/L	7.02	N/A	5514225			
Hardness (CaCO3)	mg/L	300	1.0	5513627			
Ion Balance (% Difference)	%	2.07	N/A	5514224			
Langelier Index (@ 20C)	N/A	1.07		5513689			
Langelier Index (@ 4C)	N/A	0.826		5513690			
Saturation pH (@ 20C)	N/A	6.98		5513689			
Saturation pH (@ 4C)	N/A	7.23		5513690			
Inorganics							
Total Ammonia-N	mg/L	<0.050	0.050	5518980			
Conductivity	umho/cm	690	1.0	5521282	700	1.0	5521282
Dissolved Organic Carbon	mg/L	1.7	0.50	5516263			
Orthophosphate (P)	mg/L	<0.010	0.010	5517425			
pH	pH	8.05		5521284	8.05		5521284
Dissolved Sulphate (SO4)	mg/L	13	1.0	5517424			
Alkalinity (Total as CaCO3)	mg/L	280	1.0	5521279	280	1.0	5521279
Dissolved Chloride (Cl)	mg/L	29	1.0	5517423			
Nitrite (N)	mg/L	<0.010	0.010	5515781			
Nitrate (N)	mg/L	7.93	0.10	5515781			
Metals							
. Aluminum (Al)	mg/L	<0.0050	0.0050	5515471			
. Antimony (Sb)	mg/L	<0.00050	0.00050	5515471			
. Arsenic (As)	mg/L	<0.0010	0.0010	5515471			
. Barium (Ba)	mg/L	0.059	0.0020	5515471			
. Beryllium (Be)	mg/L	<0.00050	0.00050	5515471			
. Boron (B)	mg/L	0.025	0.010	5515471			

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

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Sampling Date		2018/05/03 12:15			2018/05/03 12:15		
COC Number		113471			113471		
	UNITS	**WG-160900764-20180503-RD02**	**RDL**	**QC Batch**	**WG-160900764-20180503-RD02 Lab-Dup**	**RDL**	**QC Batch**
. Cadmium (Cd)	mg/L	<0.00010	0.00010	5515471			
. Calcium (Ca)	mg/L	110	0.20	5515471			
. Chromium (Cr)	mg/L	<0.0050	0.0050	5515471			
. Cobalt (Co)	mg/L	<0.00050	0.00050	5515471			
. Copper (Cu)	mg/L	0.0049	0.0010	5515471			
. Iron (Fe)	mg/L	<0.10	0.10	5515471			
. Lead (Pb)	mg/L	<0.00050	0.00050	5515471			
. Magnesium (Mg)	mg/L	8.9	0.050	5515471			
. Manganese (Mn)	mg/L	<0.0020	0.0020	5515471			
. Molybdenum (Mo)	mg/L	0.00052	0.00050	5515471			
. Nickel (Ni)	mg/L	<0.0010	0.0010	5515471			
. Phosphorus (P)	mg/L	<0.10	0.10	5515471			
. Potassium (K)	mg/L	4.8	0.20	5515471			
. Selenium (Se)	mg/L	<0.0020	0.0020	5515471			
. Silicon (Si)	mg/L	4.3	0.050	5515471			
. Silver (Ag)	mg/L	<0.00010	0.00010	5515471			
. Sodium (Na)	mg/L	21	0.10	5515471			
. Strontium (Sr)	mg/L	0.21	0.0010	5515471			
. Thallium (Tl)	mg/L	<0.000050	0.000050	5515471			
. Titanium (Ti)	mg/L	<0.0050	0.0050	5515471			
. Uranium (U)	mg/L	0.00027	0.00010	5515471			
. Vanadium (V)	mg/L	<0.00050	0.00050	5515471			
. Zinc (Zn)	mg/L	0.011	0.0050	5515471			
. Zirconium (Zr)	mg/L	<0.0010	0.0010	5515471			

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RESULTS OF ANALYSES OF WATER

Maxxam ID		GPK260			GPK260		
Sampling Date		2018/05/03 12:15			2018/05/03 12:15		
COC Number		113471			113471		
	UNITS	**WG-160900764-20180503-RD02**	**RDL**	**QC Batch**	**WG-160900764-20180503-RD02 Lab-Dup**	**RDL**	**QC Batch**
Inorganics							
Acidity	mg/L	17	5.0	5522024			
Total Dissolved Solids	mg/L	435	10	5521343			
Fluoride (F-)	mg/L	<0.10	0.10	5521283	<0.10	0.10	5521283
Total Organic Carbon (TOC)	mg/L	1.6	0.50	5519812			
Total Suspended Solids	mg/L	<10	10	5520388			
Turbidity	NTU	<0.1	0.1	5515544	<0.1	0.1	5515544
WAD Cyanide (Free)	ug/L	<1	1	5516042			

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		GPK260		
Sampling Date		2018/05/03 12:15		
COC Number		113471		
	UNITS	**WG-160900764-20180503-RD02**	**RDL**	**QC Batch**
Metals				
Chromium (VI)	ug/L	0.56	0.50	5512078
Mercury (Hg)	ug/L	<0.1	0.1	5521934

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MICROBIOLOGY (WATER)

Maxxam ID		GPK260	
Sampling Date		2018/05/03 12:15	
COC Number		113471	
	UNITS	**WG-160900764-20180503-RD02**	**QC Batch**
Microbiological			
Background	CFU/100mL	8	5514790
Total Coliforms	CFU/100mL	11	5514790
Escherichia coli	CFU/100mL	0	5514790
QC Batch = Quality Control Batch			

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O.REG 153 PCBS (WATER)

Maxxam ID		GPK260		
Sampling Date		2018/05/03 12:15		
COC Number		113471		
	UNITS	**WG-160900764-20180503-RD02**	**RDL**	**QC Batch**
PCBs				
Aroclor 1242	ug/L	<0.05	0.05	5517352
Aroclor 1248	ug/L	<0.05	0.05	5517352
Aroclor 1254	ug/L	<0.05	0.05	5517352
Aroclor 1260	ug/L	<0.05	0.05	5517352
Total PCB	ug/L	<0.05	0.05	5517352
Surrogate Recovery (%)				
Decachlorobiphenyl	%	73		5517352

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

Maxxam ID		GPK260		
Sampling Date		2018/05/03 12:15		
COC Number		113471		
	UNITS	**WG-160900764-20180503-RD02**	**RDL**	**QC Batch**
Calculated Parameters				
1,3-Dichloropropene (cis+trans)	ug/L	<0.50	0.50	5514096
Volatile Organics				
Acetone (2-Propanone)	ug/L	<10	10	5516423
Benzene	ug/L	<0.20	0.20	5516423
Bromodichloromethane	ug/L	<0.50	0.50	5516423
Bromoform	ug/L	<1.0	1.0	5516423
Bromomethane	ug/L	<0.50	0.50	5516423
Carbon Tetrachloride	ug/L	<0.20	0.20	5516423
Chlorobenzene	ug/L	<0.20	0.20	5516423
Chloroform	ug/L	<0.20	0.20	5516423
Dibromochloromethane	ug/L	<0.50	0.50	5516423
1,2-Dichlorobenzene	ug/L	<0.50	0.50	5516423
1,3-Dichlorobenzene	ug/L	<0.50	0.50	5516423
1,4-Dichlorobenzene	ug/L	<0.50	0.50	5516423
Dichlorodifluoromethane (FREON 12)	ug/L	<1.0	1.0	5516423
1,1-Dichloroethane	ug/L	<0.20	0.20	5516423
1,2-Dichloroethane	ug/L	<0.50	0.50	5516423
1,1-Dichloroethylene	ug/L	<0.20	0.20	5516423
cis-1,2-Dichloroethylene	ug/L	<0.50	0.50	5516423
trans-1,2-Dichloroethylene	ug/L	<0.50	0.50	5516423
1,2-Dichloropropane	ug/L	<0.20	0.20	5516423
cis-1,3-Dichloropropene	ug/L	<0.30	0.30	5516423
trans-1,3-Dichloropropene	ug/L	<0.40	0.40	5516423
Ethylbenzene	ug/L	<0.20	0.20	5516423
Ethylene Dibromide	ug/L	<0.20	0.20	5516423
Hexane	ug/L	<1.0	1.0	5516423
Methylene Chloride(Dichloromethane)	ug/L	<2.0	2.0	5516423
Methyl Ethyl Ketone (2-Butanone)	ug/L	<10	10	5516423
Methyl Isobutyl Ketone	ug/L	<5.0	5.0	5516423
Methyl t-butyl ether (MTBE)	ug/L	<0.50	0.50	5516423

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

Maxxam ID		GPK260		
Sampling Date		2018/05/03 12:15		
COC Number		113471		
	UNITS	**WG-160900764-20180503-RD02**	**RDL**	**QC Batch**
Styrene	ug/L	<0.50	0.50	5516423
1,1,1,2-Tetrachloroethane	ug/L	<0.50	0.50	5516423
1,1,2,2-Tetrachloroethane	ug/L	<0.50	0.50	5516423
Tetrachloroethylene	ug/L	<0.20	0.20	5516423
Toluene	ug/L	<0.20	0.20	5516423
1,1,1-Trichloroethane	ug/L	<0.20	0.20	5516423
1,1,2-Trichloroethane	ug/L	<0.50	0.50	5516423
Trichloroethylene	ug/L	<0.20	0.20	5516423
Trichlorofluoromethane (FREON 11)	ug/L	<0.50	0.50	5516423
Vinyl Chloride	ug/L	<0.20	0.20	5516423
p+m-Xylene	ug/L	<0.20	0.20	5516423
o-Xylene	ug/L	<0.20	0.20	5516423
Total Xylenes	ug/L	<0.20	0.20	5516423
F1 (C6-C10)	ug/L	<25	25	5516423
F1 (C6-C10) - BTEX	ug/L	<25	25	5516423
F2-F4 Hydrocarbons				
F2 (C10-C16 Hydrocarbons)	ug/L	<100	100	5519492
F3 (C16-C34 Hydrocarbons)	ug/L	<200	200	5519492
F4 (C34-C50 Hydrocarbons)	ug/L	<200	200	5519492
Reached Baseline at C50	ug/L	Yes		5519492
Surrogate Recovery (%)				
o-Terphenyl	%	96		5519492
4-Bromofluorobenzene	%	83		5516423
D4-1,2-Dichloroethane	%	108		5516423
D8-Toluene	%	94		5516423

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O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		GPK260		
Sampling Date		2018/05/03 12:15		
COC Number		113471		
	UNITS	**WG-160900764-20180503-RD02**	**RDL**	**QC Batch**
Semivolatile Organics				
1,2,4-Trichlorobenzene	ug/L	<0.1	0.1	5517203
1-Methylnaphthalene	ug/L	<0.2	0.2	5517203
2,4,5-Trichlorophenol	ug/L	<0.2	0.2	5517203
2,4,6-Trichlorophenol	ug/L	<0.2	0.2	5517203
2,4-Dichlorophenol	ug/L	<0.1	0.1	5517203
2,4-Dimethylphenol	ug/L	<0.5	0.5	5517203
2,4-Dinitrophenol	ug/L	<2	2	5517203
2,4-Dinitrotoluene	ug/L	<0.3	0.3	5517203
2,6-Dinitrotoluene	ug/L	<0.3	0.3	5517203
2-Chlorophenol	ug/L	<0.1	0.1	5517203
2-Methylnaphthalene	ug/L	<0.2	0.2	5517203
3,3'-Dichlorobenzidine	ug/L	<0.5	0.5	5517203
Acenaphthene	ug/L	<0.2	0.2	5517203
Acenaphthylene	ug/L	<0.2	0.2	5517203
Anthracene	ug/L	<0.05	0.05	5517203
Benzo(a)anthracene	ug/L	<0.05	0.05	5517203
Benzo(a)pyrene	ug/L	<0.01	0.01	5517203
Benzo(b/j)fluoranthene	ug/L	<0.05	0.05	5517203
Benzo(g,h,i)perylene	ug/L	<0.05	0.05	5517203
Benzo(k)fluoranthene	ug/L	<0.05	0.05	5517203
Biphenyl	ug/L	<0.1	0.1	5517203
Bis(2-chloroethyl)ether	ug/L	<0.5	0.5	5517203
Bis(2-chloroisopropyl)ether	ug/L	<0.5	0.5	5517203
Bis(2-ethylhexyl)phthalate	ug/L	<1	1	5517203
Chrysene	ug/L	<0.05	0.05	5517203
Dibenz(a,h)anthracene	ug/L	<0.1	0.1	5517203
Diethyl phthalate	ug/L	<0.1	0.1	5517203
Dimethyl phthalate	ug/L	<0.1	0.1	5517203
Fluoranthene	ug/L	<0.2	0.2	5517203
Fluorene	ug/L	<0.2	0.2	5517203

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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Maxxam Job #: B8A2432
Report Date: 2018/05/10

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

O.REG 153 SEMIVOLATILES PACKAGE (WATER)

Maxxam ID		GPK260		
Sampling Date		2018/05/03 12:15		
COC Number		113471		
	UNITS	**WG-160900764-20180503-RD02**	**RDL**	**QC Batch**
Indeno(1,2,3-cd)pyrene	ug/L	<0.1	0.1	5517203
Naphthalene	ug/L	<0.2	0.2	5517203
p-Chloroaniline	ug/L	<1	1	5517203
Pentachlorophenol	ug/L	<0.1	0.1	5517203
Phenanthrene	ug/L	<0.1	0.1	5517203
Phenol	ug/L	<0.5	0.5	5517203
Pyrene	ug/L	<0.05	0.05	5517203
Calculated Parameters				
Methylnaphthalene, 2-(1-)	ug/L	<0.28	0.28	5513336
Surrogate Recovery (%)				
2,4,6-Tribromophenol	%	50		5517203
2-Fluorobiphenyl	%	67		5517203
D14-Terphenyl (FS)	%	83		5517203
D5-Nitrobenzene	%	60		5517203

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

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

TEST SUMMARY

Maxxam ID: GPK260
Sample ID: WG-160900764-20180503-RD02
Matrix: Water

Collected: 2018/05/03
Shipped:
Received: 2018/05/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Methylnaphthalene Sum	CALC	5513336	N/A	2018/05/07	Automated Statchk
ABN Compounds in Water by SIM GC/MS	GC/MS	5517203	2018/05/05	2018/05/07	Milijana Avramovic
Acidity (CaCO3) in water	MT	5522024	N/A	2018/05/09	Brent Boudreau
Alkalinity	AT	5521279	N/A	2018/05/09	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	5513220	N/A	2018/05/09	Automated Statchk
1,3-Dichloropropene Sum	CALC	5514096	N/A	2018/05/09	Automated Statchk
Chloride by Automated Colourimetry	KONE	5517423	N/A	2018/05/07	Alina Dobreanu
Conductivity	AT	5521282	N/A	2018/05/09	Surinder Rai
Chromium (VI) in Water	IC	5512078	N/A	2018/05/07	Lang Le
Free (WAD) Cyanide	SKAL/CN	5516042	N/A	2018/05/07	Xuanhong Qiu
Dissolved Organic Carbon (DOC)	TOCV/NDIR	5516263	N/A	2018/05/05	Anastasia Hamanov
Petroleum Hydrocarbons F2-F4 in Water	GC/FID	5519492	2018/05/07	2018/05/08	Zhiyue (Frank) Zhu
Fluoride	ISE	5521283	2018/05/08	2018/05/09	Surinder Rai
Hardness (calculated as CaCO3)		5513627	N/A	2018/05/08	Automated Statchk
Mercury	CV/AA	5521934	2018/05/09	2018/05/09	Ron Morrison
Metals Analysis by ICPMS (as received)	ICP/MS	5515471	N/A	2018/05/07	Thao Nguyen
Ion Balance (% Difference)	CALC	5514224	N/A	2018/05/09	Automated Statchk
Anion and Cation Sum	CALC	5514225	N/A	2018/05/09	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	5514790	N/A	2018/05/03	Sirimathie Aluthwala
Total Ammonia-N	LACH/NH4	5518980	N/A	2018/05/09	Parminder Sangha
Nitrate (NO3) and Nitrite (NO2) in Water	LACH	5515781	N/A	2018/05/07	Anastasia Hamanov
Polychlorinated Biphenyl in Water	GC/ECD	5517352	2018/05/05	2018/05/07	Svitlana Shaula
pH	AT	5521284	N/A	2018/05/09	Surinder Rai
Orthophosphate	KONE	5517425	N/A	2018/05/07	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	5513689	N/A	2018/05/09	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	5513690	N/A	2018/05/09	Automated Statchk
Sulphate by Automated Colourimetry	KONE	5517424	N/A	2018/05/07	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	5513691	N/A	2018/05/09	Automated Statchk
Total Dissolved Solids	BAL	5521343	2018/05/08	2018/05/08	Jingwei (Alvin) Shi
Total Organic Carbon (TOC)	TOCV/NDIR	5519812	N/A	2018/05/08	Anastasia Hamanov
Total Suspended Solids	BAL	5520388	2018/05/08	2018/05/08	Massarat Jan
Turbidity	AT	5515544	N/A	2018/05/04	Tahir Anwar
Volatile Organic Compounds and F1 PHCs	GC/MSFD	5516423	N/A	2018/05/08	Denis Reid

Maxxam ID: GPK260 Dup
Sample ID: WG-160900764-20180503-RD02
Matrix: Water

Collected: 2018/05/03
Shipped:
Received: 2018/05/03

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	5521279	N/A	2018/05/09	Surinder Rai
Conductivity	AT	5521282	N/A	2018/05/09	Surinder Rai
Fluoride	ISE	5521283	2018/05/08	2018/05/09	Surinder Rai
pH	AT	5521284	N/A	2018/05/09	Surinder Rai
Turbidity	AT	5515544	N/A	2018/05/04	Tahir Anwar

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GENERAL COMMENTS

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

Package 1	9.0°C

Temperatures upon receipt at Maxxam Bedford
Package 1: -1 degrees C
Each temperature is the average of up to three cooler temperatures taken at receipt

Sample GPK260 [WG-160900764-20180503-RD02] : Hexavalent Chromium > Total/Dissolved Chromium: Both values fall within the method uncertainty for duplicates and are likely equivalent. TOC< DOC: Both values fall within the method uncertainty for duplicates and are likely equivalent.

Results relate only to the items tested.

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QUALITY ASSURANCE REPORT

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

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5516423	4-Bromofluorobenzene	2018/05/08	102	70 - 130	103	70 - 130	91	%				
5516423	D4-1,2-Dichloroethane	2018/05/08	104	70 - 130	102	70 - 130	105	%				
5516423	D8-Toluene	2018/05/08	106	70 - 130	105	70 - 130	92	%				
5517203	2,4,6-Tribromophenol	2018/05/07	88	50 - 130	76	50 - 130	62	%				
5517203	2-Fluorobiphenyl	2018/05/07	73	50 - 130	66	50 - 130	66	%				
5517203	D14-Terphenyl (FS)	2018/05/07	87	50 - 130	87	50 - 130	87	%				
5517203	D5-Nitrobenzene	2018/05/07	67	50 - 130	64	50 - 130	68	%				
5517352	Decachlorobiphenyl	2018/05/07	86	60 - 130	85	60 - 130	72	%				
5519492	o-Terphenyl	2018/05/08	101	60 - 130	100	60 - 130	96	%				
5512078	Chromium (VI)	2018/05/07	102	80 - 120	103	80 - 120	<0.50	ug/L	NC	20		
5515471	. Aluminum (Al)	2018/05/07	100	80 - 120	100	80 - 120	<0.0050	mg/L				
5515471	. Antimony (Sb)	2018/05/07	108	80 - 120	105	80 - 120	<0.00050	mg/L				
5515471	. Arsenic (As)	2018/05/07	102	80 - 120	100	80 - 120	<0.0010	mg/L				
5515471	. Barium (Ba)	2018/05/07	106	80 - 120	103	80 - 120	<0.0020	mg/L				
5515471	. Beryllium (Be)	2018/05/07	102	80 - 120	103	80 - 120	<0.00050	mg/L				
5515471	. Boron (B)	2018/05/07	99	80 - 120	99	80 - 120	<0.010	mg/L				
5515471	. Cadmium (Cd)	2018/05/07	102	80 - 120	102	80 - 120	<0.00010	mg/L				
5515471	. Calcium (Ca)	2018/05/07	98	80 - 120	99	80 - 120	<0.20	mg/L				
5515471	. Chromium (Cr)	2018/05/07	98	80 - 120	98	80 - 120	<0.0050	mg/L				
5515471	. Cobalt (Co)	2018/05/07	99	80 - 120	99	80 - 120	<0.00050	mg/L				
5515471	. Copper (Cu)	2018/05/07	103	80 - 120	101	80 - 120	<0.0010	mg/L				
5515471	. Iron (Fe)	2018/05/07	101	80 - 120	102	80 - 120	<0.10	mg/L				
5515471	. Lead (Pb)	2018/05/07	97	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20		
5515471	. Magnesium (Mg)	2018/05/07	98	80 - 120	99	80 - 120	<0.050	mg/L				
5515471	. Manganese (Mn)	2018/05/07	100	80 - 120	98	80 - 120	<0.0020	mg/L				
5515471	. Molybdenum (Mo)	2018/05/07	106	80 - 120	104	80 - 120	<0.00050	mg/L				
5515471	. Nickel (Ni)	2018/05/07	97	80 - 120	98	80 - 120	<0.0010	mg/L				
5515471	. Phosphorus (P)	2018/05/07	107	80 - 120	113	80 - 120	<0.10	mg/L				
5515471	. Potassium (K)	2018/05/07	101	80 - 120	99	80 - 120	<0.20	mg/L				
5515471	. Selenium (Se)	2018/05/07	100	80 - 120	102	80 - 120	<0.0020	mg/L				
5515471	. Silicon (Si)	2018/05/07	99	80 - 120	97	80 - 120	<0.050	mg/L				

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QUALITY ASSURANCE REPORT(CONT'D)

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

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5515471	. Silver (Ag)	2018/05/07	99	80 - 120	101	80 - 120	<0.00010	mg/L				
5515471	. Sodium (Na)	2018/05/07	NC	80 - 120	99	80 - 120	<0.10	mg/L				
5515471	. Strontium (Sr)	2018/05/07	100	80 - 120	98	80 - 120	<0.0010	mg/L				
5515471	. Thallium (Tl)	2018/05/07	95	80 - 120	99	80 - 120	<0.000050	mg/L				
5515471	. Titanium (Ti)	2018/05/07	97	80 - 120	94	80 - 120	<0.0050	mg/L				
5515471	. Uranium (U)	2018/05/07	102	80 - 120	103	80 - 120	<0.00010	mg/L				
5515471	. Vanadium (V)	2018/05/07	102	80 - 120	101	80 - 120	<0.00050	mg/L				
5515471	. Zinc (Zn)	2018/05/07	97	80 - 120	98	80 - 120	<0.0050	mg/L				
5515471	. Zirconium (Zr)	2018/05/07	108	80 - 120	105	80 - 120	<0.0010	mg/L				
5515544	Turbidity	2018/05/04			101	85 - 115	<0.1	NTU	NC	20		
5515781	Nitrate (N)	2018/05/07	NC	80 - 120	103	80 - 120	<0.10	mg/L	0.46	20		
5515781	Nitrite (N)	2018/05/07	98	80 - 120	102	80 - 120	<0.010	mg/L	0.46	20		
5516042	WAD Cyanide (Free)	2018/05/07	110	80 - 120	104	80 - 120	<1	ug/L	NC	20		
5516263	Dissolved Organic Carbon	2018/05/05	93	80 - 120	97	80 - 120	<0.50	mg/L	1.8	20		
5516423	1,1,1,2-Tetrachloroethane	2018/05/08	96	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
5516423	1,1,1-Trichloroethane	2018/05/08	97	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
5516423	1,1,2,2-Tetrachloroethane	2018/05/08	96	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
5516423	1,1,2-Trichloroethane	2018/05/08	99	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5516423	1,1-Dichloroethane	2018/05/08	97	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
5516423	1,1-Dichloroethylene	2018/05/08	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5516423	1,2-Dichlorobenzene	2018/05/08	95	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
5516423	1,2-Dichloroethane	2018/05/08	100	70 - 130	99	70 - 130	<0.50	ug/L	NC	30		
5516423	1,2-Dichloropropane	2018/05/08	98	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
5516423	1,3-Dichlorobenzene	2018/05/08	99	70 - 130	100	70 - 130	<0.50	ug/L	NC	30		
5516423	1,4-Dichlorobenzene	2018/05/08	91	70 - 130	93	70 - 130	<0.50	ug/L	NC	30		
5516423	Acetone (2-Propanone)	2018/05/08	98	60 - 140	99	60 - 140	<10	ug/L	NC	30		
5516423	Benzene	2018/05/08	96	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5516423	Bromodichloromethane	2018/05/08	97	70 - 130	97	70 - 130	<0.50	ug/L	NC	30		
5516423	Bromoform	2018/05/08	94	70 - 130	94	70 - 130	<1.0	ug/L	NC	30		
5516423	Bromomethane	2018/05/08	96	60 - 140	91	60 - 140	<0.50	ug/L	NC	30		
5516423	Carbon Tetrachloride	2018/05/08	95	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		

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QUALITY ASSURANCE REPORT(CONT'D)

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Site Location: CLARINGTON-PRIVATE WELL
Sampler Initials: RD

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5516423	Chlorobenzene	2018/05/08	96	70 - 130	97	70 - 130	<0.20	ug/L	NC	30		
5516423	Chloroform	2018/05/08	97	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5516423	cis-1,2-Dichloroethylene	2018/05/08	99	70 - 130	98	70 - 130	<0.50	ug/L	NC	30		
5516423	cis-1,3-Dichloropropene	2018/05/08	101	70 - 130	95	70 - 130	<0.30	ug/L	NC	30		
5516423	Dibromochloromethane	2018/05/08	96	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
5516423	Dichlorodifluoromethane (FREON 12)	2018/05/08	72	60 - 140	73	60 - 140	<1.0	ug/L	NC	30		
5516423	Ethylbenzene	2018/05/08	94	70 - 130	95	70 - 130	<0.20	ug/L	NC	30		
5516423	Ethylene Dibromide	2018/05/08	101	70 - 130	99	70 - 130	<0.20	ug/L	NC	30		
5516423	F1 (C6-C10) - BTEX	2018/05/08					<25	ug/L	NC	30		
5516423	F1 (C6-C10)	2018/05/08	98	60 - 140	89	60 - 140	<25	ug/L	NC	30		
5516423	Hexane	2018/05/08	94	70 - 130	95	70 - 130	<1.0	ug/L	NC	30		
5516423	Methyl Ethyl Ketone (2-Butanone)	2018/05/08	100	60 - 140	102	60 - 140	<10	ug/L	NC	30		
5516423	Methyl Isobutyl Ketone	2018/05/08	101	70 - 130	104	70 - 130	<5.0	ug/L	NC	30		
5516423	Methyl t-butyl ether (MTBE)	2018/05/08	96	70 - 130	96	70 - 130	<0.50	ug/L	NC	30		
5516423	Methylene Chloride(Dichloromethane)	2018/05/08	93	70 - 130	92	70 - 130	<2.0	ug/L	NC	30		
5516423	o-Xylene	2018/05/08	92	70 - 130	94	70 - 130	<0.20	ug/L	NC	30		
5516423	p+m-Xylene	2018/05/08	90	70 - 130	92	70 - 130	<0.20	ug/L	17	30		
5516423	Styrene	2018/05/08	78	70 - 130	81	70 - 130	<0.50	ug/L	NC	30		
5516423	Tetrachloroethylene	2018/05/08	95	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5516423	Toluene	2018/05/08	93	70 - 130	94	70 - 130	<0.20	ug/L	8.7	30		
5516423	Total Xylenes	2018/05/08					<0.20	ug/L	17	30		
5516423	trans-1,2-Dichloroethylene	2018/05/08	94	70 - 130	95	70 - 130	<0.50	ug/L	NC	30		
5516423	trans-1,3-Dichloropropene	2018/05/08	115	70 - 130	102	70 - 130	<0.40	ug/L	NC	30		
5516423	Trichloroethylene	2018/05/08	95	70 - 130	96	70 - 130	<0.20	ug/L	NC	30		
5516423	Trichlorofluoromethane (FREON 11)	2018/05/08	91	70 - 130	91	70 - 130	<0.50	ug/L	NC	30		
5516423	Vinyl Chloride	2018/05/08	75	70 - 130	74	70 - 130	<0.20	ug/L	NC	30		
5517203	1,2,4-Trichlorobenzene	2018/05/07	64	40 - 130	55	40 - 130	<0.1	ug/L	NC	30		
5517203	1-Methylnaphthalene	2018/05/07	79	50 - 130	72	50 - 130	<0.2	ug/L	NC	30		
5517203	2,4,5-Trichlorophenol	2018/05/07	82	50 - 130	75	50 - 130	<0.2	ug/L	NC	30		
5517203	2,4,6-Trichlorophenol	2018/05/07	77	50 - 130	70	50 - 130	<0.2	ug/L	NC	30		
5517203	2,4-Dichlorophenol	2018/05/07	58	50 - 130	58	50 - 130	<0.1	ug/L	NC	30		

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QUALITY ASSURANCE REPORT(CONT'D)

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

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5517203	2,4-Dimethylphenol	2018/05/07	22 (1)	30 - 130	39	30 - 130	<0.5	ug/L	NC	30		
5517203	2,4-Dinitrophenol	2018/05/07	109	30 - 130	94	30 - 130	<2	ug/L	NC	30		
5517203	2,4-Dinitrotoluene	2018/05/07	92	50 - 130	79	50 - 130	<0.3	ug/L	NC	30		
5517203	2,6-Dinitrotoluene	2018/05/07	91	50 - 130	82	50 - 130	<0.3	ug/L	NC	30		
5517203	2-Chlorophenol	2018/05/07	61	50 - 130	59	50 - 130	<0.1	ug/L	NC	30		
5517203	2-Methylnaphthalene	2018/05/07	70	50 - 130	64	50 - 130	<0.2	ug/L	NC	30		
5517203	3,3'-Dichlorobenzidine	2018/05/07	65	30 - 130	77	30 - 130	<0.5	ug/L	NC	30		
5517203	Acenaphthene	2018/05/07	82	50 - 130	78	50 - 130	<0.2	ug/L	NC	30		
5517203	Acenaphthylene	2018/05/07	80	50 - 130	74	50 - 130	<0.2	ug/L	NC	30		
5517203	Anthracene	2018/05/07	77	50 - 130	74	50 - 130	<0.05	ug/L	NC	30		
5517203	Benzo(a)anthracene	2018/05/07	90	50 - 130	86	50 - 130	<0.05	ug/L	NC	30		
5517203	Benzo(a)pyrene	2018/05/07	91	50 - 130	89	50 - 130	<0.01	ug/L	NC	30		
5517203	Benzo(b/j)fluoranthene	2018/05/07	95	50 - 130	96	50 - 130	<0.05	ug/L	NC	30		
5517203	Benzo(g,h,i)perylene	2018/05/07	102	50 - 130	95	50 - 130	<0.05	ug/L	NC	30		
5517203	Benzo(k)fluoranthene	2018/05/07	98	50 - 130	94	50 - 130	<0.05	ug/L	NC	30		
5517203	Biphenyl	2018/05/07	73	50 - 130	74	50 - 130	<0.1	ug/L	NC	30		
5517203	Bis(2-chloroethyl)ether	2018/05/07	61	50 - 130	60	50 - 130	<0.5	ug/L	NC	30		
5517203	Bis(2-chloroisopropyl)ether	2018/05/07	68	50 - 130	66	50 - 130	<0.5	ug/L	NC	30		
5517203	Bis(2-ethylhexyl)phthalate	2018/05/07	84	50 - 130	79	50 - 130	<1	ug/L	NC	30		
5517203	Chrysene	2018/05/07	90	50 - 130	84	50 - 130	<0.05	ug/L	NC	30		
5517203	Dibenz(a,h)anthracene	2018/05/07	102	50 - 130	90	50 - 130	<0.1	ug/L	NC	30		
5517203	Diethyl phthalate	2018/05/07	81	50 - 130	80	50 - 130	<0.1	ug/L	NC	30		
5517203	Dimethyl phthalate	2018/05/07	86	50 - 130	77	50 - 130	<0.1	ug/L	NC	30		
5517203	Fluoranthene	2018/05/07	96	50 - 130	81	50 - 130	<0.2	ug/L	NC	30		
5517203	Fluorene	2018/05/07	87	50 - 130	80	50 - 130	<0.2	ug/L	NC	30		
5517203	Indeno(1,2,3-cd)pyrene	2018/05/07	102	50 - 130	85	50 - 130	<0.1	ug/L	NC	30		
5517203	Naphthalene	2018/05/07	81	50 - 130	66	50 - 130	<0.2	ug/L	NC	30		
5517203	p-Chloroaniline	2018/05/07	36	30 - 130	34	30 - 130	<1	ug/L	NC	30		
5517203	Pentachlorophenol	2018/05/07	61	50 - 130	57	50 - 130	<0.1	ug/L	NC	30		
5517203	Phenanthrene	2018/05/07	81	50 - 130	79	50 - 130	<0.1	ug/L	NC	30		
5517203	Phenol	2018/05/07	26 (1)	30 - 130	25 (1)	30 - 130	<0.5	ug/L	NC	30		

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Maxxam Job #: B8A2432
Report Date: 2018/05/10

QUALITY ASSURANCE REPORT(CONT'D)

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

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5517203	Pyrene	2018/05/07	86	50 - 130	83	50 - 130	<0.05	ug/L	NC	30		
5517352	Aroclor 1242	2018/05/07					<0.05	ug/L				
5517352	Aroclor 1248	2018/05/07					<0.05	ug/L				
5517352	Aroclor 1254	2018/05/07					<0.05	ug/L				
5517352	Aroclor 1260	2018/05/07	96	60 - 130	97	60 - 130	<0.05	ug/L				
5517352	Total PCB	2018/05/07	96	60 - 130	97	60 - 130	<0.05	ug/L	NC	40		
5517423	Dissolved Chloride (Cl)	2018/05/07	105	80 - 120	101	80 - 120	<1.0	mg/L	2.8	20		
5517424	Dissolved Sulphate (SO4)	2018/05/07	NC	75 - 125	106	80 - 120	<1.0	mg/L	0.26	20		
5517425	Orthophosphate (P)	2018/05/07	85	75 - 125	100	80 - 120	<0.010	mg/L	NC	25		
5518980	Total Ammonia-N	2018/05/09	84	75 - 125	100	80 - 120	<0.050	mg/L	1.0	20		
5519492	F2 (C10-C16 Hydrocarbons)	2018/05/08	103	50 - 130	103	60 - 130	<100	ug/L	3.6	30		
5519492	F3 (C16-C34 Hydrocarbons)	2018/05/08	100	50 - 130	101	60 - 130	<200	ug/L	NC	30		
5519492	F4 (C34-C50 Hydrocarbons)	2018/05/08	98	50 - 130	98	60 - 130	<200	ug/L	NC	30		
5519812	Total Organic Carbon (TOC)	2018/05/08	101	80 - 120	102	80 - 120	<0.50	mg/L	0.98	20		
5520388	Total Suspended Solids	2018/05/08					<10	mg/L	NC	25	97	85 - 115
5521279	Alkalinity (Total as CaCO3)	2018/05/09			95	85 - 115	<1.0	mg/L	0.91	20		
5521282	Conductivity	2018/05/09			102	85 - 115	<1.0	umho/cm	1.0	25		
5521283	Fluoride (F-)	2018/05/09	100	80 - 120	99	80 - 120	<0.10	mg/L	NC	20		
5521284	pH	2018/05/09			102	98 - 103			0.098	N/A		
5521343	Total Dissolved Solids	2018/05/08					<10	mg/L	2.7	25	98	90 - 110
5521934	Mercury (Hg)	2018/05/09	114	75 - 125	108	80 - 120	<0.1	ug/L	NC	20		

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Maxxam Job #: B8A2432
Report Date: 2018/05/10

QUALITY ASSURANCE REPORT(CONT'D)

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

			Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
QC Batch	Parameter	Date	% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
5522024	Acidity	2018/05/09	90	80 - 120	100	80 - 120	<5.0	mg/L	1.9	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 recovery was below the lower control limit. This may represent a low bias in some results for this specific analyte.

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Maxxam Job #: B8A2432
Report Date: 2018/05/10

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

VALIDATION SIGNATURE PAGE

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

Cristina Carriere, Scientific Service Specialist

Gina Thompson, Inorganics General Chemistry Supervisor

Sirimathie Aluthwala, Campobello Micro

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

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MICRO
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CAM FCD-01191/3

CHAIN OF CUSTODY RECORD 113471

Page 1 of 1

Invoice Information	Report Information (if differs from invoice)	Project Information (where applicable)	Turnaround Time (TAT) Required
Company Name: 9197 Stantec	Company Name: # 18379	Quotation #: B48218	[X] Regular TAT (5-7 days) Most analyses
Contact Name: Accounts Payable	Contact Name:	P.O. #/ AFE#:	PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS
Address:	Address:	Project #: 160907461-200.400	Rush TAT (Surcharges will be applied)
		Site Location:	[ ] 1 Day [ ] 2 Days [ ] 3-4 Days
Phone: Fax:	Phone: jamie.kak@stantec.com	Site #: Clarington - Prevatt Well	
Email: accounts.payable.invoices@stantec.com	Email: aaron.wankentin@stantec.com	Sampled By: R. Dong	Date Required:

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

Rush Confirmation #:

Regulation 153	Other Regulations
[ ] Table 1 [ ] Res/Park [ ] Med/ Fine	[ ] CCME [ ] Sanitary Sewer Bylaw
[ ] Table 2 [ ] Ind/Comm [ ] Coarse	[ ] MISA [ ] Storm Sewer Bylaw
[ ] Table 3 [ ] Agri/ Other	[ ] PWQO Region
[ ] Table ____	[ ] Other (Specify)
FOR RSC (PLEASE CIRCLE) Y / N	[ ] REG 558 (MIN. 3 DAY TAT REQUIRED)

Include Criteria on Certificate of Analysis: Y / N

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

LABORATORY USE ONLY

CUSTODY SEAL Y / N		COOLER TEMPERATURES
Present	Intact	
Y	Y	9/8/10

COOLING MEDIA PRESENT: (Y) / N

	SAMPLE IDENTIFICATION	DATE SAMPLED (YYYY/MM/DD)	TIME SAMPLED (HH:MM)	MATRIX	# OF CONTAINERS SUBMITTED	FIELD FILTERED (CIRCLE) Metals / Hg / CrVI	BTEX/PHC F1	PHCs F2 - F4	VOCs	REG 153 METALS & INORGANICS	REG 153 ICPMS METALS	REG 153 METALS (Hg, Cr VI, ICPMS Metals, HWS - B)	Hardness, Cr(VI), Free Cn	Fluoride + Turbidity	Hg, TOC, TDS, TSS	Total Coli / E. coli (Ameq)	Reg 153 Pest (Ont) no Toxaphene	Reg153 PCBs	Reg153 VOCs + F1-F4	PAHs	HOLD- DO NOT ANALYZE	COMMENTS
1	WT-160907461-20180503 - RD02	2018/05/03	12:15	GW	19	N							X	X	X	X	X	X	X	X		* Bacti
2																						* Analyze as per grate
3																						
4																						
5																						
6																						
7																						
8																						
9																						
10																						

RELINQUISHED BY: (Signature/Print)	DATE: (YYYY/MM/DD)	TIME: (HH:MM)	RECEIVED BY: (Signature/Print)	DATE: (YYYY/MM/DD)	TIME: (HH:MM)
	2018/05/03	14:10		2018/05/03	14:18

03-May-18 14:18
Augustyna Dobosz
B8A2432
URE ENV-1138

Unless otherwise agreed to in writing, work submitted on this Chain of Custody is subject to Maxxam's standard Terms and Conditions. Signing of this Chain of Custody document is acknowledgment and acceptance of our terms which are available for viewing at www.maxxam.ca/terms. Sample container, preservation, hold time and packages information can be viewed at http://maxxam.ca/wp-content/uploads/Ontario-COC.pdf.

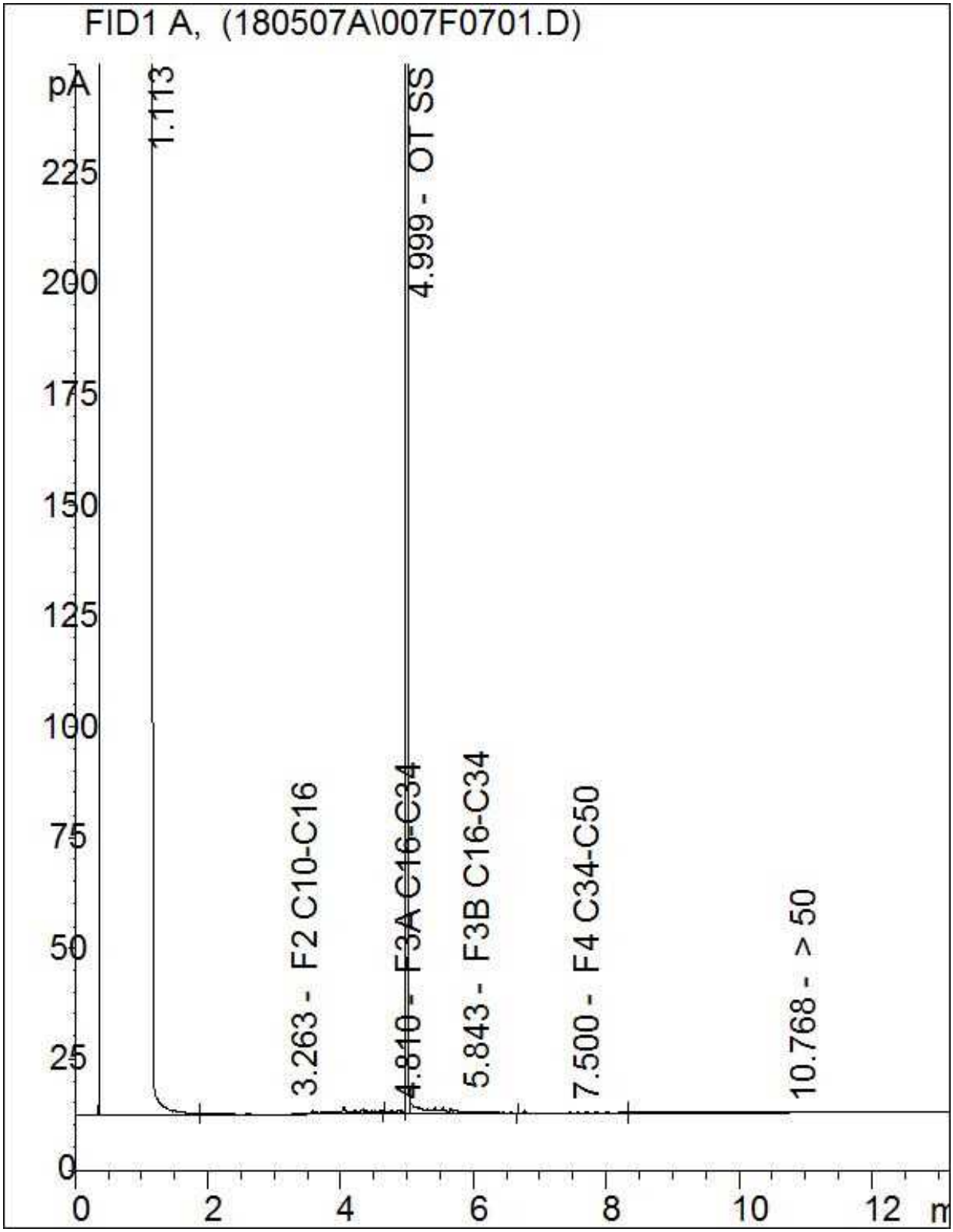
COC-1004 (03/17)

White: Maxxam ~ Yellow: Client

Maxxam Job #: B8A2432
Report Date: 2018/05/10
Maxxam Sample: GPK260

Stantec Consulting Ltd
Client Project #: 160900764
Project name: CLARINGTON-PRIVATE WELL
Client ID: WG-160900764-20180503-RD02

Petroleum Hydrocarbons F2-F4 in Water Chromatogram



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