

APPENDIX F1

Water Quality – Laboratory Certificates



Your C.O.C. #: 960959-01-01

Attention: Marlee Sauder

Stantec Consulting Ltd
300 Hagey Blvd
Suite 100
Waterloo, ON
CANADA N2L 0A4

Report Date: 2023/11/02
Report #: R7892400
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C3X3814

Received: 2023/10/25, 19:24

Sample Matrix: Water
Samples Received: 3

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity	3	N/A	2023/10/29	CAM SOP-00448	SM 23 2320 B m
Carbonate, Bicarbonate and Hydroxide	3	N/A	2023/10/30	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	3	N/A	2023/11/01	CAM SOP-00463	SM 23 4500-Cl E m
Conductivity	3	N/A	2023/10/29	CAM SOP-00414	SM 23 2510 m
Dissolved Organic Carbon (DOC) (1)	1	N/A	2023/10/30	CAM SOP-00446	SM 23 5310 B m
Dissolved Organic Carbon (DOC) (1)	2	N/A	2023/10/31	CAM SOP-00446	SM 23 5310 B m
Hardness (calculated as CaCO3)	3	N/A	2023/11/02	CAM SOP 00102/00408/00447	SM 2340 B
Lab Filtered Metals Analysis by ICP	3	2023/10/26	2023/11/01	CAM SOP-00408	EPA 6010D m
Total Metals Analysis by ICPMS	3	2023/10/31	2023/11/01	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	3	N/A	2023/11/02		
Anion and Cation Sum	3	N/A	2023/11/02		
Total Coliforms, (CFU/100mL)	3	N/A	2023/10/26	CAM SOP-00552	
E.coli, (CFU/100mL)	3	N/A	2023/10/26	CAM SOP-00552	MECP E3371
Total Ammonia-N	3	N/A	2023/10/30	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (2)	3	N/A	2023/11/01	CAM SOP-00440	SM 23 4500-NO3I/NO2B
OC Pesticides (Selected) & PCB (3)	3	2023/10/31	2023/11/01	CAM SOP-00307	EPA 8081B/ 8082A
OC Pesticides Summed Parameters	3	N/A	2023/10/27	CAM SOP-00307	EPA 8081B/ 8082A
pH	3	2023/10/26	2023/10/29	CAM SOP-00413	SM 4500H+ B m
Orthophosphate	3	N/A	2023/10/27	CAM SOP-00461	SM 23 4500-P E m
Sat. pH and Langelier Index (@ 20C)	3	N/A	2023/11/02		Auto Calc
Sat. pH and Langelier Index (@ 4C)	3	N/A	2023/11/02		Auto Calc
Sulphate by Automated Turbidimetry	3	N/A	2023/11/01	CAM SOP-00464	SM 23 4500-SO42- E m
Total Dissolved Solids (TDS calc)	3	N/A	2023/11/02		Auto Calc
Total Phosphorus (Colourimetric)	1	2023/10/27	2023/10/30	CAM SOP-00407	SM 23 4500-P I
Total Phosphorus (Colourimetric)	2	2023/10/30	2023/11/01	CAM SOP-00407	SM 23 4500-P I
Low Level Total Suspended Solids	2	2023/10/31	2023/11/02	CAM SOP-00428	SM 23 2540D m
Low Level Total Suspended Solids	1	2023/11/01	2023/11/01	CAM SOP-00428	SM 23 2540D m

Remarks:



Your C.O.C. #: 960959-01-01

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BUREAU VERITAS JOB #: C3X3814

Received: 2023/10/25, 19:24

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, MELCCFP, EPA, APHA.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas 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.

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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 Bureau Veritas, 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.

- (1) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (2) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (3) Chlordane (Total) = Alpha Chlordane + Gamma Chlordane

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Julie Clement, Technical Account Manager
Email: Julie.CLEMENT@bureauveritas.com
Phone# (613)868-6079

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This report has been generated and distributed using a secure automated process.

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



BUREAU
VERITAS

Bureau Veritas Job #: C3X3814
Report Date: 2023/11/02

Stantec Consulting Ltd
Sampler Initials: GH

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		XKF108			XKF109		XKF110		
Sampling Date		2023/10/25 16:10			2023/10/25 16:45		2023/10/25 17:15		
COC Number		960959-01-01			960959-01-01		960959-01-01		
	UNITS	20231025 SHC	RDL	QC Batch	20231025 SC	QC Batch	20231025 ZOMC	RDL	QC Batch

Calculated Parameters									
Anion Sum	me/L	8.69	N/A	9008231	14.0	9008231	14.7	N/A	9008231
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	170	1.0	9008228	200	9008228	320	1.0	9008228
Calculated TDS	mg/L	510	1.0	9008236	830	9008236	870	1.0	9008236
Carb. Alkalinity (calc. as CaCO3)	mg/L	3.2	1.0	9008228	2.2	9008228	3.5	1.0	9008228
Cation Sum	me/L	9.07	N/A	9008231	14.5	9008231	17.0	N/A	9008231
Hardness (CaCO3)	mg/L	240	1.0	9007512	380	9007512	430	1.0	9007512
Ion Balance (% Difference)	%	2.09	N/A	9008230	1.70	9008230	7.22	N/A	9008230
Langelier Index (@ 20C)	N/A	0.932		9008234	0.873	9008234	1.15		9008234
Langelier Index (@ 4C)	N/A	0.684		9008235	0.627	9008235	0.907		9008235
Saturation pH (@ 20C)	N/A	7.38		9008234	7.20	9008234	6.91		9008234
Saturation pH (@ 4C)	N/A	7.62		9008235	7.44	9008235	7.15		9008235

Inorganics									
Total Ammonia-N	mg/L	<0.050	0.050	9015255	<0.050	9015255	0.071	0.050	9015255
Conductivity	umho/cm	920	1.0	9010060	1500	9010060	1700	1.0	9010060
Dissolved Organic Carbon	mg/L	5.9	0.40	9009350	6.9	9009350	7.3	0.40	9009350
Orthophosphate (P)	mg/L	0.012	0.010	9010005	<0.010	9010005	0.012	0.010	9010005
pH	pH	8.31		9010056	8.07	9010056	8.06		9010056
Total Phosphorus	mg/L	0.041	0.004	9012357	0.041	9016314	0.070	0.004	9016314
Total Suspended Solids	mg/L	8	1	9014955	15	9020372	11	1	9014955
Dissolved Sulphate (SO4)	mg/L	83	1.0	9010004	200	9010004	76	1.0	9010004
Alkalinity (Total as CaCO3)	mg/L	170	1.0	9010053	200	9010053	320	1.0	9010053
Dissolved Chloride (Cl-)	mg/L	130	1.0	9010001	210	9010001	240	2.0	9010001
Nitrite (N)	mg/L	<0.010	0.010	9010061	<0.010	9010061	<0.010	0.010	9010061
Nitrate (N)	mg/L	<0.10	0.10	9010061	<0.10	9010061	<0.10	0.10	9010061
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	9010061	<0.10	9010061	<0.10	0.10	9010061

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



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		XKF110		
Sampling Date		2023/10/25 17:15		
COC Number		960959-01-01		
	UNITS	20231025 ZOMC Lab-Dup	RDL	QC Batch
Inorganics				
Total Phosphorus	mg/L	0.067	0.004	9016314
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate				



BUREAU
VERITAS

Bureau Veritas Job #: C3X3814

Report Date: 2023/11/02

Stantec Consulting Ltd

Sampler Initials: GH

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		XKF108	XKF109	XKF110		
Sampling Date		2023/10/25 16:10	2023/10/25 16:45	2023/10/25 17:15		
COC Number		960959-01-01	960959-01-01	960959-01-01		
	UNITS	20231025 SHC	20231025 SC	20231025 ZOMC	RDL	QC Batch
Metals						
Dissolved Calcium (Ca)	mg/L	73	110	130	0.05	9009898
Dissolved Magnesium (Mg)	mg/L	14	27	25	0.05	9009898
Total Aluminum (Al)	mg/L	0.38	0.49	0.40	0.0049	9018093
Total Antimony (Sb)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	9018093
Total Arsenic (As)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	9018093
Total Barium (Ba)	mg/L	0.016	0.059	0.053	0.0020	9018093
Total Beryllium (Be)	mg/L	<0.00040	<0.00040	<0.00040	0.00040	9018093
Total Boron (B)	mg/L	0.030	0.048	0.032	0.010	9018093
Total Cadmium (Cd)	mg/L	<0.000090	<0.000090	<0.000090	0.000090	9018093
Total Calcium (Ca)	mg/L	81	110	140	0.20	9018093
Total Chromium (Cr)	mg/L	<0.0050	<0.0050	<0.0050	0.0050	9018093
Total Cobalt (Co)	mg/L	<0.00050	0.00053	<0.00050	0.00050	9018093
Total Copper (Cu)	mg/L	<0.00090	<0.00090	0.0014	0.00090	9018093
Total Iron (Fe)	mg/L	0.46	0.64	0.55	0.10	9018093
Total Lead (Pb)	mg/L	<0.00050	<0.00050	<0.00050	0.00050	9018093
Total Magnesium (Mg)	mg/L	14	28	24	0.050	9018093
Total Manganese (Mn)	mg/L	0.054	2.4	0.93	0.0020	9018093
Total Molybdenum (Mo)	mg/L	0.00079	0.0020	0.00072	0.00050	9018093
Total Nickel (Ni)	mg/L	<0.0010	0.0016	0.0021	0.0010	9018093
Total Phosphorus (P)	mg/L	<0.10	0.12	0.16	0.10	9018093
Total Potassium (K)	mg/L	4.0	4.6	2.9	0.20	9018093
Total Selenium (Se)	mg/L	<0.0020	<0.0020	<0.0020	0.0020	9018093
Total Silicon (Si)	mg/L	2.9	4.1	7.1	0.050	9018093
Total Silver (Ag)	mg/L	<0.000090	<0.000090	<0.000090	0.000090	9018093
Total Sodium (Na)	mg/L	100	160	200	0.10	9018093
Total Strontium (Sr)	mg/L	1.8	1.2	3.6	0.0010	9018093
Total Thallium (Tl)	mg/L	<0.000050	<0.000050	<0.000050	0.000050	9018093
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	0.0010	9018093
Total Titanium (Ti)	mg/L	0.011	0.014	0.011	0.0050	9018093
Total Uranium (U)	mg/L	0.00056	0.0013	0.0011	0.00010	9018093
Total Vanadium (V)	mg/L	0.00097	0.0013	0.00088	0.00050	9018093
Total Zinc (Zn)	mg/L	<0.0050	<0.0050	0.0058	0.0050	9018093
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						



MICROBIOLOGY (WATER)

Bureau Veritas ID		XKF108	XKF109	XKF110		
Sampling Date		2023/10/25 16:10	2023/10/25 16:45	2023/10/25 17:15		
COC Number		960959-01-01	960959-01-01	960959-01-01		
	UNITS	20231025 SHC	20231025 SC	20231025 ZOMC	RDL	QC Batch
Microbiological						
Background	CFU/100mL	9600	11000	25000	10	9009897
Total Coliforms	CFU/100mL	4100	120	520	10	9009897
Escherichia coli	CFU/100mL	100	10	390	10	9009896
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						



O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		XKF108	XKF109	XKF110		
Sampling Date		2023/10/25 16:10	2023/10/25 16:45	2023/10/25 17:15		
COC Number		960959-01-01	960959-01-01	960959-01-01		
	UNITS	20231025 SHC	20231025 SC	20231025 ZOMC	RDL	QC Batch
Calculated Parameters						
Chlordane (Total)	ug/L	<0.005	<0.005	<0.005	0.005	9005166
o,p-DDD + p,p-DDD	ug/L	<0.005	<0.005	<0.005	0.005	9005166
o,p-DDE + p,p-DDE	ug/L	<0.005	<0.005	<0.005	0.005	9005166
o,p-DDT + p,p-DDT	ug/L	<0.005	<0.005	<0.005	0.005	9005166
Total Endosulfan	ug/L	<0.005	<0.005	<0.005	0.005	9005166
Total PCB	ug/L	<0.05	<0.05	<0.05	0.05	9005166
Pesticides & Herbicides						
Aldrin	ug/L	<0.005	<0.005	<0.005	0.005	9017274
Dieldrin	ug/L	<0.005	<0.005	<0.005	0.005	9017274
a-Chlordane	ug/L	<0.005	<0.005	<0.005	0.005	9017274
g-Chlordane	ug/L	<0.005	<0.005	<0.005	0.005	9017274
o,p-DDD	ug/L	<0.005	<0.005	<0.005	0.005	9017274
p,p-DDD	ug/L	<0.005	<0.005	<0.005	0.005	9017274
o,p-DDE	ug/L	<0.005	<0.005	<0.005	0.005	9017274
p,p-DDE	ug/L	<0.005	<0.005	<0.005	0.005	9017274
o,p-DDT	ug/L	<0.005	<0.005	<0.005	0.005	9017274
p,p-DDT	ug/L	<0.005	<0.005	<0.005	0.005	9017274
Lindane	ug/L	<0.003	<0.003	<0.003	0.003	9017274
Endosulfan I (alpha)	ug/L	<0.005	<0.005	<0.005	0.005	9017274
Endosulfan II (beta)	ug/L	<0.005	<0.005	<0.005	0.005	9017274
Endrin	ug/L	<0.005	<0.005	<0.005	0.005	9017274
Heptachlor	ug/L	<0.005	<0.005	<0.005	0.005	9017274
Heptachlor epoxide	ug/L	<0.005	<0.005	<0.005	0.005	9017274
Hexachlorobenzene	ug/L	<0.005	<0.005	<0.005	0.005	9017274
Hexachlorobutadiene	ug/L	<0.009	<0.009	<0.009	0.009	9017274
Hexachloroethane	ug/L	<0.01	<0.01	<0.01	0.01	9017274
Methoxychlor	ug/L	<0.01	<0.01	<0.01	0.01	9017274
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	0.05	9017274
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	0.05	9017274
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	0.05	9017274
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	0.05	9017274
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						



O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		XKF108	XKF109	XKF110		
Sampling Date		2023/10/25 16:10	2023/10/25 16:45	2023/10/25 17:15		
COC Number		960959-01-01	960959-01-01	960959-01-01		
	UNITS	20231025 SHC	20231025 SC	20231025 ZOMC	RDL	QC Batch
Surrogate Recovery (%)						
2,4,5,6-Tetrachloro-m-xylene	%	60	51	82		9017274
Decachlorobiphenyl	%	90	65	104		9017274
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						



BUREAU
VERITAS

Bureau Veritas Job #: C3X3814

Report Date: 2023/11/02

Stantec Consulting Ltd

Sampler Initials: GH

TEST SUMMARY

Bureau Veritas ID: XKF108
Sample ID: 20231025 SHC
Matrix: Water

Collected: 2023/10/25
Shipped:
Received: 2023/10/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9010053	N/A	2023/10/29	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	9008228	N/A	2023/10/30	Automated Statchk
Chloride by Automated Colourimetry	KONE	9010001	N/A	2023/11/01	Massarat Jan
Conductivity	AT	9010060	N/A	2023/10/29	Yogesh Patel
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9009350	N/A	2023/10/30	Gyulshen Idriz
Hardness (calculated as CaCO3)		9007512	N/A	2023/11/02	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	9009898	2023/10/26	2023/11/01	Suban Kanapathipplai
Total Metals Analysis by ICPMS	ICP/MS	9018093	2023/10/31	2023/11/01	Arefa Dabhad
Ion Balance (% Difference)	CALC	9008230	N/A	2023/11/02	Automated Statchk
Anion and Cation Sum	CALC	9008231	N/A	2023/11/02	Automated Statchk
Total Coliforms, (CFU/100mL)	PL	9009897	N/A	2023/10/26	Soham Patel
E.coli, (CFU/100mL)	PL	9009896	N/A	2023/10/26	Soham Patel
Total Ammonia-N	LACH/NH4	9015255	N/A	2023/10/30	Shivani Shivani
Nitrate & Nitrite as Nitrogen in Water	LACH	9010061	N/A	2023/11/01	Viorica Rotaru
OC Pesticides (Selected) & PCB	GC/ECD	9017274	2023/10/31	2023/11/01	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	9005166	N/A	2023/10/27	Automated Statchk
pH	AT	9010056	2023/10/26	2023/10/29	Yogesh Patel
Orthophosphate	KONE	9010005	N/A	2023/10/27	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9008234	N/A	2023/11/02	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9008235	N/A	2023/11/02	Automated Statchk
Sulphate by Automated Turbidimetry	KONE	9010004	N/A	2023/11/01	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9008236	N/A	2023/11/02	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9012357	2023/10/27	2023/10/30	Sachi Patel
Low Level Total Suspended Solids	BAL	9014955	2023/10/31	2023/11/02	Shaneil Hall

Bureau Veritas ID: XKF109
Sample ID: 20231025 SC
Matrix: Water

Collected: 2023/10/25
Shipped:
Received: 2023/10/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9010053	N/A	2023/10/29	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	9008228	N/A	2023/10/30	Automated Statchk
Chloride by Automated Colourimetry	KONE	9010001	N/A	2023/11/01	Massarat Jan
Conductivity	AT	9010060	N/A	2023/10/29	Yogesh Patel
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9009350	N/A	2023/10/31	Gyulshen Idriz
Hardness (calculated as CaCO3)		9007512	N/A	2023/11/02	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	9009898	2023/10/26	2023/11/01	Suban Kanapathipplai
Total Metals Analysis by ICPMS	ICP/MS	9018093	2023/10/31	2023/11/01	Arefa Dabhad
Ion Balance (% Difference)	CALC	9008230	N/A	2023/11/02	Automated Statchk
Anion and Cation Sum	CALC	9008231	N/A	2023/11/02	Automated Statchk
Total Coliforms, (CFU/100mL)	PL	9009897	N/A	2023/10/26	Soham Patel
E.coli, (CFU/100mL)	PL	9009896	N/A	2023/10/26	Soham Patel
Total Ammonia-N	LACH/NH4	9015255	N/A	2023/10/30	Shivani Shivani
Nitrate & Nitrite as Nitrogen in Water	LACH	9010061	N/A	2023/11/01	Viorica Rotaru
OC Pesticides (Selected) & PCB	GC/ECD	9017274	2023/10/31	2023/11/01	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	9005166	N/A	2023/10/27	Automated Statchk



TEST SUMMARY

Bureau Veritas ID: XKF109
Sample ID: 20231025 SC
Matrix: Water

Collected: 2023/10/25
Shipped:
Received: 2023/10/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH	AT	9010056	2023/10/26	2023/10/29	Yogesh Patel
Orthophosphate	KONE	9010005	N/A	2023/10/27	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9008234	N/A	2023/11/02	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9008235	N/A	2023/11/02	Automated Statchk
Sulphate by Automated Turbidimetry	KONE	9010004	N/A	2023/11/01	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9008236	N/A	2023/11/02	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9016314	2023/10/30	2023/11/01	Muskan
Low Level Total Suspended Solids	BAL	9020372	2023/11/01	2023/11/01	Darshan Patel

Bureau Veritas ID: XKF110
Sample ID: 20231025 ZOMC
Matrix: Water

Collected: 2023/10/25
Shipped:
Received: 2023/10/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9010053	N/A	2023/10/29	Yogesh Patel
Carbonate, Bicarbonate and Hydroxide	CALC	9008228	N/A	2023/10/30	Automated Statchk
Chloride by Automated Colourimetry	KONE	9010001	N/A	2023/11/01	Massarat Jan
Conductivity	AT	9010060	N/A	2023/10/29	Yogesh Patel
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9009350	N/A	2023/10/31	Gyulshen Idriz
Hardness (calculated as CaCO3)		9007512	N/A	2023/11/02	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	9009898	2023/10/26	2023/11/01	Suban Kanapathipplai
Total Metals Analysis by ICPMS	ICP/MS	9018093	2023/10/31	2023/11/01	Arefa Dabhad
Ion Balance (% Difference)	CALC	9008230	N/A	2023/11/02	Automated Statchk
Anion and Cation Sum	CALC	9008231	N/A	2023/11/02	Automated Statchk
Total Coliforms, (CFU/100mL)	PL	9009897	N/A	2023/10/26	Soham Patel
E.coli, (CFU/100mL)	PL	9009896	N/A	2023/10/26	Soham Patel
Total Ammonia-N	LACH/NH4	9015255	N/A	2023/10/30	Shivani Shivani
Nitrate & Nitrite as Nitrogen in Water	LACH	9010061	N/A	2023/11/01	Viorica Rotaru
OC Pesticides (Selected) & PCB	GC/ECD	9017274	2023/10/31	2023/11/01	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	9005166	N/A	2023/10/27	Automated Statchk
pH	AT	9010056	2023/10/26	2023/10/29	Yogesh Patel
Orthophosphate	KONE	9010005	N/A	2023/10/27	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9008234	N/A	2023/11/02	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9008235	N/A	2023/11/02	Automated Statchk
Sulphate by Automated Turbidimetry	KONE	9010004	N/A	2023/11/01	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9008236	N/A	2023/11/02	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9016314	2023/10/30	2023/11/01	Muskan
Low Level Total Suspended Solids	BAL	9014955	2023/10/31	2023/11/02	Shaneil Hall

Bureau Veritas ID: XKF110 Dup
Sample ID: 20231025 ZOMC
Matrix: Water

Collected: 2023/10/25
Shipped:
Received: 2023/10/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus (Colourimetric)	SKAL/P	9016314	2023/10/30	2023/11/01	Muskan



GENERAL COMMENTS

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

Package 1	11.0°C
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Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C3X3814

Report Date: 2023/11/02

QUALITY ASSURANCE REPORT

Stantec Consulting Ltd

Sampler Initials: GH

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9017274	2,4,5,6-Tetrachloro-m-xylene	2023/11/01	79	50 - 130	76	50 - 130	72	%				
9017274	Decachlorobiphenyl	2023/11/01	102	50 - 130	105	50 - 130	92	%				
9009350	Dissolved Organic Carbon	2023/10/30	90	80 - 120	94	80 - 120	<0.40	mg/L	2.5	20		
9009898	Dissolved Calcium (Ca)	2023/11/01	NC	80 - 120	98	80 - 120	<0.05	mg/L	0.62	25		
9009898	Dissolved Magnesium (Mg)	2023/11/01	NC	80 - 120	99	80 - 120	<0.05	mg/L	0.98	25		
9010001	Dissolved Chloride (Cl-)	2023/11/01	91	80 - 120	99	80 - 120	<1.0	mg/L	NC	20		
9010004	Dissolved Sulphate (SO4)	2023/11/01	89	75 - 125	97	80 - 120	<1.0	mg/L	1.9	20		
9010005	Orthophosphate (P)	2023/10/27	92	75 - 125	93	80 - 120	<0.010	mg/L	NC	20		
9010053	Alkalinity (Total as CaCO3)	2023/10/29			97	85 - 115	<1.0	mg/L	0.34	20		
9010056	pH	2023/10/29			102	98 - 103			0.025	N/A		
9010060	Conductivity	2023/10/29			97	85 - 115	<1.0	umho/cm	0.52	10		
9010061	Nitrate (N)	2023/11/01	99	80 - 120	99	80 - 120	<0.10	mg/L	NC	20		
9010061	Nitrite (N)	2023/11/01	103	80 - 120	104	80 - 120	<0.010	mg/L	NC	20		
9012357	Total Phosphorus	2023/10/30	100	80 - 120	106	80 - 120	<0.004	mg/L	2.0	20	106	80 - 120
9014955	Total Suspended Solids	2023/11/02			95	85 - 115	<1	mg/L	13	20		
9015255	Total Ammonia-N	2023/10/30	107	75 - 125	102	80 - 120	<0.050	mg/L	NC	20		
9016314	Total Phosphorus	2023/11/01	101	80 - 120	104	80 - 120	<0.004	mg/L	4.2	20	103	80 - 120
9017274	a-Chlordane	2023/11/01	85	50 - 130	89	50 - 130	<0.005	ug/L	NC	30		
9017274	Aldrin	2023/11/01	79	50 - 130	80	50 - 130	<0.005	ug/L	NC	30		
9017274	Aroclor 1242	2023/11/01					<0.05	ug/L				
9017274	Aroclor 1248	2023/11/01					<0.05	ug/L				
9017274	Aroclor 1254	2023/11/01					<0.05	ug/L				
9017274	Aroclor 1260	2023/11/01					<0.05	ug/L				
9017274	Dieldrin	2023/11/01	86	50 - 130	96	50 - 130	<0.005	ug/L	NC	30		
9017274	Endosulfan I (alpha)	2023/11/01	100	50 - 130	100	50 - 130	<0.005	ug/L	1.0	30		
9017274	Endosulfan II (beta)	2023/11/01	83	50 - 130	82	50 - 130	<0.005	ug/L	1.0	30		
9017274	Endrin	2023/11/01	89	50 - 130	89	50 - 130	<0.005	ug/L	0.71	30		
9017274	g-Chlordane	2023/11/01	85	50 - 130	88	50 - 130	<0.005	ug/L	NC	30		
9017274	Heptachlor epoxide	2023/11/01	85	50 - 130	89	50 - 130	<0.005	ug/L	2.8	30		
9017274	Heptachlor	2023/11/01	80	50 - 130	75	50 - 130	<0.005	ug/L	2.9	30		
9017274	Hexachlorobenzene	2023/11/01	88	50 - 130	87	50 - 130	<0.005	ug/L	NC	30		



BUREAU
VERITAS

Bureau Veritas Job #: C3X3814

Report Date: 2023/11/02

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd

Sampler Initials: GH

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9017274	Hexachlorobutadiene	2023/11/01	80	50 - 130	76	50 - 130	<0.009	ug/L	2.1	30		
9017274	Hexachloroethane	2023/11/01	67	50 - 130	62	50 - 130	<0.01	ug/L	0.13	30		
9017274	Lindane	2023/11/01	82	50 - 130	82	50 - 130	<0.003	ug/L	NC	30		
9017274	Methoxychlor	2023/11/01	53	50 - 130	53	50 - 130	<0.01	ug/L	0.90	30		
9017274	o,p-DDD	2023/11/01	96	50 - 130	92	50 - 130	<0.005	ug/L	9.1	30		
9017274	o,p-DDE	2023/11/01	98	50 - 130	94	50 - 130	<0.005	ug/L	9.8	30		
9017274	o,p-DDT	2023/11/01	85	50 - 130	78	50 - 130	<0.005	ug/L	NC	30		
9017274	p,p-DDD	2023/11/01	91	50 - 130	95	50 - 130	<0.005	ug/L	0.85	30		
9017274	p,p-DDE	2023/11/01	89	50 - 130	93	50 - 130	<0.005	ug/L	8.4	30		
9017274	p,p-DDT	2023/11/01	58	50 - 130	59	50 - 130	<0.005	ug/L	NC	30		
9018093	Total Aluminum (Al)	2023/11/01	NC	80 - 120	107	80 - 120	<0.0049	mg/L	6.2	20		
9018093	Total Antimony (Sb)	2023/11/01	112	80 - 120	106	80 - 120	<0.00050	mg/L	7.8	20		
9018093	Total Arsenic (As)	2023/11/01	102	80 - 120	99	80 - 120	<0.0010	mg/L	3.6	20		
9018093	Total Barium (Ba)	2023/11/01	106	80 - 120	101	80 - 120	<0.0020	mg/L	1.7	20		
9018093	Total Beryllium (Be)	2023/11/01	109	80 - 120	106	80 - 120	<0.00040	mg/L	NC	20		
9018093	Total Boron (B)	2023/11/01	NC	80 - 120	100	80 - 120	<0.010	mg/L	0.88	20		
9018093	Total Cadmium (Cd)	2023/11/01	102	80 - 120	100	80 - 120	<0.000090	mg/L	18	20		
9018093	Total Calcium (Ca)	2023/11/01	NC	80 - 120	109	80 - 120	<0.20	mg/L	0.050	20		
9018093	Total Chromium (Cr)	2023/11/01	98	80 - 120	96	80 - 120	<0.0050	mg/L	NC	20		
9018093	Total Cobalt (Co)	2023/11/01	101	80 - 120	99	80 - 120	<0.00050	mg/L	0.17	20		
9018093	Total Copper (Cu)	2023/11/01	104	80 - 120	103	80 - 120	<0.00090	mg/L	17	20		
9018093	Total Iron (Fe)	2023/11/01	99	80 - 120	99	80 - 120	<0.10	mg/L	0.75	20		
9018093	Total Lead (Pb)	2023/11/01	97	80 - 120	98	80 - 120	<0.00050	mg/L	6.1	20		
9018093	Total Magnesium (Mg)	2023/11/01	NC	80 - 120	103	80 - 120	<0.050	mg/L	1.6	20		
9018093	Total Manganese (Mn)	2023/11/01	97	80 - 120	98	80 - 120	<0.0020	mg/L	4.0	20		
9018093	Total Molybdenum (Mo)	2023/11/01	107	80 - 120	100	80 - 120	<0.00050	mg/L	6.9	20		
9018093	Total Nickel (Ni)	2023/11/01	95	80 - 120	96	80 - 120	<0.0010	mg/L	1.7	20		
9018093	Total Phosphorus (P)	2023/11/01	109	80 - 120	113	80 - 120	<0.10	mg/L				
9018093	Total Potassium (K)	2023/11/01	NC	80 - 120	106	80 - 120	<0.20	mg/L	0.12	20		
9018093	Total Selenium (Se)	2023/11/01	101	80 - 120	100	80 - 120	<0.0020	mg/L	NC	20		
9018093	Total Silicon (Si)	2023/11/01	115	80 - 120	106	80 - 120	<0.050	mg/L	0.74	20		



BUREAU
VERITAS

Bureau Veritas Job #: C3X3814

Report Date: 2023/11/02

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd

Sampler Initials: GH

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9018093	Total Silver (Ag)	2023/11/01	97	80 - 120	97	80 - 120	<0.000090	mg/L	NC	20		
9018093	Total Sodium (Na)	2023/11/01	NC	80 - 120	104	80 - 120	<0.10	mg/L	1.1	20		
9018093	Total Strontium (Sr)	2023/11/01	NC	80 - 120	97	80 - 120	<0.0010	mg/L	3.0	20		
9018093	Total Thallium (Tl)	2023/11/01	101	80 - 120	101	80 - 120	<0.000050	mg/L	NC	20		
9018093	Total Tin (Sn)	2023/11/01	108	80 - 120	102	80 - 120	<0.0010	mg/L	16	20		
9018093	Total Titanium (Ti)	2023/11/01	108	80 - 120	104	80 - 120	<0.0050	mg/L	1.9	20		
9018093	Total Uranium (U)	2023/11/01	98	80 - 120	96	80 - 120	<0.00010	mg/L	4.3	20		
9018093	Total Vanadium (V)	2023/11/01	102	80 - 120	98	80 - 120	<0.00050	mg/L	0.90	20		
9018093	Total Zinc (Zn)	2023/11/01	97	80 - 120	96	80 - 120	<0.0050	mg/L	0.26	20		
9020372	Total Suspended Solids	2023/11/01			96	85 - 115	<1	mg/L	15	20		

N/A = Not Applicable

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

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

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

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

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

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

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

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



VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Anastassia Hamanov, Scientific Specialist

Soham Patel, Senior Analyst

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas
6740 Campbell Road, Mississauga, Ontario Canada L5N 2L8 Tel: (905) 817-5700 Toll-free: 800-563-6266 Fax: (905) 817-5777 www.bvna.com

CHAIN OF CUSTODY RECORD

Page of

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:	
Company Name: #9197 Stantec Consulting Ltd	Company Name: <u>Stantec Consulting Ltd.</u>	Quotation #: C31067			
Attention: Accounts Payable	Attention: <u>Marlee Sauder</u>	P.O. #:			
Address: 300 Hagey Blvd Suite 100	Address:	Project:			
Waterloo ON N2L 0A4		Project Name:			
Tel: (519) 579-4410 Fax: (519) 579-6733	Tel: Fax:	Site #:			
Email: SAPinvoices@Stantec.com	Email: <u>marlee.sauder@stantec.com; bryan.weersink@stantec.com</u>	Sampled By: <u>GH and MO</u>			

25-Oct-23 19:24
Julie Clement
C3X3814
SWP ENV-868

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

Regulation 153 (2011)			Other Regulations			Special Instructions		
<input type="checkbox"/> Table 1	<input type="checkbox"/> Res/Park	<input type="checkbox"/> Medium/Fine	<input type="checkbox"/> CCME	<input type="checkbox"/> Sanitary Sewer Bylaw				
<input type="checkbox"/> Table 2	<input type="checkbox"/> Ind/Comm	<input type="checkbox"/> Coarse	<input type="checkbox"/> Reg 558	<input type="checkbox"/> Storm Sewer Bylaw				
<input type="checkbox"/> Table 3	<input type="checkbox"/> Agr/Other	<input type="checkbox"/> For RSC	<input type="checkbox"/> MISA	Municipality _____				
<input type="checkbox"/> Table _____			<input type="checkbox"/> PWQO	<input type="checkbox"/> Reg 406 Table _____				
<input type="checkbox"/> Other _____			<input type="checkbox"/> Other _____					

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

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr / VI	RCAp - Comprehensive	Total Coliforms E. coli, CFU/100mL	O Reg 153 OC Pesticides (Water)	Low Level Total Suspended Solids	Total Phosphorus (Colourimetric)	ANALYSIS REQUESTED (PLEASE BE SPECIFIC)		# of Bottles	Comments
1	20231025 SHC	2023/10/25	16:10	SW		X	X	X	X	X			8	
2	20231025 SC	↓	16:45	SW		X	X	X	X	X			8	
3	20231025 ZMC	↓	17:15	SW		X	X	X	X	X			8	
4														
5														
6														
7														
8														
9														
10														

* RELINQUISHED BY: (Signature/Print) <u>Max Ornat</u>	Date: (YY/MM/DD) 23/10/25	Time 19:20	RECEIVED BY: (Signature/Print) <u>Max Ornat</u>	Date: (YY/MM/DD) 2023/10/25	Time 19:24	# jars used and not submitted	Laboratory Use Only		
Time Sensitive	Temperature (°C) on Receipt 8/12/13	Custody Seal Present	Yes	No					

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'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.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COG-TERMS-AND-CONDITIONS.

** 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 WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHAIN-CUSTODY-FORMS-COCS.

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

White: Bureau Veritas Yellow: Client



Your C.O.C. #: C#998024-01-01

Attention: Marlee Sauder

Stantec Consulting Ltd
300 Hagey Blvd
Suite 100
Waterloo, ON
CANADA N2L 0A4

Report Date: 2024/07/09
Report #: R8227020
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4J8596

Received: 2024/06/28, 19:24

Sample Matrix: Water
Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity	9	N/A	2024/07/03	CAM SOP-00448	SM 24 2320 B m
Carbonate, Bicarbonate and Hydroxide	9	N/A	2024/07/03	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	9	N/A	2024/07/03	CAM SOP-00463	SM 24 4500-Cl E m
Conductivity	9	N/A	2024/07/03	CAM SOP-00414	SM 24 2510 m
Dissolved Organic Carbon (DOC) (1)	9	N/A	2024/07/03	CAM SOP-00446	SM 24 5310 B m
Hardness (calculated as CaCO3)	9	N/A	2024/07/05	CAM SOP 00102/00408/00447	SM 2340 B
Lab Filtered Metals Analysis by ICP	9	2024/07/04	2024/07/05	CAM SOP-00408	EPA 6010D m
Total Metals Analysis by ICPMS	9	2024/07/05	2024/07/08	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	9	N/A	2024/07/05		
Anion and Cation Sum	9	N/A	2024/07/05		
Total Coliforms, (CFU/100mL)	1	N/A	2024/06/28	CAM SOP-00552	SM9222B, MECP E3371
Total Coliforms, (CFU/100mL)	8	N/A	2024/07/02	CAM SOP-00552	SM9222B, MECP E3371
E.coli, (CFU/100mL)	1	N/A	2024/06/28	CAM SOP-00552	SM9222B, MECP E3371
E.coli, (CFU/100mL)	8	N/A	2024/07/02	CAM SOP-00552	SM9222B, MECP E3371
Total Ammonia-N	9	N/A	2024/07/09	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (2)	9	N/A	2024/07/03	CAM SOP-00440	SM 24 4500-NO3I/NO2B
OC Pesticides (Selected) & PCB (3)	9	2024/07/05	2024/07/06	CAM SOP-00307	EPA 8081B/ 8082A
OC Pesticides Summed Parameters	9	N/A	2024/07/02	CAM SOP-00307	EPA 8081B/ 8082A
pH (4)	9	2024/07/03	2024/07/03	CAM SOP-00413	SM 24th - 4500H+ B
Orthophosphate	9	N/A	2024/07/03	CAM SOP-00461	SM 24 4500-P E
Sat. pH and Langelier Index (@ 20C)	9	N/A	2024/07/05		Auto Calc
Sat. pH and Langelier Index (@ 4C)	9	N/A	2024/07/05		Auto Calc
Sulphate by Automated Turbidimetry	9	N/A	2024/07/03	CAM SOP-00464	SM 24 4500-SO42- E m
Total Dissolved Solids (TDS calc)	9	N/A	2024/07/05		Auto Calc
Total Phosphorus (Colourimetric)	9	2024/07/03	2024/07/05	CAM SOP-00407	SM 24 4500-P I
Low Level Total Suspended Solids	9	2024/07/03	2024/07/04	CAM SOP-00428	SM 24 2540D m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau



Your C.O.C. #: C#998024-01-01

Attention: Marlee Sauder

Stantec Consulting Ltd
300 Hagey Blvd
Suite 100
Waterloo, ON
CANADA N2L 0A4

Report Date: 2024/07/09
Report #: R8227020
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4J8596

Received: 2024/06/28, 19:24

Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas 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.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas 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 Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas 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 Bureau Veritas, results relate to the supplied samples tested.

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

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

(1) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.

(2) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

(3) Chlordane (Total) = Alpha Chlordane + Gamma Chlordane

(4) "The CCME method and Analytical Protocol (O. Reg 153/04, O. Reg. 406/19) requires pH to be analyzed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME and Analytical Protocol (O. Reg 153/04, O. Reg. 406/19) holding time. Bureau Veritas endeavors to analyze samples as soon as possible after receipt."



Your C.O.C. #: C#998024-01-01

Attention: Marlee Sauder

Stantec Consulting Ltd
300 Hagey Blvd
Suite 100
Waterloo, ON
CANADA N2L 0A4

Report Date: 2024/07/09
Report #: R8227020
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4J8596
Received: 2024/06/28, 19:24

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julie Clement, Technical Account Manager
Email: Julie.CLEMENT@bureauveritas.com
Phone# (613)868-6079

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Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



BUREAU
VERITAS

Bureau Veritas Job #: C4J8596
Report Date: 2024/07/09

Stantec Consulting Ltd
Sampler Initials: AK

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		ZPE330			ZPE330			ZPE331		
Sampling Date		2024/06/28 09:30			2024/06/28 09:30			2024/06/28 13:15		
COC Number		C#998024-01-01			C#998024-01-01			C#998024-01-01		
	UNITS	20240628 TMC1	RDL	QC Batch	20240628 TMC1 Lab-Dup	RDL	QC Batch	20240628 TMC2	RDL	QC Batch

Calculated Parameters										
Anion Sum	me/L	12.4	N/A	9489922				13.1	N/A	9489924
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	200	1.0	9489910				220	1.0	9489910
Calculated TDS	mg/L	710	1.0	9489905				750	1.0	9489905
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.3	1.0	9489910				1.4	1.0	9489910
Cation Sum	me/L	12.6	N/A	9489922				13.5	N/A	9489924
Hardness (CaCO3)	mg/L	290	1.0	9489821				310	1.0	9489821
Ion Balance (% Difference)	%	1.18	N/A	9489920				1.61	N/A	9489921
Langelier Index (@ 20C)	N/A	0.568		9489931				0.628		9489931
Langelier Index (@ 4C)	N/A	0.321		9489932				0.381		9489932
Saturation pH (@ 20C)	N/A	7.27		9489931				7.21		9489931
Saturation pH (@ 4C)	N/A	7.52		9489932				7.46		9489932

Inorganics										
Total Ammonia-N	mg/L	0.10	0.050	9497009	0.10	0.050	9497009	0.087	0.050	9497009
Conductivity	umho/cm	1300	1.0	9491317				1300	1.0	9491317
Dissolved Organic Carbon	mg/L	8.4	0.40	9489929				8.4	0.40	9489929
Orthophosphate (P)	mg/L	0.15	0.010	9491244				0.14	0.010	9491244
pH	pH	7.84		9491316				7.84		9491316
Total Phosphorus	mg/L	0.18	0.004	9492543				0.17	0.004	9492543
Total Suspended Solids	mg/L	4	1	9492415				5	1	9492415
Dissolved Sulphate (SO4)	mg/L	95	1.0	9491245				93	1.0	9491245
Alkalinity (Total as CaCO3)	mg/L	210	1.0	9491315				220	1.0	9491315
Dissolved Chloride (Cl-)	mg/L	220	2.0	9491233				240	2.0	9491233
Nitrite (N)	mg/L	<0.010	0.010	9489897				<0.010	0.010	9489897
Nitrate (N)	mg/L	<0.10	0.10	9489897				<0.10	0.10	9489897
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	9489897				<0.10	0.10	9489897

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



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		ZPE331			ZPE332	ZPE333		
Sampling Date		2024/06/28 13:15			2024/06/28 16:20	2024/06/28 10:15		
COC Number		C#998024-01-01			C#998024-01-01	C#998024-01-01		
	UNITS	20240628 TMC2 Lab-Dup	RDL	QC Batch	20240628 TMC3	20240628 SHC1	RDL	QC Batch

Calculated Parameters								
Anion Sum	me/L				13.0	11.4	N/A	9489924
Bicarb. Alkalinity (calc. as CaCO3)	mg/L				230	230	1.0	9489910
Calculated TDS	mg/L				750	630	1.0	9489905
Carb. Alkalinity (calc. as CaCO3)	mg/L				1.4	2.3	1.0	9489910
Cation Sum	me/L				13.4	11.4	N/A	9489924
Hardness (CaCO3)	mg/L				310	230	1.0	9489821
Ion Balance (% Difference)	%				1.56	0.110	N/A	9489921
Langelier Index (@ 20C)	N/A				0.624	0.716		9489931
Langelier Index (@ 4C)	N/A				0.377	0.469		9489932
Saturation pH (@ 20C)	N/A				7.21	7.30		9489931
Saturation pH (@ 4C)	N/A				7.45	7.55		9489932

Inorganics								
Total Ammonia-N	mg/L				0.080	<0.050	0.050	9497009
Conductivity	umho/cm				1400	1200	1.0	9491317
Dissolved Organic Carbon	mg/L				8.8	13	0.40	9489929
Orthophosphate (P)	mg/L				0.12	0.046	0.010	9491244
pH	pH				7.83	8.02		9491316
Total Phosphorus	mg/L	0.16	0.004	9492543	0.16	0.082	0.004	9492543
Total Suspended Solids	mg/L				3	11	1	9492415
Dissolved Sulphate (SO4)	mg/L				88	27	1.0	9491245
Alkalinity (Total as CaCO3)	mg/L				230	230	1.0	9491315
Dissolved Chloride (Cl-)	mg/L				230	220	2.0	9491233
Nitrite (N)	mg/L				<0.010	<0.010	0.010	9489897
Nitrate (N)	mg/L				<0.10	<0.10	0.10	9489897
Nitrate + Nitrite (N)	mg/L				<0.10	<0.10	0.10	9489897

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



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		ZPE333			ZPE334	ZPE335		
Sampling Date		2024/06/28 10:15			2024/06/28 13:45	2024/06/28 16:45		
COC Number		C#998024-01-01			C#998024-01-01	C#998024-01-01		
	UNITS	20240628 SHC1 Lab-Dup	RDL	QC Batch	20240628 SHC2	20240628 SHC3	RDL	QC Batch

Calculated Parameters								
Anion Sum	me/L				11.4	11.5	N/A	9489924
Bicarb. Alkalinity (calc. as CaCO3)	mg/L				230	230	1.0	9489910
Calculated TDS	mg/L				640	640	1.0	9489905
Carb. Alkalinity (calc. as CaCO3)	mg/L				2.8	3.0	1.0	9489910
Cation Sum	me/L				11.6	11.8	N/A	9489924
Hardness (CaCO3)	mg/L				230	240	1.0	9489821
Ion Balance (% Difference)	%				0.940	1.27	N/A	9489921
Langelier Index (@ 20C)	N/A				0.821	0.860		9489931
Langelier Index (@ 4C)	N/A				0.574	0.613		9489932
Saturation pH (@ 20C)	N/A				7.30	7.29		9489931
Saturation pH (@ 4C)	N/A				7.54	7.54		9489932

Inorganics								
Total Ammonia-N	mg/L				<0.050	<0.050	0.050	9497009
Conductivity	umho/cm	1200	1.0	9491317	1200	1200	1.0	9491317
Dissolved Organic Carbon	mg/L				13	12	0.40	9489929
Orthophosphate (P)	mg/L				0.045	0.042	0.010	9491244
pH	pH	8.11		9491316	8.12	8.15		9491316
Total Phosphorus	mg/L				0.080	0.074	0.004	9492543
Total Suspended Solids	mg/L				8	9	1	9492415
Dissolved Sulphate (SO4)	mg/L				28	30	1.0	9491245
Alkalinity (Total as CaCO3)	mg/L	230	1.0	9491315	230	230	1.0	9491315
Dissolved Chloride (Cl-)	mg/L				220	220	2.0	9491233
Nitrite (N)	mg/L				<0.010	<0.010	0.010	9489897
Nitrate (N)	mg/L				<0.10	<0.10	0.10	9489897
Nitrate + Nitrite (N)	mg/L				<0.10	<0.10	0.10	9489897

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



RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		ZPE336	ZPE337	ZPE338		
Sampling Date		2024/06/28 10:45	2024/06/28 14:00	2024/06/28 17:00		
COC Number		C#998024-01-01	C#998024-01-01	C#998024-01-01		
	UNITS	20240628 SC1	20240628 SC2	20240628 SC3	RDL	QC Batch
Calculated Parameters						
Anion Sum	me/L	11.3	11.0	10.8	N/A	9489924
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	190	190	190	1.0	9489910
Calculated TDS	mg/L	640	620	610	1.0	9489905
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	1.1	1.1	1.0	1.0	9489910
Cation Sum	me/L	11.8	11.1	11.1	N/A	9489924
Hardness (CaCO ₃)	mg/L	230	230	230	1.0	9489821
Ion Balance (% Difference)	%	2.19	0.650	1.09	N/A	9489921
Langelier Index (@ 20C)	N/A	0.367	0.351	0.321		9489931
Langelier Index (@ 4C)	N/A	0.119	0.104	0.0730		9489932
Saturation pH (@ 20C)	N/A	7.43	7.45	7.43		9489931
Saturation pH (@ 4C)	N/A	7.68	7.70	7.68		9489932
Inorganics						
Total Ammonia-N	mg/L	<0.050	<0.050	0.054	0.050	9497009
Conductivity	umho/cm	1200	1200	1200	1.0	9491317
Dissolved Organic Carbon	mg/L	8.8	8.7	8.8	0.40	9489929
Orthophosphate (P)	mg/L	0.14	0.13	0.12	0.010	9491244
pH	pH	7.80	7.80	7.75		9491316
Total Phosphorus	mg/L	0.19	0.19	0.16	0.004	9492543
Total Suspended Solids	mg/L	13	39	10	1	9492415
Dissolved Sulphate (SO ₄)	mg/L	48	49	49	2.0	9491245
Alkalinity (Total as CaCO ₃)	mg/L	190	190	190	1.0	9491315
Dissolved Chloride (Cl ⁻)	mg/L	230	220	210	2.0	9491233
Nitrite (N)	mg/L	<0.010	<0.010	<0.010	0.010	9489897
Nitrate (N)	mg/L	<0.10	<0.10	<0.10	0.10	9489897
Nitrate + Nitrite (N)	mg/L	<0.10	<0.10	<0.10	0.10	9489897
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable						



BUREAU
VERITAS

Bureau Veritas Job #: C4J8596
Report Date: 2024/07/09

Stantec Consulting Ltd
Sampler Initials: AK

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		ZPE330	ZPE331	ZPE332	ZPE333	ZPE334		
Sampling Date		2024/06/28 09:30	2024/06/28 13:15	2024/06/28 16:20	2024/06/28 10:15	2024/06/28 13:45		
COC Number		C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01		
	UNITS	20240628 TMC1	20240628 TMC2	20240628 TMC3	20240628 SHC1	20240628 SHC2	RDL	QC Batch

Metals								
Dissolved Calcium (Ca)	mg/L	84	90	89	67	68	0.05	9495703
Dissolved Magnesium (Mg)	mg/L	20	21	21	15	15	0.05	9495703
Total Aluminum (Al)	mg/L	0.097	0.13	0.11	0.32	0.32	0.0049	9497529
Total Antimony (Sb)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	9497529
Total Arsenic (As)	mg/L	0.0014	0.0012	0.0014	0.0012	0.0011	0.0010	9497529
Total Barium (Ba)	mg/L	0.030	0.029	0.030	0.024	0.023	0.0020	9497529
Total Beryllium (Be)	mg/L	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	0.00040	9497529
Total Boron (B)	mg/L	0.037	0.034	0.035	0.040	0.039	0.010	9497529
Total Cadmium (Cd)	mg/L	<0.000090	<0.000090	<0.000090	<0.000090	<0.000090	0.000090	9497529
Total Calcium (Ca)	mg/L	84	82	84	69	67	0.20	9497529
Total Chromium (Cr)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	9497529
Total Cobalt (Co)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	9497529
Total Copper (Cu)	mg/L	<0.00090	<0.00090	<0.00090	<0.00090	<0.00090	0.00090	9497529
Total Iron (Fe)	mg/L	0.23	0.25	0.22	0.67	0.59	0.10	9497529
Total Lead (Pb)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	9497529
Total Magnesium (Mg)	mg/L	19	19	20	15	14	0.050	9497529
Total Manganese (Mn)	mg/L	0.18	0.15	0.13	0.093	0.059	0.0020	9497529
Total Molybdenum (Mo)	mg/L	0.0013	0.0010	0.0011	0.0020	0.0019	0.00050	9497529
Total Nickel (Ni)	mg/L	0.0012	0.0011	0.0013	0.0012	0.0010	0.0010	9497529
Total Phosphorus (P)	mg/L	0.18	0.16	0.15	<0.10	<0.10	0.10	9497529
Total Potassium (K)	mg/L	3.8	3.4	3.6	3.0	2.8	0.20	9497529
Total Selenium (Se)	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	9497529
Total Silicon (Si)	mg/L	3.4	3.4	3.3	2.5	2.3	0.050	9497529
Total Silver (Ag)	mg/L	<0.000090	<0.000090	<0.000090	<0.000090	<0.000090	0.000090	9497529
Total Sodium (Na)	mg/L	150	140	150	160	150	0.10	9497529
Total Strontium (Sr)	mg/L	2.8	2.7	2.8	1.7	1.7	0.0010	9497529
Total Thallium (Tl)	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	9497529
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9497529
Total Titanium (Ti)	mg/L	0.0053	<0.0050	<0.0050	0.0077	0.0083	0.0050	9497529
Total Uranium (U)	mg/L	0.00090	0.00089	0.00092	0.00083	0.00079	0.00010	9497529
Total Vanadium (V)	mg/L	0.00091	0.00088	0.00084	0.0015	0.0015	0.00050	9497529

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch



BUREAU
VERITAS

Bureau Veritas Job #: C4J8596
Report Date: 2024/07/09

Stantec Consulting Ltd
Sampler Initials: AK

ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		ZPE330	ZPE331	ZPE332	ZPE333	ZPE334		
Sampling Date		2024/06/28 09:30	2024/06/28 13:15	2024/06/28 16:20	2024/06/28 10:15	2024/06/28 13:45		
COC Number		C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01		
	UNITS	20240628 TMC1	20240628 TMC2	20240628 TMC3	20240628 SHC1	20240628 SHC2	RDL	QC Batch
Total Zinc (Zn)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	9497529

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch



ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		ZPE335	ZPE336	ZPE337	ZPE338		
Sampling Date		2024/06/28 16:45	2024/06/28 10:45	2024/06/28 14:00	2024/06/28 17:00		
COC Number		C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01		
	UNITS	20240628 SHC3	20240628 SC1	20240628 SC2	20240628 SC3	RDL	QC Batch

Metals							
Dissolved Calcium (Ca)	mg/L	70	59	58	59	0.05	9495703
Dissolved Magnesium (Mg)	mg/L	16	20	20	20	0.05	9495703
Total Aluminum (Al)	mg/L	0.20	0.14	0.24	0.12	0.0049	9497529
Total Antimony (Sb)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	9497529
Total Arsenic (As)	mg/L	0.0011	0.0012	0.0012	0.0011	0.0010	9497529
Total Barium (Ba)	mg/L	0.020	0.019	0.019	0.018	0.0020	9497529
Total Beryllium (Be)	mg/L	<0.00040	<0.00040	<0.00040	<0.00040	0.00040	9497529
Total Boron (B)	mg/L	0.039	0.041	0.043	0.040	0.010	9497529
Total Cadmium (Cd)	mg/L	<0.000090	<0.000090	<0.000090	<0.000090	0.000090	9497529
Total Calcium (Ca)	mg/L	65	58	59	55	0.20	9497529
Total Chromium (Cr)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	9497529
Total Cobalt (Co)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	9497529
Total Copper (Cu)	mg/L	<0.00090	<0.00090	<0.00090	<0.00090	0.00090	9497529
Total Iron (Fe)	mg/L	0.43	0.80	0.86	0.60	0.10	9497529
Total Lead (Pb)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	9497529
Total Magnesium (Mg)	mg/L	15	19	20	19	0.050	9497529
Total Manganese (Mn)	mg/L	0.035	0.12	0.10	0.083	0.0020	9497529
Total Molybdenum (Mo)	mg/L	0.0019	0.0012	0.0011	0.0011	0.00050	9497529
Total Nickel (Ni)	mg/L	<0.0010	0.0010	0.0012	0.0010	0.0010	9497529
Total Phosphorus (P)	mg/L	<0.10	0.20	0.19	0.16	0.10	9497529
Total Potassium (K)	mg/L	2.8	3.1	3.1	2.9	0.20	9497529
Total Selenium (Se)	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	9497529
Total Silicon (Si)	mg/L	1.8	2.4	2.5	2.2	0.050	9497529
Total Silver (Ag)	mg/L	<0.000090	<0.000090	<0.000090	<0.000090	0.000090	9497529
Total Sodium (Na)	mg/L	150	150	150	140	0.10	9497529
Total Strontium (Sr)	mg/L	1.7	0.87	0.89	0.85	0.0010	9497529
Total Thallium (Tl)	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	9497529
Total Tin (Sn)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9497529
Total Titanium (Ti)	mg/L	<0.0050	<0.0050	0.0074	<0.0050	0.0050	9497529
Total Uranium (U)	mg/L	0.00084	0.00049	0.00051	0.00049	0.00010	9497529
Total Vanadium (V)	mg/L	0.0015	0.00092	0.0011	0.00095	0.00050	9497529

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch



ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Bureau Veritas ID		ZPE335	ZPE336	ZPE337	ZPE338		
Sampling Date		2024/06/28 16:45	2024/06/28 10:45	2024/06/28 14:00	2024/06/28 17:00		
COC Number		C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01		
	UNITS	20240628 SHC3	20240628 SC1	20240628 SC2	20240628 SC3	RDL	QC Batch
Total Zinc (Zn)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	9497529
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							

Bureau Veritas ID		ZPE338		
Sampling Date		2024/06/28 17:00		
COC Number		C#998024-01-01		
	UNITS	20240628 SC3 Lab-Dup	RDL	QC Batch
Metals				
Dissolved Calcium (Ca)	mg/L	59	0.05	9495703
Dissolved Magnesium (Mg)	mg/L	20	0.05	9495703
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate				



BUREAU
VERITAS

Bureau Veritas Job #: C4J8596
Report Date: 2024/07/09

Stantec Consulting Ltd
Sampler Initials: AK

MICROBIOLOGY (WATER)

Bureau Veritas ID		ZPE330	ZPE331	ZPE332	ZPE333	ZPE334	
Sampling Date		2024/06/28 09:30	2024/06/28 13:15	2024/06/28 16:20	2024/06/28 10:15	2024/06/28 13:45	
COC Number		C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01	
	UNITS	20240628 TMC1	20240628 TMC2	20240628 TMC3	20240628 SHC1	20240628 SHC2	QC Batch

Microbiological							
Background	CFU/100mL	56000	29000	42000	45000	53000	9490274
Total Coliforms	CFU/100mL	13000	27000	18000	2800	1200	9490274
Escherichia coli	CFU/100mL	540	1100	290	320	440	9490269

QC Batch = Quality Control Batch

Bureau Veritas ID		ZPE335	ZPE336	ZPE337	ZPE338	
Sampling Date		2024/06/28 16:45	2024/06/28 10:45	2024/06/28 14:00	2024/06/28 17:00	
COC Number		C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01	
	UNITS	20240628 SHC3	20240628 SC1	20240628 SC2	20240628 SC3	QC Batch

Microbiological						
Background	CFU/100mL	42000	22000	43000	31000	9490274
Total Coliforms	CFU/100mL	3400	980	5600	510	9490274
Escherichia coli	CFU/100mL	340	85	1200	49	9490269

QC Batch = Quality Control Batch



BUREAU
VERITAS

Bureau Veritas Job #: C4J8596
Report Date: 2024/07/09

Stantec Consulting Ltd
Sampler Initials: AK

O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		ZPE330	ZPE331	ZPE332	ZPE333	ZPE334		
Sampling Date		2024/06/28 09:30	2024/06/28 13:15	2024/06/28 16:20	2024/06/28 10:15	2024/06/28 13:45		
COC Number		C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01		
	UNITS	20240628 TMC1	20240628 TMC2	20240628 TMC3	20240628 SHC1	20240628 SHC2	RDL	QC Batch

Calculated Parameters								
Chlordane (Total)	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9489927
o,p-DDD + p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9489927
o,p-DDE + p,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9489927
o,p-DDT + p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9489927
Total Endosulfan	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9489927
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9489927

Pesticides & Herbicides								
Aldrin	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Dieldrin	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
a-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
g-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
o,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
o,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
p,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
o,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Lindane	ug/L	<0.003	<0.003	<0.003	<0.003	<0.003	0.003	9496465
Endosulfan I (alpha)	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Endosulfan II (beta)	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Endrin	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Heptachlor	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Heptachlor epoxide	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Hexachlorobenzene	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Hexachlorobutadiene	ug/L	<0.009	<0.009	<0.009	<0.009	<0.009	0.009	9496465
Hexachloroethane	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	9496465
Methoxychlor	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	9496465
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9496465
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9496465
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9496465
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9496465

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch



BUREAU
VERITAS

Bureau Veritas Job #: C4J8596

Report Date: 2024/07/09

Stantec Consulting Ltd

Sampler Initials: AK

O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		ZPE330	ZPE331	ZPE332	ZPE333	ZPE334		
Sampling Date		2024/06/28 09:30	2024/06/28 13:15	2024/06/28 16:20	2024/06/28 10:15	2024/06/28 13:45		
COC Number		C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01		
	UNITS	20240628 TMC1	20240628 TMC2	20240628 TMC3	20240628 SHC1	20240628 SHC2	RDL	QC Batch

Surrogate Recovery (%)								
2,4,5,6-Tetrachloro-m-xylene	%	92	93	94	69	68		9496465
Decachlorobiphenyl	%	132 (1)	113	113	108	111		9496465

RDL = Reportable Detection Limit
 QC Batch = Quality Control Batch
 (1) Surrogate recovery is below the control limit stipulated by Ont Reg 153, however, this recovery is still within Bureau Veritas' performance based limits.



O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		ZPE335	ZPE336	ZPE337	ZPE338		
Sampling Date		2024/06/28 16:45	2024/06/28 10:45	2024/06/28 14:00	2024/06/28 17:00		
COC Number		C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01		
	UNITS	20240628 SHC3	20240628 SC1	20240628 SC2	20240628 SC3	RDL	QC Batch

Calculated Parameters

Chlordane (Total)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9489927
o,p-DDD + p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9489927
o,p-DDE + p,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9489927
o,p-DDT + p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9489927
Total Endosulfan	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9489927
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9489927

Pesticides & Herbicides

Aldrin	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Dieldrin	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
a-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
g-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
o,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
o,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
p,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
o,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Lindane	ug/L	<0.003	<0.003	<0.003	<0.003	0.003	9496465
Endosulfan I (alpha)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Endosulfan II (beta)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Endrin	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Heptachlor	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Heptachlor epoxide	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Hexachlorobenzene	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9496465
Hexachlorobutadiene	ug/L	<0.009	<0.009	<0.009	<0.009	0.009	9496465
Hexachloroethane	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	9496465
Methoxychlor	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	9496465
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9496465
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9496465
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9496465
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9496465

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch



O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		ZPE335	ZPE336	ZPE337	ZPE338		
Sampling Date		2024/06/28 16:45	2024/06/28 10:45	2024/06/28 14:00	2024/06/28 17:00		
COC Number		C#998024-01-01	C#998024-01-01	C#998024-01-01	C#998024-01-01		
	UNITS	20240628 SHC3	20240628 SC1	20240628 SC2	20240628 SC3	RDL	QC Batch
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	62	71	69	64		9496465
Decachlorobiphenyl	%	105	102	102	89		9496465
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



TEST SUMMARY

Bureau Veritas ID: ZPE330
Sample ID: 20240628 TMC1
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9491315	N/A	2024/07/03	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	9489910	N/A	2024/07/03	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9491233	N/A	2024/07/03	Massarat Jan
Conductivity	AT	9491317	N/A	2024/07/03	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9489929	N/A	2024/07/03	Gyulshen Idriz
Hardness (calculated as CaCO3)		9489821	N/A	2024/07/05	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	9495703	2024/07/04	2024/07/05	Suban Kanapathipplai
Total Metals Analysis by ICPMS	ICP/MS	9497529	2024/07/05	2024/07/08	Nan Raykha
Ion Balance (% Difference)	CALC	9489920	N/A	2024/07/05	Automated Statchk
Anion and Cation Sum	CALC	9489922	N/A	2024/07/05	Automated Statchk
Total Coliforms, (CFU/100mL)	PL	9490274	N/A	2024/06/28	Farhana Rahman
E.coli, (CFU/100mL)	PL	9490269	N/A	2024/06/28	Farhana Rahman
Total Ammonia-N	SKAL/NH4	9497009	N/A	2024/07/09	Massarat Jan
Nitrate & Nitrite as Nitrogen in Water	LACH	9489897	N/A	2024/07/03	Jinal Chavda
OC Pesticides (Selected) & PCB	GC/ECD	9496465	2024/07/05	2024/07/06	Akruti Patel
OC Pesticides Summed Parameters	CALC	9489927	N/A	2024/07/02	Automated Statchk
pH	AT	9491316	2024/07/03	2024/07/03	Surinder Rai
Orthophosphate	KONE	9491244	N/A	2024/07/03	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9489931	N/A	2024/07/05	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9489932	N/A	2024/07/05	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9491245	N/A	2024/07/03	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9489905	N/A	2024/07/05	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9492543	2024/07/03	2024/07/05	Sachi Patel
Low Level Total Suspended Solids	BAL	9492415	2024/07/03	2024/07/04	Razieh Tabesh

Bureau Veritas ID: ZPE330 Dup
Sample ID: 20240628 TMC1
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	SKAL/NH4	9497009	N/A	2024/07/09	Massarat Jan

Bureau Veritas ID: ZPE331
Sample ID: 20240628 TMC2
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9491315	N/A	2024/07/03	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	9489910	N/A	2024/07/03	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9491233	N/A	2024/07/03	Massarat Jan
Conductivity	AT	9491317	N/A	2024/07/03	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9489929	N/A	2024/07/03	Gyulshen Idriz
Hardness (calculated as CaCO3)		9489821	N/A	2024/07/05	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	9495703	2024/07/04	2024/07/05	Suban Kanapathipplai
Total Metals Analysis by ICPMS	ICP/MS	9497529	2024/07/05	2024/07/08	Nan Raykha
Ion Balance (% Difference)	CALC	9489921	N/A	2024/07/05	Automated Statchk



TEST SUMMARY

Bureau Veritas ID: ZPE331
Sample ID: 20240628 TMC2
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Anion and Cation Sum	CALC	9489924	N/A	2024/07/05	Automated Statchk
Total Coliforms, (CFU/100mL)	PL	9490274	N/A	2024/07/02	Farhana Rahman
E.coli, (CFU/100mL)	PL	9490269	N/A	2024/07/02	Farhana Rahman
Total Ammonia-N	SKAL/NH4	9497009	N/A	2024/07/09	Massarat Jan
Nitrate & Nitrite as Nitrogen in Water	LACH	9489897	N/A	2024/07/03	Jinal Chavda
OC Pesticides (Selected) & PCB	GC/ECD	9496465	2024/07/05	2024/07/06	Akruti Patel
OC Pesticides Summed Parameters	CALC	9489927	N/A	2024/07/02	Automated Statchk
pH	AT	9491316	2024/07/03	2024/07/03	Surinder Rai
Orthophosphate	KONE	9491244	N/A	2024/07/03	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9489931	N/A	2024/07/05	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9489932	N/A	2024/07/05	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9491245	N/A	2024/07/03	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9489905	N/A	2024/07/05	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9492543	2024/07/03	2024/07/05	Sachi Patel
Low Level Total Suspended Solids	BAL	9492415	2024/07/03	2024/07/04	Razieh Tabesh

Bureau Veritas ID: ZPE331 Dup
Sample ID: 20240628 TMC2
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus (Colourimetric)	SKAL/P	9492543	2024/07/03	2024/07/05	Sachi Patel

Bureau Veritas ID: ZPE332
Sample ID: 20240628 TMC3
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9491315	N/A	2024/07/03	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	9489910	N/A	2024/07/03	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9491233	N/A	2024/07/03	Massarat Jan
Conductivity	AT	9491317	N/A	2024/07/03	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9489929	N/A	2024/07/03	Gyulshen Idriz
Hardness (calculated as CaCO3)		9489821	N/A	2024/07/05	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	9495703	2024/07/04	2024/07/05	Suban Kanapathipplai
Total Metals Analysis by ICPMS	ICP/MS	9497529	2024/07/05	2024/07/08	Nan Raykha
Ion Balance (% Difference)	CALC	9489921	N/A	2024/07/05	Automated Statchk
Anion and Cation Sum	CALC	9489924	N/A	2024/07/05	Automated Statchk
Total Coliforms, (CFU/100mL)	PL	9490274	N/A	2024/07/02	Farhana Rahman
E.coli, (CFU/100mL)	PL	9490269	N/A	2024/07/02	Farhana Rahman
Total Ammonia-N	SKAL/NH4	9497009	N/A	2024/07/09	Massarat Jan
Nitrate & Nitrite as Nitrogen in Water	LACH	9489897	N/A	2024/07/03	Jinal Chavda
OC Pesticides (Selected) & PCB	GC/ECD	9496465	2024/07/05	2024/07/06	Akruti Patel
OC Pesticides Summed Parameters	CALC	9489927	N/A	2024/07/02	Automated Statchk
pH	AT	9491316	2024/07/03	2024/07/03	Surinder Rai
Orthophosphate	KONE	9491244	N/A	2024/07/03	Massarat Jan



TEST SUMMARY

Bureau Veritas ID: ZPE332
Sample ID: 20240628 TMC3
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sat. pH and Langelier Index (@ 20C)	CALC	9489931	N/A	2024/07/05	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9489932	N/A	2024/07/05	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9491245	N/A	2024/07/03	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9489905	N/A	2024/07/05	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9492543	2024/07/03	2024/07/05	Sachi Patel
Low Level Total Suspended Solids	BAL	9492415	2024/07/03	2024/07/04	Razieh Tabesh

Bureau Veritas ID: ZPE333
Sample ID: 20240628 SHC1
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9491315	N/A	2024/07/03	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	9489910	N/A	2024/07/03	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9491233	N/A	2024/07/03	Massarat Jan
Conductivity	AT	9491317	N/A	2024/07/03	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9489929	N/A	2024/07/03	Gyulshen Idriz
Hardness (calculated as CaCO3)		9489821	N/A	2024/07/05	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	9495703	2024/07/04	2024/07/05	Suban Kanapathipplai
Total Metals Analysis by ICPMS	ICP/MS	9497529	2024/07/05	2024/07/08	Nan Raykha
Ion Balance (% Difference)	CALC	9489921	N/A	2024/07/05	Automated Statchk
Anion and Cation Sum	CALC	9489924	N/A	2024/07/05	Automated Statchk
Total Coliforms, (CFU/100mL)	PL	9490274	N/A	2024/07/02	Farhana Rahman
E.coli, (CFU/100mL)	PL	9490269	N/A	2024/07/02	Farhana Rahman
Total Ammonia-N	SKAL/NH4	9497009	N/A	2024/07/09	Massarat Jan
Nitrate & Nitrite as Nitrogen in Water	LACH	9489897	N/A	2024/07/03	Jinal Chavda
OC Pesticides (Selected) & PCB	GC/ECD	9496465	2024/07/05	2024/07/06	Akruti Patel
OC Pesticides Summed Parameters	CALC	9489927	N/A	2024/07/02	Automated Statchk
pH	AT	9491316	2024/07/03	2024/07/03	Surinder Rai
Orthophosphate	KONE	9491244	N/A	2024/07/03	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9489931	N/A	2024/07/05	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9489932	N/A	2024/07/05	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9491245	N/A	2024/07/03	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9489905	N/A	2024/07/05	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9492543	2024/07/03	2024/07/05	Sachi Patel
Low Level Total Suspended Solids	BAL	9492415	2024/07/03	2024/07/04	Razieh Tabesh

Bureau Veritas ID: ZPE333 Dup
Sample ID: 20240628 SHC1
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9491315	N/A	2024/07/03	Surinder Rai
Conductivity	AT	9491317	N/A	2024/07/03	Surinder Rai
pH	AT	9491316	2024/07/03	2024/07/03	Surinder Rai



BUREAU
VERITAS

Bureau Veritas Job #: C4J8596
Report Date: 2024/07/09

Stantec Consulting Ltd
Sampler Initials: AK

TEST SUMMARY

Bureau Veritas ID: ZPE334
Sample ID: 20240628 SHC2
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9491315	N/A	2024/07/03	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	9489910	N/A	2024/07/03	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9491233	N/A	2024/07/03	Massarat Jan
Conductivity	AT	9491317	N/A	2024/07/03	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9489929	N/A	2024/07/03	Gyulshen Idriz
Hardness (calculated as CaCO3)		9489821	N/A	2024/07/05	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	9495703	2024/07/04	2024/07/05	Suban Kanapathipplai
Total Metals Analysis by ICPMS	ICP/MS	9497529	2024/07/05	2024/07/08	Nan Raykha
Ion Balance (% Difference)	CALC	9489921	N/A	2024/07/05	Automated Statchk
Anion and Cation Sum	CALC	9489924	N/A	2024/07/05	Automated Statchk
Total Coliforms, (CFU/100mL)	PL	9490274	N/A	2024/07/02	Farhana Rahman
E.coli, (CFU/100mL)	PL	9490269	N/A	2024/07/02	Farhana Rahman
Total Ammonia-N	SKAL/NH4	9497009	N/A	2024/07/09	Massarat Jan
Nitrate & Nitrite as Nitrogen in Water	LACH	9489897	N/A	2024/07/03	Jinal Chavda
OC Pesticides (Selected) & PCB	GC/ECD	9496465	2024/07/05	2024/07/06	Akruti Patel
OC Pesticides Summed Parameters	CALC	9489927	N/A	2024/07/02	Automated Statchk
pH	AT	9491316	2024/07/03	2024/07/03	Surinder Rai
Orthophosphate	KONE	9491244	N/A	2024/07/03	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9489931	N/A	2024/07/05	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9489932	N/A	2024/07/05	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9491245	N/A	2024/07/03	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9489905	N/A	2024/07/05	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9492543	2024/07/03	2024/07/05	Sachi Patel
Low Level Total Suspended Solids	BAL	9492415	2024/07/03	2024/07/04	Razieh Tabesh

Bureau Veritas ID: ZPE335
Sample ID: 20240628 SHC3
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9491315	N/A	2024/07/03	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	9489910	N/A	2024/07/03	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9491233	N/A	2024/07/03	Massarat Jan
Conductivity	AT	9491317	N/A	2024/07/03	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9489929	N/A	2024/07/03	Gyulshen Idriz
Hardness (calculated as CaCO3)		9489821	N/A	2024/07/05	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	9495703	2024/07/04	2024/07/05	Suban Kanapathipplai
Total Metals Analysis by ICPMS	ICP/MS	9497529	2024/07/05	2024/07/08	Nan Raykha
Ion Balance (% Difference)	CALC	9489921	N/A	2024/07/05	Automated Statchk
Anion and Cation Sum	CALC	9489924	N/A	2024/07/05	Automated Statchk
Total Coliforms, (CFU/100mL)	PL	9490274	N/A	2024/07/02	Farhana Rahman
E.coli, (CFU/100mL)	PL	9490269	N/A	2024/07/02	Farhana Rahman
Total Ammonia-N	SKAL/NH4	9497009	N/A	2024/07/09	Massarat Jan
Nitrate & Nitrite as Nitrogen in Water	LACH	9489897	N/A	2024/07/03	Jinal Chavda
OC Pesticides (Selected) & PCB	GC/ECD	9496465	2024/07/05	2024/07/06	Akruti Patel
OC Pesticides Summed Parameters	CALC	9489927	N/A	2024/07/02	Automated Statchk



TEST SUMMARY

Bureau Veritas ID: ZPE335
Sample ID: 20240628 SHC3
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
pH	AT	9491316	2024/07/03	2024/07/03	Surinder Rai
Orthophosphate	KONE	9491244	N/A	2024/07/03	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9489931	N/A	2024/07/05	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9489932	N/A	2024/07/05	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9491245	N/A	2024/07/03	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9489905	N/A	2024/07/05	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9492543	2024/07/03	2024/07/05	Sachi Patel
Low Level Total Suspended Solids	BAL	9492415	2024/07/03	2024/07/04	Razieh Tabesh

Bureau Veritas ID: ZPE336
Sample ID: 20240628 SC1
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9491315	N/A	2024/07/03	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	9489910	N/A	2024/07/03	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9491233	N/A	2024/07/03	Massarat Jan
Conductivity	AT	9491317	N/A	2024/07/03	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9489929	N/A	2024/07/03	Gyulshen Idriz
Hardness (calculated as CaCO3)		9489821	N/A	2024/07/05	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	9495703	2024/07/04	2024/07/05	Suban Kanapathippilai
Total Metals Analysis by ICPMS	ICP/MS	9497529	2024/07/05	2024/07/08	Nan Raykha
Ion Balance (% Difference)	CALC	9489921	N/A	2024/07/05	Automated Statchk
Anion and Cation Sum	CALC	9489924	N/A	2024/07/05	Automated Statchk
Total Coliforms, (CFU/100mL)	PL	9490274	N/A	2024/07/02	Farhana Rahman
E.coli, (CFU/100mL)	PL	9490269	N/A	2024/07/02	Farhana Rahman
Total Ammonia-N	SKAL/NH4	9497009	N/A	2024/07/09	Massarat Jan
Nitrate & Nitrite as Nitrogen in Water	LACH	9489897	N/A	2024/07/03	Jinal Chavda
OC Pesticides (Selected) & PCB	GC/ECD	9496465	2024/07/05	2024/07/06	Akruti Patel
OC Pesticides Summed Parameters	CALC	9489927	N/A	2024/07/02	Automated Statchk
pH	AT	9491316	2024/07/03	2024/07/03	Surinder Rai
Orthophosphate	KONE	9491244	N/A	2024/07/03	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9489931	N/A	2024/07/05	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9489932	N/A	2024/07/05	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9491245	N/A	2024/07/03	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9489905	N/A	2024/07/05	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9492543	2024/07/03	2024/07/05	Sachi Patel
Low Level Total Suspended Solids	BAL	9492415	2024/07/03	2024/07/04	Razieh Tabesh

Bureau Veritas ID: ZPE337
Sample ID: 20240628 SC2
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9491315	N/A	2024/07/03	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	9489910	N/A	2024/07/03	Automated Statchk



TEST SUMMARY

Bureau Veritas ID: ZPE337
Sample ID: 20240628 SC2
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Chloride by Automated Colourimetry	SKAL	9491233	N/A	2024/07/03	Massarat Jan
Conductivity	AT	9491317	N/A	2024/07/03	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9489929	N/A	2024/07/03	Gyulshen Idriz
Hardness (calculated as CaCO3)		9489821	N/A	2024/07/05	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	9495703	2024/07/04	2024/07/05	Suban Kanapathipplai
Total Metals Analysis by ICPMS	ICP/MS	9497529	2024/07/05	2024/07/08	Nan Raykha
Ion Balance (% Difference)	CALC	9489921	N/A	2024/07/05	Automated Statchk
Anion and Cation Sum	CALC	9489924	N/A	2024/07/05	Automated Statchk
Total Coliforms, (CFU/100mL)	PL	9490274	N/A	2024/07/02	Farhana Rahman
E.coli, (CFU/100mL)	PL	9490269	N/A	2024/07/02	Farhana Rahman
Total Ammonia-N	SKAL/NH4	9497009	N/A	2024/07/09	Massarat Jan
Nitrate & Nitrite as Nitrogen in Water	LACH	9489897	N/A	2024/07/03	Jinal Chavda
OC Pesticides (Selected) & PCB	GC/ECD	9496465	2024/07/05	2024/07/06	Akruti Patel
OC Pesticides Summed Parameters	CALC	9489927	N/A	2024/07/02	Automated Statchk
pH	AT	9491316	2024/07/03	2024/07/03	Surinder Rai
Orthophosphate	KONE	9491244	N/A	2024/07/03	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9489931	N/A	2024/07/05	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9489932	N/A	2024/07/05	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9491245	N/A	2024/07/03	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9489905	N/A	2024/07/05	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9492543	2024/07/03	2024/07/05	Sachi Patel
Low Level Total Suspended Solids	BAL	9492415	2024/07/03	2024/07/04	Razieh Tabesh

Bureau Veritas ID: ZPE338
Sample ID: 20240628 SC3
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9491315	N/A	2024/07/03	Surinder Rai
Carbonate, Bicarbonate and Hydroxide	CALC	9489910	N/A	2024/07/03	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9491233	N/A	2024/07/03	Massarat Jan
Conductivity	AT	9491317	N/A	2024/07/03	Surinder Rai
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9489929	N/A	2024/07/03	Gyulshen Idriz
Hardness (calculated as CaCO3)		9489821	N/A	2024/07/05	Automated Statchk
Lab Filtered Metals Analysis by ICP	ICP	9495703	2024/07/04	2024/07/05	Suban Kanapathipplai
Total Metals Analysis by ICPMS	ICP/MS	9497529	2024/07/05	2024/07/08	Nan Raykha
Ion Balance (% Difference)	CALC	9489921	N/A	2024/07/05	Automated Statchk
Anion and Cation Sum	CALC	9489924	N/A	2024/07/05	Automated Statchk
Total Coliforms, (CFU/100mL)	PL	9490274	N/A	2024/07/02	Farhana Rahman
E.coli, (CFU/100mL)	PL	9490269	N/A	2024/07/02	Farhana Rahman
Total Ammonia-N	SKAL/NH4	9497009	N/A	2024/07/09	Massarat Jan
Nitrate & Nitrite as Nitrogen in Water	LACH	9489897	N/A	2024/07/03	Jinal Chavda
OC Pesticides (Selected) & PCB	GC/ECD	9496465	2024/07/05	2024/07/06	Akruti Patel
OC Pesticides Summed Parameters	CALC	9489927	N/A	2024/07/02	Automated Statchk
pH	AT	9491316	2024/07/03	2024/07/03	Surinder Rai
Orthophosphate	KONE	9491244	N/A	2024/07/03	Massarat Jan



Bureau Veritas Job #: C4J8596
 Report Date: 2024/07/09

Stantec Consulting Ltd
 Sampler Initials: AK

TEST SUMMARY

Bureau Veritas ID: ZPE338
Sample ID: 20240628 SC3
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sat. pH and Langelier Index (@ 20C)	CALC	9489931	N/A	2024/07/05	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9489932	N/A	2024/07/05	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9491245	N/A	2024/07/03	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9489905	N/A	2024/07/05	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9492543	2024/07/03	2024/07/05	Sachi Patel
Low Level Total Suspended Solids	BAL	9492415	2024/07/03	2024/07/04	Razieh Tabesh

Bureau Veritas ID: ZPE338 Dup
Sample ID: 20240628 SC3
Matrix: Water

Collected: 2024/06/28
Shipped:
Received: 2024/06/28

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Lab Filtered Metals Analysis by ICP	ICP	9495703	2024/07/04	2024/07/05	Suban Kanapathipplai



GENERAL COMMENTS

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

Package 1	8.3°C
Package 2	17.3°C
Package 3	14.7°C

Results relate only to the items tested.



QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9496465	2,4,5,6-Tetrachloro-m-xylene	2024/07/06			72	50 - 130	62	%				
9496465	Decachlorobiphenyl	2024/07/06			118	50 - 130	129	%				
9489897	Nitrate (N)	2024/07/03	102	80 - 120	98	80 - 120	<0.10	mg/L	0.050	20		
9489897	Nitrite (N)	2024/07/03	108	80 - 120	105	80 - 120	<0.010	mg/L	5.5	20		
9489929	Dissolved Organic Carbon	2024/07/03	102	80 - 120	99	80 - 120	<0.40	mg/L	5.1	20		
9491233	Dissolved Chloride (Cl-)	2024/07/03	NC	80 - 120	103	80 - 120	<1.0	mg/L	0.24	20		
9491244	Orthophosphate (P)	2024/07/03	96	75 - 125	94	80 - 120	<0.010	mg/L	NC	20		
9491245	Dissolved Sulphate (SO4)	2024/07/03	NC	75 - 125	100	80 - 120	<1.0	mg/L	0.11	20		
9491315	Alkalinity (Total as CaCO3)	2024/07/03			95	85 - 115	<1.0	mg/L	0.32	20		
9491316	pH	2024/07/03			101	98 - 103			1.2	N/A		
9491317	Conductivity	2024/07/03			100	85 - 115	<1.0	umho/cm	0.34	10		
9492415	Total Suspended Solids	2024/07/04			95	80 - 120	<1	mg/L	11	20		
9492543	Total Phosphorus	2024/07/05	97	80 - 120	105	80 - 120	<0.004	mg/L	6.5	20	99	80 - 120
9495703	Dissolved Calcium (Ca)	2024/07/05	NC	80 - 120	96	80 - 120	0.07, RDL=0.05	mg/L	0.62	20		
9495703	Dissolved Magnesium (Mg)	2024/07/05	NC	80 - 120	98	80 - 120	<0.05	mg/L	0.35	20		
9496465	a-Chlordane	2024/07/06			109	50 - 130	<0.005	ug/L	12	30		
9496465	Aldrin	2024/07/06			103	50 - 130	<0.005	ug/L	8.3	30		
9496465	Aroclor 1242	2024/07/06					<0.05	ug/L				
9496465	Aroclor 1248	2024/07/06					<0.05	ug/L				
9496465	Aroclor 1254	2024/07/06					<0.05	ug/L				
9496465	Aroclor 1260	2024/07/06					<0.05	ug/L				
9496465	Dieldrin	2024/07/06			116	50 - 130	<0.005	ug/L	13	30		
9496465	Endosulfan I (alpha)	2024/07/06			119	50 - 130	<0.005	ug/L	11	30		
9496465	Endosulfan II (beta)	2024/07/06			95	50 - 130	<0.005	ug/L	13	30		
9496465	Endrin	2024/07/06			109	50 - 130	<0.005	ug/L	13	30		
9496465	g-Chlordane	2024/07/06			112	50 - 130	<0.005	ug/L	11	30		
9496465	Heptachlor epoxide	2024/07/06			104	50 - 130	<0.005	ug/L	11	30		
9496465	Heptachlor	2024/07/06			97	50 - 130	<0.005	ug/L	8.0	30		
9496465	Hexachlorobenzene	2024/07/06			88	50 - 130	<0.005	ug/L	7.0	30		
9496465	Hexachlorobutadiene	2024/07/06			86	50 - 130	<0.009	ug/L	13	30		



BUREAU
VERITAS

Bureau Veritas Job #: C4J8596

Report Date: 2024/07/09

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd

Sampler Initials: AK

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9496465	Hexachloroethane	2024/07/06			75	50 - 130	<0.01	ug/L	15	30		
9496465	Lindane	2024/07/06			92	50 - 130	<0.003	ug/L	5.6	30		
9496465	Methoxychlor	2024/07/06			130	50 - 130	<0.01	ug/L	12	30		
9496465	o,p-DDD	2024/07/06			115	50 - 130	<0.005	ug/L	12	30		
9496465	o,p-DDE	2024/07/06			107	50 - 130	<0.005	ug/L	11	30		
9496465	o,p-DDT	2024/07/06			117	50 - 130	<0.005	ug/L	13	30		
9496465	p,p-DDD	2024/07/06			119	50 - 130	<0.005	ug/L	13	30		
9496465	p,p-DDE	2024/07/06			120	50 - 130	<0.005	ug/L	11	30		
9496465	p,p-DDT	2024/07/06			125	50 - 130	<0.005	ug/L	15	30		
9497009	Total Ammonia-N	2024/07/09	95	75 - 125	105	80 - 120	<0.050	mg/L	1.1	20		
9497529	Total Aluminum (Al)	2024/07/08	NC	80 - 120	101	80 - 120	<0.0049	mg/L				
9497529	Total Antimony (Sb)	2024/07/08	109	80 - 120	101	80 - 120	<0.00050	mg/L				
9497529	Total Arsenic (As)	2024/07/08	101	80 - 120	98	80 - 120	<0.0010	mg/L	10	20		
9497529	Total Barium (Ba)	2024/07/08	97	80 - 120	94	80 - 120	<0.0020	mg/L				
9497529	Total Beryllium (Be)	2024/07/08	103	80 - 120	100	80 - 120	<0.00040	mg/L				
9497529	Total Boron (B)	2024/07/08	102	80 - 120	99	80 - 120	<0.010	mg/L	1.6	20		
9497529	Total Cadmium (Cd)	2024/07/08	NC	80 - 120	99	80 - 120	<0.000090	mg/L				
9497529	Total Calcium (Ca)	2024/07/08	NC	80 - 120	103	80 - 120	<0.20	mg/L				
9497529	Total Chromium (Cr)	2024/07/08	100	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
9497529	Total Cobalt (Co)	2024/07/08	101	80 - 120	98	80 - 120	<0.00050	mg/L	0.53	20		
9497529	Total Copper (Cu)	2024/07/08	102	80 - 120	99	80 - 120	<0.00090	mg/L	1.0	20		
9497529	Total Iron (Fe)	2024/07/08	101	80 - 120	99	80 - 120	<0.10	mg/L	0.29	20		
9497529	Total Lead (Pb)	2024/07/08	101	80 - 120	102	80 - 120	<0.00050	mg/L	3.2	20		
9497529	Total Magnesium (Mg)	2024/07/08	102	80 - 120	99	80 - 120	<0.050	mg/L				
9497529	Total Manganese (Mn)	2024/07/08	100	80 - 120	97	80 - 120	<0.0020	mg/L				
9497529	Total Molybdenum (Mo)	2024/07/08	105	80 - 120	98	80 - 120	<0.00050	mg/L				
9497529	Total Nickel (Ni)	2024/07/08	95	80 - 120	97	80 - 120	<0.0010	mg/L				
9497529	Total Phosphorus (P)	2024/07/08	105	80 - 120	96	80 - 120	<0.10	mg/L				
9497529	Total Potassium (K)	2024/07/08	105	80 - 120	99	80 - 120	<0.20	mg/L				
9497529	Total Selenium (Se)	2024/07/08	104	80 - 120	104	80 - 120	<0.0020	mg/L				
9497529	Total Silicon (Si)	2024/07/08	100	80 - 120	100	80 - 120	<0.050	mg/L				



BUREAU
VERITAS

Bureau Veritas Job #: C4J8596

Report Date: 2024/07/09

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd

Sampler Initials: AK

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9497529	Total Silver (Ag)	2024/07/08	99	80 - 120	97	80 - 120	<0.000090	mg/L				
9497529	Total Sodium (Na)	2024/07/08	NC	80 - 120	100	80 - 120	<0.10	mg/L	0.51	20		
9497529	Total Strontium (Sr)	2024/07/08	106	80 - 120	97	80 - 120	<0.0010	mg/L				
9497529	Total Thallium (Tl)	2024/07/08	100	80 - 120	101	80 - 120	<0.000050	mg/L				
9497529	Total Tin (Sn)	2024/07/08	103	80 - 120	99	80 - 120	<0.0010	mg/L				
9497529	Total Titanium (Ti)	2024/07/08	98	80 - 120	95	80 - 120	<0.0050	mg/L				
9497529	Total Uranium (U)	2024/07/08	NC	80 - 120	98	80 - 120	<0.00010	mg/L				
9497529	Total Vanadium (V)	2024/07/08	100	80 - 120	94	80 - 120	<0.00050	mg/L				
9497529	Total Zinc (Zn)	2024/07/08	100	80 - 120	101	80 - 120	<0.0050	mg/L	0.063	20		

N/A = Not Applicable

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

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

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

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

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

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

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

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



VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

Farhana Rahman

Farhana Rahman, Senior Analyst

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



Bureau Veritas
5740 Campbell Road, Mississauga, Ontario Canada L5N 2L8 Tel: (905) 817-5700 Toll-free: 800-563-6268 Fax: (905) 817-5777 www.bvna.com



NONT-2024-06-3128

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:		is Only:	
Company Name: #9197 Stantec Consulting Ltd		Company Name: <u>Stantec Consulting Ltd.</u>		Quotation #: C31067		Bottle Order #:	
Attention: Accounts Payable		Attention: <u>Marlee Sauder</u>		P.O. #:		998024	
Address: 300 Hagey Blvd Suite 100		Address:		Project:		Project Manager:	
Waterloo ON N2L 0A4				Project Name:		Julie Clement	
Tel: (519) 579-4410 Fax: (519) 579-6733		Tel: Fax:		Site #:		CDC #:	
Email: SAPinvoices@Stantec.com		Email: <u>marlee.sauder@stantec.com; bryan.weersink@stantec.</u>		Sampled By: <u>MO + AK</u>		Barcode: C#998024-01-01	

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

Regulation 153 (2011)		Other Regulations		Special Instructions
<input type="checkbox"/> Table 1	<input type="checkbox"/> Res/Park	<input type="checkbox"/> Medium/Fine	<input type="checkbox"/> CCME	
<input type="checkbox"/> Table 2	<input type="checkbox"/> Ind/Comm	<input type="checkbox"/> Coarse	<input type="checkbox"/> Sanitary Sewer Bylaw	
<input type="checkbox"/> Table 3	<input type="checkbox"/> Agri/Other	<input type="checkbox"/> For RSC	<input type="checkbox"/> Storm Sewer Bylaw	
<input type="checkbox"/> Table			<input type="checkbox"/> MISA Municipality	
			<input type="checkbox"/> PWQO	
			<input type="checkbox"/> Reg 406 Table	
			<input type="checkbox"/> Other	

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

Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Field Filtered (please circle): Metals / Hg / Cr-VI	ICA _p - Comprehensive	Total Coliforms/E. coli, CFU/100mL	O Reg 153 DC Pesticides (Water)	Low Level Total Suspended Solids	Total Phosphorus (Colourimetric)	Turnaround Time (TAT) Required: Please provide advance notice for rush projects	Comments
1	20240628 TMC1	2024/06/28	9:30	SW		X	X	X	X	X	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.	8
2	20240628 TMC2		13:15			X	X	X	X	X	Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Time Required: _____ Rush Confirmation Number: _____ (call lab for #)	
3	20240628 TMC3		16:20			X	X	X	X	X		
4	20240628 SHC1		10:15			X	X	X	X	X		
5	20240628 SHC2		13:45			X	X	X	X	X		
6	20240628 SHC3		16:45			X	X	X	X	X		
7	20240628 SC1		10:45			X	X	X	X	X		
8	20240628 SC2		14:00			X	X	X	X	X		
9	20240628 SC3		17:00			X	X	X	X	X		
10												

* RELINQUISHED BY: (Signature/Print) <u>Max Ornat</u>	Date: (YY/MM/DD) 24/06/28	Time 19:20	RECEIVED BY: (Signature/Print) <u>[Signature]</u>	Date: (YY/MM/DD) 2024/06/28	Time 19:24	# Jars used and not submitted	Laboratory Use Only			
							Time Sensitive	Temperature (°C) on Receipt 8/10/28 19:20/18	Custody Seal Present Intact	Yes No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'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.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COG-TERMS-AND-CONDITIONS.
* 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 WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHAIN-CUSTODY-FORMS-COCS.

SAMPLES MUST BE KEPT COOL (< 10° C) FROM TIME OF SAMPLING UNTIL DELIVERY TO BUREAU VERITAS
White: Bureau Veritas Yellow: Client
16/16/12
ouu



Your Project #: 160623199
 Site Location: Elfrida SWS.
 Your C.O.C. #: C#1002640-01-01

Attention: Marlee Sauder

Stantec Consulting Ltd
 300 Hagey Blvd
 Suite 100
 Waterloo, ON
 CANADA N2L 0A4

Report Date: 2024/09/17
 Report #: R8323668
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4R8865

Received: 2024/09/06, 19:14

Sample Matrix: Water
 # Samples Received: 9

Analyses	Quantity	Date	Date	Laboratory Method	Analytical Method
		Extracted	Analyzed		
Alkalinity	9	N/A	2024/09/11	CAM SOP-00448	SM 24 2320 B m
Carbonate, Bicarbonate and Hydroxide	9	N/A	2024/09/11	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	9	N/A	2024/09/12	CAM SOP-00463	SM 24 4500-Cl E m
Conductivity	9	N/A	2024/09/11	CAM SOP-00414	SM 24 2510 m
Dissolved Organic Carbon (DOC) (1)	9	N/A	2024/09/10	CAM SOP-00446	SM 24 5310 B m
Hardness (calculated as CaCO3)	9	N/A	2024/09/12	CAM SOP 00102/00408/00447	SM 2340 B
Lab Filtered Metals by ICPMS	9	2024/09/11	2024/09/12	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	9	N/A	2024/09/12		
Anion and Cation Sum	9	N/A	2024/09/12		
Total Coliforms/ E. coli, CFU/100mL	9	N/A	2024/09/09	CAM SOP-00551	MECP-E3407
Total Ammonia-N	9	N/A	2024/09/11	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (2)	2	N/A	2024/09/10	CAM SOP-00440	SM 24 4500-NO3I/NO2B
Nitrate & Nitrite as Nitrogen in Water (2)	7	N/A	2024/09/11	CAM SOP-00440	SM 24 4500-NO3I/NO2B
OC Pesticides (Selected) & PCB (3)	9	2024/09/10	2024/09/13	CAM SOP-00307	EPA 8081B/ 8082A
OC Pesticides Summed Parameters	9	N/A	2024/09/09	CAM SOP-00307	EPA 8081B/ 8082A
pH (4)	9	2024/09/10	2024/09/11	CAM SOP-00413	SM 24th - 4500H+ B
Orthophosphate	9	N/A	2024/09/12	CAM SOP-00461	SM 24 4500-P E
Sat. pH and Langelier Index (@ 20C)	9	N/A	2024/09/12		Auto Calc
Sat. pH and Langelier Index (@ 4C)	9	N/A	2024/09/12		Auto Calc
Sulphate by Automated Turbidimetry	9	N/A	2024/09/12	CAM SOP-00464	SM 24 4500-SO42- E m
Total Dissolved Solids (TDS calc)	9	N/A	2024/09/12		Auto Calc
Total Phosphorus (Colourimetric)	9	2024/09/11	2024/09/13	CAM SOP-00407	SM 24 4500-P I
Low Level Total Suspended Solids	9	2024/09/11	2024/09/12	CAM SOP-00428	SM 24 2540D m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas in



Your Project #: 160623199
Site Location: Elfrida SWS.
Your C.O.C. #: C#1002640-01-01

Attention: Marlee Sauder

Stantec Consulting Ltd
300 Hagey Blvd
Suite 100
Waterloo, ON
CANADA N2L 0A4

Report Date: 2024/09/17
Report #: R8323668
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4R8865

Received: 2024/09/06, 19:14

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.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas 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 Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas 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 Bureau Veritas, 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.

- (1) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.
- (2) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.
- (3) Chlordane (Total) = Alpha Chlordane + Gamma Chlordane
- (4) "The CCME method and Analytical Protocol (O. Reg 153/04, O. Reg. 406/19) requires pH to be analyzed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME and Analytical Protocol (O. Reg 153/04, O. Reg. 406/19) holding time. Bureau Veritas endeavors to analyze samples as soon as possible after receipt."

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:
Julie Clement, Technical Account Manager
Email: Julie.CLEMENT@bureauveritas.com
Phone# (613)868-6079

=====

This report has been generated and distributed using a secure automated process.

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RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ACCO34		ACCO35	ACCO36		
Sampling Date		2024/09/06 10:45		2024/09/06 14:15	2024/09/06 16:15		
COC Number		C#1002640-01-01		C#1002640-01-01	C#1002640-01-01		
	UNITS	20240906 20MC1	RDL	20240906 20MC2	20240906 20MC3	RDL	QC Batch
Calculated Parameters							
Anion Sum	me/L	14.0	N/A	14.4	14.4	N/A	9625109
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	210	1.0	210	210	1.0	9625105
Calculated TDS	mg/L	840	1.0	850	850	1.0	9625099
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.7	1.0	1.8	1.6	1.0	9625105
Cation Sum	me/L	15.1	N/A	14.8	14.7	N/A	9625109
Hardness (CaCO3)	mg/L	410	1.0	400	390	1.0	9625107
Ion Balance (% Difference)	%	3.89	N/A	1.48	1.09	N/A	9625108
Langelier Index (@ 20C)	N/A	0.822		0.825	0.769		9625100
Langelier Index (@ 4C)	N/A	0.576		0.579	0.523		9625101
Saturation pH (@ 20C)	N/A	7.12		7.13	7.13		9625100
Saturation pH (@ 4C)	N/A	7.36		7.38	7.38		9625101
Inorganics							
Total Ammonia-N	mg/L	0.14	0.050	0.12	0.12	0.050	9628631
Conductivity	umho/cm	1500	1.0	1500	1500	1.0	9628727
Dissolved Organic Carbon	mg/L	8.2	0.40	8.6	8.3	0.40	9627749
Orthophosphate (P)	mg/L	0.057	0.010	0.062	0.077	0.010	9629652
pH	pH	7.94		7.95	7.90		9628726
Dissolved Sulphate (SO4)	mg/L	210	1.0	210	210	1.0	9629653
Alkalinity (Total as CaCO3)	mg/L	210	1.0	210	210	1.0	9628721
Dissolved Chloride (Cl-)	mg/L	190	1.0	210	210	2.0	9629643
Nitrite (N)	mg/L	<0.010	0.010	<0.010	<0.010	0.010	9628407
Nitrate (N)	mg/L	<0.10	0.10	<0.10	<0.10	0.10	9628407
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	<0.10	<0.10	0.10	9628407
Metals							
Dissolved Aluminum (Al)	mg/L	<0.0049	0.0049	<0.0049	<0.0049	0.0049	9632731
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	<0.00050	<0.00050	0.00050	9632731
Dissolved Arsenic (As)	mg/L	0.0010	0.0010	0.0014	0.0013	0.0010	9632731
Dissolved Barium (Ba)	mg/L	0.054	0.0020	0.051	0.053	0.0020	9632731
Dissolved Beryllium (Be)	mg/L	<0.00040	0.00040	<0.00040	<0.00040	0.00040	9632731
Dissolved Boron (B)	mg/L	0.048	0.010	0.048	0.049	0.010	9632731
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							
N/A = Not Applicable							



BUREAU
VERITAS

Bureau Veritas Job #: C4R8865
Report Date: 2024/09/17

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ACCO34		ACCO35	ACCO36		
Sampling Date		2024/09/06 10:45		2024/09/06 14:15	2024/09/06 16:15		
COC Number		C#1002640-01-01		C#1002640-01-01	C#1002640-01-01		
	UNITS	20240906 20MC1	RDL	20240906 20MC2	20240906 20MC3	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.000090	0.000090	<0.000090	<0.000090	0.000090	9632731
Dissolved Calcium (Ca)	mg/L	120	0.20	120	120	0.20	9632731
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	<0.0050	<0.0050	0.0050	9632731
Dissolved Cobalt (Co)	mg/L	<0.00050	0.00050	<0.00050	<0.00050	0.00050	9632731
Dissolved Copper (Cu)	mg/L	<0.00090	0.00090	<0.00090	<0.00090	0.00090	9632731
Dissolved Iron (Fe)	mg/L	<0.10	0.10	<0.10	<0.10	0.10	9632731
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	<0.00050	<0.00050	0.00050	9632731
Dissolved Magnesium (Mg)	mg/L	24	0.050	24	24	0.050	9632731
Dissolved Manganese (Mn)	mg/L	0.034	0.0020	0.11	0.066	0.0020	9632731
Dissolved Molybdenum (Mo)	mg/L	0.00096	0.00050	0.0010	0.00098	0.00050	9632731
Dissolved Nickel (Ni)	mg/L	0.0014	0.0010	0.0014	0.0012	0.0010	9632731
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	<0.10	0.10	0.10	9632731
Dissolved Potassium (K)	mg/L	4.5	0.20	4.4	4.4	0.20	9632731
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	<0.0020	<0.0020	0.0020	9632731
Dissolved Silicon (Si)	mg/L	2.2	0.050	2.2	2.1	0.050	9632731
Dissolved Silver (Ag)	mg/L	<0.000090	0.000090	<0.000090	<0.000090	0.000090	9632731
Dissolved Sodium (Na)	mg/L	160	0.10	150	160	0.10	9632731
Dissolved Strontium (Sr)	mg/L	3.4	0.0010	3.3	3.3	0.0010	9632731
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	<0.000050	<0.000050	0.000050	9632731
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	<0.0050	<0.0050	0.0050	9632731
Dissolved Uranium (U)	mg/L	0.0011	0.00010	0.0011	0.0011	0.00010	9632731
Dissolved Vanadium (V)	mg/L	<0.00050	0.00050	<0.00050	<0.00050	0.00050	9632731
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	<0.0050	<0.0050	0.0050	9632731
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



BUREAU
VERITAS

Bureau Veritas Job #: C4R8865

Report Date: 2024/09/17

Stantec Consulting Ltd

Client Project #: 160623199

Site Location: Elfrida SWS.

Sampler Initials: MO

RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ACCO37	ACCO38	ACCO39	ACCO40		
Sampling Date		2024/09/06 12:10	2024/09/06 15:10	2024/09/06 17:10	2024/09/06 11:45		
COC Number		C#1002640-01-01	C#1002640-01-01	C#1002640-01-01	C#1002640-01-01		
	UNITS	20240906 SC1	20240906 SC2	20240906 SC3	20240906 SHC1	RDL	QC Batch

Calculated Parameters

Anion Sum	me/L	9.85	9.90	9.90	6.93	N/A	9625109
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	180	180	180	180	1.0	9625105
Calculated TDS	mg/L	580	590	580	390	1.0	9625099
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	<1.0	<1.0	1.9	1.0	9625105
Cation Sum	me/L	10.5	10.7	10.1	7.46	N/A	9625109
Hardness (CaCO3)	mg/L	300	310	290	200	1.0	9625107
Ion Balance (% Difference)	%	3.23	3.76	1.10	3.68	N/A	9625108
Langelier Index (@ 20C)	N/A	0.469	0.441	0.408	0.634		9625100
Langelier Index (@ 4C)	N/A	0.222	0.193	0.161	0.386		9625101
Saturation pH (@ 20C)	N/A	7.30	7.30	7.32	7.41		9625100
Saturation pH (@ 4C)	N/A	7.54	7.55	7.57	7.66		9625101

Inorganics

Total Ammonia-N	mg/L	0.29	0.17	0.17	<0.050	0.050	9628631
Conductivity	umho/cm	1000	1000	1000	740	1.0	9628727
Dissolved Organic Carbon	mg/L	7.6	7.9	7.9	7.6	0.40	9627749
Orthophosphate (P)	mg/L	0.012	0.022	0.017	0.022	0.010	9629652
pH	pH	7.77	7.74	7.73	8.04		9628726
Dissolved Sulphate (SO4)	mg/L	140	140	140	26	1.0	9629653
Alkalinity (Total as CaCO3)	mg/L	180	180	180	180	1.0	9628721
Dissolved Chloride (Cl-)	mg/L	120	120	120	96	1.0	9629643
Nitrite (N)	mg/L	<0.010	<0.010	<0.010	<0.010	0.010	9628407
Nitrate (N)	mg/L	<0.10	<0.10	<0.10	<0.10	0.10	9628407
Nitrate + Nitrite (N)	mg/L	<0.10	<0.10	<0.10	<0.10	0.10	9628407

Metals

Dissolved Aluminum (Al)	mg/L	<0.0049	<0.0049	<0.0049	0.0067	0.0049	9632731
Dissolved Antimony (Sb)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	9632731
Dissolved Arsenic (As)	mg/L	<0.0010	<0.0010	<0.0010	<0.0010	0.0010	9632731
Dissolved Barium (Ba)	mg/L	0.035	0.037	0.034	0.018	0.0020	9632731
Dissolved Beryllium (Be)	mg/L	<0.00040	<0.00040	<0.00040	<0.00040	0.00040	9632731
Dissolved Boron (B)	mg/L	0.046	0.045	0.046	0.029	0.010	9632731

RDL = Reportable Detection Limit

QC Batch = Quality Control Batch

N/A = Not Applicable



BUREAU
VERITAS

Bureau Veritas Job #: C4R8865
Report Date: 2024/09/17

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ACCO37	ACCO38	ACCO39	ACCO40		
Sampling Date		2024/09/06 12:10	2024/09/06 15:10	2024/09/06 17:10	2024/09/06 11:45		
COC Number		C#1002640-01-01	C#1002640-01-01	C#1002640-01-01	C#1002640-01-01		
	UNITS	20240906 SC1	20240906 SC2	20240906 SC3	20240906 SHC1	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.000090	<0.000090	<0.000090	<0.000090	0.000090	9632731
Dissolved Calcium (Ca)	mg/L	85	85	80	59	0.20	9632731
Dissolved Chromium (Cr)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	9632731
Dissolved Cobalt (Co)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	9632731
Dissolved Copper (Cu)	mg/L	<0.00090	0.039	<0.00090	<0.00090	0.00090	9632731
Dissolved Iron (Fe)	mg/L	<0.10	0.84	<0.10	<0.10	0.10	9632731
Dissolved Lead (Pb)	mg/L	<0.00050	<0.00050	<0.00050	<0.00050	0.00050	9632731
Dissolved Magnesium (Mg)	mg/L	22	23	22	12	0.050	9632731
Dissolved Manganese (Mn)	mg/L	0.41	0.22	0.31	0.033	0.0020	9632731
Dissolved Molybdenum (Mo)	mg/L	0.00090	0.0012	0.0011	0.00069	0.00050	9632731
Dissolved Nickel (Ni)	mg/L	<0.0010	0.0010	<0.0010	<0.0010	0.0010	9632731
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	<0.10	<0.10	0.10	9632731
Dissolved Potassium (K)	mg/L	4.3	4.6	4.4	1.7	0.20	9632731
Dissolved Selenium (Se)	mg/L	<0.0020	<0.0020	<0.0020	<0.0020	0.0020	9632731
Dissolved Silicon (Si)	mg/L	3.6	3.6	3.6	2.8	0.050	9632731
Dissolved Silver (Ag)	mg/L	<0.000090	<0.000090	<0.000090	<0.000090	0.000090	9632731
Dissolved Sodium (Na)	mg/L	99	100	97	80	0.10	9632731
Dissolved Strontium (Sr)	mg/L	1.0	1.1	1.0	1.3	0.0010	9632731
Dissolved Thallium (Tl)	mg/L	<0.000050	<0.000050	<0.000050	<0.000050	0.000050	9632731
Dissolved Titanium (Ti)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	9632731
Dissolved Uranium (U)	mg/L	0.00059	0.00064	0.00062	0.00052	0.00010	9632731
Dissolved Vanadium (V)	mg/L	<0.00050	<0.00050	<0.00050	0.00066	0.00050	9632731
Dissolved Zinc (Zn)	mg/L	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	9632731

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch



RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ACCO41	ACCO42		
Sampling Date		2024/09/06 14:45	2024/09/06 16:45		
COC Number		C#1002640-01-01	C#1002640-01-01		
	UNITS	20240906 SHC2	20240906 SHC3	RDL	QC Batch
Calculated Parameters					
Anion Sum	me/L	6.77	6.84	N/A	9625109
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	180	180	1.0	9625105
Calculated TDS	mg/L	380	390	1.0	9625099
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.9	1.9	1.0	9625105
Cation Sum	me/L	7.00	7.44	N/A	9625109
Hardness (CaCO3)	mg/L	180	200	1.0	9625107
Ion Balance (% Difference)	%	1.67	4.22	N/A	9625108
Langelier Index (@ 20C)	N/A	0.610	0.646		9625100
Langelier Index (@ 4C)	N/A	0.362	0.398		9625101
Saturation pH (@ 20C)	N/A	7.45	7.41		9625100
Saturation pH (@ 4C)	N/A	7.70	7.66		9625101
Inorganics					
Total Ammonia-N	mg/L	<0.050	<0.050	0.050	9628631
Conductivity	umho/cm	730	730	1.0	9628727
Dissolved Organic Carbon	mg/L	8.0	8.0	0.40	9627749
Orthophosphate (P)	mg/L	0.024	0.025	0.010	9629652
pH	pH	8.06	8.06		9628726
Dissolved Sulphate (SO4)	mg/L	26	26	1.0	9629653
Alkalinity (Total as CaCO3)	mg/L	180	180	1.0	9628721
Dissolved Chloride (Cl-)	mg/L	93	94	1.0	9629643
Nitrite (N)	mg/L	<0.010	<0.010	0.010	9628407
Nitrate (N)	mg/L	<0.10	<0.10	0.10	9628407
Nitrate + Nitrite (N)	mg/L	<0.10	<0.10	0.10	9628407
Metals					
Dissolved Aluminum (Al)	mg/L	0.0076	0.012	0.0049	9632731
Dissolved Antimony (Sb)	mg/L	<0.00050	<0.00050	0.00050	9632731
Dissolved Arsenic (As)	mg/L	<0.0010	<0.0010	0.0010	9632731
Dissolved Barium (Ba)	mg/L	0.018	0.018	0.0020	9632731
Dissolved Beryllium (Be)	mg/L	<0.00040	<0.00040	0.00040	9632731
Dissolved Boron (B)	mg/L	0.030	0.032	0.010	9632731
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable					



RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ACCO41	ACCO42		
Sampling Date		2024/09/06 14:45	2024/09/06 16:45		
COC Number		C#1002640-01-01	C#1002640-01-01		
	UNITS	20240906 SHC2	20240906 SHC3	RDL	QC Batch
Dissolved Cadmium (Cd)	mg/L	<0.000090	<0.000090	0.000090	9632731
Dissolved Calcium (Ca)	mg/L	55	59	0.20	9632731
Dissolved Chromium (Cr)	mg/L	<0.0050	<0.0050	0.0050	9632731
Dissolved Cobalt (Co)	mg/L	<0.00050	<0.00050	0.00050	9632731
Dissolved Copper (Cu)	mg/L	<0.00090	<0.00090	0.00090	9632731
Dissolved Iron (Fe)	mg/L	<0.10	<0.10	0.10	9632731
Dissolved Lead (Pb)	mg/L	<0.00050	<0.00050	0.00050	9632731
Dissolved Magnesium (Mg)	mg/L	11	12	0.050	9632731
Dissolved Manganese (Mn)	mg/L	0.013	0.0066	0.0020	9632731
Dissolved Molybdenum (Mo)	mg/L	0.00077	0.00072	0.00050	9632731
Dissolved Nickel (Ni)	mg/L	<0.0010	<0.0010	0.0010	9632731
Dissolved Phosphorus (P)	mg/L	<0.10	<0.10	0.10	9632731
Dissolved Potassium (K)	mg/L	1.7	1.9	0.20	9632731
Dissolved Selenium (Se)	mg/L	<0.0020	<0.0020	0.0020	9632731
Dissolved Silicon (Si)	mg/L	2.8	2.9	0.050	9632731
Dissolved Silver (Ag)	mg/L	<0.000090	<0.000090	0.000090	9632731
Dissolved Sodium (Na)	mg/L	76	80	0.10	9632731
Dissolved Strontium (Sr)	mg/L	1.2	1.3	0.0010	9632731
Dissolved Thallium (Tl)	mg/L	<0.000050	<0.000050	0.000050	9632731
Dissolved Titanium (Ti)	mg/L	<0.0050	<0.0050	0.0050	9632731
Dissolved Uranium (U)	mg/L	0.00054	0.00055	0.00010	9632731
Dissolved Vanadium (V)	mg/L	0.00061	0.00072	0.00050	9632731
Dissolved Zinc (Zn)	mg/L	<0.0050	<0.0050	0.0050	9632731
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					



BUREAU
VERITAS

Bureau Veritas Job #: C4R8865
Report Date: 2024/09/17

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		ACCO34	ACCO35	ACCO36		ACCO37		
Sampling Date		2024/09/06 10:45	2024/09/06 14:15	2024/09/06 16:15		2024/09/06 12:10		
COC Number		C#1002640-01-01	C#1002640-01-01	C#1002640-01-01		C#1002640-01-01		
	UNITS	20240906 20MC1	20240906 20MC2	20240906 20MC3	RDL	20240906 SC1	RDL	QC Batch

Inorganics								
Total Phosphorus	mg/L	0.16	0.20	0.19	0.004	0.39	0.004	9631069
Total Suspended Solids	mg/L	45	16	25	1	290	5	9631428
RDL = Reportable Detection Limit QC Batch = Quality Control Batch								

Bureau Veritas ID		ACCO38		ACCO39			ACCO39		
Sampling Date		2024/09/06 15:10		2024/09/06 17:10			2024/09/06 17:10		
COC Number		C#1002640-01-01		C#1002640-01-01			C#1002640-01-01		
	UNITS	20240906 SC2	RDL	20240906 SC3	RDL	QC Batch	20240906 SC3 Lab-Dup	RDL	QC Batch

Inorganics									
Total Phosphorus	mg/L	0.23	0.004	0.29	0.004	9631069	0.30	0.004	9631069
Total Suspended Solids	mg/L	73	2	180	5	9631428			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate									

Bureau Veritas ID		ACCO40	ACCO41	ACCO42		
Sampling Date		2024/09/06 11:45	2024/09/06 14:45	2024/09/06 16:45		
COC Number		C#1002640-01-01	C#1002640-01-01	C#1002640-01-01		
	UNITS	20240906 SHC1	20240906 SHC2	20240906 SHC3	RDL	QC Batch

Inorganics						
Total Phosphorus	mg/L	0.080	0.071	0.072	0.004	9631069
Total Suspended Solids	mg/L	22	16	16	1	9631428
RDL = Reportable Detection Limit QC Batch = Quality Control Batch						



BUREAU
VERITAS

Bureau Veritas Job #: C4R8865
Report Date: 2024/09/17

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

MICROBIOLOGY (WATER)

Bureau Veritas ID		ACCO34	ACCO35	ACCO36	ACCO37	ACCO38	
Sampling Date		2024/09/06 10:45	2024/09/06 14:15	2024/09/06 16:15	2024/09/06 12:10	2024/09/06 15:10	
COC Number		C#1002640-01-01	C#1002640-01-01	C#1002640-01-01	C#1002640-01-01	C#1002640-01-01	
	UNITS	20240906 20MC1	20240906 20MC2	20240906 20MC3	20240906 SC1	20240906 SC2	QC Batch

Microbiological							
Background	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9625846
Total Coliforms	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9625846
Escherichia coli	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9625846

QC Batch = Quality Control Batch

(1) NDOGT: No data due to overgrowth. Total coliforms and / or E.coli detected

Bureau Veritas ID		ACCO39	ACCO40	ACCO41	ACCO42	
Sampling Date		2024/09/06 17:10	2024/09/06 11:45	2024/09/06 14:45	2024/09/06 16:45	
COC Number		C#1002640-01-01	C#1002640-01-01	C#1002640-01-01	C#1002640-01-01	
	UNITS	20240906 SC3	20240906 SHC1	20240906 SHC2	20240906 SHC3	QC Batch

Microbiological						
Background	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9625846
Total Coliforms	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9625846
Escherichia coli	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9625846

QC Batch = Quality Control Batch

(1) NDOGT: No data due to overgrowth. Total coliforms and / or E.coli detected



BUREAU
VERITAS

Bureau Veritas Job #: C4R8865
Report Date: 2024/09/17

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		ACCO34	ACCO35	ACCO36	ACCO37	ACCO38		
Sampling Date		2024/09/06 10:45	2024/09/06 14:15	2024/09/06 16:15	2024/09/06 12:10	2024/09/06 15:10		
COC Number		C#1002640-01-01	C#1002640-01-01	C#1002640-01-01	C#1002640-01-01	C#1002640-01-01		
	UNITS	20240906 20MC1	20240906 20MC2	20240906 20MC3	20240906 SC1	20240906 SC2	RDL	QC Batch

Calculated Parameters								
Chlordane (Total)	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9625381
o,p-DDD + p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9625381
o,p-DDE + p,p-DDE	ug/L	<0.005	<0.005	<0.005	0.006	<0.005	0.005	9625381
o,p-DDT + p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9625381
Total Endosulfan	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9625381
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9625381

Pesticides & Herbicides								
Aldrin	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Dieldrin	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
a-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
g-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
o,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
o,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
p,p-DDE	ug/L	<0.005	<0.005	<0.005	0.006	<0.005	0.005	9630126
o,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Lindane	ug/L	<0.003	<0.003	<0.003	<0.003	<0.003	0.003	9630126
Endosulfan I (alpha)	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Endosulfan II (beta)	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Endrin	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Heptachlor	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Heptachlor epoxide	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Hexachlorobenzene	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Hexachlorobutadiene	ug/L	<0.009	<0.009	<0.009	<0.009	<0.009	0.009	9630126
Hexachloroethane	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	9630126
Methoxychlor	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	9630126
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9630126
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9630126
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9630126
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9630126

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch



Bureau Veritas Job #: C4R8865
 Report Date: 2024/09/17

Stantec Consulting Ltd
 Client Project #: 160623199
 Site Location: Elfrida SWS.
 Sampler Initials: MO

O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		ACCO34	ACCO35	ACCO36	ACCO37	ACCO38		
Sampling Date		2024/09/06 10:45	2024/09/06 14:15	2024/09/06 16:15	2024/09/06 12:10	2024/09/06 15:10		
COC Number		C#1002640-01-01	C#1002640-01-01	C#1002640-01-01	C#1002640-01-01	C#1002640-01-01		
	UNITS	20240906 20MC1	20240906 20MC2	20240906 20MC3	20240906 SC1	20240906 SC2	RDL	QC Batch

Surrogate Recovery (%)								
2,4,5,6-Tetrachloro-m-xylene	%	78	86	79	69	74		9630126
Decachlorobiphenyl	%	78	82	78	78	79		9630126

RDL = Reportable Detection Limit
 QC Batch = Quality Control Batch



O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		ACCO39	ACCO40	ACCO41	ACCO42		
Sampling Date		2024/09/06 17:10	2024/09/06 11:45	2024/09/06 14:45	2024/09/06 16:45		
COC Number		C#1002640-01-01	C#1002640-01-01	C#1002640-01-01	C#1002640-01-01		
	UNITS	20240906 SC3	20240906 SHC1	20240906 SHC2	20240906 SHC3	RDL	QC Batch
Calculated Parameters							
Chlordane (Total)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9625381
o,p-DDD + p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9625381
o,p-DDE + p,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9625381
o,p-DDT + p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9625381
Total Endosulfan	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9625381
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9625381
Pesticides & Herbicides							
Aldrin	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Dieldrin	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
a-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
g-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
o,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
o,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
p,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
o,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Lindane	ug/L	<0.003	<0.003	<0.003	<0.003	0.003	9630126
Endosulfan I (alpha)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Endosulfan II (beta)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Endrin	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Heptachlor	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Heptachlor epoxide	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Hexachlorobenzene	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9630126
Hexachlorobutadiene	ug/L	<0.009	<0.009	<0.009	<0.009	0.009	9630126
Hexachloroethane	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	9630126
Methoxychlor	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	9630126
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9630126
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9630126
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9630126
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9630126
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							



O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		ACCO39	ACCO40	ACCO41	ACCO42		
Sampling Date		2024/09/06 17:10	2024/09/06 11:45	2024/09/06 14:45	2024/09/06 16:45		
COC Number		C#1002640-01-01	C#1002640-01-01	C#1002640-01-01	C#1002640-01-01		
	UNITS	20240906 SC3	20240906 SHC1	20240906 SHC2	20240906 SHC3	RDL	QC Batch
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	74	67	73	71		9630126
Decachlorobiphenyl	%	80	77	83	86		9630126
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							



TEST SUMMARY

Bureau Veritas ID: ACCO34
Sample ID: 20240906 20MC1
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9628721	N/A	2024/09/11	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9625105	N/A	2024/09/11	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9629643	N/A	2024/09/12	Yogesh Patel
Conductivity	AT	9628727	N/A	2024/09/11	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9627749	N/A	2024/09/10	Gyulshen Idriz
Hardness (calculated as CaCO3)		9625107	N/A	2024/09/12	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9632731	2024/09/11	2024/09/12	Azita Fazaeli
Ion Balance (% Difference)	CALC	9625108	N/A	2024/09/12	Automated Statchk
Anion and Cation Sum	CALC	9625109	N/A	2024/09/12	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9625846	N/A	2024/09/09	Soham Patel
Total Ammonia-N	SKAL/NH4	9628631	N/A	2024/09/11	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9628407	N/A	2024/09/11	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9630126	2024/09/10	2024/09/13	Akruti Patel
OC Pesticides Summed Parameters	CALC	9625381	N/A	2024/09/09	Automated Statchk
pH	AT	9628726	2024/09/10	2024/09/11	Nachiketa Gohil
Orthophosphate	SKAL	9629652	N/A	2024/09/12	Yogesh Patel
Sat. pH and Langelier Index (@ 20C)	CALC	9625100	N/A	2024/09/12	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9625101	N/A	2024/09/12	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9629653	N/A	2024/09/12	Yogesh Patel
Total Dissolved Solids (TDS calc)	CALC	9625099	N/A	2024/09/12	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9631069	2024/09/11	2024/09/13	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9631428	2024/09/11	2024/09/12	Madhav Somani

Bureau Veritas ID: ACCO35
Sample ID: 20240906 20MC2
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9628721	N/A	2024/09/11	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9625105	N/A	2024/09/11	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9629643	N/A	2024/09/12	Yogesh Patel
Conductivity	AT	9628727	N/A	2024/09/11	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9627749	N/A	2024/09/10	Gyulshen Idriz
Hardness (calculated as CaCO3)		9625107	N/A	2024/09/12	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9632731	2024/09/11	2024/09/12	Azita Fazaeli
Ion Balance (% Difference)	CALC	9625108	N/A	2024/09/12	Automated Statchk
Anion and Cation Sum	CALC	9625109	N/A	2024/09/12	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9625846	N/A	2024/09/09	Soham Patel
Total Ammonia-N	SKAL/NH4	9628631	N/A	2024/09/11	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9628407	N/A	2024/09/10	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9630126	2024/09/10	2024/09/13	Akruti Patel
OC Pesticides Summed Parameters	CALC	9625381	N/A	2024/09/09	Automated Statchk
pH	AT	9628726	2024/09/10	2024/09/11	Nachiketa Gohil
Orthophosphate	SKAL	9629652	N/A	2024/09/12	Yogesh Patel



Bureau Veritas Job #: C4R8865
Report Date: 2024/09/17

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: ACCO35
Sample ID: 20240906 20MC2
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sat. pH and Langelier Index (@ 20C)	CALC	9625100	N/A	2024/09/12	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9625101	N/A	2024/09/12	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9629653	N/A	2024/09/12	Yogesh Patel
Total Dissolved Solids (TDS calc)	CALC	9625099	N/A	2024/09/12	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9631069	2024/09/11	2024/09/13	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9631428	2024/09/11	2024/09/12	Madhav Somani

Bureau Veritas ID: ACCO36
Sample ID: 20240906 20MC3
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9628721	N/A	2024/09/11	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9625105	N/A	2024/09/11	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9629643	N/A	2024/09/12	Yogesh Patel
Conductivity	AT	9628727	N/A	2024/09/11	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9627749	N/A	2024/09/10	Gyulshen Idriz
Hardness (calculated as CaCO3)		9625107	N/A	2024/09/12	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9632731	2024/09/11	2024/09/12	Azita Fazaeli
Ion Balance (% Difference)	CALC	9625108	N/A	2024/09/12	Automated Statchk
Anion and Cation Sum	CALC	9625109	N/A	2024/09/12	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9625846	N/A	2024/09/09	Soham Patel
Total Ammonia-N	SKAL/NH4	9628631	N/A	2024/09/11	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9628407	N/A	2024/09/11	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9630126	2024/09/10	2024/09/13	Akruti Patel
OC Pesticides Summed Parameters	CALC	9625381	N/A	2024/09/09	Automated Statchk
pH	AT	9628726	2024/09/10	2024/09/11	Nachiketa Gohil
Orthophosphate	SKAL	9629652	N/A	2024/09/12	Yogesh Patel
Sat. pH and Langelier Index (@ 20C)	CALC	9625100	N/A	2024/09/12	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9625101	N/A	2024/09/12	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9629653	N/A	2024/09/12	Yogesh Patel
Total Dissolved Solids (TDS calc)	CALC	9625099	N/A	2024/09/12	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9631069	2024/09/11	2024/09/13	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9631428	2024/09/11	2024/09/12	Madhav Somani

Bureau Veritas ID: ACCO37
Sample ID: 20240906 SC1
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9628721	N/A	2024/09/11	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9625105	N/A	2024/09/11	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9629643	N/A	2024/09/12	Yogesh Patel
Conductivity	AT	9628727	N/A	2024/09/11	Nachiketa Gohil



Bureau Veritas Job #: C4R8865
Report Date: 2024/09/17

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: ACCO37
Sample ID: 20240906 SC1
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9627749	N/A	2024/09/10	Gyulshen Idriz
Hardness (calculated as CaCO3)		9625107	N/A	2024/09/12	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9632731	2024/09/11	2024/09/12	Azita Fazaeli
Ion Balance (% Difference)	CALC	9625108	N/A	2024/09/12	Automated Statchk
Anion and Cation Sum	CALC	9625109	N/A	2024/09/12	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9625846	N/A	2024/09/09	Soham Patel
Total Ammonia-N	SKAL/NH4	9628631	N/A	2024/09/11	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9628407	N/A	2024/09/11	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9630126	2024/09/10	2024/09/13	Akruti Patel
OC Pesticides Summed Parameters	CALC	9625381	N/A	2024/09/09	Automated Statchk
pH	AT	9628726	2024/09/10	2024/09/11	Nachiketa Gohil
Orthophosphate	SKAL	9629652	N/A	2024/09/12	Yogesh Patel
Sat. pH and Langelier Index (@ 20C)	CALC	9625100	N/A	2024/09/12	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9625101	N/A	2024/09/12	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9629653	N/A	2024/09/12	Yogesh Patel
Total Dissolved Solids (TDS calc)	CALC	9625099	N/A	2024/09/12	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9631069	2024/09/11	2024/09/13	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9631428	2024/09/11	2024/09/12	Madhav Somani

Bureau Veritas ID: ACCO38
Sample ID: 20240906 SC2
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9628721	N/A	2024/09/11	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9625105	N/A	2024/09/11	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9629643	N/A	2024/09/12	Yogesh Patel
Conductivity	AT	9628727	N/A	2024/09/11	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9627749	N/A	2024/09/10	Gyulshen Idriz
Hardness (calculated as CaCO3)		9625107	N/A	2024/09/12	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9632731	2024/09/11	2024/09/12	Azita Fazaeli
Ion Balance (% Difference)	CALC	9625108	N/A	2024/09/12	Automated Statchk
Anion and Cation Sum	CALC	9625109	N/A	2024/09/12	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9625846	N/A	2024/09/09	Soham Patel
Total Ammonia-N	SKAL/NH4	9628631	N/A	2024/09/11	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9628407	N/A	2024/09/11	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9630126	2024/09/10	2024/09/13	Akruti Patel
OC Pesticides Summed Parameters	CALC	9625381	N/A	2024/09/09	Automated Statchk
pH	AT	9628726	2024/09/10	2024/09/11	Nachiketa Gohil
Orthophosphate	SKAL	9629652	N/A	2024/09/12	Yogesh Patel
Sat. pH and Langelier Index (@ 20C)	CALC	9625100	N/A	2024/09/12	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9625101	N/A	2024/09/12	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9629653	N/A	2024/09/12	Yogesh Patel
Total Dissolved Solids (TDS calc)	CALC	9625099	N/A	2024/09/12	Automated Statchk



Bureau Veritas Job #: C4R8865
Report Date: 2024/09/17

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: ACCO38
Sample ID: 20240906 SC2
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus (Colourimetric)	SKAL/P	9631069	2024/09/11	2024/09/13	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9631428	2024/09/11	2024/09/12	Madhav Somani

Bureau Veritas ID: ACCO39
Sample ID: 20240906 SC3
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9628721	N/A	2024/09/11	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9625105	N/A	2024/09/11	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9629643	N/A	2024/09/12	Yogesh Patel
Conductivity	AT	9628727	N/A	2024/09/11	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9627749	N/A	2024/09/10	Gyulshen Idriz
Hardness (calculated as CaCO3)		9625107	N/A	2024/09/12	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9632731	2024/09/11	2024/09/12	Azita Fazaeli
Ion Balance (% Difference)	CALC	9625108	N/A	2024/09/12	Automated Statchk
Anion and Cation Sum	CALC	9625109	N/A	2024/09/12	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9625846	N/A	2024/09/09	Soham Patel
Total Ammonia-N	SKAL/NH4	9628631	N/A	2024/09/11	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9628407	N/A	2024/09/10	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9630126	2024/09/10	2024/09/13	Akruti Patel
OC Pesticides Summed Parameters	CALC	9625381	N/A	2024/09/09	Automated Statchk
pH	AT	9628726	2024/09/10	2024/09/11	Nachiketa Gohil
Orthophosphate	SKAL	9629652	N/A	2024/09/12	Yogesh Patel
Sat. pH and Langelier Index (@ 20C)	CALC	9625100	N/A	2024/09/12	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9625101	N/A	2024/09/12	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9629653	N/A	2024/09/12	Yogesh Patel
Total Dissolved Solids (TDS calc)	CALC	9625099	N/A	2024/09/12	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9631069	2024/09/11	2024/09/13	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9631428	2024/09/11	2024/09/12	Madhav Somani

Bureau Veritas ID: ACCO39 Dup
Sample ID: 20240906 SC3
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus (Colourimetric)	SKAL/P	9631069	2024/09/11	2024/09/13	Vidhi Khatri

Bureau Veritas ID: ACCO40
Sample ID: 20240906 SHC1
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9628721	N/A	2024/09/11	Nachiketa Gohil



Bureau Veritas Job #: C4R8865
Report Date: 2024/09/17

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: ACCO40
Sample ID: 20240906 SHC1
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Carbonate, Bicarbonate and Hydroxide	CALC	9625105	N/A	2024/09/11	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9629643	N/A	2024/09/12	Yogesh Patel
Conductivity	AT	9628727	N/A	2024/09/11	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9627749	N/A	2024/09/10	Gyulshen Idriz
Hardness (calculated as CaCO3)		9625107	N/A	2024/09/12	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9632731	2024/09/11	2024/09/12	Azita Fazaeli
Ion Balance (% Difference)	CALC	9625108	N/A	2024/09/12	Automated Statchk
Anion and Cation Sum	CALC	9625109	N/A	2024/09/12	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9625846	N/A	2024/09/09	Soham Patel
Total Ammonia-N	SKAL/NH4	9628631	N/A	2024/09/11	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9628407	N/A	2024/09/11	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9630126	2024/09/10	2024/09/13	Akruti Patel
OC Pesticides Summed Parameters	CALC	9625381	N/A	2024/09/09	Automated Statchk
pH	AT	9628726	2024/09/10	2024/09/11	Nachiketa Gohil
Orthophosphate	SKAL	9629652	N/A	2024/09/12	Yogesh Patel
Sat. pH and Langelier Index (@ 20C)	CALC	9625100	N/A	2024/09/12	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9625101	N/A	2024/09/12	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9629653	N/A	2024/09/12	Yogesh Patel
Total Dissolved Solids (TDS calc)	CALC	9625099	N/A	2024/09/12	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9631069	2024/09/11	2024/09/13	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9631428	2024/09/11	2024/09/12	Madhav Somani

Bureau Veritas ID: ACCO41
Sample ID: 20240906 SHC2
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9628721	N/A	2024/09/11	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9625105	N/A	2024/09/11	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9629643	N/A	2024/09/12	Yogesh Patel
Conductivity	AT	9628727	N/A	2024/09/11	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9627749	N/A	2024/09/10	Gyulshen Idriz
Hardness (calculated as CaCO3)		9625107	N/A	2024/09/12	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9632731	2024/09/11	2024/09/12	Azita Fazaeli
Ion Balance (% Difference)	CALC	9625108	N/A	2024/09/12	Automated Statchk
Anion and Cation Sum	CALC	9625109	N/A	2024/09/12	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9625846	N/A	2024/09/09	Soham Patel
Total Ammonia-N	SKAL/NH4	9628631	N/A	2024/09/11	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9628407	N/A	2024/09/11	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9630126	2024/09/10	2024/09/13	Akruti Patel
OC Pesticides Summed Parameters	CALC	9625381	N/A	2024/09/09	Automated Statchk
pH	AT	9628726	2024/09/10	2024/09/11	Nachiketa Gohil
Orthophosphate	SKAL	9629652	N/A	2024/09/12	Yogesh Patel
Sat. pH and Langelier Index (@ 20C)	CALC	9625100	N/A	2024/09/12	Automated Statchk



TEST SUMMARY

Bureau Veritas ID: ACCO41
Sample ID: 20240906 SHC2
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sat. pH and Langelier Index (@ 4C)	CALC	9625101	N/A	2024/09/12	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9629653	N/A	2024/09/12	Yogesh Patel
Total Dissolved Solids (TDS calc)	CALC	9625099	N/A	2024/09/12	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9631069	2024/09/11	2024/09/13	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9631428	2024/09/11	2024/09/12	Madhav Somani

Bureau Veritas ID: ACCO42
Sample ID: 20240906 SHC3
Matrix: Water

Collected: 2024/09/06
Shipped:
Received: 2024/09/06

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9628721	N/A	2024/09/11	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9625105	N/A	2024/09/11	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9629643	N/A	2024/09/12	Yogesh Patel
Conductivity	AT	9628727	N/A	2024/09/11	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9627749	N/A	2024/09/10	Gyulshen Idriz
Hardness (calculated as CaCO3)		9625107	N/A	2024/09/12	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9632731	2024/09/11	2024/09/12	Azita Fazaeli
Ion Balance (% Difference)	CALC	9625108	N/A	2024/09/12	Automated Statchk
Anion and Cation Sum	CALC	9625109	N/A	2024/09/12	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9625846	N/A	2024/09/09	Soham Patel
Total Ammonia-N	SKAL/NH4	9628631	N/A	2024/09/11	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9628407	N/A	2024/09/11	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9630126	2024/09/10	2024/09/13	Akruti Patel
OC Pesticides Summed Parameters	CALC	9625381	N/A	2024/09/09	Automated Statchk
pH	AT	9628726	2024/09/10	2024/09/11	Nachiketa Gohil
Orthophosphate	SKAL	9629652	N/A	2024/09/12	Yogesh Patel
Sat. pH and Langelier Index (@ 20C)	CALC	9625100	N/A	2024/09/12	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9625101	N/A	2024/09/12	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9629653	N/A	2024/09/12	Yogesh Patel
Total Dissolved Solids (TDS calc)	CALC	9625099	N/A	2024/09/12	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9631069	2024/09/11	2024/09/13	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9631428	2024/09/11	2024/09/12	Madhav Somani



GENERAL COMMENTS

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

Package 1	12.7°C
Package 2	14.3°C
Package 3	16.3°C

Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C4R8865

Report Date: 2024/09/17

QUALITY ASSURANCE REPORT

Stantec Consulting Ltd

Client Project #: 160623199

Site Location: Elfrida SWS.

Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9630126	2,4,5,6-Tetrachloro-m-xylene	2024/09/13	76	50 - 130	61	50 - 130	70	%				
9630126	Decachlorobiphenyl	2024/09/13	75	50 - 130	79	50 - 130	86	%				
9627749	Dissolved Organic Carbon	2024/09/10	91	80 - 120	95	80 - 120	<0.40	mg/L	4.9	20		
9628407	Nitrate (N)	2024/09/11	109	80 - 120	100	80 - 120	<0.10	mg/L	NC	20		
9628407	Nitrite (N)	2024/09/11	105	80 - 120	93	80 - 120	<0.010	mg/L	NC	20		
9628631	Total Ammonia-N	2024/09/11	93	75 - 125	103	80 - 120	<0.050	mg/L	0.14	20		
9628721	Alkalinity (Total as CaCO3)	2024/09/11			94	85 - 115	<1.0	mg/L	0.00069	20		
9628726	pH	2024/09/11			102	98 - 103			0.44	N/A		
9628727	Conductivity	2024/09/11			99	85 - 115	<1.0	umho/cm	0.78	10		
9629643	Dissolved Chloride (Cl-)	2024/09/12	91	80 - 120	94	80 - 120	<1.0	mg/L	8.0	20		
9629652	Orthophosphate (P)	2024/09/12	97	75 - 125	103	80 - 120	<0.010	mg/L	NC	20		
9629653	Dissolved Sulphate (SO4)	2024/09/12	94	75 - 125	98	80 - 120	<1.0	mg/L	4.1	20		
9630126	a-Chlordane	2024/09/13	79	50 - 130	78	50 - 130	<0.005	ug/L	NC	30		
9630126	Aldrin	2024/09/13	63	50 - 130	59	50 - 130	<0.005	ug/L	NC	30		
9630126	Aroclor 1242	2024/09/13					<0.05	ug/L	NC	30		
9630126	Aroclor 1248	2024/09/13					<0.05	ug/L	NC	30		
9630126	Aroclor 1254	2024/09/13					<0.05	ug/L	NC	30		
9630126	Aroclor 1260	2024/09/13					<0.05	ug/L	NC	30		
9630126	Dieldrin	2024/09/13	80	50 - 130	83	50 - 130	<0.005	ug/L	NC	30		
9630126	Endosulfan I (alpha)	2024/09/13	68	50 - 130	60	50 - 130	<0.005	ug/L	NC	30		
9630126	Endosulfan II (beta)	2024/09/13	65	50 - 130	71	50 - 130	<0.005	ug/L	NC	30		
9630126	Endrin	2024/09/13	81	50 - 130	82	50 - 130	<0.005	ug/L	NC	30		
9630126	g-Chlordane	2024/09/13	78	50 - 130	78	50 - 130	<0.005	ug/L	NC	30		
9630126	Heptachlor epoxide	2024/09/13	80	50 - 130	78	50 - 130	<0.005	ug/L	NC	30		
9630126	Heptachlor	2024/09/13	72	50 - 130	65	50 - 130	<0.005	ug/L	NC	30		
9630126	Hexachlorobenzene	2024/09/13	78	50 - 130	74	50 - 130	<0.005	ug/L	NC	30		
9630126	Hexachlorobutadiene	2024/09/13	70	50 - 130	75	50 - 130	<0.009	ug/L	NC	30		
9630126	Hexachloroethane	2024/09/13	61	50 - 130	66	50 - 130	<0.01	ug/L	NC	30		
9630126	Lindane	2024/09/13	75	50 - 130	76	50 - 130	<0.003	ug/L	NC	30		
9630126	Methoxychlor	2024/09/13	68	50 - 130	60	50 - 130	<0.01	ug/L	NC	30		



BUREAU
VERITAS

Bureau Veritas Job #: C4R8865

Report Date: 2024/09/17

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd

Client Project #: 160623199

Site Location: Elfrida SWS.

Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9630126	o,p-DDD	2024/09/13	85	50 - 130	82	50 - 130	<0.005	ug/L	NC	30		
9630126	o,p-DDE	2024/09/13	90	50 - 130	89	50 - 130	<0.005	ug/L	NC	30		
9630126	o,p-DDT	2024/09/13	70	50 - 130	72	50 - 130	<0.005	ug/L	NC	30		
9630126	p,p-DDD	2024/09/13	81	50 - 130	81	50 - 130	<0.005	ug/L	NC	30		
9630126	p,p-DDE	2024/09/13	94	50 - 130	91	50 - 130	<0.005	ug/L	NC	30		
9630126	p,p-DDT	2024/09/13	58	50 - 130	63	50 - 130	<0.005	ug/L	NC	30		
9631069	Total Phosphorus	2024/09/13	95	80 - 120	103	80 - 120	<0.004	mg/L	4.0	20	97	80 - 120
9631428	Total Suspended Solids	2024/09/12			100	80 - 120	<1	mg/L	9.5	20		
9632731	Dissolved Aluminum (Al)	2024/09/12	95	80 - 120	97	80 - 120	<0.0049	mg/L				
9632731	Dissolved Antimony (Sb)	2024/09/12	100	80 - 120	98	80 - 120	<0.00050	mg/L	2.8	20		
9632731	Dissolved Arsenic (As)	2024/09/12	95	80 - 120	98	80 - 120	<0.0010	mg/L	NC	20		
9632731	Dissolved Barium (Ba)	2024/09/12	100	80 - 120	97	80 - 120	<0.0020	mg/L	2.8	20		
9632731	Dissolved Beryllium (Be)	2024/09/12	96	80 - 120	94	80 - 120	<0.00040	mg/L	NC	20		
9632731	Dissolved Boron (B)	2024/09/12	99	80 - 120	96	80 - 120	<0.010	mg/L	1.1	20		
9632731	Dissolved Cadmium (Cd)	2024/09/12	97	80 - 120	96	80 - 120	<0.000090	mg/L	NC	20		
9632731	Dissolved Calcium (Ca)	2024/09/12	NC	80 - 120	99	80 - 120	<0.20	mg/L				
9632731	Dissolved Chromium (Cr)	2024/09/12	95	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
9632731	Dissolved Cobalt (Co)	2024/09/12	92	80 - 120	95	80 - 120	<0.00050	mg/L	NC	20		
9632731	Dissolved Copper (Cu)	2024/09/12	97	80 - 120	96	80 - 120	<0.00090	mg/L	NC	20		
9632731	Dissolved Iron (Fe)	2024/09/12	98	80 - 120	102	80 - 120	<0.10	mg/L				
9632731	Dissolved Lead (Pb)	2024/09/12	97	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
9632731	Dissolved Magnesium (Mg)	2024/09/12	99	80 - 120	99	80 - 120	<0.050	mg/L				
9632731	Dissolved Manganese (Mn)	2024/09/12	94	80 - 120	97	80 - 120	<0.0020	mg/L				
9632731	Dissolved Molybdenum (Mo)	2024/09/12	101	80 - 120	97	80 - 120	<0.00050	mg/L	12	20		
9632731	Dissolved Nickel (Ni)	2024/09/12	91	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20		
9632731	Dissolved Phosphorus (P)	2024/09/12	104	80 - 120	101	80 - 120	<0.10	mg/L				
9632731	Dissolved Potassium (K)	2024/09/12	94	80 - 120	96	80 - 120	<0.20	mg/L				
9632731	Dissolved Selenium (Se)	2024/09/12	97	80 - 120	98	80 - 120	<0.0020	mg/L	NC	20		
9632731	Dissolved Silicon (Si)	2024/09/12	96	80 - 120	98	80 - 120	<0.050	mg/L				
9632731	Dissolved Silver (Ag)	2024/09/12	96	80 - 120	95	80 - 120	<0.000090	mg/L	NC	20		
9632731	Dissolved Sodium (Na)	2024/09/12	NC	80 - 120	98	80 - 120	<0.10	mg/L	0.22	20		



BUREAU
VERITAS

Bureau Veritas Job #: C4R8865

Report Date: 2024/09/17

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd

Client Project #: 160623199

Site Location: Elfrida SWS.

Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9632731	Dissolved Strontium (Sr)	2024/09/12	96	80 - 120	97	80 - 120	<0.0010	mg/L				
9632731	Dissolved Thallium (Tl)	2024/09/12	95	80 - 120	99	80 - 120	<0.000050	mg/L	NC	20		
9632731	Dissolved Titanium (Ti)	2024/09/12	94	80 - 120	94	80 - 120	<0.0050	mg/L				
9632731	Dissolved Uranium (U)	2024/09/12	97	80 - 120	98	80 - 120	<0.00010	mg/L	1.3	20		
9632731	Dissolved Vanadium (V)	2024/09/12	96	80 - 120	98	80 - 120	<0.00050	mg/L	1.4	20		
9632731	Dissolved Zinc (Zn)	2024/09/12	93	80 - 120	96	80 - 120	<0.0050	mg/L	NC	20		

N/A = Not Applicable

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

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

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

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

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

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

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

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



VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

Louise A Harding

Louise Harding, Scientific Specialist

Soham N Patel

Soham Patel, Senior Analyst

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

C4R8865
2024/09/06 19:14



Bureau Veritas
100 St. 110, 2023 Meadowbrook Drive, London, Ontario Canada N6L 1E7 Tel: (519) 652-9444 Toll-free: 800-563-6266 Fax: (519) 652-8189 www.bvna.com

CHAIN OF CUSTODY RECORD

Page of

INVOICE TO: Company Name: #9197 Stantec Consulting Ltd Attention: Accounts Payable Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4 Tel: (519) 579-4410 Fax: (519) 579-6733 Email: SAPinvoices@Stantec.com		REPORT TO: Company Name: Stantec Consulting Ltd. Attention: Marlee Sauder Address: Tel: Email: marlee.sauder@stantec.com;		PROJECT INFORMATION: Quotation #: C31067 P.O. #: 160623199 Project: Project Name: Site #: MO & BS Sampled By:		Laboratory Use Only: Bureau Veritas Job #: 1002640 Bottle Order #: 1002640 COC #: Julie Clement C#1002640-01-01	
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MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY						ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required: Please provide advance notice for rush projects							
Regulation 153 (2011)			Other Regulations			Special Instructions	Field Filtered (please circle) Metals / Hg / Cr VI	RCM - Comprehensive	Total Coliforms E. coli, CFU/100mL	O.Reg 153 OC Pesticides (Water)	Low Level Total Suspended Solids	Total Phosphorus (Colourmetric)									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 #)	
Table 1	Res/Park	Medium/Fine	CCME	Sanitary Sewer Bylaw		# of Bottles															Comments		
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																			
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>																			
Include Criteria on Certificate of Analysis (Y/N)?																							
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix																			
1	20240906 20MC1	2024/09/06	10:45	SW			X	X	X	X	X											8	
2	20240906 20MC2		14:15				X	X	X	X	X											8	
3	20240906 20MC3		16:15				X	X	X	X	X											8	
4	20240906 SC1		12:10				X	X	X	X	X											8	
5	20240906 SC2		15:10				X	X	X	X	X											8	
6	20240906 SC3		17:10				X	X	X	X	X											8	
7	20240906 SHC1		11:45				X	X	X	X	X											8	
8	20240906 SHC2		14:45				X	X	X	X	X											8	
9	20240906 SHC3		16:45				X	X	X	X	X											8	
10																							



NONT-2024-09-1226

RELINQUISHED BY: (Signature/Print) Max Ornat		Date: (YY/MM/DD) 2024/09/06	Time 19:00	RECEIVED BY: (Signature/Print) Andrii Chornobyl	Date: (YY/MM/DD) 2024/09/19	Time 19:14	# Jars used and not submitted	Laboratory Use Only			
Time Sensitive	Temperature (°C) on Receipt	Custody Seal Present	Intact	Yes	No						

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'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.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.
 ** SAMPLE CONTAINER, PRESERVATION, HOLD TIME AND PACKAGE INFORMATION CAN BE VIEWED AT WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHAIN-CUSTODY-FORMS-COCS.



Your Project #: 160623199
 Site Location: Elfrida SWS.
 Your C.O.C. #: C#1012480-01-01

Attention: Marlee Sauder

Stantec Consulting Ltd
 300 Hagey Blvd
 Suite 100
 Waterloo, ON
 CANADA N2L 0A4

Report Date: 2024/10/03
 Report #: R8347157
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4U1348

Received: 2024/09/25, 19:08

Sample Matrix: Water
 # Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity	9	N/A	2024/10/02	CAM SOP-00448	SM 24 2320 B m
Carbonate, Bicarbonate and Hydroxide	9	N/A	2024/10/02	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	9	N/A	2024/10/01	CAM SOP-00463	SM 24 4500-Cl E m
Conductivity	9	N/A	2024/10/02	CAM SOP-00414	SM 24 2510 m
Dissolved Organic Carbon (DOC) (1)	1	N/A	2024/09/27	CAM SOP-00446	SM 24 5310 B m
Dissolved Organic Carbon (DOC) (1)	8	N/A	2024/09/28	CAM SOP-00446	SM 24 5310 B m
Hardness (calculated as CaCO3)	9	N/A	2024/10/02	CAM SOP 00102/00408/00447	SM 2340 B
Lab Filtered Metals by ICPMS	9	2024/09/30	2024/10/01	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	9	N/A	2024/10/03		
Anion and Cation Sum	9	N/A	2024/10/02		
Total Coliforms/ E. coli, CFU/100mL	9	N/A	2024/09/25	CAM SOP-00551	MECP-E3407
Total Ammonia-N	5	N/A	2024/10/02	CAM SOP-00441	USGS I-2522-90 m
Total Ammonia-N	4	N/A	2024/10/03	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (2)	9	N/A	2024/10/01	CAM SOP-00440	SM 24 4500-NO3I/NO2B
OC Pesticides (Selected) & PCB (3)	9	2024/09/29	2024/09/30	CAM SOP-00307	EPA 8081B/ 8082A
OC Pesticides Summed Parameters	9	N/A	2024/09/26	CAM SOP-00307	EPA 8081B/ 8082A
pH (4)	9	2024/09/28	2024/10/02	CAM SOP-00413	SM 24th - 4500H+ B
Orthophosphate	9	N/A	2024/10/01	CAM SOP-00461	SM 24 4500-P E
Sat. pH and Langelier Index (@ 20C)	9	N/A	2024/10/03		Auto Calc
Sat. pH and Langelier Index (@ 4C)	9	N/A	2024/10/03		Auto Calc
Sulphate by Automated Turbidimetry	9	N/A	2024/10/02	CAM SOP-00464	SM 24 4500-SO42- E m
Total Dissolved Solids (TDS calc)	9	N/A	2024/10/03		Auto Calc
Total Phosphorus (Colourimetric)	9	2024/10/02	2024/10/02	CAM SOP-00407	SM 24 4500-P I
Low Level Total Suspended Solids	9	2024/09/30	2024/10/01	CAM SOP-00428	SM 24 2540D m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.



Your Project #: 160623199
Site Location: Elfrida SWS.
Your C.O.C. #: C#1012480-01-01

Attention: Marlee Sauder

Stantec Consulting Ltd
300 Hagey Blvd
Suite 100
Waterloo, ON
CANADA N2L 0A4

Report Date: 2024/10/03
Report #: R8347157
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4U1348

Received: 2024/09/25, 19:08

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas 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.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas 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 Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas 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 Bureau Veritas, results relate to the supplied samples tested.

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

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

(1) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.

(2) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

(3) Chlordane (Total) = Alpha Chlordane + Gamma Chlordane

(4) "The CCME method and Analytical Protocol (O. Reg 153/04, O. Reg. 406/19) requires pH to be analyzed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME and Analytical Protocol (O. Reg 153/04, O. Reg. 406/19) holding time. Bureau Veritas endeavors to analyze samples as soon as possible after receipt."

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julie Clement, Technical Account Manager

Email: Julie.CLEMENT@bureauveritas.com

Phone# (613)868-6079

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This report has been generated and distributed using a secure automated process.

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.



RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ADZR91			ADZR91		
Sampling Date		2024/09/24 09:30			2024/09/24 09:30		
COC Number		C#1012480-01-01			C#1012480-01-01		
	UNITS	20240924 20MC1	RDL	QC Batch	20240924 20MC1 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Anion Sum	me/L	10.9	N/A	9660295			
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	120	1.0	9660298			
Calculated TDS	mg/L	650	1.0	9661082			
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	9660298			
Cation Sum	me/L	11.0	N/A	9660295			
Hardness (CaCO3)	mg/L	300	1.0	9661084			
Ion Balance (% Difference)	%	0.730	N/A	9661079			
Langelier Index (@ 20C)	N/A	0.279		9661080			
Langelier Index (@ 4C)	N/A	0.0320		9661081			
Saturation pH (@ 20C)	N/A	7.45		9661080			
Saturation pH (@ 4C)	N/A	7.70		9661081			
Inorganics							
Total Ammonia-N	mg/L	<0.050	0.050	9668804	<0.050	0.050	9668804
Conductivity	umho/cm	1100	1.0	9670048			
Dissolved Organic Carbon	mg/L	6.8	0.40	9665979			
Orthophosphate (P)	mg/L	0.13	0.010	9670089			
pH	pH	7.73		9670049			
Dissolved Sulphate (SO4)	mg/L	190	1.0	9670090			
Alkalinity (Total as CaCO3)	mg/L	120	1.0	9670047			
Dissolved Chloride (Cl-)	mg/L	160	1.0	9670088			
Nitrite (N)	mg/L	<0.010	0.010	9670050			
Nitrate (N)	mg/L	<0.10	0.10	9670050			
Nitrate + Nitrite (N)	mg/L	<0.10	0.10	9670050			
Metals							
Dissolved Aluminum (Al)	mg/L	0.010	0.0049	9672301	0.014	0.0049	9672301
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	9672301	<0.00050	0.00050	9672301
Dissolved Arsenic (As)	mg/L	<0.0010	0.0010	9672301	<0.0010	0.0010	9672301
Dissolved Barium (Ba)	mg/L	0.043	0.0020	9672301	0.043	0.0020	9672301
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable							



RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ADZR91			ADZR91		
Sampling Date		2024/09/24 09:30			2024/09/24 09:30		
COC Number		C#1012480-01-01			C#1012480-01-01		
	UNITS	20240924 20MC1	RDL	QC Batch	20240924 20MC1 Lab-Dup	RDL	QC Batch
Dissolved Beryllium (Be)	mg/L	<0.00040	0.00040	9672301	<0.00040	0.00040	9672301
Dissolved Boron (B)	mg/L	0.045	0.010	9672301	0.043	0.010	9672301
Dissolved Cadmium (Cd)	mg/L	<0.000090	0.000090	9672301	<0.000090	0.000090	9672301
Dissolved Calcium (Ca)	mg/L	90	0.20	9672301	91	0.20	9672301
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	9672301	<0.0050	0.0050	9672301
Dissolved Cobalt (Co)	mg/L	<0.00050	0.00050	9672301	<0.00050	0.00050	9672301
Dissolved Copper (Cu)	mg/L	0.0024	0.00090	9672301	0.0023	0.00090	9672301
Dissolved Iron (Fe)	mg/L	<0.10	0.10	9672301	<0.10	0.10	9672301
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	9672301	<0.00050	0.00050	9672301
Dissolved Magnesium (Mg)	mg/L	17	0.050	9672301	18	0.050	9672301
Dissolved Manganese (Mn)	mg/L	<0.0020	0.0020	9672301	<0.0020	0.0020	9672301
Dissolved Molybdenum (Mo)	mg/L	0.00086	0.00050	9672301	0.00084	0.00050	9672301
Dissolved Nickel (Ni)	mg/L	<0.0010	0.0010	9672301	<0.0010	0.0010	9672301
Dissolved Phosphorus (P)	mg/L	0.17	0.10	9672301	0.17	0.10	9672301
Dissolved Potassium (K)	mg/L	3.7	0.20	9672301	3.9	0.20	9672301
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	9672301	<0.0020	0.0020	9672301
Dissolved Silicon (Si)	mg/L	2.7	0.050	9672301	2.7	0.050	9672301
Dissolved Silver (Ag)	mg/L	<0.000090	0.000090	9672301	<0.000090	0.000090	9672301
Dissolved Sodium (Na)	mg/L	110	0.10	9672301	120	0.10	9672301
Dissolved Strontium (Sr)	mg/L	2.5	0.0010	9672301	2.6	0.0010	9672301
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	9672301	<0.000050	0.000050	9672301
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	9672301	<0.0050	0.0050	9672301
Dissolved Uranium (U)	mg/L	0.00041	0.00010	9672301	0.00036	0.00010	9672301
Dissolved Vanadium (V)	mg/L	0.00065	0.00050	9672301	0.00070	0.00050	9672301
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	9672301	<0.0050	0.0050	9672301
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							



BUREAU
VERITAS

Bureau Veritas Job #: C4U1348
Report Date: 2024/10/03

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ADZR92		ADZR93		ADZR94		
Sampling Date		2024/09/24 12:30		2024/09/24 16:00		2024/09/24 10:10		
COC Number		C#1012480-01-01		C#1012480-01-01		C#1012480-01-01		
	UNITS	20240924 20MC2	QC Batch	20240924 20MC3	QC Batch	20240924 SHC1	RDL	QC Batch

Calculated Parameters								
Anion Sum	me/L	12.0	9660295	12.1	9660295	6.84	N/A	9660295
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	140	9660298	140	9660298	110	1.0	9663193
Calculated TDS	mg/L	720	9661082	740	9661082	410	1.0	9661082
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	9660298	<1.0	9660298	<1.0	1.0	9663193
Cation Sum	me/L	12.2	9660295	12.9	9660295	7.14	N/A	9660295
Hardness (CaCO3)	mg/L	320	9661084	340	9661084	190	1.0	9661084
Ion Balance (% Difference)	%	0.960	9661079	3.20	9661079	2.15	N/A	9661079
Langelier Index (@ 20C)	N/A	0.473	9661080	0.495	9661080	0.117		9661080
Langelier Index (@ 4C)	N/A	0.226	9661081	0.248	9661081	-0.131		9661081
Saturation pH (@ 20C)	N/A	7.38	9661080	7.34	9661080	7.64		9661080
Saturation pH (@ 4C)	N/A	7.63	9661081	7.59	9661081	7.89		9661081

Inorganics								
Total Ammonia-N	mg/L	<0.050	9668821	<0.050	9668804	0.066	0.050	9668804
Conductivity	umho/cm	1200	9670048	1300	9670048	720	1.0	9670048
Dissolved Organic Carbon	mg/L	6.9	9665979	6.8	9665979	11	0.40	9665979
Orthophosphate (P)	mg/L	0.11	9670089	0.11	9670089	0.076	0.010	9670089
pH	pH	7.85	9670049	7.83	9670049	7.76		9670049
Dissolved Sulphate (SO4)	mg/L	210	9670090	210	9670090	83	1.0	9670090
Alkalinity (Total as CaCO3)	mg/L	140	9670047	140	9670047	120	1.0	9670047
Dissolved Chloride (Cl-)	mg/L	170	9670088	170	9670088	99	1.0	9670088
Nitrite (N)	mg/L	<0.010	9670050	<0.010	9670050	0.017	0.010	9670050
Nitrate (N)	mg/L	<0.10	9670050	<0.10	9670050	<0.10	0.10	9670050
Nitrate + Nitrite (N)	mg/L	<0.10	9670050	<0.10	9670050	0.12	0.10	9670050

Metals								
Dissolved Aluminum (Al)	mg/L	0.0075	9672301	0.0091	9672301	0.0090	0.0049	9672301
Dissolved Antimony (Sb)	mg/L	<0.00050	9672301	<0.00050	9672301	<0.00050	0.00050	9672301
Dissolved Arsenic (As)	mg/L	<0.0010	9672301	<0.0010	9672301	<0.0010	0.0010	9672301
Dissolved Barium (Ba)	mg/L	0.047	9672301	0.049	9672301	0.025	0.0020	9672301
Dissolved Beryllium (Be)	mg/L	<0.00040	9672301	<0.00040	9672301	<0.00040	0.00040	9672301

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



BUREAU
VERITAS

Bureau Veritas Job #: C4U1348
Report Date: 2024/10/03

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ADZR92		ADZR93		ADZR94		
Sampling Date		2024/09/24 12:30		2024/09/24 16:00		2024/09/24 10:10		
COC Number		C#1012480-01-01		C#1012480-01-01		C#1012480-01-01		
	UNITS	20240924 20MC2	QC Batch	20240924 20MC3	QC Batch	20240924 SHC1	RDL	QC Batch
Dissolved Boron (B)	mg/L	0.043	9672301	0.042	9672301	0.044	0.010	9672301
Dissolved Cadmium (Cd)	mg/L	<0.000090	9672301	<0.000090	9672301	<0.000090	0.000090	9672301
Dissolved Calcium (Ca)	mg/L	97	9672301	100	9672301	55	0.20	9672301
Dissolved Chromium (Cr)	mg/L	<0.0050	9672301	<0.0050	9672301	<0.0050	0.0050	9672301
Dissolved Cobalt (Co)	mg/L	<0.00050	9672301	<0.00050	9672301	<0.00050	0.00050	9672301
Dissolved Copper (Cu)	mg/L	0.0020	9672301	0.0019	9672301	0.0016	0.00090	9672301
Dissolved Iron (Fe)	mg/L	<0.10	9672301	<0.10	9672301	0.11	0.10	9672301
Dissolved Lead (Pb)	mg/L	<0.00050	9672301	<0.00050	9672301	<0.00050	0.00050	9672301
Dissolved Magnesium (Mg)	mg/L	19	9672301	20	9672301	12	0.050	9672301
Dissolved Manganese (Mn)	mg/L	<0.0020	9672301	0.0028	9672301	<0.0020	0.0020	9672301
Dissolved Molybdenum (Mo)	mg/L	0.00099	9672301	0.0011	9672301	0.0010	0.00050	9672301
Dissolved Nickel (Ni)	mg/L	<0.0010	9672301	<0.0010	9672301	<0.0010	0.0010	9672301
Dissolved Phosphorus (P)	mg/L	0.16	9672301	0.14	9672301	<0.10	0.10	9672301
Dissolved Potassium (K)	mg/L	3.8	9672301	3.8	9672301	6.5	0.20	9672301
Dissolved Selenium (Se)	mg/L	<0.0020	9672301	<0.0020	9672301	<0.0020	0.0020	9672301
Dissolved Silicon (Si)	mg/L	2.6	9672301	2.8	9672301	2.8	0.050	9672301
Dissolved Silver (Ag)	mg/L	<0.000090	9672301	<0.000090	9672301	<0.000090	0.000090	9672301
Dissolved Sodium (Na)	mg/L	130	9672301	140	9672301	74	0.10	9672301
Dissolved Strontium (Sr)	mg/L	2.9	9672301	3.1	9672301	1.1	0.0010	9672301
Dissolved Thallium (Tl)	mg/L	<0.000050	9672301	<0.000050	9672301	<0.000050	0.000050	9672301
Dissolved Titanium (Ti)	mg/L	<0.0050	9672301	<0.0050	9672301	<0.0050	0.0050	9672301
Dissolved Uranium (U)	mg/L	0.00057	9672301	0.00060	9672301	0.00023	0.00010	9672301
Dissolved Vanadium (V)	mg/L	0.00066	9672301	0.00067	9672301	0.00085	0.00050	9672301
Dissolved Zinc (Zn)	mg/L	<0.0050	9672301	<0.0050	9672301	<0.0050	0.0050	9672301
RDL = Reportable Detection Limit QC Batch = Quality Control Batch								



BUREAU
VERITAS

Bureau Veritas Job #: C4U1348
Report Date: 2024/10/03

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ADZR95		ADZR96		ADZR97		
Sampling Date		2024/09/24 13:00		2024/09/24 16:15		2024/09/24 10:40		
COC Number		C#1012480-01-01		C#1012480-01-01		C#1012480-01-01		
	UNITS	20240924 SHC2	QC Batch	20240924 SHC3	QC Batch	20240924 SC1	RDL	QC Batch

Calculated Parameters								
Anion Sum	me/L	6.86	9660295	6.92	9660295	7.75	N/A	9660295
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	120	9663193	120	9663193	130	1.0	9663193
Calculated TDS	mg/L	410	9661082	410	9661082	460	1.0	9661082
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	9663193	<1.0	9663193	<1.0	1.0	9663193
Cation Sum	me/L	7.31	9660295	7.27	9660295	8.23	N/A	9660295
Hardness (CaCO3)	mg/L	190	9661084	190	9661084	220	1.0	9661084
Ion Balance (% Difference)	%	3.16	9661079	2.44	9661079	2.98	N/A	9661079
Langelier Index (@ 20C)	N/A	0.211	9661080	0.277	9661080	0.275		9661080
Langelier Index (@ 4C)	N/A	-0.0380	9661081	0.0290	9661081	0.0270		9661081
Saturation pH (@ 20C)	N/A	7.63	9661080	7.62	9661080	7.56		9661080
Saturation pH (@ 4C)	N/A	7.88	9661081	7.86	9661081	7.81		9661081

Inorganics								
Total Ammonia-N	mg/L	0.058	9668821	<0.050	9668804	<0.050	0.050	9668821
Conductivity	umho/cm	730	9670048	720	9670048	800	1.0	9670048
Dissolved Organic Carbon	mg/L	11	9665979	11	9665979	7.9	0.40	9665979
Orthophosphate (P)	mg/L	0.059	9670089	0.053	9670089	0.10	0.010	9670089
pH	pH	7.84	9670049	7.89	9670049	7.83		9670049
Dissolved Sulphate (SO4)	mg/L	83	9670090	82	9670090	100	1.0	9670090
Alkalinity (Total as CaCO3)	mg/L	120	9670047	120	9670047	130	1.0	9670047
Dissolved Chloride (Cl-)	mg/L	98	9670088	100	9670088	100	1.0	9670088
Nitrite (N)	mg/L	0.015	9670050	<0.010	9670050	<0.010	0.010	9670050
Nitrate (N)	mg/L	<0.10	9670050	<0.10	9670050	<0.10	0.10	9670050
Nitrate + Nitrite (N)	mg/L	<0.10	9670050	<0.10	9670050	<0.10	0.10	9670050

Metals								
Dissolved Aluminum (Al)	mg/L	0.011	9672301	0.010	9672301	0.0074	0.0049	9672301
Dissolved Antimony (Sb)	mg/L	<0.00050	9672301	<0.00050	9672301	<0.00050	0.00050	9672301
Dissolved Arsenic (As)	mg/L	<0.0010	9672301	<0.0010	9672301	<0.0010	0.0010	9672301
Dissolved Barium (Ba)	mg/L	0.024	9672301	0.024	9672301	0.027	0.0020	9672301
Dissolved Beryllium (Be)	mg/L	<0.00040	9672301	<0.00040	9672301	<0.00040	0.00040	9672301

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



BUREAU
VERITAS

Bureau Veritas Job #: C4U1348
Report Date: 2024/10/03

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ADZR95		ADZR96		ADZR97		
Sampling Date		2024/09/24 13:00		2024/09/24 16:15		2024/09/24 10:40		
COC Number		C#1012480-01-01		C#1012480-01-01		C#1012480-01-01		
	UNITS	20240924 SHC2	QC Batch	20240924 SHC3	QC Batch	20240924 SC1	RDL	QC Batch
Dissolved Boron (B)	mg/L	0.044	9672301	0.044	9672301	0.055	0.010	9672301
Dissolved Cadmium (Cd)	mg/L	<0.000090	9672301	<0.000090	9672301	<0.000090	0.000090	9672301
Dissolved Calcium (Ca)	mg/L	56	9672301	57	9672301	60	0.20	9672301
Dissolved Chromium (Cr)	mg/L	<0.0050	9672301	<0.0050	9672301	<0.0050	0.0050	9672301
Dissolved Cobalt (Co)	mg/L	<0.00050	9672301	<0.00050	9672301	<0.00050	0.00050	9672301
Dissolved Copper (Cu)	mg/L	0.0016	9672301	0.0014	9672301	0.0019	0.00090	9672301
Dissolved Iron (Fe)	mg/L	0.10	9672301	<0.10	9672301	<0.10	0.10	9672301
Dissolved Lead (Pb)	mg/L	<0.00050	9672301	<0.00050	9672301	<0.00050	0.00050	9672301
Dissolved Magnesium (Mg)	mg/L	13	9672301	12	9672301	16	0.050	9672301
Dissolved Manganese (Mn)	mg/L	<0.0020	9672301	<0.0020	9672301	0.0036	0.0020	9672301
Dissolved Molybdenum (Mo)	mg/L	0.0010	9672301	0.0010	9672301	0.0015	0.00050	9672301
Dissolved Nickel (Ni)	mg/L	<0.0010	9672301	<0.0010	9672301	<0.0010	0.0010	9672301
Dissolved Phosphorus (P)	mg/L	<0.10	9672301	<0.10	9672301	0.14	0.10	9672301
Dissolved Potassium (K)	mg/L	6.3	9672301	5.7	9672301	5.6	0.20	9672301
Dissolved Selenium (Se)	mg/L	<0.0020	9672301	<0.0020	9672301	<0.0020	0.0020	9672301
Dissolved Silicon (Si)	mg/L	2.8	9672301	2.8	9672301	2.4	0.050	9672301
Dissolved Silver (Ag)	mg/L	<0.000090	9672301	<0.000090	9672301	<0.000090	0.000090	9672301
Dissolved Sodium (Na)	mg/L	76	9672301	75	9672301	87	0.10	9672301
Dissolved Strontium (Sr)	mg/L	1.2	9672301	1.1	9672301	0.78	0.0010	9672301
Dissolved Thallium (Tl)	mg/L	<0.000050	9672301	<0.000050	9672301	<0.000050	0.000050	9672301
Dissolved Titanium (Ti)	mg/L	<0.0050	9672301	<0.0050	9672301	<0.0050	0.0050	9672301
Dissolved Uranium (U)	mg/L	0.00022	9672301	0.00024	9672301	0.00034	0.00010	9672301
Dissolved Vanadium (V)	mg/L	0.00082	9672301	0.00088	9672301	0.00067	0.00050	9672301
Dissolved Zinc (Zn)	mg/L	<0.0050	9672301	<0.0050	9672301	<0.0050	0.0050	9672301
RDL = Reportable Detection Limit QC Batch = Quality Control Batch								



RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ADZR98	ADZR99		
Sampling Date		2024/09/24 13:30	2024/09/24 16:30		
COC Number		C#1012480-01-01	C#1012480-01-01		
	UNITS	20240924 SC2	20240924 SC3	RDL	QC Batch
Calculated Parameters					
Anion Sum	me/L	7.84	8.23	N/A	9660295
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	140	140	1.0	9663193
Calculated TDS	mg/L	470	490	1.0	9661082
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	<1.0	1.0	9663193
Cation Sum	me/L	8.28	8.77	N/A	9660295
Hardness (CaCO3)	mg/L	220	230	1.0	9661084
Ion Balance (% Difference)	%	2.70	3.15	N/A	9661079
Langelier Index (@ 20C)	N/A	0.238	0.262		9661080
Langelier Index (@ 4C)	N/A	-0.0100	0.0140		9661081
Saturation pH (@ 20C)	N/A	7.55	7.52		9661080
Saturation pH (@ 4C)	N/A	7.80	7.77		9661081
Inorganics					
Total Ammonia-N	mg/L	<0.050	<0.050	0.050	9668821
Conductivity	umho/cm	810	850	1.0	9670048
Dissolved Organic Carbon	mg/L	7.7	7.7	0.40	9665979
Orthophosphate (P)	mg/L	0.086	0.076	0.010	9670089
pH	pH	7.79	7.79		9670049
Dissolved Sulphate (SO4)	mg/L	110	110	1.0	9670090
Alkalinity (Total as CaCO3)	mg/L	140	140	1.0	9670047
Dissolved Chloride (Cl-)	mg/L	100	110	1.0	9670088
Nitrite (N)	mg/L	<0.010	<0.010	0.010	9670050
Nitrate (N)	mg/L	<0.10	<0.10	0.10	9670050
Nitrate + Nitrite (N)	mg/L	<0.10	<0.10	0.10	9670050
Metals					
Dissolved Aluminum (Al)	mg/L	0.0062	0.0060	0.0049	9672301
Dissolved Antimony (Sb)	mg/L	<0.00050	<0.00050	0.00050	9672301
Dissolved Arsenic (As)	mg/L	<0.0010	<0.0010	0.0010	9672301
Dissolved Barium (Ba)	mg/L	0.026	0.028	0.0020	9672301
Dissolved Beryllium (Be)	mg/L	<0.00040	<0.00040	0.00040	9672301
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable					



RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		ADZR98	ADZR99		
Sampling Date		2024/09/24 13:30	2024/09/24 16:30		
COC Number		C#1012480-01-01	C#1012480-01-01		
	UNITS	20240924 SC2	20240924 SC3	RDL	QC Batch
Dissolved Boron (B)	mg/L	0.056	0.055	0.010	9672301
Dissolved Cadmium (Cd)	mg/L	<0.000090	<0.000090	0.000090	9672301
Dissolved Calcium (Ca)	mg/L	59	62	0.20	9672301
Dissolved Chromium (Cr)	mg/L	<0.0050	<0.0050	0.0050	9672301
Dissolved Cobalt (Co)	mg/L	<0.00050	<0.00050	0.00050	9672301
Dissolved Copper (Cu)	mg/L	0.0018	0.0018	0.00090	9672301
Dissolved Iron (Fe)	mg/L	<0.10	<0.10	0.10	9672301
Dissolved Lead (Pb)	mg/L	<0.00050	<0.00050	0.00050	9672301
Dissolved Magnesium (Mg)	mg/L	16	17	0.050	9672301
Dissolved Manganese (Mn)	mg/L	0.0069	0.0053	0.0020	9672301
Dissolved Molybdenum (Mo)	mg/L	0.0016	0.0016	0.00050	9672301
Dissolved Nickel (Ni)	mg/L	<0.0010	<0.0010	0.0010	9672301
Dissolved Phosphorus (P)	mg/L	0.12	0.10	0.10	9672301
Dissolved Potassium (K)	mg/L	5.4	5.4	0.20	9672301
Dissolved Selenium (Se)	mg/L	<0.0020	<0.0020	0.0020	9672301
Dissolved Silicon (Si)	mg/L	2.4	2.5	0.050	9672301
Dissolved Silver (Ag)	mg/L	<0.000090	<0.000090	0.000090	9672301
Dissolved Sodium (Na)	mg/L	88	95	0.10	9672301
Dissolved Strontium (Sr)	mg/L	0.80	0.84	0.0010	9672301
Dissolved Thallium (Tl)	mg/L	<0.000050	<0.000050	0.000050	9672301
Dissolved Titanium (Ti)	mg/L	<0.0050	<0.0050	0.0050	9672301
Dissolved Uranium (U)	mg/L	0.00036	0.00038	0.00010	9672301
Dissolved Vanadium (V)	mg/L	0.00066	0.00066	0.00050	9672301
Dissolved Zinc (Zn)	mg/L	<0.0050	<0.0050	0.0050	9672301
RDL = Reportable Detection Limit					
QC Batch = Quality Control Batch					



BUREAU
VERITAS

Bureau Veritas Job #: C4U1348
Report Date: 2024/10/03

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		ADZR91			ADZR91			ADZR92		
Sampling Date		2024/09/24 09:30			2024/09/24 09:30			2024/09/24 12:30		
COC Number		C#1012480-01-01			C#1012480-01-01			C#1012480-01-01		
	UNITS	20240924 20MC1	RDL	QC Batch	20240924 20MC1 Lab-Dup	RDL	QC Batch	20240924 20MC2	RDL	QC Batch

Inorganics										
Total Phosphorus	mg/L	0.15	0.004	9676121	0.15	0.004	9676121	0.14	0.004	9676121
Total Suspended Solids	mg/L	2	1	9671571				3	1	9671571

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

Bureau Veritas ID		ADZR93	ADZR94	ADZR95	ADZR96		
Sampling Date		2024/09/24 16:00	2024/09/24 10:10	2024/09/24 13:00	2024/09/24 16:15		
COC Number		C#1012480-01-01	C#1012480-01-01	C#1012480-01-01	C#1012480-01-01		
	UNITS	20240924 20MC3	20240924 SHC1	20240924 SHC2	20240924 SHC3	RDL	QC Batch

Inorganics							
Total Phosphorus	mg/L	0.13	0.18	0.16	0.15	0.004	9676121
Total Suspended Solids	mg/L	2	34	38	33	1	9671571

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch

Bureau Veritas ID		ADZR97		ADZR98	ADZR99		
Sampling Date		2024/09/24 10:40		2024/09/24 13:30	2024/09/24 16:30		
COC Number		C#1012480-01-01		C#1012480-01-01	C#1012480-01-01		
	UNITS	20240924 SC1	QC Batch	20240924 SC2	20240924 SC3	RDL	QC Batch

Inorganics							
Total Phosphorus	mg/L	0.13	9676121	0.12	0.11	0.004	9676121
Total Suspended Solids	mg/L	4	9671578	7	6	1	9671571

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch



BUREAU
VERITAS

Bureau Veritas Job #: C4U1348
Report Date: 2024/10/03

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

MICROBIOLOGY (WATER)

Bureau Veritas ID		ADZR91	ADZR92	ADZR93	ADZR94	ADZR95	
Sampling Date		2024/09/24 09:30	2024/09/24 12:30	2024/09/24 16:00	2024/09/24 10:10	2024/09/24 13:00	
COC Number		C#1012480-01-01	C#1012480-01-01	C#1012480-01-01	C#1012480-01-01	C#1012480-01-01	
	UNITS	20240924 20MC1	20240924 20MC2	20240924 20MC3	20240924 SHC1	20240924 SHC2	QC Batch

Microbiological							
Background	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9663241
Total Coliforms	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9663241
Escherichia coli	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9663241

QC Batch = Quality Control Batch

(1) NDOGT: No data due to overgrowth. Total coliforms and / or E.coli detected

Bureau Veritas ID		ADZR96	ADZR97	ADZR98	ADZR99	
Sampling Date		2024/09/24 16:15	2024/09/24 10:40	2024/09/24 13:30	2024/09/24 16:30	
COC Number		C#1012480-01-01	C#1012480-01-01	C#1012480-01-01	C#1012480-01-01	
	UNITS	20240924 SHC3	20240924 SC1	20240924 SC2	20240924 SC3	QC Batch

Microbiological						
Background	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9663241
Total Coliforms	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9663241
Escherichia coli	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9663241

QC Batch = Quality Control Batch

(1) NDOGT: No data due to overgrowth. Total coliforms and / or E.coli detected



BUREAU
VERITAS

Bureau Veritas Job #: C4U1348
Report Date: 2024/10/03

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		ADZR91	ADZR92	ADZR93	ADZR94	ADZR95		
Sampling Date		2024/09/24 09:30	2024/09/24 12:30	2024/09/24 16:00	2024/09/24 10:10	2024/09/24 13:00		
COC Number		C#1012480-01-01	C#1012480-01-01	C#1012480-01-01	C#1012480-01-01	C#1012480-01-01		
	UNITS	20240924 20MC1	20240924 20MC2	20240924 20MC3	20240924 SHC1	20240924 SHC2	RDL	QC Batch

Calculated Parameters								
Chlordane (Total)	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9661057
o,p-DDD + p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9661057
o,p-DDE + p,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9661057
o,p-DDT + p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9661057
Total Endosulfan	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9661057
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9661057

Pesticides & Herbicides								
Aldrin	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Dieldrin	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
a-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
g-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
o,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
o,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
p,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
o,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Lindane	ug/L	<0.003	<0.003	<0.003	<0.003	<0.003	0.003	9670592
Endosulfan I (alpha)	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Endosulfan II (beta)	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Endrin	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Heptachlor	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Heptachlor epoxide	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Hexachlorobenzene	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Hexachlorobutadiene	ug/L	<0.009	<0.009	<0.009	<0.009	<0.009	0.009	9670592
Hexachloroethane	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	9670592
Methoxychlor	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	9670592
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9670592
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9670592
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9670592
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	<0.05	0.05	9670592

RDL = Reportable Detection Limit
QC Batch = Quality Control Batch



Bureau Veritas Job #: C4U1348
 Report Date: 2024/10/03

Stantec Consulting Ltd
 Client Project #: 160623199
 Site Location: Elfrida SWS.
 Sampler Initials: MO

O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		ADZR91	ADZR92	ADZR93	ADZR94	ADZR95		
Sampling Date		2024/09/24 09:30	2024/09/24 12:30	2024/09/24 16:00	2024/09/24 10:10	2024/09/24 13:00		
COC Number		C#1012480-01-01	C#1012480-01-01	C#1012480-01-01	C#1012480-01-01	C#1012480-01-01		
	UNITS	20240924 20MC1	20240924 20MC2	20240924 20MC3	20240924 SHC1	20240924 SHC2	RDL	QC Batch
Surrogate Recovery (%)								
2,4,5,6-Tetrachloro-m-xylene	%	72	70	69	66	74		9670592
Decachlorobiphenyl	%	90	86	90	88	90		9670592
RDL = Reportable Detection Limit QC Batch = Quality Control Batch								



O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		ADZR96	ADZR97	ADZR98	ADZR99		
Sampling Date		2024/09/24 16:15	2024/09/24 10:40	2024/09/24 13:30	2024/09/24 16:30		
COC Number		C#1012480-01-01	C#1012480-01-01	C#1012480-01-01	C#1012480-01-01		
	UNITS	20240924 SHC3	20240924 SC1	20240924 SC2	20240924 SC3	RDL	QC Batch
Calculated Parameters							
Chlordane (Total)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9661057
o,p-DDD + p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9661057
o,p-DDE + p,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9661057
o,p-DDT + p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9661057
Total Endosulfan	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9661057
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9661057
Pesticides & Herbicides							
Aldrin	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Dieldrin	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
a-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
g-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
o,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
o,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
p,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
o,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Lindane	ug/L	<0.003	<0.003	<0.003	<0.003	0.003	9670592
Endosulfan I (alpha)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Endosulfan II (beta)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Endrin	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Heptachlor	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Heptachlor epoxide	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Hexachlorobenzene	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9670592
Hexachlorobutadiene	ug/L	<0.009	<0.009	<0.009	<0.009	0.009	9670592
Hexachloroethane	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	9670592
Methoxychlor	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	9670592
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9670592
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9670592
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9670592
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9670592
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							



Bureau Veritas Job #: C4U1348
 Report Date: 2024/10/03

Stantec Consulting Ltd
 Client Project #: 160623199
 Site Location: Elfrida SWS.
 Sampler Initials: MO

O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		ADZR96	ADZR97	ADZR98	ADZR99		
Sampling Date		2024/09/24 16:15	2024/09/24 10:40	2024/09/24 13:30	2024/09/24 16:30		
COC Number		C#1012480-01-01	C#1012480-01-01	C#1012480-01-01	C#1012480-01-01		
	UNITS	20240924 SHC3	20240924 SC1	20240924 SC2	20240924 SC3	RDL	QC Batch
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	56	70	64	73		9670592
Decachlorobiphenyl	%	67	84	80	91		9670592
RDL = Reportable Detection Limit QC Batch = Quality Control Batch							



Bureau Veritas Job #: C4U1348
Report Date: 2024/10/03

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: ADZR91
Sample ID: 20240924 20MC1
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9670047	N/A	2024/10/02	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9660298	N/A	2024/10/02	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9670088	N/A	2024/10/01	Alina Dobreanu
Conductivity	AT	9670048	N/A	2024/10/02	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9665979	N/A	2024/09/28	Gyulshen Idriz
Hardness (calculated as CaCO3)		9661084	N/A	2024/10/02	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9672301	2024/09/30	2024/10/01	Prempal Bhatti
Ion Balance (% Difference)	CALC	9661079	N/A	2024/10/03	Automated Statchk
Anion and Cation Sum	CALC	9660295	N/A	2024/10/02	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9663241	N/A	2024/09/25	Jessica (Ya Ping) Qiang
Total Ammonia-N	SKAL/NH4	9668804	N/A	2024/10/03	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9670050	N/A	2024/10/01	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9670592	2024/09/29	2024/09/30	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	9661057	N/A	2024/09/26	Automated Statchk
pH	AT	9670049	2024/09/28	2024/10/02	Nachiketa Gohil
Orthophosphate	SKAL	9670089	N/A	2024/10/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	9661080	N/A	2024/10/03	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9661081	N/A	2024/10/03	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9670090	N/A	2024/10/02	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	9661082	N/A	2024/10/03	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9676121	2024/10/02	2024/10/02	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9671571	2024/09/30	2024/10/01	Razieh Tabesh

Bureau Veritas ID: ADZR91 Dup
Sample ID: 20240924 20MC1
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Lab Filtered Metals by ICPMS	ICP/MS	9672301	2024/09/30	2024/10/01	Prempal Bhatti
Total Ammonia-N	SKAL/NH4	9668804	N/A	2024/10/03	Muskan
Total Phosphorus (Colourimetric)	SKAL/P	9676121	2024/10/02	2024/10/02	Vidhi Khatri

Bureau Veritas ID: ADZR92
Sample ID: 20240924 20MC2
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9670047	N/A	2024/10/02	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9660298	N/A	2024/10/02	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9670088	N/A	2024/10/01	Alina Dobreanu
Conductivity	AT	9670048	N/A	2024/10/02	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9665979	N/A	2024/09/28	Gyulshen Idriz
Hardness (calculated as CaCO3)		9661084	N/A	2024/10/02	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9672301	2024/09/30	2024/10/01	Prempal Bhatti



Bureau Veritas Job #: C4U1348
Report Date: 2024/10/03

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: ADZR92
Sample ID: 20240924 20MC2
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Ion Balance (% Difference)	CALC	9661079	N/A	2024/10/03	Automated Statchk
Anion and Cation Sum	CALC	9660295	N/A	2024/10/02	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9663241	N/A	2024/09/25	Jessica (Ya Ping) Qiang
Total Ammonia-N	SKAL/NH4	9668821	N/A	2024/10/02	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9670050	N/A	2024/10/01	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9670592	2024/09/29	2024/09/30	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	9661057	N/A	2024/09/26	Automated Statchk
pH	AT	9670049	2024/09/28	2024/10/02	Nachiketa Gohil
Orthophosphate	SKAL	9670089	N/A	2024/10/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	9661080	N/A	2024/10/03	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9661081	N/A	2024/10/03	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9670090	N/A	2024/10/02	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	9661082	N/A	2024/10/03	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9676121	2024/10/02	2024/10/02	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9671571	2024/09/30	2024/10/01	Razieh Tabesh

Bureau Veritas ID: ADZR93
Sample ID: 20240924 20MC3
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9670047	N/A	2024/10/02	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9660298	N/A	2024/10/02	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9670088	N/A	2024/10/01	Alina Dobreanu
Conductivity	AT	9670048	N/A	2024/10/02	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9665979	N/A	2024/09/28	Gyulshen Idriz
Hardness (calculated as CaCO3)		9661084	N/A	2024/10/02	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9672301	2024/09/30	2024/10/01	Prempal Bhatti
Ion Balance (% Difference)	CALC	9661079	N/A	2024/10/03	Automated Statchk
Anion and Cation Sum	CALC	9660295	N/A	2024/10/02	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9663241	N/A	2024/09/25	Jessica (Ya Ping) Qiang
Total Ammonia-N	SKAL/NH4	9668804	N/A	2024/10/03	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9670050	N/A	2024/10/01	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9670592	2024/09/29	2024/09/30	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	9661057	N/A	2024/09/26	Automated Statchk
pH	AT	9670049	2024/09/28	2024/10/02	Nachiketa Gohil
Orthophosphate	SKAL	9670089	N/A	2024/10/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	9661080	N/A	2024/10/03	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9661081	N/A	2024/10/03	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9670090	N/A	2024/10/02	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	9661082	N/A	2024/10/03	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9676121	2024/10/02	2024/10/02	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9671571	2024/09/30	2024/10/01	Razieh Tabesh



Bureau Veritas Job #: C4U1348
Report Date: 2024/10/03

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: ADZR94
Sample ID: 20240924 SHC1
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9670047	N/A	2024/10/02	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9663193	N/A	2024/10/02	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9670088	N/A	2024/10/01	Alina Dobreanu
Conductivity	AT	9670048	N/A	2024/10/02	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9665979	N/A	2024/09/28	Gyulshen Idriz
Hardness (calculated as CaCO3)		9661084	N/A	2024/10/02	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9672301	2024/09/30	2024/10/01	Prempal Bhatti
Ion Balance (% Difference)	CALC	9661079	N/A	2024/10/03	Automated Statchk
Anion and Cation Sum	CALC	9660295	N/A	2024/10/02	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9663241	N/A	2024/09/25	Jessica (Ya Ping) Qiang
Total Ammonia-N	SKAL/NH4	9668804	N/A	2024/10/03	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9670050	N/A	2024/10/01	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9670592	2024/09/29	2024/09/30	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	9661057	N/A	2024/09/26	Automated Statchk
pH	AT	9670049	2024/09/28	2024/10/02	Nachiketa Gohil
Orthophosphate	SKAL	9670089	N/A	2024/10/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	9661080	N/A	2024/10/03	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9661081	N/A	2024/10/03	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9670090	N/A	2024/10/02	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	9661082	N/A	2024/10/03	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9676121	2024/10/02	2024/10/02	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9671571	2024/09/30	2024/10/01	Razieh Tabesh

Bureau Veritas ID: ADZR95
Sample ID: 20240924 SHC2
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9670047	N/A	2024/10/02	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9663193	N/A	2024/10/02	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9670088	N/A	2024/10/01	Alina Dobreanu
Conductivity	AT	9670048	N/A	2024/10/02	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9665979	N/A	2024/09/27	Gyulshen Idriz
Hardness (calculated as CaCO3)		9661084	N/A	2024/10/02	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9672301	2024/09/30	2024/10/01	Prempal Bhatti
Ion Balance (% Difference)	CALC	9661079	N/A	2024/10/03	Automated Statchk
Anion and Cation Sum	CALC	9660295	N/A	2024/10/02	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9663241	N/A	2024/09/25	Jessica (Ya Ping) Qiang
Total Ammonia-N	SKAL/NH4	9668821	N/A	2024/10/02	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9670050	N/A	2024/10/01	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9670592	2024/09/29	2024/09/30	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	9661057	N/A	2024/09/26	Automated Statchk
pH	AT	9670049	2024/09/28	2024/10/02	Nachiketa Gohil
Orthophosphate	SKAL	9670089	N/A	2024/10/01	Alina Dobreanu



Bureau Veritas Job #: C4U1348
Report Date: 2024/10/03

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: ADZR95
Sample ID: 20240924 SHC2
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sat. pH and Langelier Index (@ 20C)	CALC	9661080	N/A	2024/10/03	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9661081	N/A	2024/10/03	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9670090	N/A	2024/10/02	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	9661082	N/A	2024/10/03	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9676121	2024/10/02	2024/10/02	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9671571	2024/09/30	2024/10/01	Razieh Tabesh

Bureau Veritas ID: ADZR96
Sample ID: 20240924 SHC3
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9670047	N/A	2024/10/02	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9663193	N/A	2024/10/02	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9670088	N/A	2024/10/01	Alina Dobreanu
Conductivity	AT	9670048	N/A	2024/10/02	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9665979	N/A	2024/09/28	Gyulshen Idriz
Hardness (calculated as CaCO3)		9661084	N/A	2024/10/02	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9672301	2024/09/30	2024/10/01	Prempal Bhatti
Ion Balance (% Difference)	CALC	9661079	N/A	2024/10/03	Automated Statchk
Anion and Cation Sum	CALC	9660295	N/A	2024/10/02	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9663241	N/A	2024/09/25	Jessica (Ya Ping) Qiang
Total Ammonia-N	SKAL/NH4	9668804	N/A	2024/10/03	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9670050	N/A	2024/10/01	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9670592	2024/09/29	2024/09/30	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	9661057	N/A	2024/09/26	Automated Statchk
pH	AT	9670049	2024/09/28	2024/10/02	Nachiketa Gohil
Orthophosphate	SKAL	9670089	N/A	2024/10/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	9661080	N/A	2024/10/03	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9661081	N/A	2024/10/03	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9670090	N/A	2024/10/02	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	9661082	N/A	2024/10/03	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9676121	2024/10/02	2024/10/02	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9671571	2024/09/30	2024/10/01	Razieh Tabesh

Bureau Veritas ID: ADZR97
Sample ID: 20240924 SC1
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9670047	N/A	2024/10/02	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9663193	N/A	2024/10/02	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9670088	N/A	2024/10/01	Alina Dobreanu
Conductivity	AT	9670048	N/A	2024/10/02	Nachiketa Gohil



Bureau Veritas Job #: C4U1348
Report Date: 2024/10/03

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

TEST SUMMARY

Bureau Veritas ID: ADZR97
Sample ID: 20240924 SC1
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9665979	N/A	2024/09/28	Gyulshen Idriz
Hardness (calculated as CaCO3)		9661084	N/A	2024/10/02	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9672301	2024/09/30	2024/10/01	Prempal Bhatti
Ion Balance (% Difference)	CALC	9661079	N/A	2024/10/03	Automated Statchk
Anion and Cation Sum	CALC	9660295	N/A	2024/10/02	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9663241	N/A	2024/09/25	Jessica (Ya Ping) Qiang
Total Ammonia-N	SKAL/NH4	9668821	N/A	2024/10/02	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9670050	N/A	2024/10/01	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9670592	2024/09/29	2024/09/30	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	9661057	N/A	2024/09/26	Automated Statchk
pH	AT	9670049	2024/09/28	2024/10/02	Nachiketa Gohil
Orthophosphate	SKAL	9670089	N/A	2024/10/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	9661080	N/A	2024/10/03	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9661081	N/A	2024/10/03	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9670090	N/A	2024/10/02	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	9661082	N/A	2024/10/03	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9676121	2024/10/02	2024/10/02	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9671578	2024/09/30	2024/10/01	Razieh Tabesh

Bureau Veritas ID: ADZR98
Sample ID: 20240924 SC2
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9670047	N/A	2024/10/02	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9663193	N/A	2024/10/02	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9670088	N/A	2024/10/01	Alina Dobreanu
Conductivity	AT	9670048	N/A	2024/10/02	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9665979	N/A	2024/09/28	Gyulshen Idriz
Hardness (calculated as CaCO3)		9661084	N/A	2024/10/02	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9672301	2024/09/30	2024/10/01	Prempal Bhatti
Ion Balance (% Difference)	CALC	9661079	N/A	2024/10/03	Automated Statchk
Anion and Cation Sum	CALC	9660295	N/A	2024/10/02	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9663241	N/A	2024/09/25	Jessica (Ya Ping) Qiang
Total Ammonia-N	SKAL/NH4	9668821	N/A	2024/10/02	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9670050	N/A	2024/10/01	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9670592	2024/09/29	2024/09/30	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	9661057	N/A	2024/09/26	Automated Statchk
pH	AT	9670049	2024/09/28	2024/10/02	Nachiketa Gohil
Orthophosphate	SKAL	9670089	N/A	2024/10/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	9661080	N/A	2024/10/03	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9661081	N/A	2024/10/03	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9670090	N/A	2024/10/02	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	9661082	N/A	2024/10/03	Automated Statchk



TEST SUMMARY

Bureau Veritas ID: ADZR98
Sample ID: 20240924 SC2
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus (Colourimetric)	SKAL/P	9676121	2024/10/02	2024/10/02	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9671571	2024/09/30	2024/10/01	Razieh Tabesh

Bureau Veritas ID: ADZR99
Sample ID: 20240924 SC3
Matrix: Water

Collected: 2024/09/24
Shipped:
Received: 2024/09/25

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9670047	N/A	2024/10/02	Nachiketa Gohil
Carbonate, Bicarbonate and Hydroxide	CALC	9663193	N/A	2024/10/02	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9670088	N/A	2024/10/01	Alina Dobreanu
Conductivity	AT	9670048	N/A	2024/10/02	Nachiketa Gohil
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9665979	N/A	2024/09/28	Gyulshen Idriz
Hardness (calculated as CaCO3)		9661084	N/A	2024/10/02	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9672301	2024/09/30	2024/10/01	Prempal Bhatti
Ion Balance (% Difference)	CALC	9661079	N/A	2024/10/03	Automated Statchk
Anion and Cation Sum	CALC	9660295	N/A	2024/10/02	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9663241	N/A	2024/09/25	Jessica (Ya Ping) Qiang
Total Ammonia-N	SKAL/NH4	9668821	N/A	2024/10/02	Muskan
Nitrate & Nitrite as Nitrogen in Water	LACH	9670050	N/A	2024/10/01	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9670592	2024/09/29	2024/09/30	Mahmudul Khan
OC Pesticides Summed Parameters	CALC	9661057	N/A	2024/09/26	Automated Statchk
pH	AT	9670049	2024/09/28	2024/10/02	Nachiketa Gohil
Orthophosphate	SKAL	9670089	N/A	2024/10/01	Alina Dobreanu
Sat. pH and Langelier Index (@ 20C)	CALC	9661080	N/A	2024/10/03	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9661081	N/A	2024/10/03	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9670090	N/A	2024/10/02	Alina Dobreanu
Total Dissolved Solids (TDS calc)	CALC	9661082	N/A	2024/10/03	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9676121	2024/10/02	2024/10/02	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9671571	2024/09/30	2024/10/01	Razieh Tabesh



Bureau Veritas Job #: C4U1348
Report Date: 2024/10/03

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: MO

GENERAL COMMENTS

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

Package 1	6.7°C
Package 2	7.0°C

Results relate only to the items tested.



BUREAU
VERITAS

Bureau Veritas Job #: C4U1348

Report Date: 2024/10/03

QUALITY ASSURANCE REPORT

Stantec Consulting Ltd

Client Project #: 160623199

Site Location: Elfrida SWS.

Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9670592	2,4,5,6-Tetrachloro-m-xylene	2024/09/30	68	50 - 130	58	50 - 130	63	%				
9670592	Decachlorobiphenyl	2024/09/30	96	50 - 130	105	50 - 130	101	%				
9665979	Dissolved Organic Carbon	2024/09/27	91	80 - 120	98	80 - 120	<0.40	mg/L	2.0	20		
9668804	Total Ammonia-N	2024/10/03	77	75 - 125	99	80 - 120	<0.050	mg/L	NC	20		
9668821	Total Ammonia-N	2024/10/02	90	75 - 125	98	80 - 120	<0.050	mg/L	0.53	20		
9670047	Alkalinity (Total as CaCO3)	2024/10/02			96	85 - 115	<1.0	mg/L	0.65	20		
9670048	Conductivity	2024/10/02			99	85 - 115	<1.0	umho/cm	1.0	10		
9670049	pH	2024/10/02			102	98 - 103			0.0013	N/A		
9670050	Nitrate (N)	2024/10/01	97	80 - 120	99	80 - 120	<0.10	mg/L	0.66	20		
9670050	Nitrite (N)	2024/10/01	103	80 - 120	104	80 - 120	<0.010	mg/L	NC	20		
9670088	Dissolved Chloride (Cl-)	2024/10/01	91	80 - 120	96	80 - 120	<1.0	mg/L	0.024	20		
9670089	Orthophosphate (P)	2024/10/01	93	75 - 125	98	80 - 120	<0.010	mg/L	NC	20		
9670090	Dissolved Sulphate (SO4)	2024/10/02	83	75 - 125	98	80 - 120	<1.0	mg/L	0.37	20		
9670592	a-Chlordane	2024/09/30	84	50 - 130	93	50 - 130	<0.005	ug/L	NC	30		
9670592	Aldrin	2024/09/30	75	50 - 130	78	50 - 130	<0.005	ug/L	NC	30		
9670592	Aroclor 1242	2024/09/30					<0.05	ug/L	NC	30		
9670592	Aroclor 1248	2024/09/30					<0.05	ug/L	NC	30		
9670592	Aroclor 1254	2024/09/30					<0.05	ug/L	NC	30		
9670592	Aroclor 1260	2024/09/30					<0.05	ug/L	NC	30		
9670592	Dieldrin	2024/09/30	89	50 - 130	106	50 - 130	<0.005	ug/L	NC	30		
9670592	Endosulfan I (alpha)	2024/09/30	82	50 - 130	96	50 - 130	<0.005	ug/L	NC	30		
9670592	Endosulfan II (beta)	2024/09/30	74	50 - 130	91	50 - 130	<0.005	ug/L	NC	30		
9670592	Endrin	2024/09/30	99	50 - 130	115	50 - 130	<0.005	ug/L	NC	30		
9670592	g-Chlordane	2024/09/30	86	50 - 130	98	50 - 130	<0.005	ug/L	NC	30		
9670592	Heptachlor epoxide	2024/09/30	84	50 - 130	93	50 - 130	<0.005	ug/L	NC	30		
9670592	Heptachlor	2024/09/30	79	50 - 130	89	50 - 130	<0.005	ug/L	NC	30		
9670592	Hexachlorobenzene	2024/09/30	82	50 - 130	90	50 - 130	<0.005	ug/L	NC	30		
9670592	Hexachlorobutadiene	2024/09/30	77	50 - 130	81	50 - 130	<0.009	ug/L	NC	30		
9670592	Hexachloroethane	2024/09/30	67	50 - 130	73	50 - 130	<0.01	ug/L	NC	30		
9670592	Lindane	2024/09/30	78	50 - 130	87	50 - 130	<0.003	ug/L	NC	30		



Bureau Veritas Job #: C4U1348
 Report Date: 2024/10/03

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd
 Client Project #: 160623199
 Site Location: Elfrida SWS.
 Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9670592	Methoxychlor	2024/09/30	91	50 - 130	90	50 - 130	<0.01	ug/L	NC	30		
9670592	o,p-DDD	2024/09/30	91	50 - 130	98	50 - 130	<0.005	ug/L	NC	30		
9670592	o,p-DDE	2024/09/30	90	50 - 130	82	50 - 130	<0.005	ug/L	NC	30		
9670592	o,p-DDT	2024/09/30	94	50 - 130	97	50 - 130	<0.005	ug/L	NC	30		
9670592	p,p-DDD	2024/09/30	96	50 - 130	89	50 - 130	<0.005	ug/L	NC	30		
9670592	p,p-DDE	2024/09/30	79	50 - 130	94	50 - 130	<0.005	ug/L	NC	30		
9670592	p,p-DDT	2024/09/30	100	50 - 130	102	50 - 130	<0.005	ug/L	NC	30		
9671571	Total Suspended Solids	2024/10/01			96	80 - 120	<1	mg/L	NC	20		
9671578	Total Suspended Solids	2024/10/01			96	80 - 120	<1	mg/L	NC	20		
9672301	Dissolved Aluminum (Al)	2024/10/01	97	80 - 120	99	80 - 120	<0.0049	mg/L	NC	20		
9672301	Dissolved Antimony (Sb)	2024/10/01	101	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20		
9672301	Dissolved Arsenic (As)	2024/10/01	94	80 - 120	96	80 - 120	<0.0010	mg/L	NC	20		
9672301	Dissolved Barium (Ba)	2024/10/01	95	80 - 120	95	80 - 120	<0.0020	mg/L	0.084	20		
9672301	Dissolved Beryllium (Be)	2024/10/01	93	80 - 120	95	80 - 120	<0.00040	mg/L	NC	20		
9672301	Dissolved Boron (B)	2024/10/01	94	80 - 120	95	80 - 120	<0.010	mg/L	3.3	20		
9672301	Dissolved Cadmium (Cd)	2024/10/01	96	80 - 120	96	80 - 120	<0.000090	mg/L	NC	20		
9672301	Dissolved Calcium (Ca)	2024/10/01	NC	80 - 120	99	80 - 120	<0.20	mg/L	1.8	20		
9672301	Dissolved Chromium (Cr)	2024/10/01	95	80 - 120	97	80 - 120	<0.0050	mg/L	NC	20		
9672301	Dissolved Cobalt (Co)	2024/10/01	93	80 - 120	96	80 - 120	<0.00050	mg/L	NC	20		
9672301	Dissolved Copper (Cu)	2024/10/01	97	80 - 120	97	80 - 120	<0.00090	mg/L	4.9	20		
9672301	Dissolved Iron (Fe)	2024/10/01	95	80 - 120	99	80 - 120	<0.10	mg/L	NC	20		
9672301	Dissolved Lead (Pb)	2024/10/01	93	80 - 120	96	80 - 120	<0.00050	mg/L	NC	20		
9672301	Dissolved Magnesium (Mg)	2024/10/01	97	80 - 120	98	80 - 120	<0.050	mg/L	4.3	20		
9672301	Dissolved Manganese (Mn)	2024/10/01	93	80 - 120	97	80 - 120	<0.0020	mg/L	NC	20		
9672301	Dissolved Molybdenum (Mo)	2024/10/01	101	80 - 120	98	80 - 120	<0.00050	mg/L	2.7	20		
9672301	Dissolved Nickel (Ni)	2024/10/01	91	80 - 120	95	80 - 120	<0.0010	mg/L	NC	20		
9672301	Dissolved Phosphorus (P)	2024/10/01	99	80 - 120	101	80 - 120	<0.10	mg/L	3.3	20		
9672301	Dissolved Potassium (K)	2024/10/01	97	80 - 120	99	80 - 120	<0.20	mg/L	5.4	20		
9672301	Dissolved Selenium (Se)	2024/10/01	98	80 - 120	100	80 - 120	<0.0020	mg/L	NC	20		
9672301	Dissolved Silicon (Si)	2024/10/01	97	80 - 120	98	80 - 120	<0.050	mg/L	1.3	20		
9672301	Dissolved Silver (Ag)	2024/10/01	93	80 - 120	96	80 - 120	<0.000090	mg/L	NC	20		



BUREAU
VERITAS

Bureau Veritas Job #: C4U1348

Report Date: 2024/10/03

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd

Client Project #: 160623199

Site Location: Elfrida SWS.

Sampler Initials: MO

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9672301	Dissolved Sodium (Na)	2024/10/01	NC	80 - 120	98	80 - 120	<0.10	mg/L	3.8	20		
9672301	Dissolved Strontium (Sr)	2024/10/01	NC	80 - 120	98	80 - 120	<0.0010	mg/L	3.2	20		
9672301	Dissolved Thallium (Tl)	2024/10/01	93	80 - 120	97	80 - 120	<0.000050	mg/L	NC	20		
9672301	Dissolved Titanium (Ti)	2024/10/01	95	80 - 120	94	80 - 120	<0.0050	mg/L	NC	20		
9672301	Dissolved Uranium (U)	2024/10/01	93	80 - 120	95	80 - 120	<0.00010	mg/L	11	20		
9672301	Dissolved Vanadium (V)	2024/10/01	95	80 - 120	98	80 - 120	<0.00050	mg/L	7.1	20		
9672301	Dissolved Zinc (Zn)	2024/10/01	88	80 - 120	91	80 - 120	<0.0050	mg/L	NC	20		
9676121	Total Phosphorus	2024/10/02	90	80 - 120	99	80 - 120	<0.004	mg/L	2.1	20	95	80 - 120

N/A = Not Applicable

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

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

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

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

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

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

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

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



VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

Jessica Qiang

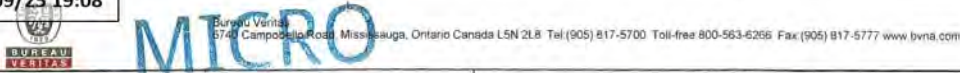
Jessica (Ya Ping) Qiang, Analyst II

Louise A Harding

Louise Harding, Scientific Specialist

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

C4U1348
2024/09/25 19:08



NONT-2024-09-5572

Page of
ID

INVOICE TO: Company Name: #9197 Stantec Consulting Ltd Attention: Accounts Payable Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4 Tel: (519) 579-4410 Fax: (519) 579-6733 Email: SAPinvoices@Stantec.com		REPORT TO: Company Name: Stantec consulting Ltd. Attention: Marlee Sauder Address: Tel: Email: marlee.sauder@stantec.com;		PROJECT INF Quotation #: C31067 P.O. #: Project: 160623199 Project Name: Site #: Sampled By: MO + WR	
Regulatory Use Only: Job #: 1012480 Bottle Order #: 1012480 COC #: 1012480-01-01 Project Manager: Julie Clément					

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY						ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required: Please provide advance notice for rush projects																				
Regulation 153 (2011)			Other Regulations			Special Instructions	Field Filtered (please circle) Metals / Hg / Cr VI	RCAP - Comprehensive	Total Coliforms/ E. coli, CFU/100mL	0 Reg 153 OC Pesticides (Water)	Low Level Total Suspended Solids	Total Phosphorus (Colometric)									Regular (Standard) TAT: (will be applied if Rush TAT is not specified): Standard TAT = 5-7 Working days for most tests. Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details. Job Specific Rush TAT (if applies to entire submission) Date Required: _____ Time Required: _____ Rush Confirmation Number: _____ (call lab for #)															
Include Criteria on Certificate of Analysis (Y/N)?																																				
<input type="checkbox"/> Table 1	<input type="checkbox"/> Res/Park	<input type="checkbox"/> Medium/Fine	<input type="checkbox"/> CCME	<input type="checkbox"/> Sanitary Sewer Bylaw																																
<input type="checkbox"/> Table 2	<input type="checkbox"/> Ind/Comm	<input type="checkbox"/> Coarse	<input type="checkbox"/> Reg 558	<input type="checkbox"/> Storm Sewer Bylaw																																
<input type="checkbox"/> Table 3	<input type="checkbox"/> Agri/Other	<input type="checkbox"/> For RSC	<input type="checkbox"/> MISA	Municipality _____																																
<input type="checkbox"/> Table _____			<input type="checkbox"/> PWQO	Reg 406 Table _____																																
			<input type="checkbox"/> Other _____																																	
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix																																
1	20240924 20MC2	2024/09/24	9:30	SW		X																X	X	X	X											8
2	20240924 20MC2		12:30			X																X	X	X	X											8
3	20240924 20MC3		16:00			X	X	X	X	X											8															
4	20240924 SHC1		10:10			X	X	X	X	X											8															
5	20240924 SHC2		13:00			X	X	X	X	X											8															
6	20240924 SHC3		16:15			X	X	X	X	X											8															
7	20240924 SC1		10:40			X	X	X	X	X											8															
8	20240924 SC2		13:30			X	X	X	X	X											8															
9	20240924 SC3		16:30			X	X	X	X	X											8															
10																																				

RELINQUISHED BY: (Signature/Print) <i>Max Ornet</i>	Date: (YY/MM/DD) 24/09/25	Time 19:00	RECEIVED BY: (Signature/Print) <i>[Signature]</i>	Date: (YY/MM/DD) 24/09/25	Time 19:10	# Jars used and not submitted	Laboratory Use Only				
							Time Sensitive	Temperature on Receipt 8/16/25, 8/16/25	Custody Seal Present Intact	Yes	No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'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.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.
 * 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 WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHAIN-CUSTODY-FORMS-COCS.



Your Project #: 160623199
 Site Location: Elfrida SWS.
 Your C.O.C. #: C#1017658-01-01

Attention: Marlee Sauder

Stantec Consulting Ltd
 300 Hagey Blvd
 Suite 100
 Waterloo, ON
 CANADA N2L 0A4

Report Date: 2024/12/11
 Report #: R8441241
 Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4A1756

Received: 2024/11/22, 08:30

Sample Matrix: Water
 # Samples Received: 9

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity	9	N/A	2024/11/27	CAM SOP-00448	SM 24 2320 B m
Carbonate, Bicarbonate and Hydroxide	9	N/A	2024/11/27	CAM SOP-00102	APHA 4500-CO2 D
Chloride by Automated Colourimetry	9	N/A	2024/11/27	CAM SOP-00463	SM 24 4500-Cl E m
Conductivity	9	N/A	2024/11/27	CAM SOP-00414	SM 24 2510 m
Dissolved Organic Carbon (DOC) (1)	7	N/A	2024/11/25	CAM SOP-00446	SM 24 5310 B m
Dissolved Organic Carbon (DOC) (1)	2	N/A	2024/11/27	CAM SOP-00446	SM 24 5310 B m
Hardness (calculated as CaCO3)	9	N/A	2024/11/27	CAM SOP 00102/00408/00447	SM 2340 B
Lab Filtered Metals by ICPMS	9	2024/11/26	2024/11/27	CAM SOP-00447	EPA 6020B m
Ion Balance (% Difference)	9	N/A	2024/11/27		
Anion and Cation Sum	9	N/A	2024/11/27		
Total Coliforms/ E. coli, CFU/100mL	9	N/A	2024/11/22	CAM SOP-00551	MECP-E3407
Total Ammonia-N	9	N/A	2024/11/27	CAM SOP-00441	USGS I-2522-90 m
Nitrate & Nitrite as Nitrogen in Water (2)	9	N/A	2024/11/25	CAM SOP-00440	SM 24 4500-NO3I/NO2B
OC Pesticides (Selected) & PCB (3)	9	2024/11/29	2024/12/01	CAM SOP-00307	EPA 8081B/ 8082A
OC Pesticides Summed Parameters	9	N/A	2024/11/23	CAM SOP-00307	EPA 8081B/ 8082A
pH (4)	9	2024/11/25	2024/11/27	CAM SOP-00413	SM 24th - 4500H+ B
Orthophosphate	9	N/A	2024/11/27	CAM SOP-00461	SM 24 4500-P E
Sat. pH and Langelier Index (@ 20C)	9	N/A	2024/11/27		Auto Calc
Sat. pH and Langelier Index (@ 4C)	9	N/A	2024/11/27		Auto Calc
Sulphate by Automated Turbidimetry	9	N/A	2024/11/27	CAM SOP-00464	SM 24 4500-SO42- E m
Total Dissolved Solids (TDS calc)	9	N/A	2024/11/27		Auto Calc
Total Phosphorus (Colourimetric)	5	2024/11/25	2024/11/26	CAM SOP-00407	SM 24 4500-P I
Total Phosphorus (Colourimetric)	1	2024/11/25	2024/11/27	CAM SOP-00407	SM 24 4500-P I
Total Phosphorus (Colourimetric)	3	2024/11/25	2024/11/28	CAM SOP-00407	SM 24 4500-P I
Low Level Total Suspended Solids	8	2024/11/26	2024/11/27	CAM SOP-00428	SM 24 2540D m
Low Level Total Suspended Solids	1	2024/11/27	2024/11/28	CAM SOP-00428	SM 24 2540D m

Remarks:

Bureau Veritas is accredited to ISO/IEC 17025 for specific parameters on scopes of accreditation. Unless otherwise noted, procedures used by Bureau



Your Project #: 160623199
Site Location: Elfrida SWS.
Your C.O.C. #: C#1017658-01-01

Attention: Marlee Sauder

Stantec Consulting Ltd
300 Hagey Blvd
Suite 100
Waterloo, ON
CANADA N2L 0A4

Report Date: 2024/12/11
Report #: R8441241
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4AI756

Received: 2024/11/22, 08:30

Veritas are based upon recognized Provincial, Federal or US method compendia such as CCME, EPA, APHA or the Quebec Ministry of Environment.

All work recorded herein has been done in accordance with procedures and practices ordinarily exercised by professionals in Bureau Veritas' profession using accepted testing methodologies, quality assurance and quality control procedures (except where otherwise agreed by the client and Bureau Veritas 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.

Bureau Veritas liability is limited to the actual cost of the requested analyses, unless otherwise agreed in writing. There is no other warranty expressed or implied. Bureau Veritas 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 Bureau Veritas, unless otherwise agreed in writing. Bureau Veritas 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 Bureau Veritas, 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.

(1) Dissolved Organic Carbon (DOC) present in the sample should be considered as non-purgeable DOC.

(2) Values for calculated parameters may not appear to add up due to rounding of raw data and significant figures.

(3) Chlordane (Total) = Alpha Chlordane + Gamma Chlordane

(4) "The CCME method and Analytical Protocol (O. Reg 153/04, O. Reg. 406/19) requires pH to be analyzed within 15 minutes of sampling and therefore field analysis is required for compliance. All Laboratory pH analyses in this report are reported past the CCME and Analytical Protocol (O. Reg 153/04, O. Reg. 406/19) holding time. Bureau Veritas endeavors to analyze samples as soon as possible after receipt."



Your Project #: 160623199
Site Location: Elfrida SWS.
Your C.O.C. #: C#1017658-01-01

Attention: Marlee Sauder

Stantec Consulting Ltd
300 Hagey Blvd
Suite 100
Waterloo, ON
CANADA N2L 0A4

Report Date: 2024/12/11
Report #: R8441241
Version: 1 - Final

CERTIFICATE OF ANALYSIS

BUREAU VERITAS JOB #: C4AI756
Received: 2024/11/22, 08:30

Encryption Key

Please direct all questions regarding this Certificate of Analysis to:

Julie Clement, Technical Account Manager
Email: Julie.CLEMENT@bureauveritas.com
Phone# (613)868-6079

=====

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RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		AJRV12			AJRV12		
Sampling Date		2024/11/21 08:30			2024/11/21 08:30		
COC Number		C#1017658-01-01			C#1017658-01-01		
	UNITS	2024.11.21.20MC1	RDL	QC Batch	2024.11.21.20MC1 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Anion Sum	me/L	6.35	N/A	9784525			
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	100	1.0	9784506			
Calculated TDS	mg/L	370	1.0	9784529			
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	9784506			
Cation Sum	me/L	6.73	N/A	9784525			
Hardness (CaCO3)	mg/L	170	1.0	9782088			
Ion Balance (% Difference)	%	2.94	N/A	9784524			
Langelier Index (@ 20C)	N/A	0.114		9784526			
Langelier Index (@ 4C)	N/A	-0.135		9784528			
Saturation pH (@ 20C)	N/A	7.72		9784526			
Saturation pH (@ 4C)	N/A	7.97		9784528			
Inorganics							
Total Ammonia-N	mg/L	<0.050	0.050	9786739			
Conductivity	umho/cm	690	1.0	9786320			
Dissolved Organic Carbon	mg/L	8.7	0.40	9785374			
Orthophosphate (P)	mg/L	0.11	0.10	9786295			
pH	pH	7.83		9786313			
Dissolved Sulphate (SO4)	mg/L	59	10	9786296			
Alkalinity (Total as CaCO3)	mg/L	100	1.0	9786319			
Dissolved Chloride (Cl-)	mg/L	110	10	9786292			
Nitrite (N)	mg/L	<0.010	0.010	9786368	<0.010	0.010	9786368
Nitrate (N)	mg/L	0.60	0.10	9786368	0.60	0.10	9786368
Nitrate + Nitrite (N)	mg/L	0.60	0.10	9786368	0.60	0.10	9786368
Metals							
Dissolved Aluminum (Al)	mg/L	0.053	0.0049	9789326			
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	9789326			
Dissolved Arsenic (As)	mg/L	<0.0010	0.0010	9789326			
Dissolved Barium (Ba)	mg/L	0.021	0.0020	9789326			
Dissolved Beryllium (Be)	mg/L	<0.00040	0.00040	9789326			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable							



RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		AJRV12			AJRV12		
Sampling Date		2024/11/21 08:30			2024/11/21 08:30		
COC Number		C#1017658-01-01			C#1017658-01-01		
	UNITS	2024.11.21.20MC1	RDL	QC Batch	2024.11.21.20MC1 Lab-Dup	RDL	QC Batch
Dissolved Boron (B)	mg/L	0.020	0.010	9789326			
Dissolved Cadmium (Cd)	mg/L	<0.000090	0.000090	9789326			
Dissolved Calcium (Ca)	mg/L	50	0.20	9789326			
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	9789326			
Dissolved Cobalt (Co)	mg/L	<0.00050	0.00050	9789326			
Dissolved Copper (Cu)	mg/L	0.0027	0.00090	9789326			
Dissolved Iron (Fe)	mg/L	<0.10	0.10	9789326			
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	9789326			
Dissolved Magnesium (Mg)	mg/L	11	0.050	9789326			
Dissolved Manganese (Mn)	mg/L	0.0042	0.0020	9789326			
Dissolved Molybdenum (Mo)	mg/L	0.00082	0.00050	9789326			
Dissolved Nickel (Ni)	mg/L	<0.0010	0.0010	9789326			
Dissolved Phosphorus (P)	mg/L	0.17	0.10	9789326			
Dissolved Potassium (K)	mg/L	5.0	0.20	9789326			
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	9789326			
Dissolved Silicon (Si)	mg/L	2.1	0.050	9789326			
Dissolved Silver (Ag)	mg/L	<0.000090	0.000090	9789326			
Dissolved Sodium (Na)	mg/L	73	0.10	9789326			
Dissolved Strontium (Sr)	mg/L	1.2	0.0010	9789326			
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	9789326			
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	9789326			
Dissolved Uranium (U)	mg/L	0.00050	0.00010	9789326			
Dissolved Vanadium (V)	mg/L	0.00057	0.00050	9789326			
Dissolved Zinc (Zn)	mg/L	0.0096	0.0050	9789326			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							



RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		AJRV13			AJRV13		
Sampling Date		2024/11/21 09:00			2024/11/21 09:00		
COC Number		C#1017658-01-01			C#1017658-01-01		
	UNITS	2024.11.21.SHC1	RDL	QC Batch	2024.11.21.SHC1 Lab-Dup	RDL	QC Batch
Calculated Parameters							
Anion Sum	me/L	5.95	N/A	9784525			
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	120	1.0	9784506			
Calculated TDS	mg/L	340	1.0	9784529			
Carb. Alkalinity (calc. as CaCO3)	mg/L	<1.0	1.0	9784506			
Cation Sum	me/L	5.84	N/A	9784525			
Hardness (CaCO3)	mg/L	170	1.0	9782088			
Ion Balance (% Difference)	%	0.910	N/A	9784524			
Langelier Index (@ 20C)	N/A	0.185		9784526			
Langelier Index (@ 4C)	N/A	-0.0640		9784528			
Saturation pH (@ 20C)	N/A	7.68		9784526			
Saturation pH (@ 4C)	N/A	7.93		9784528			
Inorganics							
Total Ammonia-N	mg/L	<0.050	0.050	9786716	<0.050	0.050	9786716
Conductivity	umho/cm	630	1.0	9786320			
Dissolved Organic Carbon	mg/L	8.7	0.40	9785133			
Orthophosphate (P)	mg/L	<0.10 (1)	0.10	9786295			
pH	pH	7.87		9786313			
Dissolved Sulphate (SO4)	mg/L	72	10	9786296			
Alkalinity (Total as CaCO3)	mg/L	120	1.0	9786319			
Dissolved Chloride (Cl-)	mg/L	74	10	9786292			
Nitrite (N)	mg/L	<0.010	0.010	9786368			
Nitrate (N)	mg/L	0.37	0.10	9786368			
Nitrate + Nitrite (N)	mg/L	0.37	0.10	9786368			
Metals							
Dissolved Aluminum (Al)	mg/L	0.0061	0.0049	9789326			
Dissolved Antimony (Sb)	mg/L	<0.00050	0.00050	9789326			
Dissolved Arsenic (As)	mg/L	<0.0010	0.0010	9789326			
Dissolved Barium (Ba)	mg/L	0.018	0.0020	9789326			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate N/A = Not Applicable (1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.							



RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		AJRV13			AJRV13		
Sampling Date		2024/11/21 09:00			2024/11/21 09:00		
COC Number		C#1017658-01-01			C#1017658-01-01		
	UNITS	2024.11.21.SHC1	RDL	QC Batch	2024.11.21.SHC1 Lab-Dup	RDL	QC Batch
Dissolved Beryllium (Be)	mg/L	<0.00040	0.00040	9789326			
Dissolved Boron (B)	mg/L	0.023	0.010	9789326			
Dissolved Cadmium (Cd)	mg/L	<0.000090	0.000090	9789326			
Dissolved Calcium (Ca)	mg/L	48	0.20	9789326			
Dissolved Chromium (Cr)	mg/L	<0.0050	0.0050	9789326			
Dissolved Cobalt (Co)	mg/L	<0.00050	0.00050	9789326			
Dissolved Copper (Cu)	mg/L	0.0020	0.00090	9789326			
Dissolved Iron (Fe)	mg/L	<0.10	0.10	9789326			
Dissolved Lead (Pb)	mg/L	<0.00050	0.00050	9789326			
Dissolved Magnesium (Mg)	mg/L	12	0.050	9789326			
Dissolved Manganese (Mn)	mg/L	0.0084	0.0020	9789326			
Dissolved Molybdenum (Mo)	mg/L	0.00080	0.00050	9789326			
Dissolved Nickel (Ni)	mg/L	<0.0010	0.0010	9789326			
Dissolved Phosphorus (P)	mg/L	<0.10	0.10	9789326			
Dissolved Potassium (K)	mg/L	4.2	0.20	9789326			
Dissolved Selenium (Se)	mg/L	<0.0020	0.0020	9789326			
Dissolved Silicon (Si)	mg/L	2.2	0.050	9789326			
Dissolved Silver (Ag)	mg/L	<0.000090	0.000090	9789326			
Dissolved Sodium (Na)	mg/L	54	0.10	9789326			
Dissolved Strontium (Sr)	mg/L	0.98	0.0010	9789326			
Dissolved Thallium (Tl)	mg/L	<0.000050	0.000050	9789326			
Dissolved Titanium (Ti)	mg/L	<0.0050	0.0050	9789326			
Dissolved Uranium (U)	mg/L	0.00039	0.00010	9789326			
Dissolved Vanadium (V)	mg/L	0.00051	0.00050	9789326			
Dissolved Zinc (Zn)	mg/L	<0.0050	0.0050	9789326			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate							



RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		AJRV14		AJRV15		
Sampling Date		2024/11/21 09:30		2024/11/21 13:15		
COC Number		C#1017658-01-01		C#1017658-01-01		
	UNITS	2024.11.21.STC1	QC Batch	2024.11.21.20MC2	RDL	QC Batch
Calculated Parameters						
Anion Sum	me/L	5.50	9784525	7.33	N/A	9784525
Bicarb. Alkalinity (calc. as CaCO ₃)	mg/L	98	9784506	130	1.0	9784506
Calculated TDS	mg/L	320	9784529	420	1.0	9784529
Carb. Alkalinity (calc. as CaCO ₃)	mg/L	<1.0	9784506	<1.0	1.0	9784506
Cation Sum	me/L	5.25	9784525	7.19	N/A	9784525
Hardness (CaCO ₃)	mg/L	130	9782088	180	1.0	9782088
Ion Balance (% Difference)	%	2.35	9784524	0.990	N/A	9784524
Langelier Index (@ 20C)	N/A	-0.129	9784526	0.160		9784526
Langelier Index (@ 4C)	N/A	-0.378	9784528	-0.0880		9784528
Saturation pH (@ 20C)	N/A	7.88	9784526	7.63		9784526
Saturation pH (@ 4C)	N/A	8.12	9784528	7.88		9784528
Inorganics						
Total Ammonia-N	mg/L	0.064	9786739	<0.050	0.050	9786739
Conductivity	umho/cm	580	9786320	790	1.0	9786320
Dissolved Organic Carbon	mg/L	13	9785133	8.0	0.40	9785133
Orthophosphate (P)	mg/L	0.15	9786295	<0.10 (1)	0.10	9786295
pH	pH	7.75	9786313	7.79		9786313
Dissolved Sulphate (SO ₄)	mg/L	55	9786296	65	10	9786296
Alkalinity (Total as CaCO ₃)	mg/L	99	9786319	130	1.0	9786319
Dissolved Chloride (Cl ⁻)	mg/L	80	9786292	120	10	9786292
Nitrite (N)	mg/L	0.029	9786368	<0.010	0.010	9786175
Nitrate (N)	mg/L	1.77	9786368	0.69	0.10	9786175
Nitrate + Nitrite (N)	mg/L	1.80	9786368	0.69	0.10	9786175
Metals						
Dissolved Aluminum (Al)	mg/L	0.014	9789326	0.0059	0.0049	9789326
Dissolved Antimony (Sb)	mg/L	<0.00050	9789326	<0.00050	0.00050	9789326
Dissolved Arsenic (As)	mg/L	<0.0010	9789326	<0.0010	0.0010	9789326
Dissolved Barium (Ba)	mg/L	0.017	9789326	0.022	0.0020	9789326
Dissolved Beryllium (Be)	mg/L	<0.00040	9789326	<0.00040	0.00040	9789326
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable (1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.						



RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		AJRV14		AJRV15		
Sampling Date		2024/11/21 09:30		2024/11/21 13:15		
COC Number		C#1017658-01-01		C#1017658-01-01		
	UNITS	2024.11.21.STC1	QC Batch	2024.11.21.20MC2	RDL	QC Batch
Dissolved Boron (B)	mg/L	0.026	9789326	0.021	0.010	9789326
Dissolved Cadmium (Cd)	mg/L	<0.000090	9789326	<0.000090	0.000090	9789326
Dissolved Calcium (Ca)	mg/L	36	9789326	52	0.20	9789326
Dissolved Chromium (Cr)	mg/L	<0.0050	9789326	<0.0050	0.0050	9789326
Dissolved Cobalt (Co)	mg/L	<0.00050	9789326	<0.00050	0.00050	9789326
Dissolved Copper (Cu)	mg/L	0.0042	9789326	0.0025	0.00090	9789326
Dissolved Iron (Fe)	mg/L	<0.10	9789326	<0.10	0.10	9789326
Dissolved Lead (Pb)	mg/L	<0.00050	9789326	<0.00050	0.00050	9789326
Dissolved Magnesium (Mg)	mg/L	11	9789326	12	0.050	9789326
Dissolved Manganese (Mn)	mg/L	0.0028	9789326	0.0039	0.0020	9789326
Dissolved Molybdenum (Mo)	mg/L	0.0011	9789326	0.00087	0.00050	9789326
Dissolved Nickel (Ni)	mg/L	<0.0010	9789326	<0.0010	0.0010	9789326
Dissolved Phosphorus (P)	mg/L	0.19	9789326	0.13	0.10	9789326
Dissolved Potassium (K)	mg/L	6.3	9789326	4.1	0.20	9789326
Dissolved Selenium (Se)	mg/L	<0.0020	9789326	<0.0020	0.0020	9789326
Dissolved Silicon (Si)	mg/L	2.3	9789326	2.3	0.050	9789326
Dissolved Silver (Ag)	mg/L	<0.000090	9789326	<0.000090	0.000090	9789326
Dissolved Sodium (Na)	mg/L	56	9789326	80	0.10	9789326
Dissolved Strontium (Sr)	mg/L	0.42	9789326	1.3	0.0010	9789326
Dissolved Thallium (Tl)	mg/L	<0.000050	9789326	<0.000050	0.000050	9789326
Dissolved Titanium (Ti)	mg/L	<0.0050	9789326	<0.0050	0.0050	9789326
Dissolved Uranium (U)	mg/L	0.00026	9789326	0.00060	0.00010	9789326
Dissolved Vanadium (V)	mg/L	0.00058	9789326	<0.00050	0.00050	9789326
Dissolved Zinc (Zn)	mg/L	<0.0050	9789326	0.0076	0.0050	9789326
RDL = Reportable Detection Limit						
QC Batch = Quality Control Batch						



BUREAU
VERITAS

Bureau Veritas Job #: C4AI756

Report Date: 2024/12/11

Stantec Consulting Ltd

Client Project #: 160623199

Site Location: Elfrida SWS.

Sampler Initials: BK

RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		AJRV15			AJRV16		AJRV17		
Sampling Date		2024/11/21 13:15			2024/11/21 12:15		2024/11/21 12:45		
COC Number		C#1017658-01-01			C#1017658-01-01		C#1017658-01-01		
	UNITS	2024.11.21.20MC2 Lab-Dup	RDL	QC Batch	2024.11.21.SHC2	QC Batch	2024.11.21.STC2	RDL	QC Batch

Calculated Parameters									
Anion Sum	me/L				5.51	9784525	5.09	N/A	9784525
Bicarb. Alkalinity (calc. as CaCO3)	mg/L				110	9784506	58	1.0	9784506
Calculated TDS	mg/L				320	9784529	320	1.0	9784529
Carb. Alkalinity (calc. as CaCO3)	mg/L				<1.0	9784506	<1.0	1.0	9784506
Cation Sum	me/L				5.61	9784525	6.11	N/A	9784525
Hardness (CaCO3)	mg/L				160	9782088	160	1.0	9782088
Ion Balance (% Difference)	%				0.950	9784524	9.15	N/A	9784524
Langelier Index (@ 20C)	N/A				0.174	9784526	-0.0490		9784526
Langelier Index (@ 4C)	N/A				-0.0750	9784528	-0.298		9784528
Saturation pH (@ 20C)	N/A				7.73	9784526	8.02		9784526
Saturation pH (@ 4C)	N/A				7.98	9784528	8.27		9784528

Inorganics									
Total Ammonia-N	mg/L				<0.050	9786739	0.065	0.050	9786739
Conductivity	umho/cm	800	1.0	9786320	590	9786320	660	1.0	9786320
Dissolved Organic Carbon	mg/L				10	9785133	11	0.40	9785133
Orthophosphate (P)	mg/L				<0.10 (1)	9786295	0.12	0.10	9786295
pH	pH	7.91		9786313	7.91	9786313	7.97		9786313
Dissolved Sulphate (SO4)	mg/L				70	9786296	58	10	9786296
Alkalinity (Total as CaCO3)	mg/L	130	1.0	9786319	110	9786319	59	1.0	9786319
Dissolved Chloride (Cl-)	mg/L				66	9786292	92	10	9786292
Nitrite (N)	mg/L				<0.010	9786368	0.024	0.010	9786175
Nitrate (N)	mg/L				0.51	9786368	1.34	0.10	9786175
Nitrate + Nitrite (N)	mg/L				0.51	9786368	1.36	0.10	9786175

Metals									
Dissolved Aluminum (Al)	mg/L				0.0069	9789326	0.010	0.0049	9789326
Dissolved Antimony (Sb)	mg/L				<0.00050	9789326	<0.00050	0.00050	9789326
Dissolved Arsenic (As)	mg/L				<0.0010	9789326	<0.0010	0.0010	9789326
Dissolved Barium (Ba)	mg/L				0.017	9789326	0.019	0.0020	9789326

RDL = Reportable Detection Limit
 QC Batch = Quality Control Batch
 Lab-Dup = Laboratory Initiated Duplicate
 N/A = Not Applicable
 (1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.



BUREAU
VERITAS

Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		AJRV15			AJRV16		AJRV17		
Sampling Date		2024/11/21 13:15			2024/11/21 12:15		2024/11/21 12:45		
COC Number		C#1017658-01-01			C#1017658-01-01		C#1017658-01-01		
	UNITS	2024.11.21.20MC2 Lab-Dup	RDL	QC Batch	2024.11.21.SHC2	QC Batch	2024.11.21.STC2	RDL	QC Batch
Dissolved Beryllium (Be)	mg/L				<0.00040	9789326	<0.00040	0.00040	9789326
Dissolved Boron (B)	mg/L				0.023	9789326	0.027	0.010	9789326
Dissolved Cadmium (Cd)	mg/L				<0.000090	9789326	<0.000090	0.000090	9789326
Dissolved Calcium (Ca)	mg/L				45	9789326	43	0.20	9789326
Dissolved Chromium (Cr)	mg/L				<0.0050	9789326	<0.0050	0.0050	9789326
Dissolved Cobalt (Co)	mg/L				<0.00050	9789326	<0.00050	0.00050	9789326
Dissolved Copper (Cu)	mg/L				0.0024	9789326	0.0032	0.00090	9789326
Dissolved Iron (Fe)	mg/L				<0.10	9789326	<0.10	0.10	9789326
Dissolved Lead (Pb)	mg/L				<0.00050	9789326	<0.00050	0.00050	9789326
Dissolved Magnesium (Mg)	mg/L				12	9789326	12	0.050	9789326
Dissolved Manganese (Mn)	mg/L				0.0057	9789326	0.0031	0.0020	9789326
Dissolved Molybdenum (Mo)	mg/L				0.00088	9789326	0.0011	0.00050	9789326
Dissolved Nickel (Ni)	mg/L				<0.0010	9789326	<0.0010	0.0010	9789326
Dissolved Phosphorus (P)	mg/L				0.11	9789326	0.15	0.10	9789326
Dissolved Potassium (K)	mg/L				4.6	9789326	5.4	0.20	9789326
Dissolved Selenium (Se)	mg/L				<0.0020	9789326	<0.0020	0.0020	9789326
Dissolved Silicon (Si)	mg/L				2.4	9789326	2.3	0.050	9789326
Dissolved Silver (Ag)	mg/L				<0.000090	9789326	<0.000090	0.000090	9789326
Dissolved Sodium (Na)	mg/L				52	9789326	65	0.10	9789326
Dissolved Strontium (Sr)	mg/L				0.89	9789326	0.54	0.0010	9789326
Dissolved Thallium (Tl)	mg/L				<0.000050	9789326	<0.000050	0.000050	9789326
Dissolved Titanium (Ti)	mg/L				<0.0050	9789326	<0.0050	0.0050	9789326
Dissolved Uranium (U)	mg/L				0.00033	9789326	0.00043	0.00010	9789326
Dissolved Vanadium (V)	mg/L				<0.00050	9789326	0.00052	0.00050	9789326
Dissolved Zinc (Zn)	mg/L				<0.0050	9789326	<0.0050	0.0050	9789326

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



BUREAU
VERITAS

Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		AJRV18		AJRV19	AJRV20		
Sampling Date		2024/11/21 16:45		2024/11/21 15:45	2024/11/21 16:15		
COC Number		C#1017658-01-01		C#1017658-01-01	C#1017658-01-01		
	UNITS	2024.11.21.20MC3	QC Batch	2024.11.21.SHC3	2024.11.21.STC3	RDL	QC Batch
Calculated Parameters							
Anion Sum	me/L	8.00	9784525	5.15	6.77	N/A	9784525
Bicarb. Alkalinity (calc. as CaCO3)	mg/L	140	9784506	97	130	1.0	9784506
Calculated TDS	mg/L	470	9784529	300	390	1.0	9784529
Carb. Alkalinity (calc. as CaCO3)	mg/L	1.2	9784506	<1.0	<1.0	1.0	9784506
Cation Sum	me/L	8.39	9784525	5.07	6.71	N/A	9784525
Hardness (CaCO3)	mg/L	220	9782088	140	190	1.0	9782088
Ion Balance (% Difference)	%	2.41	9784524	0.700	0.410	N/A	9784524
Langelier Index (@ 20C)	N/A	0.482	9784526	0.00900	0.280		9784526
Langelier Index (@ 4C)	N/A	0.234	9784528	-0.240	0.0320		9784528
Saturation pH (@ 20C)	N/A	7.48	9784526	7.83	7.62		9784526
Saturation pH (@ 4C)	N/A	7.73	9784528	8.08	7.87		9784528
Inorganics							
Total Ammonia-N	mg/L	<0.050	9786739	<0.050	0.069	0.050	9786739
Conductivity	umho/cm	860	9786320	550	730	1.0	9786320
Dissolved Organic Carbon	mg/L	7.8	9785374	12	8.9	0.40	9785133
Orthophosphate (P)	mg/L	<0.10 (1)	9786295	<0.10 (1)	<0.10 (1)	0.10	9786295
pH	pH	7.96	9786313	7.84	7.90		9786313
Dissolved Sulphate (SO4)	mg/L	70	9786296	64	74	10	9786296
Alkalinity (Total as CaCO3)	mg/L	150	9786319	98	130	1.0	9786319
Dissolved Chloride (Cl-)	mg/L	130	9786292	64	92	10	9786292
Nitrite (N)	mg/L	<0.010	9786368	<0.010	0.023	0.010	9786368
Nitrate (N)	mg/L	0.68	9786368	0.56	1.03	0.10	9786368
Nitrate + Nitrite (N)	mg/L	0.68	9786368	0.56	1.05	0.10	9786368
Metals							
Dissolved Aluminum (Al)	mg/L	0.025	9789326	0.0088	0.0076	0.0049	9789326
Dissolved Antimony (Sb)	mg/L	<0.00050	9789326	<0.00050	<0.00050	0.00050	9789326
Dissolved Arsenic (As)	mg/L	<0.0010	9789326	<0.0010	<0.0010	0.0010	9789326
Dissolved Barium (Ba)	mg/L	0.025	9789326	0.015	0.021	0.0020	9789326
Dissolved Beryllium (Be)	mg/L	<0.00040	9789326	<0.00040	<0.00040	0.00040	9789326
RDL = Reportable Detection Limit QC Batch = Quality Control Batch N/A = Not Applicable (1) Due to the sample matrix, sample required dilution. Detection limit was adjusted accordingly.							



BUREAU
VERITAS

Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

RCAP - COMPREHENSIVE (LAB FILTERED)

Bureau Veritas ID		AJRV18		AJRV19	AJRV20		
Sampling Date		2024/11/21 16:45		2024/11/21 15:45	2024/11/21 16:15		
COC Number		C#1017658-01-01		C#1017658-01-01	C#1017658-01-01		
	UNITS	2024.11.21.20MC3	QC Batch	2024.11.21.SHC3	2024.11.21.STC3	RDL	QC Batch
Dissolved Boron (B)	mg/L	0.024	9789326	0.024	0.032	0.010	9789326
Dissolved Cadmium (Cd)	mg/L	<0.000090	9789326	<0.000090	<0.000090	0.000090	9789326
Dissolved Calcium (Ca)	mg/L	66	9789326	40	52	0.20	9789326
Dissolved Chromium (Cr)	mg/L	<0.0050	9789326	<0.0050	<0.0050	0.0050	9789326
Dissolved Cobalt (Co)	mg/L	<0.00050	9789326	<0.00050	<0.00050	0.00050	9789326
Dissolved Copper (Cu)	mg/L	0.0025	9789326	0.0025	0.0025	0.00090	9789326
Dissolved Iron (Fe)	mg/L	<0.10	9789326	<0.10	<0.10	0.10	9789326
Dissolved Lead (Pb)	mg/L	<0.00050	9789326	<0.00050	<0.00050	0.00050	9789326
Dissolved Magnesium (Mg)	mg/L	14	9789326	11	15	0.050	9789326
Dissolved Manganese (Mn)	mg/L	0.0062	9789326	0.0035	0.0044	0.0020	9789326
Dissolved Molybdenum (Mo)	mg/L	0.00085	9789326	0.00097	0.0010	0.00050	9789326
Dissolved Nickel (Ni)	mg/L	<0.0010	9789326	<0.0010	<0.0010	0.0010	9789326
Dissolved Phosphorus (P)	mg/L	0.11	9789326	0.12	0.11	0.10	9789326
Dissolved Potassium (K)	mg/L	4.2	9789326	4.7	4.9	0.20	9789326
Dissolved Selenium (Se)	mg/L	<0.0020	9789326	<0.0020	<0.0020	0.0020	9789326
Dissolved Silicon (Si)	mg/L	2.6	9789326	2.5	2.0	0.050	9789326
Dissolved Silver (Ag)	mg/L	<0.000090	9789326	<0.000090	<0.000090	0.000090	9789326
Dissolved Sodium (Na)	mg/L	88	9789326	47	64	0.10	9789326
Dissolved Strontium (Sr)	mg/L	1.6	9789326	0.77	0.63	0.0010	9789326
Dissolved Thallium (Tl)	mg/L	<0.000050	9789326	<0.000050	<0.000050	0.000050	9789326
Dissolved Titanium (Ti)	mg/L	<0.0050	9789326	<0.0050	<0.0050	0.0050	9789326
Dissolved Uranium (U)	mg/L	0.00076	9789326	0.00027	0.00058	0.00010	9789326
Dissolved Vanadium (V)	mg/L	0.00051	9789326	<0.00050	<0.00050	0.00050	9789326
Dissolved Zinc (Zn)	mg/L	0.0062	9789326	<0.0050	<0.0050	0.0050	9789326
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



BUREAU
VERITAS

Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

RESULTS OF ANALYSES OF WATER

Bureau Veritas ID		AJRV12			AJRV13			AJRV14		
Sampling Date		2024/11/21 08:30			2024/11/21 09:00			2024/11/21 09:30		
COC Number		C#1017658-01-01			C#1017658-01-01			C#1017658-01-01		
	UNITS	2024.11.21.20MC1	RDL	QC Batch	2024.11.21.SHC1	RDL	QC Batch	2024.11.21.STC1	RDL	QC Batch

Inorganics										
Total Phosphorus	mg/L	0.22	0.004	9786444	0.16	0.004	9787168	0.33	0.004	9787168
Total Suspended Solids	mg/L	38	2	9788286	82	3	9788286	74	5	9790303
RDL = Reportable Detection Limit QC Batch = Quality Control Batch										

Bureau Veritas ID		AJRV15			AJRV16			AJRV17		
Sampling Date		2024/11/21 13:15			2024/11/21 12:15			2024/11/21 12:45		
COC Number		C#1017658-01-01			C#1017658-01-01			C#1017658-01-01		
	UNITS	2024.11.21.20MC2	RDL	QC Batch	2024.11.21.SHC2	QC Batch	2024.11.21.STC2	RDL	QC Batch	

Inorganics										
Total Phosphorus	mg/L	0.17	0.004	9786444	0.21	9786444	0.24	0.004	9787168	
Total Suspended Solids	mg/L	28	2	9788286	100	9791465	58	3	9788286	
RDL = Reportable Detection Limit QC Batch = Quality Control Batch										

Bureau Veritas ID		AJRV18		AJRV19		AJRV20			
Sampling Date		2024/11/21 16:45		2024/11/21 15:45		2024/11/21 16:15			
COC Number		C#1017658-01-01		C#1017658-01-01		C#1017658-01-01			
	UNITS	2024.11.21.20MC3	2024.11.21.SHC3	2024.11.21.SHC3	2024.11.21.SHC3	2024.11.21.STC3	RDL	QC Batch	

Inorganics									
Total Phosphorus	mg/L	0.15	0.22	0.19	0.004	9786444			
Total Suspended Solids	mg/L	26	79	49	1	9790303			
RDL = Reportable Detection Limit QC Batch = Quality Control Batch									



BUREAU
VERITAS

Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

MICROBIOLOGY (WATER)

Bureau Veritas ID		AJRV12	AJRV13	AJRV14	AJRV15	AJRV16	
Sampling Date		2024/11/21 08:30	2024/11/21 09:00	2024/11/21 09:30	2024/11/21 13:15	2024/11/21 12:15	
COC Number		C#1017658-01-01	C#1017658-01-01	C#1017658-01-01	C#1017658-01-01	C#1017658-01-01	
	UNITS	2024.11.21.20MC1	2024.11.21.SHC1	2024.11.21.STC1	2024.11.21.20MC2	2024.11.21.SHC2	QC Batch

Microbiological							
Background	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9784583
Total Coliforms	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9784583
Escherichia coli	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9784583
QC Batch = Quality Control Batch							
(1) NDOGT: No data due to overgrowth. Total coliforms and / or E.coli detected							

Bureau Veritas ID		AJRV17	AJRV18	AJRV19	AJRV20	
Sampling Date		2024/11/21 12:45	2024/11/21 16:45	2024/11/21 15:45	2024/11/21 16:15	
COC Number		C#1017658-01-01	C#1017658-01-01	C#1017658-01-01	C#1017658-01-01	
	UNITS	2024.11.21.STC2	2024.11.21.20MC3	2024.11.21.SHC3	2024.11.21.STC3	QC Batch

Microbiological						
Background	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9784583
Total Coliforms	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9784583
Escherichia coli	CFU/100mL	NDOGT (1)	NDOGT (1)	NDOGT (1)	NDOGT (1)	9784583
QC Batch = Quality Control Batch						
(1) NDOGT: No data due to overgrowth. Total coliforms and / or E.coli detected						



O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		AJRV12	AJRV13	AJRV14	AJRV15		
Sampling Date		2024/11/21 08:30	2024/11/21 09:00	2024/11/21 09:30	2024/11/21 13:15		
COC Number		C#1017658-01-01	C#1017658-01-01	C#1017658-01-01	C#1017658-01-01		
	UNITS	2024.11.21.20MC1	2024.11.21.SHC1	2024.11.21.STC1	2024.11.21.20MC2	RDL	QC Batch
Calculated Parameters							
Chlordane (Total)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9784542
o,p-DDD + p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9784542
o,p-DDE + p,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9784542
o,p-DDT + p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9784542
Total Endosulfan	ug/L	0.015	<0.005	0.005	0.014	0.005	9784542
Total PCB	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9784542
Pesticides & Herbicides							
Aldrin	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
Dieldrin	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
a-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
g-Chlordane	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
o,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
p,p-DDD	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
o,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
p,p-DDE	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
o,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
p,p-DDT	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
Lindane	ug/L	<0.003	<0.003	<0.003	<0.003	0.003	9796295
Endosulfan I (alpha)	ug/L	0.015	<0.005	0.005	0.014	0.005	9796295
Endosulfan II (beta)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
Endrin	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
Heptachlor	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
Heptachlor epoxide	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
Hexachlorobenzene	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	9796295
Hexachlorobutadiene	ug/L	<0.009	<0.009	<0.009	<0.009	0.009	9796295
Hexachloroethane	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	9796295
Methoxychlor	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	9796295
Aroclor 1242	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9796295
Aroclor 1248	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9796295
Aroclor 1254	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9796295
Aroclor 1260	ug/L	<0.05	<0.05	<0.05	<0.05	0.05	9796295
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		AJRV12	AJRV13	AJRV14	AJRV15		
Sampling Date		2024/11/21 08:30	2024/11/21 09:00	2024/11/21 09:30	2024/11/21 13:15		
COC Number		C#1017658-01-01	C#1017658-01-01	C#1017658-01-01	C#1017658-01-01		
	UNITS	2024.11.21.20MC1	2024.11.21.SH1	2024.11.21.STC1	2024.11.21.20MC2	RDL	QC Batch
Surrogate Recovery (%)							
2,4,5,6-Tetrachloro-m-xylene	%	75	72	75	77		9796295
Decachlorobiphenyl	%	85	82	75	84		9796295
RDL = Reportable Detection Limit							
QC Batch = Quality Control Batch							



BUREAU
VERITAS

Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		AJRV15			AJRV16	AJRV17	AJRV18		
Sampling Date		2024/11/21 13:15			2024/11/21 12:15	2024/11/21 12:45	2024/11/21 16:45		
COC Number		C#1017658-01-01			C#1017658-01-01	C#1017658-01-01	C#1017658-01-01		
	UNITS	2024.11.21.20MC2 Lab-Dup	RDL	QC Batch	2024.11.21.SHC2	2024.11.21.STC2	2024.11.21.20MC3	RDL	QC Batch

Calculated Parameters									
Chlordane (Total)	ug/L				<0.005	<0.005	<0.005	0.005	9784542
o,p-DDD + p,p-DDD	ug/L				<0.005	<0.005	<0.005	0.005	9784542
o,p-DDE + p,p-DDE	ug/L				<0.005	<0.005	<0.005	0.005	9784542
o,p-DDT + p,p-DDT	ug/L				<0.005	<0.005	<0.005	0.005	9784542
Total Endosulfan	ug/L				<0.005	<0.005	0.018	0.005	9784542
Total PCB	ug/L				<0.05	<0.05	<0.05	0.05	9784542

Pesticides & Herbicides									
Aldrin	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
Dieldrin	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
a-Chlordane	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
g-Chlordane	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
o,p-DDD	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
p,p-DDD	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
o,p-DDE	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
p,p-DDE	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
o,p-DDT	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
p,p-DDT	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
Lindane	ug/L	<0.003	0.003	9796295	<0.003	<0.003	<0.003	0.003	9796295
Endosulfan I (alpha)	ug/L	0.019	0.005	9796295	<0.005	<0.005	0.018	0.005	9796295
Endosulfan II (beta)	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
Endrin	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
Heptachlor	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
Heptachlor epoxide	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
Hexachlorobenzene	ug/L	<0.005	0.005	9796295	<0.005	<0.005	<0.005	0.005	9796295
Hexachlorobutadiene	ug/L	<0.009	0.009	9796295	<0.009	<0.009	<0.009	0.009	9796295
Hexachloroethane	ug/L	<0.01	0.01	9796295	<0.01	<0.01	<0.01	0.01	9796295
Methoxychlor	ug/L	<0.01	0.01	9796295	<0.01	<0.01	<0.01	0.01	9796295
Aroclor 1242	ug/L	<0.05	0.05	9796295	<0.05	<0.05	<0.05	0.05	9796295
Aroclor 1248	ug/L	<0.05	0.05	9796295	<0.05	<0.05	<0.05	0.05	9796295
Aroclor 1254	ug/L	<0.05	0.05	9796295	<0.05	<0.05	<0.05	0.05	9796295

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



BUREAU
VERITAS

Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		AJRV15			AJRV16	AJRV17	AJRV18		
Sampling Date		2024/11/21 13:15			2024/11/21 12:15	2024/11/21 12:45	2024/11/21 16:45		
COC Number		C#1017658-01-01			C#1017658-01-01	C#1017658-01-01	C#1017658-01-01		
	UNITS	2024.11.21.20MC2 Lab-Dup	RDL	QC Batch	2024.11.21.SH2	2024.11.21.STC2	2024.11.21.20MC3	RDL	QC Batch
Aroclor 1260	ug/L	<0.05	0.05	9796295	<0.05	<0.05	<0.05	0.05	9796295
Surrogate Recovery (%)									
2,4,5,6-Tetrachloro-m-xylene	%	77		9796295	76	74	80		9796295
Decachlorobiphenyl	%	84		9796295	82	75	80		9796295
RDL = Reportable Detection Limit QC Batch = Quality Control Batch Lab-Dup = Laboratory Initiated Duplicate									



O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		AJRV19	AJRV20		
Sampling Date		2024/11/21 15:45	2024/11/21 16:15		
COC Number		C#1017658-01-01	C#1017658-01-01		
	UNITS	2024.11.21.SHC3	2024.11.21.STC3	RDL	QC Batch
Calculated Parameters					
Chlordane (Total)	ug/L	<0.005	<0.005	0.005	9784542
o,p-DDD + p,p-DDD	ug/L	<0.005	<0.005	0.005	9784542
o,p-DDE + p,p-DDE	ug/L	<0.005	<0.005	0.005	9784542
o,p-DDT + p,p-DDT	ug/L	<0.005	<0.005	0.005	9784542
Total Endosulfan	ug/L	<0.005	<0.005	0.005	9784542
Total PCB	ug/L	<0.05	<0.05	0.05	9784542
Pesticides & Herbicides					
Aldrin	ug/L	<0.005	<0.005	0.005	9796295
Dieldrin	ug/L	<0.005	<0.005	0.005	9796295
a-Chlordane	ug/L	<0.005	<0.005	0.005	9796295
g-Chlordane	ug/L	<0.005	<0.005	0.005	9796295
o,p-DDD	ug/L	<0.005	<0.005	0.005	9796295
p,p-DDD	ug/L	<0.005	<0.005	0.005	9796295
o,p-DDE	ug/L	<0.005	<0.005	0.005	9796295
p,p-DDE	ug/L	<0.005	<0.005	0.005	9796295
o,p-DDT	ug/L	<0.005	<0.005	0.005	9796295
p,p-DDT	ug/L	<0.005	<0.005	0.005	9796295
Lindane	ug/L	<0.003	<0.003	0.003	9796295
Endosulfan I (alpha)	ug/L	<0.005	<0.005	0.005	9796295
Endosulfan II (beta)	ug/L	<0.005	<0.005	0.005	9796295
Endrin	ug/L	<0.005	<0.005	0.005	9796295
Heptachlor	ug/L	<0.005	<0.005	0.005	9796295
Heptachlor epoxide	ug/L	<0.005	<0.005	0.005	9796295
Hexachlorobenzene	ug/L	<0.005	<0.005	0.005	9796295
Hexachlorobutadiene	ug/L	<0.009	<0.009	0.009	9796295
Hexachloroethane	ug/L	<0.01	<0.01	0.01	9796295
Methoxychlor	ug/L	<0.01	<0.01	0.01	9796295
Aroclor 1242	ug/L	<0.05	<0.05	0.05	9796295
Aroclor 1248	ug/L	<0.05	<0.05	0.05	9796295
Aroclor 1254	ug/L	<0.05	<0.05	0.05	9796295
Aroclor 1260	ug/L	<0.05	<0.05	0.05	9796295
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					



Bureau Veritas Job #: C4AI756
 Report Date: 2024/12/11

Stantec Consulting Ltd
 Client Project #: 160623199
 Site Location: Elfrida SWS.
 Sampler Initials: BK

O.REG 153 OC PESTICIDES (WATER)

Bureau Veritas ID		AJRV19	AJRV20		
Sampling Date		2024/11/21 15:45	2024/11/21 16:15		
COC Number		C#1017658-01-01	C#1017658-01-01		
	UNITS	2024.11.21.SHC3	2024.11.21.STC3	RDL	QC Batch
Surrogate Recovery (%)					
2,4,5,6-Tetrachloro-m-xylene	%	74	67		9796295
Decachlorobiphenyl	%	80	73		9796295
RDL = Reportable Detection Limit QC Batch = Quality Control Batch					



Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

TEST SUMMARY

Bureau Veritas ID: AJRV12
Sample ID: 2024.11.21.20MC1
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9786319	N/A	2024/11/27	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	9784506	N/A	2024/11/27	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9786292	N/A	2024/11/27	Massarat Jan
Conductivity	AT	9786320	N/A	2024/11/27	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9785374	N/A	2024/11/27	Gyulshen Idriz
Hardness (calculated as CaCO3)		9782088	N/A	2024/11/27	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9789326	2024/11/26	2024/11/27	Prempal Bhatti
Ion Balance (% Difference)	CALC	9784524	N/A	2024/11/27	Automated Statchk
Anion and Cation Sum	CALC	9784525	N/A	2024/11/27	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9784583	N/A	2024/11/22	Rayane Gama Santos
Total Ammonia-N	SKAL/NH4	9786739	N/A	2024/11/27	Jinal Chavda
Nitrate & Nitrite as Nitrogen in Water	LACH	9786368	N/A	2024/11/25	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9796295	2024/11/29	2024/12/01	Akruti Patel
OC Pesticides Summed Parameters	CALC	9784542	N/A	2024/11/23	Automated Statchk
pH	AT	9786313	2024/11/25	2024/11/27	Kien Tran
Orthophosphate	SKAL	9786295	N/A	2024/11/27	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9784526	N/A	2024/11/27	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9784528	N/A	2024/11/27	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9786296	N/A	2024/11/27	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9784529	N/A	2024/11/27	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9786444	2024/11/25	2024/11/26	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9788286	2024/11/26	2024/11/27	Razieh Tabesh

Bureau Veritas ID: AJRV12 Dup
Sample ID: 2024.11.21.20MC1
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Nitrate & Nitrite as Nitrogen in Water	LACH	9786368	N/A	2024/11/25	Chandra Nandlal

Bureau Veritas ID: AJRV13
Sample ID: 2024.11.21.SHC1
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9786319	N/A	2024/11/27	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	9784506	N/A	2024/11/27	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9786292	N/A	2024/11/27	Massarat Jan
Conductivity	AT	9786320	N/A	2024/11/27	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9785133	N/A	2024/11/25	Gyulshen Idriz
Hardness (calculated as CaCO3)		9782088	N/A	2024/11/27	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9789326	2024/11/26	2024/11/27	Prempal Bhatti
Ion Balance (% Difference)	CALC	9784524	N/A	2024/11/27	Automated Statchk
Anion and Cation Sum	CALC	9784525	N/A	2024/11/27	Automated Statchk



Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

TEST SUMMARY

Bureau Veritas ID: AJRV13
Sample ID: 2024.11.21.SHC1
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Coliforms/ E. coli, CFU/100mL	PL	9784583	N/A	2024/11/22	Rayane Gama Santos
Total Ammonia-N	SKAL/NH4	9786716	N/A	2024/11/27	Jinal Chavda
Nitrate & Nitrite as Nitrogen in Water	LACH	9786368	N/A	2024/11/25	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9796295	2024/11/29	2024/12/01	Akruti Patel
OC Pesticides Summed Parameters	CALC	9784542	N/A	2024/11/23	Automated Statchk
pH	AT	9786313	2024/11/25	2024/11/27	Kien Tran
Orthophosphate	SKAL	9786295	N/A	2024/11/27	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9784526	N/A	2024/11/27	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9784528	N/A	2024/11/27	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9786296	N/A	2024/11/27	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9784529	N/A	2024/11/27	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9787168	2024/11/25	2024/11/28	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9788286	2024/11/26	2024/11/27	Razieh Tabesh

Bureau Veritas ID: AJRV13 Dup
Sample ID: 2024.11.21.SHC1
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Ammonia-N	SKAL/NH4	9786716	N/A	2024/11/27	Jinal Chavda

Bureau Veritas ID: AJRV14
Sample ID: 2024.11.21.STC1
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9786319	N/A	2024/11/27	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	9784506	N/A	2024/11/27	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9786292	N/A	2024/11/27	Massarat Jan
Conductivity	AT	9786320	N/A	2024/11/27	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9785133	N/A	2024/11/25	Gyulshen Idriz
Hardness (calculated as CaCO3)		9782088	N/A	2024/11/27	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9789326	2024/11/26	2024/11/27	Prempal Bhatti
Ion Balance (% Difference)	CALC	9784524	N/A	2024/11/27	Automated Statchk
Anion and Cation Sum	CALC	9784525	N/A	2024/11/27	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9784583	N/A	2024/11/22	Rayane Gama Santos
Total Ammonia-N	SKAL/NH4	9786739	N/A	2024/11/27	Jinal Chavda
Nitrate & Nitrite as Nitrogen in Water	LACH	9786368	N/A	2024/11/25	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9796295	2024/11/29	2024/12/01	Akruti Patel
OC Pesticides Summed Parameters	CALC	9784542	N/A	2024/11/23	Automated Statchk
pH	AT	9786313	2024/11/25	2024/11/27	Kien Tran
Orthophosphate	SKAL	9786295	N/A	2024/11/27	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9784526	N/A	2024/11/27	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9784528	N/A	2024/11/27	Automated Statchk



Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

TEST SUMMARY

Bureau Veritas ID: AJRV14
Sample ID: 2024.11.21.STC1
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sulphate by Automated Turbidimetry	SKAL	9786296	N/A	2024/11/27	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9784529	N/A	2024/11/27	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9787168	2024/11/25	2024/11/28	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9790303	2024/11/26	2024/11/27	Razieh Tabesh

Bureau Veritas ID: AJRV15
Sample ID: 2024.11.21.20MC2
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9786319	N/A	2024/11/27	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	9784506	N/A	2024/11/27	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9786292	N/A	2024/11/27	Massarat Jan
Conductivity	AT	9786320	N/A	2024/11/27	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9785133	N/A	2024/11/25	Gyulshen Idriz
Hardness (calculated as CaCO3)		9782088	N/A	2024/11/27	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9789326	2024/11/26	2024/11/27	Prempal Bhatti
Ion Balance (% Difference)	CALC	9784524	N/A	2024/11/27	Automated Statchk
Anion and Cation Sum	CALC	9784525	N/A	2024/11/27	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9784583	N/A	2024/11/22	Rayane Gama Santos
Total Ammonia-N	SKAL/NH4	9786739	N/A	2024/11/27	Jinal Chavda
Nitrate & Nitrite as Nitrogen in Water	LACH	9786175	N/A	2024/11/25	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9796295	2024/11/29	2024/12/01	Akruti Patel
OC Pesticides Summed Parameters	CALC	9784542	N/A	2024/11/23	Automated Statchk
pH	AT	9786313	2024/11/25	2024/11/27	Kien Tran
Orthophosphate	SKAL	9786295	N/A	2024/11/27	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9784526	N/A	2024/11/27	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9784528	N/A	2024/11/27	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9786296	N/A	2024/11/27	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9784529	N/A	2024/11/27	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9786444	2024/11/25	2024/11/27	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9788286	2024/11/26	2024/11/27	Razieh Tabesh

Bureau Veritas ID: AJRV15 Dup
Sample ID: 2024.11.21.20MC2
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9786319	N/A	2024/11/27	Kien Tran
Conductivity	AT	9786320	N/A	2024/11/27	Kien Tran
OC Pesticides (Selected) & PCB	GC/ECD	9796295	2024/11/29	2024/12/01	Akruti Patel
pH	AT	9786313	2024/11/25	2024/11/27	Kien Tran



Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

TEST SUMMARY

Bureau Veritas ID: AJRV16
Sample ID: 2024.11.21.SHC2
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9786319	N/A	2024/11/27	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	9784506	N/A	2024/11/27	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9786292	N/A	2024/11/27	Massarat Jan
Conductivity	AT	9786320	N/A	2024/11/27	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9785133	N/A	2024/11/25	Gyulshen Idriz
Hardness (calculated as CaCO3)		9782088	N/A	2024/11/27	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9789326	2024/11/26	2024/11/27	Prempal Bhatti
Ion Balance (% Difference)	CALC	9784524	N/A	2024/11/27	Automated Statchk
Anion and Cation Sum	CALC	9784525	N/A	2024/11/27	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9784583	N/A	2024/11/22	Rayane Gama Santos
Total Ammonia-N	SKAL/NH4	9786739	N/A	2024/11/27	Jinal Chavda
Nitrate & Nitrite as Nitrogen in Water	LACH	9786368	N/A	2024/11/25	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9796295	2024/11/29	2024/12/01	Akruti Patel
OC Pesticides Summed Parameters	CALC	9784542	N/A	2024/11/23	Automated Statchk
pH	AT	9786313	2024/11/25	2024/11/27	Kien Tran
Orthophosphate	SKAL	9786295	N/A	2024/11/27	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9784526	N/A	2024/11/27	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9784528	N/A	2024/11/27	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9786296	N/A	2024/11/27	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9784529	N/A	2024/11/27	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9786444	2024/11/25	2024/11/26	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9791465	2024/11/27	2024/11/28	Razieh Tabesh

Bureau Veritas ID: AJRV17
Sample ID: 2024.11.21.STC2
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9786319	N/A	2024/11/27	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	9784506	N/A	2024/11/27	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9786292	N/A	2024/11/27	Massarat Jan
Conductivity	AT	9786320	N/A	2024/11/27	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9785133	N/A	2024/11/25	Gyulshen Idriz
Hardness (calculated as CaCO3)		9782088	N/A	2024/11/27	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9789326	2024/11/26	2024/11/27	Prempal Bhatti
Ion Balance (% Difference)	CALC	9784524	N/A	2024/11/27	Automated Statchk
Anion and Cation Sum	CALC	9784525	N/A	2024/11/27	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9784583	N/A	2024/11/22	Rayane Gama Santos
Total Ammonia-N	SKAL/NH4	9786739	N/A	2024/11/27	Jinal Chavda
Nitrate & Nitrite as Nitrogen in Water	LACH	9786175	N/A	2024/11/25	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9796295	2024/11/29	2024/12/01	Akruti Patel
OC Pesticides Summed Parameters	CALC	9784542	N/A	2024/11/23	Automated Statchk
pH	AT	9786313	2024/11/25	2024/11/27	Kien Tran
Orthophosphate	SKAL	9786295	N/A	2024/11/27	Massarat Jan



Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

TEST SUMMARY

Bureau Veritas ID: AJRV17
Sample ID: 2024.11.21.STC2
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Sat. pH and Langelier Index (@ 20C)	CALC	9784526	N/A	2024/11/27	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9784528	N/A	2024/11/27	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9786296	N/A	2024/11/27	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9784529	N/A	2024/11/27	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9787168	2024/11/25	2024/11/28	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9788286	2024/11/26	2024/11/27	Razieh Tabesh

Bureau Veritas ID: AJRV18
Sample ID: 2024.11.21.20MC3
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9786319	N/A	2024/11/27	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	9784506	N/A	2024/11/27	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9786292	N/A	2024/11/27	Massarat Jan
Conductivity	AT	9786320	N/A	2024/11/27	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9785374	N/A	2024/11/27	Gyulshen Idriz
Hardness (calculated as CaCO3)		9782088	N/A	2024/11/27	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9789326	2024/11/26	2024/11/27	Prempal Bhatti
Ion Balance (% Difference)	CALC	9784524	N/A	2024/11/27	Automated Statchk
Anion and Cation Sum	CALC	9784525	N/A	2024/11/27	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9784583	N/A	2024/11/22	Rayane Gama Santos
Total Ammonia-N	SKAL/NH4	9786739	N/A	2024/11/27	Jinal Chavda
Nitrate & Nitrite as Nitrogen in Water	LACH	9786368	N/A	2024/11/25	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9796295	2024/11/29	2024/12/01	Akruti Patel
OC Pesticides Summed Parameters	CALC	9784542	N/A	2024/11/23	Automated Statchk
pH	AT	9786313	2024/11/25	2024/11/27	Kien Tran
Orthophosphate	SKAL	9786295	N/A	2024/11/27	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9784526	N/A	2024/11/27	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9784528	N/A	2024/11/27	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9786296	N/A	2024/11/27	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9784529	N/A	2024/11/27	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9786444	2024/11/25	2024/11/26	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9790303	2024/11/26	2024/11/27	Razieh Tabesh

Bureau Veritas ID: AJRV19
Sample ID: 2024.11.21.SHC3
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9786319	N/A	2024/11/27	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	9784506	N/A	2024/11/27	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9786292	N/A	2024/11/27	Massarat Jan
Conductivity	AT	9786320	N/A	2024/11/27	Kien Tran



Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

TEST SUMMARY

Bureau Veritas ID: AJRV19
Sample ID: 2024.11.21.SHC3
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9785133	N/A	2024/11/25	Gyulshen Idriz
Hardness (calculated as CaCO3)		9782088	N/A	2024/11/27	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9789326	2024/11/26	2024/11/27	Prempal Bhatti
Ion Balance (% Difference)	CALC	9784524	N/A	2024/11/27	Automated Statchk
Anion and Cation Sum	CALC	9784525	N/A	2024/11/27	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9784583	N/A	2024/11/22	Rayane Gama Santos
Total Ammonia-N	SKAL/NH4	9786739	N/A	2024/11/27	Jinal Chavda
Nitrate & Nitrite as Nitrogen in Water	LACH	9786368	N/A	2024/11/25	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9796295	2024/11/29	2024/12/01	Akruti Patel
OC Pesticides Summed Parameters	CALC	9784542	N/A	2024/11/23	Automated Statchk
pH	AT	9786313	2024/11/25	2024/11/27	Kien Tran
Orthophosphate	SKAL	9786295	N/A	2024/11/27	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9784526	N/A	2024/11/27	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9784528	N/A	2024/11/27	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9786296	N/A	2024/11/27	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9784529	N/A	2024/11/27	Automated Statchk
Total Phosphorus (Colourimetric)	SKAL/P	9786444	2024/11/25	2024/11/26	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9790303	2024/11/26	2024/11/27	Razieh Tabesh

Bureau Veritas ID: AJRV20
Sample ID: 2024.11.21.STC3
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Alkalinity	AT	9786319	N/A	2024/11/27	Kien Tran
Carbonate, Bicarbonate and Hydroxide	CALC	9784506	N/A	2024/11/27	Automated Statchk
Chloride by Automated Colourimetry	SKAL	9786292	N/A	2024/11/27	Massarat Jan
Conductivity	AT	9786320	N/A	2024/11/27	Kien Tran
Dissolved Organic Carbon (DOC)	TOCV/NDIR	9785133	N/A	2024/11/25	Gyulshen Idriz
Hardness (calculated as CaCO3)		9782088	N/A	2024/11/27	Automated Statchk
Lab Filtered Metals by ICPMS	ICP/MS	9789326	2024/11/26	2024/11/27	Prempal Bhatti
Ion Balance (% Difference)	CALC	9784524	N/A	2024/11/27	Automated Statchk
Anion and Cation Sum	CALC	9784525	N/A	2024/11/27	Automated Statchk
Total Coliforms/ E. coli, CFU/100mL	PL	9784583	N/A	2024/11/22	Rayane Gama Santos
Total Ammonia-N	SKAL/NH4	9786739	N/A	2024/11/27	Jinal Chavda
Nitrate & Nitrite as Nitrogen in Water	LACH	9786368	N/A	2024/11/25	Chandra Nandlal
OC Pesticides (Selected) & PCB	GC/ECD	9796295	2024/11/29	2024/12/01	Akruti Patel
OC Pesticides Summed Parameters	CALC	9784542	N/A	2024/11/23	Automated Statchk
pH	AT	9786313	2024/11/25	2024/11/27	Kien Tran
Orthophosphate	SKAL	9786295	N/A	2024/11/27	Massarat Jan
Sat. pH and Langelier Index (@ 20C)	CALC	9784526	N/A	2024/11/27	Automated Statchk
Sat. pH and Langelier Index (@ 4C)	CALC	9784528	N/A	2024/11/27	Automated Statchk
Sulphate by Automated Turbidimetry	SKAL	9786296	N/A	2024/11/27	Massarat Jan
Total Dissolved Solids (TDS calc)	CALC	9784529	N/A	2024/11/27	Automated Statchk



Bureau Veritas Job #: C4AI756
 Report Date: 2024/12/11

Stantec Consulting Ltd
 Client Project #: 160623199
 Site Location: Elfrida SWS.
 Sampler Initials: BK

TEST SUMMARY

Bureau Veritas ID: AJRV20
Sample ID: 2024.11.21.STC3
Matrix: Water

Collected: 2024/11/21
Shipped:
Received: 2024/11/22

Test Description	Instrumentation	Batch	Extracted	Date Analyzed	Analyst
Total Phosphorus (Colourimetric)	SKAL/P	9786444	2024/11/25	2024/11/26	Vidhi Khatri
Low Level Total Suspended Solids	BAL	9790303	2024/11/26	2024/11/27	Razieh Tabesh



GENERAL COMMENTS

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

Package 1	0.3°C
Package 2	-1.3°C
Package 3	1.3°C

Results relate only to the items tested.



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Bureau Veritas Job #: C4AI756

Report Date: 2024/12/11

QUALITY ASSURANCE REPORT

Stantec Consulting Ltd

Client Project #: 160623199

Site Location: Elfrida SWS.

Sampler Initials: BK

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9796295	2,4,5,6-Tetrachloro-m-xylene	2024/12/01	70	50 - 130	60	50 - 130	53	%				
9796295	Decachlorobiphenyl	2024/12/01	93	50 - 130	88	50 - 130	78	%				
9785133	Dissolved Organic Carbon	2024/11/25	91	80 - 120	94	80 - 120	<0.40	mg/L	1.3	20		
9785374	Dissolved Organic Carbon	2024/11/27	91	80 - 120	91	80 - 120	<0.40	mg/L	0.41	20		
9786175	Nitrate (N)	2024/11/25	94	80 - 120	94	80 - 120	<0.10	mg/L	0.48	20		
9786175	Nitrite (N)	2024/11/25	100	80 - 120	101	80 - 120	<0.010	mg/L				
9786292	Dissolved Chloride (Cl-)	2024/11/27	NC	80 - 120	99	80 - 120	<1.0	mg/L	1.0	20		
9786295	Orthophosphate (P)	2024/11/27	97	75 - 125	96	80 - 120	<0.010	mg/L	NC	20		
9786296	Dissolved Sulphate (SO4)	2024/11/27	93	75 - 125	98	80 - 120	<1.0	mg/L	2.8	20		
9786313	pH	2024/11/27			102	98 - 103			1.6	N/A		
9786319	Alkalinity (Total as CaCO3)	2024/11/27			98	85 - 115	<1.0	mg/L	0.83	20		
9786320	Conductivity	2024/11/27			102	85 - 115	<1.0	umho/cm	0.76	10		
9786368	Nitrate (N)	2024/11/25	95	80 - 120	94	80 - 120	<0.10	mg/L	0.30	20		
9786368	Nitrite (N)	2024/11/25	99	80 - 120	101	80 - 120	<0.010	mg/L	NC	20		
9786444	Total Phosphorus	2024/11/26	94	80 - 120	97	80 - 120	<0.004	mg/L	1.8	20	92	80 - 120
9786716	Total Ammonia-N	2024/11/27	92	75 - 125	94	80 - 120	<0.050	mg/L	NC	20		
9786739	Total Ammonia-N	2024/11/27	92	75 - 125	92	80 - 120	<0.050	mg/L	10	20		
9787168	Total Phosphorus	2024/11/28	91	80 - 120	98	80 - 120	<0.004	mg/L	2.4	20	95	80 - 120
9788286	Total Suspended Solids	2024/11/27			101	80 - 120	<1	mg/L	12	20		
9789326	Dissolved Aluminum (Al)	2024/11/27	104	80 - 120	99	80 - 120	<0.0049	mg/L				
9789326	Dissolved Antimony (Sb)	2024/11/27	103	80 - 120	98	80 - 120	<0.00050	mg/L	NC	20		
9789326	Dissolved Arsenic (As)	2024/11/27	101	80 - 120	99	80 - 120	<0.0010	mg/L	NC	20		
9789326	Dissolved Barium (Ba)	2024/11/27	100	80 - 120	98	80 - 120	<0.0020	mg/L	2.4	20		
9789326	Dissolved Beryllium (Be)	2024/11/27	103	80 - 120	97	80 - 120	<0.00040	mg/L	NC	20		
9789326	Dissolved Boron (B)	2024/11/27	97	80 - 120	93	80 - 120	<0.010	mg/L	1.5	20		
9789326	Dissolved Cadmium (Cd)	2024/11/27	100	80 - 120	96	80 - 120	<0.000090	mg/L	NC	20		
9789326	Dissolved Calcium (Ca)	2024/11/27	NC	80 - 120	100	80 - 120	<0.20	mg/L				
9789326	Dissolved Chromium (Cr)	2024/11/27	102	80 - 120	99	80 - 120	<0.0050	mg/L	NC	20		
9789326	Dissolved Cobalt (Co)	2024/11/27	99	80 - 120	98	80 - 120	<0.00050	mg/L	8.1	20		
9789326	Dissolved Copper (Cu)	2024/11/27	101	80 - 120	97	80 - 120	<0.00090	mg/L	5.1	20		



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VERITAS

Bureau Veritas Job #: C4AI756

Report Date: 2024/12/11

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd

Client Project #: 160623199

Site Location: Elfrida SWS.

Sampler Initials: BK

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9789326	Dissolved Iron (Fe)	2024/11/27	101	80 - 120	99	80 - 120	<0.10	mg/L				
9789326	Dissolved Lead (Pb)	2024/11/27	96	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20		
9789326	Dissolved Magnesium (Mg)	2024/11/27	NC	80 - 120	98	80 - 120	<0.050	mg/L				
9789326	Dissolved Manganese (Mn)	2024/11/27	103	80 - 120	99	80 - 120	<0.0020	mg/L				
9789326	Dissolved Molybdenum (Mo)	2024/11/27	103	80 - 120	97	80 - 120	<0.00050	mg/L	7.7	20		
9789326	Dissolved Nickel (Ni)	2024/11/27	98	80 - 120	97	80 - 120	<0.0010	mg/L	NC	20		
9789326	Dissolved Phosphorus (P)	2024/11/27	112	80 - 120	99	80 - 120	<0.10	mg/L				
9789326	Dissolved Potassium (K)	2024/11/27	105	80 - 120	100	80 - 120	<0.20	mg/L				
9789326	Dissolved Selenium (Se)	2024/11/27	101	80 - 120	98	80 - 120	<0.0020	mg/L	NC	20		
9789326	Dissolved Silicon (Si)	2024/11/27	104	80 - 120	98	80 - 120	<0.050	mg/L				
9789326	Dissolved Silver (Ag)	2024/11/27	94	80 - 120	94	80 - 120	<0.000090	mg/L	NC	20		
9789326	Dissolved Sodium (Na)	2024/11/27	NC	80 - 120	99	80 - 120	<0.10	mg/L	6.5	20		
9789326	Dissolved Strontium (Sr)	2024/11/27	NC	80 - 120	100	80 - 120	<0.0010	mg/L				
9789326	Dissolved Thallium (Tl)	2024/11/27	97	80 - 120	101	80 - 120	<0.000050	mg/L	NC	20		
9789326	Dissolved Titanium (Ti)	2024/11/27	102	80 - 120	100	80 - 120	<0.0050	mg/L				
9789326	Dissolved Uranium (U)	2024/11/27	100	80 - 120	98	80 - 120	<0.00010	mg/L	13	20		
9789326	Dissolved Vanadium (V)	2024/11/27	104	80 - 120	99	80 - 120	<0.00050	mg/L	NC	20		
9789326	Dissolved Zinc (Zn)	2024/11/27	98	80 - 120	98	80 - 120	<0.0050	mg/L	NC	20		
9790303	Total Suspended Solids	2024/11/27			95	80 - 120	<1	mg/L	0	20		
9791465	Total Suspended Solids	2024/11/28			102	80 - 120	<1	mg/L	8.0	20		
9796295	a-Chlordane	2024/12/01	81	50 - 130	82	50 - 130	<0.005	ug/L	NC	30		
9796295	Aldrin	2024/12/01	77	50 - 130	65	50 - 130	<0.005	ug/L	NC	30		
9796295	Aroclor 1242	2024/12/01					<0.05	ug/L	NC	30		
9796295	Aroclor 1248	2024/12/01					<0.05	ug/L	NC	30		
9796295	Aroclor 1254	2024/12/01					<0.05	ug/L	NC	30		
9796295	Aroclor 1260	2024/12/01					<0.05	ug/L	NC	30		
9796295	Dieldrin	2024/12/01	90	50 - 130	94	50 - 130	<0.005	ug/L	NC	30		
9796295	Endosulfan I (alpha)	2024/12/01	89	50 - 130	80	50 - 130	<0.005	ug/L	28	30		
9796295	Endosulfan II (beta)	2024/12/01	85	50 - 130	89	50 - 130	<0.005	ug/L	NC	30		
9796295	Endrin	2024/12/01	94	50 - 130	98	50 - 130	<0.005	ug/L	NC	30		
9796295	g-Chlordane	2024/12/01	82	50 - 130	85	50 - 130	<0.005	ug/L	NC	30		



BUREAU
VERITAS

Bureau Veritas Job #: C4AI756

Report Date: 2024/12/11

QUALITY ASSURANCE REPORT(CONT'D)

Stantec Consulting Ltd

Client Project #: 160623199

Site Location: Elfrida SWS.

Sampler Initials: BK

QC Batch	Parameter	Date	Matrix Spike		SPIKED BLANK		Method Blank		RPD		QC Standard	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits	% Recovery	QC Limits
9796295	Heptachlor epoxide	2024/12/01	80	50 - 130	82	50 - 130	<0.005	ug/L	NC	30		
9796295	Heptachlor	2024/12/01	91	50 - 130	86	50 - 130	<0.005	ug/L	NC	30		
9796295	Hexachlorobenzene	2024/12/01	73	50 - 130	72	50 - 130	<0.005	ug/L	NC	30		
9796295	Hexachlorobutadiene	2024/12/01	66	50 - 130	64	50 - 130	<0.009	ug/L	NC	30		
9796295	Hexachloroethane	2024/12/01	59	50 - 130	58	50 - 130	<0.01	ug/L	NC	30		
9796295	Lindane	2024/12/01	74	50 - 130	79	50 - 130	<0.003	ug/L	NC	30		
9796295	Methoxychlor	2024/12/01	133 (1)	50 - 130	117	50 - 130	<0.01	ug/L	NC	30		
9796295	o,p-DDD	2024/12/01	90	50 - 130	91	50 - 130	<0.005	ug/L	NC	30		
9796295	o,p-DDE	2024/12/01	82	50 - 130	79	50 - 130	<0.005	ug/L	NC	30		
9796295	o,p-DDT	2024/12/01	118	50 - 130	108	50 - 130	<0.005	ug/L	NC	30		
9796295	p,p-DDD	2024/12/01	90	50 - 130	90	50 - 130	<0.005	ug/L	NC	30		
9796295	p,p-DDE	2024/12/01	96	50 - 130	79	50 - 130	<0.005	ug/L	NC	30		
9796295	p,p-DDT	2024/12/01	135 (1)	50 - 130	122	50 - 130	<0.005	ug/L	NC	30		

N/A = Not Applicable

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

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

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

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

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

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

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

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

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



Bureau Veritas Job #: C4AI756
Report Date: 2024/12/11

Stantec Consulting Ltd
Client Project #: 160623199
Site Location: Elfrida SWS.
Sampler Initials: BK

VALIDATION SIGNATURE PAGE

The analytical data and all QC contained in this report were reviewed and validated by:

Cristina Carriere

Cristina Carriere, Senior Scientific Specialist

Rayane Gama Santos

Rayane Gama Santos, Analyst 2

Bureau Veritas has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per ISO/IEC 17025, signing the reports. For Service Group specific validation, please refer to the Validation Signatures page if included, otherwise available by request. For Department specific Analyst/Supervisor validation names, please refer to the Test Summary section if included, otherwise available by request. This report is authorized by Rodney Major, General Manager responsible for Ontario Environmental laboratory operations.

C4AI756
2024/11/22 08:30

MICRO
Bureau Veritas
6741 Carleton Place Road, Mississauga, Ontario Canada L5N 2L8 Tel: (905) 817-5700 Toll-free 800-563-6266 Fax: (905) 817-5777 www.bvna.com

REC'D IN WATERLOO



NONT-2024-11-4874

INVOICE TO:		REPORT TO:		PROJECT INFORMATION:	
Company Name: #9197 Stantec Consulting Ltd	Company Name: <u>Stantec Consulting</u>	Quotation #: C41673	Project Name: <u>Elfrida</u>		
Attention: Accounts Payable	Attention: <u>Marlee Sauder</u>	P.O. #:	Site #: <u>BK & AK</u>		
Address: 300 Hagey Blvd Suite 100 Waterloo ON N2L 0A4	Address:	Project: 160623199	Sampled By: <u>BK & AK</u>		
Tel: (519) 579-4410 Fax: (519) 579-6733	Tel:	COC #:		Project Manager: Julie Clement	
Email: SAPinvoices@stantec.com	Email: <u>marlee.sauder@stantec.com</u>	C#1017658-01-01		Bottle Order #: 1017658	

MOE REGULATED DRINKING WATER OR WATER INTENDED FOR HUMAN CONSUMPTION MUST BE SUBMITTED ON THE BUREAU VERITAS DRINKING WATER CHAIN OF CUSTODY					ANALYSIS REQUESTED (PLEASE BE SPECIFIC)										Turnaround Time (TAT) Required:						
Regulation 153 (2011)			Other Regulations		Special Instructions	Field Filled (please circle): Metals / Hg / Cr VI	RCAP - Comprehensive	Total Coliforms/ E. coli, CFU/100mL	D Reg 153 OC Pesticides (Water)	Low Level Total Suspended Solids	Total Phosphorus (Concometric)										
<input type="checkbox"/> Table 1	<input type="checkbox"/> Res/Park	<input type="checkbox"/> Medium/Fine	<input type="checkbox"/> CCME	<input type="checkbox"/> Sanitary Sewer Bylaw																	
<input type="checkbox"/> Table 2	<input type="checkbox"/> Ind/Comm	<input type="checkbox"/> Coarse	<input type="checkbox"/> Reg 558	<input type="checkbox"/> Storm Sewer Bylaw																	
<input type="checkbox"/> Table 3	<input type="checkbox"/> Agri/Other	<input type="checkbox"/> For RSC	<input type="checkbox"/> MISA	Municipality																	
<input type="checkbox"/> Table			<input type="checkbox"/> PWOO	Reg 406 Table																	
Include Criteria on Certificate of Analysis (Y/N)?																					
Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix																	
1	2024.11.21.20MC1	2024/11/21	8:30			X	X	X	X	X										9	
2	2024.11.21.SHC1	2024/11/21	9:00			X	X	X	X	X										9	
3	2024.11.21.STC1	2024/11/21	9:30			X	X	X	X	X										9	
4	2024.11.21.20MC2	2024/11/21	13:15			X	X	X	X	X										9	
5	2024.11.21.SHC2	2024/11/21	12:15			X	X	X	X	X										9	
6	2024.11.21.STC2	2024/11/21	12:45			X	X	X	X	X										9	
7	2024.11.21.20MC3	2024/11/21	16:45			X	X	X	X	X										9	
8	2024.11.21.SHC3	2024/11/21	15:45			X	X	X	X	X										9	
9	2024.11.21.STC3	2024/11/21	16:15			X	X	X	X	X										9	
10																					

* RELINQUISHED BY: (Signature/Print) <u>Baljeet Kaur</u>	Date: (YY/MM/DD) 2024/11/22	Time 8:30	RECEIVED BY: (Signature/Print) <u>AA YUSHI</u>	Date: (YY/MM/DD) 2024/11/22	Time 08:30	# Jars used and not submitted	Laboratory Use Only				
			<u>SUGAR SALVANI</u>	2024/11/22	16:00		Time Sensitive	Temperature (°C) on Receipt <u>Refrigerated</u>	Custody Seal Present Intact	Yes	No

* UNLESS OTHERWISE AGREED TO IN WRITING, WORK SUBMITTED ON THIS CHAIN OF CUSTODY IS SUBJECT TO BUREAU VERITAS'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.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/COC-TERMS-AND-CONDITIONS.

* 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 WWW.BVNA.COM/ENVIRONMENTAL-LABORATORIES/RESOURCES/CHAIN-CUSTODY-FORMS-COCS.

White: Bureau Veritas Yellow: Client
Custody Seal Present Intact
Cooling Media Yes No

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

BV 1016351

ON ICE

