

REPORTED TO Allterra Construction
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WORK ORDER 6101011

PO NUMBER P15-06 SIRM
PROJECT SIRM 460 Stebbings

RECEIVED / TEMP 2016-10-15 14:00 / 8°C
REPORTED 2016-10-18

PROJECT INFO

General Comments:

CARO Analytical Services employs methods which are conducted according to procedures accepted by appropriate regulatory agencies, and/or are conducted in accordance with recognized professional standards using accepted testing methodologies and quality control efforts, except where otherwise agreed to by the client.

The results in this report apply to the samples analyzed in accordance with the Chain of Custody or Sample Requisition document. This analytical report must be reproduced in its entirety. CARO is not responsible for any loss or damage resulting directly or indirectly from error or omission in the conduct of testing. Liability is limited to the cost of analysis. Samples will be disposed of 30 days after the test report has been issued unless otherwise agreed to in writing.

Work Order Comments:

This is a revised report. Refer to Appendix 3 for details

Authorized By:

DRAFT REPORT
DATA SUBJECT TO CHANGE

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DRAFT

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Analysis Description	Method Reference	Technique	Location
Alkalinity in Water	APHA 2320 B*	Titration with H2SO4	Kelowna
Anions by IC in Water	APHA 4110 B	Ion Chromatography with Chemical Suppression of Eluent Conductivity	Kelowna
Colour, True in Water	APHA 2120 C	Spectrophotometry (456 nm)	Kelowna
Conductivity in Water	APHA 2510 B	Conductivity Meter	Kelowna
Dissolved Metals by ICPMS in Water	APHA 3030 B / APHA 3125 B	0.45 µm Filtration / Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	Richmond
EPH in Water	EPA 3511* / BCMOE EPHw	Hexane MicroExtraction (Base/Neutral) / Gas Chromatography (GC-FID)	Richmond
Glycols in Water	EPA 8015B*	Gas Chromatography (GC-FID)	Richmond
Hardness (as CaCO3) in Water	APHA 2340 B	Calculation: 2.497 [diss Ca] + 4.118 [diss Mg]	N/A
Hardness (as CaCO3) in Water	APHA 2340 B*	Calculation: 2.497 [total Ca] + 4.118 [total Mg] (Estimated)	N/A
HEPHw in Water	BCMOE LEPH/HEPH	Calculation	N/A
LEPHw in Water	BCMOE LEPH/HEPH	Calculation	N/A
Mercury, dissolved by CVAFS in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	Richmond
Mercury, total by CVAFS in Water	EPA 245.7*	BrCl2 Oxidation / Cold Vapor Atomic Fluorescence Spectrometry (CVAFS)	Richmond
pH in Water	APHA 4500-H+ B	Electrometry	Richmond
Polycyclic Aromatic Hydrocarbons in Water	EPA 3511* / EPA 8270D	Hexane MicroExtraction (Base/Neutral) / GC-MS (SIM)	Richmond
Solids, Total Dissolved (Calc) in Water	APHA 1030 E	Calculation: 100 x ([Cations]-[Anions])/([Cations]+[Anions])	N/A
Solids, Total Suspended in Water	APHA 2540 D*	Gravimetry (Dried at 103-105C)	Richmond
Total Metals by ICPMS in Water	APHA 3030E* / APHA 3125 B	HNO3+HCl Hot Block Digestion / Inductively Coupled Plasma Mass Spectrometry (ICP-MS)	Richmond
Turbidity in Water	APHA 2130 B	Nephelometry	Richmond
Volatile Organic Compounds in Water	EPA 5030B / EPA 8260B	Purge&Trap / GC-MS (SIM)	Richmond

Note: An asterisk in the Method Reference indicates that the CARO method has been modified from the reference method

Method Reference Descriptions:

APHA Standard Methods for the Examination of Water and Wastewater, 22nd Edition, American Public Health Association/American Water Works Association/Water Environment Federation
 BCMOE British Columbia Environmental Laboratory Manual, 2013, British Columbia Ministry of Environment
 EPA United States Environmental Protection Agency Test Methods

Glossary of Terms:

MRL Method Reporting Limit
 < Less than the Reported Detection Limit (RDL) - the RDL may be higher than the MRL due to various factors such as dilutions, limited sample volume, high moisture, or interferences
 CU Colour Units (referenced against a platinum cobalt standard)
 mg/L Milligrams per litre
 NTU Nephelometric Turbidity Units
 pH units pH < 7 = acidic, pH > 7 = basic
 µg/L Micrograms per litre
 µS/cm Microsiemens per centimetre

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Analyte	Result / Estimate of Recovery	Uncertainty	MRL / Limits	Units	Prepared	Analyzed	Notes
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Sample ID: 1 (6101011-01) [Water] Sampled: 2016-10-15 07:30

Analyte	Result / Estimate of Recovery	Uncertainty	MRL / Limits	Units	Prepared	Analyzed	Notes
Anions							
Chloride	29.4	± 1.3	0.10	mg/L	N/A	2016-10-18	
Fluoride	< 0.10		0.10	mg/L	N/A	2016-10-18	
Nitrate (as N)	1.44	± 0.18	0.010	mg/L	N/A	2016-10-18	
Nitrite (as N)	< 0.010		0.010	mg/L	N/A	2016-10-18	
Sulfate	178	± 21	1.0	mg/L	N/A	2016-10-18	
General Parameters							
Alkalinity, Total (as CaCO ₃)	28	± 2	1	mg/L	N/A	2016-10-18	
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1		1	mg/L	N/A	2016-10-18	
Alkalinity, Bicarbonate (as CaCO ₃)	28	± 2	1	mg/L	N/A	2016-10-18	
Alkalinity, Carbonate (as CaCO ₃)	< 1		1	mg/L	N/A	2016-10-18	
Alkalinity, Hydroxide (as CaCO ₃)	< 1		1	mg/L	N/A	2016-10-18	
Colour, True	< 5		5	CU	N/A	2016-10-18	
Conductivity (EC)	520	± 8	2	µS/cm	N/A	2016-10-18	
pH	7.30	± 0.03	0.01	pH units	N/A	2016-10-17	HT2
Solids, Total Suspended	3	± 1	2	mg/L	N/A	2016-10-17	
Turbidity	20.6	± 2.6	0.10	NTU	N/A	2016-10-18	
Calculated Parameters							
Hardness, Total (as CaCO ₃)	226		0.50	mg/L	N/A	N/A	
Solids, Total Dissolved	334		10	mg/L	N/A	2016-10-18	
Dissolved Metals							
Aluminum, dissolved	0.005	± 0.002	0.005	mg/L	N/A	2016-10-18	
Antimony, dissolved	0.0003	± 0.0001	0.0001	mg/L	N/A	2016-10-18	
Arsenic, dissolved	< 0.0005		0.0005	mg/L	N/A	2016-10-18	
Barium, dissolved	0.014	± 0.002	0.005	mg/L	N/A	2016-10-18	
Beryllium, dissolved	< 0.0001		0.0001	mg/L	N/A	2016-10-18	
Bismuth, dissolved	< 0.0001		0.0001	mg/L	N/A	2016-10-18	
Boron, dissolved	0.033	± 0.006	0.004	mg/L	N/A	2016-10-18	
Cadmium, dissolved	< 0.00001		0.00001	mg/L	N/A	2016-10-18	
Calcium, dissolved	73.0	± 11.8	0.2	mg/L	N/A	2016-10-18	
Chromium, dissolved	0.0006	± 0.0002	0.0005	mg/L	N/A	2016-10-18	
Cobalt, dissolved	0.00030	± 0.00003	0.00005	mg/L	N/A	2016-10-18	
Copper, dissolved	0.0009	± 0.0003	0.0002	mg/L	N/A	2016-10-18	
Iron, dissolved	< 0.010		0.010	mg/L	N/A	2016-10-18	
Lead, dissolved	< 0.0001		0.0001	mg/L	N/A	2016-10-18	
Lithium, dissolved	0.0003	± 0.0001	0.0001	mg/L	N/A	2016-10-18	
Magnesium, dissolved	10.7	± 1.8	0.01	mg/L	N/A	2016-10-18	
Manganese, dissolved	0.0233	± 0.0028	0.0002	mg/L	N/A	2016-10-18	
Mercury, dissolved	< 0.00002		0.00002	mg/L	2016-10-16	2016-10-16	
Molybdenum, dissolved	0.0008	± 0.0001	0.0001	mg/L	N/A	2016-10-18	
Nickel, dissolved	0.0021	± 0.0003	0.0002	mg/L	N/A	2016-10-18	
Phosphorus, dissolved	< 0.02		0.02	mg/L	N/A	2016-10-18	
Potassium, dissolved	1.47	± 0.22	0.02	mg/L	N/A	2016-10-18	
Selenium, dissolved	0.0006	± 0.0002	0.0005	mg/L	N/A	2016-10-18	

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Sample ID: 1 (6101011-01) [Water] Sampled: 2016-10-15 07:30, Continued

Dissolved Metals, Continued

Silicon, dissolved	4.2	± 2.0	0.5	mg/L	N/A	2016-10-18	
Silver, dissolved	< 0.00005		0.00005	mg/L	N/A	2016-10-18	
Sodium, dissolved	17.5	± 2.8	0.02	mg/L	N/A	2016-10-18	
Strontium, dissolved	0.245	± 0.026	0.001	mg/L	N/A	2016-10-18	
Sulfur, dissolved	71	± 172	1	mg/L	N/A	2016-10-18	
Tellurium, dissolved	< 0.0002		0.0002	mg/L	N/A	2016-10-18	
Thallium, dissolved	< 0.00002		0.00002	mg/L	N/A	2016-10-18	
Thorium, dissolved	< 0.0001		0.0001	mg/L	N/A	2016-10-18	
Tin, dissolved	< 0.0002		0.0002	mg/L	N/A	2016-10-18	
Titanium, dissolved	< 0.005		0.005	mg/L	N/A	2016-10-18	
Uranium, dissolved	0.00014	± 0.00002	0.00002	mg/L	N/A	2016-10-18	
Vanadium, dissolved	< 0.001		0.001	mg/L	N/A	2016-10-18	
Zinc, dissolved	< 0.004		0.004	mg/L	N/A	2016-10-18	
Zirconium, dissolved	< 0.0001		0.0001	mg/L	N/A	2016-10-18	

Total Metals

Aluminum, total	0.828	± 0.151	0.005	mg/L	2016-10-17	2016-10-18	
Antimony, total	0.0003	± 0.0001	0.0001	mg/L	2016-10-17	2016-10-18	
Arsenic, total	< 0.0005		0.0005	mg/L	2016-10-17	2016-10-18	
Barium, total	0.018	± 0.003	0.005	mg/L	2016-10-17	2016-10-18	
Beryllium, total	< 0.0001		0.0001	mg/L	2016-10-17	2016-10-18	
Bismuth, total	< 0.0001		0.0001	mg/L	2016-10-17	2016-10-18	
Boron, total	0.042	± 0.009	0.004	mg/L	2016-10-17	2016-10-18	
Cadmium, total	0.00003	± 0.00002	0.00001	mg/L	2016-10-17	2016-10-18	
Calcium, total	77.2	± 9.4	0.2	mg/L	2016-10-17	2016-10-18	
Chromium, total	0.0015	± 0.0003	0.0005	mg/L	2016-10-17	2016-10-18	
Cobalt, total	0.00066	± 0.00006	0.00005	mg/L	2016-10-17	2016-10-18	
Copper, total	0.0029	± 0.0004	0.0002	mg/L	2016-10-17	2016-10-18	
Iron, total	0.87	± 0.17	0.01	mg/L	2016-10-17	2016-10-18	
Lead, total	0.0005	± 0.0001	0.0001	mg/L	2016-10-17	2016-10-18	
Lithium, total	0.0008	± 0.0001	0.0001	mg/L	2016-10-17	2016-10-18	
Magnesium, total	11.2	± 1.7	0.01	mg/L	2016-10-17	2016-10-18	
Manganese, total	0.0364	± 0.0033	0.0002	mg/L	2016-10-17	2016-10-18	
Mercury, total	< 0.00002		0.00002	mg/L	2016-10-16	2016-10-16	
Molybdenum, total	0.0008	± 0.0001	0.0001	mg/L	2016-10-17	2016-10-18	
Nickel, total	0.0034	± 0.0003	0.0002	mg/L	2016-10-17	2016-10-18	
Phosphorus, total	0.04	± 0.04	0.02	mg/L	2016-10-17	2016-10-18	
Potassium, total	1.43	± 0.18	0.02	mg/L	2016-10-17	2016-10-18	
Selenium, total	0.0007	± 0.0001	0.0005	mg/L	2016-10-17	2016-10-18	
Silicon, total	5.9	± 2.2	0.5	mg/L	2016-10-17	2016-10-18	
Silver, total	0.00006	± 0.00009	0.00005	mg/L	2016-10-17	2016-10-18	
Sodium, total	18.2	± 2.7	0.02	mg/L	2016-10-17	2016-10-18	
Strontium, total	0.244	± 0.023	0.001	mg/L	2016-10-17	2016-10-18	
Sulfur, total	72	± 558	1	mg/L	2016-10-17	2016-10-18	
Tellurium, total	< 0.0002		0.0002	mg/L	2016-10-17	2016-10-18	
Thallium, total	< 0.00002		0.00002	mg/L	2016-10-17	2016-10-18	

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Sample ID: 1 (6101011-01) [Water] Sampled: 2016-10-15 07:30, Continued

Total Metals, Continued

Thorium, total	< 0.0001		0.0001	mg/L	2016-10-17	2016-10-18	
Tin, total	< 0.0002		0.0002	mg/L	2016-10-17	2016-10-18	
Titanium, total	0.050	± 0.007	0.005	mg/L	2016-10-17	2016-10-18	
Uranium, total	0.00017	± 0.00001	0.00002	mg/L	2016-10-17	2016-10-18	
Vanadium, total	0.003		0.001	mg/L	2016-10-17	2016-10-18	
Zinc, total	0.005	± 0.002	0.004	mg/L	2016-10-17	2016-10-18	
Zirconium, total	0.0003	± 0.0001	0.0001	mg/L	2016-10-17	2016-10-18	

BCMOE Aggregate Hydrocarbons

EPHw10-19	< 250		250	µg/L	2016-10-17	2016-10-17	
EPHw19-32	< 250		250	µg/L	2016-10-17	2016-10-17	
LEPHw	< 250		250	µg/L	N/A	N/A	
HEPHw	< 250		250	µg/L	N/A	N/A	
Surrogate: 2-Methylnonane	90		60-140	%	2016-10-17	2016-10-17	

Glycols

Propylene glycol	< 5		5	mg/L	N/A	2016-10-17	
Ethylene glycol	< 5		5	mg/L	N/A	2016-10-17	
Diethylene glycol	< 5		5	mg/L	N/A	2016-10-17	
Triethylene glycol	< 5		5	mg/L	N/A	2016-10-17	
Surrogate: Tetramethylene Glycol	106		66-125	%	N/A	2016-10-17	

Polycyclic Aromatic Hydrocarbons (PAH)

Acenaphthene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Acenaphthylene	< 0.20		0.20	µg/L	2016-10-17	2016-10-17	
Acridine	< 0.10		0.10	µg/L	2016-10-17	2016-10-17	
Anthracene	< 0.01		0.01	µg/L	2016-10-17	2016-10-17	
Benz (a) anthracene	< 0.01		0.01	µg/L	2016-10-17	2016-10-17	
Benzo (a) pyrene	< 0.01		0.01	µg/L	2016-10-17	2016-10-17	
Benzo (b) fluoranthene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Benzo (g,h,i) perylene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Benzo (k) fluoranthene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Chrysene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Dibenz (a,h) anthracene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Fluoranthene	< 0.03		0.03	µg/L	2016-10-17	2016-10-17	
Fluorene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Indeno (1,2,3-cd) pyrene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Naphthalene	0.22	± 0.74	0.20	µg/L	2016-10-17	2016-10-17	
Phenanthrene	< 0.10		0.10	µg/L	2016-10-17	2016-10-17	
Pyrene	< 0.02		0.02	µg/L	2016-10-17	2016-10-17	
Quinoline	< 0.10		0.10	µg/L	2016-10-17	2016-10-17	
Surrogate: Acridine-d9	73		60-130	%	2016-10-17	2016-10-17	
Surrogate: Naphthalene-d8	92		60-130	%	2016-10-17	2016-10-17	
Surrogate: Perylene-d12	110		60-130	%	2016-10-17	2016-10-17	

Volatile Organic Compounds (VOC)

Benzene	1.7	± 0.7	0.5	µg/L	N/A	2016-10-17	
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Sample ID: 1 (6101011-01) [Water] Sampled: 2016-10-15 07:30, Continued

Volatile Organic Compounds (VOC), Continued

Bromodichloromethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
Bromoform	< 1.0		1.0	µg/L	N/A	2016-10-17	
Bromomethane	< 2.0		2.0	µg/L	N/A	2016-10-17	
Carbon tetrachloride	< 1.0		1.0	µg/L	N/A	2016-10-17	
Chlorobenzene	< 1.0		1.0	µg/L	N/A	2016-10-17	
Chloroethane	< 2.0		2.0	µg/L	N/A	2016-10-17	
Chloroform	< 1.0		1.0	µg/L	N/A	2016-10-17	
Chloromethane	< 2.0		2.0	µg/L	N/A	2016-10-17	
Dibromochloromethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,2-Dibromoethane	< 0.3		0.3	µg/L	N/A	2016-10-17	
Dibromomethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,2-Dichlorobenzene	< 0.5		0.5	µg/L	N/A	2016-10-17	
1,3-Dichlorobenzene	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,4-Dichlorobenzene	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,1-Dichloroethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,2-Dichloroethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,1-Dichloroethene	< 1.0		1.0	µg/L	N/A	2016-10-17	
cis-1,2-Dichloroethene	< 1.0		1.0	µg/L	N/A	2016-10-17	
trans-1,2-Dichloroethene	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,2-Dichloropropane	< 1.0		1.0	µg/L	N/A	2016-10-17	
cis-1,3-Dichloropropene	< 1.0		1.0	µg/L	N/A	2016-10-17	
trans-1,3-Dichloropropene	< 1.0		1.0	µg/L	N/A	2016-10-17	
Ethylbenzene	1.0 ± 0.5		1.0	µg/L	N/A	2016-10-17	
Methyl tert-butyl ether	< 1.0		1.0	µg/L	N/A	2016-10-17	
Methylene chloride	< 3.0		3.0	µg/L	N/A	2016-10-17	
Styrene	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,1,1,2-Tetrachloroethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,1,2,2-Tetrachloroethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
Tetrachloroethene	< 1.0		1.0	µg/L	N/A	2016-10-17	
Toluene	14.3 ± 3.2		1.0	µg/L	N/A	2016-10-17	
1,1,1-Trichloroethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,1,2-Trichloroethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
Trichloroethene	< 1.0		1.0	µg/L	N/A	2016-10-17	
Trichlorofluoromethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
Vinyl chloride	< 2.0		2.0	µg/L	N/A	2016-10-17	
Xylenes (total)	6.1 ± 1.3		2.0	µg/L	N/A	2016-10-17	
Surrogate: Toluene-d8	100		70-130	%	N/A	2016-10-17	
Surrogate: 4-Bromofluorobenzene	99		70-130	%	N/A	2016-10-17	
Surrogate: 1,4-Dichlorobenzene-d4	98		70-130	%	N/A	2016-10-17	

Sample ID: 2 (6101011-02) [Water] Sampled: 2016-10-15 07:45

Anions

Chloride	29.3 ± 1.3		0.10	mg/L	N/A	2016-10-18	
Fluoride	< 0.10		0.10	mg/L	N/A	2016-10-18	

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Sample ID: 2 (6101011-02) [Water] Sampled: 2016-10-15 07:45, Continued

Anions, Continued

Nitrate (as N)	0.969	± 0.121	0.010	mg/L	N/A	2016-10-18	
Nitrite (as N)	< 0.010		0.010	mg/L	N/A	2016-10-18	
Sulfate	134	± 16	1.0	mg/L	N/A	2016-10-18	

General Parameters

Alkalinity, Total (as CaCO3)	28	± 2	1	mg/L	N/A	2016-10-18	
Alkalinity, Phenolphthalein (as CaCO3)	< 1		1	mg/L	N/A	2016-10-18	
Alkalinity, Bicarbonate (as CaCO3)	28	± 1	1	mg/L	N/A	2016-10-18	
Alkalinity, Carbonate (as CaCO3)	< 1		1	mg/L	N/A	2016-10-18	
Alkalinity, Hydroxide (as CaCO3)	< 1		1	mg/L	N/A	2016-10-18	
Colour, True	< 5		5	CU	N/A	2016-10-18	
Conductivity (EC)	443	± 7	2	µS/cm	N/A	2016-10-18	
pH	7.25	± 0.03	0.01	pH units	N/A	2016-10-17	HT2
Solids, Total Suspended	< 2		2	mg/L	N/A	2016-10-17	
Turbidity	6.16	± 0.77	0.10	NTU	N/A	2016-10-18	

Calculated Parameters

Hardness, Total (as CaCO3)	179		0.50	mg/L	N/A	N/A	
Solids, Total Dissolved	269		10	mg/L	N/A	2016-10-18	

Dissolved Metals

Aluminum, dissolved	< 0.005		0.005	mg/L	N/A	2016-10-18	
Antimony, dissolved	0.0003	± 0.0001	0.0001	mg/L	N/A	2016-10-18	
Arsenic, dissolved	< 0.0005		0.0005	mg/L	N/A	2016-10-18	
Barium, dissolved	0.014	± 0.002	0.005	mg/L	N/A	2016-10-18	
Beryllium, dissolved	< 0.0001		0.0001	mg/L	N/A	2016-10-18	
Bismuth, dissolved	< 0.0001		0.0001	mg/L	N/A	2016-10-18	
Boron, dissolved	0.033	± 0.006	0.004	mg/L	N/A	2016-10-18	
Cadmium, dissolved	0.00001	± 0.00001	0.00001	mg/L	N/A	2016-10-18	
Calcium, dissolved	55.7	± 9.0	0.2	mg/L	N/A	2016-10-18	
Chromium, dissolved	0.0007	± 0.0002	0.0005	mg/L	N/A	2016-10-18	
Cobalt, dissolved	0.00036	± 0.00004	0.00005	mg/L	N/A	2016-10-18	
Copper, dissolved	0.0012	± 0.0004	0.0002	mg/L	N/A	2016-10-18	
Iron, dissolved	< 0.010		0.010	mg/L	N/A	2016-10-18	
Lead, dissolved	< 0.0001		0.0001	mg/L	N/A	2016-10-18	
Lithium, dissolved	0.0003	± 0.0001	0.0001	mg/L	N/A	2016-10-18	
Magnesium, dissolved	9.76	± 1.66	0.01	mg/L	N/A	2016-10-18	
Manganese, dissolved	0.0196	± 0.0023	0.0002	mg/L	N/A	2016-10-18	
Mercury, dissolved	< 0.00002		0.00002	mg/L	2016-10-16	2016-10-16	
Molybdenum, dissolved	0.0010	± 0.0001	0.0001	mg/L	N/A	2016-10-18	
Nickel, dissolved	0.0018	± 0.0003	0.0002	mg/L	N/A	2016-10-18	
Phosphorus, dissolved	< 0.02		0.02	mg/L	N/A	2016-10-18	
Potassium, dissolved	1.50	± 0.22	0.02	mg/L	N/A	2016-10-18	
Selenium, dissolved	0.0006	± 0.0002	0.0005	mg/L	N/A	2016-10-18	
Silicon, dissolved	4.5	± 2.1	0.5	mg/L	N/A	2016-10-18	
Silver, dissolved	< 0.00005		0.00005	mg/L	N/A	2016-10-18	

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Sample ID: 2 (6101011-02) [Water] Sampled: 2016-10-15 07:45, Continued

Dissolved Metals, Continued

Sodium, dissolved	17.3	± 2.8	0.02	mg/L	N/A	2016-10-18	
Strontium, dissolved	0.195	± 0.021	0.001	mg/L	N/A	2016-10-18	
Sulfur, dissolved	55	± 133	1	mg/L	N/A	2016-10-18	
Tellurium, dissolved	< 0.0002		0.0002	mg/L	N/A	2016-10-18	
Thallium, dissolved	< 0.00002		0.00002	mg/L	N/A	2016-10-18	
Thorium, dissolved	< 0.0001		0.0001	mg/L	N/A	2016-10-18	
Tin, dissolved	< 0.0002		0.0002	mg/L	N/A	2016-10-18	
Titanium, dissolved	< 0.005		0.005	mg/L	N/A	2016-10-18	
Uranium, dissolved	0.00016	± 0.00002	0.00002	mg/L	N/A	2016-10-18	
Vanadium, dissolved	< 0.001		0.001	mg/L	N/A	2016-10-18	
Zinc, dissolved	< 0.004		0.004	mg/L	N/A	2016-10-18	
Zirconium, dissolved	< 0.0001		0.0001	mg/L	N/A	2016-10-18	

Total Metals

Aluminum, total	0.172	± 0.032	0.005	mg/L	2016-10-17	2016-10-18	
Antimony, total	0.0003	± 0.0001	0.0001	mg/L	2016-10-17	2016-10-18	
Arsenic, total	< 0.0005		0.0005	mg/L	2016-10-17	2016-10-18	
Barium, total	0.015	± 0.002	0.005	mg/L	2016-10-17	2016-10-18	
Beryllium, total	< 0.0001		0.0001	mg/L	2016-10-17	2016-10-18	
Bismuth, total	< 0.0001		0.0001	mg/L	2016-10-17	2016-10-18	
Boron, total	0.036	± 0.007	0.004	mg/L	2016-10-17	2016-10-18	
Cadmium, total	0.00002	± 0.00002	0.00001	mg/L	2016-10-17	2016-10-18	
Calcium, total	60.6	± 7.4	0.2	mg/L	2016-10-17	2016-10-18	
Chromium, total	0.0006	± 0.0002	0.0005	mg/L	2016-10-17	2016-10-18	
Cobalt, total	0.00049	± 0.00005	0.00005	mg/L	2016-10-17	2016-10-18	
Copper, total	0.0018	± 0.0003	0.0002	mg/L	2016-10-17	2016-10-18	
Iron, total	0.17	± 0.04	0.01	mg/L	2016-10-17	2016-10-18	
Lead, total	0.0002	± 0.0001	0.0001	mg/L	2016-10-17	2016-10-18	
Lithium, total	0.0004	± 0.0001	0.0001	mg/L	2016-10-17	2016-10-18	
Magnesium, total	9.81	± 1.49	0.01	mg/L	2016-10-17	2016-10-18	
Manganese, total	0.0252	± 0.0023	0.0002	mg/L	2016-10-17	2016-10-18	
Mercury, total	< 0.00002		0.00002	mg/L	2016-10-16	2016-10-16	
Molybdenum, total	0.0009	± 0.0001	0.0001	mg/L	2016-10-17	2016-10-18	
Nickel, total	0.0021	± 0.0002	0.0002	mg/L	2016-10-17	2016-10-18	
Phosphorus, total	< 0.02		0.02	mg/L	2016-10-17	2016-10-18	
Potassium, total	1.40	± 0.18	0.02	mg/L	2016-10-17	2016-10-18	
Selenium, total	0.0007	± 0.0001	0.0005	mg/L	2016-10-17	2016-10-18	
Silicon, total	4.7	± 1.7	0.5	mg/L	2016-10-17	2016-10-18	
Silver, total	< 0.00005		0.00005	mg/L	2016-10-17	2016-10-18	
Sodium, total	18.0	± 2.7	0.02	mg/L	2016-10-17	2016-10-18	
Strontium, total	0.193	± 0.018	0.001	mg/L	2016-10-17	2016-10-18	
Sulfur, total	53	± 409	1	mg/L	2016-10-17	2016-10-18	
Tellurium, total	< 0.0002		0.0002	mg/L	2016-10-17	2016-10-18	
Thallium, total	< 0.00002		0.00002	mg/L	2016-10-17	2016-10-18	
Thorium, total	< 0.0001		0.0001	mg/L	2016-10-17	2016-10-18	
Tin, total	< 0.0002		0.0002	mg/L	2016-10-17	2016-10-18	

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Sample ID: 2 (6101011-02) [Water] Sampled: 2016-10-15 07:45, Continued

Total Metals, Continued

Titanium, total	0.007	± 0.001	0.005	mg/L	2016-10-17	2016-10-18	
Uranium, total	0.00019	± 0.00001	0.00002	mg/L	2016-10-17	2016-10-18	
Vanadium, total	0.001		0.001	mg/L	2016-10-17	2016-10-18	
Zinc, total	< 0.004		0.004	mg/L	2016-10-17	2016-10-18	
Zirconium, total	< 0.0001		0.0001	mg/L	2016-10-17	2016-10-18	

BCMOE Aggregate Hydrocarbons

EPHw10-19	< 250		250	µg/L	2016-10-17	2016-10-17	
EPHw19-32	< 250		250	µg/L	2016-10-17	2016-10-17	
LEPHw	< 250		250	µg/L	N/A	N/A	
HEPHw	< 250		250	µg/L	N/A	N/A	
Surrogate: 2-Methylnonane	76		60-140	%	2016-10-17	2016-10-17	

Glycols

Propylene glycol	< 5		5	mg/L	N/A	2016-10-17	
Ethylene glycol	< 5		5	mg/L	N/A	2016-10-17	
Diethylene glycol	< 5		5	mg/L	N/A	2016-10-17	
Triethylene glycol	< 5		5	mg/L	N/A	2016-10-17	
Surrogate: Tetramethylene Glycol	110		66-125	%	N/A	2016-10-17	

Polycyclic Aromatic Hydrocarbons (PAH)

Acenaphthene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Acenaphthylene	< 0.20		0.20	µg/L	2016-10-17	2016-10-17	
Acridine	< 0.10		0.10	µg/L	2016-10-17	2016-10-17	
Anthracene	< 0.01		0.01	µg/L	2016-10-17	2016-10-17	
Benz (a) anthracene	< 0.01		0.01	µg/L	2016-10-17	2016-10-17	
Benzo (a) pyrene	< 0.01		0.01	µg/L	2016-10-17	2016-10-17	
Benzo (b) fluoranthene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Benzo (g,h,i) perylene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Benzo (k) fluoranthene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Chrysene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Dibenz (a,h) anthracene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Fluoranthene	< 0.03		0.03	µg/L	2016-10-17	2016-10-17	
Fluorene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Indeno (1,2,3-cd) pyrene	< 0.05		0.05	µg/L	2016-10-17	2016-10-17	
Naphthalene	< 0.20		0.20	µg/L	2016-10-17	2016-10-17	
Phenanthrene	< 0.10		0.10	µg/L	2016-10-17	2016-10-17	
Pyrene	< 0.02		0.02	µg/L	2016-10-17	2016-10-17	
Quinoline	< 0.10		0.10	µg/L	2016-10-17	2016-10-17	
Surrogate: Acridine-d9	72		60-130	%	2016-10-17	2016-10-17	
Surrogate: Naphthalene-d8	90		60-130	%	2016-10-17	2016-10-17	
Surrogate: Perylene-d12	106		60-130	%	2016-10-17	2016-10-17	

Volatile Organic Compounds (VOC)

Benzene	< 0.5		0.5	µg/L	N/A	2016-10-17	
Bromodichloromethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
Bromoform	< 1.0		1.0	µg/L	N/A	2016-10-17	

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Sample ID: 2 (6101011-02) [Water] Sampled: 2016-10-15 07:45, Continued

Volatile Organic Compounds (VOC), Continued

Bromomethane	< 2.0		2.0	µg/L	N/A	2016-10-17	
Carbon tetrachloride	< 1.0		1.0	µg/L	N/A	2016-10-17	
Chlorobenzene	< 1.0		1.0	µg/L	N/A	2016-10-17	
Chloroethane	< 2.0		2.0	µg/L	N/A	2016-10-17	
Chloroform	< 1.0		1.0	µg/L	N/A	2016-10-17	
Chloromethane	< 2.0		2.0	µg/L	N/A	2016-10-17	
Dibromochloromethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,2-Dibromoethane	< 0.3		0.3	µg/L	N/A	2016-10-17	
Dibromomethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,2-Dichlorobenzene	< 0.5		0.5	µg/L	N/A	2016-10-17	
1,3-Dichlorobenzene	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,4-Dichlorobenzene	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,1-Dichloroethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,2-Dichloroethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,1-Dichloroethene	< 1.0		1.0	µg/L	N/A	2016-10-17	
cis-1,2-Dichloroethene	< 1.0		1.0	µg/L	N/A	2016-10-17	
trans-1,2-Dichloroethene	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,2-Dichloropropane	< 1.0		1.0	µg/L	N/A	2016-10-17	
cis-1,3-Dichloropropene	< 1.0		1.0	µg/L	N/A	2016-10-17	
trans-1,3-Dichloropropene	< 1.0		1.0	µg/L	N/A	2016-10-17	
Ethylbenzene	< 1.0		1.0	µg/L	N/A	2016-10-17	
Methyl tert-butyl ether	< 1.0		1.0	µg/L	N/A	2016-10-17	
Methylene chloride	< 3.0		3.0	µg/L	N/A	2016-10-17	
Styrene	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,1,1,2-Tetrachloroethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,1,2,2-Tetrachloroethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
Tetrachloroethene	< 1.0		1.0	µg/L	N/A	2016-10-17	
Toluene	2.9 ± 1.1		1.0	µg/L	N/A	2016-10-17	
1,1,1-Trichloroethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
1,1,2-Trichloroethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
Trichloroethene	< 1.0		1.0	µg/L	N/A	2016-10-17	
Trichlorofluoromethane	< 1.0		1.0	µg/L	N/A	2016-10-17	
Vinyl chloride	< 2.0		2.0	µg/L	N/A	2016-10-17	
Xylenes (total)	< 2.0		2.0	µg/L	N/A	2016-10-17	
Surrogate: Toluene-d8	100		70-130	%	N/A	2016-10-17	
Surrogate: 4-Bromofluorobenzene	103		70-130	%	N/A	2016-10-17	
Surrogate: 1,4-Dichlorobenzene-d4	103		70-130	%	N/A	2016-10-17	

Sample / Analysis Qualifiers:

HT2 The 15 minute recommended holding time (from sampling to analysis) has been exceeded - field analysis is recommended.

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The following section displays the quality control (QC) data that is associated with your sample data. Groups of samples are prepared in "batches" and analyzed in conjunction with QC samples that ensure your data is of the highest quality. Common QC types include:

- **Method Blank (Blk):** Laboratory reagent water is carried through sample preparation and analysis steps. Method Blanks indicate that results are free from contamination, i.e. not biased high from sources such as the sample container or the laboratory environment
- **Duplicate (Dup):** Preparation and analysis of a replicate aliquot of a sample. Duplicates provide a measure of the analytical method's precision, i.e. how reproducible a result is. Duplicates are only reported if they are associated with your sample data.
- **Blank Spike (BS):** A known amount of standard is carried through sample preparation and analysis steps. Blank Spikes, also known as laboratory control samples (LCS), are prepared from a different source of standard than used for the calibration. They ensure that the calibration is acceptable (i.e. not biased high or low) and also provide a measure of the analytical method's accuracy (i.e. closeness of the result to a target value).
- **Standard Reference Material (SRM):** A material of similar matrix to the samples, externally certified for the parameter(s) listed. Standard Reference Materials ensure that the preparation steps in the method are adequate to achieve acceptable recoveries of the parameter(s) tested.

Each QC type is analyzed at a 5-10% frequency, i.e. one blank/duplicate/spike for every 10 samples. For all types of QC, the specified recovery (% Rec) and relative percent difference (RPD) limits are derived from long-term method performance averages and/or prescribed by the reference method.

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Anions, Batch B6J1023									
Blank (B6J1023-BLK1) Prepared: 2016-10-17, Analyzed: 2016-10-17									
Chloride	< 0.10	0.10 mg/L							
Fluoride	< 0.10	0.10 mg/L							
Nitrate (as N)	< 0.010	0.010 mg/L							
Nitrite (as N)	< 0.010	0.010 mg/L							
Sulfate	< 1.0	1.0 mg/L							
LCS (B6J1023-BS1) Prepared: 2016-10-17, Analyzed: 2016-10-17									
Chloride	16.6	0.10 mg/L	16.0		104	90-110			
Fluoride	3.85	0.10 mg/L	4.00		96	88-108			
Nitrate (as N)	4.25	0.010 mg/L	4.00		106	93-108			
Nitrite (as N)	2.02	0.010 mg/L	2.00		101	83-110			
Sulfate	16.1	1.0 mg/L	16.0		101	91-109			
BCMOE Aggregate Hydrocarbons, Batch B6J0941									
Blank (B6J0941-BLK1) Prepared: 2016-10-17, Analyzed: 2016-10-17									
EPHw10-19	< 250	250 µg/L							
EPHw19-32	< 250	250 µg/L							
Surrogate: 2-Methylnonane	389	µg/L	444		88	60-140			
LCS (B6J0941-BS2) Prepared: 2016-10-17, Analyzed: 2016-10-17									
EPHw10-19	17800	250 µg/L	15500		115	70-130			
EPHw19-32	20500	250 µg/L	22200		92	70-130			
Surrogate: 2-Methylnonane	508	µg/L	444		114	60-140			
Dissolved Metals, Batch B6J0937									
Blank (B6J0937-BLK1) Prepared: 2016-10-16, Analyzed: 2016-10-16									
Mercury, dissolved	< 0.00002	0.00002 mg/L							
Reference (B6J0937-SRM1) Prepared: 2016-10-16, Analyzed: 2016-10-16									
Mercury, dissolved	0.00458	0.00002 mg/L	0.00486		94	50-150			

APPENDIX 1: QUALITY CONTROL DATA

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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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Dissolved Metals, Batch B6J0937, Continued

Dissolved Metals, Batch B6J1005

Blank (B6J1005-BLK1)

Prepared: 2016-10-18, Analyzed: 2016-10-18

Aluminum, dissolved	< 0.005	0.005 mg/L							
Antimony, dissolved	< 0.0001	0.0001 mg/L							
Arsenic, dissolved	< 0.0005	0.0005 mg/L							
Barium, dissolved	< 0.005	0.005 mg/L							
Beryllium, dissolved	< 0.0001	0.0001 mg/L							
Bismuth, dissolved	< 0.0001	0.0001 mg/L							
Boron, dissolved	< 0.004	0.004 mg/L							
Cadmium, dissolved	< 0.00001	0.00001 mg/L							
Calcium, dissolved	< 0.2	0.2 mg/L							
Chromium, dissolved	< 0.0005	0.0005 mg/L							
Cobalt, dissolved	< 0.00005	0.00005 mg/L							
Copper, dissolved	< 0.0002	0.0002 mg/L							
Iron, dissolved	< 0.010	0.010 mg/L							
Lead, dissolved	< 0.0001	0.0001 mg/L							
Lithium, dissolved	< 0.0001	0.0001 mg/L							
Magnesium, dissolved	< 0.01	0.01 mg/L							
Manganese, dissolved	< 0.0002	0.0002 mg/L							
Molybdenum, dissolved	< 0.0001	0.0001 mg/L							
Nickel, dissolved	< 0.0002	0.0002 mg/L							
Phosphorus, dissolved	< 0.02	0.02 mg/L							
Potassium, dissolved	< 0.02	0.02 mg/L							
Selenium, dissolved	< 0.0002	0.0002 mg/L							
Silicon, dissolved	< 0.5	0.5 mg/L							
Silver, dissolved	< 0.00005	0.00005 mg/L							
Sodium, dissolved	< 0.02	0.02 mg/L							
Strontium, dissolved	< 0.001	0.001 mg/L							
Sulfur, dissolved	< 1	1 mg/L							
Tellurium, dissolved	< 0.0002	0.0002 mg/L							
Thallium, dissolved	< 0.00002	0.00002 mg/L							
Thorium, dissolved	< 0.0001	0.0001 mg/L							
Tin, dissolved	< 0.0002	0.0002 mg/L							
Titanium, dissolved	< 0.005	0.005 mg/L							
Uranium, dissolved	< 0.00002	0.00002 mg/L							
Vanadium, dissolved	< 0.001	0.001 mg/L							
Zinc, dissolved	< 0.004	0.004 mg/L							
Zirconium, dissolved	< 0.0001	0.0001 mg/L							

Duplicate (B6J1005-DUP1)

Source: 6101011-02

Prepared: 2016-10-18, Analyzed: 2016-10-18

Aluminum, dissolved	< 0.005	0.005 mg/L	< 0.005	11	
Antimony, dissolved	0.0002	0.0001 mg/L	0.0003	44	
Arsenic, dissolved	< 0.0005	0.0005 mg/L	< 0.0005	8	
Barium, dissolved	0.014	0.005 mg/L	0.014	7	
Beryllium, dissolved	< 0.0001	0.0001 mg/L	< 0.0001	14	
Bismuth, dissolved	< 0.0001	0.0001 mg/L	< 0.0001	20	
Boron, dissolved	0.029	0.004 mg/L	0.033	14	13
Cadmium, dissolved	< 0.00001	0.00001 mg/L	0.00001	27	
Calcium, dissolved	55.8	0.2 mg/L	55.7	< 1	8
Chromium, dissolved	0.0007	0.0005 mg/L	0.0007	14	
Cobalt, dissolved	0.00036	0.00005 mg/L	0.00036	2	10
Copper, dissolved	0.0011	0.0002 mg/L	0.0012	8	28
Iron, dissolved	< 0.010	0.010 mg/L	< 0.010	14	
Lead, dissolved	< 0.0001	0.0001 mg/L	< 0.0001	26	
Lithium, dissolved	0.0003	0.0001 mg/L	0.0003	14	
Magnesium, dissolved	9.75	0.01 mg/L	9.76	< 1	6

APPENDIX 1: QUALITY CONTROL DATA

REPORTED TO PROJECT Allterra Construction
SIRM 460 Stebbings

WORK ORDER REPORTED 6101011
2016-10-18

Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Dissolved Metals, Batch B6J1005, Continued									
Duplicate (B6J1005-DUP1), Continued		Source: 6101011-02		Prepared: 2016-10-18, Analyzed: 2016-10-18					
Manganese, dissolved	0.0197	0.0002 mg/L		0.0196			< 1	9	
Molybdenum, dissolved	0.0010	0.0001 mg/L		0.0010			2	19	
Nickel, dissolved	0.0018	0.0002 mg/L		0.0018			1	21	
Phosphorus, dissolved	< 0.02	0.02 mg/L		< 0.02				14	
Potassium, dissolved	1.51	0.02 mg/L		1.50			< 1	8	
Selenium, dissolved	0.0006	0.0005 mg/L		0.0006				36	
Silicon, dissolved	4.3	0.5 mg/L		4.5			5	12	
Silver, dissolved	< 0.00005	0.00005 mg/L		< 0.00005				20	
Sodium, dissolved	17.4	0.02 mg/L		17.3			< 1	6	
Strontium, dissolved	0.194	0.001 mg/L		0.195			< 1	6	
Sulfur, dissolved	55	1 mg/L		55			1	26	
Tellurium, dissolved	< 0.0002	0.0002 mg/L		0.0002				20	
Thallium, dissolved	< 0.00002	0.00002 mg/L		< 0.00002				13	
Thorium, dissolved	< 0.0001	0.0001 mg/L		< 0.0001				30	
Tin, dissolved	< 0.0002	0.0002 mg/L		< 0.0002				6	
Titanium, dissolved	< 0.005	0.005 mg/L		< 0.005				20	
Uranium, dissolved	0.00016	0.00002 mg/L		0.00016			2	14	
Vanadium, dissolved	< 0.001	0.001 mg/L		< 0.001				20	
Zinc, dissolved	< 0.004	0.004 mg/L		< 0.004				11	
Zirconium, dissolved	< 0.0001	0.0001 mg/L		< 0.0001				36	
Matrix Spike (B6J1005-MS1)		Source: 6101011-01		Prepared: 2016-10-18, Analyzed: 2016-10-18					
Antimony, dissolved	0.375	0.0001 mg/L	0.400	0.0003	94	76-114			
Arsenic, dissolved	0.193	0.0005 mg/L	0.200	< 0.0005	96	81-115			
Barium, dissolved	0.930	0.005 mg/L	1.00	0.014	92	80-113			
Beryllium, dissolved	0.0937	0.0001 mg/L	0.100	< 0.0001	94	69-109			
Cadmium, dissolved	0.0920	0.00001 mg/L	0.100	< 0.00001	92	83-110			
Chromium, dissolved	0.371	0.0005 mg/L	0.400	0.0006	92	85-115			
Cobalt, dissolved	0.369	0.00005 mg/L	0.400	0.00030	92	86-114			
Copper, dissolved	0.380	0.0002 mg/L	0.400	0.0009	95	82-119			
Iron, dissolved	2.11	0.010 mg/L	2.00	< 0.010	106	80-116			
Lead, dissolved	0.192	0.0001 mg/L	0.200	< 0.0001	96	83-112			
Manganese, dissolved	0.403	0.0002 mg/L	0.400	0.0233	95	62-131			
Nickel, dissolved	0.379	0.0002 mg/L	0.400	0.0021	94	81-115			
Selenium, dissolved	0.101	0.0005 mg/L	0.100	0.0006	100	79-115			
Silver, dissolved	0.0927	0.00005 mg/L	0.100	< 0.00005	93	69-121			
Thallium, dissolved	0.0955	0.00002 mg/L	0.100	< 0.00002	96	84-115			
Vanadium, dissolved	0.359	0.001 mg/L	0.400	< 0.001	90	83-113			
Zinc, dissolved	0.973	0.004 mg/L	1.00	< 0.004	97	82-115			
Reference (B6J1005-SRM1)		Prepared: 2016-10-18, Analyzed: 2016-10-18							
Aluminum, dissolved	0.245	0.005 mg/L	0.233		105	58-142			
Antimony, dissolved	0.0469	0.0001 mg/L	0.0430		109	75-125			
Arsenic, dissolved	0.458	0.0005 mg/L	0.438		105	81-119			
Barium, dissolved	3.31	0.005 mg/L	3.35		99	83-117			
Beryllium, dissolved	0.237	0.0001 mg/L	0.213		111	80-120			
Boron, dissolved	1.69	0.004 mg/L	1.74		97	74-117			
Cadmium, dissolved	0.223	0.00001 mg/L	0.224		99	83-117			
Calcium, dissolved	8.2	0.2 mg/L	7.69		107	76-124			
Chromium, dissolved	0.435	0.0005 mg/L	0.437		99	81-119			
Cobalt, dissolved	0.130	0.00005 mg/L	0.128		101	76-124			
Copper, dissolved	0.867	0.0002 mg/L	0.844		103	84-116			
Iron, dissolved	1.35	0.010 mg/L	1.29		105	74-126			
Lead, dissolved	0.114	0.0001 mg/L	0.112		102	72-128			
Lithium, dissolved	0.114	0.0001 mg/L	0.104		110	60-140			
Magnesium, dissolved	7.25	0.01 mg/L	6.92		105	81-119			
Manganese, dissolved	0.359	0.0002 mg/L	0.345		104	84-116			

APPENDIX 1: QUALITY CONTROL DATA

REPORTED TO PROJECT Allterra Construction
SIRM 460 Stebbings

WORK ORDER REPORTED 6101011
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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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Dissolved Metals, Batch B6J1005, Continued

Reference (B6J1005-SRM1), Continued

Prepared: 2016-10-18, Analyzed: 2016-10-18

Molybdenum, dissolved	0.447	0.0001 mg/L	0.426		105	83-117			
Nickel, dissolved	0.864	0.0002 mg/L	0.840		103	74-126			
Phosphorus, dissolved	0.58	0.02 mg/L	0.495		116	68-132			
Potassium, dissolved	3.50	0.02 mg/L	3.19		110	74-126			
Selenium, dissolved	0.0349	0.0005 mg/L	0.0331		105	70-130			
Sodium, dissolved	19.7	0.02 mg/L	19.1		103	72-128			
Strontium, dissolved	0.933	0.001 mg/L	0.916		102	84-113			
Thallium, dissolved	0.0393	0.00002 mg/L	0.0393		100	57-143			
Uranium, dissolved	0.257	0.00002 mg/L	0.266		97	85-115			
Vanadium, dissolved	0.863	0.001 mg/L	0.869		99	87-113			
Zinc, dissolved	0.938	0.004 mg/L	0.881		106	72-128			

General Parameters, Batch B6J0955

Reference (B6J0955-SRM1)

Prepared: 2016-10-17, Analyzed: 2016-10-17

pH	7.06	0.01 pH units	7.02		101	98-102			
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Reference (B6J0955-SRM2)

Prepared: 2016-10-17, Analyzed: 2016-10-17

pH	7.06	0.01 pH units	7.02		101	98-102			
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General Parameters, Batch B6J0957

Blank (B6J0957-BLK1)

Prepared: 2016-10-17, Analyzed: 2016-10-17

Solids, Total Suspended	< 2	2 mg/L							
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Blank (B6J0957-BLK2)

Prepared: 2016-10-17, Analyzed: 2016-10-17

Solids, Total Suspended	< 2	2 mg/L							
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LCS (B6J0957-BS1)

Prepared: 2016-10-17, Analyzed: 2016-10-17

Solids, Total Suspended	50	2 mg/L	55.2		91	83-107			
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LCS (B6J0957-BS2)

Prepared: 2016-10-17, Analyzed: 2016-10-17

Solids, Total Suspended	47	2 mg/L	53.0		89	83-107			
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General Parameters, Batch B6J0978

Blank (B6J0978-BLK1)

Prepared: 2016-10-18, Analyzed: 2016-10-18

Turbidity	< 0.10	0.10 NTU							
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LCS (B6J0978-BS1)

Prepared: 2016-10-18, Analyzed: 2016-10-18

Turbidity	9.91	0.10 NTU	10.0		99	82-115			
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Duplicate (B6J0978-DUP1)

Source: 6101011-01

Prepared: 2016-10-18, Analyzed: 2016-10-18

Turbidity	19.6	0.10 NTU	20.6		5	18			
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General Parameters, Batch B6J1073

Blank (B6J1073-BLK1)

Prepared: 2016-10-18, Analyzed: 2016-10-18

Colour, True	< 5	5 CU							
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LCS (B6J1073-BS1)

Prepared: 2016-10-18, Analyzed: 2016-10-18

Colour, True	10	5 CU	10.0		105	85-115			
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General Parameters, Batch B6J1091

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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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General Parameters, Batch B6J1091, Continued

Blank (B6J1091-BLK1)

Prepared: 2016-10-18, Analyzed: 2016-10-18

Alkalinity, Total (as CaCO ₃)	< 1	1 mg/L							
Alkalinity, Phenolphthalein (as CaCO ₃)	< 1	1 mg/L							
Alkalinity, Bicarbonate (as CaCO ₃)	< 1	1 mg/L							
Alkalinity, Carbonate (as CaCO ₃)	< 1	1 mg/L							
Alkalinity, Hydroxide (as CaCO ₃)	< 1	1 mg/L							
Conductivity (EC)	< 2	2 µS/cm							

LCS (B6J1091-BS1)

Prepared: 2016-10-18, Analyzed: 2016-10-18

Alkalinity, Total (as CaCO ₃)	102	1 mg/L	100		102	96-108			
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LCS (B6J1091-BS2)

Prepared: 2016-10-18, Analyzed: 2016-10-18

Conductivity (EC)	1390	2 µS/cm	1410		99	95-104			
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Glycols, Batch B6J0933

Blank (B6J0933-BLK1)

Prepared: 2016-10-17, Analyzed: 2016-10-17

Propylene glycol	< 5	5 mg/L							
Ethylene glycol	< 5	5 mg/L							
Diethylene glycol	< 5	5 mg/L							
Triethylene glycol	< 5	5 mg/L							
Surrogate: Tetramethylene Glycol	99.1	mg/L	95.6		104	66-125			

LCS (B6J0933-BS1)

Prepared: 2016-10-17, Analyzed: 2016-10-17

Propylene glycol	56	5 mg/L	50.0		112	71-114			
Ethylene glycol	50	5 mg/L	49.9		99	82-124			
Diethylene glycol	51	5 mg/L	50.0		102	80-116			
Triethylene glycol	46	5 mg/L	49.8		92	73-120			
Surrogate: Tetramethylene Glycol	104	mg/L	95.6		109	66-125			

LCS Dup (B6J0933-BSD1)

Prepared: 2016-10-17, Analyzed: 2016-10-17

Propylene glycol	52	5 mg/L	50.0		105	71-114	6	20	
Ethylene glycol	53	5 mg/L	49.9		105	82-124	6	20	
Diethylene glycol	53	5 mg/L	50.0		105	80-116	3	20	
Triethylene glycol	52	5 mg/L	49.8		105	73-120	13	20	
Surrogate: Tetramethylene Glycol	104	mg/L	95.6		109	66-125			

Polycyclic Aromatic Hydrocarbons (PAH), Batch B6J0941

Blank (B6J0941-BLK1)

Prepared: 2016-10-17, Analyzed: 2016-10-17

Acenaphthene	< 0.05	0.05 µg/L							
Acenaphthylene	< 0.20	0.20 µg/L							
Acridine	< 0.10	0.10 µg/L							
Anthracene	< 0.01	0.01 µg/L							
Benz (a) anthracene	< 0.01	0.01 µg/L							
Benzo (a) pyrene	< 0.01	0.01 µg/L							
Benzo (b) fluoranthene	< 0.05	0.05 µg/L							
Benzo (g,h,i) perylene	< 0.05	0.05 µg/L							
Benzo (k) fluoranthene	< 0.05	0.05 µg/L							
Chrysene	< 0.05	0.05 µg/L							
Dibenz (a,h) anthracene	< 0.05	0.05 µg/L							
Fluoranthene	< 0.03	0.03 µg/L							
Fluorene	< 0.05	0.05 µg/L							
Indeno (1,2,3-cd) pyrene	< 0.05	0.05 µg/L							
Naphthalene	< 0.20	0.20 µg/L							
Phenanthrene	< 0.10	0.10 µg/L							
Pyrene	< 0.02	0.02 µg/L							

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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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Polycyclic Aromatic Hydrocarbons (PAH), Batch B6J0941, Continued

Blank (B6J0941-BLK1), Continued

Prepared: 2016-10-17, Analyzed: 2016-10-17

Quinoline	< 0.10	0.10 µg/L							
Surrogate: Acridine-d9	3.37	µg/L	4.44		76	60-130			
Surrogate: Naphthalene-d8	3.95	µg/L	4.44		89	60-130			
Surrogate: Perylene-d12	5.01	µg/L	4.44		113	60-130			

LCS (B6J0941-BS1)

Prepared: 2016-10-17, Analyzed: 2016-10-17

Acenaphthene	4.17	0.05 µg/L	4.44		94	70-130			
Acenaphthylene	3.90	0.20 µg/L	4.44		88	70-130			
Acridine	3.91	0.10 µg/L	4.44		88	60-130			
Anthracene	4.40	0.01 µg/L	4.44		99	70-130			
Benz (a) anthracene	4.40	0.01 µg/L	4.44		99	70-130			
Benzo (a) pyrene	5.16	0.01 µg/L	4.44		116	70-130			
Benzo (b) fluoranthene	4.17	0.05 µg/L	4.44		94	70-130			
Benzo (g,h,i) perylene	5.04	0.05 µg/L	4.44		113	70-130			
Benzo (k) fluoranthene	4.06	0.05 µg/L	4.44		91	70-130			
Chrysene	4.59	0.05 µg/L	4.44		103	70-130			
Dibenz (a,h) anthracene	5.01	0.05 µg/L	4.44		113	70-130			
Fluoranthene	4.70	0.03 µg/L	4.44		106	70-130			
Fluorene	3.96	0.05 µg/L	4.44		89	70-130			
Indeno (1,2,3-cd) pyrene	5.08	0.05 µg/L	4.44		114	70-130			
Naphthalene	4.33	0.20 µg/L	4.44		97	70-130			
Phenanthrene	4.54	0.10 µg/L	4.44		102	70-130			
Pyrene	4.81	0.02 µg/L	4.44		108	70-130			
Quinoline	4.70	0.10 µg/L	4.44		106	70-130			
Surrogate: Acridine-d9	3.53	µg/L	4.44		79	60-130			
Surrogate: Naphthalene-d8	4.16	µg/L	4.44		94	60-130			
Surrogate: Perylene-d12	5.14	µg/L	4.44		116	60-130			

LCS Dup (B6J0941-BSD1)

Prepared: 2016-10-17, Analyzed: 2016-10-17

Acenaphthene	4.08	0.05 µg/L	4.44		92	70-130	2	20	
Acenaphthylene	3.84	0.20 µg/L	4.44		86	70-130	2	20	
Acridine	3.85	0.10 µg/L	4.44		87	60-130	2	20	
Anthracene	4.27	0.01 µg/L	4.44		96	70-130	3	20	
Benz (a) anthracene	4.27	0.01 µg/L	4.44		96	70-130	3	20	
Benzo (a) pyrene	4.99	0.01 µg/L	4.44		112	70-130	3	20	
Benzo (b) fluoranthene	4.39	0.05 µg/L	4.44		99	70-130	5	20	
Benzo (g,h,i) perylene	4.78	0.05 µg/L	4.44		108	70-130	5	20	
Benzo (k) fluoranthene	3.94	0.05 µg/L	4.44		89	70-130	3	20	
Chrysene	4.57	0.05 µg/L	4.44		103	70-130	< 1	20	
Dibenz (a,h) anthracene	4.76	0.05 µg/L	4.44		107	70-130	5	20	
Fluoranthene	4.59	0.03 µg/L	4.44		103	70-130	2	20	
Fluorene	3.84	0.05 µg/L	4.44		86	70-130	3	20	
Indeno (1,2,3-cd) pyrene	5.17	0.05 µg/L	4.44		116	70-130	2	20	
Naphthalene	4.22	0.20 µg/L	4.44		95	70-130	2	20	
Phenanthrene	4.43	0.10 µg/L	4.44		100	70-130	2	20	
Pyrene	4.51	0.02 µg/L	4.44		101	70-130	6	20	
Quinoline	4.67	0.10 µg/L	4.44		105	70-130	< 1	20	
Surrogate: Acridine-d9	3.50	µg/L	4.44		79	60-130			
Surrogate: Naphthalene-d8	4.06	µg/L	4.44		91	60-130			
Surrogate: Perylene-d12	5.04	µg/L	4.44		113	60-130			

Total Metals, Batch B6J0938

Blank (B6J0938-BLK1)

Prepared: 2016-10-16, Analyzed: 2016-10-16

Mercury, total	< 0.00002	0.00002 mg/L							
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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
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Total Metals, Batch B6J0938, Continued

Reference (B6J0938-SRM1)

Prepared: 2016-10-16, Analyzed: 2016-10-16

Mercury, total	0.00465	0.00002 mg/L	0.00486		96	50-150			
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Total Metals, Batch B6J0950

Blank (B6J0950-BLK1)

Prepared: 2016-10-17, Analyzed: 2016-10-18

Aluminum, total	< 0.005	0.005 mg/L							
Antimony, total	< 0.0001	0.0001 mg/L							
Arsenic, total	< 0.0005	0.0005 mg/L							
Barium, total	< 0.005	0.005 mg/L							
Beryllium, total	< 0.0001	0.0001 mg/L							
Bismuth, total	< 0.0001	0.0001 mg/L							
Boron, total	< 0.004	0.004 mg/L							
Cadmium, total	< 0.00001	0.00001 mg/L							
Calcium, total	< 0.2	0.2 mg/L							
Chromium, total	< 0.0005	0.0005 mg/L							
Cobalt, total	< 0.00005	0.00005 mg/L							
Copper, total	< 0.0002	0.0002 mg/L							
Iron, total	< 0.01	0.01 mg/L							
Lead, total	< 0.0001	0.0001 mg/L							
Lithium, total	< 0.0001	0.0001 mg/L							
Magnesium, total	< 0.01	0.01 mg/L							
Manganese, total	< 0.0002	0.0002 mg/L							
Molybdenum, total	< 0.0001	0.0001 mg/L							
Nickel, total	< 0.0002	0.0002 mg/L							
Phosphorus, total	< 0.02	0.02 mg/L							
Potassium, total	< 0.02	0.02 mg/L							
Selenium, total	< 0.0005	0.0005 mg/L							
Silicon, total	< 0.5	0.5 mg/L							
Silver, total	< 0.00005	0.00005 mg/L							
Sodium, total	< 0.02	0.02 mg/L							
Strontium, total	< 0.001	0.001 mg/L							
Sulfur, total	< 1	1 mg/L							
Tellurium, total	< 0.0002	0.0002 mg/L							
Thallium, total	< 0.00002	0.00002 mg/L							
Thorium, total	< 0.0001	0.0001 mg/L							
Tin, total	< 0.0002	0.0002 mg/L							
Titanium, total	< 0.005	0.005 mg/L							
Uranium, total	< 0.00002	0.00002 mg/L							
Vanadium, total	< 0.001	0.001 mg/L							
Zinc, total	< 0.004	0.004 mg/L							
Zirconium, total	< 0.0001	0.0001 mg/L							

Duplicate (B6J0950-DUP1)

Source: 6101011-01

Prepared: 2016-10-17, Analyzed: 2016-10-18

Aluminum, total	0.794	0.005 mg/L	0.828		4	29
Antimony, total	0.0003	0.0001 mg/L	0.0003			31
Arsenic, total	< 0.0005	0.0005 mg/L	< 0.0005			15
Barium, total	0.019	0.005 mg/L	0.018			9
Beryllium, total	< 0.0001	0.0001 mg/L	< 0.0001			16
Bismuth, total	< 0.0001	0.0001 mg/L	< 0.0001			20
Boron, total	0.051	0.004 mg/L	0.042		19	29
Cadmium, total	0.00003	0.00001 mg/L	0.00003			33
Calcium, total	77.7	0.2 mg/L	77.2		< 1	12
Chromium, total	0.0015	0.0005 mg/L	0.0015			12
Cobalt, total	0.00067	0.00005 mg/L	0.00066		1	13
Copper, total	0.0030	0.0002 mg/L	0.0029		1	37
Iron, total	0.84	0.01 mg/L	0.87		3	18

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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Total Metals, Batch B6J0950, Continued									
Duplicate (B6J0950-DUP1), Continued		Source: 6101011-01		Prepared: 2016-10-17, Analyzed: 2016-10-18					
Lead, total	0.0005	0.0001 mg/L		0.0005			1	23	
Lithium, total	0.0009	0.0001 mg/L		0.0008			11	19	
Magnesium, total	10.9	0.01 mg/L		11.2			3	10	
Manganese, total	0.0354	0.0002 mg/L		0.0364			3	13	
Molybdenum, total	0.0008	0.0001 mg/L		0.0008			< 1	20	
Nickel, total	0.0033	0.0002 mg/L		0.0034			4	28	
Phosphorus, total	0.04	0.02 mg/L		0.04				24	
Potassium, total	1.42	0.02 mg/L		1.43			< 1	13	
Selenium, total	0.0006	0.0005 mg/L		0.0007				24	
Silicon, total	5.7	0.5 mg/L		5.9			3	11	
Silver, total	0.00006	0.00005 mg/L		0.00006				18	
Sodium, total	17.7	0.02 mg/L		18.2			3	10	
Strontium, total	0.242	0.001 mg/L		0.244			< 1	9	
Sulfur, total	69	1 mg/L		72			4	24	
Tellurium, total	< 0.0002	0.0002 mg/L		< 0.0002				20	
Thallium, total	0.00002	0.00002 mg/L		< 0.00002				24	
Thorium, total	< 0.0001	0.0001 mg/L		< 0.0001				18	
Tin, total	< 0.0002	0.0002 mg/L		< 0.0002				18	
Titanium, total	0.051	0.005 mg/L		0.050			1	32	
Uranium, total	0.00017	0.00002 mg/L		0.00017			< 1	14	
Vanadium, total	0.003	0.001 mg/L		0.003				17	
Zinc, total	0.005	0.004 mg/L		0.005				8	
Zirconium, total	0.0002	0.0001 mg/L		0.0003				60	
Matrix Spike (B6J0950-MS1)		Source: 6101011-02		Prepared: 2016-10-17, Analyzed: 2016-10-18					
Antimony, total	0.448	0.0001 mg/L	0.400	0.0003	112	84-125			
Arsenic, total	0.216	0.0005 mg/L	0.200	< 0.0005	108	85-116			
Barium, total	1.04	0.005 mg/L	1.00	0.015	103	87-114			
Beryllium, total	0.105	0.0001 mg/L	0.100	< 0.0001	105	72-116			
Cadmium, total	0.104	0.00001 mg/L	0.100	0.00002	104	90-112			
Chromium, total	0.419	0.0005 mg/L	0.400	0.0006	105	89-120			
Cobalt, total	0.418	0.00005 mg/L	0.400	0.00049	104	88-120			
Copper, total	0.429	0.0002 mg/L	0.400	0.0018	107	88-125			
Iron, total	2.65	0.01 mg/L	2.00	0.17	124	88-119			SPK1
Lead, total	0.214	0.0001 mg/L	0.200	0.0002	107	89-118			
Manganese, total	0.457	0.0002 mg/L	0.400	0.0252	108	84-120			
Nickel, total	0.427	0.0002 mg/L	0.400	0.0021	106	87-119			
Selenium, total	0.112	0.0005 mg/L	0.100	0.0007	112	85-113			
Silver, total	0.106	0.00005 mg/L	0.100	< 0.00005	106	89-119			
Thallium, total	0.106	0.00002 mg/L	0.100	< 0.00002	105	92-119			
Vanadium, total	0.408	0.001 mg/L	0.400	0.001	102	87-117			
Zinc, total	1.10	0.004 mg/L	1.00	< 0.004	110	85-116			
Reference (B6J0950-SRM1)		Prepared: 2016-10-17, Analyzed: 2016-10-18							
Aluminum, total	0.334	0.005 mg/L	0.303		110	81-129			
Antimony, total	0.0558	0.0001 mg/L	0.0511		109	88-114			
Arsenic, total	0.128	0.0005 mg/L	0.118		109	88-114			
Barium, total	0.816	0.005 mg/L	0.823		99	72-104			
Beryllium, total	0.0570	0.0001 mg/L	0.0496		115	76-131			
Boron, total	3.70	0.004 mg/L	3.45		107	75-121			
Cadmium, total	0.0512	0.00001 mg/L	0.0495		103	89-111			
Calcium, total	12.4	0.2 mg/L	11.6		106	86-121			
Chromium, total	0.258	0.0005 mg/L	0.250		103	89-114			
Cobalt, total	0.0409	0.00005 mg/L	0.0377		108	91-113			
Copper, total	0.531	0.0002 mg/L	0.486		109	91-115			
Iron, total	0.57	0.01 mg/L	0.488		116	77-124			
Lead, total	0.215	0.0001 mg/L	0.204		105	92-113			

APPENDIX 1: QUALITY CONTROL DATA

REPORTED TO PROJECT Allterra Construction
SIRM 460 Stebbings

WORK ORDER REPORTED 6101011
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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Total Metals, Batch B6J0950, Continued									
Reference (B6J0950-SRM1), Continued					Prepared: 2016-10-17, Analyzed: 2016-10-18				
Lithium, total	0.442	0.0001 mg/L	0.403		110	85-115			
Magnesium, total	4.23	0.01 mg/L	3.79		112	78-120			
Manganese, total	0.118	0.0002 mg/L	0.109		109	90-114			
Molybdenum, total	0.215	0.0001 mg/L	0.198		108	90-111			
Nickel, total	0.265	0.0002 mg/L	0.249		106	90-111			
Phosphorus, total	0.25	0.02 mg/L	0.227		111	85-115			
Potassium, total	7.61	0.02 mg/L	7.21		106	84-113			
Selenium, total	0.136	0.0005 mg/L	0.121		112	85-115			
Sodium, total	8.50	0.02 mg/L	7.54		113	82-123			
Strontium, total	0.403	0.001 mg/L	0.375		108	88-112			
Thallium, total	0.0857	0.00002 mg/L	0.0805		106	91-114			
Uranium, total	0.0324	0.00002 mg/L	0.0306		106	85-120			
Vanadium, total	0.400	0.001 mg/L	0.386		104	86-111			
Zinc, total	2.76	0.004 mg/L	2.49		111	85-111			

Volatile Organic Compounds (VOC), Batch B6J0854

Blank (B6J0854-BLK1)		Prepared: 2016-10-17, Analyzed: 2016-10-17							
Benzene	< 0.5	0.5 µg/L							
Bromodichloromethane	< 1.0	1.0 µg/L							
Bromoform	< 1.0	1.0 µg/L							
Bromomethane	< 2.0	2.0 µg/L							
Carbon tetrachloride	< 1.0	1.0 µg/L							
Chlorobenzene	< 1.0	1.0 µg/L							
Chloroethane	< 2.0	2.0 µg/L							
Chloroform	< 1.0	1.0 µg/L							
Chloromethane	< 2.0	2.0 µg/L							
Dibromochloromethane	< 1.0	1.0 µg/L							
1,2-Dibromoethane	< 0.3	0.3 µg/L							
Dibromomethane	< 1.0	1.0 µg/L							
1,2-Dichlorobenzene	< 0.5	0.5 µg/L							
1,3-Dichlorobenzene	< 1.0	1.0 µg/L							
1,4-Dichlorobenzene	< 1.0	1.0 µg/L							
1,1-Dichloroethane	< 1.0	1.0 µg/L							
1,2-Dichloroethane	< 1.0	1.0 µg/L							
1,1-Dichloroethene	< 1.0	1.0 µg/L							
cis-1,2-Dichloroethene	< 1.0	1.0 µg/L							
trans-1,2-Dichloroethene	< 1.0	1.0 µg/L							
1,2-Dichloropropane	< 1.0	1.0 µg/L							
cis-1,3-Dichloropropene	< 1.0	1.0 µg/L							
trans-1,3-Dichloropropene	< 1.0	1.0 µg/L							
Ethylbenzene	< 1.0	1.0 µg/L							
Methyl tert-butyl ether	< 1.0	1.0 µg/L							
Methylene chloride	< 3.0	3.0 µg/L							
Styrene	< 1.0	1.0 µg/L							
1,1,1,2-Tetrachloroethane	< 1.0	1.0 µg/L							
1,1,2,2-Tetrachloroethane	< 1.0	1.0 µg/L							
Tetrachloroethene	< 1.0	1.0 µg/L							
Toluene	< 1.0	1.0 µg/L							
1,1,1-Trichloroethane	< 1.0	1.0 µg/L							
1,1,2-Trichloroethane	< 1.0	1.0 µg/L							
Trichloroethene	< 1.0	1.0 µg/L							
Trichlorofluoromethane	< 1.0	1.0 µg/L							
Vinyl chloride	< 2.0	2.0 µg/L							
Xylenes (total)	< 2.0	2.0 µg/L							
Surrogate: Toluene-d8	25.2	µg/L	25.0		101	70-130			

APPENDIX 1: QUALITY CONTROL DATA

REPORTED TO PROJECT Allterra Construction
SIRM 460 Stebbings

WORK ORDER REPORTED 6101011
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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Blank (B6J0854-BLK1), Continued									
			Prepared: 2016-10-17, Analyzed: 2016-10-17						
Surrogate: 4-Bromofluorobenzene	26.7	µg/L	25.0		107	70-130			
Surrogate: 1,4-Dichlorobenzene-d4	27.6	µg/L	25.0		111	70-130			
LCS (B6J0854-BS1)									
			Prepared: 2016-10-17, Analyzed: 2016-10-17						
Benzene	22.0	0.5 µg/L	20.0		110	70-130			
Bromodichloromethane	22.6	1.0 µg/L	20.0		113	70-130			
Bromoform	24.8	1.0 µg/L	20.0		124	70-130			
Bromomethane	21.3	2.0 µg/L	20.0		106	70-130			
Carbon tetrachloride	21.4	1.0 µg/L	20.0		107	70-130			
Chlorobenzene	23.0	1.0 µg/L	20.0		115	70-130			
Chloroethane	22.1	2.0 µg/L	20.0		110	70-130			
Chloroform	22.4	1.0 µg/L	20.0		112	70-130			
Chloromethane	20.4	2.0 µg/L	20.0		102	70-130			
Dibromochloromethane	22.2	1.0 µg/L	20.0		111	70-130			
1,2-Dibromoethane	22.7	0.3 µg/L	20.0		114	70-130			
Dibromomethane	22.9	1.0 µg/L	20.0		114	70-130			
1,2-Dichlorobenzene	23.4	0.5 µg/L	20.0		117	70-130			
1,3-Dichlorobenzene	21.8	1.0 µg/L	20.0		109	70-130			
1,4-Dichlorobenzene	21.6	1.0 µg/L	20.0		108	70-130			
1,1-Dichloroethane	23.0	1.0 µg/L	20.0		115	70-130			
1,2-Dichloroethane	23.0	1.0 µg/L	20.0		115	70-130			
1,1-Dichloroethene	20.7	1.0 µg/L	20.0		104	70-130			
cis-1,2-Dichloroethene	21.8	1.0 µg/L	20.0		109	70-130			
trans-1,2-Dichloroethene	20.6	1.0 µg/L	20.0		103	70-130			
1,2-Dichloropropane	23.0	1.0 µg/L	20.0		115	70-130			
cis-1,3-Dichloropropene	16.2	1.0 µg/L	20.0		81	70-130			
trans-1,3-Dichloropropene	15.4	1.0 µg/L	20.0		77	70-130			
Ethylbenzene	21.8	1.0 µg/L	20.0		109	70-130			
Methyl tert-butyl ether	21.3	1.0 µg/L	20.0		106	70-130			
Methylene chloride	22.8	3.0 µg/L	20.0		114	70-130			
Styrene	20.7	1.0 µg/L	20.0		104	70-130			
1,1,1,2-Tetrachloroethane	23.0	1.0 µg/L	20.0		115	70-130			
1,1,1,2,2-Tetrachloroethane	29.4	1.0 µg/L	20.0		147	70-130			SPK
Tetrachloroethene	20.1	1.0 µg/L	20.0		100	70-130			
Toluene	22.2	1.0 µg/L	20.0		111	70-130			
1,1,1-Trichloroethane	21.9	1.0 µg/L	20.0		110	70-130			
1,1,2-Trichloroethane	23.3	1.0 µg/L	20.0		117	70-130			
Trichloroethene	20.2	1.0 µg/L	20.0		101	70-130			
Trichlorofluoromethane	23.6	1.0 µg/L	20.0		118	70-130			
Vinyl chloride	21.2	2.0 µg/L	20.0		106	70-130			
Xylenes (total)	65.7	2.0 µg/L	60.0		109	70-130			
Surrogate: Toluene-d8	26.3	µg/L	25.0		105	70-130			
Surrogate: 4-Bromofluorobenzene	28.1	µg/L	25.0		113	70-130			
Surrogate: 1,4-Dichlorobenzene-d4	28.4	µg/L	25.0		114	70-130			
Duplicate (B6J0854-DUP1)									
			Source: 6101011-02 Prepared: 2016-10-17, Analyzed: 2016-10-17						
Benzene	0.6	0.5 µg/L		< 0.5				20	
Bromodichloromethane	< 1.0	1.0 µg/L		< 1.0				20	
Bromoform	< 1.0	1.0 µg/L		< 1.0				20	
Bromomethane	< 2.0	2.0 µg/L		< 2.0				20	
Carbon tetrachloride	< 1.0	1.0 µg/L		< 1.0				20	
Chlorobenzene	< 1.0	1.0 µg/L		< 1.0				20	
Chloroethane	< 2.0	2.0 µg/L		< 2.0				20	
Chloroform	< 1.0	1.0 µg/L		< 1.0				20	
Chloromethane	< 2.0	2.0 µg/L		< 2.0				20	
Dibromochloromethane	< 1.0	1.0 µg/L		< 1.0				20	
1,2-Dibromoethane	< 0.3	0.3 µg/L		< 0.3				20	

APPENDIX 1: QUALITY CONTROL DATA

REPORTED TO PROJECT Allterra Construction
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WORK ORDER REPORTED 6101011
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Analyte	Result	MRL Units	Spike Level	Source Result	% REC	REC Limit	% RPD	RPD Limit	Notes
Volatile Organic Compounds (VOC), Batch B6J0854, Continued									
Duplicate (B6J0854-DUP1), Continued		Source: 6101011-02		Prepared: 2016-10-17, Analyzed: 2016-10-17					
Dibromomethane	< 1.0	1.0 µg/L		< 1.0				20	
1,2-Dichlorobenzene	< 0.5	0.5 µg/L		< 0.5				20	
1,3-Dichlorobenzene	< 1.0	1.0 µg/L		< 1.0				20	
1,4-Dichlorobenzene	< 1.0	1.0 µg/L		< 1.0				20	
1,1-Dichloroethane	< 1.0	1.0 µg/L		< 1.0				20	
1,2-Dichloroethane	< 1.0	1.0 µg/L		< 1.0				20	
1,1-Dichloroethene	< 1.0	1.0 µg/L		< 1.0				20	
cis-1,2-Dichloroethene	< 1.0	1.0 µg/L		< 1.0				20	
trans-1,2-Dichloroethene	< 1.0	1.0 µg/L		< 1.0				20	
1,2-Dichloropropane	< 1.0	1.0 µg/L		< 1.0				20	
cis-1,3-Dichloropropene	< 1.0	1.0 µg/L		< 1.0				20	
trans-1,3-Dichloropropene	< 1.0	1.0 µg/L		< 1.0				20	
Ethylbenzene	< 1.0	1.0 µg/L		< 1.0				20	
Methyl tert-butyl ether	< 1.0	1.0 µg/L		< 1.0				20	
Methylene chloride	< 3.0	3.0 µg/L		< 3.0				20	
Styrene	< 1.0	1.0 µg/L		< 1.0				20	
1,1,1,2-Tetrachloroethane	< 1.0	1.0 µg/L		< 1.0				20	
1,1,2,2-Tetrachloroethane	< 1.0	1.0 µg/L		< 1.0				20	
Tetrachloroethene	< 1.0	1.0 µg/L		< 1.0				20	
Toluene	3.9	1.0 µg/L		2.9				20	
1,1,1-Trichloroethane	< 1.0	1.0 µg/L		< 1.0				20	
1,1,2-Trichloroethane	< 1.0	1.0 µg/L		< 1.0				20	
Trichloroethene	< 1.0	1.0 µg/L		< 1.0				20	
Trichlorofluoromethane	< 1.0	1.0 µg/L		< 1.0				20	
Vinyl chloride	< 2.0	2.0 µg/L		< 2.0				20	
Xylenes (total)	< 2.0	2.0 µg/L		< 2.0				20	
Surrogate: Toluene-d8	31.3	µg/L	25.0		125	70-130			
Surrogate: 4-Bromofluorobenzene	30.8	µg/L	25.0		123	70-130			
Surrogate: 1,4-Dichlorobenzene-d4	31.3	µg/L	25.0		125	70-130			

QC Qualifiers:

SPK The recovery of this analyte was outside of established control limits.
 SPK1 The recovery of this analyte was outside of established control limits. The data was accepted based on performance of other batch QC.

REPORTED TO PROJECT Allterra Construction
SIRM 460 Stebbings

WORK ORDER REPORTED 6101011
2016-10-18

		6101011-01	6101011-02
		Water	Water
		2016-10-15	2016-10-15
		1	2
Anions	Chloride (mg/L)	29.4	29.3
	Fluoride (mg/L)	< 0.10	< 0.10
	Nitrate (as N) (mg/L)	1.44	0.969
	Nitrite (as N) (mg/L)	< 0.010	< 0.010
	Sulfate (mg/L)	178	134
General Parameters	Alkalinity, Total (as CaCO3) (mg/L)	28	28
	Alkalinity, Phenolphthalein (as CaCO3) (mg/	< 1	< 1
	Alkalinity, Bicarbonate (as CaCO3) (mg/L)	28	28
	Alkalinity, Carbonate (as CaCO3) (mg/L)	< 1	< 1
	Alkalinity, Hydroxide (as CaCO3) (mg/L)	< 1	< 1
	Colour, True (CU)	< 5	< 5
	Conductivity (EC) (uS/cm)	520	443
	pH (pH units)	7.30	7.25
	Solids, Total Suspended (mg/L)	3	< 2
	Turbidity (NTU)	20.6	6.16
Calculated Parameters	Hardness, Total (as CaCO3) (mg/L)	226	179
	Solids, Total Dissolved (mg/L)	334	269
Dissolved Metals	Aluminum, dissolved (mg/L)	0.005	< 0.005
	Antimony, dissolved (mg/L)	0.0003	0.0003
	Arsenic, dissolved (mg/L)	< 0.0005	< 0.0005
	Barium, dissolved (mg/L)	0.014	0.014
	Beryllium, dissolved (mg/L)	< 0.0001	< 0.0001
	Bismuth, dissolved (mg/L)	< 0.0001	< 0.0001
	Boron, dissolved (mg/L)	0.033	0.033
	Cadmium, dissolved (mg/L)	< 0.00001	0.00001
	Calcium, dissolved (mg/L)	73.0	55.7
	Chromium, dissolved (mg/L)	0.0006	0.0007
	Cobalt, dissolved (mg/L)	0.00030	0.00036
	Copper, dissolved (mg/L)	0.0009	0.0012
	Iron, dissolved (mg/L)	< 0.010	< 0.010
	Lead, dissolved (mg/L)	< 0.0001	< 0.0001
	Lithium, dissolved (mg/L)	0.0003	0.0003
	Magnesium, dissolved (mg/L)	10.7	9.76
	Manganese, dissolved (mg/L)	0.0233	0.0196
	Mercury, dissolved (mg/L)	< 0.00002	< 0.00002
	Molybdenum, dissolved (mg/L)	0.0008	0.0010
	Nickel, dissolved (mg/L)	0.0021	0.0018
	Phosphorus, dissolved (mg/L)	< 0.02	< 0.02
	Potassium, dissolved (mg/L)	1.47	1.50
	Selenium, dissolved (mg/L)	0.0006	0.0006
	Silicon, dissolved (mg/L)	4.2	4.5
	Silver, dissolved (mg/L)	< 0.00005	< 0.00005
	Sodium, dissolved (mg/L)	17.5	17.3
	Strontium, dissolved (mg/L)	0.245	0.195

REPORTED TO PROJECT Allterra Construction
SIRM 460 Stebbings

WORK ORDER REPORTED 6101011
2016-10-18

		6101011-01	6101011-02
		Water	Water
		2016-10-15	2016-10-15
		1	2
Dissolved Metals	Sulfur, dissolved (mg/L)	71	55
	Tellurium, dissolved (mg/L)	< 0.0002	< 0.0002
	Thallium, dissolved (mg/L)	< 0.00002	< 0.00002
	Thorium, dissolved (mg/L)	< 0.0001	< 0.0001
	Tin, dissolved (mg/L)	< 0.0002	< 0.0002
	Titanium, dissolved (mg/L)	< 0.005	< 0.005
	Uranium, dissolved (mg/L)	0.00014	0.00016
	Vanadium, dissolved (mg/L)	< 0.001	< 0.001
	Zinc, dissolved (mg/L)	< 0.004	< 0.004
	Zirconium, dissolved (mg/L)	< 0.0001	< 0.0001
Total Metals	Aluminum, total (mg/L)	0.828	0.172
	Antimony, total (mg/L)	0.0003	0.0003
	Arsenic, total (mg/L)	< 0.0005	< 0.0005
	Barium, total (mg/L)	0.018	0.015
	Beryllium, total (mg/L)	< 0.0001	< 0.0001
	Bismuth, total (mg/L)	< 0.0001	< 0.0001
	Boron, total (mg/L)	0.042	0.036
	Cadmium, total (mg/L)	0.00003	0.00002
	Calcium, total (mg/L)	77.2	60.6
	Chromium, total (mg/L)	0.0015	0.0006
	Cobalt, total (mg/L)	0.00066	0.00049
	Copper, total (mg/L)	0.0029	0.0018
	Iron, total (mg/L)	0.87	0.17
	Lead, total (mg/L)	0.0005	0.0002
	Lithium, total (mg/L)	0.0008	0.0004
	Magnesium, total (mg/L)	11.2	9.81
	Manganese, total (mg/L)	0.0364	0.0252
	Mercury, total (mg/L)	< 0.00002	< 0.00002
	Molybdenum, total (mg/L)	0.0008	0.0009
	Nickel, total (mg/L)	0.0034	0.0021
	Phosphorus, total (mg/L)	0.04	< 0.02
	Potassium, total (mg/L)	1.43	1.40
	Selenium, total (mg/L)	0.0007	0.0007
	Silicon, total (mg/L)	5.9	4.7
	Silver, total (mg/L)	0.00006	< 0.00005
	Sodium, total (mg/L)	18.2	18.0
	Strontium, total (mg/L)	0.244	0.193
	Sulfur, total (mg/L)	72	53
	Tellurium, total (mg/L)	< 0.0002	< 0.0002
	Thallium, total (mg/L)	< 0.00002	< 0.00002
	Thorium, total (mg/L)	< 0.0001	< 0.0001
	Tin, total (mg/L)	< 0.0002	< 0.0002
	Titanium, total (mg/L)	0.050	0.007
	Uranium, total (mg/L)	0.00017	0.00019
	Vanadium, total (mg/L)	0.003	0.001

REPORTED TO PROJECT Allterra Construction
SIRM 460 Stebbings

WORK ORDER REPORTED 6101011
2016-10-18

		6101011-01	6101011-02
		Water	Water
		2016-10-15	2016-10-15
		1	2
Total Metals	Zinc, total (mg/L)	0.005	< 0.004
	Zirconium, total (mg/L)	0.0003	< 0.0001
BCMOE Aggregate Hydrocarbons	EPHw10-19 (ug/L)	< 250	< 250
	EPHw19-32 (ug/L)	< 250	< 250
	LEPHw (ug/L)	< 250	< 250
	HEPHw (ug/L)	< 250	< 250
	Sur: 2-Methylnonane (%)	90	76
Glycols	Propylene glycol (mg/L)	< 5	< 5
	Ethylene glycol (mg/L)	< 5	< 5
	Diethylene glycol (mg/L)	< 5	< 5
	Triethylene glycol (mg/L)	< 5	< 5
	Sur: Tetramethylene Glycol (%)	106	110
Polycyclic Aromatic Hydrocarbons (PAH)	Acenaphthene (ug/L)	< 0.05	< 0.05
	Acenaphthylene (ug/L)	< 0.20	< 0.20
	Acridine (ug/L)	< 0.10	< 0.10
	Anthracene (ug/L)	< 0.01	< 0.01
	Benz (a) anthracene (ug/L)	< 0.01	< 0.01
	Benzo (a) pyrene (ug/L)	< 0.01	< 0.01
	Benzo (b) fluoranthene (ug/L)	< 0.05	< 0.05
	Benzo (g,h,i) perylene (ug/L)	< 0.05	< 0.05
	Benzo (k) fluoranthene (ug/L)	< 0.05	< 0.05
	Chrysene (ug/L)	< 0.05	< 0.05
	Dibenz (a,h) anthracene (ug/L)	< 0.05	< 0.05
	Fluoranthene (ug/L)	< 0.03	< 0.03
	Fluorene (ug/L)	< 0.05	< 0.05
	Indeno (1,2,3-cd) pyrene (ug/L)	< 0.05	< 0.05
	Naphthalene (ug/L)	0.22	< 0.20
	Phenanthrene (ug/L)	< 0.10	< 0.10
	Pyrene (ug/L)	< 0.02	< 0.02
	Quinoline (ug/L)	< 0.10	< 0.10
	Sur: Acridine-d9 (%)	73	72
	Sur: Naphthalene-d8 (%)	92	90
Sur: Perylene-d12 (%)	110	106	
Volatile Organic Compounds (VOC)	Benzene (ug/L)	1.7	< 0.5
	Bromodichloromethane (ug/L)	< 1.0	< 1.0
	Bromoform (ug/L)	< 1.0	< 1.0
	Bromomethane (ug/L)	< 2.0	< 2.0
	Carbon tetrachloride (ug/L)	< 1.0	< 1.0
	Chlorobenzene (ug/L)	< 1.0	< 1.0
	Chloroethane (ug/L)	< 2.0	< 2.0
	Chloroform (ug/L)	< 1.0	< 1.0
	Chloromethane (ug/L)	< 2.0	< 2.0
	Dibromochloromethane (ug/L)	< 1.0	< 1.0
	1,2-Dibromoethane (ug/L)	< 0.3	< 0.3
	Dibromomethane (ug/L)	< 1.0	< 1.0

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SIRM 460 Stebbings

WORK ORDER REPORTED 6101011
2016-10-18

		6101011-01	6101011-02
		Water	Water
		2016-10-15	2016-10-15
		1	2
Volatile Organic Compounds (VOC)	1,2-Dichlorobenzene (ug/L)	< 0.5	< 0.5
	1,3-Dichlorobenzene (ug/L)	< 1.0	< 1.0
	1,4-Dichlorobenzene (ug/L)	< 1.0	< 1.0
	1,1-Dichloroethane (ug/L)	< 1.0	< 1.0
	1,2-Dichloroethane (ug/L)	< 1.0	< 1.0
	1,1-Dichloroethene (ug/L)	< 1.0	< 1.0
	cis-1,2-Dichloroethene (ug/L)	< 1.0	< 1.0
	trans-1,2-Dichloroethene (ug/L)	< 1.0	< 1.0
	1,2-Dichloropropane (ug/L)	< 1.0	< 1.0
	cis-1,3-Dichloropropene (ug/L)	< 1.0	< 1.0
	trans-1,3-Dichloropropene (ug/L)	< 1.0	< 1.0
	Ethylbenzene (ug/L)	1.0	< 1.0
	Methyl tert-butyl ether (ug/L)	< 1.0	< 1.0
	Methylene chloride (ug/L)	< 3.0	< 3.0
	Styrene (ug/L)	< 1.0	< 1.0
	1,1,1,2-Tetrachloroethane (ug/L)	< 1.0	< 1.0
	1,1,1,2,2-Tetrachloroethane (ug/L)	< 1.0	< 1.0
	Tetrachloroethene (ug/L)	< 1.0	< 1.0
	Toluene (ug/L)	14.3	2.9
	1,1,1-Trichloroethane (ug/L)	< 1.0	< 1.0
	1,1,2-Trichloroethane (ug/L)	< 1.0	< 1.0
	Trichloroethene (ug/L)	< 1.0	< 1.0
	Trichlorofluoromethane (ug/L)	< 1.0	< 1.0
	Vinyl chloride (ug/L)	< 2.0	< 2.0
	Xylenes (total) (ug/L)	6.1	< 2.0
	Sur: Toluene-d8 (%)	100	100
	Sur: 4-Bromofluorobenzene (%)	99	103
	Sur: 1,4-Dichlorobenzene-d4 (%)	98	103

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SIRM 460 Stebbings

WORK ORDER REPORTED 6101011
2016-10-18

Sample ID	Changed	Change	Analysis	Analyte(s)
6101011-01RE1	2016-10-18	Added	Volatile Organic Compounds	
6101011-02RE1	2016-10-18	Added	Volatile Organic Compounds	

DRAFT

<p>Client Information Allterra Construction 2158 Millstream Road Victoria BC V9B 6H4 Phone: (250) 508-0726</p>	<p>Project Information SIRM 460 Stebbings Number: [none] Sample count: 2 TAT: 1</p>	<p>Laboratory Information CARO Analytical Services #110 - 4011 Viking Way Richmond BC V6V 2K9 Phone: (604) 279-1499 Fax: (604) 279-1599</p>	<p>COC Information Shipped via: Harbour Air</p>
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#1	1 (Template: 01) 10/15/2016 07:30 Grab / Water	<p style="text-align: center;">Analyses</p> Alkalinity, all (KEL) TAT: 1 Anions in Water by IC, 5 Analytes (KEL) TAT: 1 Colour, True - 456 nm (KEL) TAT: 1 Conductivity in Water (KEL) TAT: 1 Glycols in Water (RMD) TAT: 1 L/HEPH in Water (RMD) TAT: 1 Mercury, diss CVAFS Reg & Low (RMD) TAT: 1 Mercury, total CVAFS Reg & Low (RMD) TAT: 1 Metals, dissolved, All, Low (RMD) TAT: 1 Metals, total, All, Low (RMD) TAT: 1 pH in Water (KEL) TAT: 1 Solids, Total Dissolved (KEL) TAT: 1 Solids, Total Suspended (KEL) TAT: 1 Turbidity (KEL) TAT: 1 VOC in Water (RMD) TAT: 1	<p style="text-align: center;">Containers</p> C03_250 mL Glass (EPH/PAH) C04_40 mL Vial (VOC Water) C05_125 mL Plastic (Metals) C06_40 mL Vial (Mercury) C10_125 mL Plastic (H2SO4) C11_1 L Plastic (General) C19_40 mL Vial (General CG) S05_125 mL Plastic (Metals-F) S06_40 mL Vial (Mercury-F)
#2	2 (Template: 01) 10/15/2016 07:45 Grab / Water	<p style="text-align: center;">Analyses</p> Alkalinity, all (KEL) TAT: 1 Anions in Water by IC, 5 Analytes (KEL) TAT: 1 Colour, True - 456 nm (KEL) TAT: 1 Conductivity in Water (KEL) TAT: 1 Glycols in Water (RMD) TAT: 1 L/HEPH in Water (RMD) TAT: 1 Mercury, diss CVAFS Reg & Low (RMD) TAT: 1 Mercury, total CVAFS Reg & Low (RMD) TAT: 1 Metals, dissolved, All, Low (RMD) TAT: 1 Metals, total, All, Low (RMD) TAT: 1 pH in Water (KEL) TAT: 1 Solids, Total Dissolved (KEL) TAT: 1 Solids, Total Suspended (KEL) TAT: 1 Turbidity (KEL) TAT: 1 VOC in Water (RMD) TAT: 1	<p style="text-align: center;">Containers</p> C03_250 mL Glass (EPH/PAH) C04_40 mL Vial (VOC Water) C05_125 mL Plastic (Metals) C06_40 mL Vial (Mercury) C10_125 mL Plastic (H2SO4) C11_1 L Plastic (General) C19_40 mL Vial (General CG) S05_125 mL Plastic (Metals-F) S06_40 mL Vial (Mercury-F)

Relinquished by	Date/Time	Accepted by	Date/Time

Client Information	Project Information	Laboratory Information	COC Information
Allterra Construction 2158 Millstream Road Victoria BC V9B 6H4 Phone: (250) 508-0726	SIRM 460 Stebbings Number: [none] Sample count: 2 TAT: 1	CARO Analytical Services #110 - 4011 Viking Way Richmond BC V6V 2K9 Phone: (604) 279-1499 Fax: (604) 279-1599	Shipped via: Harbour Air

#	Description	Analyses	Containers
#1	1 (Template: 01) 10/15/2016 07:30 Grab / Water	Alkalinity, all (KEL) TAT: 1 Anions in Water by IC, 5 Analytes (KEL) TAT: 1 Colour, True - 456 nm (KEL) TAT: 1 Conductivity in Water (KEL) TAT: 1 Glycols in Water (RMD) TAT: 1 L/HEPH in Water (RMD) TAT: 1 Mercury, diss CVAFS Reg & Low (RMD) TAT: 1 Mercury, total CVAFS Reg & Low (RMD) TAT: 1 Metals, dissolved, All, Low (RMD) TAT: 1 Metals, total, All, Low (RMD) TAT: 1 pH in Water (KEL) TAT: 1 Solids, Total Dissolved (KEL) TAT: 1 Solids, Total Suspended (KEL) TAT: 1 Turbidity (KEL) TAT: 1 VOC in Water (RMD) TAT: 1	C03_250 mL Glass (EPH/PAH) C04_40 mL Vial (VOC Water) C05_125 mL Plastic (Metals) C06_40 mL Vial (Mercury) C10_125 mL Plastic (H2SO4) C11_1 L Plastic (General) C19_40 mL Vial (General CG) S05_125 mL Plastic (Metals-F) S06_40 mL Vial (Mercury-F)
#2	2 (Template: 01) 10/15/2016 07:45 Grab / Water	Alkalinity, all (KEL) TAT: 1 Anions in Water by IC, 5 Analytes (KEL) TAT: 1 Colour, True - 456 nm (KEL) TAT: 1 Conductivity in Water (KEL) TAT: 1 Glycols in Water (RMD) TAT: 1 L/HEPH in Water (RMD) TAT: 1 Mercury, diss CVAFS Reg & Low (RMD) TAT: 1 Mercury, total CVAFS Reg & Low (RMD) TAT: 1 Metals, dissolved, All, Low (RMD) TAT: 1 Metals, total, All, Low (RMD) TAT: 1 pH in Water (KEL) TAT: 1 Solids, Total Dissolved (KEL) TAT: 1 Solids, Total Suspended (KEL) TAT: 1 Turbidity (KEL) TAT: 1 VOC in Water (RMD) TAT: 1	C03_250 mL Glass (EPH/PAH) C04_40 mL Vial (VOC Water) C05_125 mL Plastic (Metals) C06_40 mL Vial (Mercury) C10_125 mL Plastic (H2SO4) C11_1 L Plastic (General) C19_40 mL Vial (General CG) S05_125 mL Plastic (Metals-F) S06_40 mL Vial (Mercury-F)



No	Accepted by	Date/Time
	M. Air TC	10/15
	7.7°C	14:00