

Your Project #: 13-156 SEPTEMBER 2013 CLINTON
 Site Location: CLINTON CREEK
 Your C.O.C. #: 08378570

Attention: Chris Jastrebski
 Ecological Logistics & Research Ltd
 #204 - 105 Titanium Way
 Whitehorse, YT
 CANADA Y1A 0E7

Report Date: 2014/02/27
Report #: R1523554
Version: 3R

CERTIFICATE OF ANALYSIS – REVISED REPORT

MAXXAM JOB #: B384508
Received: 2013/09/18, 09:05

Sample Matrix: Water
 # Samples Received: 12

Analyses	Quantity	Date		Laboratory Method	Analytical Method
		Extracted	Analyzed		
Carbon (DOC) - field filtered/preserved (1)	3	N/A	2013/09/19	BBY6SOP-00003	SM-5310C
Hardness Total (calculated as CaCO3)	3	N/A	2013/09/20	BBY7SOP-00002	EPA 6020A
Hardness (calculated as CaCO3)	3	N/A	2013/09/20	BBY7SOP-00002	EPA 6020A
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	2	N/A	2013/09/20	BBY7SOP-00002	EPA 6020A
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	1	N/A	2013/09/25	BBY7SOP-00002	EPA 6020A
Elements by ICPMS Low Level (dissolved)	3	N/A	2013/09/19	BBY7SOP-00002	EPA 6020A
Na, K, Ca, Mg, S by CRC ICPMS (total)	3	N/A	2013/09/20	BBY7SOP-00002	EPA 6020A
Elements by ICPMS Low Level (total)	1	N/A	2013/09/19	BBY7SOP-00002	EPA 6020A
Elements by ICPMS Low Level (total)	2	N/A	2013/09/20	BBY7SOP-00002	EPA 6020A
Nitrogen (Total)	3	2013/09/23	2013/09/23	BBY6SOP-00016	SM-4500N C
Ammonia-N (Preserved)	3	N/A	2013/09/19	BBY6SOP-00009	SM-4500NH3G
Nitrate + Nitrite (N)	12	N/A	2013/09/18	BBY6SOP-00010	SM 4500NO3-I
Nitrite (N) by CFA	12	N/A	2013/09/18	BBY6SOP-00010	EPA 353.2
Nitrogen - Nitrate (as N)	12	N/A	2013/09/18	BBY6SOP-00010	SM 4500NO3-I
Filter and HNO3 Preserve for Metals	3	N/A	2013/09/18	BBY6WI-00001	EPA 200.2
Sulphate by Automated Colourimetry	9	N/A	2013/09/19	BBY6SOP-00017	SM4500-SO42- E
Sulphate by Automated Colourimetry	3	N/A	2013/09/20	BBY6SOP-00017	SM4500-SO42- E
TKN (Calc. TN, N/N) total	3	N/A	2013/09/24	BBY6SOP-00022	SM 4500N-C
Total Phosphorus	3	N/A	2013/09/20	BBY6SOP-00013	SM 4500 PE
Total Suspended Solids	3	N/A	2013/09/20	BBY6SOP-00034	SM - 2540 D

* Results relate only to the items tested.

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

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

Ken Pomeroy, Project Manager
 Email: KPomeroy@maxxam.ca
 Phone# (604) 638-5020

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Report Date: 2014/02/27

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

Total cover pages: 2

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RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		HN9920	HN9920			HN9921	HN9921		HN9922		HN9923		
Sampling Date		2013/09/16 12:15	2013/09/16 12:15			2013/09/16 14:00	2013/09/16 14:00		2013/09/16 17:30		2013/09/15 14:00		
COC#		08378570	08378570			08378570	08378570		08378570		08378570		
	UNITS	R1	R1 Lab-Dup	RDL	QC Batch	R2	R2 Lab-Dup	RDL	R3	RDL	R4	RDL	QC Batch
ANIONS													
Nitrite (N)	mg/L	<0.0050		0.0050	7177805	<0.0050	<0.0050	0.0050	<0.0050	0.0050	<0.0050	0.0050	7177805
Calculated Parameters													
Filter and HNO3 Preservation	N/A	FIELD		N/A	ONSITE	FIELD		N/A	FIELD	N/A			ONSITE
Total Hardness (CaCO3)	mg/L	327		0.50	7175805	316		0.50	365	0.50			7175805
Nitrate (N)	mg/L	0.277		0.020	7175871	0.039		0.020	0.058	0.020	0.242	0.020	7175871
Misc. Inorganics													
Dissolved Hardness (CaCO3)	mg/L	315		0.50	7175867	326		0.50	386	0.50			7175867
Dissolved Organic Carbon (C)	mg/L	13.9		0.50	7178903	9.97		0.50	14.4	0.50			7178903
Anions													
Dissolved Sulphate (SO4)	mg/L	201		5.0	7183616	171		0.50	274	5.0	150	0.50	7180688
Nutrients													
Ammonia (N)	mg/L	0.045		0.0050	7178795	0.029		0.0050	0.041	0.0050			7178795
Total Total Kjeldahl Nitrogen (Calc)	mg/L	0.552		0.020	7176382	0.347		0.020	0.595	0.020			7176382
Nitrate plus Nitrite (N)	mg/L	0.277		0.020	7177336	0.039	0.040	0.020	0.058	0.020	0.242	0.020	7177336
Total Nitrogen (N)	mg/L	0.829		0.020	7186259	0.385		0.020	0.653	0.020			7186259
Total Phosphorus (P)	mg/L	0.0174	0.0175	0.0050	7183556	0.0099		0.0050	0.0365	0.0050			7183556
Physical Properties													
Total Suspended Solids	mg/L	<4.0		4.0	7181547	<4.0		4.0	45.8	4.0			7181547

N/A = Not Applicable

RDL = Reportable Detection Limit

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RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		HN9924		HN9925	HN9926	HN9926		HN9927		
Sampling Date		2013/09/15 16:00		2013/09/15 12:30	2013/09/15 12:30	2013/09/15 12:30		2013/09/15 13:00		
COC#		08378570		08378570	08378570	08378570		08378570		
	UNITS	R6	QC Batch	E1	DUP 1	DUP 1 Lab-Dup	RDL	E2	RDL	QC Batch
ANIONS										
Nitrite (N)	mg/L	<0.0050	7177805	0.0060	0.0062		0.0050	0.0051	0.0050	7177805
Calculated Parameters										
Nitrate (N)	mg/L	0.142	7175871	0.161	0.164		0.020	0.164	0.020	7175871
Anions										
Dissolved Sulphate (SO4)	mg/L	37.2	7183616	147	143	141	0.50	246	5.0	7180688
Nutrients										
Nitrate plus Nitrite (N)	mg/L	0.142	7177336	0.167	0.170		0.020	0.169	0.020	7177336

Maxxam ID		HN9928	HN9929	HN9930			HN9931			
Sampling Date		2013/09/15 13:15	2013/09/15 13:45	2013/09/15 15:15			2013/09/15 15:45			
COC#		08378570	08378570	08378570			08378570			
	UNITS	E3	E4	E7	RDL	QC Batch	E8	RDL	QC Batch	
ANIONS										
Nitrite (N)	mg/L	0.0051	<0.0050	<0.0050	0.0050	7177805	<0.0050	0.0050		7177805
Calculated Parameters										
Nitrate (N)	mg/L	0.088	0.143	0.169	0.020	7175871	0.146	0.020		7175871
Anions										
Dissolved Sulphate (SO4)	mg/L	229	248	245	5.0	7180688	39.0	0.50		7183616
Nutrients										
Nitrate plus Nitrite (N)	mg/L	0.093	0.143	0.169	0.020	7177336	0.146	0.020		7177336

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		HN9920		HN9921		HN9922		
Sampling Date		2013/09/16 12:15		2013/09/16 14:00		2013/09/16 17:30		
COC#		08378570		08378570		08378570		
	UNITS	R1	QC Batch	R2	QC Batch	R3	RDL	QC Batch
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	mg/L	0.0283	7178607	0.0247	7178607	0.0370	0.00050	7178607
Dissolved Antimony (Sb)	mg/L	0.000252	7178607	0.000496	7178607	0.000176	0.000020	7178607
Dissolved Arsenic (As)	mg/L	0.000615	7178607	0.000812	7178607	0.000645	0.000020	7178607
Dissolved Barium (Ba)	mg/L	0.0499	7178607	0.0483	7178607	0.0425	0.000020	7178607
Dissolved Beryllium (Be)	mg/L	0.000012	7178607	<0.000010	7178607	0.000012	0.000010	7178607
Dissolved Bismuth (Bi)	mg/L	<0.0000050	7178607	<0.0000050	7178607	<0.0000050	0.0000050	7178607
Dissolved Boron (B)	mg/L	<0.050	7178607	<0.050	7178607	<0.050	0.050	7178607
Dissolved Cadmium (Cd)	mg/L	0.0000630	7178607	0.0000280	7178607	0.0000150	0.0000050	7178607
Dissolved Chromium (Cr)	mg/L	0.00034	7178607	0.00056	7178607	0.00067	0.00010	7178607
Dissolved Cobalt (Co)	mg/L	0.000580	7178607	0.000203	7178607	0.000448	0.0000050	7178607
Dissolved Copper (Cu)	mg/L	0.00290	7178607	0.00157	7178607	0.00479 ⁽¹⁾	0.000050	7189570
Dissolved Iron (Fe)	mg/L	0.344	7178607	0.203	7178607	0.238	0.0010	7178607
Dissolved Lead (Pb)	mg/L	0.0000580	7178607	0.0000220	7178607	0.000111	0.0000050	7178607
Dissolved Lithium (Li)	mg/L	0.00333	7178607	0.00609	7178607	0.00465	0.00050	7178607
Dissolved Manganese (Mn)	mg/L	0.311	7178607	0.137	7178607	0.154	0.000050	7178607
Dissolved Mercury (Hg)	mg/L	<0.000010	7178607	<0.000010	7178607	<0.000010	0.000010	7178607
Dissolved Molybdenum (Mo)	mg/L	0.00149	7178607	0.000791	7178607	0.00132	0.000050	7178607
Dissolved Nickel (Ni)	mg/L	0.00460	7178607	0.00327	7178607	0.00359	0.000020	7178607
Dissolved Selenium (Se)	mg/L	0.00154	7178607	0.000738	7178607	0.000568	0.000040	7178607
Dissolved Silicon (Si)	mg/L	4.65	7178607	5.57	7178607	5.91	0.10	7178607
Dissolved Silver (Ag)	mg/L	<0.0000050	7178607	<0.0000050	7178607	<0.0000050	0.0000050	7178607
Dissolved Strontium (Sr)	mg/L	0.355	7178607	0.343	7178607	0.373	0.000050	7178607
Dissolved Thallium (Tl)	mg/L	0.0000040	7178607	0.0000030	7178607	<0.0000020	0.0000020	7178607
Dissolved Tin (Sn)	mg/L	0.00047	7178607	0.00078	7178607	0.00114	0.00020	7178607
Dissolved Titanium (Ti)	mg/L	0.00075	7178607	0.00062	7178607	0.00080	0.00050	7178607
Dissolved Uranium (U)	mg/L	0.00208	7178607	0.00400	7178607	0.00490	0.0000020	7178607
Dissolved Vanadium (V)	mg/L	0.00036	7178607	0.00047	7178607	0.00053	0.00020	7178607
Dissolved Zinc (Zn)	mg/L	0.00330	7189570	0.00160	7178607	0.00710	0.00010	7178607
Dissolved Zirconium (Zr)	mg/L	0.00090	7178607	0.00050	7178607	0.00074	0.00010	7178607
Dissolved Calcium (Ca)	mg/L	68.6	7188391	58.2	7177229	73.5	0.050	7177229
Dissolved Magnesium (Mg)	mg/L	34.9	7188391	43.9	7177229	49.2	0.050	7177229
Dissolved Potassium (K)	mg/L	0.597	7188391	0.812	7177229	0.791	0.050	7177229
Dissolved Sodium (Na)	mg/L	3.00	7188391	3.20	7177229	3.84	0.050	7177229
Dissolved Sulphur (S)	mg/L	83.7 ⁽¹⁾	7188391	57.4	7177229	86.8	3.0	7177229

RDL = Reportable Detection Limit

(1) - Dissolved greater than total. Reanalysis yields similar results.

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ELEMENTS BY ATOMIC SPECTROSCOPY (WATER)

Maxxam ID		HN9920		HN9921		HN9922		
Sampling Date		2013/09/16 12:15		2013/09/16 14:00		2013/09/16 17:30		
COC#		08378570		08378570		08378570		
	UNITS	R1	QC Batch	R2	QC Batch	R3	RDL	QC Batch
Total Metals by ICPMS								
Total Aluminum (Al)	mg/L	0.0735	7178599	0.0378	7178599	0.234	0.00050	7178599
Total Antimony (Sb)	mg/L	0.000238	7178599	0.000514	7178599	0.000203	0.00020	7178599
Total Arsenic (As)	mg/L	0.000804	7178599	0.000879	7178599	0.00103	0.00020	7178599
Total Barium (Ba)	mg/L	0.0540	7178599	0.0515	7178599	0.0624	0.00020	7178599
Total Beryllium (Be)	mg/L	0.000015	7178599	<0.000010	7178599	0.000029	0.00010	7178599
Total Bismuth (Bi)	mg/L	<0.0000050	7178599	<0.0000050	7178599	0.0000050	0.0000050	7178599
Total Boron (B)	mg/L	<0.050	7178599	<0.050	7178599	<0.050	0.050	7178599
Total Cadmium (Cd)	mg/L	0.0000880	7178599	0.0000290	7178599	0.0000560	0.0000050	7178599
Total Chromium (Cr)	mg/L	0.00043	7178599	0.00085	7178599	0.00169	0.00010	7178599
Total Cobalt (Co)	mg/L	0.000643	7178599	0.000240	7178599	0.000781	0.0000050	7178599
Total Copper (Cu)	mg/L	0.00313	7178599	0.00170	7178599	0.00328	0.000050	7178599
Total Iron (Fe)	mg/L	0.548	7178599	0.270	7178599	0.999	0.0010	7178599
Total Lead (Pb)	mg/L	0.000270	7178599	0.0000470	7178599	0.000511	0.0000050	7178599
Total Lithium (Li)	mg/L	0.00348	7178599	0.00627	7178599	0.00491	0.00050	7178599
Total Manganese (Mn)	mg/L	0.321	7178599	0.147	7178599	0.181	0.000050	7178599
Total Mercury (Hg)	mg/L	<0.000010	7178599	<0.000010	7178599	<0.000010	0.000010	7178599
Total Molybdenum (Mo)	mg/L	0.00144	7178599	0.000817	7178599	0.00137	0.000050	7178599
Total Nickel (Ni)	mg/L	0.00472	7178599	0.00404	7178599	0.00531	0.000020	7178599
Total Selenium (Se)	mg/L	0.00160	7178599	0.000860	7178599	0.000628	0.000040	7178599
Total Silicon (Si)	mg/L	4.26	7178599	5.05	7178599	5.32	0.10	7178599
Total Silver (Ag)	mg/L	0.0000080	7178599	<0.0000050	7178599	0.0000080	0.0000050	7178599
Total Strontium (Sr)	mg/L	0.344	7178599	0.351	7178599	0.395	0.000050	7178599
Total Thallium (Tl)	mg/L	0.0000060	7178599	0.0000030	7178599	0.0000030	0.0000020	7178599
Total Tin (Sn)	mg/L	0.00038	7178599	0.00029	7178599	0.00096	0.00020	7178599
Total Titanium (Ti)	mg/L	0.00274	7178599	0.00122	7178599	0.00655	0.00050	7178599
Total Uranium (U)	mg/L	0.00211	7178599	0.00429	7178599	0.00540	0.0000020	7178599
Total Vanadium (V)	mg/L	0.00044	7178599	0.00037	7178599	0.00143	0.00020	7178599
Total Zinc (Zn)	mg/L	0.00422	7178599	0.00246	7178599	0.0297	0.00010	7178599
Total Zirconium (Zr)	mg/L	0.00102	7178599	0.00054	7178599	0.00099	0.00010	7178599
Total Calcium (Ca)	mg/L	71.4	7175806	57.4	7175806	68.3	0.050	7175806
Total Magnesium (Mg)	mg/L	36.1	7175806	41.9	7175806	47.3	0.050	7175806
Total Potassium (K)	mg/L	0.609	7175806	0.807	7175806	0.789	0.050	7175806
Total Sodium (Na)	mg/L	2.92	7175806	3.12	7175806	3.68	0.050	7175806
Total Sulphur (S)	mg/L	63.2	7175806	57.5	7175806	86.6	3.0	7175806

RDL = Reportable Detection Limit

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General Comments

Revised Report (Version: 3R): Reporting units for metals analysis have been changed to mg/L as per client request [GRR].

Revised Report (2013/10/11): Additional parameters have been included in the metals scan (KP5).

Sample HN9920, Elements by ICPMS Low Level (dissolved): Test repeated.

Sample HN9922, Elements by ICPMS Low Level (dissolved): Test repeated.

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QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7177336	Nitrate plus Nitrite (N)	2013/09/18	106	80 - 120	108	80 - 120	<0.020	mg/L	NC	25
7177805	Nitrite (N)	2013/09/18	99	80 - 120	104	80 - 120	<0.0050	mg/L	NC	20
7178599	Total Aluminum (Al)	2013/09/19	NC	80 - 120	102	80 - 120	<0.00050	mg/L	1	20
7178599	Total Antimony (Sb)	2013/09/19	NC	80 - 120	99	80 - 120	<0.000020	mg/L	3.5	20
7178599	Total Arsenic (As)	2013/09/19	107	80 - 120	98	80 - 120	<0.000020	mg/L	1.8	20
7178599	Total Barium (Ba)	2013/09/19	NC	80 - 120	99	80 - 120	<0.000020	mg/L	0.7	20
7178599	Total Beryllium (Be)	2013/09/19	99	80 - 120	95	80 - 120	<0.000010	mg/L	NC	20
7178599	Total Bismuth (Bi)	2013/09/19	98	80 - 120	96	80 - 120	<0.0000050	mg/L	NC	20
7178599	Total Cadmium (Cd)	2013/09/19	104	80 - 120	99	80 - 120	<0.0000050	mg/L	NC	20
7178599	Total Chromium (Cr)	2013/09/19	100	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
7178599	Total Cobalt (Co)	2013/09/19	98	80 - 120	98	80 - 120	<0.0000050	mg/L	5.2	20
7178599	Total Copper (Cu)	2013/09/19	101	80 - 120	97	80 - 120	<0.000050	mg/L	0.7	20
7178599	Total Iron (Fe)	2013/09/19	107	80 - 120	109	80 - 120	<0.0010	mg/L	2.8	20
7178599	Total Lead (Pb)	2013/09/19	101	80 - 120	102	80 - 120	<0.0000050	mg/L	1	20
7178599	Total Lithium (Li)	2013/09/19	102	80 - 120	101	80 - 120	<0.00050	mg/L	3.0	20
7178599	Total Manganese (Mn)	2013/09/19	NC	80 - 120	99	80 - 120	<0.000050	mg/L	2.4	20
7178599	Total Mercury (Hg)	2013/09/19	97	80 - 120	101	80 - 120	<0.000010	mg/L		
7178599	Total Molybdenum (Mo)	2013/09/19	NC	80 - 120	97	80 - 120	<0.000050	mg/L	2.7	20
7178599	Total Nickel (Ni)	2013/09/19	NC	80 - 120	98	80 - 120	0.000022, RDL=0.000020	mg/L	1.6	20
7178599	Total Selenium (Se)	2013/09/19	114	80 - 120	107	80 - 120	<0.000040	mg/L	1.6	20
7178599	Total Silver (Ag)	2013/09/19	100	80 - 120	98	80 - 120	<0.0000050	mg/L	NC	20
7178599	Total Strontium (Sr)	2013/09/19	NC	80 - 120	101	80 - 120	<0.000050	mg/L	1.5	20
7178599	Total Thallium (Tl)	2013/09/19	106	80 - 120	105	80 - 120	<0.0000020	mg/L	2.7	20
7178599	Total Tin (Sn)	2013/09/19	100	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
7178599	Total Titanium (Ti)	2013/09/19	115	80 - 120	100	80 - 120	<0.00050	mg/L	NC	20
7178599	Total Uranium (U)	2013/09/19	104	80 - 120	102	80 - 120	<0.0000020	mg/L	4.3	20
7178599	Total Vanadium (V)	2013/09/19	103	80 - 120	100	80 - 120	<0.00020	mg/L	NC	20
7178599	Total Zinc (Zn)	2013/09/19	105	80 - 120	101	80 - 120	<0.00010	mg/L	4.2	20
7178599	Total Boron (B)	2013/09/19					<0.050	mg/L	NC	20
7178599	Total Silicon (Si)	2013/09/19					<0.10	mg/L	1.8	20
7178599	Total Zirconium (Zr)	2013/09/19					<0.00010	mg/L	NC	20
7178607	Dissolved Aluminum (Al)	2013/09/19	NC	80 - 120	98	80 - 120	<0.00050	mg/L	2.1	20
7178607	Dissolved Antimony (Sb)	2013/09/19	NC	80 - 120	101	80 - 120	<0.000020	mg/L	0.3	20
7178607	Dissolved Arsenic (As)	2013/09/19	103	80 - 120	100	80 - 120	<0.000020	mg/L	0.2	20
7178607	Dissolved Barium (Ba)	2013/09/19	NC	80 - 120	102	80 - 120	<0.000020	mg/L	2.6	20
7178607	Dissolved Beryllium (Be)	2013/09/19	100	80 - 120	100	80 - 120	<0.000010	mg/L	NC	20
7178607	Dissolved Bismuth (Bi)	2013/09/19	94	80 - 120	94	80 - 120	<0.0000050	mg/L	NC	20
7178607	Dissolved Cadmium (Cd)	2013/09/19	101	80 - 120	100	80 - 120	<0.0000050	mg/L	NC	20
7178607	Dissolved Chromium (Cr)	2013/09/19	98	80 - 120	98	80 - 120	<0.00010	mg/L	NC	20
7178607	Dissolved Cobalt (Co)	2013/09/19	94	80 - 120	98	80 - 120	<0.0000050	mg/L	3.0	20

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 Ecological Logistics & Research Ltd
 Client Project #: 13-156 SEPTEMBER 2013 CLINTON
 Site Location: CLINTON CREEK
 Sampler Initials: DD

QUALITY ASSURANCE REPORT

QC Batch	Parameter	Date	Matrix Spike		Spiked Blank		Method Blank		RPD	
			% Recovery	QC Limits	% Recovery	QC Limits	Value	UNITS	Value (%)	QC Limits
7178607	Dissolved Copper (Cu)	2013/09/19	95	80 - 120	97	80 - 120	<0.000050	mg/L		
7178607	Dissolved Iron (Fe)	2013/09/19	104	80 - 120	112	80 - 120	<0.0010	mg/L	0.2	20
7178607	Dissolved Lead (Pb)	2013/09/19	98	80 - 120	101	80 - 120	<0.0000050	mg/L		
7178607	Dissolved Lithium (Li)	2013/09/19	101	80 - 120	100	80 - 120	<0.00050	mg/L	6.3	20
7178607	Dissolved Manganese (Mn)	2013/09/19	NC	80 - 120	98	80 - 120	<0.000050	mg/L	2.0	20
7178607	Dissolved Mercury (Hg)	2013/09/19	99	80 - 120	99	80 - 120	<0.000010	mg/L		
7178607	Dissolved Molybdenum (Mo)	2013/09/19	NC	80 - 120	107	80 - 120	<0.000050	mg/L	1.2	20
7178607	Dissolved Nickel (Ni)	2013/09/19	NC	80 - 120	97	80 - 120	<0.000020	mg/L	1	20
7178607	Dissolved Selenium (Se)	2013/09/19	116	80 - 120	106	80 - 120	<0.000040	mg/L	3.6	20
7178607	Dissolved Silver (Ag)	2013/09/19	99	80 - 120	98	80 - 120	<0.0000050	mg/L	NC	20
7178607	Dissolved Strontium (Sr)	2013/09/19	NC	80 - 120	101	80 - 120	<0.000050	mg/L	1.4	20
7178607	Dissolved Thallium (Tl)	2013/09/19	102	80 - 120	102	80 - 120	<0.0000020	mg/L	0.7	20
7178607	Dissolved Tin (Sn)	2013/09/19	103	80 - 120	98	80 - 120	<0.00020	mg/L	NC	20
7178607	Dissolved Titanium (Ti)	2013/09/19	106	80 - 120	97	80 - 120	<0.00050	mg/L	NC	20
7178607	Dissolved Uranium (U)	2013/09/19	102	80 - 120	101	80 - 120	<0.0000020	mg/L	3.9	20
7178607	Dissolved Vanadium (V)	2013/09/19	104	80 - 120	101	80 - 120	<0.00020	mg/L	NC	20
7178607	Dissolved Zinc (Zn)	2013/09/19	NC	80 - 120	104	80 - 120	<0.00010	mg/L		
7178607	Dissolved Boron (B)	2013/09/19					<0.050	mg/L	NC	20
7178607	Dissolved Silicon (Si)	2013/09/19					<0.10	mg/L	1	20
7178607	Dissolved Zirconium (Zr)	2013/09/19					<0.00010	mg/L	NC	20
7178795	Ammonia (N)	2013/09/19	NC	80 - 120	102	80 - 120	<0.0050	mg/L	NC	20
7178903	Dissolved Organic Carbon (C)	2013/09/19	101	80 - 120	106	80 - 120	<0.50	mg/L	1.1	20
7180688	Dissolved Sulphate (SO4)	2013/09/19	NC	80 - 120	105	80 - 120	<0.50	mg/L	1.3	20
7181547	Total Suspended Solids	2013/09/20	105	80 - 120	100	80 - 120	<4.0	mg/L	NC	20
7183556	Total Phosphorus (P)	2013/09/20			105	80 - 120	<0.0050	mg/L	NC	20
7183616	Dissolved Sulphate (SO4)	2013/09/20			103	80 - 120	0.51, RDL=0.50	mg/L	3.8	20
7186259	Total Nitrogen (N)	2013/09/23	95	80 - 120	92	80 - 120	<0.020	mg/L	NC	20
7189570	Dissolved Copper (Cu)	2013/09/25			92	80 - 120	<0.000050	mg/L		
7189570	Dissolved Zinc (Zn)	2013/09/25			103	80 - 120	<0.00010	mg/L		

N/A = Not Applicable

RDL = Reportable Detection Limit

RPD = Relative Percent Difference

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.

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.

NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.

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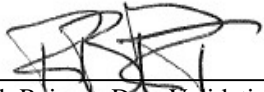
Ecological Logistics & Research Ltd
Client Project #: 13-156 SEPTEMBER 2013 CLINTON
Site Location: CLINTON CREEK
Sampler Initials: DD

NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.

Validation Signature Page

Maxxam Job #: B384508

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



Rob Reinert, Data Validation Coordinator

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

Maxxam Job #: **B384508**



08378570

Page: 1 of 1

Invoice To: Require Report? Yes No

Report To:

Company Name: Ecological Logistics & Research Ltd.
 Contact Name: Chris Jastrebski
 Address: 204-105 Titanium Way, Whitehorse YT
 PC: Y1A 0E7
 Phone / Fax#: Ph: 867.668.6386 Fax: 867.668.6385
 E-mail: chris@elf.ca

Company Name: Ecological Logistics & Research Ltd.
 Contact Name: Chris Jastrebski
 Address: 204-105 Titanium Way, Whitehorse YT
 PC: Y1A 0E7
 Phone / Fax#: Ph: 867.668.6386 Fax: 867.668.6385
 E-mail: water@elf.ca

PO #:
Quotation #: B13-213.1-DV
Project #: 13-156
Proj. Name: September 2013 Clinton Creek Monitoring
Location: Clinton Creek
Sampled by: Dave Desmarais

- REGULATORY REQUIREMENTS: SERVICE REQUESTED:**
- CSR
 - CCME
 - BC Water Quality
 - Other _____
 - DRINKING WATER
 - Regular Turn Around Time (TAT) (5 days for most tests)
 - RUSH (Please contact the lab)
 - 1 Day
 - 2 Day
 - 3 Day
- Date Required: _____

SPECIAL INSTRUCTIONS:

Return Cooler Ship Sample Bottles (please specify)

ANALYSIS REQUESTED												HOLD	Number of Containers	YES	NO	YES	NO
ICP low level Dissolved Metals (DM)	Field Filled?	Field Acidified?	IPC low level Total Metals	Field Acidified?	Nitrate	Nitrite	Sulphate	Total Phosphorous	Ammonia	Total Suspended Solids (TSS)	Dissolved Organic Carbon (DOC)						
1	R1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
2	R2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
3	R3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
4	R4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
5	R6	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
6	E1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
7	QWP1	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
8	E2	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
9	E3	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
10	E4	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
11	E7	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				
12	E8	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓				

Sample Identification	Lab Identification	Sample Type	Date/Time(24hr) Sampled
1	4119922		SEP-16 12:15
2	4119921		" " 14:00
3	4119922		" " 17:30
4	4119923		SEP 15 14:00
5	4119924	SEPTEMBER 15	" " 16:00
6	4119923		" " 12:30
7	4119926		" " 12:30
8	4119927		" " 13:00
9	4119928		" " 13:15
10	4119929		13:45 15:15
11	4119930		" " 15:15
12	4119922		" " 15:45



B384508

Print name and sign		Print name and sign			Laboratory Use Only					
*Relinquished By:	Date (yy/mm/dd):	Time (24 hr):	Received by:	Date (yy/mm/dd):	Time (24 hr):	Time Sensitive	Temperature on Receipt (C):	Custody Seal	Yes	No
D Desmarais	2013/09/		[Signature]	2013/09/	09:05	<input type="checkbox"/>	A) 3 B) 5 C) 4	Present	<input checked="" type="checkbox"/>	<input type="checkbox"/>
							<input type="checkbox"/>	Just sampled & read on ice	<input checked="" type="checkbox"/>	<input type="checkbox"/>

IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORDS. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.