EDI ENVIRONMENTAL DYNAMICS INC.
ATTN: Lyndsay Doetzel
2195 - 2nd Ave
Whitehorse YT Y1A 3T8

Date Received: 29-APR-16
Report Date: 19-MAY-16 10:56 (MT)
Version: FINAL

Client Phone: 867-393-4882

Certificate of Analysis

Lab Work Order #: L1761963

Project P.O. #: NOT SUBMITTED
Job Reference: MOUNT NANSEN 16-Y-0089
C of C Numbers: 1, 2, 3, 4
Legal Site Desc:

Can Dang
Senior Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1761963-1 Water 26-APR-16 19:00 WQ-DC-DX	L1761963-2 Water 27-APR-16 09:30 WQ-PC-U	L1761963-3 Water 27-APR-16 15:00 WQ-BC	L1761963-4 Water 27-APR-16 10:20 WQ-PC-D	L1761963-5 Water 28-APR-16 16:25 WQ-DESS-01
WATER						
Physical Tests	Conductivity (uS/cm)	80.4	110	110	117	525
	Hardness (as CaCO3) (mg/L)	41.6	55.6	55.4	57.3	277
	pH (pH)	7.22	7.13	7.47	7.22	5.68
	Total Suspended Solids (mg/L)	8.0	24.0	1060	243	23.3
	Total Dissolved Solids (mg/L)	45.8	64.1	61.7	67.7	343
Anions and Nutrients	Alkalinity, Bicarbonate (as CaCO3) (mg/L)	22.9	21.1	30.8	22.6	3.6
	Alkalinity, Carbonate (as CaCO3) (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0
	Alkalinity, Hydroxide (as CaCO3) (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0
	Alkalinity, Total (as CaCO3) (mg/L)	22.9	21.1	30.8	22.6	3.6
	Ammonia, Total (as N) (mg/L)	0.0078	0.0784	0.0314	0.0910	0.0076
	Chloride (Cl) (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50
	Fluoride (F) (mg/L)	0.032	0.031	0.051	0.034	0.039
	Nitrate (as N) (mg/L)	<0.0050	0.0263	0.0368	0.0312	<0.0050
	Nitrite (as N) (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Sulfate (SO4) (mg/L)	13.2	27.5	19.9	29.8	243
	Anion Sum (meq/L)	0.73	1.00	1.03	1.08	5.12
	Cation Sum (meq/L)	0.96	1.28	1.25	1.30	5.75
	Cation - Anion Balance (%)	13.5	12.6	9.3	9.6	5.7
Cyanides	Cyanide, Weak Acid Diss (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Cyanide, Total (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Cyanate (mg/L)	<2.0 DLIS	0.32	0.33	0.37	0.28
	Thiocyanate (SCN) (mg/L)	1.26	1.27	0.69	1.09	1.19
Total Metals	Aluminum (Al)-Total (mg/L)	0.233	0.863	15.7	3.82	0.311
	Antimony (Sb)-Total (mg/L)	0.00051	0.00076	0.00222	0.00398	0.00016
	Arsenic (As)-Total (mg/L)	0.00702	0.00820	0.0701	0.0618	0.00254
	Barium (Ba)-Total (mg/L)	0.0160	0.0481	0.406	0.120	0.0215
	Beryllium (Be)-Total (mg/L)	0.000055	0.000060	0.000639	0.000227	0.000040
	Bismuth (Bi)-Total (mg/L)	<0.000050	0.000061	0.000899	0.000550	<0.000050
	Boron (B)-Total (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cadmium (Cd)-Total (mg/L)	0.0000435	0.000168	0.00205	0.00133	0.00444
	Calcium (Ca)-Total (mg/L)	10.7	15.7	22.0	18.8	61.6
	Chromium (Cr)-Total (mg/L)	<0.00050 DLB	0.00104	0.0212	0.00478	<0.00050 DLB
	Cobalt (Co)-Total (mg/L)	0.00014	0.00065	0.00980	0.00264	0.00021
	Copper (Cu)-Total (mg/L)	<0.0050 DLB	<0.0050 DLB	0.0352	0.0203	<0.0050 DLB
	Iron (Fe)-Total (mg/L)	0.314	1.35	22.8	7.03	0.205
	Lead (Pb)-Total (mg/L)	0.000315	0.00380	0.0701	0.0416	0.000102
	Lithium (Li)-Total (mg/L)	<0.0010	0.0011	0.0101	0.0029	0.0016

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1761963-6	L1761963-7	L1761963-8	L1761963-9	L1761963-10
Description	Water	Water	Water	Water	Water
Sampled Date	28-APR-16	28-APR-16	28-APR-16	28-APR-16	28-APR-16
Sampled Time	19:40	10:35	10:00	09:15	13:30
Client ID	FIELD BLANK	WQ-SEEP-R	WQ-SEEP	WQ-DC-U	WQ-DC-R-R
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (uS/cm)	<2.0	1290	1300	708	689
Hardness (as CaCO3) (mg/L)	<0.50	689	691	384	368
pH (pH)	5.43	7.52	7.54	7.96	7.88
Total Suspended Solids (mg/L)	<3.0	60.7	35.3	11.3	6.7
Total Dissolved Solids (mg/L)	<1.0	876	952	471	453
Anions and Nutrients Alkalinity, Bicarbonate (as CaCO3) (mg/L)	<1.0	211	208	105	95.0
Alkalinity, Carbonate (as CaCO3) (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3) (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3) (mg/L)	<1.0	211	208	105	95.0
Ammonia, Total (as N) (mg/L)	<0.0050	3.34	3.18	0.400	0.308
Chloride (Cl) (mg/L)	<0.50	1.0	1.2	<0.50	0.95
Fluoride (F) (mg/L)	<0.020	0.066	0.079	0.059	0.059
Nitrate (as N) (mg/L)	<0.0050	0.362	0.395	0.0420	0.102
Nitrite (as N) (mg/L)	<0.0010	0.0111	0.0107	0.0022	0.0040
Sulfate (SO4) (mg/L)	<0.30	447	524	265	256
Anion Sum (meq/L)	<0.10	13.6	15.1	7.62	7.26
Cation Sum (meq/L)	<0.10	16.1	16.2	8.15	7.84
Cation - Anion Balance (%)	0.0	8.6	3.2	3.4	3.8
Cyanides Cyanide, Weak Acid Diss (mg/L)	<0.0050	0.0053	0.0107	<0.0050	<0.0050
Cyanide, Total (mg/L)	<0.0050	0.0493	0.0413	<0.0050	<0.0050
Cyanate (mg/L)	<0.20	<0.20	<0.20	<0.20	0.21
Thiocyanate (SCN) (mg/L)	<0.50	4.26	3.92	0.83	0.64
Total Metals Aluminum (Al)-Total (mg/L)	<0.0030	0.0667	0.0710	0.240	0.0670
Antimony (Sb)-Total (mg/L)	<0.00010	0.00063	0.00064	0.00153	0.00174
Arsenic (As)-Total (mg/L)	<0.00010	0.0948	0.101	0.0102	0.0121
Barium (Ba)-Total (mg/L)	<0.000050	0.0621	0.0633	0.0382	0.0451
Beryllium (Be)-Total (mg/L)	<0.000020	<0.000020	0.000022	<0.000020	<0.000020
Bismuth (Bi)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron (B)-Total (mg/L)	<0.010	0.044	0.046	0.013	0.013
Cadmium (Cd)-Total (mg/L)	<0.0000050	0.000344	0.000363	0.000134	0.000108
Calcium (Ca)-Total (mg/L)	<0.050	196	200	92.3	93.6
Chromium (Cr)-Total (mg/L)	<0.00010	<0.0010 DLB	<0.0010 DLB	<0.00050 DLB	<0.00050 DLB
Cobalt (Co)-Total (mg/L)	<0.00010	0.00578	0.00603	0.00105	0.00105
Copper (Cu)-Total (mg/L)	0.00216 RRV	0.00503	0.00540	<0.0050 DLB	0.00226
Iron (Fe)-Total (mg/L)	<0.010	14.1	14.5	1.64	1.12
Lead (Pb)-Total (mg/L)	0.000072 RRV	0.000461	0.000605	0.000799	0.00116
Lithium (Li)-Total (mg/L)	<0.0010	0.0014	0.0015	0.0025	0.0022

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1761963-11 Water 28-APR-16 13:15 WQ-DC-R	L1761963-12 Water 28-APR-16 17:30 WQ-NW-SEEP-02	L1761963-13 Water 27-APR-16 12:55 WQ-VC-DBC	L1761963-14 Water 26-APR-16 18:35 WQ-DC-DX+105	L1761963-15 Water 27-APR-16 18:20 WQ-VC-R+150
WATER						
Physical Tests	Conductivity (uS/cm)	691	455	78.7	113	100
	Hardness (as CaCO3) (mg/L)	371	226	42.2	52.7	50.1
	pH (pH)	7.90	7.43	7.46	7.11	7.51
	Total Suspended Solids (mg/L)	<3.0	28.0	717	34.0	174
	Total Dissolved Solids (mg/L)	456	291	43.1	63.0	55.6
Anions and Nutrients	Alkalinity, Bicarbonate (as CaCO3) (mg/L)	95.7	22.7	31.3	15.3	32.0
	Alkalinity, Carbonate (as CaCO3) (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0
	Alkalinity, Hydroxide (as CaCO3) (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0
	Alkalinity, Total (as CaCO3) (mg/L)	95.7	22.7	31.3	15.3	32.0
	Ammonia, Total (as N) (mg/L)	0.304	0.0094	0.0173	0.0065	0.0119
	Chloride (Cl) (mg/L)	0.72	1.10	<0.50	<0.50	<0.50
	Fluoride (F) (mg/L)	0.059	0.109	0.042	0.037	0.041
	Nitrate (as N) (mg/L)	0.104	0.0775	0.0287	<0.0050	0.0207
	Nitrite (as N) (mg/L)	0.0027	<0.0010	<0.0010	<0.0010	<0.0010
	Sulfate (SO4) (mg/L)	257	191	6.87	30.8	16.1
	Anion Sum (meq/L)	7.29	4.47	0.77	0.95	0.98
	Cation Sum (meq/L)	7.91	4.57	0.95	1.19	1.12
	Cation - Anion Balance (%)	4.0	1.1	10.3	11.3	6.6
Cyanides	Cyanide, Weak Acid Diss (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Cyanide, Total (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Cyanate (mg/L)	0.26	<0.20	0.44	<0.20	0.20
	Thiocyanate (SCN) (mg/L)	0.63	<0.50	0.67	1.01	0.62
Total Metals	Aluminum (Al)-Total (mg/L)	0.0748	0.340	17.3	0.224	6.26
	Antimony (Sb)-Total (mg/L)	0.00196	0.00238	0.00088	0.00213	0.00089
	Arsenic (As)-Total (mg/L)	0.0148	0.0213	0.0217	0.0166	0.0157
	Barium (Ba)-Total (mg/L)	0.0435	0.0132	0.444	0.0259	0.176
	Beryllium (Be)-Total (mg/L)	<0.000020	0.000046	0.000630	0.000029	0.000230
	Bismuth (Bi)-Total (mg/L)	<0.000050	0.000183	0.000394	<0.000050	0.000217
	Boron (B)-Total (mg/L)	0.013	<0.010	<0.010	<0.010	<0.010
	Cadmium (Cd)-Total (mg/L)	0.000154	0.00213	0.000543	0.00231	0.000298
	Calcium (Ca)-Total (mg/L)	91.4	70.2	18.2	15.3	14.9
	Chromium (Cr)-Total (mg/L)	<0.00050 DLB	<0.00050 DLB	0.0237	<0.00050 DLB	0.00861
	Cobalt (Co)-Total (mg/L)	0.00105	0.00024	0.00939	0.00022	0.00327
	Copper (Cu)-Total (mg/L)	<0.0050 DLB	0.0507	0.0316	0.00687	0.0133
	Iron (Fe)-Total (mg/L)	1.11	1.07	25.2	0.324	8.98
	Lead (Pb)-Total (mg/L)	0.00269	0.0129	0.0271	0.00378	0.0132
	Lithium (Li)-Total (mg/L)	0.0021	0.0015	0.0125	0.0011	0.0048

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1761963-16	L1761963-17	L1761963-18	L1761963-19	L1761963-20
Description	Water	Water	Water	Water	Water
Sampled Date	27-APR-16		28-APR-16	28-APR-16	27-APR-16
Sampled Time	19:15		16:00	16:45	14:25
Client ID	WQ-VC-UMN	TRAVEL BLANK	WQ-DC-D16	WQ-CH-P-13-01	WQ-VC-U
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (uS/cm)	115	<2.0	457	960	72.3
Hardness (as CaCO3) (mg/L)	56.3	<0.50	239	544	38.4
pH (pH)	7.56	5.32	7.97	4.99	7.45
Total Suspended Solids (mg/L)	268	<3.0	3.3	<3.0	460
Total Dissolved Solids (mg/L)	63.6	<1.0	285	696	38.7
Anions and Nutrients Alkalinity, Bicarbonate (as CaCO3) (mg/L)	35.1	<1.0	83.6	<1.0	29.9
Alkalinity, Carbonate (as CaCO3) (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Hydroxide (as CaCO3) (mg/L)	<1.0	<1.0	<1.0	<1.0	<1.0
Alkalinity, Total (as CaCO3) (mg/L)	35.1	<1.0	83.6	<1.0	29.9
Ammonia, Total (as N) (mg/L)	0.0136	<0.0050	0.0157	0.0098	0.0163
Chloride (Cl) (mg/L)	<0.50	<0.50	<0.50	<1.0 DLA	<0.50
Fluoride (F) (mg/L)	0.041	<0.020	0.087	0.051	0.042
Nitrate (as N) (mg/L)	0.0289	<0.0050	<0.0050	0.011	0.0257
Nitrite (as N) (mg/L)	<0.0010	<0.0010	<0.0010	<0.0020 DLA	<0.0010
Sulfate (SO4) (mg/L)	19.9	<0.30	145	509	4.78
Anion Sum (meq/L)	1.12	<0.10	4.70	10.6	0.70
Cation Sum (meq/L)	1.24	<0.10	4.97	11.2	0.87
Cation - Anion Balance (%)	5.2	0.0	2.8	2.8	10.8
Cyanides Cyanide, Weak Acid Diss (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cyanide, Total (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cyanate (mg/L)	<0.20	<0.20	<0.20	<0.20	0.26
Thiocyanate (SCN) (mg/L)	0.62	<0.50	0.65	0.98	0.61
Total Metals Aluminum (Al)-Total (mg/L)	5.46	<0.0030	0.0500	0.302	18.6
Antimony (Sb)-Total (mg/L)	0.00084	<0.00010	0.00506	0.00010	0.00083
Arsenic (As)-Total (mg/L)	0.0151	<0.00010	0.0245	0.00210	0.0169
Barium (Ba)-Total (mg/L)	0.165	<0.000050	0.0358	0.0190	0.411
Beryllium (Be)-Total (mg/L)	0.000202	<0.000020	<0.000020	0.000041	0.000548
Bismuth (Bi)-Total (mg/L)	0.000181	<0.000050	<0.000050	<0.000050	0.000333
Boron (B)-Total (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium (Cd)-Total (mg/L)	0.000283	<0.0000050	0.000346	0.0105	0.000332
Calcium (Ca)-Total (mg/L)	16.2	<0.050 RRV	65.0 DLB	111 DLB	16.3
Chromium (Cr)-Total (mg/L)	0.00758	0.00037	<0.00050	<0.00050	0.0245
Cobalt (Co)-Total (mg/L)	0.00292	<0.00010	0.00023	<0.00010	0.00916
Copper (Cu)-Total (mg/L)	0.0124	<0.00050	<0.0050 DLB	<0.0050 DLB	0.0270
Iron (Fe)-Total (mg/L)	7.65	<0.010	0.236	0.075	25.1
Lead (Pb)-Total (mg/L)	0.0121	<0.000050	0.00498	<0.000050	0.0198
Lithium (Li)-Total (mg/L)	0.0042	<0.0010	0.0030	0.0024	0.0124

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1761963-21	L1761963-22			
	Description	Water	Water			
	Sampled Date	28-APR-16	28-APR-16			
	Sampled Time	11:40	11:30			
	Client ID	WQ-TP	WQ-DC-B			
Grouping	**Analyte**					
WATER						
Physical Tests	Conductivity (uS/cm)	326	694			
	Hardness (as CaCO3) (mg/L)	168	384			
	pH (pH)	7.40	7.93			
	Total Suspended Solids (mg/L)	30.0	17.3			
	Total Dissolved Solids (mg/L)	207	458			
Anions and Nutrients	Alkalinity, Bicarbonate (as CaCO3) (mg/L)	16.3	98.5			
	Alkalinity, Carbonate (as CaCO3) (mg/L)	<1.0	<1.0			
	Alkalinity, Hydroxide (as CaCO3) (mg/L)	<1.0	<1.0			
	Alkalinity, Total (as CaCO3) (mg/L)	16.3	98.5			
	Ammonia, Total (as N) (mg/L)	0.0645	0.0347			
	Chloride (Cl) (mg/L)	<0.50	<0.50			
	Fluoride (F) (mg/L)	0.059	0.055			
	Nitrate (as N) (mg/L)	0.0496	0.0149			
	Nitrite (as N) (mg/L)	<0.0010	<0.0010			
	Sulfate (SO4) (mg/L)	129	261			
	Anion Sum (meq/L)	3.01	7.40			
	Cation Sum (meq/L)	3.53	7.99			
	Cation - Anion Balance (%)	7.9	3.8			
Cyanides	Cyanide, Weak Acid Diss (mg/L)	<0.0050	<0.0050			
	Cyanide, Total (mg/L)	<0.0050	<0.0050			
	Cyanate (mg/L)	<0.20	0.21			
	Thiocyanate (SCN) (mg/L)	<0.50	0.73			
Total Metals	Aluminum (Al)-Total (mg/L)	0.136	0.329			
	Antimony (Sb)-Total (mg/L)	0.0145	0.00178			
	Arsenic (As)-Total (mg/L)	0.0539	0.00935			
	Barium (Ba)-Total (mg/L)	0.00708	0.0393			
	Beryllium (Be)-Total (mg/L)	<0.000020	0.000022			
	Bismuth (Bi)-Total (mg/L)	0.000447	<0.000050			
	Boron (B)-Total (mg/L)	<0.010	<0.010			
	Cadmium (Cd)-Total (mg/L)	0.00211	0.000138			
	Calcium (Ca)-Total (mg/L)	51.7	88.7			
	Chromium (Cr)-Total (mg/L)	<0.00050 DLB	<0.0010 DLB			
	Cobalt (Co)-Total (mg/L)	0.00038	0.00051			
	Copper (Cu)-Total (mg/L)	0.0263	<0.0050 DLB			
	Iron (Fe)-Total (mg/L)	0.590	1.58			
	Lead (Pb)-Total (mg/L)	0.0305	0.00111			
	Lithium (Li)-Total (mg/L)	0.0015	0.0029			

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1761963-1	L1761963-2	L1761963-3	L1761963-4	L1761963-5
Description	Water	Water	Water	Water	Water
Sampled Date	26-APR-16	27-APR-16	27-APR-16	27-APR-16	28-APR-16
Sampled Time	19:00	09:30	15:00	10:20	16:25
Client ID	WQ-DC-DX	WQ-PC-U	WQ-BC	WQ-PC-D	WQ-DESS-01
Grouping / **Analyte**					
WATER					
Total Metals Magnesium (Mg)-Total (mg/L)	3.12	3.59	8.14	4.79	28.4
Manganese (Mn)-Total (mg/L)	0.0109	0.215	1.36	0.424	0.226
Mercury (Hg)-Total (mg/L)	0.0000257	0.0000246	0.000097	0.000065	0.0000216
Molybdenum (Mo)-Total (mg/L)	0.000051	0.000107	0.00120	0.000259	<0.000050
Nickel (Ni)-Total (mg/L)	0.00058	0.00242	0.0147	0.00436	0.00390
Phosphorus (P)-Total (mg/L)	0.062	0.052	0.861	0.227	<0.050
Potassium (K)-Total (mg/L)	3.30	1.43	3.39	1.96	2.16
Selenium (Se)-Total (mg/L)	0.000053	<0.000050	0.000220	0.000088	<0.000050
Silicon (Si)-Total (mg/L)	2.46	3.38	26.5	8.09	3.00
Silver (Ag)-Total (mg/L)	0.000027	0.000065	0.000747	0.000505	0.000012
Sodium (Na)-Total (mg/L)	0.564	1.20	2.32	1.41	1.22
Strontium (Sr)-Total (mg/L)	0.0362	0.104	0.168	0.126	0.163
Sulfur (S)-Total (mg/L)	4.46	9.06	6.81	10.2	83.8
Thallium (Tl)-Total (mg/L)	<0.000010	0.000016	0.000233	0.000089	<0.000010
Tin (Sn)-Total (mg/L)	<0.00010	<0.00010	0.00025	<0.00010	<0.00010
Titanium (Ti)-Total (mg/L)	0.00859	0.0200	0.496	0.114	0.00207
Uranium (U)-Total (mg/L)	0.000031	0.000277	0.00249	0.000789	0.000015
Vanadium (V)-Total (mg/L)	0.00149	0.00263	0.0454	0.0114	0.00156
Zinc (Zn)-Total (mg/L)	0.0049	0.0197	0.173	0.121	1.65
Zirconium (Zr)-Total (mg/L)	<0.00030	<0.00030	0.00167	0.00051	<0.00030
Dissolved Metals Dissolved Mercury Filtration Location	FIELD	FIELD	FIELD	FIELD	FIELD
Dissolved Metals Filtration Location	FIELD	FIELD	FIELD	FIELD	FIELD
Aluminum (Al)-Dissolved (mg/L)	0.116	0.343	0.186	0.313	0.270
Antimony (Sb)-Dissolved (mg/L)	0.00041	0.00041	0.00029	0.00055	0.00010
Arsenic (As)-Dissolved (mg/L)	0.00429	0.00391	0.00243	0.00408	0.00195
Barium (Ba)-Dissolved (mg/L)	0.0137	0.0402	0.0444	0.0386	0.0205
Beryllium (Be)-Dissolved (mg/L)	<0.000020	0.000052	0.000036	0.000042	0.000039
Bismuth (Bi)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron (B)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium (Cd)-Dissolved (mg/L)	0.0000371	0.0000854	0.000137	0.000288	0.00438
Calcium (Ca)-Dissolved (mg/L)	11.3	16.3	16.2	16.8	63.2
Chromium (Cr)-Dissolved (mg/L)	0.00023	0.00027	0.00017	0.00025	0.00020
Cobalt (Co)-Dissolved (mg/L)	<0.00010	0.00042	0.00039	0.00045	0.00019
Copper (Cu)-Dissolved (mg/L)	0.00210	0.00315	0.00452	0.00519	0.00262
Iron (Fe)-Dissolved (mg/L)	0.109	0.470	0.342	0.443	0.155
Lead (Pb)-Dissolved (mg/L)	0.000067	0.000429	0.000673	0.00100	0.000060
Lithium (Li)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	0.0017

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1761963-6 Water 28-APR-16 19:40 FIELD BLANK	L1761963-7 Water 28-APR-16 10:35 WQ-SEEP-R	L1761963-8 Water 28-APR-16 10:00 WQ-SEEP	L1761963-9 Water 28-APR-16 09:15 WQ-DC-U	L1761963-10 Water 28-APR-16 13:30 WQ-DC-R-R
WATER						
Total Metals	Magnesium (Mg)-Total (mg/L)	<0.10	44.8	45.4	32.2	31.0
	Manganese (Mn)-Total (mg/L)	<0.00010	4.91	5.09	0.986	0.976
	Mercury (Hg)-Total (mg/L)	<0.0000050	0.0000102	0.0000129	0.0000174	0.0000164
	Molybdenum (Mo)-Total (mg/L)	<0.000050	0.000874	0.000908	0.000245	0.000268
	Nickel (Ni)-Total (mg/L)	<0.00050	0.00260	0.00274	0.00138	0.00115
	Phosphorus (P)-Total (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Potassium (K)-Total (mg/L)	<0.10	4.94	5.13	2.73	2.99
	Selenium (Se)-Total (mg/L)	<0.000050	0.000227	0.000208	0.000070	0.000087
	Silicon (Si)-Total (mg/L)	<0.050	6.38	6.50	3.51	3.34
	Silver (Ag)-Total (mg/L)	<0.000010	0.000056	0.000077	0.000024	0.000039
	Sodium (Na)-Total (mg/L)	<0.050	26.1	26.7	5.39	6.95
	Strontium (Sr)-Total (mg/L)	<0.00020	0.592	0.604	0.306	0.297
	Sulfur (S)-Total (mg/L)	<0.50	179	183	88.5	89.6
	Thallium (Tl)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Tin (Sn)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Titanium (Ti)-Total (mg/L)	<0.00030	0.00196	0.00205	0.00639	0.00116
	Uranium (U)-Total (mg/L)	<0.000010	0.00165	0.00162	0.00128	0.00113
	Vanadium (V)-Total (mg/L)	<0.00050	0.00329	0.00334	0.00209	0.00231
	Zinc (Zn)-Total (mg/L)	<0.0030	0.0332	0.0289	0.0199	0.0144
	Zirconium (Zr)-Total (mg/L)	<0.00030	0.00060	0.00061	<0.00030	<0.00030
Dissolved Metals	Dissolved Mercury Filtration Location	FIELD	FIELD	FIELD	FIELD	FIELD
	Dissolved Metals Filtration Location	FIELD	FIELD	FIELD	FIELD	FIELD
	Aluminum (Al)-Dissolved (mg/L)	<0.0010	0.0337	0.0361	0.133	0.0517
	Antimony (Sb)-Dissolved (mg/L)	<0.00010	0.00049	0.00048	0.00145	0.00158
	Arsenic (As)-Dissolved (mg/L)	<0.00010	0.0661	0.0682	0.00826	0.00896
	Barium (Ba)-Dissolved (mg/L)	<0.000050	0.0577	0.0599	0.0369	0.0435
	Beryllium (Be)-Dissolved (mg/L)	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020
	Bismuth (Bi)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Boron (B)-Dissolved (mg/L)	<0.010	0.043	0.043	0.012	0.013
	Cadmium (Cd)-Dissolved (mg/L)	<0.0000050	0.000205	0.000205	0.000109	0.0000886
	Calcium (Ca)-Dissolved (mg/L)	<0.050	201	201	97.9	95.6
	Chromium (Cr)-Dissolved (mg/L)	<0.00010	0.00046	0.00035	0.00016	0.00016
	Cobalt (Co)-Dissolved (mg/L)	<0.00010	0.00578	0.00576	0.00101	0.00101
	Copper (Cu)-Dissolved (mg/L)	<0.00020	0.00247	0.00280	0.00221	0.00200
	Iron (Fe)-Dissolved (mg/L)	<0.010	12.0	12.1	1.38	0.865
	Lead (Pb)-Dissolved (mg/L)	<0.000050	<0.000050	0.000060	0.000265	0.000376
	Lithium (Li)-Dissolved (mg/L)	<0.0010	0.0014	0.0014	0.0026	0.0023

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1761963-11	L1761963-12	L1761963-13	L1761963-14	L1761963-15
Description	Water	Water	Water	Water	Water
Sampled Date	28-APR-16	28-APR-16	27-APR-16	26-APR-16	27-APR-16
Sampled Time	13:15	17:30	12:55	18:35	18:20
Client ID	WQ-DC-R	WQ-NW-SEEP-02	WQ-VC-DBC	WQ-DC-DX+105	WQ-VC-R+150
Grouping / **Analyte**					
WATER					
Total Metals					
Magnesium (Mg)-Total (mg/L)	29.9	10.6	8.58	3.51	5.63
Manganese (Mn)-Total (mg/L)	0.974	0.102	0.562	0.104	0.313
Mercury (Hg)-Total (mg/L)	0.0000156	0.0000111	0.000094	0.0000240	0.000053
Molybdenum (Mo)-Total (mg/L)	0.000272	0.000144	0.000710	0.000057	0.000513
Nickel (Ni)-Total (mg/L)	0.00117	0.00055	0.0148	0.00131	0.00573
Phosphorus (P)-Total (mg/L)	<0.050	0.057	0.984	<0.050	0.261
Potassium (K)-Total (mg/L)	2.96	1.23	2.70	3.08	1.89
Selenium (Se)-Total (mg/L)	0.000077	0.000094	0.000257	0.000074	0.000151
Silicon (Si)-Total (mg/L)	3.27	1.46	24.5	2.49	11.4
Silver (Ag)-Total (mg/L)	0.000054	0.000320	0.000237	0.000119	0.000150
Sodium (Na)-Total (mg/L)	6.72	0.379	2.06	0.556	1.56
Strontium (Sr)-Total (mg/L)	0.286	0.141	0.188	0.0424	0.130
Sulfur (S)-Total (mg/L)	86.4	63.2	2.70	10.5	5.39
Thallium (Tl)-Total (mg/L)	<0.000010	0.000036	0.000154	0.000017	0.000078
Tin (Sn)-Total (mg/L)	<0.00010	<0.00010	0.00022	<0.00010	0.00011
Titanium (Ti)-Total (mg/L)	0.00150	0.00396	0.502	0.00416	0.198
Uranium (U)-Total (mg/L)	0.00108	0.000281	0.00251	0.000054	0.000948
Vanadium (V)-Total (mg/L)	0.00222	0.00223	0.0540	0.00134	0.0190
Zinc (Zn)-Total (mg/L)	0.0180	0.120	0.0986	0.316	0.0398
Zirconium (Zr)-Total (mg/L)	<0.00030	<0.00030	0.00129	<0.00030	0.00086
Dissolved Metals					
Dissolved Mercury Filtration Location	FIELD	FIELD	FIELD	FIELD	FIELD
Dissolved Metals Filtration Location	FIELD	FIELD	FIELD	FIELD	FIELD
Aluminum (Al)-Dissolved (mg/L)	0.0516	0.0106	0.154	0.142	0.125
Antimony (Sb)-Dissolved (mg/L)	0.00160	0.00077	<0.00010	0.00157	0.00020
Arsenic (As)-Dissolved (mg/L)	0.00949	0.00280	0.00061	0.00889	0.00150
Barium (Ba)-Dissolved (mg/L)	0.0438	0.00829	0.0587	0.0229	0.0556
Beryllium (Be)-Dissolved (mg/L)	<0.000020	<0.000020	0.000033	0.000028	0.000021
Bismuth (Bi)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron (B)-Dissolved (mg/L)	0.013	<0.010	<0.010	<0.010	<0.010
Cadmium (Cd)-Dissolved (mg/L)	0.000111	0.00160	0.0000408	0.00219	0.0000445
Calcium (Ca)-Dissolved (mg/L)	96.5	72.8	11.4	15.4	13.4
Chromium (Cr)-Dissolved (mg/L)	0.00016	<0.00010	0.00017	0.00019	0.00022
Cobalt (Co)-Dissolved (mg/L)	0.00105	<0.00010	0.00021	0.00018	0.00023
Copper (Cu)-Dissolved (mg/L)	0.00202	0.00907	0.00362	0.00631	0.00323
Iron (Fe)-Dissolved (mg/L)	0.857	0.021	0.274	0.139	0.299
Lead (Pb)-Dissolved (mg/L)	0.000422	0.000390	0.000205	0.000859	0.000182
Lithium (Li)-Dissolved (mg/L)	0.0022	0.0012	<0.0010	0.0011	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1761963-16	L1761963-17	L1761963-18	L1761963-19	L1761963-20
Description	Water	Water	Water	Water	Water
Sampled Date	27-APR-16		28-APR-16	28-APR-16	27-APR-16
Sampled Time	19:15		16:00	16:45	14:25
Client ID	WQ-VC-UMN	TRAVEL BLANK	WQ-DC-D16	WQ-CH-P-13-01	WQ-VC-U
Grouping / **Analyte**					
WATER					
Total Metals Magnesium (Mg)-Total (mg/L)	5.98	<0.10	18.6	57.4	8.26
Manganese (Mn)-Total (mg/L)	0.305	0.00017 RRV	0.452	0.466	0.448
Mercury (Hg)-Total (mg/L)	0.0000093	<0.0000050	0.0000171	0.0000189	0.000094
Molybdenum (Mo)-Total (mg/L)	0.000504	<0.000050	0.000167	<0.000050	0.000714
Nickel (Ni)-Total (mg/L)	0.00511	0.00081 RRV	0.00082	0.00641	0.0143
Phosphorus (P)-Total (mg/L)	0.213	<0.050	<0.050	<0.050	0.843
Potassium (K)-Total (mg/L)	1.77	<0.10	3.20	2.34	2.78
Selenium (Se)-Total (mg/L)	0.000119	<0.000050	<0.000050	<0.000050	0.000248
Silicon (Si)-Total (mg/L)	10.1	<0.050	4.00	3.09	26.4
Silver (Ag)-Total (mg/L)	0.000137	<0.000010	0.000093	0.000013	0.000140
Sodium (Na)-Total (mg/L)	1.60	<0.050	1.89	1.76	2.24
Strontium (Sr)-Total (mg/L)	0.140	<0.00020	0.165	0.274	0.175
Sulfur (S)-Total (mg/L)	6.67	<0.50	50.1	166	2.03
Thallium (Tl)-Total (mg/L)	0.000067	<0.000010	<0.000010	<0.000010	0.000160
Tin (Sn)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	0.00024
Titanium (Ti)-Total (mg/L)	0.168	<0.00030	0.00147	0.00141	0.568
Uranium (U)-Total (mg/L)	0.000898	<0.000010	0.000573	<0.000010	0.00204
Vanadium (V)-Total (mg/L)	0.0168	<0.00050	0.00112	0.00170	0.0551
Zinc (Zn)-Total (mg/L)	0.0363	<0.0030	0.0868	3.74	0.0785
Zirconium (Zr)-Total (mg/L)	0.00065	<0.00030	<0.00030	<0.00030	0.00116
Dissolved Metals Dissolved Mercury Filtration Location	FIELD		FIELD	FIELD	FIELD
Dissolved Metals Filtration Location	FIELD		FIELD	FIELD	FIELD
Aluminum (Al)-Dissolved (mg/L)	0.116		0.0259	0.296	0.164
Antimony (Sb)-Dissolved (mg/L)	0.00021		0.00461	<0.00010	<0.00010
Arsenic (As)-Dissolved (mg/L)	0.00161		0.0199	0.00162	0.00039
Barium (Ba)-Dissolved (mg/L)	0.0559		0.0342	0.0195	0.0581
Beryllium (Be)-Dissolved (mg/L)	<0.000020		<0.000020	0.000039	0.000022
Bismuth (Bi)-Dissolved (mg/L)	<0.000050		<0.000050	<0.000050	<0.000050
Boron (B)-Dissolved (mg/L)	<0.010		<0.010	<0.010	<0.010
Cadmium (Cd)-Dissolved (mg/L)	0.0000428		0.000250	0.0110	0.0000275
Calcium (Ca)-Dissolved (mg/L)	14.9		65.0	118	10.2
Chromium (Cr)-Dissolved (mg/L)	0.00017		0.00011	0.00015	0.00019
Cobalt (Co)-Dissolved (mg/L)	0.00021		0.00021	<0.00010	0.00020
Copper (Cu)-Dissolved (mg/L)	0.00313		0.00312	0.00210	0.00345
Iron (Fe)-Dissolved (mg/L)	0.253		0.133	0.059	0.268
Lead (Pb)-Dissolved (mg/L)	0.000209		0.00140	<0.000050	0.000128
Lithium (Li)-Dissolved (mg/L)	<0.0010		0.0030	0.0025	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1761963-21	L1761963-22			
	Description	Water	Water			
	Sampled Date	28-APR-16	28-APR-16			
	Sampled Time	11:40	11:30			
	Client ID	WQ-TP	WQ-DC-B			
Grouping	**Analyte**					
WATER						
Total Metals	Magnesium (Mg)-Total (mg/L)	5.95	34.9			
	Manganese (Mn)-Total (mg/L)	0.513	0.411			
	Mercury (Hg)-Total (mg/L)	0.0000153	0.0000203			
	Molybdenum (Mo)-Total (mg/L)	0.000234	0.000180			
	Nickel (Ni)-Total (mg/L)	0.00107	0.00133			
	Phosphorus (P)-Total (mg/L)	<0.050	<0.050			
	Potassium (K)-Total (mg/L)	2.05	2.71			
	Selenium (Se)-Total (mg/L)	<0.000050	0.000068			
	Silicon (Si)-Total (mg/L)	0.971	3.65			
	Silver (Ag)-Total (mg/L)	0.000630	0.000026			
	Sodium (Na)-Total (mg/L)	1.73	3.47			
	Strontium (Sr)-Total (mg/L)	0.118	0.302			
	Sulfur (S)-Total (mg/L)	45.3	87.8			
	Thallium (Tl)-Total (mg/L)	0.000060	<0.000010			
	Tin (Sn)-Total (mg/L)	<0.00010	<0.00010			
	Titanium (Ti)-Total (mg/L)	0.00160	0.0122			
	Uranium (U)-Total (mg/L)	0.000143	0.00141			
	Vanadium (V)-Total (mg/L)	0.00104	0.00246			
	Zinc (Zn)-Total (mg/L)	0.241	0.0227			
	Zirconium (Zr)-Total (mg/L)	<0.00030	<0.00030			
Dissolved Metals	Dissolved Mercury Filtration Location	FIELD	FIELD			
	Dissolved Metals Filtration Location	FIELD	FIELD			
	Aluminum (Al)-Dissolved (mg/L)	0.0236	0.129			
	Antimony (Sb)-Dissolved (mg/L)	0.0108	0.00168			
	Arsenic (As)-Dissolved (mg/L)	0.0172	0.00714			
	Barium (Ba)-Dissolved (mg/L)	0.00454	0.0345			
	Beryllium (Be)-Dissolved (mg/L)	<0.000020	0.000024			
	Bismuth (Bi)-Dissolved (mg/L)	<0.000050	<0.000050			
	Boron (B)-Dissolved (mg/L)	<0.010	<0.010			
	Cadmium (Cd)-Dissolved (mg/L)	0.00196	0.000103			
	Calcium (Ca)-Dissolved (mg/L)	56.4	93.4			
	Chromium (Cr)-Dissolved (mg/L)	<0.00010	0.00015			
	Cobalt (Co)-Dissolved (mg/L)	0.00035	0.00043			
	Copper (Cu)-Dissolved (mg/L)	0.0204	0.00220			
	Iron (Fe)-Dissolved (mg/L)	0.081	1.11			
	Lead (Pb)-Dissolved (mg/L)	0.00245	0.000322			
	Lithium (Li)-Dissolved (mg/L)	0.0017	0.0029			

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1761963-1 Water 26-APR-16 19:00 WQ-DC-DX	L1761963-2 Water 27-APR-16 09:30 WQ-PC-U	L1761963-3 Water 27-APR-16 15:00 WQ-BC	L1761963-4 Water 27-APR-16 10:20 WQ-PC-D	L1761963-5 Water 28-APR-16 16:25 WQ-DESS-01
WATER						
Dissolved Metals	Magnesium (Mg)-Dissolved (mg/L)	3.26	3.62	3.66	3.74	29.0
	Manganese (Mn)-Dissolved (mg/L)	0.00859	0.203	0.224	0.220	0.221
	Mercury (Hg)-Dissolved (mg/L)	0.0000222	0.0000211	0.0000171	0.0000194	0.0000163
	Molybdenum (Mo)-Dissolved (mg/L)	<0.000050	0.000079	0.000463	0.000081	<0.000050
	Nickel (Ni)-Dissolved (mg/L)	<0.00050	0.00125	0.00121	0.00116	0.00387
	Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Potassium (K)-Dissolved (mg/L)	3.46	1.37	1.26	1.35	2.15
	Selenium (Se)-Dissolved (mg/L)	0.000053	0.000053	0.000060	0.000060	0.000060
	Silicon (Si)-Dissolved (mg/L)	2.44	2.63	2.98	2.63	3.00
	Silver (Ag)-Dissolved (mg/L)	0.000022	0.000017	0.000019	0.000019	<0.000010
	Sodium (Na)-Dissolved (mg/L)	0.577	1.43	1.31	1.19	1.23
	Strontium (Sr)-Dissolved (mg/L)	0.0364	0.104	0.100	0.105	0.163
	Sulfur (S)-Dissolved (mg/L)	4.65	9.43	6.82	9.95	84.5
	Thallium (Tl)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Tin (Sn)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Titanium (Ti)-Dissolved (mg/L)	0.00189	0.00275	0.00319	0.00277	0.00082
	Uranium (U)-Dissolved (mg/L)	0.000023	0.000208	0.000449	0.000209	0.000012
	Vanadium (V)-Dissolved (mg/L)	<0.00050	<0.00050	0.00062	<0.00050	<0.00050
	Zinc (Zn)-Dissolved (mg/L)	0.0036	0.0122	0.0049	0.0356	1.68
	Zirconium (Zr)-Dissolved (mg/L)	<0.00030	0.00038	0.00038	0.00049	<0.00030

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1761963-6	L1761963-7	L1761963-8	L1761963-9	L1761963-10
Description	Water	Water	Water	Water	Water
Sampled Date	28-APR-16	28-APR-16	28-APR-16	28-APR-16	28-APR-16
Sampled Time	19:40	10:35	10:00	09:15	13:30
Client ID	FIELD BLANK	WQ-SEEP-R	WQ-SEEP	WQ-DC-U	WQ-DC-R-R
Grouping / **Analyte**					
WATER					
Dissolved Metals Magnesium (Mg)-Dissolved (mg/L)	<0.10	45.7	45.8	34.0	31.4
Manganese (Mn)-Dissolved (mg/L)	0.00019 RRV	4.99	4.93	1.01	0.957
Mercury (Hg)-Dissolved (mg/L)	<0.0000050	0.0000123	0.0000129	0.0000130	0.0000101
Molybdenum (Mo)-Dissolved (mg/L)	<0.000050	0.000857	0.000859	0.000236	0.000244
Nickel (Ni)-Dissolved (mg/L)	<0.00050	0.00239	0.00240	0.00128	0.00109
Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium (K)-Dissolved (mg/L)	<0.10	4.98	5.00	2.84	2.92
Selenium (Se)-Dissolved (mg/L)	<0.000050	0.000213	0.000228	0.000070	0.000061
Silicon (Si)-Dissolved (mg/L)	<0.050	6.37	6.39	3.52	3.32
Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	0.000012	0.000010	0.000014
Sodium (Na)-Dissolved (mg/L)	<0.050	26.8	26.9	5.64	6.89
Strontium (Sr)-Dissolved (mg/L)	<0.00020	0.595	0.599	0.315	0.295
Sulfur (S)-Dissolved (mg/L)	<0.50	178	179	91.7	89.4
Thallium (Tl)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Tin (Sn)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	0.00043 DTC
Titanium (Ti)-Dissolved (mg/L)	<0.00030	0.00100	0.00108	0.00112	0.00073
Uranium (U)-Dissolved (mg/L)	<0.000010	0.00160	0.00160	0.00133	0.00111
Vanadium (V)-Dissolved (mg/L)	<0.00050	0.00169	0.00179	0.00078	0.00073
Zinc (Zn)-Dissolved (mg/L)	<0.0010	0.0263	0.0270	0.0181	0.0138
Zirconium (Zr)-Dissolved (mg/L)	<0.00030	0.00061	0.00061	<0.00030	<0.00030

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1761963-11	L1761963-12	L1761963-13	L1761963-14	L1761963-15
Description	Water	Water	Water	Water	Water
Sampled Date	28-APR-16	28-APR-16	27-APR-16	26-APR-16	27-APR-16
Sampled Time	13:15	17:30	12:55	18:35	18:20
Client ID	WQ-DC-R	WQ-NW-SEEP-02	WQ-VC-DBC	WQ-DC-DX+105	WQ-VC-R+150
Grouping / **Analyte**					
WATER					
Dissolved Metals Magnesium (Mg)-Dissolved (mg/L)	31.7	10.7	3.36	3.48	4.06
Manganese (Mn)-Dissolved (mg/L)	0.995	0.0614	0.0429	0.0830	0.0712
Mercury (Hg)-Dissolved (mg/L)	0.0000093	<0.0000050	0.0000157	0.0000173	0.0000146
Molybdenum (Mo)-Dissolved (mg/L)	0.000267	0.000125	0.000202	<0.000050	0.000208
Nickel (Ni)-Dissolved (mg/L)	0.00110	<0.00050	0.00097	0.00116	0.00102
Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium (K)-Dissolved (mg/L)	2.96	1.05	1.06	2.99	1.10
Selenium (Se)-Dissolved (mg/L)	0.000088	0.000092	0.000065	0.000064	<0.000050
Silicon (Si)-Dissolved (mg/L)	3.38	0.912	2.97	2.36	2.77
Silver (Ag)-Dissolved (mg/L)	0.000013	0.000012	<0.000010	0.000038	0.000012
Sodium (Na)-Dissolved (mg/L)	6.90	0.376	1.04	0.549	1.21
Strontium (Sr)-Dissolved (mg/L)	0.295	0.140	0.107	0.0419	0.109
Sulfur (S)-Dissolved (mg/L)	90.3	65.4	2.52	10.6	5.57
Thallium (Tl)-Dissolved (mg/L)	<0.000010	0.000011	<0.000010	0.000011	<0.000010
Tin (Sn)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Dissolved (mg/L)	0.00078	<0.00030	0.00157	0.00160	0.00127
Uranium (U)-Dissolved (mg/L)	0.00111	0.000238	0.000268	0.000045	0.000243
Vanadium (V)-Dissolved (mg/L)	0.00076	<0.00050	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Dissolved (mg/L)	0.0159	0.0703	0.0028	0.310	0.0068
Zirconium (Zr)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	0.00038

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1761963-16	L1761963-17	L1761963-18	L1761963-19	L1761963-20
Description	Water	Water	Water	Water	Water
Sampled Date	27-APR-16		28-APR-16	28-APR-16	27-APR-16
Sampled Time	19:15		16:00	16:45	14:25
Client ID	WQ-VC-UMN	TRAVEL BLANK	WQ-DC-D16	WQ-CH-P-13-01	WQ-VC-U
Grouping **Analyte**					
WATER					
Dissolved Metals Magnesium (Mg)-Dissolved (mg/L)	4.61		18.6	60.7	3.13
Manganese (Mn)-Dissolved (mg/L)	0.0669		0.446	0.472	0.0268
Mercury (Hg)-Dissolved (mg/L)	0.0000128		0.0000143	0.0000130	0.0000156
Molybdenum (Mo)-Dissolved (mg/L)	0.000228		0.000155	<0.000050	0.000159
Nickel (Ni)-Dissolved (mg/L)	0.00081		0.00071	0.00646	0.00092
Phosphorus (P)-Dissolved (mg/L)	<0.050		<0.050	<0.050	<0.050
Potassium (K)-Dissolved (mg/L)	1.09		3.16	2.46	1.03
Selenium (Se)-Dissolved (mg/L)	<0.000050		<0.000050	0.000056	<0.000050
Silicon (Si)-Dissolved (mg/L)	2.84		4.01	3.24	2.89
Silver (Ag)-Dissolved (mg/L)	<0.000010		0.000028	0.000010	<0.000010
Sodium (Na)-Dissolved (mg/L)	1.36		1.88	1.82	0.996
Strontium (Sr)-Dissolved (mg/L)	0.122		0.162	0.289	0.101
Sulfur (S)-Dissolved (mg/L)	6.79		50.6	175	1.86
Thallium (Tl)-Dissolved (mg/L)	<0.000010		<0.000010	<0.000010	<0.000010
Tin (Sn)-Dissolved (mg/L)	<0.00010		<0.00010	<0.00010	<0.00010
Titanium (Ti)-Dissolved (mg/L)	0.00142		0.00069	0.00049	0.00186
Uranium (U)-Dissolved (mg/L)	0.000269		0.000559	<0.000010	0.000236
Vanadium (V)-Dissolved (mg/L)	<0.00050		<0.00050	<0.00050	<0.00050
Zinc (Zn)-Dissolved (mg/L)	0.0027		0.0842	3.91	0.0020
Zirconium (Zr)-Dissolved (mg/L)	<0.00030		<0.00030	<0.00030	<0.00030

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1761963-21	L1761963-22			
	Description	Water	Water			
	Sampled Date	28-APR-16	28-APR-16			
	Sampled Time	11:40	11:30			
	Client ID	WQ-TP	WQ-DC-B			
Grouping	**Analyte**					
WATER						
Dissolved Metals	Magnesium (Mg)-Dissolved (mg/L)	6.63	36.7			
	Manganese (Mn)-Dissolved (mg/L)	0.536	0.403			
	Mercury (Hg)-Dissolved (mg/L)	0.0000062	0.0000117			
	Molybdenum (Mo)-Dissolved (mg/L)	0.000237	0.000184			
	Nickel (Ni)-Dissolved (mg/L)	0.00079	0.00105			
	Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050			
	Potassium (K)-Dissolved (mg/L)	2.11	2.77			
	Selenium (Se)-Dissolved (mg/L)	<0.000050	0.000090			
	Silicon (Si)-Dissolved (mg/L)	0.830	3.47			
	Silver (Ag)-Dissolved (mg/L)	0.000110	0.000011			
	Sodium (Na)-Dissolved (mg/L)	1.84	3.58			
	Strontium (Sr)-Dissolved (mg/L)	0.126	0.312			
	Sulfur (S)-Dissolved (mg/L)	50.3	90.7			
	Thallium (Tl)-Dissolved (mg/L)	0.000051	<0.000010			
	Tin (Sn)-Dissolved (mg/L)	<0.00010	<0.00010			
	Titanium (Ti)-Dissolved (mg/L)	<0.00030	0.00108			
	Uranium (U)-Dissolved (mg/L)	0.000138	0.00143			
	Vanadium (V)-Dissolved (mg/L)	<0.00050	0.00061			
	Zinc (Zn)-Dissolved (mg/L)	0.235	0.0206			
	Zirconium (Zr)-Dissolved (mg/L)	<0.00030	<0.00030			

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Method Blank	Alkalinity, Total (as CaCO3)	B	L1761963-17
Method Blank	Alkalinity, Total (as CaCO3)	B	L1761963-17
Duplicate	Chromium (Cr)-Total	DLB	L1761963-14, -15, -16, -17, -18, -19, -20, -21, -22
Duplicate	Cyanide, Weak Acid Diss	HTD	L1761963-1, -14
Method Blank	Chromium (Cr)-Total	MB-LOR	L1761963-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -8, -9
Method Blank	Copper (Cu)-Total	MB-LOR	L1761963-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -8, -9
Method Blank	Chromium (Cr)-Total	MB-LOR	L1761963-14, -15, -16, -17, -18, -19, -20, -21, -22
Matrix Spike	Sulfate (SO4)	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Molybdenum (Mo)-Dissolved	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Aluminum (Al)-Dissolved	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Copper (Cu)-Dissolved	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Aluminum (Al)-Total	MS-B	L1761963-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Total	MS-B	L1761963-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Total	MS-B	L1761963-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Uranium (U)-Dissolved	MS-B	L1761963-1, -10, -11, -12, -13, -14, -15, -16, -18, -19, -2, -20, -21, -22, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Total	MS-B	L1761963-14, -15, -16, -17, -18, -19, -20, -21, -22
Matrix Spike	Sodium (Na)-Total	MS-B	L1761963-14, -15, -16, -17, -18, -19, -20, -21, -22
Matrix Spike	Strontium (Sr)-Total	MS-B	L1761963-14, -15, -16, -17, -18, -19, -20, -21, -22

Qualifiers for Individual Parameters Listed:

Qualifier	Description
B	Method Blank exceeds ALS DQO. All associated sample results are at least 5 times greater than blank levels and are considered reliable.
DLA	Detection Limit adjusted for required dilution
DLB	Detection Limit Raised. Analyte detected at comparable level in Method Blank.
DLIS	Detection Limit Adjusted: Insufficient Sample
DTC	Dissolved concentration exceeds total. Results were confirmed by re-analysis.
HTD	Hold time exceeded for re-analysis or dilution, but initial testing was conducted within hold time.
MB-LOR	Method Blank exceeds ALS DQO. Limits of Reporting have been adjusted for samples with positive hits below 5x blank level.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RRV	Reported Result Verified By Repeat Analysis

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

Reference Information

ALK-TITR-VA Water Alkalinity Species by Titration APHA 2320 Alkalinity

This analysis is carried out using procedures adapted from APHA Method 2320 "Alkalinity". Total alkalinity is determined by potentiometric titration to a pH 4.5 endpoint. Bicarbonate, carbonate and hydroxide alkalinity are calculated from phenolphthalein alkalinity and total alkalinity values.

BE-D-L-CCMS-VA Water Diss. Be (low) in Water by CRC ICPMS APHA 3030B/6020A (mod)

Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

BE-T-L-CCMS-VA Water Total Be (Low) in Water by CRC ICPMS EPA 200.2/6020A (mod)

Water samples are digested with nitric and hydrochloric acids, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

CL-IC-N-WR Water Chloride in Water by IC EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

CN-CNO-WT Water Cyanate APHA 4500-CN-L

This analysis is carried out using procedures adapted from APHA method 4500-CN "Cyanide". Cyanate is determined by the Cyanate hydrolysis method using an ammonia selective electrode

CN-SCN-VA Water Thiocyanate by Colour APHA 4500-CN CYANIDE

This analysis is carried out using procedures adapted from APHA Method 4500-CN- M "Thiocyanate" Thiocyanate is determined by the ferric nitrate colourimetric method.

CN-T-CFA-VA Water Total Cyanide in water by CFA ISO 14403:2002

This analysis is carried out using procedures adapted from ISO Method 14403:2002 "Determination of Total Cyanide using Flow Analysis (FIA and CFA)". Total or strong acid dissociable (SAD) cyanide is determined by in-line UV digestion along with sample distillation and final determination by colourimetric analysis. Method Limitation: This method is susceptible to interference from thiocyanate (SCN). If SCN is present in the sample, there could be a positive interference with this method, but it would be less than 1% and could be as low as zero.

CN-WAD-CFA-VA Water Weak Acid Diss. Cyanide in water by CFA APHA 4500-CN CYANIDE

This analysis is carried out using procedures adapted from APHA Method 4500-CN I. "Weak Acid Dissociable Cyanide". Weak Acid Dissociable (WAD) cyanide is determined by in-line sample distillation with final determination by colourimetric analysis.

EC-PCT-VA Water Conductivity (Automated) APHA 2510 Auto. Conduc.

This analysis is carried out using procedures adapted from APHA Method 2510 "Conductivity". Conductivity is determined using a conductivity electrode.

F-IC-N-WR Water Fluoride in Water by IC EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

HARDNESS-CALC-VA Water Hardness APHA 2340B

Hardness (also known as Total Hardness) is calculated from the sum of Calcium and Magnesium concentrations, expressed in CaCO3 equivalents. Dissolved Calcium and Magnesium concentrations are preferentially used for the hardness calculation.

HG-D-CVAA-VA Water Diss. Mercury in Water by CVAAS or CVAFS APHA 3030B/EPA 1631E (mod)

Water samples are filtered (0.45 um), preserved with hydrochloric acid, then undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS or CVAFS.

HG-T-CVAA-VA Water Total Mercury in Water by CVAAS or CVAFS EPA 1631E (mod)

Water samples undergo a cold-oxidation using bromine monochloride prior to reduction with stannous chloride, and analyzed by CVAAS or CVAFS.

IONBALANCE-VA Water Ion Balance Calculation APHA 1030E

Cation Sum, Anion Sum, and Ion Balance (as % difference) are calculated based on guidance from APHA Standard Methods (1030E Checking Correctness of Analysis). Because all aqueous solutions are electrically neutral, the calculated ion balance (% difference of cations minus anions) should be near-zero.

Cation and Anion Sums are the total meq/L concentration of major cations and anions. Dissolved species are used where available. Minor ions are included where data is present. Ion Balance is calculated as:

Ion Balance (%) = [Cation Sum-Anion Sum] / [Cation Sum+Anion Sum]

MET-D-CCMS-VA Water Dissolved Metals in Water by CRC ICPMS APHA 3030B/6020A (mod)

Water samples are filtered (0.45 um), preserved with nitric acid, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

Reference Information

MET-DIS-LOW-ICP-VA Water Dissolved Metals in Water by ICPOES EPA 3005A/6010B

This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedure involves filtration (EPA Method 3005A) and analysis by inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B).

MET-T-CCMS-VA Water Total Metals in Water by CRC ICPMS EPA 200.2/6020A (mod)

Water samples are digested with nitric and hydrochloric acids, and analyzed by CRC ICPMS.

Method Limitation (re: Sulfur): Sulfide and volatile sulfur species may not be recovered by this method.

MET-TOT-LOW-ICP-VA Water Total Metals in Water by ICPOES EPA 3005A/6010B

This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using either hotblock or microwave oven (EPA Method 3005A). Instrumental analysis is by inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B).

NH3-F-VA Water Ammonia in Water by Fluorescence APHA 4500 NH3-NITROGEN (AMMONIA)

This analysis is carried out, on sulfuric acid preserved samples, using procedures modified from J. Environ. Monit., 2005, 7, 37 - 42, The Royal Society of Chemistry, "Flow-injection analysis with fluorescence detection for the determination of trace levels of ammonium in seawater", Roslyn J. Waston et al.

NH3-F-VA Water Ammonia in Water by Fluorescence J. ENVIRON. MONIT., 2005, 7, 37-42, RSC

This analysis is carried out, on sulfuric acid preserved samples, using procedures modified from J. Environ. Monit., 2005, 7, 37 - 42, The Royal Society of Chemistry, "Flow-injection analysis with fluorescence detection for the determination of trace levels of ammonium in seawater", Roslyn J. Waston et al.

NO2-L-IC-N-WR Water Nitrite in Water by IC (Low Level) EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

NO3-L-IC-N-WR Water Nitrate in Water by IC (Low Level) EPA 300.1 (mod)

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

PH-PCT-VA Water pH by Meter (Automated) APHA 4500-H "pH Value"

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode

It is recommended that this analysis be conducted in the field.

PH-PCT-VA Water pH by Meter (Automated) APHA 4500-H pH Value

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode

It is recommended that this analysis be conducted in the field.

S-DIS-ICP-VA Water Dissolved Sulfur in Water by ICPOES EPA SW-846 3005A/6010B

This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using either hotblock or microwave oven, or filtration (EPA Method 3005A). Instrumental analysis is by inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B).

Method Limitation: This method will not give total sulfur results for all samples. Sulfide or other volatile forms of sulfur that may be present in submitted samples, is often lost during the sampling, preservation and analysis process. The data reported as total and/or dissolved sulfur represents all non-volatile forms of sulfur present in a particular sample.

S-TOT-ICP-VA Water Total Sulfur in Water by ICPOES EPA SW-846 3005A/6010B

This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using either hotblock or microwave oven, or filtration (EPA Method 3005A). Instrumental analysis is by inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B).

Method Limitation: This method will not give total sulfur results for all samples. Sulfide or other volatile forms of sulfur that may be present in submitted samples, is often lost during the sampling, preservation and analysis process. The data reported as total and/or dissolved sulfur represents all non-volatile forms of sulfur present in a particular sample.

SO4-IC-N-WR Water Sulfate in Water by IC EPA 300.1 (mod)

Reference Information

Inorganic anions are analyzed by Ion Chromatography with conductivity and/or UV detection.

TDS-CALC-VA	Water	TDS (Calculated)	APHA 1030E (20TH EDITION)

This analysis is carried out using procedures adapted from APHA 1030E "Checking Correctness of Analyses".

TSS-MAN-WR	Water	Total Suspended Solids by Gravimetric	APHA 2540 D

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total Suspended Solids are determined by filtering a sample through a glass fibre filter and drying the filter at 104 degrees celsius.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location
VA	ALS ENVIRONMENTAL - VANCOUVER, BRITISH COLUMBIA, CANADA

Chain of Custody Numbers:

1 2 3 4

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
mg/kg - milligrams per kilogram based on dry weight of sample.
mg/kg wwt - milligrams per kilogram based on wet weight of sample.
mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Chain of Custody (COC) / Analytical Request Form

ALS Environmental

www.alsglobal.com

Canada Toll Free: 1 800 668 9878

L1761963-COFC

COC Number: 14 -

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Report To		Report Format /	(Rush Turnaround Time (TAT) is not available for all tests)
Company:	EDI	Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)	R ☑ Regular (Standard TAT if received by 3 pm - business days)
Contact:	Lyndsay Doetzel	Quality Control (QC) Report with Report ☐ Yes ☐ No	P ☐ Priority (2-4 bus. days if received by 3pm) 50% surcharge - contact ALS to confirm TAT
Address:	2195 - 2nd Avenue Whitehorse, YT Y1A 3T8	☐ Criteria on Report - provide details below if box checked	E ☐ Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT
		Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	E2 ☐ Same day or weekend emergency - contact ALS to confirm TAT and surcharge
Phone:	867-393-4882	Email 1 or Fax ldoetzel@edynamics.com	Specify Date Required for E2,E or P:
		Email 2 Emilie.Hamm@gov.yk.ca	
		Email 3 erik.pit@gov.yk.ca	

Invoice To	Same as Report To ☑ Yes ☑ No	Invoice Distribution	Analysis Request
	Copy of Invoice with Report ☑ Yes ☐ No	Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below
Company:	EDI	Email 1 or Fax sjenner@edynamics.com	
Contact:	S Jenner	Email 2 ldoetzel@edynamics.com	

Project Information		Oil and Gas Required Fields (client use)	
ALS Quote #:	Q55559	Approver ID:	Cost Center:
Job #:	MOUNT NANSEN 16-Y-0089	GL Account:	Routing Code:
PO / AFE:		Activity Code:	
LSD:		Location:	
ALS Lab Work Order # (lab use only)		ALS Contact: Sean Slugget	Sampler:

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	ALK-PCT-VA,EC-PCT-VA,PH-PCT-VA	ANIONS-ALL-IC-WR,TSS-MAN-WR	CN-WAD-CFA-VA,CN-T-CFA-VA	CN-CNO-WT	CN-SCN-VA	NH3-F-VA	MET-T-BCMDG-VA	MET-D-BCMDG-VA	IONBALANC-VA, TDS-CALC-VA	Number of Containers
	WQ-DC-DX	26-Apr-16	19:00	Water	R	R	R	R	R	R	R	R	R	9
	WQ-PC-U	27-Apr-16	09:30	Water	R	R	R	R	R	R	R	R	R	9
	WQ-BC	27-Apr-16	15:00	Water	R	R	R	R	R	R	R	R	R	9
	WQ-PC-D	27-Apr-16	10:20	Water	R	R	R	R	R	R	R	R	R	9
	WQ-DESS-01	28-Apr-16	16:25	Water	R	R	R	R	R	R	R	R	R	9
	FIELD BLANK	28-Apr-16	19:40	Water	R	R	R	R	R	R	R	R	R	9

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report (client Use)
Are samples taken from a Regulated DW System? ☐ Yes ☐ No	
Are samples for human drinking water use? ☐ Yes ☐ No	

SAMPLE CONDITION AS RECEIVED (lab use only)			
Frozen ☐	SIF Observations Yes ☐ No ☐		
Ice packs Yes ☐ No ☐	Custody seal intact Yes ☐ No ☐		
Cooling Initiated ☐			
INITIAL COOLER TEMPERATURES °C		FINAL COOLER TEMPERATURES °C	
3.1	0.2	0.9	1.9

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
				Apr 29-16	09:20 AM			

Chain of Custody (COC) / Analytical Request Form

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L1761963-COFC

COC Number: 14 -

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Report To		Report Format / D	Rush Turnaround Time (TAT) is not available for all tests
Company:	EDI	Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)	R ☑ Regular (Standard TAT if received by 3 pm - business days)
Contact:	Lyndsay Doetzel	Quality Control (QC) Report with Report ☐ Yes ☐ No	P ☐ Priority (2-4 bus. days if received by 3pm) 50% surcharge - contact ALS to confirm TAT
Address:	2195 - 2nd Avenue Whitehorse, YT Y1A 3T8	☐ Criteria on Report - provide details below if box checked	E ☐ Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT
Phone:	867-393-4682	Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	E2 ☐ Same day or weekend emergency - contact ALS to confirm TAT and surcharge
		Email 1 or Fax: ldoetzel@edynamics.com	Specify Date Required for E2,E or P:
		Email 2: Emilie.Hamm@gov.yk.ca	
		Email 3: erik.pit@gov.yk.ca	

Invoice To	Same as Report To ☑ Yes ☑ No	Invoice Distribution	
	Copy of Invoice with Report ☑ Yes ☐ No	Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX	
Company:	EDI	Email 1 or Fax: sjenner@edynamics.com	
Contact:	S Jenner	Email 2: ldoetzel@edynamics.com	

Project Information		Oil and Gas Required Fields (client use)	
ALS Quote #:	Q55559	Approver ID:	Cost Center:
Job #:	MOUNT NANSEN 16-Y-0089	GL Account:	Routing Code:
PO / AFE:		Activity Code:	
LSD:		Location:	

ALS Lab Work Order # (lab use only)		ALS Contact: Sean Slugget	Sampler:

Analysis Request

Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below

ALS Sample # (lab use only)	Sample Identification and/or Coordinates (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	ALK-PCT-VA,EC-PCT-VA,PH-PCT-VA	ANIONS-ALL-IC-WR,TSS-MAN-WR	CN-WAD-CFA-VA,CN-T-CFA-VA	CN-CNO-WT	CN-SCN-VA	NH3-F-VA	MET-T-BCMDG-VA	MET-D-BCMDG-VA	IONBALANC-VA, TDS-CALC-VA	Number of Containers
					P	P	P	P	P	P	P	F/P		
	WQ-SEEP-r	28 - Apr -16	10:35	Water	R	R	R	R	R	R	R	R	R	9
	WQ-SEEP	28 - Apr -16	10:00	Water	R	R	R	R	R	R	R	R	R	9
	WQ-DC-U	28 - Apr -16	9:15	Water	R	R	R	R	R	R	R	R	R	9
	WQ-DC-R-r	28 - Apr -16	13:30	Water	R	R	R	R	R	R	R	R	R	9
	WQ-DC-R	28 - Apr -16	13:15	Water	R	R	R	R	R	R	R	R	R	9
		- Apr -16		Water	R	R	R	R	R	R	R	R	R	9

Drinking Water (DW) Samples[1] (client use)	Special Instructions / Specify Criteria to add on report (client Use)
Are samples taken from a Regulated DW System? ☐ Yes ☑ No	
Are samples for human drinking water use? ☐ Yes ☑ No	

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ SIF Observations Yes ☐ No ☐

Ice packs Yes ☐ No ☐ Custody seal intact Yes ☐ No ☐

Cooling Initiated ☐

INITIAL COOLER TEMPERATURES °C			FINAL COOLER TEMPERATURES °C		
3.1	0.2	0.9	1.9		

SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)			FINAL SHIPMENT RECEPTION (lab use only)		
Released by:	Date:	Time:	Received by:	Date:	Time:	Received by:	Date:	Time:
	29-APR-2016	0910		Apr 29/16	9:20 AM			