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

Date Received: 08-JUN-16
Report Date: 23-JUN-16 17:02 (MT)
Version: FINAL

Client Phone: 867-393-4882

Certificate of Analysis

Lab Work Order #: L1780519

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

Comments: ADDITIONAL 23-JUN-16 15:27
ADDITIONAL 23-JUN-16 15:00

Can Dang
Senior Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1780519-1 Water 06-JUN-16 14:55 WQ-DC-R	L1780519-2 Water 06-JUN-16 19:00 WQ-DC-B	L1780519-3 Water 06-JUN-16 14:30 WQ-VCR	L1780519-4 Water 06-JUN-16 18:40 WQ-TP	L1780519-5 Water 07-JUN-16 11:15 WQ-VC-VMN
WATER						
Physical Tests	Conductivity (uS/cm)	1050	1090	220	1120	248
	Hardness (as CaCO3) (mg/L)	622	665	117	636	128
	pH (pH)	8.23	8.20	8.09	7.98	8.08
	Total Suspended Solids (mg/L)	4.7	217	4.7	20.7	54.7
	Total Dissolved Solids (mg/L)	772	799	128	857	145
Anions and Nutrients	Alkalinity, Bicarbonate (as CaCO3) (mg/L)	160	162	78.0	64.7	75.1
	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)	160	162	78.0	64.7	75.1
	Ammonia, Total (as N) (mg/L)	0.320	0.0921	0.0055	0.0179	0.0168
	Chloride (Cl) (mg/L)	<1.0 DLDS	<1.0 DLDS	<0.50	<1.0 DLDS	<0.50
	Fluoride (F) (mg/L)	0.114	0.122	0.054	0.259	0.058
	Nitrate (as N) (mg/L)	0.449	0.118	0.0903	0.144	0.0928
	Nitrite (as N) (mg/L)	0.0091	0.0021	<0.0010	0.0036	0.0016
	Sulfate (SO4) (mg/L)	445	469	36.9	562	51.0
	Anion Sum (meq/L)	12.5	13.0	2.34	13.0	2.57
	Cation Sum (meq/L)	13.1	13.7	2.49	13.6	2.72
	Cation - Anion Balance (%)	2.2	2.5	3.1	2.1	2.8
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)	<2.0 DLIS	<0.20	<0.20	<0.20	<0.20
	Thiocyanate (SCN) (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50
Total Metals	Aluminum (Al)-Total (mg/L)	0.0765	3.72	0.112	0.167	1.65
	Antimony (Sb)-Total (mg/L)	0.00249	0.00557	0.00028	0.0486	0.00082
	Arsenic (As)-Total (mg/L)	0.0243	0.0676	0.00140	0.147	0.00935
	Barium (Ba)-Total (mg/L)	0.0475	0.104	0.0583	0.0115	0.0799
	Beryllium (Be)-Total (mg/L)	<0.000020	0.000168	<0.000020	<0.000020	0.000064
	Bismuth (Bi)-Total (mg/L)	<0.000050	0.000069	<0.000050	0.000794	0.000100
	Boron (B)-Total (mg/L)	0.018	0.017	<0.010	0.057	<0.010
	Cadmium (Cd)-Total (mg/L)	0.0000930	0.000747	0.0000315	0.00153	0.000244
	Calcium (Ca)-Total (mg/L)	151	151	29.7	186	32.4
	Chromium (Cr)-Total (mg/L)	0.00031	0.00742	0.00024	0.00033	0.00224
	Cobalt (Co)-Total (mg/L)	0.00117	0.00224	0.00014	0.00064	0.00101
	Copper (Cu)-Total (mg/L)	0.00143	0.0134	0.00162	0.0366	0.00486
	Iron (Fe)-Total (mg/L)	1.85	9.18	0.259	1.19	2.34
	Lead (Pb)-Total (mg/L)	0.00364	0.0195	0.000438	0.0599	0.00736
	Lithium (Li)-Total (mg/L)	0.0023	0.0061	<0.0010	0.0071	0.0016

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1780519-6 Water 06-JUN-16 18:10 WQ-SEEP	L1780519-7 Water 07-JUN-16 16:40 WQ-PC-D	L1780519-8 Water 07-JUN-16 09:45 WQ-DC-DX+105	L1780519-9 Water 07-JUN-16 09:00 WQ-FIELD BLANK	L1780519-10 Water 07-JUN-16 09:35 WQ-MS-S-03
WATER						
Physical Tests	Conductivity (uS/cm)	1510	380	782	<2.0	1240
	Hardness (as CaCO3) (mg/L)	872	177	461	<0.50	792
	pH (pH)	8.10	7.33	8.16	5.31	8.22
	Total Suspended Solids (mg/L)	32.0	840	<3.0	<3.0	6.7
	Total Dissolved Solids (mg/L)	1210	240	536	<1.0	934
Anions and Nutrients	Alkalinity, Bicarbonate (as CaCO3) (mg/L)	262	53.9	172	<1.0	286
	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)	262	53.9	172	<1.0	286
	Ammonia, Total (as N) (mg/L)	4.16	2.74	0.0101	<0.0050	0.0263
	Chloride (Cl) (mg/L)	<2.5 DLDS	0.63	<0.50	<0.50	<1.0 DLDS
	Fluoride (F) (mg/L)	0.092	0.080	0.131	<0.020	0.212
	Nitrate (as N) (mg/L)	0.460	0.388	<0.0050	<0.0050	<0.010 DLDS
	Nitrite (as N) (mg/L)	0.0122	0.0480	<0.0010	<0.0010	<0.0020 DLDS
	Sulfate (SO4) (mg/L)	686	129	265	<0.30	476
	Anion Sum (meq/L)	19.6	3.82	8.96	<0.10	15.6
	Cation Sum (meq/L)	19.9	4.05	9.51	<0.10	16.3
	Cation - Anion Balance (%)	0.9	2.9	3.0	0.0	2.2
Cyanides	Cyanide, Weak Acid Diss (mg/L)	0.0084	<0.0050	<0.0050	<0.0050	<0.0050
	Cyanide, Total (mg/L)	0.0230	<0.0050	<0.0050	<0.0050	<0.0050
	Cyanate (mg/L)	<0.20	<0.20	<0.20	<0.20	<0.20
	Thiocyanate (SCN) (mg/L)	4.81	<0.50	<0.50	<0.50	<0.50
Total Metals	Aluminum (Al)-Total (mg/L)	0.0207	27.4	0.0166	<0.0030	1.86
	Antimony (Sb)-Total (mg/L)	0.00050	0.0138	0.00674	<0.00010	0.0348
	Arsenic (As)-Total (mg/L)	0.0750	0.340	0.0149	<0.00010	0.449
	Barium (Ba)-Total (mg/L)	0.0689	0.685	0.0201	<0.000050	0.0672
	Beryllium (Be)-Total (mg/L)	<0.000020	0.00132	<0.000020	<0.000020	0.000100
	Bismuth (Bi)-Total (mg/L)	<0.000050	0.00455	<0.000050	<0.000050	0.000603
	Boron (B)-Total (mg/L)	0.057	0.010	<0.010	<0.010	<0.010
	Cadmium (Cd)-Total (mg/L)	0.000269	0.00421	0.00135	<0.0000050	0.0108
	Calcium (Ca)-Total (mg/L)	253	55.5	106	<0.050	194
	Chromium (Cr)-Total (mg/L)	0.00064	0.0277	0.00127	<0.00010	0.00273
	Cobalt (Co)-Total (mg/L)	0.00742	0.0123	0.00039	<0.00010	0.00325
	Copper (Cu)-Total (mg/L)	0.00261	0.0933	0.00136	<0.00050	0.0528
	Iron (Fe)-Total (mg/L)	12.0	48.3	0.222	<0.010	11.7
	Lead (Pb)-Total (mg/L)	0.000125	0.290	0.000102	<0.000050	0.114
	Lithium (Li)-Total (mg/L)	0.0012	0.0199	0.0045	<0.0010	0.0111

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1780519-11 Water 07-JUN-16 09:15 WQ-DC-DX	L1780519-12 Water 07-JUN-16 13:15 WQ-VC-DBC	L1780519-13 Water 07-JUN-16 08:40 WQ-NW-SEEP-02	L1780519-14 Water 07-JUN-16 16:15 WQ-PC-U	L1780519-15 Water 08-JUN-16 10:05 WQ-DESS-03
WATER						
Physical Tests	Conductivity (uS/cm)	399	181	1480	385	49.3
	Hardness (as CaCO3) (mg/L)	204	93.1	950	178	26.0
	pH (pH)	8.00	8.02	7.71	7.20	6.54
	Total Suspended Solids (mg/L)	<3.0	48.7	5.3	1240	<3.0
	Total Dissolved Solids (mg/L)	249	103	1230	242	25.5
Anions and Nutrients	Alkalinity, Bicarbonate (as CaCO3) (mg/L)	69.5	67.5	43.4	53.3	6.3
	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)	69.5	67.5	43.4	53.3	6.3
	Ammonia, Total (as N) (mg/L)	<0.0050	0.0201	<0.0050	2.94	0.0072
	Chloride (Cl) (mg/L)	<0.50	<0.50	<2.5 DLDS	0.65	<0.50
	Fluoride (F) (mg/L)	0.059	0.057	0.34	0.080	0.029
	Nitrate (as N) (mg/L)	<0.0050	0.0775	0.027	0.396	<0.0050
	Nitrite (as N) (mg/L)	<0.0010	<0.0010	<0.0050 DLDS	0.0470	<0.0010
	Sulfate (SO4) (mg/L)	127	26.3	854	131	9.64
	Anion Sum (meq/L)	4.04	1.91	18.7	3.84	0.33
	Cation Sum (meq/L)	4.33	2.00	19.2	4.12	0.64
	Cation - Anion Balance (%)	3.5	2.4	1.3	3.5	32.5
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	<0.20
	Thiocyanate (SCN) (mg/L)	<0.50	<0.50	<0.50	<0.50	1.05
Total Metals	Aluminum (Al)-Total (mg/L)	0.0128	1.40	0.0877	28.5	0.369
	Antimony (Sb)-Total (mg/L)	0.00118	0.00065	0.00389	0.0131	0.00027
	Arsenic (As)-Total (mg/L)	0.00280	0.00777	0.0127	0.345	0.00139
	Barium (Ba)-Total (mg/L)	0.0364	0.0753	0.0123	0.771	0.0343
	Beryllium (Be)-Total (mg/L)	<0.000020	0.000056	<0.000020	0.00134	<0.000020
	Bismuth (Bi)-Total (mg/L)	<0.000050	0.000087	0.000066	0.00462	<0.000050
	Boron (B)-Total (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cadmium (Cd)-Total (mg/L)	0.0000102	0.000219	0.00217	0.00472	0.0000328
	Calcium (Ca)-Total (mg/L)	54.7	24.0	298	59.6	7.52
	Chromium (Cr)-Total (mg/L)	<0.00010	0.00174	0.00011	0.0294	0.00028
	Cobalt (Co)-Total (mg/L)	<0.00010	0.00080	<0.00010	0.0134	<0.00010
	Copper (Cu)-Total (mg/L)	0.00134	0.00471	0.0179	0.0990	0.00346
	Iron (Fe)-Total (mg/L)	0.050	1.98	0.334	50.7	0.159
	Lead (Pb)-Total (mg/L)	<0.000050	0.00618	0.00391	0.302	<0.000050
	Lithium (Li)-Total (mg/L)	<0.0010	0.0013	0.0032	0.0201	<0.0010

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1780519-16 Water 08-JUN-16 09:00 WQ-DC-D1B-R	L1780519-17 Water 08-JUN-16 09:00 WQ-DC-D1B	L1780519-18 Water 08-JUN-16 10:30 WQ-CH-P-13-01	L1780519-19 Water 08-JUN-16 10:20 WQ-DESS-01	L1780519-20 Water 07-JUN-16 08:50 WQ-NW-SEEP-02
WATER						
Physical Tests	Conductivity (uS/cm)	1310	1300	1150	715	1490
	Hardness (as CaCO3) (mg/L)	825	815	686	402	958
	pH (pH)	8.41	8.40	6.32	6.18	7.80
	Total Suspended Solids (mg/L)	22.0	22.0	<3.0	4.0	<3.0
	Total Dissolved Solids (mg/L)	976	992	868	497	1220
Anions and Nutrients	Alkalinity, Bicarbonate (as CaCO3) (mg/L)	225	231	2.8	3.0	44.3
	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)	225	231	2.8	3.0	44.3
	Ammonia, Total (as N) (mg/L)	0.220	0.221	0.0146	0.0076	<0.0050
	Chloride (Cl) (mg/L)	<1.0 DLDS	<1.0 DLDS	<1.0 DLDS	<0.50	<1.0 DLDS
	Fluoride (F) (mg/L)	0.154	0.153	0.047	0.043	0.309
	Nitrate (as N) (mg/L)	0.073	0.068	0.025	0.0147	0.024
	Nitrite (as N) (mg/L)	0.0023	0.0041	<0.0020 DLDS	<0.0010	<0.0020 DLDS
	Sulfate (SO4) (mg/L)	555	555	629	356	839
	Anion Sum (meq/L)	16.1	16.2	13.2	7.47	18.4
	Cation Sum (meq/L)	16.9	17.4	14.0	8.24	19.3
	Cation - Anion Balance (%)	2.5	3.6	3.2	4.9	2.5
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	<0.20
	Thiocyanate (SCN) (mg/L)	<0.50	<0.50	0.56	0.62	<0.50
Total Metals	Aluminum (Al)-Total (mg/L)	0.340	0.203	0.220	0.254	0.0315
	Antimony (Sb)-Total (mg/L)	0.00653	0.00594	<0.00010	0.00018	0.00352
	Arsenic (As)-Total (mg/L)	0.0441	0.0325	0.00080	0.00185	0.00900
	Barium (Ba)-Total (mg/L)	0.0323	0.0301	0.0128	0.0296	0.0115
	Beryllium (Be)-Total (mg/L)	<0.000020	<0.000020	0.000037	0.000026	<0.000020
	Bismuth (Bi)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Boron (B)-Total (mg/L)	0.030	0.027	<0.010	<0.010	<0.010
	Cadmium (Cd)-Total (mg/L)	0.000520	0.000402	0.00944	0.00342	0.00217
	Calcium (Ca)-Total (mg/L)	179	188	151	86.9	295
	Chromium (Cr)-Total (mg/L)	0.00051	0.00039	0.00015	0.00031	<0.00010
	Cobalt (Co)-Total (mg/L)	0.00061	0.00040	<0.00010	0.00015	<0.00010
	Copper (Cu)-Total (mg/L)	0.00220	0.00179	0.00138	0.00225	0.0127
	Iron (Fe)-Total (mg/L)	1.86	1.33	0.072	0.310	0.166
	Lead (Pb)-Total (mg/L)	0.00703	0.00468	0.000070	0.000199	0.00158
	Lithium (Li)-Total (mg/L)	0.0072	0.0066	0.0018	<0.0010	0.0023

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1780519-21	L1780519-22	L1780519-23	L1780519-24	
Description	Water	Water	Water	Water	
Sampled Date	07-JUN-16	06-JUN-16	08-JUN-16		
Sampled Time	13:40	16:45	14:30		
Client ID	WQ-VC-U	WQ-DC-U	WQ-BC	TRAVEL BLANK	
Grouping	**Analyte**				
WATER					
Physical Tests	Conductivity (uS/cm)	166	1180	220	<2.0
	Hardness (as CaCO3) (mg/L)	82.3	721	115	<0.50
	pH (pH)	8.11	8.32	7.96	5.37
	Total Suspended Solids (mg/L)	<3.0	281	145	<3.0
	Total Dissolved Solids (mg/L)	88.2	879	131	<1.0
Anions and Nutrients	Alkalinity, Bicarbonate (as CaCO3) (mg/L)	70.7	181	59.3	<1.0
	Alkalinity, Carbonate (as CaCO3) (mg/L)	<1.0	<1.0	<1.0	<1.0
	Alkalinity, Hydroxide (as CaCO3) (mg/L)	<1.0	<1.0	<1.0	<1.0
	Alkalinity, Total (as CaCO3) (mg/L)	70.7	181	59.3	<1.0
	Ammonia, Total (as N) (mg/L)	<0.0050	0.544	0.0447	<0.0050
	Chloride (Cl) (mg/L)	<0.50	<1.0 DLDS	<0.50	<0.50
	Fluoride (F) (mg/L)	0.058	0.124	0.067	<0.020
	Nitrate (as N) (mg/L)	0.0788	0.233	0.0528	<0.0050
	Nitrite (as N) (mg/L)	<0.0010	0.0064	0.0039	<0.0010
	Sulfate (SO4) (mg/L)	14.3	510	49.6	<0.30
	Anion Sum (meq/L)	1.72	14.3	2.23	<0.10
	Cation Sum (meq/L)	1.75	15.0	2.46	<0.10
	Cation - Anion Balance (%)	1.0	2.6	5.0	0.0
Cyanides	Cyanide, Weak Acid Diss (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050
	Cyanide, Total (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050
	Cyanate (mg/L)	<2.0 DLIS	<0.20	<0.20	<0.20
	Thiocyanate (SCN) (mg/L)	<0.50	<0.50	<0.50	<0.50
Total Metals	Aluminum (Al)-Total (mg/L)	0.0745	1.63	4.04	<0.0030
	Antimony (Sb)-Total (mg/L)	0.00012	0.00374	0.00132	<0.00010
	Arsenic (As)-Total (mg/L)	0.00039	0.0494	0.0217	<0.00010
	Barium (Ba)-Total (mg/L)	0.0572	0.0725	0.116	<0.000050
	Beryllium (Be)-Total (mg/L)	<0.000020	0.000069	0.000146	<0.000020
	Bismuth (Bi)-Total (mg/L)	<0.000050	<0.000050	0.000462	<0.000050
	Boron (B)-Total (mg/L)	<0.010	0.022	<0.010	<0.010
	Cadmium (Cd)-Total (mg/L)	0.0000176	0.000298	0.000673	<0.0000050
	Calcium (Ca)-Total (mg/L)	21.0	170	33.3	<0.050
	Chromium (Cr)-Total (mg/L)	0.00017	0.00309	0.00492	<0.00010
	Cobalt (Co)-Total (mg/L)	<0.00010	0.00192	0.00237	<0.00010
	Copper (Cu)-Total (mg/L)	0.00159	0.00732	0.0109	<0.00050
	Iron (Fe)-Total (mg/L)	0.119	5.71	5.45	<0.010
	Lead (Pb)-Total (mg/L)	0.000095	0.00798	0.0168	<0.000050
	Lithium (Li)-Total (mg/L)	<0.0010	0.0040	0.0032	<0.0010

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1780519-1	L1780519-2	L1780519-3	L1780519-4	L1780519-5
Description	Water	Water	Water	Water	Water
Sampled Date	06-JUN-16	06-JUN-16	06-JUN-16	06-JUN-16	07-JUN-16
Sampled Time	14:55	19:00	14:30	18:40	11:15
Client ID	WQ-DC-R	WQ-DC-B	WQ-VCR	WQ-TP	WQ-VC-VMN
Grouping / **Analyte**					
WATER					
Total Metals Magnesium (Mg)-Total (mg/L)	56.1	66.6	9.25	37.0	10.0
Manganese (Mn)-Total (mg/L)	0.691	0.585	0.0592	0.220	0.168
Mercury (Hg)-Total (mg/L)	<0.0000050	0.000028 DLM	<0.0000050	0.0000136	0.000013 DLM
Molybdenum (Mo)-Total (mg/L)	0.000454	0.000686	0.000430	0.00111	0.000587
Nickel (Ni)-Total (mg/L)	0.00109	0.00532	0.00068	0.00092	0.00186
Phosphorus (P)-Total (mg/L)	<0.050	0.210	<0.050	<0.050	0.068
Potassium (K)-Total (mg/L)	2.90	3.09	0.74	10.8	1.15
Selenium (Se)-Total (mg/L)	0.000124	0.000360	0.000064	0.000078	0.000077
Silicon (Si)-Total (mg/L)	4.99	9.65	5.51	1.77	7.70
Silver (Ag)-Total (mg/L)	0.000055	0.000328	<0.000010	0.00125	0.000121
Sodium (Na)-Total (mg/L)	11.6	6.72	2.86	13.3	2.92
Strontium (Sr)-Total (mg/L)	0.472	0.480	0.248	0.458	0.249
Sulfur (S)-Total (mg/L)	150	155	12.4	190	16.3
Thallium (Tl)-Total (mg/L)	<0.000010	0.000070	<0.000010	0.000194	0.000040
Tin (Sn)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Total (mg/L)	0.00286	0.148	0.00352	0.00153	0.0556
Uranium (U)-Total (mg/L)	0.00192	0.00321	0.000576	0.000897	0.000751
Vanadium (V)-Total (mg/L)	0.00093	0.0190	0.00072	0.00069	0.00484
Zinc (Zn)-Total (mg/L)	0.0090	0.0763	<0.0030	0.101	0.0207
Zirconium (Zr)-Total (mg/L)	<0.00030	0.00048	<0.00030	<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)	0.0071	0.0118	0.0184	0.0086	0.0209
Antimony (Sb)-Dissolved (mg/L)	0.00181	0.00262	0.00021	0.0405	0.00032
Arsenic (As)-Dissolved (mg/L)	0.00626	0.00541	0.00092	0.0625	0.00144
Barium (Ba)-Dissolved (mg/L)	0.0447	0.0389	0.0577	0.00715	0.0523
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)	0.017	0.016	<0.010	0.054	<0.010
Cadmium (Cd)-Dissolved (mg/L)	0.0000282	0.0000197	0.0000248	0.000717	0.0000408
Calcium (Ca)-Dissolved (mg/L)	156	155	31.0	193	34.4
Chromium (Cr)-Dissolved (mg/L)	0.00013	<0.00010	0.00012	<0.00010	0.00011
Cobalt (Co)-Dissolved (mg/L)	0.00110	0.00037	<0.00010	0.00051	0.00011
Copper (Cu)-Dissolved (mg/L)	0.00092	0.00082	0.00147	0.0197	0.00165
Iron (Fe)-Dissolved (mg/L)	0.488	0.115	0.088	0.013	0.054
Lead (Pb)-Dissolved (mg/L)	0.000077	0.000058	0.000112	0.000517	0.000123
Lithium (Li)-Dissolved (mg/L)	0.0023	0.0038	<0.0010	0.0074	<0.0010

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1780519-6	L1780519-7	L1780519-8	L1780519-9	L1780519-10
Description	Water	Water	Water	Water	Water
Sampled Date	06-JUN-16	07-JUN-16	07-JUN-16	07-JUN-16	07-JUN-16
Sampled Time	18:10	16:40	09:45	09:00	09:35
Client ID	WQ-SEEP	WQ-PC-D	WQ-DC-DX+105	WQ-FIELD BLANK	WQ-MS-S-03
Grouping / **Analyte**					
WATER					
Total Metals Magnesium (Mg)-Total (mg/L)	57.2	16.6	34.0	<0.10	65.0
Manganese (Mn)-Total (mg/L)	5.86	1.69	0.576	<0.00010	2.00
Mercury (Hg)-Total (mg/L)	<0.0000050	0.00025	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total (mg/L)	0.000933	0.00181	0.000217	<0.000050	0.000471
Nickel (Ni)-Total (mg/L)	0.00276	0.0197	0.00107	<0.00050	0.00443
Phosphorus (P)-Total (mg/L)	<0.050	0.741	<0.050	<0.050	0.320
Potassium (K)-Total (mg/L)	5.93	7.73	3.31	<0.10	3.95
Selenium (Se)-Total (mg/L)	0.000210	0.000600	<0.000050	<0.000050	0.000105
Silicon (Si)-Total (mg/L)	7.53	56.9	5.06	<0.050	9.47
Silver (Ag)-Total (mg/L)	0.000028	0.00520	<0.000010	<0.000010	0.00165
Sodium (Na)-Total (mg/L)	35.9	6.01	3.33	<0.050	5.05
Strontium (Sr)-Total (mg/L)	0.762	0.357	0.254	<0.00020	0.446
Sulfur (S)-Total (mg/L)	221	41.7	81.2	<0.50	152
Thallium (Tl)-Total (mg/L)	<0.000010	0.000504	0.000047	<0.000010	0.000230
Tin (Sn)-Total (mg/L)	<0.00010	0.00021	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Total (mg/L)	0.00134	0.320	0.00046	<0.00030	0.110
Uranium (U)-Total (mg/L)	0.00186	0.00253	0.00211	<0.000010	0.00428
Vanadium (V)-Total (mg/L)	0.00234	0.0714	<0.00050	<0.00050	0.00938
Zinc (Zn)-Total (mg/L)	0.0214	0.629	0.374	<0.0030	1.43
Zirconium (Zr)-Total (mg/L)	0.00061	0.00151	<0.00030	<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)	0.0093	0.0213	0.0106	<0.0010	0.0013
Antimony (Sb)-Dissolved (mg/L)	0.00039	0.00342	0.00750	<0.00010	0.0174
Arsenic (As)-Dissolved (mg/L)	0.0390	0.00742	0.00419	<0.00010	0.0425
Barium (Ba)-Dissolved (mg/L)	0.0632	0.130	0.0222	0.000055	0.0146
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)	0.053	<0.010	<0.010	<0.010	<0.010
Cadmium (Cd)-Dissolved (mg/L)	0.000192	0.0000223	0.000707	<0.0000050	0.00188
Calcium (Ca)-Dissolved (mg/L)	255	52.6	121	<0.050	207
Chromium (Cr)-Dissolved (mg/L)	0.00040	<0.00010	<0.00010	<0.00010	<0.00010
Cobalt (Co)-Dissolved (mg/L)	0.00704	0.00053	0.00042	<0.00010	0.00121
Copper (Cu)-Dissolved (mg/L)	0.00165	0.00166	0.00125	<0.00020	0.00027
Iron (Fe)-Dissolved (mg/L)	5.84	0.131	0.056	<0.010	1.84
Lead (Pb)-Dissolved (mg/L)	<0.000050	0.000669	<0.000050	<0.000050	0.000080
Lithium (Li)-Dissolved (mg/L)	0.0012	0.0017	0.0050	<0.0010	0.0104

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1780519-11 Water 07-JUN-16 09:15 WQ-DC-DX	L1780519-12 Water 07-JUN-16 13:15 WQ-VC-DBC	L1780519-13 Water 07-JUN-16 08:40 WQ-NW-SEEP-02	L1780519-14 Water 07-JUN-16 16:15 WQ-PC-U	L1780519-15 Water 08-JUN-16 10:05 WQ-DESS-03
WATER						
Total Metals	Magnesium (Mg)-Total (mg/L)	14.7	7.25	50.1	17.8	1.56
	Manganese (Mn)-Total (mg/L)	0.0185	0.161	0.0453	1.75	0.00351
	Mercury (Hg)-Total (mg/L)	<0.0000050	0.0000076	<0.0000050	0.00024 DLM	0.0000078
	Molybdenum (Mo)-Total (mg/L)	0.000058	0.000574	0.000107	0.00160	<0.000050
	Nickel (Ni)-Total (mg/L)	<0.00050	0.00157	<0.00050	0.0215	0.00136
	Phosphorus (P)-Total (mg/L)	<0.050	<0.050	<0.050	0.907	<0.050
	Potassium (K)-Total (mg/L)	4.95	0.98	2.77	7.88	0.79
	Selenium (Se)-Total (mg/L)	<0.000050	0.000059	0.000466	0.000604	0.000058
	Silicon (Si)-Total (mg/L)	4.13	7.60	4.06	58.5	5.82
	Silver (Ag)-Total (mg/L)	<0.000010	0.000100	0.000116	0.00545	<0.000010
	Sodium (Na)-Total (mg/L)	2.94	2.31	2.09	6.26	1.37
	Strontium (Sr)-Total (mg/L)	0.169	0.221	0.617	0.371	0.0373
	Sulfur (S)-Total (mg/L)	42.6	8.68	287	43.9	3.43
	Thallium (Tl)-Total (mg/L)	<0.000010	0.000033	0.000044	0.000518	<0.000010
	Tin (Sn)-Total (mg/L)	<0.00010	<0.00010	<0.00010	0.00016	<0.00010
	Titanium (Ti)-Total (mg/L)	<0.00030	0.0479	0.00122	0.336	0.00125
	Uranium (U)-Total (mg/L)	0.000110	0.000637	0.000697	0.00282	0.000019
	Vanadium (V)-Total (mg/L)	<0.00050	0.00400	<0.00050	0.0765	<0.00050
	Zinc (Zn)-Total (mg/L)	<0.0030	0.0171	0.0893	0.658	0.0062
	Zirconium (Zr)-Total (mg/L)	<0.00030	0.00033	<0.00030	0.00125	0.00049
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)	0.0093	0.0750	0.0070	0.0201	0.335
	Antimony (Sb)-Dissolved (mg/L)	0.00117	0.00021	0.00332	0.00330	0.00024
	Arsenic (As)-Dissolved (mg/L)	0.00281	0.00128	0.00335	0.00915	0.00133
	Barium (Ba)-Dissolved (mg/L)	0.0364	0.0533	0.0111	0.147	0.0350
	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	<0.010	<0.010	<0.010	<0.010
	Cadmium (Cd)-Dissolved (mg/L)	0.0000106	0.0000491	0.00207	0.0000681	0.0000367
	Calcium (Ca)-Dissolved (mg/L)	57.0	25.1	299	52.8	7.77
	Chromium (Cr)-Dissolved (mg/L)	<0.00010	0.00015	<0.00010	<0.00010	0.00024
	Cobalt (Co)-Dissolved (mg/L)	<0.00010	0.00014	<0.00010	0.00102	<0.00010
	Copper (Cu)-Dissolved (mg/L)	0.00126	0.00192	0.00682	0.00144	0.00352
	Iron (Fe)-Dissolved (mg/L)	0.040	0.149	0.012	0.503	0.139
	Lead (Pb)-Dissolved (mg/L)	<0.000050	0.000442	0.000097	0.000477	<0.000050
	Lithium (Li)-Dissolved (mg/L)	<0.0010	<0.0010	0.0031	0.0016	<0.0010

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1780519-16	L1780519-17	L1780519-18	L1780519-19	L1780519-20
Description	Water	Water	Water	Water	Water
Sampled Date	08-JUN-16	08-JUN-16	08-JUN-16	08-JUN-16	07-JUN-16
Sampled Time	09:00	09:00	10:30	10:20	08:50
Client ID	WQ-DC-D1B-R	WQ-DC-D1B	WQ-CH-P-13-01	WQ-DESS-01	WQ-NW-SEEP-02
Grouping / **Analyte**					
WATER					
Total Metals					
Magnesium (Mg)-Total (mg/L)	81.8	82.3	68.0	39.0	49.1
Manganese (Mn)-Total (mg/L)	0.743	0.659	0.283	0.0721	0.0360
Mercury (Hg)-Total (mg/L)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Total (mg/L)	0.000229	0.000273	<0.000050	0.000069	0.000133
Nickel (Ni)-Total (mg/L)	0.00095	0.00079	0.00670	0.00429	<0.00050
Phosphorus (P)-Total (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium (K)-Total (mg/L)	3.79	4.07	0.95	0.69	2.61
Selenium (Se)-Total (mg/L)	0.000115	0.000072	<0.000050	0.000067	0.000414
Silicon (Si)-Total (mg/L)	5.90	5.68	5.27	5.55	3.90
Silver (Ag)-Total (mg/L)	0.000094	0.000026	<0.000010	<0.000010	0.000063
Sodium (Na)-Total (mg/L)	5.87	5.60	3.62	2.44	1.91
Strontium (Sr)-Total (mg/L)	0.472	0.461	0.353	0.229	0.614
Sulfur (S)-Total (mg/L)	180	183	204	117	284
Thallium (Tl)-Total (mg/L)	0.000019	0.000022	<0.000010	<0.000010	0.000040
Tin (Sn)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Total (mg/L)	0.0171	0.0110	0.00058	0.00402	0.00046
Uranium (U)-Total (mg/L)	0.00278	0.00265	0.000014	0.000018	0.000678
Vanadium (V)-Total (mg/L)	0.00200	0.00104	<0.00050	0.00065	<0.00050
Zinc (Zn)-Total (mg/L)	0.126	0.111	3.35	1.68	0.0837
Zirconium (Zr)-Total (mg/L)	<0.00030	<0.00030	<0.00030	<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)	0.0042	0.0041	0.207	0.174	0.0059
Antimony (Sb)-Dissolved (mg/L)	0.00545	0.00553	<0.00010	0.00015	0.00339
Arsenic (As)-Dissolved (mg/L)	0.0197	0.0199	0.00071	0.00115	0.00357
Barium (Ba)-Dissolved (mg/L)	0.0274	0.0275	0.0131	0.0283	0.0109
Beryllium (Be)-Dissolved (mg/L)	<0.000020	<0.000020	0.000037	0.000027	<0.000020
Bismuth (Bi)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Boron (B)-Dissolved (mg/L)	0.028	0.028	<0.010	<0.010	<0.010
Cadmium (Cd)-Dissolved (mg/L)	0.000107	0.000103	0.0101	0.00318	0.00212
Calcium (Ca)-Dissolved (mg/L)	190	189	158	93.1	303
Chromium (Cr)-Dissolved (mg/L)	<0.00010	<0.00010	0.00010	0.00013	<0.00010
Cobalt (Co)-Dissolved (mg/L)	0.00026	0.00027	<0.00010	0.00012	<0.00010
Copper (Cu)-Dissolved (mg/L)	0.00075	0.00079	0.00133	0.00192	0.00701
Iron (Fe)-Dissolved (mg/L)	0.159	0.148	0.061	0.143	0.014
Lead (Pb)-Dissolved (mg/L)	0.000100	0.000086	<0.000050	<0.000050	0.000103
Lithium (Li)-Dissolved (mg/L)	0.0075	0.0070	0.0017	<0.0010	0.0024

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1780519-21	L1780519-22	L1780519-23	L1780519-24	
	Description	Water	Water	Water	Water	
	Sampled Date	07-JUN-16	06-JUN-16	08-JUN-16		
	Sampled Time	13:40	16:45	14:30		
	Client ID	WQ-VC-U	WQ-DC-U	WQ-BC	TRAVEL BLANK	
Grouping	**Analyte**					
WATER						
Total Metals	Magnesium (Mg)-Total (mg/L)	6.83	67.0	8.27	<0.10	
	Manganese (Mn)-Total (mg/L)	0.0233	1.19	0.470	<0.00010	
	Mercury (Hg)-Total (mg/L)	<0.0000050	<0.000025 DLM	<0.000025 DLM	<0.0000050	
	Molybdenum (Mo)-Total (mg/L)	0.000369	0.000578	0.000943	<0.000050	
	Nickel (Ni)-Total (mg/L)	<0.00050	0.00290	0.00407	<0.00050	
	Phosphorus (P)-Total (mg/L)	<0.050	0.109	0.115	<0.050	
	Potassium (K)-Total (mg/L)	0.57	3.37	1.56	<0.10	
	Selenium (Se)-Total (mg/L)	<0.000050	0.000209	0.000097	<0.000050	
	Silicon (Si)-Total (mg/L)	5.25	7.32	12.0	<0.050	
	Silver (Ag)-Total (mg/L)	<0.000010	0.000150	0.000262	<0.000010	
	Sodium (Na)-Total (mg/L)	2.15	10.5	2.93	<0.050	
	Strontium (Sr)-Total (mg/L)	0.223	0.549	0.212	<0.00020	
	Sulfur (S)-Total (mg/L)	4.97	172	17.0	<0.50	
	Thallium (Tl)-Total (mg/L)	<0.000010	0.000030	0.000087	<0.000010	
	Tin (Sn)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
	Titanium (Ti)-Total (mg/L)	0.00215	0.0725	0.137	<0.00030	
	Uranium (U)-Total (mg/L)	0.000448	0.00284	0.00101	<0.000010	
	Vanadium (V)-Total (mg/L)	0.00056	0.00867	0.0113	<0.00050	
	Zinc (Zn)-Total (mg/L)	<0.0030	0.0321	0.0477	<0.0030	
	Zirconium (Zr)-Total (mg/L)	<0.00030	<0.00030	0.00071	<0.00030	
Dissolved Metals	Dissolved Mercury Filtration Location	FIELD	FIELD	FIELD		
	Dissolved Metals Filtration Location	FIELD	FIELD	FIELD		
	Aluminum (Al)-Dissolved (mg/L)	0.0183	0.0164	0.0658		
	Antimony (Sb)-Dissolved (mg/L)	<0.00010	0.00240	0.00042		
	Arsenic (As)-Dissolved (mg/L)	0.00033	0.00951	0.00308		
	Barium (Ba)-Dissolved (mg/L)	0.0564	0.0438	0.0437		
	Beryllium (Be)-Dissolved (mg/L)	<0.000020	<0.000020	<0.000020		
	Bismuth (Bi)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050		
	Boron (B)-Dissolved (mg/L)	<0.010	0.018	<0.010		
	Cadmium (Cd)-Dissolved (mg/L)	0.0000122	0.0000108	0.0000826		
	Calcium (Ca)-Dissolved (mg/L)	21.4	176	33.5		
	Chromium (Cr)-Dissolved (mg/L)	<0.00010	<0.00010	0.00015		
	Cobalt (Co)-Dissolved (mg/L)	<0.00010	0.00107	0.00020		
	Copper (Cu)-Dissolved (mg/L)	0.00146	0.00067	0.00262		
	Iron (Fe)-Dissolved (mg/L)	0.042	0.222	0.153		
	Lead (Pb)-Dissolved (mg/L)	<0.000050	<0.000050	0.000229		
	Lithium (Li)-Dissolved (mg/L)	<0.0010	0.0028	<0.0010		

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1780519-1	L1780519-2	L1780519-3	L1780519-4	L1780519-5
Description	Water	Water	Water	Water	Water
Sampled Date	06-JUN-16	06-JUN-16	06-JUN-16	06-JUN-16	07-JUN-16
Sampled Time	14:55	19:00	14:30	18:40	11:15
Client ID	WQ-DC-R	WQ-DC-B	WQ-VCR	WQ-TP	WQ-VC-VMN
Grouping / **Analyte**					
WATER					
Dissolved Metals Magnesium (Mg)-Dissolved (mg/L)	56.5	67.7	9.59	37.6	10.3
Manganese (Mn)-Dissolved (mg/L)	0.660	0.451	0.0492	0.161	0.0609
Mercury (Hg)-Dissolved (mg/L)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved (mg/L)	0.000383	0.000414	0.000405	0.00105	0.000460
Nickel (Ni)-Dissolved (mg/L)	0.00093	0.00077	<0.00050	0.00080	<0.00050
Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium (K)-Dissolved (mg/L)	2.98	2.85	0.75	11.0	0.77
Selenium (Se)-Dissolved (mg/L)	0.000096	0.000083	<0.000050	0.000077	0.000061
Silicon (Si)-Dissolved (mg/L)	4.87	4.77	5.49	1.55	5.21
Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	0.000026	<0.000010
Sodium (Na)-Dissolved (mg/L)	11.6	6.65	2.81	13.4	2.96
Strontium (Sr)-Dissolved (mg/L)	0.469	0.468	0.248	0.453	0.246
Sulfur (S)-Dissolved (mg/L)	147	156	12.4	185	17.1
Thallium (Tl)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	0.000171	<0.000010
Tin (Sn)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Uranium (U)-Dissolved (mg/L)	0.00192	0.00252	0.000561	0.000855	0.000605
Vanadium (V)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Dissolved (mg/L)	0.0047	0.0116	0.0053	0.0402	0.0012
Zirconium (Zr)-Dissolved (mg/L)	<0.00030	<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	L1780519-6	L1780519-7	L1780519-8	L1780519-9	L1780519-10
Description	Water	Water	Water	Water	Water
Sampled Date	06-JUN-16	07-JUN-16	07-JUN-16	07-JUN-16	07-JUN-16
Sampled Time	18:10	16:40	09:45	09:00	09:35
Client ID	WQ-SEEP	WQ-PC-D	WQ-DC-DX+105	WQ-FIELD BLANK	WQ-MS-S-03
Grouping **Analyte**					
WATER					
Dissolved Metals Magnesium (Mg)-Dissolved (mg/L)	57.4	11.1	38.5	<0.10	67.1
Manganese (Mn)-Dissolved (mg/L)	5.60	0.835	0.633	<0.00010	1.35
Mercury (Hg)-Dissolved (mg/L)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved (mg/L)	0.000811	0.000738	0.000191	<0.000050	0.000267
Nickel (Ni)-Dissolved (mg/L)	0.00259	0.00077	0.00117	<0.00050	0.00211
Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium (K)-Dissolved (mg/L)	6.00	2.47	3.66	<0.10	3.51
Selenium (Se)-Dissolved (mg/L)	0.000246	0.000091	0.000065	<0.000050	0.000062
Silicon (Si)-Dissolved (mg/L)	7.30	4.57	5.69	<0.050	6.63
Silver (Ag)-Dissolved (mg/L)	<0.000010	0.000021	0.000013	<0.000010	<0.000010
Sodium (Na)-Dissolved (mg/L)	34.6	5.01	3.69	<0.050	5.06
Strontium (Sr)-Dissolved (mg/L)	0.723	0.255	0.277	<0.00020	0.435
Sulfur (S)-Dissolved (mg/L)	214	43.8	90.6	<0.50	156
Thallium (Tl)-Dissolved (mg/L)	<0.000010	<0.000010	0.000050	<0.000010	0.000093
Tin (Sn)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Dissolved (mg/L)	0.00061	0.00095	<0.00030	<0.00030	<0.00030
Uranium (U)-Dissolved (mg/L)	0.00175	0.000325	0.00227	<0.000010	0.00403
Vanadium (V)-Dissolved (mg/L)	0.00122	0.00058	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Dissolved (mg/L)	0.0190	0.0080	0.423	<0.0010	1.16
Zirconium (Zr)-Dissolved (mg/L)	0.00048	<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	L1780519-11	L1780519-12	L1780519-13	L1780519-14	L1780519-15
Description	Water	Water	Water	Water	Water
Sampled Date	07-JUN-16	07-JUN-16	07-JUN-16	07-JUN-16	08-JUN-16
Sampled Time	09:15	13:15	08:40	16:15	10:05
Client ID	WQ-DC-DX	WQ-VC-DBC	WQ-NW-SEEP-02	WQ-PC-U	WQ-DESS-03
Grouping / Analyte					
WATER					
Dissolved Metals					
Magnesium (Mg)-Dissolved (mg/L)	15.0	7.38	49.5	11.3	1.61
Manganese (Mn)-Dissolved (mg/L)	0.0181	0.0887	0.0335	0.922	0.00198
Mercury (Hg)-Dissolved (mg/L)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	0.0000087
Molybdenum (Mo)-Dissolved (mg/L)	<0.000050	0.000430	0.000092	0.000672	<0.000050
Nickel (Ni)-Dissolved (mg/L)	<0.00050	0.00052	<0.00050	0.00117	0.00137
Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium (K)-Dissolved (mg/L)	4.85	0.67	2.67	2.49	0.78
Selenium (Se)-Dissolved (mg/L)	<0.000050	<0.000050	0.000464	0.000111	0.000058
Silicon (Si)-Dissolved (mg/L)	4.26	5.48	3.89	4.65	5.93
Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	0.000015	0.000025	<0.000010
Sodium (Na)-Dissolved (mg/L)	2.97	2.30	2.03	5.00	1.35
Strontium (Sr)-Dissolved (mg/L)	0.169	0.224	0.597	0.250	0.0367
Sulfur (S)-Dissolved (mg/L)	43.7	8.69	279	44.2	3.43
Thallium (Tl)-Dissolved (mg/L)	<0.000010	<0.000010	0.000036	<0.000010	<0.000010
Tin (Sn)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium (Ti)-Dissolved (mg/L)	<0.00030	0.00153	<0.00030	0.00065	0.00077
Uranium (U)-Dissolved (mg/L)	0.000098	0.000531	0.000656	0.000164	0.000018
Vanadium (V)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Dissolved (mg/L)	0.0024	0.0020	0.0790	0.0156	0.0053
Zirconium (Zr)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	0.00050

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1780519-16	L1780519-17	L1780519-18	L1780519-19	L1780519-20
Description	Water	Water	Water	Water	Water
Sampled Date	08-JUN-16	08-JUN-16	08-JUN-16	08-JUN-16	07-JUN-16
Sampled Time	09:00	09:00	10:30	10:20	08:50
Client ID	WQ-DC-D1B-R	WQ-DC-D1B	WQ-CH-P-13-01	WQ-DESS-01	WQ-NW-SEEP-02
Grouping **Analyte**					
WATER					
Dissolved Metals Magnesium (Mg)-Dissolved (mg/L)	85.3	83.6	70.5	41.1	48.8
Manganese (Mn)-Dissolved (mg/L)	0.633	0.632	0.292	0.0720	0.0320
Mercury (Hg)-Dissolved (mg/L)	<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
Molybdenum (Mo)-Dissolved (mg/L)	0.000217	0.000212	<0.000050	<0.000050	0.000081
Nickel (Ni)-Dissolved (mg/L)	0.00059	0.00059	0.00706	0.00422	<0.00050
Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Potassium (K)-Dissolved (mg/L)	3.95	3.90	0.97	0.70	2.61
Selenium (Se)-Dissolved (mg/L)	0.000097	0.000059	0.000062	<0.000050	0.000437
Silicon (Si)-Dissolved (mg/L)	5.60	5.55	5.44	5.66	3.86
Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	0.000016
Sodium (Na)-Dissolved (mg/L)	5.90	21.8 DTC	3.61	2.60	1.88
Strontium (Sr)-Dissolved (mg/L)	0.480	0.485	0.367	0.233	0.597
Sulfur (S)-Dissolved (mg/L)	187	183	207	121	285
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)	<0.00030	<0.00030	<0.00030	0.00041	<0.00030
Uranium (U)-Dissolved (mg/L)	0.00272	0.00269	<0.000010	<0.000010	0.000641
Vanadium (V)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Zinc (Zn)-Dissolved (mg/L)	0.0844	0.0837	3.74	1.71	0.0780
Zirconium (Zr)-Dissolved (mg/L)	<0.00030	<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	L1780519-21	L1780519-22	L1780519-23	L1780519-24	
Description	Water	Water	Water	Water	
Sampled Date	07-JUN-16	06-JUN-16	08-JUN-16		
Sampled Time	13:40	16:45	14:30		
Client ID	WQ-VC-U	WQ-DC-U	WQ-BC	TRAVEL BLANK	
Grouping **Analyte**					
WATER					
Dissolved Metals Magnesium (Mg)-Dissolved (mg/L)	6.97	68.6	7.66		
Manganese (Mn)-Dissolved (mg/L)	0.0177	1.05	0.218		
Mercury (Hg)-Dissolved (mg/L)	<0.0000050	<0.0000050	<0.0000050		
Molybdenum (Mo)-Dissolved (mg/L)	0.000389	0.000426	0.000696		
Nickel (Ni)-Dissolved (mg/L)	<0.00050	0.00077	0.00068		
Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050	<0.050		
Potassium (K)-Dissolved (mg/L)	0.57	3.32	0.83		
Selenium (Se)-Dissolved (mg/L)	<0.000050	0.000087	0.000065		
Silicon (Si)-Dissolved (mg/L)	5.25	5.15	5.70		
Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010		
Sodium (Na)-Dissolved (mg/L)	2.02	9.90	2.60		
Strontium (Sr)-Dissolved (mg/L)	0.238	0.526	0.197		
Sulfur (S)-Dissolved (mg/L)	4.99	174	17.5		
Thallium (Tl)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010		
Tin (Sn)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010		
Titanium (Ti)-Dissolved (mg/L)	<0.00030	<0.00030	0.00095		
Uranium (U)-Dissolved (mg/L)	0.000415	0.00242	0.000711		
Vanadium (V)-Dissolved (mg/L)	<0.00050	<0.00050	0.00070		
Zinc (Zn)-Dissolved (mg/L)	0.0031	0.0028	0.0053		
Zirconium (Zr)-Dissolved (mg/L)	<0.00030	<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	L1780519-24
Method Blank	Alkalinity, Total (as CaCO3)	B	L1780519-24
Method Blank	Alkalinity, Total (as CaCO3)	B	L1780519-24
Duplicate	Beryllium (Be)-Total	DLA	L1780519-1, -2, -3, -4
Duplicate	Bismuth (Bi)-Total	DLA	L1780519-1, -2, -3, -4
Duplicate	Tin (Sn)-Total	DLA	L1780519-1, -2, -3, -4
Duplicate	Zirconium (Zr)-Total	DLA	L1780519-1, -2, -3, -4
Duplicate	Bismuth (Bi)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Cadmium (Cd)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Chromium (Cr)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Cobalt (Co)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Copper (Cu)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Lead (Pb)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Nickel (Ni)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Selenium (Se)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Silver (Ag)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Tin (Sn)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Titanium (Ti)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Vanadium (V)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Zinc (Zn)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Zirconium (Zr)-Total	DLA	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Duplicate	Cadmium (Cd)-Dissolved	DLM	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sulfate (SO4)	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -24, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Total	MS-B	L1780519-1, -2, -3, -4
Matrix Spike	Magnesium (Mg)-Total	MS-B	L1780519-1, -2, -3, -4
Matrix Spike	Potassium (K)-Total	MS-B	L1780519-1, -2, -3, -4
Matrix Spike	Silicon (Si)-Total	MS-B	L1780519-1, -2, -3, -4
Matrix Spike	Sulfur (S)-Total	MS-B	L1780519-1, -2, -3, -4
Matrix Spike	Aluminum (Al)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Uranium (U)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Aluminum (Al)-Total	MS-B	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Matrix Spike	Barium (Ba)-Total	MS-B	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Matrix Spike	Manganese (Mn)-Total	MS-B	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -

Reference Information

	Parameter	Qualifier	Applies to Sample Number(s)
			23, -24
Matrix Spike	Sodium (Na)-Total	MS-B	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Matrix Spike	Strontium (Sr)-Total	MS-B	L1780519-13, -14, -15, -16, -17, -18, -19, -20, -21, -22, -23, -24
Matrix Spike	Sulfur (S)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Silicon (Si)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sulfur (S)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Silicon (Si)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Zinc (Zn)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Arsenic (As)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Uranium (U)-Dissolved	MS-B	L1780519-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -3, -4, -5, -6, -7, -8, -9

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
DLDS	Detection Limit Raised: Dilution required due to high Dissolved Solids / Electrical Conductivity.
DLIS	Detection Limit Adjusted: Insufficient Sample
DLM	Detection Limit Adjusted due to sample matrix effects (e.g. chemical interference, colour, turbidity).
DTC	Dissolved concentration exceeds total. Results were confirmed by re-analysis.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
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)

Reference Information

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.

F-SIE-VA	Water	Fluoride by SIE	APHA 4500-F "Fluoride"

This analysis is carried out using procedures adapted from APHA Method 4500-F "Fluoride". Fluoride is determined using a selective ion electrode. This method has a significant negative interference (i.e. results could be biased low) when Al3+ is present in the sample at a concentration greater than 2.5 mg/L.

F-SIE-VA	Water	Fluoride by SIE	APHA 4500-F Fluoride

This analysis is carried out using procedures adapted from APHA Method 4500-F "Fluoride". Fluoride is determined using a selective ion electrode. This method has a significant negative interference (i.e. results could be biased low) when Al3+ is present in the sample at a concentration greater than 2.5 mg/L.

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.

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

Reference Information

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)

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

Reference Information

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
WR	ALS ENVIRONMENTAL - WHITEHORSE, YUKON, CANADA
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA
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.

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Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

L1780519-COFC

COC Number: 14 -

Page ____ of ____

Report To		Report Format / Dis		Select Service Level below (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	
	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): [redacted]

ALS Contact: Sean Slugget

Sampler: AM/DS/JM

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	F/P		
[redacted]	WQ - DC - R	06 -Jun-16	14:55	Water	R	R	R	R	R	R	R	R	R	9
[redacted]	~~WQ - DC - B~~ WQ - DC - B	06 -Jun-16	19:00	Water	R	R	R	R	R	R	R	R	R	9
[redacted]	WQ - VCR	06 -Jun-16	14:30	Water	R	R	R	R	R	R	R	R	R	9
[redacted]	WQ - TP	06 -Jun-16	18:40	Water	R	R	R	R	R	R	R	R	R	9
[redacted]	WQ - VC - UMN	07 -Jun-16	11:15	Water	R	R	R	R	R	R	R	R	R	9
[redacted]	WQ - SEEP	06 -Jun-16	18:10	Water	R	R	R	R	R	R	R	R	R	9
[redacted]	WQ - PC - D	07-JUN-16	16:40	water	R	R	R	R	R	R	R	R	R	9
[redacted]														
[redacted]														
[redacted]														
[redacted]														
[redacted]														

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ Yes ☐ No

Are samples for human drinking water use? ☐ Yes ☐ No

Special Instructions / Specify Criteria to add on report (client Use)

SAMPLE CONDITION AS RECEIVED (lab use only)

Frozen ☐ | Ice packs ☐ Yes ☐ No | Cooling Initiated ☑

SIF Observations ☐ Yes ☐ No | Custody seal intact ☐ Yes ☐ No

INITIAL COOLER TEMPERATURES °C		FINAL COOLER TEMPERATURES °C	
3.9	4.1	5.6	[redacted]

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:
ALEX MISCHLER	08 JUN 2016	16:28	[redacted]	6JUN16	9:30	[redacted]	JUN 10	3:15PM

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Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

L1780519-COFC

COC Number: 14 -

Page ___ of ___

Report To	
Company:	EDI
Contact:	Lyndsay Doetzel
Address:	2195 - 2nd Avenue Whitehorse, YT Y1A 3T8
Phone:	867-393-4882

Report Format / Distribution

Select Report Format: ☑ PDF ☑ EXCEL ☐ EDD (DIGITAL)

Quality Control (QC) Report with Report ☐ Yes ☐ No

☐ Criteria on Report - provide details below if box checked

Select Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: ldoetzel@edynamics.com

Email 2: Emilie.Hamm@gov.yk.ca

Email 3: erik.pit@gov.yk.ca

...sh Turnaround Time (TAT) is not available for all tests)

- R ☑ Regular (Standard TAT if received by 3 pm - business days)
- P ☐ Priority (2-4 bus. days if received by 3pm) 50% surcharge - contact ALS to confirm TAT
- E ☐ Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT
- E2 ☐ Same day or weekend emergency - contact ALS to confirm TAT and surcharge

Specify Date Required for E2,E or P:

Invoice To		
Same as Report To	☑ Yes	☑ No
Copy of Invoice with Report	☑ Yes	☐ No
Company:	EDI	
Contact:	S Jenner	

Invoice Distribution

Select Invoice Distribution: ☑ EMAIL ☐ MAIL ☐ FAX

Email 1 or Fax: sjenner@edynamics.com

Email 2: ldoetzel@edynamics.com

Project Information

ALS Quote #:	Q55559
Job #:	MOUNT NANSEN 16-Y-0089
PO / AFE:	
LSD:	

Oil and Gas Required Fields (client use)

Approver ID:	Cost Center:
GL Account:	Routing Code:
Activity Code:	
Location:	

ALS Lab Work Order # (lab use only) [redacted]

ALS Contact: Sean Slugget

Sampler: AM/JM/DS

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 (P)	CN-CNO-WT (P)	CN-SCN-VA (P)	NH3-F-VA (P)	MET-T-BCMDG-VA (P)	MET-D-BCMDG-VA (F/P)	IONBALANC-VA, TDS-CALC-VA					Number of Containers
[redacted]	WQ - DXC - DX+105	07-Jun-16	09:45	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	WQ - FIELD BLANK	07-Jun-16	09:00	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	WQ - MS - S - 03	07-Jun-16	09:35	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	WQ - DC - DX	07-Jun-16	09:15	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	WQ - VC - DBC	07-Jun-16	13:15	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	WQ - NW - SEEP - 02	07-Jun-16	08:40	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	WQ - PC - U	07 JUN 16	16:15	Water	R	R	R	R	R	R	R	R	R					9
[redacted]																		
[redacted]																		
[redacted]																		
[redacted]																		
[redacted]																		

Drinking Water (DW) Samples[1] (client use)

Are samples taken from a Regulated DW System? ☐ Yes ☐ No

Are samples for human drinking water use? ☐ Yes ☐ No

Special Instructions / Specify Criteria to add on report (client Use)

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 [redacted]

FINAL COOLER TEMPERATURES °C: 9/8/5/8/8°C

SHIPMENT RELEASE (client use)		
Released by: ALEX MISCHLER	Date: 08 JUN 2016	Time: 16 28

INITIAL SHIPMENT RECEPTION (lab use only)		
Received by: [redacted]	Date: [redacted]	Time: [redacted]

FINAL SHIPMENT RECEPTION (lab use only)		
Received by: [illegible]	Date: Jun 10	Time: 3:15 pm

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COC Number: 14 -

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Report To		Report Format / Distribution		Turnaround Time (TAT) (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		
	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): [redacted]

ALS Contact: Sean Slugget

Sampler: AM/DS/JM

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	F/P						
[redacted]	WQ - DESS - 03	08 -Jun-16	10:05	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	WQ - DC - D1B - R	08 -Jun-16	9:00	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	WQ - DC - D1B	08 -Jun-16	9:00	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	WQ - CH - P - 13 - 01	08 -Jun-16	10:30	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	WQ - DESS - 01	08 -Jun-16	10:20	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	WQ - NW - SEEP - 02	07 -Jun-16	08:50	Water	R	R	R	R	R	R	R	R	R					9
[redacted]																		
[redacted]																		
[redacted]																		
[redacted]																		
[redacted]																		
[redacted]																		

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	

[redacted] SAMPLE CONDITION AS RECEIVED (lab use only) [redacted]

Frozen ☐ | Ice packs Yes ☐ No ☐ | Cooling Initiated ☐ | SIF Observations Yes ☐ No ☐ | Custody seal intact Yes ☐ No ☐

[redacted] INITIAL COOLER TEMPERATURES °C [redacted] FINAL COOLER TEMPERATURES °C [redacted]

[redacted] 9/8/7/8/6

SHIPMENT RELEASE (client use)			[redacted] INITIAL SHIPMENT RECEPTION (lab use only) [redacted]			[redacted] FINAL SHIPMENT RECEPTION (lab use only) [redacted]		
Released by: Joel Hefebe	Date: 08 Jun 2016	Time: 16:28	Received by: [redacted]	Date: [redacted]	Time: [redacted]	Received by: [redacted]	Date: Jun 10	Time: 3:15pm

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Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

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COC Number: 14 -

Page 1 of 2

Report To		Report Format / Distribution		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	
	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): [redacted]		ALS Contact: Sean Slugget	Sampler: AM/DS/JM

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	F/P						
[redacted]	WQ - VC - U	07-Jun-16	13:40	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	WQ - DC - U	06-Jun-16	16:45	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	WQ - BC	07-Jun-16	14:30	Water	R	R	R	R	R	R	R	R	R					9
[redacted]	TRAVEL BLANK	-Jun-16		Water	R	R	R	R	R	R	R	R	R					9
[redacted]		-Jun-16		Water	R	R	R	R	R	R	R	R	R					9
[redacted]		-Jun-16		Water	R	R	R	R	R	R	R	R	R					9
[redacted]																		
[redacted]																		
[redacted]																		
[redacted]																		
[redacted]																		
[redacted]																		

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	
[redacted]	[redacted]	[redacted]	[redacted]	9/8/7/6/5°C

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:
ALEX MISCHLER	08 JUN 2016	16:28	[redacted]	[redacted]	[redacted]	[redacted]	JUN 10	3:15pm