



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

Date Received: 17-FEB-16
Report Date: 29-FEB-16 14:44 (MT)
Version: FINAL

Client Phone: 867-393-4882

Certificate of Analysis

Lab Work Order #: L1735057
Project P.O. #: NOT SUBMITTED
Job Reference: MOUNT NANSEN 15-Y-0146
C of C Numbers: 1, 2
Legal Site Desc:

Can Dang
Senior Account Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 8081 Lougheed Hwy, Suite 100, Burnaby, BC V5A 1W9 Canada | Phone: +1 604 253 4188 | Fax: +1 604 253 6700
ALS CANADA LTD Part of the ALS Group A Campbell Brothers Limited Company

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID Description Sampled Date Sampled Time Client ID					
	L1735057-1 Water 15-FEB-16 13:35 WQ-VC-R+150	L1735057-2 Water 15-FEB-16 17:05 WQ-DC-U	L1735057-3 Water 15-FEB-16 18:40 WQ-SEEP	L1735057-4 Water 15-FEB-16 19:10 WQ-TP	L1735057-5 Water 16-FEB-16 14:45 FIELD BLANK	
Grouping	Analyte					
WATER						
Physical Tests	Conductivity (uS/cm)	286	1770	1660	2850	<2.0
	Hardness (as CaCO3) (mg/L)	137	1000	916	1850	<0.50
	pH (pH)	7.51	7.64	7.04	7.71	5.55
	Total Suspended Solids (mg/L)	<3.0	10.7	46	105	<3.0
	Total Dissolved Solids (mg/L)	154	1380	1310	2390	<1.0
Anions and Nutrients	Alkalinity, Bicarbonate (as CaCO3) (mg/L)	107	285	250	267	<1.0
	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)	107	285	250	267	<1.0
	Ammonia, Total (as N) (mg/L)	<0.0050	4.71	4.87	1.67	<0.0050
	Chloride (Cl) (mg/L)	<0.50	<2.5 ^{DLA}	<2.5 ^{DLA}	<2.5 ^{DLA}	<0.50
	Fluoride (F) (mg/L)	0.056	0.13	<0.10 ^{DLA}	0.37	<0.020
	Nitrate (as N) (mg/L)	0.167	0.397	0.623	0.185	<0.0050
	Nitrite (as N) (mg/L)	<0.0010	0.0165	0.0208	<0.0050 ^{DLA}	<0.0010
	Sulfate (SO4) (mg/L)	37.6	794	751	1470	<0.30
	Anion Sum (meq/L)	2.93	22.3	20.7	35.9	<0.10
	Cation Sum (meq/L)	2.92	22.7	21.5	40.0	<0.10
	Cation - Anion Balance (%)	-0.1	0.9	2.0	5.4	0.0
	Cyanides	Cyanide, Weak Acid Diss (mg/L)	<0.0050	0.0181	0.0131	<0.0050
Cyanide, Total (mg/L)		<0.0050	0.0431	0.0711	<0.0050	<0.0050
Cyanate (mg/L)		0.22	<0.20	<0.20	<0.20	<0.20
Thiocyanate (SCN) (mg/L)		<0.50	3.02	4.68	<0.50	<0.50
Total Metals	Aluminum (Al)-Total (mg/L)	0.0078	0.0132	0.0158	0.0193	<0.0030
	Antimony (Sb)-Total (mg/L)	0.00054	0.00045	0.00050	0.0210	<0.00010
	Arsenic (As)-Total (mg/L)	0.00124	0.0449	0.0809	0.229	<0.00010
	Barium (Ba)-Total (mg/L)	0.0813	0.0907	0.0620	0.0378	<0.000050
	Beryllium (Be)-Total (mg/L)	<0.000020	<0.000020	<0.000020	<0.000040 ^{DLA}	<0.000020
	Bismuth (Bi)-Total (mg/L)	<0.000050	<0.000050	<0.000050	<0.00010 ^{DLA}	<0.000050
	Boron (B)-Total (mg/L)	<0.010	0.052	0.054	0.153	<0.010
	Cadmium (Cd)-Total (mg/L)	0.0000109	0.000204	0.000507	0.00708	<0.000050
	Calcium (Ca)-Total (mg/L)	35.2	282	268	558	<0.050
	Chromium (Cr)-Total (mg/L)	<0.00010	0.00048	0.00058	<0.00020 ^{DLA}	<0.00010
	Cobalt (Co)-Total (mg/L)	<0.00010	0.00804	0.00877	0.00164	<0.00010
	Copper (Cu)-Total (mg/L)	0.00109	0.00135	0.00281	0.0504	<0.00050
	Iron (Fe)-Total (mg/L)	<0.010	5.02	16.9	0.590	<0.010
	Lead (Pb)-Total (mg/L)	<0.000050	<0.000050	0.000055	0.00866	<0.000050
	Lithium (Li)-Total (mg/L)	0.0010	0.0015	0.0013	0.0199	<0.0010

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID Description Sampled Date Sampled Time Client ID	L1735057-6 Water TRAVEL BLANK	L1735057-7 Water 16-FEB-16 09:00 WQ-DC-DX+105-R	L1735057-8 Water 16-FEB-16 08:55 WQ-DC-DX+105	L1735057-9 Water 16-FEB-16 12:55 WQ-VC-U	L1735057-10 Water 16-FEB-16 10:15 WQ-VC-UMN	
Grouping	Analyte					
WATER						
Physical Tests	Conductivity (uS/cm)	<2.0	1150	1130	231	285
	Hardness (as CaCO3) (mg/L)	<0.50	698	696	123	152
	pH (pH)	5.54	7.59	7.58	7.47	7.56
	Total Suspended Solids (mg/L)	<3.0	22.0	46.7	<3.0	<3.0
	Total Dissolved Solids (mg/L)	<1.0	814	812	125	162
Anions and Nutrients	Alkalinity, Bicarbonate (as CaCO3) (mg/L)	<1.0	258	255	92.0	108
	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	258	255	92.0	108
	Ammonia, Total (as N) (mg/L)	<0.0050	0.0219	0.0201	<0.0050	<0.0050
	Chloride (Cl) (mg/L)	<0.50	<1.0	<1.0 ^{DLA}	<0.50	<0.50
	Fluoride (F) (mg/L)	<0.020	0.197	0.217	0.054	0.060
	Nitrate (as N) (mg/L)	<0.0050	<0.010	<0.010 ^{DLA}	0.178	0.122
	Nitrite (as N) (mg/L)	<0.0010	<0.0020	0.0029	<0.0010	<0.0010
	Sulfate (SO4) (mg/L)	<0.30	407	408	22.9	39.0
	Anion Sum (meq/L)	<0.10	13.6	13.6	2.33	2.98
	Cation Sum (meq/L)	<0.10	14.3	14.3	2.61	3.24
	Cation - Anion Balance (%)	0.0	2.4	2.5	5.7	4.3
	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	<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	<0.50
Total Metals	Aluminum (Al)-Total (mg/L)	<0.0030	0.714	1.64	0.0368	0.0107
	Antimony (Sb)-Total (mg/L)	<0.00010	0.0119	0.0197	0.00010	0.00068
	Arsenic (As)-Total (mg/L)	<0.00010	0.148	0.301	0.00028	0.00298
	Barium (Ba)-Total (mg/L)	<0.000050	0.0226	0.0449	0.0879	0.0838
	Beryllium (Be)-Total (mg/L)	<0.000020	0.000030	0.000071	<0.000020	<0.000020
	Bismuth (Bi)-Total (mg/L)	<0.000050	0.000101	0.000194	<0.000050	<0.000050
	Boron (B)-Total (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cadmium (Cd)-Total (mg/L)	<0.0000050	0.00501	0.0114	0.0000198	0.0000390
	Calcium (Ca)-Total (mg/L)	<0.050	175	173	32.6	39.6
	Chromium (Cr)-Total (mg/L)	<0.00010	0.00088	0.00182	0.00012	<0.00010
	Cobalt (Co)-Total (mg/L)	<0.00010	0.00139	0.00286	<0.00010	<0.00010
	Copper (Cu)-Total (mg/L)	<0.00050	0.00330	0.00635	0.00112	0.00129
	Iron (Fe)-Total (mg/L)	<0.010	3.02	6.39	0.045	0.016
	Lead (Pb)-Total (mg/L)	<0.000050	0.0106	0.0182	<0.000050	0.000078
	Lithium (Li)-Total (mg/L)	<0.0010	0.0098	0.0099	<0.0010	<0.0010

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

		Sample ID	L1735057-11			
		Description	Water			
		Sampled Date	16-FEB-16			
		Sampled Time	12:25			
		Client ID	WQ-VC-DBC			
Grouping	Analyte					
WATER						
Physical Tests	Conductivity (uS/cm)		230			
	Hardness (as CaCO3) (mg/L)		124			
	pH (pH)		7.54			
	Total Suspended Solids (mg/L)		4.0			
	Total Dissolved Solids (mg/L)		126			
Anions and Nutrients	Alkalinity, Bicarbonate (as CaCO3) (mg/L)		92.7			
	Alkalinity, Carbonate (as CaCO3) (mg/L)		<1.0			
	Alkalinity, Hydroxide (as CaCO3) (mg/L)		<1.0			
	Alkalinity, Total (as CaCO3) (mg/L)		92.7			
	Ammonia, Total (as N) (mg/L)		<0.0050			
	Chloride (Cl) (mg/L)		<0.50			
	Fluoride (F) (mg/L)		0.053			
	Nitrate (as N) (mg/L)		0.178			
	Nitrite (as N) (mg/L)		<0.0010			
	Sulfate (SO4) (mg/L)		22.8			
	Anion Sum (meq/L)		2.34			
	Cation Sum (meq/L)		2.62			
	Cation - Anion Balance (%)		5.5			
	Cyanides	Cyanide, Weak Acid Diss (mg/L)		<0.0050		
Cyanide, Total (mg/L)			<0.0050			
Cyanate (mg/L)			<0.20			
Thiocyanate (SCN) (mg/L)			<0.50			
Total Metals	Aluminum (Al)-Total (mg/L)		0.0368			
	Antimony (Sb)-Total (mg/L)		<0.00010			
	Arsenic (As)-Total (mg/L)		0.00025			
	Barium (Ba)-Total (mg/L)		0.0831			
	Beryllium (Be)-Total (mg/L)		<0.000020			
	Bismuth (Bi)-Total (mg/L)		<0.000050			
	Boron (B)-Total (mg/L)		<0.010			
	Cadmium (Cd)-Total (mg/L)		0.0000223			
	Calcium (Ca)-Total (mg/L)		30.9			
	Chromium (Cr)-Total (mg/L)		0.00013			
	Cobalt (Co)-Total (mg/L)		<0.00010			
	Copper (Cu)-Total (mg/L)		0.00103			
	Iron (Fe)-Total (mg/L)		0.044			
	Lead (Pb)-Total (mg/L)		<0.000050			
	Lithium (Li)-Total (mg/L)		<0.0010			

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

		Sample ID	L1735057-1	L1735057-2	L1735057-3	L1735057-4	L1735057-5
		Description	Water	Water	Water	Water	Water
		Sampled Date	15-FEB-16	15-FEB-16	15-FEB-16	15-FEB-16	16-FEB-16
		Sampled Time	13:35	17:05	18:40	19:10	14:45
		Client ID	WQ-VC-R+150	WQ-DC-U	WQ-SEEP	WQ-TP	FIELD BLANK
Grouping	Analyte						
WATER							
Total Metals	Magnesium (Mg)-Total (mg/L)		11.7	69.2	56.7	101	<0.10
	Manganese (Mn)-Total (mg/L)		0.00145	6.88	6.77	10.5	<0.00010
	Mercury (Hg)-Total (mg/L)		<0.0000050	<0.0000050	<0.0000050	0.0000068	<0.0000050
	Molybdenum (Mo)-Total (mg/L)		0.000413	0.00121	0.00111	0.00462	<0.000050
	Nickel (Ni)-Total (mg/L)		<0.00050	0.00356	0.00408	0.0063	<0.00050
	Phosphorus (P)-Total (mg/L)		<0.050	<0.050	<0.050	<0.050	<0.050
	Potassium (K)-Total (mg/L)		0.94	6.93	6.37	33.8	<0.10
	Selenium (Se)-Total (mg/L)		0.000066	0.000269	0.000260	0.00011	<0.000050
	Silicon (Si)-Total (mg/L)		6.56	7.87	7.76	6.11	<0.050
	Silver (Ag)-Total (mg/L)		<0.000010	0.000015	0.000030	0.000201	<0.000010
	Sodium (Na)-Total (mg/L)		3.79	38.0	36.8	39.7	<0.050
	Strontium (Sr)-Total (mg/L)		0.306	0.858	0.754	1.43	<0.00020
	Sulfur (S)-Total (mg/L)		12.2	254	237	531	<0.50
	Thallium (Tl)-Total (mg/L)		<0.000010	<0.000010	<0.000010	0.000387	<0.000010
	Tin (Sn)-Total (mg/L)		<0.00010	<0.00010	<0.00010	<0.00020 ^{DLA}	<0.00010
	Titanium (Ti)-Total (mg/L)		<0.00030	<0.0015 ^{DLM}	<0.0018 ^{DLM}	<0.00060 ^{DLA}	<0.00030
	Uranium (U)-Total (mg/L)		0.000840	0.00201	0.00189	0.00279	<0.000010
	Vanadium (V)-Total (mg/L)		<0.00050	0.00119	0.00267	<0.0010 ^{DLA}	<0.00050
	Zinc (Zn)-Total (mg/L)		<0.0030	0.0571	0.122	0.613	<0.0030
	Zirconium (Zr)-Total (mg/L)		<0.00030	0.00045	0.00072	<0.00060 ^{DLA}	<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)		0.0040	0.0063	0.0212	0.0034	<0.0010
	Antimony (Sb)-Dissolved (mg/L)		0.00054	0.00043	0.00049	0.0178	<0.00010
	Arsenic (As)-Dissolved (mg/L)		0.00120	0.0422	0.0582	0.149	<0.00010
	Barium (Ba)-Dissolved (mg/L)		0.0837	0.0877	0.0610	0.0372	<0.000050
	Beryllium (Be)-Dissolved (mg/L)		<0.000020	<0.000020	<0.000020	<0.000040 ^{DLA}	<0.000020
	Bismuth (Bi)-Dissolved (mg/L)		<0.000050	<0.000050	<0.000050	<0.00010 ^{DLA}	<0.000050
	Boron (B)-Dissolved (mg/L)		<0.010	0.049	0.051	0.150	<0.010
	Cadmium (Cd)-Dissolved (mg/L)		0.0000111	0.000165	0.000413	0.00698	<0.0000050
	Calcium (Ca)-Dissolved (mg/L)		35.6	287	273	571	<0.050
	Chromium (Cr)-Dissolved (mg/L)		<0.00010	0.00027	0.00043	<0.00020 ^{DLA}	<0.00010
	Cobalt (Co)-Dissolved (mg/L)		<0.00010	0.00800	0.00862	0.00159	<0.00010
	Copper (Cu)-Dissolved (mg/L)		0.00103	0.00091	0.00198	0.0405	<0.00020
	Iron (Fe)-Dissolved (mg/L)		<0.010	3.64	16.2	0.190	<0.010
	Lead (Pb)-Dissolved (mg/L)		<0.000050	<0.000050	<0.000050	0.00177	<0.000050
	Lithium (Li)-Dissolved (mg/L)		0.0010	0.0014	0.0013	0.0198	<0.0010

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID Description Sampled Date Sampled Time Client ID		L1735057-6 Water TRAVEL BLANK	L1735057-7 Water 16-FEB-16 09:00 WQ-DC-DX+105-R	L1735057-8 Water 16-FEB-16 08:55 WQ-DC-DX+105	L1735057-9 Water 16-FEB-16 12:55 WQ-VC-U	L1735057-10 Water 16-FEB-16 10:15 WQ-VC-UMN
Grouping	Analyte					
WATER						
Total Metals	Magnesium (Mg)-Total (mg/L)	<0.10	57.0	56.4	10.3	12.8
	Manganese (Mn)-Total (mg/L)	<0.00010	1.71	3.16	0.0941	0.0217
	Mercury (Hg)-Total (mg/L)	<0.0000050	<0.0000050	0.0000064	<0.0000050	<0.0000050
	Molybdenum (Mo)-Total (mg/L)	<0.000050	0.000442	0.000587	0.000381	0.000374
	Nickel (Ni)-Total (mg/L)	<0.00050	0.00234	0.00417	0.00051	<0.00050
	Phosphorus (P)-Total (mg/L)	<0.050	<0.050	0.129	<0.050	<0.050
	Potassium (K)-Total (mg/L)	<0.10	3.62	3.72	0.75	1.07
	Selenium (Se)-Total (mg/L)	<0.000050	<0.000050	0.000069	<0.000050	0.000069
	Silicon (Si)-Total (mg/L)	<0.050	7.60	8.97	6.46	7.27
	Silver (Ag)-Total (mg/L)	<0.000010	0.000194	0.000326	<0.000010	<0.000010
	Sodium (Na)-Total (mg/L)	<0.050	5.08	5.04	2.94	4.10
	Strontium (Sr)-Total (mg/L)	<0.00020	0.387	0.387	0.313	0.340
	Sulfur (S)-Total (mg/L)	<0.50	127	123	7.41	12.6
	Thallium (Tl)-Total (mg/L)	<0.000010	0.000121	0.000185	<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	0.0384	0.0908	0.00120	<0.00030
	Uranium (U)-Total (mg/L)	<0.000010	0.00400	0.00412	0.000724	0.000797
	Vanadium (V)-Total (mg/L)	<0.00050	0.00323	0.00708	<0.00050	<0.00050
	Zinc (Zn)-Total (mg/L)	<0.0030	0.755	1.23	<0.0030	0.0044
	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
	Dissolved Metals Filtration Location		FIELD	FIELD	FIELD	FIELD
	Aluminum (Al)-Dissolved (mg/L)		<0.0010	0.0010	0.0060	0.0061
	Antimony (Sb)-Dissolved (mg/L)		0.00798	0.00807	<0.00010	0.00065
	Arsenic (As)-Dissolved (mg/L)		0.0159	0.0180	0.00023	0.00292
	Barium (Ba)-Dissolved (mg/L)		0.0114	0.0121	0.0862	0.0833
	Beryllium (Be)-Dissolved (mg/L)		<0.000020	<0.000020	<0.000020	<0.000020
	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)		0.000403	0.000331	0.0000235	0.0000344
	Calcium (Ca)-Dissolved (mg/L)		183	183	32.8	40.4
	Chromium (Cr)-Dissolved (mg/L)		<0.00010	<0.00010	<0.00010	0.00011
	Cobalt (Co)-Dissolved (mg/L)		0.00063	0.00066	<0.00010	<0.00010
	Copper (Cu)-Dissolved (mg/L)		<0.00020	<0.00020	0.00094	0.00118
	Iron (Fe)-Dissolved (mg/L)		0.208	0.235	<0.010	0.012
	Lead (Pb)-Dissolved (mg/L)		<0.000050	<0.000050	<0.000050	<0.000050
	Lithium (Li)-Dissolved (mg/L)		0.0093	0.0098	<0.0010	<0.0010

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID Description Sampled Date Sampled Time Client ID	L1735057-11			
		Water	16-FEB-16	12:25	WQ-VC-DBC
Grouping	Analyte				
WATER					
Total Metals	Magnesium (Mg)-Total (mg/L)	9.92			
	Manganese (Mn)-Total (mg/L)	0.0958			
	Mercury (Hg)-Total (mg/L)	<0.0000050			
	Molybdenum (Mo)-Total (mg/L)	0.000381			
	Nickel (Ni)-Total (mg/L)	<0.00050			
	Phosphorus (P)-Total (mg/L)	<0.050			
	Potassium (K)-Total (mg/L)	0.75			
	Selenium (Se)-Total (mg/L)	<0.000050			
	Silicon (Si)-Total (mg/L)	6.16			
	Silver (Ag)-Total (mg/L)	<0.000010			
	Sodium (Na)-Total (mg/L)	2.77			
	Strontium (Sr)-Total (mg/L)	0.302			
	Sulfur (S)-Total (mg/L)	7.06			
	Thallium (Tl)-Total (mg/L)	<0.000010			
	Tin (Sn)-Total (mg/L)	<0.00010			
	Titanium (Ti)-Total (mg/L)	0.00110			
	Uranium (U)-Total (mg/L)	0.000704			
	Vanadium (V)-Total (mg/L)	<0.00050			
	Zinc (Zn)-Total (mg/L)	<0.0030			
	Zirconium (Zr)-Total (mg/L)	<0.00030			
Dissolved Metals	Dissolved Mercury Filtration Location	FIELD			
	Dissolved Metals Filtration Location	FIELD			
	Aluminum (Al)-Dissolved (mg/L)	0.0056			
	Antimony (Sb)-Dissolved (mg/L)	<0.00010			
	Arsenic (As)-Dissolved (mg/L)	0.00024			
	Barium (Ba)-Dissolved (mg/L)	0.0863			
	Beryllium (Be)-Dissolved (mg/L)	<0.000020			
	Bismuth (Bi)-Dissolved (mg/L)	<0.000050			
	Boron (B)-Dissolved (mg/L)	<0.010			
	Cadmium (Cd)-Dissolved (mg/L)	0.0000228			
	Calcium (Ca)-Dissolved (mg/L)	32.7			
	Chromium (Cr)-Dissolved (mg/L)	<0.00010			
	Cobalt (Co)-Dissolved (mg/L)	<0.00010			
	Copper (Cu)-Dissolved (mg/L)	0.00097			
	Iron (Fe)-Dissolved (mg/L)	<0.010			
	Lead (Pb)-Dissolved (mg/L)	<0.000050			
	Lithium (Li)-Dissolved (mg/L)	<0.0010			

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

		Sample ID	L1735057-1	L1735057-2	L1735057-3	L1735057-4	L1735057-5
		Description	Water	Water	Water	Water	Water
		Sampled Date	15-FEB-16	15-FEB-16	15-FEB-16	15-FEB-16	16-FEB-16
		Sampled Time	13:35	17:05	18:40	19:10	14:45
		Client ID	WQ-VC-R+150	WQ-DC-U	WQ-SEEP	WQ-TP	FIELD BLANK
Grouping	Analyte						
WATER							
Dissolved Metals	Magnesium (Mg)-Dissolved (mg/L)		11.6	69.8	57.0	103	<0.10
	Manganese (Mn)-Dissolved (mg/L)		0.00126	6.77	6.60	10.4	<0.00010
	Mercury (Hg)-Dissolved (mg/L)		<0.0000050	<0.0000050	<0.0000050	<0.0000050	<0.0000050
	Molybdenum (Mo)-Dissolved (mg/L)		0.000373	0.00108	0.00102	0.00461	<0.000050
	Nickel (Ni)-Dissolved (mg/L)		<0.00050	0.00336	0.00397	0.0061	<0.00050
	Phosphorus (P)-Dissolved (mg/L)		<0.050	<0.050	<0.050	<0.050	<0.050
	Potassium (K)-Dissolved (mg/L)		0.85	6.90	6.37	33.5	<0.10
	Selenium (Se)-Dissolved (mg/L)		0.000077	0.000260	0.000319	0.00015	<0.000050
	Silicon (Si)-Dissolved (mg/L)		6.57	7.83	7.83	6.08	<0.050
	Silver (Ag)-Dissolved (mg/L)		<0.000010	<0.000010	0.000012	0.000084	<0.000010
	Sodium (Na)-Dissolved (mg/L)		3.76	37.8	36.5	38.9	<0.050
	Strontium (Sr)-Dissolved (mg/L)		0.299	0.832	0.745	1.43	<0.00020
	Sulfur (S)-Dissolved (mg/L)		12.1	254	234	527	<0.50
	Thallium (Tl)-Dissolved (mg/L)		<0.000010	<0.000010	<0.000010	0.000395	<0.000010
	Tin (Sn)-Dissolved (mg/L)		<0.00010	<0.00010	<0.00010	<0.00020 ^{DLA}	<0.00010
	Titanium (Ti)-Dissolved (mg/L)		<0.00030	<0.00090 ^{DLM}	0.00099	<0.00060 ^{DLA}	<0.00030
	Uranium (U)-Dissolved (mg/L)		0.000794	0.00192	0.00183	0.00283	<0.000010
	Vanadium (V)-Dissolved (mg/L)		<0.00050	0.00089	0.00197	<0.0010 ^{DLA}	<0.00050
	Zinc (Zn)-Dissolved (mg/L)		<0.0010	0.0546	0.123	0.597	<0.0010
	Zirconium (Zr)-Dissolved (mg/L)		<0.00030	0.00043	0.00072	<0.00060 ^{DLA}	<0.00030

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID Description Sampled Date Sampled Time Client ID	L1735057-6 Water TRAVEL BLANK	L1735057-7 Water 16-FEB-16 09:00 WQ-DC-DX+105-R	L1735057-8 Water 16-FEB-16 08:55 WQ-DC-DX+105	L1735057-9 Water 16-FEB-16 12:55 WQ-VC-U	L1735057-10 Water 16-FEB-16 10:15 WQ-VC-UMN
Grouping	Analyte				
WATER					
Dissolved Metals	Magnesium (Mg)-Dissolved (mg/L)	58.3	58.3	10.1	12.5
	Manganese (Mn)-Dissolved (mg/L)	1.05	1.14	0.0885	0.0198
	Mercury (Hg)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050
	Molybdenum (Mo)-Dissolved (mg/L)	0.000360	0.000371	0.000353	0.000350
	Nickel (Ni)-Dissolved (mg/L)	0.00129	0.00143	<0.00050	<0.00050
	Phosphorus (P)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050
	Potassium (K)-Dissolved (mg/L)	3.45	3.44	0.71	1.02
	Selenium (Se)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	0.000070
	Silicon (Si)-Dissolved (mg/L)	6.62	6.60	6.33	7.18
	Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Dissolved (mg/L)	4.87	5.13	2.84	3.95
	Strontium (Sr)-Dissolved (mg/L)	0.389	0.394	0.305	0.328
	Sulfur (S)-Dissolved (mg/L)	128	127	7.22	12.4
	Thallium (Tl)-Dissolved (mg/L)	0.000071	0.000077	<0.000010	<0.000010
	Tin (Sn)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010
	Titanium (Ti)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030
	Uranium (U)-Dissolved (mg/L)	0.00397	0.00401	0.000683	0.000756
	Vanadium (V)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050
	Zinc (Zn)-Dissolved (mg/L)	0.554	0.590	0.0011	0.0042
	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 Description Sampled Date Sampled Time Client ID	L1735057-11	Water	16-FEB-16	12:25	WQ-VC-DBC
Grouping	Analyte					
WATER						
Dissolved Metals	Magnesium (Mg)-Dissolved (mg/L)	10.2				
	Manganese (Mn)-Dissolved (mg/L)	0.0956				
	Mercury (Hg)-Dissolved (mg/L)	<0.000050				
	Molybdenum (Mo)-Dissolved (mg/L)	0.000370				
	Nickel (Ni)-Dissolved (mg/L)	<0.00050				
	Phosphorus (P)-Dissolved (mg/L)	<0.050				
	Potassium (K)-Dissolved (mg/L)	0.71				
	Selenium (Se)-Dissolved (mg/L)	<0.000050				
	Silicon (Si)-Dissolved (mg/L)	6.36				
	Silver (Ag)-Dissolved (mg/L)	<0.000010				
	Sodium (Na)-Dissolved (mg/L)	2.86				
	Strontium (Sr)-Dissolved (mg/L)	0.308				
	Sulfur (S)-Dissolved (mg/L)	7.31				
	Thallium (Tl)-Dissolved (mg/L)	<0.000010				
	Tin (Sn)-Dissolved (mg/L)	<0.00010				
	Titanium (Ti)-Dissolved (mg/L)	<0.00030				
	Uranium (U)-Dissolved (mg/L)	0.000692				
	Vanadium (V)-Dissolved (mg/L)	<0.00050				
	Zinc (Zn)-Dissolved (mg/L)	<0.0010				
	Zirconium (Zr)-Dissolved (mg/L)	<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)
Matrix Spike	Cobalt (Co)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Lithium (Li)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Nickel (Ni)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Uranium (U)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Barium (Ba)-Total	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Total	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Total	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Copper (Cu)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Molybdenum (Mo)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9
Matrix Spike	Uranium (U)-Dissolved	MS-B	L1735057-1, -10, -11, -2, -3, -4, -5, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
DLA	Detection Limit adjusted for required dilution
DLM	Detection Limit Adjusted due to sample matrix effects.
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)
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			

Reference Information

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 CaCO ₃ 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
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 NH ₃ -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)

Reference Information

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.

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
---	---

Reference Information

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.



L1735057-COFC

COC Number: 14 -
Page 1 of 2

www.alsglobal.com

Report To		Report Format				Below (Rush Turnaround Time (TAT) is not available for all tests) R <input checked="" type="checkbox"/> Regular (Standard TAT if received by 3 pm - business days) P <input type="checkbox"/> Priority (2-4 bus. days if received by 3pm) 50% surcharge - contact ALS to confirm TAT E <input type="checkbox"/> Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT E2 <input type="checkbox"/> Same day or weekend emergency - contact ALS to confirm TAT and surcharge													
Company: EDI		Select Report Format: <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL) Quality Control (QC) Report with Report <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Criteria on Report - provide details below if box checked Select Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX				Specify Date Required for E2, E or P:													
Contact: Meghan Marjanovic		Email 1 or Fax: mmarjanovic@edynamics.com				Analysis Request Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below P P P P P F/P 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													
Address: 2195 - 2nd Avenue Whitehorse, YT Y1A 3T8		Email 2: Emilie.Hamm@gov.yk.ca																	
Phone: 867-393-4882		Email 3: erik.pit@gov.yk.ca																	
Invoice To: Same as Report To <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> No Copy of Invoice with Report <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Invoice Distribution																	
Company: EDI		Select Invoice Distribution: <input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX																	
Contact: S Jenner		Email 1 or Fax: sjenner@edynamics.com																	
Email 2: mmarjanovic@edynamics.com																			
Project Information		Oil and Gas Required Fields (client use)																	
ALS Quote #: Q49310		Approver ID:		Cost Center:															
Job #: MOUNT NANSEN 15-Y-0146		GL Account:		Routing Code:															
PO / AFE:		Activity Code:																	
LSD:		Location:																	
ALS Lab Work Order # (lab use only)		ALS Contact: Sean Slugget		Sampler: MS, JM															
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													Number of Containers
	WG-VC-R+150			15-Feb-16	13:35	Water	R	R	R	R	R	R	R	R	R	R	R	R	9
	WQ-DC-U			15-Feb-16	17:05	Water	R	R	R	R	R	R	R	R	R	R	R	R	9
	WQ-BEEP			15-Feb-16	18:40	Water	R	R	R	R	R	R	R	R	R	R	R	R	9
	WQ-TP			15-Feb-16	19:10	Water	R	R	R	R	R	R	R	R	R	R	R	R	9
	Field Blank			16-Feb-16	14:45	Water	R	R	R	R	R	R	R	R	R	R	R	R	9
	Travel Blank			/-Feb-16	/	Water	R	R	R	R	R	R	R	R	R	R	R	R	9
	WQ-PH			16-Feb-16	12:50	Water	R	R	R	R	R	R	R	R	R	R	R	R	9
Drinking Water (DW) Samples ¹ (client use) Are samples taken from a Regulated DW System? <input type="checkbox"/> Yes <input type="checkbox"/> No Are samples for human drinking water use? <input type="checkbox"/> Yes <input type="checkbox"/> No		Special Instructions / Specify Criteria to add on report (client Use)				SAMPLE CONDITION AS RECEIVED (lab use only) Frozen <input type="checkbox"/> SIF Observations Yes <input type="checkbox"/> No <input type="checkbox"/> Ice packs Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Custody seal intact Yes <input type="checkbox"/> No <input type="checkbox"/> Cooling Initiated <input type="checkbox"/> INITIAL COOLER TEMPERATURES °C: 5/6 16.0 FINAL COOLER TEMPERATURES °C: 4 8													
SHIPMENT RELEASE (client use)		INITIAL SHIPMENT RECEPTION (lab use only)				FINAL SHIPMENT RECEPTION (lab use only)													
Released by: JM	Date: 17 Feb 16	Time: 10:10	Received by: [Signature]	Date: 17 Feb 16	Time: 10:10	Received by: Sean F. B.	Date: 18 Feb 2016	Time: 11:25											



Chain of Custody (COC) / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com



L1735057-COFC

COC Number: 14 -

Page 1 of 1

Report To		Report Format / Distribution		<i>*(Rush Turnaround Time (TAT) is not available for all tests)</i>																																																																																																																																																																	
Company:	EDI	Select Report Format:	<input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> EXCEL <input type="checkbox"/> EDD (DIGITAL)	R	<input checked="" type="checkbox"/> Regular (Standard TAT if received by 3 pm - business days)																																																																																																																																																																
Contact:	Meghan Marjanovic	Quality Control (QC) Report with Report	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	P	<input type="checkbox"/> Priority (2-4 bus. days if received by 3pm) 50% surcharge - contact ALS to confirm TAT																																																																																																																																																																
Address:	2195 - 2nd Avenue Whitehorse, YT Y1A 3T8	<input type="checkbox"/> Criteria on Report - provide details below if box checked		E	<input checked="" type="checkbox"/> Emergency (1-2 bus. days if received by 3pm) 100% surcharge - contact ALS to confirm TAT																																																																																																																																																																
Phone:	867-393-4882	Select Distribution:	<input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX	E2	<input type="checkbox"/> Same day or weekend emergency - contact ALS to confirm TAT and surcharge																																																																																																																																																																
		Email 1 or Fax:	mmarjanovic@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		Invoice Distribution		Analysis Request																																																																																																																																																																	
Same as Report To		Select Invoice Distribution:		Indicate Filtered (F), Preserved (P) or Filtered and Preserved (F/P) below																																																																																																																																																																	
Copy of Invoice with Report		<input checked="" type="checkbox"/> EMAIL <input type="checkbox"/> MAIL <input type="checkbox"/> FAX		<table border="1" style="width:100%; text-align: center;"> <tr> <th></th> <th>P</th> <th>P</th> <th>P</th> <th>P</th> <th>P</th> <th>F/P</th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> <th></th> </tr> <tr> <td>ALK-PCT-VA, EC-PCT-VA, PH-PCT-VA</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>ANIONS-ALL-IC-WR, TSS-MAN-WR</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>CN-WAD-CFA-VA, CN-T-CFA-VA</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>CN-CNO-WT</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>CN-SCN-VA</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>NHG-F-VA</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>MET-T-BCMDG-VA</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>MET-D-BCMDG-VA</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> <tr> <td>IONBALANC-VA, TDS-CALC-VA</td> <td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>													P	P	P	P	P	F/P									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															NHG-F-VA															MET-T-BCMDG-VA															MET-D-BCMDG-VA															IONBALANC-VA, TDS-CALC-VA														
	P	P	P	P	P	F/P																																																																																																																																																															
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																																																																																																																																																																					
NHG-F-VA																																																																																																																																																																					
MET-T-BCMDG-VA																																																																																																																																																																					
MET-D-BCMDG-VA																																																																																																																																																																					
IONBALANC-VA, TDS-CALC-VA																																																																																																																																																																					
Company: EDI		Email 1 or Fax: sjenner@edynamics.com		Number of Containers																																																																																																																																																																	
Contact: S Jenner		Email 2: mmarjanovic@edynamics.com																																																																																																																																																																			
Project Information		Oil and Gas Required Fields (client use)																																																																																																																																																																			
ALS Quote #: Q49310		Approver ID: _____ Cost Center: _____																																																																																																																																																																			
Job #: MOUNT NANSEN 15-Y-0146		GL Account: _____ Routing Code: _____																																																																																																																																																																			
PO / AFE: _____		Activity Code: _____																																																																																																																																																																			
LSD: _____		Location: _____																																																																																																																																																																			
ALS Lab Work Order # (lab use only)		ALS Contact: Sean Slugget	Sampler: MS, JM																																																																																																																																																																		
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																																																																																																																																																															
	WQ-DS-DX+105-r			16-Feb-16	0900	Water	R	R	R	R	R	R	R	R	R	R	R	9																																																																																																																																																			
	WQ-DC-DX+105			16-Feb-16	08:55	Water	R	R	R	R	R	R	R	R	R	R	R	9																																																																																																																																																			
	WQ-VC-U			16-Feb-16	12:55	Water	R	R	R	R	R	R	R	R	R	R	R	9																																																																																																																																																			
	WQ-VC-UMN			16-Feb-16	10:15	Water	R	R	R	R	R	R	R	R	R	R	R	9																																																																																																																																																			
	WQ-VC-DBC			16-Feb-16	12:25	Water	R	R	R	R	R	R	R	R	R	R	R	9																																																																																																																																																			
				-Feb-16		Water	R	R	R	R	R	R	R	R	R	R	R	9																																																																																																																																																			
				-Feb-16		Water	R	R	R	R	R	R	R	R	R	R	R	9																																																																																																																																																			
Drinking Water (DW) Samples¹ (client use)		Special Instructions / Specify Criteria to add on report (client Use)										SAMPLE CONDITION AS RECEIVED (lab use only)																																																																																																																																																									
Are samples taken from a Regulated DW System?												Frozen <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>																																																																																																																																																									
Are samples for human drinking water use?												SIF Observations				Yes <input type="checkbox"/> No <input type="checkbox"/>				Custody seal intact				Yes <input type="checkbox"/> No <input type="checkbox"/>																																																																																																																																													
Cooling Initiated												Yes <input type="checkbox"/> No <input type="checkbox"/>																																																																																																																																																									
INITIAL COOLER TEMPERATURES °C		FINAL COOLER TEMPERATURES °C																																																																																																																																																																			
SHIPMENT RELEASE (client use)			INITIAL SHIPMENT RECEPTION (lab use only)						FINAL SHIPMENT RECEPTION (lab use only)																																																																																																																																																												
Released by: JM	Date: 17 Feb 16	Time: 10:00	Received by: _____	Date: _____	Time: _____	Received by: Jean	Date: FEB 17 2016	Time: 17:25																																																																																																																																																													