ENVIRONMENTAL DYNAMICS INC.

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March 4, 2014

EDI Job Number: 13-Y-0452

Assessment and Abandoned Mines
Yukon Government
Box 2703
Whitehorse, YT

Attention: Adrienne Turcotte, Project Officer

Re: Faro Rose Creek Surface and Groundwater Sampling Field Program – Trip 13

In response to an urgent request by Assessment and Abandoned Mines (AAM), EDI Environmental Dynamics Inc. (EDI) has been conducting on-going water quality sampling and fish telemetry surveys at the Faro Mine Site since November 2013. Table 1, attached, summarizes tasks conducted for each field trip completed. The intent of this memo is to summarize field data obtained during the February 18, 2014 field program, referred to as Trip 13.

The objective of Trip 13 was to complete surface water sampling in Rose Creek at 11 sites, including QA/QC samples. Weather conditions on February 18, 2014 were relatively cold; air temperatures remained near -20°C and the sky was mostly clear. The crew was able to collect in-situ data at all sites except NF2-A which was frozen to bed. A new hole was created at NF2-B adjacent to the regular sampling hole in order to find flowing water and collect water samples. Overflow was limited at NF1 Pond, allowing the crew to walk on the ice and collect samples away from the shore.

Field data collected at each surface water sampling site is summarized in Table 2, attached. Figure 1 provides the locations of all water quality sampling. Representative photos of each site and the ALS laboratory analytical reports for all water chemistry samples submitted during this field trip are also attached.

If you have any questions or concerns, please do not hesitate to contact me at (867) 393 - 4882 or through email at mkearns@edynamics.com.

Yours truly,

EDI Environmental Dynamics Inc.

Submitted via email

Meighan Kearns, B.Sc., R.P.Bio.
Aquatic Biologist

Attachments:

- Table 1. Summary of Trips 1 to 13, Faro Mine Site.
- Table 2. Surface water sampling field data, Trip 13, February 18, 2014.
- Figure 1. Location of surface water sampling, Faro Mine Site, February 18, 2014.
- Photos 1 – 11. Representative site photos.
- ALS Laboratory Analytical Reports

Table 1. Summary of Trips 1 to 13, Faro Mine Site.

Trip No.	Dates	General Tasks
1	Nov 12 – 14, 2013	• Fish telemetry • Piezometer water depth measurements • Ground water sampling • Surface water sampling
2	Nov 27 – 30, 2013	• Fish telemetry • Surface water sampling
3	Dec 10, 2013	• Fish telemetry
4	Dec 19 – 20, 2013	• Surface water sampling
5	Dec 27, 2013	• Surface water sampling
6	Jan 2, 2014	• Surface water sampling
7	Jan 7 – 8, 2014	• Fish telemetry • Surface water sampling
8	Jan 14 – 15, 2014	• Surface water sampling • Fish telemetry
9	Jan 21, 2014	• Surface water sampling
10	Jan 28 – 29, 2014	• Surface water sampling • Fish telemetry
11	Feb 4, 2014	• Surface water sampling
12	Feb 11&13, 2014	• Surface water sampling
13	Feb 18, 2014	• Surface water sampling

Table 2. Surface water sampling field data, February 18, 2014.

Site Name	UTM Location (NAD83/ Zone 8)		Sample		QA/ QC Rep. ID	In-situ Parameters			
	Easting	Northing	Date	Time		Temp (°C)	SPC (µS/cm)	pH	Turbidity (NTU)
X14	579342	6915078	18-Feb-14	9:55	X14-r	0.00	781.7	7.25	1.24
X10	579443	6914883	18-Feb-14	10:15	-	0.00	340.0	7.51	1.21
X3A	583151	6912542	18-Feb-14	10:35	-	0.00	334.0	7.42	-
X2	584070	6912774	18-Feb-14	10:55	-	0.00	331.0	7.29	1.39
NF2-A	584708	6913033	18-Feb-14	11:00	- [(a)]	- [(a)]	- [(a)]	- [(a)]	- [(a)]
NF2-B	584725	6913024	18-Feb-14	11:10	-	0.00	295.6	7.33	1.04
NF2	584682	6913009	18-Feb-14	11:20	-	0.00	318.2	7.28	1.01
NF1	584844	6913228	18-Feb-14	11:50	-	0.00	292.3	7.40	0.98
R10	585107	6913481	18-Feb-14	12:00	-	0.00	284.6	7.48	1.46
R9	585225	6913667	18-Feb-14	12:20	-	0.00	290.5	7.79	0.97
R8	586296	6914401	18-Feb-14	12:40	-	0.00	231.8	7.75	1.08

Where, UTM = Universal Transverse Mercator;
QA/QC Rep = Quality Assurance/ Quality Control Replicate;
Temp = water temperature; and
SPC = specific conductance.

Notes: [(a)] Site frozen to bottom substrate.

Location of surface water sampling, Faro Mine Site, February 18, 2014

Legend

- Surface Water Sample Collected
- Frozen to Bed
- Road (Mine Access/Haul)
- Topographic Contour (30 m Interval)

N
W E
S

0 200 400 600 800 1,000
metres

Map Scale = 1:20,000 (printed on 11 x 17)
Map Projection: North American Datum 1983 UTM Zone 8N

Data sources

1:50,000 topographic spatial data provided by Geomatics - Yukon Government via online source (Corporate Spatial Warehouse) www.geomaticsyukon.ca.

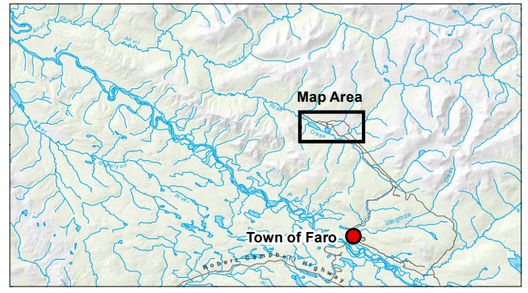
National Road Network courtesy of Her Majesty the Queen in Right of Canada, Department of Natural Resources. All Rights Reserved.

Detailed toppgraphic features of the Faro, Grum and Vangorda mine sites were provided by Yukon Government - Energy, Mines and Resources - Assessment and Abandoned Mines Branch (March 2012).

Project data displayed is site specific. Data collected by EDI Environmental Dynamics Inc. was obtained using Garmin GPS technology.

This document is not an official land survey and the spatial data presented is subject to change.

Drawn:	Checked:		
LG	MK	FIGURE 1	Date: 04/03/2014



EDI

Map Prepared by
EDI Environmental Dynamics Inc.

Path: J:\Yukon\Projects\2013\13_Y_0452_AAM_NF_Sampling\Mapping\February\Fig1_WaterSamplingSites_Feb18.mxd

Site Photos

Photo 1. Overview of surface water sampling site X14, February 18, 2014.

Photo 2. Downstream view from surface water sampling site X10, February 18, 2014.

Photo 3. Downstream view from surface water sampling site X3A, February 18, 2014.

Photo 4. View towards left downstream bank at surface water sampling site X2, February 18, 2014.

Photo 5. Surface water sampling site NF2-A, February 18, 2014.

Photo 6. Surface water sampling site NF2-B, February 18, 2014.

Photo 7. Upstream view from surface water sampling site NF2, February 18, 2014.

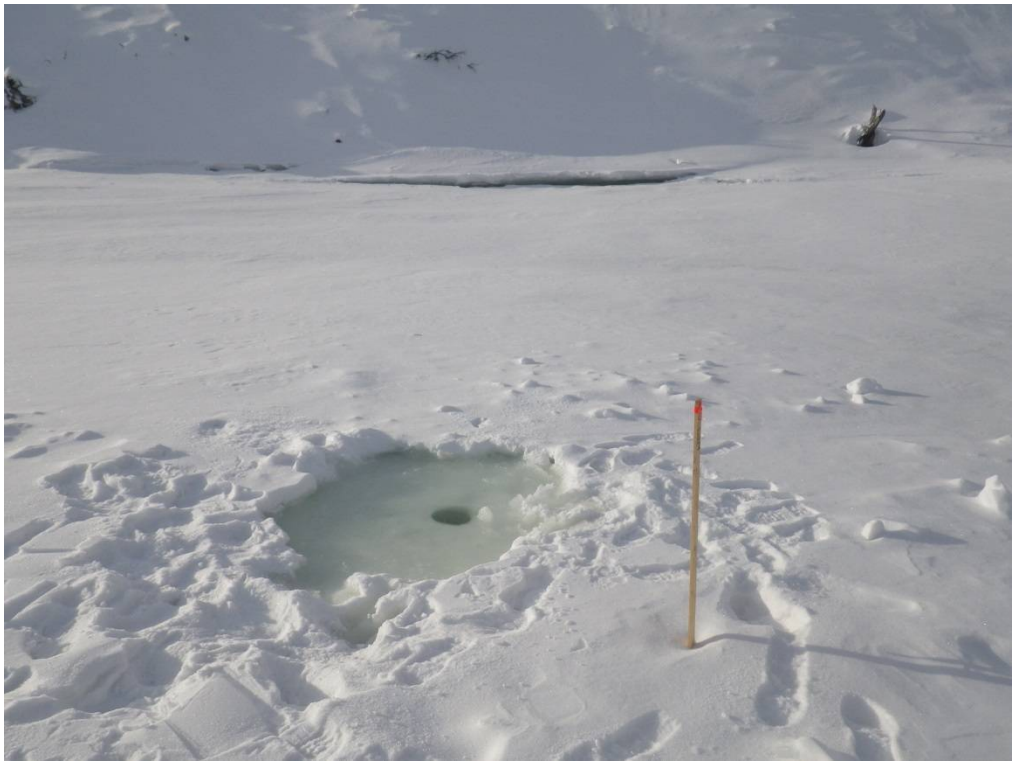


Photo 8. Downstream view of surface water sampling site NF1, February 18, 2014.

Photo 9. Upstream view from surface water sampling site R10, February 18, 2014.

Photo 10. Downstream view from surface water sampling site R9, February 18, 2014.

Photo 11. Downstream view of surface water sampling site R8, February 18, 2014.

ENVIRONMENTAL DYNAMICS INC.
ATTN: Meighan Kearns
2195 - 2nd Avenue
Whitehorse YT Y1A 3T8

Date Received: 19-FEB-14
Report Date: 25-FEB-14 17:30 (MT)
Version: FINAL

Client Phone: 867-393-4882

Certificate of Analysis

Lab Work Order #: L1423769

Project P.O. #: NOT SUBMITTED
Job Reference: 13-Y-0452
C of C Numbers: 1, 2
Legal Site Desc:

Can Dang
Senior Account Manager

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1423769-1	L1423769-2	L1423769-3	L1423769-4	L1423769-5
	Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
	Sampled Date	18-FEB-14	18-FEB-14	18-FEB-14	18-FEB-14	18-FEB-14
	Sampled Time	10:55	10:35	11:20	10:15	11:10
	Client ID	X2	X3A	NF2	X10	NF2-B
Grouping	**Analyte**					
WATER						
Physical Tests	Conductivity (uS/cm)	319	325	312	327	281
	Hardness (as CaCO3) (mg/L)	153	160	148	166	141
	pH (pH)	7.39	7.46	7.45	7.65	7.60
	Total Suspended Solids (mg/L)	<1.0	1.0	<1.0	<1.0	<1.0
	Total Dissolved Solids (mg/L)	183	188	173	187	161
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	135	141	130	138	134
	Ammonia, Total (as N) (mg/L)	0.0084	0.0122	0.0064	0.0084	<0.0050
	Chloride (Cl) (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50
	Fluoride (F) (mg/L)	0.188	0.187	0.191	0.175	0.170
	Nitrate (as N) (mg/L)	0.273	0.282	0.279	0.264	0.279
	Nitrite (as N) (mg/L)	0.0011	0.0011	0.0014	<0.0010	<0.0010
	Phosphorus (P)-Total (mg/L)	0.0024	0.0035	0.0031	0.0025	0.0037
	Sulfate (SO4) (mg/L)	39.4	38.2	34.1	38.2	22.9
	Anion Sum (meq/L)	3.55	3.64	3.35	3.58	3.19
	Cation Sum (meq/L)	3.27	3.41	3.17	3.50	2.98
	Cation - Anion Balance (%)	-4.1	-3.3	-2.6	-1.2	-3.3
Organic / Inorganic Carbon	Dissolved Organic Carbon (mg/L)	1.35	1.62	1.24	1.34	1.23
	Total Organic Carbon (mg/L)	1.32	1.50	1.44	1.40	1.37
Total Metals	Aluminum (Al)-Total (mg/L)	0.0161	0.0209	0.0180	0.0096	0.0106
	Antimony (Sb)-Total (mg/L)	<0.00010	0.00015	<0.00010	<0.00010	<0.00010
	Arsenic (As)-Total (mg/L)	0.00043	0.00041	0.00052	0.00025	0.00047
	Barium (Ba)-Total (mg/L)	0.0737	0.0772	0.0748	0.0723	0.0743
	Beryllium (Be)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Bismuth (Bi)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Boron (B)-Total (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cadmium (Cd)-Total (mg/L)	0.000633	0.000468	0.000673	0.000309	0.000054
	Calcium (Ca)-Total (mg/L)	44.6	46.8	41.8	44.2	42.0
	Chromium (Cr)-Total (mg/L)	0.00011	0.00041	0.00010	0.00012	0.00012
	Cobalt (Co)-Total (mg/L)	0.00389	0.00272	0.00433	0.00133	0.00035
	Copper (Cu)-Total (mg/L)	<0.00050	0.00066	<0.00050	<0.00050	<0.00050
	Iron (Fe)-Total (mg/L)	0.265	0.366	0.215	0.183	0.115
	Lead (Pb)-Total (mg/L)	0.000284	0.000330	0.000317	0.000145	0.000165
	Lithium (Li)-Total (mg/L)	0.00791	0.00690	0.00767	0.00623	0.00715
	Magnesium (Mg)-Total (mg/L)	12.1	11.8	11.3	12.3	9.67
	Manganese (Mn)-Total (mg/L)	0.264	0.229	0.238	0.121	0.0353
	Molybdenum (Mo)-Total (mg/L)	0.000805	0.000708	0.000826	0.000692	0.000844

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1423769-6 Surface Water 18-FEB-14 09:55 X14-R	L1423769-7 Surface Water 18-FEB-14 09:55 X14	L1423769-8 Surface Water 10-JAN-14 TRAVEL BLANK	L1423769-9 Surface Water 18-FEB-14 12:10 R10	L1423769-10 Surface Water 18-FEB-14 12:40 R8
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
WATER						
Physical Tests	Conductivity (uS/cm)	685	699	<2.0	283	257
	Hardness (as CaCO3) (mg/L)	379	379	<0.50	140	126
	pH (pH)	7.54	7.49	5.75	7.75	7.67
	Total Suspended Solids (mg/L)	2.0	1.4	<1.0	<1.0	1.0
	Total Dissolved Solids (mg/L)	488	496	<1.0	158	139
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	187	177	<2.0	132	128
	Ammonia, Total (as N) (mg/L)	0.0846	0.0915	<0.0050	0.0072	0.0063
	Chloride (Cl) (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50
	Fluoride (F) (mg/L)	0.153	0.162	<0.020	0.170	0.168
	Nitrate (as N) (mg/L)	0.210	0.223	<0.0050	0.272	0.203
	Nitrite (as N) (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Phosphorus (P)-Total (mg/L)	<0.0020	<0.0020	<0.0020	0.0040	0.0048
	Sulfate (SO4) (mg/L)	224	238	<0.50	21.8	9.90
	Anion Sum (meq/L)	8.41	8.51	<0.10	3.11	2.78
	Cation Sum (meq/L)	8.14	8.14	<0.10	2.95	2.67
	Cation - Anion Balance (%)	-1.7	-2.3	0.0	-2.6	-2.0
Organic / Inorganic Carbon	Dissolved Organic Carbon (mg/L)	1.40	1.35		1.33	1.24
	Total Organic Carbon (mg/L)	1.59	1.49	<0.50	1.39	1.35
Total Metals	Aluminum (Al)-Total (mg/L)	0.0169	0.0171	<0.0030	0.0176	0.0103
	Antimony (Sb)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Arsenic (As)-Total (mg/L)	0.00039	0.00038	<0.00010	0.00058	0.00061
	Barium (Ba)-Total (mg/L)	0.0702	0.0706	<0.000050	0.0743	0.0739
	Beryllium (Be)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Bismuth (Bi)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Boron (B)-Total (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cadmium (Cd)-Total (mg/L)	0.000305	0.000317	<0.000010	0.000013	<0.000010
	Calcium (Ca)-Total (mg/L)	113	114	<0.020	43.0	38.2
	Chromium (Cr)-Total (mg/L)	0.00013	0.00014	<0.00010	0.00011	0.00016
	Cobalt (Co)-Total (mg/L)	0.00382	0.00387	<0.00010	<0.00010	<0.00010
	Copper (Cu)-Total (mg/L)	0.00052	0.00059	<0.00050	<0.00050	<0.00050
	Iron (Fe)-Total (mg/L)	0.768	0.773	<0.010	0.149	0.149
	Lead (Pb)-Total (mg/L)	0.000184	0.000216	<0.000050	0.000073	<0.000050
	Lithium (Li)-Total (mg/L)	0.00822	0.00805	<0.00050	0.00682	0.00653
	Magnesium (Mg)-Total (mg/L)	25.9	26.6	<0.0050	9.08	7.86
	Manganese (Mn)-Total (mg/L)	4.52	4.37	<0.000050	0.0267	0.0219
	Molybdenum (Mo)-Total (mg/L)	0.000748	0.000734	<0.000050	0.000857	0.000859

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1423769-11	L1423769-12	L1423769-13		
	Description	Surface Water	Surface Water	Surface Water		
	Sampled Date	18-FEB-14	18-FEB-14	18-FEB-14		
	Sampled Time	11:50	09:26	12:20		
	Client ID	NF1	FIELD BLANK	R9		
Grouping	**Analyte**					
WATER						
Physical Tests	Conductivity (uS/cm)	289	<2.0	287		
	Hardness (as CaCO3) (mg/L)	144	<0.50	137		
	pH (pH)	7.63	6.34	7.76		
	Total Suspended Solids (mg/L)	<1.0	<1.0	1.0		
	Total Dissolved Solids (mg/L)	159	<1.0	155		
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	130	<2.0	129		
	Ammonia, Total (as N) (mg/L)	0.0069	<0.0050	0.0051		
	Chloride (Cl) (mg/L)	<0.50	<0.50	<0.50		
	Fluoride (F) (mg/L)	0.171	<0.020	0.171		
	Nitrate (as N) (mg/L)	0.291	<0.0050	0.279		
	Nitrite (as N) (mg/L)	<0.0010	<0.0010	0.0010		
	Phosphorus (P)-Total (mg/L)	0.0042	<0.0020	0.0048		
	Sulfate (SO4) (mg/L)	22.3	<0.50	21.5		
	Anion Sum (meq/L)	3.08	<0.10	3.05		
	Cation Sum (meq/L)	3.04	<0.10	2.91		
	Cation - Anion Balance (%)	-0.7	0.0	-2.4		
Organic / Inorganic Carbon	Dissolved Organic Carbon (mg/L)	1.36	<0.50	1.25		
	Total Organic Carbon (mg/L)	1.39	<0.50	1.33		
Total Metals	Aluminum (Al)-Total (mg/L)	0.0116	<0.0030	0.0142		
	Antimony (Sb)-Total (mg/L)	<0.00010	<0.00010	<0.00010		
	Arsenic (As)-Total (mg/L)	0.00057	<0.00010	0.00062		
	Barium (Ba)-Total (mg/L)	0.0742	<0.000050	0.0744		
	Beryllium (Be)-Total (mg/L)	<0.00010	<0.00010	<0.00010		
	Bismuth (Bi)-Total (mg/L)	<0.00050	<0.00050	<0.00050		
	Boron (B)-Total (mg/L)	<0.010	<0.010	<0.010		
	Cadmium (Cd)-Total (mg/L)	0.000019	<0.000010	<0.000010		
	Calcium (Ca)-Total (mg/L)	42.9	<0.020	42.7		
	Chromium (Cr)-Total (mg/L)	0.00013	<0.00010	0.00012		
	Cobalt (Co)-Total (mg/L)	0.00015	<0.00010	<0.00010		
	Copper (Cu)-Total (mg/L)	<0.00050	<0.00050	<0.00050		
	Iron (Fe)-Total (mg/L)	0.133	<0.010	0.142		
	Lead (Pb)-Total (mg/L)	0.000118	<0.000050	0.000072		
	Lithium (Li)-Total (mg/L)	0.00714	<0.00050	0.00701		
	Magnesium (Mg)-Total (mg/L)	9.26	<0.0050	9.23		
	Manganese (Mn)-Total (mg/L)	0.0341	<0.000050	0.0228		
	Molybdenum (Mo)-Total (mg/L)	0.000876	<0.000050	0.000897		

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1423769-1 Surface Water 18-FEB-14 10:55 X2	L1423769-2 Surface Water 18-FEB-14 10:35 X3A	L1423769-3 Surface Water 18-FEB-14 11:20 NF2	L1423769-4 Surface Water 18-FEB-14 10:15 X10	L1423769-5 Surface Water 18-FEB-14 11:10 NF2-B
WATER						
Total Metals	Nickel (Ni)-Total (mg/L)	0.00620	0.00525	0.00642	0.00451	0.00088
	Phosphorus (P)-Total (mg/L)	<0.30	<0.30	<0.30	<0.30	<0.30
	Potassium (K)-Total (mg/L)	1.09	1.19	1.03	1.14	1.01
	Selenium (Se)-Total (mg/L)	0.00045	0.00041	0.00046	0.00041	0.00043
	Silicon (Si)-Total (mg/L)	5.91	5.70	5.77	5.70	5.99
	Silver (Ag)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Total (mg/L)	3.33	3.30	3.25	3.06	3.21
	Strontium (Sr)-Total (mg/L)	0.189	0.207	0.185	0.204	0.184
	Thallium (Tl)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Tin (Sn)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Titanium (Ti)-Total (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Uranium (U)-Total (mg/L)	0.00248	0.00266	0.00267	0.00267	0.00258
	Vanadium (V)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Total (mg/L)	0.930	0.769	1.04	0.618	0.0712
	Zirconium (Zr)-Total (mg/L)	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080
Dissolved Metals	Dissolved Metals Filtration Location	FIELD	FIELD	FIELD	FIELD	FIELD
	Aluminum (Al)-Dissolved (mg/L)	0.0030	0.0027	0.0040	0.0017	0.0014
	Antimony (Sb)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Arsenic (As)-Dissolved (mg/L)	0.00021	0.00020	0.00032	0.00013	0.00032
	Barium (Ba)-Dissolved (mg/L)	0.0744	0.0754	0.0735	0.0754	0.0759
	Beryllium (Be)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Bismuth (Bi)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Boron (B)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Cadmium (Cd)-Dissolved (mg/L)	0.000610	0.000441	0.000629	0.000305	0.000057
	Calcium (Ca)-Dissolved (mg/L)	42.2	44.9	41.1	46.5	41.3
	Chromium (Cr)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Cobalt (Co)-Dissolved (mg/L)	0.00382	0.00263	0.00418	0.00123	0.00034
	Copper (Cu)-Dissolved (mg/L)	0.00026	0.00031	0.00027	0.00027	0.00026
	Iron (Fe)-Dissolved (mg/L)	0.072	0.151	0.098	0.018	0.026
	Lead (Pb)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Lithium (Li)-Dissolved (mg/L)	0.00773	0.00659	0.00763	0.00682	0.00722
	Magnesium (Mg)-Dissolved (mg/L)	11.7	11.7	11.1	12.0	9.22
	Manganese (Mn)-Dissolved (mg/L)	0.258	0.221	0.231	0.119	0.0338
	Molybdenum (Mo)-Dissolved (mg/L)	0.000732	0.000675	0.000777	0.000683	0.000779
	Nickel (Ni)-Dissolved (mg/L)	0.00613	0.00502	0.00654	0.00429	0.00079
	Phosphorus (P)-Dissolved (mg/L)	<0.30	<0.30	<0.30	<0.30	<0.30
	Potassium (K)-Dissolved (mg/L)	1.06	1.17	1.03	1.11	1.01

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1423769-6 Surface Water 18-FEB-14 09:55 X14-R	L1423769-7 Surface Water 18-FEB-14 09:55 X14	L1423769-8 Surface Water 10-JAN-14 TRAVEL BLANK	L1423769-9 Surface Water 18-FEB-14 12:10 R10	L1423769-10 Surface Water 18-FEB-14 12:40 R8
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
WATER						
Total Metals	Nickel (Ni)-Total (mg/L)	0.00959	0.0100	<0.00050	<0.00050	<0.00050
	Phosphorus (P)-Total (mg/L)	<0.30	<0.30	<0.30	<0.30	<0.30
	Potassium (K)-Total (mg/L)	1.88	1.89	<0.050	0.966	0.905
	Selenium (Se)-Total (mg/L)	0.00039	0.00040	<0.00010	0.00046	0.00044
	Silicon (Si)-Total (mg/L)	6.12	5.99	<0.050	5.98	5.99
	Silver (Ag)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Total (mg/L)	7.26	7.29	<0.050	3.05	3.12
	Strontium (Sr)-Total (mg/L)	0.363	0.369	<0.00020	0.184	0.166
	Thallium (Tl)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Tin (Sn)-Total (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Titanium (Ti)-Total (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Uranium (U)-Total (mg/L)	0.00334	0.00357	<0.000010	0.00266	0.00234
	Vanadium (V)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Total (mg/L)	0.480	0.482	<0.0030	0.0080	<0.0030
	Zirconium (Zr)-Total (mg/L)	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080
Dissolved Metals	Dissolved Metals Filtration Location	FIELD	FIELD		FIELD	FIELD
	Aluminum (Al)-Dissolved (mg/L)	0.0016	0.0015		0.0019	0.0019
	Antimony (Sb)-Dissolved (mg/L)	<0.00010	<0.00010		<0.00010	<0.00010
	Arsenic (As)-Dissolved (mg/L)	0.00025	0.00025		0.00040	0.00042
	Barium (Ba)-Dissolved (mg/L)	0.0703	0.0696		0.0772	0.0718
	Beryllium (Be)-Dissolved (mg/L)	<0.00010	<0.00010		<0.00010	<0.00010
	Bismuth (Bi)-Dissolved (mg/L)	<0.00050	<0.00050		<0.00050	<0.00050
	Boron (B)-Dissolved (mg/L)	<0.010	<0.010		<0.010	<0.010
	Cadmium (Cd)-Dissolved (mg/L)	0.000295	0.000298		0.000013	<0.000010
	Calcium (Ca)-Dissolved (mg/L)	109	109		41.2	38.5
	Chromium (Cr)-Dissolved (mg/L)	<0.00010	<0.00010		<0.00010	<0.00010
	Cobalt (Co)-Dissolved (mg/L)	0.00371	0.00371		<0.00010	<0.00010
	Copper (Cu)-Dissolved (mg/L)	0.00036	0.00034		0.00026	0.00020
	Iron (Fe)-Dissolved (mg/L)	0.540	0.550		0.029	0.035
	Lead (Pb)-Dissolved (mg/L)	<0.000050	<0.000050		<0.000050	<0.000050
	Lithium (Li)-Dissolved (mg/L)	0.00797	0.00788		0.00692	0.00677
	Magnesium (Mg)-Dissolved (mg/L)	26.1	25.7		8.94	7.25
	Manganese (Mn)-Dissolved (mg/L)	4.26	4.30		0.0230	0.0193
	Molybdenum (Mo)-Dissolved (mg/L)	0.000687	0.000689		0.000818	0.000832
	Nickel (Ni)-Dissolved (mg/L)	0.00938	0.00941		<0.00050	<0.00050
	Phosphorus (P)-Dissolved (mg/L)	<0.30	<0.30		<0.30	<0.30
	Potassium (K)-Dissolved (mg/L)	1.90	1.88		0.982	0.890

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1423769-11	L1423769-12	L1423769-13		
	Description	Surface Water	Surface Water	Surface Water		
	Sampled Date	18-FEB-14	18-FEB-14	18-FEB-14		
	Sampled Time	11:50	09:26	12:20		
	Client ID	NF1	FIELD BLANK	R9		
Grouping	**Analyte**					
WATER						
Total Metals	Nickel (Ni)-Total (mg/L)	<0.00050	<0.00050	<0.00050		
	Phosphorus (P)-Total (mg/L)	<0.30	<0.30	<0.30		
	Potassium (K)-Total (mg/L)	1.00	<0.050	1.01		
	Selenium (Se)-Total (mg/L)	0.00044	<0.00010	0.00046		
	Silicon (Si)-Total (mg/L)	6.11	<0.050	5.91		
	Silver (Ag)-Total (mg/L)	<0.000010	<0.000010	<0.000010		
	Sodium (Na)-Total (mg/L)	3.27	<0.050	3.10		
	Strontium (Sr)-Total (mg/L)	0.190	<0.00020	0.184		
	Thallium (Tl)-Total (mg/L)	<0.000010	<0.000010	<0.000010		
	Tin (Sn)-Total (mg/L)	<0.00010	<0.00010	<0.00010		
	Titanium (Ti)-Total (mg/L)	<0.010	<0.010	<0.010		
	Uranium (U)-Total (mg/L)	0.00267	<0.000010	0.00264		
	Vanadium (V)-Total (mg/L)	<0.0010	<0.0010	<0.0010		
	Zinc (Zn)-Total (mg/L)	0.0125	<0.0030	<0.0030		
	Zirconium (Zr)-Total (mg/L)	<0.00080	<0.00080	<0.00080		
Dissolved Metals	Dissolved Metals Filtration Location	FIELD	FIELD	FIELD		
	Aluminum (Al)-Dissolved (mg/L)	0.0025	<0.0010	0.0020		
	Antimony (Sb)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010		
	Arsenic (As)-Dissolved (mg/L)	0.00036	<0.00010	0.00040		
	Barium (Ba)-Dissolved (mg/L)	0.0736	<0.000050	0.0738		
	Beryllium (Be)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010		
	Bismuth (Bi)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050		
	Boron (B)-Dissolved (mg/L)	<0.010	<0.010	<0.010		
	Cadmium (Cd)-Dissolved (mg/L)	0.000016	<0.000010	<0.000010		
	Calcium (Ca)-Dissolved (mg/L)	42.3	<0.020	40.2		
	Chromium (Cr)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010		
	Cobalt (Co)-Dissolved (mg/L)	0.00015	<0.00010	<0.00010		
	Copper (Cu)-Dissolved (mg/L)	0.00029	<0.00020	0.00024		
	Iron (Fe)-Dissolved (mg/L)	0.036	<0.010	0.026		
	Lead (Pb)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050		
	Lithium (Li)-Dissolved (mg/L)	0.00738	<0.00050	0.00685		
	Magnesium (Mg)-Dissolved (mg/L)	9.32	<0.0050	8.97		
	Manganese (Mn)-Dissolved (mg/L)	0.0326	<0.000050	0.0195		
	Molybdenum (Mo)-Dissolved (mg/L)	0.000810	<0.000050	0.000818		
	Nickel (Ni)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050		
	Phosphorus (P)-Dissolved (mg/L)	<0.30	<0.30	<0.30		
	Potassium (K)-Dissolved (mg/L)	0.985	<0.050	0.979		

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1423769-1	L1423769-2	L1423769-3	L1423769-4	L1423769-5
	Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
	Sampled Date	18-FEB-14	18-FEB-14	18-FEB-14	18-FEB-14	18-FEB-14
	Sampled Time	10:55	10:35	11:20	10:15	11:10
	Client ID	X2	X3A	NF2	X10	NF2-B
Grouping	**Analyte**					
WATER						
Dissolved Metals	Selenium (Se)-Dissolved (mg/L)	0.00044	0.00040	0.00045	0.00041	0.00046
	Silicon (Si)-Dissolved (mg/L)	6.12	5.86	6.11	5.71	5.83
	Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Dissolved (mg/L)	3.17	3.14	3.16	3.04	3.07
	Strontium (Sr)-Dissolved (mg/L)	0.190	0.197	0.181	0.204	0.180
	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)	<0.010	<0.010	<0.010	<0.010	<0.010
	Uranium (U)-Dissolved (mg/L)	0.00250	0.00264	0.00253	0.00262	0.00249
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	0.956	0.766	0.974	0.612	0.0720
	Zirconium (Zr)-Dissolved (mg/L)	<0.00080	<0.00080	<0.00080	<0.00080	<0.00080

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1423769-6 Surface Water 18-FEB-14 09:55 X14-R	L1423769-7 Surface Water 18-FEB-14 09:55 X14	L1423769-8 Surface Water 10-JAN-14 TRAVEL BLANK	L1423769-9 Surface Water 18-FEB-14 12:10 R10	L1423769-10 Surface Water 18-FEB-14 12:40 R8
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
WATER						
Dissolved Metals	Selenium (Se)-Dissolved (mg/L)	0.00040	0.00040		0.00048	0.00043
	Silicon (Si)-Dissolved (mg/L)	6.14	6.05		6.02	5.91
	Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010		<0.000010	<0.000010
	Sodium (Na)-Dissolved (mg/L)	7.18	7.12		3.07	2.96
	Strontium (Sr)-Dissolved (mg/L)	0.353	0.356		0.181	0.163
	Thallium (Tl)-Dissolved (mg/L)	<0.000010	<0.000010		<0.000010	<0.000010
	Tin (Sn)-Dissolved (mg/L)	<0.00010	<0.00010		<0.00010	<0.00010
	Titanium (Ti)-Dissolved (mg/L)	<0.010	<0.010		<0.010	<0.010
	Uranium (U)-Dissolved (mg/L)	0.00332	0.00338		0.00256	0.00234
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010		<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	0.475	0.471		0.0078	<0.0010
	Zirconium (Zr)-Dissolved (mg/L)	<0.00080	<0.00080		<0.00080	<0.00080

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1423769-11	L1423769-12	L1423769-13		
	Description	Surface Water	Surface Water	Surface Water		
	Sampled Date	18-FEB-14	18-FEB-14	18-FEB-14		
	Sampled Time	11:50	09:26	12:20		
	Client ID	NF1	FIELD BLANK	R9		
Grouping	**Analyte**					
WATER						
Dissolved Metals	Selenium (Se)-Dissolved (mg/L)	0.00042	<0.00010	0.00044		
	Silicon (Si)-Dissolved (mg/L)	5.97	<0.050	5.94		
	Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010		
	Sodium (Na)-Dissolved (mg/L)	3.11	<0.050	3.12		
	Strontium (Sr)-Dissolved (mg/L)	0.191	<0.00020	0.179		
	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)	<0.010	<0.010	<0.010		
	Uranium (U)-Dissolved (mg/L)	0.00260	<0.000010	0.00265		
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Zinc (Zn)-Dissolved (mg/L)	0.0123	<0.0010	<0.0010		
	Zirconium (Zr)-Dissolved (mg/L)	<0.00080	<0.00080	<0.00080		

* 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)
Duplicate	Cadmium (Cd)-Dissolved	DLM	L1423769-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1423769-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1423769-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1423769-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1423769-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -9
Matrix Spike	Barium (Ba)-Total	MS-B	L1423769-1, -10, -11, -13, -2, -3, -4, -5, -6, -7, -9
Matrix Spike	Calcium (Ca)-Total	MS-B	L1423769-1, -10, -11, -13, -2, -3, -4, -5, -6, -7, -9
Matrix Spike	Strontium (Sr)-Total	MS-B	L1423769-1, -10, -11, -13, -2, -3, -4, -5, -6, -7, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
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-COL-VA	Water	Alkalinity by Colourimetric (Automated)	EPA 310.2

This analysis is carried out using procedures adapted from EPA Method 310.2 "Alkalinity". Total Alkalinity is determined using the methyl orange colourimetric method.

ANIONS-CL-IC-WR Water Chloride by Ion Chromatography EPA 300.1

This analysis is carried out using procedures adapted from EPA Method 300.1, "Determination of Inorganic Anions by Ion Chromatography", Revision 1.0, April 1999 and from "Determination of Inorganic Anions in Environmental Waters Using a Hydroxide-Selective Column", Application Note 154 v.19, Dionex 2003.

ANIONS-F-IC-WR Water Fluoride by Ion Chromatography EPA 300.1

This analysis is carried out using procedures adapted from EPA Method 300.1, "Determination of Inorganic Anions by Ion Chromatography", Revision 1.0, April 1999 and from "Determination of Inorganic Anions in Environmental Waters Using a Hydroxide-Selective Column", Application Note 154 v.19, Dionex 2003.

ANIONS-NO2-IC-WR Water Nitrite Nitrogen by Ion Chromatography EPA 300.1

This analysis is carried out using procedures adapted from EPA Method 300.1, "Determination of Inorganic Anions by Ion Chromatography", Revision 1.0, April 1999 and from "Determination of Inorganic Anions in Environmental Waters Using a Hydroxide-Selective Column", Application Note 154 v.19, Dionex 2003. Nitrate is detected by UV absorbance.

ANIONS-NO3-IC-WR Water Nitrate Nitrogen by Ion Chromatography EPA 300.1

This analysis is carried out using procedures adapted from EPA Method 300.1, "Determination of Inorganic Anions by Ion Chromatography", Revision 1.0, April 1999 and from "Determination of Inorganic Anions in Environmental Waters Using a Hydroxide-Selective Column", Application Note 154 v.19, Dionex 2003. Nitrate is detected by UV absorbance.

ANIONS-SO4-IC-WR Water Sulphate by Ion Chromatography EPA 300.1

This analysis is carried out using procedures adapted from EPA Method 300.1, "Determination of Inorganic Anions by Ion Chromatography", Revision 1.0, April 1999 and from "Determination of Inorganic Anions in Environmental Waters Using a Hydroxide-Selective Column", Application Note 154 v.19, Dionex 2003.

CARBONS-DOC-VA Water Dissolved organic carbon by combustion APHA 5310 TOTAL ORGANIC CARBON (TOC)

This analysis is carried out using procedures adapted from APHA Method 5310 "Total Organic Carbon (TOC)". Dissolved carbon (DOC) fractions are determined by filtering the sample through a 0.45 micron membrane filter prior to analysis.

CARBONS-TOC-VA Water Total organic carbon by combustion APHA 5310 TOTAL ORGANIC CARBON (TOC)

This analysis is carried out using procedures adapted from APHA Method 5310 "Total Organic Carbon (TOC)".

EC-MAN-WR Water Conductivity by Meter APHA 2510 (B)

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

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.

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

Reference Information

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 3030 B&E / EPA SW-846 6020A

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 hotblock, or filtration (APHA 3030B&E). Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).

MET-T-CCMS-VA	Water	Total Metals in Water by CRC ICPMS	APHA 3030 B&E / EPA SW-846 6020A

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 hotblock, or filtration (APHA 3030B&E). Instrumental analysis is by collision cell inductively coupled plasma - mass spectrometry (modified from EPA Method 6020A).

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.

P-T-COL-VA	Water	Total P in Water by Colour	APHA 4500-P Phosphorous

This analysis is carried out using procedures adapted from APHA Method 4500-P "Phosphorus". Total Phosphorous is determined colourimetrically after persulphate digestion of the sample.

PH-MAN-WR	Water	pH by Meter	APHA 4500-H (B)

"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."

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-LOW-WR	Water	Total Suspended Solids by Grav. (1 mg/L)	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.

ZR-D-MS-VA	Water	Dissolved Zr in Water by ICPMS	EPA SW-846 3005A/6020A

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 - mass spectrometry (EPA Method 6020A).

ZR-T-MS-VA	Water	Total Zr in Water by ICPMS	EPA SW-846 3005A/6020A

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 - mass spectrometry (EPA Method 6020A).

** 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
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.

ALS Environmental

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L1423769-COFC

COC #

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		Email 2:	adrienne.turcotte@gov.yk.ca
Phone:	867-393-4882 Fax:	Email 3:	
Invoice To	Same as Report ? ☑ Yes ☐ No	Client / Project Information	
Hardcopy of Invoice with Report?	☐ Yes ☑ No	Job #:	13-Y-0452
Company:		PO / AFE:	
Contact:		LSD:	
Address:			
Phone:	Fax:	Quote #:	Q38556
Lab Work Order # (lab use only)		ALS Contact: M. Kearns	Sampler: L. GRIEVE

...e analysis subject to availability)

- ○ Regular (Standard Turnaround Times - Business Days)
- ◉ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
- ○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
- ○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT

Analysis Request

Please indicate below Filtered, Preserved or both (F, P, F/P)

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	ALK-COL-VA,P-T-COL-VA	ANIONS-ALL-IC-WR	CARBONS-DOC-VA	CARBONS-TOC-VA,NH3-F-V	EC-MAN-WR,PH-MAN-WR	MET-D-CCMS-VA,ZR-D-MS-	MET-T-CCMS-VA,ZR-T-MS-	IONBALANCE-VA	TDS-CALC-VA	TSS-LOW-WR	HARDNESS-CALC-VA		Number of Containers
1	X2	18-Feb-14	1055	Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
2	X3A	"	1035	Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
3	NF2	"	1120	Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
4	X10	"	1015	Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
5	NF2-B	"	1110	Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
6	X14-r	"	955	Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
7	X14	"	955	Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
				Surface Water	X	X	X	X	X	X	X	X	X	X	X		5

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

Use Faro Equis Format to report

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.
By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab.
Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by: Joel MacFabe	Date (dd-mmm-yy) 18-Feb-14	Time (hh-mm)	Received by: [signature]	Date: 19-Feb-14	Time: 9:25	Temperature: 0.6, 0.1 °C	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF

ALS Environmental

Chain of Custody / Analytical R
Canada Toll Free: 1 800 66
www.alsglobal.com

L1423769-COFC

OC # _____

Page 1 of 1

Report To				Report Format / Distribution				e analysis subject to availability)
Company:	EDI			☑ Standard ☐ Other				○ Regular (Standard Turnaround Times - Business Days)
Contact:	Meighan Kearns			☑ PDF ☑ Excel ☐ Digital ☐ Fax				◉ Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address:	2195 - 2nd Avenue			Email 1: mkearns@edynamics.com				○ Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
	Whitehorse, YT Y1A 3T8			Email 2: adrienne.turcotte@gov.yk.ca				○ Same Day or Weekend Emergency - Contact ALS to Confirm TAT
Phone:	867-393-4882	Fax:		Email 3:				
Invoice To	Same as Report ? ☑ Yes	☐ No		Client / Project Information				Analysis Request
Hardcopy of Invoice with Report?	☐ Yes	☑ No		Job #: 13-Y-0452				Please indicate below Filtered, Preserved or both (F, P, F/P)
Company:				PO / AFE:				
Contact:				LSD:				
Address:								
Phone:		Fax:		Quote #: Q38556				
Lab Work Order # (lab use only):				ALS Contact:		Sampler: L. GRIEVE		

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	ALK-COL-VA,P-T-COL-VA	ANIONS-ALL-IC-WR	CARBONS-DOC-VA	CARBONS-TOC-VA,NH3-F-VA	EC-MAN-WR,PH-MAN-WR	MET-D-CCMS-VA,ZR-D-MS-VA	MET-T-CCMS-VA,ZR-T-MS-VA	IONBALANCE-VA	TDS-CALC-VA	TSS-LOW-WR	HARDNESS-CALC-VA		Number of Containers
1	Travel Blank	10-Jan-14	—	Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
2	R10	18-Feb-14	12:10	Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
3	R8	"	12:40	Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
4	MF1	"	11:50	Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
5	Field Blank	"	926	Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
6	R9	"	1220	Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
				Surface Water	X	X	X	X	X	X	X	X	X	X	X		5
				Surface Water	X	X	X	X	X	X	X	X	X	X	X		5

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/AB Tier 1 - Natural, etc) / Hazardous Details

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SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
Joel MacFabe	18-Feb-14			19-Feb-14	0.6, 0.1	9.25 °C				

GENF 18.01 Front