

January 9, 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 4

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 the field trips completed. The intent of this memo is to summarize field data obtained during the December 19 to 20 field program, referred to as Trip 4.

Specific tasks completed during Trip 4 included:

- Surface water sampling in Rose Creek at 11 sites as well as three additional QA/QC samples; and,
- Surface water sampling on NF1 Pond at 15 sites plus QA/QC sample.

The field program conducted December 19 to 20, 2013 (Trip 4) experienced extreme cold weather conditions (i.e., air temperatures below -30°C) that limited the field crew and equipment abilities. The equipment used to measure in-situ water quality parameters cannot withstand extreme cold temperatures; therefore, no in-situ parameters were measured during this field trip.

Field data that was collected at each surface water sampling site is summarized in Table 2, attached. Figures 1 and 2 provide 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 4, Faro Mine Site.
- Table 2. Surface water sampling field data, Trip 4, December 19 – 20, 2013.
- Figure 1. Location of surface water sampling, Faro Mine Site, December 19, 2013
- Figure 2. Water sampling locations and results at NF-1, Faro Mine Site, December 20, 2013
- Photos 1 – 26: Representative site photos.
- ALS Laboratory Analytical Reports



Table 1. Summary of Trips 1 to 4, Faro Mine Site.

Trip No.	Dates	General Tasks
1	Nov 12 – 14, 2013	<ul style="list-style-type: none">• Fish telemetry• Piezometer water depth measurements• Ground water sampling• Surface water sampling
2	Nov 27 – 30, 2013	<ul style="list-style-type: none">• Fish telemetry• Surface water sampling
3	Dec 10, 2013	<ul style="list-style-type: none">• Fish telemetry
4	Dec 19 – 20, 2013	<ul style="list-style-type: none">• Surface water sampling



Table 2. Surface water sampling field data, Trip 4, December 19 – 20, 2013.

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)
R10	585106	6913485	19-Dec-13	16:12	-	-	-	-	-
R9	585228	6913662	19-Dec-13	16:20	-	-	-	-	-
R8	586299	6914404	19-Dec-13	16:40	-	-	-	-	-
NF2-A	584708	6913035	19-Dec-13	15:00	-	-	-	-	-
NF2-B	584720	6913024	19-Dec-13	15:10	-	-	-	-	-
NF2	584689	6913013	19-Dec-13	15:25	-	-	-	-	-
NF1	584842	6913225	19-Dec-13	16:00	NF1-r1 NF1-r2	-	-	-	-
X14	579337	6915078	19-Dec-13	13:50	X14-r	-	-	-	-
X10	579445	6914885	19-Dec-13	14:10	-	-	-	-	-
X3A	583154	6912544	19-Dec-13	14:30	-	-	-	-	-
X2	584072	6912768	19-Dec-13	14:45	-	-	-	-	-
NF1-Y-1	584824	6913227	20-Dec-13	8:25	-	-	-	-	-
NF1-Y-2	584836	6913209	20-Dec-13	9:00	-	-	-	-	-
NF1-Y-3	584836	6913205	20-Dec-13	9:15	-	-	-	-	-
NF1-Y-4	584896	6193200	20-Dec-13	9:40	-	-	-	-	-
NF1-Y-5	584852	6913195	20-Dec-13	10:15	-	-	-	-	-
NF1-Y-6	584850	6913218	20-Dec-13	11:20	-	-	-	-	-
NF1-Y-7	584845	6913223	20-Dec-13	11:30	-	-	-	-	-
NF1-Y-8	584836	6913234	20-Dec-13	12:00	-	-	-	-	-
NF1-Y-9	584831	6913240	20-Dec-13	12:10	-	-	-	-	-
NF1-Y-10	584833	6913248	20-Dec-13	12:25	NF1-Y-10-r	-	-	-	-
NF1-Y-11	584840	6913243	20-Dec-13	12:45	-	-	-	-	-
NF1-Y-12	584846	6913233	20-Dec-13	13:00	-	-	-	-	-
NF1-Y-13	584850	6913226	20-Dec-13	13:15	-	-	-	-	-
NF1-Y-14	584846	6913247	20-Dec-13	13:45	-	-	-	-	-
NF1-Y-15	584857	6913250	20-Dec-13	14:00	-	-	-	-	-

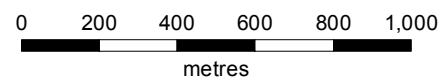
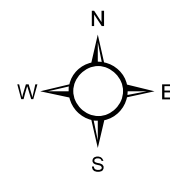
Where, UTM = Universal Transverse Mercator;
 QA/QC Rep = Quality Assurance/ Quality Control Replicate;
 Temp = water temperature;
 SPC = specific conductance;
 - = data not collected due to extreme cold temperature (below -30°C)



Location of surface water sampling, Faro Mine Site, December 19, 2013

Legend

- Surface Water Sampling Site
- Road (Mine Access/Haul)
- Topographic Contour (30 m Interval)



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

Data sources

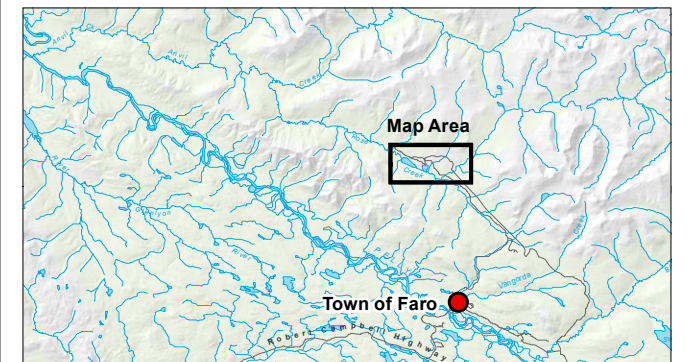
1:50,000 topographic spatial data provided by Geomatics - Yukon Government via online source (Corporate Spatial Warehouse) www.geomaticsyukon.ca.

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

Detailed topographic 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).

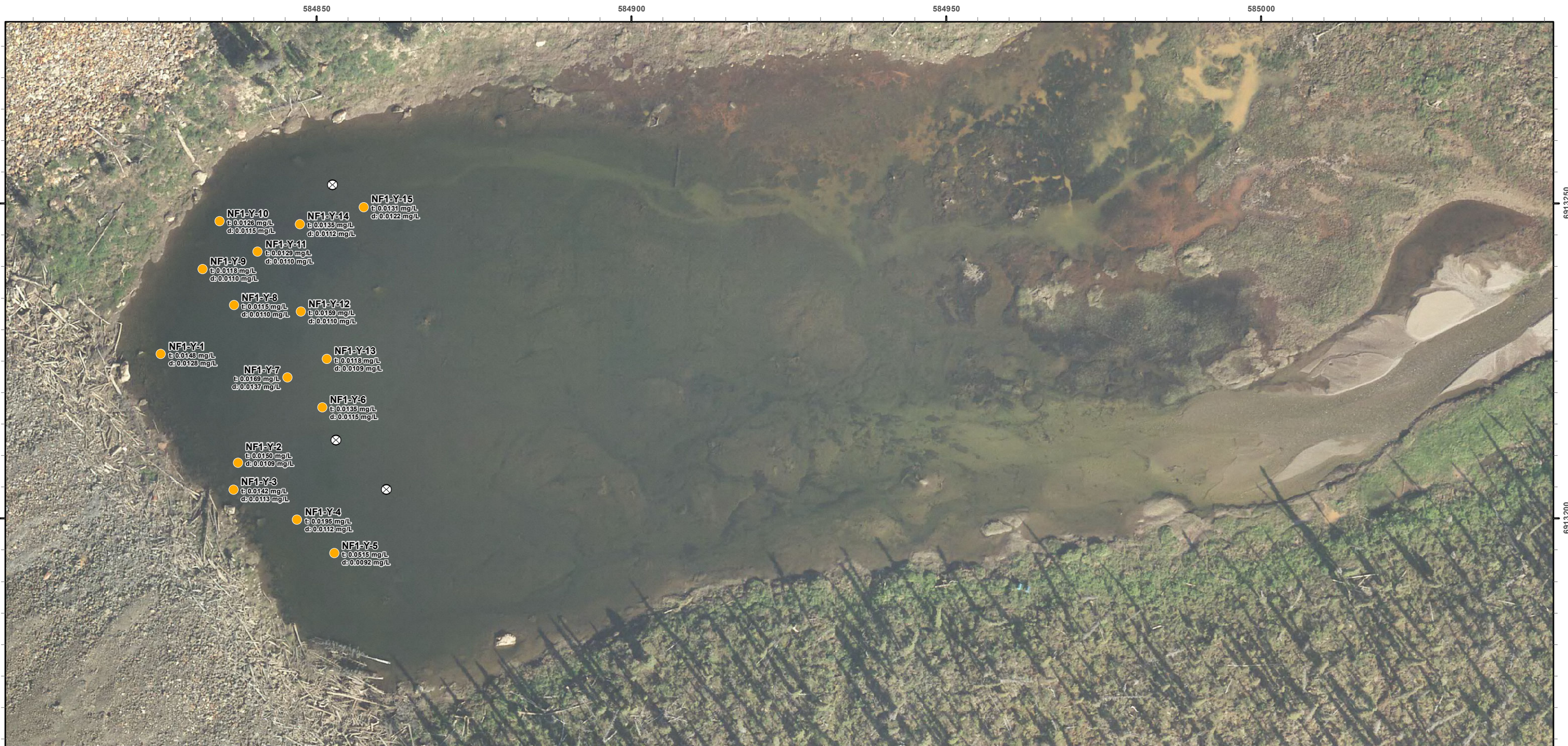
Project data displayed is site specific. Data collected by EDI Environmental Dynamics Inc. was obtained using Garmin GPS technology.

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



Map Prepared by
 EDI Environmental Dynamics Inc.

Drawn: LG	Checked: MK	FIGURE 1	Date: 09/01/2014
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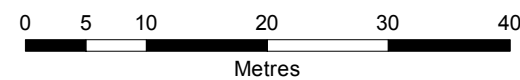
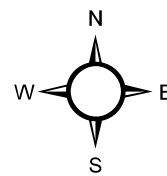
Water sampling locations and results at NF-1, Faro Mine Site, December 20, 2013

Legend

Site condition

- ⊗ Frozen to substrate
- Water present (site sampled)¹

¹The laboratory results displayed on the map indicate total (t) and dissolved (d) zinc (mg/L).



Map Scale = 1:625 (printed on 11 x 17)
Map Projection: North American Datum 1983 UTM Zone 8N

Data sources

Results refer to laboratory testing for total and dissolved zinc (mg/L).

1:250,000 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.

Orthophoto of the Faro Mine Site was provided by Yukon Government - Energy, Mines and Resources - Assessment and Abandoned Mines Branch (2012).

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

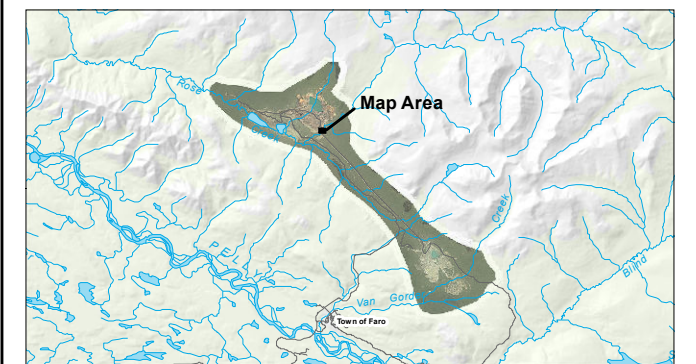
This document is not an official land survey and the spatial data presented is subject to change.

Drawn:
LG

Checked:
MK

FIGURE 2

Date: 09/01/2014



Map Prepared by
EDI Environmental Dynamics Inc.



Site Photos



Photo 1. Upstream view at surface water sampling site X14, December 19, 2013.



Photo 2. Overview of surface water sampling site at X10, December 19, 2013.



Photo 3. Overview of surface water sampling site at X3A, December 19, 2013.



Photo 4. Downstream view of surface water sampling site at X2, December 19, 2013.



Photo 5. Downstream view of surface water sampling site at NF2-A, December 19, 2013.



Photo 6. Overview of surface water sampling site at NF2-B, December 19, 2013.



Photo 7. Overview of surface water sampling site at NF2, December 19, 2013.



Photo 8. Overview of surface water sampling site at NF1, December 19, 2013.



Photo 9. Downstream view of surface water sampling site R10, December 19, 2013.



Photo 10. Overview of surface water sampling site R9, December 19, 2013.



Photo 11. Overview of surface water sampling site R8, December 19, 2013.



Photo 12. Overview of surface water sampling site NF1-Y-1, December 20, 2013.



Photo 13. Overview of surface water sampling site NF1-Y-2, December 20, 2013.



Photo 14. Overview of surface water sampling site NF1-Y-3, December 20, 2013.



Photo 15. Overview of surface water sampling site NF1-Y-4, December 20, 2013.



Photo 16. Overview of surface water sampling site NF1-Y-5, December 20, 2013.



Photo 17. Overview of surface water sampling site NF1-Y-6, December 20, 2013.



Photo 18. Overview of surface water sampling site NF1-Y-7, December 20, 2013.



Photo 19. Overview of surface water sampling site NF1-Y-8, December 20, 2013.



Photo 20. Overview of surface water sampling site NF1-Y-9, December 20, 2013.



Photo 21. Overview of surface water sampling site NF1-Y-10, December 20, 2013.



Photo 22. Overview of surface water sampling site NF1-Y-11, December 20, 2013.



Photo 23. Overview of surface water sampling site NF1-Y-12, December 20, 2013.



Photo 24. Overview of surface water sampling site NF1-Y-13, December 20, 2013.



Photo 25. Overview of surface water sampling site NF1-Y-14, December 20, 2013.



Photo 26. Overview of NF1 Pond where 15 surface water sampling sites were drilled, December 20, 2013.



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

Date Received: 20-DEC-13
Report Date: 28-DEC-13 13:20 (MT)
Version: FINAL

Client Phone: 867-393-4882

Certificate of Analysis

Lab Work Order #: L1406279
Project P.O. #: NOT SUBMITTED
Job Reference: 13-Y-0452
C of C Numbers: 1, 2, 3, 4
Legal Site Desc:

Can Dang
Senior Account Manager

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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	L1406279-1 Surface Water 19-DEC-13 14:45 X2	L1406279-2 Surface Water 19-DEC-13 13:50 X14	L1406279-3 Surface Water 19-DEC-13 13:50 X14-R	L1406279-4 Surface Water 19-DEC-13 14:10 X10	L1406279-5 Surface Water 19-DEC-13 14:30 X3A
Grouping	Analyte					
WATER						
Physical Tests	Conductivity (uS/cm)	282	536	538	289	280
	Hardness (as CaCO3) (mg/L)	134	268	265	144	135
	pH (pH)	7.79	7.84	7.85	7.97	7.88
	Total Suspended Solids (mg/L)	5.2	2.6	3.0	1.4	1.4
	Total Dissolved Solids (mg/L)	159	341	342	164	160
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	126	155	155	127	126
	Ammonia, Total (as N) (mg/L)	0.0094	0.0649	0.0637	0.0133	0.0177
	Chloride (Cl) (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50
	Fluoride (F) (mg/L)	0.157	0.146	0.144	0.148	0.151
	Nitrate (as N) (mg/L)	0.225	0.220	0.440	0.205	0.209
	Nitrite (as N) (mg/L)	0.0011	0.0011	<0.0010	<0.0010	<0.0010
	Phosphorus (P)-Total (mg/L)	0.0065	<0.0020	0.0020	0.0022	0.0034
	Sulfate (SO4) (mg/L)	29.0	140	141	30.1	28.9
	Anion Sum (meq/L)	3.14	6.03	6.07	3.18	3.15
	Cation Sum (meq/L)	2.86	5.73	5.66	3.04	2.86
	Cation - Anion Balance (%)	-4.7	-2.6	-3.5	-2.4	-4.7
Organic / Inorganic Carbon	Dissolved Organic Carbon (mg/L)	1.68	2.05	1.89	1.82	1.88
	Total Organic Carbon (mg/L)	1.77	1.98	2.02	1.97	1.80
Total Metals	Aluminum (Al)-Total (mg/L)	0.0303	0.0258	0.0245	0.0095	0.0154
	Antimony (Sb)-Total (mg/L)	0.00028	0.00030	0.00024	0.00025	0.00025
	Arsenic (As)-Total (mg/L)	0.00056	0.00044	0.00040	0.00034	0.00051
	Barium (Ba)-Total (mg/L)	0.0663	0.0639	0.0675	0.0696	0.0668
	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)	0.000329	0.000167	0.000161	0.000151	0.000208
	Calcium (Ca)-Total (mg/L)	37.6	79.4	81.1	42.9	40.2
	Chromium (Cr)-Total (mg/L)	0.00020	0.00021	0.00018	0.00016	0.00014
	Cobalt (Co)-Total (mg/L)	0.00213	0.00224	0.00223	0.00083	0.00125
	Copper (Cu)-Total (mg/L)	0.00056	0.00061	0.00059	<0.00050	0.00051
	Iron (Fe)-Total (mg/L)	0.261	0.664	0.660	0.316	0.338
	Lead (Pb)-Total (mg/L)	0.000485	0.000255	0.000284	0.000156	0.000287
	Lithium (Li)-Total (mg/L)	0.00640	0.00620	0.00636	0.00517	0.00520
	Magnesium (Mg)-Total (mg/L)	9.61	18.4	18.4	10.0	9.42
	Manganese (Mn)-Total (mg/L)	0.151	2.44	2.43	0.0999	0.126
	Molybdenum (Mo)-Total (mg/L)	0.000716	0.000646	0.000659	0.000607	0.000587

* 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	L1406279-6 Surface Water 19-DEC-13 16:45 NF1-R1	L1406279-7 Surface Water 19-DEC-13 16:45 NF1-R2	L1406279-8 Surface Water 19-DEC-13 16:25 R9	L1406279-9 Surface Water 19-DEC-13 16:40 R8	L1406279-10 Surface Water 19-DEC-13 15:25 NF2	
Grouping	Analyte					
WATER						
Physical Tests	Conductivity (uS/cm)	254	254	247	221	273
	Hardness (as CaCO3) (mg/L)	126	129	120	111	131
	pH (pH)	7.82	7.84	7.99	7.98	7.81
	Total Suspended Solids (mg/L)	<1.0	<1.0	1.8	4.0	2.6
	Total Dissolved Solids (mg/L)	144	146	139	124	155
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	122	122	119	114	118
	Ammonia, Total (as N) (mg/L)	0.0105	0.0122	0.0099	0.0104	0.0129
	Chloride (Cl) (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50
	Fluoride (F) (mg/L)	0.147	0.148	0.145	0.144	0.165
	Nitrate (as N) (mg/L)	0.263	0.314	0.224	0.136	0.231
	Nitrite (as N) (mg/L)	0.0012	<0.0010	<0.0010	0.0012	0.0012
	Phosphorus (P)-Total (mg/L)	0.0047	0.0047	0.0063	0.0073	0.0043
	Sulfate (SO4) (mg/L)	19.3	19.2	18.4	9.20	30.4
	Anion Sum (meq/L)	2.87	2.87	2.79	2.48	3.03
	Cation Sum (meq/L)	2.66	2.74	2.54	2.36	2.82
	Cation - Anion Balance (%)	-3.8	-2.3	-4.7	-2.5	-3.6
Organic / Inorganic Carbon	Dissolved Organic Carbon (mg/L)	1.90	1.83	1.92	1.78	2.04
	Total Organic Carbon (mg/L)	1.80	1.74	1.89	1.80	1.50
Total Metals	Aluminum (Al)-Total (mg/L)	0.0090	0.0142	0.0270	0.0707	0.0365
	Antimony (Sb)-Total (mg/L)	0.00023	0.00024	0.00021	0.00021	0.00021
	Arsenic (As)-Total (mg/L)	0.00062	0.00062	0.00068	0.00082	0.00061
	Barium (Ba)-Total (mg/L)	0.0665	0.0702	0.0704	0.0691	0.0679
	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)	0.000017	0.000021	<0.000010	0.000011	0.000585
	Calcium (Ca)-Total (mg/L)	37.2	37.2	36.7	34.1	38.9
	Chromium (Cr)-Total (mg/L)	0.00018	0.00018	0.00018	0.00025	0.00018
	Cobalt (Co)-Total (mg/L)	<0.00010	0.00012	<0.00010	0.00024	0.00387
	Copper (Cu)-Total (mg/L)	<0.00050	0.00058	<0.00050	0.00061	<0.00050
	Iron (Fe)-Total (mg/L)	0.146	0.152	0.201	0.308	0.274
	Lead (Pb)-Total (mg/L)	0.000115	0.00453	0.000104	0.000175	0.000559
	Lithium (Li)-Total (mg/L)	0.00619	0.00611	0.00602	0.00578	0.00660
	Magnesium (Mg)-Total (mg/L)	8.47	8.34	8.17	6.70	10.2
	Manganese (Mn)-Total (mg/L)	0.0327	0.0349	0.0304	0.0356	0.200
	Molybdenum (Mo)-Total (mg/L)	0.000753	0.000749	0.000769	0.000773	0.000751

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1406279-11	L1406279-12	L1406279-13	L1406279-14	L1406279-15
	Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
	Sampled Date	19-DEC-13	19-DEC-13	19-DEC-13	19-DEC-13	20-DEC-13
	Sampled Time	16:12	15:00	15:10	16:00	12:25
	Client ID	R10	NF2-A	NF2-B	NF1	NF1-Y-10
Grouping	Analyte					
WATER						
Physical Tests	Conductivity (uS/cm)	249	310	253	255	285
	Hardness (as CaCO3) (mg/L)	126	147	126	124	130
	pH (pH)	7.84	7.74	7.85	7.88	7.87
	Total Suspended Solids (mg/L)	1.8	2.6	2.2	<1.0	<1.0
	Total Dissolved Solids (mg/L)	144	179	144	143	154
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	122	119	121	121	133
	Ammonia, Total (as N) (mg/L)	0.0102	0.0105	0.0060	0.0103	0.0131
	Chloride (Cl) (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50
	Fluoride (F) (mg/L)	0.146	0.191	0.143	0.146	0.152
	Nitrate (as N) (mg/L)	0.224	0.262	0.256	0.238	0.231
	Nitrite (as N) (mg/L)	<0.0010	0.0018	0.0014	<0.0010	0.0010
	Phosphorus (P)-Total (mg/L)	0.0050	0.0030	0.0061	0.0039	0.0044
	Sulfate (SO4) (mg/L)	18.8	46.8	19.0	19.1	20.2
	Anion Sum (meq/L)	2.85	3.39	2.84	2.84	3.10
	Cation Sum (meq/L)	2.66	3.19	2.67	2.63	2.76
	Cation - Anion Balance (%)	-3.6	-3.0	-3.2	-3.9	-5.9
Organic / Inorganic Carbon	Dissolved Organic Carbon (mg/L)	1.79	1.72	1.86	1.82	1.80
	Total Organic Carbon (mg/L)	1.85	2.06	1.93	1.73	1.93
Total Metals	Aluminum (Al)-Total (mg/L)	0.0348	0.0415	0.0262	0.0085	0.0083
	Antimony (Sb)-Total (mg/L)	0.00022	0.00022	0.00018	0.00017	0.00017
	Arsenic (As)-Total (mg/L)	0.00068	0.00059	0.00063	0.00063	0.00063
	Barium (Ba)-Total (mg/L)	0.0686	0.0688	0.0685	0.0683	0.0718
	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)	0.000018	0.00147	0.000017	0.000017	0.000020
	Calcium (Ca)-Total (mg/L)	39.3	39.7	39.2	37.0	41.8
	Chromium (Cr)-Total (mg/L)	0.00023	0.00026	0.00020	0.00022	0.00017
	Cobalt (Co)-Total (mg/L)	<0.00010	0.0101	<0.00010	<0.00010	0.00012
	Copper (Cu)-Total (mg/L)	<0.00050	0.00058	<0.00050	<0.00050	0.00068
	Iron (Fe)-Total (mg/L)	0.207	0.434	0.174	0.141	0.175
	Lead (Pb)-Total (mg/L)	0.000225	0.000799	0.000970	0.000125	0.000137
	Lithium (Li)-Total (mg/L)	0.00624	0.00728	0.00634	0.00612	0.00661
	Magnesium (Mg)-Total (mg/L)	8.23	13.0	8.47	8.23	8.96
	Manganese (Mn)-Total (mg/L)	0.0319	0.475	0.0255	0.0330	0.0497
	Molybdenum (Mo)-Total (mg/L)	0.000771	0.000735	0.000741	0.000762	0.000872

* 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	L1406279-16	L1406279-17	L1406279-18	L1406279-19	L1406279-20
	Surface Water	20-DEC-13	12:45	NF1-Y-11	Surface Water	20-DEC-13	13:15	NF1-Y-13	Surface Water
	Surface Water	20-DEC-13	13:00	NF1-Y-12	Surface Water	20-DEC-13	13:45	NF1-Y-14	Surface Water
	Surface Water	20-DEC-13	12:00	NF1-Y-8					
Grouping	Analyte								
WATER									
Physical Tests	Conductivity (uS/cm)	265	265	269	265	270			
	Hardness (as CaCO3) (mg/L)	126	126	126	127	124			
	pH (pH)	7.89	7.90	7.89	7.88	7.87			
	Total Suspended Solids (mg/L)	2.4	<1.0	<1.0	<1.0	<1.0			
	Total Dissolved Solids (mg/L)	146	144	146	147	146			
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	126	122	125	126	128			
	Ammonia, Total (as N) (mg/L)	0.0103	0.0114	0.0109	0.0105	0.0114			
	Chloride (Cl) (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50			
	Fluoride (F) (mg/L)	0.145	0.146	0.148	0.146	0.147			
	Nitrate (as N) (mg/L)	0.224	0.225	0.229	0.227	0.222			
	Nitrite (as N) (mg/L)	<0.0010	<0.0010	<0.0010	0.0010	0.0012			
	Phosphorus (P)-Total (mg/L)	0.0048	0.0041	0.0038	0.0067	0.0052			
	Sulfate (SO4) (mg/L)	19.2	19.2	19.7	19.2	19.0			
	Anion Sum (meq/L)	2.93	2.86	2.92	2.94	2.97			
	Cation Sum (meq/L)	2.67	2.66	2.67	2.69	2.61			
	Cation - Anion Balance (%)	-4.8	-3.8	-4.6	-4.4	-6.5			
Organic / Inorganic Carbon	Dissolved Organic Carbon (mg/L)	1.86	1.68	1.73	1.57	1.70			
	Total Organic Carbon (mg/L)	1.85	1.60	1.63	1.56	1.57			
Total Metals	Aluminum (Al)-Total (mg/L)	0.0412	0.0086	0.0105	0.0118	0.0089			
	Antimony (Sb)-Total (mg/L)	0.00018	0.00017	0.00017	0.00017	0.00016			
	Arsenic (As)-Total (mg/L)	0.00065	0.00061	0.00061	0.00061	0.00063			
	Barium (Ba)-Total (mg/L)	0.0704	0.0670	0.0715	0.0716	0.0678			
	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)	0.000022	0.000015	0.000016	0.000018	0.000016			
	Calcium (Ca)-Total (mg/L)	38.3	38.1	37.8	37.4	38.1			
	Chromium (Cr)-Total (mg/L)	0.00028	0.00015	0.00017	0.00019	0.00023			
	Cobalt (Co)-Total (mg/L)	0.00011	<0.00010	<0.00010	<0.00010	<0.00010			
	Copper (Cu)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050			
	Iron (Fe)-Total (mg/L)	0.199	0.137	0.136	0.149	0.136			
	Lead (Pb)-Total (mg/L)	0.000612	0.000078	0.000152	0.000179	0.000085			
	Lithium (Li)-Total (mg/L)	0.00604	0.00620	0.00606	0.00603	0.00598			
	Magnesium (Mg)-Total (mg/L)	8.20	8.26	8.74	8.33	8.20			
	Manganese (Mn)-Total (mg/L)	0.0338	0.0324	0.0325	0.0338	0.0319			
	Molybdenum (Mo)-Total (mg/L)	0.000761	0.000787	0.000773	0.000795	0.000768			

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1406279-21	L1406279-22	L1406279-23	L1406279-24	L1406279-25
	Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
	Sampled Date	20-DEC-13	20-DEC-13	20-DEC-13	20-DEC-13	20-DEC-13
	Sampled Time	12:10	12:25	09:00	09:40	11:20
	Client ID	NF1-Y-9	NF1-Y-10-R	NF1-Y-2	NF1-Y-4	NF1-Y-6
Grouping	Analyte					
WATER						
Physical Tests	Conductivity (uS/cm)	275	285	273	289	260
	Hardness (as CaCO3) (mg/L)	128	127	126	131	128
	pH (pH)	7.89	7.88	7.90	7.94	7.91
	Total Suspended Solids (mg/L)	<1.0	1.2	<1.0	22.0	1.4
	Total Dissolved Solids (mg/L)	150	154	149	157	145
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	130	136	130	135	122
	Ammonia, Total (as N) (mg/L)	0.0106	0.0135	0.0119	0.0159	0.0122
	Chloride (Cl) (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50
	Fluoride (F) (mg/L)	0.146	0.153	0.147	0.155	0.148
	Nitrate (as N) (mg/L)	0.224	0.242	0.234	0.253	0.229
	Nitrite (as N) (mg/L)	0.0011	0.0011	<0.0010	<0.0010	<0.0010
	Phosphorus (P)-Total (mg/L)	0.0044	0.0044	0.0049	0.0225	0.0042
	Sulfate (SO4) (mg/L)	19.1	20.5	19.3	21.1	19.2
	Anion Sum (meq/L)	3.03	3.17	3.03	3.17	2.87
	Cation Sum (meq/L)	2.70	2.68	2.66	2.78	2.70
	Cation - Anion Balance (%)	-5.8	-8.3	-6.5	-6.6	-3.0
Organic / Inorganic Carbon	Dissolved Organic Carbon (mg/L)	2.06	1.64	1.57	2.02	1.73
	Total Organic Carbon (mg/L)	1.55	1.82	1.68	2.46	1.87
Total Metals	Aluminum (Al)-Total (mg/L)	0.0080	0.0082	0.0120	0.385	0.0157
	Antimony (Sb)-Total (mg/L)	0.00015	0.00015	0.00016	0.00018	0.00014
	Arsenic (As)-Total (mg/L)	0.00063	0.00061	0.00067	0.00113	0.00064
	Barium (Ba)-Total (mg/L)	0.0704	0.0739	0.0694	0.0837	0.0703
	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)	0.000014	0.000022	0.000018	0.000054	0.000018
	Calcium (Ca)-Total (mg/L)	38.0	40.7	38.1	41.5	39.0
	Chromium (Cr)-Total (mg/L)	0.00017	0.00015	0.00021	0.00109	0.00023
	Cobalt (Co)-Total (mg/L)	<0.00010	0.00012	0.00010	0.00041	0.00012
	Copper (Cu)-Total (mg/L)	<0.00050	0.00060	<0.00050	0.00146	<0.00050
	Iron (Fe)-Total (mg/L)	0.141	0.171	0.147	0.793	0.164
	Lead (Pb)-Total (mg/L)	0.000189	0.000152	0.000206	0.00734	0.000182
	Lithium (Li)-Total (mg/L)	0.00596	0.00622	0.00623	0.00711	0.00607
	Magnesium (Mg)-Total (mg/L)	8.12	8.73	8.42	9.19	8.33
	Manganese (Mn)-Total (mg/L)	0.0335	0.0484	0.0340	0.0618	0.0338
	Molybdenum (Mo)-Total (mg/L)	0.000758	0.000838	0.000801	0.000842	0.000776

* 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	L1406279-26	L1406279-27	L1406279-28	L1406279-29	L1406279-30											
	Surface Water	20-DEC-13	11:30	NF1-Y-7	Surface Water	20-DEC-13	09:15	NF1-Y-3	Surface Water	20-DEC-13	10:15	NF1-Y-5	Surface Water	20-DEC-13	08:25	NF1-Y-1	Surface Water	20-DEC-13	13:30	FIELD BLANK
Grouping	Analyte																			
WATER																				
Physical Tests	Conductivity (uS/cm)	266	273	317	308	<2.0														
	Hardness (as CaCO3) (mg/L)	127	125	147	134	<0.50														
	pH (pH)	7.93	7.89	7.90	7.90	5.48														
	Total Suspended Solids (mg/L)	2.2	1.0	144	2.4	<1.0														
	Total Dissolved Solids (mg/L)	144	146	180	162	<1.0														
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	120	126	150	144	<2.0														
	Ammonia, Total (as N) (mg/L)	0.0114	0.0104	0.0847	0.0118	<0.0050														
	Chloride (Cl) (mg/L)	<0.50	<0.50	<0.50	<0.50	<0.50														
	Fluoride (F) (mg/L)	0.150	0.145	0.169	0.153	<0.020														
	Nitrate (as N) (mg/L)	0.251	0.222	0.272	0.303	<0.0050														
	Nitrite (as N) (mg/L)	0.0012	<0.0010	0.0023	0.0010	<0.0010														
	Phosphorus (P)-Total (mg/L)	0.0064	0.0045	0.125	0.0049	<0.0020														
	Sulfate (SO4) (mg/L)	19.7	18.9	23.1	20.6	<0.50														
	Anion Sum (meq/L)	2.84	2.94	3.51	3.35	<0.10														
	Cation Sum (meq/L)	2.69	2.63	3.14	2.83	<0.10														
	Cation - Anion Balance (%)	-2.7	-5.5	-5.7	-8.4	0.0														
Organic / Inorganic Carbon	Dissolved Organic Carbon (mg/L)	1.60	1.53	3.03	1.81	<0.50														
	Total Organic Carbon (mg/L)	1.81	1.48	7.94	1.74	<0.50														
Total Metals	Aluminum (Al)-Total (mg/L)	0.0244	0.0100	2.93	0.0371	<0.0030														
	Antimony (Sb)-Total (mg/L)	0.00013	0.00014	0.00041	0.00013	<0.00010														
	Arsenic (As)-Total (mg/L)	0.00066	0.00063	0.00428	0.00068	<0.00010														
	Barium (Ba)-Total (mg/L)	0.0720	0.0753	0.132	0.0762	<0.000050														
	Beryllium (Be)-Total (mg/L)	<0.00010	<0.00010	0.00019	<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)	0.000019	0.000017	0.000240	0.000022	<0.000010														
	Calcium (Ca)-Total (mg/L)	39.5	36.8	43.5	39.9	<0.020														
	Chromium (Cr)-Total (mg/L)	0.00039	0.00019	0.00754	0.00021	<0.00010														
	Cobalt (Co)-Total (mg/L)	0.00012	<0.00010	0.00258	0.00015	<0.00010														
	Copper (Cu)-Total (mg/L)	0.00062	0.00064	0.00867	0.00053	<0.00050														
	Iron (Fe)-Total (mg/L)	0.186	0.144	5.43	0.232	<0.010														
	Lead (Pb)-Total (mg/L)	0.000527	0.000127	0.0386	0.000723	<0.000050														
	Lithium (Li)-Total (mg/L)	0.00622	0.00572	0.0115	0.00644	<0.00050														
	Magnesium (Mg)-Total (mg/L)	8.44	8.61	10.7	8.79	<0.0050														
	Manganese (Mn)-Total (mg/L)	0.0350	0.0332	0.295	0.0499	<0.000050														
	Molybdenum (Mo)-Total (mg/L)	0.000812	0.000729	0.00113	0.000843	<0.000050														

* 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				
	L1406279-31 Surface Water 20-DEC-13 14:00 NF1-Y-15	L1406279-32 Surface Water 20-DEC-13 12:00 TRAVEL BLANK			
Grouping	Analyte				
WATER					
Physical Tests	Conductivity (uS/cm)	266	<2.0		
	Hardness (as CaCO3) (mg/L)	124	<0.50		
	pH (pH)	7.87	5.80		
	Total Suspended Solids (mg/L)	1.4	<1.0		
	Total Dissolved Solids (mg/L)	147	<1.0		
Anions and Nutrients	Alkalinity, Total (as CaCO3) (mg/L)	128	<2.0		
	Ammonia, Total (as N) (mg/L)	0.0103	0.0085 ^{RRV}		
	Chloride (Cl) (mg/L)	<0.50	<0.50		
	Fluoride (F) (mg/L)	0.148	<0.020		
	Nitrate (as N) (mg/L)	0.241	<0.0050		
	Nitrite (as N) (mg/L)	<0.0010	<0.0010		
	Phosphorus (P)-Total (mg/L)	0.0048	<0.0020		
	Sulfate (SO4) (mg/L)	19.1	<0.50		
	Anion Sum (meq/L)	2.99	<0.10		
	Cation Sum (meq/L)	2.61	<0.10		
	Cation - Anion Balance (%)	-6.7	0.0		
Organic / Inorganic Carbon	Dissolved Organic Carbon (mg/L)	2.03			
	Total Organic Carbon (mg/L)	1.51	<0.50		
Total Metals	Aluminum (Al)-Total (mg/L)	0.0088	<0.0030		
	Antimony (Sb)-Total (mg/L)	0.00012	<0.00010		
	Arsenic (As)-Total (mg/L)	0.00062	<0.00010		
	Barium (Ba)-Total (mg/L)	0.0689	<0.000050		
	Beryllium (Be)-Total (mg/L)	<0.00010	<0.00010		
	Bismuth (Bi)-Total (mg/L)	<0.00050	<0.00050		
	Boron (B)-Total (mg/L)	<0.010	<0.010		
	Cadmium (Cd)-Total (mg/L)	0.000019	<0.000010		
	Calcium (Ca)-Total (mg/L)	37.2	<0.020		
	Chromium (Cr)-Total (mg/L)	0.00017	0.00029 ^{RRV}		
	Cobalt (Co)-Total (mg/L)	0.00010	<0.00010		
	Copper (Cu)-Total (mg/L)	<0.00050	<0.00050		
	Iron (Fe)-Total (mg/L)	0.146	<0.010		
	Lead (Pb)-Total (mg/L)	0.000084	<0.000050		
	Lithium (Li)-Total (mg/L)	0.00587	<0.00050		
	Magnesium (Mg)-Total (mg/L)	8.06	<0.0050		
	Manganese (Mn)-Total (mg/L)	0.0322	<0.000050		
	Molybdenum (Mo)-Total (mg/L)	0.000784	<0.000050		

* 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		L1406279-1 Surface Water 19-DEC-13 14:45 X2	L1406279-2 Surface Water 19-DEC-13 13:50 X14	L1406279-3 Surface Water 19-DEC-13 13:50 X14-R	L1406279-4 Surface Water 19-DEC-13 14:10 X10	L1406279-5 Surface Water 19-DEC-13 14:30 X3A
Grouping	Analyte					
WATER						
Total Metals	Nickel (Ni)-Total (mg/L)	0.00358	0.00536	0.00539	0.00226	0.00249
	Phosphorus (P)-Total (mg/L)	<0.30	<0.30	<0.30	<0.30	<0.30
	Potassium (K)-Total (mg/L)	0.923	1.52	1.49	1.00	1.01
	Selenium (Se)-Total (mg/L)	0.00040	0.00037	0.00036	0.00037	0.00036
	Silicon (Si)-Total (mg/L)	6.09	6.00	5.80	5.61	5.87
	Silver (Ag)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Total (mg/L)	2.81	5.04	5.08	2.72	2.83
	Strontium (Sr)-Total (mg/L)	0.166	0.273	0.281	0.194	0.188
	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)	0.00209	0.00273	0.00269	0.00225	0.00227
	Vanadium (V)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Total (mg/L)	0.488	0.249	0.253	0.286	0.334
	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)	0.0032	0.0013	0.0015	0.0025	0.0024
	Antimony (Sb)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Arsenic (As)-Dissolved (mg/L)	0.00030	0.00020	0.00023	0.00015	0.00025
	Barium (Ba)-Dissolved (mg/L)	0.0653	0.0640	0.0645	0.0656	0.0661
	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)	0.000315	0.000153	0.000149	0.000129	0.000196
	Calcium (Ca)-Dissolved (mg/L)	37.9	77.5	76.5	41.0	38.7
	Chromium (Cr)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Cobalt (Co)-Dissolved (mg/L)	0.00208	0.00215	0.00214	0.00081	0.00121
	Copper (Cu)-Dissolved (mg/L)	0.00038	0.00033	0.00032	0.00030	0.00031
	Iron (Fe)-Dissolved (mg/L)	0.076	0.324	0.325	0.052	0.134
	Lead (Pb)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Lithium (Li)-Dissolved (mg/L)	0.00645	0.00588	0.00583	0.00494	0.00502
	Magnesium (Mg)-Dissolved (mg/L)	9.69	18.1	17.9	10.1	9.31
	Manganese (Mn)-Dissolved (mg/L)	0.147	2.38	2.38	0.0972	0.123
	Molybdenum (Mo)-Dissolved (mg/L)	0.000701	0.000594	0.000593	0.000561	0.000575
	Nickel (Ni)-Dissolved (mg/L)	0.00355	0.00516	0.00516	0.00216	0.00248
	Phosphorus (P)-Dissolved (mg/L)	<0.30	<0.30	<0.30	<0.30	<0.30
	Potassium (K)-Dissolved (mg/L)	0.912	1.46	1.45	1.00	0.998

* 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		L1406279-6 Surface Water 19-DEC-13 16:45 NF1-R1	L1406279-7 Surface Water 19-DEC-13 16:45 NF1-R2	L1406279-8 Surface Water 19-DEC-13 16:25 R9	L1406279-9 Surface Water 19-DEC-13 16:40 R8	L1406279-10 Surface Water 19-DEC-13 15:25 NF2
Grouping	Analyte					
WATER						
Total Metals	Nickel (Ni)-Total (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	0.00601
	Phosphorus (P)-Total (mg/L)	<0.30	<0.30	<0.30	<0.30	<0.30
	Potassium (K)-Total (mg/L)	0.866	0.888	0.832	0.778	0.896
	Selenium (Se)-Total (mg/L)	0.00040	0.00041	0.00040	0.00037	0.00037
	Silicon (Si)-Total (mg/L)	6.00	5.93	6.01	6.03	6.05
	Silver (Ag)-Total (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Total (mg/L)	2.83	2.85	2.90	2.71	2.94
	Strontium (Sr)-Total (mg/L)	0.162	0.164	0.162	0.148	0.165
	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)	0.00205	0.00206	0.00201	0.00185	0.00205
	Vanadium (V)-Total (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Total (mg/L)	0.0160	0.0178	<0.0030	0.0041	0.897
	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)	0.0026	0.0026	0.0021	0.0021	0.0062
	Antimony (Sb)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Arsenic (As)-Dissolved (mg/L)	0.00043	0.00044	0.00047	0.00050	0.00039
	Barium (Ba)-Dissolved (mg/L)	0.0681	0.0666	0.0678	0.0649	0.0659
	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)	0.000018	0.000014	<0.000010	<0.000010	0.000603
	Calcium (Ca)-Dissolved (mg/L)	36.8	38.0	35.0	33.5	35.8
	Chromium (Cr)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Cobalt (Co)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	0.00398
	Copper (Cu)-Dissolved (mg/L)	0.00028	0.00031	0.00030	0.00025	0.00056
	Iron (Fe)-Dissolved (mg/L)	0.040	0.044	0.041	0.060	0.126
	Lead (Pb)-Dissolved (mg/L)	<0.000050	<0.000050	<0.000050	<0.000050	0.000074
	Lithium (Li)-Dissolved (mg/L)	0.00599	0.00589	0.00528	0.00575	0.00603
	Magnesium (Mg)-Dissolved (mg/L)	8.24	8.36	7.92	6.71	10.2
	Manganese (Mn)-Dissolved (mg/L)	0.0315	0.0321	0.0264	0.0262	0.202
	Molybdenum (Mo)-Dissolved (mg/L)	0.000743	0.000719	0.000676	0.000733	0.000695
	Nickel (Ni)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	0.00610
	Phosphorus (P)-Dissolved (mg/L)	<0.30	<0.30	<0.30	<0.30	<0.30
	Potassium (K)-Dissolved (mg/L)	0.842	0.878	0.831	0.748	0.870

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

		Sample ID	L1406279-11	L1406279-12	L1406279-13	L1406279-14	L1406279-15
		Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
		Sampled Date	19-DEC-13	19-DEC-13	19-DEC-13	19-DEC-13	20-DEC-13
		Sampled Time	16:12	15:00	15:10	16:00	12:25
		Client ID	R10	NF2-A	NF2-B	NF1	NF1-Y-10
Grouping	Analyte						
WATER							
Total Metals	Nickel (Ni)-Total (mg/L)		<0.00050	0.0152	<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)		0.858	0.955	0.878	0.856	0.930
	Selenium (Se)-Total (mg/L)		0.00039	0.00041	0.00039	0.00039	0.00044
	Silicon (Si)-Total (mg/L)		5.81	6.09	6.03	6.06	6.25
	Silver (Ag)-Total (mg/L)		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Total (mg/L)		2.80	3.04	2.89	2.78	2.99
	Strontium (Sr)-Total (mg/L)		0.164	0.171	0.164	0.159	0.176
	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)		0.00202	0.00206	0.00207	0.00200	0.00206
	Vanadium (V)-Total (mg/L)		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Total (mg/L)		0.0093	2.34	0.0135	0.0123	0.0126
	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)		0.0025	0.0117	0.0019	0.0021	0.0019
	Antimony (Sb)-Dissolved (mg/L)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Arsenic (As)-Dissolved (mg/L)		0.00043	0.00028	0.00039	0.00042	0.00040
	Barium (Ba)-Dissolved (mg/L)		0.0652	0.0677	0.0660	0.0694	0.0704
	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)		0.000014	0.00148	0.000014	0.000017	0.000017
	Calcium (Ca)-Dissolved (mg/L)		36.9	37.7	37.3	36.0	37.7
	Chromium (Cr)-Dissolved (mg/L)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Cobalt (Co)-Dissolved (mg/L)		<0.00010	0.00967	<0.00010	<0.00010	0.00011
	Copper (Cu)-Dissolved (mg/L)		0.00024	0.00029	0.00028	0.00041	0.00033
	Iron (Fe)-Dissolved (mg/L)		0.044	0.226	0.033	0.038	0.049
	Lead (Pb)-Dissolved (mg/L)		<0.000050	0.000081	<0.000050	<0.000050	<0.000050
	Lithium (Li)-Dissolved (mg/L)		0.00584	0.00698	0.00613	0.00599	0.00601
	Magnesium (Mg)-Dissolved (mg/L)		8.16	12.8	8.03	8.28	8.77
	Manganese (Mn)-Dissolved (mg/L)		0.0276	0.465	0.0205	0.0316	0.0472
	Molybdenum (Mo)-Dissolved (mg/L)		0.000741	0.000748	0.000729	0.000723	0.000746
	Nickel (Ni)-Dissolved (mg/L)		<0.00050	0.0145	<0.00050	<0.00050	<0.00050
	Phosphorus (P)-Dissolved (mg/L)		<0.30	<0.30	<0.30	<0.30	<0.30
	Potassium (K)-Dissolved (mg/L)		0.835	0.919	0.836	0.848	0.904

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

		Sample ID	L1406279-16	L1406279-17	L1406279-18	L1406279-19	L1406279-20
		Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
		Sampled Date	20-DEC-13	20-DEC-13	20-DEC-13	20-DEC-13	20-DEC-13
		Sampled Time	12:45	13:15	13:00	13:45	12:00
		Client ID	NF1-Y-11	NF1-Y-13	NF1-Y-12	NF1-Y-14	NF1-Y-8
Grouping	Analyte						
WATER							
Total Metals	Nickel (Ni)-Total (mg/L)		<0.00050	<0.00050	<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)		0.866	0.871	0.889	0.867	0.868
	Selenium (Se)-Total (mg/L)		0.00039	0.00043	0.00037	0.00040	0.00040
	Silicon (Si)-Total (mg/L)		6.04	6.01	6.02	5.94	5.95
	Silver (Ag)-Total (mg/L)		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Total (mg/L)		2.86	2.77	2.80	2.69	2.73
	Strontium (Sr)-Total (mg/L)		0.164	0.164	0.164	0.168	0.161
	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)		0.00207	0.00202	0.00199	0.00202	0.00201
	Vanadium (V)-Total (mg/L)		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Total (mg/L)		0.0129	0.0118	0.0159	0.0135	0.0115
	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)		0.0021	0.0027	0.0030	0.0021	0.0028
	Antimony (Sb)-Dissolved (mg/L)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Arsenic (As)-Dissolved (mg/L)		0.00041	0.00041	0.00044	0.00042	0.00041
	Barium (Ba)-Dissolved (mg/L)		0.0669	0.0688	0.0677	0.0706	0.0676
	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)		0.000016	0.000014	0.000016	0.000015	0.000013
	Calcium (Ca)-Dissolved (mg/L)		37.2	36.8	36.8	37.5	35.9
	Chromium (Cr)-Dissolved (mg/L)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Cobalt (Co)-Dissolved (mg/L)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Copper (Cu)-Dissolved (mg/L)		0.00025	0.00025	0.00026	0.00025	0.00025
	Iron (Fe)-Dissolved (mg/L)		0.045	0.040	0.040	0.044	0.043
	Lead (Pb)-Dissolved (mg/L)		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Lithium (Li)-Dissolved (mg/L)		0.00609	0.00604	0.00584	0.00578	0.00575
	Magnesium (Mg)-Dissolved (mg/L)		8.11	8.15	8.30	8.16	8.21
	Manganese (Mn)-Dissolved (mg/L)		0.0315	0.0315	0.0308	0.0314	0.0311
	Molybdenum (Mo)-Dissolved (mg/L)		0.000719	0.000736	0.000760	0.000729	0.000729
	Nickel (Ni)-Dissolved (mg/L)		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Phosphorus (P)-Dissolved (mg/L)		<0.30	<0.30	<0.30	<0.30	<0.30
	Potassium (K)-Dissolved (mg/L)		0.852	0.855	0.877	0.857	0.848

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

		Sample ID	L1406279-21	L1406279-22	L1406279-23	L1406279-24	L1406279-25
		Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
		Sampled Date	20-DEC-13	20-DEC-13	20-DEC-13	20-DEC-13	20-DEC-13
		Sampled Time	12:10	12:25	09:00	09:40	11:20
		Client ID	NF1-Y-9	NF1-Y-10-R	NF1-Y-2	NF1-Y-4	NF1-Y-6
Grouping	Analyte						
WATER							
Total Metals	Nickel (Ni)-Total (mg/L)		<0.00050	<0.00050	<0.00050	0.00144	<0.00050
	Phosphorus (P)-Total (mg/L)		<0.30	<0.30	<0.30	<0.30	<0.30
	Potassium (K)-Total (mg/L)		0.871	0.933	0.914	1.03	0.904
	Selenium (Se)-Total (mg/L)		0.00042	0.00040	0.00042	0.00044	0.00039
	Silicon (Si)-Total (mg/L)		5.97	6.46	6.39	7.29	6.32
	Silver (Ag)-Total (mg/L)		<0.000010	<0.000010	<0.000010	0.000016	<0.000010
	Sodium (Na)-Total (mg/L)		2.75	2.88	2.82	3.03	2.75
	Strontium (Sr)-Total (mg/L)		0.162	0.169	0.167	0.175	0.163
	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	0.020	<0.010
	Uranium (U)-Total (mg/L)		0.00208	0.00218	0.00210	0.00231	0.00203
	Vanadium (V)-Total (mg/L)		<0.0010	<0.0010	<0.0010	0.0013	<0.0010
	Zinc (Zn)-Total (mg/L)		0.0118	0.0139	0.0150	0.0195	0.0135
	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)		0.0023	0.0017	0.0021	0.0021	0.0021
	Antimony (Sb)-Dissolved (mg/L)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Arsenic (As)-Dissolved (mg/L)		0.00042	0.00040	0.00041	0.00043	0.00043
	Barium (Ba)-Dissolved (mg/L)		0.0694	0.0700	0.0677	0.0679	0.0679
	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)		0.000017	0.000019	0.000014	0.000013	0.000015
	Calcium (Ca)-Dissolved (mg/L)		37.9	36.8	37.2	38.2	38.1
	Chromium (Cr)-Dissolved (mg/L)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Cobalt (Co)-Dissolved (mg/L)		<0.00010	0.00012	<0.00010	0.00013	<0.00010
	Copper (Cu)-Dissolved (mg/L)		0.00025	0.00029	0.00024	0.00028	0.00026
	Iron (Fe)-Dissolved (mg/L)		0.041	0.050	0.040	0.081	0.046
	Lead (Pb)-Dissolved (mg/L)		<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
	Lithium (Li)-Dissolved (mg/L)		0.00611	0.00559	0.00589	0.00610	0.00586
	Magnesium (Mg)-Dissolved (mg/L)		8.13	8.51	8.04	8.67	8.06
	Manganese (Mn)-Dissolved (mg/L)		0.0318	0.0473	0.0308	0.0491	0.0312
	Molybdenum (Mo)-Dissolved (mg/L)		0.000744	0.000769	0.000736	0.000787	0.000740
	Nickel (Ni)-Dissolved (mg/L)		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Phosphorus (P)-Dissolved (mg/L)		<0.30	<0.30	<0.30	<0.30	<0.30
	Potassium (K)-Dissolved (mg/L)		0.851	0.926	0.850	0.937	0.848

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

		Sample ID	L1406279-26	L1406279-27	L1406279-28	L1406279-29	L1406279-30
		Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
		Sampled Date	20-DEC-13	20-DEC-13	20-DEC-13	20-DEC-13	20-DEC-13
		Sampled Time	11:30	09:15	10:15	08:25	13:30
		Client ID	NF1-Y-7	NF1-Y-3	NF1-Y-5	NF1-Y-1	FIELD BLANK
Grouping	Analyte						
WATER							
Total Metals	Nickel (Ni)-Total (mg/L)		<0.00050	<0.00050	0.00886	0.00051	<0.00050
	Phosphorus (P)-Total (mg/L)		<0.30	<0.30	<0.30	<0.30	<0.30
	Potassium (K)-Total (mg/L)		0.922	0.907	1.59	1.01	<0.050
	Selenium (Se)-Total (mg/L)		0.00042	0.00041	0.00065	0.00043	<0.00010
	Silicon (Si)-Total (mg/L)		6.24	6.15	11.5	6.43	<0.050
	Silver (Ag)-Total (mg/L)		<0.000010	<0.000010	0.000113	<0.000010	<0.000010
	Sodium (Na)-Total (mg/L)		2.81	2.82	3.35	2.94	<0.050
	Strontium (Sr)-Total (mg/L)		0.173	0.162	0.191	0.174	<0.00020
	Thallium (Tl)-Total (mg/L)		<0.000010	<0.000010	0.000073	<0.000010	<0.000010
	Tin (Sn)-Total (mg/L)		<0.00010	<0.00010	0.00020	<0.00010	<0.00010
	Titanium (Ti)-Total (mg/L)		<0.010	<0.010	0.116	<0.010	<0.010
	Uranium (U)-Total (mg/L)		0.00214	0.00214	0.00303	0.00219	<0.000010
	Vanadium (V)-Total (mg/L)		<0.0010	<0.0010	0.0085	<0.0010	<0.0010
	Zinc (Zn)-Total (mg/L)		0.0169	0.0142	0.0515	0.0148	<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	FIELD
	Aluminum (Al)-Dissolved (mg/L)		0.0023	0.0022	0.0025	0.0034	<0.0010
	Antimony (Sb)-Dissolved (mg/L)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Arsenic (As)-Dissolved (mg/L)		0.00043	0.00041	0.00056	0.00041	<0.00010
	Barium (Ba)-Dissolved (mg/L)		0.0715	0.0661	0.0798	0.0695	<0.000050
	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)		0.000017	0.000016	<0.000010	0.000019	<0.000010
	Calcium (Ca)-Dissolved (mg/L)		37.1	36.6	42.9	39.2	<0.020
	Chromium (Cr)-Dissolved (mg/L)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Cobalt (Co)-Dissolved (mg/L)		<0.00010	<0.00010	0.00029	0.00012	<0.00010
	Copper (Cu)-Dissolved (mg/L)		0.00027	0.00025	0.00033	0.00032	<0.00020
	Iron (Fe)-Dissolved (mg/L)		0.045	0.046	0.302	0.046	<0.010
	Lead (Pb)-Dissolved (mg/L)		<0.000050	<0.000050	0.000130	<0.000050	<0.000050
	Lithium (Li)-Dissolved (mg/L)		0.00597	0.00567	0.00682	0.00630	<0.00050
	Magnesium (Mg)-Dissolved (mg/L)		8.42	8.08	9.71	8.72	<0.0050
	Manganese (Mn)-Dissolved (mg/L)		0.0321	0.0306	0.189	0.0445	<0.000050
	Molybdenum (Mo)-Dissolved (mg/L)		0.000767	0.000698	0.000906	0.000803	<0.000050
	Nickel (Ni)-Dissolved (mg/L)		<0.00050	<0.00050	0.00066	<0.00050	<0.00050
	Phosphorus (P)-Dissolved (mg/L)		<0.30	<0.30	<0.30	<0.30	<0.30
	Potassium (K)-Dissolved (mg/L)		0.906	0.850	1.06	0.931	<0.050

* 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	L1406279-31 Surface Water 20-DEC-13 14:00 NF1-Y-15	L1406279-32 Surface Water 20-DEC-13 12:00 TRAVEL BLANK			
Grouping	Analyte				
WATER					
Total Metals	Nickel (Ni)-Total (mg/L)	<0.00050	<0.00050		
	Phosphorus (P)-Total (mg/L)	<0.30	<0.30		
	Potassium (K)-Total (mg/L)	0.858	<0.050		
	Selenium (Se)-Total (mg/L)	0.00038	<0.00010		
	Silicon (Si)-Total (mg/L)	5.96	<0.050		
	Silver (Ag)-Total (mg/L)	<0.000010	<0.000010		
	Sodium (Na)-Total (mg/L)	2.72	<0.050		
	Strontium (Sr)-Total (mg/L)	0.164	<0.00020		
	Thallium (Tl)-Total (mg/L)	<0.000010	<0.000010		
	Tin (Sn)-Total (mg/L)	<0.00010	<0.00010		
	Titanium (Ti)-Total (mg/L)	<0.010	<0.010		
	Uranium (U)-Total (mg/L)	0.00200	<0.000010		
	Vanadium (V)-Total (mg/L)	<0.0010	<0.0010		
	Zinc (Zn)-Total (mg/L)	0.0131	<0.0030		
	Zirconium (Zr)-Total (mg/L)	<0.00080	<0.00080		
Dissolved Metals	Dissolved Metals Filtration Location	FIELD			
	Aluminum (Al)-Dissolved (mg/L)	0.0022			
	Antimony (Sb)-Dissolved (mg/L)	<0.00010			
	Arsenic (As)-Dissolved (mg/L)	0.00040			
	Barium (Ba)-Dissolved (mg/L)	0.0684			
	Beryllium (Be)-Dissolved (mg/L)	<0.00010			
	Bismuth (Bi)-Dissolved (mg/L)	<0.00050			
	Boron (B)-Dissolved (mg/L)	<0.010			
	Cadmium (Cd)-Dissolved (mg/L)	0.000014			
	Calcium (Ca)-Dissolved (mg/L)	36.1			
	Chromium (Cr)-Dissolved (mg/L)	<0.00010			
	Cobalt (Co)-Dissolved (mg/L)	<0.00010			
	Copper (Cu)-Dissolved (mg/L)	0.00046			
	Iron (Fe)-Dissolved (mg/L)	0.041			
	Lead (Pb)-Dissolved (mg/L)	<0.000050			
	Lithium (Li)-Dissolved (mg/L)	0.00566			
	Magnesium (Mg)-Dissolved (mg/L)	8.08			
	Manganese (Mn)-Dissolved (mg/L)	0.0313			
	Molybdenum (Mo)-Dissolved (mg/L)	0.000725			
	Nickel (Ni)-Dissolved (mg/L)	<0.00050			
	Phosphorus (P)-Dissolved (mg/L)	<0.30			
	Potassium (K)-Dissolved (mg/L)	0.860			

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1406279-1	L1406279-2	L1406279-3	L1406279-4	L1406279-5
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sampled Date	19-DEC-13	19-DEC-13	19-DEC-13	19-DEC-13	19-DEC-13	19-DEC-13
Sampled Time	14:45	13:50	13:50	14:10	14:30	14:30
Client ID	X2	X14	X14-R	X10	X3A	X3A
Grouping	Analyte					
WATER						
Dissolved Metals	Selenium (Se)-Dissolved (mg/L)	0.00039	0.00036	0.00036	0.00039	0.00036
	Silicon (Si)-Dissolved (mg/L)	5.83	5.82	5.89	5.59	5.54
	Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Dissolved (mg/L)	2.78	4.98	4.93	2.61	2.77
	Strontium (Sr)-Dissolved (mg/L)	0.165	0.262	0.263	0.189	0.181
	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)	0.00207	0.00263	0.00258	0.00220	0.00219
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	0.497	0.246	0.245	0.282	0.327
	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

	Sample ID Description Sampled Date Sampled Time Client ID	L1406279-6 Surface Water 19-DEC-13 16:45 NF1-R1	L1406279-7 Surface Water 19-DEC-13 16:45 NF1-R2	L1406279-8 Surface Water 19-DEC-13 16:25 R9	L1406279-9 Surface Water 19-DEC-13 16:40 R8	L1406279-10 Surface Water 19-DEC-13 15:25 NF2
Grouping	Analyte					
WATER						
Dissolved Metals	Selenium (Se)-Dissolved (mg/L)	0.00044	0.00037	0.00041	0.00042	0.00038
	Silicon (Si)-Dissolved (mg/L)	6.03	5.94	5.73	5.97	5.83
	Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Dissolved (mg/L)	2.72	2.82	2.69	2.54	2.89
	Strontium (Sr)-Dissolved (mg/L)	0.154	0.161	0.149	0.144	0.159
	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)	0.00204	0.00201	0.00198	0.00171	0.00199
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	0.0137	0.0139	0.0011	<0.0010	0.965
	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

Sample ID Description Sampled Date Sampled Time Client ID	L1406279-11 Surface Water 19-DEC-13 16:12 R10	L1406279-12 Surface Water 19-DEC-13 15:00 NF2-A	L1406279-13 Surface Water 19-DEC-13 15:10 NF2-B	L1406279-14 Surface Water 19-DEC-13 16:00 NF1	L1406279-15 Surface Water 20-DEC-13 12:25 NF1-Y-10	
Grouping	Analyte					
WATER						
Dissolved Metals	Selenium (Se)-Dissolved (mg/L)	0.00040	0.00041	0.00040	0.00040	0.00044
	Silicon (Si)-Dissolved (mg/L)	5.72	5.97	5.92	5.88	6.40
	Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Dissolved (mg/L)	2.75	3.00	2.77	2.82	2.92
	Strontium (Sr)-Dissolved (mg/L)	0.159	0.168	0.160	0.163	0.168
	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)	0.00201	0.00197	0.00199	0.00197	0.00210
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	0.0087	2.33	0.0104	0.0117	0.0115
	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

	Sample ID Description Sampled Date Sampled Time Client ID	L1406279-16 Surface Water 20-DEC-13 12:45 NF1-Y-11	L1406279-17 Surface Water 20-DEC-13 13:15 NF1-Y-13	L1406279-18 Surface Water 20-DEC-13 13:00 NF1-Y-12	L1406279-19 Surface Water 20-DEC-13 13:45 NF1-Y-14	L1406279-20 Surface Water 20-DEC-13 12:00 NF1-Y-8
Grouping	Analyte					
WATER						
Dissolved Metals	Selenium (Se)-Dissolved (mg/L)	0.00042	0.00040	0.00043	0.00041	0.00039
	Silicon (Si)-Dissolved (mg/L)	6.03	5.95	6.01	5.93	6.01
	Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Dissolved (mg/L)	2.63	2.77	2.80	2.77	2.69
	Strontium (Sr)-Dissolved (mg/L)	0.161	0.160	0.160	0.157	0.156
	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)	0.00195	0.00203	0.00207	0.00200	0.00200
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	0.0110	0.0109	0.0110	0.0112	0.0110
	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

	Sample ID	L1406279-21	L1406279-22	L1406279-23	L1406279-24	L1406279-25
Description	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water	Surface Water
Sampled Date	20-DEC-13	20-DEC-13	20-DEC-13	20-DEC-13	20-DEC-13	20-DEC-13
Sampled Time	12:10	12:25	09:00	09:40	11:20	11:20
Client ID	NF1-Y-9	NF1-Y-10-R	NF1-Y-2	NF1-Y-4	NF1-Y-6	NF1-Y-6
Grouping	Analyte					
WATER						
Dissolved Metals	Selenium (Se)-Dissolved (mg/L)	0.00037	0.00043	0.00039	0.00044	0.00042
	Silicon (Si)-Dissolved (mg/L)	6.03	6.11	5.72	6.16	5.97
	Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Dissolved (mg/L)	2.54	2.75	2.67	2.84	2.65
	Strontium (Sr)-Dissolved (mg/L)	0.162	0.159	0.157	0.169	0.159
	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)	0.00197	0.00210	0.00203	0.00221	0.00198
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	0.0110	0.0117	0.0109	0.0112	0.0115
	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

Sample ID Description Sampled Date Sampled Time Client ID	L1406279-26 Surface Water 20-DEC-13 11:30 NF1-Y-7	L1406279-27 Surface Water 20-DEC-13 09:15 NF1-Y-3	L1406279-28 Surface Water 20-DEC-13 10:15 NF1-Y-5	L1406279-29 Surface Water 20-DEC-13 08:25 NF1-Y-1	L1406279-30 Surface Water 20-DEC-13 13:30 FIELD BLANK	
Grouping	Analyte					
WATER						
Dissolved Metals	Selenium (Se)-Dissolved (mg/L)	0.00041	0.00037	0.00050	0.00041	<0.00010
	Silicon (Si)-Dissolved (mg/L)	6.21	5.87	7.02	6.29	<0.050
	Silver (Ag)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Sodium (Na)-Dissolved (mg/L)	2.72	2.65	3.16	2.87	<0.050
	Strontium (Sr)-Dissolved (mg/L)	0.162	0.155	0.185	0.169	<0.00020
	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)	0.00201	0.00198	0.00269	0.00207	<0.000010
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	0.0137	0.0113	0.0092	0.0128	<0.0010
	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

	Sample ID	L1406279-31	L1406279-32		
Description	Surface Water	Surface Water			
Sampled Date	20-DEC-13	20-DEC-13			
Sampled Time	14:00	12:00			
Client ID	NF1-Y-15	TRAVEL BLANK			
Grouping	Analyte				
WATER					
Dissolved Metals	Selenium (Se)-Dissolved (mg/L)	0.00037			
	Silicon (Si)-Dissolved (mg/L)	5.90			
	Silver (Ag)-Dissolved (mg/L)	<0.000010			
	Sodium (Na)-Dissolved (mg/L)	2.72			
	Strontium (Sr)-Dissolved (mg/L)	0.155			
	Thallium (Tl)-Dissolved (mg/L)	<0.000010			
	Tin (Sn)-Dissolved (mg/L)	<0.00010			
	Titanium (Ti)-Dissolved (mg/L)	<0.010			
	Uranium (U)-Dissolved (mg/L)	0.00207			
	Vanadium (V)-Dissolved (mg/L)	<0.0010			
	Zinc (Zn)-Dissolved (mg/L)	0.0122			
	Zirconium (Zr)-Dissolved (mg/L)	<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)
Matrix Spike	Sulfate (SO4)	MS-B	L1406279-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -24, -25, -26, -27, -28, -29, -3, -30, -31, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1406279-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -24, -25, -26, -27, -28, -29, -3, -30, -31, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1406279-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -24, -25, -26, -27, -28, -29, -3, -30, -31, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1406279-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -24, -25, -26, -27, -28, -29, -3, -30, -31, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1406279-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -24, -25, -26, -27, -28, -29, -3, -30, -31, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1406279-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -24, -25, -26, -27, -28, -29, -3, -30, -31, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RRV	Reported Result Verified By Repeat Analysis

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
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-VA	Water	Chloride by Ion Chromatography	APHA 4110 B.
This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".			
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-VA	Water	Fluoride by Ion Chromatography	APHA 4110 B.
This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".			
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-VA	Water	Nitrite in Water by Ion Chromatography	EPA 300.0
This analysis is carried out using procedures adapted from EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". Nitrite is detected by UV absorbance.			
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-VA	Water	Nitrate in Water by Ion Chromatography	EPA 300.0
This analysis is carried out using procedures adapted from EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". 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-VA	Water	Sulfate by Ion Chromatography	APHA 4110 B.

Reference Information

This analysis is carried out using procedures adapted from APHA Method 4110 B. "Ion Chromatography with Chemical Suppression of Eluent Conductivity" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography".

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-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.

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 included where data is present. Ion Balance is calculated as:

Ion Balance (%) = $\frac{[\text{Cation Sum} - \text{Anion Sum}]}{[\text{Cation Sum} + \text{Anion Sum}]}$

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. Weston 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-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.

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-VA Water Total Suspended Solids by Grav. (1 mg/L) APHA 2540 Gravimetric

Reference Information

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

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	3	4
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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.



Report To	Report Format / Distribution	Service Requested (Rush for routine analysis subject to availability)
Company: EDI	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Other	<input checked="" type="radio"/> Regular (Standard Turnaround Times - Business Days)
Contact: Meighan Kearns	<input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> Excel <input type="checkbox"/> Digital <input type="checkbox"/> Fax	<input type="radio"/> Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
Address: 2195 - 2nd Avenue Whitehorse, YT Y1A 3T8	Email 1: mkearns@edynamics.com	<input checked="" type="radio"/> Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT
Phone: 867-393-4882 Fax:	Email 2:	<input type="radio"/> Same Day or Weekend Emergency - Contact ALS to Confirm TAT
	Email 3:	Analysis Request

Invoice To Same as Report? <input type="checkbox"/> Yes <input type="checkbox"/> No	Client / Project Information	Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report? <input type="checkbox"/> Yes <input type="checkbox"/> No	Job #: 13-Y-0452	
Company:	PO / AFE:	
Contact:	LSD:	
Address:	Quote #: Q38556	

Lab Work Order # (lab use only)	ALS Contact:	Sampler:
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Sample #	Sample Identification (This description)	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-	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	19-DEC-13	1445	Surface Water	X	X	X	X	X	X	X	X	X	X	X	5
2	X14		1350													5
3	X14-r		1350													5
4	X15		1410													5
5	X3A		1430													5
6	NF1-r1		1645													5
7	NF1-r2		1645													5
8	R9		1625													5
9	R8		1640													5



RUSH

Special Instructions / Regulations with water or land use (CCME-Freshwater Aquatic Life/BC CSR - Commercial/A)

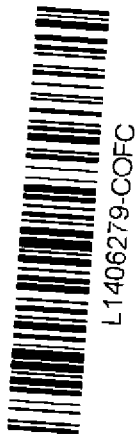
Use Faro Equis Format to report, *regular turn around time* *Priority processing*

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:	Date (dd-mm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
			<i>[Signature]</i>	20-Dec-13	11:00	11, 20, 16.2				

DJ Dec 23 11:45 20C

Report To		Report Format / Distribution			Service Requested (Rush for routine analysis subject to availability)																																																						
Company: EDI		<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Other			<input type="radio"/> Regular (Standard Turnaround Times - Business Days)																																																						
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Address: 2195 - 2nd Avenue Whitehorse, YT Y1A 3T8		Email 1: mkearns@edynamics.com			<input checked="" type="radio"/> Emergency (1-2 Bus. Days) - 100% Surcharge - Contact ALS to Confirm TAT																																																						
Phone: 867-393-4882 Fax:		Email 2: Adrienne.Turcotte@gov.yk.ca			<input type="radio"/> Same Day or Weekend Emergency - Contact ALS to Confirm TAT																																																						
Invoice To Same as Report? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Client / Project Information			Analysis Request Please indicate below Filtered, Preserved or both (F, P, F/P)																																																						
Hardcopy of Invoice with Report? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Job #: 13-Y-0452																																																									
Company:		PO / AFE:			<table border="1" style="width:100%; border-collapse: collapse; text-align: center;"> <tr> <td>ALK-COL-VA, P-T-COL-VA</td> <td>ANIONS-ALL-IC-WR</td> <td>CARBONS-DOC-VA</td> <td>CARBONS-TOC-VA, NH3-F-V</td> <td>EC-MAN-WR, PH-MAN-WR</td> <td>MET-D-CCMS-VA, ZR-D-MS</td> <td>MET-T-CCMS-VA, ZR-T-MS</td> <td>IONBALANCE-VA</td> <td>TDS-CALC-VA</td> <td>TSS-LOW-WR</td> <td>HARDNESS-CALC-VA</td> <td rowspan="4" style="writing-mode: vertical-rl; transform: rotate(180deg);">Number of Containers</td> </tr> <tr> <td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td>X</td><td></td> </tr> <tr> <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></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td> </tr> </table>										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	X	X	X	X	X	X	X	X	X	X																							
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																																						
X	X	X	X	X											X	X	X	X	X																																								
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15	NFI-Y-10	20-Dec-13	1225	Surface Water	X	X	X	X	X	X	X	X	X	5																																													
16	NFI-Y-11		1245											5																																													
17	NFI-Y-13		1315											5																																													
18	NFI-Y-12		1300											5																																													
19	NFI-Y-14		1345											5																																													
20	NFI-Y-8		1200											5																																													
21	NFI-Y-9		1210											5																																													
22	NFI-Y-10-C		1225											5																																													
RUSH					Priority processing																																																						
Special Instructions / Regulations with respect to this sample (CCME-Freshwater Aquatic Life/BC CSR - Co																																																											



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SHIPMENT, RELEASE (client use)			SHIPMENT, RECEPTION (lab use only)			SHIPMENT, VERIFICATION (lab use only)			Observations: Yes / No ? If Yes add SIF			
Released by:	Date (dd-mmm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:			
<i>[Signature]</i>	20-Dec-13	20:30	<i>[Signature]</i>	Dec 23	11:45	2°C °C						

Report To	Report Format / Distribution	Service Requested (Rush for routine analysis subject to availability)
Company: EDI	<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Other	<input type="radio"/> Regular (Standard Turnaround Times - Business Days)
Contact: Meighan Kearns	<input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> Excel <input type="checkbox"/> Digital <input type="checkbox"/> Fax	<input type="radio"/> Priority (2-4 Business Days) - 50% Surcharge - Contact ALS to Confirm TAT
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Phone: 867-393-4882 Fax: _____	Email 2: Adrienne.Turcotte@gov.yk.ca	<input type="radio"/> Same Day or Weekend Emergency - Contact ALS to Confirm TAT
	Email 3: Patricia.Randell@gov.yk.ca	

Invoice To Same as Report? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Client / Project Information	Analysis Request Please indicate below Filtered, Preserved or both (F, P, F/P)
Hardcopy of Invoice with Report? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Job #: 13-Y-0452	
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Address:	Quote #: Q38556	

Lab Work Order # (lab use only)	ALS Contact:	Sampler:
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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
23	NFI-Y-2	20 DEC 13	900	Surface Water	X	X	X	X	X	X	X	X	X	X	X	5
24	NFI-Y-4		940													5
25	NFI-Y-6		1130													5
26	NFI-Y-7		1130													5
27	NFI-Y-3		915													5
28	NFI-Y-5		1015													5
29	NFI-Y-1		825	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	5
30	FIELD BLANK		1330													5
31	NFI-Y-15		1400	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	5
32	TRAVEL BLANK		1200	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	↓	5



Special Instructions / Remarks

CCME-Freshwater Aquatic Life/BC CSR - Commercial

RUSH

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Priority processing

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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
<i>[Signature]</i>	20 DEC 13	830				°C				