BRIEF SUMMARY REPORT FOR:

PELLY RIVER AQUATIC ECOSYSTEM

MONITORING PLAN, OCTOBER 2011

For

Energy Mines and Resources

Jeff Moore
Assessment and Abandoned Mines Branch

Submitted by

November 30th, 2011

1.0 BACKGROUND

Thrice annual water quality monitoring is required at 22 sites on and near the Faro Mining Complex (FMC) as part of the Pelly River Aquatic Ecosystem Monitoring Plan. YG contracted Laberge Environmental Services (LES) to complete the final sampling program for 2011.

2.0 STUDY AREA

The study area encompasses reference sites, impacted sites and receiving water sites and has generally been divided into three main areas: the Vangorda watershed, the Faro mine site and Rose and Anvil watersheds, and the Pelly River. The table below lists the sites to be sampled during each of the sampling periods. The sites are listed by area from upstream to downstream in all of the tables of this report, to aid in interpretation of the data.

TABLE 1 LIST OF SITES AND DESCRIPTIONS

Vangorda Watershed	VR	West Fork of Vangorda upstream of Haul Road.
	V17A	AEX Cr upstream of Haul Road
	VW3	West Fork of Vangorda downstream of AEX Creek
	VW1	West Fork of Vangorda downstream of landslide but u/s of VW2
	VW2	Tributary to West Vangorda Cr which drains Grum west lobe, upstream of Mine Access Road
	V20A	Dixon Cr upstream of mine workings, tributary to Vangorda Cr.
	VGMAIN	Vangorda Cr downstream of mine but upstream of West Vangorda Creek.
	V8	Vangorda Cr downstream all inputs but u/s Pelly River.
Faro Sites and Rose & Anvil Watersheds	USFR	South Fork Rose Creek upstream Haul Road
	GCULV	South Fork Rose Creek downstream Haul Road and u/s Mine Access Road
	K8	Reservoir Creek upstream Mine Access Road
	R1	Rose Creek upstream pumphouse pond and tailings system
	FC	Faro Cr upstream diversion
	W10	Upper Guardhouse Creek upstream NW Dump
	NWID	Northwest interceptor ditch upstream of diversion point
	X14	Rose Creek downstream of all mining inputs
	R4	Rose Creek upstream confluence with Anvil Creek
	R6	Anvil Creek upstream confluence with Rose Creek
	R5	Anvil Cr downstream of Rose Cr after full mixing.
	A1	Anvil Creek near confluence with Pelly River
Pelly	P1	Pelly River upstream Vangorda Cr
	P4	Pelly River downstream Anvil Creek

The only site where samples were not collected in October was R5, Anvil Creek downstream of the confluence with Rose Creek. Due to relatively high water levels late in the season, perching shelf ice was prevalent throughout the Rose and Anvil Creek drainages. This created dangerous landing conditions for the helicopter. No suitable landing location was available within a reasonable distance downstream of the confluence. All possible gravel bars were covered with shelf ice and the

bush is too thick and high along here to enable landing on the banks. Sampling further downstream would be unrepresentative of the water quality of R5 due to the input from other tributaries.

3.0 METHODS

Maxxam Analytics Ltd supplied LES with the necessary sample kits prior to the field trip of October 25th to 28th. Each sample bottle was rinsed three times with the sample waters and then filled and preserved as specified by the laboratory's protocols. Samples that required filtering (dissolved organic carbon and dissolved metals), were filtered in the field prior to preservation. Samples were kept cool then shipped as soon as possible to the Maxxam laboratory in Burnaby, BC.

To comply with conditions of the RFP, three of the sites (V8, X14 and V20a) were sampled concurrently with Denison Environmental Services (DES) personnel.

In-situ measurements of water temperature, conductivity, pH and discharge (where possible) were taken at each site. Photographs were also taken to document the current conditions at each location. A separate 100 mL sample was collected for the analysis of turbidity by the DES lab.

As measures of quality assurance and quality control QA/QC, two blind duplicates were collected during the survey, one field blank and the lab provided a travel blank. The lab also ran their own QA/QC and their report is included with their analytical report, appended to this document.

4.0 RESULTS

4.1 In-Situ Results

The in-situ data is presented in Table 2 at the end of this document. This table also includes the coordinates for each site as recorded during the October sampling period. All water temperatures were very low reflecting the seasonal time of sampling. Most sites had partial ice cover.

All waters were slightly alkaline with an anomalous pH reading of 9.01 documented at VW2. This was not confirmed by the DES lab although their analysis was completed a few days later.

Conductivity ranged from 39.1 uS/cm at FC to 684 uS/cm at VW2. The lower values were generally at sites upstream of the Haul Road.

Discharge was measured where ice cover allowed.

4.2 Turbidity as Analyzed by DES

As turbidity can change quickly depending on the quantity of dissolved metals present, DES analyzed samples for turbidity at their lab on site. Table 3 below displays the data. Turbidity values ranged from below detection at VW2 and NWID to 1.77 NTU at X-14.

TABLE 3	DES TURBIDITY ANALYSIS			
Field Sample ID	**Sampling Date**	**Turbidity**	**Units**	**RDL**
VR	10/25/2011 17:10	0.22	NTU	0.10
V17a	10/25/2011 16:30	0.65	NTU	0.10
VW3	10/27/2011 10:45	0.36	NTU	0.10
BD1	10/27/2011 10:45	0.29	NTU	0.10
VW1	10/27/2011 15:35	1.56	NTU	0.10
VW2	10/27/2011 9:30	<0.10	NTU	0.10
V20a	10/25/2011 15:30	0.21	NTU	0.10
VGMAIN	10/25/2011 10:15	0.11	NTU	0.10
V-8	10/25/2011 9:00	0.88	NTU	0.10
USFR	10/26/2011 16:35	0.28	NTU	0.10
GCULV	10/27/2011 12:00	0.26	NTU	0.10
K-8	10/27/2011 12:30	0.11	NTU	0.10
R-1	10/27/2011 14:00	0.91	NTU	0.10
FC	10/26/2011 15:35	0.35	NTU	0.10
BD2	10/26/2011 15:35	0.39	NTU	0.10
W-10	10/26/2011 14:20	0.18	NTU	0.10
NWID	10/25/2011 12:10	<0.10	NTU	0.10
X-14	10/25/2011 13:45	1.77	NTU	0.10
R-4	10/26/2011 10:45	0.86	NTU	0.10
R-6	10/26/2011 10:10	0.44	NTU	0.10
A-1	10/26/2011 12:00	0.86	NTU	0.10
P-1	10/26/2011 9:30	1.40	NTU	0.10
P-4	10/26/2011 12:20	1.40	NTU	0.10

4.3 Analytical Data

Anions, Nutrients and Physical Data

Table 4, appended to the end of this document, present the compiled anion, nutrient and physical attributes of the samples collected in the study area.

Total and Dissolved Metals

The metals data has been separated into the three sub-study areas; Table 5 Vangorda Watershed, Table 6 FMC and Rose and Anvil watersheds, and Table 7 Pelly River.

5.0 DISCUSSION

Based on a casual review of the October 2011 data only, the following observations and notes have been made.

Pelly River

Looking at the big picture based on the October dataset, it appears that neither the Vangorda watershed nor the Rose/Anvil Creek watershed are creating any influences to the Pelly River. An examination of the data in Table 7 indicates that there is very little difference in the water quality upstream of Vangorda Creek to that downstream of Anvil Creek. In fact, several parameters are actually greater upstream at P1. The CCME guidelines for the protection of freshwater aquatic life were exceeded for cadmium and selenium at both sites with higher values documented upstream at P1. The cadmium concentrations recorded in the Pelly River were the greatest within the entire study area. Although nickel levels were well below the CCME guideline, concentrations in the Pelly River were the highest throughout the study area with greater concentrations at P1 than downstream at P4.

Vangorda Creek Watershed

The CCME guideline for selenium was exceeded in both the dissolved and total metals samples collected at VW2 and V8. All other parameters met the respective CCME guidelines. The concentrations of many of the metals at VW2 were higher than at the other sites of the study area. This site is located on a tributary to West Vangorda Creek which drains the west lobe of the Grum waste rock dump.

The concentrations of arsenic and zinc at V17A were the highest in the entire study area, however levels did meet CCME guidelines. Interestingly, V17A is located on AEX Creek upstream of the Haul Road and as such represents a reference site.

Sites on Rose and Anvil Watersheds and on the FMC Site

The CCME guideline for cadmium was exceeded in samples collected from FC (including the blind duplicate sample that was collected here), NWID and R6. The concentration of iron at X14 exceeded the CCME guideline in the total metals sample. The CCME guideline for lead was slightly exceeded in the total metals sample collected from R1 and was the highest lead level recorded in the study area.

The Haul Road appears to have no effects on the water quality of the south fork of Rose Creek as sites USFR and GCULV had very similar concentrations.

R1 is located on Rose Creek upstream of the tailings impoundments and X14 is located downstream. There was a significant increase in manganese concentrations at X14 indicating an impact by the tailings system on Rose Creek. There was a slight increase in the concentrations of nickel, cadmium, sulphur, zinc, calcium, magnesium, iron, sodium, strontium and hardness. Aluminium concentrations decreased slightly at X14 and the remaining metals were similar.

6.0 RECOMMENDATIONS

Since high metal concentrations were documented at VW2 relative to the other sites in the study area, it is recommended that consideration be made to include this site in one of the other more frequent care and maintenance monitoring programs to fully characterize the water quality draining the west lobe of the Grum waste rock dump as well as to determine inputs to West Vangorda Creek.

For the purposes of this current monitoring program it is recommended that consideration be given to include V5 as one of the sampling locations in the future monitoring programs. Since VW1 is located upstream of the confluence with VW2, characterization of the water quality at V5 would give some indication of VW2's influence on West Vangorda Creek prior to mixing with Vangorda Creek at V8.

Respectively submitted,

Bonnie Burns
Laberge Environmental Services

DATA TABLES, OCTOBER 2011

TABLE 2 **INSITU DATA FOR THE PELLY RIVER AQUATIC MONITORING PROGRAM AT AND NEAR THE FMC, OCTOBER 2011**

Site #	Site Description	Date Sampled 2011	Time Sampled	NAD 27 Zone 8V		Water Temp oC	pH	Conductivity uS/cm	Average Velocity m/s	Discharge (cms)	Comments
				Easting	Northing						
VR	West Fork of Vangorda u/s of Haul Road.	25-Oct	17:10	590801	6906722	0.4	8.27	75.3	---	---	Flow not measured due to ice cover.
V17A	AEX Cr u/s of Haul Road	25-Oct	16:30	591380	6906066	0.1	7.77	222	---	---	Flow not measured due to ice cover.
VW3	West Fork of Vangorda d/s of AEX Creek	27-Oct	10:25	590508	6906424	0.2	8.47	211	0.35	0.042	Sampled u/s of Grum access road. Collected Blind Duplicate, BD1, here.
VW1	West Fork of Vangorda d/s of landslide but u/s of VW2	27-Oct	15:35	587050	6904547	0.1	8.71	386	---	---	Access is 100 m off mine access road, red and blue flagging at trail head. No flow measured due to ice cover.
VW2	Tributary to West Vangorda Cr which drains Grum west lobe	27-Oct	9:30	587407	6903555	0.3	9.01	684	0.19	0.019	
V20A	Dixon Cr u/s of mine workings, trib to Vangorda Cr.	25-Oct	15:30	595269	6902053	0.8	7.81	578	---	---	Sampled with DES (they sampled V20 - frozen). V20A collected from ponded water, ice covered. Ice depth; 120mm, snow depth; 900 mm, water depth; 880mm
VGMAIN	Vangorda Cr d/s mine but u/s West Vangorda Creek.	25-Oct	10:15	585794	6901321	0.5	7.29	99	0.31	0.154	
V8	Vangorda Cr d/s all inputs but u/s Pelly River.	25-Oct	9:00	584951	6900458	0.1	---	572	0.38	0.332	Sampled with DES.
USFR	South Fork Rose Creek u/s Haul Road	26-Oct	16:35	590363	6907200	0.0	8.30	69.1	---	---	Too much ice cover to do a flow measurement
GCULV	South Fork Rose Creek d/s Haul Road and u/s Mine Access Road	27-Oct	12:00	589930	6907206	-0.0	8.31	73.9	0.42	0.211	Some thick shore fast ice but did a discharge measurement altho missed some flowing water under the ice.
K8	Reservoir Creek u/s Mine Access Road	27-Oct	12:30	586530	6910570	0.4	8.47	129.2	0.48	0.089	Cleared shore ice and measured discharge.
R1	Rose Creek u/s pumphouse pond and tailings system	27-Oct	14:00	583733	6912159	-0.0	8.34	230	0.30	1.124	Collected field blank here.
FC	Faro Cr u/s diversion	26-Oct	15:35	585473	6916553	0.3	8.28	39.1	0.18	0.075	Large open lead so expanded and conducted flow. Blind Duplicate, BD2, collected here.
W10	Upper Guardhouse Creek u/s NW Dump	26-Oct	14:20	583400	6915392	0.3	8.36	118.7	---	---	Flow not measured due to ice cover.
NWID	Northwest interceptor ditch u/s of diversion point	25-Oct	12:10	582508	6914540	0.3	8.24	302	0.11	0.006	Measured flow with DES but they did not collect samples.
X14	Rose Creek d/s of all mining inputs	25-Oct	13:45	579299	6914803	0.3	7.92	379	0.29	1.175	Sampled with DES at the gauged site.
R4	Rose Creek u/s confluence with Anvil Creek	26-Oct	10:45	567655	6921163	-0.0	8.53	344	---	---	Discharge not measured due to large amount of anchor ice by right bank.
R6	Anvil Creek u/s confluence with Rose Creek	26-Oct	10:10	568197	6921432	-0.0	8.34	312	0.39	2.136	Discharge measured. Shorefast ice to substrate on left bank.
R5	Anvil Cr d/s of Rose Cr after full mixing.	26-Oct	---	567432	6922324	---	---	---	---	---	Not done due to lack of safe landing site due to shelf ice.
A1	Anvil Creek near confluence with Pelly River	26-Oct	12:00	545855	6924017	0.0	8.72	301	---	---	Shore fast ice, recent beaver activity.
P1	Pelly River u/s Vangorda Cr	26-Oct	9:30	585384	6898429	0.2	8.73	354	---	---	Pelly River running with pan ice.
P4	Pelly River d/s Anvil Creek	26-Oct	12:20	543435	6925496	0.0	8.74	352	---	---	Recent sloughing of left steep bank.

TABLE 4 **VARIOUS ANIONS, NUTRIENTS AND PHYSICAL DATA FOR THE PELLY RIVER AQUATIC MONITORING PROGRAM, OCTOBER, 2011**

Parameter	Nitrite (N)	Nitrate (N)	Dissolved Organic Carbon (C)	Alkalinity (Total as CaCO3)	Total Organic Carbon (C)	Alkalinity (PP as CaCO3)	Bicarbonate (HCO3)	Carbonate (CO3)	Hydroxide (OH)	Dissolved Sulphate (SO4)	Dissolved Chloride (Cl)	Ammonia (N)	Nitrate plus Nitrite (N)	Total Phosphorus (P)	Conductivity	pH	Total Suspended Solids	Total Dissolved Solids	Turbidity
Units	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	uS/cm	pH Units	mg/L	mg/L	NTU
VR	<0.005 (1)	<0.02	2.3	30	2.5	<0.5	37	<0.5	<0.5	5.5	<0.5	0.036	<0.02 (1)	0.004	75	7.51	<1	58	0.4 (2)
V17A	<0.005 (1)	0.31	2.4	59	2.6	<0.5	71	<0.5	<0.5	46	<0.5	0.047	0.31 (1)	0.004	223	7.64	1	150	1.0 (2)
VW3	<0.005	0.20	2.3	66	2.4	<0.5	80	<0.5	<0.5	33	<0.5	0.021	0.20	0.003	203	7.86	2	130	0.6
BD1	<0.005 (1)	0.19	2.0	65	2.3	<0.5	79	<0.5	<0.5	30	<0.5	0.034	0.19 (1)	0.005	203	7.77	2	120	0.3 (2)
VW1	<0.005	0.12	3.1	160	3.0	<0.5	190	<0.5	<0.5	45	1.3	0.029	0.12	0.012	392	8.13	10	240	2.0
VW2	<0.005	0.15	2.3	290	2.2	2.7	350	3.3	<0.5	95	0.7	0.017	0.15	0.014	682	8.33	<1	430	0.3
V20A	<0.005 (1)	0.02	3.4	240	3.3	<0.5	290	<0.5	<0.5	16	<0.5	0.008	0.02 (1)	0.006	457	8.16	<1	270	0.7 (2)
VG MAIN	<0.005 (1)	0.31	2.3	140	2.2	<0.5	170	<0.5	<0.5	130	<0.5	0.022	0.31 (1)	0.003	526	7.95	<1	350	0.3 (2)
V8	<0.005 (1)	0.22	2.8	180	2.8	<0.5	230	<0.5	<0.5	120	1.3	0.014	0.22 (1)	0.003	570	8.13	1	360	1.0 (2)
USFR	<0.005 (1)	0.03	2.1	27	1.9	<0.5	32	<0.5	<0.5	6.2	<0.5	0.047	0.03 (1)	0.005	69	7.21	<1	50	0.6
GCULV	<0.005	0.05	1.9	27	2.0	<0.5	32	<0.5	<0.5	6.4	<0.5	0.027	0.05	0.004	71	7.40	<1	44	0.4
K8	<0.005	0.07	1.5	50	1.4	<0.5	61	<0.5	<0.5	12	<0.5	0.010	0.07	0.004	127	7.76	<1	82	0.3
R1	<0.005	0.13	1.9	97	2.0	<0.5	120	<0.5	<0.5	19	<0.5	0.034	0.13	0.005	230	7.93	<1	140	0.9
FC	<0.005 (1)	<0.02	1.7	17	2.1	<0.5	21	<0.5	<0.5	1.7	<0.5	0.099	<0.02 (1)	0.004	40	7.46	<1	40	0.7
BD-2	<0.005 (1)	<0.02	2.2	16	1.7	<0.5	19	<0.5	<0.5	1.5	<0.5	0.017	<0.02 (1)	0.005	40	7.31	<1	30	0.5 (2)
W10	<0.005 (1)	<0.02	2.7	58	2.7	<0.5	71	<0.5	<0.5	3.8	<0.5	0.030	<0.02 (1)	0.003	118	7.76	<1	84	0.4
NWID	<0.005 (1)	0.04	2.0	130	2.1	<0.5	150	<0.5	<0.5	30	<0.5	0.010	0.04 (1)	<0.002	303	8.15	<1	180	0.4 (2)
X14	<0.005 (1)	0.11	1.9	120	2.3	<0.5	150	<0.5	<0.5	67	<0.5	0.094	0.11 (1)	0.005	380	7.98	<1	230	1.8 (2)
R4	<0.005 (1)	0.15	2.0	120	2.1	<0.5	150	<0.5	<0.5	53	<0.5	0.021	0.15 (1)	0.004	344	8.10	<1	210	0.8
R6	<0.005 (1)	0.17	1.6	140	1.6	<0.5	170	<0.5	<0.5	23	<0.5	0.026	0.17 (1)	0.004	312	8.14	<1	180	0.8
A1	<0.005 (1)	0.14	2.4	120	2.2	<0.5	150	<0.5	<0.5	32	<0.5	0.045	0.14 (1)	0.007	303	8.13	4	180	0.9
P1	<0.005 (1)	<0.02	3.1	120	3.2	<0.5	150	<0.5	<0.5	60	<0.5	0.028	<0.02 (1)	0.009	359	8.06	3	220	2.0
P4	<0.005 (1)	0.04	2.7	130	2.9	<0.5	150	<0.5	<0.5	51	<0.5	0.013	0.04 (1)	0.007	352	8.05	2	200	1.5
FIELD BLANK	<0.005	<0.02	<0.5	1.1	<0.5	<0.5	1.4	<0.5	<0.5	<0.5	<0.5	0.005	<0.02	<0.002	1	6.19	<1	<10	<0.1
RDL	0.005	0.02	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.005	0.02	0.002	1		1	10	0.1
CCME	0.06	13										2.33				6.5 - 9.0			

(1) Sample analysed past recommended hold time

(2) Sample was analyzed after holding time expired.

TABLE 5

LOW LEVEL METAL CONCENTRATIONS IN THE VANGORDA WATERSHED, OCTOBER 2011

			WEST FORK VANGORDA						VANGORDA CREEK			CCME
Sampling Date & Time:			10/25/2011 17:10	10/25/2011 16:30	10/27/2011 10:45	1911010301	10/27/2011 15:35	10/27/2011 9:35	10/25/2011 15:30	10/25/2011 10:15	10/25/2011 9:00	
Metal	**State**	**Units**	**VR**	**V17A**	**VW3**	**BD1**	**VW1**	**VW2**	**V20A**	**VG MAIN**	**V8**	
Aluminum (Al)	Dissolved	ug/L	13.9	14.0	12.0	13.4	4.4	2.6	1.9	3.0	3.6	100
Aluminum (Al)	Total	ug/L	30.3	23.9	19.8	20.6	67.1	3.8	4.1	4.4	25.8	100
Antimony (Sb)	Dissolved	ug/L	0.03	0.04	0.04	0.04	0.06	0.24	0.04	0.12	0.13	
Antimony (Sb)	Total	ug/L	0.03	0.04	0.04	0.04	0.06	0.24	0.05	0.11	0.14	
Arsenic (As)	Dissolved	ug/L	0.18	0.74	0.50	0.44	0.59	0.40	0.45	0.41	0.50	5
Arsenic (As)	Total	ug/L	0.20	0.92	0.57	0.53	0.76	0.43	0.46	0.43	0.51	5
Barium (Ba)	Dissolved	ug/L	27.2	24.6	31.8	32.2	61.8	107	85.1	52.9	60.7	
Barium (Ba)	Total	ug/L	28.8	25.6	33.3	31.7	66.0	109	87.3	52.5	63.4	
Beryllium (Be)	Dissolved	ug/L	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Beryllium (Be)	Total	ug/L	0.01	0.01	0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Bismuth (Bi)	Dissolved	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Bismuth (Bi)	Total	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Boron (B)	Dissolved	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	1500
Boron (B)	Total	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	1500
Cadmium (Cd)	Dissolved	ug/L	0.011	0.014	0.031	0.029	0.014	0.103	<0.005	0.054	0.039	*
Cadmium (Cd)	Total	ug/L	0.010	0.018	0.028	0.029	0.020	0.105	<0.005	0.054	0.046	*
Calcium (Ca)	Dissolved	mg/L	10.7	30.9	29.4	27.7	55.8	103	71.9	73.0	78.0	
Calcium (Ca)	Total	mg/L	11.0	30.6	28.5	27.5	54.2	103	71.8	73.5	80.1	
Chromium (Cr)	Dissolved	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	1.2 (1)	<0.1	<0.1	0.1	1
Chromium (Cr)	Total	ug/L	<0.1	<0.1	<0.1	<0.1	0.2	0.5	<0.1	0.1	0.1	1
Cobalt (Co)	Dissolved	ug/L	0.012	0.085	0.029	0.032	0.064	0.015	0.010	0.054	0.070	
Cobalt (Co)	Total	ug/L	0.032	0.091	0.045	0.037	0.144	0.011	0.009	0.058	0.078	
Copper (Cu)	Dissolved	ug/L	0.44	0.44	0.53	0.52	0.49	0.54	0.31	0.66	0.73	2
Copper (Cu)	Total	ug/L	0.57	0.49	0.47	0.47	0.73	0.54	0.28	0.72	0.78	2
Iron (Fe)	Dissolved	ug/L	8	128	42	42	64	3	7	15	19	300
Iron (Fe)	Total	ug/L	31	179	70	71	222	5	9	27	67	300
Lead (Pb)	Dissolved	ug/L	0.012	0.075	0.048	0.086	0.020	0.055	0.029	0.012	0.049	1
Lead (Pb)	Total	ug/L	0.132	0.250	0.296	0.320	0.335	0.050	0.063	0.055	0.100	1
Lithium (Li)	Dissolved	ug/L	<0.5	1.0	0.9	0.9	3.3	3.5	3.7	4.0	4.8	
Lithium (Li)	Total	ug/L	<0.5	0.9	0.8	0.9	3.2	3.3	3.8	3.9	4.8	
Magnesium (Mg)	Dissolved	mg/L	2.08	8.00	7.03	6.73	18.1	38.5	21.6	27.7	32.0	
Magnesium (Mg)	Total	mg/L	2.07	7.99	7.24	6.88	18.2	39.3	21.8	28.1	31.9	
Manganese (Mn)	Dissolved	ug/L	0.26	38.3	7.86	8.01	36.8	0.32 (1)	0.80	3.95	8.27	
Manganese (Mn)	Total	ug/L	1.73	38.3	9.28	9.54	46.8	0.25	1.10	4.28	9.60	
Molybdenum (Mo)	Dissolved	ug/L	0.12	0.14	0.16	0.13	0.47	2.95	0.22	0.70	1.02	73
Molybdenum (Mo)	Total	ug/L	0.12	0.12	0.17	0.14	0.44	2.86	0.21	0.69	0.99	73
Nickel (Ni)	Dissolved	ug/L	0.17	0.43 (1)	0.31	0.35 (1)	0.50	1.11	0.71 (1)	1.27	1.42	25
Nickel (Ni)	Total	ug/L	0.24	0.34	0.33	0.27	0.73	1.11	0.20	1.28	1.39	25
Potassium (K)	Dissolved	mg/L	0.35	0.35	0.38	0.40	0.78	1.05	0.49	0.93	1.11	
Potassium (K)	Total	mg/L	0.36	0.36	0.40	0.40	0.82	1.09	0.48	0.96	1.14	
Selenium (Se)	Dissolved	ug/L	0.04	0.09	0.09	0.10	0.47	**3.80**	0.56	0.53	**1.13**	1
Selenium (Se)	Total	ug/L	0.04	0.09	0.08	0.10	0.46	**3.85**	0.56	0.55	**1.12**	1
Silicon (Si)	Dissolved	ug/L	5280	5820	5640	5150	5410	4880	5920	5450	5460	
Silicon (Si)	Total	ug/L	5570	5850	5470	5440	5390	4940	5970	5530	5730	
Silver (Ag)	Dissolved	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Silver (Ag)	Total	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Sodium (Na)	Dissolved	mg/L	1.76	1.92	1.86	1.80	3.71	2.82	3.09	3.66	4.20	
Sodium (Na)	Total	mg/L	1.73	1.93	1.93	1.83	3.77	2.86	3.11	3.70	4.13	
Strontium (Sr)	Dissolved	ug/L	52.7	117	120	123	237	338	323	255	294	
Strontium (Sr)	Total	ug/L	52.2	118	122	120	237	336	317	253	291	
Sulphur (S)	Dissolved	mg/L	<10	17	13	12	18	36	<10	50	46	
Sulphur (S)	Total	mg/L	<10	18	13	13	18	38	<10	49	48	
Thallium (Tl)	Dissolved	ug/L	<0.002	0.002	0.003	0.004	<0.002	0.002	<0.002	0.008	0.006	0.8
Thallium (Tl)	Total	ug/L	0.002	0.003	0.003	0.003	0.003	<0.002	<0.002	0.009	0.007	0.8
Tin (Sn)	Dissolved	ug/L	<0.01	<0.01	0.01	<0.01	<0.01	0.01	<0.01	<0.01	0.02	
Tin (Sn)	Total	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Titanium (Ti)	Dissolved	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Titanium (Ti)	Total	ug/L	0.7	<0.5	<0.5	<0.5	2.3	<0.5	<0.5	<0.5	0.8	
Uranium (U)	Dissolved	ug/L	0.371	1.59	2.01	2.04	3.00	7.22	1.17	6.08	5.69	15
Uranium (U)	Total	ug/L	0.394	1.55	2.06	2.16	2.95	6.99	1.09	5.81	5.57	15
Vanadium (V)	Dissolved	ug/L	<0.2	<0.2	<0.2	<0.2	<0.2	0.9	<0.2	<0.2	<0.2	
Vanadium (V)	Total	ug/L	<0.2	<0.2	<0.2	<0.2	0.3	0.9	<0.2	<0.2	0.2	
Zinc (Zn)	Dissolved	ug/L	0.9	27.2	16.6	18.7	3.1	5.6	2.2 (1)	17.1	12.6 (1)	30
Zinc (Zn)	Total	ug/L	1.2	27.0	18.8	17.4	4.8	5.0	0.8	17.0	9.5	30
Zirconium (Zr)	Dissolved	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Zirconium (Zr)	Total	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Hardness (CaCO3)	Total	mg/L	35.9	109	101	96.8	210	420	269	299	331	
* Cadmium guideline by calculation per site using the formula 10{0.86[log(hardness)]-3.2}.			0.014	0.036	0.033	0.032	0.063	0.114	0.078	0.085	0.093	

(1) Dissolved greater than total. Reanalysis yields similar results

TABLE 6

LOW LEVEL METAL CONCENTRATIONS IN ROSE ANVIL WATERSHEDS AND ON FMC SITE

Sampling Date			10/26/2011 16:35	10/27/2011 12:00	10/27/2011 12:45	10/27/2011 14:00	10/26/2011 15:35	10/26/2011	10/26/2011 14:20	10/25/2011 12:10	10/25/2011 13:45	10/26/2011 10:45	10/26/2011 10:10	10/26/2011 12:00	CCME
Parameter	**State**	**Units**	**USFR**	**GCULV**	**K8**	**R1**	**FC**	**BD-2**	**W10**	**NWID**	**X14**	**R4**	**R6**	**A1**	
Aluminum (Al)	Dissolved	ug/L	9.2	8.5	4.7	5.0	19.9	21.0	7.4	4.6	3.0	3.1	4.1	3.6	100
Aluminum (Al)	Total	ug/L	16.4	14.6	6.9	12.8	46.2	39.7	14.7	4.5	9.1	5.7	7.0	43.8	100
Antimony (Sb)	Dissolved	ug/L	0.03	0.04	0.02	0.06	<0.02	0.02	0.03	0.05	0.08	0.10	0.12	0.11	
Antimony (Sb)	Total	ug/L	0.03	0.03	0.02	0.06	<0.02	0.02	0.03	0.04	0.07	0.09	0.11	0.14	
Arsenic (As)	Dissolved	ug/L	0.22	0.20	0.20	0.42	0.08	0.07	0.11	0.21	0.35	0.27	0.42	0.48	5
Arsenic (As)	Total	ug/L	0.23	0.22	0.18	0.53	0.09	0.11	0.13	0.19	0.47	0.33	0.43	0.62	5
Barium (Ba)	Dissolved	ug/L	27.9	28.5	27.6	54.5	17.2	17.5	17.9	48.2	57.7	61.7	76.2	63.4	
Barium (Ba)	Total	ug/L	29.3	29.4	28.5	56.9	18.5	17.3	18.4	47.4	60.8	63.0	78.4	64.3	
Beryllium (Be)	Dissolved	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Beryllium (Be)	Total	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	
Bismuth (Bi)	Dissolved	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Bismuth (Bi)	Total	ug/L	<0.005	0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Boron (B)	Dissolved	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	1500
Boron (B)	Total	ug/L	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	<50	1500
Cadmium (Cd)	Dissolved	ug/L	<0.005	<0.005	0.006	0.011	**0.009**	**0.015**	0.017	**0.053**	0.027	0.020	**0.099 (1)**	0.028 (1)	*
Cadmium (Cd)	Total	ug/L	<0.005	<0.005	<0.005	0.012	**0.008**	**0.010**	0.019	**0.048**	0.028	0.024	0.034	0.019	*
Calcium (Ca)	Dissolved	mg/L	9.87	10.6	20.3	35.0	4.75	4.46	20.6	53.8	58.0	54.4	50.0	48.7	
Calcium (Ca)	Total	mg/L	9.60	10.2	19.8	35.0	4.78	4.63	19.4	46.0	57.5	53.2	48.2	45.7	
Chromium (Cr)	Dissolved	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.1	1
Chromium (Cr)	Total	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	0.1	<0.1	<0.1	<0.1	0.1	<0.1	0.2	1
Cobalt (Co)	Dissolved	ug/L	0.011	0.011	0.015	0.121	0.020	0.018	0.016	0.013	0.647	0.145	0.047	0.040	
Cobalt (Co)	Total	ug/L	0.021	0.027	0.015	0.131	0.025	0.025	0.014	0.014	0.669	0.169	0.043	0.097	
Copper (Cu)	Dissolved	ug/L	0.40 (1)	0.31	0.32	0.35	0.38	0.61 (1)	0.73	0.77	0.37	0.66	0.63 (1)	0.61	2
Copper (Cu)	Total	ug/L	0.28	0.32	0.35	0.42	0.43	0.45	0.79	0.73	0.42	0.57	0.46	0.70	2
Iron (Fe)	Dissolved	ug/L	53	45	4	126	14	14	5	3	195	64	65	33	300
Iron (Fe)	Total	ug/L	94	75	7	210	39	35	13	4	**446**	179	119	141	300
Lead (Pb)	Dissolved	ug/L	0.175 (1)	0.029	0.024	0.459	0.327	0.335	0.018	0.090	0.222	0.148	0.483 (1)	0.083	1
Lead (Pb)	Total	ug/L	0.035	0.033	0.054	**1.23**	0.563	0.514	0.068	0.085	0.650	0.431	0.052	0.199	1
Lithium (Li)	Dissolved	ug/L	1.0	1.0	1.9	3.7	1.9	1.9	1.0	5.5	4.1	3.3	2.2	2.8	
Lithium (Li)	Total	ug/L	0.9	1.0	1.8	3.6	1.8	1.9	0.9	5.4	4.2	3.3	2.1	3.0	
Magnesium (Mg)	Dissolved	mg/L	1.66	1.73	2.69	7.38	1.00	0.95	2.53	7.01	12.8	11.5	11.9	10.2	
Magnesium (Mg)	Total	mg/L	1.64	1.70	2.71	7.29	1.02	0.95	2.60	6.33	12.7	11.6	12.2	10.2	
Manganese (Mn)	Dissolved	ug/L	1.08	0.67	0.15	55.7	0.50	0.54	0.08	0.22	862	255	18.6	36.3	
Manganese (Mn)	Total	ug/L	7.19	5.29	0.31	57.4	0.96	1.11	0.29	0.12	864	264	18.7	50.9	
Molybdenum (Mo)	Dissolved	ug/L	0.28	0.29	0.11	0.48	0.06	0.07	0.20	0.30	0.55	0.63	1.17	0.94	73
Molybdenum (Mo)	Total	ug/L	0.25	0.29	0.12	0.47	0.07	0.06	0.21	0.24	0.57	0.58	1.12	0.88	73
Nickel (Ni)	Dissolved	ug/L	0.26	0.73 (1)	0.21	0.49	0.28	0.26	0.32	0.39	1.88	1.01	0.39	0.61	25
Nickel (Ni)	Total	ug/L	0.17	0.17	0.20	0.53	0.27	0.25	0.29	0.43	1.84	1.03	0.34	0.77	25
Potassium (K)	Dissolved	mg/L	0.34	0.33	0.49	0.84	0.14	0.18	0.45	1.54	1.17	1.19	1.22	1.33	
Potassium (K)	Total	mg/L	0.33	0.33	0.50	0.84	0.15	0.15	0.47	1.50	1.20	1.23	1.23	1.38	
Selenium (Se)	Dissolved	ug/L	0.06	0.06	0.09	0.30	<0.04	<0.04	0.04	0.22	0.31	0.55	0.92	0.69	1
Selenium (Se)	Total	ug/L	0.05	0.05	0.09	0.32	<0.04	<0.04	0.04	0.25	0.37	0.56	0.90	0.69	1
Silicon (Si)	Dissolved	ug/L	4860	4980	5570	5720	7770	6910	7380	7410 (1)	5690	5470	5450	5430	
Silicon (Si)	Total	ug/L	4730	4760	5380	5780	7910	7610	7050	5990	5700	5380	5200	5220	
Silver (Ag)	Dissolved	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Silver (Ag)	Total	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	
Sodium (Na)	Dissolved	mg/L	1.96	1.94	2.17	2.63	2.01	1.96	1.92	3.12	3.92	3.26	2.11	2.75	
Sodium (Na)	Total	mg/L	1.87	1.86	2.15	2.57	2.05	1.93	1.97	2.74	3.90	3.29	2.12	2.67	
Strontium (Sr)	Dissolved	ug/L	54.4	57.5	118	148	27.4	27.7	62.9	192	201	181	132	144	
Strontium (Sr)	Total	ug/L	54.5	56.8	117	149	27.9	27.3	62.5	189	202	179	133	140	
Sulphur (S)	Dissolved	mg/L	<10	<10	<10	<10	<10	<10	<10	12	27	22	<10	13	
Sulphur (S)	Total	mg/L	<10	<10	<10	<10	<10	<10	<10	11	26	22	<10	13	
Thallium (Tl)	Dissolved	ug/L	<0.002	<0.002	<0.002	0.002	<0.002	<0.002	<0.002	0.002	0.005	0.007	<0.002	0.004	0.8
Thallium (Tl)	Total	ug/L	<0.002	<0.002	<0.002	0.003	<0.002	<0.002	<0.002	0.004	0.004	0.007	<0.002	0.004	0.8
Tin (Sn)	Dissolved	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	<0.01	
Tin (Sn)	Total	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.05	<0.01	0.01	<0.01	
Titanium (Ti)	Dissolved	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	
Titanium (Ti)	Total	ug/L	<0.5	<0.5	<0.5	<0.5	0.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	2.2	
Uranium (U)	Dissolved	ug/L	0.422	0.512	2.14	1.66	0.100	0.109	0.152	0.989	2.01	1.76	2.07	1.87	15
Uranium (U)	Total	ug/L	0.469	0.533	2.10	1.70	0.112	0.113	0.153	1.03	2.10	1.73	2.11	1.94	15
Vanadium (V)	Dissolved	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	
Vanadium (V)	Total	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.3	
Zinc (Zn)	Dissolved	ug/L	3.2 (1)	1.3 (1)	2.5 (1)	7.1	1.5	1.9	1.1	13.8 (1)	24.4	8.8	4.2 (1)	2.4	30
Zinc (Zn)	Total	ug/L	0.4	0.5	0.8	8.1	1.3	3.0 (1)	1.1	10.3	26.0	10.8	1.0	3.2	30
Zirconium (Zr)	Dissolved	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Zirconium (Zr)	Total	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	
Hardness (CaCO3)	Total	mg/L	30.7	32.4	60.6	117	16.1	15.1	59.1	141	196	180	171	156	
* Cadmium guideline by calculation per site using the formula 10{0.86[log(hardness)]-3.2}.			0.012	0.013	0.022	0.038	0.007	0.007	0.021	0.044	0.059	0.055	0.053	0.049	

(1) Dissolved greater than total. Reanalysis yields similar results

TABLE 7 **LOW LEVELS METAL CONCENTRATIONS IN THE PELLY RIVER, OCTOBER 2011**

Sampling Date			10/26/2011 9:30	10/26/2011 12:20	CCME
Parameter	**State**	**Units**	**P1**	**P4**	
Aluminum (Al)	Dissolved	ug/L	12.9	23.7	100
Aluminum (Al)	Total	ug/L	48.0	39.5	100
Antimony (Sb)	Dissolved	ug/L	0.17	0.16	
Antimony (Sb)	Total	ug/L	0.17	0.16	
Arsenic (As)	Dissolved	ug/L	0.40	0.44	5
Arsenic (As)	Total	ug/L	0.52	0.52	5
Barium (Ba)	Dissolved	ug/L	70.8	71.8	
Barium (Ba)	Total	ug/L	71.8	70.7	
Beryllium (Be)	Dissolved	ug/L	<0.01	<0.01	
Beryllium (Be)	Total	ug/L	<0.01	<0.01	
Bismuth (Bi)	Dissolved	ug/L	<0.005	<0.005	
Bismuth (Bi)	Total	ug/L	<0.005	<0.005	
Boron (B)	Dissolved	ug/L	<50	<50	1500
Boron (B)	Total	ug/L	<50	<50	1500
Cadmium (Cd)	Dissolved	ug/L	**0.158**	**0.118**	*
Cadmium (Cd)	Total	ug/L	**0.190**	**0.118**	*
Calcium (Ca)	Dissolved	mg/L	50.2	46.7	
Calcium (Ca)	Total	mg/L	46.2	48.5	
Chromium (Cr)	Dissolved	ug/L	<0.1	<0.1	1
Chromium (Cr)	Total	ug/L	<0.1	<0.1	1
Cobalt (Co)	Dissolved	ug/L	0.033	0.039	
Cobalt (Co)	Total	ug/L	0.068	0.064	
Copper (Cu)	Dissolved	ug/L	0.75	0.78	2
Copper (Cu)	Total	ug/L	0.90	0.79	2
Iron (Fe)	Dissolved	ug/L	46	37	300
Iron (Fe)	Total	ug/L	133	110	300
Lead (Pb)	Dissolved	ug/L	0.022	0.141 (1)	1
Lead (Pb)	Total	ug/L	0.100	0.074	1
Lithium (Li)	Dissolved	ug/L	3.3	3.2	
Lithium (Li)	Total	ug/L	3.4	3.4	
Magnesium (Mg)	Dissolved	mg/L	16.6	14.7	
Magnesium (Mg)	Total	mg/L	16.0	15.1	
Manganese (Mn)	Dissolved	ug/L	11.7	18.0	
Manganese (Mn)	Total	ug/L	17.3	22.6	
Molybdenum (Mo)	Dissolved	ug/L	1.16	1.17	73
Molybdenum (Mo)	Total	ug/L	1.14	1.19	73
Nickel (Ni)	Dissolved	ug/L	4.75	3.62	25
Nickel (Ni)	Total	ug/L	5.00	3.77	25
Potassium (K)	Dissolved	mg/L	0.72	0.89	
Potassium (K)	Total	mg/L	0.74	0.89	
Selenium (Se)	Dissolved	ug/L	**1.17**	0.97	1
Selenium (Se)	Total	ug/L	**1.18**	**1.08**	1
Silicon (Si)	Dissolved	ug/L	3610	3440	
Silicon (Si)	Total	ug/L	3380	3830	
Silver (Ag)	Dissolved	ug/L	<0.005	<0.005	
Silver (Ag)	Total	ug/L	<0.005	<0.005	
Sodium (Na)	Dissolved	mg/L	2.09	2.28	
Sodium (Na)	Total	mg/L	2.01	2.32	
Strontium (Sr)	Dissolved	ug/L	204	196	
Strontium (Sr)	Total	ug/L	197	192	
Sulphur (S)	Dissolved	mg/L	24	22	
Sulphur (S)	Total	mg/L	24	22	
Thallium (Tl)	Dissolved	ug/L	0.003	0.004	0.8
Thallium (Tl)	Total	ug/L	0.003	0.003	0.8
Tin (Sn)	Dissolved	ug/L	<0.01	<0.01	
Tin (Sn)	Total	ug/L	0.01	<0.01	
Titanium (Ti)	Dissolved	ug/L	<0.5	<0.5	
Titanium (Ti)	Total	ug/L	1.0	1.5	
Uranium (U)	Total	ug/L	1.88	1.87	15
Uranium (U)	Dissolved	ug/L	1.84	2.05	15
Vanadium (V)	Total	ug/L	0.3	0.3	
Vanadium (V)	Dissolved	ug/L	0.2	<0.2	
Zinc (Zn)	Total	ug/L	17.3	10.3	30
Zinc (Zn)	Dissolved	ug/L	12.7	7.5	30
Zirconium (Zr)	Total	ug/L	<0.1	<0.1	
Zirconium (Zr)	Dissolved	ug/L	<0.1	<0.1	
Hardness (CaCO3)	Total	mg/L	181	183	
* Cadmium guideline by calculation per site using the formula 10{0.86[log(hardness)]-3.2}.			0.055	0.056	

PHOTOGRAPHS OF EACH SITE, OCTOBER 2011

VR, West Vangorda Creek u/s Haul Road, looking upstream.

VR looking downstream towards Haul Road, Oct 25th, 2011.

V17A, upstream of Haul Road, looking upstream from sample site, Oct 25th, 2011.

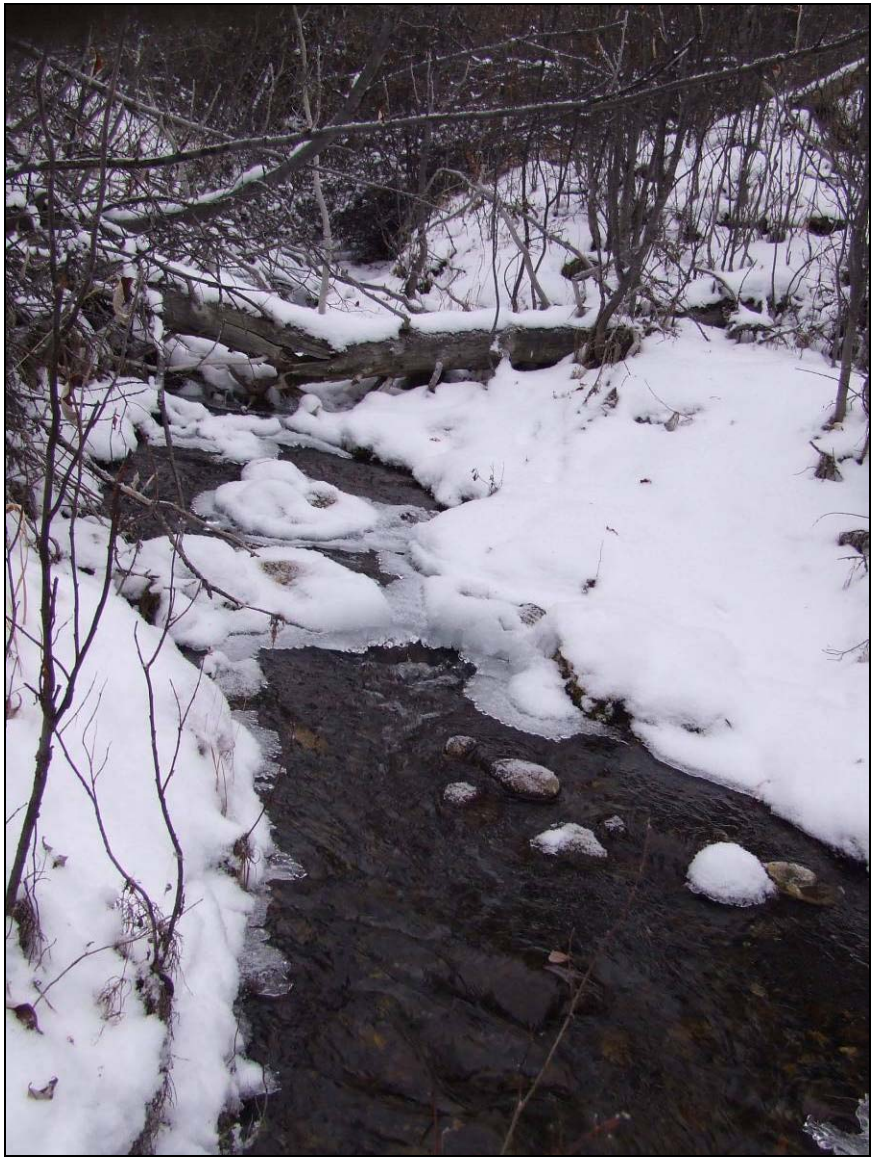
V17A, looking downstream at sample site where there was open water.

VW3, West Vangorda d/s AEX Creek, looking upstream to Haul Road, Oct 27th, 2011.

VW3 looking downstream from the Grum access road towards the mine access road.

VW1, West Vangorda Creek d/s landslide and u/s VW2, looking downstream, Oct 27th, 2011.

VW1, looking upstream.



VW2, tributary to West Vangorda Creek, looking upstream.

VW2 looking downstream to Mine Access Road, Oct 27th, 2011.

V20A, Dixon Creek u/s of mine influence, looking upstream, October 25th, 2011.

V20A looking downstream toward the access trail.

VGMAIN looking upstream, October 25th, 2011.

VGMAIN looking downstream, October 25th, 2011.

V8, Vangorda Creek near the confluence with the Pelly River, October 25th, 2011.

The staff gauge at V8, October 25th, 2011.

USFR, South Fork of Rose Creek u/s of Haul Road, looking upstream.

USFR looking downstream to the culverts through the Haul Road, October 26th, 2011.

GCULV, South Fork Rose Creek looking upstream from the Mine Access Road.

GCULV looking downstream to the culvert on the Mine Access Road, October 27, 2011.

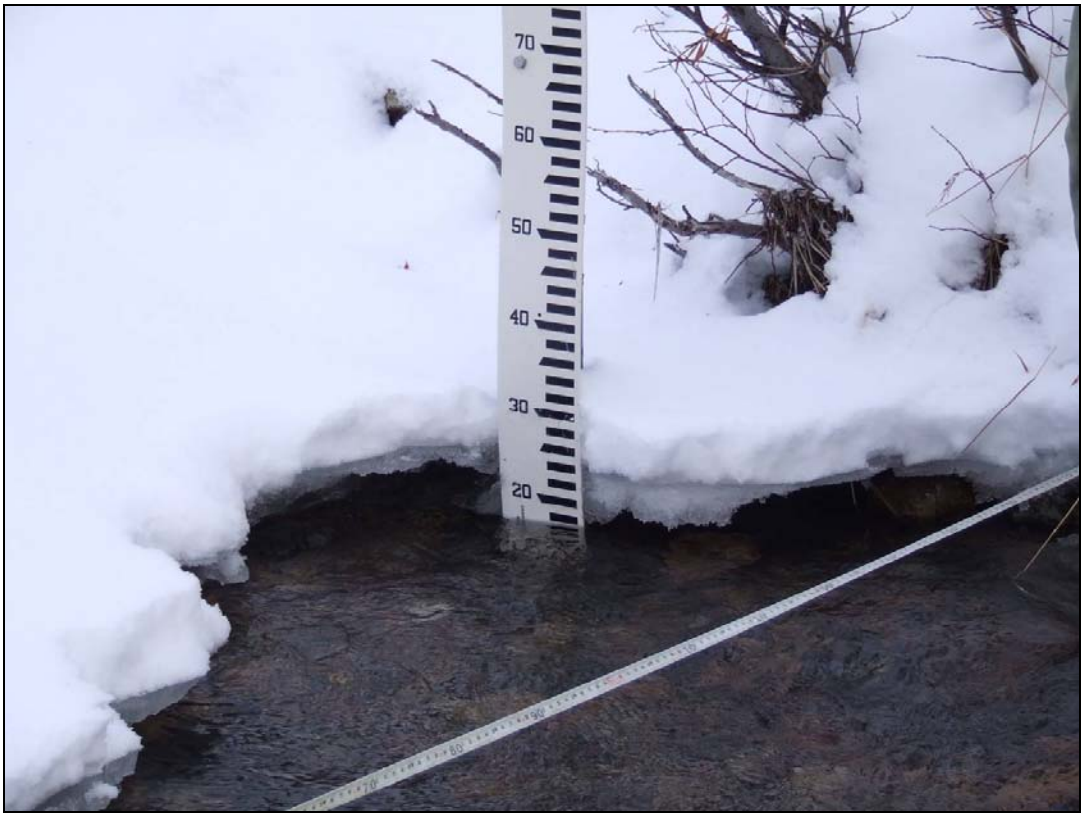
K8, Reservoir Creek u/s of Mine Access Road, looking upstream.

K8 looking downstream from Mine Access Road, Oct 27th, 2011

Conducting discharge measurement at R1.

R1, Rose Creek u/s pumphouse pond, looking downstream, Oct 27th, 2011.

FC, Faro Creek u/s Diversion, looking upstream, October 26th, 2011.



Staff gauge at FC, October 26th, 2011.

W10, Upper Guardhouse Creek looking upstream, October 26th, 2011.

W10 looking downstream from the sample site, October 26th, 2011.

NWID, Northwest Inceptor Ditch looking upstream.

NWID looking downstream, October 25th, 2011.

X14, Rose Creek downstream of all mining activity, looking downstream to the site.

The staff gauge at X14, October 25th, 2011.

R4, Rose Creek u/s Anvil Creek, looking upstream, October 26th, 2011.

R4 looking downstream to the confluence with Anvil Creek.

R6, Anvil Creek u/s of Rose Creek, looking upstream, October 26th, 2011.

R6 looking downstream.

A1, Anvil Creek upstream of the confluence with the Pelly River, looking upstream.

A1 looking downstream, October 26th, 2011.

P1, Pelly River upstream of Vangorda Creek, looking upstream from sample site.

P1 looking downstream, October 26th, 2011.

P4, Pelly River downstream of the confluence with Anvil Creek, looking upstream.

P4 looking downstream, October 26th, 2011.

CERTIFICATE OF ANALYSIS

Denison Environmental Services – Turbidity Analysis, October 2011

Denison Environmental Services

Faro Mine Closure

Client Project #: Pelly Aquatic Monitoring

Attention: Bonnie Burns
Laberge Environmental Services
P.O. Box 21072
Whitehorse, YT

Report Date: November 2, 2011

CERTIFICATE OF ANALYSIS

Received: October 25, 26, 27, 2011

Sample Matrix: Water
Samples Received: 23

Analyses	Quantity	Date Analyzed	Laboratory Method	Analytical Method
Turbidity	10	26-Oct-11	FMC-ENV-504	Based on SM-2130B
Turbidity	13	27-Oct-11	FMC-ENV-504	Based on SM-2130B
pH	1	27-Oct-11	FMC-ENV-513	Based on SM-4500-H^+B

Report all questions regarding this Certificate of Analysis to:

JESSIE LUCHINSKI, FMC Laboratory Chemist
Email: jluchinski@denisonenvironmental.com
Tel: (867) 994-2600

Report Date: November 2, 2011

Laberge Environmental Services
Client Project #: Pelly Aquatic Monitoring

Sampler Initials: BB, DF

RESULTS OF CHEMICAL ANALYSES

Field Sample ID	Sampling Date	Turbidity	Units	RDL
V-8	25/10/2011 9:00	0.88	NTU	0.10
VGMAIN	25/10/2011 10:15	0.11	NTU	0.10
NWID	25/10/2011 12:10	<0.10	NTU	0.10
X-14	25/10/2011 13:45	1.77	NTU	0.10
V20a	25/10/2011 15:30	0.21	NTU	0.10
V17a	25/10/2011 16:30	0.65	NTU	0.10
VR	25/10/2011 17:10	0.22	NTU	0.10
P-1	26/10/2011 9:30	1.40	NTU	0.10
R-6	26/10/2011 10:10	0.44	NTU	0.10
R-4	26/10/2011 10:45	0.86	NTU	0.10
A-1	26/10/2011 12:00	0.86	NTU	0.10
P-4	26/10/2011 12:20	1.40	NTU	0.10
W-10	26/10/2011 14:20	0.18	NTU	0.10
FC	26/10/2011 15:35	0.35	NTU	0.10
BD2	26/10/2011 15:35	0.39	NTU	0.10
USFR	26/10/2011 16:35	0.28	NTU	0.10
VW2	27/10/2011 9:30	<0.10	NTU	0.10
VW3	27/10/2011 10:45	0.36	NTU	0.10
BD1	27/10/2011 10:45	0.29	NTU	0.10
GCULV	27/10/2011 12:00	0.26	NTU	0.10
K-8	27/10/2011 12:30	0.11	NTU	0.10
R-1	27/10/2011 14:00	0.91	NTU	0.10
VW-1	27/10/2011 15:35	1.56	NTU	0.10

Field Sample ID	Sampling Date	pH	Units
VW2	27/10/2011 9:30	8.33	pH Units

Denison Environmental Services

FMC Laboratory Chain of Custody and Analysis Request Form

Denison Environmental Services
Faro Mine Complex, Faro, YT, Y0B1K
Ph: (867)994-2600 Fax: (867)994-237
www.denisonenvironmental.com

SECTION 1: Contact Information

Contact: Bonnie Burns	**Address:** Box 21072		
Company:	**City:** Whitehor	**Prov/Territory:**	**Postal Code:**
Email:	**Phone:**	**Fax:**	

SECTION 2: Sample Information

Client Project ID: Pelly Aquatic Monitoring

Sampler Name (Print): Bonnie Burns & Deb Fulmer

Results Within:

☑ Reg. 6 Days	☐ Rush 78 Hrs	☐ Rush 24 Hrs	☐ Rush 2 Hrs

For Lab Use Only

Project No.:
Date:
Analyst Initials:

SECTION 3: Sample Details

FMC Lab ID# (Lab Use Only)	Field Sample ID	Sampling		Water Type					# Containers	Requested Services								
		Date DD/MM/YYYY	Time	Ground	Surface	Drinking	Seepage	Other		Turbidity								
	V-8	25/10/2011	9:00		✓				1	✓								
	VGMAIN	25/10/2011	10:15		✓					✓								
	NWD	25/10/201	12:10		✓					✓								
	X-14	25/10/2011	13:45		✓					✓								
	V20a	25/10/2011	15:30		✓					✓								
	V17a	25/10/2011	16:30		✓					✓								
	VR	25/10/2011	17:10		✓					✓								

SECTION 4: Custody Record

Relinquished By Sampler	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By Lab:	Date/Time:

COC# (Lab Use Only):

Denison Environmental Services

FMC Laboratory Chain of Custody and Analysis Request Form

Denison Environmental Services
Faro Mine Complex, Faro, YT, Y0B1K0
Ph: (867)994-2600 Fax: (867)994-2373
www.denisonenvironmental.com

SECTION 1: Contact Information

Contact: Bonnie Burns	Address:		
Company: Laberge Env. Services	City:	Prov/Territory:	Postal Code:
Email: bonnieburns@northwestel.net	Phone:	Fax:	

SECTION 2: Sample Information

Client Project ID:	Results Within: ☐ Reg. 6 Days ☐ Rush 78 Hrs ☐ Rush 24 Hrs ☐ Rush 2 Hrs
Sampler Name (Print):	For Lab Use Only — Project No.: Date: Analyst Initials:

SECTION 3: Sample Details

FMC Lab ID# (Lab Use Only)	Field Sample ID	Sampling: Date DD/MM/YYYY	Sampling: Time	Water Type: Ground	Surface	Drinking	Seepage	Other	# Containers	Requested Services: Turbidity
	P-1	26/10/2011	9:30		✓				1	✓
	R-6	26/10/2011	10:10		✓				1	✓
	R-4	26/10/2011	10:45		✓				1	✓
	A-1	26/10/2011	12:00		✓				1	✓
	P-4	26/10/2011	12:20		✓				1	✓
	W-10	26/10/2011	14:20		✓				1	✓
	FC	26/10/2011	15:35		✓				1	✓
	USFR	26/10/2011	16:35		✓				1	✓

SECTION 4: Custody Record

Relinquished By Sampler	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By Lab:	Date/Time:

COC# (Lab Use Only):

Denison Environmental Services

FMC Laboratory Chain of Custody and Analysis Request Form

Denison Environmental Services
Faro Mine Complex, Faro, YT, Y0B1K
Ph: (867)994-2600 Fax: (867)994-237
www.denisonenvironmental.com

SECTION 1: Contact Information

Contact: Bonnie Burns	**Address:**		
Company: Laberge Env. Serv.	**City:**	**Prov/Territory:**	**Postal Code:**
Email: bonnieburns@northwestel.net	**Phone:**	**Fax:**	

SECTION 2: Sample Information

Client Project ID:	**Results Within:** ☐ Reg. 6 Days ☐ Rush 78 Hrs ☐ Rush 24 Hrs ☐ Rush 2 Hrs
Sampler Name (Print):	**For Lab Use Only** — **Project No.:** **Date:** **Analyst Initials:**

SECTION 3: Sample Details

FMC Lab ID# (Lab Use Only)	Field Sample ID	Sampling: Date DD/MM/YYYY	Sampling: Time	Water Type: Ground	Surface	Drinking	Seepage	Other	# Containers	Requested Services: Turbidity	pH
	VW2	27/10/2011	9:30		✓				1	✓	✓
	VW3	27/10/2011	10:45		✓				1	✓	
	GCULV	27/10/2011	12:00		✓				1	✓	
	K-8	27/10/2011	12:30		✓				1	✓	
	R-1	27/10/2011	14:00		✓				1	✓	
	VW-1	27/10/2011	15:35		✓				1	✓	

SECTION 4: Custody Record

Relinquished By Sampler	Date/Time:	Received By:	Date/Time:
Relinquished By:	Date/Time:	Received By Lab:	Date/Time:

COC# (Lab Use Only):

CERTIFICATE OF ANALYSIS

Maxxam Analytics Ltd – Job # B1A4623

Your C.O.C. #: 19110101, 1911010101, 1911010201, 1911010301

Attention: Bonnie Burns
LABERGE ENVIRONMENTAL SERVICES
WHITEHORSE
405 Ogilvie Street
PO Box 21072
Whitehorse, YT
CANADA Y1A 6P7

Report Date: 2011/11/04

CERTIFICATE OF ANALYSIS

MAXXAM JOB #: B1A4623
Received: 2011/10/28, 14:30

Sample Matrix: Water
Samples Received: 24

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Alkalinity - Water	22	2011/10/31	2011/10/31	BBY6SOP-00026, BBY0SOP-00002	SM2320B
Alkalinity - Water	2	2011/11/02	2011/11/02	BBY6SOP-00026, BBY0SOP-00002	SM2320B
Chloride by Automated Colourimetry	22	N/A	2011/10/31	BBY6SOP-00011	SM-4500-Cl-
Chloride by Automated Colourimetry	2	N/A	2011/11/02	BBY6SOP-00011	SM-4500-Cl-
Carbon (DOC)	22	N/A	2011/10/31	BBY6SOP-00003	SM-5310C
Carbon (DOC)	2	N/A	2011/11/02	BBY6SOP-00003	SM-5310C
Conductance - water	22	N/A	2011/10/31	BBY6SOP-00026	SM-2510B
Conductance - water	2	N/A	2011/11/02	BBY6SOP-00026	SM-2510B
Hardness Total (calculated as CaCO3)	24	N/A	2011/11/04		
Hardness (calculated as CaCO3)	24	N/A	2011/11/04		Calc
Na, K, Ca, Mg, S by CRC ICPMS (diss.)	24	N/A	2011/11/04	BBY7SOP-00002	EPA 200.8
Elements by ICPMS Low Level (dissolved)	20	N/A	2011/11/03	BBY7SOP-00002	EPA 200.8
Elements by ICPMS Low Level (dissolved)	4	N/A	2011/11/04	BBY7SOP-00002	EPA 200.8
Na, K, Ca, Mg, S by CRC ICPMS (total)	24	N/A	2011/11/04	BBY7SOP-00002	EPA 200.8
Elements by ICPMS Low Level (total)	1	N/A	2011/11/03	BBY7SOP-00002	EPA 200.8
Elements by ICPMS Low Level (total)	23	N/A	2011/11/04	BBY7SOP-00002	EPA 200.8
Ammonia-N	22	N/A	2011/10/31	BBY6SOP-00009	SM-4500NH3G
Ammonia-N	2	N/A	2011/11/02	BBY6SOP-00009	SM-4500NH3G
Nitrate + Nitrite (N)	22	N/A	2011/10/30	BBY6SOP-00010	USEPA 353.2
Nitrate + Nitrite (N)	2	N/A	2011/11/02	BBY6SOP-00010	USEPA 353.2
Nitrite (N) by CFA	22	N/A	2011/10/30	BBY6SOP-00010	EPA 353.2
Nitrite (N) by CFA	2	N/A	2011/11/02	BBY6SOP-00010	EPA 353.2
Nitrogen - Nitrate (as N)	22	N/A	2011/10/31	BBY6SOP-00010	Based on EPA 353.2
Nitrogen - Nitrate (as N)	2	N/A	2011/11/02	BBY6SOP-00010	Based on EPA 353.2
Filter and HNO3 Preserve for Metals	22	N/A	2011/10/28	BBY6WI-00001	EPA 200.2
Filter and HNO3 Preserve for Metals	2	N/A	2011/11/01	BBY6WI-00001	EPA 200.2
pH Water	22	N/A	2011/10/31	BBY6SOP-00026	SM-4500H+B
pH Water	2	N/A	2011/11/02	BBY6SOP-00026	SM-4500H+B
Sulphate by Automated Colourimetry	21	N/A	2011/10/31	BBY6SOP-00017	SM4500-SO42
Sulphate by Automated Colourimetry	1	N/A	2011/11/01	BBY6SOP-00017	SM4500-SO42
Sulphate by Automated Colourimetry	2	N/A	2011/11/02	BBY6SOP-00017	SM4500-SO42
Total Dissolved Solids (Filt. Residue)	22	2011/11/01	2011/11/01	BBY6SOP-00033	SM 2540C
Total Dissolved Solids (Filt. Residue)	2	2011/11/02	2011/11/02	BBY6SOP-00033	SM 2540C
Carbon (Total Organic)	22	N/A	2011/10/31	BBY6SOP-00003	SM-5310C
Carbon (Total Organic)	2	N/A	2011/11/02	BBY6SOP-00003	SM-5310C
Total Phosphorus	22	N/A	2011/10/31	BBY6SOP-00013	SM 4500

../2

Your C.O.C. #: 19110101, 1911010101, 1911010201, 1911010301

Attention: Bonnie Burns
LABERGE ENVIRONMENTAL SERVICES
WHITEHORSE
405 Ogilvie Street
PO Box 21072
Whitehorse, YT
CANADA Y1A 6P7

Report Date: 2011/11/04

CERTIFICATE OF ANALYSIS

Sample Matrix: Water
Samples Received: 24

Analyses	Quantity	Date Extracted	Date Analyzed	Laboratory Method	Analytical Method
Total Phosphorus	2	N/A	2011/11/02	BBY6SOP-00013	SM 4500
Total Suspended Solids-LowLevel	22	N/A	2011/10/31	BBY6SOP-00034	SM-2540 D
Total Suspended Solids-LowLevel	2	N/A	2011/11/02	BBY6SOP-00034	SM-2540 D
Turbidity	22	N/A	2011/10/29	BBY6SOP-00027	SM - 2130B
Turbidity	2	N/A	2011/11/01	BBY6SOP-00027	SM - 2130B

* RPDs calculated using raw data. The rounding of final results may result in the apparent difference.

Encryption Key

Please direct all questions regarding this Certificate of Analysis to your Project Manager.

TABITHA RUDKIN, Project Manager
Email: TRudkin@maxxam.ca
Phone# (604) 638-2639

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		BZ0018	BZ0019	BZ0020	BZ0021		
Sampling Date		2011/10/25 09:00	2011/10/25 16:30	2011/10/25 15:30	2011/10/25 17:10		
COC Number		1911010101	1911010101	1911010101	1911010101		
	Units	**V8**	**V17A**	**V20A**	**VR**	**RDL**	**QC Batch**
ANIONS							
Nitrite (N)	mg/L	<0.005 (1)	<0.005 (1)	<0.005 (1)	<0.005 (1)	0.005	5315052
Calculated Parameters							
Filter and HNO3 Preservation	N/A	FIELD	FIELD	FIELD	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	0.22	0.31	0.02	<0.02	0.02	5310082
Misc. Inorganics							
Dissolved Organic Carbon (C)	mg/L	2.8	2.4	3.4	2.3	0.5	5317236
Alkalinity (Total as CaCO3)	mg/L	180	59	240	30	0.5	5318314
Total Organic Carbon (C)	mg/L	2.8	2.6	3.3	2.5	0.5	5317285
Alkalinity (PP as CaCO3)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	5318314
Bicarbonate (HCO3)	mg/L	230	71	290	37	0.5	5318314
Carbonate (CO3)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	5318314
Hydroxide (OH)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	5318314
Anions							
Dissolved Sulphate (SO4)	mg/L	120	46	16	5.5	0.5	5317619
Dissolved Chloride (Cl)	mg/L	1.3	<0.5	<0.5	<0.5	0.5	5317595
Nutrients							
Ammonia (N)	mg/L	0.014	0.047	0.008	0.036	0.005	5318469
Nitrate plus Nitrite (N)	mg/L	0.22 (1)	0.31 (1)	0.02 (1)	<0.02 (1)	0.02	5315051
Total Phosphorus (P)	mg/L	0.003	0.004	0.006	0.004	0.002	5317095
Physical Properties							
Conductivity	uS/cm	570	223	457	75	1	5318386
pH	pH Units	8.13	7.64	8.16	7.51		5318387
Physical Properties							
Total Suspended Solids	mg/L	1	1	<1	<1	1	5317596
Total Dissolved Solids	mg/L	360	150	270	58	10	5319122
Turbidity	NTU	1.0 (2)	1.0 (2)	0.7 (2)	0.4 (2)	0.1	5314050

RDL = Reportable Detection Limit
(1) Sample analysed past recommended hold time
(2) Sample was analyzed after holding time expired.

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		BZ0022	BZ0023	BZ0024	BZ0025		
Sampling Date		2011/10/25 10:15	2011/10/27 15:35	2011/10/27 09:35	2011/10/27 10:45		
COC Number		1911010101	1911010101	1911010101	1911010101		
	Units	**VG MAIN**	**VW1**	**VW2**	**VW3**	**RDL**	**QC Batch**
ANIONS							
Nitrite (N)	mg/L	<0.005 (1)	<0.005	<0.005	<0.005	0.005	5315052
Calculated Parameters							
Filter and HNO3 Preservation	N/A	FIELD	FIELD	FIELD	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	0.31	0.12	0.15	0.20	0.02	5310082
Misc. Inorganics							
Dissolved Organic Carbon (C)	mg/L	2.3	3.1	2.3	2.3	0.5	5317236
Alkalinity (Total as CaCO3)	mg/L	140	160	290	66	0.5	5318314
Total Organic Carbon (C)	mg/L	2.2	3.0	2.2	2.4	0.5	5317285
Alkalinity (PP as CaCO3)	mg/L	<0.5	<0.5	2.7	<0.5	0.5	5318314
Bicarbonate (HCO3)	mg/L	170	190	350	80	0.5	5318314
Carbonate (CO3)	mg/L	<0.5	<0.5	3.3	<0.5	0.5	5318314
Hydroxide (OH)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	5318314
Anions							
Dissolved Sulphate (SO4)	mg/L	130	45	95	33	0.5	5317619
Dissolved Chloride (Cl)	mg/L	<0.5	1.3	0.7	<0.5	0.5	5317595
Nutrients							
Ammonia (N)	mg/L	0.022	0.029	0.017	0.021	0.005	5318469
Nitrate plus Nitrite (N)	mg/L	0.31 (1)	0.12	0.15	0.20	0.02	5315051
Total Phosphorus (P)	mg/L	0.003	0.012	0.014	0.003	0.002	5317095
Physical Properties							
Conductivity	uS/cm	526	392	682	203	1	5318386
pH	pH Units	7.95	8.13	8.33	7.86		5318387
Physical Properties							
Total Suspended Solids	mg/L	<1	10	<1	2	1	5317596
Total Dissolved Solids	mg/L	350	240	430	130	10	5319122
Turbidity	NTU	0.3 (2)	2.0	0.3	0.6	0.1	5314050

RDL = Reportable Detection Limit
(1) Sample analysed past recommended hold time
(2) Sample was analyzed after holding time expired.

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		BZ0026	BZ0027	BZ0028	BZ0029		
Sampling Date		2011/10/26 15:35	2011/10/27 14:00	2011/10/26 10:45	2011/10/26 10:10		
COC Number		1911010101	1911010101	1911010201	1911010201		
	Units	**FC**	**R1**	**R4**	**R6**	**RDL**	**QC Batch**
ANIONS							
Nitrite (N)	mg/L	<0.005 (1)	<0.005	<0.005 (1)	<0.005 (1)	0.005	5315052
Calculated Parameters							
Filter and HNO3 Preservation	N/A	FIELD	FIELD	FIELD	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.02	0.13	0.15	0.17	0.02	5310082
Misc. Inorganics							
Dissolved Organic Carbon (C)	mg/L	1.7	1.9	2.0	1.6	0.5	5317236
Alkalinity (Total as CaCO3)	mg/L	17	97	120	140	0.5	5318314
Total Organic Carbon (C)	mg/L	2.1	2.0	2.1	1.6	0.5	5317285
Alkalinity (PP as CaCO3)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	5318314
Bicarbonate (HCO3)	mg/L	21	120	150	170	0.5	5318314
Carbonate (CO3)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	5318314
Hydroxide (OH)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	5318314
Anions							
Dissolved Sulphate (SO4)	mg/L	1.7	19	53	23	0.5	5317619
Dissolved Chloride (Cl)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	5317595
Nutrients							
Ammonia (N)	mg/L	0.099	0.034	0.021	0.026	0.005	5318469
Nitrate plus Nitrite (N)	mg/L	<0.02 (1)	0.13	0.15 (1)	0.17 (1)	0.02	5315051
Total Phosphorus (P)	mg/L	0.004	0.005	0.004	0.004	0.002	5317095
Physical Properties							
Conductivity	uS/cm	40	230	344	312	1	5318386
pH	pH Units	7.46	7.93	8.10	8.14		5318387
Physical Properties							
Total Suspended Solids	mg/L	<1	<1	<1	<1	1	5317596
Total Dissolved Solids	mg/L	40	140	210	180	10	5319122
Turbidity	NTU	0.7	0.9	0.8	0.8	0.1	5314050

RDL = Reportable Detection Limit
(1) Sample analysed past recommended hold time

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		BZ0030		BZ0031	BZ0032	BZ0033		
Sampling Date		2011/10/26 14:20		2011/10/25 13:45	2011/10/25 12:10	2011/10/26 16:35		
COC Number		1911010201		1911010201	1911010201	1911010201		
	Units	**W10**	**QC Batch**	**X14**	**NWID**	**USFR**	**RDL**	**QC Batch**
ANIONS								
Nitrite (N)	mg/L	<0.005 (1)	5315052	<0.005 (1)	<0.005 (1)	<0.005 (1)	0.005	5315052
Calculated Parameters								
Filter and HNO3 Preservation	N/A	FIELD	ONSITE	FIELD	FIELD	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	<0.02	5310082	0.11	0.04	0.03	0.02	5310082
Misc. Inorganics								
Dissolved Organic Carbon (C)	mg/L	2.7	5317236	1.9	2.0	2.1	0.5	5317236
Alkalinity (Total as CaCO3)	mg/L	58	5318314	120	130	27	0.5	5318314
Total Organic Carbon (C)	mg/L	2.7	5317285	2.3	2.1	1.9	0.5	5317285
Alkalinity (PP as CaCO3)	mg/L	<0.5	5318314	<0.5	<0.5	<0.5	0.5	5318314
Bicarbonate (HCO3)	mg/L	71	5318314	150	150	32	0.5	5318314
Carbonate (CO3)	mg/L	<0.5	5318314	<0.5	<0.5	<0.5	0.5	5318314
Hydroxide (OH)	mg/L	<0.5	5318314	<0.5	<0.5	<0.5	0.5	5318314
Anions								
Dissolved Sulphate (SO4)	mg/L	3.8	5324753	67	30	6.2	0.5	5317619
Dissolved Chloride (Cl)	mg/L	<0.5	5317595	<0.5	<0.5	<0.5	0.5	5317595
Nutrients								
Ammonia (N)	mg/L	0.030	5318469	0.094	0.010	0.047	0.005	5318469
Nitrate plus Nitrite (N)	mg/L	<0.02 (1)	5315051	0.11 (1)	0.04 (1)	0.03 (1)	0.02	5315051
Total Phosphorus (P)	mg/L	0.003	5317095	0.005	<0.002	0.005	0.002	5317095
Physical Properties								
Conductivity	uS/cm	118	5318386	380	303	69	1	5318386
pH	pH Units	7.76	5318387	7.98	8.15	7.21		5318387
Physical Properties								
Total Suspended Solids	mg/L	<1	5317596	<1	<1	<1	1	5317596
Total Dissolved Solids	mg/L	84	5319122	230	180	50	10	5319122
Turbidity	NTU	0.4	5314050	1.8 (2)	0.4 (2)	0.6	0.1	5314050

RDL = Reportable Detection Limit
(1) Sample analysed past recommended hold time
(2) Sample was analyzed after holding time expired.

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		BZ0034	BZ0035	BZ0036	BZ0037		
Sampling Date		2011/10/27 12:00	2011/10/27 12:45	2011/10/26 12:00	2011/10/26 09:30		
COC Number		1911010201	1911010201	1911010201	1911010301		
	Units	**GCULV**	**K8**	**A1**	**P1**	**RDL**	**QC Batch**
ANIONS							
Nitrite (N)	mg/L	<0.005	<0.005	<0.005 (1)	<0.005 (1)	0.005	5315052
Calculated Parameters							
Filter and HNO3 Preservation	N/A	FIELD	FIELD	FIELD	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	0.05	0.07	0.14	<0.02	0.02	5310082
Misc. Inorganics							
Dissolved Organic Carbon (C)	mg/L	1.9	1.5	2.4	3.1	0.5	5317236
Alkalinity (Total as CaCO3)	mg/L	27	50	120	120	0.5	5318314
Total Organic Carbon (C)	mg/L	2.0	1.4	2.2	3.2	0.5	5317285
Alkalinity (PP as CaCO3)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	5318314
Bicarbonate (HCO3)	mg/L	32	61	150	150	0.5	5318314
Carbonate (CO3)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	5318314
Hydroxide (OH)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	5318314
Anions							
Dissolved Sulphate (SO4)	mg/L	6.4	12	32	60	0.5	5317619
Dissolved Chloride (Cl)	mg/L	<0.5	<0.5	<0.5	<0.5	0.5	5317595
Nutrients							
Ammonia (N)	mg/L	0.027	0.010	0.045	0.028	0.005	5318469
Nitrate plus Nitrite (N)	mg/L	0.05	0.07	0.14 (1)	<0.02 (1)	0.02	5315051
Total Phosphorus (P)	mg/L	0.004	0.004	0.007	0.009	0.002	5317095
Physical Properties							
Conductivity	uS/cm	71	127	303	359	1	5318386
pH	pH Units	7.40	7.76	8.13	8.06		5318387
Physical Properties							
Total Suspended Solids	mg/L	<1	<1	4	3	1	5317596
Total Dissolved Solids	mg/L	44	82	180	220	10	5319122
Turbidity	NTU	0.4	0.3	0.9	2.0	0.1	5314050

RDL = Reportable Detection Limit
(1) Sample analysed past recommended hold time

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

RESULTS OF CHEMICAL ANALYSES OF WATER

Maxxam ID		BZ0038	BZ0039		BZ0041	BZ0042		
Sampling Date		2011/10/26 12:20	2011/10/27 12:20					
COC Number		1911010301	1911010301		1911010301	1911010301		
	Units	**P4**	**FIELD BLANK**	**QC Batch**	**BD1**	**BD-2**	**RDL**	**QC Batch**
ANIONS								
Nitrite (N)	mg/L	<0.005 (1)	<0.005	5315052	<0.005 (1)	<0.005 (1)	0.005	5324692
Calculated Parameters								
Filter and HNO3 Preservation	N/A	FIELD	FIELD	ONSITE	FIELD	FIELD	N/A	ONSITE
Nitrate (N)	mg/L	0.04	<0.02	5310082	0.19	<0.02	0.02	5318841
Misc. Inorganics								
Dissolved Organic Carbon (C)	mg/L	2.7	<0.5	5317236	2.0	2.2	0.5	5324885
Alkalinity (Total as CaCO3)	mg/L	130	1.1	5318314	65	16	0.5	5326856
Total Organic Carbon (C)	mg/L	2.9	<0.5	5317285	2.3	1.7	0.5	5324972
Alkalinity (PP as CaCO3)	mg/L	<0.5	<0.5	5318314	<0.5	<0.5	0.5	5326856
Bicarbonate (HCO3)	mg/L	150	1.4	5318314	79	19	0.5	5326856
Carbonate (CO3)	mg/L	<0.5	<0.5	5318314	<0.5	<0.5	0.5	5326856
Hydroxide (OH)	mg/L	<0.5	<0.5	5318314	<0.5	<0.5	0.5	5326856
Anions								
Dissolved Sulphate (SO4)	mg/L	51	<0.5	5317619	30	1.5	0.5	5328503
Dissolved Chloride (Cl)	mg/L	<0.5	<0.5	5317595	<0.5	<0.5	0.5	5328445
Nutrients								
Ammonia (N)	mg/L	0.013	0.005	5318469	0.034	0.017	0.005	5325548
Nitrate plus Nitrite (N)	mg/L	0.04 (1)	<0.02	5315051	0.19 (1)	<0.02 (1)	0.02	5324685
Total Phosphorus (P)	mg/L	0.007	<0.002	5317095	0.005	0.005	0.002	5322779
Physical Properties								
Conductivity	uS/cm	352	1	5318386	203	40	1	5326879
pH	pH Units	8.05	6.19	5318387	7.77	7.31		5326880
Physical Properties								
Total Suspended Solids	mg/L	2	<1	5317596	2	<1	1	5321037
Total Dissolved Solids	mg/L	200	<10	5319122	120	30	10	5324305
Turbidity	NTU	1.5	<0.1	5314050	0.3 (2)	0.5 (2)	0.1	5320961

RDL = Reportable Detection Limit
(1) Sample analysed past recommended hold time
(2) Sample was analyzed after holding time expired.

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		BZ0018	BZ0019	BZ0020	BZ0021		
Sampling Date		2011/10/25 09:00	2011/10/25 16:30	2011/10/25 15:30	2011/10/25 17:10		
COC Number		1911010101	1911010101	1911010101	1911010101		
	Units	**V8**	**V17A**	**V20A**	**VR**	**RDL**	**QC Batch**
Misc. Inorganics							
Dissolved Hardness (CaCO3)	mg/L	327	110	268	35.3	0.5	5312802
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	3.6	14.0	1.9	13.9	0.2	5325925
Dissolved Antimony (Sb)	ug/L	0.13	0.04	0.04	0.03	0.02	5325925
Dissolved Arsenic (As)	ug/L	0.50	0.74	0.45	0.18	0.02	5325925
Dissolved Barium (Ba)	ug/L	60.7	24.6	85.1	27.2	0.02	5325925
Dissolved Beryllium (Be)	ug/L	<0.01	<0.01	<0.01	0.01	0.01	5325925
Dissolved Bismuth (Bi)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5325925
Dissolved Boron (B)	ug/L	<50	<50	<50	<50	50	5325925
Dissolved Cadmium (Cd)	ug/L	0.039	0.014	<0.005	0.011	0.005	5325925
Dissolved Chromium (Cr)	ug/L	0.1	<0.1	<0.1	<0.1	0.1	5325925
Dissolved Cobalt (Co)	ug/L	0.070	0.085	0.010	0.012	0.005	5325925
Dissolved Copper (Cu)	ug/L	0.73	0.44	0.31	0.44	0.05	5325925
Dissolved Iron (Fe)	ug/L	19	128	7	8	1	5325925
Dissolved Lead (Pb)	ug/L	0.049	0.075	0.029	0.012	0.005	5325925
Dissolved Lithium (Li)	ug/L	4.8	1.0	3.7	<0.5	0.5	5325925
Dissolved Manganese (Mn)	ug/L	8.27	38.3	0.80	0.26	0.05	5325925
Dissolved Molybdenum (Mo)	ug/L	1.02	0.14	0.22	0.12	0.05	5325925
Dissolved Nickel (Ni)	ug/L	1.42	0.43 (1)	0.71 (1)	0.17	0.02	5325925
Dissolved Selenium (Se)	ug/L	1.13	0.09	0.56	0.04	0.04	5325925
Dissolved Silicon (Si)	ug/L	5460	5820	5920	5280	100	5325925
Dissolved Silver (Ag)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5325925
Dissolved Strontium (Sr)	ug/L	294	117	323	52.7	0.05	5325925
Dissolved Thallium (Tl)	ug/L	0.006	0.002	<0.002	<0.002	0.002	5325925
Dissolved Tin (Sn)	ug/L	0.02	<0.01	<0.01	<0.01	0.01	5325925
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5325925
Dissolved Uranium (U)	ug/L	5.69	1.59	1.17	0.371	0.002	5325925
Dissolved Vanadium (V)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5325925
Dissolved Zinc (Zn)	ug/L	12.6 (1)	27.2	2.2 (1)	0.9	0.1	5325925
Dissolved Zirconium (Zr)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5325925
Dissolved Calcium (Ca)	mg/L	78.0	30.9	71.9	10.7	0.05	5312302
Dissolved Magnesium (Mg)	mg/L	32.0	8.00	21.6	2.08	0.05	5312302

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		BZ0018	BZ0019	BZ0020	BZ0021		
Sampling Date		2011/10/25 09:00	2011/10/25 16:30	2011/10/25 15:30	2011/10/25 17:10		
COC Number		1911010101	1911010101	1911010101	1911010101		
	Units	**V8**	**V17A**	**V20A**	**VR**	**RDL**	**QC Batch**
Dissolved Potassium (K)	mg/L	1.11	0.35	0.49	0.35	0.05	5312302
Dissolved Sodium (Na)	mg/L	4.20	1.92	3.09	1.76	0.05	5312302
Dissolved Sulphur (S)	mg/L	46	17	<10	<10	10	5312302

RDL = Reportable Detection Limit

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		BZ0022	BZ0023	BZ0024	BZ0025		
Sampling Date		2011/10/25 10:15	2011/10/27 15:35	2011/10/27 09:35	2011/10/27 10:45		
COC Number		1911010101	1911010101	1911010101	1911010101		
	Units	**VG MAIN**	**VW1**	**VW2**	**VW3**	**RDL**	**QC Batch**
Misc. Inorganics							
Dissolved Hardness (CaCO3)	mg/L	297	214	414	102	0.5	5312802
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	3.0	4.4	2.6	12.0	0.2	5325925
Dissolved Antimony (Sb)	ug/L	0.12	0.06	0.24	0.04	0.02	5325925
Dissolved Arsenic (As)	ug/L	0.41	0.59	0.40	0.50	0.02	5325925
Dissolved Barium (Ba)	ug/L	52.9	61.8	107	31.8	0.02	5325925
Dissolved Beryllium (Be)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5325925
Dissolved Bismuth (Bi)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5325925
Dissolved Boron (B)	ug/L	<50	<50	<50	<50	50	5325925
Dissolved Cadmium (Cd)	ug/L	0.054	0.014	0.103	0.031	0.005	5325925
Dissolved Chromium (Cr)	ug/L	<0.1	<0.1	1.2 (1)	<0.1	0.1	5325925
Dissolved Cobalt (Co)	ug/L	0.054	0.064	0.015	0.029	0.005	5325925
Dissolved Copper (Cu)	ug/L	0.66	0.49	0.54	0.53	0.05	5325925
Dissolved Iron (Fe)	ug/L	15	64	3	42	1	5325925
Dissolved Lead (Pb)	ug/L	0.012	0.020	0.055	0.048	0.005	5325925
Dissolved Lithium (Li)	ug/L	4.0	3.3	3.5	0.9	0.5	5325925
Dissolved Manganese (Mn)	ug/L	3.95	36.8	0.32 (1)	7.86	0.05	5325925
Dissolved Molybdenum (Mo)	ug/L	0.70	0.47	2.95	0.16	0.05	5325925
Dissolved Nickel (Ni)	ug/L	1.27	0.50	1.11	0.31	0.02	5325925
Dissolved Selenium (Se)	ug/L	0.53	0.47	3.80	0.09	0.04	5325925
Dissolved Silicon (Si)	ug/L	5450	5410	4880	5640	100	5325925
Dissolved Silver (Ag)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5325925
Dissolved Strontium (Sr)	ug/L	255	237	338	120	0.05	5325925
Dissolved Thallium (Tl)	ug/L	0.008	<0.002	0.002	0.003	0.002	5325925
Dissolved Tin (Sn)	ug/L	<0.01	<0.01	0.01	0.01	0.01	5325925
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5325925
Dissolved Uranium (U)	ug/L	6.08	3.00	7.22	2.01	0.002	5325925
Dissolved Vanadium (V)	ug/L	<0.2	<0.2	0.9	<0.2	0.2	5325925
Dissolved Zinc (Zn)	ug/L	17.1	3.1	5.6	16.6	0.1	5325925
Dissolved Zirconium (Zr)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5325925
Dissolved Calcium (Ca)	mg/L	73.0	55.8	103	29.4	0.05	5312302
Dissolved Magnesium (Mg)	mg/L	27.7	18.1	38.5	7.03	0.05	5312302

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		BZ0022	BZ0023	BZ0024	BZ0025		
Sampling Date		2011/10/25 10:15	2011/10/27 15:35	2011/10/27 09:35	2011/10/27 10:45		
COC Number		1911010101	1911010101	1911010101	1911010101		
	Units	**VG MAIN**	**VW1**	**VW2**	**VW3**	**RDL**	**QC Batch**
Dissolved Potassium (K)	mg/L	0.93	0.78	1.05	0.38	0.05	5312302
Dissolved Sodium (Na)	mg/L	3.66	3.71	2.82	1.86	0.05	5312302
Dissolved Sulphur (S)	mg/L	50	18	36	13	10	5312302

RDL = Reportable Detection Limit

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		BZ0026	BZ0027	BZ0028	BZ0029		
Sampling Date		2011/10/26 15:35	2011/10/27 14:00	2011/10/26 10:45	2011/10/26 10:10		
COC Number		1911010101	1911010101	1911010201	1911010201		
	Units	**FC**	**R1**	**R4**	**R6**	**RDL**	**QC Batch**
Misc. Inorganics							
Dissolved Hardness (CaCO3)	mg/L	16.0	118	183	174	0.5	5312802
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	19.9	5.0	3.1	4.1	0.2	5325925
Dissolved Antimony (Sb)	ug/L	<0.02	0.06	0.10	0.12	0.02	5325925
Dissolved Arsenic (As)	ug/L	0.08	0.42	0.27	0.42	0.02	5325925
Dissolved Barium (Ba)	ug/L	17.2	54.5	61.7	76.2	0.02	5325925
Dissolved Beryllium (Be)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5325925
Dissolved Bismuth (Bi)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5325925
Dissolved Boron (B)	ug/L	<50	<50	<50	<50	50	5325925
Dissolved Cadmium (Cd)	ug/L	0.009	0.011	0.020	0.099 (1)	0.005	5325925
Dissolved Chromium (Cr)	ug/L	0.1	<0.1	0.1	<0.1	0.1	5325925
Dissolved Cobalt (Co)	ug/L	0.020	0.121	0.145	0.047	0.005	5325925
Dissolved Copper (Cu)	ug/L	0.38	0.35	0.66	0.63 (1)	0.05	5325925
Dissolved Iron (Fe)	ug/L	14	126	64	65	1	5325925
Dissolved Lead (Pb)	ug/L	0.327	0.459	0.148	0.483 (1)	0.005	5325925
Dissolved Lithium (Li)	ug/L	1.9	3.7	3.3	2.2	0.5	5325925
Dissolved Manganese (Mn)	ug/L	0.50	55.7	255	18.6	0.05	5325925
Dissolved Molybdenum (Mo)	ug/L	0.06	0.48	0.63	1.17	0.05	5325925
Dissolved Nickel (Ni)	ug/L	0.28	0.49	1.01	0.39	0.02	5325925
Dissolved Selenium (Se)	ug/L	<0.04	0.30	0.55	0.92	0.04	5325925
Dissolved Silicon (Si)	ug/L	7770	5720	5470	5450	100	5325925
Dissolved Silver (Ag)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5325925
Dissolved Strontium (Sr)	ug/L	27.4	148	181	132	0.05	5325925
Dissolved Thallium (Tl)	ug/L	<0.002	0.002	0.007	<0.002	0.002	5325925
Dissolved Tin (Sn)	ug/L	<0.01	<0.01	<0.01	0.03	0.01	5325925
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5325925
Dissolved Uranium (U)	ug/L	0.100	1.66	1.76	2.07	0.002	5325925
Dissolved Vanadium (V)	ug/L	0.2	<0.2	<0.2	<0.2	0.2	5325925
Dissolved Zinc (Zn)	ug/L	1.5	7.1	8.8	4.2 (1)	0.1	5325925
Dissolved Zirconium (Zr)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5325925
Dissolved Calcium (Ca)	mg/L	4.75	35.0	54.4	50.0	0.05	5312302
Dissolved Magnesium (Mg)	mg/L	1.00	7.38	11.5	11.9	0.05	5312302

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		BZ0026	BZ0027	BZ0028	BZ0029		
Sampling Date		2011/10/26 15:35	2011/10/27 14:00	2011/10/26 10:45	2011/10/26 10:10		
COC Number		1911010101	1911010101	1911010201	1911010201		
	Units	**FC**	**R1**	**R4**	**R6**	**RDL**	**QC Batch**
Dissolved Potassium (K)	mg/L	0.14	0.84	1.19	1.22	0.05	5312302
Dissolved Sodium (Na)	mg/L	2.01	2.63	3.26	2.11	0.05	5312302
Dissolved Sulphur (S)	mg/L	<10	<10	22	<10	10	5312302

RDL = Reportable Detection Limit

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		BZ0030	BZ0031	BZ0032	BZ0033		
Sampling Date		2011/10/26 14:20	2011/10/25 13:45	2011/10/25 12:10	2011/10/26 16:35		
COC Number		1911010201	1911010201	1911010201	1911010201		
	Units	**W10**	**X14**	**NWID**	**USFR**	**RDL**	**QC Batch**
Misc. Inorganics							
Dissolved Hardness (CaCO3)	mg/L	61.8	197	163	31.5	0.5	5312802
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	7.4	3.0	4.6	9.2	0.2	5325925
Dissolved Antimony (Sb)	ug/L	0.03	0.08	0.05	0.03	0.02	5325925
Dissolved Arsenic (As)	ug/L	0.11	0.35	0.21	0.22	0.02	5325925
Dissolved Barium (Ba)	ug/L	17.9	57.7	48.2	27.9	0.02	5325925
Dissolved Beryllium (Be)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5325925
Dissolved Bismuth (Bi)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5325925
Dissolved Boron (B)	ug/L	<50	<50	<50	<50	50	5325925
Dissolved Cadmium (Cd)	ug/L	0.017	0.027	0.053	<0.005	0.005	5325925
Dissolved Chromium (Cr)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5325925
Dissolved Cobalt (Co)	ug/L	0.016	0.647	0.013	0.011	0.005	5325925
Dissolved Copper (Cu)	ug/L	0.73	0.37	0.77	0.40 (1)	0.05	5325925
Dissolved Iron (Fe)	ug/L	5	195	3	53	1	5325925
Dissolved Lead (Pb)	ug/L	0.018	0.222	0.090	0.175 (1)	0.005	5325925
Dissolved Lithium (Li)	ug/L	1.0	4.1	5.5	1.0	0.5	5325925
Dissolved Manganese (Mn)	ug/L	0.08	862	0.22	1.08	0.05	5325925
Dissolved Molybdenum (Mo)	ug/L	0.20	0.55	0.30	0.28	0.05	5325925
Dissolved Nickel (Ni)	ug/L	0.32	1.88	0.39	0.26	0.02	5325925
Dissolved Selenium (Se)	ug/L	0.04	0.31	0.22	0.06	0.04	5325925
Dissolved Silicon (Si)	ug/L	7380	5690	7410 (1)	4860	100	5325925
Dissolved Silver (Ag)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5325925
Dissolved Strontium (Sr)	ug/L	62.9	201	192	54.4	0.05	5325925
Dissolved Thallium (Tl)	ug/L	<0.002	0.005	0.002	<0.002	0.002	5325925
Dissolved Tin (Sn)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5325925
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5325925
Dissolved Uranium (U)	ug/L	0.152	2.01	0.989	0.422	0.002	5325925
Dissolved Vanadium (V)	ug/L	<0.2	<0.2	0.2	<0.2	0.2	5325925
Dissolved Zinc (Zn)	ug/L	1.1	24.4	13.8 (1)	3.2 (1)	0.1	5325925
Dissolved Zirconium (Zr)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5325925
Dissolved Calcium (Ca)	mg/L	20.6	58.0	53.8	9.87	0.05	5312302
Dissolved Magnesium (Mg)	mg/L	2.53	12.8	7.01	1.66	0.05	5312302

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		BZ0030	BZ0031	BZ0032	BZ0033		
Sampling Date		2011/10/26 14:20	2011/10/25 13:45	2011/10/25 12:10	2011/10/26 16:35		
COC Number		1911010201	1911010201	1911010201	1911010201		
	Units	**W10**	**X14**	**NWID**	**USFR**	**RDL**	**QC Batch**
Dissolved Potassium (K)	mg/L	0.45	1.17	1.54	0.34	0.05	5312302
Dissolved Sodium (Na)	mg/L	1.92	3.92	3.12	1.96	0.05	5312302
Dissolved Sulphur (S)	mg/L	<10	27	12	<10	10	5312302

RDL = Reportable Detection Limit

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		BZ0034	BZ0035	BZ0036	BZ0037		
Sampling Date		2011/10/27 12:00	2011/10/27 12:45	2011/10/26 12:00	2011/10/26 09:30		
COC Number		1911010201	1911010201	1911010201	1911010301		
	Units	**GCULV**	**K8**	**A1**	**P1**	**RDL**	**QC Batch**
Misc. Inorganics							
Dissolved Hardness (CaCO3)	mg/L	33.6	61.7	164	194	0.5	5312802
Dissolved Metals by ICPMS							
Dissolved Aluminum (Al)	ug/L	8.5	4.7	3.6	12.9	0.2	5325925
Dissolved Antimony (Sb)	ug/L	0.04	0.02	0.11	0.17	0.02	5325925
Dissolved Arsenic (As)	ug/L	0.20	0.20	0.48	0.40	0.02	5325925
Dissolved Barium (Ba)	ug/L	28.5	27.6	63.4	70.8	0.02	5325925
Dissolved Beryllium (Be)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5325925
Dissolved Bismuth (Bi)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5325925
Dissolved Boron (B)	ug/L	<50	<50	<50	<50	50	5325925
Dissolved Cadmium (Cd)	ug/L	<0.005	0.006	0.028 (1)	0.158	0.005	5325925
Dissolved Chromium (Cr)	ug/L	<0.1	<0.1	0.1	<0.1	0.1	5325925
Dissolved Cobalt (Co)	ug/L	0.011	0.015	0.040	0.033	0.005	5325925
Dissolved Copper (Cu)	ug/L	0.31	0.32	0.61	0.75	0.05	5325925
Dissolved Iron (Fe)	ug/L	45	4	33	46	1	5325925
Dissolved Lead (Pb)	ug/L	0.029	0.024	0.083	0.022	0.005	5325925
Dissolved Lithium (Li)	ug/L	1.0	1.9	2.8	3.3	0.5	5325925
Dissolved Manganese (Mn)	ug/L	0.67	0.15	36.3	11.7	0.05	5325925
Dissolved Molybdenum (Mo)	ug/L	0.29	0.11	0.94	1.16	0.05	5325925
Dissolved Nickel (Ni)	ug/L	0.73 (1)	0.21	0.61	4.75	0.02	5325925
Dissolved Selenium (Se)	ug/L	0.06	0.09	0.69	1.17	0.04	5325925
Dissolved Silicon (Si)	ug/L	4980	5570	5430	3610	100	5325925
Dissolved Silver (Ag)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5325925
Dissolved Strontium (Sr)	ug/L	57.5	118	144	204	0.05	5325925
Dissolved Thallium (Tl)	ug/L	<0.002	<0.002	0.004	0.003	0.002	5325925
Dissolved Tin (Sn)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5325925
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5325925
Dissolved Uranium (U)	ug/L	0.512	2.14	1.87	1.84	0.002	5325925
Dissolved Vanadium (V)	ug/L	<0.2	<0.2	<0.2	0.2	0.2	5325925
Dissolved Zinc (Zn)	ug/L	1.3 (1)	2.5 (1)	2.4	12.7	0.1	5325925
Dissolved Zirconium (Zr)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5325925
Dissolved Calcium (Ca)	mg/L	10.6	20.3	48.7	50.2	0.05	5312302
Dissolved Magnesium (Mg)	mg/L	1.73	2.69	10.2	16.6	0.05	5312302

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		BZ0034	BZ0035	BZ0036	BZ0037		
Sampling Date		2011/10/27 12:00	2011/10/27 12:45	2011/10/26 12:00	2011/10/26 09:30		
COC Number		1911010201	1911010201	1911010201	1911010301		
	Units	**GCULV**	**K8**	**A1**	**P1**	**RDL**	**QC Batch**
Dissolved Potassium (K)	mg/L	0.33	0.49	1.33	0.72	0.05	5312302
Dissolved Sodium (Na)	mg/L	1.94	2.17	2.75	2.09	0.05	5312302
Dissolved Sulphur (S)	mg/L	<10	<10	13	24	10	5312302

RDL = Reportable Detection Limit

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		BZ0038	BZ0039		BZ0041	BZ0042		
Sampling Date		2011/10/26 12:20	2011/10/27 12:20					
COC Number		1911010301	1911010301		1911010301	1911010301		
	Units	**P4**	**FIELD BLANK**	**QC Batch**	**BD1**	**BD-2**	**RDL**	**QC Batch**
Misc. Inorganics								
Dissolved Hardness (CaCO3)	mg/L	177	<0.5	5312802	96.8	15.1	0.5	5318838
Dissolved Metals by ICPMS								
Dissolved Aluminum (Al)	ug/L	23.7	1.7 (1)	5326210	13.4	21.0	0.2	5326210
Dissolved Antimony (Sb)	ug/L	0.16	<0.02	5326210	0.04	0.02	0.02	5326210
Dissolved Arsenic (As)	ug/L	0.44	<0.02	5326210	0.44	0.07	0.02	5326210
Dissolved Barium (Ba)	ug/L	71.8	<0.02	5326210	32.2	17.5	0.02	5326210
Dissolved Beryllium (Be)	ug/L	<0.01	<0.01	5326210	<0.01	<0.01	0.01	5326210
Dissolved Bismuth (Bi)	ug/L	<0.005	<0.005	5326210	<0.005	<0.005	0.005	5326210
Dissolved Boron (B)	ug/L	<50	<50	5326210	<50	<50	50	5326210
Dissolved Cadmium (Cd)	ug/L	0.118	<0.005	5326210	0.029	0.015	0.005	5326210
Dissolved Chromium (Cr)	ug/L	<0.1	<0.1	5326210	<0.1	0.1	0.1	5326210
Dissolved Cobalt (Co)	ug/L	0.039	<0.005	5326210	0.032	0.018	0.005	5326210
Dissolved Copper (Cu)	ug/L	0.78	<0.05	5326210	0.52	0.61 (1)	0.05	5326210
Dissolved Iron (Fe)	ug/L	37	<1	5326210	42	14	1	5326210
Dissolved Lead (Pb)	ug/L	0.141 (1)	<0.005	5326210	0.086	0.335	0.005	5326210
Dissolved Lithium (Li)	ug/L	3.2	<0.5	5326210	0.9	1.9	0.5	5326210
Dissolved Manganese (Mn)	ug/L	18.0	<0.05	5326210	8.01	0.54	0.05	5326210
Dissolved Molybdenum (Mo)	ug/L	1.17	<0.05	5326210	0.13	0.07	0.05	5326210
Dissolved Nickel (Ni)	ug/L	3.62	<0.02	5326210	0.35 (1)	0.26	0.02	5326210
Dissolved Selenium (Se)	ug/L	0.97	<0.04	5326210	0.10	<0.04	0.04	5326210
Dissolved Silicon (Si)	ug/L	3440	<100	5326210	5150	6910	100	5326210
Dissolved Silver (Ag)	ug/L	<0.005	<0.005	5326210	<0.005	<0.005	0.005	5326210
Dissolved Strontium (Sr)	ug/L	196	<0.05	5326210	123	27.7	0.05	5326210
Dissolved Thallium (Tl)	ug/L	0.004	<0.002	5326210	0.004	<0.002	0.002	5326210
Dissolved Tin (Sn)	ug/L	<0.01	<0.01	5326210	<0.01	<0.01	0.01	5326210
Dissolved Titanium (Ti)	ug/L	<0.5	<0.5	5326210	<0.5	<0.5	0.5	5326210
Dissolved Uranium (U)	ug/L	2.05	<0.002	5326210	2.16	0.113	0.002	5326210
Dissolved Vanadium (V)	ug/L	<0.2	<0.2	5326210	<0.2	<0.2	0.2	5326210
Dissolved Zinc (Zn)	ug/L	7.5	0.1	5326210	17.4	3.0 (1)	0.1	5326210
Dissolved Zirconium (Zr)	ug/L	<0.1	<0.1	5326210	<0.1	<0.1	0.1	5326210
Dissolved Calcium (Ca)	mg/L	46.7	<0.05	5312302	27.7	4.46	0.05	5318839
Dissolved Magnesium (Mg)	mg/L	14.7	<0.05	5312302	6.73	0.95	0.05	5318839

RDL = Reportable Detection Limit
(1) Dissolved greater than total. Reanalysis yields similar results

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL DISSOLVED METALS IN WATER (WATER)

Maxxam ID		BZ0038	BZ0039		BZ0041	BZ0042		
Sampling Date		2011/10/26 12:20	2011/10/27 12:20					
COC Number		1911010301	1911010301		1911010301	1911010301		
	Units	**P4**	**FIELD BLANK**	**QC Batch**	**BD1**	**BD-2**	**RDL**	**QC Batch**
Dissolved Potassium (K)	mg/L	0.89	<0.05	5312302	0.40	0.18	0.05	5318839
Dissolved Sodium (Na)	mg/L	2.28	<0.05	5312302	1.80	1.96	0.05	5318839
Dissolved Sulphur (S)	mg/L	22	<10	5312302	12	<10	10	5318839

RDL = Reportable Detection Limit

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		BZ0018	BZ0019	BZ0020	BZ0021		
Sampling Date		2011/10/25 09:00	2011/10/25 16:30	2011/10/25 15:30	2011/10/25 17:10		
COC Number		1911010101	1911010101	1911010101	1911010101		
	Units	**V8**	**V17A**	**V20A**	**VR**	**RDL**	**QC Batch**
Calculated Parameters							
Total Hardness (CaCO3)	mg/L	331	109	269	35.9	0.5	5312756
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	25.8	23.9	4.1	30.3	0.2	5324901
Total Antimony (Sb)	ug/L	0.14	0.04	0.05	0.03	0.02	5324901
Total Arsenic (As)	ug/L	0.51	0.92	0.46	0.20	0.02	5324901
Total Barium (Ba)	ug/L	63.4	25.6	87.3	28.8	0.02	5324901
Total Beryllium (Be)	ug/L	<0.01	0.01	<0.01	0.01	0.01	5324901
Total Bismuth (Bi)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5324901
Total Boron (B)	ug/L	<50	<50	<50	<50	50	5324901
Total Cadmium (Cd)	ug/L	0.046	0.018	<0.005	0.010	0.005	5324901
Total Chromium (Cr)	ug/L	0.1	<0.1	<0.1	<0.1	0.1	5324901
Total Cobalt (Co)	ug/L	0.078	0.091	0.009	0.032	0.005	5324901
Total Copper (Cu)	ug/L	0.78	0.49	0.28	0.57	0.05	5324901
Total Iron (Fe)	ug/L	67	179	9	31	1	5324901
Total Lead (Pb)	ug/L	0.100	0.250	0.063	0.132	0.005	5324901
Total Lithium (Li)	ug/L	4.8	0.9	3.8	<0.5	0.5	5324901
Total Manganese (Mn)	ug/L	9.60	38.3	1.10	1.73	0.05	5324901
Total Molybdenum (Mo)	ug/L	0.99	0.12	0.21	0.12	0.05	5324901
Total Nickel (Ni)	ug/L	1.39	0.34	0.20	0.24	0.02	5324901
Total Selenium (Se)	ug/L	1.12	0.09	0.56	0.04	0.04	5324901
Total Silicon (Si)	ug/L	5730	5850	5970	5570	100	5324901
Total Silver (Ag)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5324901
Total Strontium (Sr)	ug/L	291	118	317	52.2	0.05	5324901
Total Thallium (Tl)	ug/L	0.007	0.003	<0.002	0.002	0.002	5324901
Total Tin (Sn)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5324901
Total Titanium (Ti)	ug/L	0.8	<0.5	<0.5	0.7	0.5	5324901
Total Uranium (U)	ug/L	5.57	1.55	1.09	0.394	0.002	5324901
Total Vanadium (V)	ug/L	0.2	<0.2	<0.2	<0.2	0.2	5324901
Total Zinc (Zn)	ug/L	9.5	27.0	0.8	1.2	0.1	5324901
Total Zirconium (Zr)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5324901
Total Calcium (Ca)	mg/L	80.1	30.6	71.8	11.0	0.05	5313033
Total Magnesium (Mg)	mg/L	31.9	7.99	21.8	2.07	0.05	5313033

RDL = Reportable Detection Limit

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		BZ0018	BZ0019	BZ0020	BZ0021		
Sampling Date		2011/10/25 09:00	2011/10/25 16:30	2011/10/25 15:30	2011/10/25 17:10		
COC Number		1911010101	1911010101	1911010101	1911010101		
	Units	**V8**	**V17A**	**V20A**	**VR**	**RDL**	**QC Batch**
Total Potassium (K)	mg/L	1.14	0.36	0.48	0.36	0.05	5313033
Total Sodium (Na)	mg/L	4.13	1.93	3.11	1.73	0.05	5313033
Total Sulphur (S)	mg/L	48	18	<10	<10	10	5313033

RDL = Reportable Detection Limit

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		BZ0022	BZ0023	BZ0024	BZ0025	BZ0026		
Sampling Date		2011/10/25 10:15	2011/10/27 15:35	2011/10/27 09:35	2011/10/27 10:45	2011/10/26 15:35		
COC Number		1911010101	1911010101	1911010101	1911010101	1911010101		
	Units	**VG MAIN**	**VW1**	**VW2**	**VW3**	**FC**	**RDL**	**QC Batch**
Calculated Parameters								
Total Hardness (CaCO3)	mg/L	299	210	420	101	16.1	0.5	5313619
Total Metals by ICPMS								
Total Aluminum (Al)	ug/L	4.4	67.1	3.8	19.8	46.2	0.2	5324901
Total Antimony (Sb)	ug/L	0.11	0.06	0.24	0.04	<0.02	0.02	5324901
Total Arsenic (As)	ug/L	0.43	0.76	0.43	0.57	0.09	0.02	5324901
Total Barium (Ba)	ug/L	52.5	66.0	109	33.3	18.5	0.02	5324901
Total Beryllium (Be)	ug/L	<0.01	<0.01	<0.01	0.01	<0.01	0.01	5324901
Total Bismuth (Bi)	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	5324901
Total Boron (B)	ug/L	<50	<50	<50	<50	<50	50	5324901
Total Cadmium (Cd)	ug/L	0.054	0.020	0.105	0.028	0.008	0.005	5324901
Total Chromium (Cr)	ug/L	0.1	0.2	0.5	<0.1	0.1	0.1	5324901
Total Cobalt (Co)	ug/L	0.058	0.144	0.011	0.045	0.025	0.005	5324901
Total Copper (Cu)	ug/L	0.72	0.73	0.54	0.47	0.43	0.05	5324901
Total Iron (Fe)	ug/L	27	222	5	70	39	1	5324901
Total Lead (Pb)	ug/L	0.055	0.335	0.050	0.296	0.563	0.005	5324901
Total Lithium (Li)	ug/L	3.9	3.2	3.3	0.8	1.8	0.5	5324901
Total Manganese (Mn)	ug/L	4.28	46.8	0.25	9.28	0.96	0.05	5324901
Total Molybdenum (Mo)	ug/L	0.69	0.44	2.86	0.17	0.07	0.05	5324901
Total Nickel (Ni)	ug/L	1.28	0.73	1.11	0.33	0.27	0.02	5324901
Total Selenium (Se)	ug/L	0.55	0.46	3.85	0.08	<0.04	0.04	5324901
Total Silicon (Si)	ug/L	5530	5390	4940	5470	7910	100	5324901
Total Silver (Ag)	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	5324901
Total Strontium (Sr)	ug/L	253	237	336	122	27.9	0.05	5324901
Total Thallium (Tl)	ug/L	0.009	0.003	<0.002	0.003	<0.002	0.002	5324901
Total Tin (Sn)	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	5324901
Total Titanium (Ti)	ug/L	<0.5	2.3	<0.5	<0.5	0.9	0.5	5324901
Total Uranium (U)	ug/L	5.81	2.95	6.99	2.06	0.112	0.002	5324901
Total Vanadium (V)	ug/L	<0.2	0.3	0.9	<0.2	0.2	0.2	5324901
Total Zinc (Zn)	ug/L	17.0	4.8	5.0	18.8	1.3	0.1	5324901
Total Zirconium (Zr)	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	5324901
Total Calcium (Ca)	mg/L	73.5	54.2	103	28.5	4.78	0.05	5313033
Total Magnesium (Mg)	mg/L	28.1	18.2	39.3	7.24	1.02	0.05	5313033

RDL = Reportable Detection Limit

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		BZ0022	BZ0023	BZ0024	BZ0025	BZ0026		
Sampling Date		2011/10/25 10:15	2011/10/27 15:35	2011/10/27 09:35	2011/10/27 10:45	2011/10/26 15:35		
COC Number		1911010101	1911010101	1911010101	1911010101	1911010101		
	Units	**VG MAIN**	**VW1**	**VW2**	**VW3**	**FC**	**RDL**	**QC Batch**
Total Potassium (K)	mg/L	0.96	0.82	1.09	0.40	0.15	0.05	5313033
Total Sodium (Na)	mg/L	3.70	3.77	2.86	1.93	2.05	0.05	5313033
Total Sulphur (S)	mg/L	49	18	38	13	<10	10	5313033

RDL = Reportable Detection Limit

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		BZ0027	BZ0028	BZ0029	BZ0030	BZ0031		
Sampling Date		2011/10/27 14:00	2011/10/26 10:45	2011/10/26 10:10	2011/10/26 14:20	2011/10/25 13:45		
COC Number		1911010101	1911010201	1911010201	1911010201	1911010201		
	Units	**R1**	**R4**	**R6**	**W10**	**X14**	**RDL**	**QC Batch**
Calculated Parameters								
Total Hardness (CaCO3)	mg/L	117	180	171	59.1	196	0.5	5313619
Total Metals by ICPMS								
Total Aluminum (Al)	ug/L	12.8	5.7	7.0	14.7	9.1	0.2	5324901
Total Antimony (Sb)	ug/L	0.06	0.09	0.11	0.03	0.07	0.02	5324901
Total Arsenic (As)	ug/L	0.53	0.33	0.43	0.13	0.47	0.02	5324901
Total Barium (Ba)	ug/L	56.9	63.0	78.4	18.4	60.8	0.02	5324901
Total Beryllium (Be)	ug/L	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	5324901
Total Bismuth (Bi)	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	5324901
Total Boron (B)	ug/L	<50	<50	<50	<50	<50	50	5324901
Total Cadmium (Cd)	ug/L	0.012	0.024	0.034	0.019	0.028	0.005	5324901
Total Chromium (Cr)	ug/L	<0.1	0.1	<0.1	<0.1	<0.1	0.1	5324901
Total Cobalt (Co)	ug/L	0.131	0.169	0.043	0.014	0.669	0.005	5324901
Total Copper (Cu)	ug/L	0.42	0.57	0.46	0.79	0.42	0.05	5324901
Total Iron (Fe)	ug/L	210	179	119	13	446	1	5324901
Total Lead (Pb)	ug/L	1.23	0.431	0.052	0.068	0.650	0.005	5324901
Total Lithium (Li)	ug/L	3.6	3.3	2.1	0.9	4.2	0.5	5324901
Total Manganese (Mn)	ug/L	57.4	264	18.7	0.29	864	0.05	5324901
Total Molybdenum (Mo)	ug/L	0.47	0.58	1.12	0.21	0.57	0.05	5324901
Total Nickel (Ni)	ug/L	0.53	1.03	0.34	0.29	1.84	0.02	5324901
Total Selenium (Se)	ug/L	0.32	0.56	0.90	0.04	0.37	0.04	5324901
Total Silicon (Si)	ug/L	5780	5380	5200	7050	5700	100	5324901
Total Silver (Ag)	ug/L	<0.005	<0.005	<0.005	<0.005	<0.005	0.005	5324901
Total Strontium (Sr)	ug/L	149	179	133	62.5	202	0.05	5324901
Total Thallium (Tl)	ug/L	0.003	0.007	<0.002	<0.002	0.004	0.002	5324901
Total Tin (Sn)	ug/L	<0.01	<0.01	0.01	<0.01	0.05	0.01	5324901
Total Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	<0.5	0.5	5324901
Total Uranium (U)	ug/L	1.70	1.73	2.11	0.153	2.10	0.002	5324901
Total Vanadium (V)	ug/L	<0.2	<0.2	<0.2	<0.2	<0.2	0.2	5324901
Total Zinc (Zn)	ug/L	8.1	10.8	1.0	1.1	26.0	0.1	5324901
Total Zirconium (Zr)	ug/L	<0.1	<0.1	<0.1	<0.1	<0.1	0.1	5324901
Total Calcium (Ca)	mg/L	35.0	53.2	48.2	19.4	57.5	0.05	5313033
Total Magnesium (Mg)	mg/L	7.29	11.6	12.2	2.60	12.7	0.05	5313033

RDL = Reportable Detection Limit

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		BZ0027	BZ0028	BZ0029	BZ0030	BZ0031		
Sampling Date		2011/10/27 14:00	2011/10/26 10:45	2011/10/26 10:10	2011/10/26 14:20	2011/10/25 13:45		
COC Number		1911010101	1911010201	1911010201	1911010201	1911010201		
	Units	**R1**	**R4**	**R6**	**W10**	**X14**	**RDL**	**QC Batch**
Total Potassium (K)	mg/L	0.84	1.23	1.23	0.47	1.20	0.05	5313033
Total Sodium (Na)	mg/L	2.57	3.29	2.12	1.97	3.90	0.05	5313033
Total Sulphur (S)	mg/L	<10	22	<10	<10	26	10	5313033

RDL = Reportable Detection Limit

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		BZ0032	BZ0033	BZ0034	BZ0035		
Sampling Date		2011/10/25 12:10	2011/10/26 16:35	2011/10/27 12:00	2011/10/27 12:45		
COC Number		1911010201	1911010201	1911010201	1911010201		
	Units	**NWID**	**USFR**	**GCULV**	**K8**	**RDL**	**QC Batch**
Calculated Parameters							
Total Hardness (CaCO3)	mg/L	141	30.7	32.4	60.6	0.5	5313619
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	4.5	16.4	14.6	6.9	0.2	5324901
Total Antimony (Sb)	ug/L	0.04	0.03	0.03	0.02	0.02	5324901
Total Arsenic (As)	ug/L	0.19	0.23	0.22	0.18	0.02	5324901
Total Barium (Ba)	ug/L	47.4	29.3	29.4	28.5	0.02	5324901
Total Beryllium (Be)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5324901
Total Bismuth (Bi)	ug/L	<0.005	<0.005	0.005	<0.005	0.005	5324901
Total Boron (B)	ug/L	<50	<50	<50	<50	50	5324901
Total Cadmium (Cd)	ug/L	0.048	<0.005	<0.005	<0.005	0.005	5324901
Total Chromium (Cr)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5324901
Total Cobalt (Co)	ug/L	0.014	0.021	0.027	0.015	0.005	5324901
Total Copper (Cu)	ug/L	0.73	0.28	0.32	0.35	0.05	5324901
Total Iron (Fe)	ug/L	4	94	75	7	1	5324901
Total Lead (Pb)	ug/L	0.085	0.035	0.033	0.054	0.005	5324901
Total Lithium (Li)	ug/L	5.4	0.9	1.0	1.8	0.5	5324901
Total Manganese (Mn)	ug/L	0.12	7.19	5.29	0.31	0.05	5324901
Total Molybdenum (Mo)	ug/L	0.24	0.25	0.29	0.12	0.05	5324901
Total Nickel (Ni)	ug/L	0.43	0.17	0.17	0.20	0.02	5324901
Total Selenium (Se)	ug/L	0.25	0.05	0.05	0.09	0.04	5324901
Total Silicon (Si)	ug/L	5990	4730	4760	5380	100	5324901
Total Silver (Ag)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5324901
Total Strontium (Sr)	ug/L	189	54.5	56.8	117	0.05	5324901
Total Thallium (Tl)	ug/L	0.004	<0.002	<0.002	<0.002	0.002	5324901
Total Tin (Sn)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5324901
Total Titanium (Ti)	ug/L	<0.5	<0.5	<0.5	<0.5	0.5	5324901
Total Uranium (U)	ug/L	1.03	0.469	0.533	2.10	0.002	5324901
Total Vanadium (V)	ug/L	<0.2	<0.2	<0.2	<0.2	0.2	5324901
Total Zinc (Zn)	ug/L	10.3	0.4	0.5	0.8	0.1	5324901
Total Zirconium (Zr)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5324901
Total Calcium (Ca)	mg/L	46.0	9.60	10.2	19.8	0.05	5313033
Total Magnesium (Mg)	mg/L	6.33	1.64	1.70	2.71	0.05	5313033

RDL = Reportable Detection Limit

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		BZ0032	BZ0033	BZ0034	BZ0035		
Sampling Date		2011/10/25 12:10	2011/10/26 16:35	2011/10/27 12:00	2011/10/27 12:45		
COC Number		1911010201	1911010201	1911010201	1911010201		
	Units	**NWID**	**USFR**	**GCULV**	**K8**	**RDL**	**QC Batch**
Total Potassium (K)	mg/L	1.50	0.33	0.33	0.50	0.05	5313033
Total Sodium (Na)	mg/L	2.74	1.87	1.86	2.15	0.05	5313033
Total Sulphur (S)	mg/L	11	<10	<10	<10	10	5313033

RDL = Reportable Detection Limit

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		BZ0036	BZ0037	BZ0038	BZ0039		
Sampling Date		2011/10/26 12:00	2011/10/26 09:30	2011/10/26 12:20	2011/10/27 12:20		
COC Number		1911010201	1911010301	1911010301	1911010301		
	Units	**A1**	**P1**	**P4**	**FIELD BLANK**	**RDL**	**QC Batch**
Calculated Parameters							
Total Hardness (CaCO3)	mg/L	156	181	183	<0.5	0.5	5313619
Total Metals by ICPMS							
Total Aluminum (Al)	ug/L	43.8	48.0	39.5	0.7	0.2	5325400
Total Antimony (Sb)	ug/L	0.14	0.17	0.16	<0.02	0.02	5325400
Total Arsenic (As)	ug/L	0.62	0.52	0.52	<0.02	0.02	5325400
Total Barium (Ba)	ug/L	64.3	71.8	70.7	<0.02	0.02	5325400
Total Beryllium (Be)	ug/L	<0.01	<0.01	<0.01	<0.01	0.01	5325400
Total Bismuth (Bi)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5325400
Total Boron (B)	ug/L	<50	<50	<50	<50	50	5325400
Total Cadmium (Cd)	ug/L	0.019	0.190	0.118	<0.005	0.005	5325400
Total Chromium (Cr)	ug/L	0.2	<0.1	<0.1	<0.1	0.1	5325400
Total Cobalt (Co)	ug/L	0.097	0.068	0.064	<0.005	0.005	5325400
Total Copper (Cu)	ug/L	0.70	0.90	0.79	<0.05	0.05	5325400
Total Iron (Fe)	ug/L	141	133	110	<1	1	5325400
Total Lead (Pb)	ug/L	0.199	0.100	0.074	0.008	0.005	5325400
Total Lithium (Li)	ug/L	3.0	3.4	3.4	<0.5	0.5	5325400
Total Manganese (Mn)	ug/L	50.9	17.3	22.6	<0.05	0.05	5325400
Total Molybdenum (Mo)	ug/L	0.88	1.14	1.19	<0.05	0.05	5325400
Total Nickel (Ni)	ug/L	0.77	5.00	3.77	<0.02	0.02	5325400
Total Selenium (Se)	ug/L	0.69	1.18	1.08	<0.04	0.04	5325400
Total Silicon (Si)	ug/L	5220	3380	3830	<100	100	5325400
Total Silver (Ag)	ug/L	<0.005	<0.005	<0.005	<0.005	0.005	5325400
Total Strontium (Sr)	ug/L	140	197	192	<0.05	0.05	5325400
Total Thallium (Tl)	ug/L	0.004	0.003	0.003	<0.002	0.002	5325400
Total Tin (Sn)	ug/L	<0.01	0.01	<0.01	<0.01	0.01	5325400
Total Titanium (Ti)	ug/L	2.2	1.0	1.5	<0.5	0.5	5325400
Total Uranium (U)	ug/L	1.94	1.88	1.87	<0.002	0.002	5325400
Total Vanadium (V)	ug/L	0.3	0.3	0.3	<0.2	0.2	5325400
Total Zinc (Zn)	ug/L	3.2	17.3	10.3	0.3	0.1	5325400
Total Zirconium (Zr)	ug/L	<0.1	<0.1	<0.1	<0.1	0.1	5325400
Total Calcium (Ca)	mg/L	45.7	46.2	48.5	<0.05	0.05	5313033
Total Magnesium (Mg)	mg/L	10.2	16.0	15.1	<0.05	0.05	5313033

RDL = Reportable Detection Limit

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		BZ0036	BZ0037	BZ0038	BZ0039		
Sampling Date		2011/10/26 12:00	2011/10/26 09:30	2011/10/26 12:20	2011/10/27 12:20		
COC Number		1911010201	1911010301	1911010301	1911010301		
	Units	**A1**	**P1**	**P4**	**FIELD BLANK**	**RDL**	**QC Batch**
Total Potassium (K)	mg/L	1.38	0.74	0.89	<0.05	0.05	5313033
Total Sodium (Na)	mg/L	2.67	2.01	2.32	<0.05	0.05	5313033
Total Sulphur (S)	mg/L	13	24	22	<10	10	5313033

RDL = Reportable Detection Limit

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		BZ0041	BZ0042		
Sampling Date					
COC Number		1911010301	1911010301		
	Units	**BD1**	**BD-2**	**RDL**	**QC Batch**
Calculated Parameters					
Total Hardness (CaCO3)	mg/L	97.0	15.5	0.5	5318837
Total Metals by ICPMS					
Total Aluminum (Al)	ug/L	20.6	39.7	0.2	5325400
Total Antimony (Sb)	ug/L	0.04	0.02	0.02	5325400
Total Arsenic (As)	ug/L	0.53	0.11	0.02	5325400
Total Barium (Ba)	ug/L	31.7	17.3	0.02	5325400
Total Beryllium (Be)	ug/L	0.01	0.01	0.01	5325400
Total Bismuth (Bi)	ug/L	<0.005	<0.005	0.005	5325400
Total Boron (B)	ug/L	<50	<50	50	5325400
Total Cadmium (Cd)	ug/L	0.029	0.010	0.005	5325400
Total Chromium (Cr)	ug/L	<0.1	0.1	0.1	5325400
Total Cobalt (Co)	ug/L	0.037	0.025	0.005	5325400
Total Copper (Cu)	ug/L	0.47	0.45	0.05	5325400
Total Iron (Fe)	ug/L	71	35	1	5325400
Total Lead (Pb)	ug/L	0.320	0.514	0.005	5325400
Total Lithium (Li)	ug/L	0.9	1.9	0.5	5325400
Total Manganese (Mn)	ug/L	9.54	1.11	0.05	5325400
Total Molybdenum (Mo)	ug/L	0.14	0.06	0.05	5325400
Total Nickel (Ni)	ug/L	0.27	0.25	0.02	5325400
Total Selenium (Se)	ug/L	0.10	<0.04	0.04	5325400
Total Silicon (Si)	ug/L	5440	7610	100	5325400
Total Silver (Ag)	ug/L	<0.005	<0.005	0.005	5325400
Total Strontium (Sr)	ug/L	120	27.3	0.05	5325400
Total Thallium (Tl)	ug/L	0.003	<0.002	0.002	5325400
Total Tin (Sn)	ug/L	<0.01	<0.01	0.01	5325400
Total Titanium (Ti)	ug/L	<0.5	<0.5	0.5	5325400
Total Uranium (U)	ug/L	2.04	0.109	0.002	5325400
Total Vanadium (V)	ug/L	<0.2	<0.2	0.2	5325400
Total Zinc (Zn)	ug/L	18.7	1.9	0.1	5325400
Total Zirconium (Zr)	ug/L	<0.1	<0.1	0.1	5325400
Total Calcium (Ca)	mg/L	27.5	4.63	0.05	5318840
Total Magnesium (Mg)	mg/L	6.88	0.95	0.05	5318840
Total Potassium (K)	mg/L	0.40	0.15	0.05	5318840

RDL = Reportable Detection Limit

LABERGE ENVIRONMENTAL SERVICES

Maxxam Job #: B1A4623
Report Date: 2011/11/04

LOW LEVEL TOTAL METALS IN WATER (WATER)

Maxxam ID		BZ0041	BZ0042		
Sampling Date					
COC Number		1911010301	1911010301		
	Units	**BD1**	**BD-2**	**RDL**	**QC Batch**
Total Sodium (Na)	mg/L	1.83	1.93	0.05	5318840
Total Sulphur (S)	mg/L	13	<10	10	5318840
RDL = Reportable Detection Limit					

General Comments

Results relate only to the items tested.

LABERGE ENVIRONMENTAL SERVICES
Attention: Bonnie Burns
Client Project #:
P.O. #:
Site Location:

Quality Assurance Report

Maxxam Job Number: VB1A4623

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
5314050	TW2	Spiked Blank	Turbidity	2011/10/29		102	%	80 - 120
		Method Blank	Turbidity	2011/10/29	<0.1		NTU	
		RPD [BZ0039-02]	Turbidity	2011/10/29	NC		%	20
5315051	CB9	Matrix Spike	Nitrate plus Nitrite (N)	2011/10/30		104	%	80 - 120
		Spiked Blank	Nitrate plus Nitrite (N)	2011/10/30		104	%	80 - 120
		Method Blank	Nitrate plus Nitrite (N)	2011/10/30	<0.02		mg/L	
		RPD [BZ0027-02]	Nitrate plus Nitrite (N)	2011/10/30	1.6		%	25
		RPD [BZ0030-02]	Nitrate plus Nitrite (N)	2011/10/30	NC		%	25
		RPD [BZ0034-02]	Nitrate plus Nitrite (N)	2011/10/30	NC		%	25
		RPD [BZ0035-02]	Nitrate plus Nitrite (N)	2011/10/30	NC		%	25
5315052	CB9	Matrix Spike	Nitrite (N)	2011/10/30		107	%	80 - 120
		Spiked Blank	Nitrite (N)	2011/10/30		99	%	80 - 120
		Method Blank	Nitrite (N)	2011/10/30	<0.005		mg/L	
		RPD [BZ0027-02]	Nitrite (N)	2011/10/30	NC		%	20
		RPD [BZ0030-02]	Nitrite (N)	2011/10/30	NC		%	20
		RPD [BZ0034-02]	Nitrite (N)	2011/10/30	NC		%	20
		RPD [BZ0035-02]	Nitrite (N)	2011/10/30	NC		%	20
5317095	CK	Matrix Spike						
		[BZ0030-05]	Total Phosphorus (P)	2011/10/31		94	%	80 - 120
		Spiked Blank	Total Phosphorus (P)	2011/10/31		94	%	80 - 120
		Method Blank	Total Phosphorus (P)	2011/10/31	<0.002		mg/L	
		RPD [BZ0030-05]	Total Phosphorus (P)	2011/10/31	NC		%	20
5317236	IC4	Matrix Spike	Dissolved Organic Carbon (C)	2011/10/31		NC	%	80 - 120
		Spiked Blank	Dissolved Organic Carbon (C)	2011/10/31		102	%	80 - 120
		Method Blank	Dissolved Organic Carbon (C)	2011/10/31	<0.5		mg/L	
		RPD [BZ0029-06]	Dissolved Organic Carbon (C)	2011/10/31	NC		%	20
		RPD [BZ0030-06]	Dissolved Organic Carbon (C)	2011/10/31	3.4		%	20
		RPD [BZ0035-06]	Dissolved Organic Carbon (C)	2011/10/31	NC		%	20
5317285	IC4	Matrix Spike						
		[BZ0020-05]	Total Organic Carbon (C)	2011/10/31		103	%	80 - 120
		Spiked Blank	Total Organic Carbon (C)	2011/10/31		103	%	80 - 120
		Method Blank	Total Organic Carbon (C)	2011/10/31	<0.5		mg/L	
		RPD [BZ0030-05]	Total Organic Carbon (C)	2011/10/31	1.9		%	20
		RPD [BZ0034-05]	Total Organic Carbon (C)	2011/10/31	NC		%	20
5317595	BB3	Matrix Spike	Dissolved Chloride (Cl)	2011/10/31		100	%	80 - 120
		Spiked Blank	Dissolved Chloride (Cl)	2011/10/31		104	%	80 - 120
		Method Blank	Dissolved Chloride (Cl)	2011/10/31	<0.5		mg/L	
		RPD [BZ0018-02]	Dissolved Chloride (Cl)	2011/10/31	NC		%	20
		RPD [BZ0030-02]	Dissolved Chloride (Cl)	2011/10/31	NC		%	20
		RPD [BZ0038-02]	Dissolved Chloride (Cl)	2011/10/31	NC		%	20
5317596	TM8	Spiked Blank	Total Suspended Solids	2011/10/31		100	%	80 - 120
		Method Blank	Total Suspended Solids	2011/10/31	<1		mg/L	
5317619	BB3	Matrix Spike	Dissolved Sulphate (SO4)	2011/10/31		NC	%	80 - 120
		Spiked Blank	Dissolved Sulphate (SO4)	2011/10/31		100	%	80 - 120
		Method Blank	Dissolved Sulphate (SO4)	2011/10/31	<0.5		mg/L	
		RPD [BZ0018-02]	Dissolved Sulphate (SO4)	2011/10/31	0.8		%	20
		RPD [BZ0038-02]	Dissolved Sulphate (SO4)	2011/10/31	6.1		%	20
5318314	AL8	Matrix Spike						
		[BZ0034-02]	Alkalinity (Total as CaCO3)	2011/10/31		NC	%	80 - 120
		Spiked Blank	Alkalinity (Total as CaCO3)	2011/10/31		97	%	80 - 120
		Method Blank	Alkalinity (Total as CaCO3)	2011/10/31	<0.5		mg/L	
			Alkalinity (PP as CaCO3)	2011/10/31	<0.5		mg/L	
			Bicarbonate (HCO3)	2011/10/31	<0.5		mg/L	
			Carbonate (CO3)	2011/10/31	<0.5		mg/L	
			Hydroxide (OH)	2011/10/31	<0.5		mg/L	

LABERGE ENVIRONMENTAL SERVICES
Attention: Bonnie Burns
Client Project #:
P.O. #:
Site Location:

Quality Assurance Report (Continued)

Maxxam Job Number: VB1A4623

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
5318314	AL8	RPD [BZ0031-02]	Alkalinity (Total as CaCO3)	2011/10/31	0.8		%	20
			Alkalinity (PP as CaCO3)	2011/10/31	NC		%	20
			Bicarbonate (HCO3)	2011/10/31	0.7		%	20
			Carbonate (CO3)	2011/10/31	NC		%	20
			Hydroxide (OH)	2011/10/31	NC		%	20
		RPD [BZ0034-02]	Alkalinity (Total as CaCO3)	2011/10/31	6.8		%	20
			Alkalinity (PP as CaCO3)	2011/10/31	NC		%	20
			Bicarbonate (HCO3)	2011/10/31	6.8		%	20
			Carbonate (CO3)	2011/10/31	NC		%	20
			Hydroxide (OH)	2011/10/31	NC		%	20
5318386	AL8	Spiked Blank	Conductivity	2011/10/31		100	%	80 - 120
		Method Blank	Conductivity	2011/10/31	<1		uS/cm	
		RPD [BZ0031-02]	Conductivity	2011/10/31	0.3		%	20
		RPD [BZ0034-02]	Conductivity	2011/10/31	0.8		%	20
5318469	SF1	Matrix Spike	Ammonia (N)	2011/10/31		97	%	80 - 120
		Spiked Blank	Ammonia (N)	2011/10/31		97	%	80 - 120
		Method Blank	Ammonia (N)	2011/10/31	0.006, RDL=0.005		mg/L	
		RPD [BZ0034-05]	Ammonia (N)	2011/10/31	4.7		%	20
5319122	DB8	Matrix Spike	Total Dissolved Solids	2011/11/01		NC	%	80 - 120
		Spiked Blank	Total Dissolved Solids	2011/11/01		104	%	80 - 120
		Method Blank	Total Dissolved Solids	2011/11/01	<10		mg/L	
		RPD	Total Dissolved Solids	2011/11/01	13.9		%	20
5320961	CR5	Spiked Blank	Turbidity	2011/11/01		103	%	80 - 120
		Method Blank	Turbidity	2011/11/01	<0.1		NTU	
		RPD	Turbidity	2011/11/01	5.2		%	20
5321037	TM8	Spiked Blank	Total Suspended Solids	2011/11/02		97	%	80 - 120
		Method Blank	Total Suspended Solids	2011/11/02	<1		mg/L	
5322779	CK	Matrix Spike	Total Phosphorus (P)	2011/11/02		104	%	80 - 120
		Spiked Blank	Total Phosphorus (P)	2011/11/02		101	%	80 - 120
		Method Blank	Total Phosphorus (P)	2011/11/02	<0.002		mg/L	
		RPD	Total Phosphorus (P)	2011/11/02	NC		%	20
5324305	DB	Matrix Spike	Total Dissolved Solids	2011/11/02		NC	%	80 - 120
		Spiked Blank	Total Dissolved Solids	2011/11/02		98	%	80 - 120
		Method Blank	Total Dissolved Solids	2011/11/02	<10		mg/L	
		RPD	Total Dissolved Solids	2011/11/02	7.1		%	20
5324685	AD5	Matrix Spike	Nitrate plus Nitrite (N)	2011/11/02		NC	%	80 - 120
		Spiked Blank	Nitrate plus Nitrite (N)	2011/11/02		106	%	80 - 120
		Method Blank	Nitrate plus Nitrite (N)	2011/11/02	<0.02		mg/L	
		RPD	Nitrate plus Nitrite (N)	2011/11/02	0.2		%	25
5324692	AD5	Matrix Spike	Nitrite (N)	2011/11/02		97	%	80 - 120
		Spiked Blank	Nitrite (N)	2011/11/02		101	%	80 - 120
		Method Blank	Nitrite (N)	2011/11/02	<0.005		mg/L	
		RPD	Nitrite (N)	2011/11/02	NC		%	20
5324753	BB3	Matrix Spike	Dissolved Sulphate (SO4)	2011/11/01		NC	%	80 - 120
		Spiked Blank	Dissolved Sulphate (SO4)	2011/11/01		100	%	80 - 120
		Method Blank	Dissolved Sulphate (SO4)	2011/11/01	<0.5		mg/L	
		RPD [BZ0030-02]	Dissolved Sulphate (SO4)	2011/11/01	0.08		%	20
5324885	IC4	Matrix Spike	Dissolved Organic Carbon (C)	2011/11/02		98	%	80 - 120
		Spiked Blank	Dissolved Organic Carbon (C)	2011/11/02		105	%	80 - 120
		Method Blank	Dissolved Organic Carbon (C)	2011/11/02	<0.5		mg/L	
		RPD	Dissolved Organic Carbon (C)	2011/11/02	1.7		%	20
5324901	AA1	Matrix Spike [BZ0018-03]	Total Antimony (Sb)	2011/11/03		110	%	80 - 120
			Total Arsenic (As)	2011/11/03		101	%	80 - 120
			Total Barium (Ba)	2011/11/03		NC	%	80 - 120

LABERGE ENVIRONMENTAL SERVICES
Attention: Bonnie Burns
Client Project #:
P.O. #:
Site Location:

Quality Assurance Report (Continued)

Maxxam Job Number: VB1A4623

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
5324901	AA1	Matrix Spike						
		[BZ0018-03]	Total Beryllium (Be)	2011/11/03		94	%	80 - 120
			Total Bismuth (Bi)	2011/11/03		70 (1)	%	80 - 120
			Total Cadmium (Cd)	2011/11/03		101	%	80 - 120
			Total Chromium (Cr)	2011/11/03		95	%	80 - 120
			Total Cobalt (Co)	2011/11/03		95	%	80 - 120
			Total Copper (Cu)	2011/11/03		90	%	80 - 120
			Total Iron (Fe)	2011/11/03		NC	%	80 - 120
			Total Lead (Pb)	2011/11/03		97	%	80 - 120
			Total Lithium (Li)	2011/11/03		91	%	80 - 120
			Total Manganese (Mn)	2011/11/03		NC	%	80 - 120
			Total Molybdenum (Mo)	2011/11/03		NC	%	80 - 120
			Total Nickel (Ni)	2011/11/03		91	%	80 - 120
			Total Selenium (Se)	2011/11/03		110	%	80 - 120
			Total Silver (Ag)	2011/11/03		105	%	80 - 120
			Total Strontium (Sr)	2011/11/03		NC	%	80 - 120
			Total Thallium (Tl)	2011/11/03		99	%	80 - 120
			Total Tin (Sn)	2011/11/03		102	%	80 - 120
			Total Titanium (Ti)	2011/11/03		103	%	80 - 120
			Total Uranium (U)	2011/11/03		NC	%	80 - 120
			Total Vanadium (V)	2011/11/03		99	%	80 - 120
			Total Zinc (Zn)	2011/11/03		NC	%	80 - 120
		Spiked Blank	Total Antimony (Sb)	2011/11/03		107	%	80 - 120
			Total Arsenic (As)	2011/11/03		96	%	80 - 120
			Total Barium (Ba)	2011/11/03		104	%	80 - 120
			Total Beryllium (Be)	2011/11/03		91	%	80 - 120
			Total Bismuth (Bi)	2011/11/03		92	%	80 - 120
			Total Cadmium (Cd)	2011/11/03		99	%	80 - 120
			Total Chromium (Cr)	2011/11/03		94	%	80 - 120
			Total Cobalt (Co)	2011/11/03		96	%	80 - 120
			Total Copper (Cu)	2011/11/03		94	%	80 - 120
			Total Iron (Fe)	2011/11/03		105	%	80 - 120
			Total Lead (Pb)	2011/11/03		102	%	80 - 120
			Total Lithium (Li)	2011/11/03		96	%	80 - 120
			Total Manganese (Mn)	2011/11/03		96	%	80 - 120
			Total Molybdenum (Mo)	2011/11/03		100	%	80 - 120
			Total Nickel (Ni)	2011/11/03		96	%	80 - 120
			Total Selenium (Se)	2011/11/03		104	%	80 - 120
			Total Silver (Ag)	2011/11/03		109	%	80 - 120
			Total Strontium (Sr)	2011/11/03		103	%	80 - 120
			Total Thallium (Tl)	2011/11/03		99	%	80 - 120
			Total Tin (Sn)	2011/11/03		102	%	80 - 120
			Total Titanium (Ti)	2011/11/03		87	%	80 - 120
			Total Uranium (U)	2011/11/03		101	%	80 - 120
			Total Vanadium (V)	2011/11/03		93	%	80 - 120
			Total Zinc (Zn)	2011/11/03		102	%	80 - 120
		Method Blank	Total Aluminum (Al)	2011/11/03	<0.2		ug/L	
			Total Antimony (Sb)	2011/11/03	<0.02		ug/L	
			Total Arsenic (As)	2011/11/03	<0.02		ug/L	
			Total Barium (Ba)	2011/11/03	<0.02		ug/L	
			Total Beryllium (Be)	2011/11/03	<0.01		ug/L	
			Total Bismuth (Bi)	2011/11/03	<0.005		ug/L	
			Total Boron (B)	2011/11/03	<50		ug/L	
			Total Cadmium (Cd)	2011/11/03	<0.005		ug/L	
			Total Chromium (Cr)	2011/11/03	<0.1		ug/L	

LABERGE ENVIRONMENTAL SERVICES
Attention: Bonnie Burns
Client Project #:
P.O. #:
Site Location:

Quality Assurance Report (Continued)

Maxxam Job Number: VB1A4623

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
5324901	AA1	Method Blank	Total Cobalt (Co)	2011/11/03	<0.005		ug/L	
			Total Copper (Cu)	2011/11/03	<0.05		ug/L	
			Total Iron (Fe)	2011/11/03	<1		ug/L	
			Total Lead (Pb)	2011/11/03	<0.005		ug/L	
			Total Lithium (Li)	2011/11/03	<0.5		ug/L	
			Total Manganese (Mn)	2011/11/03	<0.05		ug/L	
			Total Molybdenum (Mo)	2011/11/03	<0.05		ug/L	
			Total Nickel (Ni)	2011/11/03	<0.02		ug/L	
			Total Selenium (Se)	2011/11/03	<0.04		ug/L	
			Total Silicon (Si)	2011/11/03	<100		ug/L	
			Total Silver (Ag)	2011/11/03	<0.005		ug/L	
			Total Strontium (Sr)	2011/11/03	<0.05		ug/L	
			Total Thallium (Tl)	2011/11/03	<0.002		ug/L	
			Total Tin (Sn)	2011/11/03	<0.01		ug/L	
			Total Titanium (Ti)	2011/11/03	<0.5		ug/L	
			Total Uranium (U)	2011/11/03	<0.002		ug/L	
			Total Vanadium (V)	2011/11/03	<0.2		ug/L	
			Total Zinc (Zn)	2011/11/03	<0.1		ug/L	
			Total Zirconium (Zr)	2011/11/03	<0.1		ug/L	
		RPD [BZ0018-03]	Total Aluminum (Al)	2011/11/04	9.5		%	20
			Total Antimony (Sb)	2011/11/04	11.9		%	20
			Total Arsenic (As)	2011/11/04	4.7		%	20
			Total Barium (Ba)	2011/11/04	1.8		%	20
			Total Beryllium (Be)	2011/11/04	NC		%	20
			Total Bismuth (Bi)	2011/11/04	NC		%	20
			Total Boron (B)	2011/11/04	NC		%	20
			Total Cadmium (Cd)	2011/11/04	1.5		%	20
			Total Chromium (Cr)	2011/11/04	NC		%	20
			Total Cobalt (Co)	2011/11/04	8.1		%	20
			Total Copper (Cu)	2011/11/04	1.2		%	20
			Total Iron (Fe)	2011/11/04	2.6		%	20
			Total Lead (Pb)	2011/11/04	3.0		%	20
			Total Lithium (Li)	2011/11/04	1.5		%	20
			Total Manganese (Mn)	2011/11/04	1.7		%	20
			Total Molybdenum (Mo)	2011/11/04	1.0		%	20
			Total Nickel (Ni)	2011/11/04	0.07		%	20
			Total Selenium (Se)	2011/11/04	0		%	20
			Total Silicon (Si)	2011/11/04	2.9		%	20
			Total Silver (Ag)	2011/11/04	NC		%	20
			Total Strontium (Sr)	2011/11/04	0.2		%	20
			Total Thallium (Tl)	2011/11/04	NC		%	20
			Total Tin (Sn)	2011/11/04	NC		%	20
			Total Titanium (Ti)	2011/11/04	NC		%	20
			Total Uranium (U)	2011/11/04	0.2		%	20
			Total Vanadium (V)	2011/11/04	NC		%	20
			Total Zinc (Zn)	2011/11/04	5.3		%	20
			Total Zirconium (Zr)	2011/11/04	NC		%	20
5324972	IC4	Matrix Spike	Total Organic Carbon (C)	2011/11/02		107	%	80 - 120
		Spiked Blank	Total Organic Carbon (C)	2011/11/02		105	%	80 - 120
		Method Blank	Total Organic Carbon (C)	2011/11/02	<0.5		mg/L	
		RPD [BZ0041-05]	Total Organic Carbon (C)	2011/11/02	NC		%	20
5325400	AA1	Matrix Spike [BZ0039-03]						
			Total Antimony (Sb)	2011/11/04		109	%	80 - 120
			Total Arsenic (As)	2011/11/04		103	%	80 - 120
			Total Barium (Ba)	2011/11/04		99	%	80 - 120

LABERGE ENVIRONMENTAL SERVICES
Attention: Bonnie Burns
Client Project #:
P.O. #:
Site Location:

Quality Assurance Report (Continued)

Maxxam Job Number: VB1A4623

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
5325400	AA1	Matrix Spike [BZ0039-03]	Total Beryllium (Be)	2011/11/04		108	%	80 - 120
			Total Bismuth (Bi)	2011/11/04		100	%	80 - 120
			Total Cadmium (Cd)	2011/11/04		103	%	80 - 120
			Total Chromium (Cr)	2011/11/04		95	%	80 - 120
			Total Cobalt (Co)	2011/11/04		96	%	80 - 120
			Total Copper (Cu)	2011/11/04		99	%	80 - 120
			Total Iron (Fe)	2011/11/04		103	%	80 - 120
			Total Lead (Pb)	2011/11/04		102	%	80 - 120
			Total Lithium (Li)	2011/11/04		99	%	80 - 120
			Total Manganese (Mn)	2011/11/04		100	%	80 - 120
			Total Molybdenum (Mo)	2011/11/04		100	%	80 - 120
			Total Nickel (Ni)	2011/11/04		98	%	80 - 120
			Total Selenium (Se)	2011/11/04		112	%	80 - 120
			Total Silver (Ag)	2011/11/04		109	%	80 - 120
			Total Strontium (Sr)	2011/11/04		100	%	80 - 120
			Total Thallium (Tl)	2011/11/04		97	%	80 - 120
			Total Tin (Sn)	2011/11/04		100	%	80 - 120
			Total Titanium (Ti)	2011/11/04		107	%	80 - 120
			Total Uranium (U)	2011/11/04		101	%	80 - 120
			Total Vanadium (V)	2011/11/04		95	%	80 - 120
			Total Zinc (Zn)	2011/11/04		107	%	80 - 120
		Spiked Blank	Total Antimony (Sb)	2011/11/04		107	%	80 - 120
			Total Arsenic (As)	2011/11/04		96	%	80 - 120
			Total Barium (Ba)	2011/11/04		100	%	80 - 120
			Total Beryllium (Be)	2011/11/04		100	%	80 - 120
			Total Bismuth (Bi)	2011/11/04		93	%	80 - 120
			Total Cadmium (Cd)	2011/11/04		99	%	80 - 120
			Total Chromium (Cr)	2011/11/04		96	%	80 - 120
			Total Cobalt (Co)	2011/11/04		95	%	80 - 120
			Total Copper (Cu)	2011/11/04		95	%	80 - 120
			Total Iron (Fe)	2011/11/04		102	%	80 - 120
			Total Lead (Pb)	2011/11/04		101	%	80 - 120
			Total Lithium (Li)	2011/11/04		97	%	80 - 120
			Total Manganese (Mn)	2011/11/04		103	%	80 - 120
			Total Molybdenum (Mo)	2011/11/04		99	%	80 - 120
			Total Nickel (Ni)	2011/11/04		96	%	80 - 120
			Total Selenium (Se)	2011/11/04		104	%	80 - 120
			Total Silver (Ag)	2011/11/04		105	%	80 - 120
			Total Strontium (Sr)	2011/11/04		101	%	80 - 120
			Total Thallium (Tl)	2011/11/04		96	%	80 - 120
			Total Tin (Sn)	2011/11/04		101	%	80 - 120
			Total Titanium (Ti)	2011/11/04		85	%	80 - 120
			Total Uranium (U)	2011/11/04		99	%	80 - 120
			Total Vanadium (V)	2011/11/04		91	%	80 - 120
			Total Zinc (Zn)	2011/11/04		107	%	80 - 120
		Method Blank	Total Aluminum (Al)	2011/11/04	<0.2		ug/L	
			Total Antimony (Sb)	2011/11/04	<0.02		ug/L	
			Total Arsenic (As)	2011/11/04	<0.02		ug/L	
			Total Barium (Ba)	2011/11/04	<0.02		ug/L	
			Total Beryllium (Be)	2011/11/04	<0.01		ug/L	
			Total Bismuth (Bi)	2011/11/04	<0.005		ug/L	
			Total Boron (B)	2011/11/04	<50		ug/L	
			Total Cadmium (Cd)	2011/11/04	<0.005		ug/L	
			Total Chromium (Cr)	2011/11/04	<0.1		ug/L	

LABERGE ENVIRONMENTAL SERVICES
Attention: Bonnie Burns
Client Project #:
P.O. #:
Site Location:

Quality Assurance Report (Continued)

Maxxam Job Number: VB1A4623

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
5325400	AA1	Method Blank	Total Cobalt (Co)	2011/11/04	0.005, RDL=0.005		ug/L	
			Total Copper (Cu)	2011/11/04	<0.05		ug/L	
			Total Iron (Fe)	2011/11/04	<1		ug/L	
			Total Lead (Pb)	2011/11/04	<0.005		ug/L	
			Total Lithium (Li)	2011/11/04	<0.5		ug/L	
			Total Manganese (Mn)	2011/11/04	<0.05		ug/L	
			Total Molybdenum (Mo)	2011/11/04	<0.05		ug/L	
			Total Nickel (Ni)	2011/11/04	<0.02		ug/L	
			Total Selenium (Se)	2011/11/04	<0.04		ug/L	
			Total Silicon (Si)	2011/11/04	<100		ug/L	
			Total Silver (Ag)	2011/11/04	<0.005		ug/L	
			Total Strontium (Sr)	2011/11/04	<0.05		ug/L	
			Total Thallium (Tl)	2011/11/04	<0.002		ug/L	
			Total Tin (Sn)	2011/11/04	<0.01		ug/L	
			Total Titanium (Ti)	2011/11/04	<0.5		ug/L	
			Total Uranium (U)	2011/11/04	<0.002		ug/L	
			Total Vanadium (V)	2011/11/04	<0.2		ug/L	
			Total Zinc (Zn)	2011/11/04	<0.1		ug/L	
			Total Zirconium (Zr)	2011/11/04	<0.1		ug/L	
		RPD [BZ0039-03]	Total Aluminum (Al)	2011/11/04	NC		%	20
			Total Antimony (Sb)	2011/11/04	NC		%	20
			Total Arsenic (As)	2011/11/04	NC		%	20
			Total Barium (Ba)	2011/11/04	NC		%	20
			Total Beryllium (Be)	2011/11/04	NC		%	20
			Total Bismuth (Bi)	2011/11/04	NC		%	20
			Total Boron (B)	2011/11/04	NC		%	20
			Total Cadmium (Cd)	2011/11/04	NC		%	20
			Total Chromium (Cr)	2011/11/04	NC		%	20
			Total Cobalt (Co)	2011/11/04	NC		%	20
			Total Copper (Cu)	2011/11/04	NC		%	20
			Total Iron (Fe)	2011/11/04	NC		%	20
			Total Lead (Pb)	2011/11/04	NC		%	20
			Total Lithium (Li)	2011/11/04	NC		%	20
			Total Manganese (Mn)	2011/11/04	NC		%	20
			Total Molybdenum (Mo)	2011/11/04	NC		%	20
			Total Nickel (Ni)	2011/11/04	NC		%	20
			Total Selenium (Se)	2011/11/04	NC		%	20
			Total Silicon (Si)	2011/11/04	NC		%	20
			Total Silver (Ag)	2011/11/04	NC		%	20
			Total Strontium (Sr)	2011/11/04	NC		%	20
			Total Thallium (Tl)	2011/11/04	NC		%	20
			Total Tin (Sn)	2011/11/04	NC		%	20
			Total Titanium (Ti)	2011/11/04	NC		%	20
			Total Uranium (U)	2011/11/04	NC		%	20
			Total Vanadium (V)	2011/11/04	NC		%	20
			Total Zinc (Zn)	2011/11/04	NC		%	20
			Total Zirconium (Zr)	2011/11/04	NC		%	20
5325548	SF1	Matrix Spike	Ammonia (N)	2011/11/02		108	%	80 - 120
		Spiked Blank	Ammonia (N)	2011/11/02		103	%	80 - 120
		Method Blank	Ammonia (N)	2011/11/02	<0.005		mg/L	
		RPD	Ammonia (N)	2011/11/02	2.9		%	20
5325925	AA1	Matrix Spike [BZ0037-04]	Dissolved Antimony (Sb)	2011/11/03		107	%	80 - 120
			Dissolved Arsenic (As)	2011/11/03		100	%	80 - 120
			Dissolved Barium (Ba)	2011/11/03		NC	%	80 - 120

LABERGE ENVIRONMENTAL SERVICES
Attention: Bonnie Burns
Client Project #:
P.O. #:
Site Location:

Quality Assurance Report (Continued)

Maxxam Job Number: VB1A4623

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
5325925	AA1	Matrix Spike						
		[BZ0037-04]	Dissolved Beryllium (Be)	2011/11/03		99	%	80 - 120
			Dissolved Bismuth (Bi)	2011/11/03		75 (1)	%	80 - 120
			Dissolved Cadmium (Cd)	2011/11/03		100	%	80 - 120
			Dissolved Chromium (Cr)	2011/11/03		94	%	80 - 120
			Dissolved Cobalt (Co)	2011/11/03		94	%	80 - 120
			Dissolved Copper (Cu)	2011/11/03		91	%	80 - 120
			Dissolved Iron (Fe)	2011/11/03		97	%	80 - 120
			Dissolved Lead (Pb)	2011/11/03		96	%	80 - 120
			Dissolved Lithium (Li)	2011/11/03		92	%	80 - 120
			Dissolved Manganese (Mn)	2011/11/03		NC	%	80 - 120
			Dissolved Molybdenum (Mo)	2011/11/03		NC	%	80 - 120
			Dissolved Nickel (Ni)	2011/11/03		93	%	80 - 120
			Dissolved Selenium (Se)	2011/11/03		106	%	80 - 120
			Dissolved Silver (Ag)	2011/11/03		103	%	80 - 120
			Dissolved Strontium (Sr)	2011/11/03		NC	%	80 - 120
			Dissolved Thallium (Tl)	2011/11/03		96	%	80 - 120
			Dissolved Tin (Sn)	2011/11/03		102	%	80 - 120
			Dissolved Titanium (Ti)	2011/11/03		102	%	80 - 120
			Dissolved Uranium (U)	2011/11/03		98	%	80 - 120
			Dissolved Vanadium (V)	2011/11/03		96	%	80 - 120
			Dissolved Zinc (Zn)	2011/11/03		NC	%	80 - 120
		Spiked Blank	Dissolved Antimony (Sb)	2011/11/03		107	%	80 - 120
			Dissolved Arsenic (As)	2011/11/03		99	%	80 - 120
			Dissolved Barium (Ba)	2011/11/03		104	%	80 - 120
			Dissolved Beryllium (Be)	2011/11/03		95	%	80 - 120
			Dissolved Bismuth (Bi)	2011/11/03		94	%	80 - 120
			Dissolved Cadmium (Cd)	2011/11/03		100	%	80 - 120
			Dissolved Chromium (Cr)	2011/11/03		95	%	80 - 120
			Dissolved Cobalt (Co)	2011/11/03		98	%	80 - 120
			Dissolved Copper (Cu)	2011/11/03		96	%	80 - 120
			Dissolved Iron (Fe)	2011/11/03		106	%	80 - 120
			Dissolved Lead (Pb)	2011/11/03		104	%	80 - 120
			Dissolved Lithium (Li)	2011/11/03		97	%	80 - 120
			Dissolved Manganese (Mn)	2011/11/03		96	%	80 - 120
			Dissolved Molybdenum (Mo)	2011/11/03		101	%	80 - 120
			Dissolved Nickel (Ni)	2011/11/03		97	%	80 - 120
			Dissolved Selenium (Se)	2011/11/03		104	%	80 - 120
			Dissolved Silver (Ag)	2011/11/03		108	%	80 - 120
			Dissolved Strontium (Sr)	2011/11/03		105	%	80 - 120
			Dissolved Thallium (Tl)	2011/11/03		100	%	80 - 120
			Dissolved Tin (Sn)	2011/11/03		103	%	80 - 120
			Dissolved Titanium (Ti)	2011/11/03		96	%	80 - 120
			Dissolved Uranium (U)	2011/11/03		102	%	80 - 120
			Dissolved Vanadium (V)	2011/11/03		95	%	80 - 120
			Dissolved Zinc (Zn)	2011/11/03		105	%	80 - 120
		Method Blank	Dissolved Aluminum (Al)	2011/11/03	<0.2		ug/L	
			Dissolved Antimony (Sb)	2011/11/03	<0.02		ug/L	
			Dissolved Arsenic (As)	2011/11/03	<0.02		ug/L	
			Dissolved Barium (Ba)	2011/11/03	<0.02		ug/L	
			Dissolved Beryllium (Be)	2011/11/03	<0.01		ug/L	
			Dissolved Bismuth (Bi)	2011/11/03	<0.005		ug/L	
			Dissolved Boron (B)	2011/11/03	<50		ug/L	
			Dissolved Cadmium (Cd)	2011/11/03	<0.005		ug/L	
			Dissolved Chromium (Cr)	2011/11/03	<0.1		ug/L	

LABERGE ENVIRONMENTAL SERVICES
Attention: Bonnie Burns
Client Project #:
P.O. #:
Site Location:

Quality Assurance Report (Continued)

Maxxam Job Number: VB1A4623

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
5325925	AA1	Method Blank	Dissolved Cobalt (Co)	2011/11/03	<0.005		ug/L	
			Dissolved Copper (Cu)	2011/11/03	<0.05		ug/L	
			Dissolved Iron (Fe)	2011/11/03	<1		ug/L	
			Dissolved Lead (Pb)	2011/11/03	<0.005		ug/L	
			Dissolved Lithium (Li)	2011/11/03	<0.5		ug/L	
			Dissolved Manganese (Mn)	2011/11/03	<0.05		ug/L	
			Dissolved Molybdenum (Mo)	2011/11/03	<0.05		ug/L	
			Dissolved Nickel (Ni)	2011/11/03	<0.02		ug/L	
			Dissolved Selenium (Se)	2011/11/03	<0.04		ug/L	
			Dissolved Silicon (Si)	2011/11/03	<100		ug/L	
			Dissolved Silver (Ag)	2011/11/03	<0.005		ug/L	
			Dissolved Strontium (Sr)	2011/11/03	<0.05		ug/L	
			Dissolved Thallium (Tl)	2011/11/03	<0.002		ug/L	
			Dissolved Tin (Sn)	2011/11/03	<0.01		ug/L	
			Dissolved Titanium (Ti)	2011/11/03	<0.5		ug/L	
			Dissolved Uranium (U)	2011/11/03	<0.002		ug/L	
			Dissolved Vanadium (V)	2011/11/03	<0.2		ug/L	
			Dissolved Zinc (Zn)	2011/11/03	<0.1		ug/L	
			Dissolved Zirconium (Zr)	2011/11/03	<0.1		ug/L	
		RPD [BZ0037-04]	Dissolved Aluminum (Al)	2011/11/03	2.3		%	20
			Dissolved Antimony (Sb)	2011/11/03	0.2		%	20
			Dissolved Arsenic (As)	2011/11/03	3.5		%	20
			Dissolved Barium (Ba)	2011/11/03	3.2		%	20
			Dissolved Beryllium (Be)	2011/11/03	NC		%	20
			Dissolved Bismuth (Bi)	2011/11/03	NC		%	20
			Dissolved Boron (B)	2011/11/03	NC		%	20
			Dissolved Cadmium (Cd)	2011/11/03	1.2		%	20
			Dissolved Chromium (Cr)	2011/11/03	NC		%	20
			Dissolved Cobalt (Co)	2011/11/03	19.6		%	20
			Dissolved Copper (Cu)	2011/11/03	0.1		%	20
			Dissolved Iron (Fe)	2011/11/03	0.3		%	20
			Dissolved Lead (Pb)	2011/11/03	NC		%	20
			Dissolved Lithium (Li)	2011/11/03	5.4		%	20
			Dissolved Manganese (Mn)	2011/11/03	0.5		%	20
			Dissolved Molybdenum (Mo)	2011/11/03	1.2		%	20
			Dissolved Nickel (Ni)	2011/11/03	1.5		%	20
			Dissolved Selenium (Se)	2011/11/03	1.0		%	20
			Dissolved Silicon (Si)	2011/11/03	1.6		%	20
			Dissolved Silver (Ag)	2011/11/03	NC		%	20
			Dissolved Strontium (Sr)	2011/11/03	2.0		%	20
			Dissolved Thallium (Tl)	2011/11/03	NC		%	20
			Dissolved Tin (Sn)	2011/11/03	NC		%	20
			Dissolved Titanium (Ti)	2011/11/03	NC		%	20
			Dissolved Uranium (U)	2011/11/03	2.7		%	20
			Dissolved Vanadium (V)	2011/11/03	NC		%	20
			Dissolved Zinc (Zn)	2011/11/03	1.1		%	20
			Dissolved Zirconium (Zr)	2011/11/03	NC		%	20
5326210	AA1	Matrix Spike	Dissolved Antimony (Sb)	2011/11/04		108	%	80 - 120
			Dissolved Arsenic (As)	2011/11/04		100	%	80 - 120
			Dissolved Barium (Ba)	2011/11/04		102	%	80 - 120
			Dissolved Beryllium (Be)	2011/11/04		109	%	80 - 120
			Dissolved Bismuth (Bi)	2011/11/04		98	%	80 - 120
			Dissolved Cadmium (Cd)	2011/11/04		104	%	80 - 120
			Dissolved Chromium (Cr)	2011/11/04		95	%	80 - 120
			Dissolved Cobalt (Co)	2011/11/04		94	%	80 - 120

LABERGE ENVIRONMENTAL SERVICES
Attention: Bonnie Burns
Client Project #:
P.O. #:
Site Location:

Quality Assurance Report (Continued)

Maxxam Job Number: VB1A4623

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
5326210	AA1	Matrix Spike	Dissolved Copper (Cu)	2011/11/04		97	%	80 - 120
			Dissolved Iron (Fe)	2011/11/04		104	%	80 - 120
			Dissolved Lead (Pb)	2011/11/04		102	%	80 - 120
			Dissolved Lithium (Li)	2011/11/04		98	%	80 - 120
			Dissolved Manganese (Mn)	2011/11/04		92	%	80 - 120
			Dissolved Molybdenum (Mo)	2011/11/04		95	%	80 - 120
			Dissolved Nickel (Ni)	2011/11/04		97	%	80 - 120
			Dissolved Selenium (Se)	2011/11/04		113	%	80 - 120
			Dissolved Silver (Ag)	2011/11/04		110	%	80 - 120
			Dissolved Strontium (Sr)	2011/11/04		102	%	80 - 120
			Dissolved Thallium (Tl)	2011/11/04		89	%	80 - 120
			Dissolved Tin (Sn)	2011/11/04		98	%	80 - 120
			Dissolved Titanium (Ti)	2011/11/04		94	%	80 - 120
			Dissolved Uranium (U)	2011/11/04		107	%	80 - 120
			Dissolved Vanadium (V)	2011/11/04		92	%	80 - 120
			Dissolved Zinc (Zn)	2011/11/04		106	%	80 - 120
		Spiked Blank	Dissolved Antimony (Sb)	2011/11/04		107	%	80 - 120
			Dissolved Arsenic (As)	2011/11/04		95	%	80 - 120
			Dissolved Barium (Ba)	2011/11/04		103	%	80 - 120
			Dissolved Beryllium (Be)	2011/11/04		106	%	80 - 120
			Dissolved Bismuth (Bi)	2011/11/04		95	%	80 - 120
			Dissolved Cadmium (Cd)	2011/11/04		101	%	80 - 120
			Dissolved Chromium (Cr)	2011/11/04		94	%	80 - 120
			Dissolved Cobalt (Co)	2011/11/04		96	%	80 - 120
			Dissolved Copper (Cu)	2011/11/04		99	%	80 - 120
			Dissolved Iron (Fe)	2011/11/04		105	%	80 - 120
			Dissolved Lead (Pb)	2011/11/04		104	%	80 - 120
			Dissolved Lithium (Li)	2011/11/04		100	%	80 - 120
			Dissolved Manganese (Mn)	2011/11/04		94	%	80 - 120
			Dissolved Molybdenum (Mo)	2011/11/04		98	%	80 - 120
			Dissolved Nickel (Ni)	2011/11/04		98	%	80 - 120
			Dissolved Selenium (Se)	2011/11/04		106	%	80 - 120
			Dissolved Silver (Ag)	2011/11/04		108	%	80 - 120
			Dissolved Strontium (Sr)	2011/11/04		104	%	80 - 120
			Dissolved Thallium (Tl)	2011/11/04		88	%	80 - 120
			Dissolved Tin (Sn)	2011/11/04		103	%	80 - 120
			Dissolved Titanium (Ti)	2011/11/04		91	%	80 - 120
			Dissolved Uranium (U)	2011/11/04		108	%	80 - 120
			Dissolved Vanadium (V)	2011/11/04		93	%	80 - 120
			Dissolved Zinc (Zn)	2011/11/04		101	%	80 - 120
		Method Blank	Dissolved Aluminum (Al)	2011/11/04	<0.2		ug/L	
			Dissolved Antimony (Sb)	2011/11/04	<0.02		ug/L	
			Dissolved Arsenic (As)	2011/11/04	<0.02		ug/L	
			Dissolved Barium (Ba)	2011/11/04	<0.02		ug/L	
			Dissolved Beryllium (Be)	2011/11/04	<0.01		ug/L	
			Dissolved Bismuth (Bi)	2011/11/04	<0.005		ug/L	
			Dissolved Boron (B)	2011/11/04	<50		ug/L	
			Dissolved Cadmium (Cd)	2011/11/04	<0.005		ug/L	
			Dissolved Chromium (Cr)	2011/11/04	<0.1		ug/L	
			Dissolved Cobalt (Co)	2011/11/04	<0.005		ug/L	
			Dissolved Copper (Cu)	2011/11/04	<0.05		ug/L	
			Dissolved Iron (Fe)	2011/11/04	<1		ug/L	
			Dissolved Lead (Pb)	2011/11/04	<0.005		ug/L	
			Dissolved Lithium (Li)	2011/11/04	<0.5		ug/L	
			Dissolved Manganese (Mn)	2011/11/04	<0.05		ug/L	

LABERGE ENVIRONMENTAL SERVICES
Attention: Bonnie Burns
Client Project #:
P.O. #:
Site Location:

Quality Assurance Report (Continued)

Maxxam Job Number: VB1A4623

QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
5326210	AA1	Method Blank	Dissolved Molybdenum (Mo)	2011/11/04	<0.05		ug/L	
			Dissolved Nickel (Ni)	2011/11/04	0.03, RDL=0.02		ug/L	
			Dissolved Selenium (Se)	2011/11/04	<0.04		ug/L	
			Dissolved Silicon (Si)	2011/11/04	<100		ug/L	
			Dissolved Silver (Ag)	2011/11/04	<0.005		ug/L	
			Dissolved Strontium (Sr)	2011/11/04	<0.05		ug/L	
			Dissolved Thallium (Tl)	2011/11/04	<0.002		ug/L	
			Dissolved Tin (Sn)	2011/11/04	<0.01		ug/L	
			Dissolved Titanium (Ti)	2011/11/04	<0.5		ug/L	
			Dissolved Uranium (U)	2011/11/04	<0.002		ug/L	
			Dissolved Vanadium (V)	2011/11/04	<0.2		ug/L	
			Dissolved Zinc (Zn)	2011/11/04	<0.1		ug/L	
			Dissolved Zirconium (Zr)	2011/11/04	<0.1		ug/L	
		RPD	Dissolved Aluminum (Al)	2011/11/04	NC		%	20
			Dissolved Antimony (Sb)	2011/11/04	NC		%	20
			Dissolved Arsenic (As)	2011/11/04	NC		%	20
			Dissolved Barium (Ba)	2011/11/04	NC		%	20
			Dissolved Beryllium (Be)	2011/11/04	NC		%	20
			Dissolved Bismuth (Bi)	2011/11/04	NC		%	20
			Dissolved Boron (B)	2011/11/04	NC		%	20
			Dissolved Cadmium (Cd)	2011/11/04	NC		%	20
			Dissolved Chromium (Cr)	2011/11/04	NC		%	20
			Dissolved Cobalt (Co)	2011/11/04	NC		%	20
			Dissolved Copper (Cu)	2011/11/04	2.0		%	20
			Dissolved Iron (Fe)	2011/11/04	NC		%	20
			Dissolved Lead (Pb)	2011/11/04	3.7		%	20
			Dissolved Lithium (Li)	2011/11/04	NC		%	20
			Dissolved Manganese (Mn)	2011/11/04	NC		%	20
			Dissolved Molybdenum (Mo)	2011/11/04	NC		%	20
			Dissolved Nickel (Ni)	2011/11/04	NC		%	20
			Dissolved Selenium (Se)	2011/11/04	NC		%	20
			Dissolved Silicon (Si)	2011/11/04	NC		%	20
			Dissolved Silver (Ag)	2011/11/04	NC		%	20
			Dissolved Strontium (Sr)	2011/11/04	NC		%	20
			Dissolved Thallium (Tl)	2011/11/04	NC		%	20
			Dissolved Tin (Sn)	2011/11/04	NC		%	20
			Dissolved Titanium (Ti)	2011/11/04	NC		%	20
			Dissolved Uranium (U)	2011/11/04	NC		%	20
			Dissolved Vanadium (V)	2011/11/04	NC		%	20
			Dissolved Zinc (Zn)	2011/11/04	4.0		%	20
			Dissolved Zirconium (Zr)	2011/11/04	NC		%	20
5326856	AL8	Matrix Spike	Alkalinity (Total as CaCO3)	2011/11/02		NC	%	80 - 120
		Spiked Blank	Alkalinity (Total as CaCO3)	2011/11/02		97	%	80 - 120
		Method Blank	Alkalinity (Total as CaCO3)	2011/11/02	<0.5		mg/L	
			Alkalinity (PP as CaCO3)	2011/11/02	<0.5		mg/L	
			Bicarbonate (HCO3)	2011/11/02	<0.5		mg/L	
			Carbonate (CO3)	2011/11/02	<0.5		mg/L	
			Hydroxide (OH)	2011/11/02	<0.5		mg/L	
		RPD	Alkalinity (Total as CaCO3)	2011/11/02	0.06		%	20
			Alkalinity (PP as CaCO3)	2011/11/02	NC		%	20
			Bicarbonate (HCO3)	2011/11/02	0.07		%	20
			Carbonate (CO3)	2011/11/02	NC		%	20
			Hydroxide (OH)	2011/11/02	NC		%	20
5326879	AL8	Spiked Blank	Conductivity	2011/11/02		99	%	80 - 120
		Method Blank	Conductivity	2011/11/02	<1		uS/cm	

LABERGE ENVIRONMENTAL SERVICES
Attention: Bonnie Burns
Client Project #:
P.O. #:
Site Location:

Quality Assurance Report (Continued)

Maxxam Job Number: VB1A4623

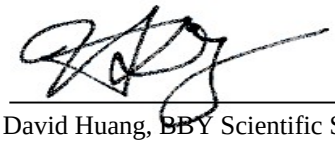
QA/QC Batch Num	Init	QC Type	Parameter	Date Analyzed yyyy/mm/dd	Value	Recovery	Units	QC Limits
5326879	AL8	RPD	Conductivity	2011/11/02	0.3		%	20
5328445	BB3	Spiked Blank	Dissolved Chloride (Cl)	2011/11/02		101	%	80 - 120
		Method Blank	Dissolved Chloride (Cl)	2011/11/02	<0.5		mg/L	
		RPD	Dissolved Chloride (Cl)	2011/11/02	NC		%	20
5328503	BB3	Spiked Blank	Dissolved Sulphate (SO4)	2011/11/02		95	%	80 - 120
		Method Blank	Dissolved Sulphate (SO4)	2011/11/02	<0.5		mg/L	
		RPD	Dissolved Sulphate (SO4)	2011/11/02	NC		%	20

Duplicate: Paired analysis of a separate portion of the same sample. Used to evaluate the variance in the measurement.
Matrix Spike: A sample to which a known amount of the analyte of interest has been added. Used to evaluate sample matrix interference.
Spiked Blank: A blank matrix to which a known amount of the analyte has been added. Used to evaluate analyte recovery.
Method Blank: A blank matrix containing all reagents used in the analytical procedure. Used to identify laboratory contamination.
NC (Matrix Spike): The recovery in the matrix spike was not calculated. The relative difference between the concentration in the parent sample and the spiked amount was not sufficiently significant to permit a reliable recovery calculation.
NC (RPD): The RPD was not calculated. The level of analyte detected in the parent sample and its duplicate was not sufficiently significant to permit a reliable calculation.
(1) Matrix Spike outside acceptance criteria (10% of analytes failure allowed).

Validation Signature Page

Maxxam Job #: B1A4623

The analytical data and all QC contained in this report were reviewed and validated by the following individual(s).



David Huang, BBY Scientific Specialist

==========

Maxxam has procedures in place to guard against improper use of the electronic signature and have the required "signatories", as per section 5.10.2 of ISO/IEC 17025:2005(E), signing the reports. For Service Group specific validation please refer to the Validation Signature Page.

Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (604) 734 7276 Fax (604) 731 2386 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#3673 LABERGE ENVIRONMENTAL SERVICES	Company Name:		Quotation #:	A80211	MAXXAM JOB #: B1A4623	BOTTLE ORDER #: 191101
Contact Name:	Bonnie Burns	Contact Name:	Bonnie Burns	P.O. #:			
Address:	405 Ogilvie Street PO Box 21072 Whitehorse YT Y1A 6P7	Address:		Project #:		CHAIN OF CUSTODY #: C#191101-01-01	PROJECT MANAGER: TABITHA RUDKIN
Phone:	(867)668-6838 Fax:	Phone:	Fax:	Project Name:			
Email:	bonnieburns@northwestel.net	Email:	bonnieburns@northwestel.net	Site #:			
				Sampled By:			

REGULATORY CRITERIA: CCME for freshwater aquatic life.

SPECIAL INSTRUCTIONS:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: ☐
(will be applied if Rush TAT is not specified):
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) ☐
Date Required: _____ Time Required: _____
Rush Confirmation Number: _____ (call lab for #)

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	Alk, Cl, EC, TDS, Nitrate, pH, SO4, turb	Total Suspended Solids-LowLevel	Ammonia, TOC, total Phosphorus	dissolved organic Carbon (DOC)	Low Level Dissolved Metals in Water	Low Level Total Metals in Water	# of Bottles	Comments
1	SID#016380	V8 B2001S	2011 Oct 25	9:00	H_2O		Y	✓	✓	✓	✓	✓	✓		
2	SID#016381	V17A B2001G	Oct 25	16:30	"		Y	✓	✓	✓	✓	✓	✓		
3	SID#016382	V20A B2001K	Oct 25	15:30	"		Y	✓	✓	✓	✓	✓	✓		
4	SID#016383	VR B2001H	Oct 25	17:10	"		Y	✓	✓	✓	✓	✓	✓		
5	SID#016384	VG Main B2001J	Oct 25	10:15	"		Y	✓	✓	✓	✓	✓	✓		
6	SID#016385	VW1 B2001S	Oct 27	15:35	"		Y	✓	✓	✓	✓	✓	✓		
7	SID#016386	VW2 B2001H	Oct 27	09:35	"		Y	✓	✓	✓	✓	✓	✓		
8	SID#016387	VW3 B2001S	Oct 27	10:45	"		Y	✓	✓	✓	✓	✓	✓		
9	SID#016388	FC B2001L	Oct 26	15:35	"		Y	✓	✓	✓	✓	✓	✓		
10	SID#016389	R1 B2001T	Oct 27	14:00	"		Y	✓	✓	✓	✓	✓	✓		

B1A4623

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted
	11/10/27		Naheed Amer	11/10/28	14:30	

Laboratory Use Only: Time Sensitive ☐ | Temperature (°C) on Receipt: 3,3,3 / 3,4,5 / 4,6,7 | Custody Seal Intact on Cooler? ☐ Yes ☐ No: N/A

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel (604) 734 7276 Toll-free (604) 734 7276 Fax (604) 731 2386 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#3673 LABERGE ENVIRONMENTAL SERVICES	Company Name:		Quotation #:	A80211	MAXXAM JOB #:	BOTTLE ORDER #:
Contact Name:	Bonnie Burns	Contact Name:	Bonnie Burns	P.O. #:		B1A4623	191101
Address:	405 Ogilvie Street PO Box 21072	Address:		Project #:		CHAIN OF CUSTODY #:	PROJECT MANAGER:
	Whitehorse YT Y1A 6P7			Project Name:		C#191101-02-01	TABITHA RUDKIN
Phone:	(867)668-6838 Fax:	Phone:	Fax:	Site #:			
Email:	bonnieburns@northwestel.net	Email:	bonnieburns@northwestel.net	Sampled By:			

REGULATORY CRITERIA: CCME for freshwater aquatic life

SPECIAL INSTRUCTIONS

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: ☐
(will be applied if Rush TAT is not specified)
Standard TAT = 5-7 Working days for most tests
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) ☐
Date Required: _____ Time Required: _____
Rush Confirmation Number: _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y / N)	Metals Field Filtered ? (Y / N)	Alk., Cl, EC, TDS, Nitrate, pH, SO4, turb	Total Suspended Solids-LowLevel	Ammonia, TOC, total Phosphorus	dissolved organic Carbon (DOC)	Low Level Dissolved Metals in Water	Low Level Total Metals in Water	# of Bottles	Comments
1	SID#016390	R4 BZ0028	Oct 26	10:45	H_2O		Y	✓	✓	✓	✓	✓	✓		
2	SID#016391	R5 ~~BZ0027~~													No safe landing spot
3	SID#016392	R6 BZ0029	Oct 26	10:10	"		Y	✓	✓	✓	✓	✓	✓		
4	SID#016393	W10 BZ0030	Oct 26	14:20	"		Y	✓	✓	✓	✓	✓	✓		
5	SID#016394	X14 BZ0031	Oct 25	13:45	"		Y	✓	✓	✓	✓	✓	✓		
6	SID#016395	NWID BZ0032	Oct 25	12:10	"		Y	✓	✓	✓	✓	✓	✓		
7	SID#016396	USFR BZ0033	Oct 26	16:35	"		Y	✓	✓	✓	✓	✓	✓		
8	SID#016397	GCULV BZ0034	Oct 27	12:00	"		Y	✓	✓	✓	✓	✓	✓		B1A4623
9	SID#016398	K8 BZ0035	Oct 27	12:45	"		Y	✓	✓	✓	✓	✓	✓		
10	SID#016399	A1 BZ0036	Oct 26	12:00			Y	✓	✓	✓	✓	✓	✓		

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted
B Burns	11/10/27		Rachel Bone	11/10/28	14:30	

Laboratory Use Only: Time Sensitive ☐ | Temperature (°C) on Receipt ~~14.30~~ NA | Custody Seal Intact on Cooler? ☐ Yes ☐ No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

3133
3145 4617 NA

Maxxam

Maxxam Analytics International Corporation o/a Maxxam Analytics
4606 Canada Way, Burnaby, British Columbia Canada V5G 1K5 Tel:(604) 734 7276 Toll-free (604) 734 7276 Fax:(604) 731 2386 www.maxxam.ca

CHAIN OF CUSTODY RECORD

INVOICE INFORMATION:		REPORT INFORMATION (if differs from invoice):		PROJECT INFORMATION:		Laboratory Use Only:	
Company Name:	#3673 LABERGE ENVIRONMENTAL SERVICES	Company Name:		Quotation #:	A80211	MAXXAM JOB #: B1A4623	BOTTLE ORDER #: 191101
Contact Name:	Bonnie Burns	Contact Name:	Bonnie Burns	P.O. #:			
Address:	405 Ogilvie Street PO Box 21072 Whitehorse YT Y1A 6P7	Address:		Project #:		CHAIN OF CUSTODY #: C#191101-03-01	PROJECT MANAGER: TABITHA RUDKIN
Phone:	(867)668-6838 Fax:	Phone:	Fax:	Project Name:			
Email:	bonnieburns@northwestel.net	Email:	bonnieburns@northwestel.net	Site #:			
				Sampled By:			

REGULATORY CRITERIA: CCME for protection aquatic life

SPECIAL INSTRUCTIONS:

Note: For regulated drinking water samples - please use the Drinking Water Chain of Custody Form

SAMPLES MUST BE KEPT COOL (< 10°C) FROM TIME OF SAMPLING UNTIL DELIVERY TO MAXXAM

ANALYSIS REQUESTED (Please be specific):

TURNAROUND TIME (TAT) REQUIRED:

PLEASE PROVIDE ADVANCE NOTICE FOR RUSH PROJECTS

Regular (Standard) TAT: ☐
(will be applied if Rush TAT is not specified):
Standard TAT = 5-7 Working days for most tests.
Please note: Standard TAT for certain tests such as BOD and Dioxins/Furans are > 5 days - contact your Project Manager for details.

Job Specific Rush TAT (if applies to entire submission) ☐
Date Required: _____ Time Required: _____
Rush Confirmation Number: _____ *(call lab for #)*

	Sample Barcode Label	Sample (Location) Identification	Date Sampled	Time Sampled	Matrix	Regulated Drinking Water ? (Y/N)	Metals Field Filtered ? (Y/N)	Alk, Cl, EC, TDS, Nitrate, pH, SO4, turb	Total Suspended Solids-LowLevel	Ammonia, TOC, total Phosphorus	dissolved organic Carbon (DOC)	Low Level Dissolved Metals in Water	Low Level Total Metals in Water				# of Bottles	Comments
1	SID#016400	P1 B20037	Oct 26	09:30	H2O	N	Y	✓	✓	✓	✓	✓	✓					
2	SID#016401	P4 B20038	Oct 26	12:20	"	N	Y	✓	✓	✓	✓	✓	✓					
3	SID#016402	Field Blank B20039	Oct 27		"		Y	✓	✓	✓	✓	✓	✓					
4	SID#016403	Dup 1	Oct 27		"		Y	✓	✓	✓	✓	✓	✓					
5	SID#016404	Dup 2	Oct 26		"	N	Y	✓	✓	✓	✓	✓	✓					
6	SID#016405	Trip Blank B20040																
7																		
8																		
9																		
10																		

B1A4623

*RELINQUISHED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	RECEIVED BY: (Signature/Print)	Date: (YY/MM/DD)	Time:	# Jars Used and Not Submitted	Laboratory Use Only: Time Sensitive	Temperature (°C) on Receipt	Custody Seal Intact on Cooler?
B Burns	27/10/2011		Rahal	11/10/28	14:30		☐	3,3,3 3,4,3 4,6,7	☐ Yes ☐ No

* IT IS THE RESPONSIBILITY OF THE RELINQUISHER TO ENSURE THE ACCURACY OF THE CHAIN OF CUSTODY RECORD. AN INCOMPLETE CHAIN OF CUSTODY MAY RESULT IN ANALYTICAL TAT DELAYS.

White: Maxxam Yellow: Client

KA