

KENO VALLEY RECEIVING ENVIRONMENT MONITORING

FRESHET SURVEY 2006



FOR



GOVERNMENT

ENERGY MINES AND RESOURCES

ASSESSMENT AND ABANDONED MINES BRANCH

BY



July, 2006

Letter of Transmittal



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August 1, 2006

Frank Patch
Type II Project Manager
Assessment and Abandoned Mines
Energy Mines and Resources

Dear Frank:

Re : Final Report Keno Valley Receiving Water Freshet Survey 2006

Included herewith are three (3) hard copies of the above report. An electronic copy which includes all text, figures and appendices will follow under separate cover. This report was prepared in response to our discussions and in line with our proposal dated April 15, 2006.

The preparation of this report was delayed as the final water quality data was not received until June 30. Part of the freshet was captured at Christal Creek and at the Porcupine Diversion ditch, but the days of the strong diurnal fluctuation had passed. This year Christal Creek peaked about May 22nd, Flat Creek on May 16th and Lightning Creek on June 2nd.

Although not a great diurnal fluctuation of zinc was documented, a significant portion of zinc in total form was presenting in the creeks during freshet, accounting for a significant loading of zinc at the monitoring sites.

Sincerely,

Ken Nordin AScT CCEP
Laberge Environmental Services

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1.0 INTRODUCTION

Type II Mines requested that Laberge Environmental Services (LES) conduct receiving environment monitoring in the Keno Valley for 2006 to capture the freshet event. This included sampling the routine receiving water sites, with increased frequency of sampling at KV-7 Christal Creek at the Hanson Lake Road, and KV-47, Porcupine Diversion Ditch, to examine the phenomenon of metals possibly being flushed out of these systems as metals-laden ice melts out of the valleys. Twice daily composite samples were collected during the diurnal highs and lows in the spring freshet, and analysed by ICP/MS for total and dissolved metals in attempts to capture daily fluctuations and note any difference between total and dissolved metals concentrations.

2.0 SCOPE of WORK

The following table summarizes the scope of work.

WQ = water quality surveys

QM = spot discharge measurements with water quality sampling

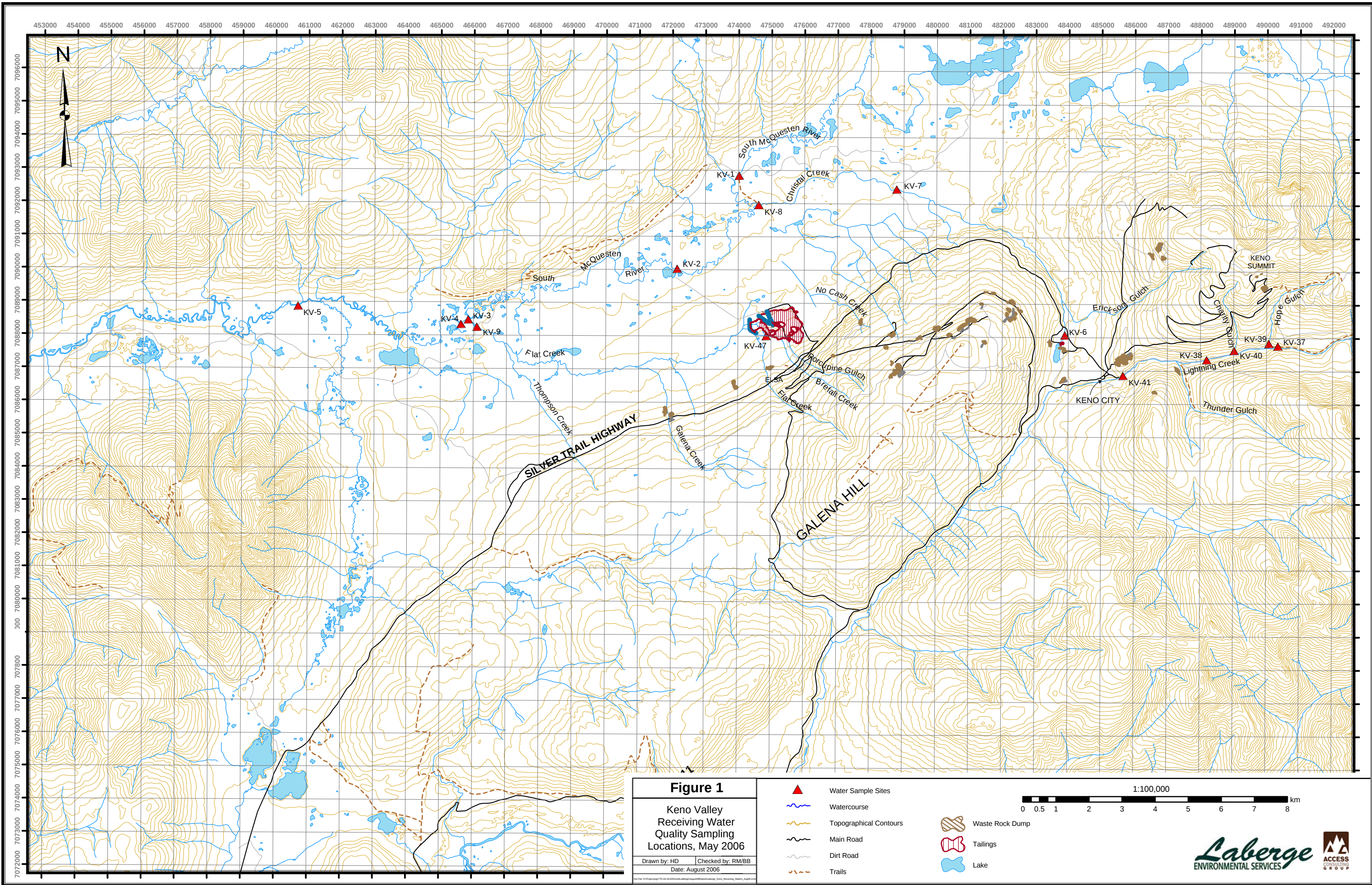
QL = discharge measurements and continuous water level logging

AS = automated sampler

Table 1 Site Locations and Tasks

Station	tasks
KV-1: South McQuesten River upstream Christal Creek	WQ
KV-2: South McQuesten River at Pumphouse	WQ
KV-3: South McQuesten River upstream Flat Creek	WQ
KV-4: South McQuesten River 300 m downstream Flat Creek	WQ
KV-5: South McQuesten River 9 km downstream Flat Creek	WQ
KV-6: Christal Creek at Keno Highway	WQ / QM
KV-7: Christal Creek upstream Hanson Lake Road Crossing	WQ / QM / QL / AS
KV-8: Christal Creek at mouth	WQ / QM
KV-9: Flat Creek at mouth	WQ / QM / QL
KV-37: Lightning Creek upstream Hope Gulch	WQ / QM
KV-39: Hope Gulch	WQ
KV-40: Charity Gulch	WQ
KV-38: Lightning Creek upstream Thunder Gulch	WQ / QM
KV-41: Lightning Creek upstream Keno City Bridge	WQ / QM / QL
KV-47: Porcupine Diversion Ditch	WQ / QM / AS

The locations of these sites are displayed in Figure 1.



3.0 METHODS

Water quality samples and spot flow measurements were collected from each of the sites indicated in the above table on May 25th and 26th 2006. Routine samples were collected in new one litre plastic bottles. Nutrients were collected in 250 ml plastic bottles. Samples analyzed for total metals were collected in acid washed 100 ml plastic bottles and preserved with nitric acid. Samples analyzed for dissolved metals were collected in new 250 mL plastic bottles and field filtered prior to preservation with nitric acid. All samples were kept cool and shipped by air in coolers to Vancouver, BC for analysis. Several of the sites are included with the continuing G300 fugitive flow monitoring and these samples were sent to Norwest Labs along with the G300 samples. The remaining samples were sent to the ALS laboratory, also in Vancouver.

Water Resources loaned LES two ISCO automated samplers for deployment at LES-47, the Porcupine Diversion Ditch and at KV-7, Christal Creek upstream of the Hanson Lake Road Crossing. The automated samplers were programmed to collect composite samples made up of 300 mL aliquots at 12 midnight to 3 AM (KV_#_1) and 12 Noon to 3 PM (KV_#_2). In this way, representative samples were obtained from the diurnal high and diurnal low flow each day for ten days during the freshet. The experiment took place between May 26th and June 5th 2006. The automated sampler containers were transferred to 250 mL bottles daily and filtered on site for dissolved metals. These samples were then preserved with nitric acid. A complete set of samples was collected at both sites on the final day of the automated sampling. All samples were kept cool until shipped to ALS laboratory in Vancouver, BC.

There was no continuous record of stage at KV-47; however there is staff gauge at the site which was observed every day at about 2PM. During the start and at the end of the experiment, the overnight high stage was noted and surveyed relative to the local BM. In this way a crude record of daily flow can be inferred from the stage discharge relationship.

4.0 RESULTS

4.1 May 2006 Sampling

On May 25th and May 26th 2006, water quality samples were collected from the regular receiving water monitoring sites in the South McQuesten River and Lightning Creek drainages. All data are presented in Appendix A.

The same parameters were summarized as in previous surveys and are presented in Table 2. The data were compared to the applicable CCME (1999) guidelines for the protection of freshwater aquatic life. The cells containing data that exceeded the CCME guidelines are highlighted in yellow.

The data was then analyzed according to the CCME Water Quality Index. For each sample, the number of yellow cells was counted to give a number that could range from 0 to 8. This value is displayed in the column labelled 'Index'. The sites with a high index value indicate that more guidelines were exceeded than sites with a low index, and thus are potentially more contaminated. This approach does not differentiate between samples that barely exceed the guideline than those that grossly exceed the guideline. For the sites investigated, the majority of the parameters that were exceeded had fairly low concentrations.

All waters were near neutral. The total suspended solids ranged from below the detection limit of 3.0 mg/L in Hope and Charity Gulches to 93 mg/L at KV-4, South McQuesten River d/s Flat Creek.

Lightning Creek had very soft water although the hardness of the inputs, Hope Gulch and Charity Gulch were very hard. The other locations had moderately hard water.

Sulphate levels were considerably higher at KV-6, Christal Creek u/s Keno Hwy (106 mg/L) and at KV-40, Charity Gulch (147 mg/L) than at the other sites.

The guideline for arsenic was exceeded at KV-6, KV-7, KV-9 and KV-39. Cadmium has a very conservative guideline, which was exceeded at all sites where it was detected. The detection limit is slightly greater than the guideline and it is uncertain whether it was met at KV-37 (Lightning Creek upstream of Hope Gulch). The guideline for copper was slightly exceeded in the South McQuesten River at KV-4 and in the Flat Creek drainage both at KV-47 and KV-9. All sites met the guideline for iron. The concentration of lead slightly exceeded the guideline at all of the sites on the Christal and Flat Creek drainages, and at KV-4 and KV-5 on the South McQuesten and at KV-39, Hope Gulch. The guideline for zinc was exceeded in all of the total metals samples with the exception of KV-37, Lightning Creek u/s Hope Gulch and KV-40, Charity Gulch. The guideline was significantly exceeded in all the water samples collected from the Christal Creek drainage and from Hope Gulch. Fewer sites exceeded the zinc guideline in the dissolved metals samples.

For the sites surveyed, KV-47, Porcupine Diversion, had the highest index with a value of 6. Quite a few sites had an index of 5; KV-39, KV-6, KV-7, KV-9 and KV-4. Christal Creek at mouth, KV-8, had an index of 4. The other sites ranged from an index of 3, down to 0 at KV-37, Lightning Creek u/s of Hope Gulch.

TABLE 2 WATER QUALITY DATA FOR MAY 2006

Site	Site Description	Date	Time	Water T.	pH	Cond. uS/cm	Flow cms	Hard.-d mg/L	TSS mg/l	Sulphate-d mg/L	As-t mg/L	Cd-d mg/L	Cu-d mg/L	Fe-d mg/L	Pb-d mg/L	Se-d mg/L	Zn-t mg/L	Zn-d mg/L	Index
South McQuesten River																			
KV-1	S. McQuesten u/s Chr.	25/05/2006	17:30	7.0	6.28	126		72	36	23.1	0.0018	0.0001	<0.001	0.2	0.0002	<0.0002	0.048	0.021	2
KV-2	S. McQuesten @ PH pond	25/05/2006	15:00	7.3	6.28	132		81	24	26.2	0.0022	0.00015	<0.001	0.18	0.0005	<0.0002	0.054	0.027	2
KV-3	S. McQuesten u/s Flat Cr	26/05/2006	19:00	7.7	7.74	146		93.4	33.2	27.3	0.00269	0.000182	0.00173	0.159	0.000767	<0.0010	0.0530	0.0314	3
KV-4	S. McQuesten d/s Flat Cr	26/05/2006	19:15	8.7	7.76	174		122	93.2	37.7	0.00311	0.000352	0.00260	0.084	0.00570	<0.0010	0.0623	0.0492	5
KV-5	S. McQuesten 9K d/s Fl.	26/05/2006	20:15	7.8	7.72	147		86	20	27.5	0.0046	0.00013	<0.001	0.17	0.0013	<0.0002	0.046	0.025	3
Christal Creek																			
KV-6	Christal u/s Hwy	26/05/2006	09:50	5.1	7.35	341	0.122	169	12	106	0.0057	0.00108	<0.001	0.25	0.0034	0.0002	0.218	0.186	5
KV-7	Christal @ HL Rd.	25/05/2006	16:15	4.7	6.21	171	0.977	120	28	56	0.0129	0.00059	<0.001	0.08	0.0012	<0.0002	0.166	0.101	5
KV-8	Christal @ Mouth	25/05/2006	17:05	4.9	6.25	180		100	9	50	0.0026	0.00097	<0.001	0.09	0.0011	<0.0002	0.196	0.165	4
Flat Creek																			
KV-47	Porcupine Diversion Ditch	25/05/2006	12:00				0.413	111	43.2	58.8	0.0135	0.00112	0.00240	0.162	0.00737	<0.0010	0.160	0.117	6
KV-9	Flat Creek @ mouth	26/05/2006	18:17	9.4	7.57	198	1.878	129	3.2	41.6	0.00370	0.000436	0.00283	0.039	0.00817	<0.0010	0.0646	0.0548	5
Lightning Creek																			
KV-37	Lightning Cr u/s Hope Gulch	26/05/2006	12:00	1.9	7.63	74	0.751	35.8	15.2	15.1	0.00498	<0.000050	0.00126	0.073	0.000178	<0.0010	<0.0050	0.0031	0
KV-39	Hope Gulch	26/05/2006	12:30	2.4	7.60	166		96.5	<3.0	56.8	0.00925	0.00411	0.00185	<0.030	0.00213	<0.0010	0.363	0.365	5
KV-40	Charity Gulch	26/05/2006	12:50	2.0	8.10	251		183	<3.0	147	0.00043	0.000071	0.00090	<0.030	<0.000050	<0.0010	0.0066	0.0081	1
KV-38	Lightning Cr u/s Thunder Gulch	26/05/2006	13:15	2.6	7.84	101		52.0	6.5	25.4	0.00394	0.000379	0.00122	0.048	0.000357	<0.0010	0.0435	0.0399	3
KV-41	Lightning Cr @ Keno u/s bridge	26/05/2006	10:40	2.7	7.73	98	1.535	52.5	17.2	21.8	0.00317	0.000220	0.00141	0.055	0.000305	<0.0010	0.0306	0.0239	2
CCME guideline for freshwater aquatic life:											0.005	0.000017	0.002	0.3	0.001	0.001	0.03	0.03	
Detection Limit for May 2006, Norwest:									1	0.1	0.0002	0.00001	0.001	0.01	0.0001	0.0002	0.001	0.001	
Detection Limit for May 2006, ALS:									0.54	3.0	0.50	0.00010	0.000050	0.00010	0.030	0.000050	0.0010	0.0010	

The highest concentrations of zinc were reported in Hope Gulch (KV-39), followed by the Christal Creek sites and the Flat Creek sites. Zinc concentrations were increasingly lower in the South McQuesten sites and lower still in the Lightning Creek sites.

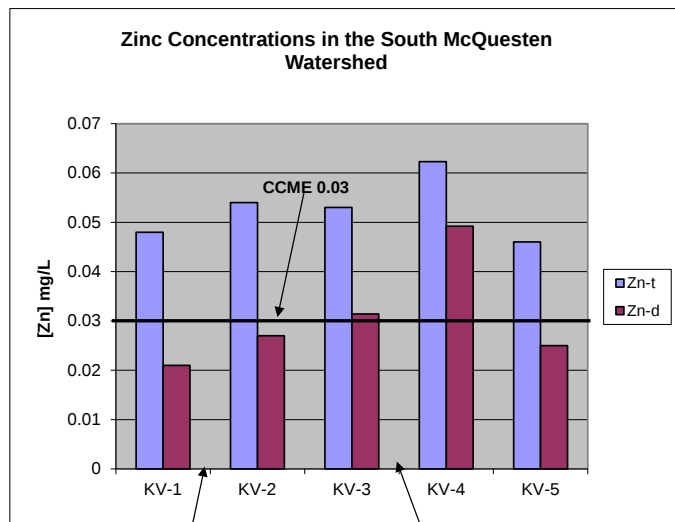
Zinc was identified in the 2003 survey as the major contaminant of concern in the Keno Valley study area. Total and dissolved zinc concentrations have been graphed per watershed in Figure 2.

In the South McQuesten watershed, the highest concentrations of total and dissolved zinc occurred at KV-4 where the CCME guideline was exceeded. The dissolved zinc concentrations were at or met the guideline at the other sites, however the total zinc concentrations exceeded the guideline at all of the sites. Total zinc concentrations were up to twice that of dissolved, indicating that up to half of the total zinc throughout the South McQuesten River is in particulate form.

Both total and dissolved zinc concentrations were greater than the CCME guideline in the Flat Creek watershed, however, concentrations had decreased significantly at KV-9, Flat Creek near the mouth. It is suspected that significant attenuation occurs in the wetland situated between KV-47 and KV-9.

Both phases of zinc grossly exceeded the CCME in the Christal Creek watershed. The highest concentrations were documented at KV-6. Zinc levels decreased somewhat at KV-7 but increased downstream at KV-8 near the mouth with concentrations approaching values similar to those at KV-6.

Total and dissolved zinc were similar throughout the Lightning Creek drainage indicating that the majority of zinc in these waters exist in the dissolved form. Hope Gulch contributes a significant loading of zinc to Lightning Creek, however levels barely exceeded the CCME guideline at the closest site downstream, KV-38 (Lightning Creek u/s Thunder Gulch).



Confluence with Christal Cr

Confluence with Flat Creek

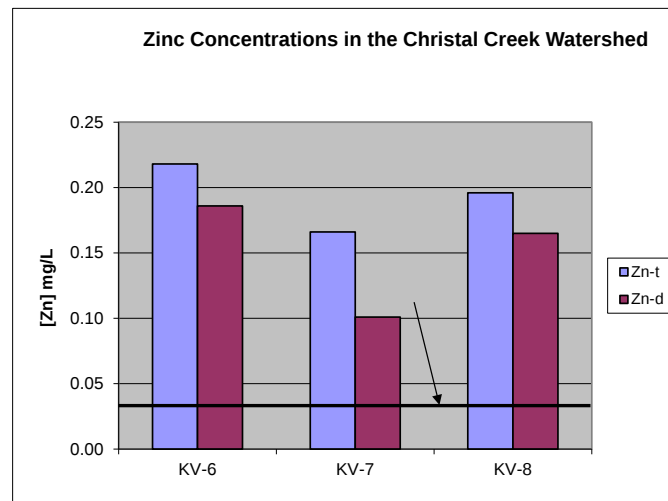
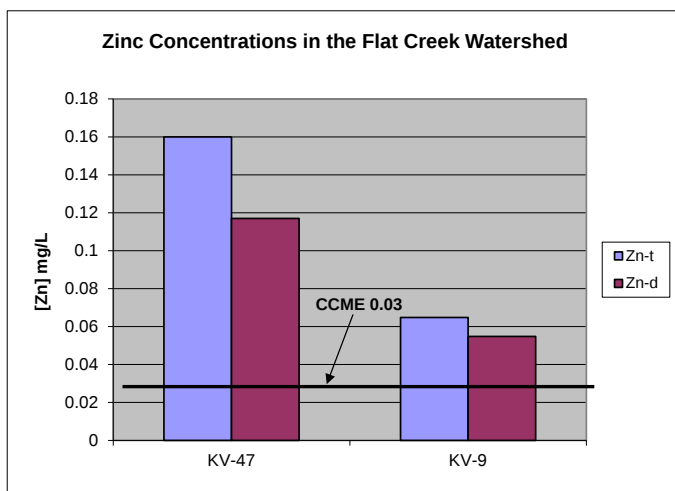
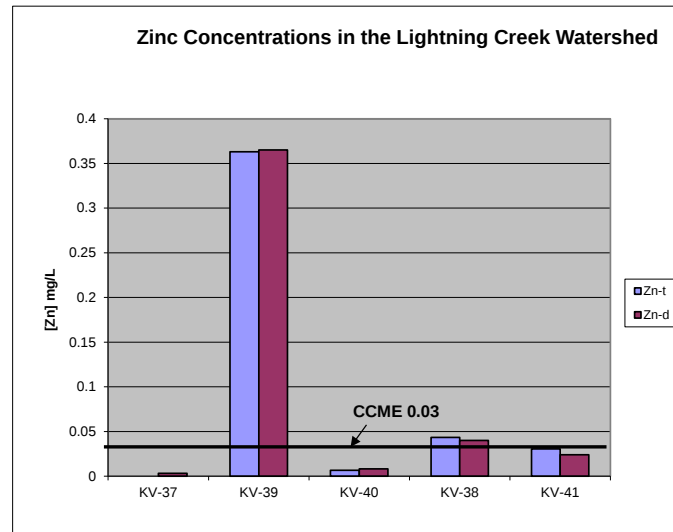


FIGURE 2 TOTAL AND DISSOLVED ZINC CONCENTRATIONS PER WATERSHED, MAY 2006

4.2 Automated Sampling Data, May 26 to June 6th, 2006

During the period covered by the survey both Christal Creek at Hanson Lake Road (KV-7) and the Porcupine Diversion (KV-47) were presenting the highest daily flow at night and the lowest flow around mid day. However, the strongest diurnal fluctuation of the freshet had already passed, so the daily highs and lows were less prominent than they could have been.

Porcupine Diversion Ditch - KV-47

The diversion ditch sampler was installed on May 25 and allowed to run through a cycle before initiating the sampling on May 26. The results for total and dissolved zinc are summarized in Figure 3.

Figure 4 shows the relationship between discharge and total/dissolved zinc in the diversion ditch. These flows are based on stage observations; the night time flow was a best guess based on the evident high water mark on shore.

There was a notable difference between total and dissolved zinc in the diversion ditch. At daily high flows the difference was more prominent.

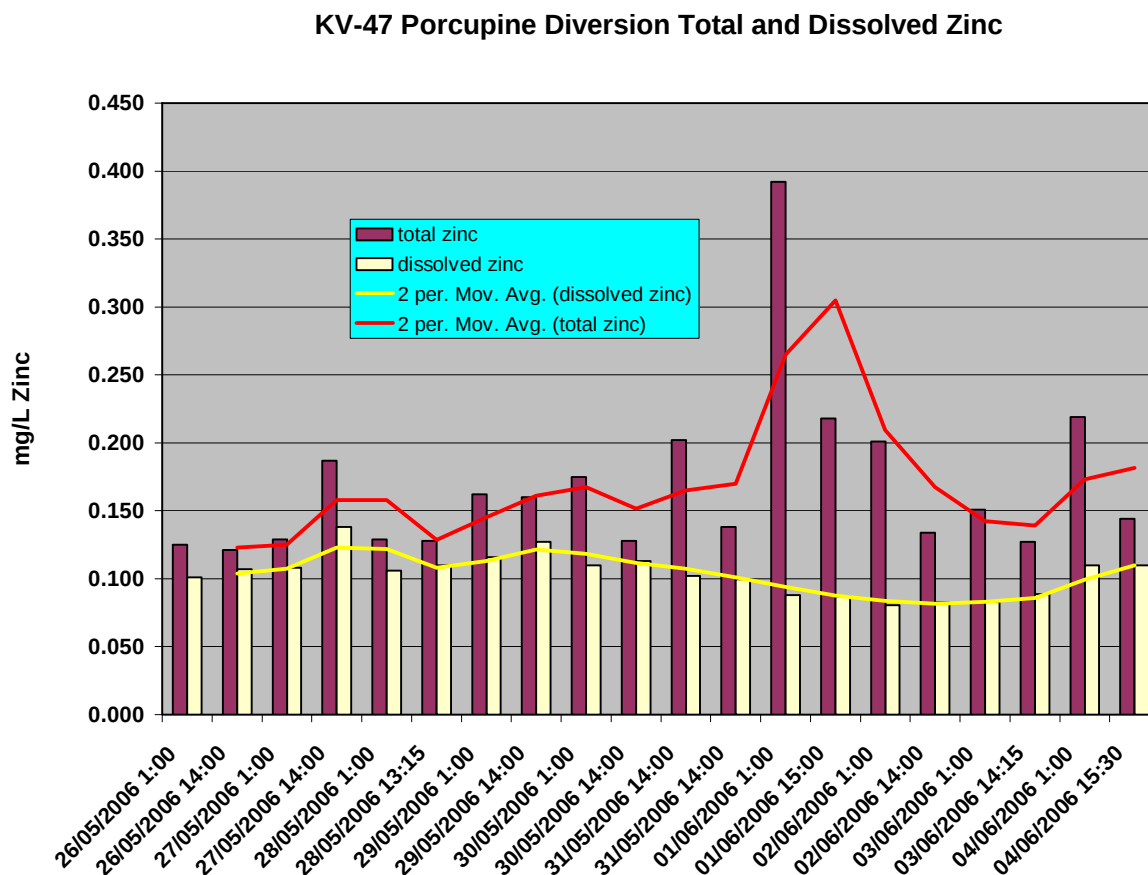
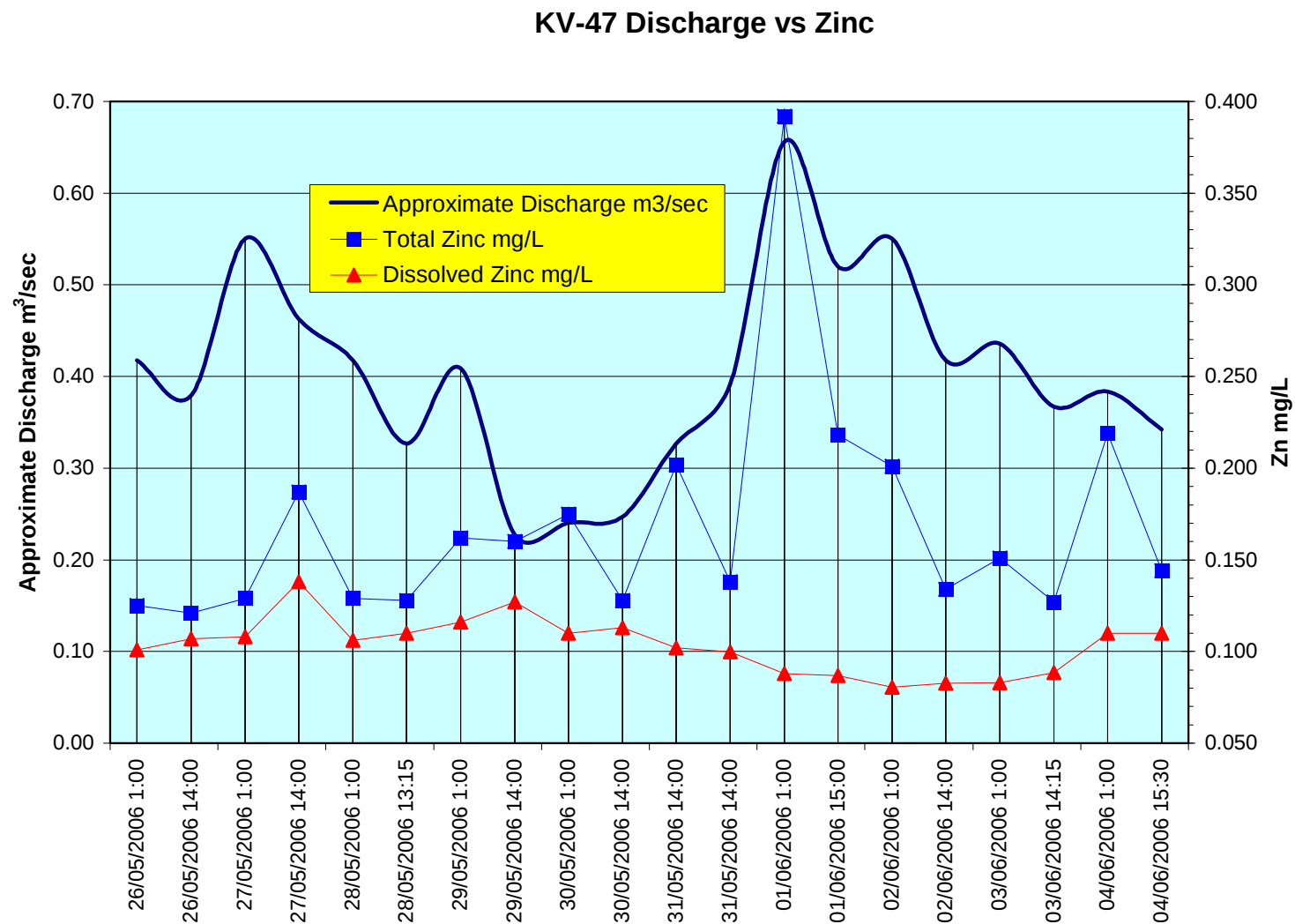


Figure 3 Total and Dissolved Zinc Concentrations at KV-47

Figure 4 Porcupine Diversion Discharge vs. Zinc Concentrations

Christal Creek at Hanson Lake Road KV-7

As documented at the Porcupine Diversion Ditch, there was a notable difference between total and dissolved zinc in Christal Creek (Figure 5).

Figure 6 shows the relationship between discharge and total/dissolved zinc at KV-7. Discharge is taken from the datalogger situated 150 m upstream of the bridge on the Hanson Lake Road, with the rating curve updated this spring. In Christal Creek the night time high is recorded, and roughly coincides with the highest total zinc concentrations. At daily high flows the difference was more prominent, as also observed at KV-47.

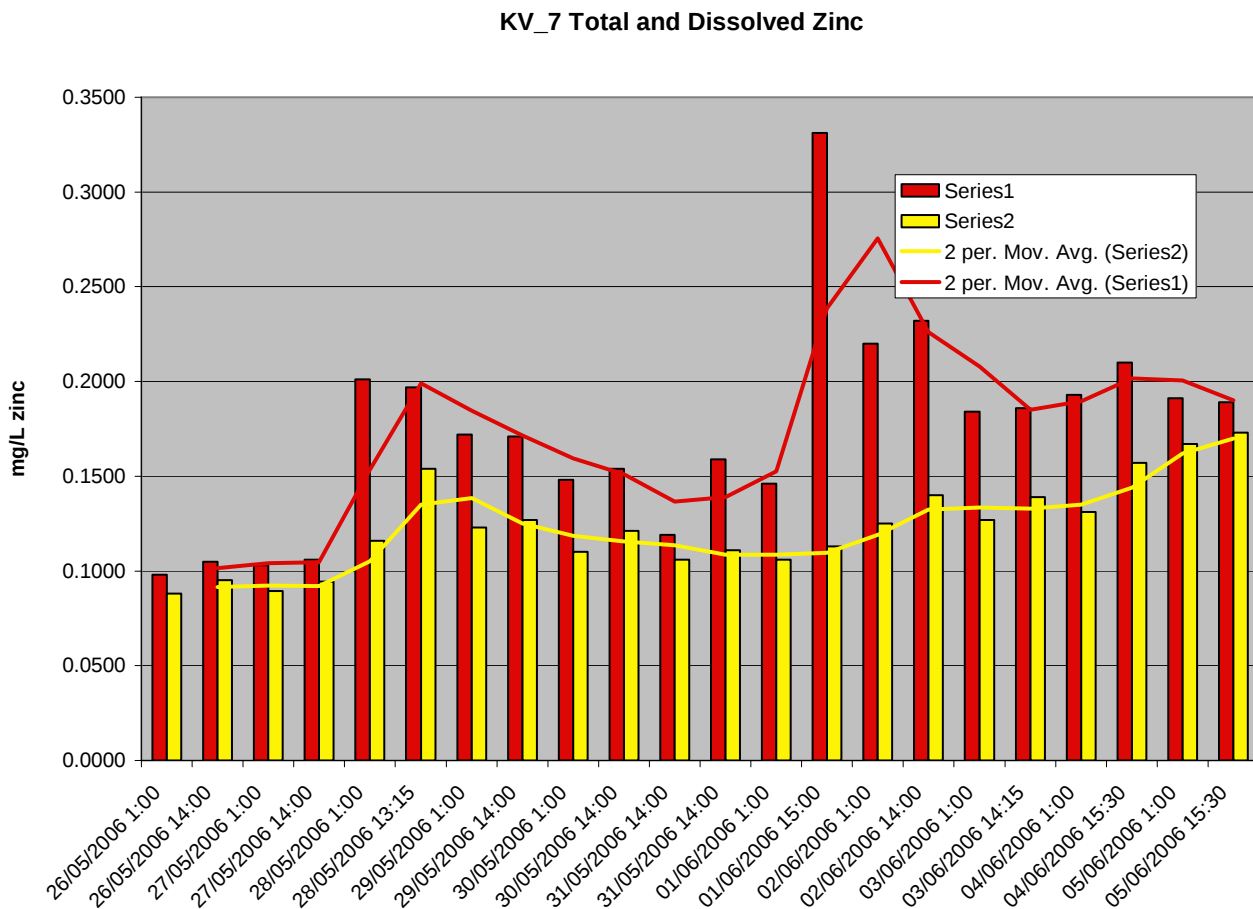
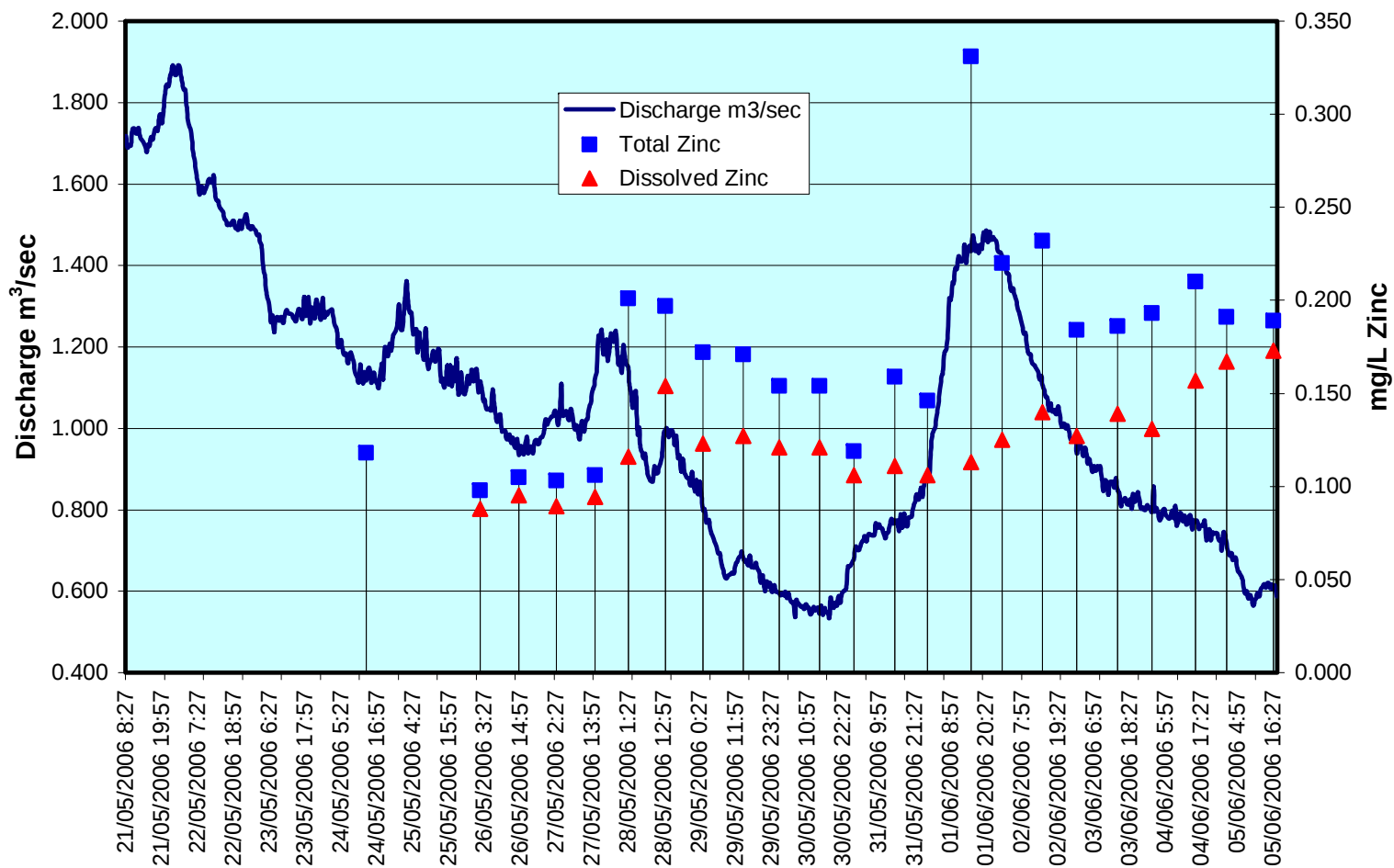


Figure 5 Total and Dissolved Zinc Concentrations at Christal Creek, KV-7

KV-7 Christal at Hanson Lake Road Discharge vs Zinc



4.3 Flow Variation over the Study Period

Christal Creek at the Hanson Lake Road (KV-7)

The peak snowmelt freshet at KV-7 occurred between May 18 and May 22 with an inferred peak of just over 2 cubic metres per second. As can be seen on Figure 7, diurnal fluctuation was evident throughout the freshet but was strongest just before the start of the experiment. Nevertheless, diurnal highs were observed on most days with lowest flow occurring around mid day. The freshet lasted from about May 18 until normal flows resumed on about June 2.

Flat Creek Upstream of South McQuesten River (KV-9)

Flat Creek snowmelt freshet at KV-9 started early, on about May 7, and peaked around May 17 to 22nd at over 3.5 m³/sec. This is probably a true estimate because the creek did not overtop the banks this year. Freshet flows were still observed during the experiment but had diminished to daily highs of approximately 1.5 m³/sec. See Figure 8.

Lightning Creek at Keno City (KV-41)

This year Lightning Creek snowmelt freshet occurred between about May 28 and June 6th, with the peak occurring just after midnight on June 2 (Figure 9).

Porcupine Creek Diversion Ditch (KV-47)

Although the Porcupine Diversion Ditch at KV-47 reports to Flat Creek, it is high in the basin and presented a different flow variation over the experiment than Flat Creek proper. The ditch was constructed in the 1970s with the lower portion blasted in March 1979. The ditch transects the outer extent of old tailings and flows through permafrost in the lower portion near the tailings dam. Unfortunately there is no continuous stage recording at KV-47, but there is a staff gauge which has allowed a crude record of discharge based on a rating curve. Diurnal highs were observed at the start and at the end of the experiment. Manual staff gauge readings were taken each day. It was noted that a high water mark was present, which meant that the high flow was occurring at night. Based on the observed rise in stage at the start and end of the experiment, a best guess was made as to the overnight "highs", which can be seen on Figure 10.

KV-7 Christal Creek at Hanson Lake Road Discharge during Freshet 2006

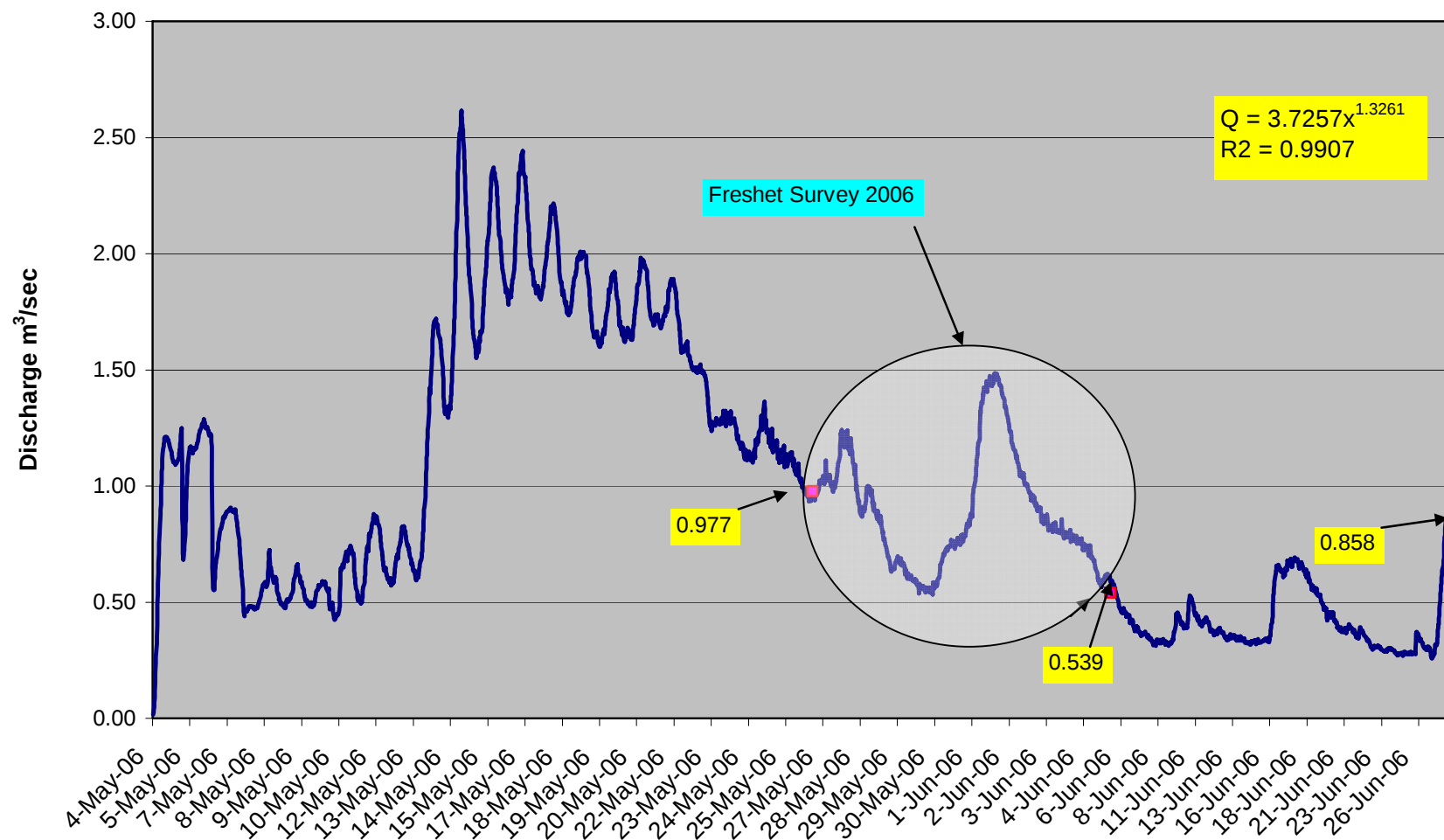


Figure 7 Discharge During Freshet at KV-7

KV_9 Flat Creek near Mouth Discharge during Freshet 2006

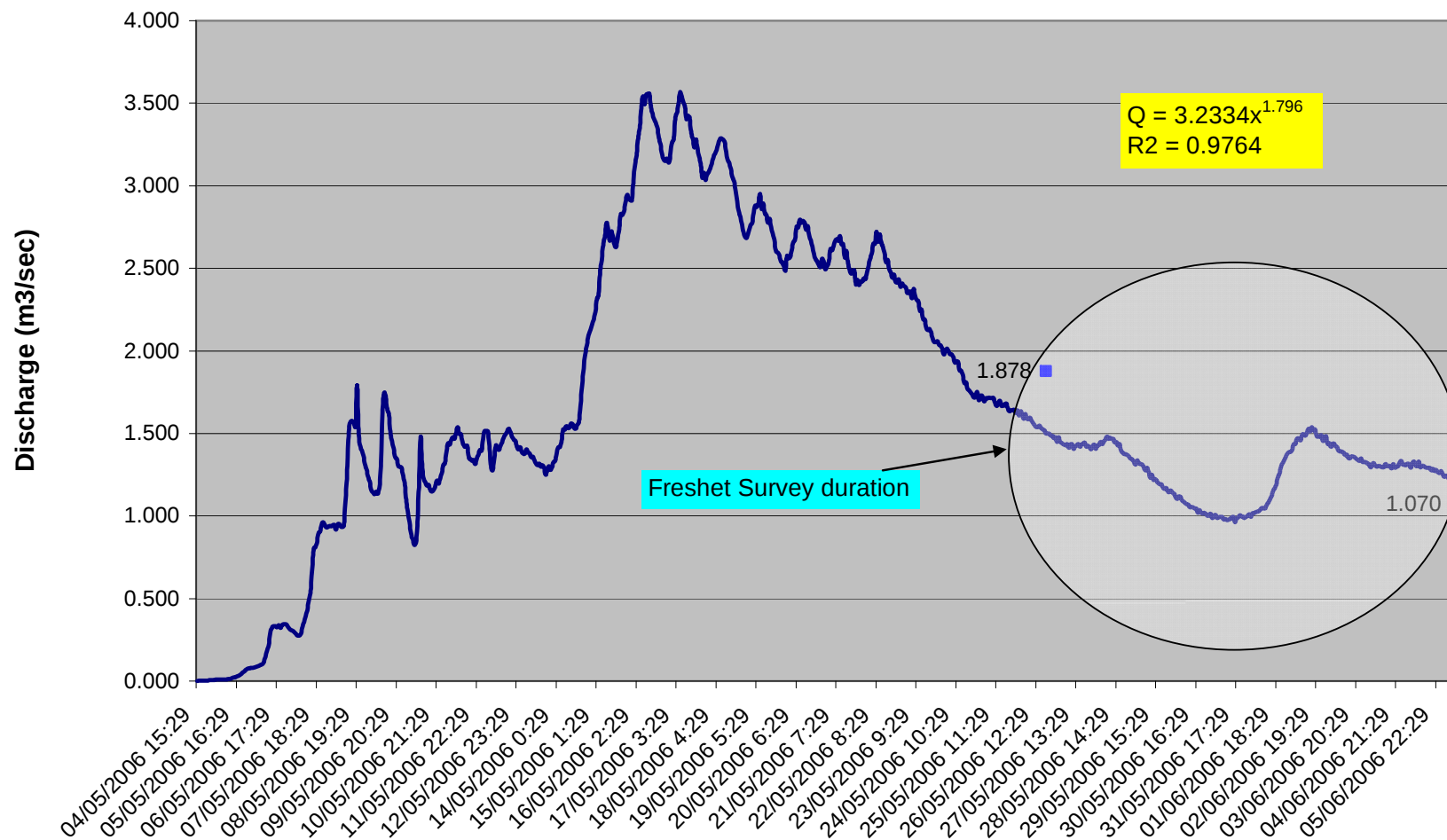
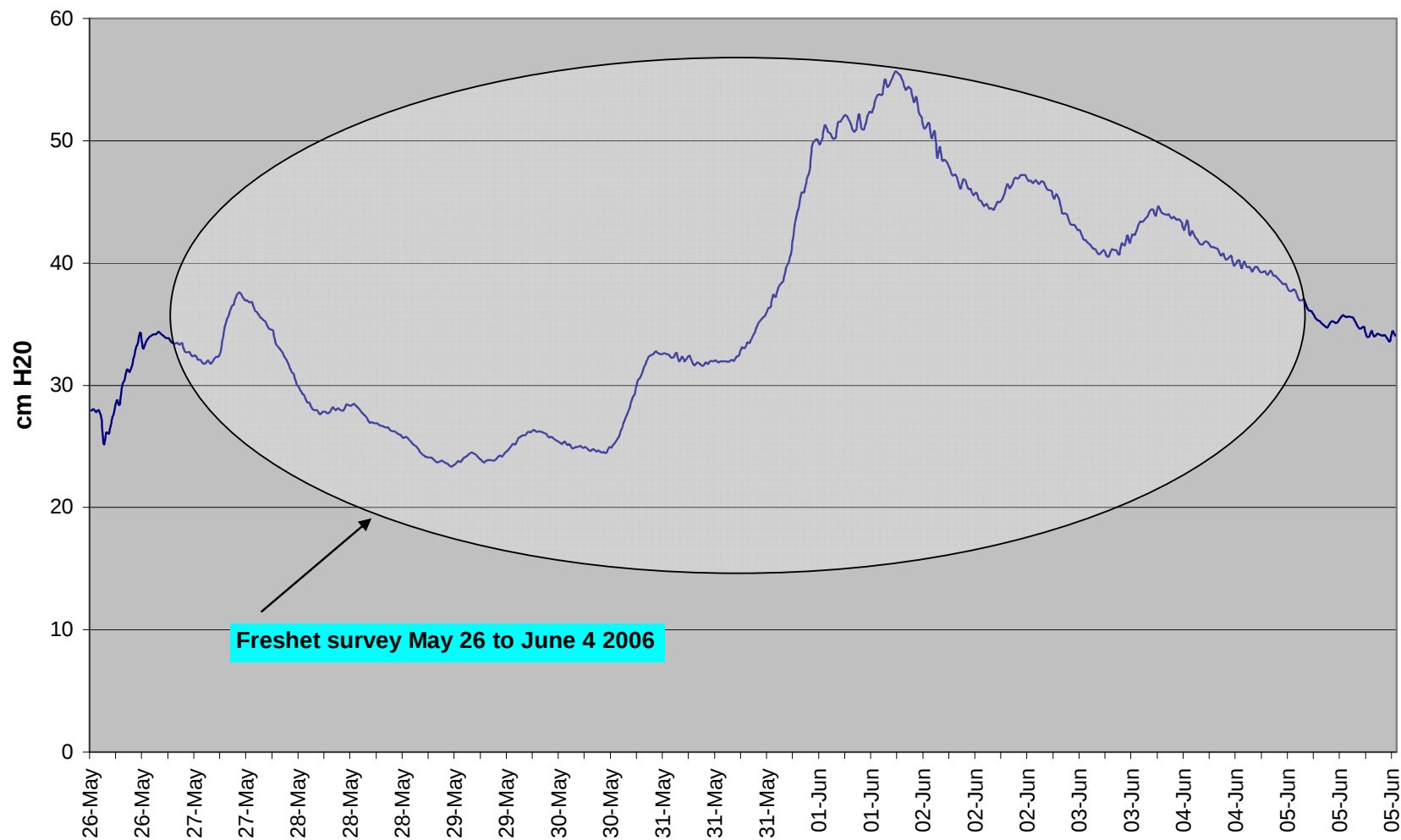


Figure 8 Discharge During Freshet at KV-9

KV_41 Primary Water Level Freshet 2006

**Figure 9 Water Level During the Study Period at KV-41**

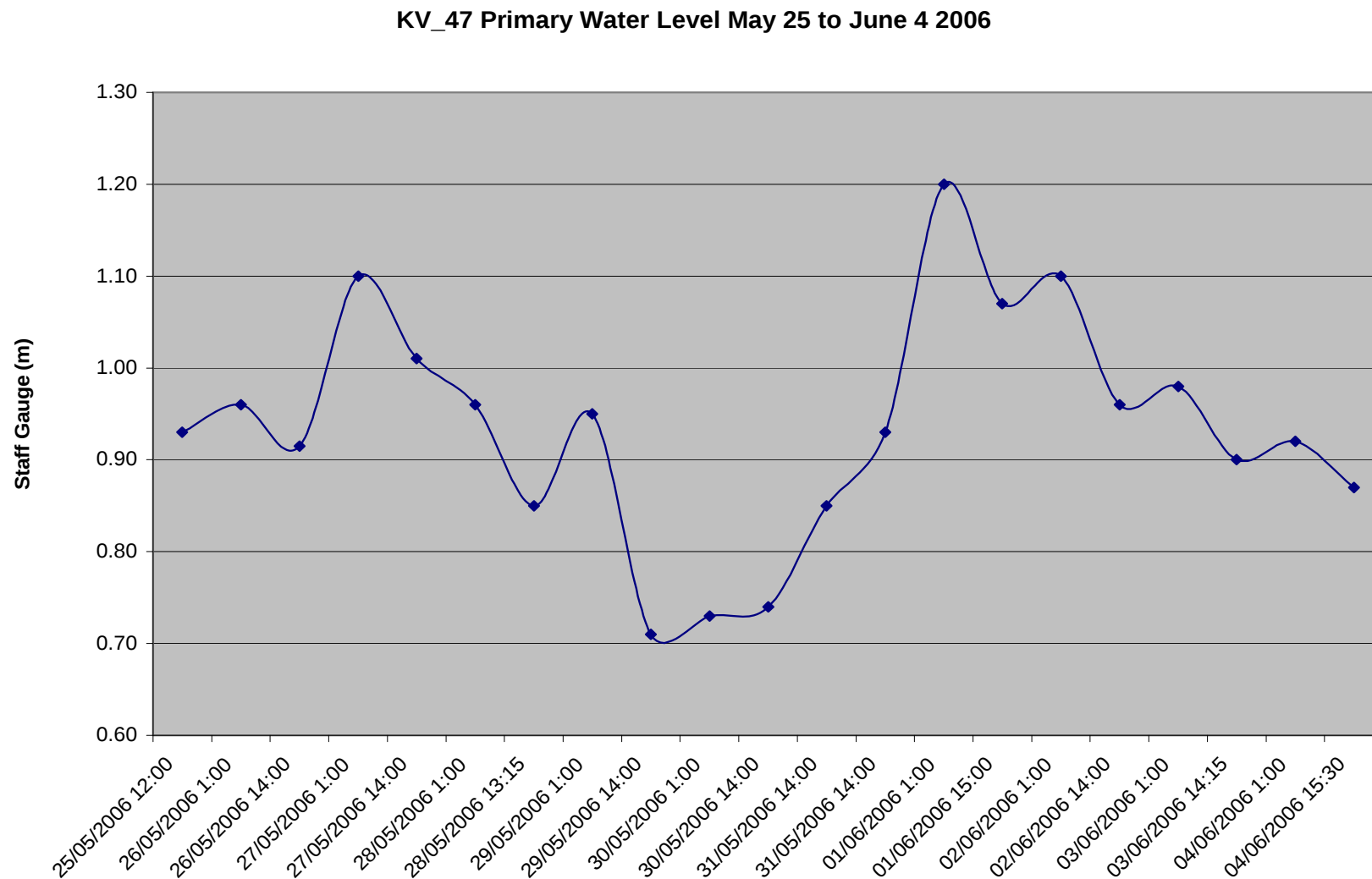


Figure 10 Water Level During the Study Period at KV-47

4.4 Zinc Loading

Note that the following rough estimates are for the purpose and scope of this data report. Further more detailed analysis may be done by others using the digital files generated under this project and made available to Type II and to Elsa Reclamation and Development (Alexco).

The experiment showed that total zinc is being transported at both of the observed sites, and was consistently higher in concentration than dissolved zinc. Extrapolating the average total zinc concentration over the period of the experiment, a crude estimate can be made of the overall loading of Total Zinc at each site.

At KV-47, the average total zinc concentration was 0.16 mg/L and the average flow was 0.4 m³/sec. Over the ten day period of the experiment, therefore;

Total discharge (Q) = 345,600 m³ or 345,600,000 L
Total zinc load for the 10 days: 0.16 mg/L x 345,600,000 L = 56,490,000 mg / 1,000 = 58,752 g = 56.5 kg, or about 5.5 kg/day.

At KV-7 the average flow during the experiment was about 1.2 m³/sec at and average total zinc concentration of 0.17 mg/L Total Q = 1,036,800 m³ or 1,036,800,000 L
Total zinc load 0.17 mg/L x 1,036,800,000 L = 176,256,000 mg / 1,000 = 176,256 g = 176.2 kg. or about 18 kg/day

Extrapolating over the entire freshet period, the conservative amount of zinc loading would be in the order of;

KV-47, assuming a 15 day freshet – 90 kg of total zinc.

KV-7, recorded approximately 20 days – 360 kg total zinc.

The record of total zinc as measured by the Elsa field lab does not show a trend towards higher zinc during freshet at KV-7. In fact zinc seems to have been elevated throughout the past two years in Christal Creek, with the result that the input of total zinc to the South McQuesten at KV-8 would have been substantial.

The following figure shows Elsa field lab total zinc for 2005 to 2006.

Elsa Field Lab Zinc at KV_7 2005-2006

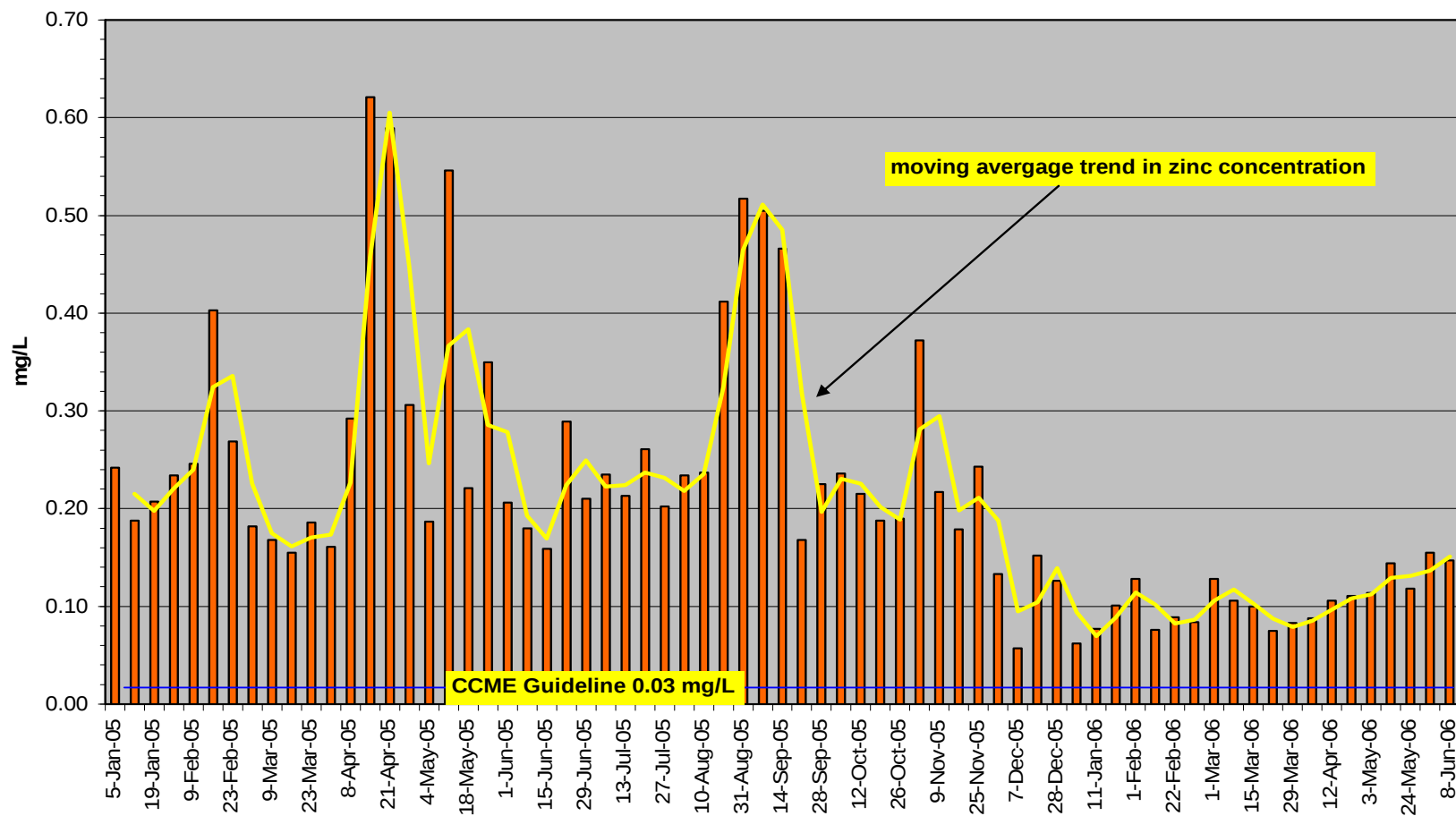


Figure 11 Total Zinc Concentration Analyzed by the Elsa Field Lab, Jan 2005 to June 2006

5.0 SUMMARY

Although every effort was made to encompass the freshet period for the purposes of this study, the early portion of freshet was missed. However the study did show that zinc levels were elevated during freshet and that typically there was significantly more total zinc than dissolved zinc in the watersheds.

There were greater concentrations of total zinc at the diurnal high flows, but the correlation was not as strong as expected since that time period has passed.

Significant quantities of particulate zinc are being flushed throughout the receiving waters. The transport and fate of that zinc is not totally understood but it seems that much of it would be in the form of metal compounds that would settle out and could become re-suspended depending on flow.

6.0 RECOMMENDATIONS

It is recommended that this study be repeated next year but timed earlier in order to catch the rise of freshet as well as the duration.

It would be beneficial to determine the metals speciation using the suspended solids and the settled sediment during freshet. The form of zinc plays a major role in its toxicity to freshwater aquatic life. Sediment traps could be installed in conjunction with auto samplers.

7.0 REFERENCES

Laberge Environmental Services. 2004. *Receiving Water and Contaminant Pathway Monitoring in the Keno Valley, 2003*. Special Projects #3. Prepared for Nacho Nyak Dun Development Corporation.

Laberge Environmental Services. 2005. *Keno Valley Receiving Water Monitoring Program, 2004/2005*. Prepared for Access Mining Consultants Ltd.

Laberge Environmental Services. 2006. *Keno Valley Receiving Water Monitoring Program, 2005/2006*. Prepared for Assessment and Abandoned Mines, Energe Mines and Resources, Yukon Territorial Government

APPENDIX A

WATER QUALITY ANALYSIS

MAY 2006 – NORWEST LABS WORKORDER # 466883

MAY 2006 – ALS ENVIRONMENTAL WORKORDER # X6399

**AUTOMATED SAMPLER ANALYSES – ALS ENVIRONMENTAL
WORKORDER # X6955**



NORWEST LABS

Control Number E 67439

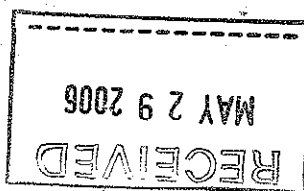
Environmental Sample Information Sheet

NOTE Proper completion of this form is required in order to proceed with analysis
See reverse for your nearest Norwest location and proper sampling protocol

Billing Address:		Report To: ☒	Copy of Report To:	Copy of invoice: ☐
Company: Laberge Environmental Services		QA/QC Report ☐	Company: ACG	Mail invoice to this address for approval ☐
Address: P.O. Box 5111 Whitehorse, Yukon, Y1A 4S3			Address:	
Attention: Ken Nordin		Report Result:	Attention: SCOTT KEESER	Report Result:
Phone: (867) 668-1043		Fax ☒	Phone: 867 668 6463	Fax ☐
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Cell:		Courier ☐	Cell:	Courier ☐
e-mail: laberge@internorth.com		e-mail ☒	e-mail: scott@accessconsulting.ca	e-mail ☒

Information to be included on Report and Invoice	RUSH	Sample Custody (Please Print)
	Please contact the laboratory to confirm rush dates and times before submitting samples.	
Project ID: G300 RWQ	Upon filling out this section, client accepts that surcharges will be attached to this analysis	Sampled by: KEN NORDIN Date: MAY 2006
Project Name:	Required on: all analyses or as indicated	Company: LES Signature: [Signature]
Project Location: ELSA - KEND	☐ or ☐	Relinquished by: KEN NORDIN
Legal Location:		Company: LES Date: May 27 2006
PO#:		Waybill number:
Proj. Acct. Code:	Date Required:	Received by:
Agreement ID: 17654	Signature:	Company: Date:
	Norwest Authorization:	Processed by: Donna
		Norwest Labs Date: May 31/06

Special Instructions / Comments



MAY, 2006

Sample Identification	Location	Depth	Date / Time Sampled	Matrix	Sampling Method	Number of Containers	Enter tests above (✓ relevant samples below)
1. S. McQuesten U/S chr	KV-1	—	25/15:00	H ₂ O	GRAB	3	✓✓✓✓✓✓
2. S. McQuesten @ PH Pond	KV-2	—	25/13:00	H ₂ O	GRAB	3	✓✓✓✓✓✓
3. S. McQuesten 9k d/s FL	KV-5	—	26/21:00	H ₂ O	GRAB	3	✓✓✓✓✓✓
4. Christal U/S Hwy	KV-6	—	26/9:50	H ₂ O	GRAB	3	✓✓✓✓✓✓
5. Christal @ mouth	KV-8	—	25/17:00	H ₂ O	GRAB	3	✓✓✓✓✓✓
6. Christal site (A)	—	—	26/8:50	H ₂ O	GRAB	3	✓✓✓✓✓✓
7. Christal site (D)	—	—	26/9:15	H ₂ O	GRAB	3	✓✓✓✓✓✓
8. Culvert #4	—	—	26/12:30	H ₂ O	GRAB	3	✓✓✓✓✓✓
9. G300 ADIT	—	—	25/21:08	H ₂ O	GRAB	3	✓✓✓✓✓✓
10. G300 DECANT	—	—	25/21:50	H ₂ O	GRAB	3	✓✓✓✓✓✓
11. Christal @ HL RD.	KV-7	—	25/16:00	H ₂ O	GRAB	3	✓✓✓✓✓✓
12.	—	—	—	—	—	—	—
13.	—	—	—	—	—	—	—
14.	—	—	—	—	—	—	—

NOTE: All hazardous samples must be labelled according to WHMIS guidelines.

Accredited by the Standards Council of Canada for specific tests

Page 1 of 1

NW1008 (0-2000)

287|YXY|00489720

287 00489720

SHIPPER'S NAME AND ADDRESS Laberge Environmental Whitehorse YT CANADA		SHIPPER'S ACCOUNT NUMBER 91127255		NOT NEGOTIABLE AIR WAYBILL (AIR CONSIGNMENT NOTE)		AIR NORTH LTD. 150 Condor Rd. Whitehorse, YT Y1A 6E6 GST No. R100094499	
CONSIGNEE'S NAME AND ADDRESS NORWEST LABS #104-19575- 55A Ave Surrey BC CANADA		CONSIGNEE'S ACCOUNT NUMBER 89312196		It is agreed that the goods described herein are accepted in apparent good order and condition (except as noted) for carriage. SUBJECT TO THE CONDITIONS OF CONTRACT ON THE REVERSE HEREOF, THE SHIPPER'S ATTENTION IS DRAWN TO THE NOTICE CONCERNING CARRIERS' LIMITATION OF LIABILITY. Shipper may increase such limitation of liability by declaring a higher value for carriage and paying a supplemental charge if required.			
ISSUING CARRIER'S AGENT NAME AND CITY AIR NORTH LTD. Whitehorse		TO EXPEDITE MOVEMENT, SHIPMENT MAY BE DIVERTED TO MOTOR OR OTHER CARRIER AS PER TARIFF RULE UNLESS SHIPPER GIVES OTHER INSTRUCTIONS HEREON					
AGENTS IATA CODE 287		ACCOUNT NO.		ACCOUNTING INFORMATION INVOICE: Access Consulting			
AIRPORT OF DEPARTURE (ADDR OF FIRST CARRIER) AND REQUESTED ROUTING Whitehorse							
ROUTING AND DESTINATION TO: YVR BY FIRST CARRIER 4N		CURRENCY CDN		CHGS CODE PPD COLL		OTHER PPD COLL	
AIRPORT OF DESTINATION Vancouver		FLIGHT/DATE 505A 29/05/06		DECLARED VALUE FOR CARRIAGE NVD		DECLARED VALUE FOR CUSTOMS NCV	
FOR CARRIER USE ONLY FLIGHT/DATE		AMOUNT OF INSURANCE		INSURANCE- If shipper requests insurance in accordance with conditions on reverse hereof, indicate amount to be insured in figures in box marked amount of insurance		TC	
HANDLING INFORMATION these commodities licensed by US for ultimate destination				Diversion contrary to US law is provided			
NO. OF PIECES RCP	GROSS WEIGHT	RATE CLASS COMMODITY ITEM NO.	CHARGEABLE WEIGHT	RATE CHARGE	TOTAL	NATURE AND QUANTITY OF GOODS (INCL. DIMENSION OR VOLUME)	
1	47	P	47.00	1.00	47.00	Water Samples	
				NSC 18%	8.46	DIMS 1.0X1.0X1.0 INCHES.	
1	47.0				55.46		
PREPAID		WEIGHT CHARGE		COLLECT		PICKUP CHARGES	
A. 55.46						B. DELIVERY CHARGES	
VALUATION CHARGE						C. DEST. ADVANCE CHARGES	
D. TAX						E. OTHER CHARGES AND DESCRIPTION	
I. 3.88						F. SHIPPER'S R.F.C.	
TOTAL OTHER CHARGES DUE AGENT		SHIPPER certifies that the particulars on the face hereof are correct and that insofar as any part of the consignment contains restricted articles, such part is properly described by name and is in proper condition for carriage by air according to applicable national government regulations, and for international shipments, the current international Air Transport Association's Restricted Articles Regulations					
B,F TOTAL OTHER CHARGES DUE CARRIER							
C. CURRENCY		SIGNATURE OF SHIPPER OR HIS AGENT					
G. TOTAL PREPAID		TOTAL COLLECT		EXECUTED ON			
59.34				28-05-2006 16:28 Whitehorse			



Report Transmission Cover Page

Norwest Labs
#104, 19575-55 A Ave.
Surrey, BC. V3S 8P8
Phone: (604) 514-3322
Fax: (604) 514-3323

Bill to: Access Mining Consultants Ltd.
Report to: Access Mining Consultants Ltd.
3 Calcite Business Centre
151 Industrial Road
Whitehorse, YT, Canada
Y1A 2V3
Attn: Scott Keeseey
Sampled By: Ken Nordin
Company: LES

Project
ID: G300RWQ
Name:
Location: Elsa - Keno
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 466883
Control Number: E 67439
Date Received: May 29, 2006
Date Reported: Jun 02, 2006
Report Number: 859067

Contact	Company	Address												
Scott Keeseey Web x Email Notification	Access Mining Consultants Ltd.	# 3 Calcite Business Centre, 151 Industrial Road Whitehorse, YT Y1A 2V3 Phone: (867) 668-6463 Fax: (867) 667-6680 Email: scott@accessconsulting.ca												
<table><tr><th>Copies</th><th>Delivery Strategy</th><th>Format</th></tr><tr><td>1</td><td>Post</td><td></td></tr><tr><td>A 1</td><td>Email - Single Report</td><td>PDF</td></tr><tr><td>A 1</td><td>Email - Single Report</td><td>Standard List</td></tr></table>		Copies	Delivery Strategy	Format	1	Post		A 1	Email - Single Report	PDF	A 1	Email - Single Report	Standard List	
Copies	Delivery Strategy	Format												
1	Post													
A 1	Email - Single Report	PDF												
A 1	Email - Single Report	Standard List												
xxxTravis xxxRitchie Web x Email Notification	Access Mining Consultants Ltd.	# 3 Calcite Business Centre, 151 Industrial Road Whitehorse, YT Y1A 2V3 Phone: (867) 668-6463 Fax: (867) 667-6680 Email: travis@accessconsulting.ca												
<table><tr><th>Copies</th><th>Delivery Strategy</th><th>Format</th></tr></table>		Copies	Delivery Strategy	Format										
Copies	Delivery Strategy	Format												

NOTE: **P** indicates a preliminary report is required

NOTE: **A** indicates report is delivered using automated delivery

_____ # OF PAGES IN THIS TRANSMISSION

Report Transmission Notes

Agreement Notes

Lot Notes

Sample Notes:

Notes to Clients

Lot Notes:

Analysis was completed on a sample that exceeded the recommended holding time for Alkalinity analysis.

Analysis was completed on a sample that exceeded the recommended holding time for pH analysis.

Sample Notes:

Batch Notes:

Method Notes:

Method Result Notes:

Reports associated with this Lot

Id/Format/Reported Date
859067 Env2 3 Smp & DL

Id/Format/Reported Date

Id/Format/Reported Date



Report Transmission Cover Page

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#104, 19575-55 A Ave.
Surrey, BC. V3S 8P8
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Bill to: Access Mining Consultants Ltd.
Report to: Access Mining Consultants Ltd.
3 Calcite Business Centre
151 Industrial Road
Whitehorse, YT, Canada
Y1A 2V3
Attn: Scott Keeseey
Sampled By: Ken Nordin
Company: LES

Project
ID: G300RWQ
Name:
Location: Elsa - Keno
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 466883
Control Number: E 67439
Date Received: May 29, 2006
Date Reported: Jun 02, 2006
Report Number: 859067

Comment:

See Methodology and Notes page of Analytical Report for all comments pertaining to this report.

If this report transmission is not satisfactory, please send report requirements to the address at the top of this page.



Sample Custody

Norwest Labs
#104, 19575-55 A Ave.
Surrey, BC. V3S 8P8
Phone: (604) 514-3322
Fax: (604) 514-3323

Bill to: Access Mining Consultants Ltd.
Report to: Access Mining Consultants Ltd.
3 Calcite Business Centre
151 Industrial Road
Whitehorse, YT, Canada
Y1A 2V3
Attn: Scott Keeseey
Sampled By: Ken Nordin
Company: LES

Project
ID: G300RWQ
Name:
Location: Elsa - Keno
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 466883
Control Number: E 67439
Date Received: May 29, 2006
Date Reported: Jun 02, 2006
Report Number: 859067

Sample Disposal Date: Jul 02, 2006

All samples will be stored until this date unless other instructions are received. Please indicate other requirements below and return this form to the address or fax number on the upper right of this page.

_____ **Extend Sample Storage Until** _____ **(MM/DD/YY)**

The following charges apply to extended sample storage:

Storage for 1 to 5 samples per month	\$ 10.00
Storage for 6 to 20 samples per month	\$ 15.00
Storage for 21 to 50 samples per month	\$ 30.00
Storage for 51 to 200 samples per month	\$ 60.00
Storage for more than 200 samples per month	\$ 110.00

_____ **Return Sample, collect, to the address below via:**

_____ Greyhound
_____ Loomis
_____ Purolator
_____ Other (Specify) _____

Name: _____
Company: _____
Address: _____

Phone: _____
Fax: _____
Signature: _____

If no other arrangements have been made, samples will be disposed of on Jul 02, 2006.



Analytical Report

Norwest Labs
#104, 19575-55 A Ave.
Surrey, BC. V3S 8P8
Phone: (604) 514-3322
Fax: (604) 514-3323

Bill to: Access Mining Consultants Ltd.
Report to: Access Mining Consultants Ltd.
3 Calcite Business Centre
151 Industrial Road
Whitehorse, YT, Canada
Y1A 2V3
Attn: Scott Keesey
Sampled By: Ken Nordin
Company: LES

Project
ID: G300RWQ
Name:
Location: Elsa - Keno
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 466883
Control Number: E 67439
Date Received: May 29, 2006
Date Reported: Jun 02, 2006
Report Number: 859067

Page: 1 of 13

		NWL Number	466883-1	466883-2	466883-3		
		Sample Date	May 25, 2006 4:00:00PM	May 25, 2006 1:00:00PM	May 26, 2006 9:00:00PM		
		Sample Description	KV-1 / S. McQuesten u/s Chr.	KV-2 / S. McQuesten @ PH pond	KV-5 / S. McQuesten 9K d/s Fl.		
		Matrix	Water	Water	Water		
Analyte		Units	Results	Results	Results	Detection Limit	
Metals Dissolved							
Silicon	Dissolved	mg/L	1.21	1.35	1.41	0.05	
Sulfur	Dissolved	mg/L	7.3	8.3	8.4	0.3	
Aluminum	Dissolved	mg/L	0.079	0.061	0.043	0.005	
Antimony	Dissolved	mg/L	<0.0002	<0.0002	0.0003	0.0002	
Arsenic	Dissolved	mg/L	0.0008	0.0009	0.0024	0.0002	
Barium	Dissolved	mg/L	0.027	0.030	0.033	0.001	
Beryllium	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001	
Bismuth	Dissolved	mg/L	<0.0005	<0.0005	<0.0005	0.0005	
Boron	Dissolved	mg/L	<0.002	<0.002	<0.002	0.002	
Cadmium	Dissolved	mg/L	0.00010	0.00015	0.00013	0.00001	
Chromium	Dissolved	mg/L	<0.0005	<0.0005	<0.0005	0.0005	
Cobalt	Dissolved	mg/L	0.0004	0.0002	0.0002	0.0001	
Copper	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001	
Lead	Dissolved	mg/L	0.0002	0.0005	0.0013	0.0001	
Lithium	Dissolved	mg/L	0.002	0.002	0.002	0.001	
Molybdenum	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001	
Nickel	Dissolved	mg/L	0.0051	0.0040	0.0030	0.0005	
Selenium	Dissolved	mg/L	<0.0002	<0.0002	<0.0002	0.0002	
Silver	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001	
Strontium	Dissolved	mg/L	0.071	0.074	0.084	0.001	
Thallium	Dissolved	mg/L	<0.00005	<0.00005	<0.00005	0.00005	
Tin	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001	
Titanium	Dissolved	mg/L	0.0008	0.0008	0.0010	0.0005	
Uranium	Dissolved	mg/L	<0.0005	<0.0005	<0.0005	0.0005	
Vanadium	Dissolved	mg/L	0.0002	0.0002	0.0002	0.0001	
Zinc	Dissolved	mg/L	0.021	0.027	0.025	0.001	
Subsample	Field Filtered		Yes	Yes	Yes		
Metals Total							
Calcium	Total	mg/L	20.0	22.4	24.3	0.2	
Iron	Total	mg/L	1.0	0.8	0.8	0.1	
Magnesium	Total	mg/L	5.4	6.0	6.3	0.1	
Manganese	Total	mg/L	0.097	0.103	0.086	0.005	
Potassium	Total	mg/L	0.6	0.6	0.6	0.4	



Analytical Report

Norwest Labs
#104, 19575-55 A Ave.
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Phone: (604) 514-3322
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Bill to: Access Mining Consultants Ltd.
Report to: Access Mining Consultants Ltd.
3 Calcite Business Centre
151 Industrial Road
Whitehorse, YT, Canada
Y1A 2V3
Attn: Scott Keesey
Sampled By: Ken Nordin
Company: LES

Project
ID: G300RWQ
Name:
Location: Elsa - Keno
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 466883
Control Number: E 67439
Date Received: May 29, 2006
Date Reported: Jun 02, 2006
Report Number: 859067

Page: 2 of 13

		NWL Number	466883-1	466883-2	466883-3	
		Sample Date	May 25, 2006 4:00:00PM	May 25, 2006 1:00:00PM	May 26, 2006 9:00:00PM	
		Sample Description	KV-1 / S. McQuesten u/s Chr.	KV-2 / S. McQuesten @ PH pond	KV-5 / S. McQuesten 9K d/s Fl.	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Detection Limit
Metals Total - Continued						
Silicon	Total	mg/L	1.80	1.76	1.95	0.05
Sodium	Total	mg/L	0.9	0.8	1.1	0.4
Sulfur	Total	mg/L	7.1	7.9	8.4	0.3
Aluminum	Total	mg/L	0.508	0.374	0.397	0.005
Antimony	Total	mg/L	0.0003	<0.0002	0.0005	0.0002
Arsenic	Total	mg/L	0.0018	0.0022	0.0046	0.0002
Barium	Total	mg/L	0.037	0.038	0.040	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	<0.002	<0.002	<0.002	0.002
Cadmium	Total	mg/L	0.00024	0.00038	0.00034	0.00001
Chromium	Total	mg/L	0.0006	<0.0005	0.0006	0.0005
Cobalt	Total	mg/L	0.0012	0.0009	0.0006	0.0001
Copper	Total	mg/L	0.004	0.003	0.003	0.001
Lead	Total	mg/L	0.0021	0.0040	0.0080	0.0001
Lithium	Total	mg/L	0.002	0.002	0.002	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.0088	0.0061	0.0046	0.0005
Selenium	Total	mg/L	0.0003	0.0005	0.0004	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	0.0001	0.0001
Strontium	Total	mg/L	0.071	0.076	0.086	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0125	0.0108	0.0117	0.0005
Uranium	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Vanadium	Total	mg/L	0.0012	0.001	0.0011	0.0001
Zinc	Total	mg/L	0.048	0.054	0.046	0.001
Zirconium	Total	mg/L	<0.001	<0.001	<0.001	0.001
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	36	24	20	1
Routine Water						
pH	@ 25 °C	pH	7.29	7.35	7.50	
Electrical Conductivity	Water	uS/cm	151	166	180	1



Analytical Report

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Bill to: Access Mining Consultants Ltd.
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3 Calcite Business Centre
151 Industrial Road
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Y1A 2V3
Attn: Scott Keesey
Sampled By: Ken Nordin
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Project
ID: G300RWQ
Name:
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NWL Lot ID: 466883
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Page: 3 of 13

		NWL Number	466883-1	466883-2	466883-3
		Sample Date	May 25, 2006 4:00:00PM	May 25, 2006 1:00:00PM	May 26, 2006 9:00:00PM
		Sample Description	KV-1 / S. McQuesten u/s Chr.	KV-2 / S. McQuesten @ PH pond	KV-5 / S. McQuesten 9K d/s Fl.
		Matrix	Water	Water	Water
Analyte		Units	Results	Results	Detection Limit
Routine Water - Continued					
Calcium	Dissolved	mg/L	19.9	22.4	24.1
Magnesium	Dissolved	mg/L	5.5	6.1	6.3
Sodium	Dissolved	mg/L	1.3	1.0	1.1
Potassium	Dissolved	mg/L	0.5	0.4	0.6
Iron	Dissolved	mg/L	0.20	0.18	0.17
Manganese	Dissolved	mg/L	0.038	0.038	0.030
Chloride	Dissolved	mg/L	0.27	0.28	0.30
Fluoride	Dissolved	mg/L	0.05	0.05	<0.04
Nitrate - N	Dissolved	mg/L	<0.03	<0.03	0.04
Nitrite - N	Dissolved	mg/L	<0.03	<0.03	<0.03
Sulfate (SO4)	Dissolved	mg/L	23.1	26.2	27.5
Hydroxide	Water	mg/L	<5	<5	<5
Carbonate	Water	mg/L	<6	<6	<6
Bicarbonate	Water	mg/L	61	70	80
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5
T-Alkalinity	as CaCO3	mg/L	50	58	66
Hardness	Dissolved as CaCO3	mg/L	72	81	86



Analytical Report

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Attn: Scott Keesey
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Company: LES

Project
ID: G300RWQ
Name:
Location: Elsa - Keno
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 466883
Control Number: E 67439
Date Received: May 29, 2006
Date Reported: Jun 02, 2006
Report Number: 859067

Page: 4 of 13

		NWL Number		466883-4	466883-5	466883-6
		Sample Date		May 26, 2006 9:50:00AM	May 25, 2006 5:00:00PM	May 26, 2006 8:50:00AM
		Sample Description		KV-6 / Christal u/s Hwy	KV-8 / Christal @ Mouth Water	Christal Site A
		Matrix	Water			Water
Analyte		Units	Results	Results	Results	Detection Limit
Metals Dissolved						
Silicon	Dissolved	mg/L	1.93	1.50	1.98	0.05
Sulfur	Dissolved	mg/L	34.6	16.6	49.0	0.3
Aluminum	Dissolved	mg/L	0.030	0.030	0.041	0.005
Antimony	Dissolved	mg/L	0.0003	0.0003	0.0003	0.0002
Arsenic	Dissolved	mg/L	0.0027	0.0015	0.0024	0.0002
Barium	Dissolved	mg/L	0.036	0.025	0.034	0.001
Beryllium	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Dissolved	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Dissolved	mg/L	<0.002	<0.002	<0.002	0.002
Cadmium	Dissolved	mg/L	0.00108	0.00097	0.00071	0.00001
Chromium	Dissolved	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Dissolved	mg/L	0.0005	<0.0001	0.0005	0.0001
Copper	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Lead	Dissolved	mg/L	0.0034	0.0011	0.0017	0.0001
Lithium	Dissolved	mg/L	0.004	0.002	0.005	0.001
Molybdenum	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Dissolved	mg/L	0.0020	0.0011	0.0016	0.0005
Selenium	Dissolved	mg/L	0.0002	<0.0002	0.0003	0.0002
Silver	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Dissolved	mg/L	0.092	0.072	0.128	0.001
Thallium	Dissolved	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Dissolved	mg/L	0.0023	0.0016	0.0034	0.0005
Uranium	Dissolved	mg/L	0.0018	<0.0005	0.0015	0.0005
Vanadium	Dissolved	mg/L	0.0002	0.0002	0.0003	0.0001
Zinc	Dissolved	mg/L	0.186	0.165	0.198	0.001
Subsample	Field Filtered		Yes	Yes	Yes	
Metals Total						
Calcium	Total	mg/L	54.6	31.7	70.4	0.2
Iron	Total	mg/L	0.7	0.4	2.1	0.1
Magnesium	Total	mg/L	9.2	6.5	11.8	0.1
Manganese	Total	mg/L	0.455	0.114	0.477	0.005
Potassium	Total	mg/L	0.4	<0.4	0.8	0.4



Analytical Report

Norwest Labs
#104, 19575-55 A Ave.
Surrey, BC. V3S 8P8
Phone: (604) 514-3322
Fax: (604) 514-3323

Bill to: Access Mining Consultants Ltd.
Report to: Access Mining Consultants Ltd.
3 Calcite Business Centre
151 Industrial Road
Whitehorse, YT, Canada
Y1A 2V3
Attn: Scott Keesey
Sampled By: Ken Nordin
Company: LES

Project
ID: G300RWQ
Name:
Location: Elsa - Keno
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 466883
Control Number: E 67439
Date Received: May 29, 2006
Date Reported: Jun 02, 2006
Report Number: 859067

Page: 5 of 13

		NWL Number		466883-4	466883-5	466883-6
		Sample Date		May 26, 2006 9:50:00AM	May 25, 2006 5:00:00PM	May 26, 2006 8:50:00AM
		Sample Description		KV-6 / Christal u/s Hwy	KV-8 / Christal @ Mouth Water	Christal Site A
		Matrix	Water			Water
Analyte		Units	Results	Results	Results	Detection Limit
Metals Total - Continued						
Silicon	Total	mg/L	2.29	1.71	4.14	0.05
Sodium	Total	mg/L	0.8	0.7	1	0.4
Sulfur	Total	mg/L	35.2	16.5	49.8	0.3
Aluminum	Total	mg/L	0.216	0.190	1.14	0.005
Antimony	Total	mg/L	0.0007	0.0004	0.0005	0.0002
Arsenic	Total	mg/L	0.0057	0.0026	0.0063	0.0002
Barium	Total	mg/L	0.040	0.028	0.063	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	<0.002	<0.002	<0.002	0.002
Cadmium	Total	mg/L	0.00159	0.00130	0.00123	0.00001
Chromium	Total	mg/L	<0.0005	<0.0005	0.0020	0.0005
Cobalt	Total	mg/L	0.0006	0.0002	0.0013	0.0001
Copper	Total	mg/L	0.002	0.003	0.005	0.001
Lead	Total	mg/L	0.0260	0.0068	0.0107	0.0001
Lithium	Total	mg/L	0.004	0.002	0.007	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.0027	0.0016	0.0045	0.0005
Selenium	Total	mg/L	0.0007	0.0003	0.0004	0.0002
Silver	Total	mg/L	0.0003	0.0001	0.0001	0.0001
Strontium	Total	mg/L	0.095	0.074	0.135	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0081	0.0066	0.0439	0.0005
Uranium	Total	mg/L	0.0018	0.0005	0.0016	0.0005
Vanadium	Total	mg/L	0.0007	0.0006	0.0036	0.0001
Zinc	Total	mg/L	0.218	0.196	0.274	0.001
Zirconium	Total	mg/L	<0.001	<0.001	<0.001	0.001
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	12	9	52	1
Routine Water						
pH	@ 25 °C	pH	7.38	7.40	7.73	
Electrical Conductivity	Water	uS/cm	359	222	438	1



Analytical Report

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Attn: Scott Keesey
Sampled By: Ken Nordin
Company: LES

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ID: G300RWQ
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		NWL Number		466883-4	466883-5	466883-6
		Sample Date		May 26, 2006 9:50:00AM	May 25, 2006 5:00:00PM	May 26, 2006 8:50:00AM
		Sample Description		KV-6 / Christal u/s Hwy	KV-8 / Christal @ Mouth	Christal Site A
		Matrix	Water	Water	Water	Water
Analyte		Units	Results	Results	Results	Detection Limit
Routine Water - Continued						
Calcium	Dissolved	mg/L	53.1	31.6	67.6	0.2
Magnesium	Dissolved	mg/L	8.9	6.5	11.0	0.1
Sodium	Dissolved	mg/L	0.8	<0.4	0.8	0.4
Potassium	Dissolved	mg/L	<0.4	<0.4	0.4	0.4
Iron	Dissolved	mg/L	0.25	0.09	0.21	0.01
Manganese	Dissolved	mg/L	0.403	0.051	0.405	0.005
Chloride	Dissolved	mg/L	0.48	0.29	0.55	0.07
Fluoride	Dissolved	mg/L	0.06	0.04	0.07	0.04
Nitrate - N	Dissolved	mg/L	0.06	0.03	0.04	0.03
Nitrite - N	Dissolved	mg/L	<0.03	<0.03	<0.03	0.03
Sulfate (SO4)	Dissolved	mg/L	106	50	150	0.1
Hydroxide	Water	mg/L	<5	<5	<5	5
Carbonate	Water	mg/L	<6	<6	<6	5
Bicarbonate	Water	mg/L	89	71	112	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	73	58	92	5
Hardness	Dissolved as CaCO3	mg/L	169	100	214	



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NWL Lot ID: 466883
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		NWL Number	466883-7	466883-8	466883-9	
		Sample Date	May 26, 2006 9:15:00AM	May 26, 2006 12:30:00PM	May 25, 2006 9:08:00PM	
		Sample Description	Christal Site D	Culvert #4	G300 Adit	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Detection Limit
Metals Dissolved						
Silicon	Dissolved	mg/L	2.00	2.20	3.58	0.05
Sulfur	Dissolved	mg/L	51.3	178	273	0.3
Aluminum	Dissolved	mg/L	0.040	0.007	<0.005	0.005
Antimony	Dissolved	mg/L	0.0003	<0.0002	<0.0002	0.0002
Arsenic	Dissolved	mg/L	0.0023	0.0006	0.0198	0.0002
Barium	Dissolved	mg/L	0.033	0.020	0.006	0.001
Beryllium	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Bismuth	Dissolved	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Dissolved	mg/L	<0.002	<0.002	0.004	0.002
Cadmium	Dissolved	mg/L	0.00072	0.00548	0.233	0.00001
Chromium	Dissolved	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Cobalt	Dissolved	mg/L	0.0005	0.0010	0.0896	0.0001
Copper	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Lead	Dissolved	mg/L	0.0016	0.0001	0.0002	0.0001
Lithium	Dissolved	mg/L	0.006	0.009	0.023	0.001
Molybdenum	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Dissolved	mg/L	0.0022	0.0088	0.325	0.0005
Selenium	Dissolved	mg/L	<0.0002	0.0003	0.0003	0.0002
Silver	Dissolved	mg/L	<0.0001	<0.0001	<0.0001	0.0001
Strontium	Dissolved	mg/L	0.134	0.348	0.210	0.001
Thallium	Dissolved	mg/L	<0.00005	<0.00005	0.00101	0.00005
Tin	Dissolved	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Dissolved	mg/L	0.0035	0.0099	0.0128	0.0005
Uranium	Dissolved	mg/L	0.0015	0.0009	<0.0005	0.0005
Vanadium	Dissolved	mg/L	0.0002	0.0001	<0.0001	0.0001
Zinc	Dissolved	mg/L	0.219	3.4	107	0.001
Subsample	Field Filtered		Yes	Yes	Yes	
Metals Total						
Calcium	Total	mg/L	70.2	202	157	0.2
Iron	Total	mg/L	1.3	0.7	20.0	0.1
Magnesium	Total	mg/L	11.6	27.2	29.8	0.1
Manganese	Total	mg/L	0.437	1.84	133	0.005
Potassium	Total	mg/L	0.6	1.0	0.6	0.4
Silicon	Total	mg/L	3.05	2.72	4.07	0.05



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3 Calcite Business Centre
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Y1A 2V3
Attn: Scott Keesey
Sampled By: Ken Nordin
Company: LES

Project
ID: G300RWQ
Name:
Location: Elsa - Keno
LSD:
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NWL Lot ID: 466883
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		NWL Number	466883-7	466883-8	466883-9	
		Sample Date	May 26, 2006 9:15:00AM	May 26, 2006 12:30:00PM	May 25, 2006 9:08:00PM	
		Sample Description	Christal Site D	Culvert #4	G300 Adit	
		Matrix	Water	Water	Water	
Analyte		Units	Results	Results	Results	Detection Limit
Metals Total - Continued						
Sodium	Total	mg/L	0.9	1.1	1.4	0.4
Sulfur	Total	mg/L	52.7	184	284	0.3
Aluminum	Total	mg/L	0.664	0.363	0.133	0.005
Antimony	Total	mg/L	0.0004	<0.0002	0.001	0.0002
Arsenic	Total	mg/L	0.0047	0.0022	0.135	0.0002
Barium	Total	mg/L	0.048	0.028	0.007	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	<0.002	<0.002	<0.002	0.002
Cadmium	Total	mg/L	0.00108	0.00625	0.244	0.00001
Chromium	Total	mg/L	0.001	<0.0005	<0.0005	0.0005
Cobalt	Total	mg/L	0.0009	0.0016	0.0958	0.0001
Copper	Total	mg/L	0.004	0.003	0.006	0.001
Lead	Total	mg/L	0.0078	0.0017	0.0708	0.0001
Lithium	Total	mg/L	0.006	0.01	0.026	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.0032	0.0110	0.361	0.0005
Selenium	Total	mg/L	0.0004	0.0002	0.0006	0.0002
Silver	Total	mg/L	<0.0001	<0.0001	0.0003	0.0001
Strontium	Total	mg/L	0.134	0.360	0.223	0.001
Thallium	Total	mg/L	<0.00005	<0.00005	0.00099	0.00005
Tin	Total	mg/L	<0.001	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0242	0.0239	0.0124	0.0005
Uranium	Total	mg/L	0.0015	0.0009	<0.0005	0.0005
Vanadium	Total	mg/L	0.0021	0.0010	0.0001	0.0001
Zinc	Total	mg/L	0.268	4.4	109	0.001
Zirconium	Total	mg/L	<0.001	<0.001	<0.001	0.001
Physical and Aggregate Properties						
Solids	Total Suspended	mg/L	49	30	42	1
Routine Water						
pH	@ 25 °C	pH	7.68	7.53	6.00	
Electrical Conductivity	Water	uS/cm	452	1080	1420	1
Calcium	Dissolved	mg/L	70.3	197	151	0.2
Magnesium	Dissolved	mg/L	11.4	26.4	29.0	0.1



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3 Calcite Business Centre
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Project
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		NWL Number	466883-7	466883-8	466883-9
		Sample Date	May 26, 2006 9:15:00AM	May 26, 2006 12:30:00PM	May 25, 2006 9:08:00PM
		Sample Description	Christal Site D	Culvert #4	G300 Adit
		Matrix	Water	Water	Water
Analyte		Units	Results	Results	Detection Limit
Routine Water - Continued					
Sodium	Dissolved	mg/L	0.6	1.1	1.4
Potassium	Dissolved	mg/L	<0.4	0.8	0.5
Iron	Dissolved	mg/L	0.20	0.02	7.51
Manganese	Dissolved	mg/L	0.405	1.62	133
Chloride	Dissolved	mg/L	0.57	0.40	0.52
Fluoride	Dissolved	mg/L	0.08	<0.04	0.27
Nitrate - N	Dissolved	mg/L	0.04	0.04	0.04
Nitrite - N	Dissolved	mg/L	<0.03	<0.03	<0.03
Sulfate (SO4)	Dissolved	mg/L	159	540	860
Hydroxide	Water	mg/L	<5	<5	<5
Carbonate	Water	mg/L	<6	<6	<6
Bicarbonate	Water	mg/L	81	72	43
P-Alkalinity	as CaCO3	mg/L	<5	<5	<5
T-Alkalinity	as CaCO3	mg/L	67	59	35
Hardness	Dissolved as CaCO3	mg/L	222	601	497



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		NWL Number		466883-10	466883-11
		Sample Date		May 25, 2006 9:50:00PM	May 25, 2006 4:00:00PM
		Sample Description		G300 Decant	KV-7 / Christal @ HL Rd.
		Matrix	Water	Water	
Analyte		Units	Results	Results	Detection Limit
Metals Dissolved					
Silicon	Dissolved	mg/L	0.36	1.51	0.05
Sulfur	Dissolved	mg/L	286	19.4	0.3
Aluminum	Dissolved	mg/L	<0.005	0.030	0.005
Antimony	Dissolved	mg/L	<0.0002	0.0002	0.0002
Arsenic	Dissolved	mg/L	0.0003	0.0013	0.0002
Barium	Dissolved	mg/L	0.006	0.028	0.001
Beryllium	Dissolved	mg/L	<0.0001	<0.0001	0.0001
Bismuth	Dissolved	mg/L	<0.0005	<0.0005	0.0005
Boron	Dissolved	mg/L	0.004	<0.002	0.002
Cadmium	Dissolved	mg/L	0.00209	0.00059	0.00001
Chromium	Dissolved	mg/L	<0.0005	<0.0005	0.0005
Cobalt	Dissolved	mg/L	0.0025	0.0001	0.0001
Copper	Dissolved	mg/L	<0.001	<0.001	0.001
Lead	Dissolved	mg/L	<0.0001	0.0012	0.0001
Lithium	Dissolved	mg/L	0.024	0.002	0.001
Molybdenum	Dissolved	mg/L	<0.001	<0.001	0.001
Nickel	Dissolved	mg/L	0.0023	0.0009	0.0005
Selenium	Dissolved	mg/L	0.0003	<0.0002	0.0002
Silver	Dissolved	mg/L	<0.0001	<0.0001	0.0001
Strontium	Dissolved	mg/L	0.427	0.077	0.001
Thallium	Dissolved	mg/L	0.00098	<0.00005	0.00005
Tin	Dissolved	mg/L	<0.001	<0.001	0.001
Titanium	Dissolved	mg/L	0.0007	0.0016	0.0005
Uranium	Dissolved	mg/L	<0.0005	0.0006	0.0005
Vanadium	Dissolved	mg/L	<0.0001	0.0002	0.0001
Zinc	Dissolved	mg/L	0.008	0.101	0.001
Subsample	Field Filtered		Yes	Yes	
Metals Total					
Calcium	Total	mg/L	304	35.7	0.2
Iron	Total	mg/L	<0.1	1.0	0.1
Magnesium	Total	mg/L	27.1	7.3	0.1
Manganese	Total	mg/L	64.2	0.185	0.005
Potassium	Total	mg/L	0.6	0.4	0.4



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		NWL Number		466883-10	466883-11
		Sample Date		May 25, 2006 9:50:00PM	May 25, 2006 4:00:00PM
		Sample Description		G300 Decant	KV-7 / Christal @ HL Rd.
		Matrix	Water	Water	
Analyte		Units	Results	Results	Detection Limit
Metals Total - Continued					
Silicon	Total	mg/L	0.45	2.28	0.05
Sodium	Total	mg/L	1.4	0.6	0.4
Sulfur	Total	mg/L	289	19.0	0.3
Aluminum	Total	mg/L	<0.005	0.509	0.005
Antimony	Total	mg/L	<0.0002	0.0005	0.0002
Arsenic	Total	mg/L	0.0023	0.0129	0.0002
Barium	Total	mg/L	0.006	0.040	0.001
Beryllium	Total	mg/L	<0.0001	<0.0001	0.0001
Bismuth	Total	mg/L	<0.0005	<0.0005	0.0005
Boron	Total	mg/L	<0.002	<0.002	0.002
Cadmium	Total	mg/L	0.0183	0.00113	0.00001
Chromium	Total	mg/L	<0.0005	0.0008	0.0005
Cobalt	Total	mg/L	0.0040	0.0006	0.0001
Copper	Total	mg/L	<0.001	0.004	0.001
Lead	Total	mg/L	0.0005	0.0093	0.0001
Lithium	Total	mg/L	0.026	0.003	0.001
Molybdenum	Total	mg/L	<0.001	<0.001	0.001
Nickel	Total	mg/L	0.0056	0.0024	0.0005
Selenium	Total	mg/L	0.0006	0.0004	0.0002
Silver	Total	mg/L	<0.0001	0.0003	0.0001
Strontium	Total	mg/L	0.444	0.085	0.001
Thallium	Total	mg/L	0.00091	<0.00005	0.00005
Tin	Total	mg/L	<0.001	<0.001	0.001
Titanium	Total	mg/L	0.0125	0.0166	0.0005
Uranium	Total	mg/L	<0.0005	0.0006	0.0005
Vanadium	Total	mg/L	<0.0001	0.0015	0.0001
Zinc	Total	mg/L	0.822	0.166	0.001
Zirconium	Total	mg/L	<0.001	<0.001	0.001
Physical and Aggregate Properties					
Solids	Total Suspended	mg/L	32	28	1
Routine Water					
pH	@ 25 °C	pH	7.89	7.38	
Electrical Conductivity	Water	uS/cm	1550	239	1



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Date Reported: Jun 02, 2006
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		NWL Number		466883-10	466883-11
		Sample Date		May 25, 2006 9:50:00PM	May 25, 2006 4:00:00PM
		Sample Description		G300 Decant	KV-7 / Christal @ HL Rd.
		Matrix	Water	Water	
Analyte		Units	Results	Results	Detection Limit
Routine Water - Continued					
Calcium	Dissolved	mg/L	298	35.0	0.2
Magnesium	Dissolved	mg/L	27.0	7.0	0.1
Sodium	Dissolved	mg/L	1.4	0.8	0.4
Potassium	Dissolved	mg/L	0.6	<0.4	0.4
Iron	Dissolved	mg/L	<0.01	0.08	0.01
Manganese	Dissolved	mg/L	48.2	0.189	0.005
Chloride	Dissolved	mg/L	0.40	0.34	0.07
Fluoride	Dissolved	mg/L	0.25	0.05	0.04
Nitrate - N	Dissolved	mg/L	0.06	0.04	0.03
Nitrite - N	Dissolved	mg/L	<0.03	<0.03	0.03
Sulfate (SO4)	Dissolved	mg/L	870	56	0.1
Hydroxide	Water	mg/L	<5	<5	5
Carbonate	Water	mg/L	<6	<6	5
Bicarbonate	Water	mg/L	114	69	5
P-Alkalinity	as CaCO3	mg/L	<5	<5	5
T-Alkalinity	as CaCO3	mg/L	93	56	5
Hardness	Dissolved as CaCO3	mg/L	857	120	

Approved by:

Marie England
Consulting Scientist



Methodology and Notes

Norwest Labs
#104, 19575-55 A Ave.
Surrey, BC. V3S 8P8
Phone: (604) 514-3322
Fax: (604) 514-3323

Bill to: Access Mining Consultants Ltd.
Report to: Access Mining Consultants Ltd.
3 Calcite Business Centre
151 Industrial Road
Whitehorse, YT, Canada
Y1A 2V3
Attn: Scott Keeseey
Sampled By: Ken Nordin
Company: LES

Project
ID: G300RWQ
Name:
Location: Elsa - Keno
LSD:
P.O.:
Acct. Code:

NWL Lot ID: 466883
Control Number: E 67439
Date Received: May 29, 2006
Date Reported: Jun 02, 2006
Report Number: 859067

Page: 13 of 13

Method of Analysis:

MethodName	Reference	Method	Date Analysis Started	Location
Alkalinity (Surrey)	APHA	* Titration Method, 2320 B	30-May-06	Norwest Labs Surrey
Anions by IEC in water (Surrey)	APHA	* Ion Chromatography with Chemical Suppression of Eluent Cond., 4110 B	30-Jun-06	Norwest Labs Surrey
Conductivity (Surrey)	APHA	* Conductivity - Laboratory Method, 2510 B	31-May-06	Norwest Labs Surrey
Metals ICP-MS (Dissolved) in water	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	2-Jun-06	Norwest Labs Edmonton
Metals ICP-MS (Total) in water	US EPA	* Determination of Trace Elements in Waters and Wastes by ICP-MS, 200.8	2-Jun-06	Norwest Labs Edmonton
Metals Trace (Dissolved) in water	APHA	* Inductively Coupled Plasma (ICP) Method, 3120 B	2-Jun-06	Norwest Labs Edmonton
Metals Trace (Total) in water	APHA	* Inductively Coupled Plasma (ICP) Method, 3120 B	2-Jun-06	Norwest Labs Edmonton
pH in water (Surrey)	APHA	* Electrometric Method, 4500-H+ B	30-May-06	Norwest Labs Surrey
Solids Suspended (Total, Fixed and Volatile)	APHA	* Total Suspended Solids Dried at 103-105°C, 2540 D	31-May-06	Norwest Labs Surrey

* Norwest method(s) is based on reference method

References:

APHA Standard Methods for the Examination of Water and Wastewater
US EPA US Environmental Protection Agency Test Methods

Comments:

Analysis was completed on a sample that exceeded the recommended holding time for Alkalinity analysis.
Analysis was completed on a sample that exceeded the recommended holding time for pH analysis.

Please direct any inquiries regarding this report to our Client Services group.
Results relate only to samples as submitted

The test report shall not be reproduced except in full, without the written approval of the laboratory



CERTIFICATE OF ANALYSIS

Date: June 15, 2006

ALS File No. X6399

Report On: Keno Valley Freshet
Water Analysis

Report To: **Laberge Environmental Services**
PO Box 21072
Whitehorse, YT
Y1A 6P7

Attention: **Mr. Ken Nordin**

Received: May 29, 2006

ALS ENVIRONMENTAL

per:

Can Dang, B.Sc. - Senior Account Manager
Sime Buric, B.Sc. - Account Manager

REMARKS



For some of the submitted water samples, the measured concentration of specific dissolved parameters is greater than the corresponding total parameters concentration. The explanation for these findings is one or a combination of the following:

- * laboratory method variability;
- * field sampling method variability;
- * bias introduced during general handling, storage, transportation and/or analysis of the sample;
- * field sample grab bias - where separate grab samples are processed to produce total and dissolved samples;
- * field sample split bias - where total and dissolved parameters samples are produced from the same grab sample.

For further clarification on any of the above information, please contact us.

File No. X6399

RESULTS OF ANALYSIS - Water



Sample ID	HOPE GULCH	FAITH GULCH	KV-3 SMQ U/S	KV-4 SMQ D/S	KV-41 LIGHTNG
Sample Date	06-05-26	06-05-26	06-05-06	06-05-26	06-05-26
Sample Time	12:30	12:50	19:00	19:15	10:40
ALS ID	1	2	3	4	5

Physical Tests

Conductivity (uS/cm)	192	347	168	215	99.8
Hardness CaCO ₃	96.5	183	93.4	122	52.5
Oxidation Reduction Potential mV	160	160	160	160	150
pH	7.98	7.87	7.98	7.96	7.98
Total Suspended Solids	<3.0	<3.0	33.2	93.2	17.2

Dissolved Anions

Acidity (to pH 8.3)	CaCO ₃	4.3	4.5	4.2	4.1	3.5
Bromide Br		<0.050	<0.050	<0.050	<0.050	<0.050
Chloride Cl		<0.50	<0.50	<0.50	<0.50	<0.50
Fluoride F		0.053	0.103	0.054	0.046	0.045
Sulphate SO ₄		56.8	147	27.3	37.7	21.8

Nutrients

Nitrate Nitrogen	N	0.226	0.102	0.0166	0.0075	0.0627
Nitrite Nitrogen	N	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

Remarks regarding the analyses appear at the beginning of this report.
Results are expressed as milligrams per litre except where noted.
< = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	HOPE GULCH	FAITH GULCH	KV-3 SMQ U/S	KV-4 SMQ D/S	KV-41 LIGHTNG
Sample Date	06-05-26	06-05-26	06-05-06	06-05-26	06-05-26
Sample Time	12:30	12:50	19:00	19:15	10:40
ALS ID	1	2	3	4	5

Total Metals

Aluminum	T-Al	0.0189	0.0453	0.319	0.0896	0.322
Antimony	T-Sb	0.00174	0.00014	0.00029	0.00155	0.00054
Arsenic	T-As	0.00925	0.00043	0.00269	0.00311	0.00317
Barium	T-Ba	0.0364	0.0402	0.0406	0.0249	0.0399
Beryllium	T-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	T-Cd	0.00403	0.000083	0.000396	0.000566	0.000306
Calcium	T-Ca	30.4	45.1	26.0	32.6	15.8
Chromium	T-Cr	<0.00050	<0.00050	<0.00050	<0.00050	0.00058
Cobalt	T-Co	<0.00010	<0.00010	0.00072	0.00023	0.00026
Copper	T-Cu	0.00210	0.00102	0.00317	0.00343	0.00242
Iron	T-Fe	<0.030	<0.030	0.745	0.276	0.485
Lead	T-Pb	0.00454	<0.000050	0.00694	0.0237	0.00219
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	5.32	17.3	7.51	9.09	3.14
Manganese	T-Mn	0.00805	0.00137	0.0978	0.0730	0.0193
Molybdenum	T-Mo	0.000252	0.000065	0.000467	0.000250	0.000175
Nickel	T-Ni	0.00121	0.00385	0.00624	0.00243	0.00136
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	1.80	2.20	1.55	1.34	1.87
Silver	T-Ag	0.000034	<0.000010	0.000099	0.000250	0.000059
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.0777	0.150	0.0820	0.0777	0.0473
Thallium	T-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	T-Sn	<0.00010	<0.00010	0.00018	<0.00010	<0.00010
Titanium	T-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	T-U	0.000325	0.000030	0.000357	0.000251	0.000183
Vanadium	T-V	<0.0010	<0.0010	0.0010	<0.0010	<0.0010
Zinc	T-Zn	0.363	0.0066	0.0530	0.0623	0.0306

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	HOPE GULCH	FAITH GULCH	KV-3 SMQ U/S	KV-4 SMQ D/S	KV-41 LIGHTNG
Sample Date	06-05-26	06-05-26	06-05-06	06-05-26	06-05-26
Sample Time	12:30	12:50	19:00	19:15	10:40
ALS ID	1	2	3	4	5

Dissolved Metals

Aluminum	D-Al	0.0093	0.0351	0.0489	0.0164	0.0597
Antimony	D-Sb	0.00173	0.00014	0.00015	0.00127	0.00020
Arsenic	D-As	0.00898	0.00042	0.00120	0.00174	0.00171
Barium	D-Ba	0.0369	0.0397	0.0328	0.0221	0.0306
Beryllium	D-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	D-Cd	0.00411	0.000071	0.000182	0.000352	0.000220
Calcium	D-Ca	30.0	45.0	25.3	33.4	15.9
Chromium	D-Cr	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	D-Co	<0.00010	<0.00010	0.00020	<0.00010	<0.00010
Copper	D-Cu	0.00185	0.00090	0.00173	0.00260	0.00141
Iron	D-Fe	<0.030	<0.030	0.159	0.084	0.055
Lead	D-Pb	0.00213	<0.000050	0.000767	0.00570	0.000305
Lithium	D-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	D-Mg	5.26	17.1	7.33	9.36	3.10
Manganese	D-Mn	0.00452	0.000651	0.0408	0.0165	0.00594
Molybdenum	D-Mo	0.000277	0.000073	0.000357	0.000231	0.000118
Nickel	D-Ni	0.00126	0.00386	0.00444	0.00172	0.00073
Phosphorus	D-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	D-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	D-Si	1.80	2.19	1.22	1.25	1.56
Silver	D-Ag	0.000020	<0.000010	<0.000010	0.000066	<0.000010
Sodium	D-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	D-Sr	0.0798	0.149	0.0780	0.0762	0.0430
Thallium	D-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	D-Sn	<0.00010	<0.00010	0.00042	<0.00010	<0.00010
Titanium	D-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	D-U	0.000326	0.000030	0.000302	0.000221	0.000139
Vanadium	D-V	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	D-Zn	0.365	0.0081	0.0314	0.0492	0.0239

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

File No. X6399

RESULTS OF ANALYSIS - Water



Sample ID	KV-9 FLAT CK	KV-37 LIGHTNG	KV-38 LIGHTNG	LES-47 PORC DIV.
Sample Date	06-05-26	06-05-26	06-05-26	06-05-25
Sample Time	18:17	12:00	13:15	12:00
ALS ID	6	7	8	9

Physical Tests

Conductivity	(uS/cm)	234	71.4	103	216
Hardness	CaCO3	129	35.8	52.0	111
Oxidation Reduction Potential	mV	150	160	160	160
pH		7.97	7.91	7.83	7.84
Total Suspended Solids		3.2	15.2	6.5	43.2

Dissolved Anions

Acidity (to pH 8.3)	CaCO3	4.2	3.6	4.0	4.5
Bromide	Br	<0.050	<0.050	<0.050	<0.050
Chloride	Cl	<0.50	<0.50	<0.50	<0.50
Fluoride	F	0.045	0.029	0.041	0.048
Sulphate	SO4	41.6	15.1	25.4	58.8

Nutrients

Nitrate Nitrogen	N	<0.0050	0.0379	0.0593	0.0294
Nitrite Nitrogen	N	<0.0010	<0.0010	<0.0010	<0.0010

Remarks regarding the analyses appear at the beginning of this report.
Results are expressed as milligrams per litre except where noted.
< = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	KV-9 FLAT CK	KV-37 LIGHTNG	KV-38 LIGHTNG	LES-47 PORC DIV.
Sample Date	06-05-26	06-05-26	06-05-26	06-05-25
Sample Time	18:17	12:00	13:15	12:00
ALS ID	6	7	8	9

Total Metals

Aluminum	T-Al	0.0307	0.277	0.0909	0.572
Antimony	T-Sb	0.00191	0.00013	0.00034	0.00406
Arsenic	T-As	0.00370	0.00498	0.00394	0.0135
Barium	T-Ba	0.0196	0.0429	0.0389	0.0369
Beryllium	T-Be	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010	<0.010	<0.010
Cadmium	T-Cd	0.000655	<0.000050	0.000476	0.00255
Calcium	T-Ca	36.4	10.6	15.5	36.2
Chromium	T-Cr	<0.00050	<0.00050	<0.00050	0.00089
Cobalt	T-Co	<0.00010	0.00024	0.00011	0.00072
Copper	T-Cu	0.00343	0.00215	0.00161	0.00644
Iron	T-Fe	0.204	0.463	0.156	1.86
Lead	T-Pb	0.0333	0.000884	0.00166	0.130
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	9.91	2.30	3.23	7.17
Manganese	T-Mn	0.0754	0.0205	0.0133	0.517
Molybdenum	T-Mo	0.000136	0.000120	0.000142	0.000159
Nickel	T-Ni	0.00085	0.00117	0.00082	0.00237
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	1.34	1.72	1.70	1.87
Silver	T-Ag	0.000188	0.000028	0.000022	0.00214
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.0729	0.0391	0.0491	0.0751
Thallium	T-Tl	<0.00010	<0.00010	<0.00010	<0.00010
Tin	T-Sn	<0.00010	<0.00010	<0.00010	0.00011
Titanium	T-Ti	<0.010	<0.010	<0.010	0.015
Uranium	T-U	0.000197	0.000078	0.000116	0.000366
Vanadium	T-V	<0.0010	<0.0010	<0.0010	0.0016
Zinc	T-Zn	0.0648	<0.0050	0.0435	0.160

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	KV-9 FLAT CK	KV-37 LIGHTNG	KV-38 LIGHTNG	LES-47 PORC DIV.
Sample Date	06-05-26	06-05-26	06-05-26	06-05-25
Sample Time	18:17	12:00	13:15	12:00
ALS ID	6	7	8	9

Dissolved Metals

Aluminum	D-Al	0.0049	0.0507	0.0468	0.0724
Antimony	D-Sb	0.00155	<0.00010	0.00029	0.00041
Arsenic	D-As	0.00189	0.00241	0.00277	0.00130
Barium	D-Ba	0.0186	0.0360	0.0361	0.0225
Beryllium	D-Be	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010	<0.010	<0.010
Cadmium	D-Cd	0.000436	<0.000050	0.000379	0.00112
Calcium	D-Ca	35.7	10.6	15.5	33.7
Chromium	D-Cr	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	D-Co	<0.00010	<0.00010	<0.00010	0.00024
Copper	D-Cu	0.00283	0.00126	0.00122	0.00240
Iron	D-Fe	0.039	0.073	0.048	0.162
Lead	D-Pb	0.00817	0.000178	0.000357	0.00737
Lithium	D-Li	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	D-Mg	9.71	2.25	3.21	6.59
Manganese	D-Mn	0.00900	0.00780	0.00645	0.251
Molybdenum	D-Mo	0.000173	0.000069	0.000139	0.000124
Nickel	D-Ni	0.00078	0.00057	0.00069	0.00115
Phosphorus	D-P	<0.30	<0.30	<0.30	<0.30
Potassium	D-K	<2.0	<2.0	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	D-Si	1.27	1.54	1.66	1.18
Silver	D-Ag	0.000067	<0.000010	0.000012	0.000013
Sodium	D-Na	<2.0	<2.0	<2.0	<2.0
Strontium	D-Sr	0.0740	0.0363	0.0467	0.0688
Thallium	D-Tl	<0.00010	<0.00010	<0.00010	<0.00010
Tin	D-Sn	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	D-Ti	<0.010	<0.010	<0.010	<0.010
Uranium	D-U	0.000210	0.000042	0.000097	0.000267
Vanadium	D-V	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	D-Zn	0.0548	0.0031	0.0399	0.117

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

**Appendix 1 - QUALITY CONTROL - Replicates**

Water	FAITH GULCH	FAITH GULCH
	06-05-26 12:50	QC # 503882

Physical Tests

Conductivity	(uS/cm)	347	348
Hardness	CaCO ₃	183	184
pH		7.87	7.89
Total Suspended Solids		<3.0	<3.0

Dissolved Anions

Acidity (to pH 8.3)		CaCO ₃	4.5	4.5
Bromide	Br		<0.050	<0.050
Chloride	Cl		<0.50	<0.50
Fluoride	F		0.103	0.102
Sulphate	SO ₄		147	147

Nutrients

Nitrate Nitrogen	N	0.102	0.102
Nitrite Nitrogen	N	<0.0010	<0.0010

Remarks regarding the analyses appear at the beginning of this report.
Results are expressed as milligrams per litre except where noted.
< = Less than the detection limit indicated.

Appendix 1 - QUALITY CONTROL - Replicates

Water

FAITH
GULCHFAITH
GULCH06-05-26
12:50QC #
503882**Total Metals**

Aluminum	T-Al	0.0453	0.0439
Antimony	T-Sb	0.00014	0.00014
Arsenic	T-As	0.00043	0.00042
Barium	T-Ba	0.0402	0.0397
Beryllium	T-Be	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010
Cadmium	T-Cd	0.000083	0.000091
Calcium	T-Ca	45.1	45.4
Chromium	T-Cr	<0.00050	<0.00050
Cobalt	T-Co	<0.00010	<0.00010
Copper	T-Cu	0.00102	0.00097
Iron	T-Fe	<0.030	<0.030
Lead	T-Pb	<0.000050	<0.000050
Lithium	T-Li	<0.0050	<0.0050
Magnesium	T-Mg	17.3	17.5
Manganese	T-Mn	0.00137	0.00132
Molybdenum	T-Mo	0.000065	0.000059
Nickel	T-Ni	0.00385	0.00384
Phosphorus	T-P	<0.30	<0.30
Potassium	T-K	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010
Silicon	T-Si	2.20	2.22
Silver	T-Ag	<0.000010	<0.000010
Sodium	T-Na	<2.0	<2.0
Strontium	T-Sr	0.150	0.150
Thallium	T-Tl	<0.00010	<0.00010
Tin	T-Sn	<0.00010	<0.00010
Titanium	T-Ti	<0.010	<0.010
Uranium	T-U	0.000030	0.000031
Vanadium	T-V	<0.0010	<0.0010
Zinc	T-Zn	0.0066	0.0064

Remarks regarding the analyses appear at the beginning of this report.
Results are expressed as milligrams per litre except where noted.
< = Less than the detection limit indicated.

**Appendix 1 - QUALITY CONTROL - Replicates**

Water		FAITH GULCH	FAITH GULCH
		06-05-26 12:50	QC # 503882
Dissolved Metals			
Aluminum	D-Al	0.0351	0.0392
Antimony	D-Sb	0.00014	0.00013
Arsenic	D-As	0.00042	0.00040
Barium	D-Ba	0.0397	0.0395
Beryllium	D-Be	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010
Cadmium	D-Cd	0.000071	0.000068
Calcium	D-Ca	45.0	45.1
Chromium	D-Cr	<0.00050	<0.00050
Cobalt	D-Co	<0.00010	<0.00010
Copper	D-Cu	0.00090	0.00088
Iron	D-Fe	<0.030	<0.030
Lead	D-Pb	<0.000050	<0.000050
Lithium	D-Li	<0.0050	<0.0050
Magnesium	D-Mg	17.1	17.3
Manganese	D-Mn	0.000651	0.000652
Molybdenum	D-Mo	0.000073	0.000068
Nickel	D-Ni	0.00386	0.00371
Phosphorus	D-P	<0.30	<0.30
Potassium	D-K	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010
Silicon	D-Si	2.19	2.20
Silver	D-Ag	<0.000010	<0.000010
Sodium	D-Na	<2.0	<2.0
Strontium	D-Sr	0.149	0.149
Thallium	D-Tl	<0.00010	<0.00010
Tin	D-Sn	<0.00010	<0.00010
Titanium	D-Ti	<0.010	<0.010
Uranium	D-U	0.000030	0.000029
Vanadium	D-V	<0.0010	<0.0010
Zinc	D-Zn	0.0081	0.0078

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.



Appendix 2 - METHODOLOGY

Outlines of the methodologies utilized for the analysis of the samples submitted are as follows

Conductivity in Water

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

Recommended Holding Time:

Sample: 28 days

Reference: APHA

Laboratory Location: ALS Environmental, Vancouver

Oxidation Reduction Potential

This analysis is carried out in accordance with the procedure described in the "Fisher Scientific Company Instruction Manual for the Fisher platinum combination electrode" published by Fisher Scientific Co., 1978. Further details available on request.

Laboratory Location: ALS Environmental, Vancouver

pH in Water

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode.

Recommended Holding Time:

Sample: 2 hours

Reference: APHA

Laboratory Location: ALS Environmental, Vancouver

Solids in Water

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total dissolved solids (TDS) and total suspended solids (TSS) are determined by filtering a sample through a glass fibre filter, TDS is determined by evaporating the filtrate to dryness at 180 degrees celsius, TSS is determined by drying the filter at 104 degrees celsius. Total solids are determined by evaporating a sample to dryness at 104 degrees celsius. Fixed and volatile solids are determined by igniting a dried sample residue at 550 degrees celsius.

Recommended Holding Time:

Sample: 7 days

Reference: APHA



Appendix 2 - METHODOLOGY - Continued

Laboratory Location: ALS Environmental, Vancouver

Acidity in Water

This analysis is carried out using procedures adapted from APHA Method 2310 "Acidity". Acidity is determined by potentiometric titration to a specified endpoint.

Recommended Holding Time:

Sample: 14 days

Reference: APHA

Laboratory Location: ALS Environmental, Vancouver

Dissolved Anions in Water by Ion Chromatography

This analysis is carried out using procedures adapted from APHA Method 4110 "Determination of Anions by Ion Chromatography" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". Anions are determined by filtering the sample through a 0.45 micron membrane filter and injecting the filtrate onto a Dionex IonPac AG17 anion exchange column with a hydroxide eluent stream. Anions routinely determined by this method include: bromide, chloride, fluoride, nitrate, nitrite and sulphate.

Recommended Holding Time:

Sample: 28 days (bromide, chloride, fluoride, sulphate)

Sample: 2 days (nitrate, nitrite)

Reference: APHA and EPA

Laboratory Location: ALS Environmental, Vancouver

Metals in Water

This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" 20th Edition 1998 published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using either hotplate or microwave oven, or filtration (EPA Method 3005A). Instrumental analysis is by atomic absorption/emission spectrophotometry (EPA Method 7000 series), inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B), and/or inductively coupled plasma - mass spectrometry (EPA Method 6020).

Recommended Holding Time:

Sample: 6 months

Reference: EPA

Laboratory Location: ALS Environmental, Vancouver

File No. X6399

Appendix 2 - METHODOLOGY - Continued



Results contained within this certificate relate only to the samples as submitted.

This Certificate Of Analysis shall only be reproduced in full, except with the written approval of ALS Environmental.

End of Report



CERTIFICATE OF ANALYSIS

Date: June 28, 2006

ALS File No. X6955

Report On: Keno Valley Freshet
Water Analysis

Report To: **Laberge Environmental Services**
PO Box 21072
Whitehorse, YT
Y1A 6P7

Attention: **Mr. Ken Nordin**

Received: June 8, 2006

ALS ENVIRONMENTAL

per:

Sime Buric, B.Sc. - Account Manager
Mahssa Rostambake, - Account Manager



REMARKS

Please note that the detection limits for certain Metals have been increased for some of the samples reported in the following data tables due to sample matrix interferences.

For some of the submitted water samples, the measured concentration of specific dissolved parameters is greater than the corresponding total parameters concentration. The explanation for these findings is one or a combination of the following:

- laboratory method variability;
- field sampling method variability;
- bias introduced during general handling, storage, transportation and/or analysis of the sample;
- field sample grab bias - where separate grab samples are processed to produce total and dissolved samples;
- field sample split bias - where total and dissolved parameters samples are produced from the same grab sample.

For further clarification on any of the above information, please contact your ALS representative.

RESULTS OF ANALYSIS - Water

Sample ID	LES 47-1	LES 47-2	LES 47-1	LES 47-2	LES 47-1
Sample Date	06-05-26	06-05-26	06-05-27	06-05-27	06-05-28
Sample Time					
ALS ID	1	2	3	4	5

Total Metals

Aluminum	T-Al	0.272	0.199	0.261	0.313	0.235
Antimony	T-Sb	0.00217	0.00145	0.00231	0.00382	0.00134
Arsenic	T-As	0.00613	0.00383	0.00475	0.00917	0.00443
Barium	T-Ba	0.0259	0.0267	0.0238	0.0280	0.0256
Beryllium	T-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	T-Cd	0.00187	0.00172	0.00209	0.00320	0.00185
Calcium	T-Ca	26.5	34.3	24.7	29.4	29.0
Chromium	T-Cr	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	T-Co	0.00047	0.00042	0.00038	0.00052	0.00042
Copper	T-Cu	0.00466	0.00534	0.00427	0.00739	0.00776
Iron	T-Fe	0.816	0.588	0.599	1.10	0.637
Lead	T-Pb	0.0556	0.0350	0.0511	0.111	0.0508
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	5.23	6.85	4.78	5.87	5.75
Manganese	T-Mn	0.303	0.299	0.239	0.410	0.284
Molybdenum	T-Mo	0.000111	0.000104	0.000098	0.000090	0.000092
Nickel	T-Ni	0.00163	0.00142	0.00137	0.00171	0.00147
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	1.69	1.57	1.51	1.70	1.40
Silver	T-Ag	0.000860	0.000390	0.000279	0.000874	0.000475
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.0604	0.0742	0.0560	0.0648	0.0634
Thallium	T-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	T-Sn	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	T-Ti	0.016	<0.010	0.012	<0.010	<0.010
Uranium	T-U	0.000239	0.000296	0.000210	0.000282	0.000261
Vanadium	T-V	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	T-Zn	0.125	0.121	0.129	0.187	0.129

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	LES 47-1	LES 47-2	LES 47-1	LES 47-2	LES 47-1
Sample Date	06-05-26	06-05-26	06-05-27	06-05-27	06-05-28
Sample Time					
ALS ID	1	2	3	4	5

Dissolved Metals

Aluminum	D-Al	0.0847	0.0884	0.0863	0.0840	0.0960
Antimony	D-Sb	0.00053	0.00057	0.00050	0.00050	0.00050
Arsenic	D-As	0.00137	0.00141	0.00119	0.00120	0.00119
Barium	D-Ba	0.0207	0.0230	0.0194	0.0206	0.0204
Beryllium	D-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	D-Cd	0.00135	0.00135	0.00166	0.00219	0.00134
Calcium	D-Ca	26.3	34.0	24.4	29.3	28.6
Chromium	D-Cr	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	D-Co	0.00031	0.00033	0.00027	0.00031	0.00028
Copper	D-Cu	0.00288	0.00424	0.00286	0.00403	0.00561
Iron	D-Fe	0.169	0.199	0.152	0.167	0.166
Lead	D-Pb	0.0105	0.00931	0.0151	0.0178	0.0114
Lithium	D-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	D-Mg	5.14	6.71	4.69	5.75	5.69
Manganese	D-Mn	0.219	0.263	0.187	0.274	0.219
Molybdenum	D-Mo	0.000104	0.000103	0.000088	0.000093	0.000091
Nickel	D-Ni	0.00116	0.00121	0.00111	0.00120	0.00107
Phosphorus	D-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	D-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	D-Si	1.13	1.32	1.07	1.18	1.18
Silver	D-Ag	0.000057	0.000118	0.000036	0.000034	0.000099
Sodium	D-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	D-Sr	0.0593	0.0743	0.0541	0.0631	0.0639
Thallium	D-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	D-Sn	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	D-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	D-U	0.000217	0.000289	0.000185	0.000239	0.000243
Vanadium	D-V	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	D-Zn	0.101	0.107	0.108	0.138	0.106

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	LES 47-2	LES 47-1	LES 47-2	LES 47-1	LES 47-2
Sample Date	06-05-28	06-05-29	06-05-29	06-05-30	06-05-30
Sample Time					
ALS ID	6	7	8	9	10

Total Metals

Aluminum	T-Al	0.179	0.299	0.236	0.379	0.147
Antimony	T-Sb	0.00104	0.00220	0.00162	0.00250	0.00100
Arsenic	T-As	0.00363	0.00856	0.00593	0.00987	0.00321
Barium	T-Ba	0.0281	0.0364	0.0356	0.0383	0.0311
Beryllium	T-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	T-Cd	0.00183	0.00220	0.00213	0.00267	0.00151
Calcium	T-Ca	39.8	43.6	52.0	43.3	47.3
Chromium	T-Cr	<0.00050	<0.00050	<0.00050	0.00056	<0.00050
Cobalt	T-Co	0.00040	0.00064	0.00057	0.00074	0.00043
Copper	T-Cu	0.00364	0.00583	0.00602	0.00601	0.00378
Iron	T-Fe	0.584	1.26	1.02	1.46	0.586
Lead	T-Pb	0.0372	0.0956	0.0716	0.124	0.0275
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	7.97	8.81	10.5	8.72	9.52
Manganese	T-Mn	0.296	0.494	0.450	0.527	0.360
Molybdenum	T-Mo	0.000088	0.000133	0.000117	0.000107	0.000115
Nickel	T-Ni	0.00144	0.00194	0.00173	0.00214	0.00141
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	1.65	2.10	2.08	2.16	1.96
Silver	T-Ag	0.000141	0.00124	0.000417	0.000915	0.000073
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.0853	0.0955	0.108	0.0933	0.0972
Thallium	T-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	T-Sn	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	T-Ti	<0.010	0.021	<0.010	0.011	<0.010
Uranium	T-U	0.000394	0.000453	0.000510	0.000460	0.000438
Vanadium	T-V	<0.0010	<0.0010	<0.0010	0.0010	<0.0010
Zinc	T-Zn	0.128	0.162	0.160	0.175	0.128

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	LES 47-2	LES 47-1	LES 47-2	LES 47-1	LES 47-2
Sample Date	06-05-28	06-05-29	06-05-29	06-05-30	06-05-30
Sample Time					
ALS ID	6	7	8	9	10

Dissolved Metals

Aluminum	D-Al	0.0756	0.0599	0.0574	0.0529	0.0589
Antimony	D-Sb	0.00049	0.00057	0.00053	0.00056	0.00055
Arsenic	D-As	0.00127	0.00142	0.00146	0.00143	0.00145
Barium	D-Ba	0.0247	0.0272	0.0288	0.0267	0.0275
Beryllium	D-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	D-Cd	0.00132	0.00138	0.00147	0.00148	0.00126
Calcium	D-Ca	39.5	43.6	51.3	42.8	46.8
Chromium	D-Cr	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	D-Co	0.00029	0.00033	0.00036	0.00034	0.00034
Copper	D-Cu	0.00253	0.00234	0.00307	0.00217	0.00282
Iron	D-Fe	0.192	0.213	0.247	0.211	0.249
Lead	D-Pb	0.00844	0.00794	0.00830	0.00913	0.00745
Lithium	D-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	D-Mg	7.81	8.79	10.2	8.63	9.37
Manganese	D-Mn	0.252	0.318	0.333	0.309	0.324
Molybdenum	D-Mo	0.000105	0.000135	0.000119	0.000122	0.000112
Nickel	D-Ni	0.00109	0.00123	0.00120	0.00112	0.00115
Phosphorus	D-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	D-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	D-Si	1.42	1.60	1.76	1.70	1.76
Silver	D-Ag	0.000026	0.000022	0.000020	0.000021	0.000018
Sodium	D-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	D-Sr	0.0846	0.0941	0.107	0.0891	0.0971
Thallium	D-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	D-Sn	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	D-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	D-U	0.000359	0.000400	0.000476	0.000397	0.000420
Vanadium	D-V	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	D-Zn	0.110	0.116	0.127	0.110	0.113

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	LES 47-1	LES 47-2	LES 47-1	LES 47-2	LES 47-1
Sample Date	06-05-31	06-05-31	06-06-01	06-06-01	06-06-02
Sample Time					
ALS ID	11	12	13	14	15

Total Metals

Aluminum	T-Al	0.683	0.732	3.06	1.56	1.80
Antimony	T-Sb	0.00324	0.00376	0.0170	0.00747	0.00721
Arsenic	T-As	0.0127	0.00955	0.0521	0.0206	0.0196
Barium	T-Ba	0.0436	0.0383	0.0887	0.0559	0.0637
Beryllium	T-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	T-Cd	0.00366	0.00210	0.00651	0.00342	0.00297
Calcium	T-Ca	30.1	31.8	26.4	27.1	27.9
Chromium	T-Cr	0.00101	0.0012	0.00519	0.00258	0.00318
Cobalt	T-Co	0.00108	0.00080	0.00318	0.00168	0.00188
Copper	T-Cu	0.00869	0.00730	0.0242	0.0123	0.0138
Iron	T-Fe	2.11	1.79	8.28	4.01	4.28
Lead	T-Pb	0.186	0.107	0.642	0.276	0.234
Lithium	T-Li	<0.0050	<0.0050	0.0061	<0.0050	<0.0050
Magnesium	T-Mg	5.92	6.42	5.76	5.64	5.83
Manganese	T-Mn	0.600	0.362	1.35	0.720	0.689
Molybdenum	T-Mo	0.000111	0.000176	0.000396	0.000254	0.000284
Nickel	T-Ni	0.00289	0.00251	0.00837	0.00448	0.00528
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	2.10	2.19	4.66	2.95	3.34
Silver	T-Ag	0.00190	0.00205	0.0136	0.00486	0.00473
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.0672	0.0734	0.0659	0.0669	0.0712
Thallium	T-Tl	<0.00010	<0.00010	0.00026	<0.00010	0.00010
Tin	T-Sn	<0.00010	0.00032	0.00041	0.00032	0.00038
Titanium	T-Ti	0.014	0.017	0.074	0.038	0.070
Uranium	T-U	0.000409	0.000379	0.000645	0.000431	0.000460
Vanadium	T-V	0.0018	0.0019	0.0078	0.0042	0.0048
Zinc	T-Zn	0.202	0.138	0.392	0.218	0.201

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	LES 47-1	LES 47-2	LES 47-1	LES 47-2	LES 47-1
Sample Date	06-05-31	06-05-31	06-06-01	06-06-01	06-06-02
Sample Time					
ALS ID	11	12	13	14	15

Dissolved Metals

Aluminum	D-Al	0.0715	0.0857	0.0731	0.0665	0.0622
Antimony	D-Sb	0.00051	0.00050	0.00055	0.00051	0.00051
Arsenic	D-As	0.00136	0.00132	0.00135	0.00125	0.00119
Barium	D-Ba	0.0221	0.0217	0.0213	0.0205	0.0218
Beryllium	D-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	D-Cd	0.00131	0.00121	0.00121	0.00109	0.000830
Calcium	D-Ca	29.8	32.0	24.5	26.5	26.7
Chromium	D-Cr	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	D-Co	0.00029	0.00029	0.00024	0.00025	0.00026
Copper	D-Cu	0.00236	0.00277	0.00242	0.00248	0.00308
Iron	D-Fe	0.170	0.188	0.157	0.161	0.154
Lead	D-Pb	0.0123	0.00813	0.0137	0.00983	0.00677
Lithium	D-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	D-Mg	5.80	6.28	4.74	5.14	5.18
Manganese	D-Mn	0.233	0.233	0.164	0.190	0.180
Molybdenum	D-Mo	0.000093	0.000104	0.000103	0.000102	0.000107
Nickel	D-Ni	0.00107	0.00108	0.00100	0.00104	0.00099
Phosphorus	D-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	D-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	D-Si	1.44	1.47	1.29	1.26	1.31
Silver	D-Ag	0.000058	0.000038	0.000105	0.000064	0.000098
Sodium	D-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	D-Sr	0.0630	0.0677	0.0535	0.0586	0.0647
Thallium	D-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	D-Sn	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	D-Ti	<0.010	<0.010	<0.010	<0.010	0.034
Uranium	D-U	0.000252	0.000264	0.000189	0.000204	0.000233
Vanadium	D-V	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	D-Zn	0.102	0.0997	0.0880	0.0870	0.0806

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	LES 47-2	LES 47-1	LES 47-2	LES 47-1	LES 47-2
Sample Date	06-06-02	06-06-03	06-06-03	06-06-04	06-06-04
Sample Time					
ALS ID	16	17	18	19	20

Total Metals

Aluminum	T-Al	0.429	0.969	0.310	0.920	0.288
Antimony	T-Sb	0.00191	0.00527	0.00165	0.0109	0.00160
Arsenic	T-As	0.00694	0.0120	0.00544	0.0205	0.00494
Barium	T-Ba	0.0398	0.0465	0.0371	0.0499	0.0381
Beryllium	T-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	T-Cd	0.00194	0.00228	0.00170	0.00407	0.00182
Calcium	T-Ca	35.7	32.8	40.1	38.3	43.1
Chromium	T-Cr	0.00073	0.0018	0.00058	0.0019	0.00066
Cobalt	T-Co	0.00082	0.00115	0.00061	0.00115	0.00065
Copper	T-Cu	0.00507	0.00802	0.00502	0.00965	0.00416
Iron	T-Fe	1.48	2.44	1.07	2.83	1.08
Lead	T-Pb	0.103	0.149	0.0693	0.229	0.0804
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	7.16	6.58	8.03	7.81	8.79
Manganese	T-Mn	0.416	0.518	0.375	0.776	0.439
Molybdenum	T-Mo	0.000115	0.000217	0.000148	0.000231	0.000142
Nickel	T-Ni	0.00215	0.00310	0.00178	0.00335	0.00178
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	2.07	2.65	2.08	2.80	2.18
Silver	T-Ag	0.000954	0.00318	0.00119	0.00586	0.00116
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.0852	0.0848	0.0951	0.0992	0.105
Thallium	T-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	T-Sn	0.00010	0.00027	<0.00010	0.00044	<0.00010
Titanium	T-Ti	0.030	0.050	0.034	0.055	0.038
Uranium	T-U	0.000404	0.000456	0.000450	0.000529	0.000495
Vanadium	T-V	0.0011	0.0027	<0.0010	0.0026	<0.0010
Zinc	T-Zn	0.134	0.151	0.127	0.219	0.144

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	LES 47-2	LES 47-1	LES 47-2	LES 47-1	LES 47-2
Sample Date	06-06-02	06-06-03	06-06-03	06-06-04	06-06-04
Sample Time					
ALS ID	16	17	18	19	20

Dissolved Metals

Aluminum	D-Al	0.0499	0.0478	0.0448	0.0389	0.0360
Antimony	D-Sb	0.00050	0.00052	0.00055	0.00053	0.00052
Arsenic	D-As	0.00121	0.00125	0.00128	0.00123	0.00130
Barium	D-Ba	0.0251	0.0243	0.0274	0.0255	0.0277
Beryllium	D-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	D-Cd	0.000897	0.000934	0.00104	0.00159	0.00117
Calcium	D-Ca	35.2	33.7	39.2	38.7	43.1
Chromium	D-Cr	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	D-Co	0.00026	0.00027	0.00028	0.00032	0.00031
Copper	D-Cu	0.00196	0.00183	0.00250	0.00299	0.00184
Iron	D-Fe	0.171	0.172	0.181	0.165	0.200
Lead	D-Pb	0.00584	0.00656	0.00642	0.0163	0.00619
Lithium	D-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	D-Mg	6.97	6.63	7.78	7.68	8.76
Manganese	D-Mn	0.219	0.214	0.245	0.308	0.292
Molybdenum	D-Mo	0.000119	0.000130	0.000125	0.000148	0.000150
Nickel	D-Ni	0.00098	0.00092	0.00096	0.00113	0.00106
Phosphorus	D-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	D-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	D-Si	1.55	1.63	1.72	1.79	1.85
Silver	D-Ag	0.000045	0.000045	0.000046	0.000056	0.000044
Sodium	D-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	D-Sr	0.0835	0.0797	0.0948	0.0921	0.105
Thallium	D-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	D-Sn	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	D-Ti	0.032	0.036	0.036	0.037	0.036
Uranium	D-U	0.000332	0.000326	0.000396	0.000383	0.000436
Vanadium	D-V	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	D-Zn	0.0827	0.0831	0.0885	0.110	0.110

Remarks regarding the analyses appear at the beginning of this report.
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 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	LES 47-1	LES 47-2	KV 7-1	KV 7-2	KV 7-1
Sample Date	06-06-05	06-06-05	06-05-26	06-05-26	06-05-27
Sample Time					
ALS ID	21	22	23	24	25

Total Metals

Aluminum	T-Al	0.0734	0.0891	0.142	0.0993	0.168
Antimony	T-Sb	0.00064	0.00066	0.00039	0.00033	0.00036
Arsenic	T-As	0.00187	0.00233	0.00183	0.00191	0.00202
Barium	T-Ba	0.0292	0.0336	0.0288	0.0276	0.0309
Beryllium	T-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	T-Cd	0.00110	0.00124	0.000676	0.000706	0.000672
Calcium	T-Ca	45.2	50.0	35.2	36.5	37.5
Chromium	T-Cr	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	T-Co	0.00031	0.00039	0.00022	0.00018	0.00023
Copper	T-Cu	0.00388	0.00218	0.0108	0.00318	0.00386
Iron	T-Fe	0.309	0.416	0.278	0.248	0.343
Lead	T-Pb	0.0116	0.0167	0.00314	0.00282	0.00385
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	9.21	10.2	7.60	7.98	8.17
Manganese	T-Mn	0.277	0.326	0.0700	0.0763	0.0776
Molybdenum	T-Mo	0.000114	0.000141	0.000287	0.000250	0.000277
Nickel	T-Ni	0.00098	0.00122	0.00157	0.00148	0.00163
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	1.99	2.09	1.64	1.63	1.87
Silver	T-Ag	0.000034	0.000098	0.000026	0.000039	0.000024
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.104	0.123	0.0749	0.0762	0.0802
Thallium	T-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	T-Sn	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	T-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	T-U	0.000443	0.000591	0.000544	0.000554	0.000557
Vanadium	T-V	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	T-Zn	0.109	0.117	0.0980	0.105	0.103

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	LES 47-1	LES 47-2	KV 7-1	KV 7-2	KV 7-1
Sample Date	06-06-05	06-06-05	06-05-26	06-05-26	06-05-27
Sample Time					
ALS ID	21	22	23	24	25

Dissolved Metals

Aluminum	D-Al	0.0337	0.0256	0.0284	0.0282	0.0267
Antimony	D-Sb	0.00051	0.00052	0.00032	0.00029	0.00032
Arsenic	D-As	0.00130	0.00127	0.00135	0.00135	0.00144
Barium	D-Ba	0.0289	0.0308	0.0253	0.0255	0.0266
Beryllium	D-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	D-Cd	0.00102	0.00103	0.000514	0.000613	0.000532
Calcium	D-Ca	44.2	50.0	34.9	36.0	37.5
Chromium	D-Cr	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	D-Co	0.00029	0.00029	0.00012	0.00012	0.00011
Copper	D-Cu	0.00334	0.00151	0.0107	0.00296	0.00331
Iron	D-Fe	0.179	0.191	0.094	0.093	0.089
Lead	D-Pb	0.00446	0.00457	0.00112	0.000946	0.00113
Lithium	D-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	D-Mg	9.01	10.3	7.54	7.83	8.03
Manganese	D-Mn	0.281	0.294	0.0379	0.0496	0.0418
Molybdenum	D-Mo	0.000141	0.000117	0.000275	0.000278	0.000288
Nickel	D-Ni	0.00097	0.00106	0.00137	0.00131	0.00123
Phosphorus	D-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	D-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	D-Si	1.90	2.02	1.38	1.43	1.48
Silver	D-Ag	0.000017	0.000012	0.000015	0.000021	0.000013
Sodium	D-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	D-Sr	0.108	0.121	0.0738	0.0761	0.0800
Thallium	D-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	D-Sn	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	D-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	D-U	0.000480	0.000554	0.000544	0.000552	0.000549
Vanadium	D-V	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	D-Zn	0.106	0.104	0.0880	0.0951	0.0895

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	KV 7-2	KV 7-1	KV 7-2	KV 7-1	KV 7-2
Sample Date	06-05-27	06-05-28	06-05-28	06-05-29	06-05-29
Sample Time					
ALS ID	26	27	28	29	30

Total Metals

Aluminum	T-Al	0.103	0.337	0.265	0.277	0.165
Antimony	T-Sb	0.00045	0.00051	0.00049	0.00045	0.00042
Arsenic	T-As	0.00177	0.00462	0.00359	0.00381	0.00345
Barium	T-Ba	0.0279	0.0396	0.0391	0.0403	0.0382
Beryllium	T-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	T-Cd	0.000657	0.00157	0.00148	0.00124	0.00120
Calcium	T-Ca	35.5	36.2	52.1	48.2	52.7
Chromium	T-Cr	<0.00050	0.00069	<0.00060	0.00053	<0.00050
Cobalt	T-Co	0.00020	0.00070	0.00052	0.00058	0.00044
Copper	T-Cu	0.00266	0.00491	0.00419	0.00976	0.00316
Iron	T-Fe	0.249	0.935	0.618	0.764	0.545
Lead	T-Pb	0.00323	0.0153	0.00837	0.00904	0.00789
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	7.74	7.81	9.83	9.73	10.8
Manganese	T-Mn	0.0744	0.230	0.320	0.209	0.209
Molybdenum	T-Mo	0.000253	0.000164	0.000324	0.000273	0.000266
Nickel	T-Ni	0.00146	0.00302	0.00277	0.00257	0.00222
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	1.67	2.01	1.98	2.10	2.00
Silver	T-Ag	0.000030	0.000065	0.000109	0.000095	0.000084
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.0765	0.0764	0.108	0.0997	0.109
Thallium	T-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	T-Sn	<0.00010	<0.00010	0.00024	<0.00010	<0.00010
Titanium	T-Ti	<0.010	0.011	<0.010	0.010	<0.010
Uranium	T-U	0.000539	0.000643	0.00109	0.000887	0.000954
Vanadium	T-V	<0.0010	0.0011	<0.0010	<0.0010	<0.0010
Zinc	T-Zn	0.106	0.201	0.197	0.172	0.171

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	KV 7-2	KV 7-1	KV 7-2	KV 7-1	KV 7-2
Sample Date	06-05-27	06-05-28	06-05-28	06-05-29	06-05-29
Sample Time					
ALS ID	26	27	28	29	30

Dissolved Metals

Aluminum	D-Al	0.0302	0.0330	0.0254	0.0243	0.0193
Antimony	D-Sb	0.00030	0.00031	0.00028	0.00029	0.00028
Arsenic	D-As	0.00128	0.00124	0.00144	0.00146	0.00149
Barium	D-Ba	0.0248	0.0251	0.0304	0.0298	0.0303
Beryllium	D-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	D-Cd	0.000504	0.000663	0.00100	0.000768	0.000710
Calcium	D-Ca	34.8	35.1	53.7	48.1	53.0
Chromium	D-Cr	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	D-Co	0.00011	0.00013	0.00020	0.00016	0.00016
Copper	D-Cu	0.00237	0.00244	0.00305	0.00721	0.00191
Iron	D-Fe	0.084	0.078	0.080	0.084	0.084
Lead	D-Pb	0.00109	0.00137	0.00108	0.000976	0.000880
Lithium	D-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	D-Mg	7.64	7.48	10.0	9.67	10.7
Manganese	D-Mn	0.0429	0.0544	0.213	0.106	0.110
Molybdenum	D-Mo	0.000258	0.000241	0.000269	0.000287	0.000291
Nickel	D-Ni	0.00130	0.00131	0.00157	0.00146	0.00142
Phosphorus	D-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	D-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	D-Si	1.41	1.43	1.74	1.69	1.79
Silver	D-Ag	0.000025	0.000028	0.000021	0.000012	0.000014
Sodium	D-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	D-Sr	0.0748	0.0744	0.0993	0.0976	0.108
Thallium	D-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	D-Sn	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	D-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	D-U	0.000536	0.000552	0.000966	0.000838	0.000919
Vanadium	D-V	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	D-Zn	0.0945	0.116	0.154	0.123	0.127

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	KV 7-1	KV 7-2	KV 7-1	KV 7-2	KV 7-1
Sample Date	06-05-30	06-05-30	06-05-31	06-05-31	06-06-01
Sample Time					
ALS ID	31	32	33	34	35

Total Metals

Aluminum	T-Al	0.207	0.149	0.129	0.203	0.342
Antimony	T-Sb	0.00044	0.00040	0.00035	0.00051	0.00072
Arsenic	T-As	0.00307	0.00310	0.00206	0.00331	0.00332
Barium	T-Ba	0.0400	0.0376	0.0368	0.0372	0.0400
Beryllium	T-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	T-Cd	0.00103	0.000986	0.000705	0.00113	0.000954
Calcium	T-Ca	55.9	55.5	58.2	46.3	45.3
Chromium	T-Cr	<0.00050	<0.00050	<0.00050	<0.00050	<0.00080
Cobalt	T-Co	0.00038	0.00037	0.00022	0.00045	0.00049
Copper	T-Cu	0.00306	0.00266	0.00723	0.00312	0.00491
Iron	T-Fe	0.567	0.467	0.292	0.567	0.769
Lead	T-Pb	0.00638	0.00659	0.00270	0.00999	0.0106
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	11.2	11.4	11.6	9.52	9.17
Manganese	T-Mn	0.143	0.151	0.0919	0.158	0.159
Molybdenum	T-Mo	0.000285	0.000284	0.000316	0.000253	0.000366
Nickel	T-Ni	0.00327	0.00225	0.00155	0.00228	0.00260
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	2.13	2.05	2.14	1.96	2.11
Silver	T-Ag	0.000058	0.000053	<0.000010	0.000083	0.000151
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.115	0.117	0.120	0.0997	0.103
Thallium	T-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	T-Sn	<0.00010	<0.00010	<0.00010	<0.00010	<0.00020
Titanium	T-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	T-U	0.00102	0.00100	0.00109	0.000809	0.000825
Vanadium	T-V	<0.0010	<0.0010	<0.0010	<0.0010	0.0011
Zinc	T-Zn	0.148	0.154	0.119	0.159	0.146

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	KV 7-1	KV 7-2	KV 7-1	KV 7-2	KV 7-1
Sample Date	06-05-30	06-05-30	06-05-31	06-05-31	06-06-01
Sample Time					
ALS ID	31	32	33	34	35

Dissolved Metals

Aluminum	D-Al	0.0172	0.0161	0.0141	0.0214	0.0207
Antimony	D-Sb	0.00034	0.00033	0.00035	0.00035	0.00038
Arsenic	D-As	0.00153	0.00148	0.00149	0.00138	0.00137
Barium	D-Ba	0.0331	0.0319	0.0337	0.0293	0.0295
Beryllium	D-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	D-Cd	0.000632	0.000641	0.000602	0.000586	0.000568
Calcium	D-Ca	55.8	56.1	57.6	47.0	45.4
Chromium	D-Cr	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	D-Co	0.00014	0.00014	0.00013	0.00013	0.00013
Copper	D-Cu	0.00191	0.00182	0.00749	0.00187	0.00307
Iron	D-Fe	0.072	0.070	0.061	0.069	0.069
Lead	D-Pb	0.000773	0.000744	0.000666	0.00111	0.00137
Lithium	D-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	D-Mg	11.2	11.4	11.6	9.58	9.09
Manganese	D-Mn	0.0811	0.0839	0.0724	0.0672	0.0699
Molybdenum	D-Mo	0.000321	0.000284	0.000312	0.000308	0.000280
Nickel	D-Ni	0.00124	0.00141	0.00141	0.00137	0.00138
Phosphorus	D-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	D-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	D-Si	1.85	1.86	1.88	1.74	1.72
Silver	D-Ag	<0.000010	<0.000010	<0.000010	0.000015	0.000015
Sodium	D-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	D-Sr	0.116	0.115	0.121	0.0991	0.0961
Thallium	D-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	D-Sn	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	D-Ti	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium	D-U	0.000989	0.000955	0.00107	0.000765	0.000728
Vanadium	D-V	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	D-Zn	0.110	0.121	0.106	0.111	0.106

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	KV 7-2	KV 7-1	KV 7-2	KV 7-1	KV 7-2
Sample Date	06-06-01	06-06-02	06-06-02	06-06-03	06-06-03
Sample Time					
ALS ID	36	37	38	39	40

Total Metals

Aluminum	T-Al	1.83	0.479	0.690	0.322	0.208
Antimony	T-Sb	0.00316	0.00121	0.00125	0.00059	0.00051
Arsenic	T-As	0.0142	0.00553	0.00616	0.00409	0.00330
Barium	T-Ba	0.0789	0.0466	0.0498	0.0438	0.0409
Beryllium	T-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	T-Cd	0.00291	0.00177	0.00181	0.00135	0.00120
Calcium	T-Ca	38.4	36.7	39.8	47.2	48.0
Chromium	T-Cr	0.00340	0.00106	0.0016	0.00068	0.00055
Cobalt	T-Co	0.00221	0.00087	0.00092	0.00058	0.00049
Copper	T-Cu	0.0113	0.00776	0.0129	0.00397	0.00346
Iron	T-Fe	3.98	1.32	1.61	0.903	0.619
Lead	T-Pb	0.0726	0.0327	0.0286	0.0138	0.0101
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	8.27	7.33	8.10	9.40	9.71
Manganese	T-Mn	0.543	0.259	0.283	0.187	0.178
Molybdenum	T-Mo	0.000528	0.000314	0.000390	0.000309	0.000297
Nickel	T-Ni	0.00790	0.00387	0.00412	0.00278	0.00271
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	3.67	2.03	2.35	2.14	1.96
Silver	T-Ag	0.000920	0.000405	0.000373	0.000169	0.000115
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.0890	0.0779	0.0887	0.0962	0.100
Thallium	T-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	T-Sn	0.00030	<0.00010	0.00029	<0.00010	<0.00010
Titanium	T-Ti	0.056	0.037	0.043	0.031	0.032
Uranium	T-U	0.000817	0.000629	0.000733	0.000740	0.000787
Vanadium	T-V	0.0051	0.0014	0.0021	<0.0010	<0.0010
Zinc	T-Zn	0.331	0.220	0.232	0.184	0.186

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	KV 7-2	KV 7-1	KV 7-2	KV 7-1	KV 7-2
Sample Date	06-06-01	06-06-02	06-06-02	06-06-03	06-06-03
Sample Time					
ALS ID	36	37	38	39	40

Dissolved Metals

Aluminum	D-Al	0.0401	0.0383	0.0358	0.0229	0.0237
Antimony	D-Sb	0.00043	0.00044	0.00037	0.00037	0.00035
Arsenic	D-As	0.00132	0.00154	0.00153	0.00165	0.00148
Barium	D-Ba	0.0265	0.0273	0.0286	0.0317	0.0313
Beryllium	D-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	D-Cd	0.000631	0.000714	0.000790	0.000666	0.000776
Calcium	D-Ca	37.4	35.6	40.7	46.1	49.0
Chromium	D-Cr	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	D-Co	0.00013	0.00014	0.00016	0.00016	0.00015
Copper	D-Cu	0.00245	0.00357	0.00598	0.00219	0.00197
Iron	D-Fe	0.089	0.109	0.112	0.109	0.099
Lead	D-Pb	0.00299	0.00375	0.00309	0.00205	0.00166
Lithium	D-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	D-Mg	7.50	6.96	8.21	9.01	9.80
Manganese	D-Mn	0.0570	0.0725	0.0931	0.0861	0.102
Molybdenum	D-Mo	0.000243	0.000278	0.000276	0.000314	0.000301
Nickel	D-Ni	0.00137	0.00150	0.00157	0.00164	0.00155
Phosphorus	D-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	D-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	D-Si	1.55	1.47	1.59	1.70	1.80
Silver	D-Ag	0.000027	0.000073	0.000060	0.000034	0.000028
Sodium	D-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	D-Sr	0.0777	0.0749	0.0821	0.0948	0.0967
Thallium	D-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	D-Sn	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	D-Ti	0.023	0.037	0.033	0.032	0.033
Uranium	D-U	0.000535	0.000521	0.000611	0.000691	0.000729
Vanadium	D-V	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	D-Zn	0.113	0.125	0.140	0.127	0.139

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID		KV 7-1	KV 7-2	KV 7-1	KV 7-2	FIELD BLANK
Sample Date		06-06-04	06-06-04	06-06-05	06-06-05	06-06-06
Sample Time						
ALS ID		41	42	43	44	45
Total Metals						
Aluminum	T-Al	0.309	0.467	0.123	0.0496	<0.0010
Antimony	T-Sb	0.00058	0.00070	0.00040	0.00033	<0.00010
Arsenic	T-As	0.00440	0.00400	0.00267	0.00193	<0.00010
Barium	T-Ba	0.0462	0.0459	0.0399	0.0365	<0.000050
Beryllium	T-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	T-Cd	0.00133	0.00130	0.00119	0.000964	<0.000050
Calcium	T-Ca	53.6	52.4	56.2	60.8	<0.050
Chromium	T-Cr	0.00072	0.0011	<0.00050	<0.00050	<0.00050
Cobalt	T-Co	0.00064	0.00063	0.00034	0.00022	<0.00010
Copper	T-Cu	0.00548	0.00507	0.00362	0.00302	<0.00010
Iron	T-Fe	0.908	1.10	0.414	0.174	<0.030
Lead	T-Pb	0.0109	0.0107	0.00528	0.00259	<0.000050
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	10.7	10.6	11.3	12.2	<0.10
Manganese	T-Mn	0.199	0.205	0.158	0.151	<0.000050
Molybdenum	T-Mo	0.000336	0.000446	0.000296	0.000318	<0.000050
Nickel	T-Ni	0.00302	0.00326	0.00234	0.00185	<0.00050
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	2.20	2.38	2.05	2.01	<0.050
Silver	T-Ag	0.000125	0.000151	0.000026	0.000016	<0.000010
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.111	0.114	0.113	0.124	<0.00010
Thallium	T-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	T-Sn	<0.00010	0.00024	<0.00010	0.00010	<0.00010
Titanium	T-Ti	0.028	0.032	<0.010	<0.010	<0.010
Uranium	T-U	0.000894	0.000904	0.000968	0.000993	<0.000010
Vanadium	T-V	<0.0010	0.0015	<0.0010	<0.0010	<0.0010
Zinc	T-Zn	0.193	0.210	0.191	0.189	<0.0010

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

RESULTS OF ANALYSIS - Water

Sample ID	KV 7-1	KV 7-2	KV 7-1	KV 7-2	FIELD BLANK
Sample Date	06-06-04	06-06-04	06-06-05	06-06-05	06-06-06
Sample Time					
ALS ID	41	42	43	44	45

Dissolved Metals

Aluminum	D-Al	0.0166	0.0182	0.0149	0.0135	<0.0010
Antimony	D-Sb	0.00037	0.00034	0.00034	0.00030	<0.00010
Arsenic	D-As	0.00154	0.00148	0.00153	0.00156	<0.00010
Barium	D-Ba	0.0340	0.0327	0.0339	0.0346	<0.000050
Beryllium	D-Be	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium	D-Cd	0.000685	0.000791	0.000811	0.000805	<0.000050
Calcium	D-Ca	54.2	52.4	56.0	60.0	<0.050
Chromium	D-Cr	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	D-Co	0.00016	0.00015	0.00016	0.00017	<0.00010
Copper	D-Cu	0.00271	0.00237	0.00242	0.00163	<0.00010
Iron	D-Fe	0.088	0.079	0.086	0.077	<0.030
Lead	D-Pb	0.00117	0.00120	0.00108	0.000948	<0.000050
Lithium	D-Li	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	D-Mg	10.6	10.5	11.2	12.3	<0.10
Manganese	D-Mn	0.103	0.111	0.117	0.134	<0.000050
Molybdenum	D-Mo	0.000339	0.000322	0.000329	0.000325	<0.000050
Nickel	D-Ni	0.00140	0.00153	0.00150	0.00154	<0.00050
Phosphorus	D-P	<0.30	<0.30	<0.30	<0.30	<0.30
Potassium	D-K	<2.0	<2.0	<2.0	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	D-Si	1.89	1.83	1.91	1.94	<0.050
Silver	D-Ag	0.000023	0.000024	<0.000010	<0.000010	<0.000010
Sodium	D-Na	<2.0	<2.0	<2.0	<2.0	<2.0
Strontium	D-Sr	0.106	0.107	0.112	0.122	<0.00010
Thallium	D-Tl	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin	D-Sn	<0.00010	0.00011	<0.00010	<0.00010	<0.00010
Titanium	D-Ti	0.024	0.035	<0.010	<0.010	<0.010
Uranium	D-U	0.000819	0.000815	0.000947	0.000977	<0.000010
Vanadium	D-V	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	D-Zn	0.131	0.157	0.167	0.173	0.0012

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

File No. X6955

RESULTS OF ANALYSIS - Water



Sample ID	LES 47	K 7
Sample Date	06-06-05	06-06-05
Sample Time	15:00	17:00
ALS ID	46	47

Physical Tests

Conductivity	(uS/cm)	368	308
pH		8.07	8.02
Total Suspended Solids		16.1	26.1

Dissolved Anions

Bromide	Br	<0.050	<0.050
Chloride	Cl	<0.50	<0.50
Fluoride	F	0.066	0.056
Sulphate	SO4	117	81.8

Nutrients

Nitrate Nitrogen	N	0.0769	0.0856
Nitrite Nitrogen	N	<0.0010	<0.0010

Remarks regarding the analyses appear at the beginning of this report.
Results are expressed as milligrams per litre except where noted.
< = Less than the detection limit indicated.

Appendix 1 - QUALITY CONTROL - Replicates

Water		LES 47-1	LES 47-1	LES 47-2	LES 47-2
		06-05-29	QC # 506165	06-06-02	QC # 506166
Total Metals					
Aluminum	T-Al	0.299	0.291	0.429	0.438
Antimony	T-Sb	0.00220	0.00211	0.00191	0.00197
Arsenic	T-As	0.00856	0.00843	0.00694	0.00707
Barium	T-Ba	0.0364	0.0358	0.0398	0.0402
Beryllium	T-Be	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010	<0.010	<0.010
Cadmium	T-Cd	0.00220	0.00223	0.00194	0.00195
Calcium	T-Ca	43.6	43.6	35.7	35.8
Chromium	T-Cr	<0.00050	<0.00050	0.00073	0.00077
Cobalt	T-Co	0.00064	0.00063	0.00082	0.00079
Copper	T-Cu	0.00583	0.00615	0.00507	0.00500
Iron	T-Fe	1.26	1.25	1.48	1.50
Lead	T-Pb	0.0956	0.0957	0.103	0.102
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	8.81	8.78	7.16	7.20
Manganese	T-Mn	0.494	0.500	0.416	0.415
Molybdenum	T-Mo	0.000133	0.000115	0.000115	0.000129
Nickel	T-Ni	0.00194	0.00201	0.00215	0.00210
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	2.10	2.09	2.07	2.10
Silver	T-Ag	0.00124	0.00103	0.000954	0.00104
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.0955	0.0961	0.0852	0.0857
Thallium	T-Tl	<0.00010	<0.00010	<0.00010	<0.00010
Tin	T-Sn	<0.00010	<0.00010	0.00010	<0.00010
Titanium	T-Ti	0.021	<0.010	0.030	0.029
Uranium	T-U	0.000453	0.000458	0.000404	0.000409
Vanadium	T-V	<0.0010	<0.0010	0.0011	0.0012
Zinc	T-Zn	0.162	0.163	0.134	0.133

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

Appendix 1 - QUALITY CONTROL - Replicates

Water	LES 47-1	LES 47-1	LES 47-2	LES 47-2
	06-05-29	QC # 506165	06-06-02	QC # 506166

Dissolved Metals

Aluminum	D-Al	0.0599	0.0586	0.0499	0.0492
Antimony	D-Sb	0.00057	0.00053	0.00050	0.00049
Arsenic	D-As	0.00142	0.00138	0.00121	0.00122
Barium	D-Ba	0.0272	0.0266	0.0251	0.0251
Beryllium	D-Be	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010	<0.010	<0.010
Cadmium	D-Cd	0.00138	0.00124	0.000897	0.000940
Calcium	D-Ca	43.6	43.8	35.2	35.0
Chromium	D-Cr	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	D-Co	0.00033	0.00033	0.00026	0.00026
Copper	D-Cu	0.00234	0.00231	0.00196	0.00190
Iron	D-Fe	0.213	0.216	0.171	0.169
Lead	D-Pb	0.00794	0.00782	0.00584	0.00580
Lithium	D-Li	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	D-Mg	8.79	8.77	6.97	6.96
Manganese	D-Mn	0.318	0.318	0.219	0.218
Molybdenum	D-Mo	0.000135	0.000122	0.000119	0.000129
Nickel	D-Ni	0.00123	0.00117	0.00098	0.00102
Phosphorus	D-P	<0.30	<0.30	<0.30	<0.30
Potassium	D-K	<2.0	<2.0	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	D-Si	1.60	1.63	1.55	1.54
Silver	D-Ag	0.000022	0.000019	0.000045	0.000042
Sodium	D-Na	<2.0	<2.0	<2.0	<2.0
Strontium	D-Sr	0.0941	0.0936	0.0835	0.0833
Thallium	D-Tl	<0.00010	<0.00010	<0.00010	<0.00010
Tin	D-Sn	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	D-Ti	<0.010	<0.010	0.032	0.033
Uranium	D-U	0.000400	0.000394	0.000332	0.000329
Vanadium	D-V	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	D-Zn	0.116	0.115	0.0827	0.0833

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

Appendix 1 - QUALITY CONTROL - Replicates

Water		KV 7-2	KV 7-2	FIELD BLANK	FIELD BLANK
		06-05-26	QC # 506167	06-06-06	QC # 506168
Total Metals					
Aluminum	T-Al	0.0993	0.0990	<0.0010	<0.0010
Antimony	T-Sb	0.00033	0.00032	<0.00010	<0.00010
Arsenic	T-As	0.00191	0.00183	<0.00010	<0.00010
Barium	T-Ba	0.0276	0.0275	<0.000050	<0.000050
Beryllium	T-Be	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	T-Bi	<0.00050	<0.00050	<0.00050	<0.00050
Boron	T-B	<0.010	<0.010	<0.010	<0.010
Cadmium	T-Cd	0.000706	0.000670	<0.000050	<0.000050
Calcium	T-Ca	36.5	36.7	<0.050	<0.050
Chromium	T-Cr	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	T-Co	0.00018	0.00019	<0.00010	<0.00010
Copper	T-Cu	0.00318	0.00328	<0.00010	<0.00010
Iron	T-Fe	0.248	0.251	<0.030	<0.030
Lead	T-Pb	0.00282	0.00282	<0.000050	<0.000050
Lithium	T-Li	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	T-Mg	7.98	8.03	<0.10	<0.10
Manganese	T-Mn	0.0763	0.0771	<0.000050	<0.000050
Molybdenum	T-Mo	0.000250	0.000259	<0.000050	<0.000050
Nickel	T-Ni	0.00148	0.00153	<0.00050	<0.00050
Phosphorus	T-P	<0.30	<0.30	<0.30	<0.30
Potassium	T-K	<2.0	<2.0	<2.0	<2.0
Selenium	T-Se	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	T-Si	1.63	1.64	<0.050	<0.050
Silver	T-Ag	0.000039	0.000039	<0.000010	<0.000010
Sodium	T-Na	<2.0	<2.0	<2.0	<2.0
Strontium	T-Sr	0.0762	0.0771	<0.00010	<0.00010
Thallium	T-Tl	<0.00010	<0.00010	<0.00010	<0.00010
Tin	T-Sn	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	T-Ti	<0.010	<0.010	<0.010	<0.010
Uranium	T-U	0.000554	0.000543	<0.000010	<0.000010
Vanadium	T-V	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	T-Zn	0.105	0.106	<0.0010	<0.0010

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

Appendix 1 - QUALITY CONTROL - Replicates

Water		KV 7-2	KV 7-2	FIELD BLANK	FIELD BLANK
		06-05-26	QC # 506167	06-06-06	QC # 506168
Dissolved Metals					
Aluminum	D-Al	0.0282	0.0284	<0.0010	<0.0010
Antimony	D-Sb	0.00029	0.00029	<0.00010	<0.00010
Arsenic	D-As	0.00135	0.00133	<0.00010	<0.00010
Barium	D-Ba	0.0255	0.0257	<0.000050	<0.000050
Beryllium	D-Be	<0.00050	<0.00050	<0.00050	<0.00050
Bismuth	D-Bi	<0.00050	<0.00050	<0.00050	<0.00050
Boron	D-B	<0.010	<0.010	<0.010	<0.010
Cadmium	D-Cd	0.000613	0.000567	<0.000050	<0.000050
Calcium	D-Ca	36.0	35.9	<0.050	<0.050
Chromium	D-Cr	<0.00050	<0.00050	<0.00050	<0.00050
Cobalt	D-Co	0.00012	0.00012	<0.00010	<0.00010
Copper	D-Cu	0.00296	0.00303	<0.00010	<0.00010
Iron	D-Fe	0.093	0.087	<0.030	<0.030
Lead	D-Pb	0.000946	0.000951	<0.000050	<0.000050
Lithium	D-Li	<0.0050	<0.0050	<0.0050	<0.0050
Magnesium	D-Mg	7.83	7.81	<0.10	<0.10
Manganese	D-Mn	0.0496	0.0506	<0.000050	<0.000050
Molybdenum	D-Mo	0.000278	0.000265	<0.000050	<0.000050
Nickel	D-Ni	0.00131	0.00122	<0.00050	<0.00050
Phosphorus	D-P	<0.30	<0.30	<0.30	<0.30
Potassium	D-K	<2.0	<2.0	<2.0	<2.0
Selenium	D-Se	<0.0010	<0.0010	<0.0010	<0.0010
Silicon	D-Si	1.43	1.41	<0.050	<0.050
Silver	D-Ag	0.000021	0.000029	<0.000010	<0.000010
Sodium	D-Na	<2.0	<2.0	<2.0	<2.0
Strontium	D-Sr	0.0761	0.0766	<0.00010	<0.00010
Thallium	D-Tl	<0.00010	<0.00010	<0.00010	<0.00010
Tin	D-Sn	<0.00010	<0.00010	<0.00010	<0.00010
Titanium	D-Ti	<0.010	<0.010	<0.010	<0.010
Uranium	D-U	0.000552	0.000549	<0.000010	<0.000010
Vanadium	D-V	<0.0010	<0.0010	<0.0010	<0.0010
Zinc	D-Zn	0.0951	0.0946	0.0012	0.0014

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

**Appendix 1 - QUALITY CONTROL - Replicates**

Water	LES 47	LES 47
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06-06-05	QC #
15:00	506169

Physical Tests

Conductivity	(uS/cm)	368	369
pH		8.07	8.07
Total Suspended Solids		16.1	17.5

Dissolved Anions

Bromide	Br	<0.050	<0.050
Chloride	Cl	<0.50	<0.50
Fluoride	F	0.066	0.067
Sulphate	SO4	117	117

Nutrients

Nitrate Nitrogen	N	0.0769	0.0774
Nitrite Nitrogen	N	<0.0010	<0.0010

Remarks regarding the analyses appear at the beginning of this report.
 Results are expressed as milligrams per litre except where noted.
 < = Less than the detection limit indicated.

Appendix 2 - METHODOLOGY



Outlines of the methodologies utilized for the analysis of the samples submitted are as follows

Metals in Water

This analysis is carried out using procedures adapted from "Standard Methods for the Examination of Water and Wastewater" 20th Edition 1998 published by the American Public Health Association, and with procedures adapted from "Test Methods for Evaluating Solid Waste" SW-846 published by the United States Environmental Protection Agency (EPA). The procedures may involve preliminary sample treatment by acid digestion, using either hotplate or microwave oven, or filtration (EPA Method 3005A). Instrumental analysis is by atomic absorption/emission spectrophotometry (EPA Method 7000 series), inductively coupled plasma - optical emission spectrophotometry (EPA Method 6010B), and/or inductively coupled plasma - mass spectrometry (EPA Method 6020).

Recommended Holding Time:

Sample: 6 months

Reference: EPA

Laboratory Location: ALS Environmental, Vancouver

Conductivity in Water

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

Recommended Holding Time:

Sample: 28 days

Reference: APHA

Laboratory Location: ALS Environmental, Vancouver

pH in Water

This analysis is carried out using procedures adapted from APHA Method 4500-H "pH Value". The pH is determined in the laboratory using a pH electrode.

Recommended Holding Time:

Sample: 2 hours

Reference: APHA

Laboratory Location: ALS Environmental, Vancouver

Solids in Water

This analysis is carried out using procedures adapted from APHA Method 2540 "Solids". Solids are determined gravimetrically. Total dissolved solids (TDS) and total suspended solids (TSS) are determined by filtering a sample



Appendix 2 - METHODOLOGY - Continued

through a glass fibre filter, TDS is determined by evaporating the filtrate to dryness at 180 degrees celsius, TSS is determined by drying the filter at 104 degrees celsius. Total solids are determined by evaporating a sample to dryness at 104 degrees celsius. Fixed and volatile solids are determined by igniting a dried sample residue at 550 degrees celsius.

Recommended Holding Time:

Sample: 7 days

Reference: APHA

Laboratory Location: ALS Environmental, Vancouver

Dissolved Anions in Water by Ion Chromatography

This analysis is carried out using procedures adapted from APHA Method 4110 "Determination of Anions by Ion Chromatography" and EPA Method 300.0 "Determination of Inorganic Anions by Ion Chromatography". Anions are determined by filtering the sample through a 0.45 micron membrane filter and injecting the filtrate onto a Dionex IonPac AG17 anion exchange column with a hydroxide eluent stream. Anions routinely determined by this method include: bromide, chloride, fluoride, nitrate, nitrite and sulphate.

Recommended Holding Time:

Sample: 28 days (bromide, chloride, fluoride, sulphate)

Sample: 2 days (nitrate, nitrite)

Reference: APHA and EPA

Laboratory Location: ALS Environmental, Vancouver

Results contained within this certificate relate only to the samples as submitted.

This Certificate Of Analysis shall only be reproduced in full, except with the written approval of ALS Environmental.

End of Report