



Gartner Lee Limited

December 15th, 2006

Harvey Klatt
Sabina Silver Corporation
401-1113 Jade Court
Thunder Bay, Ontario
P7B 6M7

Dear Mr. Klatt:

Re: 60606 – 2006 Baseline Water Quality Monitoring Program at Hackett River Project

Gartner Lee Limited (GLL) carried out a baseline water quality monitoring program (initiated 2004¹ and continued in 2005²) at the Hackett River Project Area in Nunavut from July 4th to July 6th 2006. Sample collection, general site observations and subsequent analysis of results were completed by Chad Davey M.Sc, Environmental Scientist of GLL's Whitehorse, Yukon office.

The scope of work conducted as part of this program included:

- Collection of water quality samples for chemical analysis from 19 locations plus a control lake;
- Measurement of surface flow on 8 streams within the Mara and Hackett River watersheds; and
- Summarization and reporting of the results from the water quality monitoring program.

This letter report contains a description of the 2006 water quality monitoring and flow measurement program and a presentation of the results.

1.0 Background

The Hackett River property is an advanced-stage base and precious metal property located in the Kitikmeot region of Nunavut at 66 degrees north and 108 degrees west, approximately 480 kilometers northeast of Yellowknife, NWT and 75 kilometers southwest of a potential deep water shipping port at Bathurst Inlet.

¹ Gartner Lee Limited. December 2004. 40655- Baseline Water Quality Program at Hackett River Project. Prepared for Sabina Resources Limited.

² Gartner Lee Limited. October 2005. 50598-2005 Baseline Water Quality Program at Hackett River Project. Prepared for Sabina Resources Limited.



The Hackett River project area is situated in two watersheds; Hackett River and Mara River. Both rivers are tributaries of the Burnside River. Boot Lake, Cleaver Lake, Anne Lake and Turtle Lake are located in the Mara River drainage while Banana Lake, Camp Lake and Sunken Lakes are in the Hackett River drainage.

2.0 Methodology

GLL visited the property in July 2006 to continue the baseline water quality monitoring program that was initiated in 2004. The sampling program focused on the areas being targeted by current exploration activities and consisted of water quality sampling from the following 12 locations including one reference lake (Figure 1):

- Upper Sunken Lake (H01);
- Boot Lake (H07);
- Cleaver Lake (H06);
- Anne Lake (H05);
- Mara River (two locations – H02 and H03);
- Unnamed tributary #1 entering Mara River (H15)
- Banana Lake (H11);
- Camp Lake (H12);
- Hackett River (two locations – H09 and H10); and
- Cigar Lake (reference lake – H08).

Water quality sampling and flow measurements were conducted at the following 8 locations:

- Outlet of Hood Lake (H17);
- Outlet of Jo Lake (H18);
- Camp Creek (H19);
- Outlet of Upper Sunken Lake (2 locations – H13 and H14)
- Outlet of Boot Lake (H20);
- Outlet of Turtle Lake (H16);
- Unnamed Tributary #2 entering Mara River (H04).

2.1 Water Quality Sampling

GLL collected field measurements of pH, temperature and electrical conductivity at each site. Conductivity and temperature measurements were collected using a YSI-63 pH, Conductivity and Temperature probe. The pH was calibrated on site using pH 7 and pH 4 buffer solutions. Calibration of the conductivity probe was checked in standard solutions on site and indicated acceptable calibration.



The water samples were collected using recognized sampling protocols. Appropriate measures were taken to mitigate sample contamination from all sources. Field staff wore disposable latex gloves when sampling. Where possible samples were collected from mid-stream and approximately 20 cm under the surface. All samples were collected with the mouth of the sampling bottle facing upstream.

Samples were collected by GLL for general chemical parameters (laboratory pH, conductivity, sulphate, alkalinity, hardness, nitrate, nitrite, phosphate, total dissolved solids, total suspended solids and turbidity) in a pre-cleaned 1 L plastic bottle supplied by the analytical laboratory. Samples for total metals were collected in 250 mL acid washed plastic bottles supplied by the laboratory and preserved with nitric acid. Dissolved metals were vacuum filtered in the field through 0.45 micron disposable filterware and preserved with nitric acid immediately after filtration. Samples for total organic carbon (TOC), dissolved organic carbon and total nitrogen were collected in 125 mL amber glass bottles. TOC and total nitrogen samples were preserved on site using hydrochloric acid.

All samples were kept cold, but not allowed to freeze, at all times between sample collection and delivery to the laboratory. Samples were shipped via air cargo from Yellowknife to ALS Environmental (formerly EnviroTest Laboratories), a CAEAL accredited environmental laboratory in Edmonton, Alberta. Chain of custody forms were prepared and accompanied the samples. A copy of the Chain of Custody is attached to the analytical laboratory report (Attachment A).

2.2 Flow Measurements

In order to characterize the hydrology and assess the potential loading of various water quality parameters within the watershed, measurements of stream flow at several lake and stream outlets was conducted. The Swiffer Model 2100 propeller-type meter was used to measure flow velocity in streams.

2.3 Quality Control/Quality Assurance

Quality Control/Quality Assurance protocols are a necessary component to any environmental sampling program. For the purposes of maintaining data quality a number of industry and corporate protocols were applied to this project including field replicates, field blanks and trip blanks. Field replicate sampling is designed to provide a measure of field variability and the repeatability of sampling. Variability of less than 25 % indicates very low field variability. Two replicate sample locations were chosen randomly and two samples collected sequentially. The surface sample for Camp Lake and Banana Lake was taken in replicate. Field and trip blanks



provide a measure of any possible contamination during the collection and transport of the water quality samples.

In accordance with GLL's stream gauging protocols for propeller-type meters, all stream gauging locations were established in straight channels, free from obstructions upstream or downstream and point velocities were taken at 10% intervals of the total channel width. Careful planning in selecting each site was taken to ensure representative hydraulic conditions.

3.0 Results

The 2006 sampling program sites were chosen based upon previous work carried out in the area, as well as focusing on areas of exploration and potential development. The results of the 2006 water quality program are presented in Tables 1, 2, 3 and 4 and discussed in the following section. Data were evaluated based upon the Canadian Council of Ministers for the Environment (CCME) Canadian Water Quality Guidelines for the Protection of Aquatic Life (2003). Values that exceed guidelines are highlighted within the data tables. Photographs of the sampling locations are presented in Attachment B. The following results describe water quality parameter values for the 2006³ field program and comparisons with results of 2005 and 2004 water quality programs as well.

Generally, the overall surface water system can be characterized as a series of isolated lakes with moderate surface water drainage systems at the time of sampling. The following general observations can be made in regards to the 2006 water sampling program results:

- Cigar Lake was established as a reference lake to provide an overview of the regional and background water chemistry. The water quality at Cigar Lake is similar to the other locations in the area not receiving drainage from mineralized areas (Boot Lake - H07, Mara River - H02 and H03, and Hackett River – H09 and H10).
- The majority of surface waters sampled were very soft⁴ (hardness less than 30 mg/L) with the exception of Camp Lake (H12), Anne Lake (H05), Boot Lake (H07), Mara Inflow #2 (H15) and Turtle Outflow (H16) which are considered soft² (hardness between 30 and 60 mg/L) and Cleaver Lake (H06) which was moderately soft² (hardness between 60 and 120 mg/L);

³ The detection limits for each water quality parameter are higher than results for the 2005 data, an indication that lab results in 2006 may not be as precise as 2005 results.

⁴ McNeeley, R.N., V.P. Neimanis and L. Dwyer. 1979. *Water Quality Sourcebook – A Guide to Water Quality Parameters*. Inland Waters Directorate, Water Quality Branch, Minister of Supply and Services Canada.



- The majority of surface waters sampled contained alkalinity levels that were generally low ($< 10 \text{ mg/l CaCO}_3$) indicative of high sensitivity⁵ to acidic inputs with the exception of Anne Lake (H05), Mara Inflow #1 (H04), Mara Inflow #2 (H15), and Turtle Outflow (H16) which had slightly higher (10 to 20 mg/l CaCO_3) alkalinity levels and therefore moderate sensitivity to acidic inputs³;
- Alkalinity levels in the Mara and Hackett rivers were also low indicating a sensitivity to acid inputs⁶;
- Organic carbon levels in all waters sampled were low and nutrient levels, specifically phosphorus, are indicative of nutrient poor surface waters⁷;
- There were no detectable levels of total suspended sediment in any of the surface samples and turbidity levels are extremely low ($< 2.0 \text{ NTU}$).
- Sulphate levels are elevated in lakes/streams potentially receiving drainage from mineralized areas, specifically Camp Lake (H12), Cleaver Lake (H06), Anne Lake (H05), Banana Lake (H11) and Upper Sunken Lake (H01), Upper Sunken Lake Outflow (H13), Sunken Lakes Outflow (H14), Mara Inflow #2 (H15), Turtle Outflow (H16).
- Generally, most metal levels in lakes/streams were low and within the recommended CCME guidelines with the exception of cadmium, copper, zinc and aluminum.
- The concentration of cadmium exceeded the recommended CCME guidelines in Cleaver (H06) Lake, Anne Lake (H05) and Camp Lake (H12), as well as lakes/streams downstream: Upper Sunken Lake (H01), Upper Sunken Lake Outflow (H13), and Sunken Lakes Outflow (H14).
- The concentration of zinc exceeded the recommended CCME guidelines in Cleaver Lake (H06), Anne Lake (H05), and Camp Lake (H12) as well as lakes/streams downstream: Upper Sunken Lake (H01), Upper Sunken Lake Outflow (H13), and Sunken Lakes Outflow (H14), and Camp Creek (H19).
- The concentration of copper exceeded the CCME guidelines in Cleaver Lake (H06), Anne Lake (H05), Boot Lake Outflow (H20), Banana Lake (H11), Hackett River D/S (H09), Camp Lake (H12), Camp Creek (H19) and Turtle Outflow (H16).
- The concentration of aluminum exceeded CCME guidelines in Upper Sunken Lake Outflow (H13) and Sunken Lakes Outflow (H14).
- The concentration of lead exceeds the recommended CCME guidelines in Cleaver Lake (H06) and the concentration of iron exceeds the recommended CCME guidelines in Mara Inflow #2 (H15).

⁵ Saffran, K.A. and D.O. Trew. 1996. *Sensitivity of Alberta Lakes to Acidifying Deposition: An Update of Maps with Emphasis on 109 Northern Lakes*. Water Management Division, Alberta Environmental Protection.

⁶ Boward, D., P. Kayzak, S. Stranko, M. Hurd and A. Prochaska. 1999. *From the Mountains to the Sea: The State of Maryland's Freshwater Streams*. Maryland Department of Natural Resources.

⁷ Canadian Council of Ministers of the Environment (CCME). 2003. *Canadian Guidance Framework for the Management of Phosphorus in Freshwater Systems*. National Guidelines and Standards Office, Environment Canada.



The following set of results outline comparisons and contrasts between the water quality parameters values between the 2006 and 2005 sampling programs. Comparisons to 2004 results are also mentioned where noted. The difference in water quality parameter results between sampling programs are assumed to be the result of natural variability.

- The stream flows measured in 2006 are between 2-5 times higher than values recorded in 2005, with the exception of Boot Lake Outflow (H20) and Turtle Lake Outflow (H16). It was reported by personnel at the Hackett River camp that intense isolated rain showers had occurred a few days prior to the field visit. Reasons as to why Boot Lake Outflow (H20) and Turtle Lake Outflow (H16) are lower in 2006 than 2005 are unknown.
- Conductivity within the Mara River (Sites H02 and H03) was four times greater in 2006 than the year previous.
- The hardness within the Mara River (Sites H02 and H03) increase by a factor of five in 2006 than compared to the hardness recorded in 2005.
- Dissolved organic carbon is slightly higher for all sites in 2006 than the year previous.
- Due to slightly higher pH levels recorded in 2006, the level of aluminum is no longer considered to exceed the CCME guidelines for Upper Sunken Lake (H01) and Boot Lake (H07) in comparison 2005 results.
- Cadmium was not detected for Boot Lake (H07), Boot Lake Outflow (H20), Banana Lake (H11), Hackett D/S (H09) and Turtle Lake Outflow (H16) in 2006. In contrast, these same sites in 2005 contained cadmium concentrations that slightly exceeded CCME guidelines. We suspect that the difference in detection limits between 2005 and 2006 is the primary cause of this result, as detection limits for cadmium in 2006 were higher than actual concentrations observed in 2005.
- The concentration of chromium in Hackett U/S (H10) in 2006 is over three times higher than the recommended concentration listed within the CCME guidelines, yet chromium was not detected at this site in 2005.
- The concentration of copper in Cigar Lake (H08), Hackett U/S (H10), Hood Lake Outflow (H17), Boot Lake (H07), Mara Inflow #1 (H04) and Mara Inflow #2 (H15) increased slightly in 2006 and now exceed the CCME guidelines but not in 2005.
- The concentration of iron, mainly in the particulate phase, exceeds the CCME guidelines in 2006 for Banana Lake (H11), yet iron was not detected at this site in 2005.
- The concentration of zinc no longer exceeds the CCME guidelines in 2006 for Turtle Lake Outflow (H16) in comparison to results found in 2005.
- For the 2005 and 2006 programs, the level of cadmium has consistently exceeded the recommended CCME guidelines in Cleaver Lake (H06), Anne Lake (H05) and Camp Lake (H12), as well as lakes/streams downstream: Upper Sunken Lake (H01), Upper Sunken Lake Outflow (H13), and Sunken Lakes Outflow (H14).



- For the 2005 and 2006 programs, the level of zinc has consistently exceeded the recommended CCME guidelines in Cleaver Lake (H06), Anne Lake (H05) and Camp Lake (H12), as well as lakes/streams downstream: Upper Sunken Lake (H01), Upper Sunken Lake Outflow (H13), Sunken Lakes Outflow (H14), and Camp Creek (H19).
- For the 2005 and 2006 programs, the level of copper has consistently exceeded the CCME guidelines in Cleaver Lake (H06), Anne Lake (H05), Boot Lake Outflow (H20), Banana Lake (H11), Hackett River D/S (H09), Camp Lake (H12), Camp Creek (H19) and Turtle Lake Outflow (H16).
- For the 2005 and 2006 programs, the level of aluminum has consistently exceeded CCME guidelines in Upper Sunken Lake Outflow (H13) and Sunken Lakes Outflow (H14).
- For the 2005 and 2006 programs, lead consistently exceeds the recommended CCME guideline in Cleaver Lake (H06) and elevated levels of iron exceeds the recommended CCME guidelines for Mara Inflow #2 (H15).
- The concentration of cadmium exceeded the CCME guidelines for all sampling programs (2004, 2005, and 2006) in Cleaver Lake (H06), Anne Lake (H05), Banana Lake (H11), Camp Lake (H12) and Upper Sunken Lake (H01).
- The concentration of copper exceeded the CCME guidelines for all sampling programs (2004, 2005, and 2006) in Cleaver Lake (H06), Anne Lake (H05), Banana Lake (H11), and Camp Lake (H12).
- The concentration of zinc exceeded the CCME guidelines for all sampling programs (2004, 2005, and 2006) in Cleaver Lake (H06), Anne Lake (H05), Upper Sunken Lake (H01) and Camp Lake (H12).
- For all sampling programs (2004, 2005 and 2006), the concentration of metals occurs primarily in the dissolved phase, with a very small percentage of the metal concentrations occurring as particulate matter in the water column.

3.1 Quality Control/Quality Assurance

The surface sample from Camp Lake and Banana Lake was collected in replicate (e.g. two samples collected sequentially) and summarized in Tables 5 and 6. Generally, the two water samples had similar water quality. The highest relative percent difference (RPD) was noted in dissolved lithium for Camp Lake with a RPD between samples of 158%. Typically, RPD's greater than 25% can be an indication of field variability, and as parameters approach their detection limit high variability is more likely to occur. Dissolved manganese and total lead values for Banana Lake also had a high RPD's (147% and 124% respectively). A comparison of dissolved and total lead indicates that the majority of the lead in these samples is associated with particulate matter (> 0.45 micron), which could be the cause of this variability. Total manganese and aluminum for Banana Lake also had high RPD values (both at 93%). The majority of parameters had variability of 24% or less.



Field and trip blanks were also taken as part of the QA/QC program. Field blanks are bottle sets that are filled in the field with certified deionized water and subjected to the same sampling procedures as regular samples. Field blanks are used to assess if contamination is introduced as a result of handling exposed samples. Trip blanks are bottles filled and sealed in the lab and set up with the bottle sets and travel with all the samples. They are used to assess if any contamination is introduced by the handling and transport of the samples. Table 7 outlines the results from the field and trip blank analysis. Trace amounts of metal contamination was observed in the field and trip blanks, including: antimony, strontium, and vanadium, for both the total and/or dissolved phase. These metals were not detected in any of the water quality samples for this year's program and thus would not alter any of the results outlined in this report.

I trust that this summary of the 2006 Baseline Water Quality Monitoring Program at Hackett River Project meets your current needs. If you have any questions, or if we can be of further assistance, please do not hesitate to contact me at (867) 633-6474 ext. 40.

Yours very truly,
GARTNER LEE LIMITED

Chad Davey, M.Sc.

Environmental Scientist

Attachments: A – Surface Water Quality Laboratory Data Sheets
B – Photo log

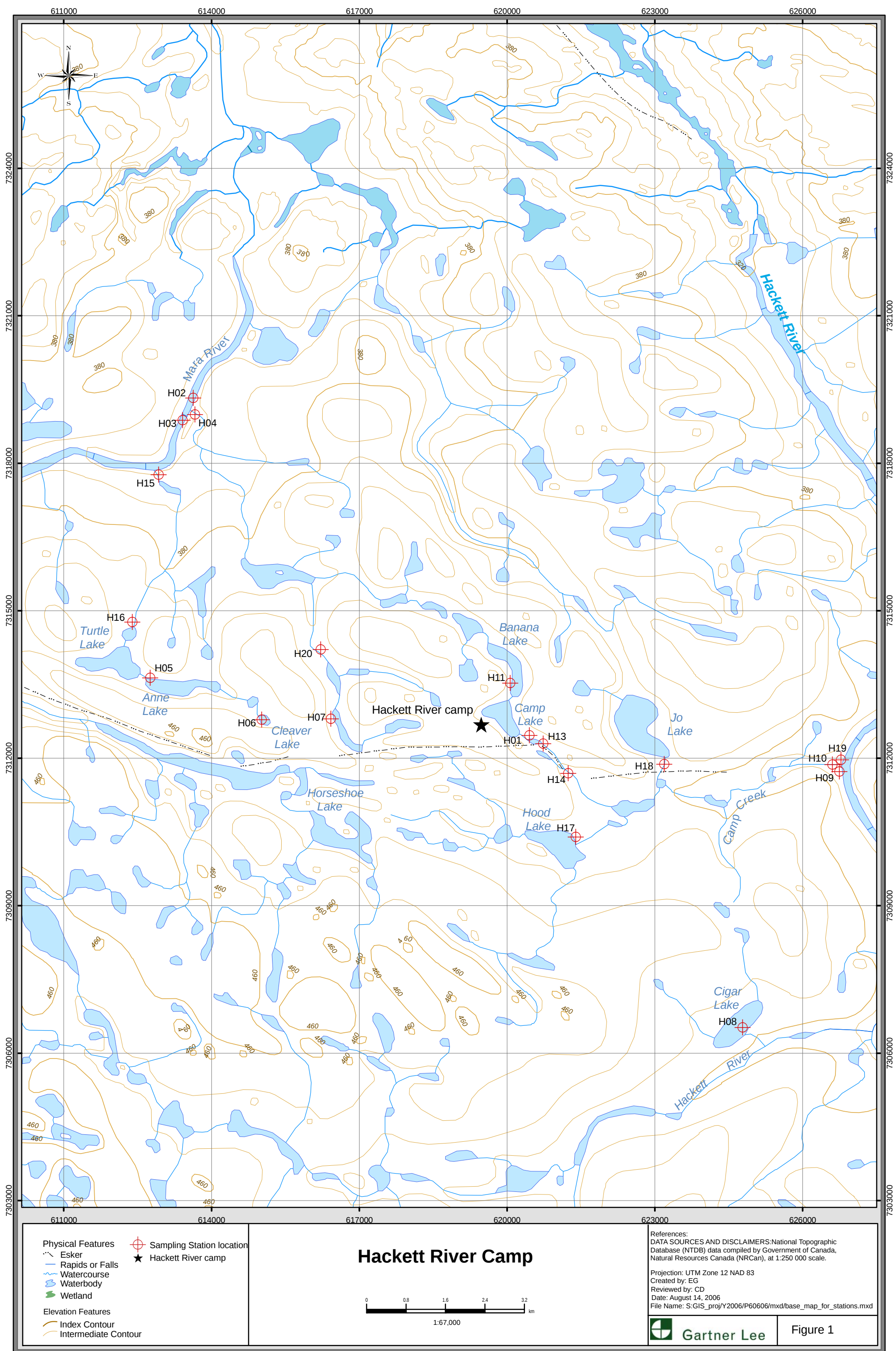




Table 2 Surface Water Samples from Hackett River, 2006
General Chemistry Analysis (mg/L)

Station	Detection Limits	Water Quality Guidelines	Upper Sunken Lake (H01)	Upper Sunken Lake Outflow (H13)	Sunken Lakes Outflow (H14)	Boot Lake (H07)	Boot Lake Outflow (H20)	Cleaver Lake (H06)	Anne Lake (H05)	Mara U/S (H03)	Mara D/S (H02)	Mara Inflow #1 (H04)	Mara Inflow #2 (H15)
Date		CCME ^a	4-Jul-06	4-Jul-06	4-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06
Physical Tests													
Temperature (°C) (field)			14	15	15	14	13	15	18	12	11	12	14
Conductivity (lab) (uS/cm)	0.2		75.8	67.1	73.7	134	79.5	141	122	57.1	49.1	50.8	103
Conductivity (field) (uS/cm)	-		79.2	68	71	150.7	-	139	101.4	13.7	15	53.9	69
Total Dissolved Solids	5		55	47	49	123	64	98	79	36	35	29	65
Hardness CaCO ₃	-		30	26	29	53	33	61	55	26	22	23	49
pH (lab)	0.1	6.5-9.0	6.8	6.8	6.3	6.6	6.9	7.1	7.4	7.4	7.3	7.4	7.6
pH (field)	-		7.5	6.7	7.2	6.4	-	8	7.7	6.4	7.1	6.7	6.7
TSS	3		<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3
Turbidity (NTU)	0.1		0.5	0.75	0.55	0.65	0.25	0.5	0.25	0.3	0.3	0.2	0.2
Dissolved Anions													
Alkalinity-Total CaCO ₃	5		<5	<5	<5	<5	<5	8	16	13	11	12	17
Sulphate SO ₄	0.5		17.2	15.3	19.7	10.3	10.1	38.3	40.5	8.9	7.6	7.9	29.1
Nutrients													
Ammonia Nitrogen	0.05	1.78-38.6 ^a	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Total Kjeldahl Nitrogen	0.2		<0.2	0.2	<0.2	0.4	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrate Nitrogen	0.1	13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrite Nitrogen	0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved ortho-phosphate	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total Phosphate	0.02		<0.02	<0.02	<0.02	<0.02	0.03	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Organic Parameters													
Dissolved Organic Carbon	1		3	4	3	3	3	2	3	3	3	3	3
Total Organic Carbon	1		4	4	3	5	3	3	3	3	4	3	3

All units mg/L unless otherwise noted

^a Canadian water quality guidelines for the protection of aquatic life, Council of Ministers of the Environment, 2001

*Average of sample and replicate

[#] Lab error, no chloride test could be completed

a) Varies with temperature and pH: 1.78 at pH=7.5 and Temp =15° C and 38.6 at pH=6.5 and Temp =50C

Italic results exceed CCME Aquatic Life Guidelines



Table 2 (continued) Surface Water Samples from Hackett River, 2006
General Chemistry Analysis (mg/L)

Station	Detection Limits	Water Quality Guidelines	Cigar Lake (H08)	*Banana Lake (H11)	Hackett U/S (H10)	Hackett D/S (H09)	*Camp Lake (H12)	Turtle Outflow (H16)	Hood Lake Outflow (H17)	Jo lake Outflow (H18)	Camp Creek (H19)
Date		CCME ^a	6-Jul-06	6-Jul-06	6-Jul-06	6-Jul-06	5-Jul-06	5-Jul-06	6-Jul-06	6-Jul-06	6-Jul-06
Physical Tests											
Temperature (°C) (field)	-		11	10	13	13	12	11	12	12	11
Conductivity (lab) (uS/cm)	0.2		28.3	50.3	20.7	33.2	80.8	123	32.4	11.5	36.3
Conductivity (field) (uS/cm)	-		39	64	31	21.9	70.3	111.7	51	9.6	56
Total Dissolved Solids	5		22	32	14	23	60.5	79	20	7	24
Hardness CaCO ₃	-		13	22	8	13	33	59	14	5	14
pH (lab)	0.1	6.5-9.0	7.2	7.2	6.9	6.9	6.7	7.5	7.0	6.8	6.9
pH (field)	-		7.07		7.3	7.8	7.2	7.05	7.7	6.6	6.6
TSS	3		<3	<3	<3	<3	<3	<3	<3	<3	<3
Turbidity (NTU)	0.1		0.55	0.8	0.30	0.35	0.55	0.2	0.35	0.35	0.30
Dissolved Anions											
Alkalinity-Total CaCO ₃	5		8	9.5	<5	<5	<5	18	6	<5	<5
Sulphate SO ₄	0.5		3.8	12.35	3.9	8.2	17.5	38.5	7.8	1.1	9.0
Nutrients											
Ammonia Nitrogen	0.05	1.78-38.6 ^a	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Total Kjeldahl Nitrogen	0.2		0.3	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
Nitrate Nitrogen	0.1	13	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrite Nitrogen	0.05	0.06	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
Dissolved ortho-phosphate	0.01		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total Phosphate	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Organic Parameters											
Dissolved Organic Carbon	1		5	3	3	3	3	3	3	3	3
Total Organic Carbon	1		6	4	4	4	3	3	3	3	3

All units mg/L unless otherwise noted

^a Canadian water quality guidelines for the protection of aquatic life, Council of Ministers of the Environment, 2005

*Average of sample and replicate

Lab error, no chloride test could be completed

a) Varies with temperature and pH: 1.78 at pH=7.5 and Temp =15 ° C and 38.6 at pH=6.5 and Temp =50C

Italic

results exceed CCME Aquatic Life Guidelines

Table 3 Surface Water Samples from Hackett River, 2006
Total Metals Analysis (mg/L)

Station	Detection Limits	Water Quality Guidelines	Upper Sunken Lake (H01)	Upper Sunken Lake Outflow (H13)	Sunken Lakes Outflow (H14)	Boot Lake (H07)	Boot Lake Outflow (H20)	Cleaver Lake (H06)	Anne Lake (H05)	Mara U/S (H03)	Mara D/S (H02)	Mara Inflow #1 (H04)	Mara Inflow #2 (H15)
Date		CCME ^a	4-Jul-06	4-Jul-06	4-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06
Total Metals													
Aluminum	0.02	0.005-0.1 ^b	0.08	0.11	0.18	0.05	0.03	0.07	0.03	<0.02	0.03	0.03	0.04
Antimony	0.0004		0.0006	0.0006	0.0007	0.0006	0.0006	0.0006	0.0006	0.0007	0.0007	0.0006	0.0006
Arsenic	0.0004	0.005	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Barium	0.0002		0.0099	0.008	0.0088	0.0197	0.0099	0.0116	0.0065	0.0039	0.0041	0.0039	0.005
Beryllium	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bismuth	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Boron	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Cadmium	0.0002	0.000017	0.0013	0.0013	0.0014	<0.0002	<0.0002	0.0057	0.0008	<0.0002	<0.0002	<0.0002	<0.0002
Calcium	0.5		7.8	7	7.2	16.5	9.4	16.8	15	6.8	5.8	5.9	13.5
Chromium	0.0008	0.001	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Cobalt	0.0002		0.0007	0.0007	0.0009	0.0007	<0.0002	0.0006	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Copper	0.001	0.002-0.004 ^c	0.032	0.037	0.028	0.002	0.003	0.024	0.018	<0.001	0.001	0.002	0.002
Iron	0.005	0.3	0.041	0.047	0.091	0.207	0.026	0.03	0.021	0.008	0.019	0.017	0.083
Lead	0.0001	0.001-0.007 ^d	0.0005	0.0008	0.0006	0.0004	0.0002	0.0022	0.0002	<0.0001	<0.0001	<0.0001	0.0001
Lithium	0.006		<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Magnesium	0.1		1.7	1.6	1.8	2.1	1.6	3.3	3.2	1.5	1.4	1.4	2.8
Manganese	0.001		0.045	0.038	0.038	0.023	0.002	0.015	0.006	<0.001	0.001	0.001	0.005
Mercury	0.0002	0.000026	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Molybdenum	0.0001	0.073	0.0008	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001
Nickel	0.0002	0.025-0.15 ^e	0.0024	0.0022	0.0043	0.0052	0.0014	0.0035	0.0017	<0.0002	0.0003	0.0004	0.0005
Potassium	0.1		0.8	0.7	0.8	0.9	0.7	1	0.9	0.6	0.5	0.6	0.7
Selenium	0.0004	0.001	0.0007	0.0008	0.0005	0.0009	0.0009	0.0007	<0.0004	<0.0004	0.0006	0.0004	<0.0004
Silver	0.0004	0.0001	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Strontium	0.0002		0.038	0.0341	0.0263	0.0897	0.0485	0.0773	0.0142	0.0109	0.0092	0.0085	0.0119
Thallium	0.0001	0.0008	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Tin	0.0004		<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Titanium	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Vanadium	0.0002		0.0005	0.0004	0.0005	0.0007	0.0007	0.0007	0.0005	<0.0002	0.0004	0.0004	0.0007
Zinc	0.004	0.03	0.243	0.268	0.3	0.026	0.018	0.814	0.121	<0.004	<0.004	0.007	0.009

All units mg/l unless otherwise noted

a) Canadian water quality guidelines for the protection of aquatic life, Council of Ministers of the Environment, 2005

b) 0.005mg/L at pH < 6.5, [Ca²⁺] < 4 mg/L, DOC < 2 mg/L; 0.1 mg/L at pH ≥ 6.5, [Ca²⁺] ≥ 4 mg/L, DOC ≥ 2 mg/L

c) 0.002 mg/L at [CaCO₃] = 0 - 120 mg/L; 0.003 mg/L at [CaCO₃] = 120 - 180 mg/L; 0.004 mg/L at [CaCO₃] > 180mg/L

d) 0.001 mg/L at [CaCO₃] = 0 - 60 mg/L; 0.002 mg/L at [CaCO₃] = 60 - 120 mg/L; 0.004 mg/L at [CaCO₃] = 120 -180mg/L; 0.007 mg/L at [CaCO₃] > 180mg/L

e) 0.025 mg/L at [CaCO₃] = 0 - 60 mg/L; 0.065 mg/L at [CaCO₃] = 60 - 120 mg/L; 0.110 mg/L at [CaCO₃] = 120 -180mg/L; 0.150 mg/L at [CaCO₃] > 180mg/L

*Average of sample and replicate

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results exceed CCME Aquatic Life Guidelines

Table 3 (continued) Surface Water Samples from Hackett River, 2006

Total Metals Analysis (mg/L)

Station	Detection Limits	Water Quality Guidelines	Cigar Lake (H08)	*Banana Lake (H11)	Hackett U/S (H10)	Hackett D/S (H09)	*Camp Lake (H12)	Turtle Outflow (H16)	Hood Lake Outflow (H17)	Jo lake Outflow (H18)	Camp Creek (H19)
Date		CCME ^a	6-Jul-06	6-Jul-06	6-Jul-06	6-Jul-06	5-Jul-06	5-Jul-06	6-Jul-06	6-Jul-06	6-Jul-06
Total Metals											
Aluminum	0.02	0.005-0.1 ^b	0.03	0.075	0.03	0.04	0.09	<0.02	0.02	0.02	0.04
Antimony	0.0004		0.0006	0.0006	0.0006	0.0006	0.00075	0.0007	0.0006	0.0005	0.0006
Arsenic	0.0004	0.005	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Barium	0.0002		0.0041	0.00545	0.0042	0.0051	0.00865	0.0057	0.0041	0.0025	0.0056
Beryllium	0.001		<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001
Bismuth	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Boron	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Cadmium	0.0002	0.000017	<0.0002	<0.0002	<0.0002	<0.0002	0.00135	<0.0002	<0.0002	<0.0002	<0.0002
Calcium	0.5		3.2	5.2	2.1	2.7	8.65	15.3	2.8	0.8	3.5
Chromium	0.0008	0.001	<0.0008	<0.0008	0.0035	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008	<0.0008
Cobalt	0.0002		<0.0002	0.0003	<0.0002	<0.0002	0.00085	<0.0002	0.0002	<0.0002	<0.0002
Copper	0.001	0.002-0.004 ^c	0.005	0.01	0.002	0.003	0.032	0.005	0.002	0.001	0.003
Iron	0.005	0.3	0.079	0.5295	0.044	0.055	0.052	0.015	0.036	0.039	0.049
Lead	0.0001	0.001-0.007 ^d	<0.0001	<0.0001	0.0001	<0.0001	0.0005	0.0001	<0.0001	<0.0001	<0.0001
Lithium	0.006		<0.006	<0.006	<0.006	<0.006	<0.006	<0.0001	<0.006	<0.006	<0.006
Magnesium	0.1		1.0	1.7	0.9	1.2	1.9	3.1	1.2	0.5	1.4
Manganese	0.001		0.003	0.0225	0.002	0.002	0.0525	0.003	0.004	0.006	0.002
Mercury	0.0002	0.000026	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.01	<0.0002	<0.0002	<0.0002
Molybdenum	0.0001	0.073	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Nickel	0.0002	0.025-0.15 ^e	0.0028	0.00075	0.0013	0.0034	0.003	0.0004	0.0052	0.0002	0.0041
Potassium	0.1		0.3	0.7	0.4	0.4	0.75	0.9	0.3	0.3	0.5
Selenium	0.0004	0.001	0.0005	<0.0004	0.0006	<0.0004	0.0008	0.0006	0.0005	0.0005	0.0005
Silver	0.0004	0.0001	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	1		<1	<1	<1	<1	<1	<1	<1	<1	<1
Strontium	0.0002		0.0098	0.0086	0.0122	0.0091	0.04035	0.0169	0.0078	0.0038	0.0109
Thallium	0.0001	0.0008	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Tin	0.0004		<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Titanium	0.005		<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Uranium	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Vanadium	0.0002		0.0003	0.0007	0.0003	0.0003	0.0007	0.0002	0.0003	0.0003	0.0003
Zinc	0.004	0.03	<0.004	0.0205	<0.004	0.029	0.258	0.025	<0.004	<0.004	0.044

All units mg/l unless otherwise noted

a) Canadian water quality guidelines for the protection of aquatic life, Council of Ministers of the Environment, 2005

b) 0.005mg/L at pH < 6.5, [Ca2+] < 4 mg/L, DOC < 2 mg/L; 0.1 mg/L at pH ≥ 6.5, [Ca2+] ≥ 4 mg/L, DOC ≥ 2 mg/L

c) 0.002 mg/L at [CaCO3] = 0 - 120 mg/L; 0.003 mg/L at [CaCO3] = 120 - 180 mg/L; 0.004 mg/L at [CaCO3] > 180mg/L

d) 0.001 mg/L at [CaCO3] = 0 - 60 mg/L; 0.002 mg/L at [CaCO3] = 60 - 120 mg/L; 0.004 mg/L at [CaCO3] = 120 -180mg/L; 0.007 mg/L at [CaCO3] > 180mg/L

e) 0.025 mg/L at [CaCO3] = 0 - 60 mg/L; 0.065 mg/L at [CaCO3] = 60 - 120 mg/L; 0.110 mg/L at [CaCO3] = 120 -180mg/L; 0.150 mg/L at [CaCO3] > 180mg/L

*Average of sample and replicate

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results exceed CCME Aquatic Life Guidelines

Table 4 Surface Water Samples from Hackett River, 2006
Dissolved Metals Analysis (mg/L)

Station	Detection Limits	Water Quality Guidelines	Upper Sunken Lake (H01)	Upper Sunken Lake Outflow (H13)	Sunken Lakes Outflow (H14)	Boot Lake (H07)	Boot Lake Outflow (H20)	Cleaver Lake (H06)	Anne Lake (H05)	Mara U/S (H03)	Mara D/S (H02)	Mara Inflow #1 (H04)	Mara Inflow #2 (H15)
Date		CCME ^a	4-Jul-06	4-Jul-06	4-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06	5-Jul-06
Dissolved Metals													
Aluminum	0.01	0.005-0.1 ^b	0.07	0.09	0.13	0.01	0.01	0.05	0.01	0.01	0.01	0.01	<0.01
Antimony	0.0004		0.0006	0.0006	0.0006	0.0007	0.0007	0.0008	0.0011	0.0007	0.0006	0.0007	<0.0004
Arsenic	0.0004	0.005	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Barium	0.0001		0.008	0.007	0.0084	0.0189	0.0086	0.0112	0.0064	0.0051	0.0032	0.0032	0.0047
Beryllium	0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bismuth	0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	0.00005	0.00009	<0.00005	<0.00005	<0.00005	<0.00005
Boron	0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	0.0001	0.000017	0.0015	0.0014	0.0015	0.0001	<0.0001	0.0059	0.0008	<0.0001	<0.0001	<0.0001	<0.0001
Calcium	0.0002		8.4	7.7	7.6	17.5	9.8	17.7	15.6	7.1	5.9	6.2	13.8
Chromium	0.0004	0.001	0.0008	0.0006	0.0004	<0.0004	0.0004	0.0004	0.0005	0.0007	0.0007	0.0008	0.0007
Cobalt	0.0001		0.0006	0.0006	0.0008	0.0005	<0.0001	0.0005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Copper	0.0006	0.002-0.004 ^c	0.0279	0.0317	0.0243	0.0009	0.0025	0.0198	0.0145	0.0011	0.0009	0.001	0.0021
Iron	0.005	0.3	0.03	0.032	0.074	0.094	0.008	0.016	0.008	0.007	0.013	0.011	0.012
Lead	0.0001	0.001-0.007 ^d	0.0003	0.0006	0.0004	<0.0001	<0.0001	0.0014	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Lithium	0.0001		0.0016	0.0012	0.0016	0.0024	0.0011	0.0031	0.0014	<0.0001	<0.0001	<0.0001	0.0008
Magnesium	0.01		1.89	1.77	1.95	2.12	1.69	3.41	3.3	1.6	1.45	1.46	2.83
Manganese	0.001		0.048	0.043	0.041	0.021	0.001	0.015	0.005	<0.001	0.001	<0.001	<0.001
Mercury	0.0001	0.000026	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Molybdenum	0.0001	0.073	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Nickel	0.0001	0.025-0.15 ^e	0.0023	0.002	0.0042	0.005	0.0012	0.0036	0.0018	0.0007	0.0002	0.0004	0.0004
Potassium	0.1		0.8	0.7	0.8	0.9	0.8	1	0.9	0.6	0.5	0.6	0.8
Selenium	0.0004	0.001	<0.0004	<0.0004	<0.0004	0.0008	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Silver	0.0002	0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Sodium	0.5		0.7	0.7	0.6	0.9	0.7	0.9	0.6	0.6	0.5	0.5	0.7
Strontium	0.0001		0.0365	0.0308	0.0303	0.0877	0.048	0.0752	0.0141	0.011	0.0097	0.0099	0.0122
Thallium	0.00005	0.0008	<0.00005	<0.00005	<0.00005	0.00006	<0.00005	0.00007	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin	0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Titanium	0.0003		<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	0.0004	<0.0003	<0.0003	<0.0003
Uranium	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Vanadium	0.0001		0.0002	0.0003	0.0003	0.0003	0.0003	0.0003	0.0002	0.0002	0.0002	0.0003	0.0002
Zinc	0.002	0.03	0.271	0.312	0.342	0.025	0.017	0.889	0.13	0.009	<0.002	0.008	0.007

All units mg/L unless otherwise noted

a) Canadian water quality guidelines for the protection of aquatic life, Council of Ministers of the Environment, 2005

b) 0.005mg/L at pH < 6.5, [Ca²⁺] < 4 mg/L; DOC < 2 mg/L: 0.1 mg results exceed CCME Aquatic Life Guidelines

c) 0.002 mg/L at [CaCO₃] = 0 - 120 mg/L; 0.003 mg/L at [CaCO₃] = 120 - 180 mg/L; 0.004 mg/L at [CaCO₃] > 180mg/L

d) 0.001 mg/L at [CaCO₃] = 0 - 60 mg/L; 0.002 mg/L at [CaCO₃] = 60 - 120 mg/L; 0.004 mg/L at [CaCO₃] = 120 - 180mg/L; 0.007 mg/L at [CaCO₃] > 180mg/L

e) 0.025 mg/L at [CaCO₃] = 0 - 60 mg/L; 0.065 mg/L at [CaCO₃] = 60 - 120 mg/L; 0.110 mg/L at [CaCO₃] = 120 - 180mg/L; 0.150 mg/L at [CaCO₃] > 180mg/L

Table 4 (continued) Surface Water Samples from Hackett River, 2006
Dissolved Metals Analysis (mg/L)

Station	Detection Limits	Water Quality Guidelines	Cigar Lake (H08)	*Banana Lake (H11)	Hackett U/S (H10)	Hackett D/S (H09)	*Camp Lake (H12)	Turtle Outflow (H16)	Hood Lake Outflow (H17)	Jo lake Outflow (H18)	Camp Creek (H19)
Date		CCME ^a	6-Jul-06	6-Jul-06	6-Jul-06	6-Jul-06	5-Jul-06	5-Jul-06	6-Jul-06	6-Jul-06	6-Jul-06
Dissolved Metals											
Aluminum	0.01	0.005-0.1 ^b	0.02	0.01	0.03	0.03	0.06	<0.01	0.02	0.01	0.02
Antimony	0.0004		0.0006	0.00065	0.0006	0.0006	0.0007	0.0006	0.0006	0.0005	0.0007
Arsenic	0.0004	0.005	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Barium	0.0001		0.0029	0.0039	0.0028	0.0046	0.0083	0.0046	0.0033	0.0015	0.0046
Beryllium	0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005
Bismuth	0.00005		<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Boron	0.002		<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
Cadmium	0.0001	0.000017	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Calcium	0.0002		3.1	6.2	1.6	2.9	9.3	16.7	2.8	0.8	3.2
Chromium	0.0004	0.001	0.0014	0.0006	<0.0004	<0.0004	<0.0004	0.0009	<0.0004	0.0004	<0.0004
Cobalt	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	0.0008	<0.0001	<0.0001	<0.0001	<0.0001
Copper	0.0006	0.002-0.004 ^c	0.0012	0.0048	0.0012	0.0022	0.028	0.0038	0.0011	<0.0006	0.0024
Iron	0.005	0.3	0.059	0.0675	0.031	0.039	0.0315	<0.005	0.019	0.015	0.037
Lead	0.0001	0.001-0.007 ^d	<0.0001	<0.0001	<0.0001	<0.0001	0.00035	0.0003	<0.0001	<0.0001	<0.0001
Lithium	0.0001		<0.0001	<0.0001	<0.0001	0.0004	0.00095	<0.006	0.0003	<0.0001	0.0003
Magnesium	0.01		1.05	1.835	0.79	1.28	2.065	3.34	1.22	0.51	1.38
Manganese	0.001		0.001	0.015	0.001	0.002	0.056	0.001	0.002	0.002	0.002
Mercury	0.0001	0.000026	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0002	<0.0001	<0.0001	<0.0001
Molybdenum	0.0001	0.073	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Nickel	0.0001	0.025-0.15 ^e	0.0026	0.0005	0.0013	0.0033	0.003	0.0004	0.0047	0.0004	0.0040
Potassium	0.1		0.3	0.5	0.4	0.5	0.8	0.9	0.3	0.3	0.4
Selenium	0.0004	0.001	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Silver	0.0002	0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Sodium	0.5		0.5	<0.5	<0.5	0.5	0.7	0.5	<0.5	0.6	0.5
Strontium	0.0001		0.0064	0.008	0.0050	0.0085	0.03895	0.014	0.0069	0.0032	0.0092
Thallium	0.00005	0.0008	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005
Tin	0.0002		<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002
Titanium	0.0003		<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003	<0.0003
Uranium	0.0001		<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001
Vanadium	0.0001		0.0003	0.0002	0.0002	0.0001	0.0003	0.0002	0.0002	0.0002	0.0002
Zinc	0.002	0.03	0.004	0.013	0.003	0.040	0.2775	0.029	0.002	<0.002	0.038

All units mg/l unless otherwise noted

a) Canadian water quality guidelines for the protection of aquatic life, Council of Ministers of the Environment, 2005

b) 0.005mg/L at pH < 6.5, [Ca²⁺] < 4 mg/L, DOC < 2 mg/L; 0.1 mg/l/results exceed CCME Aquatic Life Guidelines

c) 0.002 mg/L at [CaCO₃] = 0 - 120 mg/L; 0.003 mg/L at [CaCO₃] =120 - 180 mg/L; 0.004 mg/L at [CaCO₃] >180mg/L

d) 0.001 mg/L at [CaCO₃] = 0 - 60 mg/L; 0.002 mg/L at [CaCO₃] =60 - 120 mg/L; 0.004 mg/L at [CaCO₃] =120 -180mg/L; 0.007 mg/L at [CaCO₃] > 180mg/L

e) 0.025 mg/L at [CaCO₃] = 0 - 60 mg/L; 0.065 mg/L at [CaCO₃] =60 - 120 mg/L; 0.110 mg/L at [CaCO₃] =120 -180mg/L; 0.150 mg/L at [CaCO₃] > 180mg/L



Table 5. QA/QC: Field Replicates
Surface Water Analysis Results (mg/L)

Station	Banana Lake	Banana Lake	RPD	Station	Banana Lake	Banana Lake	RPD
Date	7/6/2005	7/6/2005	%	Date	7/7/2005	7/7/2005	%
Physical Tests				Dissolved Anions			
Conductivity (uS/cm)	50.1	50.5	1%	Alkalinity-Total CaCO ₃	9	10	11%
Total Dissolved Solids	33	31	6%	Sulphate SO ₄	12.4	12.3	1%
Hardness CaCO ₃	21	23	9%				
pH	7.2	7.2	0%				
Total Suspended Solids	<3	5	-				
Turbidity (NTU)	0.80	0.80	0%				
Nutrients				Organic Parameters			
Ammonia Nitrogen N	<0.05	<0.05	0%	Dissolved Organic Carbon C	3	3	0%
Total Kjeldahl Nitrogen N	<0.2	0.2	0%	Total Organic Carbon C	4	4	0%
Ortho-Phosphate P	<0.01	<0.01	0%				
Total Phosphate P	<0.02	<0.02	0%				
Total Metals				Dissolved Metals			
Aluminum T-Al	0.04	0.11	93%	Aluminum D-Al	0.01	0.01	0%
Antimony T-Sb	0.0006	0.0006	0%	Antimony D-Sb	0.0007	0.0006	15%
Arsenic T-As	<0.0004	<0.0004	0%	Arsenic D-As	<0.0004	<0.0004	0%
Barium T-Ba	0.0046	0.0063	31%	Barium D-Ba	0.0039	0.0039	0%
Beryllium T-Be	<0.001	<0.001	0%	Beryllium D-Be	<0.0005	<0.0005	0%
Bismuth T-Bi	<0.0001	<0.0001	0%	Bismuth D-Bi	<0.00005	<0.00005	0%
Boron T-B	<0.02	<0.02	0%	Boron D-B	<0.002	<0.002	0%
Cadmium T-Cd	<0.0002	<0.0002	0%	Cadmium D-Cd	<0.0001	<0.0001	0%
Calcium T-Ca	5.1	5.3	4%	Calcium D-Ca	7.0	5.4	26%
Chromium T-Cr	<0.0008	<0.0008	0%	Chromium D-Cr	0.0005	0.0007	33%
Cobalt T-Co	0.0002	0.0004	67%	Cobalt D-Co	<0.0001	<0.0001	0%
Copper T-Cu	0.007	0.013	60%	Copper D-Cu	0.0048	0.0048	0%
Iron T-Fe	0.200	0.859	124%	Iron D-Fe	0.056	0.079	34%
Lead T-Pb	<0.0001	0.0001	0%	Lead D-Pb	<0.0001	<0.0001	0%
Lithium T-Li	<0.006	<0.006	0%	Lithium D-Li	<0.0001	<0.0001	0%
Magnesium T-Mg	1.7	1.7	0%	Magnesium D-Mg	1.95	1.72	13%
Manganese T-Mn	0.012	0.033	93%	Manganese D-Mn	0.026	0.004	147%
Mercury T-Hg	<0.0002	<0.0002	0%	Mercury D-Hg	<0.0001	<0.0001	0%
Molybdenum T-Mo	<0.0001	<0.0001	0%	Molybdenum D-Mo	<0.0001	<0.0001	0%
Nickel T-Ni	0.0006	0.0009	40%	Nickel D-Ni	0.0005	0.0005	0%
Potassium T-K	0.7	0.7	0%	Potassium D-K	0.3	0.7	80%
Selenium T-Si	<0.0004	<0.0004	0%	Selenium D-Si	<0.0004	<0.0004	0%
Silver T-Ag	<0.0004	<0.0004	0%	Silver D-Ag	<0.0002	<0.0002	0%
Sodium T-Na	<1	<1	0%	Sodium D-Na	<0.5	0.6	0%
Strontium T-Sr	0.0085	0.0087	2%	Strontium D-Sr	0.0080	0.0080	0%
Thallium T-Tl	<0.0001	<0.0001	0%	Thallium D-Tl	<0.00005	<0.00005	0%
Tin T-Sn	<0.0004	<0.0004	0%	Tin D-Sn	<0.0002	<0.0002	0%
Titanium T-Ti	<0.005	<0.005	0%	Titanium D-Ti	<0.0003	<0.0003	0%
Uranium T-U	<0.0001	<0.0001	0%	Uranium D-U	<0.0001	<0.0001	0%
Vanadium T-V	0.0007	0.0007	0%	Vanadium D-V	0.0002	0.0002	0%
Zinc T-Zn	0.018	0.023	24%	Zinc D-Zn	0.013	0.013	0%



Table 6. QA/QC: Field Replicates
Surface Water Analysis Results (mg/L)

Station	Camp Lake	Camp Lake	RPD	Station	Camp Lake	Camp Lake	RPD
Date	7/5/2005	7/5/2005	%	Date	7/5/2005	7/5/2005	%
Physical Tests				Dissolved Anions			
Conductivity (uS/cm)	81.4	80.2	1%	Alkalinity-Total CaCO ₃	<5	<5	0%
Total Dissolved Solids	59	62	5%	Sulphate SO ₄	17.6	17.4	1%
Hardness CaCO ₃	33	33	0%				
pH	6.7	6.7	0%				
Total Suspended Solids	<3	<3	0%				
Turbidity (NTU)	0.55	0.55	0%				
Nutrients				Organic Parameters			
Ammonia Nitrogen N	<0.05	<0.05	0%	Dissolved Organic Carbon C	3	3	0%
Total Kjeldahl Nitrogen N	<0.2	<0.2	0%	Total Organic Carbon C	3	3	0%
Ortho-Phosphate P	<0.01	<0.01	0%				
Total Phosphate P	<0.02	<0.02	0%				
Total Metals				Dissolved Metals			
Aluminum T-Al	0.09	0.09	0%	Aluminum D-Al	0.06	0.06	0%
Antimony T-Sb	0.0006	0.0009	40%	Antimony D-Sb	0.0007	0.0007	0%
Arsenic T-As	<0.0004	<0.0004	0%	Arsenic D-As	<0.0004	<0.0004	0%
Barium T-Ba	0.0087	0.0086	1%	Barium D-Ba	0.0082	0.0084	2%
Beryllium T-Be	<0.001	<0.001	0%	Beryllium D-Be	<0.0005	<0.0005	0%
Bismuth T-Bi	<0.0001	<0.0001	0%	Bismuth D-Bi	<0.00005	<0.00005	0%
Boron T-B	<0.02	<0.02	0%	Boron D-B	<0.002	<0.002	0%
Cadmium T-Cd	0.0014	0.0013	7%	Cadmium D-Cd	0.0014	0.0015	7%
Calcium T-Ca	8.7	8.6	1%	Calcium D-Ca	9.3	9.3	0%
Chromium T-Cr	<0.0008	<0.0008	0%	Chromium D-Cr	<0.0004	<0.0004	0%
Cobalt T-Co	0.0008	0.0009	12%	Cobalt D-Co	0.0008	0.0008	0%
Copper T-Cu	0.032	0.032	0%	Copper D-Cu	0.0277	0.0283	2%
Iron T-Fe	0.053	0.051	4%	Iron D-Fe	0.032	0.031	3%
Lead T-Pb	0.0005	0.0005	0%	Lead D-Pb	0.0003	0.0004	29%
Lithium T-Li	<0.006	<0.006	0%	Lithium D-Li	0.0002	0.0017	158%
Magnesium T-Mg	1.9	1.9	0%	Magnesium D-Mg	2.05	2.08	1%
Manganese T-Mn	0.053	0.052	2%	Manganese D-Mn	0.056	0.056	0%
Mercury T-Hg	<0.0002	<0.0002	0%	Mercury D-Hg	<0.0001	<0.0001	0%
Molybdenum T-Mo	<0.0001	<0.0001	0%	Molybdenum D-Mo	<0.0001	<0.0001	0%
Nickel T-Ni	0.0029	0.0031	7%	Nickel D-Ni	0.0029	0.0031	7%
Potassium T-K	0.7	0.8	13%	Potassium D-K	0.8	0.8	0%
Selenium T-Si	0.0007	0.0009	25%	Selenium D-Si	<0.0004	<0.0004	0%
Silver T-Ag	<0.0004	<0.0004	0%	Silver D-Ag	<0.0002	<0.0002	0%
Sodium T-Na	<1	<1	0%	Sodium D-Na	0.7	0.7	0%
Strontium T-Sr	0.0406	0.0401	1%	Strontium D-Sr	0.0387	0.0392	1%
Thallium T-Tl	<0.0001	<0.0001	0%	Thallium D-Tl	<0.00005	<0.00005	0%
Tin T-Sn	<0.0004	<0.0004	0%	Tin D-Sn	<0.0002	<0.0002	0%
Titanium T-Ti	<0.005	<0.005	0%	Titanium D-Ti	<0.0003	<0.0003	0%
Uranium T-U	<0.0001	<0.0001	0%	Uranium D-U	<0.0001	<0.0001	0%
Vanadium T-V	0.0007	0.0007	0%	Vanadium D-V	0.0003	0.0003	0%
Zinc T-Zn	0.259	0.257	1%	Zinc D-Zn	0.276	0.279	1%



Table 7. QA/QC: Field and Trip Blanks
Surface Water Analysis Results (mg/L)

Station	Field Blank (H19)	Trip Blank	Station	Field Blank (H19)	Trip Blank
Date	05-Jul-06		Date	05-Jul-06	
Physical Tests			Dissolved Anions		
Conductivity (uS/cm)	1.4	0.9	Alkalinity-Total CaCO ₃	<5	<5
Total Dissolved Solids	<5	<5	Sulphate SO ₄	<0.5	<0.5
Hardness (as CaCO ₃)	<1	<1			
pH	5.8	5.6			
Total Suspended Solids	<3	<3			
Turbidity (NTU)	<0.1	<0.1			
Nutrients			Organic Parameters		
Ammonia Nitrogen N	<0.05	<0.05	Dissolved Organic Carbon C	<1	<1
Total Kjeldahl Nitrogen N	<0.2	<0.2	Total Organic Carbon C	<1	<1
Ortho-Phosphate P	<0.01	<0.01			
Total Phosphate P	<0.02	<0.02			
Total Metals			Dissolved Metals		
Aluminum T-Al	<0.02	<0.02	Aluminum D-Al	<0.01	<0.01
Antimony T-Sb	0.0006	0.0007	Antimony D-Sb	0.0006	0.0007
Arsenic T-As	<0.0004	<0.0004	Arsenic D-As	<0.0004	<0.0004
Barium T-Ba	<0.0002	<0.0002	Barium D-Ba	<0.0001	<0.0001
Beryllium T-Be	<0.001	<0.001	Beryllium D-Be	<0.0005	<0.0005
Bismuth T-Bi	<0.0001	<0.0001	Bismuth D-Bi	<0.00005	<0.00005
Boron T-B	<0.02	<0.02	Boron D-B	<0.002	<0.002
Cadmium T-Cd	<0.0002	<0.0002	Cadmium D-Cd	<0.0001	<0.0001
Calcium T-Ca	<0.5	<0.5	Calcium D-Ca	<0.5	<0.5
Chromium T-Cr	<0.0008	<0.0008	Chromium D-Cr	<0.0004	0.0005
Cobalt T-Co	<0.0002	<0.0002	Cobalt D-Co	<0.0001	<0.0001
Copper T-Cu	<0.001	<0.001	Copper D-Cu	<0.0006	<0.0006
Iron T-Fe	<0.005	<0.005	Iron D-Fe	<0.005	<0.005
Lead T-Pb	<0.0001	<0.0001	Lead D-Pb	<0.0001	<0.0001
Lithium T-Li	<0.006	<0.006	Lithium D-Li	<0.0001	<0.0001
Magnesium T-Mg	<0.1	<0.1	Magnesium D-Mg	<0.01	<0.01
Manganese T-Mn	<0.001	<0.001	Manganese D-Mn	<0.001	<0.001
Mercury T-Hg	<0.0002	<0.0002	Mercury D-Hg	<0.0001	<0.0001
Molybdenum T-Mo	<0.0001	<0.0001	Molybdenum D-Mo	<0.0001	<0.0001
Nickel T-Ni	<0.0002	<0.0002	Nickel D-Ni	<0.0001	<0.0001
Potassium T-K	<0.1	<0.1	Potassium D-K	<0.1	<0.1
Selenium T-Si	<0.0004	<0.0004	Selenium D-Si	<0.0004	<0.0004
Silver T-Ag	<0.0004	<0.0004	Silver D-Ag	<0.0002	<0.0002
Sodium T-Na	<1	<1	Sodium D-Na	<0.5	<0.5
Strontium T-Sr	0.0004	0.0002	Strontium D-Sr	<0.0001	0.0001
Thallium T-Tl	<0.0001	<0.0001	Thallium D-Tl	<0.00005	<0.00005
Tin T-Sn	<0.0004	<0.0004	Tin D-Sn	<0.0002	<0.0002
Titanium T-Ti	<0.005	<0.005	Titanium D-Ti	<0.0003	<0.0003
Uranium T-U	<0.0001	<0.0001	Uranium D-U	<0.0001	<0.0001
Vanadium T-V	0.0003	<0.0002	Vanadium D-V	0.0002	0.0002
Zinc T-Zn	<0.004	<0.004	Zinc D-Zn	<0.002	<0.002

Attachments

Attachment A

ALS Environmental Laboratory Results





Environmental Division

ANALYTICAL REPORT

GARTNER LEE LIMITED

ATTN: CHAD DAVEY

2251 2 AVENUE

WHITEHORSE YT Y1A 5W1

Reported On: 17-OCT-06 04:20 PM

Revision: 1

Lab Work Order #: L408785

Date Received: 09-JUL-06

Project P.O. #:

Job Reference: 60606-HACKETT RIVER

Legal Site Desc:

CofC Numbers: 262810

Other Information:

Comments: ADDITIONAL 02-AUG-06 15:15

ROY JONES
General Manager, Edmonton

For any questions about this report please contact your Account Manager:

ERIN ANDERSON

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

ETL Chemspec Analytical Ltd.

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408785-1	H12 HACKETT RIVER,NU								
Sampled By:	CHAD on 05-JUL-06 @ 18:50								
Matrix:	SURFACE WATER								
Hardness									
	Calcium (Ca)	9.6		0.5	mg/L		17-JUL-06	EOC	R420501
	Hardness (as CaCO3)	33			mg/L		17-JUL-06		
	Magnesium (Mg)	2.2		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
	Calcium (Ca)	9.3		0.5	mg/L		18-JUL-06	HAS	R421183
	Potassium (K)	0.8		0.1	mg/L		18-JUL-06	HAS	R421183
	Magnesium (Mg)	2.05		0.01	mg/L		18-JUL-06	HAS	R421183
	Sodium (Na)	0.7		0.5	mg/L		18-JUL-06	HAS	R421183
	Iron (Fe)	0.032		0.005	mg/L		18-JUL-06	HAS	R421183
	Manganese (Mn)	0.056		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
	Silver (Ag)	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
	Aluminum (Al)	0.06		0.01	mg/L		19-JUL-06	QLI	R421834
	Arsenic (As)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
	Boron (B)	<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
	Barium (Ba)	0.0082		0.0001	mg/L		19-JUL-06	QLI	R421834
	Beryllium (Be)	<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
	Bismuth (Bi)	<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
	Cadmium (Cd)	0.0014		0.0001	mg/L		19-JUL-06	QLI	R421834
	Cobalt (Co)	0.0008		0.0001	mg/L		19-JUL-06	QLI	R421834
	Chromium (Cr)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
	Copper (Cu)	0.0277		0.0006	mg/L		19-JUL-06	QLI	R421834
	Molybdenum (Mo)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Nickel (Ni)	0.0029		0.0001	mg/L		19-JUL-06	QLI	R421834
	Lead (Pb)	0.0003		0.0001	mg/L		19-JUL-06	QLI	R421834
	Antimony (Sb)	0.0007		0.0004	mg/L		19-JUL-06	QLI	R421834
	Selenium (Se)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
	Tin (Sn)	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
	Strontium (Sr)	0.0387		0.0001	mg/L		19-JUL-06	QLI	R421834
	Titanium (Ti)	<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
	Thallium (Tl)	<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
	Uranium (U)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Vanadium (V)	0.0003		0.0001	mg/L		19-JUL-06	QLI	R421834
	Zinc (Zn)	0.276		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
	Calcium (Ca)	8.7		0.5	mg/L		17-JUL-06	HAS	R420542
	Potassium (K)	0.7		0.1	mg/L		17-JUL-06	HAS	R420542
	Magnesium (Mg)	1.9		0.1	mg/L		17-JUL-06	HAS	R420542
	Sodium (Na)	<1		1	mg/L		17-JUL-06	HAS	R420542
	Iron (Fe)	0.053		0.005	mg/L		17-JUL-06	HAS	R420542
	Manganese (Mn)	0.053		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
	Silver (Ag)	<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
	Aluminum (Al)	0.09		0.02	mg/L		17-JUL-06	QLI	R420556
	Arsenic (As)	<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
	Boron (B)	<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
	Barium (Ba)	0.0087		0.0002	mg/L		17-JUL-06	QLI	R420556
	Beryllium (Be)	<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
	Bismuth (Bi)	<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
	Cadmium (Cd)	0.0014		0.0002	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408785-1 H12 HACKETT RIVER,NU									
Sampled By: CHAD on 05-JUL-06 @ 18:50									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Cobalt (Co)		0.0008		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.032		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		0.0029		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		0.0005		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		0.0007		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0406		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0007		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		0.259		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		<5		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		81.4		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		<0.1		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		1.3		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		17.6		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		59		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.55		0.1	NTU		17-JUL-06	BOC	R420506
pH		6.7		0.1	pH		14-JUL-06	PTT	R420571
L408785-2 H12-R HACKETT RIVER,NU									
Sampled By: CHAD on 05-JUL-06 @ 18:55									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		9.4		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		33			mg/L		17-JUL-06		
Magnesium (Mg)		2.2		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408785-2	H12-R HACKETT RIVER,NU								
Sampled By:	CHAD on 05-JUL-06 @ 18:55								
Matrix:	SURFACE WATER								
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		9.3		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.8		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		2.08		0.01	mg/L		18-JUL-06	HAS	R421183
Sodium (Na)		0.7		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.031		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.056		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.06		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0084		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		0.0015		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		0.0008		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0283		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0031		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		0.0004		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0007		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0392		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0003		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.279		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		8.6		0.5	mg/L		17-JUL-06	HAS	R420542
Potassium (K)		0.8		0.1	mg/L		17-JUL-06	HAS	R420542
Magnesium (Mg)		1.9		0.1	mg/L		17-JUL-06	HAS	R420542
Sodium (Na)		<1		1	mg/L		17-JUL-06	HAS	R420542
Iron (Fe)		0.051		0.005	mg/L		17-JUL-06	HAS	R420542
Manganese (Mn)		0.052		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		0.09		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0086		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		0.0013		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		0.0009		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.032		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408785-2	H12-R HACKETT RIVER,NU								
Sampled By:	CHAD on 05-JUL-06 @ 18:55								
Matrix:	SURFACE WATER								
Total Metals									
Total Trace Metals (Low Level)									
Nickel (Ni)		0.0031		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		0.0005		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0009		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		0.0009		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0401		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0007		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		0.257		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		<5		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		80.2		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		<0.1		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		0.0017		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Nitrate+Nitrite-N		0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		1.2		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		17.4		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		62		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.55		0.1	NTU		17-JUL-06	BOC	R420506
pH		6.7		0.1	pH		14-JUL-06	PTT	R420571
L408785-3	H11 HACKETT RIVER,NU								
Sampled By:	CHAD on 06-JUL-06 @ 11:00								
Matrix:	SURFACE WATER								
Hardness									
Calcium (Ca)		5.5		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		21			mg/L		17-JUL-06		
Magnesium (Mg)		1.8		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		7.0		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.3		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		1.95		0.01	mg/L		18-JUL-06	HAS	R421183

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408785-3	H11 HACKETT RIVER,NU								
Sampled By:	CHAD on 06-JUL-06 @ 11:00								
Matrix:	SURFACE WATER								
Dissolved Metals									
Dissolved Major Metals									
Sodium (Na)		<0.5		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.056		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.026		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.01		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0039		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		0.0005		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0048		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0005		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0007		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0080		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.013		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		5.1		0.5	mg/L		17-JUL-06	HAS	R420542
Potassium (K)		0.7		0.1	mg/L		17-JUL-06	HAS	R420542
Magnesium (Mg)		1.7		0.1	mg/L		17-JUL-06	HAS	R420542
Sodium (Na)		<1		1	mg/L		17-JUL-06	HAS	R420542
Iron (Fe)		0.200		0.005	mg/L		17-JUL-06	HAS	R420542
Manganese (Mn)		0.012		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		0.04		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0046		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.007		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		0.0006		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408785-3 H11 HACKETT RIVER,NU									
Sampled By: CHAD on 06-JUL-06 @ 11:00									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Selenium (Se)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0085		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0007		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		0.018		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		9		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		50.1		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		0.2		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		1.2		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		12.4		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		33		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		4		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.80		0.1	NTU		17-JUL-06	BOC	R420506
pH		7.2		0.1	pH		14-JUL-06	PTT	R420571
L408785-4 H11-R HACKETT RIVER,NU									
Sampled By: CHAD on 06-JUL-06 @ 11:10									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		5.9		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		23			mg/L		17-JUL-06		
Magnesium (Mg)		1.9		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		5.4		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.7		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		1.72		0.01	mg/L		18-JUL-06	HAS	R421183
Sodium (Na)		0.6		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.079		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.004		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408785-4	H11-R HACKETT RIVER,NU								
Sampled By:	CHAD on 06-JUL-06 @ 11:10								
Matrix:	SURFACE WATER								
Dissolved Metals									
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.01		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0039		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		0.0007		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0048		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0005		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0080		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.013		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		5.3		0.5	mg/L		17-JUL-06	HAS	R420542
Potassium (K)		0.7		0.1	mg/L		17-JUL-06	HAS	R420542
Magnesium (Mg)		1.7		0.1	mg/L		17-JUL-06	HAS	R420542
Sodium (Na)		<1		1	mg/L		17-JUL-06	HAS	R420542
Iron (Fe)		0.859		0.005	mg/L		17-JUL-06	HAS	R420542
Manganese (Mn)		0.033		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		0.11		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0063		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		0.0004		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.013		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		0.0009		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0087		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408785-4	H11-R HACKETT RIVER,NU								
Sampled By: CHAD on 06-JUL-06 @ 11:10									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0007		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		0.023		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		10		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		50.5		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		0.2		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		1.3		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		12.3		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		31		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		4		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		5		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.80		0.1	NTU		17-JUL-06	BOC	R420506
pH		7.2		0.1	pH		14-JUL-06	PTT	R420571
* Refer to Referenced Information for Qualifiers (if any) and Methodology.									

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
EHT	SOME ROUTINE PARAMETERS PAST HOLD TIME - Exceeds Recommended Holding Time Prior To Analysis
SRU	DOC & DISSOLVED METALS - Sample Received Unpreserved
SFU	DOC & DISSOLVED METALS - Sample filtered to remove particulate
EHR	no3,no2,n2n3 are past hold time - Exceeds Recommended Holding Time On Receipt: Proceed With Analysis As Requested

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
ALK-GRAN-ED	Water	Gran Alkalinity		AB Env. Method 51515
ALK-TOT-ED	Water	Alkalinity, Total		APHA 2320 B-Auto-Pot. Titration
C-DIS-ORG-ED	Water	Dissolved Organic Carbon		APHA 5310 B-Instrumental
C-TOT-ORG-ED	Water	Total Organic Carbon		APHA 5310 B-Instrumental
CA-ED	Water	Calcium (Ca)		APHA 3120 B-ICP-OES
EC-ED	Water	Conductivity (EC)		APHA 2510 B-electrode
ETL-HARDNESS-ROU-ED	Water	Hardness (from Routine Ca and Mg)		APHA 2340 B-Calculation
HG-DIS-LOW-ED	Water	Mercury (Hg)-Dissolved		EPA 6020
HG-TOT-LOW-ED	Water	Mercury, (Hg)-Total	EPA3015	EPA 6020
K-ED	Water	Potassium (K)		APHA 3120 B-ICP-OES
LI-DIS-LOW-ED	Water	Lithium (Li)-Dissolved		EPA 6020
LI-TOT-LOW-ED	Water	Lithium (Li)-Total	EPA3015	EPA 6020
MET1-DIS-LOW-ED	Water	Dissolved Trace Metals (Low Level)		EPA 6020
MET1-TOT-LOW-ED	Water	Total Trace Metals (Low Level)	EPA3015	EPA 6020
MET2-DIS-ED	Water	Dissolved Major Metals		EPA 200.7
MET2-TOT-LOW-ED	Water	Total Major Metals	EPA3015	EPA 200.7
MG-ED	Water	Magnesium (Mg)		APHA 3120 B-ICP-OES
N-TOTKJ-ED	Water	Total Kjeldahl Nitrogen		APHA 4500N-C -Dig.-Auto-Colorimetry
N2N3-ED	Water	Nitrate+Nitrite-N		APHA 4500 NO3H-Colorimetry
NA-ED	Water	Sodium (Na)		APHA 3120 B-ICP-OES
NH4-ED	Water	Ammonia-N		APHA4500NH3F Colorimetry
NO2-ED	Water	Nitrite-N		APHA 4500 NO2B-Colorimetry
NO3-ED	Water	Nitrate-N		APHA 4500 NO3H-Colorimetry
P-TOTAL-ED	Water	Phosphorus, Total		APHA 4500 P B,E-Auto-Colorimetry
PH-ED	Water	pH		APHA 4500 H-Electrode
PO4-ED	Water	Orthophosphate (PO4-P)		APHA 4500 P B,E-Auto-Colorimetry
SO4-ED	Water	Sulfate (SO4)		APHA 4110 B-Ion Chromatography
SOLIDS-TDS-ED	Water	Total Dissolved Solids		APHA 2540 C
SOLIDS-TOTSUS-ED	Water	Total Suspended Solids		APHA 2540 D-Gravimetric
TEMP-ED	Water	Temperature		APHA 2550-Thermometer
TURBIDITY-ED	Water	Turbidity		APHA 2130 B-Nephelometer

Reference Information

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

262810

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
ED	ALS LABORATORY GROUP - EDMONTON, ALBERTA, CANADA		

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million.

mg/L (units) - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.



Environmental Division

ANALYTICAL REPORT

GARTNER LEE LIMITED

ATTN: CHAD DAVEY

2251 2 AVENUE

WHITEHORSE YK Y1A 5W1

Reported On: 17-OCT-06 04:33 PM

Revision: 2

Lab Work Order #: L408775

Date Received: 09-JUL-06

Project P.O. #:

Job Reference: 60606-HACKETT RIVER

Legal Site Desc:

CofC Numbers: 262801

Other Information:

Comments: ADDITIONAL 02-AUG-06 15:22

ROY JONES
General Manager, Edmonton

For any questions about this report please contact your Account Manager:

ERIN ANDERSON

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

ETL Chemspec Analytical Ltd.

Part of the **ALS Laboratory Group**
9936-67 Avenue, Edmonton, AB T6E 0P5

Phone: +1 780 413 5227 Fax: +1 780 437 2311 www.alsglobal.com

A Campbell Brothers Limited Company

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-1	H04 HACKETT RIVER, NV								
Sampled By:	CHAD on 05-JUL-06 @ 08:50								
Matrix:	SURFACE WATER								
Hardness									
	Calcium (Ca)	6.6		0.5	mg/L		17-JUL-06	EOC	R420501
	Hardness (as CaCO3)	23			mg/L		17-JUL-06		
	Magnesium (Mg)	1.6		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
	Calcium (Ca)	6.2		0.5	mg/L		18-JUL-06	HAS	R421183
	Potassium (K)	0.6		0.1	mg/L		18-JUL-06	HAS	R421183
	Magnesium (Mg)	1.46		0.01	mg/L		18-JUL-06	HAS	R421183
	Sodium (Na)	0.5		0.5	mg/L		18-JUL-06	HAS	R421183
	Iron (Fe)	0.011		0.005	mg/L		18-JUL-06	HAS	R421183
	Manganese (Mn)	<0.001		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
	Silver (Ag)	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
	Aluminum (Al)	0.01		0.01	mg/L		19-JUL-06	QLI	R421834
	Arsenic (As)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
	Boron (B)	<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
	Barium (Ba)	0.0032		0.0001	mg/L		19-JUL-06	QLI	R421834
	Beryllium (Be)	<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
	Bismuth (Bi)	<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
	Cadmium (Cd)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Chromium (Cr)	0.0008		0.0004	mg/L		19-JUL-06	QLI	R421834
	Copper (Cu)	0.0010		0.0006	mg/L		19-JUL-06	QLI	R421834
	Molybdenum (Mo)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Nickel (Ni)	0.0004		0.0001	mg/L		19-JUL-06	QLI	R421834
	Lead (Pb)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Antimony (Sb)	0.0007		0.0004	mg/L		19-JUL-06	QLI	R421834
	Selenium (Se)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
	Tin (Sn)	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
	Strontium (Sr)	0.0099		0.0001	mg/L		19-JUL-06	QLI	R421834
	Titanium (Ti)	<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
	Thallium (Tl)	<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
	Uranium (U)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Vanadium (V)	0.0003		0.0001	mg/L		19-JUL-06	QLI	R421834
	Zinc (Zn)	0.008		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
	Calcium (Ca)	5.9		0.5	mg/L		18-JUL-06	HAS	R421182
	Potassium (K)	0.6		0.1	mg/L		18-JUL-06	HAS	R421182
	Magnesium (Mg)	1.4		0.1	mg/L		18-JUL-06	HAS	R421182
	Sodium (Na)	<1		1	mg/L		18-JUL-06	HAS	R421182
	Iron (Fe)	0.017		0.005	mg/L		18-JUL-06	HAS	R421182
	Manganese (Mn)	0.001		0.001	mg/L		18-JUL-06	HAS	R421182
Total Trace Metals (Low Level)									
	Silver (Ag)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
	Aluminum (Al)	0.03		0.02	mg/L		19-JUL-06	QLI	R421833
	Arsenic (As)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
	Boron (B)	<0.02		0.02	mg/L		19-JUL-06	QLI	R421833
	Barium (Ba)	0.0039		0.0002	mg/L		19-JUL-06	QLI	R421833
	Beryllium (Be)	<0.001		0.001	mg/L		19-JUL-06	QLI	R421833
	Bismuth (Bi)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
	Cadmium (Cd)	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-1H04 HACKETT RIVER, NV									
Sampled By: CHAD on 05-JUL-06 @ 08:50									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Cobalt (Co)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Chromium (Cr)		<0.0008		0.0008	mg/L		19-JUL-06	QLI	R421833
Copper (Cu)		0.002		0.001	mg/L		19-JUL-06	QLI	R421833
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Nickel (Ni)		0.0004		0.0002	mg/L		19-JUL-06	QLI	R421833
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Antimony (Sb)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421833
Selenium (Se)		0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Tin (Sn)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Strontium (Sr)		0.0085		0.0002	mg/L		19-JUL-06	QLI	R421833
Titanium (Ti)		<0.005		0.005	mg/L		19-JUL-06	QLI	R421833
Thallium (Tl)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Vanadium (V)		0.0004		0.0002	mg/L		19-JUL-06	QLI	R421833
Zinc (Zn)		0.007		0.004	mg/L		19-JUL-06	QLI	R421833
Alkalinity, Total (as CaCO3)		12		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		50.8		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		0.2		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		19-JUL-06	QLI	R421833
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		0.8		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		<1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		7.9		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		29		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.20		0.1	NTU		17-JUL-06	BOC	R420506
pH		7.4		0.1	pH		14-JUL-06	PTT	R420571
L408775-2H05 HACKETT RIVER, NV									
Sampled By: CHAD on 05-JUL-06 @ 11:45									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		16.2		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		55			mg/L		17-JUL-06		
Magnesium (Mg)		3.5		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-2	H05 HACKETT RIVER, NV								
Sampled By: CHAD on 05-JUL-06 @ 11:45									
Matrix: SURFACE WATER									
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		15.6		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.9		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		3.30		0.01	mg/L		18-JUL-06	HAS	R421183
Sodium (Na)		0.6		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.008		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.005		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.01		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0064		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		0.00009		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		0.0008		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		0.0005		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0145		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0018		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0011		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0141		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.130		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		15.0		0.5	mg/L		17-JUL-06	HAS	R420542
Potassium (K)		0.9		0.1	mg/L		17-JUL-06	HAS	R420542
Magnesium (Mg)		3.2		0.1	mg/L		17-JUL-06	HAS	R420542
Sodium (Na)		<1		1	mg/L		17-JUL-06	HAS	R420542
Iron (Fe)		0.021		0.005	mg/L		17-JUL-06	HAS	R420542
Manganese (Mn)		0.006		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		0.03		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0065		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		0.0008		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.018		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-2 H05 HACKETT RIVER, NV									
Sampled By: CHAD on 05-JUL-06 @ 11:45									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Nickel (Ni)		0.0017		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		0.0002		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0142		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0005		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		0.121		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		16		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		122		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		0.3		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		0.0014		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		1.5		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		<1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		40.5		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		79		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.25		0.1	NTU		17-JUL-06	BOC	R420506
pH		7.4		0.1	pH		14-JUL-06	PTT	R420571
L408775-3 H06 HACKETT RIVER, NV									
Sampled By: CHAD on 05-JUL-06 @ 13:55									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		18.3		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		61			mg/L		17-JUL-06		
Magnesium (Mg)		3.8		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		17.7		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		1.0		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		3.41		0.01	mg/L		18-JUL-06	HAS	R421183

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-3	H06 HACKETT RIVER, NV								
Sampled By: CHAD on 05-JUL-06 @ 13:55									
Matrix: SURFACE WATER									
Dissolved Metals									
Dissolved Major Metals									
Sodium (Na)		0.9		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.016		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.015		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.05		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0112		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		0.0059		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		0.0005		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0198		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0036		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		0.0014		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0008		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0752		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		0.00007		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0003		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.889		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		16.8		0.5	mg/L		17-JUL-06	HAS	R420542
Potassium (K)		1.0		0.1	mg/L		17-JUL-06	HAS	R420542
Magnesium (Mg)		3.3		0.1	mg/L		17-JUL-06	HAS	R420542
Sodium (Na)		<1		1	mg/L		17-JUL-06	HAS	R420542
Iron (Fe)		0.030		0.005	mg/L		17-JUL-06	HAS	R420542
Manganese (Mn)		0.015		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		0.07		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0116		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		0.0057		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		0.0006		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.024		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		0.0035		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		0.0022		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-3 H06 HACKETT RIVER, NV									
Sampled By: CHAD on 05-JUL-06 @ 13:55									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Selenium (Se)		0.0007		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0773		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0007		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		0.814		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		8		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		141		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		2		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		0.2		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		0.0031		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		1.7		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		38.3		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		98		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.50		0.1	NTU		17-JUL-06	BOC	R420506
pH		7.1		0.1	pH		14-JUL-06	PTT	R420571
L408775-4 H07 HACKETT RIVER, NV									
Sampled By: CHAD on 05-JUL-06 @ 14:15									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		17.4		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		53			mg/L		17-JUL-06		
Magnesium (Mg)		2.3		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		17.5		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.9		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		2.12		0.01	mg/L		18-JUL-06	HAS	R421183
Sodium (Na)		0.9		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.094		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.021		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-4	H07 HACKETT RIVER, NV								
Sampled By:	CHAD on 05-JUL-06 @ 14:15								
Matrix:	SURFACE WATER								
Dissolved Metals									
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.01		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0189		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		0.0005		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0009		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0050		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0007		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		0.0008		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0877		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		0.00006		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0003		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.025		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		16.5		0.5	mg/L		17-JUL-06	HAS	R420542
Potassium (K)		0.9		0.1	mg/L		17-JUL-06	HAS	R420542
Magnesium (Mg)		2.1		0.1	mg/L		17-JUL-06	HAS	R420542
Sodium (Na)		<1		1	mg/L		17-JUL-06	HAS	R420542
Iron (Fe)		0.207		0.005	mg/L		17-JUL-06	HAS	R420542
Manganese (Mn)		0.023		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		0.05		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0197		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		0.0007		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.002		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		0.0002		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		0.0052		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		0.0004		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		0.0009		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0897		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-4 H07 HACKETT RIVER, NV									
Sampled By: CHAD on 05-JUL-06 @ 14:15									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Thallium (Tl)		0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0007		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		0.026		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		<5		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		134		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		<0.1		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		0.0024		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		1.2		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		10.3		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		123		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		0.4		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		5		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.65		0.1	NTU		17-JUL-06	BOC	R420506
pH		6.6		0.1	pH		14-JUL-06	PTT	R420571
L408775-5 H15 HACKETT RIVER, NV									
Sampled By: CHAD on 05-JUL-06 @ 10:00									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		14.6		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		49			mg/L		17-JUL-06		
Magnesium (Mg)		3.1		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		13.8		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.8		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		2.83		0.01	mg/L		18-JUL-06	HAS	R421183
Sodium (Na)		0.7		0.5	mg/L		19-JUL-06	SYF	R421419
Iron (Fe)		0.012		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		<0.001		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		<0.01		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-5	H15 HACKETT RIVER, NV								
Sampled By: CHAD on 05-JUL-06 @ 10:00									
Matrix: SURFACE WATER									
Dissolved Metals									
Dissolved Trace Metals (Low Level)									
Barium (Ba)		0.0047		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		0.0007		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0021		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0004		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0122		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.007		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		13.5		0.5	mg/L		17-JUL-06	HAS	R420542
Potassium (K)		0.7		0.1	mg/L		17-JUL-06	HAS	R420542
Magnesium (Mg)		2.8		0.1	mg/L		17-JUL-06	HAS	R420542
Sodium (Na)		<1		1	mg/L		17-JUL-06	HAS	R420542
Iron (Fe)		0.083		0.005	mg/L		17-JUL-06	HAS	R420542
Manganese (Mn)		0.005		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		0.04		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0050		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.002		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		0.0005		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0119		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0007		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		0.009		0.004	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-5 H15 HACKETT RIVER, NV									
Sampled By: CHAD on 05-JUL-06 @ 10:00									
Matrix: SURFACE WATER									
Total Metals									
Alkalinity, Total (as CaCO3)		17		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		103		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		0.4		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		0.0008		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		1.6		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		6		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		29.1		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		65		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.20		0.1	NTU		17-JUL-06	BOC	R420506
pH		7.6		0.1	pH		14-JUL-06	PTT	R420571
L408775-6 H20 HACKETT RIVER, NV									
Sampled By: CHAD on 05-JUL-06 @ 13:00									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		10.1		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		33			mg/L		17-JUL-06		
Magnesium (Mg)		1.8		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		9.8		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.8		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		1.69		0.01	mg/L		18-JUL-06	HAS	R421183
Sodium (Na)		0.7		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.008		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.001		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.01		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0086		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-6	H2O HACKETT RIVER, NV								
Sampled By:	CHAD on 05-JUL-06 @ 13:00								
Matrix:	SURFACE WATER								
Dissolved Metals									
Dissolved Trace Metals (Low Level)									
Chromium (Cr)		0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0025		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0012		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0007		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0480		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0003		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.017		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		9.4		0.5	mg/L		17-JUL-06	HAS	R420542
Potassium (K)		0.7		0.1	mg/L		17-JUL-06	HAS	R420542
Magnesium (Mg)		1.6		0.1	mg/L		17-JUL-06	HAS	R420542
Sodium (Na)		<1		1	mg/L		17-JUL-06	HAS	R420542
Iron (Fe)		0.026		0.005	mg/L		17-JUL-06	HAS	R420542
Manganese (Mn)		0.002		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		0.03		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0099		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.003		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		0.0014		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		0.0002		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		0.0009		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0485		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0007		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		0.018		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		<5		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		79.5		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-6	H2O HACKETT RIVER, NV								
Sampled By:	CHAD on 05-JUL-06 @ 13:00								
Matrix:	SURFACE WATER								
	Gran Alkalinity (as -H+)	0.1		0.1	meq/L		18-JUL-06	BOC	R421627
	Lithium (Li)-Dissolved	0.0011		0.0001	mg/L		19-JUL-06	QLI	R421834
	Lithium (Li)-Total	<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
	Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Mercury (Hg)-Total	<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
	Nitrate+Nitrite-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrate-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrite-N	<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
	Orthophosphate (PO4-P)	<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
	Phosphorus, Total	0.03		0.02	mg/L		17-JUL-06	WYA	R420563
	Potassium (K)	1.0		0.5	mg/L		17-JUL-06	EOC	R420501
	Sodium (Na)	<1		1	mg/L		17-JUL-06	EOC	R420501
	Sulphate (SO4)	10.1		0.5	mg/L		17-JUL-06	JWU	R418352
	Temperature	25		1	Degree C		14-JUL-06	PTT	R420571
	Total Dissolved Solids	64		5	mg/L		18-JUL-06	SVG	R420746
	Total Kjeldahl Nitrogen	<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
	Total Organic Carbon	3		1	mg/L		19-JUL-06	ZOW	R421239
	Total Suspended Solids	<3		3	mg/L		18-JUL-06	SVG	R420875
	Turbidity	0.25		0.1	NTU		17-JUL-06	BOC	R420506
	pH	6.9		0.1	pH		14-JUL-06	PTT	R420571
L408775-7	TRIP BLANKS HACKETT RIVER, NV								
Sampled By:	CHAD on 14-JUN-06								
Matrix:	SURFACE WATER								
	Hardness								
	Calcium (Ca)	<0.5		0.5	mg/L		17-JUL-06	EOC	R420501
	Hardness (as CaCO3)	<1			mg/L		17-JUL-06		
	Magnesium (Mg)	<0.1		0.1	mg/L		17-JUL-06	EOC	R420501
	Dissolved Metals								
	Dissolved Major Metals								
	Calcium (Ca)	<0.5		0.5	mg/L		18-JUL-06	HAS	R421183
	Potassium (K)	<0.1		0.1	mg/L		18-JUL-06	HAS	R421183
	Magnesium (Mg)	<0.01		0.01	mg/L		18-JUL-06	HAS	R421183
	Sodium (Na)	<0.5		0.5	mg/L		18-JUL-06	HAS	R421183
	Iron (Fe)	<0.005		0.005	mg/L		18-JUL-06	HAS	R421183
	Manganese (Mn)	<0.001		0.001	mg/L		18-JUL-06	HAS	R421183
	Dissolved Trace Metals (Low Level)								
	Silver (Ag)	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
	Aluminum (Al)	<0.01		0.01	mg/L		19-JUL-06	QLI	R421834
	Arsenic (As)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
	Boron (B)	<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
	Barium (Ba)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Beryllium (Be)	<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
	Bismuth (Bi)	<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
	Cadmium (Cd)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Chromium (Cr)	0.0005		0.0004	mg/L		19-JUL-06	QLI	R421834
	Copper (Cu)	<0.0006		0.0006	mg/L		19-JUL-06	QLI	R421834
	Molybdenum (Mo)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Nickel (Ni)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Lead (Pb)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-7	TRIP BLANKS HACKETT RIVER, NV								
Sampled By:	CHAD on 14-JUN-06								
Matrix:	SURFACE WATER								
Dissolved Metals									
Dissolved Trace Metals (Low Level)									
Antimony (Sb)		0.0007		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		<0.5		0.5	mg/L		18-JUL-06	HAS	R421182
Potassium (K)		<0.1		0.1	mg/L		18-JUL-06	HAS	R421182
Magnesium (Mg)		<0.1		0.1	mg/L		18-JUL-06	HAS	R421182
Sodium (Na)		<1		1	mg/L		18-JUL-06	HAS	R421182
Iron (Fe)		<0.005		0.005	mg/L		18-JUL-06	HAS	R421182
Manganese (Mn)		<0.001		0.001	mg/L		18-JUL-06	HAS	R421182
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0007		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		<0.004		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		<5		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		0.9		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		<1		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		<0.1		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408775-7	TRIP BLANKS HACKETT RIVER, NV								
Sampled By:	CHAD on 14-JUN-06								
Matrix:	SURFACE WATER								
	Mercury (Hg)-Total	<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
	Nitrate+Nitrite-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrate-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrite-N	<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
	Orthophosphate (PO4-P)	<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
	Phosphorus, Total	<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
	Potassium (K)	<0.5		0.5	mg/L		17-JUL-06	EOC	R420501
	Sodium (Na)	<1		1	mg/L		17-JUL-06	EOC	R420501
	Sulphate (SO4)	<0.5		0.5	mg/L		17-JUL-06	JWU	R418352
	Temperature	25		1	Degree C		14-JUL-06	PTT	R420571
	Total Dissolved Solids	<5		5	mg/L		18-JUL-06	SVG	R420746
	Total Kjeldahl Nitrogen	<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
	Total Organic Carbon	<1		1	mg/L		19-JUL-06	ZOW	R421239
	Total Suspended Solids	<3		3	mg/L		18-JUL-06	SVG	R420875
	Turbidity	<0.1		0.1	NTU		17-JUL-06	BOC	R420506
	pH	5.6		0.1	pH		14-JUL-06	PTT	R420571
* Refer to Referenced Information for Qualifiers (if any) and Methodology.									

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
EHT	SOME ROUTINE PARAMETERS PAST HOLD TIME - Exceeds Recommended Holding Time Prior To Analysis
SRU	DOC & DISSOLVED METALS - Sample Received Unpreserved
SFU	DOC & DISSOLVED METALS - Sample filtered to remove particulate
EHR	no2,no3,n2n3 past hold time - Exceeds Recommended Holding Time On Receipt: Proceed With Analysis As Requested

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
ALK-GRAN-ED	Water	Gran Alkalinity		AB Env. Method 51515
ALK-TOT-ED	Water	Alkalinity, Total		APHA 2320 B-Auto-Pot. Titration
C-DIS-ORG-ED	Water	Dissolved Organic Carbon		APHA 5310 B-Instrumental
C-TOT-ORG-ED	Water	Total Organic Carbon		APHA 5310 B-Instrumental
CA-ED	Water	Calcium (Ca)		APHA 3120 B-ICP-OES
EC-ED	Water	Conductivity (EC)		APHA 2510 B-electrode
ETL-HARDNESS-ROU-ED	Water	Hardness (from Routine Ca and Mg)		APHA 2340 B-Calculation
HG-DIS-LOW-ED	Water	Mercury (Hg)-Dissolved		EPA 6020
HG-TOT-LOW-ED	Water	Mercury, (Hg)-Total	EPA3015	EPA 6020
K-ED	Water	Potassium (K)		APHA 3120 B-ICP-OES
LI-DIS-LOW-ED	Water	Lithium (Li)-Dissolved		EPA 6020
LI-TOT-LOW-ED	Water	Lithium (Li)-Total	EPA3015	EPA 6020
MET1-DIS-LOW-ED	Water	Dissolved Trace Metals (Low Level)		EPA 6020
MET1-TOT-LOW-ED	Water	Total Trace Metals (Low Level)	EPA3015	EPA 6020
MET2-DIS-ED	Water	Dissolved Major Metals		EPA 200.7
MET2-TOT-LOW-ED	Water	Total Major Metals	EPA3015	EPA 200.7
MG-ED	Water	Magnesium (Mg)		APHA 3120 B-ICP-OES
N-TOTKJ-ED	Water	Total Kjeldahl Nitrogen		APHA 4500N-C -Dig.-Auto-Colorimetry
N2N3-ED	Water	Nitrate+Nitrite-N		APHA 4500 NO3H-Colorimetry
NA-ED	Water	Sodium (Na)		APHA 3120 B-ICP-OES
NH4-ED	Water	Ammonia-N		APHA4500NH3F Colorimetry
NO2-ED	Water	Nitrite-N		APHA 4500 NO2B-Colorimetry
NO3-ED	Water	Nitrate-N		APHA 4500 NO3H-Colorimetry
P-TOTAL-ED	Water	Phosphorus, Total		APHA 4500 P B,E-Auto-Colorimetry
PH-ED	Water	pH		APHA 4500 H-Electrode
PO4-ED	Water	Orthophosphate (PO4-P)		APHA 4500 P B,E-Auto-Colorimetry
SO4-ED	Water	Sulfate (SO4)		APHA 4110 B-Ion Chromatography
SOLIDS-TDS-ED	Water	Total Dissolved Solids		APHA 2540 C
SOLIDS-TOTSUS-ED	Water	Total Suspended Solids		APHA 2540 D-Gravimetric
TEMP-ED	Water	Temperature		APHA 2550-Thermometer
TURBIDITY-ED	Water	Turbidity		APHA 2130 B-Nephelometer

Reference Information

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

262801

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
ED	ALS LABORATORY GROUP - EDMONTON, ALBERTA, CANADA		

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million.

mg/L (units) - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.

EnviroTest

LABORATORIES

CHAIN OF CUSTODY / ANALYTICAL REQUEST FORM
CANADA TOLL FREE 1-800-668-9878

COC #262801

WWW.ENVIROTEST.COM
Pg. 1 of 1

REPORT TO: <u>Chad Davey Enr. Anderson</u>		DATE: _____		LAB WORK ORDER # <u>408475</u>	
COMPANY: <u>Gartner Lee Ltd</u>		REPORT DISTRIBUTION ALL FINAL RESULTS WILL BE MAILED		SERVICE REQUESTED	
CONTACT: <u>Chad Davey</u>		EMAIL: ☒ FAX _____		☒ REGULAR SERVICE (DEFAULT)	
ADDRESS: <u>2251 2nd Ave</u>		EMAIL 1: <u>cdavey@gartnerlee.com</u>		☐ PRIORITY SERVICE (50% SURCHARGE)	
PHONE: <u>867-633-6474</u> FAX: <u>867-633-6321</u>		EMAIL 2: _____		☐ EMERGENCY SERVICE (100% SURCHARGE)	
CELLPHONE: _____		DIGITAL EMAIL: _____		ANALYSIS REQUEST	
INVOICE TO: <u>SAME @ I N</u>		SELECT: pdf ☒ digital _____ both _____			
COMPANY: _____		INDICATE BOTTLES: FILTERED/PRESERVED (F/P) ☒			
CONTACT: _____		JOB # <u>60606 - Hackett River</u>			
ADDRESS: _____		PO/AFE: _____			
PHONE: _____		LSD: _____			
FAX: _____		QUOTE # _____			
SAMPLE ID	SAMPLING LOCATION	SAMPLED BY / DATE / TIME	SAMPLING METHOD	SAMPLE TYPE	
H04	Hackett River, NW	Chad / 7/5/06/10:30	Grab	Surface water	☒ *General Chemistry*
H05		" / 11:45			☒ Metals - Total
H06		" / 17:35			☒ Metals - Dissolved
H07		" / 14:45			☒ TOC/COD
H15		" / 10:00			☒ DOC
H20		" / 13:00			☒ Nutrients
Trip Blanks		6/14/06			
HAZARDOUS ? ☐					
NUMBER OF CONTAINERS _____					
HIGHLY CONTAMINATED ? ☐					
LAB SAMPLE # _____					

GUIDELINES / REGULATIONS		SPECIAL INSTRUCTIONS / NATURE OF HAZARDOUS MATERIAL		SAMPLE CONDITION	
Failure to complete all portions of this form may delay analysis. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the reverse of the white report copy.		<u>* suite of parameters will be emailed</u> <u>Note: Metals - dissolved and DOC were preserved but not field filtered, please do so in lab.</u>		FROZEN ☒ MEAN TEMPERATURE <u>4°C</u> COLD ☐ AMBIENT ☐	

RELINQUISHED BY: <u>Chad Davey</u>	DATE & TIME: <u>7/7/06 15:30</u>	RECEIVED BY: <u>[Signature]</u>	DATE & TIME: <u>6/9/06</u>	SAMPLE CONDITION ACCEPTABLE UPON RECEIPT ? (Y/N) <u>Y</u>
------------------------------------	----------------------------------	---------------------------------	----------------------------	---



Environmental Division

ANALYTICAL REPORT

GARTNER LEE LIMITED

ATTN: CHAD DAVEY

2251 2 AVENUE

WHITEHORSE YK Y1A 5W1

Reported On: 17-OCT-06 04:26 PM

Revision: 2

Lab Work Order #: L408774

Date Received: 10-JUL-06

Project P.O. #:

Job Reference: 60606-HACKETT RIVER

Legal Site Desc:

CofC Numbers: 262812

Other Information:

Comments: ADDITIONAL 02-AUG-06 15:25

ROY JONES
General Manager, Edmonton

For any questions about this report please contact your Account Manager:

ERIN ANDERSON

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

ETL Chemspec Analytical Ltd.

Part of the **ALS Laboratory Group**
9936-67 Avenue, Edmonton, AB T6E 0P5

Phone: +1 780 413 5227 **Fax:** +1 780 437 2311 www.alsglobal.com

A Campbell Brothers Limited Company

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408774-1	H01 HACKETT RIVER,NU								
Sampled By:	CHAD on 04-JUL-06 @ 13:00								
Matrix:	SURFACE WATER								
Hardness									
	Calcium (Ca)	8.7		0.5	mg/L		17-JUL-06	EOC	R420501
	Hardness (as CaCO3)	30			mg/L		17-JUL-06		
	Magnesium (Mg)	2.1		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
	Calcium (Ca)	8.4		0.5	mg/L		18-JUL-06	HAS	R421183
	Potassium (K)	0.8		0.1	mg/L		18-JUL-06	HAS	R421183
	Magnesium (Mg)	1.89		0.01	mg/L		18-JUL-06	HAS	R421183
	Sodium (Na)	0.7		0.5	mg/L		18-JUL-06	HAS	R421183
	Iron (Fe)	0.030		0.005	mg/L		18-JUL-06	HAS	R421183
	Manganese (Mn)	0.048		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
	Silver (Ag)	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
	Aluminum (Al)	0.07		0.01	mg/L		19-JUL-06	QLI	R421834
	Arsenic (As)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
	Boron (B)	<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
	Barium (Ba)	0.0080		0.0001	mg/L		19-JUL-06	QLI	R421834
	Beryllium (Be)	<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
	Bismuth (Bi)	<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
	Cadmium (Cd)	0.0015		0.0001	mg/L		19-JUL-06	QLI	R421834
	Cobalt (Co)	0.0006		0.0001	mg/L		19-JUL-06	QLI	R421834
	Chromium (Cr)	0.0008		0.0004	mg/L		19-JUL-06	QLI	R421834
	Copper (Cu)	0.0279		0.0006	mg/L		19-JUL-06	QLI	R421834
	Molybdenum (Mo)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Nickel (Ni)	0.0023		0.0001	mg/L		19-JUL-06	QLI	R421834
	Lead (Pb)	0.0003		0.0001	mg/L		19-JUL-06	QLI	R421834
	Antimony (Sb)	0.0006		0.0004	mg/L		19-JUL-06	QLI	R421834
	Selenium (Se)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
	Tin (Sn)	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
	Strontium (Sr)	0.0365		0.0001	mg/L		19-JUL-06	QLI	R421834
	Titanium (Ti)	<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
	Thallium (Tl)	<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
	Uranium (U)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Vanadium (V)	0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
	Zinc (Zn)	0.271		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
	Calcium (Ca)	7.8		0.5	mg/L		17-JUL-06	HAS	R420542
	Potassium (K)	0.8		0.1	mg/L		17-JUL-06	HAS	R420542
	Magnesium (Mg)	1.7		0.1	mg/L		17-JUL-06	HAS	R420542
	Sodium (Na)	<1		1	mg/L		17-JUL-06	HAS	R420542
	Iron (Fe)	0.041		0.005	mg/L		17-JUL-06	HAS	R420542
	Manganese (Mn)	0.045		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
	Silver (Ag)	<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
	Aluminum (Al)	0.08		0.02	mg/L		17-JUL-06	QLI	R420556
	Arsenic (As)	<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
	Boron (B)	<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
	Barium (Ba)	0.0099		0.0002	mg/L		17-JUL-06	QLI	R420556
	Beryllium (Be)	<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
	Bismuth (Bi)	<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
	Cadmium (Cd)	0.0013		0.0002	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408774-1 H01 HACKETT RIVER,NU									
Sampled By: CHAD on 04-JUL-06 @ 13:00									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Cobalt (Co)		0.0007		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.032		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		0.0008		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		0.0024		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		0.0005		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		0.0007		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0380		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0005		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		0.243		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		<5		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		75.8		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		<0.1		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		0.0016		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		1.3		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		<1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		17.2		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		55		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		4		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.50		0.1	NTU		17-JUL-06	BOC	R420506
pH		6.8		0.1	pH		14-JUL-06	PTT	R420571
L408774-2 H13 HACKETT RIVER,NU									
Sampled By: CHAD on 04-JUL-06 @ 13:15									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		7.6		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		26			mg/L		17-JUL-06		
Magnesium (Mg)		1.8		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408774-2	H13 HACKETT RIVER,NU								
Sampled By:	CHAD on 04-JUL-06 @ 13:15								
Matrix:	SURFACE WATER								
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		7.7		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.7		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		1.77		0.01	mg/L		18-JUL-06	HAS	R421183
Sodium (Na)		0.7		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.032		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.043		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.09		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0070		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		0.0014		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		0.0006		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0317		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0020		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		0.0006		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0308		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0003		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.312		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		7.0		0.5	mg/L		17-JUL-06	HAS	R420542
Potassium (K)		0.7		0.1	mg/L		17-JUL-06	HAS	R420542
Magnesium (Mg)		1.6		0.1	mg/L		17-JUL-06	HAS	R420542
Sodium (Na)		<1		1	mg/L		17-JUL-06	HAS	R420542
Iron (Fe)		0.047		0.005	mg/L		17-JUL-06	HAS	R420542
Manganese (Mn)		0.038		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		0.11		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0080		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		0.0013		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		0.0007		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.037		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408774-2 H13 HACKETT RIVER,NU									
Sampled By: CHAD on 04-JUL-06 @ 13:15									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Nickel (Ni)		0.0022		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		0.0008		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		0.0008		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0341		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0004		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		0.268		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		<5		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		67.1		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		4		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		<0.1		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		0.0012		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		1.2		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		<1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		15.3		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		47		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		4		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.75		0.1	NTU		17-JUL-06	BOC	R420506
pH		6.8		0.1	pH		14-JUL-06	PTT	R420571
L408774-3 H14 HACKETT RIVER,NU									
Sampled By: CHAD on 04-JUL-06 @ 14:30									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		8.2		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		29			mg/L		17-JUL-06		
Magnesium (Mg)		2.1		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		7.6		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.8		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		1.95		0.01	mg/L		18-JUL-06	HAS	R421183

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408774-3	H14 HACKETT RIVER,NU								
Sampled By: CHAD on 04-JUL-06 @ 14:30									
Matrix: SURFACE WATER									
Dissolved Metals									
Dissolved Major Metals									
Sodium (Na)		0.6		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.074		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.041		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.13		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0084		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		0.0015		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		0.0008		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0243		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0042		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		0.0004		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0303		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0003		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.342		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		7.2		0.5	mg/L		18-JUL-06	HAS	R421182
Potassium (K)		0.8		0.1	mg/L		18-JUL-06	HAS	R421182
Magnesium (Mg)		1.8		0.1	mg/L		18-JUL-06	HAS	R421182
Sodium (Na)		<1		1	mg/L		18-JUL-06	HAS	R421182
Iron (Fe)		0.091		0.005	mg/L		18-JUL-06	HAS	R421182
Manganese (Mn)		0.038		0.001	mg/L		18-JUL-06	HAS	R421182
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Aluminum (Al)		0.18		0.02	mg/L		19-JUL-06	QLI	R421833
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Boron (B)		<0.02		0.02	mg/L		19-JUL-06	QLI	R421833
Barium (Ba)		0.0088		0.0002	mg/L		19-JUL-06	QLI	R421833
Beryllium (Be)		<0.001		0.001	mg/L		19-JUL-06	QLI	R421833
Bismuth (Bi)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Cadmium (Cd)		0.0014		0.0002	mg/L		19-JUL-06	QLI	R421833
Cobalt (Co)		0.0009		0.0002	mg/L		19-JUL-06	QLI	R421833
Chromium (Cr)		<0.0008		0.0008	mg/L		19-JUL-06	QLI	R421833
Copper (Cu)		0.028		0.001	mg/L		19-JUL-06	QLI	R421833
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Nickel (Ni)		0.0043		0.0002	mg/L		19-JUL-06	QLI	R421833
Lead (Pb)		0.0006		0.0001	mg/L		19-JUL-06	QLI	R421833
Antimony (Sb)		0.0007		0.0004	mg/L		19-JUL-06	QLI	R421833

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408774-3 H14 HACKETT RIVER,NU									
Sampled By: CHAD on 04-JUL-06 @ 14:30									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Selenium (Se)		0.0005		0.0004	mg/L		19-JUL-06	QLI	R421833
Tin (Sn)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Strontium (Sr)		0.0263		0.0002	mg/L		19-JUL-06	QLI	R421833
Titanium (Ti)		<0.005		0.005	mg/L		19-JUL-06	QLI	R421833
Thallium (Tl)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Vanadium (V)		0.0005		0.0002	mg/L		19-JUL-06	QLI	R421833
Zinc (Zn)		0.300		0.004	mg/L		19-JUL-06	QLI	R421833
Alkalinity, Total (as CaCO3)		<5		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		73.7		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Lithium (Li)-Dissolved		0.0016		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		19-JUL-06	QLI	R421833
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		1.0		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		<1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		19.7		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		49		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.55		0.1	NTU		17-JUL-06	BOC	R420506
pH		6.3		0.1	pH		14-JUL-06	PTT	R420571
L408774-4 H02 HACKETT RIVER,NU									
Sampled By: CHAD on 05-JUL-06 @ 09:00									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		6.3		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		22			mg/L		17-JUL-06		
Magnesium (Mg)		1.6		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		5.9		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.5		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		1.45		0.01	mg/L		18-JUL-06	HAS	R421183
Sodium (Na)		0.5		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.013		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.001		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408774-4	H02 HACKETT RIVER,NU								
Sampled By: CHAD on 05-JUL-06 @ 09:00									
Matrix: SURFACE WATER									
Dissolved Metals									
Dissolved Trace Metals (Low Level)									
Aluminum (Al)		0.01		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0032		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		0.0007		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0009		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0097		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		5.8		0.5	mg/L		18-JUL-06	HAS	R421182
Potassium (K)		0.5		0.1	mg/L		18-JUL-06	HAS	R421182
Magnesium (Mg)		1.4		0.1	mg/L		18-JUL-06	HAS	R421182
Sodium (Na)		<1		1	mg/L		18-JUL-06	HAS	R421182
Iron (Fe)		0.019		0.005	mg/L		18-JUL-06	HAS	R421182
Manganese (Mn)		0.001		0.001	mg/L		18-JUL-06	HAS	R421182
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Aluminum (Al)		0.03		0.02	mg/L		19-JUL-06	QLI	R421833
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Boron (B)		<0.02		0.02	mg/L		19-JUL-06	QLI	R421833
Barium (Ba)		0.0041		0.0002	mg/L		19-JUL-06	QLI	R421833
Beryllium (Be)		<0.001		0.001	mg/L		19-JUL-06	QLI	R421833
Bismuth (Bi)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Cadmium (Cd)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Cobalt (Co)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Chromium (Cr)		<0.0008		0.0008	mg/L		19-JUL-06	QLI	R421833
Copper (Cu)		0.001		0.001	mg/L		19-JUL-06	QLI	R421833
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Nickel (Ni)		0.0003		0.0002	mg/L		19-JUL-06	QLI	R421833
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Antimony (Sb)		0.0007		0.0004	mg/L		19-JUL-06	QLI	R421833
Selenium (Se)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421833
Tin (Sn)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Strontium (Sr)		0.0092		0.0002	mg/L		19-JUL-06	QLI	R421833
Titanium (Ti)		<0.005		0.005	mg/L		19-JUL-06	QLI	R421833
Thallium (Tl)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408774-4	H02 HACKETT RIVER,NU								
Sampled By: CHAD on 05-JUL-06 @ 09:00									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Vanadium (V)		0.0004		0.0002	mg/L		19-JUL-06	QLI	R421833
Zinc (Zn)		<0.004		0.004	mg/L		19-JUL-06	QLI	R421833
Alkalinity, Total (as CaCO3)		11		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		49.1		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		0.2		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		19-JUL-06	QLI	R421833
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		0.7		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		<1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		7.6		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		35		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		4		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.30		0.1	NTU		17-JUL-06	BOC	R420506
pH		7.3		0.1	pH		14-JUL-06	PTT	R420571
L408774-5	H03 HACKETT RIVER,NU								
Sampled By: CHAD on 05-JUL-06 @ 09:15									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		7.5		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		26			mg/L		17-JUL-06		
Magnesium (Mg)		1.7		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		7.1		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.6		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		1.60		0.01	mg/L		18-JUL-06	HAS	R421183
Sodium (Na)		0.6		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.007		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		<0.001		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.01		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0051	RRV	0.0001	mg/L		19-JUL-06	QLI	R421834

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408774-5	H03 HACKETT RIVER,NU								
Sampled By:	CHAD on 05-JUL-06 @ 09:15								
Matrix:	SURFACE WATER								
Dissolved Metals									
Dissolved Trace Metals (Low Level)									
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		0.0007		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0011		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0007	RRV	0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0007		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0110		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		0.0004		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.009	RRV	0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		6.8		0.5	mg/L		18-JUL-06	HAS	R421182
Potassium (K)		0.6		0.1	mg/L		18-JUL-06	HAS	R421182
Magnesium (Mg)		1.5		0.1	mg/L		18-JUL-06	HAS	R421182
Sodium (Na)		<1		1	mg/L		18-JUL-06	HAS	R421182
Iron (Fe)		0.008		0.005	mg/L		18-JUL-06	HAS	R421182
Manganese (Mn)		<0.001		0.001	mg/L		18-JUL-06	HAS	R421182
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0039		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0007		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0109		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		<0.004		0.004	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408774-5	H03 HACKETT RIVER,NU								
Sampled By:	CHAD on 05-JUL-06 @ 09:15								
Matrix:	SURFACE WATER								
	Alkalinity, Total (as CaCO3)	13		5	mg/L		14-JUL-06	PTT	R420571
	Ammonia-N	<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
	Conductivity (EC)	57.1		0.2	uS/cm		14-JUL-06	PTT	R420571
	Dissolved Organic Carbon	3		1	mg/L		19-JUL-06	ZOW	R421239
	Gran Alkalinity (as -H+)	0.2		0.1	meq/L		18-JUL-06	BOC	R421627
	Lithium (Li)-Dissolved	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Lithium (Li)-Total	<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
	Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Mercury (Hg)-Total	<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
	Nitrate+Nitrite-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrate-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrite-N	<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
	Orthophosphate (PO4-P)	<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
	Phosphorus, Total	<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
	Potassium (K)	1.0		0.5	mg/L		17-JUL-06	EOC	R420501
	Sodium (Na)	<1		1	mg/L		17-JUL-06	EOC	R420501
	Sulphate (SO4)	8.9		0.5	mg/L		17-JUL-06	JWU	R418352
	Temperature	25		1	Degree C		14-JUL-06	PTT	R420571
	Total Dissolved Solids	36		5	mg/L		18-JUL-06	SVG	R420746
	Total Kjeldahl Nitrogen	<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
	Total Organic Carbon	3		1	mg/L		19-JUL-06	ZOW	R421239
	Total Suspended Solids	<3		3	mg/L		18-JUL-06	SVG	R420875
	Turbidity	0.30		0.1	NTU		17-JUL-06	BOC	R420506
	pH	7.4		0.1	pH		14-JUL-06	PTT	R420571
L408774-6	H16 HACKETT RIVER,NU								
Sampled By:	CHAD on 05-JUL-06 @ 10:50								
Matrix:	SURFACE WATER								
	Hardness								
	Calcium (Ca)	17.5		0.5	mg/L		17-JUL-06	EOC	R420501
	Hardness (as CaCO3)	59			mg/L		17-JUL-06		
	Magnesium (Mg)	3.6		0.1	mg/L		17-JUL-06	EOC	R420501
	Dissolved Metals								
	Dissolved Major Metals								
	Calcium (Ca)	16.7		0.5	mg/L		18-JUL-06	HAS	R421183
	Potassium (K)	0.9		0.1	mg/L		18-JUL-06	HAS	R421183
	Magnesium (Mg)	3.34		0.01	mg/L		18-JUL-06	HAS	R421183
	Sodium (Na)	0.5		0.5	mg/L		18-JUL-06	HAS	R421183
	Iron (Fe)	<0.005		0.005	mg/L		18-JUL-06	HAS	R421183
	Manganese (Mn)	0.001		0.001	mg/L		18-JUL-06	HAS	R421183
	Dissolved Trace Metals (Low Level)								
	Silver (Ag)	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
	Aluminum (Al)	<0.01		0.01	mg/L		19-JUL-06	QLI	R421834
	Arsenic (As)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
	Boron (B)	<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
	Barium (Ba)	0.0046		0.0001	mg/L		19-JUL-06	QLI	R421834
	Beryllium (Be)	<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
	Bismuth (Bi)	<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
	Cadmium (Cd)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408774-6	H16 HACKETT RIVER,NU								
Sampled By:	CHAD on 05-JUL-06 @ 10:50								
Matrix:	SURFACE WATER								
Dissolved Metals									
Dissolved Trace Metals (Low Level)									
Chromium (Cr)		0.0009		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0038		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0004		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		0.0003		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0140		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.029		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		15.3		0.5	mg/L		17-JUL-06	HAS	R420542
Potassium (K)		0.9		0.1	mg/L		17-JUL-06	HAS	R420542
Magnesium (Mg)		3.1		0.1	mg/L		17-JUL-06	HAS	R420542
Sodium (Na)		<1		1	mg/L		17-JUL-06	HAS	R420542
Iron (Fe)		0.015		0.005	mg/L		17-JUL-06	HAS	R420542
Manganese (Mn)		0.003		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0057		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.005		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		0.0004		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0007		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0169		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		0.025		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		18		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		17-JUL-06	LDC	R420426
Conductivity (EC)		123		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408774-6	H16 HACKETT RIVER,NU								
Sampled By:	CHAD on 05-JUL-06 @ 10:50								
Matrix:	SURFACE WATER								
	Lithium (Li)-Dissolved	0.0011		0.0001	mg/L		19-JUL-06	QLI	R421834
	Lithium (Li)-Total	<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
	Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Mercury (Hg)-Total	<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
	Nitrate+Nitrite-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrate-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrite-N	<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
	Orthophosphate (PO4-P)	<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
	Phosphorus, Total	<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
	Potassium (K)	1.3		0.5	mg/L		17-JUL-06	EOC	R420501
	Sodium (Na)	<1		1	mg/L		17-JUL-06	EOC	R420501
	Sulphate (SO4)	38.5		0.5	mg/L		17-JUL-06	JWU	R418352
	Temperature	25		1	Degree C		14-JUL-06	PTT	R420571
	Total Dissolved Solids	79		5	mg/L		18-JUL-06	SVG	R420746
	Total Kjeldahl Nitrogen	<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
	Total Organic Carbon	3		1	mg/L		19-JUL-06	ZOW	R421239
	Total Suspended Solids	<3		3	mg/L		18-JUL-06	SVG	R420875
	Turbidity	0.20		0.1	NTU		17-JUL-06	BOC	R420506
	pH	7.5		0.1	pH		14-JUL-06	PTT	R420571
* Refer to Referenced Information for Qualifiers (if any) and Methodology.									

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
EHT	SOME ROUTINE PARAMETERS PAST HOLD TIME - Exceeds Recommended Holding Time Prior To Analysis
SRU	DOC & DISSOLVED METALS - Sample Received Unpreserved
SFU	DOC & DISSOLVED METALS - Sample filtered to remove particulate
EHR	no3,no2,n2n3 past hold time - Exceeds Recommended Holding Time On Receipt: Proceed With Analysis As Requested

Sample Parameter Qualifier key listed:

Qualifier	Description
RRV	Reported Result Verified By Repeat Analysis

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
ALK-GRAN-ED	Water	Gran Alkalinity		AB Env. Method 51515
ALK-TOT-ED	Water	Alkalinity, Total		APHA 2320 B-Auto-Pot. Titration
C-DIS-ORG-ED	Water	Dissolved Organic Carbon		APHA 5310 B-Instrumental
C-TOT-ORG-ED	Water	Total Organic Carbon		APHA 5310 B-Instrumental
CA-ED	Water	Calcium (Ca)		APHA 3120 B-ICP-OES
EC-ED	Water	Conductivity (EC)		APHA 2510 B-electrode
ETL-HARDNESS-ROU-ED	Water	Hardness (from Routine Ca and Mg)		APHA 2340 B-Calculation
HG-DIS-LOW-ED	Water	Mercury (Hg)-Dissolved		EPA 6020
HG-TOT-LOW-ED	Water	Mercury, (Hg)-Total	EPA3015	EPA 6020
K-ED	Water	Potassium (K)		APHA 3120 B-ICP-OES
LI-DIS-LOW-ED	Water	Lithium (Li)-Dissolved		EPA 6020
LI-TOT-LOW-ED	Water	Lithium (Li)-Total	EPA3015	EPA 6020
MET1-DIS-LOW-ED	Water	Dissolved Trace Metals (Low Level)		EPA 6020
MET1-TOT-LOW-ED	Water	Total Trace Metals (Low Level)	EPA3015	EPA 6020
MET2-DIS-ED	Water	Dissolved Major Metals		EPA 200.7
MET2-TOT-LOW-ED	Water	Total Major Metals	EPA3015	EPA 200.7
MG-ED	Water	Magnesium (Mg)		APHA 3120 B-ICP-OES
N-TOTKJ-ED	Water	Total Kjeldahl Nitrogen		APHA 4500N-C -Dig.-Auto-Colorimetry
N2N3-ED	Water	Nitrate+Nitrite-N		APHA 4500 NO3H-Colorimetry
NA-ED	Water	Sodium (Na)		APHA 3120 B-ICP-OES
NH4-ED	Water	Ammonia-N		APHA4500NH3F Colorimetry
NO2-ED	Water	Nitrite-N		APHA 4500 NO2B-Colorimetry
NO3-ED	Water	Nitrate-N		APHA 4500 NO3H-Colorimetry
P-TOTAL-ED	Water	Phosphorus, Total		APHA 4500 P B,E-Auto-Colorimetry
PH-ED	Water	pH		APHA 4500 H-Electrode
PO4-ED	Water	Orthophosphate (PO4-P)		APHA 4500 P B,E-Auto-Colorimetry
SO4-ED	Water	Sulfate (SO4)		APHA 4110 B-Ion Chromatography
SOLIDS-TDS-ED	Water	Total Dissolved Solids		APHA 2540 C

Reference Information

SOLIDS-TOTSUS-ED	Water	Total Suspended Solids	APHA 2540 D-Gravimetric
TEMP-ED	Water	Temperature	APHA 2550-Thermometer
TURBIDITY-ED	Water	Turbidity	APHA 2130 B-Nephelometer

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

262812

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
ED	ALS LABORATORY GROUP - EDMONTON, ALBERTA, CANADA		

GLOSSARY OF REPORT TERMS

Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds.

The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.

mg/kg (units) - unit of concentration based on mass, parts per million.

mg/L (units) - unit of concentration based on volume, parts per million.

< - Less than.

D.L. - The reporting limit.

N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.

UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.

UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.

Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.

LABORATORIES

CANADA TOLL FREE 1-800-668-9878

Pg. 1 of 1

WWW.ENVIROTEST.COM

LABORATORIES REPORT TO: <u>Chad Davey, Frin Anderson</u> COMPANY: <u>Gartner Lee Ltd</u> CONTACT: <u>Chad Davey</u> ADDRESS: <u>2251 2nd Ave</u> <u>Whitehorse, Yukon Y1A 5W1</u> PHONE: <u>867-633-6774</u> FAX: <u>867-633-6321</u> CELLPHONE: INVOICE TO: <u>SAME</u> / N COMPANY: CONTACT: ADDRESS: PHONE: FAX: SAMPLE ID:		DATE: REPORT DISTRIBUTION ALL FINAL RESULTS WILL BE EMAIL: ☒ FAX: ☐ MAILED EMAIL 1: <u>cdavey@gartnerlee.com</u> EMAIL 2: DIGITAL EMAIL: SELECT: pdf ☒ digital ☐ both ☐ INDICATE BOTTLES: FILTERED/PRESERVED (F/P)													
JOB # <u>60666 - Hackett River</u> PO/A/E: LSD: QUOTE #		LAB WORK ORDER # <u>1408774</u> ☒ REGULAR SERVICE (DEFAULT) ☐ PRIORITY SERVICE (50% SURCHARGE) ☐ EMERGENCY SERVICE (100% SURCHARGE)													
ANALYSIS REQUEST <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>General Chemistry</td> <td>☒</td> </tr> <tr> <td>Metals - Total</td> <td>☒</td> </tr> <tr> <td>Metals - dissolved</td> <td>☒</td> </tr> <tr> <td>TOC/COD</td> <td>☒</td> </tr> <tr> <td>DOC</td> <td>☒</td> </tr> <tr> <td>Nutrients</td> <td>☒</td> </tr> </table>		General Chemistry	☒	Metals - Total	☒	Metals - dissolved	☒	TOC/COD	☒	DOC	☒	Nutrients	☒	HAZARDOUS ? NUMBER OF CONTAINERS HIGHLY CONTAMINATED ? LAB SAMPLE #	
General Chemistry	☒														
Metals - Total	☒														
Metals - dissolved	☒														
TOC/COD	☒														
DOC	☒														
Nutrients	☒														

GUIDELINES / REGULATIONS	SPECIAL INSTRUCTIONS / NATURE OF HAZARDOUS MATERIAL	SAMPLE CONDITION	MEAN TEMPERATURE
Failure to complete all portions of this form may delay analysis. By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the reverse of the white report copy.	* Suite of parameters to be analyzed will be emailed. Note: Metals - dissolved and DOC were preserved but not field filtered, please do so in lab.	X FROZEN X COLD X AMBIENT	4°C

RELINQUISHED BY: <u>Chad Davey</u> DATE & TIME: <u>7/7/06, 15:30</u>	RECEIVED BY: <u>[Signature]</u> DATE & TIME: <u>7/7/06/1408774</u>
SAMPLE CONDITION ACCEPTABLE (SEE REVERSE) ? (Y/N)	



Environmental Division

ANALYTICAL REPORT

GARTNER LEE LIMITED

ATTN: CHAD DAVEY

2251 2 AVENUE

WHITEHORSE YT Y1A 5W1

Reported On: 11-OCT-06 12:53 PM

Revision: 1

Lab Work Order #: L408790

Date Received: 09-JUL-06

Project P.O. #:

Job Reference: 60606-HACKETT RIVER

Legal Site Desc:

CofC Numbers: 262802

Other Information:

Comments: ADDITIONAL 02-AUG-06 15:06

ROY JONES
General Manager, Edmonton

For any questions about this report please contact your Account Manager:

ERIN ANDERSON

THIS REPORT SHALL NOT BE REPRODUCED EXCEPT IN FULL WITHOUT THE WRITTEN AUTHORITY OF THE LABORATORY.
ALL SAMPLES WILL BE DISPOSED OF AFTER 30 DAYS FOLLOWING ANALYSIS. PLEASE CONTACT THE LAB IF YOU
REQUIRE ADDITIONAL SAMPLE STORAGE TIME.

ETL Chemspec Analytical Ltd.

Part of the **ALS Laboratory Group**
9936-67 Avenue, Edmonton, AB T6E 0P5

Phone: +1 780 413 5227 Fax: +1 780 437 2311 www.alsglobal.com

A Campbell Brothers Limited Company

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-1	H08 HACKETT RIVER, NU								
Sampled By: CHAD on 06-JUL-06 @ 10:35									
Matrix: SURFACE WATER									
Hardness									
	Calcium (Ca)	3.4		0.5	mg/L		17-JUL-06	EOC	R420501
	Hardness (as CaCO3)	13			mg/L		17-JUL-06		
	Magnesium (Mg)	1.1		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
	Calcium (Ca)	3.1		0.5	mg/L		18-JUL-06	HAS	R421183
	Potassium (K)	0.3		0.1	mg/L		18-JUL-06	HAS	R421183
	Magnesium (Mg)	1.05		0.01	mg/L		18-JUL-06	HAS	R421183
	Sodium (Na)	0.5		0.5	mg/L		18-JUL-06	HAS	R421183
	Iron (Fe)	0.059		0.005	mg/L		18-JUL-06	HAS	R421183
	Manganese (Mn)	0.001		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
	Silver (Ag)	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R422337
	Aluminum (Al)	0.02		0.01	mg/L		19-JUL-06	QLI	R422337
	Arsenic (As)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R422337
	Boron (B)	<0.002		0.002	mg/L		19-JUL-06	QLI	R422337
	Barium (Ba)	0.0029		0.0001	mg/L		19-JUL-06	QLI	R422337
	Beryllium (Be)	<0.0005		0.0005	mg/L		19-JUL-06	QLI	R422337
	Bismuth (Bi)	<0.00005		0.00005	mg/L		19-JUL-06	QLI	R422337
	Cadmium (Cd)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R422337
	Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R422337
	Chromium (Cr)	0.0014		0.0004	mg/L		19-JUL-06	QLI	R422337
	Copper (Cu)	0.0012		0.0006	mg/L		19-JUL-06	QLI	R422337
	Molybdenum (Mo)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R422337
	Nickel (Ni)	0.0026		0.0001	mg/L		19-JUL-06	QLI	R422337
	Lead (Pb)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R422337
	Antimony (Sb)	0.0006		0.0004	mg/L		19-JUL-06	QLI	R422337
	Selenium (Se)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R422337
	Tin (Sn)	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R422337
	Strontium (Sr)	0.0064		0.0001	mg/L		19-JUL-06	QLI	R422337
	Titanium (Ti)	<0.0003		0.0003	mg/L		19-JUL-06	QLI	R422337
	Thallium (Tl)	<0.00005		0.00005	mg/L		19-JUL-06	QLI	R422337
	Uranium (U)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R422337
	Vanadium (V)	0.0003		0.0001	mg/L		19-JUL-06	QLI	R422337
	Zinc (Zn)	0.004		0.002	mg/L		19-JUL-06	QLI	R422337
Total Metals									
Total Major Metals									
	Calcium (Ca)	3.2		0.5	mg/L		17-JUL-06	HAS	R420542
	Potassium (K)	0.3		0.1	mg/L		17-JUL-06	HAS	R420542
	Magnesium (Mg)	1.0		0.1	mg/L		17-JUL-06	HAS	R420542
	Sodium (Na)	<1		1	mg/L		17-JUL-06	HAS	R420542
	Iron (Fe)	0.079		0.005	mg/L		17-JUL-06	HAS	R420542
	Manganese (Mn)	0.003		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
	Silver (Ag)	<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
	Aluminum (Al)	0.03		0.02	mg/L		17-JUL-06	QLI	R420556
	Arsenic (As)	<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
	Boron (B)	<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
	Barium (Ba)	0.0041		0.0002	mg/L		17-JUL-06	QLI	R420556
	Beryllium (Be)	<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
	Bismuth (Bi)	<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
	Cadmium (Cd)	<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-1 H08 HACKETT RIVER, NU									
Sampled By: CHAD on 06-JUL-06 @ 10:35									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Cobalt (Co)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.005		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		0.0028		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		0.0005		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0098		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0003		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		<0.004		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		8		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		19-JUL-06	LDC	R421283
Conductivity (EC)		28.3		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		5		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		0.1		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R422337
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R422337
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		0.6		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		<1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		3.8		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		22		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		0.3		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		6		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.55		0.1	NTU		17-JUL-06	BOC	R420506
pH		7.2		0.1	pH		14-JUL-06	PTT	R420571
L408790-2 H09 HACKETT RIVER, NU									
Sampled By: CHAD on 06-JUL-06 @ 09:15									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		3.0		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		13			mg/L		17-JUL-06		
Magnesium (Mg)		1.4		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-2	H09 HACKETT RIVER, NU								
Sampled By:	CHAD on 06-JUL-06 @ 09:15								
Matrix:	SURFACE WATER								
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		2.9		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.5		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		1.28		0.01	mg/L		18-JUL-06	HAS	R421183
Sodium (Na)		0.5		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.039		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.002		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.03		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0046		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0022		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0033		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0085		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.040		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		2.7		0.5	mg/L		18-JUL-06	HAS	R421182
Potassium (K)		0.4		0.1	mg/L		18-JUL-06	HAS	R421182
Magnesium (Mg)		1.2		0.1	mg/L		18-JUL-06	HAS	R421182
Sodium (Na)		<1		1	mg/L		18-JUL-06	HAS	R421182
Iron (Fe)		0.055		0.005	mg/L		18-JUL-06	HAS	R421182
Manganese (Mn)		0.002		0.001	mg/L		18-JUL-06	HAS	R421182
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Aluminum (Al)		0.04		0.02	mg/L		19-JUL-06	QLI	R421833
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Boron (B)		<0.02		0.02	mg/L		19-JUL-06	QLI	R421833
Barium (Ba)		0.0051		0.0002	mg/L		19-JUL-06	QLI	R421833
Beryllium (Be)		<0.001		0.001	mg/L		19-JUL-06	QLI	R421833
Bismuth (Bi)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Cadmium (Cd)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Cobalt (Co)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Chromium (Cr)		<0.0008		0.0008	mg/L		19-JUL-06	QLI	R421833
Copper (Cu)		0.003		0.001	mg/L		19-JUL-06	QLI	R421833
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-2 H09 HACKETT RIVER, NU									
Sampled By: CHAD on 06-JUL-06 @ 09:15									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Nickel (Ni)		0.0034		0.0002	mg/L		19-JUL-06	QLI	R421833
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Antimony (Sb)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421833
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Tin (Sn)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Strontium (Sr)		0.0091		0.0002	mg/L		19-JUL-06	QLI	R421833
Titanium (Ti)		<0.005		0.005	mg/L		19-JUL-06	QLI	R421833
Thallium (Tl)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Vanadium (V)		0.0003		0.0002	mg/L		19-JUL-06	QLI	R421833
Zinc (Zn)		0.029		0.004	mg/L		19-JUL-06	QLI	R421833
Alkalinity, Total (as CaCO3)		<5		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		19-JUL-06	LDC	R421283
Conductivity (EC)		33.2		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		<0.1		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		0.0004		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		19-JUL-06	QLI	R421833
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		0.7		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		<1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		8.2		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		23		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		4		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.35		0.1	NTU		17-JUL-06	BOC	R420506
pH		6.9		0.1	pH		14-JUL-06	PTT	R420571
L408790-3 H10 HACKETT RIVER, NU									
Sampled By: CHAD on 06-JUL-06 @ 08:30									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		2.0		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		8			mg/L		17-JUL-06		
Magnesium (Mg)		0.8		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		1.6		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.4		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		0.79		0.01	mg/L		18-JUL-06	HAS	R421183

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-3	H10 HACKETT RIVER, NU								
Sampled By:	CHAD on 06-JUL-06 @ 08:30								
Matrix:	SURFACE WATER								
Dissolved Metals									
Dissolved Major Metals									
Sodium (Na)		<0.5		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.031		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.001		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.03		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0028		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0012		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0013		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0050		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.003		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		2.1		0.5	mg/L		17-JUL-06	HAS	R420542
Potassium (K)		0.4		0.1	mg/L		17-JUL-06	HAS	R420542
Magnesium (Mg)		0.9		0.1	mg/L		17-JUL-06	HAS	R420542
Sodium (Na)		<1		1	mg/L		17-JUL-06	HAS	R420542
Iron (Fe)		0.044		0.005	mg/L		17-JUL-06	HAS	R420542
Manganese (Mn)		0.002		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		0.03		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0042		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		0.0035		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.002		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		0.0013		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-3 H10 HACKETT RIVER, NU									
Sampled By: CHAD on 06-JUL-06 @ 08:30									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Selenium (Se)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0122		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0003		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		<0.004		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		<5		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		19-JUL-06	LDC	R421283
Conductivity (EC)		20.7		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		0.2		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		0.8		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		3.9		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		14		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		4		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.30		0.1	NTU		17-JUL-06	BOC	R420506
pH		6.9		0.1	pH		14-JUL-06	PTT	R420571
L408790-4 H17 HACKETT RIVER, NU									
Sampled By: CHAD on 06-JUL-06 @ 10:15									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		3.3		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		14			mg/L		17-JUL-06		
Magnesium (Mg)		1.4		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		2.8		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.3		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		1.22		0.01	mg/L		18-JUL-06	HAS	R421183
Sodium (Na)		<0.5		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.019		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.002		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-4	H17 HACKETT RIVER, NU								
Sampled By:	CHAD on 06-JUL-06 @ 10:15								
Matrix:	SURFACE WATER								
Dissolved Metals									
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.02		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Barium (Ba)		0.0033		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0011		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0047		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0069		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		2.8		0.5	mg/L		17-JUL-06	HAS	R420542
Potassium (K)		0.3		0.1	mg/L		17-JUL-06	HAS	R420542
Magnesium (Mg)		1.2		0.1	mg/L		17-JUL-06	HAS	R420542
Sodium (Na)		<1		1	mg/L		17-JUL-06	HAS	R420542
Iron (Fe)		0.036		0.005	mg/L		17-JUL-06	HAS	R420542
Manganese (Mn)		0.004		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0041		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.002		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		0.0052		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0006		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		0.0005		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0078		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-4 H17 HACKETT RIVER, NU									
Sampled By: CHAD on 06-JUL-06 @ 10:15									
Matrix: SURFACE WATER									
Total Metals									
Total Trace Metals (Low Level)									
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0003		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		<0.004		0.004	mg/L		17-JUL-06	QLI	R420556
Alkalinity, Total (as CaCO3)		6		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		19-JUL-06	LDC	R421283
Conductivity (EC)		32.4		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		0.1		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		0.0003		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Mercury (Hg)-Total		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Nitrate+Nitrite-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrate-N		<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
Nitrite-N		<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
Orthophosphate (PO4-P)		<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
Phosphorus, Total		<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
Potassium (K)		0.8		0.5	mg/L		17-JUL-06	EOC	R420501
Sodium (Na)		1		1	mg/L		17-JUL-06	EOC	R420501
Sulphate (SO4)		7.8		0.5	mg/L		17-JUL-06	JWU	R418352
Temperature		25		1	Degree C		14-JUL-06	PTT	R420571
Total Dissolved Solids		20		5	mg/L		18-JUL-06	SVG	R420746
Total Kjeldahl Nitrogen		<0.2		0.2	mg/L	18-JUL-06	18-JUL-06	KMY	R420915
Total Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239
Total Suspended Solids		<3		3	mg/L		18-JUL-06	SVG	R420875
Turbidity		0.35		0.1	NTU		17-JUL-06	BOC	R420506
pH		7.0		0.1	pH		14-JUL-06	PTT	R420571
L408790-5 H18 HACKETT RIVER, NU									
Sampled By: CHAD on 06-JUL-06 @ 09:50									
Matrix: SURFACE WATER									
Hardness									
Calcium (Ca)		0.9		0.5	mg/L		17-JUL-06	EOC	R420501
Hardness (as CaCO3)		5			mg/L		17-JUL-06		
Magnesium (Mg)		0.6		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
Calcium (Ca)		0.8		0.5	mg/L		18-JUL-06	HAS	R421183
Potassium (K)		0.3		0.1	mg/L		18-JUL-06	HAS	R421183
Magnesium (Mg)		0.51		0.01	mg/L		18-JUL-06	HAS	R421183
Sodium (Na)		0.6		0.5	mg/L		18-JUL-06	HAS	R421183
Iron (Fe)		0.015		0.005	mg/L		18-JUL-06	HAS	R421183
Manganese (Mn)		0.002		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
Silver (Ag)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Aluminum (Al)		0.01		0.01	mg/L		19-JUL-06	QLI	R421834
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Boron (B)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-5	H18 HACKETT RIVER, NU								
Sampled By: CHAD on 06-JUL-06 @ 09:50									
Matrix: SURFACE WATER									
Dissolved Metals									
Dissolved Trace Metals (Low Level)									
Barium (Ba)		0.0015		0.0001	mg/L		19-JUL-06	QLI	R421834
Beryllium (Be)		<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
Bismuth (Bi)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Cadmium (Cd)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Cobalt (Co)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Chromium (Cr)		0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		<0.0006		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0004		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0005		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0032		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		0.8		0.5	mg/L		17-JUL-06	HAS	R420542
Potassium (K)		0.3		0.1	mg/L		17-JUL-06	HAS	R420542
Magnesium (Mg)		0.5		0.1	mg/L		17-JUL-06	HAS	R420542
Sodium (Na)		<1		1	mg/L		17-JUL-06	HAS	R420542
Iron (Fe)		0.039		0.005	mg/L		17-JUL-06	HAS	R420542
Manganese (Mn)		0.006		0.001	mg/L		17-JUL-06	HAS	R420542
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Aluminum (Al)		0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Arsenic (As)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Boron (B)		<0.02		0.02	mg/L		17-JUL-06	QLI	R420556
Barium (Ba)		0.0025		0.0002	mg/L		17-JUL-06	QLI	R420556
Beryllium (Be)		<0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Bismuth (Bi)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Cadmium (Cd)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Cobalt (Co)		<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Chromium (Cr)		<0.0008		0.0008	mg/L		17-JUL-06	QLI	R420556
Copper (Cu)		0.001		0.001	mg/L		17-JUL-06	QLI	R420556
Molybdenum (Mo)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Nickel (Ni)		0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
Lead (Pb)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Antimony (Sb)		0.0005		0.0004	mg/L		17-JUL-06	QLI	R420556
Selenium (Se)		0.0005		0.0004	mg/L		17-JUL-06	QLI	R420556
Tin (Sn)		<0.0004		0.0004	mg/L		17-JUL-06	QLI	R420556
Strontium (Sr)		0.0038		0.0002	mg/L		17-JUL-06	QLI	R420556
Titanium (Ti)		<0.005		0.005	mg/L		17-JUL-06	QLI	R420556
Thallium (Tl)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Uranium (U)		<0.0001		0.0001	mg/L		17-JUL-06	QLI	R420556
Vanadium (V)		0.0003		0.0002	mg/L		17-JUL-06	QLI	R420556
Zinc (Zn)		<0.004		0.004	mg/L		17-JUL-06	QLI	R420556

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-5	H18 HACKETT RIVER, NU								
Sampled By: CHAD on 06-JUL-06 @ 09:50									
Matrix: SURFACE WATER									
Total Metals									
	Alkalinity, Total (as CaCO3)	<5		5	mg/L		14-JUL-06	PTT	R420571
	Ammonia-N	<0.05		0.05	mg/L		19-JUL-06	LDC	R421283
	Conductivity (EC)	11.5		0.2	uS/cm		14-JUL-06	PTT	R420571
	Dissolved Organic Carbon	3		1	mg/L		19-JUL-06	ZOW	R421239
	Gran Alkalinity (as -H+)	<0.1		0.1	meq/L		18-JUL-06	BOC	R421627
	Lithium (Li)-Dissolved	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Lithium (Li)-Total	<0.006		0.006	mg/L		17-JUL-06	QLI	R420556
	Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Mercury (Hg)-Total	<0.0002		0.0002	mg/L		17-JUL-06	QLI	R420556
	Nitrate+Nitrite-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrate-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrite-N	<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
	Orthophosphate (PO4-P)	<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
	Phosphorus, Total	<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
	Potassium (K)	<0.5		0.5	mg/L		17-JUL-06	EOC	R420501
	Sodium (Na)	<1		1	mg/L		17-JUL-06	EOC	R420501
	Sulphate (SO4)	1.1		0.5	mg/L		17-JUL-06	JWU	R418352
	Temperature	25		1	Degree C		14-JUL-06	PTT	R420571
	Total Dissolved Solids	7		5	mg/L		18-JUL-06	SVG	R420746
	Total Kjeldahl Nitrogen	<0.2		0.2	mg/L	18-JUL-06	19-JUL-06	KMY	R421325
	Total Organic Carbon	3		1	mg/L		19-JUL-06	ZOW	R421239
	Total Suspended Solids	<3		3	mg/L		18-JUL-06	SVG	R420875
	Turbidity	0.35		0.1	NTU		17-JUL-06	BOC	R420506
	pH	6.8		0.1	pH		14-JUL-06	PTT	R420571
L408790-6	H19 HACKETT RIVER, NU								
Sampled By: CHAD on 06-JUL-06 @ 08:45									
Matrix: SURFACE WATER									
Hardness									
	Calcium (Ca)	3.3		0.5	mg/L		17-JUL-06	EOC	R420501
	Hardness (as CaCO3)	14			mg/L		17-JUL-06		
	Magnesium (Mg)	1.5		0.1	mg/L		17-JUL-06	EOC	R420501
Dissolved Metals									
Dissolved Major Metals									
	Calcium (Ca)	3.2		0.5	mg/L		18-JUL-06	HAS	R421183
	Potassium (K)	0.4		0.1	mg/L		18-JUL-06	HAS	R421183
	Magnesium (Mg)	1.38		0.01	mg/L		18-JUL-06	HAS	R421183
	Sodium (Na)	0.5		0.5	mg/L		18-JUL-06	HAS	R421183
	Iron (Fe)	0.037		0.005	mg/L		18-JUL-06	HAS	R421183
	Manganese (Mn)	0.002		0.001	mg/L		18-JUL-06	HAS	R421183
Dissolved Trace Metals (Low Level)									
	Silver (Ag)	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
	Aluminum (Al)	0.02		0.01	mg/L		19-JUL-06	QLI	R421834
	Arsenic (As)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
	Boron (B)	<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
	Barium (Ba)	0.0046		0.0001	mg/L		19-JUL-06	QLI	R421834
	Beryllium (Be)	<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
	Bismuth (Bi)	<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
	Cadmium (Cd)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-6	H19 HACKETT RIVER, NU								
Sampled By:	CHAD on 06-JUL-06 @ 08:45								
Matrix:	SURFACE WATER								
Dissolved Metals									
Dissolved Trace Metals (Low Level)									
Chromium (Cr)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Copper (Cu)		0.0024		0.0006	mg/L		19-JUL-06	QLI	R421834
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Nickel (Ni)		0.0040		0.0001	mg/L		19-JUL-06	QLI	R421834
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Antimony (Sb)		0.0007		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		0.0092		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		0.038		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		3.5		0.5	mg/L		18-JUL-06	HAS	R421182
Potassium (K)		0.5		0.1	mg/L		18-JUL-06	HAS	R421182
Magnesium (Mg)		1.4		0.1	mg/L		18-JUL-06	HAS	R421182
Sodium (Na)		<1		1	mg/L		18-JUL-06	HAS	R421182
Iron (Fe)		0.049		0.005	mg/L		18-JUL-06	HAS	R421182
Manganese (Mn)		0.002		0.001	mg/L		18-JUL-06	HAS	R421182
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Aluminum (Al)		0.04		0.02	mg/L		19-JUL-06	QLI	R421833
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Boron (B)		<0.02		0.02	mg/L		19-JUL-06	QLI	R421833
Barium (Ba)		0.0056		0.0002	mg/L		19-JUL-06	QLI	R421833
Beryllium (Be)		<0.001		0.001	mg/L		19-JUL-06	QLI	R421833
Bismuth (Bi)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Cadmium (Cd)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Cobalt (Co)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Chromium (Cr)		<0.0008		0.0008	mg/L		19-JUL-06	QLI	R421833
Copper (Cu)		0.003		0.001	mg/L		19-JUL-06	QLI	R421833
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Nickel (Ni)		0.0041		0.0002	mg/L		19-JUL-06	QLI	R421833
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Antimony (Sb)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421833
Selenium (Se)		0.0005		0.0004	mg/L		19-JUL-06	QLI	R421833
Tin (Sn)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Strontium (Sr)		0.0109		0.0002	mg/L		19-JUL-06	QLI	R421833
Titanium (Ti)		<0.005		0.005	mg/L		19-JUL-06	QLI	R421833
Thallium (Tl)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Vanadium (V)		0.0003		0.0002	mg/L		19-JUL-06	QLI	R421833
Zinc (Zn)		0.044		0.004	mg/L		19-JUL-06	QLI	R421833
Alkalinity, Total (as CaCO3)		<5		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		19-JUL-06	LDC	R421283
Conductivity (EC)		36.3		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		3		1	mg/L		19-JUL-06	ZOW	R421239

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-6	H19 HACKETT RIVER, NU								
Sampled By:	CHAD on 06-JUL-06 @ 08:45								
Matrix:	SURFACE WATER								
	Gran Alkalinity (as -H+)	<0.1		0.1	meq/L		18-JUL-06	BOC	R421627
	Lithium (Li)-Dissolved	0.0003		0.0001	mg/L		19-JUL-06	QLI	R421834
	Lithium (Li)-Total	<0.006		0.006	mg/L		19-JUL-06	QLI	R421833
	Mercury (Hg)-Dissolved	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Mercury (Hg)-Total	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
	Nitrate+Nitrite-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrate-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrite-N	<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
	Orthophosphate (PO4-P)	<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
	Phosphorus, Total	<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
	Potassium (K)	0.7		0.5	mg/L		17-JUL-06	EOC	R420501
	Sodium (Na)	<1		1	mg/L		17-JUL-06	EOC	R420501
	Sulphate (SO4)	9.0		0.5	mg/L		17-JUL-06	JWU	R418352
	Temperature	25		1	Degree C		14-JUL-06	PTT	R420571
	Total Dissolved Solids	24		5	mg/L		18-JUL-06	SVG	R420746
	Total Kjeldahl Nitrogen	<0.2		0.2	mg/L	18-JUL-06	19-JUL-06	KMY	R421325
	Total Organic Carbon	3		1	mg/L		19-JUL-06	ZOW	R421239
	Total Suspended Solids	<3		3	mg/L		18-JUL-06	SVG	R420875
	Turbidity	0.30		0.1	NTU		17-JUL-06	BOC	R420506
	pH	6.9		0.1	pH		14-JUL-06	PTT	R420571
L408790-7	FIELD REPLICATE (BLANK) HACKETT RIVER, NU								
Sampled By:	CHAD on 05-JUL-06 @ 18:50								
Matrix:	SURFACE WATER								
	Hardness								
	Calcium (Ca)	<0.5		0.5	mg/L		17-JUL-06	EOC	R420501
	Hardness (as CaCO3)	<1			mg/L		17-JUL-06		
	Magnesium (Mg)	<0.1		0.1	mg/L		17-JUL-06	EOC	R420501
	Dissolved Metals								
	Dissolved Major Metals								
	Calcium (Ca)	<0.5		0.5	mg/L		18-JUL-06	HAS	R421183
	Potassium (K)	<0.1		0.1	mg/L		18-JUL-06	HAS	R421183
	Magnesium (Mg)	<0.01		0.01	mg/L		18-JUL-06	HAS	R421183
	Sodium (Na)	<0.5		0.5	mg/L		18-JUL-06	HAS	R421183
	Iron (Fe)	<0.005		0.005	mg/L		18-JUL-06	HAS	R421183
	Manganese (Mn)	<0.001		0.001	mg/L		18-JUL-06	HAS	R421183
	Dissolved Trace Metals (Low Level)								
	Silver (Ag)	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
	Aluminum (Al)	<0.01		0.01	mg/L		19-JUL-06	QLI	R421834
	Arsenic (As)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
	Boron (B)	<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
	Barium (Ba)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Beryllium (Be)	<0.0005		0.0005	mg/L		19-JUL-06	QLI	R421834
	Bismuth (Bi)	<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
	Cadmium (Cd)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Chromium (Cr)	<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
	Copper (Cu)	<0.0006		0.0006	mg/L		19-JUL-06	QLI	R421834
	Molybdenum (Mo)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Nickel (Ni)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
	Lead (Pb)	<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-7	FIELD REPLICATE (BLANK) HACKETT RIVER, NU								
Sampled By: CHAD on 05-JUL-06 @ 18:50									
Matrix: SURFACE WATER									
Dissolved Metals									
Dissolved Trace Metals (Low Level)									
Antimony (Sb)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421834
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421834
Tin (Sn)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421834
Strontium (Sr)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Titanium (Ti)		<0.0003		0.0003	mg/L		19-JUL-06	QLI	R421834
Thallium (Tl)		<0.00005		0.00005	mg/L		19-JUL-06	QLI	R421834
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Vanadium (V)		0.0002		0.0001	mg/L		19-JUL-06	QLI	R421834
Zinc (Zn)		<0.002		0.002	mg/L		19-JUL-06	QLI	R421834
Total Metals									
Total Major Metals									
Calcium (Ca)		<0.5		0.5	mg/L		18-JUL-06	HAS	R421182
Potassium (K)		<0.1		0.1	mg/L		18-JUL-06	HAS	R421182
Magnesium (Mg)		<0.1		0.1	mg/L		18-JUL-06	HAS	R421182
Sodium (Na)		<1		1	mg/L		18-JUL-06	HAS	R421182
Iron (Fe)		<0.005		0.005	mg/L		18-JUL-06	HAS	R421182
Manganese (Mn)		<0.001		0.001	mg/L		18-JUL-06	HAS	R421182
Total Trace Metals (Low Level)									
Silver (Ag)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Aluminum (Al)		<0.02		0.02	mg/L		19-JUL-06	QLI	R421833
Arsenic (As)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Boron (B)		<0.02		0.02	mg/L		19-JUL-06	QLI	R421833
Barium (Ba)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Beryllium (Be)		<0.001		0.001	mg/L		19-JUL-06	QLI	R421833
Bismuth (Bi)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Cadmium (Cd)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Cobalt (Co)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Chromium (Cr)		<0.0008		0.0008	mg/L		19-JUL-06	QLI	R421833
Copper (Cu)		<0.001		0.001	mg/L		19-JUL-06	QLI	R421833
Molybdenum (Mo)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Nickel (Ni)		<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
Lead (Pb)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Antimony (Sb)		0.0006		0.0004	mg/L		19-JUL-06	QLI	R421833
Selenium (Se)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Tin (Sn)		<0.0004		0.0004	mg/L		19-JUL-06	QLI	R421833
Strontium (Sr)		0.0004		0.0002	mg/L		19-JUL-06	QLI	R421833
Titanium (Ti)		<0.005		0.005	mg/L		19-JUL-06	QLI	R421833
Thallium (Tl)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Uranium (U)		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421833
Vanadium (V)		0.0003		0.0002	mg/L		19-JUL-06	QLI	R421833
Zinc (Zn)		<0.004		0.004	mg/L		19-JUL-06	QLI	R421833
Alkalinity, Total (as CaCO3)		<5		5	mg/L		14-JUL-06	PTT	R420571
Ammonia-N		<0.05		0.05	mg/L		19-JUL-06	LDC	R421283
Conductivity (EC)		1.4		0.2	uS/cm		14-JUL-06	PTT	R420571
Dissolved Organic Carbon		<1		1	mg/L		19-JUL-06	ZOW	R421239
Gran Alkalinity (as -H+)		<0.1		0.1	meq/L		18-JUL-06	BOC	R421627
Lithium (Li)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834
Lithium (Li)-Total		<0.006		0.006	mg/L		19-JUL-06	QLI	R421833
Mercury (Hg)-Dissolved		<0.0001		0.0001	mg/L		19-JUL-06	QLI	R421834

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L408790-7	FIELD REPLICATE (BLANK) HACKETT RIVER, NU								
Sampled By:	CHAD on 05-JUL-06 @ 18:50								
Matrix:	SURFACE WATER								
	Mercury (Hg)-Total	<0.0002		0.0002	mg/L		19-JUL-06	QLI	R421833
	Nitrate+Nitrite-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrate-N	<0.1		0.1	mg/L		03-AUG-06	SHC	R427092
	Nitrite-N	<0.05		0.05	mg/L		03-AUG-06	SHC	R427092
	Orthophosphate (PO4-P)	<0.01		0.01	mg/L		17-JUL-06	WYA	R420550
	Phosphorus, Total	<0.02		0.02	mg/L		17-JUL-06	WYA	R420563
	Potassium (K)	<0.5		0.5	mg/L		17-JUL-06	EOC	R420501
	Sodium (Na)	<1		1	mg/L		17-JUL-06	EOC	R420501
	Sulphate (SO4)	<0.5		0.5	mg/L		17-JUL-06	JWU	R418352
	Temperature	25		1	Degree C		14-JUL-06	PTT	R420571
	Total Dissolved Solids	<5		5	mg/L		18-JUL-06	SVG	R420746
	Total Kjeldahl Nitrogen	<0.2		0.2	mg/L	18-JUL-06	19-JUL-06	KMY	R421325
	Total Organic Carbon	<1		1	mg/L		19-JUL-06	ZOW	R421239
	Total Suspended Solids	<3		3	mg/L		18-JUL-06	SVG	R420875
	Turbidity	<0.1		0.1	NTU		17-JUL-06	BOC	R420506
	pH	5.8		0.1	pH		14-JUL-06	PTT	R420571
* Refer to Referenced Information for Qualifiers (if any) and Methodology.									

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
EHT	SOME ROUTINE PARAMETERS PAST HOLD TIME - Exceeds Recommended Holding Time Prior To Analysis
SRU	DOC & DISSOLVED METALS - Sample Received Unpreserved
SFU	DOC & DISSOLVED METALS - Sample filtered to remove particulate
EHR	no3,no2 and n2n3 past hold time - Exceeds Recommended Holding Time On Receipt: Proceed With Analysis As Requested

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
ALK-GRAN-ED	Water	Gran Alkalinity		AB Env. Method 51515
ALK-TOT-ED	Water	Alkalinity, Total		APHA 2320 B-Auto-Pot. Titration
C-DIS-ORG-ED	Water	Dissolved Organic Carbon		APHA 5310 B-Instrumental
C-TOT-ORG-ED	Water	Total Organic Carbon		APHA 5310 B-Instrumental
CA-ED	Water	Calcium (Ca)		APHA 3120 B-ICP-OES
EC-ED	Water	Conductivity (EC)		APHA 2510 B-electrode
ETL-HARDNESS-ROU-ED	Water	Hardness (from Routine Ca and Mg)		APHA 2340 B-Calculation
HG-DIS-LOW-ED	Water	Mercury (Hg)-Dissolved		EPA 6020
HG-TOT-LOW-ED	Water	Mercury, (Hg)-Total	EPA3015	EPA 6020
K-ED	Water	Potassium (K)		APHA 3120 B-ICP-OES
LI-DIS-LOW-ED	Water	Lithium (Li)-Dissolved		EPA 6020
LI-TOT-LOW-ED	Water	Lithium (Li)-Total	EPA3015	EPA 6020
MET1-DIS-LOW-ED	Water	Dissolved Trace Metals (Low Level)		EPA 6020
MET1-TOT-LOW-ED	Water	Total Trace Metals (Low Level)	EPA3015	EPA 6020
MET2-DIS-ED	Water	Dissolved Major Metals		EPA 200.7
MET2-TOT-LOW-ED	Water	Total Major Metals	EPA3015	EPA 200.7
MG-ED	Water	Magnesium (Mg)		APHA 3120 B-ICP-OES
N-TOTKJ-ED	Water	Total Kjeldahl Nitrogen		APHA 4500N-C -Dig.-Auto-Colorimetry
N2N3-ED	Water	Nitrate+Nitrite-N		APHA 4500 NO3H-Colorimetry
NA-ED	Water	Sodium (Na)		APHA 3120 B-ICP-OES
NH4-ED	Water	Ammonia-N		APHA4500NH3F Colorimetry
NO2-ED	Water	Nitrite-N		APHA 4500 NO2B-Colorimetry
NO3-ED	Water	Nitrate-N		APHA 4500 NO3H-Colorimetry
P-TOTAL-ED	Water	Phosphorus, Total		APHA 4500 P B,E-Auto-Colorimetry
PH-ED	Water	pH		APHA 4500 H-Electrode
PO4-ED	Water	Orthophosphate (PO4-P)		APHA 4500 P B,E-Auto-Colorimetry
SO4-ED	Water	Sulfate (SO4)		APHA 4110 B-Ion Chromatography
SOLIDS-TDS-ED	Water	Total Dissolved Solids		APHA 2540 C
SOLIDS-TOTSUS-ED	Water	Total Suspended Solids		APHA 2540 D-Gravimetric
TEMP-ED	Water	Temperature		APHA 2550-Thermometer
TURBIDITY-ED	Water	Turbidity		APHA 2130 B-Nephelometer

Reference Information

** Laboratory Methods employed follow in-house procedures, which are generally based on nationally or internationally accepted methodologies.

Chain of Custody numbers:

262802

The last two letters of the above test code(s) indicate the laboratory that performed analytical analysis for that test. Refer to the list below:

Laboratory Definition Code	Laboratory Location	Laboratory Definition Code	Laboratory Location
ED	ALS LABORATORY GROUP - EDMONTON, ALBERTA, CANADA		

GLOSSARY OF REPORT TERMS
Surr - A surrogate is an organic compound that is similar to the target analyte(s) in chemical composition and behavior but not normally detected in environmental samples. Prior to sample processing, samples are fortified with one or more surrogate compounds. The reported surrogate recovery value provides a measure of method efficiency. The Laboratory control limits are determined under column heading D.L.
mg/kg (units) - unit of concentration based on mass, parts per million.
mg/L (units) - unit of concentration based on volume, parts per million.
< - Less than.
D.L. - The reporting limit.
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
UNLESS OTHERWISE STATED, SAMPLES ARE NOT CORRECTED FOR CLIENT FIELD BLANKS.
Although test results are generated under strict QA/QC protocols, any unsigned test reports, faxes, or emails are considered preliminary.

ALS Laboratory Group has an extensive QA/QC program where all analytical data reported is analyzed using approved referenced procedures followed by checks and reviews by senior managers and quality assurance personnel. However, since the results are obtained from chemical measurements and thus cannot be guaranteed, ALS Laboratory Group assumes no liability for the use or interpretation of the results.

REPORT TO: Erin Anderson

COMPANY: Gartner Lee Ltd

CONTACT: Chad Davey

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PHONE: 867-633-6474 FAX: 867-633-6321

CELLPHONE:

INVOICE TO: SAME

COMPANY:

CONTACT:

ADDRESS:

PHONE:

FAX:

DATE: 7/17/06

REPORT DISTRIBUTION ALL FINAL RESULTS WILL BE MAILED

EMAIL: ✓ FAX:

EMAIL 1: cdavey@gartnerlee.com

EMAIL 2:

DIGITAL EMAIL:

SELECT: pdf ✓ digital both

INDICATE BOTTLES: FILTERED/PRESERVED (F/P) ✓

JOB # 60606 - Herbert River

PO/A/E:

LSD:

QUOTE #

LAB WORK ORDER # 1468490

REGULAR SERVICE (DEFAULT) ✓

PRIORITY SERVICE (50% SURCHARGE)

EMERGENCY SERVICE (100% SURCHARGE)

ANALYSIS REQUEST

HAZARDOUS ?

NUMBER OF CONTAINERS

HIGHLY CONTAMINATED ?

LAB SAMPLE #

SAMPLE ID	SAMPLING LOCATION	SAMPLED BY / DATE / TIME	SAMPLING METHOD	SAMPLE TYPE	General Chemistry	Metals - Total	Metals - dissolved	TOC/COD	DOC	Nutrients	FROZEN	COLD	AMBIENT	MEAN TEMPERATURE
H08	Herbert River, N/A	Chad Davey / 7/17/06 / 10:35	Grab	Surface water	X	X	X	X	X	X				
H09	"	" / 7/17/06 / 9:15												
H10	"	" / 8:30												
H17	"	" / 10:15												
H18	"	" / 9:50												
H19	"	" / 8:45												
Field Replicate (blank)		Chad Davey / 7/17/06 / 18:50												

RELINQUISHED BY: Chad Davey

DATE & TIME: 7/17/06 15:30

RECEIVED BY: [Signature]

DATE & TIME: 7/17/06 15:30

RELINQUISHED BY:

DATE & TIME:

RECEIVED BY:

DATE & TIME:

CONDITIONS AS SPECIFIED ON THE REVERSE OF THE WHITE REPORT COPY.

FAILURE TO COMPLETE ALL PORTIONS OF THIS FORM MAY DELAY ANALYSIS. BY THE USE OF THIS FORM THE USER ACKNOWLEDGES AND AGREES WITH THE TERMS AND CONDITIONS AS SPECIFIED ON THE REVERSE OF THE WHITE REPORT COPY.

NOTE: METALS - DISSOLVED AND DOC WERE PRESERVED BUT NOT FIELD FILLED, PLEASE DO SO IN FIELD

* Suite of parameters to be analyzed will be emailed

HAZARDOUS ?

NUMBER OF CONTAINERS

HIGHLY CONTAMINATED ?

LAB SAMPLE #

MEAN TEMPERATURE 4.0 C

HAZARDOUS ?

NUMBER OF CONTAINERS

HIGHLY CONTAMINATED ?

LAB SAMPLE #

Attachment B

Photolog



- PHOTOGRAPHS -

PHOTOGRAPH 1



Upper Sunken Lake (Site H01) looking southeast.

PHOTOGRAPH 2



Outflow of Upper and Lower Sunken Lakes (Site H14), looking upstream. Field assistant Doris is helping collect stream flow data.

- PHOTOGRAPHS -

PHOTOGRAPH 3



Overview of Upper Sunken Lake outflow (Site H13). Upper Sunken lake is visible on the left and the stream flow is from left to right.

PHOTOGRAPH 4



The Mara River (Site H02), flow is from left to right. The helicopter pilot Bruce, is in the foreground.

- PHOTOGRAPHS -

PHOTOGRAPH 5



This Mara River inflow #1 (Site H04). Flow measurements were not possible here as the water was quite stagnant and shallow.

PHOTOGRAPH 6



This is the Mara river upstream (Site H03) of any inflow #1. Flow is from left to right.

- PHOTOGRAPHS -

PHOTOGRAPH 7



This is the Mara River inflow #2 (Site H15). Flow is from foreground to background. The Mara River is seen in the background.

PHOTOGRAPH 8



This is Turtle Lake outflow (Site H16) looking northeast. Turtle Lake is directly behind the photographer.

- PHOTOGRAPHS -

PHOTOGRAPH 9



This is Anne Lake (Site H05) looking east.

PHOTOGRAPH 10



This is Cleaver Lake (Site H06) looking south.

- PHOTOGRAPHS -

PHOTOGRAPH 11



This is Boot Lake (Site H07) looking south. The drill rigs can be seen in the background.

PHOTOGRAPH 12



This Camp Lake (Site H12), looking north. The Hackett River base camp is directly behind the photographer.

- PHOTOGRAPHS -

PHOTOGRAPH 13



This is Hackett River upstream (Site H10) of Camp Creek, looking upstream, south. Flow is from background to foreground.

PHOTOGRAPH 14



This is Camp Creek (Site H19) just upstream of where it flows into Hackett River. Flow is from left to right.

- PHOTOGRAPHS -

PHOTOGRAPH 15



This is the outlet stream of Jo Lake (Site H18), looking north. Jo Lake is just out of site in the background.

PHOTOGRAPH 16



This is the outlet stream Hood Lake (Site H17), looking south. Hood Lake is just out of site in the background.

- PHOTOGRAPHS -

PHOTOGRAPH 17



This is Cigar Lake (Site H08), looking northeast.