Tamerlane Ventures Inc.




TAMERLANE PINE POINT PROJECT
2006 WATER QUALITY SAMPLING REPORT
PINE POINT, NT

1740149.001

November 2006

CREATING AND DELIVERING BETTER SOLUTIONS

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Tamerlane Ventures Inc.

2006 WATER QUALITY SAMPLING PROGRAM
PINE POINT, NORTHWEST TERRITORIES

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November 2006

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EXECUTIVE SUMMARY

EBA Engineering Consultants Ltd. conducted a water-quality sampling program at Tamerlane Ventures Inc.'s property near Pine Point, Northwest Territories (NWT), during the spring and summer of 2006. The objectives of the 2006 water-quality program were to monitor the water quality in the vicinity of Pine Point, as part of a follow-up environmental baseline study for Tamerlane's lead-zinc project.

Three monitoring stations (Fen Head, Fen Mid and Twin Creek) were sampled as part of the program. Water samples were collected at Tamerlane on May 17, June 5, July 21, and August 18, 2006. Tamerlane Ventures Inc. had requested that water be sampled from R190 test well; this was conducted in August.

The sampling program entailed collecting surface water samples from each of the three stations. Water samples were submitted to ALS Environmental in Edmonton, and were analysed for total and dissolved ultra-low metals, total organic carbon, low-level nutrients and low-level routine water.

In general, the physical and chemical water quality parameters of Tamerlane are low and are consistent with those of the 2005 water-quality samples collected at Twin Creek. Elevated levels of ammonia and trace metals aluminum, chromium and iron were found to be above the CCME FAL Guideline. These elevated concentrations are indicative of background levels. Both the Slave River and the Little Buffalo River are naturally enriched sources of ammonia, chromium and iron, with no evidence that water in this area has been contaminated from past mining activities. Furthermore, because of these and naturally occurring high concentrations of other metals in these rivers, such as manganese and nickel, it's quite likely that the high levels of aluminum may be explained in the same manner.

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1.0 INTRODUCTION

1.1 GENERAL

Tamerlane Ventures Inc. (Tamerlane) retained EBA Engineering Consultants Ltd. (EBA) in September 2005 to complete an environmental baseline study for its Pine Point lead-zinc project located on the south shore of Great Slave Lake, at Pine Point, Northwest Territories (Figure 1). This was undertaken as part of the feasibility studies that the Company is conducting on the property.

The objectives of the 2006 water-quality program were to monitor the water quality near Pine Point, as part of a follow-up environmental baseline study for Tamerlane's lead-zinc project. This follow-up environmental baseline study program is needed to support ongoing feasibility studies and anticipated future regulatory applications for a proposed pilot plant project being evaluated by Tamerlane for its Pine Point mining property (Figure 2).

1.2 BACKGROUND

In 2005, EBA began a surface water quality sampling program of Buffalo River and Twin Creek, the two primary streams flowing though Tamerlane's Pine Point project area, located on the south shore of Great Slave Lake, NWT, as well as along the south shore of Great Slave Lake and from three abandoned mine pit lakes (EBA 2005). Between the 2005 and 2006 sampling programs, the objectives and thus the program changed. For the 2006 program, it was recommended that water quality sampling only be conducted at Twin Creek (closest water body to the proposed Pilot Plant local study area) and two other nearby points located at the head and middle of a fen (Fen Head and Fen Mid). Samples were collected both upstream and downstream from the project area. Part way through the season, it was requested that samples be collected from the R190 water well, which was installed in the 1980's to conduct groundwater pump testing.

The data presented in this report are from the second year of water quality sampling and will be compared, where possible, to the 2005 data. When year-to-year comparisons are not being conducted, information from all sites sampled in 2006 will be reported. When year-to-year comparisons are being conducted, they will be for the Twin Creek station only, as it was the only site common between the two years of sampling. The values reported for 2005 are single values as there was only one sampling event in 2005. Average values reported for 2006 are averages of the four sampling events from Twin Creek.

1.3 SITE DESCRIPTION

In 2005, water quality sampling sites were selected to gain an understanding of prevailing water quality conditions in various water bodies throughout the study area and the former Pine Point mine site. Sampling sites were located in Buffalo River and Twin Creek both upstream and downstream of the highway. In Buffalo River, sites upstream and downstream of the study area were also selected. Sampling sites were also selected where

both the Buffalo River and Twin Creek flow into Great Slave Lake. Several other sites were chosen on Great Slave Lake. A number of tailings ponds and/or flooded open pits were also sampled. In 2006, water quality sampling was conducted at Twin Creek (same location as in 2005), Fen Head and Fen Mid. Coordinates of these three locations are provided in Table 1 and are depicted in Figure 3. Duplicate samples were collected at Twin Creek.

TABLE 1: UTM CO-ORDINATES OF TAMERLANE WATER SAMPLING STATIONS

Station	Northing	Easting
Fen Head	6 734 519	602 410
Fen Mid	6 734 060	601 683
Twin Creek	6 733 959	598 016
R190 test well	6 734 389	602 357

Map Datum: NAD 1983, Zone 11V North

2.0 FIELD PROGRAM

In 2006, surface water samples were collected at Tamerlane Pine Point, on May 17, June 5, July 21, and August 18. Mr. Steve Moore and Ms. Karla Langlois conducted the water-sampling for the May and June events, July sampling was conducted by Ms. Langlois and Ms. Krista Amey, while August water samples were collected by Mr. Rick Hoos.

A Global Positioning System (GPS) was used to locate the Twin Creek station (WS11) based on the UTM co-ordinates established during the 2005 season (EBA 2005). A GPS was also used to locate Fen Head and Fen Mid stations, although they were new stations and their location was determined prior to going into the field. During the August sampling event, R190 well water pipe was located and water samples were collected. This well is encased in a 12" steel pipe extending down through the bedrock to a depth of approximately 600 feet. The water that was sampled was encountered at approximately 25 metres.

Water quality samples were collected for standard analytical parameters including dissolved metals, total metals, major ions, nutrients and inorganics. All bottles were rinsed three times with source water prior to drawing a sample. Samples collected for nutrients were preserved with 2 mL of 1:1 sulfuric acid. The dissolved metal samples were filtered in the field using dedicated disposable Nalgene 45-micrometre (µm) filters. Water samples collected for both total and dissolved metals were preserved using 1 millilitre (mL) of ultra-pure 1:1 nitric acid. Water samples collected for total organic carbon were preserved with 1 mL of 1:1 sulfuric acid. All samples were transported in portable coolers with ice packs during transport.

3.0 QUALITY ASSURANCE / QUALITY CONTROL PROGRAM

ALS Environmental (ALS) of Edmonton prepared the water-sampling bottles. Total and dissolved ultra-low level metal bottles were acid-washed with ultra-trace grade 1:1 nitric acid by ALS in the laboratory. Powderless latex gloves were worn during handling of bottles and equipment to minimize contamination. All bottles were rinsed three times with the source water (*i.e.* the same water the bottle was filled with) prior to water collection. To minimize trace metals contamination from the filters, filters were rinsed three times with source water prior filling the bottles.

As part of a Quality Assurance/Quality Control (QA/QC) program, travel blanks were used and field blanks and duplicates were collected. Travel blanks and field blanks were used to assess contamination from sample containers or other equipment used in the collection and handling of samples, and to detect other systematic or random errors from sampling through to analysis. Duplicates were collected in order to test the validity of sampling procedures and laboratory methodology.

Travel blanks were prepared by ALS and shipped along with the sample bottles. Bottles were filled with deionized water and preserved in the laboratory prior to shipment. Travel blank bottles remained completely sealed until they were returned to ETL for analysis. One set of travel blanks was used for each sampling event.

Field blanks were prepared in the field in the same environment in which the water samples were collected. Once in the field, field blank sample bottles were filled with deionized water and preserved. One set of field blanks was collected for each sampling event.

A disposable 45-µm Nalgene filter was submitted to the laboratory along with each sampling event. This "filter blank" is to ensure that possible metals introduced into the dissolved samples from the filtering process are accounted for.

Duplicates were prepared in the field in the same environment in which the original water samples were collected. One set of duplicates was collected for each sampling event; Twin Creek was the chosen site.

4.0 ANALYTICAL PROGRAM

Water samples were submitted to ALS in Edmonton, a laboratory accredited by the Canadian Association for Environmental Analytical Laboratories (CAEAL). Laboratory results and Quality Assurance and Quality Control (QA/QC) are included in Appendix A.

Water samples were analysed for total organic carbon, low-level nutrients and low-level routine water chemistry (major ions and physical parameters). Samples were also analyzed for total and dissolved metals at ultra-low level, unless there were too many suspended solids in the sample (turbidity greater than 1 NTU), then they were analyzed at low level. A list of specific parameters analysed and their respective detection limits are presented in Table 2.

TABLE 2: PARAMETER DETECTION LIMITS AND CCME GUIDELINES

PARAMETER	DETECTION LIMITS			UNITS
Major Ions/Nutrients/Inorganics				
Ammonia-N	0.005			mg/L
Chloride (Cl)	1			mg/L
Calcium (Ca)	0.5			mg/L
Magnesium (Mg)	0.1			mg/L
Potassium (K)	0.1			mg/L
Sodium (Na)	1			mg/L
Hardness (as CaCO3)	---			mg/L
Ion Balance	---			%
TDS (Calculated)	---			mg/L
Iron (Fe)	0.005			mg/L
Iron (Fe)	0.005			mg/L
Nitrate+Nitrite-N	0.006/0.1*			mg/L
Nitrate-N	0.006/0.1*			mg/L
Nitrite-N	0.002			mg/L
Alkalinity, Total (as CaCO3)	5			mg/L
Bicarbonate (HCO3)	5			mg/L
Carbonate (CO3)	5			mg/L
Conductivity (EC)	0.2			µS/cm
Hydroxide (OH)	5			mg/L
pH	0.1			pH
Phosphorus, Total	0.001			mg/L
Sulphate (SO4)	0.05/0.5**			mg/L
Total Organic Carbon	1			mg/L
Metals	***Ultra Low-level (Total and Dissolved)***	***Low-level (Total)***	***Low-level (Dissolved)***	
Aluminum (Al)	0.0003	0.02	0.01	mg/L
Antimony (Sb)	0.00003	0.0004	0.0004	mg/L
Arsenic (As)	0.00003	0.0004	0.0004	mg/L
Barium (Ba)	0.00005	0.0002	0.0001	mg/L
Beryllium (Be)	0.0002	0.001	0.0005	mg/L
Bismuth (Bi)	---	0.0001	0.00005	mg/L
Boron (B)	0.001	0.02	0.002	mg/L
Cadmium (Cd)	0.00005	0.0002	0.0001	mg/L
Calcium (Ca)	0.02	0.5	---	mg/L
Chromium (Cr)	0.00006	0.0008	0.0004	mg/L
Cobalt (Co)	0.0001	0.0002	0.0001	mg/L
Copper (Cu)	0.0006	0.001	0.0006	mg/L
Iron (Fe)	---	0.005	0.005	mg/L

PARAMETER	DETECTION LIMITS			UNITS
Lead (Pb)	0.00005	0.0001	0.0001	mg/L
Magnesium (Mg)	0.004	0.1	---	mg/L
Manganese (Mn)	0.0001	0.001	---	mg/L
Mercury (Hg)	0.00002	---	---	mg/L
Molybdenum (Mo)	0.00006	0.0001	0.0001	mg/L
Nickel (Ni)	0.00006	0.0002	0.0001	mg/L
Potassium (K)	0.02	0.1	---	mg/L
Selenium (Se)	0.0001	0.0004	0.0004	mg/L
Silver (Ag)	0.0001	0.0004	0.0002	mg/L
Sodium (Na)	0.005	1	---	mg/L
Strontium (Sr)	0.0001	0.0002	0.0001	mg/L
Thallium (Tl)	---	0.0001	0.00005	mg/L
Tin (Sn)	---	0.0004	0.0002	mg/L
Titanium (Ti)	---	0.005	0.0003	mg/L
Uranium (U)	0.00005	0.0001	0.0001	mg/L
Vanadium (V)	0.00005	0.0002	0.0001	mg/L
Zinc (Zn)	0.0008	0.004	0.002	mg/L

*Detection limit was 0.006 mg/L in May and June, 2006, and 0.1 mg/L in July and August, 2006

**Detection limit was 0.05 mg/L in May, June and August, 2006, and 0.5 mg/L in July 2006

Under some circumstances (mainly if low- rather than ultra-low analysis was performed on the sample), the detection limits are above the CCME Guideline. In this situation, if a concentration is reported as being below detection, it is not known whether or not the reported concentration is actually above or below the CCME guideline. For example, the CCME guideline for silver (Ag) is 0.0001 mg/L. The low-level detection limits for silver are 0.0004 mg/L and 0.0002 mg/L for total and dissolved, respectively. If silver fell below detection during low-level analysis, it could be above the 0.0001 mg/L CCME guideline, yet would go unseen.

5.0 QA/QC RESULTS AND DISCUSSIONS

5.1 QA/QC BLANKS

Three sets of QA/QC blanks are employed for each sampling event; travel, field and filter blanks. The travel and field blanks were analysed for total and dissolved ultra-low level metals, total organic carbon, low-level nutrients and low-level routine water chemistry; the filter blanks for dissolved ultra-low level metals. A summary of the metals found to be above detection limits are presented in Table 3. Comprehensive laboratory results and laboratory QA/QC reports are included in Appendix A.

TABLE 3: METALS ABOVE DETECTION LIMITS* FOR TAMERLANE QA/QC BLANKS, 2006

Sampling Event	Ultra-low Analysis	Travel Blanks	Field Blanks	Filter Blanks
17 May	Total	Antimony**	Antimony**, **calcium**, sodium**	n/a
	Dissolved	Antimony**, **lead**	Antimony**, calcium***, sodium**, zinc***	Aluminum, antimony, barium, calcium, chromium, magnesium, manganese, nickel, potassium, sodium, strontium, zinc
5 June	Total	Antimony**, **zinc**	**Aluminum**, antimony**, sodium**	n/a
	Dissolved	Antimony**	**Aluminum**, antimony**, sodium**, **zinc**	---
21 July	Total	Antimony**, **calcium**, **iron**, sodium**, **strontium**	**Aluminum**, antimony**, **barium**, **calcium**, **lead**, **magnesium**, **manganese**, sodium**, **strontium**, **zinc**	n/a
	Dissolved	Antimony**, sodium**, **zinc**	**Aluminum******, antimony**, **barium**, **calcium**, **magnesium**, **manganese**, sodium**, **strontium**, **zinc**	Aluminum, antimony, barium, calcium, chromium, manganese, nickel, sodium, strontium
18 August	Total	Antimony**	**---**	n/a
	Dissolved	Antimony**	**---**	---

*Above detection limits but not above CCME Guidelines **May have been introduced through deionized water. ***May have been introduced through the filter membrane (dissolved only). **Bolded** items may have been introduced through contamination. --- Not submitted

Levels of antimony, calcium, iron, sodium, strontium and zinc were detected in the total ultra-low level metals analysis. In the dissolved ultra-low level metals analysis concentrations of antimony, lead, sodium and zinc were found to be above the detection limit. The contaminants found in the travel blanks can be attributed to one or a combination of five sources: laboratory errors, preservatives, deionized water, bottles/containers, and filters.

Since ALS is an accredited laboratory with high standards of QA/QC, the likelihood of laboratory errors is very small. In addition, all preservatives used during this program were

used within the expiry date. ALS has indicated that occasionally, trace amounts of cations such as calcium, iron, potassium, magnesium, manganese and sodium, and trace metals such as aluminum, barium and strontium in the travel blanks can be present. In order to distinguish between the three remaining potential sources of the contamination, all deionized water used during this program was first analysed for ultra-low level metals in the laboratory prior its shipment and usage in the field by EBA. Past results of laboratory analyses on deionized water indicated that it has contained trace amounts of aluminum and antimony. Therefore, based on these analyses, the source of the trace amounts of aluminum and antimony found in the travel blanks may have been from the deionized water. The source of the lead and zinc in the total metals travel blank may be attributed to laboratory contamination. The source of the lead in the dissolved metals travel blank may either be from the filters that the laboratory uses when preparing the dissolved metals portion of the travel blank or may also be from contamination in the laboratory.

Since the main purpose of a field blank is to test for field contamination, all field blank results were compared to travel blank results. In the previous section, it was indicated that the deionized water used contained trace amounts of aluminum and antimony. Furthermore, field filters submitted to ETL for analysis of dissolved ultra-low level metals indicated that concentrations of aluminum, antimony, barium, calcium, chromium, magnesium, manganese, nickel, potassium, sodium, strontium and zinc were above the detection limits. Therefore, based on these analyses, the trace amounts of contamination found in the field blanks are mainly due to the bottles/containers and the filters that were used. The trace amounts of barium, magnesium, manganese, lead, strontium and zinc detected in the July field blank for total and dissolved ultra-low analysis may be explained by contamination introduced through a secondary processing of the field blanks while adding preservatives. Consequently, the contamination is specific to the field blanks and does not appear in the actual field samples.

5.2 DUPLICATES

Duplicates were collected during each sampling event and were analysed for total and dissolved ultra-low level metals (low level if too many suspended solids were present in the sample), total organic carbon, low-level nutrients and low-level routine water chemistry.

ALS performed a statistical analysis on the all the duplicate samples to determine if the duplicates were statistically the "same" as or "different" from the original samples. The results of the analysis indicated that in general the duplicates were the same as their original samples.

6.0 ANALYTICAL RESULTS AND DISCUSSIONS

Concentrations of most parameters tested were above laboratory detection limits but below existing federal (CCME) guideline criteria. Physical and chemical water quality parameters of the rivers and fens in the region of Pine Point are low, with the exception of aluminum,

chromium and iron. In 2005, metals were analyzed at trace low level and therefore detection levels differ from the 2006 ultra-low or low analyses, deeming the "below detection" results incomparable, but the absolute values can be compared. All other parameters are consistent with those of the 2005 water quality results. Physical parameters such as pH and electrical conductivity were similar to those of Twin Creek in 2005. Nutrient parameters such as nitrate and phosphorous were either below the detection limits or very low, which is also consistent with results from 2005. Ammonia concentrations were above the CCME guidelines of 0.00429 mg/L at Twin Creek in 2005 and 2006.

All year-to-year comparisons are for the Twin Creek station only, as it was the only site common between the two years of sampling. The values reported for 2005 are single values as there was only one sampling event in 2005. Average values reported for 2006 are averages of the four sampling events from Twin Creek. Where possible, Twin Creek concentrations from September 1979 reported by Beak Consultants Ltd (1980) are presented.

Chemical analytical results for the water sampling program at Tamerlane, Pine Point, are included in Tables 4, 5, 6 and 7. Average values of pH, turbidity, conductivity, ammonia, nitrate, total phosphorous and major ions are presented in Table 8.

TABLE 4: ANALYTICAL RESULTS OF TAMERLANE MAY 2006

Analyte	Field Blank	Filter Blank	Travel Blank	Fen Head	Fen Mid	Twin Creek	Twin Creek Duplicate	UNITS	Detection Limits			CCME Guideline *
									Ultra-Low Level (Total & Dissolved)	Low Level (Total)	Low Level (Dissolved)	
Major Ions, Nutrients and Inorganics												
Chloride (Cl)	1	---	<1	3	12	3	3	mg/L	1	---	---	---
Calcium (Ca)	<0.5	---	<0.5	78.9	38.9	47.2	47.6	mg/L	0.5	---	---	---
Potassium (K)	<0.1	---	<0.1	2.7	1.1	0.6	0.6	mg/L	0.1	---	---	---
Magnesium (Mg)	0.1	---	<0.1	21.7	11	11.2	11.4	mg/L	0.1	---	---	---
Sodium (Na)	<1	---	<1	3	8	4	4	mg/L	1	---	---	---
Ion Balance	Low EC	---	Low TDS	102	110	105	106	%	---	---	---	---
TDS (Calculated)	1	---	<1	291	156	166	167	mg/L	---	---	---	---
Hardness (as CaCO3)	<1	---	<1	286	142	164	166	mg/L	---	---	---	---
Nitrate+Nitrite-N	<0.006	---	<0.006	<0.006	<0.006	<0.006	<0.006	mg/L	0.006	---	---	---
Nitrate-N	<0.006	---	<0.006	<0.006	<0.006	<0.006	<0.006	mg/L	0.006	---	---	2.94[a]
Nitrite-N	<0.002	---	<0.002	0.004	0.002	<0.002	<0.002	mg/L	0.002	---	---	0.014[b]
Sulfate (SO4)	<0.05	---	<0.05	25.4	13.3	9.24	9.22	mg/L	0.05	---	---	---
pH	6	---	5.5	8.2	8.4	8.1	8.1	pH	0.1	---	---	6.5-9
Conductivity (EC)	1.2	---	0.8	527	293	314	314	µS/cm	0.2	---	---	---
Bicarbonate (HCO3)	<5	---	<5	317	142	184	185	mg/L	5	---	---	---
Carbonate (CO3)	<5	---	<5	<5	<5	<5	<5	mg/L	5	---	---	---
Hydroxide (OH)	<5	---	<5	<5	<5	<5	<5	mg/L	5	---	---	---
Alkalinity, Total (as CaCO3)	<5	---	<5	260	120	151	152	mg/L	5	---	---	---
Ammonia-N	<0.005	---	<0.005	0.009	0.017	0.009	0.007	mg/L	0.005	---	---	0.00429[c]
Phosphorus, Total	<0.001	---	<0.001	0.037	0.007	0.005	0.004	mg/L	0.001	---	---	---
Total Organic Carbon	<1	---	<1	32	24	20	20	mg/L	1	---	---	---
Total Metals												
Silver (Ag)	<0.0001	---	<0.0001	<0.0001	<0.0004	<0.0001	<0.0001	mg/L	0.0001	0.0004	---	0.0001
Aluminum (Al)	<0.0003	---	<0.0003	0.0515	<0.02	0.0022	0.0022	mg/L	0.0003	0.02	---	0.005
Arsenic (As)	<0.00003	---	<0.00003	0.00101	<0.0004	0.00046	0.00046	mg/L	0.00003	0.0004	---	0.005
Boron (B)	<0.001	---	<0.001	0.016	<0.02	0.002	0.002	mg/L	0.001	0.02	---	---
Barium (Ba)	<0.00005	---	<0.00005	0.077	0.0229	0.0255	0.0256	mg/L	0.00005	0.0002	---	---
Beryllium (Be)	<0.0002	---	<0.0002	<0.0002	<0.001	<0.0002	<0.0002	mg/L	0.0002	0.001	---	---
Bismuth (Bi)	---	---	---	---	---	---	---	mg/L	0.00003	0.0001	---	---
Calcium (Ca)	0.02	---	<0.02	87.1	38.8	50.3	50	mg/L	0.02	0.5	---	---
Cadmium (Cd)	<0.00005	---	<0.00005	<0.00005	<0.0002	<0.00005	<0.00005	mg/L	0.00005	0.0002	---	0.000017
Cobalt (Co)	<0.0001	---	<0.0001	0.0001	<0.0002	<0.0001	<0.0001	mg/L	0.0001	0.0002	---	---
Chromium (Cr)	<0.00006	---	<0.00006	0.00588	0.001	0.00358	0.00331	mg/L	0.00006	0.0008	---	0.001
Copper (Cu)	<0.0006	---	<0.0006	0.0009	<0.001	<0.0006	<0.0006	mg/L	0.0006	0.001	---	0.002
Iron (Fe)	<0.005	---	<0.005	0.115	0.024	0.016	0.017	mg/L	0.005	0.005	---	0.3
Mercury (Hg)	<0.00002	---	<0.00002	<0.00002	---	<0.00002	<0.00002	mg/L	0.00002	---	---	0.000026[d]
Potassium (K)	<0.02	---	<0.02	2.94	1.2	0.79	0.8	mg/L	0.02	0.1	---	---
Magnesium (Mg)	<0.004	---	<0.004	25.8	11	12.8	12.8	mg/L	0.004	0.1	---	---
Manganese (Mn)	<0.0001	---	<0.0001	0.0548	0.007	0.0009	0.0009	mg/L	0.0001	0.001	---	---
Molybdenum (Mo)	<0.00006	---	<0.00006	0.00034	<0.0001	<0.00006	<0.00006	mg/L	0.00006	0.0001	---	0.073
Sodium (Na)	0.123	---	<0.005	3.33	7	3.98	3.96	mg/L	0.005	1	---	---
Nickel (Ni)	<0.00006	---	<0.00006	<0.00006	<0.0002	<0.00006	<0.00006	mg/L	0.00006	0.0002	---	0.025
Lead (Pb)	<0.00005	---	<0.00005	0.00019	<0.0001	<0.00005	<0.00005	mg/L	0.00005	0.0001	---	0.001
Antimony (Sb)	0.00013	---	0.0001	0.00029	<0.0004	0.00017	0.00013	mg/L	0.00003	0.0004	---	-
Selenium (Se)	<0.0001	---	<0.0001	0.0002	<0.0004	<0.0001	<0.0001	mg/L	0.0001	0.0004	---	0.001
Strontium (Sr)	<0.0001	---	<0.0001	0.489	0.0928	0.101	0.101	mg/L	0.0001	0.0002	---	---
Tin (Sn)	---	---	---	---	<0.0004	---	---	mg/L	0.0001	0.0004	---	---
Titanium (Ti)	---	---	---	---	<0.005	---	---	mg/L	0.005	0.005	---	---
Thallium (Tl)	---	---	---	---	<0.0001	---	---	mg/L	0.0001	0.0001	---	---
Uranium (U)	<0.00005	---	<0.00005	0.00085	<0.0001	0.00012	0.00012	mg/L	0.00005	0.0001	---	---
Vanadium (V)	<0.00005	---	<0.00005	0.00027	<0.0002	<0.00005	<0.00005	mg/L	0.00005	0.0002	---	---
Zinc (Zn)	<0.0008	---	<0.0008	0.0022	<0.004	0.0009	0.001	mg/L	0.0008	0.004	---	0.03
Dissolved Metals												
Silver (Ag)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001	---	---	0.0001
Aluminum (Al)	<0.0003	0.0006	<0.0003	0.005	0.0047	0.0013	0.0014	mg/L	0.0003	---	---	0.005
Arsenic (As)	<0.00003	<0.00003	<0.00003	0.00096	0.0004	0.00046	0.00048	mg/L	0.00003	---	---	0.005
Boron (B)	<0.001	<0.001	<0.001	0.013	0.002	0.002	0.002	mg/L	0.001	---	---	---
Barium (Ba)	<0.00005	0.00008	<0.00005	0.0756	0.0225	0.0256	0.026	mg/L	0.00005	---	---	---
Beryllium (Be)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	mg/L	0.0002	---	---	---
Bismuth (Bi)	---	---	---	---	---	---	---	mg/L	0.00003	---	---	---
Calcium (Ca)	0.04	0.2	<0.02	84.6	41.3	50.8	51	mg/L	0.02	---	---	---
Cadmium (Cd)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	0.00005	---	---	0.000017
Cobalt (Co)	<0.0001	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001	---	---	---
Chromium (Cr)	<0.00006	0.00012	<0.00006	0.00532	0.00255	0.00355	0.00354	mg/L	0.00006	---	---	0.001
Copper (Cu)	<0.0006	<0.0006	<0.0006	0.0008	<0.0006	<0.0006	<0.0006	mg/L	0.0006	---	---	0.002
Iron (Fe)	<0.005	<0.005	<0.005	0.075	0.015	0.015	0.014	mg/L	0.005	---	---	0.3
Mercury (Hg)	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	mg/L	0.00002	---	---	0.000026[d]
Potassium (K)	<0.02	0.02	<0.02	2.72	1.3	0.79	0.8	mg/L	0.02	---	---	---
Magnesium (Mg)	<0.004	0.005	<0.004	24.2	12.7	12.9	13.2	mg/L	0.004	---	---	---
Manganese (Mn)	<0.0001	0.0002	<0.0001	0.0602	0.0042	0.0007	0.0007	mg/L	0.0001	---	---	---
Molybdenum (Mo)	<0.00006	<0.00006	<0.00006	0.00033	0.00007	<0.00006	<0.00006	mg/L	0.00006	---	---	0.073
Sodium (Na)	0.131	0.12	<0.005	3.09	8.45	3.97	4.06	mg/L	0.005	---	---	---
Nickel (Ni)	<0.00006	0.00048	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	mg/L	0.00006	---	---	0.025
Lead (Pb)	<0.00005	<0.00005	0.0001	0.00013	0.00008	<0.00005	<0.00005	mg/L	0.00005	---	---	0.001
Antimony (Sb)	0.00014	0.00018	0.00017	0.00022	0.00017	0.00011	0.00017	mg/L	0.00003	---	---	---
Selenium (Se)	<0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	mg/L	0.0001	---	---	0.001
Strontium (Sr)	<0.0001	0.0003	<0.0001	0.481	0.0885	0.101	0.103	mg/L	0.0001	---	---	---
Tin (Sn)	---	---	---	---	---	---	---	mg/L	0.0001	---	---	---
Uranium (U)	<0.00005	<0.00005	<0.00005	0.00087	<0.00005	0.00011	0.00012	mg/L	0.00005	---	---	---
Vanadium (V)	<0.00005	<0.00005	<0.00005	0.00019	<0.00005	<0.00005	<0.00005	mg/L	0.00005	---	---	---
Zinc (Zn)	0.0022	0.0069	<0.0008	0.0048	0.0026	0.0024	0.0026	mg/L	0.0008	---	---	0.03

Canadian Council of Ministers of the Environment - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (Oct. 2005).

Above (or Below - pH only) CCME Guidelines

[a] standard for nitrate [13mg/L(NO_3)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into ug/L.

[b] standard for nitrite [0.06mg/L(NO_2)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into ug/L.

[c] standard for ammonia [0.019mg/L(NH_4)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into ug/L.

[d] standard for inorganic Hg, (results expressed as total or dissolved Hg).

TABLE 5: ANALYTICAL RESULTS OF TAMERLANE JUNE 2006

Analyte	Field Blank	Travel Blank	Fen Head	Fen Mid	Twin Creek	Twin Creek Duplicate	UNITS	Detection Limits			CCME Guideline *
								Ultra-Low Level (Total & Dissolved)	Low Level (Total)	Low Level (Dissolved)	
Major Ions, Nutrients and Inorganics											
Chloride (Cl)	<1	<1	3	14	3	4	mg/L	1	---	---	---
Calcium (Ca)	<0.5	<0.5	91.7	42.7	55.8	57.5	mg/L	0.5	---	---	---
Potassium (K)	<0.1	<0.1	2.4	1.1	0.6	0.6	mg/L	0.1	---	---	---
Magnesium (Mg)	<0.1	<0.1	25	13.8	14	14	mg/L	0.1	---	---	---
Sodium (Na)	<1	<1	3	8	4	5	mg/L	1	---	---	---
Ion Balance	Low EC	Low TDS	109	109	107	111	%	---	---	---	---
TDS (Calculated)	5	<1	318	174	194	196	mg/L	---	---	---	---
Hardness (as CaCO3)	<1	<1	332	163	197	201	mg/L	---	---	---	---
Nitrate+Nitrite-N	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	mg/L	0.006	---	---	---
Nitrate-N	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	mg/L	0.006	---	---	2.94[a]
Nitrite-N	<0.002	<0.002	0.004	0.002	<0.002	<0.002	mg/L	0.002	---	---	0.018[b]
Sulfate (SO4)	<0.05	<0.05	16.9	15	8.67	8.56	mg/L	0.05	---	---	---
pH	6	5.7	8.1	8.3	8.1	8.1	pH	0.1	---	---	6.5-9
Conductivity (EC)	1.3	1	355	319	354	351	µS/cm	0.2	---	---	---
Bicarbonate (HCO3)	10	<5	357	161	219	217	mg/L	5	---	---	---
Carbonate (CO3)	<5	<5	<5	<5	<5	<5	mg/L	5	---	---	---
Hydroxide (OH)	<5	<5	<5	<5	<5	<5	mg/L	5	---	---	---
Alkalinity, Total (as CaCO3)	9	<5	293	132	180	178	mg/L	5	---	---	---
Ammonia-N	<0.005	<0.005	0.023	0.03	0.028	0.028	mg/L	0.005	---	---	0.00429[c]
Phosphorus, Total	0.001	<0.001	0.037	0.007	0.005	0.005	mg/L	0.001	---	---	---
Total Organic Carbon	<1	<1	32	27	25	25	mg/L	1	---	---	---
Total Metals											
Silver (Ag)	<0.0001	<0.0001	<0.0004	<0.0004	<0.0001	<0.0001	mg/L	0.0001	0.0004	---	0.0001
Aluminum (Al)	0.0003	<0.0003	0.05	<0.02	0.0033	0.0027	mg/L	0.0003	0.02	---	0.005
Arsenic (As)	<0.00003	<0.00003	0.0011	0.0005	0.00046	0.00044	mg/L	0.00003	0.0004	---	0.005
Boron (B)	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	mg/L	0.001	0.02	---	---
Barium (Ba)	<0.00005	<0.00005	0.0899	0.024	0.027	0.0271	mg/L	0.00005	0.0002	---	---
Beryllium (Be)	<0.0002	<0.0002	<0.001	<0.001	<0.0002	<0.0002	mg/L	0.0002	0.001	---	---
Bismuth (Bi)	---	---	<0.0001	<0.0001	---	---	mg/L	0.00003	0.0001	---	---
Calcium (Ca)	<0.02	<0.02	98.8	40.9	52.3	51.5	mg/L	0.02	0.5	---	---
Cadmium (Cd)	<0.00005	<0.00005	<0.0002	<0.0002	<0.00005	<0.00005	mg/L	0.00005	0.0002	---	0.000017
Cobalt (Co)	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	mg/L	0.0001	0.0002	---	---
Chromium (Cr)	<0.00006	<0.00006	0.0014	0.0014	0.0002	0.00018	mg/L	0.00006	0.0008	---	0.001
Copper (Cu)	<0.0006	<0.0006	<0.001	<0.001	<0.0006	<0.0006	mg/L	0.0006	0.001	---	0.002
Iron (Fe)	<0.005	<0.005	0.178	0.019	0.025	0.026	mg/L	0.005	0.005	---	0.3
Mercury (Hg)	0.00002	<0.00002	---	---	<0.00002	<0.00002	mg/L	0.00002	---	---	0.000026[d]
Potassium (K)	<0.02	<0.02	3.3	1.2	0.55	0.54	mg/L	0.02	0.1	---	---
Magnesium (Mg)	<0.004	<0.004	26.9	12.8	13	13.3	mg/L	0.004	0.1	---	---
Manganese (Mn)	<0.0001	<0.0001	0.181	0.007	0.0016	0.0019	mg/L	0.0001	0.001	---	---
Molybdenum (Mo)	<0.00006	<0.00006	0.0002	<0.0001	<0.00006	<0.00006	mg/L	0.00006	0.0001	---	0.073
Sodium (Na)	0.117	<0.005	4	9	4.09	4.19	mg/L	0.005	1	---	---
Nickel (Ni)	<0.00006	<0.00006	<0.0002	<0.0002	<0.00006	<0.00006	mg/L	0.00006	0.0002	---	0.025
Lead (Pb)	<0.00005	<0.00005	0.0003	0.0001	<0.00005	<0.00005	mg/L	0.00005	0.0001	---	0.001
Antimony (Sb)	0.00022	0.00021	0.0005	<0.0004	0.0002	0.00017	mg/L	0.00003	0.0004	---	---
Selenium (Se)	<0.0001	<0.0001	0.0009	<0.0004	<0.0001	<0.0001	mg/L	0.0001	0.0004	---	0.001
Strontium (Sr)	<0.0001	<0.0001	0.582	0.11	0.112	0.11	mg/L	0.0001	0.0002	---	---
Tin (Sn)	---	---	<0.0004	<0.0004	---	---	mg/L	0.0001	0.0004	---	---
Titanium (Ti)	---	---	<0.005	<0.005	---	---	mg/L	0.005	0.005	---	---
Thallium (Tl)	---	---	<0.0001	<0.0001	---	---	mg/L	0.0001	0.0001	---	---
Uranium (U)	<0.00005	<0.00005	0.0006	<0.0001	0.00013	0.00013	mg/L	0.00005	0.0001	---	---
Vanadium (V)	<0.00005	<0.00005	0.0004	<0.0002	0.00006	0.00006	mg/L	0.00005	0.0002	---	---
Zinc (Zn)	<0.0008	0.0011	<0.004	<0.004	<0.0008	<0.0008	mg/L	0.0008	0.004	---	0.03
Dissolved Metals											
Silver (Ag)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001	---	---	0.0001
Aluminum (Al)	<0.0003	<0.0003	0.003	0.0041	0.0011	0.001	mg/L	0.0003	---	---	0.005
Arsenic (As)	<0.00003	<0.00003	0.00077	0.00042	0.00045	0.00044	mg/L	0.00003	---	---	0.005
Boron (B)	<0.001	<0.001	0.01	0.002	<0.001	<0.001	mg/L	0.001	---	---	---
Barium (Ba)	<0.00005	<0.00005	0.0821	0.0227	0.0273	0.0264	mg/L	0.00005	---	---	---
Beryllium (Be)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	mg/L	0.0002	---	---	---
Bismuth (Bi)	---	---	---	---	---	---	mg/L	0.00003	---	---	---
Calcium (Ca)	0.03	<0.02	85.7	39.6	52.5	51.5	mg/L	0.02	---	---	---
Cadmium (Cd)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	0.00005	---	---	0.000017
Cobalt (Co)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001	---	---	---
Chromium (Cr)	<0.00006	<0.00006	0.00038	0.00023	0.00008	0.00024	mg/L	0.00006	---	---	0.001
Copper (Cu)	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	mg/L	0.0006	---	---	0.002
Iron (Fe)	<0.005	<0.005	0.097	0.013	0.023	0.023	mg/L	0.005	---	---	0.3
Mercury (Hg)	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	mg/L	0.00002	---	---	0.000026[d]
Potassium (K)	<0.02	<0.02	2.71	1.18	0.54	0.53	mg/L	0.02	---	---	---
Magnesium (Mg)	<0.004	<0.004	24.7	13.4	12.8	13	mg/L	0.004	---	---	---
Manganese (Mn)	<0.0001	<0.0001	0.151	0.0055	0.0012	0.0012	mg/L	0.0001	---	---	---
Molybdenum (Mo)	<0.00006	<0.00006	0.00016	<0.00006	<0.00006	<0.00006	mg/L	0.00006	---	---	0.073
Sodium (Na)	0.124	<0.005	2.98	8.62	4.04	4.13	mg/L	0.005	---	---	---
Nickel (Ni)	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	<0.00006	mg/L	0.00006	---	---	0.025
Lead (Pb)	<0.00005	<0.00005	0.00008	0.00006	<0.00005	<0.00005	mg/L	0.00005	---	---	0.001
Antimony (Sb)	0.00038	0.00058	0.00035	0.00042	0.00014	0.00011	mg/L	0.00003	---	---	---
Selenium (Se)	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	<0.0001	mg/L	0.0001	---	---	0.001
Strontium (Sr)	<0.0001	<0.0001	0.513	0.0984	0.113	0.111	mg/L	0.0001	---	---	---
Tin (Sn)	---	---	---	---	---	---	mg/L	0.0001	---	---	---
Uranium (U)	<0.00005	<0.00005	0.00051	<0.00005	0.00012	0.00012	mg/L	0.00005	---	---	---
Vanadium (V)	<0.00005	<0.00005	0.0001	<0.00005	0.00005	0.00005	mg/L	0.00005	---	---	---
Zinc (Zn)	0.0013	<0.0008	0.0032	0.0021	0.0021	0.002	mg/L	0.0008	---	---	0.03

Canadian Council of Ministers of the Environment - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (Oct. 2005).

Above (or Below - pH only) CCME Guidelines

[a] standard for nitrate [13mg/L(NO3)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into ug/L.

[b] standard for nitrite [0.06mg/L(NO$_2$)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into ug/L.

[c] standard for ammonia [0.019mg/L(NH$_3$)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into ug/L.

[d] standard for inorganic Hg, (results expressed as total or dissolved Hg).

TABLE 6: ANALYTICAL RESULTS OF TAMERLANE JULY 2006

Analyte	Field Blank	Filter Blank	Travel Blank	Fen Head	Fen Mid	Twin Creek	Twin Creek Duplicate	UNITS	Detection Limits			CCME Guideline *
									Ultra-Low Level (Total & Dissolved)	Low Level (Total)	Low Level (Dissolved)	
Major Ions, Nutrients and Inorganics												
Chloride (Cl)	<1	---	<1	5	25	5	5	mg/L	1	---	---	---
Calcium (Ca)	0.7	---	<0.5	133	41.5	78.2	77.8	mg/L	0.5	---	---	---
Potassium (K)	<0.5	---	<0.5	4.8	1.5	<0.5	<0.5	mg/L	0.5	---	---	---
Magnesium (Mg)	<0.1	---	<0.1	37.8	19.5	19.9	19.6	mg/L	0.1	---	---	---
Sodium (Na)	<1	---	<1	6	15	6	6	mg/L	1	---	---	---
Ion Balance	Low EC	---	Low TDS	102	110	103	102	%	---	---	---	---
TDS (Calculated)	1	---	<1	483	211	276	274	mg/L	---	---	---	---
Hardness (as CaCO3)	2	---	<1	488	184	277	275	mg/L	---	---	---	---
Nitrate+Nitrite-N	<0.1	---	<0.1	<0.1	<0.1	<0.1	<0.1	mg/L	0.1	---	---	---
Nitrate-N	<0.1	---	<0.1	<0.1	<0.1	<0.1	<0.1	mg/L	0.1	---	---	2.94[a]
Nitrite-N	<0.05	---	<0.05	<0.05	<0.05	<0.05	<0.05	mg/L	0.05	---	---	0.018[b]
Sulfate (SO4)	0.6	---	<0.5	6.3	26.5	3.8	3.9	mg/L	0.5	---	---	---
pH	6.7	---	5.8	8.3	8.3	8.2	8.2	pH	0.1	---	---	6.5-9
Conductivity (EC)	3.8	---	1	791	374	476	479	µS/cm	0.2	---	---	---
Bicarbonate (HCO3)	<5	---	<5	591	166	330	330	mg/L	5	---	---	---
Carbonate (CO3)	<5	---	<5	<5	<5	<5	<5	mg/L	5	---	---	---
Hydroxide (OH)	<5	---	<5	<5	<5	<5	<5	mg/L	5	---	---	---
Alkalinity, Total (as CaCO3)	<5	---	<5	484	137	271	270	mg/L	5	---	---	---
Ammonia-N	<0.005	---	<0.005	0.042	0.052	0.029	0.032	mg/L	0.005	---	---	0.00429[c]
Phosphorus, Total		---	---	---	---	---	---	mg/L	0.001	---	---	---
Total Organic Carbon	<1	---	<1	57	45	32	33	mg/L	1	---	---	---
Total Metals												
Silver (Ag)	<0.0001	---	<0.0001	<0.0004	<0.0004	<0.0004	<0.0004	mg/L	0.0001	0.0004	---	0.0001
Aluminum (Al)	0.037	---	<0.0003	0.03	<0.02	0.09	0.02	mg/L	0.0003	0.02	---	0.005
Arsenic (As)	<0.00003	---	<0.00003	0.0018	0.0008	0.0011	0.0011	mg/L	0.00003	0.0004	---	0.005
Boron (B)	<0.001	---	<0.001	0.03	<0.02	<0.02	<0.02	mg/L	0.001	0.02	---	---
Barium (Ba)	0.00044	---	<0.00005	0.143	0.026	0.0374	0.0336	mg/L	0.00005	0.0002	---	---
Beryllium (Be)	<0.0002	---	<0.0002	<0.001	<0.001	<0.001	<0.001	mg/L	0.0002	0.001	---	---
Bismuth (Bi)		---		<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.00003	0.0001	---	---
Calcium (Ca)	0.57	---	0.37	127	40.3	76.9	76.2	mg/L	0.02	0.5	---	---
Cadmium (Cd)	<0.00005	---	<0.00005	<0.0002	<0.0002	<0.0002	<0.0002	mg/L	0.00005	0.0002	---	0.000017
Cobalt (Co)	<0.0001	---	<0.0001	0.0004	<0.0002	<0.0002	<0.0002	mg/L	0.0001	0.0002	---	---
Chromium (Cr)	<0.00006	---	<0.00006	0.0009	0.0029	0.0034	0.0035	mg/L	0.00006	0.0008	---	0.001
Copper (Cu)	<0.0006	---	<0.0006	<0.001	<0.001	<0.001	<0.001	mg/L	0.0006	0.001	---	0.002
Iron (Fe)	<0.005	---	0.013	0.556	0.019	0.351	0.166	mg/L	0.005	0.005	---	0.3
Mercury (Hg)	<0.00002	---	<0.00002	---	---	---	---	mg/L	0.00002	---	---	0.000026[d]
Potassium (K)	<0.02	---	<0.02	5	1.6	0.4	0.3	mg/L	0.02	0.1	---	---
Magnesium (Mg)	0.007	---	<0.004	35.5	19	18.6	18.9	mg/L	0.004	0.1	---	---
Manganese (Mn)	0.0004	---	<0.0001	0.351	0.011	0.17	0.081	mg/L	0.0001	0.001	---	---
Molybdenum (Mo)	<0.00006	---	<0.00006	0.0003	<0.0001	<0.0001	<0.0001	mg/L	0.00006	0.0001	---	0.073
Sodium (Na)	0.093	---	0.006	6	14	6	6	mg/L	0.005	1	---	---
Nickel (Ni)	<0.00006	---	<0.00006	<0.0002	<0.0002	<0.0002	<0.0002	mg/L	0.00006	0.0002	---	0.025
Lead (Pb)	0.00006	---	<0.00005	0.0005	0.0001	<0.0001	<0.0001	mg/L	0.00005	0.0001	---	0.001
Antimony (Sb)	0.00019	---	0.00013	<0.0004	<0.0004	<0.0004	<0.0004	mg/L	0.00003	0.0004	---	---
Selenium (Se)	<0.0001	---	<0.0001	0.001	<0.0004	<0.0004	<0.0004	mg/L	0.0001	0.0004	---	0.001
Strontium (Sr)	0.0006	---	0.0002	0.812	0.135	0.177	0.176	mg/L	0.0001	0.0002	---	---
Tin (Sn)	---	---	---	<0.0004	<0.0004	<0.0004	<0.0004	mg/L	0.0001	0.0004	---	---
Titanium (Ti)	---	---	---	<0.005	<0.005	<0.005	<0.005	mg/L	---	0.005	---	---
Thallium (Tl)	---	---	---	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	---	0.0001	---	---
Uranium (U)	<0.00005	---	<0.00005	0.001	<0.0001	0.0002	0.0002	mg/L	0.00005	0.0001	---	---
Vanadium (V)	<0.00005	---	<0.00005	0.0003	0.0004	0.0004	0.0002	mg/L	0.00005	0.0002	---	---
Zinc (Zn)	0.0012	---	<0.0008	0.007	0.005	0.005	0.015	mg/L	0.0008	0.004	---	0.03
Dissolved Metals												
Silver (Ag)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001	---	---	0.0001
Aluminum (Al)	0.0276	0.0004	0.0004	0.0049	0.0094	0.001	0.0011	mg/L	0.0003	---	---	0.005
Arsenic (As)	<0.00003	<0.00003	<0.00003	0.0017	0.00067	0.00122	0.00122	mg/L	0.00003	---	---	0.005
Boron (B)	<0.001	<0.001	<0.001	0.023	0.012	0.006	0.006	mg/L	0.001	---	---	---
Barium (Ba)	0.00038	0.00008	<0.00005	0.136	0.0245	0.0306	0.0312	mg/L	0.00005	---	---	---
Beryllium (Be)	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	mg/L	0.0002	---	---	---
Bismuth (Bi)	---	---	---	---	---	---	---	mg/L	0.00003	---	---	---
Calcium (Ca)	0.6	0.13	<0.02	153	41.2	79.9	83.6	mg/L	0.02	---	---	---
Cadmium (Cd)	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	0.00005	---	---	0.000017
Cobalt (Co)	<0.0001	<0.0001	<0.0001	0.0005	<0.0001	<0.0001	<0.0001	mg/L	0.0001	---	---	---
Chromium (Cr)	<0.00006	0.00018	<0.00006	<0.00006	0.00193	0.00449	0.00434	mg/L	0.00006	---	---	0.001
Copper (Cu)	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	<0.0006	mg/L	0.0006	---	---	0.002
Iron (Fe)	<0.005	<0.005	<0.005	0.308	0.01	0.044	0.044	mg/L	0.005	---	---	0.3
Mercury (Hg)	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	mg/L	0.00002	---	---	0.000026[d]
Potassium (K)	<0.02	<0.02	<0.02	5.5	1.56	0.29	0.3	mg/L	0.02	---	---	---
Magnesium (Mg)	0.007	<0.004	<0.004	42.1	20.6	21	21.2	mg/L	0.004	---	---	---
Manganese (Mn)	0.0004	0.0001	<0.0001	0.382	0.0099	0.0104	0.0105	mg/L	0.0001	---	---	---
Molybdenum (Mo)	<0.00006	<0.00006	<0.00006	0.00032	0.00009	0.00008	0.00008	mg/L	0.00006	---	---	0.073
Sodium (Na)	0.106	0.102	0.005	6.38	15.5	6.13	6.17	mg/L	0.005	---	---	---
Nickel (Ni)	0.0001	0.00034	<0.00006	0.00013	<0.00006	<0.00006	<0.00006	mg/L	0.00006	---	---	0.025
Lead (Pb)	<0.00005	<0.00005	<0.00005	0.00022	0.00006	<0.00005	<0.00005	mg/L	0.00005	---	---	0.001
Antimony (Sb)	0.00018	0.00054	0.00021	0.00025	0.00019	0.00021	0.00021	mg/L	0.00003	---	---	---
Selenium (Se)	<0.0001	<0.0001	<0.0001	0.0005	0.0003	0.0002	0.0002	mg/L	0.0001	---	---	0.001
Strontium (Sr)	0.0006	0.0003	<0.0001	0.812	0.133	0.168	0.17	mg/L	0.0001	---	---	---
Tin (Sn)	---	---	---	---	---	---	---	mg/L	0.0001	---	---	---
Uranium (U)	<0.00005	<0.00005	<0.00005	0.00112	<0.00005	0.00015	0.00015	mg/L	0.00005	---	---	---
Vanadium (V)	<0.00005	<0.00005	<0.00005	0.00027	0.0001	0.00019	0.00019	mg/L	0.00005	---	---	---
Zinc (Zn)	0.0023	0.0042	0.0017	0.0064	0.0052	0.0075	0.0079	mg/L	0.0008	---	---	0.03

Canadian Council of Ministers of the Environment - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (Oct. 2005).

Above (or Below - pH only) CCME Guidelines

[a] standard for nitrate [13mg/L(NO3)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into ug/L.

[b] standard for nitrite [0.06mg/L(NQ)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into ug/L.

[c] standard for ammonia [0.019mg/L(NH3)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into ug/L.

[d] standard for inorganic Hg, (results expressed as total or dissolved Hg).

TABLE 7: ANALYTICAL RESULTS OF TAMERLANE AUGUST 2006

Analyte	Field Blank	Travel Blank	Fen Head	Fen Mid	Twin Creek	Twin Creek Duplicate	Groundwater (R190)	UNITS	Detection Limits			CCME Guideline *
									Ultra-Low Level (Total & Dissolved)	Low Level (Total)	Low Level (Dissolved)	
Major Ions, Nutrients and Inorganics												
Chloride (Cl)	<1	<1	3	25	9	9	155	mg/L	1	---	---	---
Calcium (Ca)	<0.5	<0.5	96.6	96.3	44	42.3	20.7	mg/L	0.5	---	---	---
Potassium (K)	<0.5	<0.5	<0.5	1.7	<0.5	0.6	8.4	mg/L	0.5	---	---	---
Magnesium (Mg)	<0.1	<0.1	26.4	29.8	20	19.3	15.2	mg/L	0.1	---	---	---
Sodium (Na)	<1	<1	3	15	9	8	222	mg/L	1	---	---	---
Ion Balance	Low TDS	Low TDS	105	104	109	107	107	%	---	---	---	---
TDS (Calculated)	<1	<1	334	389	195	185	663	mg/L	---	---	---	---
Hardness (as CaCO3)	<1	<1	350	363	192	185	114	mg/L	---	---	---	---
Nitrate+Nitrite-N	<0.1	<0.1	0.1	<0.1	0.1	<0.1	0.2	mg/L	0.1	---	---	---
Nitrate-N	<0.1	<0.1	0.1	<0.1	0.1	<0.1	0.2	mg/L	0.1	---	---	2.94[a]
Nitrite-N	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/L	0.05	---	---	0.018[b]
Sulfate (SO4)	<0.5	<0.5	7.9	32.5	6.5	---	64.9	mg/L	0.5	---	---	---
pH	6.4	5.7	7.9	8	8.3	8.3	7.8	pH	0.1	---	---	6.5-9
Conductivity (EC)	1.9	1	553	643	307	308	1150	µS/cm	0.2	---	---	---
Bicarbonate (HCO3)	<5	<5	399	383	214	216	357	mg/L	5	---	---	---
Carbonate (CO3)	<5	<5	<5	<5	<5	<5	<5	mg/L	5	---	---	---
Hydroxide (OH)	<5	<5	<5	<5	<5	<5	<5	mg/L	5	---	---	---
Alkalinity, Total (as CaCO3)	<5	<5	327	314	176	177	293	mg/L	5	---	---	---
Ammonia-N	<0.005	<0.005	0.053	0.038	0.036	0.034	3.8	mg/L	0.005	---	---	0.00429[c]
Phosphorus, Total	---	---	---	---	---	---	---	mg/L	---	---	---	---
Total Organic Carbon	<1	<1	44	26	29	31	95	mg/L	1	---	---	---
Total Metals												
Silver (Ag)	<0.0001	<0.0001	<0.0004	<0.0004	<0.0001	<0.0001	<0.0004	mg/L	0.0001	0.0004	---	0.0001
Aluminum (Al)	0.0041	<0.0003	0.06	0.06	0.0087	0.0097	0.07	mg/L	0.0003	0.02	---	0.005
Arsenic (As)	<0.00003	<0.00003	0.0008	0.0004	0.00087	0.00085	<0.0004	mg/L	0.00003	0.0004	---	0.005
Boron (B)		<0.001	<0.02	<0.02	0.007	0.007	0.04	mg/L	0.001	0.02	---	---
Barium (Ba)	<0.001	<0.00005	0.124	0.0858	0.021	0.0206	0.0107	mg/L	0.00005	0.0002	---	---
Beryllium (Be)	<0.0002	<0.0002	<0.001	<0.001	<0.0002	<0.0002	<0.001	mg/L	0.0002	0.001	---	---
Bismuth (Bi)	---	---	<0.0001	<0.0001	---	---	<0.0001	mg/L	---	0.0001	---	---
Calcium (Ca)	0.05	<0.02	90.3	87	42.4	41.5	19	mg/L	0.02	0.5	---	---
Cadmium (Cd)	<0.00005	<0.00005	<0.0002	<0.0002	<0.00005	<0.00005	<0.0002	mg/L	0.00005	0.0002	---	0.000017
Cobalt (Co)	<0.0001	<0.0001	<0.0002	<0.0002	<0.0001	<0.0001	<0.0002	mg/L	0.0001	0.0002	---	---
Chromium (Cr)	<0.00006	<0.00006	0.0015	0.0009	0.00092	0.00097	0.0009	mg/L	0.00006	0.0008	---	0.001
Copper (Cu)	<0.0006	<0.0006	<0.001	<0.001	<0.0006	<0.0006	0.002	mg/L	0.0006	0.001	---	0.002
Iron (Fe)	<0.005	<0.005	0.379	0.379	0.085	0.091	15.5	mg/L	0.005	0.005	---	0.3
Mercury (Hg)	<0.00002	<0.00002	---	---	<0.00002	<0.00002	---	mg/L	0.00002	---	---	0.000026[d]
Potassium (K)	<0.02	<0.02	0.6	1.8	0.56	0.54	8.4	mg/L	0.02	0.1	---	---
Magnesium (Mg)	<0.004	<0.004	23.3	25.2	20	19.1	12.8	mg/L	0.004	0.1	---	---
Manganese (Mn)	<0.0001	<0.0001	0.806	0.088	0.0305	0.0314	2.2	mg/L	0.0001	0.001	---	---
Molybdenum (Mo)	<0.00006	<0.00006	<0.0001	0.0004	<0.00006	<0.00006	0.0002	mg/L	0.00006	0.0001	---	0.073
Sodium (Na)	0.355	<0.005	3	14	8.39	8.07	209	mg/L	0.005	1	---	-
Nickel (Ni)	<0.00006	<0.00006	<0.0002	<0.0002	<0.00006	<0.00006	0.0002	mg/L	0.00006	0.0002	---	0.025
Lead (Pb)	---	<0.00005	0.0006	0.0004	<0.00005	<0.00005	0.0276	mg/L	0.00005	0.0001	---	0.001
Antimony (Sb)	0.00022	0.0002	<0.0004	<0.0004	0.00025	0.00021	0.0005	mg/L	0.00003	0.0004	---	---
Selenium (Se)	<0.0001	<0.0001	0.0005	0.0005	<0.0001	<0.0001	0.0012	mg/L	0.0001	0.0004	---	0.001
Strontium (Sr)	---	<0.0001	0.417	0.231	0.133	0.128	1.64	mg/L	0.0001	0.0002	---	---
Tin (Sn)	---	---	<0.0004	<0.0004	---	---	<0.0004	mg/L	---	0.0004	---	---
Titanium (Ti)	---	---	<0.005	<0.005	---	---	<0.005	mg/L	---	0.005	---	---
Thallium (Tl)	---	---	<0.0001	<0.0001	---	---	<0.0001	mg/L	---	0.0001	---	---
Uranium (U)	<0.00005	<0.00005	0.0001	0.0011	0.00014	0.00014	0.0001	mg/L	0.00005	0.0001	---	---
Vanadium (V)	<0.00005	<0.00005	0.0006	0.0008	0.00007	0.00008	<0.002	mg/L	0.00005	0.0002	---	---
Zinc (Zn)	<0.0008	<0.0008	0.005	0.015	<0.0008	<0.0008	0.008	mg/L	0.0008	0.004	---	0.03
Dissolved Metals												
Silver (Ag)	<0.0001	<0.0001	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	mg/L	0.0001	---	0.0002	0.0001
Aluminum (Al)	0.0006	<0.0003	<0.01	<0.01	<0.01	<0.01	<0.01	mg/L	0.0003	---	0.01	0.005
Arsenic (As)	<0.00003	<0.00003	0.0006	0.0004	0.0008	0.0008	<0.0004	mg/L	0.00003	---	0.0004	0.005
Boron (B)	<0.001	<0.001	0.012	0.014	0.005	0.005	0.045	mg/L	0.001	---	0.002	---
Barium (Ba)	<0.00005	<0.00005	0.0916	0.0721	0.021	0.021	0.0075	mg/L	0.00005	---	0.0001	---
Beryllium (Be)	<0.0002	<0.0002	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	mg/L	0.0002	---	0.0005	---
Bismuth (Bi)	---	---	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	0.00003	---	0.00005	---
Calcium (Ca)	0.02	<0.02	---	---	---	---	---	mg/L	0.02	---	---	---
Cadmium (Cd)	<0.00005	<0.00005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.00005	---	0.0001	0.000017
Cobalt (Co)	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001	---	0.0001	---
Chromium (Cr)	<0.00006	<0.00006	0.0016	0.001	0.0013	0.0012	0.0014	mg/L	0.00006	---	0.0004	0.001
Copper (Cu)	<0.0006	<0.0006	0.0007	0.0006	<0.0006	0.001	0.0012	mg/L	0.0006	---	0.0006	0.002
Iron (Fe)	<0.005	<0.005	0.054	0.051	0.007	0.006	<0.005	mg/L	0.005	---	0.005	0.3
Mercury (Hg)	<0.00002	<0.00002	---	---	---	---	---	mg/L	0.00002	---	---	0.000026[d]
Potassium (K)	<0.02	<0.02	---	---	---	---	---	mg/L	0.02	---	---	---
Magnesium (Mg)	<0.004	<0.004	---	---	---	---	---	mg/L	0.004	---	---	---
Manganese (Mn)	<0.0001	<0.0001	0.001	<0.001	<0.001	<0.001	1.74	mg/L	0.0001	---	0.001	---
Molybdenum (Mo)	<0.00006	<0.00006	<0.0001	0.0004	<0.0001	<0.0001	<0.0001	mg/L	0.00006	---	0.0001	0.073
Sodium (Na)	0.374	<0.005	---	---	---	---	---	mg/L	0.005	---	---	---
Nickel (Ni)	<0.00006	<0.00006	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.00006	---	0.0001	0.025
Lead (Pb)	<0.00005	<0.00005	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.00005	---	0.0001	0.001
Antimony (Sb)	0.00012	0.00013	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	mg/L	0.00003	---	0.0004	---
Selenium (Se)	<0.0001	<0.0001	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	mg/L	0.0001	---	0.0004	0.001
Strontium (Sr)	<0.0001	<0.0001	0.408	0.227	0.135	0.135	1.59	mg/L	0.0001	---	0.0001	---
Tin (Sn)	---	---	<0.0002	<0.0002	<0.0002	<0.0002	<0.0002	mg/L	0.0001	---	0.0002	---
Titanium (Ti)	---	---	0.0005	0.0007	<0.0003	0.0003	<0.0003	mg/L	---	---	0.0003	---
Thallium (Tl)	---	---	<0.00005	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	---	---	0.00005	---
Uranium (U)	<0.00005	<0.00005	0.0001	0.0011	0.0002	0.0002	<0.0001	mg/L	0.00005	---	0.0001	---
Vanadium (V)	<0.00005	<0.00005	0.0002	0.0002	0.0002	0.0002	<0.001	mg/L	0.00005	---	0.0001	---
Zinc (Zn)	<0.0008	<0.0008	0.004	0.013	0.003	0.004	0.004	mg/L	0.0008	---	0.002	0.03

Canadian Council of Ministers of the Environment - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (Oct. 2005).

Above (or Below - pH only) CCME Guidelines

[a] standard for nitrate [13mg/L(NO3)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into ug/L.

[b] standard for nitrite [0.06mg/L(NO2)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into ug/L.

[c] standard for ammonia [0.019mg/L(NH3)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into ug/L.

[d] standard for inorganic Hg, (results expressed as total or dissolved Hg).

TABLE 8 : TAMERLANE 2006 SAMPLING PROGRAM ANALYTICAL RESULTS AVERAGES

pH (pH)				
Trip	**Fen Head**	**Fen Mid**	**Twin Creek**	**Trip Average**
17-May	8.2	8.4	8.1	8.2
5-Jun	8.1	8.3	8.1	8.2
21-Jul	8.3	8.3	8.2	8.3
18-Aug	7.9	8.0	8.3	8.1
Station Average	8.1	8.3	8.2	8.2

Phosphorous (mg/L)				
Trip	**Fen Head**	**Fen Mid**	**Twin Creek**	**Trip Average**
17-May	0.037	0.007	0.005	0.016
5-Jun	0.037	0.007	0.005	0.016
21-Jul	---	---	---	---
18-Aug	---	---	---	---
Station Average	0.037	0.007	0.005	0.016

Conductivity (µS/cm)				
Trip	**Fen Head**	**Fen Mid**	**Twin Creek**	**Trip Average**
17-May	527	293	314	378
5-Jun	355	319	354	343
21-Jul	791	374	476	547
18-Aug	553	643	307	501
Station Average	557	407	363	442

Calcium (mg/L)				
Trip	**Fen Head**	**Fen Mid**	**Twin Creek**	**Trip Average**
17-May	78.9	38.9	47.2	55.0
5-Jun	91.7	42.7	55.8	63.4
21-Jul	133.0	41.5	78.2	84.2
18-Aug	96.6	96.3	44.0	79.0
Station Average	100.1	54.9	56.3	70.4

Ammonia-N(mg/L)				
Trip	**Fen Head**	**Fen Mid**	**Twin Creek**	**Trip Average**
17-May	0.009	0.017	0.009	0.012
5-Jun	0.023	0.030	0.028	0.027
21-Jul	0.042	0.052	0.029	0.041
18-Aug	0.053	0.038	0.036	0.042
Station Average	0.032	0.034	0.026	0.031

Potassium (mg/L)				
Trip	**Fen Head**	**Fen Mid**	**Twin Creek**	**Trip Average**
17-May	2.7	1.1	0.6	1.5
5-Jun	2.4	1.1	0.6	1.4
21-Jul	4.8	1.5	**0.5**	2.3
18-Aug	**0.5**	1.7	**0.5**	0.9
Station Average	2.6	1.4	0.6	1.5

Nitrate-N (mg/L)				
Trip	**Fen Head**	**Fen Mid**	**Twin Creek**	**Trip Average**
17-May	**0.006**	**0.006**	**0.006**	0.006
5-Jun	**0.006**	**0.006**	**0.006**	0.006
21-Jul	**0.100**	**0.100**	**0.100**	0.100
18-Aug	0.100	**0.100**	0.100	0.100
Station Average	0.053	0.053	0.053	0.053

Magnesium (mg/L)				
Trip	**Fen Head**	**Fen Mid**	**Twin Creek**	**Trip Average**
17-May	21.7	11.0	11.2	14.6
5-Jun	25.0	13.8	14.0	17.6
21-Jul	37.8	19.5	19.9	25.7
18-Aug	26.4	29.8	20.0	25.4
Station Average	27.7	18.5	16.3	20.8

Total Organic Carbon (mg/L)				
Trip	**Fen Head**	**Fen Mid**	**Twin Creek**	**Trip Average**
17-May	32	24	20	25
5-Jun	32	27	25	28
21-Jul	57	45	32	45
18-Aug	44	26	29	33
Station Average	41	31	27	33

Sodium (mg/L)				
Trip	**Fen Head**	**Fen Mid**	**Twin Creek**	**Trip Average**
17-May	3	8	4	5
5-Jun	3	8	4	5
21-Jul	6	15	6	9
18-Aug	3	15	9	9
Station Average	4	12	6	7

Note: Bolded figures indicate that the detection limit value was used to calculate the average value as the analytical value was not detected
--- : Not analyzed by ALS Environmental

6.1 PHYSICAL PARAMETERS

Physical parameters include pH and electrical conductivity. In general, these parameters were normal for the watershed in this region. The fens at Tamerlane are typical of rich fens as they are quite alkaline (>6.5) and have high conductivity values (>374 µS/cm) (Zoltai and Vitt 1995; Zoltai 1988).

6.1.1 pH

The pH of the water at Tamerlane is quite alkaline, with pH values above 8.0 (with the exception of Fen Head in August where the pH was 7.9) for all three sites during the 2006-sampling program. pH values at Tamerlane during the 2006 water-sampling program ranged from 7.9 to 8.4. The average pH was 8.1 for Fen Head, 8.3 for Fen Mid and 8.2 for Twin Creek. Monthly average pH values were 8.2 for May, 8.2 for June, 8.3 for July and 8.1 for August.

When compared to the Canadian Council of Ministers of the Environment (CCME) Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (FAL), the pH of Tamerlane is quite alkaline but within the range of the guideline. These values are consistent with those from Twin Creek in 2005 and with values reported by Beak Consultants Ltd (1980).

TABLE 9: pH AT TWIN CREEK, 1979, 2005 and 2006

Year	pH
2006	8.2
2005	8.2
1979*	8.0

* Beak Consultants Ltd (1980)

6.1.2 Conductivity

Electrical conductivity (EC) at Tamerlane is high because of the high level cations present in the water from the mineral bodies. During the 2006 water-sampling program, average conductivity for all four stations was 442.2 micro-siemens per centimetre (µS/cm). Average EC during the 2006 program ranged from a low of 307 µS/cm at Twin Creek in August to a high of 791 µS/cm at Fen Head in July. The average EC for Fen Head was 556.5 µS/cm, Fen Mid was 407.3 µS/cm and Twin Creek was 362.8 µS/cm. Monthly average EC was 378.0 µS/cm for May, 342.7 µS/cm for June, 547.0 µS/cm for July and 501.0 µS/cm August.

There is no CCME FAL guideline for electrical conductivity. The average electrical conductivity for the Twin Creek site in 2006 was compared to the 2005 electrical conductivity value. In general, the EC values in 2006 were comparable to those of 2005 (Table 10) and slightly higher than those reported by Beak Consultants Ltd (1980).

TABLE 10: ELECTRICAL CONDUCTIVITY AT TWIN CREEK, 1979, 2005 and 2006

Year	Electrical Conductivity (µS/cm)
2006	442
2005	433
1979*	346 - 407

* Beak Consultants Ltd (1980)

6.2 NUTRIENTS

Nutrients include parameters such as ammonia, nitrate and phosphorous.

6.2.1 Ammonia

The average ammonia concentration during the 2006 sampling program at Tamerlane was 0.0305 mg/L. Ammonia concentration ranged from 0.009 mg/L at Fen Head and Twin Creek in May to 0.053 mg/L at Fen Head in August. The average ammonia concentration at Fen Head was 0.0318 mg/L, Fen Mid was 0.0343 mg/L and Twin Creek was 0.0255 mg/L. Trip averages were 0.0117 mg/L in May, 0.0270 mg/L in June, 0.0410 mg/L in July and 0.0423 mg/L in August.

When compared to the CCME FAL guideline, average ammonia concentrations at Tamerlane observed during the 2006 sampling program were above CCME guidelines of 0.00429 mg/L. These concentrations were also observed in 2005 and are indicative of background ammonia levels. The Little Buffalo River, one of the streams flowing through the Tamerlane property, is a naturally enriched source of ammonia, with no evidence that water in this area has been contaminated from past mining activities (Evans *et al.* 1998).

The Twin Creek average ammonia concentration was slightly higher in 2006 when compared that of Twin Creek in 2005. Average ammonia concentrations for 2005 and 2006 are presented in Table 11.

TABLE 11: AMMONIA CONCENTRATIONS AT TWIN CREEK, 2005 and 2006

Year	Ammonia (mg/L)
2006	0.026
2005	0.019
1979*	Not reported

* Beak Consultants Ltd (1980)

6.2.2 Nitrate

The average nitrate concentration at Tamerlane during the 2006-sampling program was 0.053 mg/L. Nitrate concentration ranged from below the detection limit of 0.006 mg/L to 0.1 at all sites in July and August. The average nitrate concentration at Fen Head was 0.053 mg/L, Fen Mid was 0.053 mg/L and Twin Creek was 0.053 mg/L. Trip averages were 0.006 mg/L in May, 0.006 mg/L in June, 0.1 mg/L in July and 0.1 mg/L in August. A

different detection limit was used for the July and August analyses (0.1 mg/L) because Regular- rather than Low-level analyses were conducted.

When compared to the CCME FAL guideline, the average nitrate concentration at Tamerlane was below the guideline of 2.94 mg/L.

The average nitrate concentration at Twin Creek was higher for 2006 when compared to that of 2005. Average nitrate concentrations for 2005 and 2006 are presented in Table 12.

TABLE 12: NITRATE CONCENTRATIONS AT TWIN CREEK, 1979, 2005 and 2006

Year	Nitrate (mg/L)
2006	0.053
2005	<0.006
1979*	<0.05

* Beak Consultants Ltd (1980)

6.2.3 Total Phosphorous

Phosphorous concentration at Tamerlane during the 2006 sampling program averaged 0.0163 mg/L. It ranged from 0.005 mg/L at Twin Creek in May and June to 0.037 mg/L at Fen Head in May and June. Trip averages were 0.0163 mg/L in May, 0.0163 mg/L in June, not analyzed for in July and August.

There are no guidelines for phosphorous in the CCME FAL guideline.

Phosphorous concentrations measured at Twin Creek during the 2006 sampling program were greater than those of 2005 and those reported by Beak Consultants Ltd (1980). Average phosphorous concentrations measured in 2005 and 2006 are presented in Table 13.

TABLE 13: PHOSPHOROUS CONCENTRATIONS AT TWIN CREEK, 1979, 2005 and 2006

Year	Phosphorous (mg/L)
2006	0.005
2005	0.003
1979*	<0.003 – 0.009

* Beak Consultants Ltd (1980)

6.3 MAJOR IONS

Major ions include calcium, potassium, magnesium and sodium and are part of the Tamerlane water-sampling regime. There are no guidelines for comparison with the CCME FAL guideline. In general, these parameters were normal for the watershed in this region. The concentrations of calcium, magnesium, potassium and sodium of Tamerlane further exemplify rich fens (Zoltai and Vitt 1995; Zoltai 1988).

Calcium concentrations at Tamerlane during the 2006 water sampling program exhibited an average of 70.40 mg/L, with a range of 38.9 mg/L to 133.0 mg/L. Average concentrations

for Fen Head, Fen Mid and Twin Creek were 100.05 mg/L, 54.85 mg/L and 56.30 mg/L, respectively. The average calcium concentration was 55.00 mg/L in May, 63.40 mg/L in June, 84.23 mg/L in July and 78.97 mg/L in August. Average calcium concentrations for 2005 and 2006 are presented in Table 14.

Potassium concentrations at Tamerlane during the 2006 water sampling program exhibited an average of 1.50 mg/L, with a range from 0.5 mg/L (of below the detection limit) to 4.8 mg/L. Average concentrations for Fen Head, Fen Mid and Twin Creek were 2.60 mg/L, 1.35 mg/L and 0.55 mg/L, respectively. The average potassium concentration was 1.47 mg/L in May, 1.37 mg/L in June, 2.27 mg/L in July and 0.90 mg/L in August. Average potassium concentrations for 2005 and 2006 are presented in Table 14.

Magnesium concentrations at Tamerlane during the 2006 water sampling program exhibited an average of 20.84 mg/L, with a range of 11.0 mg/L to 37.8 mg/L. Average concentrations for Fen Head, Fen Mid and Twin Creek were 27.73 mg/L, 18.53 mg/L and 16.28 mg/L, respectively. The average magnesium concentration was 14.63 mg/L in May, 17.60 mg/L in June, 25.73 mg/L in July and 25.40 mg/L in August. Average magnesium concentrations for 2005 and 2006 are presented in Table 14.

Sodium concentrations at Tamerlane during the 2006 water sampling program exhibited an average of 7.0 mg/L, with a range of 3 mg/L to 15 mg/L. Average concentrations for Fen Head, Fen Mid and Twin Creek were 3.8 mg/L, 11.5 mg/L and 5.8 mg/L, respectively. The average sodium concentration was 5.0 mg/L in May, 5.0 mg/L in June, 9.0 mg/L in July and 9.0 mg/L in August. Average sodium concentrations for 2005 and 2006 are presented in Table 14.

TABLE 14: MAJOR IONS CONCENTRATIONS AT TWIN CREEK, 2005 and 2006

Year	Calcium (mg/L)	Potassium (mg/L)	Magnesium (mg/L)	Sodium (mg/L)
2006	56.3	0.55	16.28	5.8
2005	60.9	1.0	16.0	6
1979*	Not reported	Not reported	Not reported	Not reported

* Beak Consultants Ltd (1980)

6.4 TOTAL ORGANIC CARBON

The average total organic carbon (TOC) for the 2006 winter sampling program was 32.8 mg/L, with a range of 20 mg/L to 57 mg/L. The average TOC concentrations measured for Fen Head, Fen Mid, and Twin Creek were 41.3 mg/L, 30.5 mg/L and 26.5 mg/L, respectively. Trip averages were 25.3 mg/L for May, 28.0 mg/L for June, 44.7 mg/L for July and 33.0 mg/L for August. Table 15 presents the TOC values from 2005 and 2006 at Twin Creek.

There is no guideline for TOC within the CCME FAL guideline.

TABLE 15: TOTAL ORGANIC CARBON AT TWIN CREEK, 2005 and 2006

Year	Total Organic Carbon (mg/L)
2006	26.5
2005	23
1979*	Not reported

* Beak Consultants Ltd (1980)

6.5 TRACE METALS

Laboratory results of total and dissolved metals at Tamerlane ranged from below the detection limit to above the CCME FAL guideline for aluminum, chromium and iron. Table 16 presents the 2006 summary of the metals that were below the detection limit, those that were above the detection limit but within the CCME FAL guideline, and those that were above the detection limit and exceeded the CCME FAL guideline.

TABLE 16: METALS ANALYSES COMPARISON, 2006

Metals Below Detection Limits	Metals Above Detection Limit but Below CCME FAL*	Above Detection Limit and Above CCME FAL
Silver	Antimony	Aluminum
Beryllium	Arsenic	Chromium
Bismuth	Barium	Iron
Cadmium	Boron	
Titanium**	Calcium	
Thallium**	Cobalt	
	Iron	
	Magnesium	
	Manganese	
	Molybdenum	
	Nickel	
	Potassium	
	Selenium	
	Sodium	
	Strontium	
	Tin	
	Uranium	
	Vanadium	
	Zinc	

* Canadian Council of Ministers of the Environment – Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life Updated October 2005)

** Analyzed for during low level analyses only

During the 2006 water-sampling program, concentrations of aluminum were found to be above the CCME FAL guideline of 0.005 mg/L. A review of the travel blanks, field blanks

and duplicate samples indicated that these results were not likely due to laboratory, field or human error.

Aluminum levels in Twin Creek were above the CCME FAL guideline in 2005 and 2006. These levels are indicative of the water quality in this region and are likely representative of background conditions. The Slave and Little Buffalo rivers are naturally high sources of metals, such as chromium, iron, manganese and possibly nickel (Evans *et al.* 1998), it is therefore quite conceivable that aluminum is also naturally high in the waters of this region. Table 17 is a summary of the average aluminum concentration at Twin Creek for 2005 and 2006.

TABLE 17: ALUMINUM CONCENTRATION AT TWIN CREEK, 2005 and 2006

Year	Total Aluminum (mg/L)	Dissolved Aluminum (mg/L)
2006	0.026	0.003
2005	0.01	<0.01
1979*	Not reported	Not reported

* Beak Consultants Ltd (1980)

Chromium concentrations exceeded the CCME FAL guideline of 0.001 mg/L in several samples during the 2006 sampling program. Samples that exceeded the guideline included total metals at Fen Head and Twin Creek in May, Fen Head and Fen Mid in June, Fen Mid and Twin Creek in July and at Fen Head in August; and dissolved metals at Fen Head and Fen Mid in July and Fen Head and Twin Creek in August. A review of the travel blanks, field blanks and duplicate samples indicated that these results were not likely due to laboratory, field or human error. The overall average chromium concentration during the 2006 program exceeded the CCME FAL guideline of 0.001 mg\L.

Chromium is found naturally in the environment and is used commercially for many purposes. However, the elevated chromium concentrations found at Tamerlane during 2006 and are indicative of background chromium levels. The Little Buffalo River appears to be a naturally enriched source of chromium, with no evidence that water in this area has been contaminated from past mining activities (Evans *et al.* 1998). Table 18 presents a summary of average chromium concentrations at Tamerlane in 2005 and 2006. Chromium concentrations measured at Twin Creek in 1979 by Beak Consultants Ltd (1980) appear to have been greater than those of 2005 and 2006.

TABLE 18: CHROMIUM CONCENTRATION AT TWIN CREEK, 1979, 2005 and 2006

Year	Total Chromium (mg/L)	Dissolved Chromium (mg/L)
2006	0.002	0.002
2005	<0.005	<0.005
1979*	Not reported	<0.01

* Beak Consultants Ltd (1980)

Iron concentrations exceeded the CCME FAL guideline of 0.3 mg/L in a couple of samples during the 2006 sampling program. Samples that exceeded the guideline included total

metals at Fen Head and Twin Creek in July and Fen Head and Fen Mid in August; and dissolved metals at Fen Head in July. Iron was detected in the July total metals travel blank. A review of the travel blanks, field blanks and duplicate samples indicated that these results were not likely due to laboratory, field or human error. The elevated iron concentrations found at Tamerlane during 2006 are indicative of background iron levels. Both the Slave River and the Little Buffalo River are naturally enriched sources of iron, with no evidence that water in this area has been contaminated from past mining activities (Evans *et al.* 1998). The overall average during the 2006 program did not exceed the CCME FAL guideline.

TABLE 19: IRON CONCENTRATION AT TWIN CREEK, 1979, 2005 and 2006

Year	Total Iron (mg/L)	Dissolved Iron (mg/L)
2006	0.12	0.02
2005	0.029	0.02
1979*	Not reported	0.03 – 0.08

* Beak Consultants Ltd (1980)

6.6 GROUNDWATER (R190 TEST WELL)

Water was sampled from the R190 Test Well in August 2006. Some of the results are presented below (Table 15). Comprehensive chemical analytical results for the water sampled from the R190 test well are included in Table 20. The results of the groundwater analysis should be interpreted with caution as they are not representative of groundwater at greater depths. It is unknown whether or not these results accurately portray the surficial groundwater conditions, since the chemical make-up of the water reported here may be an artefact of the sampling protocol, leaching from the groundwater pipe, stagnancy of the water and/or predominantly rainwater.

TABLE 20: ANALYTES AND TRACE METALS FROM GROUNDWATER (R190 TEST WELL), AUGUST 2006

Analyte	Value	
pH	7.8	
Conductivity (µS/cm)	1150	
Ammonia (mg/L)	3.8	
Nitrate (mg/L)	0.2	
Calcium (mg/L)	20.7	
Potassium (mg/L)	8.4	
Magnesium (mg/L)	15.2	
Sodium (mg/L)	222	
Total Organic Carbon (mg/L)	95	
Metals	**Total Low-level***	**Dissolved Low-level**
Aluminum (mg/L)	0.07	<0.01
Chromium (mg/L)	0.0009	0.0014**
Iron (mg/L)	15.5	<0.005
Lead (mg/L)	0.0276	<0.0001
Selenium (mg/L)	0.0012	<0.0004

*Detection limits are different for total and dissolved low level analysis **This above-CCME level was rechecked by the lab and the value confirmed; no explanation is available at this time.

Above CCME Guideline

In 1978, groundwater samples from a pump test conducted for Western Mines were analyzed (Beak Consultants Ltd 1980). It had been conducted at X-25 Deposit near Polar Lake but the results would likely be similar for R190. The pH of the water extracted from R190 in 2006 was 7.8, falling within the range of that reported for X-25 in 1978 (7.1 to 8.1). This was the only parameter comparable between the two reported years. Conductivity was considerably lower in 2006 (1150 µS/cm) than in 1978 (3049 - 3122 µS/cm). Calcium and magnesium concentrations (mg/L) were lower in 2006 (20.7 and 15.2, respectively) than in 1978 (407 to 457 and 167 to 177, respectively); however sodium and potassium concentrations (mg/L) were higher in 2006 (222 and 8.4, respectively) than in 1978 (106 to 122 and<0.1, respectively).

Total metal concentrations (mg/L) for iron and lead were higher in 2006 (15.5 and 0.0276, respectively) than in 1978 (0.48 to 1.59 and 0.06 to 0.17, respectively). The remaining metals above CCME guidelines for 2006 that were not reported in 1978 are aluminum, chromium and selenium.

7.0 CONCLUSION

EBA Engineering Consultants Ltd. conducted a water-quality sampling program at Tamerlane Ventures Inc.'s property at Pine Point during the spring and summer of 2006. The objectives of the 2006 water-quality program were to monitor the water quality of Pine Point area, as part of a follow-up environmental baseline study for Tamerlane's lead-zinc project.

Three monitoring stations (Fen Head, Fen Mid and Twin Creek) were sampled as part of the program. Water samples were collected at Tamerlane on May 17, June 5, July 21, and August 18, 2006. Tamerlane Ventures Inc. has requested that water be sampled from R190 test well; this was conducted in August.

The sampling program entailed collecting surface water samples from each of the three stations. Water samples were submitted to ALS Environmental in Edmonton, and were analysed for total and dissolved ultra-low metals, total organic carbon, low-level nutrients and low-level routine water.

In general, the physical and chemical water quality parameters of Tamerlane are low and are consistent with those of the 2005 water-quality samples collected at Twin Creek. Elevated levels of ammonia and trace metals chromium and iron were found to be above the CCME FAL Guideline. These elevated concentrations are indicative of background levels. Both the Slave River and the Little Buffalo River are naturally enriched sources of ammonia, chromium and iron, with no evidence that water in this area has been contaminated from past mining activities (Evans *et al.* 1998). Furthermore, because of these and naturally occurring high concentrations of other metals in these rivers, such as manganese and nickel, it is quite likely that the high levels of aluminum may be explained in the same manner.

8.0 CLOSURE

EBA is pleased to present Tamerlane Ventures Inc. with this 2006 Water Quality Sampling Program, Pine Point, Northwest Territories. We hope everything is found to be satisfactory. If there are any questions, please do not hesitate to contact us.

Respectfully submitted,
EBA Engineering Consultants Ltd.

Prepared by:

Krista Amey, M.Sc.
Intermediate Environmental Scientist

Reviewed by:

Steve Moore, B.E.S., B.A..
Wildlife Biologist / Environmental Scientist

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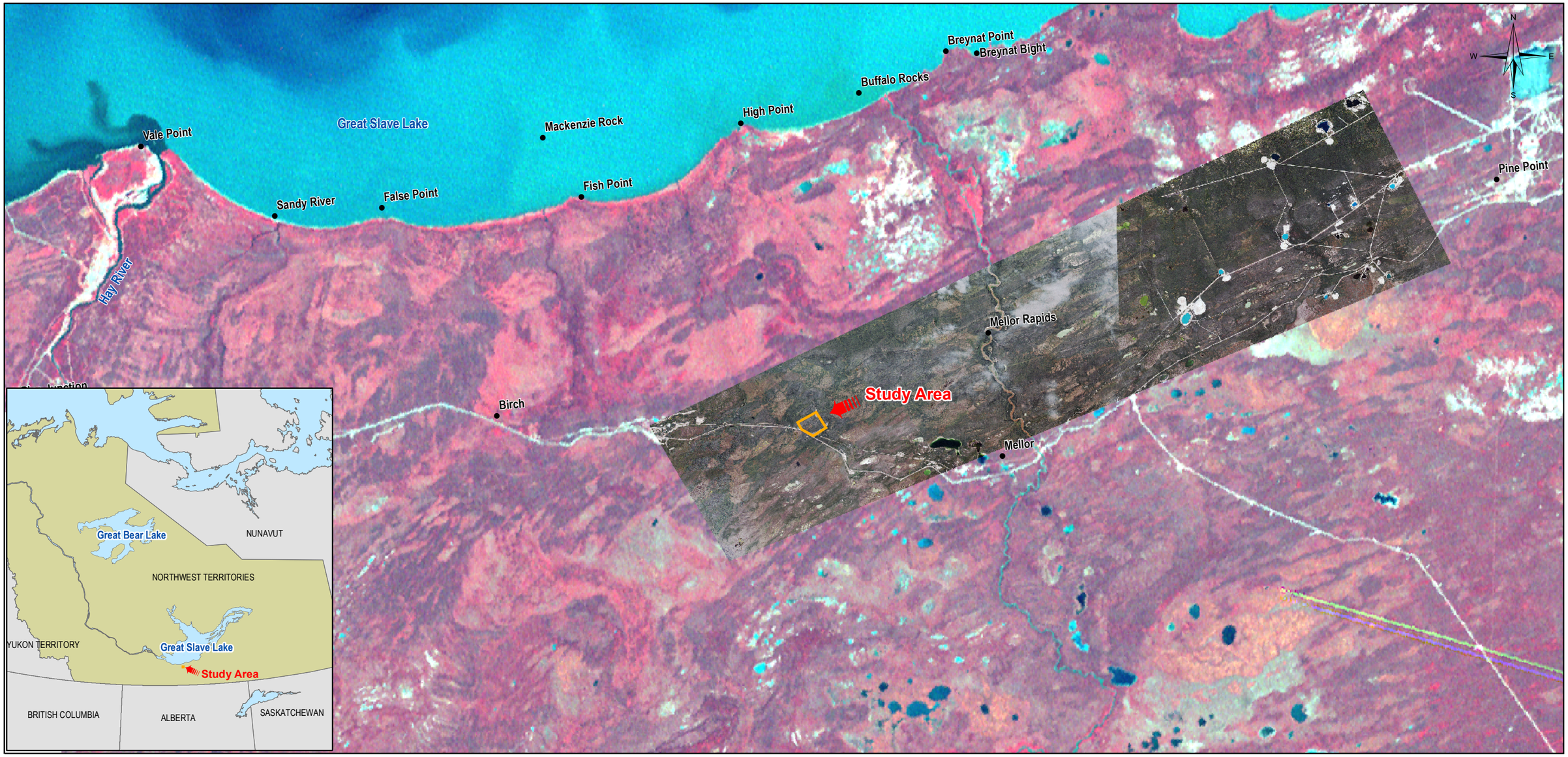
FIGURES



LEGEND

Study Area

NOTES

Base data source: Quickbird Imagery (Digital Globe)
acquired Aug. 31 and Sept. 02, 2005
Landsat 7
National Atlas of Canada

PINE POINT PROJECT

Overview of Study Area

PROJECTION	DATUM
UTM ZONE 11	NAD83

Scale: 1:200,000
2.5 1.25 0 2.5
Kilometres

FILE NO.

PROJECT NO.	DWN	CKD	REV
1740164	KMW	KMW	1

OFFICE	DATE
EBA-VANC	August 30, 2006

EBA Engineering Consultants Ltd.

Figure 1

Q:\Vancouver\GIS\0701_YEL\1740149-PinePoint\arcview_maps\vegetation\1740149_Veg_Map001.mxd

LEGEND

- Study Area
- Footprint

NOTES

Base data source: Quickbird Imagery (Digital Globe) acquired Aug. 31 and Sept. 02, 2005

PINE POINT PROJECT

Study Area and Proposed Development

PROJECTION	DATUM
UTM Zone 11	NAD83

Scale: 1:5,000

100 50 0 100

Meters

EBA Engineering Consultants Ltd.

FILE NO.
1740149_Veg_Map002

PROJECT NO.	DWN	CKD	REV
1740149	KMW	SH	1

OFFICE	DATE
EBA-VANC	August 30, 2006

Figure 2

Q:\Vancouver\GIS\0701_YEL\1740149-PinePoint\arcview_maps\vegetation\1740149_Veg_Map002.mxd

598000 599000 600000 601000 602000 603000

6735000

6734000

6733000

N W E S

Fen Head

Groundwater (R190)

Fen Mid

Twin Creek

LEGEND

Local Study Area (LSA)

2006 Water Sampling Location

NOTES

Base data source: Quickbird Imagery (Digital Globe) acquired Aug. 31 and Sept. 02, 2005

PINE POINT PROJECT

2006 Water Sampling Locations

PROJECTION	DATUM
UTM ZONE 11	NAD83

Scale: 1:15,000

100 50 0 100 200 300 400

Metres

FILE NO.: 1740149_Water_Map001.mxd

PROJECT NO.	DWN	CKD	REV
1740149.001	KMW	KA	1

OFFICE	DATE
EBA-VANC	October 11, 2006

Tamerlane Ventures Inc.

EBA Engineering Consultants Ltd.

Figure 3

Q:\Vancouver\GIS\0701_YEL\1740149-PinePoint\maps\water\1740149_Water_Map001.mxd

APPENDIX

APPENDIX A LABORATORY RESULTS AND QUALITY ASSURANCE AND QUALITY CONTROL

ANALYTICAL REPORT

EBA ENG CONSULTANTS LTD
ATTN: STEVE MOORE
201-4916 49 STREET
YELLOWKNIFE NT X1A 2P7

Report On: 04-JUL-06 11:01 AM

Lab Work Order #: L390909 **Date Received:** 23-MAY-06

Project P.O. #:
Job Reference: 1740149.001
Legal Site Desc:
CofC Numbers: 159699

Comments: Report comment: L390909-2; Analysis of all total metals was changed from ultra low to total low metals, as the sample contained too many suspended solids.

DOUG JOHNSON
Director of Operations, Edmonton

CATHERINE EVARISTO-CORDERO
Account Manager

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L390909-1 FEN HEAD PINE POINT, NWT								
Sample By: SM on 17-MAY-06 @ 18:00								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Iron (Fe)	0.075		0.005	mg/L		26-MAY-06	HAS	R402987
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Aluminum (Al)	0.0050		0.0003	mg/L		24-MAY-06	CLL	R402501
Arsenic (As)	0.00096		0.00003	mg/L		24-MAY-06	CLL	R402501
Boron (B)	0.013		0.001	mg/L		24-MAY-06	CLL	R402501
Barium (Ba)	0.0756		0.00005	mg/L		24-MAY-06	CLL	R402501
Beryllium (Be)	<0.0002		0.0002	mg/L		24-MAY-06	CLL	R402501
Calcium (Ca)	84.6		0.02	mg/L		24-MAY-06	CLL	R402501
Cadmium (Cd)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Cobalt (Co)	0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Chromium (Cr)	0.00532		0.00006	mg/L		24-MAY-06	CLL	R402501
Copper (Cu)	0.0008		0.0006	mg/L		24-MAY-06	CLL	R402501
Mercury (Hg)	<0.00002		0.00002	mg/L		24-MAY-06	CLL	R402501
Potassium (K)	2.72		0.02	mg/L		24-MAY-06	CLL	R402501
Magnesium (Mg)	24.2		0.004	mg/L		24-MAY-06	CLL	R402501
Manganese (Mn)	0.0602		0.0001	mg/L		24-MAY-06	CLL	R402501
Molybdenum (Mo)	0.00033		0.00006	mg/L		24-MAY-06	CLL	R402501
Sodium (Na)	3.09		0.005	mg/L		24-MAY-06	CLL	R402501
Nickel (Ni)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Lead (Pb)	0.00013		0.00005	mg/L		24-MAY-06	CLL	R402501
Antimony (Sb)	0.00022		0.00003	mg/L		24-MAY-06	CLL	R402501
Selenium (Se)	0.0002		0.0001	mg/L		24-MAY-06	CLL	R402501
Strontium (Sr)	0.481		0.0001	mg/L		24-MAY-06	CLL	R402501
Uranium (U)	0.00087		0.00005	mg/L		24-MAY-06	CLL	R402501
Vanadium (V)	0.00019		0.00005	mg/L		24-MAY-06	CLL	R402501
Zinc (Zn)	0.0048		0.0008	mg/L		24-MAY-06	CLL	R402501
Ultra-Low Metals								
Iron (Fe)	0.115		0.005	mg/L		26-MAY-06	HAS	R402987
Ultra-Low Metals								
Silver (Ag)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Aluminum (Al)	0.0515		0.0003	mg/L		24-MAY-06	CLL	R402501
Arsenic (As)	0.00101		0.00003	mg/L		24-MAY-06	CLL	R402501
Boron (B)	0.016		0.001	mg/L		24-MAY-06	CLL	R402501
Barium (Ba)	0.0770		0.00005	mg/L		24-MAY-06	CLL	R402501
Beryllium (Be)	<0.0002		0.0002	mg/L		24-MAY-06	CLL	R402501
Calcium (Ca)	87.1		0.02	mg/L		24-MAY-06	CLL	R402501
Cadmium (Cd)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Cobalt (Co)	0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Chromium (Cr)	0.00588		0.00006	mg/L		24-MAY-06	CLL	R402501
Copper (Cu)	0.0009		0.0006	mg/L		24-MAY-06	CLL	R402501
Mercury (Hg)	<0.00002		0.00002	mg/L		24-MAY-06	CLL	R402501
Potassium (K)	2.94		0.02	mg/L		24-MAY-06	CLL	R402501
Magnesium (Mg)	25.8		0.004	mg/L		24-MAY-06	CLL	R402501
Manganese (Mn)	0.0548		0.0001	mg/L		24-MAY-06	CLL	R402501
Molybdenum (Mo)	0.00034		0.00006	mg/L		24-MAY-06	CLL	R402501
Sodium (Na)	3.33		0.005	mg/L		24-MAY-06	CLL	R402501
Nickel (Ni)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Lead (Pb)	0.00019		0.00005	mg/L		24-MAY-06	CLL	R402501
Antimony (Sb)	0.00029		0.00003	mg/L		24-MAY-06	CLL	R402501
Selenium (Se)	0.0002		0.0001	mg/L		24-MAY-06	CLL	R402501

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L390909-1 FEN HEAD PINE POINT, NWT								
Sample By: SM on 17-MAY-06 @ 18:00								
Matrix: WATER								
Ultra-Low Metals								
Ultra-Low Metals								
Strontium (Sr)	0.489		0.0001	mg/L		24-MAY-06	CLL	R402501
Uranium (U)	0.00085		0.00005	mg/L		24-MAY-06	CLL	R402501
Vanadium (V)	0.00027		0.00005	mg/L		24-MAY-06	CLL	R402501
Zinc (Zn)	0.0022		0.0008	mg/L		24-MAY-06	CLL	R402501
Ammonia-N	0.009		0.005	mg/L		23-MAY-06	KMY	R401394
Phosphorus, Total	0.037	RAMB	0.001	mg/L		25-MAY-06	SHC	R402399
Total Organic Carbon	32		1	mg/L		24-MAY-06	ZOW	R401804
Routine Water Analysis - Low Level								
Chloride (Cl)	3		1	mg/L		23-MAY-06	BYU	R401388
ICP metals for routine water								
Calcium (Ca)	78.9		0.5	mg/L		25-MAY-06	JWU	R402398
Potassium (K)	2.7		0.1	mg/L		25-MAY-06	JWU	R402398
Magnesium (Mg)	21.7		0.1	mg/L		25-MAY-06	JWU	R402398
Sodium (Na)	3		1	mg/L		25-MAY-06	JWU	R402398
Ion Balance Calculation								
Ion Balance	102			%		26-MAY-06		
TDS (Calculated)	291			mg/L		26-MAY-06		
Hardness (as CaCO3)	286			mg/L		26-MAY-06		
Nitrate+Nitrite-N	<0.006		0.006	mg/L		23-MAY-06	SHC	R401465
Nitrate-N	<0.006		0.006	mg/L		23-MAY-06	SHC	R401465
Nitrite-N	0.004		0.002	mg/L		23-MAY-06	SHC	R401465
Sulphate (SO4)	25.4		0.05	mg/L		24-MAY-06	JTV	R401879
pH, Conductivity and Total Alkalinity								
pH	8.2		0.1	pH		24-MAY-06	PTT	R401754
Conductivity (EC)	527		0.2	uS/cm		24-MAY-06	PTT	R401754
Bicarbonate (HCO3)	317		5	mg/L		24-MAY-06	PTT	R401754
Carbonate (CO3)	<5		5	mg/L		24-MAY-06	PTT	R401754
Hydroxide (OH)	<5		5	mg/L		24-MAY-06	PTT	R401754
Alkalinity, Total (as CaCO3)	260		5	mg/L		24-MAY-06	PTT	R401754
L390909-2 FEN MID PINE POINT, NWT								
Sample By: SM on 17-MAY-06 @ 17:00								
Matrix: WATER								
Total Metals								
Total Major Metals								
Calcium (Ca)	38.8		0.5	mg/L		26-MAY-06	HAS	R402989
Potassium (K)	1.2		0.1	mg/L		26-MAY-06	HAS	R402989
Magnesium (Mg)	11.0		0.1	mg/L		26-MAY-06	HAS	R402989
Sodium (Na)	7		1	mg/L		26-MAY-06	HAS	R402989
Iron (Fe)	0.024		0.005	mg/L		26-MAY-06	HAS	R402989
Manganese (Mn)	0.007		0.001	mg/L		26-MAY-06	HAS	R402989
Total Trace Metals (Low Level)								
Silver (Ag)	<0.0004		0.0004	mg/L		24-MAY-06	QLI	R401978
Aluminum (Al)	<0.02		0.02	mg/L		24-MAY-06	QLI	R401978
Arsenic (As)	<0.0004		0.0004	mg/L		24-MAY-06	QLI	R401978
Boron (B)	<0.02		0.02	mg/L		24-MAY-06	QLI	R401978
Barium (Ba)	0.0229		0.0002	mg/L		24-MAY-06	QLI	R401978
Beryllium (Be)	<0.001		0.001	mg/L		24-MAY-06	QLI	R401978
Bismuth (Bi)	<0.0001		0.0001	mg/L		24-MAY-06	QLI	R401978

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L390909-2 FEN MID PINE POINT, NWT								
Sample By: SM on 17-MAY-06 @ 17:00								
Matrix: WATER								
Total Metals								
Total Trace Metals (Low Level)								
Cadmium (Cd)	<0.0002		0.0002	mg/L		24-MAY-06	QLI	R401978
Cobalt (Co)	<0.0002		0.0002	mg/L		24-MAY-06	QLI	R401978
Chromium (Cr)	0.0010		0.0008	mg/L		24-MAY-06	QLI	R401978
Copper (Cu)	<0.001		0.001	mg/L		24-MAY-06	QLI	R401978
Molybdenum (Mo)	<0.0001		0.0001	mg/L		24-MAY-06	QLI	R401978
Nickel (Ni)	<0.0002		0.0002	mg/L		24-MAY-06	QLI	R401978
Lead (Pb)	<0.0001		0.0001	mg/L		24-MAY-06	QLI	R401978
Antimony (Sb)	<0.0004		0.0004	mg/L		24-MAY-06	QLI	R401978
Selenium (Se)	<0.0004		0.0004	mg/L		24-MAY-06	QLI	R401978
Tin (Sn)	<0.0004		0.0004	mg/L		24-MAY-06	QLI	R401978
Strontium (Sr)	0.0928		0.0002	mg/L		24-MAY-06	QLI	R401978
Titanium (Ti)	<0.005		0.005	mg/L		24-MAY-06	QLI	R401978
Thallium (Tl)	<0.0001		0.0001	mg/L		24-MAY-06	QLI	R401978
Uranium (U)	<0.0001		0.0001	mg/L		24-MAY-06	QLI	R401978
Vanadium (V)	<0.0002		0.0002	mg/L		24-MAY-06	QLI	R401978
Zinc (Zn)	<0.004		0.004	mg/L		24-MAY-06	QLI	R401978
Ultra-Low Metals - Dissolved								
Iron (Fe)	0.015		0.005	mg/L		26-MAY-06	HAS	R402987
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Aluminum (Al)	0.0047		0.0003	mg/L		24-MAY-06	CLL	R402501
Arsenic (As)	0.00040		0.00003	mg/L		24-MAY-06	CLL	R402501
Boron (B)	0.002		0.001	mg/L		24-MAY-06	CLL	R402501
Barium (Ba)	0.0225		0.00005	mg/L		24-MAY-06	CLL	R402501
Beryllium (Be)	<0.0002		0.0002	mg/L		24-MAY-06	CLL	R402501
Calcium (Ca)	41.3		0.02	mg/L		24-MAY-06	CLL	R402501
Cadmium (Cd)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Cobalt (Co)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Chromium (Cr)	0.00255		0.00006	mg/L		24-MAY-06	CLL	R402501
Copper (Cu)	<0.0006		0.0006	mg/L		24-MAY-06	CLL	R402501
Mercury (Hg)	<0.00002		0.00002	mg/L		24-MAY-06	CLL	R402501
Potassium (K)	1.30		0.02	mg/L		24-MAY-06	CLL	R402501
Magnesium (Mg)	12.7		0.004	mg/L		24-MAY-06	CLL	R402501
Manganese (Mn)	0.0042		0.0001	mg/L		24-MAY-06	CLL	R402501
Molybdenum (Mo)	0.00007		0.00006	mg/L		24-MAY-06	CLL	R402501
Sodium (Na)	8.45		0.005	mg/L		24-MAY-06	CLL	R402501
Nickel (Ni)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Lead (Pb)	0.00008		0.00005	mg/L		24-MAY-06	CLL	R402501
Antimony (Sb)	0.00017		0.00003	mg/L		24-MAY-06	CLL	R402501
Selenium (Se)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Strontium (Sr)	0.0885		0.0001	mg/L		24-MAY-06	CLL	R402501
Uranium (U)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Vanadium (V)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Zinc (Zn)	0.0026		0.0008	mg/L		24-MAY-06	CLL	R402501
Ammonia-N	0.017		0.005	mg/L		23-MAY-06	KMY	R401394
Phosphorus, Total	0.007	RAMB	0.001	mg/L		25-MAY-06	SHC	R402399
Total Organic Carbon	24		1	mg/L		24-MAY-06	ZOW	R401804
Routine Water Analysis - Low Level								
Chloride (Cl)	12		1	mg/L		23-MAY-06	BYU	R401388

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L390909-2 FEN MID PINE POINT, NWT								
Sample By: SM on 17-MAY-06 @ 17:00								
Matrix: WATER								
Routine Water Analysis - Low Level								
ICP metals for routine water								
Calcium (Ca)	38.9		0.5	mg/L		25-MAY-06	JWU	R402398
Potassium (K)	1.1		0.1	mg/L		25-MAY-06	JWU	R402398
Magnesium (Mg)	11.0		0.1	mg/L		25-MAY-06	JWU	R402398
Sodium (Na)	8		1	mg/L		25-MAY-06	JWU	R402398
Ion Balance Calculation								
Ion Balance	110	BL:INT		%		26-MAY-06		
TDS (Calculated)	156			mg/L		26-MAY-06		
Hardness (as CaCO3)	142			mg/L		26-MAY-06		
Nitrate+Nitrite-N	<0.006		0.006	mg/L		23-MAY-06	SHC	R401465
Nitrate-N	<0.006		0.006	mg/L		23-MAY-06	SHC	R401465
Nitrite-N	0.002		0.002	mg/L		23-MAY-06	SHC	R401465
Sulphate (SO4)	13.3		0.05	mg/L		24-MAY-06	JTV	R401879
pH, Conductivity and Total Alkalinity								
pH	8.4		0.1	pH		24-MAY-06	PTT	R401754
Conductivity (EC)	293		0.2	uS/cm		24-MAY-06	PTT	R401754
Bicarbonate (HCO3)	142		5	mg/L		24-MAY-06	PTT	R401754
Carbonate (CO3)	<5		5	mg/L		24-MAY-06	PTT	R401754
Hydroxide (OH)	<5		5	mg/L		24-MAY-06	PTT	R401754
Alkalinity, Total (as CaCO3)	120		5	mg/L		24-MAY-06	PTT	R401754
L390909-3 TWIN CREEK PINE POINT, NWT								
Sample By: SM on 17-MAY-06 @ 16:00								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Iron (Fe)	0.015		0.005	mg/L		26-MAY-06	HAS	R402987
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Aluminum (Al)	0.0013		0.0003	mg/L		24-MAY-06	CLL	R402501
Arsenic (As)	0.00046		0.00003	mg/L		24-MAY-06	CLL	R402501
Boron (B)	0.002		0.001	mg/L		24-MAY-06	CLL	R402501
Barium (Ba)	0.0256		0.00005	mg/L		24-MAY-06	CLL	R402501
Beryllium (Be)	<0.0002		0.0002	mg/L		24-MAY-06	CLL	R402501
Calcium (Ca)	50.8		0.02	mg/L		24-MAY-06	CLL	R402501
Cadmium (Cd)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Cobalt (Co)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Chromium (Cr)	0.00355		0.00006	mg/L		24-MAY-06	CLL	R402501
Copper (Cu)	<0.0006		0.0006	mg/L		24-MAY-06	CLL	R402501
Mercury (Hg)	<0.00002		0.00002	mg/L		24-MAY-06	CLL	R402501
Potassium (K)	0.79		0.02	mg/L		24-MAY-06	CLL	R402501
Magnesium (Mg)	12.9		0.004	mg/L		24-MAY-06	CLL	R402501
Manganese (Mn)	0.0007		0.0001	mg/L		24-MAY-06	CLL	R402501
Molybdenum (Mo)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Sodium (Na)	3.97		0.005	mg/L		24-MAY-06	CLL	R402501
Nickel (Ni)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Lead (Pb)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Antimony (Sb)	0.00011		0.00003	mg/L		24-MAY-06	CLL	R402501
Selenium (Se)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Strontium (Sr)	0.101		0.0001	mg/L		24-MAY-06	CLL	R402501
Uranium (U)	0.00011		0.00005	mg/L		24-MAY-06	CLL	R402501
Vanadium (V)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L390909-3 TWIN CREEK PINE POINT, NWT								
Sample By: SM on 17-MAY-06 @ 16:00								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Ultra-Low Metals - Dissolved								
Zinc (Zn)	0.0024		0.0008	mg/L		24-MAY-06	CLL	R402501
Ultra-Low Metals								
Iron (Fe)	0.016		0.005	mg/L		26-MAY-06	HAS	R402987
Ultra-Low Metals								
Silver (Ag)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Aluminum (Al)	0.0022		0.0003	mg/L		24-MAY-06	CLL	R402501
Arsenic (As)	0.00046		0.00003	mg/L		24-MAY-06	CLL	R402501
Boron (B)	0.002		0.001	mg/L		24-MAY-06	CLL	R402501
Barium (Ba)	0.0255		0.00005	mg/L		24-MAY-06	CLL	R402501
Beryllium (Be)	<0.0002		0.0002	mg/L		24-MAY-06	CLL	R402501
Calcium (Ca)	50.3		0.02	mg/L		24-MAY-06	CLL	R402501
Cadmium (Cd)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Cobalt (Co)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Chromium (Cr)	0.00358		0.00006	mg/L		24-MAY-06	CLL	R402501
Copper (Cu)	<0.0006		0.0006	mg/L		24-MAY-06	CLL	R402501
Mercury (Hg)	<0.00002		0.00002	mg/L		24-MAY-06	CLL	R402501
Potassium (K)	0.79		0.02	mg/L		24-MAY-06	CLL	R402501
Magnesium (Mg)	12.8		0.004	mg/L		24-MAY-06	CLL	R402501
Manganese (Mn)	0.0009		0.0001	mg/L		24-MAY-06	CLL	R402501
Molybdenum (Mo)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Sodium (Na)	3.98		0.005	mg/L		24-MAY-06	CLL	R402501
Nickel (Ni)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Lead (Pb)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Antimony (Sb)	0.00017		0.00003	mg/L		24-MAY-06	CLL	R402501
Selenium (Se)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Strontium (Sr)	0.101		0.0001	mg/L		24-MAY-06	CLL	R402501
Uranium (U)	0.00012		0.00005	mg/L		24-MAY-06	CLL	R402501
Vanadium (V)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Zinc (Zn)	0.0009		0.0008	mg/L		24-MAY-06	CLL	R402501
Ammonia-N	0.009		0.005	mg/L		23-MAY-06	KMY	R401394
Phosphorus, Total	0.005	RAMB	0.001	mg/L		25-MAY-06	SHC	R402399
Total Organic Carbon	20		1	mg/L		24-MAY-06	ZOW	R401804
Routine Water Analysis - Low Level								
Chloride (Cl)	3		1	mg/L		23-MAY-06	BYU	R401388
ICP metals for routine water								
Calcium (Ca)	47.2		0.5	mg/L		25-MAY-06	JWU	R402398
Potassium (K)	0.6		0.1	mg/L		25-MAY-06	JWU	R402398
Magnesium (Mg)	11.2		0.1	mg/L		25-MAY-06	JWU	R402398
Sodium (Na)	4		1	mg/L		25-MAY-06	JWU	R402398
Ion Balance Calculation								
Ion Balance	105			%		26-MAY-06		
TDS (Calculated)	166			mg/L		26-MAY-06		
Hardness (as CaCO3)	164			mg/L		26-MAY-06		
Nitrate+Nitrite-N	<0.006		0.006	mg/L		23-MAY-06	SHC	R401465
Nitrate-N	<0.006		0.006	mg/L		23-MAY-06	SHC	R401465
Nitrite-N	<0.002		0.002	mg/L		23-MAY-06	SHC	R401465
Sulphate (SO4)	9.24		0.05	mg/L		24-MAY-06	JTV	R401879
pH, Conductivity and Total Alkalinity								
pH	8.1		0.1	pH		24-MAY-06	PTT	R401754

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L390909-3 TWIN CREEK PINE POINT, NWT								
Sample By: SM on 17-MAY-06 @ 16:00								
Matrix: WATER								
Routine Water Analysis - Low Level								
pH, Conductivity and Total Alkalinity								
Conductivity (EC)	314		0.2	uS/cm		24-MAY-06	PTT	R401754
Bicarbonate (HCO3)	184		5	mg/L		24-MAY-06	PTT	R401754
Carbonate (CO3)	<5		5	mg/L		24-MAY-06	PTT	R401754
Hydroxide (OH)	<5		5	mg/L		24-MAY-06	PTT	R401754
Alkalinity, Total (as CaCO3)	151		5	mg/L		24-MAY-06	PTT	R401754
L390909-4 TWIN CREEK DUP PINE POINT, NWT								
Sample By: SM on 17-MAY-06 @ 16:00								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Iron (Fe)	0.014		0.005	mg/L		26-MAY-06	HAS	R402987
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Aluminum (Al)	0.0014		0.0003	mg/L		24-MAY-06	CLL	R402501
Arsenic (As)	0.00048		0.00003	mg/L		24-MAY-06	CLL	R402501
Boron (B)	0.002		0.001	mg/L		24-MAY-06	CLL	R402501
Barium (Ba)	0.0260		0.00005	mg/L		24-MAY-06	CLL	R402501
Beryllium (Be)	<0.0002		0.0002	mg/L		24-MAY-06	CLL	R402501
Calcium (Ca)	51.0		0.02	mg/L		24-MAY-06	CLL	R402501
Cadmium (Cd)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Cobalt (Co)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Chromium (Cr)	0.00354		0.00006	mg/L		24-MAY-06	CLL	R402501
Copper (Cu)	<0.0006		0.0006	mg/L		24-MAY-06	CLL	R402501
Mercury (Hg)	<0.00002		0.00002	mg/L		24-MAY-06	CLL	R402501
Potassium (K)	0.80		0.02	mg/L		24-MAY-06	CLL	R402501
Magnesium (Mg)	13.2		0.004	mg/L		24-MAY-06	CLL	R402501
Manganese (Mn)	0.0007		0.0001	mg/L		24-MAY-06	CLL	R402501
Molybdenum (Mo)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Sodium (Na)	4.06		0.005	mg/L		24-MAY-06	CLL	R402501
Nickel (Ni)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Lead (Pb)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Antimony (Sb)	0.00017		0.00003	mg/L		24-MAY-06	CLL	R402501
Selenium (Se)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Strontium (Sr)	0.103		0.0001	mg/L		24-MAY-06	CLL	R402501
Uranium (U)	0.00012		0.00005	mg/L		24-MAY-06	CLL	R402501
Vanadium (V)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Zinc (Zn)	0.0026		0.0008	mg/L		24-MAY-06	CLL	R402501
Ultra-Low Metals								
Iron (Fe)	0.017		0.005	mg/L		26-MAY-06	HAS	R402987
Ultra-Low Metals								
Silver (Ag)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Aluminum (Al)	0.0022		0.0003	mg/L		24-MAY-06	CLL	R402501
Arsenic (As)	0.00046		0.00003	mg/L		24-MAY-06	CLL	R402501
Boron (B)	0.002		0.001	mg/L		24-MAY-06	CLL	R402501
Barium (Ba)	0.0256		0.00005	mg/L		24-MAY-06	CLL	R402501
Beryllium (Be)	<0.0002		0.0002	mg/L		24-MAY-06	CLL	R402501
Calcium (Ca)	50.0		0.02	mg/L		24-MAY-06	CLL	R402501
Cadmium (Cd)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Cobalt (Co)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Chromium (Cr)	0.00331		0.00006	mg/L		24-MAY-06	CLL	R402501
Copper (Cu)	<0.0006		0.0006	mg/L		24-MAY-06	CLL	R402501

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L390909-4 TWIN CREEK DUP PINE POINT, NWT								
Sample By: SM on 17-MAY-06 @ 16:00								
Matrix: WATER								
Ultra-Low Metals								
Ultra-Low Metals								
Mercury (Hg)	<0.00002		0.00002	mg/L		24-MAY-06	CLL	R402501
Potassium (K)	0.80		0.02	mg/L		24-MAY-06	CLL	R402501
Magnesium (Mg)	12.8		0.004	mg/L		24-MAY-06	CLL	R402501
Manganese (Mn)	0.0009		0.0001	mg/L		24-MAY-06	CLL	R402501
Molybdenum (Mo)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Sodium (Na)	3.96		0.005	mg/L		24-MAY-06	CLL	R402501
Nickel (Ni)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Lead (Pb)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Antimony (Sb)	0.00013		0.00003	mg/L		24-MAY-06	CLL	R402501
Selenium (Se)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Strontium (Sr)	0.101		0.0001	mg/L		24-MAY-06	CLL	R402501
Uranium (U)	0.00012		0.00005	mg/L		24-MAY-06	CLL	R402501
Vanadium (V)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Zinc (Zn)	0.0010		0.0008	mg/L		24-MAY-06	CLL	R402501
Ammonia-N	0.007		0.005	mg/L		23-MAY-06	KMY	R401394
Phosphorus, Total	0.004	RAMB	0.001	mg/L		25-MAY-06	SHC	R402399
Total Organic Carbon	20		1	mg/L		24-MAY-06	ZOW	R401804
Routine Water Analysis - Low Level								
Chloride (Cl)	3		1	mg/L		23-MAY-06	BYU	R401388
ICP metals for routine water								
Calcium (Ca)	47.6		0.5	mg/L		25-MAY-06	JWU	R402398
Potassium (K)	0.6		0.1	mg/L		25-MAY-06	JWU	R402398
Magnesium (Mg)	11.4		0.1	mg/L		25-MAY-06	JWU	R402398
Sodium (Na)	4		1	mg/L		25-MAY-06	JWU	R402398
Ion Balance Calculation								
Ion Balance	106			%		26-MAY-06		
TDS (Calculated)	167			mg/L		26-MAY-06		
Hardness (as CaCO3)	166			mg/L		26-MAY-06		
Nitrate+Nitrite-N	<0.006		0.006	mg/L		23-MAY-06	SHC	R401465
Nitrate-N	<0.006		0.006	mg/L		23-MAY-06	SHC	R401465
Nitrite-N	<0.002		0.002	mg/L		23-MAY-06	SHC	R401465
Sulphate (SO4)	9.22		0.05	mg/L		24-MAY-06	JTV	R401879
pH, Conductivity and Total Alkalinity								
pH	8.1		0.1	pH		24-MAY-06	PTT	R401754
Conductivity (EC)	314		0.2	uS/cm		24-MAY-06	PTT	R401754
Bicarbonate (HCO3)	185		5	mg/L		24-MAY-06	PTT	R401754
Carbonate (CO3)	<5		5	mg/L		24-MAY-06	PTT	R401754
Hydroxide (OH)	<5		5	mg/L		24-MAY-06	PTT	R401754
Alkalinity, Total (as CaCO3)	152		5	mg/L		24-MAY-06	PTT	R401754
L390909-5 FIELD BLANK PINE POINT, NWT								
Sample By: SM on 17-MAY-06 @ 16:00								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Iron (Fe)	<0.005		0.005	mg/L		26-MAY-06	HAS	R402987
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Aluminum (Al)	<0.0003		0.0003	mg/L		24-MAY-06	CLL	R402501
Arsenic (As)	<0.00003		0.00003	mg/L		24-MAY-06	CLL	R402501

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L390909-5 FIELD BLANK PINE POINT, NWT								
Sample By: SM on 17-MAY-06 @ 16:00								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Ultra-Low Metals - Dissolved								
Boron (B)	<0.001		0.001	mg/L		24-MAY-06	CLL	R402501
Barium (Ba)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Beryllium (Be)	<0.0002		0.0002	mg/L		24-MAY-06	CLL	R402501
Calcium (Ca)	0.04		0.02	mg/L		24-MAY-06	CLL	R402501
Cadmium (Cd)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Cobalt (Co)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Chromium (Cr)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Copper (Cu)	<0.0006		0.0006	mg/L		24-MAY-06	CLL	R402501
Mercury (Hg)	<0.00002		0.00002	mg/L		24-MAY-06	CLL	R402501
Potassium (K)	<0.02		0.02	mg/L		24-MAY-06	CLL	R402501
Magnesium (Mg)	<0.004		0.004	mg/L		24-MAY-06	CLL	R402501
Manganese (Mn)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Molybdenum (Mo)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Sodium (Na)	0.131		0.005	mg/L		24-MAY-06	CLL	R402501
Nickel (Ni)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Lead (Pb)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Antimony (Sb)	0.00014		0.00003	mg/L		24-MAY-06	CLL	R402501
Selenium (Se)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Strontium (Sr)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Uranium (U)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Vanadium (V)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Zinc (Zn)	0.0022		0.0008	mg/L		24-MAY-06	CLL	R402501
Ultra-Low Metals								
Iron (Fe)	<0.005		0.005	mg/L		26-MAY-06	HAS	R402987
Ultra-Low Metals								
Silver (Ag)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Aluminum (Al)	<0.0003		0.0003	mg/L		24-MAY-06	CLL	R402501
Arsenic (As)	<0.00003		0.00003	mg/L		24-MAY-06	CLL	R402501
Boron (B)	<0.001		0.001	mg/L		24-MAY-06	CLL	R402501
Barium (Ba)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Beryllium (Be)	<0.0002		0.0002	mg/L		24-MAY-06	CLL	R402501
Calcium (Ca)	0.02		0.02	mg/L		24-MAY-06	CLL	R402501
Cadmium (Cd)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Cobalt (Co)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Chromium (Cr)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Copper (Cu)	<0.0006		0.0006	mg/L		24-MAY-06	CLL	R402501
Mercury (Hg)	<0.00002		0.00002	mg/L		24-MAY-06	CLL	R402501
Potassium (K)	<0.02		0.02	mg/L		24-MAY-06	CLL	R402501
Magnesium (Mg)	<0.004		0.004	mg/L		24-MAY-06	CLL	R402501
Manganese (Mn)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Molybdenum (Mo)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Sodium (Na)	0.123		0.005	mg/L		24-MAY-06	CLL	R402501
Nickel (Ni)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Lead (Pb)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Antimony (Sb)	0.00013		0.00003	mg/L		24-MAY-06	CLL	R402501
Selenium (Se)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Strontium (Sr)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Uranium (U)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Vanadium (V)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Zinc (Zn)	<0.0008		0.0008	mg/L		24-MAY-06	CLL	R402501

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L390909-5 FIELD BLANK PINE POINT, NWT								
Sample By: SM on 17-MAY-06 @ 16:00								
Matrix: WATER								
Ultra-Low Metals								
Ammonia-N	<0.005		0.005	mg/L		23-MAY-06	KMY	R401394
Phosphorus, Total	<0.001	RAMB	0.001	mg/L		25-MAY-06	SHC	R402399
Total Organic Carbon	<1		1	mg/L		24-MAY-06	ZOW	R401804
Routine Water Analysis - Low Level								
Chloride (Cl)	1		1	mg/L		23-MAY-06	BYU	R401388
ICP metals for routine water								
Calcium (Ca)	<0.5		0.5	mg/L		25-MAY-06	JWU	R402398
Potassium (K)	<0.1		0.1	mg/L		25-MAY-06	JWU	R402398
Magnesium (Mg)	0.1		0.1	mg/L		25-MAY-06	JWU	R402398
Sodium (Na)	<1		1	mg/L		25-MAY-06	JWU	R402398
Ion Balance Calculation								
Ion Balance	Low EC			%		26-MAY-06		
TDS (Calculated)	1			mg/L		26-MAY-06		
Hardness (as CaCO3)	<1			mg/L		26-MAY-06		
Nitrate+Nitrite-N	<0.006		0.006	mg/L		23-MAY-06	SHC	R401465
Nitrate-N	<0.006		0.006	mg/L		23-MAY-06	SHC	R401465
Nitrite-N	<0.002		0.002	mg/L		23-MAY-06	SHC	R401465
Sulphate (SO4)	<0.05		0.05	mg/L		24-MAY-06	JTV	R401879
pH, Conductivity and Total Alkalinity								
pH	6.0		0.1	pH		24-MAY-06	PTT	R401754
Conductivity (EC)	1.2		0.2	uS/cm		24-MAY-06	PTT	R401754
Bicarbonate (HCO3)	<5		5	mg/L		24-MAY-06	PTT	R401754
Carbonate (CO3)	<5		5	mg/L		24-MAY-06	PTT	R401754
Hydroxide (OH)	<5		5	mg/L		24-MAY-06	PTT	R401754
Alkalinity, Total (as CaCO3)	<5		5	mg/L		24-MAY-06	PTT	R401754
L390909-6 TRIP BLANK PINE POINT, NWT								
Sample By: CLIENT								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Iron (Fe)	<0.005		0.005	mg/L		26-MAY-06	HAS	R402987
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Aluminum (Al)	<0.0003		0.0003	mg/L		24-MAY-06	CLL	R402501
Arsenic (As)	<0.00003		0.00003	mg/L		24-MAY-06	CLL	R402501
Boron (B)	<0.001		0.001	mg/L		24-MAY-06	CLL	R402501
Barium (Ba)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Beryllium (Be)	<0.0002		0.0002	mg/L		24-MAY-06	CLL	R402501
Calcium (Ca)	<0.02		0.02	mg/L		24-MAY-06	CLL	R402501
Cadmium (Cd)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Cobalt (Co)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Chromium (Cr)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Copper (Cu)	<0.0006		0.0006	mg/L		24-MAY-06	CLL	R402501
Mercury (Hg)	<0.00002		0.00002	mg/L		24-MAY-06	CLL	R402501
Potassium (K)	<0.02		0.02	mg/L		24-MAY-06	CLL	R402501
Magnesium (Mg)	<0.004		0.004	mg/L		24-MAY-06	CLL	R402501
Manganese (Mn)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Molybdenum (Mo)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Sodium (Na)	<0.005		0.005	mg/L		24-MAY-06	CLL	R402501
Nickel (Ni)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L390909-6 TRIP BLANK PINE POINT, NWT								
Sample By: CLIENT								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Ultra-Low Metals - Dissolved								
Lead (Pb)	0.00010		0.00005	mg/L		24-MAY-06	CLL	R402501
Antimony (Sb)	0.00017		0.00003	mg/L		24-MAY-06	CLL	R402501
Selenium (Se)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Strontium (Sr)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Uranium (U)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Vanadium (V)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Zinc (Zn)	<0.0008		0.0008	mg/L		24-MAY-06	CLL	R402501
Ultra-Low Metals								
Iron (Fe)	<0.005		0.005	mg/L		26-MAY-06	HAS	R402987
Ultra-Low Metals								
Silver (Ag)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Aluminum (Al)	<0.0003		0.0003	mg/L		24-MAY-06	CLL	R402501
Arsenic (As)	<0.00003		0.00003	mg/L		24-MAY-06	CLL	R402501
Boron (B)	<0.001		0.001	mg/L		24-MAY-06	CLL	R402501
Barium (Ba)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Beryllium (Be)	<0.0002		0.0002	mg/L		24-MAY-06	CLL	R402501
Calcium (Ca)	<0.02		0.02	mg/L		24-MAY-06	CLL	R402501
Cadmium (Cd)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Cobalt (Co)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Chromium (Cr)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Copper (Cu)	<0.0006		0.0006	mg/L		24-MAY-06	CLL	R402501
Mercury (Hg)	<0.00002		0.00002	mg/L		24-MAY-06	CLL	R402501
Potassium (K)	<0.02		0.02	mg/L		24-MAY-06	CLL	R402501
Magnesium (Mg)	<0.004		0.004	mg/L		24-MAY-06	CLL	R402501
Manganese (Mn)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Molybdenum (Mo)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Sodium (Na)	<0.005		0.005	mg/L		24-MAY-06	CLL	R402501
Nickel (Ni)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Lead (Pb)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Antimony (Sb)	0.00010		0.00003	mg/L		24-MAY-06	CLL	R402501
Selenium (Se)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Strontium (Sr)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Uranium (U)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Vanadium (V)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Zinc (Zn)	<0.0008		0.0008	mg/L		24-MAY-06	CLL	R402501
Ammonia-N	<0.005		0.005	mg/L		23-MAY-06	KMY	R401394
Phosphorus, Total	<0.001	RAMB	0.001	mg/L		25-MAY-06	SHC	R402399
Total Organic Carbon	<1		1	mg/L		24-MAY-06	ZOW	R401804
Routine Water Analysis - Low Level								
Chloride (Cl)	<1		1	mg/L		23-MAY-06	BYU	R401388
ICP metals for routine water								
Calcium (Ca)	<0.5		0.5	mg/L		25-MAY-06	JWU	R402398
Potassium (K)	<0.1		0.1	mg/L		25-MAY-06	JWU	R402398
Magnesium (Mg)	<0.1		0.1	mg/L		25-MAY-06	JWU	R402398
Sodium (Na)	<1		1	mg/L		25-MAY-06	JWU	R402398
Ion Balance Calculation								
Ion Balance	Low TDS			%		26-MAY-06		
TDS (Calculated)	<1			mg/L		26-MAY-06		
Hardness (as CaCO3)	<1			mg/L		26-MAY-06		

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L390909-6 TRIP BLANK PINE POINT, NWT								
Sample By: CLIENT								
Matrix: WATER								
Routine Water Analysis - Low Level								
Nitrate+Nitrite-N	<0.006		0.006	mg/L		23-MAY-06	SHC	R401465
Nitrate-N	<0.006		0.006	mg/L		23-MAY-06	SHC	R401465
Nitrite-N	<0.002		0.002	mg/L		23-MAY-06	SHC	R401465
Sulphate (SO4)	<0.05		0.05	mg/L		24-MAY-06	JTV	R401879
pH, Conductivity and Total Alkalinity								
pH	5.5		0.1	pH		24-MAY-06	PTT	R401754
Conductivity (EC)	0.8		0.2	uS/cm		24-MAY-06	PTT	R401754
Bicarbonate (HCO3)	<5		5	mg/L		24-MAY-06	PTT	R401754
Carbonate (CO3)	<5		5	mg/L		24-MAY-06	PTT	R401754
Hydroxide (OH)	<5		5	mg/L		24-MAY-06	PTT	R401754
Alkalinity, Total (as CaCO3)	<5		5	mg/L		24-MAY-06	PTT	R401754
L390909-7 FILTER BLANK								
Sample By: CLIENT								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Iron (Fe)	<0.005		0.005	mg/L		26-MAY-06	HAS	R402987
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Aluminum (Al)	0.0006		0.0003	mg/L		24-MAY-06	CLL	R402501
Arsenic (As)	<0.00003		0.00003	mg/L		24-MAY-06	CLL	R402501
Boron (B)	<0.001		0.001	mg/L		24-MAY-06	CLL	R402501
Barium (Ba)	0.00008		0.00005	mg/L		24-MAY-06	CLL	R402501
Beryllium (Be)	<0.0002		0.0002	mg/L		24-MAY-06	CLL	R402501
Calcium (Ca)	0.20		0.02	mg/L		24-MAY-06	CLL	R402501
Cadmium (Cd)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Cobalt (Co)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Chromium (Cr)	0.00012		0.00006	mg/L		24-MAY-06	CLL	R402501
Copper (Cu)	<0.0006		0.0006	mg/L		24-MAY-06	CLL	R402501
Mercury (Hg)	<0.00002		0.00002	mg/L		24-MAY-06	CLL	R402501
Potassium (K)	0.02		0.02	mg/L		24-MAY-06	CLL	R402501
Magnesium (Mg)	0.005		0.004	mg/L		24-MAY-06	CLL	R402501
Manganese (Mn)	0.0002		0.0001	mg/L		24-MAY-06	CLL	R402501
Molybdenum (Mo)	<0.00006		0.00006	mg/L		24-MAY-06	CLL	R402501
Sodium (Na)	0.120		0.005	mg/L		24-MAY-06	CLL	R402501
Nickel (Ni)	0.00048		0.00006	mg/L		24-MAY-06	CLL	R402501
Lead (Pb)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Antimony (Sb)	0.00018		0.00003	mg/L		24-MAY-06	CLL	R402501
Selenium (Se)	<0.0001		0.0001	mg/L		24-MAY-06	CLL	R402501
Strontium (Sr)	0.0003		0.0001	mg/L		24-MAY-06	CLL	R402501
Uranium (U)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Vanadium (V)	<0.00005		0.00005	mg/L		24-MAY-06	CLL	R402501
Zinc (Zn)	0.0069		0.0008	mg/L		24-MAY-06	CLL	R402501

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier key listed:

Qualifier	Description
BL:INT	Balance Reviewed: Interference Or Non-Measured Component
RAMB	Result Adjusted For Method Blank

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
C-TOT-ORG-ED	Water	Total Organic Carbon		APHA 5310 B-Instrumental
CL-ED	Water	Chloride (Cl)		APHA 4500 Cl E-Colorimetry
ETL-ROUTINE-LOW-ED	Water	ICP metals for routine water		APHA 3120 B-ICP/OES
IONBALANCE-ED	Water	Ion Balance Calculation		APHA 1030E
MET1-TOT-LOW-ED	Water	Total Trace Metals (Low Level)	EPA3015	EPA 6020
MET1-ULTRA-DIS-ED	Water	Ultra-Low Metals - Dissolved		EPA 6020
MET1-ULTRA-ED	Water	Ultra-Low Metals		EPA 6020
MET2-TOT-LOW-ED	Water	Total Major Metals	EPA3015	EPA 200.7
MET2-ULTRA-DIS-ED	Water	Major Metals - Dissolved		EPA 200.7
MET2-ULTRA-ED	Water	Major Metals		EPA 200.7
N2N3-LOW-ED	Water	Nitrate+Nitrite-N		APHA 4500 NO3E-Colorimetry
NH4-LOW-ED	Water	Ammonia-N		APHA 4500 NH3F-Colorimetry
NO2-LOW-ED	Water	Nitrite-N		APHA 4500 NO2B-Colorimetry
NO3-LOW-ED	Water	Nitrate-N		APHA 4500 NO3H-Colorimetry
P-TOTAL-LOW-ED	Water	Phosphorus, Total		APHA 4500 P B,E-Auto-Colorimetry
PH/EC/ALK-ED	Water	pH, Conductivity and Total Alkalinity		APHA 4500-H, 2510, 2320
SO4-LOW-ED	Water	Sulfate (SO4)		APHA 4110 B-Ion Chromatography

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

Chain of Custody numbers:

159699

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		

Reference Information

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. - Detection 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.

PRELIMINARY RESULTS

EBA ENG CONSULTANTS LTD
ATTN: STEVE MOORE
201-4916 49 STREET
YELLOWKNIFE NT X1A 2P7

Report On: 26-JUN-06 04:48 PM

Lab Work Order #: **L396814** **Date Received:** **07-JUN-06**

Project P.O. #:
Job Reference: 1740149.001
Legal Site Desc:
CofC Numbers: 58041

Comments: Report Comment: L39814-3, L396814-4; Analysis of total metals was changed from ultra-low level to low level, because of high turbidity.

DOUG JOHNSON
Director of Operations, Edmonton

CATHERINE EVARISTO-CORDERO
Account Manager

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L396814-1 TWIN CREEK PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Iron (Fe)	0.023		0.005	mg/L		22-JUN-06	SYF	R412254
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Aluminum (Al)	0.0011		0.0003	mg/L		19-JUN-06	CLL	R411259
Arsenic (As)	0.00045		0.00003	mg/L		19-JUN-06	CLL	R411259
Boron (B)	<0.001		0.001	mg/L		19-JUN-06	CLL	R411259
Barium (Ba)	0.0273		0.00005	mg/L		19-JUN-06	CLL	R411259
Beryllium (Be)	<0.0002		0.0002	mg/L		19-JUN-06	CLL	R411259
Calcium (Ca)	52.5		0.02	mg/L		19-JUN-06	CLL	R411259
Cadmium (Cd)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Chromium (Cr)	0.00008		0.00006	mg/L		19-JUN-06	CLL	R411259
Copper (Cu)	<0.0006		0.0006	mg/L		19-JUN-06	CLL	R411259
Mercury (Hg)	<0.00002		0.00002	mg/L		19-JUN-06	CLL	R411259
Potassium (K)	0.54		0.02	mg/L		19-JUN-06	CLL	R411259
Magnesium (Mg)	12.8		0.004	mg/L		19-JUN-06	CLL	R411259
Manganese (Mn)	0.0012		0.0001	mg/L		19-JUN-06	CLL	R411259
Molybdenum (Mo)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Sodium (Na)	4.04		0.005	mg/L		19-JUN-06	CLL	R411259
Nickel (Ni)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Lead (Pb)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Antimony (Sb)	0.00014		0.00003	mg/L		19-JUN-06	CLL	R411259
Selenium (Se)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Strontium (Sr)	0.113		0.0001	mg/L		19-JUN-06	CLL	R411259
Uranium (U)	0.00012		0.00005	mg/L		19-JUN-06	CLL	R411259
Vanadium (V)	0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Zinc (Zn)	0.0021	RRVAP	0.0008	mg/L		19-JUN-06	CLL	R411259
Ultra-Low Metals								
Iron (Fe)	0.025		0.005	mg/L		22-JUN-06	SYF	R412254
Ultra-Low Metals								
Silver (Ag)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Aluminum (Al)	0.0033		0.0003	mg/L		19-JUN-06	CLL	R411259
Arsenic (As)	0.00046		0.00003	mg/L		19-JUN-06	CLL	R411259
Boron (B)	<0.001		0.001	mg/L		19-JUN-06	CLL	R411259
Barium (Ba)	0.0270		0.00005	mg/L		19-JUN-06	CLL	R411259
Beryllium (Be)	<0.0002		0.0002	mg/L		19-JUN-06	CLL	R411259
Calcium (Ca)	52.3		0.02	mg/L		19-JUN-06	CLL	R411259
Cadmium (Cd)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Chromium (Cr)	0.00020		0.00006	mg/L		19-JUN-06	CLL	R411259
Copper (Cu)	<0.0006		0.0006	mg/L		19-JUN-06	CLL	R411259
Mercury (Hg)	<0.00002		0.00002	mg/L		19-JUN-06	CLL	R411259
Potassium (K)	0.55		0.02	mg/L		19-JUN-06	CLL	R411259
Magnesium (Mg)	13.0		0.004	mg/L		19-JUN-06	CLL	R411259
Manganese (Mn)	0.0016		0.0001	mg/L		19-JUN-06	CLL	R411259
Molybdenum (Mo)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Sodium (Na)	4.09		0.005	mg/L		19-JUN-06	CLL	R411259
Nickel (Ni)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Lead (Pb)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Antimony (Sb)	0.00020		0.00003	mg/L		19-JUN-06	CLL	R411259
Selenium (Se)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L396814-1 TWIN CREEK PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Ultra-Low Metals								
Ultra-Low Metals								
Strontium (Sr)	0.112		0.0001	mg/L		19-JUN-06	CLL	R411259
Uranium (U)	0.00013		0.00005	mg/L		19-JUN-06	CLL	R411259
Vanadium (V)	0.00006		0.00005	mg/L		19-JUN-06	CLL	R411259
Zinc (Zn)	<0.0008	RRVAP	0.0008	mg/L		19-JUN-06	CLL	R411259
Ammonia-N	0.028		0.005	mg/L		15-JUN-06	KMY	R409765
Phosphorus, Total	0.005		0.001	mg/L		12-JUN-06	TL	R408717
Total Organic Carbon	25		1	mg/L		09-JUN-06	TL	R407504
Routine Water Analysis - Low Level								
Chloride (Cl)	3		1	mg/L		11-JUN-06	WYA	R408060
ICP metals for routine water								
Calcium (Ca)	55.8		0.5	mg/L		17-JUN-06	MLH	R410415
Potassium (K)	0.6		0.1	mg/L		17-JUN-06	MLH	R410415
Magnesium (Mg)	14.0		0.1	mg/L		17-JUN-06	MLH	R410415
Sodium (Na)	4		1	mg/L		17-JUN-06	MLH	R410415
Ion Balance Calculation								
Ion Balance	107			%		18-JUN-06		
TDS (Calculated)	194			mg/L		18-JUN-06		
Hardness (as CaCO3)	197			mg/L		18-JUN-06		
Nitrate+Nitrite-N	<0.006		0.006	mg/L		07-JUN-06	KMY	R407085
Nitrate-N	<0.006		0.006	mg/L		07-JUN-06	KMY	R407085
Nitrite-N	<0.002		0.002	mg/L		07-JUN-06	KMY	R407085
Sulphate (SO4)	8.67		0.05	mg/L		09-JUN-06	JTV	R407362
pH, Conductivity and Total Alkalinity								
pH	8.1		0.1	pH		08-JUN-06	PTT	R407140
Conductivity (EC)	354		0.2	uS/cm		08-JUN-06	PTT	R407140
Bicarbonate (HCO3)	219		5	mg/L		08-JUN-06	PTT	R407140
Carbonate (CO3)	<5		5	mg/L		08-JUN-06	PTT	R407140
Hydroxide (OH)	<5		5	mg/L		08-JUN-06	PTT	R407140
Alkalinity, Total (as CaCO3)	180		5	mg/L		08-JUN-06	PTT	R407140
L396814-2 TWIN CREEK DUP PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Iron (Fe)	0.023		0.005	mg/L		22-JUN-06	SYF	R412254
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Aluminum (Al)	0.0010		0.0003	mg/L		19-JUN-06	CLL	R411259
Arsenic (As)	0.00044		0.00003	mg/L		19-JUN-06	CLL	R411259
Boron (B)	<0.001		0.001	mg/L		19-JUN-06	CLL	R411259
Barium (Ba)	0.0264		0.00005	mg/L		19-JUN-06	CLL	R411259
Beryllium (Be)	<0.0002		0.0002	mg/L		19-JUN-06	CLL	R411259
Calcium (Ca)	51.5		0.02	mg/L		19-JUN-06	CLL	R411259
Cadmium (Cd)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Chromium (Cr)	0.00024		0.00006	mg/L		19-JUN-06	CLL	R411259
Copper (Cu)	<0.0006		0.0006	mg/L		19-JUN-06	CLL	R411259
Mercury (Hg)	<0.00002		0.00002	mg/L		19-JUN-06	CLL	R411259
Potassium (K)	0.53		0.02	mg/L		19-JUN-06	CLL	R411259

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L396814-2 TWIN CREEK DUP PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Ultra-Low Metals - Dissolved								
Magnesium (Mg)	13.0		0.004	mg/L		19-JUN-06	CLL	R411259
Manganese (Mn)	0.0012		0.0001	mg/L		19-JUN-06	CLL	R411259
Molybdenum (Mo)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Sodium (Na)	4.13		0.005	mg/L		19-JUN-06	CLL	R411259
Nickel (Ni)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Lead (Pb)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Antimony (Sb)	0.00011		0.00003	mg/L		19-JUN-06	CLL	R411259
Selenium (Se)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Strontium (Sr)	0.111		0.0001	mg/L		19-JUN-06	CLL	R411259
Uranium (U)	0.00012		0.00005	mg/L		19-JUN-06	CLL	R411259
Vanadium (V)	0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Zinc (Zn)	0.0020	RRVAP	0.0008	mg/L		19-JUN-06	CLL	R411259
Ultra-Low Metals								
Iron (Fe)	0.026		0.005	mg/L		22-JUN-06	SYF	R412254
Ultra-Low Metals								
Silver (Ag)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Aluminum (Al)	0.0027		0.0003	mg/L		19-JUN-06	CLL	R411259
Arsenic (As)	0.00044		0.00003	mg/L		19-JUN-06	CLL	R411259
Boron (B)	<0.001		0.001	mg/L		19-JUN-06	CLL	R411259
Barium (Ba)	0.0271		0.00005	mg/L		19-JUN-06	CLL	R411259
Beryllium (Be)	<0.0002		0.0002	mg/L		19-JUN-06	CLL	R411259
Calcium (Ca)	51.5		0.02	mg/L		19-JUN-06	CLL	R411259
Cadmium (Cd)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Chromium (Cr)	0.00018		0.00006	mg/L		19-JUN-06	CLL	R411259
Copper (Cu)	<0.0006		0.0006	mg/L		19-JUN-06	CLL	R411259
Mercury (Hg)	<0.00002		0.00002	mg/L		19-JUN-06	CLL	R411259
Potassium (K)	0.54		0.02	mg/L		19-JUN-06	CLL	R411259
Magnesium (Mg)	13.3		0.004	mg/L		19-JUN-06	CLL	R411259
Manganese (Mn)	0.0019		0.0001	mg/L		19-JUN-06	CLL	R411259
Molybdenum (Mo)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Sodium (Na)	4.19		0.005	mg/L		19-JUN-06	CLL	R411259
Nickel (Ni)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Lead (Pb)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Antimony (Sb)	0.00017		0.00003	mg/L		19-JUN-06	CLL	R411259
Selenium (Se)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Strontium (Sr)	0.110		0.0001	mg/L		19-JUN-06	CLL	R411259
Uranium (U)	0.00013		0.00005	mg/L		19-JUN-06	CLL	R411259
Vanadium (V)	0.00006		0.00005	mg/L		19-JUN-06	CLL	R411259
Zinc (Zn)	<0.0008	RRVAP	0.0008	mg/L		19-JUN-06	CLL	R411259
Ammonia-N	0.028		0.005	mg/L		15-JUN-06	KMY	R409765
Phosphorus, Total	0.005		0.001	mg/L		12-JUN-06	TL	R408717
Total Organic Carbon	25		1	mg/L		09-JUN-06	TL	R407504
Routine Water Analysis - Low Level								
Chloride (Cl)	4		1	mg/L		11-JUN-06	WYA	R408060
ICP metals for routine water								
Calcium (Ca)	57.5		0.5	mg/L		10-JUN-06	MLH	R408180
Potassium (K)	0.6		0.1	mg/L		10-JUN-06	MLH	R408180
Magnesium (Mg)	14.0		0.1	mg/L		10-JUN-06	MLH	R408180

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L396814-2 TWIN CREEK DUP PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Routine Water Analysis - Low Level								
ICP metals for routine water								
Sodium (Na)	5		1	mg/L		10-JUN-06	MLH	R408180
Ion Balance Calculation								
Ion Balance	111			%		12-JUN-06		
TDS (Calculated)	196			mg/L		12-JUN-06		
Hardness (as CaCO3)	201			mg/L		12-JUN-06		
Nitrate+Nitrite-N	<0.006		0.006	mg/L		07-JUN-06	KMY	R407085
Nitrate-N	<0.006		0.006	mg/L		07-JUN-06	KMY	R407085
Nitrite-N	<0.002		0.002	mg/L		07-JUN-06	KMY	R407085
Sulphate (SO4)	8.56		0.05	mg/L		09-JUN-06	JTV	R407362
pH, Conductivity and Total Alkalinity								
pH	8.1		0.1	pH		08-JUN-06	PTT	R407140
Conductivity (EC)	351		0.2	uS/cm		08-JUN-06	PTT	R407140
Bicarbonate (HCO3)	217		5	mg/L		08-JUN-06	PTT	R407140
Carbonate (CO3)	<5		5	mg/L		08-JUN-06	PTT	R407140
Hydroxide (OH)	<5		5	mg/L		08-JUN-06	PTT	R407140
Alkalinity, Total (as CaCO3)	178		5	mg/L		08-JUN-06	PTT	R407140
L396814-3 FEN MID PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Total Metals								
Total Major Metals								
Calcium (Ca)	40.9		0.5	mg/L		13-JUN-06	HAS	R409066
Potassium (K)	1.2		0.1	mg/L		13-JUN-06	HAS	R409066
Magnesium (Mg)	12.8		0.1	mg/L		13-JUN-06	HAS	R409066
Sodium (Na)	9		1	mg/L		13-JUN-06	HAS	R409066
Iron (Fe)	0.019		0.005	mg/L		13-JUN-06	HAS	R409066
Manganese (Mn)	0.007		0.001	mg/L		13-JUN-06	HAS	R409066
Total Trace Metals (Low Level)								
Silver (Ag)	<0.0004		0.0004	mg/L		12-JUN-06	QLI	R408513
Aluminum (Al)	<0.02		0.02	mg/L		12-JUN-06	QLI	R408513
Arsenic (As)	0.0005		0.0004	mg/L		12-JUN-06	QLI	R408513
Boron (B)	<0.02		0.02	mg/L		12-JUN-06	QLI	R408513
Barium (Ba)	0.0240		0.0002	mg/L		12-JUN-06	QLI	R408513
Beryllium (Be)	<0.001		0.001	mg/L		12-JUN-06	QLI	R408513
Bismuth (Bi)	<0.0001		0.0001	mg/L		12-JUN-06	QLI	R408513
Cadmium (Cd)	<0.0002		0.0002	mg/L		12-JUN-06	QLI	R408513
Cobalt (Co)	<0.0002		0.0002	mg/L		12-JUN-06	QLI	R408513
Chromium (Cr)	0.0014		0.0008	mg/L		12-JUN-06	QLI	R408513
Copper (Cu)	<0.001		0.001	mg/L		12-JUN-06	QLI	R408513
Molybdenum (Mo)	<0.0001		0.0001	mg/L		12-JUN-06	QLI	R408513
Nickel (Ni)	<0.0002		0.0002	mg/L		12-JUN-06	QLI	R408513
Lead (Pb)	0.0001		0.0001	mg/L		12-JUN-06	QLI	R408513
Antimony (Sb)	<0.0004		0.0004	mg/L		12-JUN-06	QLI	R408513
Selenium (Se)	<0.0004		0.0004	mg/L		12-JUN-06	QLI	R408513
Tin (Sn)	<0.0004		0.0004	mg/L		12-JUN-06	QLI	R408513
Strontium (Sr)	0.110		0.0002	mg/L		12-JUN-06	QLI	R408513
Titanium (Ti)	<0.005		0.005	mg/L		12-JUN-06	QLI	R408513
Thallium (Tl)	<0.0001		0.0001	mg/L		12-JUN-06	QLI	R408513
Uranium (U)	<0.0001		0.0001	mg/L		12-JUN-06	QLI	R408513
Vanadium (V)	<0.0002		0.0002	mg/L		12-JUN-06	QLI	R408513

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L396814-3 FEN MID PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Total Metals								
Total Trace Metals (Low Level)								
Zinc (Zn)	<0.004		0.004	mg/L		12-JUN-06	QLI	R408513
Ultra-Low Metals - Dissolved								
Iron (Fe)	0.013		0.005	mg/L		22-JUN-06	SYF	R412254
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Aluminum (Al)	0.0041		0.0003	mg/L		19-JUN-06	CLL	R411259
Arsenic (As)	0.00042		0.00003	mg/L		19-JUN-06	CLL	R411259
Boron (B)	0.002		0.001	mg/L		19-JUN-06	CLL	R411259
Barium (Ba)	0.0227		0.00005	mg/L		19-JUN-06	CLL	R411259
Beryllium (Be)	<0.0002		0.0002	mg/L		19-JUN-06	CLL	R411259
Calcium (Ca)	39.6		0.02	mg/L		19-JUN-06	CLL	R411259
Cadmium (Cd)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Chromium (Cr)	0.00023		0.00006	mg/L		19-JUN-06	CLL	R411259
Copper (Cu)	<0.0006		0.0006	mg/L		19-JUN-06	CLL	R411259
Mercury (Hg)	<0.00002		0.00002	mg/L		19-JUN-06	CLL	R411259
Potassium (K)	1.18		0.02	mg/L		19-JUN-06	CLL	R411259
Magnesium (Mg)	13.4		0.004	mg/L		19-JUN-06	CLL	R411259
Manganese (Mn)	0.0055		0.0001	mg/L		19-JUN-06	CLL	R411259
Molybdenum (Mo)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Sodium (Na)	8.62		0.005	mg/L		19-JUN-06	CLL	R411259
Nickel (Ni)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Lead (Pb)	0.00006		0.00005	mg/L		19-JUN-06	CLL	R411259
Antimony (Sb)	0.00042		0.00003	mg/L		19-JUN-06	CLL	R411259
Selenium (Se)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Strontium (Sr)	0.0984		0.0001	mg/L		19-JUN-06	CLL	R411259
Uranium (U)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Vanadium (V)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Zinc (Zn)	0.0021		0.0008	mg/L		19-JUN-06	CLL	R411259
Ammonia-N	0.030		0.005	mg/L		15-JUN-06	KMY	R409765
Phosphorus, Total	0.007		0.001	mg/L		12-JUN-06	TL	R408717
Total Organic Carbon	27		1	mg/L		09-JUN-06	TL	R407504
Routine Water Analysis - Low Level								
Chloride (Cl)	14		1	mg/L		11-JUN-06	WYA	R408060
ICP metals for routine water								
Calcium (Ca)	42.7		0.5	mg/L		10-JUN-06	MLH	R408180
Potassium (K)	1.1		0.1	mg/L		10-JUN-06	MLH	R408180
Magnesium (Mg)	13.8		0.1	mg/L		10-JUN-06	MLH	R408180
Sodium (Na)	8		1	mg/L		10-JUN-06	MLH	R408180
Ion Balance Calculation								
Ion Balance	109	BL:INT		%		12-JUN-06		
TDS (Calculated)	174			mg/L		12-JUN-06		
Hardness (as CaCO3)	163			mg/L		12-JUN-06		
Nitrate+Nitrite-N	<0.006		0.006	mg/L		07-JUN-06	KMY	R407085
Nitrate-N	<0.006		0.006	mg/L		07-JUN-06	KMY	R407085
Nitrite-N	0.002		0.002	mg/L		07-JUN-06	KMY	R407085
Sulphate (SO4)	15.0		0.05	mg/L		09-JUN-06	JTV	R407362
pH, Conductivity and Total Alkalinity								
pH	8.3		0.1	pH		08-JUN-06	PTT	R407140

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L396814-3 FEN MID PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Routine Water Analysis - Low Level								
pH, Conductivity and Total Alkalinity								
Conductivity (EC)	319		0.2	uS/cm		08-JUN-06	PTT	R407140
Bicarbonate (HCO3)	161		5	mg/L		08-JUN-06	PTT	R407140
Carbonate (CO3)	<5		5	mg/L		08-JUN-06	PTT	R407140
Hydroxide (OH)	<5		5	mg/L		08-JUN-06	PTT	R407140
Alkalinity, Total (as CaCO3)	132		5	mg/L		08-JUN-06	PTT	R407140
L396814-4 FEN HEAD PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Total Metals								
Total Major Metals								
Calcium (Ca)	98.8		0.5	mg/L		14-JUN-06	HAS	R409439
Potassium (K)	3.3		0.1	mg/L		14-JUN-06	HAS	R409439
Magnesium (Mg)	26.9		0.1	mg/L		14-JUN-06	HAS	R409439
Sodium (Na)	4		1	mg/L		14-JUN-06	HAS	R409439
Iron (Fe)	0.178		0.005	mg/L		14-JUN-06	HAS	R409439
Manganese (Mn)	0.181		0.001	mg/L		14-JUN-06	HAS	R409439
Total Trace Metals (Low Level)								
Silver (Ag)	<0.0004		0.0004	mg/L		14-JUN-06	QLI	R409447
Aluminum (Al)	0.05		0.02	mg/L		14-JUN-06	QLI	R409447
Arsenic (As)	0.0011		0.0004	mg/L		14-JUN-06	QLI	R409447
Boron (B)	<0.02		0.02	mg/L		14-JUN-06	QLI	R409447
Barium (Ba)	0.0899		0.0002	mg/L		14-JUN-06	QLI	R409447
Beryllium (Be)	<0.001		0.001	mg/L		14-JUN-06	QLI	R409447
Bismuth (Bi)	<0.0001		0.0001	mg/L		14-JUN-06	QLI	R409447
Cadmium (Cd)	<0.0002		0.0002	mg/L		14-JUN-06	QLI	R409447
Cobalt (Co)	<0.0002		0.0002	mg/L		14-JUN-06	QLI	R409447
Chromium (Cr)	0.0014		0.0008	mg/L		14-JUN-06	QLI	R409447
Copper (Cu)	<0.001		0.001	mg/L		14-JUN-06	QLI	R409447
Molybdenum (Mo)	0.0002		0.0001	mg/L		14-JUN-06	QLI	R409447
Nickel (Ni)	<0.0002		0.0002	mg/L		14-JUN-06	QLI	R409447
Lead (Pb)	0.0003		0.0001	mg/L		14-JUN-06	QLI	R409447
Antimony (Sb)	0.0005		0.0004	mg/L		14-JUN-06	QLI	R409447
Selenium (Se)	0.0009		0.0004	mg/L		14-JUN-06	QLI	R409447
Tin (Sn)	<0.0004		0.0004	mg/L		14-JUN-06	QLI	R409447
Strontium (Sr)	0.582		0.0002	mg/L		14-JUN-06	QLI	R409447
Titanium (Ti)	<0.005		0.005	mg/L		14-JUN-06	QLI	R409447
Thallium (Tl)	<0.0001		0.0001	mg/L		14-JUN-06	QLI	R409447
Uranium (U)	0.0006		0.0001	mg/L		14-JUN-06	QLI	R409447
Vanadium (V)	0.0004		0.0002	mg/L		14-JUN-06	QLI	R409447
Zinc (Zn)	<0.004		0.004	mg/L		14-JUN-06	QLI	R409447
Ultra-Low Metals - Dissolved								
Iron (Fe)	0.097		0.005	mg/L		22-JUN-06	SYF	R412254
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Aluminum (Al)	0.0030		0.0003	mg/L		19-JUN-06	CLL	R411259
Arsenic (As)	0.00077		0.00003	mg/L		19-JUN-06	CLL	R411259
Boron (B)	0.010		0.001	mg/L		19-JUN-06	CLL	R411259
Barium (Ba)	0.0821		0.00005	mg/L		19-JUN-06	CLL	R411259
Beryllium (Be)	<0.0002		0.0002	mg/L		19-JUN-06	CLL	R411259
Calcium (Ca)	85.7		0.02	mg/L		19-JUN-06	CLL	R411259

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L396814-4 FEN HEAD PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Ultra-Low Metals - Dissolved								
Cadmium (Cd)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Chromium (Cr)	0.00038		0.00006	mg/L		19-JUN-06	CLL	R411259
Copper (Cu)	<0.0006		0.0006	mg/L		19-JUN-06	CLL	R411259
Mercury (Hg)	<0.00002		0.00002	mg/L		19-JUN-06	CLL	R411259
Potassium (K)	2.71		0.02	mg/L		19-JUN-06	CLL	R411259
Magnesium (Mg)	24.7		0.004	mg/L		19-JUN-06	CLL	R411259
Manganese (Mn)	0.151		0.0001	mg/L		19-JUN-06	CLL	R411259
Molybdenum (Mo)	0.00016		0.00006	mg/L		19-JUN-06	CLL	R411259
Sodium (Na)	2.98		0.005	mg/L		19-JUN-06	CLL	R411259
Nickel (Ni)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Lead (Pb)	0.00008		0.00005	mg/L		19-JUN-06	CLL	R411259
Antimony (Sb)	0.00035		0.00003	mg/L		19-JUN-06	CLL	R411259
Selenium (Se)	0.0002		0.0001	mg/L		19-JUN-06	CLL	R411259
Strontium (Sr)	0.513		0.0001	mg/L		19-JUN-06	CLL	R411259
Uranium (U)	0.00051		0.00005	mg/L		19-JUN-06	CLL	R411259
Vanadium (V)	0.00010		0.00005	mg/L		19-JUN-06	CLL	R411259
Zinc (Zn)	0.0032		0.0008	mg/L		19-JUN-06	CLL	R411259
Ammonia-N	0.023		0.005	mg/L		15-JUN-06	KMY	R409765
Phosphorus, Total	0.037		0.001	mg/L		12-JUN-06	TL	R408717
Total Organic Carbon	32		1	mg/L		09-JUN-06	TL	R407504
Routine Water Analysis - Low Level								
Chloride (Cl)	3		1	mg/L		11-JUN-06	WYA	R408060
ICP metals for routine water								
Calcium (Ca)	91.7		0.5	mg/L		10-JUN-06	MLH	R408180
Potassium (K)	2.4		0.1	mg/L		10-JUN-06	MLH	R408180
Magnesium (Mg)	25.0		0.1	mg/L		10-JUN-06	MLH	R408180
Sodium (Na)	3		1	mg/L		10-JUN-06	MLH	R408180
Ion Balance Calculation								
Ion Balance	109			%		12-JUN-06		
TDS (Calculated)	318			mg/L		12-JUN-06		
Hardness (as CaCO3)	332			mg/L		12-JUN-06		
Nitrate+Nitrite-N	<0.006		0.006	mg/L		07-JUN-06	KMY	R407085
Nitrate-N	<0.006		0.006	mg/L		07-JUN-06	KMY	R407085
Nitrite-N	0.004		0.002	mg/L		07-JUN-06	KMY	R407085
Sulphate (SO4)	16.9		0.05	mg/L		09-JUN-06	JTV	R407362
pH, Conductivity and Total Alkalinity								
pH	8.1		0.1	pH		08-JUN-06	PTT	R407140
Conductivity (EC)	355		0.2	uS/cm		08-JUN-06	PTT	R407140
Bicarbonate (HCO3)	357		5	mg/L		08-JUN-06	PTT	R407140
Carbonate (CO3)	<5		5	mg/L		08-JUN-06	PTT	R407140
Hydroxide (OH)	<5		5	mg/L		08-JUN-06	PTT	R407140
Alkalinity, Total (as CaCO3)	293		5	mg/L		08-JUN-06	PTT	R407140
L396814-5 FIELD BLANK PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Iron (Fe)	<0.005		0.005	mg/L		22-JUN-06	SYF	R412254

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L396814-5 FIELD BLANK PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Aluminum (Al)	<0.0003		0.0003	mg/L		19-JUN-06	CLL	R411259
Arsenic (As)	<0.00003		0.00003	mg/L		19-JUN-06	CLL	R411259
Boron (B)	<0.001		0.001	mg/L		19-JUN-06	CLL	R411259
Barium (Ba)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Beryllium (Be)	<0.0002		0.0002	mg/L		19-JUN-06	CLL	R411259
Calcium (Ca)	0.03		0.02	mg/L		19-JUN-06	CLL	R411259
Cadmium (Cd)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Chromium (Cr)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Copper (Cu)	<0.0006		0.0006	mg/L		19-JUN-06	CLL	R411259
Mercury (Hg)	<0.00002		0.00002	mg/L		19-JUN-06	CLL	R411259
Potassium (K)	<0.02		0.02	mg/L		19-JUN-06	CLL	R411259
Magnesium (Mg)	<0.004		0.004	mg/L		19-JUN-06	CLL	R411259
Manganese (Mn)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Molybdenum (Mo)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Sodium (Na)	0.124		0.005	mg/L		19-JUN-06	CLL	R411259
Nickel (Ni)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Lead (Pb)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Antimony (Sb)	0.00038		0.00003	mg/L		19-JUN-06	CLL	R411259
Selenium (Se)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Strontium (Sr)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Uranium (U)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Vanadium (V)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Zinc (Zn)	0.0013	RRVAP	0.0008	mg/L		19-JUN-06	CLL	R411259
Ultra-Low Metals								
Iron (Fe)	<0.005		0.005	mg/L		22-JUN-06	SYF	R412254
Ultra-Low Metals								
Silver (Ag)	<0.0001		0.0001	mg/L		09-JUN-06	CLL	R409238
Aluminum (Al)	0.0003		0.0003	mg/L		09-JUN-06	CLL	R409238
Arsenic (As)	<0.00003		0.00003	mg/L		09-JUN-06	CLL	R409238
Boron (B)	<0.001		0.001	mg/L		09-JUN-06	CLL	R409238
Barium (Ba)	<0.00005		0.00005	mg/L		09-JUN-06	CLL	R409238
Beryllium (Be)	<0.0002		0.0002	mg/L		09-JUN-06	CLL	R409238
Calcium (Ca)	<0.02		0.02	mg/L		09-JUN-06	CLL	R409238
Cadmium (Cd)	<0.00005		0.00005	mg/L		09-JUN-06	CLL	R409238
Cobalt (Co)	<0.0001		0.0001	mg/L		09-JUN-06	CLL	R409238
Chromium (Cr)	<0.00006		0.00006	mg/L		09-JUN-06	CLL	R409238
Copper (Cu)	<0.0006		0.0006	mg/L		09-JUN-06	CLL	R409238
Mercury (Hg)	0.00002		0.00002	mg/L		09-JUN-06	CLL	R409238
Potassium (K)	<0.02		0.02	mg/L		09-JUN-06	CLL	R409238
Magnesium (Mg)	<0.004		0.004	mg/L		09-JUN-06	CLL	R409238
Manganese (Mn)	<0.0001		0.0001	mg/L		09-JUN-06	CLL	R409238
Molybdenum (Mo)	<0.00006		0.00006	mg/L		09-JUN-06	CLL	R409238
Sodium (Na)	0.117		0.005	mg/L		09-JUN-06	CLL	R409238
Nickel (Ni)	<0.00006		0.00006	mg/L		09-JUN-06	CLL	R409238
Lead (Pb)	<0.00005		0.00005	mg/L		09-JUN-06	CLL	R409238
Antimony (Sb)	0.00022		0.00003	mg/L		09-JUN-06	CLL	R409238
Selenium (Se)	<0.0001		0.0001	mg/L		09-JUN-06	CLL	R409238
Strontium (Sr)	<0.0001		0.0001	mg/L		09-JUN-06	CLL	R409238

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L396814-5 FIELD BLANK PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Ultra-Low Metals								
Ultra-Low Metals								
Uranium (U)	<0.00005		0.00005	mg/L		09-JUN-06	CLL	R409238
Vanadium (V)	<0.00005		0.00005	mg/L		09-JUN-06	CLL	R409238
Zinc (Zn)	<0.0008		0.0008	mg/L		09-JUN-06	CLL	R409238
Ammonia-N	<0.005		0.005	mg/L		15-JUN-06	KMY	R409765
Phosphorus, Total	0.001		0.001	mg/L		12-JUN-06	TL	R408717
Total Organic Carbon	<1		1	mg/L		09-JUN-06	TL	R407504
Routine Water Analysis - Low Level								
Chloride (Cl)	<1		1	mg/L		11-JUN-06	WYA	R408060
ICP metals for routine water								
Calcium (Ca)	<0.5		0.5	mg/L		10-JUN-06	MLH	R408180
Potassium (K)	<0.1		0.1	mg/L		10-JUN-06	MLH	R408180
Magnesium (Mg)	<0.1		0.1	mg/L		10-JUN-06	MLH	R408180
Sodium (Na)	<1		1	mg/L		10-JUN-06	MLH	R408180
Ion Balance Calculation								
Ion Balance	Low EC			%		12-JUN-06		
TDS (Calculated)	5			mg/L		12-JUN-06		
Hardness (as CaCO3)	<1			mg/L		12-JUN-06		
Nitrate+Nitrite-N	<0.006		0.006	mg/L		07-JUN-06	KMY	R407085
Nitrate-N	<0.006		0.006	mg/L		07-JUN-06	KMY	R407085
Nitrite-N	<0.002		0.002	mg/L		07-JUN-06	KMY	R407085
Sulphate (SO4)	<0.05		0.05	mg/L		09-JUN-06	JTV	R407362
pH, Conductivity and Total Alkalinity								
pH	6.0		0.1	pH		08-JUN-06	PTT	R407140
Conductivity (EC)	1.3		0.2	uS/cm		08-JUN-06	PTT	R407140
Bicarbonate (HCO3)	10		5	mg/L		08-JUN-06	PTT	R407140
Carbonate (CO3)	<5		5	mg/L		08-JUN-06	PTT	R407140
Hydroxide (OH)	<5		5	mg/L		08-JUN-06	PTT	R407140
Alkalinity, Total (as CaCO3)	9		5	mg/L		08-JUN-06	PTT	R407140
L396814-6 TRAVEL BLANK PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Iron (Fe)	<0.005		0.005	mg/L		22-JUN-06	SYF	R412254
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Aluminum (Al)	<0.0003		0.0003	mg/L		19-JUN-06	CLL	R411259
Arsenic (As)	<0.00003		0.00003	mg/L		19-JUN-06	CLL	R411259
Boron (B)	<0.001		0.001	mg/L		19-JUN-06	CLL	R411259
Barium (Ba)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Beryllium (Be)	<0.0002		0.0002	mg/L		19-JUN-06	CLL	R411259
Calcium (Ca)	<0.02		0.02	mg/L		19-JUN-06	CLL	R411259
Cadmium (Cd)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Cobalt (Co)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Chromium (Cr)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Copper (Cu)	<0.0006		0.0006	mg/L		19-JUN-06	CLL	R411259
Mercury (Hg)	<0.00002		0.00002	mg/L		19-JUN-06	CLL	R411259
Potassium (K)	<0.02		0.02	mg/L		19-JUN-06	CLL	R411259
Magnesium (Mg)	<0.004		0.004	mg/L		19-JUN-06	CLL	R411259

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L396814-6 TRAVEL BLANK PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Ultra-Low Metals - Dissolved								
Manganese (Mn)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Molybdenum (Mo)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Sodium (Na)	<0.005		0.005	mg/L		19-JUN-06	CLL	R411259
Nickel (Ni)	<0.00006		0.00006	mg/L		19-JUN-06	CLL	R411259
Lead (Pb)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Antimony (Sb)	0.00058		0.00003	mg/L		19-JUN-06	CLL	R411259
Selenium (Se)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Strontium (Sr)	<0.0001		0.0001	mg/L		19-JUN-06	CLL	R411259
Uranium (U)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Vanadium (V)	<0.00005		0.00005	mg/L		19-JUN-06	CLL	R411259
Zinc (Zn)	<0.0008		0.0008	mg/L		19-JUN-06	CLL	R411259
Ultra-Low Metals								
Iron (Fe)	<0.005		0.005	mg/L		13-JUN-06	HAS	R409065
Ultra-Low Metals								
Silver (Ag)	<0.0001		0.0001	mg/L		09-JUN-06	CLL	R409238
Aluminum (Al)	<0.0003		0.0003	mg/L		09-JUN-06	CLL	R409238
Arsenic (As)	<0.00003		0.00003	mg/L		09-JUN-06	CLL	R409238
Boron (B)	<0.001		0.001	mg/L		09-JUN-06	CLL	R409238
Barium (Ba)	<0.00005		0.00005	mg/L		09-JUN-06	CLL	R409238
Beryllium (Be)	<0.0002		0.0002	mg/L		09-JUN-06	CLL	R409238
Calcium (Ca)	<0.02		0.02	mg/L		09-JUN-06	CLL	R409238
Cadmium (Cd)	<0.00005		0.00005	mg/L		09-JUN-06	CLL	R409238
Cobalt (Co)	<0.0001		0.0001	mg/L		09-JUN-06	CLL	R409238
Chromium (Cr)	<0.00006		0.00006	mg/L		09-JUN-06	CLL	R409238
Copper (Cu)	<0.0006		0.0006	mg/L		09-JUN-06	CLL	R409238
Mercury (Hg)	<0.00002		0.00002	mg/L		09-JUN-06	CLL	R409238
Potassium (K)	<0.02		0.02	mg/L		09-JUN-06	CLL	R409238
Magnesium (Mg)	<0.004		0.004	mg/L		09-JUN-06	CLL	R409238
Manganese (Mn)	<0.0001		0.0001	mg/L		09-JUN-06	CLL	R409238
Molybdenum (Mo)	<0.00006		0.00006	mg/L		09-JUN-06	CLL	R409238
Sodium (Na)	<0.005		0.005	mg/L		09-JUN-06	CLL	R409238
Nickel (Ni)	<0.00006		0.00006	mg/L		09-JUN-06	CLL	R409238
Lead (Pb)	<0.00005		0.00005	mg/L		09-JUN-06	CLL	R409238
Antimony (Sb)	0.00021		0.00003	mg/L		09-JUN-06	CLL	R409238
Selenium (Se)	<0.0001		0.0001	mg/L		09-JUN-06	CLL	R409238
Strontium (Sr)	<0.0001		0.0001	mg/L		09-JUN-06	CLL	R409238
Uranium (U)	<0.00005		0.00005	mg/L		09-JUN-06	CLL	R409238
Vanadium (V)	<0.00005		0.00005	mg/L		09-JUN-06	CLL	R409238
Zinc (Zn)	0.0011		0.0008	mg/L		09-JUN-06	CLL	R409238
Ammonia-N	<0.005		0.005	mg/L		15-JUN-06	KMY	R409765
Phosphorus, Total	<0.001		0.001	mg/L		12-JUN-06	TL	R408717
Total Organic Carbon	<1		1	mg/L		09-JUN-06	TL	R407504
Routine Water Analysis - Low Level								
Chloride (Cl)	<1		1	mg/L		11-JUN-06	WYA	R408060
ICP metals for routine water								
Calcium (Ca)	<0.5		0.5	mg/L		10-JUN-06	MLH	R408180
Potassium (K)	<0.1		0.1	mg/L		10-JUN-06	MLH	R408180
Magnesium (Mg)	<0.1		0.1	mg/L		10-JUN-06	MLH	R408180
Sodium (Na)	<1		1	mg/L		10-JUN-06	MLH	R408180

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L396814-6 TRAVEL BLANK PINE POINT								
Sample By: SM/KL on 05-JUN-06								
Matrix: WATER								
Routine Water Analysis - Low Level								
Ion Balance Calculation								
Ion Balance	Low TDS			%		12-JUN-06		
TDS (Calculated)	<1			mg/L		12-JUN-06		
Hardness (as CaCO3)	<1			mg/L		12-JUN-06		
Nitrate+Nitrite-N	<0.006		0.006	mg/L		07-JUN-06	KMY	R407085
Nitrate-N	<0.006		0.006	mg/L		07-JUN-06	KMY	R407085
Nitrite-N	<0.002		0.002	mg/L		07-JUN-06	KMY	R407085
Sulphate (SO4)	<0.05		0.05	mg/L		09-JUN-06	JTV	R407362
pH, Conductivity and Total Alkalinity								
pH	5.7		0.1	pH		08-JUN-06	PTT	R407140
Conductivity (EC)	1.0		0.2	uS/cm		08-JUN-06	PTT	R407140
Bicarbonate (HCO3)	<5		5	mg/L		08-JUN-06	PTT	R407140
Carbonate (CO3)	<5		5	mg/L		08-JUN-06	PTT	R407140
Hydroxide (OH)	<5		5	mg/L		08-JUN-06	PTT	R407140
Alkalinity, Total (as CaCO3)	<5		5	mg/L		08-JUN-06	PTT	R407140

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier key listed:

Qualifier	Description
BL:INT	Balance Reviewed: Interference Or Non-Measured Component
RRVAP	Reported Result Verified by Alternate Process

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
C-TOT-ORG-ED	Water	Total Organic Carbon		APHA 5310 B-Instrumental
CL-ED	Water	Chloride (Cl)		APHA 4500 Cl E-Colorimetry
ETL-ROUTINE-LOW-ED	Water	ICP metals for routine water		APHA 3120 B-ICP/OES
IONBALANCE-ED	Water	Ion Balance Calculation		APHA 1030E
MET1-TOT-LOW-ED	Water	Total Trace Metals (Low Level)	EPA3015	EPA 6020
MET1-ULTRA-DIS-ED	Water	Ultra-Low Metals - Dissolved		EPA 6020
MET1-ULTRA-ED	Water	Ultra-Low Metals		EPA 6020
MET2-TOT-LOW-ED	Water	Total Major Metals	EPA3015	EPA 200.7
MET2-ULTRA-DIS-ED	Water	Major Metals - Dissolved		EPA 200.7
MET2-ULTRA-ED	Water	Major Metals		EPA 200.7
N2N3-LOW-ED	Water	Nitrate+Nitrite-N		APHA 4500 NO3E-Colorimetry
NH4-LOW-ED	Water	Ammonia-N		APHA 4500 NH3F-Colorimetry
NO2-LOW-ED	Water	Nitrite-N		APHA 4500 NO2B-Colorimetry
NO3-LOW-ED	Water	Nitrate-N		APHA 4500 NO3H-Colorimetry
P-TOTAL-LOW-ED	Water	Phosphorus, Total		APHA 4500 P B,E-Auto-Colorimetry
PH/EC/ALK-ED	Water	pH, Conductivity and Total Alkalinity		APHA 4500-H, 2510, 2320
SO4-LOW-ED	Water	Sulfate (SO4)		APHA 4110 B-Ion Chromatography

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

Chain of Custody numbers:

58041

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		

Reference Information

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. - Detection 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.

PRELIMINARY RESULTS

EBA ENG CONSULTANTS LTD
ATTN: STEVE MOORE
Reported On: 25-AUG-06 08:24 PM

201-4916 49 STREET

YELLOWKNIFE NT X1A 2P7

Lab Work Order #: **L414068** **Date Received:** **24-JUL-06**

Project P.O. #:
Job Reference: 1740149.001
Legal Site Desc:
CofC Numbers: 261065

Other Information:

Comments: L414068-1, -2, -3, -4; Analysis for total metals was changed from ultra low level to low level because samples had too many suspended solids.

ROY JONES
General Manager

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

CATHERINE EVARISTO-CORDERO

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L414068-1 TWIN CREEK TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Total Metals								
Total Major Metals								
Calcium (Ca)	76.9		0.5	mg/L		27-JUL-06	DDN	R424411
Potassium (K)	0.4		0.1	mg/L		27-JUL-06	DDN	R424411
Magnesium (Mg)	18.6		0.1	mg/L		27-JUL-06	DDN	R424411
Sodium (Na)	6		1	mg/L		27-JUL-06	DDN	R424411
Iron (Fe)	0.351		0.005	mg/L		27-JUL-06	DDN	R424411
Manganese (Mn)	0.170		0.001	mg/L		27-JUL-06	DDN	R424411
Total Trace Metals (Low Level)								
Silver (Ag)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Aluminum (Al)	0.09		0.02	mg/L		31-JUL-06	QLI	R425868
Arsenic (As)	0.0011		0.0004	mg/L		31-JUL-06	QLI	R425868
Boron (B)	<0.02		0.02	mg/L		31-JUL-06	QLI	R425868
Barium (Ba)	0.0374		0.0002	mg/L		31-JUL-06	QLI	R425868
Beryllium (Be)	<0.001		0.001	mg/L		31-JUL-06	QLI	R425868
Bismuth (Bi)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Cadmium (Cd)	<0.0002		0.0002	mg/L		31-JUL-06	QLI	R425868
Cobalt (Co)	<0.0002		0.0002	mg/L		31-JUL-06	QLI	R425868
Chromium (Cr)	0.0034		0.0008	mg/L		31-JUL-06	QLI	R425868
Copper (Cu)	<0.001		0.001	mg/L		31-JUL-06	QLI	R425868
Molybdenum (Mo)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Nickel (Ni)	<0.0002		0.0002	mg/L		31-JUL-06	QLI	R425868
Lead (Pb)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Antimony (Sb)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Selenium (Se)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Tin (Sn)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Strontium (Sr)	0.177		0.0002	mg/L		31-JUL-06	QLI	R425868
Titanium (Ti)	<0.005		0.005	mg/L		31-JUL-06	QLI	R425868
Thallium (Tl)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Uranium (U)	0.0002		0.0001	mg/L		31-JUL-06	QLI	R425868
Vanadium (V)	0.0004		0.0002	mg/L		31-JUL-06	QLI	R425868
Zinc (Zn)	0.005		0.004	mg/L		31-JUL-06	QLI	R425868
Ultra-Low Metals - Dissolved								
Iron (Fe)	0.044		0.005	mg/L		08-AUG-06	HAS	R428461
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Aluminum (Al)	0.0010		0.0003	mg/L		02-AUG-06	CLL	R427756
Arsenic (As)	0.00122		0.00003	mg/L		02-AUG-06	CLL	R427756
Boron (B)	0.006		0.001	mg/L		02-AUG-06	CLL	R427756
Barium (Ba)	0.0306		0.00005	mg/L		02-AUG-06	CLL	R427756
Beryllium (Be)	<0.0002		0.0002	mg/L		02-AUG-06	CLL	R427756
Calcium (Ca)	79.9		0.02	mg/L		02-AUG-06	CLL	R427756
Cadmium (Cd)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Cobalt (Co)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Chromium (Cr)	0.00449		0.00006	mg/L		02-AUG-06	CLL	R427756
Copper (Cu)	<0.0006		0.0006	mg/L		02-AUG-06	CLL	R427756
Mercury (Hg)	<0.00002		0.00002	mg/L		02-AUG-06	CLL	R427756
Potassium (K)	0.29		0.02	mg/L		02-AUG-06	CLL	R427756
Magnesium (Mg)	21.0		0.004	mg/L		02-AUG-06	CLL	R427756
Manganese (Mn)	0.0104		0.0001	mg/L		02-AUG-06	CLL	R427756
Molybdenum (Mo)	0.00008		0.00006	mg/L		02-AUG-06	CLL	R427756
Sodium (Na)	6.13		0.005	mg/L		02-AUG-06	CLL	R427756
Nickel (Ni)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L414068-1 TWIN CREEK TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Ultra-Low Metals - Dissolved								
Lead (Pb)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Antimony (Sb)	0.00021		0.00003	mg/L		02-AUG-06	CLL	R427756
Selenium (Se)	0.0002		0.0001	mg/L		02-AUG-06	CLL	R427756
Strontium (Sr)	0.168		0.0001	mg/L		02-AUG-06	CLL	R427756
Uranium (U)	0.00015		0.00005	mg/L		02-AUG-06	CLL	R427756
Vanadium (V)	0.00019		0.00005	mg/L		02-AUG-06	CLL	R427756
Zinc (Zn)	0.0075	RRVAP	0.0008	mg/L		02-AUG-06	CLL	R427756
Ammonia-N	0.029		0.005	mg/L		27-JUL-06	LDC	R424248
Total Organic Carbon	32		1	mg/L		26-JUL-06	ZOW	R423725
Routine Water Analysis								
Chloride (Cl)	5		1	mg/L		25-JUL-06	WYA	R423446
ICP metals and SO4 for routine water								
Calcium (Ca)	78.2		0.5	mg/L		25-JUL-06	EOC	R423381
Potassium (K)	<0.5		0.5	mg/L		25-JUL-06	EOC	R423381
Magnesium (Mg)	19.9		0.1	mg/L		25-JUL-06	EOC	R423381
Sodium (Na)	6		1	mg/L		25-JUL-06	EOC	R423381
Sulfate (SO4)	3.8		0.5	mg/L		25-JUL-06	EOC	R423381
Ion Balance Calculation								
Ion Balance	103			%		26-JUL-06		
TDS (Calculated)	276			mg/L		26-JUL-06		
Hardness (as CaCO3)	277			mg/L		26-JUL-06		
Nitrate+Nitrite-N	<0.1		0.1	mg/L		25-JUL-06	SHC	R423571
Nitrate-N	<0.1		0.1	mg/L		25-JUL-06	SHC	R423571
Nitrite-N	<0.05		0.05	mg/L		25-JUL-06	SHC	R423571
pH, Conductivity and Total Alkalinity								
pH	8.2		0.1	pH		25-JUL-06	PTT	R423649
Conductivity (EC)	476		0.2	uS/cm		25-JUL-06	PTT	R423649
Bicarbonate (HCO3)	330		5	mg/L		25-JUL-06	PTT	R423649
Carbonate (CO3)	<5		5	mg/L		25-JUL-06	PTT	R423649
Hydroxide (OH)	<5		5	mg/L		25-JUL-06	PTT	R423649
Alkalinity, Total (as CaCO3)	271		5	mg/L		25-JUL-06	PTT	R423649
L414068-2 TWIN CREEK DUP TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Total Metals								
Total Major Metals								
Calcium (Ca)	76.2		0.5	mg/L		27-JUL-06	DDN	R424411
Potassium (K)	0.3		0.1	mg/L		27-JUL-06	DDN	R424411
Magnesium (Mg)	18.9		0.1	mg/L		27-JUL-06	DDN	R424411
Sodium (Na)	6		1	mg/L		27-JUL-06	DDN	R424411
Iron (Fe)	0.166		0.005	mg/L		27-JUL-06	DDN	R424411
Manganese (Mn)	0.081		0.001	mg/L		27-JUL-06	DDN	R424411
Total Trace Metals (Low Level)								
Silver (Ag)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Aluminum (Al)	0.02		0.02	mg/L		31-JUL-06	QLI	R425868
Arsenic (As)	0.0011		0.0004	mg/L		31-JUL-06	QLI	R425868
Boron (B)	<0.02		0.02	mg/L		31-JUL-06	QLI	R425868
Barium (Ba)	0.0336		0.0002	mg/L		31-JUL-06	QLI	R425868
Beryllium (Be)	<0.001		0.001	mg/L		31-JUL-06	QLI	R425868

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L414068-2 TWIN CREEK DUP TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Total Metals								
Total Trace Metals (Low Level)								
Bismuth (Bi)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Cadmium (Cd)	<0.0002		0.0002	mg/L		31-JUL-06	QLI	R425868
Cobalt (Co)	<0.0002		0.0002	mg/L		31-JUL-06	QLI	R425868
Chromium (Cr)	0.0035		0.0008	mg/L		31-JUL-06	QLI	R425868
Copper (Cu)	<0.001		0.001	mg/L		31-JUL-06	QLI	R425868
Molybdenum (Mo)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Nickel (Ni)	<0.0002		0.0002	mg/L		31-JUL-06	QLI	R425868
Lead (Pb)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Antimony (Sb)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Selenium (Se)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Tin (Sn)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Strontium (Sr)	0.176		0.0002	mg/L		31-JUL-06	QLI	R425868
Titanium (Ti)	<0.005		0.005	mg/L		31-JUL-06	QLI	R425868
Thallium (Tl)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Uranium (U)	0.0002		0.0001	mg/L		31-JUL-06	QLI	R425868
Vanadium (V)	0.0002		0.0002	mg/L		31-JUL-06	QLI	R425868
Zinc (Zn)	0.015		0.004	mg/L		31-JUL-06	QLI	R425868
Ultra-Low Metals - Dissolved								
Iron (Fe)	0.044		0.005	mg/L		08-AUG-06	HAS	R428461
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Aluminum (Al)	0.0011		0.0003	mg/L		02-AUG-06	CLL	R427756
Arsenic (As)	0.00122		0.00003	mg/L		02-AUG-06	CLL	R427756
Boron (B)	0.006		0.001	mg/L		02-AUG-06	CLL	R427756
Barium (Ba)	0.0312		0.00005	mg/L		02-AUG-06	CLL	R427756
Beryllium (Be)	<0.0002		0.0002	mg/L		02-AUG-06	CLL	R427756
Calcium (Ca)	83.6		0.02	mg/L		02-AUG-06	CLL	R427756
Cadmium (Cd)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Cobalt (Co)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Chromium (Cr)	0.00434		0.00006	mg/L		02-AUG-06	CLL	R427756
Copper (Cu)	<0.0006		0.0006	mg/L		02-AUG-06	CLL	R427756
Mercury (Hg)	<0.00002		0.00002	mg/L		02-AUG-06	CLL	R427756
Potassium (K)	0.30		0.02	mg/L		02-AUG-06	CLL	R427756
Magnesium (Mg)	21.2		0.004	mg/L		02-AUG-06	CLL	R427756
Manganese (Mn)	0.0105		0.0001	mg/L		02-AUG-06	CLL	R427756
Molybdenum (Mo)	0.00008		0.00006	mg/L		02-AUG-06	CLL	R427756
Sodium (Na)	6.17		0.005	mg/L		02-AUG-06	CLL	R427756
Nickel (Ni)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Lead (Pb)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Antimony (Sb)	0.00021		0.00003	mg/L		02-AUG-06	CLL	R427756
Selenium (Se)	0.0002		0.0001	mg/L		02-AUG-06	CLL	R427756
Strontium (Sr)	0.170		0.0001	mg/L		02-AUG-06	CLL	R427756
Uranium (U)	0.00015		0.00005	mg/L		02-AUG-06	CLL	R427756
Vanadium (V)	0.00019		0.00005	mg/L		02-AUG-06	CLL	R427756
Zinc (Zn)	0.0079		0.0008	mg/L		02-AUG-06	CLL	R427756
Ammonia-N	0.032		0.005	mg/L		27-JUL-06	LDC	R424248
Total Organic Carbon	33		1	mg/L		26-JUL-06	ZOW	R423725
Routine Water Analysis								
Chloride (Cl)	5		1	mg/L		25-JUL-06	WYA	R423446

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L414068-2 TWIN CREEK DUP TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Routine Water Analysis								
ICP metals and SO4 for routine water								
Calcium (Ca)	77.8		0.5	mg/L		25-JUL-06	EOC	R423381
Potassium (K)	<0.5		0.5	mg/L		25-JUL-06	EOC	R423381
Magnesium (Mg)	19.6		0.1	mg/L		25-JUL-06	EOC	R423381
Sodium (Na)	6		1	mg/L		25-JUL-06	EOC	R423381
Sulfate (SO4)	3.9		0.5	mg/L		25-JUL-06	EOC	R423381
Ion Balance Calculation								
Ion Balance	102			%		26-JUL-06		
TDS (Calculated)	274			mg/L		26-JUL-06		
Hardness (as CaCO3)	275			mg/L		26-JUL-06		
Nitrate+Nitrite-N	<0.1		0.1	mg/L		25-JUL-06	SHC	R423571
Nitrate-N	<0.1		0.1	mg/L		25-JUL-06	SHC	R423571
Nitrite-N	<0.05		0.05	mg/L		25-JUL-06	SHC	R423571
pH, Conductivity and Total Alkalinity								
pH	8.2		0.1	pH		25-JUL-06	PTT	R423649
Conductivity (EC)	479		0.2	uS/cm		25-JUL-06	PTT	R423649
Bicarbonate (HCO3)	330		5	mg/L		25-JUL-06	PTT	R423649
Carbonate (CO3)	<5		5	mg/L		25-JUL-06	PTT	R423649
Hydroxide (OH)	<5		5	mg/L		25-JUL-06	PTT	R423649
Alkalinity, Total (as CaCO3)	270		5	mg/L		25-JUL-06	PTT	R423649
L414068-3 FEN HEAD TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Total Metals								
Total Major Metals								
Calcium (Ca)	127		0.5	mg/L		27-JUL-06	DDN	R424411
Potassium (K)	5.0		0.1	mg/L		27-JUL-06	DDN	R424411
Magnesium (Mg)	35.5		0.1	mg/L		27-JUL-06	DDN	R424411
Sodium (Na)	6		1	mg/L		27-JUL-06	DDN	R424411
Iron (Fe)	0.556		0.005	mg/L		27-JUL-06	DDN	R424411
Manganese (Mn)	0.351		0.001	mg/L		27-JUL-06	DDN	R424411
Total Trace Metals (Low Level)								
Silver (Ag)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Aluminum (Al)	0.03		0.02	mg/L		31-JUL-06	QLI	R425868
Arsenic (As)	0.0018		0.0004	mg/L		31-JUL-06	QLI	R425868
Boron (B)	0.03		0.02	mg/L		31-JUL-06	QLI	R425868
Barium (Ba)	0.143		0.0002	mg/L		31-JUL-06	QLI	R425868
Beryllium (Be)	<0.001		0.001	mg/L		31-JUL-06	QLI	R425868
Bismuth (Bi)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Cadmium (Cd)	<0.0002		0.0002	mg/L		31-JUL-06	QLI	R425868
Cobalt (Co)	0.0004		0.0002	mg/L		31-JUL-06	QLI	R425868
Chromium (Cr)	0.0009		0.0008	mg/L		31-JUL-06	QLI	R425868
Copper (Cu)	<0.001		0.001	mg/L		31-JUL-06	QLI	R425868
Molybdenum (Mo)	0.0003		0.0001	mg/L		31-JUL-06	QLI	R425868
Nickel (Ni)	<0.0002		0.0002	mg/L		31-JUL-06	QLI	R425868
Lead (Pb)	0.0005		0.0001	mg/L		31-JUL-06	QLI	R425868
Antimony (Sb)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Selenium (Se)	0.0010		0.0004	mg/L		31-JUL-06	QLI	R425868
Tin (Sn)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Strontium (Sr)	0.812		0.0002	mg/L		31-JUL-06	QLI	R425868
Titanium (Ti)	<0.005		0.005	mg/L		31-JUL-06	QLI	R425868

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L414068-3 FEN HEAD TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Total Metals								
Total Trace Metals (Low Level)								
Thallium (Tl)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Uranium (U)	0.0010		0.0001	mg/L		31-JUL-06	QLI	R425868
Vanadium (V)	0.0003		0.0002	mg/L		31-JUL-06	QLI	R425868
Zinc (Zn)	0.007		0.004	mg/L		31-JUL-06	QLI	R425868
Ultra-Low Metals - Dissolved								
Iron (Fe)	0.308		0.005	mg/L		08-AUG-06	HAS	R428461
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Aluminum (Al)	0.0049		0.0003	mg/L		02-AUG-06	CLL	R427756
Arsenic (As)	0.00170		0.00003	mg/L		14-AUG-06	HLA	R430231
Boron (B)	0.023		0.001	mg/L		02-AUG-06	CLL	R427756
Barium (Ba)	0.136		0.00005	mg/L		02-AUG-06	CLL	R427756
Beryllium (Be)	<0.0002		0.0002	mg/L		02-AUG-06	CLL	R427756
Calcium (Ca)	153		0.02	mg/L		02-AUG-06	CLL	R427756
Cadmium (Cd)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Cobalt (Co)	0.0005		0.0001	mg/L		02-AUG-06	CLL	R427756
Chromium (Cr)	<0.00006		0.00006	mg/L		11-AUG-06	DEO	R429566
Copper (Cu)	<0.0006		0.0006	mg/L		02-AUG-06	CLL	R427756
Mercury (Hg)	<0.00002		0.00002	mg/L		02-AUG-06	CLL	R427756
Potassium (K)	5.50		0.02	mg/L		02-AUG-06	CLL	R427756
Magnesium (Mg)	42.1		0.004	mg/L		02-AUG-06	CLL	R427756
Manganese (Mn)	0.382		0.0001	mg/L		02-AUG-06	CLL	R427756
Molybdenum (Mo)	0.00032		0.00006	mg/L		02-AUG-06	CLL	R427756
Sodium (Na)	6.38		0.005	mg/L		02-AUG-06	CLL	R427756
Nickel (Ni)	0.00013		0.00006	mg/L		02-AUG-06	CLL	R427756
Lead (Pb)	0.00022		0.00005	mg/L		02-AUG-06	CLL	R427756
Antimony (Sb)	0.00025		0.00003	mg/L		02-AUG-06	CLL	R427756
Selenium (Se)	0.0005		0.0001	mg/L		02-AUG-06	CLL	R427756
Strontium (Sr)	0.812		0.0001	mg/L		02-AUG-06	CLL	R427756
Uranium (U)	0.00112		0.00005	mg/L		02-AUG-06	CLL	R427756
Vanadium (V)	0.00027		0.00005	mg/L		02-AUG-06	CLL	R427756
Zinc (Zn)	0.0064		0.0008	mg/L		02-AUG-06	CLL	R427756
Ammonia-N	0.042		0.005	mg/L		27-JUL-06	LDC	R424248
Total Organic Carbon	57		1	mg/L		26-JUL-06	ZOW	R423725
Routine Water Analysis								
Chloride (Cl)	5		1	mg/L		25-JUL-06	WYA	R423446
ICP metals and SO4 for routine water								
Calcium (Ca)	133		0.5	mg/L		25-JUL-06	EOC	R423381
Potassium (K)	4.8		0.5	mg/L		25-JUL-06	EOC	R423381
Magnesium (Mg)	37.8		0.1	mg/L		25-JUL-06	EOC	R423381
Sodium (Na)	6		1	mg/L		25-JUL-06	EOC	R423381
Sulfate (SO4)	6.3		0.5	mg/L		25-JUL-06	EOC	R423381
Ion Balance Calculation								
Ion Balance	102			%		26-JUL-06		
TDS (Calculated)	483			mg/L		26-JUL-06		
Hardness (as CaCO3)	488			mg/L		26-JUL-06		
Nitrate+Nitrite-N	<0.1		0.1	mg/L		25-JUL-06	SHC	R423571
Nitrate-N	<0.1		0.1	mg/L		25-JUL-06	SHC	R423571
Nitrite-N	<0.05		0.05	mg/L		25-JUL-06	SHC	R423571

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L414068-3 FEN HEAD TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Routine Water Analysis								
pH, Conductivity and Total Alkalinity								
pH	8.3		0.1	pH		25-JUL-06	PTT	R423649
Conductivity (EC)	791		0.2	uS/cm		25-JUL-06	PTT	R423649
Bicarbonate (HCO3)	591		5	mg/L		25-JUL-06	PTT	R423649
Carbonate (CO3)	<5		5	mg/L		25-JUL-06	PTT	R423649
Hydroxide (OH)	<5		5	mg/L		25-JUL-06	PTT	R423649
Alkalinity, Total (as CaCO3)	484		5	mg/L		25-JUL-06	PTT	R423649
L414068-4 FEN MID TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Total Metals								
Total Major Metals								
Calcium (Ca)	40.3		0.5	mg/L		27-JUL-06	DDN	R424411
Potassium (K)	1.6		0.1	mg/L		27-JUL-06	DDN	R424411
Magnesium (Mg)	19.0		0.1	mg/L		27-JUL-06	DDN	R424411
Sodium (Na)	14		1	mg/L		27-JUL-06	DDN	R424411
Iron (Fe)	0.019		0.005	mg/L		27-JUL-06	DDN	R424411
Manganese (Mn)	0.011		0.001	mg/L		27-JUL-06	DDN	R424411
Total Trace Metals (Low Level)								
Silver (Ag)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Aluminum (Al)	<0.02		0.02	mg/L		31-JUL-06	QLI	R425868
Arsenic (As)	0.0008		0.0004	mg/L		31-JUL-06	QLI	R425868
Boron (B)	<0.02		0.02	mg/L		31-JUL-06	QLI	R425868
Barium (Ba)	0.0260		0.0002	mg/L		31-JUL-06	QLI	R425868
Beryllium (Be)	<0.001		0.001	mg/L		31-JUL-06	QLI	R425868
Bismuth (Bi)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Cadmium (Cd)	<0.0002		0.0002	mg/L		31-JUL-06	QLI	R425868
Cobalt (Co)	<0.0002		0.0002	mg/L		31-JUL-06	QLI	R425868
Chromium (Cr)	0.0029		0.0008	mg/L		31-JUL-06	QLI	R425868
Copper (Cu)	<0.001		0.001	mg/L		31-JUL-06	QLI	R425868
Molybdenum (Mo)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Nickel (Ni)	<0.0002		0.0002	mg/L		31-JUL-06	QLI	R425868
Lead (Pb)	0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Antimony (Sb)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Selenium (Se)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Tin (Sn)	<0.0004		0.0004	mg/L		31-JUL-06	QLI	R425868
Strontium (Sr)	0.135		0.0002	mg/L		31-JUL-06	QLI	R425868
Titanium (Ti)	<0.005		0.005	mg/L		31-JUL-06	QLI	R425868
Thallium (Tl)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Uranium (U)	<0.0001		0.0001	mg/L		31-JUL-06	QLI	R425868
Vanadium (V)	0.0004		0.0002	mg/L		31-JUL-06	QLI	R425868
Zinc (Zn)	0.005		0.004	mg/L		31-JUL-06	QLI	R425868
Ultra-Low Metals - Dissolved								
Iron (Fe)	0.010		0.005	mg/L		08-AUG-06	HAS	R428461
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Aluminum (Al)	0.0094		0.0003	mg/L		02-AUG-06	CLL	R427756
Arsenic (As)	0.00067		0.00003	mg/L		02-AUG-06	CLL	R427756
Boron (B)	0.012		0.001	mg/L		02-AUG-06	CLL	R427756
Barium (Ba)	0.0245		0.00005	mg/L		02-AUG-06	CLL	R427756
Beryllium (Be)	<0.0002		0.0002	mg/L		02-AUG-06	CLL	R427756

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L414068-4 FEN MID TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Ultra-Low Metals - Dissolved								
Calcium (Ca)	41.2		0.02	mg/L		02-AUG-06	CLL	R427756
Cadmium (Cd)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Cobalt (Co)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Chromium (Cr)	0.00193		0.00006	mg/L		02-AUG-06	CLL	R427756
Copper (Cu)	<0.0006		0.0006	mg/L		02-AUG-06	CLL	R427756
Mercury (Hg)	<0.00002		0.00002	mg/L		02-AUG-06	CLL	R427756
Potassium (K)	1.56		0.02	mg/L		02-AUG-06	CLL	R427756
Magnesium (Mg)	20.6		0.004	mg/L		02-AUG-06	CLL	R427756
Manganese (Mn)	0.0099		0.0001	mg/L		02-AUG-06	CLL	R427756
Molybdenum (Mo)	0.00009		0.00006	mg/L		02-AUG-06	CLL	R427756
Sodium (Na)	15.5		0.005	mg/L		02-AUG-06	CLL	R427756
Nickel (Ni)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Lead (Pb)	0.00006		0.00005	mg/L		02-AUG-06	CLL	R427756
Antimony (Sb)	0.00019		0.00003	mg/L		02-AUG-06	CLL	R427756
Selenium (Se)	0.0003		0.0001	mg/L		02-AUG-06	CLL	R427756
Strontium (Sr)	0.133		0.0001	mg/L		02-AUG-06	CLL	R427756
Uranium (U)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Vanadium (V)	0.00010		0.00005	mg/L		02-AUG-06	CLL	R427756
Zinc (Zn)	0.0052		0.0008	mg/L		02-AUG-06	CLL	R427756
Ammonia-N	0.052		0.005	mg/L		27-JUL-06	LDC	R424248
Total Organic Carbon	45		1	mg/L		26-JUL-06	ZOW	R423725
Routine Water Analysis								
Chloride (Cl)	25		1	mg/L		25-JUL-06	WYA	R423446
ICP metals and SO4 for routine water								
Calcium (Ca)	41.5		0.5	mg/L		25-JUL-06	EOC	R423381
Potassium (K)	1.5		0.5	mg/L		25-JUL-06	EOC	R423381
Magnesium (Mg)	19.5		0.1	mg/L		25-JUL-06	EOC	R423381
Sodium (Na)	15		1	mg/L		25-JUL-06	EOC	R423381
Sulfate (SO4)	26.5		0.5	mg/L		25-JUL-06	EOC	R423381
Ion Balance Calculation								
Ion Balance	110	BL:INT		%		26-JUL-06		
TDS (Calculated)	211			mg/L		26-JUL-06		
Hardness (as CaCO3)	184			mg/L		26-JUL-06		
Nitrate+Nitrite-N	<0.1		0.1	mg/L		25-JUL-06	SHC	R423571
Nitrate-N	<0.1		0.1	mg/L		25-JUL-06	SHC	R423571
Nitrite-N	<0.05		0.05	mg/L		25-JUL-06	SHC	R423571
pH, Conductivity and Total Alkalinity								
pH	8.3		0.1	pH		25-JUL-06	PTT	R423649
Conductivity (EC)	374		0.2	uS/cm		25-JUL-06	PTT	R423649
Bicarbonate (HCO3)	166		5	mg/L		25-JUL-06	PTT	R423649
Carbonate (CO3)	<5		5	mg/L		25-JUL-06	PTT	R423649
Hydroxide (OH)	<5		5	mg/L		25-JUL-06	PTT	R423649
Alkalinity, Total (as CaCO3)	137		5	mg/L		25-JUL-06	PTT	R423649
L414068-5 TRIP BLANK TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Iron (Fe)	<0.005		0.005	mg/L		08-AUG-06	HAS	R428461
Ultra-Low Metals - Dissolved								

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L414068-5 TRIP BLANK TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Aluminum (Al)	0.0004	RRV	0.0003	mg/L		02-AUG-06	CLL	R427756
Arsenic (As)	<0.00003		0.00003	mg/L		02-AUG-06	CLL	R427756
Boron (B)	<0.001		0.001	mg/L		02-AUG-06	CLL	R427756
Barium (Ba)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Beryllium (Be)	<0.0002		0.0002	mg/L		02-AUG-06	CLL	R427756
Calcium (Ca)	<0.02		0.02	mg/L		02-AUG-06	CLL	R427756
Cadmium (Cd)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Cobalt (Co)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Chromium (Cr)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Copper (Cu)	<0.0006		0.0006	mg/L		02-AUG-06	CLL	R427756
Mercury (Hg)	<0.00002		0.00002	mg/L		02-AUG-06	CLL	R427756
Potassium (K)	<0.02		0.02	mg/L		02-AUG-06	CLL	R427756
Magnesium (Mg)	<0.004		0.004	mg/L		02-AUG-06	CLL	R427756
Manganese (Mn)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Molybdenum (Mo)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Sodium (Na)	0.005	RRV	0.005	mg/L		02-AUG-06	CLL	R427756
Nickel (Ni)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Lead (Pb)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Antimony (Sb)	0.00021	RRV	0.00003	mg/L		02-AUG-06	CLL	R427756
Selenium (Se)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Strontium (Sr)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Uranium (U)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Vanadium (V)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Zinc (Zn)	0.0017	RRV	0.0008	mg/L		02-AUG-06	CLL	R427756
Ultra-Low Metals								
Iron (Fe)	0.013		0.005	mg/L		08-AUG-06	HAS	R428461
Ultra-Low Metals								
Silver (Ag)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Aluminum (Al)	<0.0003		0.0003	mg/L		02-AUG-06	CLL	R427756
Arsenic (As)	<0.00003		0.00003	mg/L		02-AUG-06	CLL	R427756
Boron (B)	<0.001		0.001	mg/L		02-AUG-06	CLL	R427756
Barium (Ba)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Beryllium (Be)	<0.0002		0.0002	mg/L		02-AUG-06	CLL	R427756
Calcium (Ca)	0.37	RRV	0.02	mg/L		02-AUG-06	CLL	R427756
Cadmium (Cd)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Cobalt (Co)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Chromium (Cr)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Copper (Cu)	<0.0006		0.0006	mg/L		02-AUG-06	CLL	R427756
Mercury (Hg)	<0.00002		0.00002	mg/L		02-AUG-06	CLL	R427756
Potassium (K)	<0.02		0.02	mg/L		02-AUG-06	CLL	R427756
Magnesium (Mg)	<0.004		0.004	mg/L		02-AUG-06	CLL	R427756
Manganese (Mn)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Molybdenum (Mo)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Sodium (Na)	0.006	RRV	0.005	mg/L		02-AUG-06	CLL	R427756
Nickel (Ni)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Lead (Pb)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Antimony (Sb)	0.00013	RRV	0.00003	mg/L		02-AUG-06	CLL	R427756
Selenium (Se)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Strontium (Sr)	0.0002	RRV	0.0001	mg/L		02-AUG-06	CLL	R427756
Uranium (U)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L414068-5 TRIP BLANK TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Ultra-Low Metals								
Ultra-Low Metals								
Vanadium (V)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Zinc (Zn)	<0.0008	RRV	0.0008	mg/L		02-AUG-06	CLL	R427756
Ammonia-N	<0.005		0.005	mg/L		27-JUL-06	LDC	R424248
Total Organic Carbon	<1		1	mg/L		26-JUL-06	ZOW	R423725
Routine Water Analysis								
Chloride (Cl)	<1		1	mg/L		25-JUL-06	WYA	R423446
ICP metals and SO4 for routine water								
Calcium (Ca)	<0.5		0.5	mg/L		27-JUL-06	EOC	R424377
Potassium (K)	<0.5		0.5	mg/L		27-JUL-06	EOC	R424377
Magnesium (Mg)	<0.1		0.1	mg/L		27-JUL-06	EOC	R424377
Sodium (Na)	<1		1	mg/L		27-JUL-06	EOC	R424377
Sulfate (SO4)	<0.5		0.5	mg/L		27-JUL-06	EOC	R424377
Ion Balance Calculation								
Ion Balance	Low TDS			%		27-JUL-06		
TDS (Calculated)	<1			mg/L		27-JUL-06		
Hardness (as CaCO3)	<1			mg/L		27-JUL-06		
Nitrate+Nitrite-N	<0.1		0.1	mg/L		25-JUL-06	SHC	R423571
Nitrate-N	<0.1		0.1	mg/L		25-JUL-06	SHC	R423571
Nitrite-N	<0.05		0.05	mg/L		25-JUL-06	SHC	R423571
pH, Conductivity and Total Alkalinity								
pH	5.8		0.1	pH		25-JUL-06	PTT	R423649
Conductivity (EC)	1.0		0.2	uS/cm		25-JUL-06	PTT	R423649
Bicarbonate (HCO3)	<5		5	mg/L		25-JUL-06	PTT	R423649
Carbonate (CO3)	<5		5	mg/L		25-JUL-06	PTT	R423649
Hydroxide (OH)	<5		5	mg/L		25-JUL-06	PTT	R423649
Alkalinity, Total (as CaCO3)	<5		5	mg/L		25-JUL-06	PTT	R423649
L414068-6 FIELD BLANK TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Iron (Fe)	<0.005		0.005	mg/L		08-AUG-06	HAS	R428461
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Aluminum (Al)	0.0276	RRV	0.0003	mg/L		02-AUG-06	CLL	R427756
Arsenic (As)	<0.00003		0.00003	mg/L		02-AUG-06	CLL	R427756
Boron (B)	<0.001		0.001	mg/L		02-AUG-06	CLL	R427756
Barium (Ba)	0.00038	RRV	0.00005	mg/L		02-AUG-06	CLL	R427756
Beryllium (Be)	<0.0002		0.0002	mg/L		02-AUG-06	CLL	R427756
Calcium (Ca)	0.60	RRVAP	0.02	mg/L		02-AUG-06	CLL	R427756
Cadmium (Cd)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Cobalt (Co)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Chromium (Cr)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Copper (Cu)	<0.0006		0.0006	mg/L		02-AUG-06	CLL	R427756
Mercury (Hg)	<0.00002		0.00002	mg/L		02-AUG-06	CLL	R427756
Potassium (K)	<0.02		0.02	mg/L		02-AUG-06	CLL	R427756
Magnesium (Mg)	0.007		0.004	mg/L		02-AUG-06	CLL	R427756
Manganese (Mn)	0.0004		0.0001	mg/L		02-AUG-06	CLL	R427756
Molybdenum (Mo)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Sodium (Na)	0.106	RRVAP	0.005	mg/L		02-AUG-06	CLL	R427756

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L414068-6 FIELD BLANK TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Ultra-Low Metals - Dissolved								
Nickel (Ni)	0.00010		0.00006	mg/L		02-AUG-06	CLL	R427756
Lead (Pb)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Antimony (Sb)	0.00018		0.00003	mg/L		02-AUG-06	CLL	R427756
Selenium (Se)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Strontium (Sr)	0.0006		0.0001	mg/L		02-AUG-06	CLL	R427756
Uranium (U)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Vanadium (V)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Zinc (Zn)	0.0023	RRVAP	0.0008	mg/L		02-AUG-06	CLL	R427756
Ultra-Low Metals								
Iron (Fe)	<0.005		0.005	mg/L		08-AUG-06	HAS	R428461
Ultra-Low Metals								
Silver (Ag)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Aluminum (Al)	0.0370	RRV	0.0003	mg/L		02-AUG-06	CLL	R427756
Arsenic (As)	<0.00003		0.00003	mg/L		02-AUG-06	CLL	R427756
Boron (B)	<0.001		0.001	mg/L		02-AUG-06	CLL	R427756
Barium (Ba)	0.00044	RRV	0.00005	mg/L		02-AUG-06	CLL	R427756
Beryllium (Be)	<0.0002		0.0002	mg/L		02-AUG-06	CLL	R427756
Calcium (Ca)	0.57	RRVAP	0.02	mg/L		02-AUG-06	CLL	R427756
Cadmium (Cd)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Cobalt (Co)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Chromium (Cr)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Copper (Cu)	<0.0006		0.0006	mg/L		02-AUG-06	CLL	R427756
Mercury (Hg)	<0.00002		0.00002	mg/L		02-AUG-06	CLL	R427756
Potassium (K)	<0.02		0.02	mg/L		02-AUG-06	CLL	R427756
Magnesium (Mg)	0.007		0.004	mg/L		02-AUG-06	CLL	R427756
Manganese (Mn)	0.0004		0.0001	mg/L		02-AUG-06	CLL	R427756
Molybdenum (Mo)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Sodium (Na)	0.093	RRVAP	0.005	mg/L		02-AUG-06	CLL	R427756
Nickel (Ni)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Lead (Pb)	0.00006		0.00005	mg/L		02-AUG-06	CLL	R427756
Antimony (Sb)	0.00019		0.00003	mg/L		02-AUG-06	CLL	R427756
Selenium (Se)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Strontium (Sr)	0.0006		0.0001	mg/L		02-AUG-06	CLL	R427756
Uranium (U)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Vanadium (V)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Zinc (Zn)	0.0012	RRVAP	0.0008	mg/L		02-AUG-06	CLL	R427756
Ammonia-N	<0.005		0.005	mg/L		27-JUL-06	LDC	R424248
Total Organic Carbon	<1		1	mg/L		26-JUL-06	ZOW	R423725
Routine Water Analysis								
Chloride (Cl)	<1		1	mg/L		25-JUL-06	WYA	R423446
ICP metals and SO4 for routine water								
Calcium (Ca)	0.7		0.5	mg/L		27-JUL-06	EOC	R424377
Potassium (K)	<0.5		0.5	mg/L		27-JUL-06	EOC	R424377
Magnesium (Mg)	<0.1		0.1	mg/L		27-JUL-06	EOC	R424377
Sodium (Na)	<1		1	mg/L		27-JUL-06	EOC	R424377
Sulfate (SO4)	0.6		0.5	mg/L		27-JUL-06	EOC	R424377
Ion Balance Calculation								
Ion Balance	Low EC			%		27-JUL-06		
TDS (Calculated)	1			mg/L		27-JUL-06		

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	By	Batch
L414068-6 FIELD BLANK TAMEDARE								
Sampled By: KL/KA on 21-JUL-06								
Matrix: WATER								
Routine Water Analysis								
Ion Balance Calculation								
Hardness (as CaCO3)	2			mg/L		27-JUL-06		
Nitrate+Nitrite-N	<0.1		0.1	mg/L		25-JUL-06	SHC	R423571
Nitrate-N	<0.1		0.1	mg/L		25-JUL-06	SHC	R423571
Nitrite-N	<0.05		0.05	mg/L		25-JUL-06	SHC	R423571
pH, Conductivity and Total Alkalinity								
pH	6.7		0.1	pH		25-JUL-06	PTT	R423649
Conductivity (EC)	3.8		0.2	uS/cm		25-JUL-06	PTT	R423649
Bicarbonate (HCO3)	<5		5	mg/L		25-JUL-06	PTT	R423649
Carbonate (CO3)	<5		5	mg/L		25-JUL-06	PTT	R423649
Hydroxide (OH)	<5		5	mg/L		25-JUL-06	PTT	R423649
Alkalinity, Total (as CaCO3)	<5		5	mg/L		25-JUL-06	PTT	R423649
L414068-7 FILTER BLANK TAMEDARE								
Sampled By: NOT PROVIDED								
Matrix: WATER								
Ultra-Low Metals - Dissolved								
Iron (Fe)	<0.005		0.005	mg/L		08-AUG-06	HAS	R428461
Ultra-Low Metals - Dissolved								
Silver (Ag)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Aluminum (Al)	0.0004		0.0003	mg/L		02-AUG-06	CLL	R427756
Arsenic (As)	<0.00003		0.00003	mg/L		02-AUG-06	CLL	R427756
Boron (B)	<0.001		0.001	mg/L		02-AUG-06	CLL	R427756
Barium (Ba)	0.00008		0.00005	mg/L		02-AUG-06	CLL	R427756
Beryllium (Be)	<0.0002		0.0002	mg/L		02-AUG-06	CLL	R427756
Calcium (Ca)	0.13		0.02	mg/L		02-AUG-06	CLL	R427756
Cadmium (Cd)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Cobalt (Co)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Chromium (Cr)	0.00018		0.00006	mg/L		02-AUG-06	CLL	R427756
Copper (Cu)	<0.0006		0.0006	mg/L		02-AUG-06	CLL	R427756
Mercury (Hg)	<0.00002		0.00002	mg/L		02-AUG-06	CLL	R427756
Potassium (K)	<0.02		0.02	mg/L		02-AUG-06	CLL	R427756
Magnesium (Mg)	<0.004		0.004	mg/L		02-AUG-06	CLL	R427756
Manganese (Mn)	0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Molybdenum (Mo)	<0.00006		0.00006	mg/L		02-AUG-06	CLL	R427756
Sodium (Na)	0.102		0.005	mg/L		02-AUG-06	CLL	R427756
Nickel (Ni)	0.00034		0.00006	mg/L		02-AUG-06	CLL	R427756
Lead (Pb)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Antimony (Sb)	0.00054		0.00003	mg/L		02-AUG-06	CLL	R427756
Selenium (Se)	<0.0001		0.0001	mg/L		02-AUG-06	CLL	R427756
Strontium (Sr)	0.0003		0.0001	mg/L		02-AUG-06	CLL	R427756
Uranium (U)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Vanadium (V)	<0.00005		0.00005	mg/L		02-AUG-06	CLL	R427756
Zinc (Zn)	0.0042		0.0008	mg/L		02-AUG-06	CLL	R427756

* Refer to Referenced Information for Qualifiers (if any) and Methodology.

Reference Information

Sample Parameter Qualifier key listed:

Qualifier	Description
BL:INT	Balance Reviewed: Interference Or Non-Measured Component
RRV	Reported Result Verified By Repeat Analysis
RRVAP	Reported Result Verified by Alternate Process

Methods Listed (if applicable):

ALS Test Code	Matrix	Test Description	Preparation Method Reference(Based On)	Analytical Method Reference(Based On)
C-TOT-ORG-ED	Water	Total Organic Carbon		APHA 5310 B-Instrumental
CL-ED	Water	Chloride (Cl)		APHA 4500 Cl E-Colorimetry
ETL-ROUTINE-ICP-ED	Water	ICP metals and SO4 for routine water		APHA 3120 B-ICP-OES
IONBALANCE-ED	Water	Ion Balance Calculation		APHA 1030E
MET1-TOT-LOW-ED	Water	Total Trace Metals (Low Level)	EPA3015	EPA 6020
MET1-ULTRA-DIS-ED	Water	Ultra-Low Metals - Dissolved		EPA 6020
MET1-ULTRA-ED	Water	Ultra-Low Metals		EPA 6020
MET2-TOT-LOW-ED	Water	Total Major Metals	EPA3015	EPA 200.7
MET2-ULTRA-DIS-ED	Water	Major Metals - Dissolved		EPA 200.7
MET2-ULTRA-ED	Water	Major Metals		EPA 200.7
N2N3-ED	Water	Nitrate+Nitrite-N		APHA 4500 NO3H-Colorimetry
NH4-LOW-ED	Water	Ammonia-N		APHA 4500 NH3F-Colorimetry
NO2-ED	Water	Nitrite-N		APHA 4500 NO2B-Colorimetry
NO3-ED	Water	Nitrate-N		APHA 4500 NO3H-Colorimetry
PH/EC/ALK-ED	Water	pH, Conductivity and Total Alkalinity		APHA 4500-H, 2510, 2320

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

Chain of Custody numbers:

261065

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		

Reference Information

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.

ETL Enviro-Test LABORATORIES

CHAIN OF CUSTODY / ANALYTICAL REQUEST FORM

CANADA TOLL FREE 1-800-668-9878

WWW.ENVIROTEST.COM

COC #261065

Pg. 1 of 1

DATE: July 21/06

LAB WORK ORDER # L 414068

REPORT TO:	
COMPANY:	EBA Engineering Consultants
CONTACT:	Steve Moore
ADDRESS:	#201, 4916-49 St Yellowknife, NT
PHONE:	(867)920-2287 FAX: (867)873-3324
CELLPHONE:	
INVOICE TO:	SAME (Y) / N
COMPANY:	
CONTACT:	
ADDRESS:	
PHONE:	FAX:

REPORT DISTRIBUTION ALL FINAL RESULTS WILL BE MAILED

EMAIL ✓ FAX ___

EMAIL 1: Smoore@eba.ca

EMAIL 2: Klanglois@eba.ca

DIGITAL EMAIL: ___

SELECT: pdf ___ digital ___ both ✓

JOB # 1740149.001

PO/AFE:

LSD:

QUOTE #

SERVICE REQUESTED

- ✓ REGULAR SERVICE (DEFAULT)
- PRIORITY SERVICE (50% SURCHARGE)
- EMERGENCY SERVICE (100% SURCHARGE)

ANALYSIS REQUEST

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

SAMPLE ID	SAMPLING LOCATION	SAMPLED BY / DATE / TIME	SAMPLING METHOD	SAMPLE TYPE	Routine	Alkalinity	Ultra Low Total Metal	Ultra Low Dissolved Metal	Tox	HAZARDOUS ?	NUMBER OF CONTAINERS	HIGHLY CONTAMINATED ?	LAB SAMPLE #
Twin Creek	Tamedare	KL/KA/July 21/06	Grab	Water	✓	✓	✓	✓	✓				
Twin Creek Dup	"	"	"	"	✓	✓	✓	✓	✓				
Fen Head	"	"	"	"	✓	✓	✓	✓	✓				
Fen Mid	"	"	"	"	✓	✓	✓	✓	✓				
Trip Blank	"	"	"	"	✓	✓	✓	✓	✓				
Field Blank	"	"	"	"	✓	✓	✓	✓	✓				
Filter Blank	"												

GUIDELINES / REGULATIONS

CCME

SPECIAL INSTRUCTIONS / NATURE OF HAZARDOUS MATERIAL

SAMPLE CONDITION

FROZEN ___ COLD ✓ AMBIENT ___

MEAN TEMPERATURE 12.9°C

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.

RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:	SAMPLE CONDITION ACCEPTABLE UPON RECEIPT ? (Y/N)
Karla Langlois	July 21/06		24-Jul-06	
RELINQUISHED BY:	DATE & TIME:	RECEIVED BY:	DATE & TIME:	
			1046	

APPENDIX

APPENDIX B TAMERLANE TRAVEL BLANKS – 2006

APPENDIX B. TAMERLANE TRAVEL BLANKS – 2006

Analyte	17-May	5-Jun	21-Jul	18-Aug	Units	Detection Limits
Major Ions, Nutrients and Inorganics						
Chloride (Cl)	<1	<1	<1	<1	mg/L	1
Calcium (Ca)	<0.5	<0.5	<0.5	<0.5	mg/L	0.5
Potassium (K)	<0.1	<0.1	<0.5	<0.5	mg/L	0.1
Magnesium (Mg)	<0.1	<0.1	<0.1	<0.1	mg/L	0.1
Sodium (Na)	<1	<1	<1	<1	mg/L	1
Ion Balance	Low TDS	Low TDS	Low TDS	Low TDS	%	---
TDS (Calculated)	<1	<1	<1	<1	mg/L	---
Hardness (as CaCO3)	<1	<1	<1	<1	mg/L	---
Nitrate+Nitrite-N	<0.006	<0.006	<0.1	<0.1	mg/L	0.006
Nitrate-N	<0.006	<0.006	<0.1	<0.1	mg/L	0.006
Nitrite-N	<0.002	<0.002	<0.05	<0.05	mg/L	0.002
Sulfate (SO4)	<0.05	<0.05	<0.5	<0.5	mg/L	0.05
pH	5.5	5.7	5.8	5.7	pH	0.1
Conductivity (EC)	0.8	1	1	1	µS/cm	0.2
Bicarbonate (HCO3)	<5	<5	<5	<5	mg/L	5
Carbonate (CO3)	<5	<5	<5	<5	mg/L	5
Hydroxide (OH)	<5	<5	<5	<5	mg/L	5
Alkalinity, Total (as CaCO3)	<5	<5	<5	<5	mg/L	5
Ammonia-N	<0.005	<0.005	<0.005	<0.005	mg/L	0.005
Phosphorus, Total	<0.001	<0.001	---	---	mg/L	0.001
Total Organic Carbon	<1	<1	<1	<1	mg/L	1
Total Ultra-Low Level Metals						
Silver (Ag)	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001
Aluminum (Al)	<0.0003	<0.0003	<0.0003	<0.0003	mg/L	0.0003
Arsenic (As)	<0.00003	<0.00003	<0.00003	<0.00003	mg/L	0.00003
Boron (B)	<0.001	<0.001	<0.001	<0.001	mg/L	0.001
Barium (Ba)	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	0.00005
Beryllium (Be)	<0.0002	<0.0002	<0.0002	<0.0002	mg/L	0.0002
Calcium (Ca)	<0.02	<0.02	0.37	<0.02	mg/L	0.02
Cadmium (Cd)	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	0.00005
Cobalt (Co)	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001
Chromium (Cr)	<0.00006	<0.00006	<0.00006	<0.00006	mg/L	0.00006
Copper (Cu)	<0.0006	<0.0006	<0.0006	<0.0006	mg/L	0.0006
Iron (Fe)	<0.005	<0.005	0.013	<0.005	mg/L	0.005
Mercury (Hg)	<0.00002	<0.00002	<0.00002	<0.00002	mg/L	0.00002
Potassium (K)	<0.02	<0.02	<0.02	<0.02	mg/L	0.02
Magnesium (Mg)	<0.004	<0.004	<0.004	<0.004	mg/L	0.004
Manganese (Mn)	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001
Molybdenum (Mo)	<0.00006	<0.00006	<0.00006	<0.00006	mg/L	0.00006
Sodium (Na)	<0.005	<0.005	0.006	<0.005	mg/L	0.005
Nickel (Ni)	<0.00006	<0.00006	<0.00006	<0.00006	mg/L	0.00006
Lead (Pb)	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	0.00005
Antimony (Sb)	0.0001	0.00021	0.00013	0.0002	mg/L	0.00003
Selenium (Se)	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001
Strontium (Sr)	<0.0001	<0.0001	0.0002	<0.0001	mg/L	0.0001
Uranium (U)	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	0.00005
Vanadium (V)	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	0.00005
Zinc (Zn)	<0.0008	0.0011	<0.0008	<0.0008	mg/L	0.0008
Dissolved Ultra-Low Level Metals						
Silver (Ag)	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001
Aluminum (Al)	<0.0003	<0.0003	0.0004	<0.0003	mg/L	0.0003
Arsenic (As)	<0.00003	<0.00003	<0.00003	<0.00003	mg/L	0.00003
Boron (B)	<0.001	<0.001	<0.001	<0.001	mg/L	0.001
Barium (Ba)	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	0.00005
Beryllium (Be)	<0.0002	<0.0002	<0.0002	<0.0002	mg/L	0.0002
Calcium (Ca)	<0.02	<0.02	<0.02	<0.02	mg/L	0.02
Cadmium (Cd)	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	0.00005
Cobalt (Co)	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001
Chromium (Cr)	<0.00006	<0.00006	<0.00006	<0.00006	mg/L	0.00006
Copper (Cu)	<0.0006	<0.0006	<0.0006	<0.0006	mg/L	0.0006
Iron (Fe)	<0.005	<0.005	<0.005	<0.005	mg/L	0.005
Mercury (Hg)	<0.00002	<0.00002	<0.00002	<0.00002	mg/L	0.00002
Potassium (K)	<0.02	<0.02	<0.02	<0.02	mg/L	0.02
Magnesium (Mg)	<0.004	<0.004	<0.004	<0.004	mg/L	0.004
Manganese (Mn)	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001
Molybdenum (Mo)	<0.00006	<0.00006	<0.00006	<0.00006	mg/L	0.00006
Sodium (Na)	<0.005	<0.005	0.005	<0.005	mg/L	0.005
Nickel (Ni)	<0.00006	<0.00006	<0.00006	<0.00006	mg/L	0.00006
Lead (Pb)	0.0001	<0.00005	<0.00005	<0.00005	mg/L	0.00005
Antimony (Sb)	0.00017	0.00058	0.00021	0.00013	mg/L	0.00003
Selenium (Se)	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001
Strontium (Sr)	<0.0001	<0.0001	<0.0001	<0.0001	mg/L	0.0001
Uranium (U)	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	0.00005
Vanadium (V)	<0.00005	<0.00005	<0.00005	<0.00005	mg/L	0.00005
Zinc (Zn)	<0.0008	<0.0008	0.0017	<0.0008	mg/L	0.0008

Canadian Council of Ministers of the Environment - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (Oct. 2005).

Above Detection Limit

Footnotes

a standard for nitrate [13mg/L(NO3)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into µg/L.

b standard for nitrite [0.06mg/L(NO2)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into µg/L.

c standard for ammonia [0.019mg/L(NH4)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into µg/L.

d standard for inorganic Hg, (results expressed as total or dissolved Hg).

APPENDIX

APPENDIX C TAMERLANE FIELD BLANKS - 2006

APPENDIX C. TAMERLANE FIELD BLANKS – 2006

Analyte	17-May	5-Jun	21-Jul	18-Aug	Units	Detection Limits
Major Ions, Nutrients and Inorganics						
Chloride (Cl)	1	<1	<1	---	mg/L	1
Calcium (Ca)	<0.5	<0.5	0.7	---	mg/L	0.5
Potassium (K)	<0.1	<0.1	<0.5	---	mg/L	0.1
Magnesium (Mg)	0.1	<0.1	<0.1	---	mg/L	0.1
Sodium (Na)	<1	<1	<1	---	mg/L	1
Ion Balance	Low EC	Low EC	Low EC	---	%	---
TDS (Calculated)	1	5	1	---	mg/L	---
Hardness (as CaCO3)	<1	<1	2	---	mg/L	---
Nitrate+Nitrite-N	<0.006	<0.006	<0.1	---	mg/L	0.006
Nitrate-N	<0.006	<0.006	<0.1	---	mg/L	0.006
Nitrite-N	<0.002	<0.002	<0.05	---	mg/L	0.002
Sulfate (SO4)	<0.05	<0.05	0.6	---	mg/L	0.05
pH	6	6	6.7	---	pH	0.1
Conductivity (EC)	1.2	1.3	3.8	---	µS/cm	0.2
Bicarbonate (HCO3)	<5	10	<5	---	mg/L	5
Carbonate (CO3)	<5	<5	<5	---	mg/L	5
Hydroxide (OH)	<5	<5	<5	---	mg/L	5
Alkalinity, Total (as CaCO3)	<5	9	<5	---	mg/L	5
Ammonia-N	<0.005	<0.005	<0.005	---	mg/L	0.005
Phosphorus, Total	<0.001	0.001	---	---	mg/L	0.001
Total Organic Carbon	<1	<1	<1	---	mg/L	1
Total Ultra-Low Level Metals						
Silver (Ag)	<0.0001	<0.0001	<0.0001	---	mg/L	0.0001
Aluminum (Al)	<0.0003	0.0003	0.037	---	mg/L	0.0003
Arsenic (As)	<0.00003	<0.00003	<0.00003	---	mg/L	0.00003
Boron (B)	<0.001	<0.001	<0.001	---	mg/L	0.001
Barium (Ba)	<0.00005	<0.00005	0.00044	---	mg/L	0.00005
Beryllium (Be)	<0.0002	<0.0002	<0.0002	---	mg/L	0.0002
Calcium (Ca)	0.02	<0.02	0.57	---	mg/L	0.02
Cadmium (Cd)	<0.00005	<0.00005	<0.00005	---	mg/L	0.00005
Cobalt (Co)	<0.0001	<0.0001	<0.0001	---	mg/L	0.0001
Chromium (Cr)	<0.00006	<0.00006	<0.00006	---	mg/L	0.00006
Copper (Cu)	<0.0006	<0.0006	<0.0006	---	mg/L	0.0006
Iron (Fe)	<0.005	<0.005	<0.005	---	mg/L	0.005
Mercury (Hg)	<0.00002	0.00002	<0.00002	---	mg/L	0.00002
Potassium (K)	<0.02	<0.02	<0.02	---	mg/L	0.02
Magnesium (Mg)	<0.004	<0.004	0.007	---	mg/L	0.004
Manganese (Mn)	<0.0001	<0.0001	0.0004	---	mg/L	0.0001
Molybdenum (Mo)	<0.00006	<0.00006	<0.00006	---	mg/L	0.00006
Sodium (Na)	0.123	0.117	0.093	---	mg/L	0.005
Nickel (Ni)	<0.00006	<0.00006	<0.00006	---	mg/L	0.00006
Lead (Pb)	<0.00005	<0.00005	0.00006	---	mg/L	0.00005
Antimony (Sb)	0.00013	0.00022	0.00019	---	mg/L	0.00003
Selenium (Se)	<0.0001	<0.0001	<0.0001	---	mg/L	0.0001
Strontium (Sr)	<0.0001	<0.0001	0.0006	---	mg/L	0.0001
Uranium (U)	<0.00005	<0.00005	<0.00005	---	mg/L	0.00005
Vanadium (V)	<0.00005	<0.00005	<0.00005	---	mg/L	0.00005
Zinc (Zn)	<0.0008	<0.0008	0.0012	---	mg/L	0.0008
Dissolved Ultra-Low Level Metals						
Silver (Ag)	<0.0001	<0.0001	<0.0001	---	mg/L	0.0001
Aluminum (Al)	<0.0003	<0.0003	0.0276	---	mg/L	0.0003
Arsenic (As)	<0.00003	<0.00003	<0.00003	---	mg/L	0.00003
Boron (B)	<0.001	<0.001	<0.001	---	mg/L	0.001
Barium (Ba)	<0.00005	<0.00005	0.00038	---	mg/L	0.00005
Beryllium (Be)	<0.0002	<0.0002	<0.0002	---	mg/L	0.0002
Calcium (Ca)	0.04	0.03	0.6	---	mg/L	0.02
Cadmium (Cd)	<0.00005	<0.00005	<0.00005	---	mg/L	0.00005
Cobalt (Co)	<0.0001	<0.0001	<0.0001	---	mg/L	0.0001
Chromium (Cr)	<0.00006	<0.00006	<0.00006	---	mg/L	0.00006
Copper (Cu)	<0.0006	<0.0006	<0.0006	---	mg/L	0.0006
Iron (Fe)	<0.005	<0.005	<0.005	---	mg/L	0.005
Mercury (Hg)	<0.00002	<0.00002	<0.00002	---	mg/L	0.00002
Potassium (K)	<0.02	<0.02	<0.02	---	mg/L	0.02
Magnesium (Mg)	<0.004	<0.004	0.007	---	mg/L	0.004
Manganese (Mn)	<0.0001	<0.0001	0.0004	---	mg/L	0.0001
Molybdenum (Mo)	<0.00006	<0.00006	<0.00006	---	mg/L	0.00006
Sodium (Na)	0.131	0.124	0.106	---	mg/L	0.005
Nickel (Ni)	<0.00006	<0.00006	0.0001	---	mg/L	0.00006
Lead (Pb)	<0.00005	<0.00005	<0.00005	---	mg/L	0.00005
Antimony (Sb)	0.00014	0.00038	0.00018	---	mg/L	0.00003
Selenium (Se)	<0.0001	<0.0001	<0.0001	---	mg/L	0.0001
Strontium (Sr)	<0.0001	<0.0001	0.0006	---	mg/L	0.0001
Uranium (U)	<0.00005	<0.00005	<0.00005	---	mg/L	0.00005
Vanadium (V)	<0.00005	<0.00005	<0.00005	---	mg/L	0.00005
Zinc (Zn)	0.0022	0.0013	0.0023	---	mg/L	0.0008

Canadian Council of Ministers of the Environment - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (Oct. 2005).

Above Detection Limit

Footnotes

a standard for nitrate [13mg/L(NO3)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into µg/L.

b standard for nitrite [0.06mg/L(NO2)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into µg/L.

c standard for ammonia [0.019mg/L(NH4)] has been converted by a factor of 1/4.43 to reflect the results expressed as mg/l(N), then converted into µg/L.

d standard for inorganic Hg, (results expressed as total or dissolved Hg).