

PEREGRINE DIAMONDS LTD.

2010 ENVIRONMENTAL BASELINE PROGRAM CHIDLIAK PROJECT, BAFFIN ISLAND, NUNAVUT



REPORT

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EXECUTIVE SUMMARY

Peregrine Diamonds Ltd. (Peregrine) retained EBA Engineering Consultants Ltd. to carry out the 2010 Environmental Baseline Program at the Chidliak Project site, located approximately 75 kilometres (km) east of Iqaluit (distance from the most south westerly corner of the Chidliak project block). The 2010 environmental baseline study area covers an area approximately 1,950 square kilometres (km²) within the Chidliak project block and is roughly centered on the 2010 exploration sites. The study area lies entirely inland and includes portions of two glaciers to the east, the upper McKeand River and its tributaries, and borders a section of Ptarmigan Fiord in the north.

Baseline winter water quality, surface water quality, potable water, preliminary stream discharge, preliminary fish and fish habitat, waterfowl, raptor, caribou, and carnivore (including species at risk) surveys were the primary focus of the 2010 program. Environmental baseline conditions were surveyed during four field events: April 7-10, June 2, July 8-12, and July 26-29, 2010. The timing of the field events was determined by helicopter sharing opportunities, camp availability, and exploration schedules. An additional field event from April 28 to 30 was initiated, but due to inclement weather on site and logistical issues, baseline field data was not collected.

Peregrine identified ten lakes with proposed winter drill targets; however, drilling occurred on two of the ten lakes in 2010. Winter water quality samples were collected on these ten lakes before drilling activities commenced and on the two drilled lakes after drilling activities ceased (water quality stations WWQ7 and WWQ10). Winter water quality was analyzed for routine parameters (including total suspended solids and turbidity), nutrients, total and dissolved metals, and total organic carbon. Winter water quality results indicated that the majority of analytes sampled during the pre- and post-drilling events were at or below laboratory detection limits. The winter water quality samples from the pre- and post-drilling sampling events were considered to represent natural background conditions, and no apparent changes in the water quality occurred as a result of drilling activities. Pre- and post-drilling results indicated that all parameters analyzed were within the Canadian Council of Ministers of the Environment (CCME) Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (FAL) (December 2007), except pH, total and dissolved aluminum, cadmium, and copper.

A total of twelve surface water quality stations were sampled for routine parameters, nutrients, total metals, total organic carbon, and oil and grease. Laboratory water quality results indicated that the majority of analytes sampled were at or below laboratory detection limits, and all parameters were within the CCME FAL guidelines (December 2007) at all water quality stations sampled, except pH and total aluminum. The water quality samples were considered to represent natural background conditions.

Potable water quality samples, to be analyzed for total coliforms, fecal coliforms, and *Escherichia coli* (E. coli) were collected at Sunrise and Discovery camps. Potable water quality samples were collected from Sunrise camp in April and July; whereas, potable water quality samples were collected from Discovery camp in July. Laboratory results of the potable water quality parameters collected from within both camps (camp taps, not including the raw water sources) were below laboratory detection limits and within appropriate health criteria (Guidelines for Canadian Drinking Water Quality).

Preliminary stream flow velocities were measured at five watercourse stations in early and late July. As anticipated, stream discharges at measured watercourses abated by late July. In early July, preliminary

discharges ranged from 0.148 to 1.148 cubic metres per second (m^3/s). A few weeks later, two stations were dry and flow velocities measured at the remaining watercourse stations ranged from 0.021 to 0.065 m^3/s . These smaller headwater streams experience their greatest discharge during spring freshet and rain events, and quickly diminish due to their small drainage areas. These drainage areas are characterized as predominantly bedrock with limited soil and vegetation cover, and limited storage capacity in the form of wetlands and lakes.

Preliminary fish and fish habitat was described at watercourses downstream of exploration focus areas, plus another watercourse outside the zone of influence. Backpack electrofishing, minnow traps, and fish observations were used to collect preliminary fish presence data. Arctic char in their parr (first two years) life history stage were documented at four watercourses: Hydro 9, -10, -11, and WQ8. Watercourse locations sampled provide moderate to good habitat conditions for Arctic char rearing. It is presumed that Arctic char spawn in lakes within the area, since most streams would freeze to the bottom, and that juveniles utilize stream habitats in summer for feeding.

An aerial waterfowl/water bird survey was conducted in early July. During the aerial survey, a total of 41 waterfowl/water birds were observed in 285 km flown. An additional 20 waterfowl/water bird observations were recorded incidentally during other surveys. A total of seven species of waterfowl/water birds were recorded. No Harlequin ducks were observed during the 2010 field programs; however, a few fast flowing watercourses near Ptarmigan Fiord may provide suitable Harlequin Duck habitat.

A total of five raptor observations, including two species (Peregrine Falcon and Rough-legged Hawk) were recorded during the 285 km aerial raptor survey. An additional Peregrine Falcon was observed outside the aerial raptor survey. Two known or suspected raptor nest sites were recorded, including one Peregrine Falcon nest site approximately 27 km northwest of Sunrise Camp and a Rough-legged Hawk nest site approximately 6 km southeast of Sunrise Camp. A probable Rough-legged Hawk nest site was also documented outside the study area (approximately 30 km north of Sunrise Camp). Raptors are sensitive to disturbance at their nest sites during the breeding season; therefore, a conservative 1.5 km buffer was recommended near known or probable raptor nests from early May to mid August.

Systematic aerial caribou surveys were conducted on July 9 and 27, 2010 within the 1,950 km^2 study area (caribou surveys covered approximately 18% of the study area). No caribou were observed during the early July survey; however, a single caribou track was documented near Ptarmigan Fiord. During the late July survey, four caribou were observed on transect and one off transect. Each observation on transect included a single cow or a cow / calf pair located on small snow patches. The calculated relative caribou density within the study area during the late July survey event was 0.009 caribou per km^2 , with an estimated abundance of 18 caribou (plus or minus (\pm) standard error (SE) of 36.7) across the study area.

A carnivore survey was carried-out in conjunction with the aerial caribou surveys. As encountered, sites that were considered potential carnivore denning habitat were surveyed, including sand deposits and gravel ridges, particularly near a waterbody or potential look-out points. No carnivores or carnivore dens were observed; however, four observations of fox tracks were documented during the early July aerial survey approximately 8 km southeast and 18 km north of Sunrise Camp.

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ACRONYMS & ABBREVIATIONS

%	Per Cent
°C	Degrees Celsius
agl	Above ground level
asl	Above sea level
ALS	ALS Laboratory Group
CCME FAL	Canadian Council of Ministers of the Environment for the Protection of Freshwater Aquatic Life
CH-#	Chidliak project bulk sampling site
CHI-#	Chidliak project drill site
cm	Centimetre
COSEWIC	Committee on the Status of Endangered Wildlife in Canada
DO	Dissolved oxygen
EBA	EBA Engineering Consultants Ltd.
EC	Electrical conductivity
<i>E.coli</i>	<i>Escherichia coli</i> , a member of the faecal pathogen coliform group
g	Gram
GPS	Global Positioning System
Hydro	Hydrology station (includes surface water and stream flow)
km	Kilometre
km ²	Square kilometre
km/hr	Kilometres per hour
m	Metre
mg/L	Milligram per litre
mL	Millilitre
mm	Millimetre
m ³ /s	Cubic metres per second
MPN	Most probable number
NRI	Nunavut Research Institute
NTS	National Topographic System
NWB	Nunavut Water Board
Peregrine	Peregrine Diamonds Ltd.
SARA	Species at Risk Act
SE	Standard error
TOC	Total organic carbon
µm	Micrometre
µS/cm	Microsiemens per centimetre
WWQ	Winter water quality
WQ	Water quality (surface water)
QA/QC	Quality assurance/quality control

1.0 INTRODUCTION

The Chidliak Project site is situated on Hall Peninsula, southeast Baffin Island, Nunavut and is approximately 75 kilometres (km) east of Iqaluit (distance from the most south westerly corner of the Chidliak project block) (Figure 1). Environmental studies carried out in 2010 serve to facilitate understanding of the environmental baseline conditions within in the study area. Peregrine Diamonds Ltd. (Peregrine) retained EBA Engineering Consultants Ltd. (EBA) to carry out the 2010 environmental baseline Program at the Chidliak Project site, which will function as a key management tool for planning exploration activities to avoid or minimize impacts to the surrounding environment.

The 2010 environmental baseline study area covers an area approximately 1,950 square kilometres (km²) within the Chidliak project block and is roughly centered on the 2010 exploration sites. The study area lies entirely inland and includes portions of two glaciers to the east, the upper McKeand River and its tributaries, and borders a section of Ptarmigan Fiord in the north (Figure 1).

1.1 Project Background

Peregrine began systematic exploration of the Chidliak Project site in the summer of 2008 following receipt of their permits and licences. Since then, Peregrine has continued ground and airborne geophysical surveys, land and lake based drilling programs, bulk sampling, and the construction of two exploration camps (Sunrise and Discovery camp).

Baseline studies for various biophysical components were initiated in 2009 and are ongoing for some key disciplines. The 2010 baseline program continued with many of these programs and initiated other environmental programs in response to additional exploration work.

2.0 METHODS

Environmental surveys conducted during the four field events include:

- April 7 to 10, Ms. Karla Langlois of EBA and Mr. Alden Williams, a Wildlife Officer and field assistant from Iqaluit, carried out the pre-drilling winter water quality and potable water quality sampling programs.
- June 2, Ms. Karla Langlois and Mr. Neil Armstrong, a bear monitor and field assistant from Iqaluit, carried out the post-drilling winter water quality sampling program.
- July 8 to 12, Ms. Karla Langlois and Mosha Pudloo, a bear monitor and field assistant from Iqaluit, completed surface and potable water quality sampling, preliminary stream flow, caribou, carnivore, waterfowl, raptor, and species at risk surveys.
- July 26 to 29, Ms. Karla Langlois and Craig Beardsall and Noah Alookie, both local field assistants from Iqaluit, carried out the surface water quality, preliminary stream flow, caribou, carnivore, waterfowl, and species at risk surveys. Ms. Michelle Pask of EBA, with assistance from Karla Langlois, Craig Beardsall, and Noah Alookie, completed the preliminary fish and fish habitat field program.

The timing of the field events was determined by helicopter sharing opportunities, camp availability, and exploration schedules. An additional field event from April 28 to 30 to collect winter water quality data during drilling at one lake-based location was initiated but due to inclement weather on site and logistical issues, baseline field data was not collected.

2.1 Winter Water Quality

In compliance with Peregrine's Nunavut Water Board Type B Water Licence #2BE-CHI0813, amendment condition Part J, Item #7, the objective of the winter water quality program was to conduct baseline water quality sampling prior to and after drilling. Pre-drilling water quality samples were collected from April 7 to 10, and post-drilling water samples were collected June 2, 2010.

Winter water quality sampling stations were established at least 100 metres (m) downstream of lake-based drill targets, where appropriate. A single winter water quality sample site was sampled per drill-target lake. At each water quality sampling location, snow was removed from the work area, and a 20 centimetre (cm) diameter gas-powered ice auger was used to drill through the ice. The snow shovel and ice auger were kept covered and clean prior to use. A clam tent was placed over the ice hole and heated with a small propane heater to keep equipment from freezing. To ensure that bottom sediments were not disturbed during sampling, an Eagle model fish sonar was used to establish water depth prior to collecting measurements and samples.

A WTW ProfiLine Oxi 197 model dissolved oxygen and temperature meter with a TA 197 electrode was used to measure dissolved oxygen (DO) and temperature profiles *in-situ* at one-metre intervals. Calibration of the electrode was completed in the field prior to each use. The electrode was lowered to the desired depth and results were recorded on standardized data sheets. Surface water temperature, pH, and electrical conductivity (EC) were measured from within the hole using a Multi-Parameter hand probe.

Several water depths were sampled at each water quality station: upper, middle, and lower. Upper surface water quality samples were labelled "A", middle depth samples were labelled "B", and lower depth samples were labelled "C". Water quality samples were collected at depth using a 4.2-litre capacity Kemmerer bottle constructed of transparent acrylic with silicone seals. The Kemmerer bottle was acid washed and rinsed with laboratory issued de-ionized water prior to each sampling event. Routine parameters, nutrients, total metals, dissolved metals, and total organic carbon (TOC) water quality samples were collected at each sampling depth. Dissolved metal samples were filtered in the field using dedicated disposable Nalgene 45-micrometre (μm) filters, and samples were preserved using appropriate acid concentrations provided by ALS Laboratory Group (ALS) (an accredited environmental laboratory). Powderless nitrile gloves were worn during handling of bottles and equipment to minimize contamination. All bottles were tripled rinsed with source water (*i.e.* the same water the bottle was filled with) prior to water collection. To minimize trace metal contamination from the filters, the filters were also rinsed three times with source water prior to filling the bottles.

ALS prepared all water quality sample bottles and preservatives, and analyzed the water quality samples. Water quality results were compared to the CCME FAL (December 2007).

A duplicate sample¹ and field blank² were also collected and analyzed for the full suite of parameters (routine, nutrients, total and dissolved metals, and TOC) as part of the quality assurance/quality control (QA/QC) program. ALS provided the de-ionized water for the field blanks; trip blank³ were prepared in their laboratory. Trip blank samples accompanied the sample bottles to site, were kept intact, and were returned to the laboratory with the water quality samples for each field program. These QA/QC samples were also analyzed for routine parameters, nutrients, total and dissolved metals, and TOC.

2.2 Surface Water Quality

Water quality samples were collected during the early July and late July field events at pre-determined locations in relation to known project footprints and in consultation with Peregrine. Sampling stations were positioned along lakes and streams, upstream and downstream, of known project footprints, as well as outside the proposed project's zone of influence. All water quality bottles, preservatives, and de-ionized water were supplied, and all samples were analyzed, by ALS.

Once on site, water quality samples were collected for standard analytical parameters selected by Peregrine including routine parameters, nutrients, total metals, TOC, and oil and grease. Peregrine advised EBA during the planning of the water-quality sampling program that parameters sampled were to be in consonance with the Nunavut Water Board (NWB) Type B Licence, which sets out parameters and methodology for monitoring and effluent on the Chidliak Project.

During the collection of water quality samples, bottles were triple rinsed with source water prior to collecting the water samples. Disposable nitrile gloves were worn during handling of all the bottles and equipment. Source water was collected in a manner consistent with standard field sampling methods, including lowering the bottle in a horizontal position to minimize the disturbance to the bottom sediment, and collected towards the current at stations with flowing water. Water quality samples were collected off shore as much as possible without disturbing the bottom sediment. Select parameters including pH, surface water temperature, and EC were measured in the field using Multi-Parameter 35 Series probe.

Samples collected were preserved with an appropriate formula of acids provided by ALS or by maintaining sample temperatures close to 4 degrees Celsius (°C). Water quality samples collected for nutrient analysis were preserved with 1 millilitre (mL) of 1:1 sulphuric acid, total metals were preserved using 1 mL 1:1 nitric acid, TOC samples were preserved with 1 mL of 1:1 sulphuric acid, and oil and grease samples were preserved with 1 mL of 1:1 hydrochloric acid.

Water quality samples were transported in laboratory-issued portable coolers with ice packs, to ensure that water quality samples remained below 4 °C. Care was taken to ensure water quality samples remained upright and secure in the cooler, and the cooler was sealed with tape prior to shipping. A chain-of-custody

¹ A duplicate water quality sample is a replicate of a field sample using the same collection, preservation, and transportation methods employed for the original field water quality sample.

² A field blank sample is prepared at a field sampling station by filling water quality bottles with laboratory issued de-ionized water and using the same sample collection, preservation, and transportation methods employed for the field water quality sample.

³ A trip blank sample is prepared by the laboratory by filling water quality bottles with de-ionized water, sealed, and transported with sample bottles.

form was completed and shipped with the water quality samples to ALS for laboratory analysis for all sampling events.

As part of the QA/QC program, a duplicate water quality sample and a field blank sample were collected on site to represent the full suite of parameters analyzed during both field programs. Methods used to collect the duplicate and field blank sample were similar to those for the field water quality samples. In addition, a set of trip blank samples accompanied the sample bottles to the site, were kept intact, and were returned to the laboratory with the water quality samples for each field program. These QA/QC samples were also analyzed for routine parameters, nutrients, total metals, TOC, and oil and grease.

Trip blanks were prepared by the laboratory to test for possible contamination that might arise during the handling, transport or storage of the samples; while field blanks were used to test for contamination arising from the sampling equipment, handling, or from the general conditions during sampling. A duplicate sample was collected to test the validity of sampling procedures and laboratory methodology. Each quality control sample represented the full suite of parameters collected across site.

2.3 Potable Water Quality

The objectives of the potable water quality sampling program were to collect representative potable water quality samples from Sunrise and Discovery camps while in operation. Potable water quality samples were collected during the April and early July field events.

Prior to sampling, it was confirmed water levels in the tanks were low and no chlorine or other disinfecting agents had been recently added. The water lines were purged by running water through the taps for 10 minutes immediately prior to sample collection. Potable water quality samples were taken at various taps throughout the water system, including the kitchen, dry tents, bathrooms, and at the raw water source (directly from the source lake or source watercourse).

Sampling methods included the following:

- Immediately prior to collecting the potable water sample, label the water sample bottles;
- Disposable nitrile sampling gloves were worn during handling of all the bottles and equipment. Clean gloves were worn at each potable water quality station;
- Since these bottles have preservative pellets already added by the laboratory, the bottles were not rinsed prior to sample collection; and
- Once collected, the lids were tightened and the bottle inverted at least three times to mix the preservatives.

All potable water quality bottles with preservatives, and de-ionized water were supplied by ALS. All potable water quality samples were shipped to ALS in Yellowknife, NWT within 12 hours and a single duplicate sample was also submitted to the Nunavut Research Institute's (NRI's) laboratory for analysis of total coliforms, faecal coliforms, and *Escherichia coli* (*E. coli*). Potable water quality results were compared against the Guidelines for Canadian Drinking Water Quality (Federal-Provincial-Territorial Committee on Drinking Water of the Federal-Provincial-Territorial Committee on Health and the Environment 2010).

Three types of quality assurance/quality control samples were used: travel, field, and duplicate samples. Travel blanks (also referred to as trip blanks) were supplied and shipped by ALS, and field blanks and duplicate samples were collected in the field. A single duplicate and field sample were collected during each field event, and were analyzed for the full suite of parameters collected across site.

Samples were transported in laboratory issued portable coolers and kept at 4 °C. A chain-of-custody form was completed and added to the cooler, and the cooler was secured with packing tape and shipped to ALS. Potable water quality samples have a 24 hour holding time, and were analyzed by the laboratory within this time limit.

2.4 Preliminary Stream Discharge

The objective of the preliminary stream discharge assessment was to collect flow data of local watercourses near the existing camps and bulk sampling sites.

At each stream flow station, a tape measure was secured across the watercourse, and where necessary, boulders obstructing the metering station were removed. A Swoffer meter 2100 was used to measure flow velocities, and was calibrated at each sampling station. Flow velocities were recorded at 11 to 12 locations equally spaced along the tape measure. Based on the total watercourse width, each section of watercourse did not constitute more than 10 per cent (%) of the total volume of discharge. At each station along the tape measure, the water depth was recorded. Using the Swoffer meter, flow velocities were recorded at 20%, 60%, and 80% depths from the water surface.

Flow velocities were recorded on dedicated datasheets, along with a description of the watercourse banks, channel characteristics including wetted width, GPS location, date and time, sampling personnel, Swoffer meter calibration, photographs, and any other comments at each tagline station.

2.5 Fish and Fish Habitat

The project area is generally about 600 to 900 m above sea level (asl) with higher land to the east that is covered by glaciers. Approximately a third of the property drains northward while the remainder drains west via the McKeand River and its tributaries. All of the watercourses chosen within the study area have two years of baseline water quality data and many of the sample sites have two years of preliminary stream discharge data (since these are downstream from potential development sites) which provides the reasoning for why fish and fish habitat assessments were conducted at the sample sites listed in Section 3.5 of this report.

No existing information or data regarding fish populations could be found for streams in the vicinity of this Project. However, general information on fish presence within Nunavut was obtained from the Nunavut Wildlife Resource and Habitat Values report (NUNAMI 2008). Based on information in the NUNAMI (2008), the following species have been recorded on Baffin Island: Arctic char (*Salvelinus alpinus*), lake trout (*S. namaycush*), slimy sculpin (*Cottus cognatus*), lake herring (*Coregonus artedii*), lake whitefish (*C. clupeaformis*), broad whitefish (*C. nasus*), Northern pike (*Esox lucius*), fourhorn sculpin (freshwater form) (*Myoxcephalus quadricornis*), Arctic grayling (*Thymallus arcticus*), and burbot (*Lota lota*). An additional search on fishbase.org found several freshwater species specific to Baffin Island such as Atlantic salmon

(*Salmo salar*), ninespine stickleback (*Pungitius pungitius*), threespine stickleback (*Gasterosteus aculeatus*), least cisco (*C. sardinella*), and Arctic cisco (*C. autumnalis*) (Fishbase.org searched on November 24, 2010).

A field assessment of fish and fish habitat was conducted on July 26 to 29, 2010. The assessment was performed based on the 1:20,000 Resource Inventory Committee of British Columbia standards (RIC 2004). Fish assessments were conducted by Michelle Pask of EBA with assistance from an Iqaluit community member. Electrofishing was conducted by Michelle Pask and Karla Langlois.

2.5.1 Fish Habitat

For each site, a channel segment of approximately 100 m was assessed to determine the general distribution, quality, and suitability of fish habitat. Site cards were used to record descriptions and measurements of fish habitat and stream morphology (*i.e.*, wetted width, substrate, channel morphology, water depths and instream cover). Classification of watercourses as ephemeral, intermittent, small permanent or large permanent was based on definitions provided by Fisher *et al.* (1989). Additionally, observations were made regarding the overall quality and abundance of fish habitat, as well as of the presence of specific habitat features related to spawning, nursery/rearing, migration, and overwintering for fish species.

Water quality measurements were taken at each sample site to determine the suitability of water quality parameters to support fish survival. For these measurements, DO (mg/L) and temperature (°C) were measured with an Oakton DO 300 meter, turbidity was measured with an Oakton T-100 meter and pH and conductivity was measured using an Oakton pH/Conductivity meter.

2.5.2 Fish Presence

Fish population sampling was conducted at several habitat sample locations to identify local fish species and populations. Fish sampling was conducted under the authority of Animal use Protocol number FWI-ACC-2010-052 and a License to Fish for Scientific Purposes #S-10/11-1024-NU, which were obtained from Fisheries and Oceans Canada. Angling was conducted by Iqaluit and Pangnirtung community members present at Sunrise Camp. Baited Gee minnow traps were set in several watercourse locations and allowed to soak for at least 12 hours and not more than 24 hours.

Watercourses were also electrofished using a Smith-Root LR-24 backpack electrofisher. Electrofishing was conducted within the assessed area of the watercourse, between 100 m upstream and 300 m downstream of the watercourse crossing. Electrofishing was conducted following the Alberta Fisheries Management Division Electrofishing Policy Respecting Injuries to Fish (ASRD 2004).

Year-round fish presence rating was based on habitat quality at the time of the assessment, the quality of the overwintering habitat, and the connectivity of the watercourse to other watercourses.

2.6 Wildlife

2.6.1 Waterfowl and Water Birds

The objectives of the waterfowl and water bird⁴ surveys were to document waterfowl and water bird species occurring within the study area and report species distributions and presence during the July field events (fledging season). These surveys were sufficient to document species with special conservation status, such as Harlequin Duck, which have the potential to occupy the fast flowing streams near the glaciers and fiords.

A pre-determined survey route following lakes, ponds, and rivers was planned using a 1:20,000 National Topographic System (NTS) map prior to the field surveys. Additional ponds and streams outside this pre-determined route were surveyed opportunistically as encountered during the survey. An aerial survey for waterfowl/water birds was conducted flying the shoreline of the McKeand River, lakes, ponds, and streams during the early July field event (July 8-12). The shoreline of streams and lakes, particularly within the northern portion of the study area (an area that had limited aerial coverage during the 2009 field programs) were focused on, as well as the McKeand River.

A helicopter was used to fly the route at a speed of approximately 80 – 100 kilometres per hour (km/hr) at an altitude of 50 m above ground level (agl). All waterfowl and water birds observed and their occupied habitats were recorded. Data was analysed to species present and the total number of waterfowl and water bird observations per distance flown.

2.6.2 Raptors

The objective of the raptor surveys was to record raptor species presence and distribution within the study area and report nesting areas, which may be sensitive to disturbance, in context to exploration activities. This includes surveying for raptor species with special conservation status, including Peregrine Falcons and Short-eared Owls.

Prior to the field surveys, 1:20,000 NTS maps covering the study area were reviewed and potential cliff nesting habitat was delineated. Once in the field, aerial surveys involved a “Look-See” method where potential cliff nesting sites were flown in search of raptors and/or a nest. The helicopter remained at least 30 m from the cliff face.

All raptors, raptor nests (active and inactive), and perch observation locations were recorded using a GPS and entered onto a data sheet. Proof of an occupied nest included seeing two adults together near the nest site, finding a nest containing eggs or young, flushing an adult from a nest, and/or seeing adults carrying food to young birds. Photographs were taken of each occupied nest. Additional information on active nests was recorded including cliff aspect, general surrounding habitat type, and approximate distance above ground.

An aerial raptor survey was conducted during the early July field event along potential cliff nesting raptor habitat in conjunction with the waterfowl/water bird aerial survey. All incidental raptor observations during all other environmental surveys were also recorded.

⁴ In this report, the term water bird is used to define gulls and terns.

Raptor data collected from the aerial raptor survey was analyzed for species presence, sensitive habitats, and the total number of raptor observations per distance flown.

2.6.3 Caribou

The main objective of the aerial caribou survey was to determine the general distribution and abundance of caribou in the study area in relation to the exploration-focus area during the survey periods. Based on the 2010 winter lake-drilling program, the caribou survey transects flown in 2009 were slightly altered to include the 2010 winter drilling locations and to maintain a 4 hour maximum helicopter time limit. The minor changes to the 2010 caribou survey transects included the following:

- The two most easterly 2009 transects over the glacier were omitted from the 2010 caribou survey;
- Two transects were lengthened an additional 8 km to the north to include anomaly CHI-292;
- Two transects were lengthened an additional 30 km to the north to include anomalies CHI-199, -163, and -166; and
- Two 10 km transects were added north of transects 1 and 4 to increase the survey coverage near Ptarmigan Fiord.

The study area was divided into nine north – south transects, ranging from 40 to 70 km in length, and spaced 4 km apart. Systematic aerial caribou surveys covered approximately 18% of the study area.

Prior to each survey, weather conditions were documented and helicopter windows were calibrated. Caribou summer pelage blends easily with the tundra habitats. To minimize the possibility of overlooking caribou on transect during the survey, the helicopter windows were calibrated to represent a 400 m boundary on each side of the aircraft flying at 150 m agl. The purpose of calibrating the aircraft windows allows observers to determine which caribou are inside 400 m and which ones are beyond (outside) 400 m. All caribou inside and outside the 400 m boundary on either side of the helicopter were counted. In addition, once caribou were observed, the helicopter would pass the caribou, gain altitude, and then circle back to the general area where the caribou were last seen to ensure all caribou in the group were recorded. The helicopter would perform no more than a single 360 degrees circle before continuing the survey on transect.

Since caribou are highly mobile, each aerial survey was completed in its entirety once the survey began to reduce double counting. Flight altitude and ground speed was 150 m agl and 120 km/hr (average), respectively. All caribou and caribou sign observed were recorded on standardized datasheets. Information recorded for each caribou observation included the GPS location, number of caribou observed, activity, general habitat type, and herd composition (if possible without further disruption of the animal(s)). Following the caribou survey, caribou density estimates were calculated using Jolly's Method⁵ (Jolly 1969).

⁵ Jolly (1969) established aerial survey protocols and density estimate calculations for surveying wildlife populations, that provide the foundation for contemporary surveys. The systematic aerial surveys carried out in the study area follow these same basic principals established by Jolly (1969), including a constant survey height and speed, fixed survey widths, and parallel transects. Density estimates were calculated using Jolly's Method 1 using transects of equal length. This method calculates a population estimate based on the sum of animals counted along each transect

Incidental observations of other species including carnivores, waterfowl/water birds, and raptors were also recorded during the caribou survey.

2.6.4 Carnivores

The objective of the carnivore survey was to document carnivore presence and the location of sensitive carnivore areas (*i.e.* carnivore dens) in relation to the proposed project activities.

Prior to field mobilization, potential denning habitat (*e.g.* areas of hummocky glacial sandy-till) for foxes and wolves was reviewed within the study area using 1:20,000 NTS maps and consultations with on-site Peregrine staff. Due to the limited amount of suitable denning habitat potentially available in the study area, the carnivore and carnivore den survey was completed in conjunction with the aerial caribou survey. These areas and other potential denning areas such as stream banks and lakeshores were surveyed, as encountered during the aerial caribou surveys.

A specific den assessment, including general habitat characterization, GPS location, aspect, estimated distance to the nearest waterbody, and the activity status (active vs. inactive) were to be recorded for all dens, if encountered.

2.6.5 Permits

Research permit applications were submitted to the Nunavut Research Institute (NRI), the Government of Nunavut Department of Environment (DOE), and the Department of Fisheries and Oceans (DFO) to ensure regulatory and stakeholder acceptance of the surveys design and issuance of appropriate research permits and licenses.

A Scientific Research Licence (#01 054 10R-M) was obtained from NRI for the 2010 water quality and hydrology environmental programs, and a Wildlife Research Permit (#WL-2010-041) was obtained from DOE for the 2010 wildlife survey program. In addition, a Licence to Fish for Scientific Purposes (#S-10/11-1024-NU) and an Animal Use Protocol (#FWI-ACC-2010-052) number were approved by DFO for research and handling of fish and fish habitat.

3.0 RESULTS

During the April field event, poor weather conditions delayed the sampling team's arrival into camp, and once in camp, weather postponed many attempts at early morning sampling. Extra field time was required with the addition of new lake-based drill targets identified once on site.

During the June field event, poor weather conditions delayed the sampling team's arrival into camp, and patchy fog conditions influenced the available field time, particularly at the most northerly lake (WWQ7). At the time of the June field event, lake ice conditions were beginning to deteriorate, particularly along the shorelines and the inlet/outlet channels. Snow covered approximately 75% of the region, particularly in low lying valleys and lakes.

and the area of each transect. These values were then used to estimate a population variance, which was used to estimate the standard error of total population and the 95% confidence limits on the total population size.

During the early July field event, snow covered approximately 15% of the eastern portion of the study area and less than 1% of the western portion of the study area. By the late July field event, snow covered approximately 10% of the eastern portion and less than 1% of the western portion. Weather conditions were generally lightly to moderately overcast and daytime air temperatures were approximately 10 °C in early July. However, by the late July event, rain and snow showers, morning fog, and strong afternoon winds were common (average daytime air temperatures were approximately 5 °C).

3.1 Winter Water Quality

Peregrine identified ten lakes with proposed winter drill targets; however, drilling occurred on only two of the ten lakes in 2010. Winter water quality samples were collected before drilling activities commenced (during the April field event) and after drilling activities ceased (during the June field event). An additional field event during drilling (from April 28 to 30) was initiated, but due to inclement weather on site and logistical issues, winter water quality samples were not collected.

During the April and June field events, poor weather conditions delayed the sampling team's arrival into camp. Extra field time was required during the April field event due to the addition of new lake-based drill targets, identified once on site. By the June field event, a substantial amount of water was present on top of the ice at WWQ10, and once the water sampling hole was drilled, water from the surface of the lake ice began flowing into the sampling hole.

3.1.1 Quality Control Results

A trip blank, field blank, and duplicate sample were also collected during the pre- and post-drilling field events and were analysed for the full suite of parameters (routine, nutrients, total and dissolved metals, and TOC) as part of the QA/QC program. The duplicate samples were collected with WWQ7-C samples during both field programs.

A relative per cent difference assessment was completed to determine the reliability of the duplicate samples. In general, the relative per cent difference assessments of these duplicate samples (pre- and post-drilling events) indicated the duplicate samples were reliable; therefore, the sampling and analytical methods employed were acceptable (Tables 1 and 2).

During the post-drilling field event, laboratory error occurred in the preparation of the routine water quality field blank samples. A description of the laboratory error and the corrective action report is provided in Appendix B.

Laboratory results from the field and trip blanks were below detection limits during both sampling events, except for a single parameter during the pre- and post-drilling sampling events (Tables 3a and 4, respectively). Largely, the trip and field blanks for both sampling events were below detection limits, and the methods employed during the collection, transportation, and analysis of these samples did not lead to the introduction of potential contaminants. However, dissolved strontium was detected in the field blank during the pre-drilling sampling event, and dissolved lead was detected in the field blank during the post-drilling sampling event. Dissolved strontium and lead levels in the trip blanks were well below CCME FAL guidelines and were within 5% of the laboratory detection limit. Since dissolved strontium and lead were detected these parameters may have been introduced during the collection, transportation, and/or

laboratory analysis of these samples. Alternatively, dissolved strontium and lead levels in the field blanks may represent “false positives” since analytical error increases near the detection limit.

3.1.2 Winter Water Quality Field Results

A total of ten winter water quality stations were sampled during the April field event (Figure 2). By the June event, winter water quality samples were collected at the pre-drilling sampling locations on the two lakes drilled (stations WWQ7 and WWQ10). In April, ice thickness averaged approximately 1.4 m, and water depths ranged from 2.2 m (at station WWQ3) to 34.8 m (at station WWQ4) (Table 5). In June, the average ice thickness at the two sample stations WWQ7 and WWQ10 was 1.3 m. However, the location of the WWQ7 post-drilling water quality station was moved approximately 16 m from the pre-drilling sampling location due to poor ice conditions. The water depth at the post-drilling sampling station at WWQ7 was 5.2 m deeper than the pre-drilling sampling station. The depth of water at WWQ10 remained similar to the pre-drilling sampling event (Table 5).

Table 5. Summary of Winter Water Quality Site Conditions, 2010

Winter Water Quality Station	Pre-Drilling Event (April 7 to 10)		Post-Drilling Event (June 2)*	
	Water Depth (m)	Depths Sampled** (total samples collected)	Water Depth (m)	Depths Sampled** (total samples collected)
WWQ1	19.0	Upper and mid depths (2)	-	-
WWQ2	17.0	Upper, mid, and lower depths (3)	-	-
WWQ3	2.2	One depth (1)	-	-
WWQ4	34.8	Upper, mid, and lower depths (3)	-	-
WWQ5	27.3	Upper, mid, and lower depths (3)	-	-
WWQ6	12.7	Upper and mid depths (2)	-	-
WWQ7	32.8	Upper, mid, and lower depths (3)	38.0**	Upper, mid, and lower depths (3)
WWQ8	31.2	Upper and mid depths (2)	-	-
WWQ9	3.25	One depth (1)	-	-
WWQ10	19.4	Upper and lower depths (2)	19.0	Upper and lower depths (2)

- indicates samples not collected.

* Lake-based drilling occurred on two of the ten proposed lakes.

** Station WWQ7 was moved approximately 16 m from the pre-drilling sampling location due to poor ice conditions in June.

DO and water temperatures were recorded at 1 m intervals ascending up the water column at each water quality sampling station, except where poor weather was approaching and the field crew was required to increase the sampling interval for safety concerns (during the April and June field events). DO levels and water temperatures represent natural background conditions for the pre- and post-drilling programs. The DO and temperature profile of each winter water quality station during the pre- and post-drilling sampling

events are provided in Figures 3 to 14. In general, the DO levels were similar between the pre- and post-drilling sampling events. DO levels decreased with water depth at all winter water quality stations, except at WWQ4, WWQ5, and WWQ7. At WWQ4 DO levels increased with water depth until 24 m then proceeded to decrease. During the April event, DO levels decreased with depth at WWQ5 and WWQ7 until water depths of 25 m and 28 m, respectively, where DO levels then began to increase with depth. Similarly during the June event, DO levels at WWQ7 decreased with water depth down to 28 m and then proceeded to increase to near bottom depths. Similar to DO patterns recorded during the pre-drilling water sampling program, DO levels at WWQ10 generally decreased with water depth. The observed DO pattern at WWQ7 may be in response to chemical stratification, which is common in deeper lakes or represents extreme oligotrophic lake conditions.

Water temperatures increased with water depth in the pre- and post-drilling events. In April, water temperatures ranged from 0.6 °C near the water surface to 3.1 °C near the bottom of deeper lakes. Whereas at stations WWQ7 and WWQ10 in June, water temperatures ranged from 0.8 °C near the surface to 2.7 °C near the lake bottom.

Surface water temperature pH, and EC were measured at the ice surface with a Multi-Parameter hand probe. At the time of the field sampling events, the temperature reading on the hand probe indicated an error likely due to the low water temperatures; therefore, all surface water temperatures were estimated at 0.1 °C. The pH and EC levels are influenced by water temperature and, consequently, may be imprecise. Laboratory analysis of the pH and EC levels are provided below. During the pre-drilling sampling event, the field measured pH averaged 6.54, and the field EC averaged 10.5 (Table 6). Whereas, during the post-drilling sampling event, the field measured pH averaged 6.47, and the EC averaged 14.0 (Table 6).

Table 6. Summary of Field Measured Parameters, 2010

Station	Field pH	Field EC (µS/cm)	Surface Water Temperature* (°C)
Pre-Drilling, April 7-10, 2010			
WWQ1	5.90	7.5	0.1
WWQ2	6.35	9.4	0.1
WWQ3	5.89	12.4	0.1
WWQ4	6.85	8.6	0.1
WWQ5	7.03	15.4	0.1
WWQ6	6.68	11.7	0.1
WWQ7	7.80	10.9	0.1
WWQ8	6.26	6.5	0.1
WWQ9	5.87	6.6	0.1
WWQ10	6.80	15.6	0.1
Post-Drilling, June 2, 2010			
WWQ7	7.51	16.4	0.1
WWQ10	5.42	11.6	0.1

* The temperature sensor of the Multi-Parameter probe may not be accurate due to the low temperature levels at the water surface. As a result, the EC and pH readings may also be imprecise.

During the post-drilling event, water quality samples were collected at the same water depths as the pre-drilling sampling program.

During the post-drilling field event, laboratory error occurred in the preparation of the routine water quality samples collected at WWQ7-C and the field blank. A description of the laboratory error and the corrective action report is provided in Appendix B. As a result of the laboratory error, turbidity, total suspended solids, nitrates/nitrites, pH, and EC analyses were unavailable for these two samples (WWQ7-C and the field blank). For the purposes of this report, the analytical results of the duplicate sample (collected at WWQ7-C) have been used as a suitable substitute for results at WWQ7-C.

However, laboratory winter water quality results indicate that the majority of analytes sampled during the pre- and post-drilling events were at or below laboratory detection limits (Tables 3 and 4). The winter water quality from the pre- and post-drilling sampling events was considered to represent natural background conditions. Winter water quality laboratory results from the pre- and post-drilling sampling events were summarized in Tables 3 to 4, and the detailed analytical results were provided in Appendix B, respectively. Results indicate that all parameters analyzed during these two sampling programs were within the Canadian Council of Ministers of the Environment (CCME) Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (FAL) (December 2007), except pH, total and dissolved aluminum, total and dissolved cadmium, and total and dissolved copper (Table 7).

Table 7. Summary of Winter Water Quality Parameters Outside CCME Guidelines, Pre- and Post-Drilling Events

Parameter	Winter Water Quality Station(s)	
	Pre-Drilling	Post-Drilling
pH	All WWQ Stations	All WWQ Stations Trip Blank
Total Aluminum	WWQ5-A, B, and C WWQ8-B WWQ10-A and B	WWQ10-A and B
Total Cadmium	WWQ1-A WWQ10-A and B	WWQ10-A and B
Total Copper	Duplicate (but not its field sample)	WWQ7-C (but not its duplicate sample)
Dissolved Aluminum	WWQ8-B WWQ10-A and B	WWQ10-A
Dissolved Cadmium	WWQ1-A WWQ3-A WWQ8-A WWQ10-A and B	WWQ7-A and C WWQ10-A and B
Dissolved Copper	WWQ7-C Duplicate	WWQ7-A and C Duplicate WWQ10-A

The CCME FAL guideline for aluminum is pH dependent, whereas, cadmium and copper guidelines are hardness dependent. Since the pH and hardness levels were naturally low compared to other Canadian aquatic systems, the CCME FAL guideline values for aluminum, cadmium, and copper were also low. See Section 5.1 for further discussion on select parameter levels within the study area. For example, the CCME FAL guideline for cadmium is dependent upon the water hardness⁶. Since water hardness within the study area is very soft (commonly less than laboratory detectable limits), indicating little to no calcium, magnesium, and other metallic ions were present in the water, the resulting cadmium guideline is also very low and commonly below the laboratory's detection limit. From discussions with ALS laboratory personnel these low hardness values are rarely encountered and represent "clean" water. Parameter values this low (example cadmium results $\times 10^{-6}$) may represent "false positives" detected from the equipment. However, all water quality results are considered natural background conditions.

Statistical comparisons between the analytical results observed during the pre- and post-drilling sampling events were not valid due to the low sample size ($n=2$ at each water quality station). In general, it appears the analytical results observed in the pre- and post-drilling sampling events were similar, and no apparent changes in the water quality occurred as a result of drilling activities. Slight observable differences in the level of nitrates and nitrites, pH, and EC were detected at WWQ7-A. At WWQ7-A, the level of nitrates and nitrites and EC appears to decrease by the post-drilling event, and pH appears to increase. Possible differences in nitrates, nitrites, pH, and EC may be attributable to natural seasonal lake transitions, likely as a result of melt along the shorelines, runoff into the lake, and the inlet channel open and flowing into the lake.

3.2 Surface Water Quality

3.2.1 Quality Control Results

Trip blanks, field blanks, and duplicate samples were collected during each field event and were analyzed for the full suite of parameters (routine, nutrients, total metals, TOC, and oil and grease) as part of the QA/QC program. Analytical results from both sets of field and trip blanks indicate all parameters were below detection limits, except a detectable level of Ammonia-N was present in the late July trip blank (Table 8) (laboratory results are provided in Appendix C). This detectable level of Ammonia-N was verified by the laboratory by repeat analysis. Since no other parameters in the trip or field blanks were above detectable levels, it is assumed Ammonia-N was a remnant from the laboratory where the bottle was filled and/or the laboratory's de-ionized water. However, the methods employed during the field collection, transportation, and analysis did not lead to the introduction of potential contaminants.

The relative per cent difference assessment of the duplicate samples indicated that they were reliable; therefore, the sampling and analytical methods employed were acceptable (Tables 9 and 10). Internal laboratory QC analysis and replicate sampling using Method Blanks, Lab Control Samples, and Matrix Spikes indicated that the tests performed were valid and accurate.

⁶ CCME equation for the cadmium guideline = $10^{(0.86[\log(\text{hardness})] - 3.2)}$

3.2.2 Surface Water Quality Field Results

The objectives of the water quality survey were to conduct baseline surface water grab sampling, with particular focus near exploration-focus sites (*i.e.* bulk sampling and drill sites, and camps). The 2009 water quality sampling stations were re-sampled in 2010 to the extent possible. Three sampling stations (Hydro 10, -11, and WQ12) were added to the 2010 field program in response to new exploration-focus locations (*e.g.* CH-6 and -7). As in 2009, water quality and stream flow data were collected at stations labelled “Hydro”; whereas, only water quality data were collected at stations labelled “WQ”.

A total of twelve water quality stations (Table 11) were sampled for routine parameters, nutrients, total metals, TOC, and oil and grease water quality analyses during two field events (July 8-12 and July 26-29, 2010) (Figure 15). At the time of the early July field program, water quality sampling lakes were frozen with only the shorelines and inlets/outlets open; however, streams and rivers were completely open (Photo 1). Water quality station Hydro 1 was dry at the time of the early July field program. (Photo 2) Subsequently, water quality samples were collected approximately 2.4 km downstream from the 2009 Hydro 1 station location (nearest location with sufficient water depth to collect water quality samples and stream flow measurements) (Table 11). By the late July field event, the new location of the Hydro 1 sampling station and Hydro 2 were dry, and were therefore not sampled (Table 11).

Table 11. Summary of Surface Water Quality Sampling Locations, July 2010

Water Quality Station	Location	Sample Collected (yes or no)	
		July 8 – 12, 2010	July 26 – 29, 2010
Hydro 1	Unnamed stream downstream of the kimberlite CH 1 2009 bulk sample site	Yes. Stream dry at 2009 station. 2010 water quality sample collected 2.4 km downstream.	No. Stream dry at 2009 station and at the earlier July 2010 station.
Hydro 2	Unnamed stream downstream of kimberlite CH 2	Yes	No. Stream dry.
WQ 3	Unnamed lake south of CH 3. Upstream from known proposed footprints	Yes	Yes
WQ 4	Sunrise Camp Lake at kimberlite CH 3 (sampling location was dependent upon available open water)	Yes	Yes
WQ 5	At Sunrise Camp Lake outlet	Yes	Yes
WQ 6	McKeand River immediately downstream from the confluence with Discovery Camp	Yes	Yes
WQ 7	McKeand River downstream from known proposed footprints	Yes	Yes
WQ 8	Unnamed stream north of known proposed footprints	Yes	Yes
Hydro 9	Unnamed stream downstream of CH 1 and CH 2 confluence	Yes	Yes
Hydro 10	Unnamed stream downstream of Discovery Camp	Yes	Yes
Hydro 11	Unnamed stream downstream from CH 6	Yes	Yes

Table 11. Summary of Surface Water Quality Sampling Locations, July 2010

Water Quality Station	Location	Sample Collected (yes or no)	
		July 8 – 12, 2010	July 26 – 29, 2010
WQ12	Unnamed ephemeral stream downstream from CH 7	Yes	Yes

The average field pH values remained similar between the two July field events; however, there was an observable difference in water temperatures between sampling events, with temperatures being higher during the early July sampling program. The average field measured pH levels during the early and late July field programs were 6.57 and 7.12, respectively (Table 12). However, during this same time period, the laboratory reported the average pH levels were 6.18 and 6.23, respectively. In addition, the field measured EC levels averaged 7 Microsiemens per centimetre ($\mu\text{S}/\text{cm}$) during the late July field program (EC levels were not recorded during the early July field program due to equipment error) (Table 12). However, the laboratory reported the surface water EC levels during the late July field program averaged 6.06 $\mu\text{S}/\text{cm}$. Differences between the field measured parameters and the laboratory analysis may be due to several reasons including: differences in water temperatures during measurements/analyses, and the precision of the field Multi-parameter probe.

Table 12. Summary of Surface Water Quality Field Measured Data, July 2010

Water Quality Station	Field pH		Field EC ($\mu\text{S}/\text{cm}$)		Water Temperature ($^{\circ}\text{C}$)	
	July 8-12	July 26-29	July 8-12	July 26-29	July 8-12	July 26-29
Hydro 1	6.33	-	na	-	11.1	-
Hydro 2	6.37	-	na	-	11.1	-
WQ 3	6.12	6.10	10*	4	8.3	3.5
WQ 4	8.48	6.78	10*	7	10.2	4.9
WQ 5	6.56	7.90	10*	6	9.1	5.1
WQ 6	6.40	6.53	na	5	9.1	5.7
WQ 7	6.32	na	na	na	12.9	na
WQ 8	6.50	6.90	na	7	12.9	8.6
Hydro 9	6.43	7.19	na	6	16.3	13.1
Hydro 10	6.43	7.90	na	7	13.5	12.6
Hydro 11	6.35	8.00	na	17	14.9	11.5
WQ12	6.57	6.82	na	7	13.8	5.8
Average	6.57	7.12	10*	7	11.9**	7.9**

na = data not available. There were mechanical issues with the EC probe during the early July field event. In addition, no data was collected at WQ7 during the late July program due to field personnel error.

- = water quality station dry and, therefore, not sampled.

* = data considered unreliable due to mechanical issues with the EC meter.

** = Higher air temperatures in early July likely contributed to higher surface water temperatures observed.

Laboratory water quality results from both July sampling programs indicated that the majority of analytes sampled were at or below laboratory detection limits (laboratory results are provided in Appendix C). A summary of the laboratory results is provided in Tables 13 and 14. Results indicated that all parameters were within the CCME FAL guidelines (December 2007), except pH and total aluminum at all water quality stations sampled during the July field events.

3.3 Potable Water Quality

Potable water quality sampling was conducted in the camps where source water was used for human consumption after chlorination or chlorination and ultraviolet filtration. The objective of the potable water quality sampling program was to collect representative potable water quality samples from Sunrise and Discovery camps to ensure the safety of the water in camp (Figure 15).

During the April field event, Sunrise Camp was the only camp in operation and was subsequently sampled for potable water. The Discovery Camp opened at the end of June and was subsequently sampled for potable water, along with the Sunrise Camp during the early July field event (this time period coincided with spring freshet). Laboratory potable water quality results are provided in Appendix D.

3.3.1 Sunrise Camp

The water supply system at Sunrise Camp consisted of two separate water tanks that were individually filled directly from the lake via a rubber hose. The water tanks were located in two different dry tents (for the purposes of this report named dry-1 and dry-2). Water tank-1 (located in dry-1) was connected to the hand-wash basin in the toilet tent; whereas, water tank-2 (located in dry 2) was connected to the kitchen tent. A chlorine bleach and ultraviolet (UV) filter system was employed at water tank-2, while water tank-1 used only bleach.

In April and early July, potable water quality samples were collected at the kitchen tap, the tap in the toilet tent, and at the intake pump at the lake (raw water source). An additional sample was collected from the dry-1 tap during the early July field program. All samples were submitted to ALS in Yellowknife within 12 hours of sample collection. Potable water quality samples were analyzed for total coliforms, faecal coliforms, and *Escherichia coli* (*E. coli*). A duplicate sample, trip blank, and field blank were also collected and analyzed as part of the QA/QC program.

Laboratory results from the potable water quality samples collected in April and July indicated all parameters were below laboratory detection limits (<1 units/100 mL) (Table 15). However, the Canadian Drinking Water Quality Guidelines for total coliform and *E. coli* (0 MPN/100 mL) were lower than the laboratory detection limit (Federal-Provincial-Territorial Committee on Drinking Water of the Federal-Provincial-Territorial Committee on Health and the Environment 2010). From discussions with laboratory personnel, no laboratory is presently capable of reporting lower detection limits. The potable water quality samples from Sunrise Camp are considered within the appropriate health criteria.

3.3.2 Discovery Camp

The water supply system at Discovery Camp was similar to that employed at the Sunrise Camp. Two separate water tanks were filled directly from a stream via a rubber hose. Each water tank was located in two separate dry tents (dry-1 and -2). The water tank in dry-1 was connected to the hand-wash basins in

the toilet tent, whereas, the water tank in dry-2 (also known as the driller's dry) was connected to the kitchen tent. Chlorination was the disinfection system used for both water tanks.

In early July, potable water quality samples were collected at the tap in the kitchen, dry-1 and -2, and the toilet tents, as well as at the intake pump at the stream (raw water source). Samples were submitted to ALS in Yellowknife within 12 hours of sample collection, and a single duplicate sample (collected from dry-2) was also submitted to NRI's laboratory for analysis. A trip blank and field blank were also collected and analyzed by ALS as part of the QA/QC program.

Laboratory results indicated all parameters were below laboratory detection limits (<1 units/100 mL), except at the raw water source (Table 16). Results indicate that the chlorination system used at the Discovery Camp was an effective disinfection program. The potable water quality samples from Discovery Camp were considered within the appropriate health criteria.

3.4 Preliminary Stream Discharge

The objective of the preliminary stream discharge assessment was to continue collecting flow data at all 2009 locations (Hydro 1, -2, and -9) as well as downstream from the proposed 2010 bulk sampling locations (CH-6 and -7) (Figure 15).

In early July, flow velocities were measured at five watercourses (stations Hydro 1, -2, -9, -10, and -11), which were located downstream from CH-1, CH-2, CH-6, CH-7, and Discovery Camp. Hydro 1 station, located downstream from CH-1 was dry (Photo 2) and was therefore moved 2.4 km downstream to the nearest location with a measurable flow. As well, station Hydro 2 was moved 163 m downstream from its 2009 location since the survey station was too shallow to measure flow. The wetted width of Hydro 1 and -2 during the early July field program was approximately 24 m and 11 m, respectively. During the early July field program, wetted width at the Hydro 2 station was the narrowest (Photo 3), and was greatest at the Hydro 11 station (Photo 4) (Table 17). Although Hydro 11 had the widest wetted width, it also had the lowest stream velocity (Table 17). Preliminary flow velocities ranged from 0.148 cubic metres per second (m^3/s) at Hydro 11 to 1.148 m^3/s at Hydro 9 station (Table 17).

A few weeks following the early July field program, flow velocities were markedly lower by July 26-29 (Table 17). By the late July field event, watercourse flow stations Hydro 1 and -2 were dry (including the revised locations sampled in early July); however, velocities were measured at Hydro 9, -10, and 11 (Table 17). Since stations Hydro 1 and -2 were dry, the wetted width of Hydro 9 was reduced during the late July field event (Photo 5), whereas little difference in wetted widths between the early and late July field events was recorded at stations Hydro 10 and -11. At the time of the late July field program, flow velocities ranged from 0.021 m^3/s at Hydro 11 to 0.065 m^3/s at Hydro 9 (Table 17).

Table 17. Summary of Stream Discharges, July 2010

Hydrology Station	Stream Discharge (m^3/s)		Channel Description
	July 8-12	July 26-29	
Hydro 1	1.062*	Dry	Shallow (water depths no greater than 27 cm), flat bottomed, boulder and cobble dominated, and wetted width approximately 24 m in early July.

Table 17. Summary of Stream Discharges, July 2010

Hydrology Station	Stream Discharge (m ³ /s)		Channel Description
	July 8-12	July 26-29	
Hydro 2	0.167	Dry	Shallow (water depths no greater than 14 cm), flat bottomed, boulder dominated, wetted width approximately 11 m in early July.
Hydro 9	1.148	0.065	Shallow (water depths no greater than 16 cm), gentle sloping to almost flat bottomed, boulder and cobble dominated, and wetted width approximately 27 m and 24 m in early and late July, respectively.
Hydro 10	0.485	0.035	Shallow (water depths no greater than 29 cm), shallow to moderate sloping banks, thalweg nearest to the left bank, cobble dominated, and wetted width approximately 26 m in early and late July.
Hydro 11	0.148	0.021*	Shallow (water depths no greater than 18 cm), flat bottomed, a thin layer of cobble overlying silty sand, and wetted width approximately 51 m in early and late July.

* Strong winds may have influenced near surface water flows while measuring flow velocities.

3.5 Fish and Fish Habitat

An assessment of fish and fish habitat was conducted at seven watercourses within the study area: Hydro 9, Hydro 10, Hydro 11, CH-11, WQ 5, WQ 8, and Sunrise Camp lake. DFO Collection Report Forms were filled out for each watercourse where fish sampling was carried out (Appendix E).

3.5.1 Hydro 9 Sample Site

3.5.1.1 Fish Data

Electrofishing was conducted over a distance of 100 m for 593 seconds at the Hydro 9 sample site (Figure 16). Six Arctic char were captured and measured. Fish sampling results are presented in Table 18 below.

TABLE 18: Hydro 9 Electrofishing Capture Data, 2010

EF PASS #	UTM Coordinates NAD 83		Date	Time		Sec	Volts	Hz	Duty Cycle (%)	Species	Length (mm)
				In	Out						
1	19N 0624576 E	7126062 N	27-Jul	1300	1310	583	450	60	12	Arctic char	140
											95
											190
											140
											140
											135

3.5.1.2 Fish Habitat

The channel was unconfined and flowed in a sinuous pattern (Photos 5, 6, and 7). Table 19 (see Tables section) provides the results of the habitat assessment. Surrounding topography was composed of boulders and cobbles and was sloped. Gradient was 2%. No riparian vegetation was present on the tundra and consequently, no low growing shrub or graminoid crown closure was observed.

The measured water quality parameters were within the tolerance range for salmonids (Newbury and Gaboury 1993). No research was available related to the low conductivities found within the watercourse and the tolerance for these levels by Arctic char.

3.5.1.3 Fish Habitat Summary

Overall, fish habitat value was high with a high potential for fish presence during open water season and a low potential for fish presence during winter conditions. Spawning habitat was moderate for salmonids with sections of suitable gravels and good flow. Rearing habitat was good with adequate water flows and cover provided by cobbles and large boulders. Over-wintering habitat was poor as the watercourse will likely freeze to bottom during the winter season.

3.5.2 Hydro 10 Sample Site

3.5.2.1 Fish Data

One Arctic char was visually observed at the Hydro 10 sample site (Figure 16). Electrofishing was not conducted within this watercourse due to a malfunction with the electrofishing unit. No Gee minnow trapping was conducted as constraints with helicopter time did not allow for a re-visit to this watercourse during the July sampling session.

3.5.2.2 Fish Habitat

The channel was unconfined and flowed in a sinuous pattern (Photos 8 and 9). Braided channels characterized this watercourse. Refer to Table 19 for results of the habitat assessment. Surrounding topography was composed of boulders and cobbles and was sloped. Gradient was 2%. No riparian vegetation was present on the tundra and consequently, no crown closure was observed.

The measured water quality parameters were within the tolerance range for salmonids (Newbury and Gaboury 1993). No research was available related to the low conductivities found within the watercourse and the tolerance for these levels by Arctic char.

3.5.2.3 Fish Habitat Summary

Overall, fish habitat value was moderate with a high potential for fish presence during open water season and a low potential for fish presence during winter conditions. Spawning habitat was moderate in sections for salmonids as most of the channel substrate within the stream was covered with thick mats of moss. Rearing habitat was moderate with adequate water flows and cover provided by cobbles and boulders. Over-wintering habitat was poor due to the likelihood this watercourse will freeze to bottom during the winter season.

3.5.3 Hydro 11 Sample Site

3.5.3.1 Fish Data

Six Gee minnow traps were set at the Hydro 11 sample location (Figure 16) and allowed to soak for 18 hours. Table 20 provides fish capture results for this site.

TABLE 20: Hydro 11 Gee Minnow Trap Capture Data, 2010

Trap #	UTM Coordinates NAD 83		Date		Time		Species	Length (mm)	Weight (g)
			Set	Pulled	Set	Pulled			
1	19N 0616178E	7134230N	27-Jul	28-Jul	1510	845	Arctic char	95	9.1
2	19N 0616167E	7134229N	27-Jul	28-Jul	1512	850		95	10.4
3	19N 0616168E	7134225N	27-Jul	28-Jul	1515	852		115	16.2
4	19N 0616147E	7134245N	27-Jul	28-Jul	1520	855		120	19.5
5	19N 0616147E	7134245N	27-Jul	28-Jul	1520	855		130	22.9
6	19N 0616147E	7134245N	27-Jul	28-Jul	1520	855		135 150	28.2 40.1

Two Arctic char were captured with a dip net. The char measured 75 mm and 70 mm and were in the parr stage of their life cycle.

3.5.3.2 Fish Habitat

The channel was unconfined and flowed in a sinuous pattern (Photos 10 and 11). Braided channels characterized this watercourse. Refer to Table 19 for results of the habitat assessment. Surrounding topography was composed of boulders and cobbles and was sloped. Gradient was 1%. No riparian vegetation was present on the tundra and consequently, no crown closure was observed.

The measured water quality parameters were within the tolerance range for salmonids (Newbury and Gaboury 1993).

3.5.3.3 Fish Habitat Summary

Overall, fish habitat value was good with a high potential for fish presence during open water season and a low potential for fish presence during winter conditions. Spawning habitat was good for salmonids with suitable sections of gravels and adequate water flows. Rearing habitat was good with cover provided by boulders and cobbles. Over-wintering habitat was poor as the watercourse will likely freeze to bottom during the winter season.

3.5.4 CH 11 Sample Site

3.5.4.1 Fish Habitat

CH 11 (Figure 16) was almost dry during the July 28, 2010 fish assessment field visit. No fish or fish habitat data was collected at this time (Photos 12 and 13).

3.5.5 WQ 5 Sample Site

3.5.5.1 Fish Data

No fish sampling was conducted within this watercourse (Figure 16) due to constraints with helicopter time.

3.5.5.2 Fish Habitat: 50 m Upstream

The channel was unconfined and flowed in a straight pattern (Photos 14, 15, and 16). Refer to Table 19 for results of the habitat assessment. Surrounding topography was composed of boulders and cobbles and was sloped. Gradient was 2%. No riparian vegetation was present on the tundra and consequently, no crown closure was observed.

The measured water quality parameters were within the tolerance range for salmonids (Newbury and Gaboury 1993). No research was available for the low conductivities found within the watercourse and the tolerance for Arctic char.

3.5.5.3 Fish Habitat Summary

Overall, fish habitat value was good with a high potential for fish presence during open water season and a moderate potential for fish presence during winter conditions. Spawning habitat was good for salmonids with suitable sections of smaller cobbles that may be utilized for spawning. Rearing habitat was good with adequate water flows and cover provided by deep sections throughout, as well as boulders and cobbles. Although deep sections were observed at this location, further sampling in winter would be necessary to determine if sufficient flow and oxygen levels were available to provide suitable overwintering habitat.

3.5.6 WQ 8 Sample Site

3.5.6.1 Fish Data

Six Gee minnow traps were set at the WQ 8 sample site (Figure 16) and allowed to soak for approximately 23 hours. Results for Gee minnow trap efforts are presented in Table 21.

TABLE 21: WQ 8 Gee Minnow Trap Capture Data, 2010

Trap #	UTM Coordinates NAD 83		Date		Time		Species	Length (mm)	Weight (g)
			Set	Pulled	Set	Pulled			
1	19N 0628180E	7140691N	28-Jul	29-Jul	1145	1000	Arctic char	-	-
2	19N 0628173E	7140702N	28-Jul	29-Jul	1146	1010		110	14.3
3	19N 0628173E	7140678N	28-Jul	29-Jul	1147	1011		-	-
4	19N 0628164E	7140645N	28-Jul	29-Jul	1150	1015		-	-
5	19N 0628155E	7140631N	28-Jul	29-Jul	1151	1020		-	-
6	19N 0628140E	7140634N	28-Jul	29-Jul	1152	1030		-	-

- = not measured

3.5.6.2 Fish Habitat

The channel was unconfined and flowed in a straight pattern (Photos 17 and 18). Refer to Table 19 for results of the habitat assessment. Maximum pool depth averaged 0.74 m (range of 0.52 m to 0.95 m). Surrounding topography was composed of boulders and cobbles and was sloped. Gradient was 3%. No riparian vegetation was present on the tundra and consequently, no crown closure was observed.

No water quality measurements were taken at this assessment location due to time constraints with the helicopter and poor weather conditions.

3.5.6.3 Fish Habitat Summary

Overall, fish habitat value was good with a high potential for fish presence during open water season and a moderate potential during the winter season. Spawning habitat was moderate for salmonids due to some sections of smaller cobbles available for spawning. Rearing habitat was good with adequate water flows and cover provided by deep pools and boulders. Although deep sections were observed at this location, given the extreme climatic conditions experienced in the Arctic, it is unlikely these areas would provide suitable overwintering habitat.

3.5.7 Sunrise Lake

3.5.7.1 Fish Data

Angling was conducted over a 1 hour period by 3 anglers on July 28, 2010. Three adult Arctic char were captured and released (Photo 19). Measurements were 630 mm, 590 mm and 460 mm. No weights were taken.

3.5.7.2 Fish Habitat

No fish habitat assessment was conducted for Sunrise Lake.

3.6 Wildlife

Marine mammals (except polar bear) and birds were not assessed during the 2010 environmental baseline programs. In 2010, a single active drill site was 8 km from the nearest marine waters, and the remainder of the drilling and bulk sampling programs were at least 20 km from marine waters.

Based on species range maps, 37 bird species occur or potentially occur within the study area (Cornell Lab of Ornithology and the American Ornithologists' Union 2010; Sale 2006; Sibley 2003) providing suitable habitat exists (Appendix F). Of these, three bird species have special conservation status: Peregrine Falcon, Short-eared Owl, and Harlequin Duck (Table 22).

Table 22. Wildlife Species with Special Conservation Status¹

Common Name	Scientific Name	Conservation Status		
		Nunavut	SARA*	COSEWIC**
Harlequin Duck	<i>Histrionicus histrionicus</i>	Sensitive	Special Concern (Schedule 1)	Special Concern
Short-eared Owl	<i>Asio flammeus</i>	Sensitive	Special Concern (Schedule 3)	Special Concern
Peregrine Falcon	<i>Falco peregrinus anatum/tundrius</i>	Secure	No Status	Special Concern
Polar Bear	<i>Ursus maritimus</i>	Sensitive	No Status	Special Concern
Wolverine	<i>Gulo gulo</i>	Secure	No Status	Special Concern

SARA = Species at Risk Act (Government of Canada 2010)

COSEWIC = Committee on the Status of Endangered Wildlife in Canada (COSEWIC 2010)

In addition, ten species of mammals occur or potentially occur within the study area based on species range maps (Banfield 1977; Sale 2006). Of these species, only the wolverine and polar bear have special conservation status (assessed by Committee on the Status of Endangered Wildlife in Canada (COSEWIC) as Special Concern on May 2003 and April 2008, respectively).

Species with special conservation status are discussed in Section 3.6.5.

3.6.1 Waterfowl and Water Birds

For the purpose of this report, all loons, ducks, swans, and geese were considered waterfowl species. Gulls and terns were considered water birds.

An aerial survey for waterfowl/water birds was conducted flying the shoreline of the McKeand River, lakes, ponds, and streams during the early July field event (July 8-12). A second aerial survey during the July 26-29 field event was omitted due to poor weather conditions (snow and fog) that reduced helicopter availability.

During the aerial survey, a total of seven species of waterfowl and water birds were recorded including Common Loon, Pacific Loon, Red-breasted Merganser, Canada Goose, Snow Goose, Glaucous Gull, and Herring Gull (Table 23). These species were all expected breeders within the study area; however, no nests or chicks were observed. A total of 41 waterfowl/water birds were observed in 285 km flown (0.14 birds per km). Figure 17 depicts the waterfowl/water bird observations recorded during the 2010 field programs.

Table 23. Summary of Aerial Waterfowl/Water Bird Survey Results, July 10, 2010

Species	Number Observed	Species	Number Observed
Common Loon	7	Snow Goose	1
Pacific Loon	2	Glaucous Gull	5
Red-breasted Merganser	1	Herring Gull	3
Canada Goose	21	Unknown duck species	1

A total of 20 incidental observations of waterfowl and water birds were documented throughout the 2010 field programs. At the time of the post-drilling water quality sampling field event (June 2, 2010), two Canada Geese were observed flying south over WWQ7 and flocks (unknown number in the flock) were heard flying approximately 1 km away. In addition, two Herring Gulls, one Glaucous Gull, two Snow Geese, and three Common Loons were recorded as incidentals during the early July caribou survey, and eight Herring Gulls were recorded during the late July caribou survey. A Common Loon and a Red-breasted Merganser were also heard vocalizing near Sunrise Camp during the late July field event (Figure 17).

3.6.2 Raptors

The objectives of the aerial raptor survey were to fly close to potential cliff nesting sites in search of raptors and/or nests to document species presence and breeding territories. The 2010 field program focused on potential cliff nesting sites that were not surveyed in 2009 (outside the 2009 study area), as well as probable raptor territories documented in 2009. A three hour aerial raptor survey was carried out during the early July field event. A total of five raptor observations, comprising of two species (Peregrine Falcon and Rough-legged Hawk), were recorded during the 285 km aerial raptor survey (0.02 raptors/km), as well as one Peregrine Falcon observed during the early July aerial caribou survey.

Within the study area, a probable⁷ Peregrine Falcon nest site was observed approximately 27 km northwest of Sunrise Camp (Figure 17). This Peregrine Falcon observation included an adult flushing from the cliff face and remaining in the immediate area. The cliff and a possible scrape was situated approximately 10 m agl, with an easterly aspect, immediately over looking an unnamed lake (Photo 20).

In addition, probable raptor territories identified during the 2009 aerial surveys were re-visited. In 2009, a probable Common Raven nest site was recorded approximately 6 km southeast of Sunrise Camp. In 2010, a Rough-legged Hawk was observed sitting on this nest site, and its mate was flushed from a neighbouring cliff. The scrape was located on a southeast aspect, approximately 10 m agl, and within approximately 650 m from the nearest waterbody (Photo 21).

In addition, a probable Rough-legged Hawk nesting territory was observed outside of the study area (north of the study area, approximately 30 km from Sunrise Camp). Two adult Rough-legged Hawks were observed together and remained in the immediate area; therefore, a nesting territory was presumed to exist in this area.

Incidental Peregrine Falcon observations were also noted outside the raptor survey. A single Peregrine Falcon was observed (likely hunting) during the early July caribou survey approximately 12.5 km northwest of Sunrise Camp (Figure 17). In addition, several observations of a Peregrine Falcon at the northern most lake-based drill target (approximately 49 km northwest of Sunrise Camp) were mentioned by Peregrine's field staff (Figure 17). Although no active nest was found, the reoccurring observations of a Peregrine Falcon near the northern lake-based drill target likely indicate a nesting or hunting territory.

Raptors are sensitive to disturbance at their nest sites during breeding season. A conservative 1.5 km buffer was recommended near known or probable raptor nests from early May to mid August. Figure 17 depicts the raptor observations recorded during the 2010 environmental baseline studies and any known sensitive raptor areas.

3.6.3 Caribou

Caribou surveys were completed during the early July and late July field events. Weather during the early July caribou survey was approximately 9 °C and partially cloudy. During the early July field event, snow covered approximately 15% of the eastern portion of the study area and less than 1% of the western portion of the study area. A single caribou track was documented near Ptarmigan Fiord during the caribou survey (Figure 18).

It began raining during the last hour of the late July caribou survey, but the ambient air temperature reached a high of 8 °C. Snow covered approximately 10% of the eastern portion and less than 1% of the western portion. During the late July survey, four caribou were observed on transect and one other caribou was observed off transect. Each observation on transect included a single cow or a cow / calf pair located on small snow patches. The calculated relative caribou density within the study area during the late July survey event was 0.009 caribou per km², with an estimated abundance of 18 caribou (plus or minus (\pm) standard error (SE) of 36.7) across the study area.

⁷ A probable raptor territory is defined as an adult flushed from a cliff face and/or a pair observed, but no nest or scrape observed.

The incidental observation (caribou off transect) recorded during the late July aerial caribou survey was possibly a young bull on a snow patch (Figure 18). An additional caribou was observed during the late July field program while conducting stream flow measurements at station Hydro 10. The observed caribou was located approximately 1 km northwest of Hydro 10 station (Figure 18).

Figure 18 depicts the caribou and caribou sign observations recorded during the 2010 environmental baseline studies.

3.6.4 Carnivores

A carnivore survey was carried-out in conjunction with the aerial caribou surveys. As encountered, sites that were considered potential carnivore denning habitat were surveyed, including sand deposits and gravel ridges, particularly near waterbodies or potential look-out points. No eskers, a favoured carnivore denning substrate, were observed within the study area. No carnivores or carnivore dens were observed during the July field programs; however, four observations of fox tracks were documented during the early July aerial survey. Three of these tracks were observed in the same general location, approximately 8 km southeast of Sunrise Camp, and the fourth track was observed approximately 18 km to the north of Sunrise Camp.

Figure 18 depicts the carnivore sign observations recorded during the early and late July field programs.

3.6.5 Species with Special Conservation Status

Five terrestrial wildlife species that may occur in the study area have special conservation status under the Species at Risk Act (SARA) or the COSEWIC, including the Peregrine Falcon *tundrius/anatum* subspecies, Harlequin Duck, Short-eared Owl, wolverine, and polar bear.

Harlequin Ducks and Short-eared Owls were listed by SARA as Special Concern (Schedules 1 and 3, respectively). Whereas, the Peregrine Falcon, wolverine, and polar bear were assessed by COSEWIC as Special Concern (assessed April 2007, May 2003 and April 2008, respectively). By definition species considered Special Concern are sensitive to human activities or natural events due to their biological characteristics (*i.e.* low reproductive rate).

The baseline raptor survey program is designed to detect potential Peregrine Falcon nest sites in the study area. In addition, the caribou surveys may serve to detect Short-eared Owls, wolverine, and polar bear over the larger study area through incidental observations. Peregrine Falcons (and probable nesting territories) were documented in the study area in 2010 during the raptor surveys and in the camp wildlife logs (see Sections 3.6.2 and 4.0 for the raptor survey results and a summary of the camp wildlife logs, respectively).

In addition, three polar bear tracks were observed by Peregrine staff in March near Ptarmigan Fiord, approximately 11 km from the WWQ7 or approximately 57 km north of Sunrise Camp (not recorded in the camp logs, but were reported to EBA directly). Additional polar bear observations were logged in the camp wildlife sightings records (refer to Section 4.0). No polar bears were documented during the 2010 environmental baseline surveys. Similarly, no wolverines were documented within the study area during the 2010 baseline surveys or in the camp wildlife sightings logs.

A survey to detect Harlequin Ducks within the study area was initiated in association with the aerial waterfowl and raptor surveys during the early July field program. The shoreline of streams and lakes near the glaciers and Ptarmigan fiord were targeted. No Harlequin Ducks were observed during this survey, nor during any other environmental baseline survey or in the camp wildlife sightings logs.

4.0 SUMMARY OF CAMP INCIDENTAL WILDLIFE SIGHTINGS

The wildlife sighting logs from Sunrise and Discovery camps were obtained and summarized. Wildlife sightings were reported by Peregrine staff while both camps were in operation (Sunrise camp in operation from March to September, and Discovery Camp from July to September). Recorded wildlife sightings range from March 24 to September 6, 2010. During this time, a total of 133 caribou observations (groups ranging in size from 1 to 20 animals observed), four fox, one wolf, one polar bear, two Peregrine Falcons (plus an unidentified falcon), one Snowy Owl, and 20 geese were observed within the study area (Table 24). Note, the same individual(s) may have been observed and recorded over multiple days and records may be biased towards species, such as caribou, and species groups such as birds may be reported less often.

Of particular interest:

- Caribou were observed within the study area by Peregrine staff from March to September (every month of the record period) though numbers were generally low per observation. The most frequent observations of caribou were in April and July. Caribou group size recorded in April ranged from 4 to 20 individuals. Caribou group size recorded in July, with both camps open and keeping records, ranged from 1 to 5 individuals. The lowest number recorded per observation was 1 single individual; single-animal observations were recorded in May, June, July, August, and September. Average group size was 4 individuals during the record period;
- A few carnivores, including fox, wolf, and polar bear were observed within the study area during the recording period. Fox observations were recorded inland in March, July, and August, and a single wolf observation was recorded in July. Two polar bears were observed in Ptarmigan Fiord in April;
- Geese observations were first recorded on May 16 and continued intermittently until June 19. No other waterfowl were recorded within the study area by Peregrine staff; and
- A falcon (species not recorded) was first observed May 30 approximately 18 km north of Sunrise camp, and two Peregrine Falcons were observed approximately 13 km northwest of Discovery camp on July 9. A single Snowy Owl was also observed on July 15 northwest of Discovery camp.

5.0 DISCUSSION

5.1 Winter Water Quality

In the winter, ice cover can affect lake water quality including, but not limited to: DO, temperature, EC, total dissolved solids, and natural lake circulation (EMAN North 2005).

DO is depleted throughout the winter by micro-organisms that generally live in the bottom sediment and continue to consume oxygen; however, the ice cover prevents oxygen from being replenished from the atmosphere. Therefore, DO levels are commonly lowest near the bottom sediment and may decrease throughout the winter. As oxygen is depleted due to prolonged ice cover, other parameter levels (*e.g.* lead) may increase (EMAN North 2005). This represents natural background conditions and does not necessarily indicate deteriorated water quality (EMAN North 2005). In addition to DO, EC is also affected by ice cover. When ice forms, total dissolved solids (concentration of all dissolved ions in the water) in the unfrozen water column increase, also increasing the EC of the water (EMAN North 2005).

Within the study area, natural background levels of pH, aluminum, cadmium, and copper were found outside the CCME FAL guidelines. The CCME FAL guideline for aluminum is pH dependent, whereas, cadmium and copper guidelines are dependent on water hardness. Total hardness is the sum of calcium and magnesium (principal contributors), and other major ions naturally in the water. Based on the laboratory analysis, calcium and magnesium occur within the study area at low levels. From discussions with ALS laboratory personnel these low hardness values are rarely encountered and represent “clean” water. Since the pH and hardness levels were naturally low, the CCME FAL guideline values for aluminum, cadmium, and copper were also low. For example, the CCME FAL guideline for cadmium is dependent upon the water hardness⁸. Since water hardness within the study area is very soft (commonly less than laboratory detectable limits), the resulting cadmium guideline is also very low. Consequently, CCME water quality guidelines should be used with care when comparing northern aquatic systems due to these more unique natural water quality conditions (EMAN North 2005).

5.2 Surface Water Quality

The CCME FAL water quality guidelines for comparing surface water quality within the study area should also be used with care. Natural seasonal changes in surface water quality also occur due to spring freshet, water temperatures, water flows, sediment load, and other natural conditions. Natural seasonal changes can result in water quality guidelines being exceeded from time to time (EMAN North 2005).

Surface water quality was analyzed at a time when ice was beginning to retreat along the lake shorelines (early July) and when the upper reaches of small streams were beginning to dry (late July). During both sampling events, the surface water quality remained similar. All sampled parameters were at or below laboratory detection limits, except for pH and total aluminum. These two parameters (pH and total aluminum) were outside the CCME FAL guidelines during both field events. Similarly, these same parameters were also outside the CCME FAL guidelines during the 2009 water quality sampling program. The surface water quality represents natural background conditions since the parameters outside the

⁸ CCME equation for the cadmium guideline = $10^{(0.86[\log(\text{hardness})] - 3.2)}$

CCME FAL guidelines were at all water quality stations, including those well outside the disturbance zones of the 2009 and 2010 exploration activities.

5.3 Preliminary Stream Discharge

Preliminary stream flow measurements were collected between July 8-12 and July 26-29, 2010. Within this 2 week period between sampling events, watercourse discharge abated at all stations. Preliminary stream flow measurement stations all have relatively small drainage areas (ranging from 2.6 km² at Hydro 1 to 36.7 km² at Hydro 10) (EBA 2010). These smaller headwater streams likely experience the greatest discharge during spring freshet and rain events, and flow quickly diminishes due to their small drainage areas, and since their watersheds consist mainly of bedrock with limited soil and vegetation cover, and little to no storage capacity in the form of wetlands and lakes (EMAN North 2005).

5.4 Fish and Fish Habitat

No fish species other than Arctic char were observed or captured during this baseline study. It is possible that the lack of overwintering habitat and upstream lakes would restrict habitat availability for other species in these streams. A more detailed fish sampling program would be required over several seasons to determine if this is true. However, the survey did determine that the sampled locations provided moderate to good habitat conditions for Arctic char rearing. It is presumed that Arctic char spawn in lakes within the area, since most streams would freeze to the bottom (Johnson 1980), and that juveniles utilize stream habitats in summer for feeding.

5.5 Waterfowl and Water Birds

Waterfowl and water birds occupied lakes and the McKeand River and its larger tributaries in low densities. Canada geese were the most commonly observed waterfowl/water bird species followed by Herring Gulls and Common Loons. No Harlequin ducks were observed during the 2010 field program; however, a few fast flowing watercourses near Ptarmigan Fiord may provide suitable Harlequin Duck habitat. Harlequin Ducks have historically been reported in Cumberland Sound, and more recently, a resident from Pangnirtung reported seeing a Harlequin Duck that had been shot in 1998 (Mallory *et al.* 2001).

5.6 Raptors

Two raptor nest sites within the study area (and an additional probable nest site outside the study area) were identified as sensitive areas, and a conservative buffer zone of 1.5 km surrounding each site was recommended, particularly during the breeding season (early May to mid August). Raptors show nest site fidelity, actively guard their nesting territories, and are sensitive to disturbances during the nesting season. Peregrine Falcons have been reported (as well as their nests, eggs, and young) across south Baffin Island (Mallory *et al.* 2001).

5.7 Caribou

Due to the low numbers of caribou counted on transect during the 2010 baseline caribou surveys (total $n=4$), the standard error for the estimated caribou abundance was high. “Standard error” is considered directly related to the number of caribou counted and their distribution within a study area. If a large number of caribou were counted and they were distributed more evenly across the study area, one would have had a smaller standard error. Based on our results, caribou exist at very low population densities in the study area at the time of the field surveys. Since few caribou were observed during the 2009 ($n=5$) and 2010 baseline field surveys, sensitive caribou habitats near the exploration or camp sites cannot be delineated at this time.

Based on incidental observations by Peregrine staff in the camp wildlife sightings logs, caribou occur within the study area from March to September, and may be present in the study area year round at varying densities.

5.8 Carnivores

No carnivore dens were observed during the 2009 or 2010 survey events. Arctic and red foxes, and wolves dig dens wherever suitable substrates permit digging, such as ridges of gravel and sand left by glacial outwashes (*e.g.* eskers and kames) (Cluff *et al.* 2002), or areas where the permafrost is sufficiently deep. Wolves occupying Baffin Island are considered non-migratory (Carmichael 2007). Likely due to limited suitable denning sites, foxes and wolves display a high fidelity to dens sites (DOE 2010).

Polar bears within the subject property belong to the Davis Strait population, which reside along the eastern side of Baffin Island in the summer. The approximate annual ice-free period near the study area begins between early to mid July, leaving polar bears to fast on land until freeze-up, approximately November. Polar bears are expected to occur on or near the study area during this time. Maternal polar bear dens have been documented along the coastal regions of Hall Peninsula including east of the study area (Jonkel *et al.* 1978). Polar bear cubs are born in snow dens in approximately early January and leave the den with the sow in early spring (by mid-April) (DOE 2010).

Wolverines live at low densities even under optimal conditions. Although active year round, wolverines will construct snow dens to escape predators, cache food, and raise their young. Kits (young) are born in February to April at ground level within a constructed snow den or in a rock crevice. Wolverine tracks have been reported on rare occasions throughout southern Baffin Island and are considered uncommon in the region (Mallory *et al.* 2001).

Although no carnivore dens were observed, Arctic and red foxes, wolves, and polar bears have been observed within the study area in 2009 and 2010. Although these carnivores were documented, denning may or may not have occurred within the study area during this time.

6.0 CONCLUSION

The study area is considered a pristine environment. Concluding statements regarding the 2010 baseline studies are presented here:

- The quality of the winter water quality samples represented natural conditions prior to and after drilling activities.
- The quality of the surface water sampled was characteristic of oligotrophic waterbodies, which exhibit low nutrients and pH values and sample results are representative of natural conditions.
- The quality of potable water at Sunrise and Discovery camps is considered within health criteria and, consequently, the treatment systems employed at both camps are appropriate.
- Small ephemeral streams sampled near the exploration and camp sites have limited water storage capacity and were strongly influenced by freshet.
- Juvenile and adult Arctic char occur in the study area, and moderate to good habitat conditions exist at the sampled watercourses for Arctic char rearing.
- Seven species of waterfowl and water birds were documented occupying lakes and the McKeand River in low densities. Suitable Harlequin Duck habitat exists in fast flowing streams near Ptarmigan Fiord.
- Peregrine Falcon and Rough-legged Hawks were observed within the study area during the aerial raptor survey as well as incidentally during other field programs. Two nesting sites, considered sensitive areas, were documented.
- Few caribou were observed during the early and late July aerial surveys and as incidentals. Based on these results, caribou exist at very low population densities in the study area during this survey time.
- No carnivores or carnivore dens were observed within the study area during the 2010 baseline field studies; however, four fox tracks were recorded.

7.0 CLOSURE

We trust this report meets your present requirements. Should you have any questions or comments, please contact the undersigned at your convenience.

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Table 1. Pre-Drilling Event Water Quality Duplicate Analysis (Relative Per Cent Difference)

Analyte	April 8-12, 2010		Units	Detection Limit	Applicability ¹			RPD ² (%)	Reliable Duplicate ³ Yes (RPD <20%) or No
	WWQ7-C	WWQ7-C Duplicate			WWQ7-C	WWQ7-C Duplicate	Yes (Applicability >5) or No		
Major Ions, Nutrients, and Inorganics									
Hardness (as CaCO3)	<1.3	<1.3	mg/L	1.3	-	-	-	-	-
Calcium (Ca)-Total	<0.50	<0.50	mg/L	0.50	-	-	-	-	-
Phosphorus (P)- Total	<0.020	<0.020	mg/L	0.020	-	-	-	-	-
Potassium (K)-Total	<0.50	<0.50	mg/L	0.50	-	-	-	-	-
Sodium (Na)-Total	<1.0	<1.0	mg/L	1.0	-	-	-	-	-
Magnesium (Mg) - Total	0.14	0.15	mg/L	0.10	1.4	1.5	No	---	---
Nitrate and Nitrite as N	<0.071	<0.071	mg/L	0.071	-	-	-	-	-
Nitrate (as N)	<0.050	<0.050	mg/L	0.050	-	-	-	-	-
Nitrite (as N)	<0.050	<0.050	mg/L	0.050	-	-	-	-	-
Nitrogen, Total	<0.20	<0.20	mg/L	0.20	-	-	-	-	-
Total Kjeldahl Nitrogen	<0.20	<0.20	mg/L	0.20	-	-	-	-	-
pH	6.37	6.36	pH	0.10	63.7	63.6	Yes	0	Yes
Electrical Conductivity (EC)	6.48	6.45	uS/cm	0.20	32.4	32.3	Yes	0	Yes
Ammonia-N	0.0065	0.0099	mg/L	0.0050	1.3	2.0	No	---	---
Total Organic Carbon	<1.0	<1.0	mg/L	1.0	-	-	-	-	-
Total Suspended Solids	<3.0	<3.0	mg/L	3.0	-	-	-	-	-
Turbidity	0.16	0.15	NTU	0.10	1.6	1.5	No	---	---
Total Metals									
Aluminum (Al)	<0.0050	<0.0050	mg/L	0.0050	-	-	-	-	-
Antimony (Sb)	<0.00040	<0.00040	mg/L	0.00040	-	-	-	-	-
Arsenic (As)	<0.00040	<0.00040	mg/L	0.00040	-	-	-	-	-
Barium (Ba)	0.0038	0.0037	mg/L	0.0030	1.3	1.2	No	---	---
Beryllium (Be)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Boron (B)	<0.050	<0.050	mg/L	0.050	-	-	-	-	-
Cadmium (Cd)	<0.000010	<0.000010	mg/L	0.000010	-	-	-	-	-
Chromium (Cr)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Cobalt (Co)	<0.0020	<0.0020	mg/L	0.0020	-	-	-	-	-
Copper (Cu)	<0.0010	0.0029	mg/L	0.0010	-	2.9	No	---	---
Iron (Fe)	<0.030	<0.030	mg/L	0.030	-	-	-	-	-
Lead (Pb)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Lithium (Li)	<0.010	<0.010	mg/L	0.010	-	-	-	-	-
Manganese (Mn)	<0.0050	<0.0050	mg/L	0.0050	-	-	-	-	-
Mercury (Hg)	<0.000020	<0.000020	mg/L	0.000020	-	-	-	-	-
Molybdenum (Mo)	<0.0050	<0.0050	mg/L	0.0050	-	-	-	-	-
Nickel (Ni)	<0.0020	<0.0020	mg/L	0.0020	-	-	-	-	-
Selenium (Se)	<0.00040	<0.00040	mg/L	0.00040	-	-	-	-	-
Silver (Ag)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Strontium (Sr)	0.00365	0.00371	mg/L	0.0002	18.3	18.6	Yes	2	Yes
Thallium (Tl)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Tin (Sn)	<0.050	<0.050	mg/L	0.050	-	-	-	-	-
Titanium (Ti)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Uranium (U)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Vanadium (V)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Zinc (Zn)	<0.0040	<0.0040	mg/L	0.0040	-	-	-	-	-
Dissolved Metals									
Aluminum (Al)	<0.0050	<0.0050	mg/L	0.0050	-	-	-	-	-
Antimony (Sb)	<0.00040	<0.00040	mg/L	0.00040	-	-	-	-	-
Arsenic (As)	<0.00040	<0.00040	mg/L	0.00040	-	-	-	-	-
Barium (Ba)	0.0037	0.0037	mg/L	0.0030	1.2	1.2	No	---	---
Beryllium (Be)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Boron (B)	<0.050	<0.050	mg/L	0.050	-	-	-	-	-
Cadmium (Cd)	<0.000010	<0.000010	mg/L	0.000010	-	-	-	-	-
Chromium (Cr)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Cobalt (Co)	<0.0020	<0.0020	mg/L	0.0020	-	-	-	-	-
Copper (Cu)	0.0023	0.0025	mg/L	0.0010	2.3	2.5	No	---	---
Iron (Fe)	<0.030	<0.030	mg/L	0.030	-	-	-	-	-
Lead (Pb)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Lithium (Li)	<0.010	<0.010	mg/L	0.010	-	-	-	-	-
Manganese (Mn)	<0.0050	<0.0050	mg/L	0.0050	-	-	-	-	-
Mercury (Hg)	<0.000020	<0.000020	mg/L	0.000020	-	-	-	-	-
Molybdenum (Mo)	<0.0050	<0.0050	mg/L	0.0050	-	-	-	-	-
Nickel (Ni)	<0.0020	<0.0020	mg/L	0.0020	-	-	-	-	-
Selenium (Se)	<0.00040	<0.00040	mg/L	0.00040	-	-	-	-	-
Silver (Ag)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Strontium (Sr)	0.00408	0.00405	mg/L	0.00010	40.8	40.5	Yes	1	Yes
Thallium (Tl)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Tin (Sn)	<0.050	<0.050	mg/L	0.050	-	-	-	-	-
Titanium (Ti)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Uranium (U)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Vanadium (V)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Zinc (Zn)	<0.0040	<0.0040	mg/L	0.0040	-	-	-	-	-

Legend

< denotes result below laboratory detection level.

1 = Applicability to the Relative Percent Difference (RPD) Assessment requires that results be at least 5 x the detection limit since analytical error increases near the detection limit. "Yes" depicts results greater than 5 x the detection limit (applicable results); whereas, "No" depicts results less than 5 x the detection limit. Results that are close to the detection limit have an increased probability of analytical error and were not used in the reliability assessment.

2 = $RPD (\%) = 200 \times ABS (x - y) / (x + y)$, where ABS = Absolute difference, x = the concentration of the original sample, y = the concentration of the blind field duplicate sample.

3 = Duplicate samples are reliable when their RPD is less than 20%.

- = not available since the result(s) are below the detection limit.

--- = not available since the applicability is less than 5 x the detection limit.

Table 2. Post-Drilling Event Water Quality Duplicate Assessment (Relative Per Cent Difference)

Analyte	June 2, 2010		Units	Detection Limit	Applicability ¹			RPD ² (%)	Reliable Duplicate ³ Yes (RPD <20%) or No
	WWQ7-C	WWQ7-C Duplicate			WWQ7-C	WWQ7-C Duplicate	Yes (Applicability >5) or No		
Major Ions, Nutrients, and Inorganics									
Hardness (as CaCO3)	1.8	<1.3	mg/L	1.3	1.4	-	-	-	-
Calcium (Ca)-Total	0.51	<0.50	mg/L	0.50	1.0	-	-	-	-
Phosphorus (P)- Total	<0.020	<0.020	mg/L	0.020	-	-	-	-	-
Potassium (K)-Total	<0.50	<0.50	mg/L	0.50	-	-	-	-	-
Sodium (Na)-Total	<1.0	<1.0	mg/L	1.0	-	-	-	-	-
Magnesium (Mg)- Total	0.14	0.17	mg/L	0.10	1.4	1.7	No	---	---
Nitrate and Nitrite as N	n/a	<0.071	mg/L	0.071	-	-	-	-	-
Nitrate (as N)	n/a	<0.050	mg/L	0.050	-	-	-	-	-
Nitrite (as N)	n/a	<0.050	mg/L	0.050	-	-	-	-	-
Nitrogen, Total	n/a	<0.20	mg/L	0.20	-	-	-	-	-
Total Kjeldahl Nitrogen	<0.20	<0.20	mg/L	0.20	-	-	-	-	-
pH	n/a	6.12	pH	0.10	-	61.2	No	-	-
Electrical Conductivity (EC)	n/a	5.84	uS/cm	0.20	-	29.2	No	-	-
Ammonia-N	0.0057	0.0079	mg/L	0.0050	1.1	1.6	No	---	---
Total Organic Carbon	1.1	1.0	mg/L	1.0	1.1	1.0	No	-	-
Total Suspended Solids	n/a	<3.0	mg/L	3.0	-	-	-	-	-
Turbidity	n/a	<0.10	NTU	0.10	-	-	-	---	---
Total Metals									
Aluminum (Al)	<0.0050	<0.0050	mg/L	0.0050	-	-	-	-	-
Antimony (Sb)	<0.00040	<0.00040	mg/L	0.00040	-	-	-	-	-
Arsenic (As)	<0.00040	<0.00040	mg/L	0.00040	-	-	-	-	-
Barium (Ba)	0.0038	0.0038	mg/L	0.0030	1.3	1.3	No	---	---
Beryllium (Be)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Boron (B)	<0.050	<0.050	mg/L	0.050	-	-	-	-	-
Cadmium (Cd)	<0.000010	<0.000010	mg/L	0.000010	-	-	-	-	-
Chromium (Cr)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Cobalt (Co)	<0.0020	<0.0020	mg/L	0.0020	-	-	-	-	-
Copper (Cu)	0.0020	<0.0010	mg/L	0.0010	2.0	-	No	---	---
Iron (Fe)	<0.030	<0.030	mg/L	0.030	-	-	-	-	-
Lead (Pb)	0.00011	0.00011	mg/L	0.00010	1.1	1.1	No	-	-
Lithium (Li)	<0.010	<0.010	mg/L	0.010	-	-	-	-	-
Manganese (Mn)	<0.0050	<0.0050	mg/L	0.0050	-	-	-	-	-
Mercury (Hg)	<0.000020	<0.000020	mg/L	0.000020	-	-	-	-	-
Molybdenum (Mo)	<0.0050	<0.0050	mg/L	0.0050	-	-	-	-	-
Nickel (Ni)	<0.0020	<0.0020	mg/L	0.0020	-	-	-	-	-
Selenium (Se)	<0.00040	<0.00040	mg/L	0.00040	-	-	-	-	-
Silver (Ag)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Strontium (Sr)	0.00375	0.00368	mg/L	0.00020	18.8	18.4	Yes	2	Yes
Thallium (Tl)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Tin (Sn)	<0.050	<0.050	mg/L	0.050	-	-	-	-	-
Titanium (Ti)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Uranium (U)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Vanadium (V)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Zinc (Zn)	<0.0040	<0.0040	mg/L	0.0040	-	-	-	-	-
Dissolved Metals									
Aluminum (Al)	<0.0050	<0.0050	mg/L	0.0050	-	-	-	-	-
Antimony (Sb)	<0.00040	<0.00040	mg/L	0.00040	-	-	-	-	-
Arsenic (As)	<0.00040	<0.00040	mg/L	0.00040	-	-	-	-	-
Barium (Ba)	0.0036	0.0036	mg/L	0.0030	1.2	1.2	No	---	---
Beryllium (Be)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Boron (B)	<0.050	<0.050	mg/L	0.050	-	-	-	-	-
Cadmium (Cd)	0.000011	<0.000010	mg/L	0.000010	1.1	-	No	-	-
Chromium (Cr)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Cobalt (Co)	<0.0020	<0.0020	mg/L	0.0020	-	-	-	-	-
Copper (Cu)	0.0023	0.0020	mg/L	0.0010	2.3	2.0	No	---	---
Iron (Fe)	<0.030	<0.030	mg/L	0.030	-	-	-	-	-
Lead (Pb)	<0.00010	0.00011	mg/L	0.00010	-	1.1	No	-	-
Lithium (Li)	<0.010	<0.010	mg/L	0.010	-	-	-	-	-
Manganese (Mn)	<0.0050	<0.0050	mg/L	0.0050	-	-	-	-	-
Mercury (Hg)	<0.000020	<0.000020	mg/L	0.000020	-	-	-	-	-
Molybdenum (Mo)	<0.0050	<0.0050	mg/L	0.0050	-	-	-	-	-
Nickel (Ni)	<0.0020	<0.0020	mg/L	0.0020	-	-	-	-	-
Selenium (Se)	<0.00040	<0.00040	mg/L	0.00040	-	-	-	-	-
Silver (Ag)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Strontium (Sr)	0.00418	0.00425	mg/L	0.00010	41.8	42.5	Yes	2	Yes
Thallium (Tl)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Tin (Sn)	<0.050	<0.050	mg/L	0.050	-	-	-	-	-
Titanium (Ti)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Uranium (U)	<0.00010	<0.00010	mg/L	0.00010	-	-	-	-	-
Vanadium (V)	<0.0010	<0.0010	mg/L	0.0010	-	-	-	-	-
Zinc (Zn)	<0.0040	<0.0040	mg/L	0.0040	-	-	-	-	-

Legend

< denotes result below laboratory detection level.

1 = Applicability to the Relative Percent Difference (RPD) Assessment requires that results be at least 5 x the detection limit since analytical error increases near the detection limit. "Yes" depicts results greater than 5 x the detection limit (applicable results); whereas, "No" depicts results less than 5 x the detection limit. Results that are close to the detection limit have an increased probability of analytical error and were not used in the reliability assessment.

2 = RPD (%) = 200 x ABS (x - y) / (x + y), where ABS = Absolute difference, x = the concentration of the original sample, y = the concentration of the blind field duplicate sample.

3 = Duplicate samples are reliable when their RPD is less than 20%.

n/a = not available due to laboratory error with the sample.

- = not available since the result(s) are below the detection limit or not available due to laboratory error.

--- = not available since the applicability is less than 5 x the detection limit.

Table 3a. Pre-Drilling Winter Water Quality Results (QA/QC to WWQ3), April 7-10, 2010

Analyte	Trip Blank	Field Blank	WWQ1-A	WWQ1-B	WWQ2-A	WWQ2-B	WWQ2-C	WWQ3-A	Units	Detection Limit	CCME Guideline
Major Ions, Nutrients, and Inorganics											
Hardness (as CaCO ₃)	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	mg/L	1.3	---
Calcium (Ca)-Total	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	mg/L	0.50	---
Phosphorus (P)- Total	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	mg/L	0.020	---
Potassium (K)-Total	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	mg/L	0.50	---
Sodium (Na)-Total	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	mg/L	1.0	---
Magnesium (Mg) - Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	mg/L	0.10	---
Nitrate and Nitrite as N	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	mg/L	0.071	---
Nitrate (as N)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	2.9
Nitrite (as N)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	0.06
Nitrogen, Total	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	mg/L	0.20	---
Total Kjeldahl Nitrogen	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	mg/L	0.20	---
pH	5.74	6.16	6.27	6.10	6.19	6.18	6.13	6.29	pH	0.10	6.5 - 9
Electrical Conductivity (EC)	0.71	1.02	4.94	4.94	5.11	5.21	5.28	6.87	uS/cm	0.20	---
Ammonia-N	<0.0050	<0.0050	<0.0050	<0.0050	0.0058	0.0067	0.0072	0.0105	mg/L	0.0050	125.83*
Total Organic Carbon	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	mg/L	1.0	---
Total Suspended Solids	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	mg/L	3.0	---
Turbidity	<0.10	<0.10	<0.10	<0.10	<0.10	0.13	0.12	0.12	NTU	0.10	---
Total Metals											
Aluminum (Al)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	0.005**
Antimony (Sb)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	---
Arsenic (As)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.005
Barium (Ba)	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	mg/L	0.0030	---
Beryllium (Be)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Boron (B)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Cadmium (Cd)	<0.000010	<0.000010	0.000013	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	mg/L	0.000010	0.0000008***
Chromium (Cr)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.001
Cobalt (Co)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.0020	---
Copper (Cu)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.002****
Iron (Fe)	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	mg/L	0.030	0.3
Lead (Pb)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.001***
Lithium (Li)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	mg/L	0.010	---
Manganese (Mn)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	---
Mercury (Hg)	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	mg/L	0.000020	0.000026
Molybdenum (Mo)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	0.073
Nickel (Ni)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.0020	0.025****
Selenium (Se)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.001
Silver (Ag)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0001
Strontium (Sr)	<0.00020	<0.00020	0.00144	0.00164	0.00193	0.00203	0.00203	0.00287	mg/L	0.0002	---
Thallium (Tl)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0008
Tin (Sn)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Titanium (Ti)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Uranium (U)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	---
Vanadium (V)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Zinc (Zn)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	mg/L	0.0040	0.03
Dissolved Metals											
Aluminum (Al)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	0.005**
Antimony (Sb)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	---
Arsenic (As)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.005
Barium (Ba)	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	mg/L	0.0030	---
Beryllium (Be)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Boron (B)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Cadmium (Cd)	<0.000010	<0.000010	0.000022	<0.000010	<0.000010	<0.000010	<0.000010	0.00001	mg/L	0.000010	0.0000008***
Chromium (Cr)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.001
Cobalt (Co)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.0020	---
Copper (Cu)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.002****
Iron (Fe)	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	mg/L	0.030	0.3
Lead (Pb)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.001***
Lithium (Li)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	mg/L	0.010	---
Manganese (Mn)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	---
Mercury (Hg)	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	mg/L	0.000020	0.000026
Molybdenum (Mo)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	0.073
Nickel (Ni)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.0020	0.025****
Selenium (Se)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.001
Silver (Ag)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0001
Strontium (Sr)	<0.00010	0.00011	0.00167	0.00171	0.00219	0.00227	0.00229	0.00348	mg/L	<0.00010	---
Thallium (Tl)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0008
Tin (Sn)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Titanium (Ti)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Uranium (U)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	---
Vanadium (V)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Zinc (Zn)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	mg/L	0.0040	0.03

Legend

* Canadian Council of Ministers of the Environment - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Outside CCME Guidelines

Detection Limit above CCME Guidelines

Bold = Field and/or trip blank above the laboratory detection limit.

< denotes result below laboratory detection level.

--- = No CCME Guideline.

* = CCME guideline for Ammonia-N (Total Ammonia) is pH and water temperature dependent. There is no CCME guideline value for water with pH levels less than 6.0. The CCME value presented here represents water at pH 6.0 and temperature at 5 deg. C.

** CCME guideline for Aluminum is pH dependent. The guideline presented here for Aluminum is specific to the pH of the water at this site during this particular sampling event.

*** = CCME guideline for Cadmium is dependent on hardness of the water and is calculated using the formula: Cd guideline = 10 exp[0.86(log(hardness))-3.2]. The value 1.3 mg/L was used for the maximum average hardness concentration.

**** = CCME guideline dependent on hardness of the water and is specific to the average hardness of the water at this site during this particular sampling event.

Table 3b. Pre-Drilling Winter Water Quality Results (WWQ4 to -6), April 7-10, 2010

Analyte	WWQ4-A	WWQ4-B	WWQ4-C	WWQ5-A	WWQ5-B	WWQ5-C	WWQ6-A	WWQ6-B	Units	Detection Limit	CCME Guideline
Major Ions, Nutrients, and Inorganics											
Hardness (as CaCO ₃)	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	mg/L	1.3	---
Calcium (Ca)-Total	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	mg/L	0.50	---
Phosphorus (P)-Total	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	mg/L	0.020	---
Potassium (K)-Total	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	mg/L	0.50	---
Sodium (Na)-Total	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	mg/L	1.0	---
Magnesium (Mg) - Total	<0.10	<0.10	<0.10	0.10	0.12	0.11	0.15	0.13	mg/L	0.10	---
Nitrate and Nitrite as N	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	mg/L	0.071	---
Nitrate (as N)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	2.9
Nitrite (as N)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	0.06
Nitrogen, Total	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	mg/L	0.20	---
Total Kjeldahl Nitrogen	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	mg/L	0.20	---
pH	6.16	6.05	6.07	6.01	6.02	6.07	6.30	6.35	pH	0.10	6.5 - 9
Electrical Conductivity (EC)	4.65	4.52	4.66	5.24	5.28	5.5	5.85	5.58	uS/cm	0.20	---
Ammonia-N	<0.0050	0.0095	0.0072	0.0054	<0.0050	0.0074	0.0075	0.0085	mg/L	0.0050	125.83*
Total Organic Carbon	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	mg/L	1.0	---
Total Suspended Solids	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	mg/L	3.0	---
Turbidity	0.21	<0.10	0.12	0.13	0.18	0.16	0.12	0.17	NTU	0.10	---
Total Metals											
Aluminum (Al)	<0.0050	<0.0050	<0.0050	0.0077	0.0087	0.0069	<0.0050	<0.0050	mg/L	0.0050	0.005**
Antimony (Sb)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	---
Arsenic (As)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.005
Barium (Ba)	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	mg/L	0.0030	---
Beryllium (Be)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Boron (B)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Cadmium (Cd)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	mg/L	0.000010	0.000008***
Chromium (Cr)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.001
Cobalt (Co)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.0020	---
Copper (Cu)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.002****
Iron (Fe)	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	mg/L	0.030	0.3
Lead (Pb)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.001***
Lithium (Li)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	mg/L	0.010	---
Manganese (Mn)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	---
Mercury (Hg)	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	mg/L	0.000020	0.000026
Molybdenum (Mo)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	0.073
Nickel (Ni)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.0020	0.025****
Selenium (Se)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.001
Silver (Ag)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0001
Strontium (Sr)	0.00386	0.00384	0.00399	0.00139	0.00144	0.00152	0.0034	0.00321	mg/L	0.0002	---
Thallium (Tl)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0008
Tin (Sn)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Titanium (Ti)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Uranium (U)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	---
Vanadium (V)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Zinc (Zn)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	mg/L	0.0040	0.03
Dissolved Metals											
Aluminum (Al)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	0.005**
Antimony (Sb)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	---
Arsenic (As)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.005
Barium (Ba)	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	mg/L	0.0030	---
Beryllium (Be)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Boron (B)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Cadmium (Cd)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	mg/L	0.000010	0.000008***
Chromium (Cr)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.001
Cobalt (Co)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.0020	---
Copper (Cu)	<0.0010	<0.0010	<0.0010	0.0015	<0.0010	<0.0010	0.0012	<0.0010	mg/L	0.0010	0.002****
Iron (Fe)	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	mg/L	0.030	0.3
Lead (Pb)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.001***
Lithium (Li)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	mg/L	0.010	---
Manganese (Mn)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	---
Mercury (Hg)	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	mg/L	0.000020	0.000026
Molybdenum (Mo)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	0.073
Nickel (Ni)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.0020	0.025****
Selenium (Se)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.001
Silver (Ag)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0001
Strontium (Sr)	0.00401	0.00384	0.00396	0.00154	0.00166	0.00179	0.00370	0.00348	mg/L	<0.00010	---
Thallium (Tl)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0008
Tin (Sn)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Titanium (Ti)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Uranium (U)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	---
Vanadium (V)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Zinc (Zn)	<0.0040	<0.0040	<0.0040	0.0087	<0.0040	<0.0040	<0.0040	<0.0040	mg/L	0.0040	0.03

Legend

* Canadian Council of Ministers of the Environment - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Outside CCME Guidelines

Detection Limit above CCME Guidelines

< denotes result below laboratory detection level.

--- = No CCME Guideline.

* = CCME guideline for Ammonia-N (Total Ammonia) is pH and water temperature dependent. There is no CCME guideline value for water with pH levels less than 6.0. The CCME value presented here represents water at pH 6.0 and temperature at 5 deg. C.

** CCME guideline for Aluminum is pH dependent. The guideline presented here is specific to the pH of the water at this site during this particular sampling event.

*** = CCME guideline for Cadmium is dependent on hardness of the water and is calculated using the formula: Cd guideline = 10 exp[0.86(log(hardness))-3.2]. The value 1.3 mg/L was used for the maximum average hardness concentration.

**** = CCME guideline dependent on hardness of the water and is specific to the average hardness of the water at this site during this particular sampling event.

Table 3c. Pre-Drilling Winter Water Quality Results (WWQ7 to -10), April 7-10, 2010

Analyte	WWQ7-A	WWQ7-B	WWQ7-C	Duplicate	WWQ8-A	WWQ8-B	WWQ9-A	WWQ10-A	WWQ10-B	Units	Detection Limit	CCME Guideline
Major Ions, Nutrients, and Inorganics												
Hardness (as CaCO ₃)	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	mg/L	1.3	---
Calcium (Ca)-Total	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	mg/L	0.50	---
Phosphorus (P)- Total	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	mg/L	0.020	---
Potassium (K)-Total	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	mg/L	0.50	---
Sodium (Na)-Total	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	mg/L	1.0	---
Magnesium (Mg) - Total	0.17	0.13	0.14	0.15	<0.10	<0.10	0.11	0.22	0.24	mg/L	0.10	---
Nitrate and Nitrite as N	1.14	<0.071	<0.071	<0.071	<0.071	0.081	<0.071	<0.071	<0.071	mg/L	0.071	---
Nitrate (as N)	1.14	<0.050	<0.050	<0.050	<0.050	0.081	<0.050	<0.050	0.067	mg/L	0.050	2.9
Nitrite (as N)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	0.06
Nitrogen, Total	1.14	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	mg/L	0.20	---
Total Kjeldahl Nitrogen	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	mg/L	0.20	---
pH	4.33	6.27	6.37	6.36	6.00	5.86	6.24	5.89	5.90	pH	0.10	6.5 - 9
Electrical Conductivity (EC)	26.5	6.19	6.48	6.45	4.35	5.18	6.51	8.44	9.24	uS/cm	0.20	---
Ammonia-N	0.008	0.007	0.0065	0.0099	0.007	0.0096	0.0107	0.0075	0.0127	mg/L	0.0050	125.83*
Total Organic Carbon	1.1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	mg/L	1.0	---
Total Suspended Solids	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	3	mg/L	3.0	---
Turbidity	0.16	0.13	0.16	0.15	0.14	<0.10	0.15	0.2	0.19	NTU	0.10	---
Total Metals												
Aluminum (Al)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0087	<0.0050	0.0194	0.0219	mg/L	0.0050	0.005**
Antimony (Sb)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	---
Arsenic (As)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.005
Barium (Ba)	0.0037	0.0031	0.0038	0.0037	0.0030	0.0030	0.0030	<0.0030	<0.0030	mg/L	0.0030	---
Beryllium (Be)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Boron (B)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Cadmium (Cd)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000017	0.00002	mg/L	0.000010	0.000008***
Chromium (Cr)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.001
Cobalt (Co)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.0020	---
Copper (Cu)	<0.0010	<0.0010	<0.0010	0.0029	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.002****
Iron (Fe)	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	mg/L	0.030	0.3
Lead (Pb)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.001****
Lithium (Li)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	mg/L	0.010	---
Manganese (Mn)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0072	0.0077	mg/L	0.0050	---
Mercury (Hg)	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	mg/L	0.000020	0.000026
Molybdenum (Mo)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0050	0.0050	mg/L	0.0050	0.073
Nickel (Ni)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0021	0.0022	mg/L	0.0020	0.025****
Selenium (Se)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.001
Silver (Ag)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0001
Strontium (Sr)	0.00417	0.00344	0.00365	0.00371	0.00143	0.00169	0.00289	0.0024	0.00257	mg/L	0.0002	---
Thallium (Tl)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0008
Tin (Sn)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Titanium (Ti)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Uranium (U)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	---
Vanadium (V)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Zinc (Zn)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	mg/L	0.0040	0.03
Dissolved Metals												
Aluminum (Al)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.007	<0.0050	0.0121	0.0164	mg/L	0.0050	0.005**
Antimony (Sb)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	---
Arsenic (As)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.005
Barium (Ba)	0.0035	0.0034	0.0037	0.0037	0.0030	0.0030	0.0030	<0.0030	<0.0030	mg/L	0.0030	---
Beryllium (Be)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Boron (B)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Cadmium (Cd)	<0.000010	<0.000010	<0.000010	<0.000010	0.000013	<0.000010	<0.000010	0.000025	0.000025	mg/L	0.000010	0.000008***
Chromium (Cr)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.001
Cobalt (Co)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.0020	---
Copper (Cu)	<0.0010	<0.0010	0.0023	0.0025	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.002****
Iron (Fe)	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	mg/L	0.030	0.3
Lead (Pb)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.001****
Lithium (Li)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	mg/L	0.010	---
Manganese (Mn)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0077	0.008	mg/L	0.0050	---
Mercury (Hg)	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	mg/L	0.000020	0.000026
Molybdenum (Mo)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	0.073
Nickel (Ni)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0024	0.0022	mg/L	0.0020	0.025****
Selenium (Se)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.001
Silver (Ag)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0001
Strontium (Sr)	0.00396	0.00388	0.00408	0.00405	0.00160	0.00185	0.00304	0.00261	0.00284	mg/L	0.00010	---
Thallium (Tl)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0008
Tin (Sn)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Titanium (Ti)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Uranium (U)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	---
Vanadium (V)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Zinc (Zn)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	mg/L	0.0040	0.03

Legend

* Canadian Council of Ministers of the Environment - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Outside CCME Guidelines

Detection Limit above CCME Guidelines

< denotes result below laboratory detection level

--- = No CCME Guideline.

* = CCME guideline for Ammonia-N (Total Ammonia) is pH and water temperature dependent. There is no CCME guideline value for water with pH levels less than 6.0. The CCME value presented here represents water at pH 6.0 and temperature at 5 deg. C.

** CCME guideline for Aluminum is pH dependent. The guideline presented here for Aluminum is specific to the pH of the water at this site during this particular sampling event.

*** = CCME guideline for Cadmium is dependent on hardness of the water and is calculated using the formula: Cd guideline = 10 exp{0.86[log(hardness)]-3.2}. The value 1.3 mg/L was used for the maximum average hardness concentration.

**** = CCME guideline dependent on hardness of the water and is specific to the average hardness of the water at this site during this particular sampling event.



Table 4. Post-Drilling Winter Water Quality Results, June 2, 2010

Analyte	Trip Blank	Field Blank	WWQ7-A	WWQ7-B	WWQ7-C	Duplicate	WWQ10-A	WWQ10-B	Units	Detection Limit	CCME Guideline
Major Ions, Nutrients, and Inorganics											
Hardness (as CaCO ₃)	<1.3	<1.3	2.2	<1.3	<1.3	<1.3	<1.3	2.1	mg/L	1.3	---
Calcium (Ca)-Total	<0.50	<0.50	0.58	<0.50	1.8	<0.50	<0.50	0.50	mg/L	0.50	---
Phosphorus (P)-Total	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	mg/L	0.020	---
Potassium (K)-Total	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	mg/L	0.50	---
Sodium (Na)-Total	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	mg/L	1.0	---
Magnesium (Mg)-Total	<0.10	<0.10	0.18	0.13	0.14	0.17	0.22	---	mg/L	0.10	---
Nitrate and Nitrite as N	<0.071	n/a	0.522	<0.071	n/a	<0.071	<0.071	0.094	mg/L	0.071	---
Nitrate (as N)	<0.050	n/a	0.522	0.060	n/a	<0.050	<0.050	0.094	mg/L	0.050	2.9
Nitrite (as N)	<0.050	n/a	<0.050	<0.050	n/a	<0.050	<0.050	<0.050	mg/L	0.050	0.06
Nitrogen, Total	<0.20	n/a	0.52	<0.20	n/a	<0.20	<0.20	---	mg/L	0.20	---
Total Kjeldahl Nitrogen	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	mg/L	0.20	---
pH	5.65	n/a	5.62	6.18	5.98	6.12	5.98	5.39	pH	0.10	6.5 - 9
Electrical Conductivity (EC)	0.22	n/a	13.4	6.43	n/a	5.84	8.14	9.96	uS/cm	0.20	---
Ammonia-N	<0.0050	<0.0050	<0.0050	0.0065	0.0057	0.0079	<0.0050	0.0089	mg/L	0.0050	125.83*
Total Organic Carbon	<1.0	<1.0	1.3	1.2	1.1	1.0	<1.0	<1.0	mg/L	1.0	---
Total Suspended Solids (TSS)	<3.0	n/a	<3.0	5	n/a	<3.0	<3.0	<3.0	mg/L	3.0	+5**
Turbidity	<0.10	n/a	<0.10	<0.10	n/a	<0.10	<0.10	<0.10	NTU	0.10	+2***
Total Metals											
Aluminum (Al)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0181	0.0241	mg/L	0.0050	0.005**
Antimony (Sb)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	---
Arsenic (As)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.005
Barium (Ba)	<0.0030	<0.0030	0.0049	0.0039	0.0038	0.0038	<0.0030	0.0033	mg/L	0.0030	---
Beryllium (Be)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Boron (B)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Cadmium (Cd)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	0.000026	0.000029	mg/L	0.000010	0.000001***
Chromium (Cr)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.001
Cobalt (Co)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.0020	---
Copper (Cu)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.002****
Iron (Fe)	<0.030	<0.030	0.030	<0.030	<0.030	<0.030	<0.030	<0.030	mg/L	0.030	0.3
Lead (Pb)	<0.00010	<0.00010	0.00011	0.00010	0.00011	0.00011	<0.00010	0.00011	mg/L	0.00010	0.001****
Lithium (Li)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	mg/L	0.010	---
Manganese (Mn)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0065	0.0100	mg/L	0.0050	---
Mercury (Hg)	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	mg/L	0.000020	0.000026
Molybdenum (Mo)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	0.073
Nickel (Ni)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0021	0.0023	mg/L	0.0020	0.025****
Selenium (Se)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.001
Silver (Ag)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0001
Strontium (Sr)	<0.00020	<0.00020	0.00479	0.00384	0.00375	0.00368	0.00247	0.00283	mg/L	0.00020	---
Thallium (Tl)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0008
Tin (Sn)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Titanium (Ti)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Uranium (U)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	---
Vanadium (V)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Zinc (Zn)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	mg/L	0.0040	0.03
Dissolved Metals											
Aluminum (Al)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0125	<0.0050	mg/L	0.0050	0.005**
Antimony (Sb)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	---
Arsenic (As)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.005
Barium (Ba)	<0.0030	<0.0030	0.0044	0.0036	0.0036	0.0036	<0.0030	<0.0030	mg/L	0.0030	---
Beryllium (Be)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Boron (B)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Cadmium (Cd)	<0.000010	<0.000010	0.000015	<0.000010	0.000011	<0.000010	0.000024	0.000028	mg/L	0.000010	0.000001***
Chromium (Cr)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	0.001
Cobalt (Co)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.0020	---
Copper (Cu)	<0.0010	<0.0010	0.0043	<0.0010	0.0023	0.0020	0.0021	0.0016	mg/L	0.0010	0.002****
Iron (Fe)	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	<0.030	mg/L	0.030	0.3
Lead (Pb)	<0.00010	0.00011	0.00011	0.00011	<0.00010	0.00011	0.00011	0.00012	mg/L	0.00010	0.001****
Lithium (Li)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	mg/L	0.010	---
Manganese (Mn)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0113	---	mg/L	0.0050	---
Mercury (Hg)	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	mg/L	0.000020	0.000026
Molybdenum (Mo)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	0.073
Nickel (Ni)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.0022	0.0024	mg/L	0.0020	0.025****
Selenium (Se)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.00040	0.001
Silver (Ag)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0001
Strontium (Sr)	<0.00010	<0.00010	0.00526	0.00424	0.00418	0.00425	0.00271	0.00332	mg/L	0.00010	---
Thallium (Tl)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	0.0008
Tin (Sn)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.050	---
Titanium (Ti)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Uranium (U)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.00010	---
Vanadium (V)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.0010	---
Zinc (Zn)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	0.0045	0.0051	mg/L	0.0040	0.03

Legend

^ Canadian Council of Ministers of the Environment - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Outside CCME Guidelines

Detection Limit above CCME Guidelines

Bold = Field and/or trip blank above the laboratory detection limit.

< denotes result below laboratory detection level.

n/a = denotes analysis not available due to laboratory error.

- = No CCME Guideline.

■ = CCME guideline for Total Suspended Solids represents the maximum average increase of 5 mg/L from background levels (pre-drilling) for longer term exposures (24 hours to 30 days).

■ = CCME guideline for Turbidity represents the maximum average increase of 2 NTUs from background levels (pre-drilling) for longer term exposures (24 hours to 30 days).

* = CCME guideline for Ammonia-N (Total Ammonia) is pH and water temperature dependent. There is no CCME guideline value for water with pH levels less than 6.0. The CCME value presented here represents water at pH 6.0 and temperature at 5 deg. C.

** = CCME guideline for Aluminum is pH dependent. The guideline presented here for Aluminum is specific to the pH of the water at this site during this particular sampling event.

*** = CCME guideline for Cadmium is dependent on hardness of the water and is calculated using the formula: Cd guideline = 10 exp[(0.86log(hardness))-3.2]. The average total hardness values were used for the maximum average hardness concentration.

**** = CCME guideline dependent on hardness of the water and is specific to the average hardness of the water at this site during this particular sampling event.

**Table 8. July Surface Water Quality QA/QC Results**

Analyte	July 8-12 Sampling Event		July 26-29 Sampling Event		Units	Detection Limit
	Trip Blank	Field Blank	Trip Blank	Field Blank		
Major Ions, Nutrients, and Inorganics						
Calcium (Ca)-Total	<0.50	<0.50	<0.50	<0.50	mg/L	0.5
Phosphorus (P), Total	<0.020	<0.020	<0.020	<0.020	mg/L	0.02
Potassium (K)-Total	<0.50	<0.50	<0.50	<0.50	mg/L	0.5
Sodium (Na)-Total	<1.0	<1.0	<1.0	<1.0	mg/L	1
Hardness (as CaCO3)	<1.3	<1.3	<1.3	<1.3	mg/L	1.3
Nitrate and Nitrite as N	<0.071	<0.071	<0.071	<0.071	mg/L	0.071
Nitrate (as N)	<0.050	<0.050	<0.050	<0.050	mg/L	0.05
Nitrite (as N)	<0.050	<0.050	<0.050	<0.050	mg/L	0.05
Nitrogen, Total	<0.20	<0.20	<0.20	<0.20	mg/L	0.2
Total Kjeldahl Nitrogen	<0.20	<0.20	<0.20	<0.20	mg/L	0.2
pH	5.98	6.62	5.66	5.74	pH	0.1
Electrical Conductivity (EC)	1.15	1.33	1.13	0.77	uS/cm	0.2
Ammonia-N	<0.0050	<0.0050	0.0077*	<0.0050	mg/L	0.005
Total Organic Carbon	<1.0	<1.0	<1.0	<1.0	mg/L	1
Total Suspended Solids	<3.0	<3.0	<3.0	<3.0	mg/L	3
Turbidity	<0.10	<0.10	<0.10	<0.10	NTU	0.1
Organics						
Oil and Grease	<1.0	<1.0	<1.0	<1.0	mg/L	1
Total Metals						
Aluminum (Al)	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.005
Antimony (Sb)	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.0004
Arsenic (As)	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.0004
Barium (Ba)	<0.0030	<0.0030	<0.0030	<0.0030	mg/L	0.003
Beryllium (Be)	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.001
Boron (B)	<0.050	<0.050	<0.050	<0.050	mg/L	0.05
Cadmium (Cd)	<0.000010	<0.000010	<0.000010	<0.000010	mg/L	0.00001
Chromium (Cr)	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.001
Cobalt (Co)	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.002
Copper (Cu)	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.001
Iron (Fe)	<0.030	<0.030	<0.030	<0.030	mg/L	0.03
Lead (Pb)	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.0001
Lithium (Li)	<0.010	<0.010	<0.010	<0.010	mg/L	0.01
Magnesium (Mg)	<0.10	<0.10	<0.10	<0.10	mg/L	0.1
Manganese (Mn)	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.005
Mercury (Hg)	<0.000020	<0.000020	<0.000020	<0.000020	mg/L	0.00002
Molybdenum (Mo)	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.005
Nickel (Ni)	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.002
Selenium (Se)	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.0004
Silver (Ag)	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.0001
Strontium (Sr)	<0.00020	<0.00020	<0.00020	<0.00020	mg/L	0.0002
Thallium (Tl)	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.0001
Tin (Sn)	<0.050	<0.050	<0.050	<0.050	mg/L	0.05
Titanium (Ti)	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.001
Uranium (U)	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.0001
Vanadium (V)	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.001
Zinc (Zn)	<0.0040	<0.0040	<0.0040	<0.0040	mg/L	0.004

Legend

< denotes result below laboratory detection level.

Bold = Above laboratory detection limit

* reported result varified by laboratory repeat analysis.

Table 9. July 8-12 Surface Water Quality Duplicate Assessment (Relative Per Cent Difference)

Analyte	WQ6	WQ6 Duplicate	Units	Detection Limit	Applicability ¹			RPD ² (%)	Reliable Duplicate ³ Yes (RPD <20%) or No
					WQ6	WQ6 Duplicate	Yes (Applicability >5) or No		
Major Ions, Nutrients, and Inorganics									
Calcium (Ca)-Total	<0.50	<0.50	mg/L	0.5	-	-	-	-	-
Phosphorus (P), Total	<0.020	<0.020	mg/L	0.02	-	-	-	-	-
Potassium (K)-Total	<0.50	<0.50	mg/L	0.5	-	-	-	-	-
Sodium (Na)-Total	<1.0	<1.0	mg/L	1	-	-	-	-	-
Hardness (as CaCO3)	<1.3	<1.3	mg/L	1.3	-	-	-	-	-
Nitrate and Nitrite as N	<0.071	<0.071	mg/L	0.071	-	-	-	-	-
Nitrate (as N)	<0.050	<0.050	mg/L	0.05	-	-	-	-	-
Nitrite (as N)	<0.050	<0.050	mg/L	0.05	-	-	-	-	-
Nitrogen, Total	<0.20	<0.20	mg/L	0.2	-	-	-	-	-
Total Kjeldahl Nitrogen	<0.20	<0.20	mg/L	0.2	-	-	-	-	-
pH	6.15	6.22	pH	0.1	61.5	62.2	Yes	1	Yes
Electrical Conductivity (EC)	4.52	4.55	uS/cm	0.2	22.6	22.8	Yes	1	Yes
Ammonia-N	<0.0050	<0.0050	mg/L	0.005	-	-	-	-	-
Total Organic Carbon	<1.0	<1.0	mg/L	1	-	-	-	-	-
Total Suspended Solids	<3.0	<3.0	mg/L	3	-	-	-	-	-
Turbidity	0.32	0.32	NTU	0.1	3.2	3.2	No	---	---
Organics									
Oil and Grease	<0.1	<0.1	mg/L	1	-	-	-	-	-
Total Metals									
Aluminum (Al)	0.0159	0.0180	mg/L	0.005	3.2	3.6	No	---	---
Antimony (Sb)	<0.00040	<0.00040	mg/L	0.0004	-	-	-	-	-
Arsenic (As)	<0.00040	<0.00040	mg/L	0.0004	-	-	-	-	-
Barium (Ba)	<0.0030	<0.0030	mg/L	0.003	-	-	-	-	-
Beryllium (Be)	<0.0010	<0.0010	mg/L	0.001	-	-	-	-	-
Boron (B)	<0.050	<0.050	mg/L	0.05	-	-	-	-	-
Cadmium (Cd)	<0.000010	<0.000010	mg/L	0.00001	-	-	-	-	-
Chromium (Cr)	<0.0010	<0.0010	mg/L	0.001	-	-	-	-	-
Cobalt (Co)	<0.0020	<0.0020	mg/L	0.002	-	-	-	-	-
Copper (Cu)	<0.0010	<0.0010	mg/L	0.001	-	-	-	-	-
Iron (Fe)	<0.030	<0.030	mg/L	0.03	-	-	-	-	-
Lead (Pb)	<0.00010	<0.00010	mg/L	0.0001	-	-	-	-	-
Lithium (Li)	<0.010	<0.010	mg/L	0.01	-	-	-	-	-
Manganese (Mn)	<0.0050	<0.0050	mg/L	0.005	-	-	-	-	-
Mercury (Hg)	<0.000020	<0.000020	mg/L	0.00002	-	-	-	-	-
Molybdenum (Mo)	<0.0050	<0.0050	mg/L	0.005	-	-	-	-	-
Nickel (Ni)	<0.0020	<0.0020	mg/L	0.002	-	-	-	-	-
Selenium (Se)	<0.00040	<0.00040	mg/L	0.0004	-	-	-	-	-
Silver (Ag)	<0.00010	<0.00010	mg/L	0.0001	-	-	-	-	-
Strontium (Sr)	0.00180	0.00169	mg/L	0.0002	9.0	8.5	Yes	6	Yes
Thallium (Tl)	<0.00010	<0.00010	mg/L	0.0001	-	-	-	-	-
Tin (Sn)	<0.050	<0.050	mg/L	0.05	-	-	-	-	-
Titanium (Ti)	0.0011	0.0011	mg/L	0.001	1.1	1.1	No	---	---
Uranium (U)	<0.00010	<0.00010	mg/L	0.0001	-	-	-	-	-
Vanadium (V)	<0.0010	<0.0010	mg/L	0.001	-	-	-	-	-
Zinc (Zn)	<0.0040	<0.0040	mg/L	0.004	-	-	-	-	-

Legend

< denotes result below laboratory detection level.

1 = Applicability to the Relative Percent Difference (RPD) Assessment requires that results be at least 5 x the detection limit since analytical error increases near the detection limit. "Yes" depicts results greater than 5 x the detection limit (applicable results); whereas, "No" depicts results less than 5 x the detection limit. Results that are close to the detection limit have an increased probability of analytical error and were not used in the reliability assessment.

2 = RPD (%) = 200 x ABS (x - y) / (x + y), where ABS = Absolute difference, x = the concentration of the original sample, y = the concentration of the blind field duplicate sample.

3 = Duplicate samples are reliable when their RPD is less than 20%.

- = not available since the result(s) are below the detection limit.

--- = not available since the applicability is less than 5 x the detection limit.



Table 10. July 26-29 Surface Water Quality Duplicate Assessment (Relative Per Cent Difference)

Analyte	WQ5	WQ5 Duplicate	Units	Detection Limit	Applicability ¹			RPD ² (%)	Reliable Duplicate ³ Yes (RPD <20%) or No
					WQ5	WQ5 Duplicate	Yes (Applicability >5) or No		
Major Ions, Nutrients, and Inorganics									
Calcium (Ca)-Total	<0.50	<0.50	mg/L	0.5	-	-	-	-	-
Phosphorus (P), Total	0.05	<0.020	mg/L	0.02	2.5	-	No	-	---
Potassium (K)-Total	<0.50	<0.50	mg/L	0.5	-	-	-	-	-
Sodium (Na)-Total	<1.0	<1.0	mg/L	1	-	-	-	-	-
Hardness (as CaCO3)	<1.3	<1.3	mg/L	1.3	-	-	-	-	-
Nitrate and Nitrite as N	<0.071	<0.071	mg/L	0.071	-	-	-	-	-
Nitrate (as N)	<0.050	<0.050	mg/L	0.05	-	-	-	-	-
Nitrite (as N)	<0.050	<0.050	mg/L	0.05	-	-	-	-	-
Nitrogen, Total	<0.20	<0.20	mg/L	0.2	-	-	-	-	-
Total Kjeldahl Nitrogen	<0.20	<0.20	mg/L	0.2	-	-	-	-	-
pH	6.09	6.07	pH	0.1	60.9	60.7	Yes	0	Yes
Electrical Conductivity (EC)	5.06	4.8	uS/cm	0.2	25.3	24.0	Yes	5	Yes
Ammonia-N	<0.0050	<0.0050	mg/L	0.005	-	-	-	-	-
Total Organic Carbon	<1.0	<1.0	mg/L	1	-	-	-	-	-
Total Suspended Solids	<3.0	<3.0	mg/L	3	-	-	-	-	-
Turbidity	0.14	0.16	NTU	0.1	1.4	1.6	No	---	---
Organics									
Oil and Grease	<0.1	<0.1	mg/L	1	-	-	-	-	-
Total Metals									
Aluminum (Al)	0.009	0.0088	mg/L	0.005	1.8	1.8	No	---	---
Antimony (Sb)	<0.00040	<0.00040	mg/L	0.0004	-	-	-	-	-
Arsenic (As)	<0.00040	<0.00040	mg/L	0.0004	-	-	-	-	-
Barium (Ba)	<0.0030	<0.0030	mg/L	0.003	-	-	-	-	-
Beryllium (Be)	<0.0010	<0.0010	mg/L	0.001	-	-	-	-	-
Boron (B)	<0.050	<0.050	mg/L	0.05	-	-	-	-	-
Cadmium (Cd)	<0.000010	<0.000010	mg/L	0.00001	-	-	-	-	-
Chromium (Cr)	<0.0010	<0.0010	mg/L	0.001	-	-	-	-	-
Cobalt (Co)	<0.0020	<0.0020	mg/L	0.002	-	-	-	-	-
Copper (Cu)	<0.0010	<0.0010	mg/L	0.001	-	-	-	-	-
Iron (Fe)	<0.030	<0.030	mg/L	0.03	-	-	-	-	-
Lead (Pb)	<0.00010	<0.00010	mg/L	0.0001	-	-	-	-	-
Lithium (Li)	<0.010	<0.010	mg/L	0.01	-	-	-	-	-
Manganese (Mn)	<0.0050	<0.0050	mg/L	0.005	-	-	-	-	-
Mercury (Hg)	<0.000020	<0.000020	mg/L	0.00002	-	-	-	-	-
Molybdenum (Mo)	<0.0050	<0.0050	mg/L	0.005	-	-	-	-	-
Nickel (Ni)	<0.0020	<0.0020	mg/L	0.002	-	-	-	-	-
Selenium (Se)	<0.00040	<0.00040	mg/L	0.0004	-	-	-	-	-
Silver (Ag)	<0.00010	<0.00010	mg/L	0.0001	-	-	-	-	-
Strontium (Sr)	0.00201	0.00193	mg/L	0.0002	10.1	9.7	Yes	4	Yes
Thallium (Tl)	<0.00010	<0.00010	mg/L	0.0001	-	-	-	-	-
Tin (Sn)	<0.050	<0.050	mg/L	0.05	-	-	-	-	-
Titanium (Ti)	<0.0010	<0.0010	mg/L	0.001	-	-	-	-	-
Uranium (U)	<0.00010	<0.00010	mg/L	0.0001	-	-	-	-	-
Vanadium (V)	<0.0010	<0.0010	mg/L	0.001	-	-	-	-	-
Zinc (Zn)	<0.0040	<0.0040	mg/L	0.004	-	-	-	-	-

Legend

< denotes result below laboratory detection level.

1 = Applicability to the Relative Percent Difference (RPD) Assessment requires that results be at least 5 x the detection limit since analytical error increases near the detection limit. "Yes" depicts results greater than 5 x the detection limit (applicable results); whereas, "No" depicts results less than 5 x the detection limit. Results that are close to the detection limit have an increased probability of analytical error and were not used in the reliability assessment.

2 = RPD (%) = $200 \times \text{ABS} (x - y) / (x + y)$, where ABS = Absolute difference, x = the concentration of the original sample, y = the concentration of the blind field duplicate sample.

3 = Duplicate samples are reliable when their RPD is less than 20%.

- = not available since the result(s) are below the detection limit.

--- = not available since the applicability is less than 5 x the detection limit.

Table 13. July 8-12 Surface Water Quality Results, 2010

Analyte	Hydro 1	Hydro 2	WQ3	WQ4	WQ5	WQ6	WQ7	WQ8	Hydro 9	Hydro 10	Hydro 11	WQ12	Units	Detection Limit	CCME Guideline
Major Ions, Nutrients, and Inorganics															
Calcium (Ca)-Total	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.55	<0.50	mg/L	0.5	---
Phosphorus (P) _i Total	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	mg/L	0.02	---
Potassium (K)-Total	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	mg/L	0.5	---
Sodium (Na)-Total	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	mg/L	1	---
Hardness (as CaCO ₃)	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	2.5	<1.3	mg/L	1.3	---
Nitrate and Nitrite as N	0.106	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	0.082	<0.071	<0.071	<0.071	mg/L	0.071	---
Total Kjeldahl Nitrogen	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	mg/L	0.2	---
pH	6.06	6.09	5.94	6.15	6.07	6.15	6.20	6.20	6.08	6.26	6.49	6.42	pH	0.1	6.5 - 9
Electrical Conductivity (EC)	4.34	4.02	4.36	4.45	5.49	4.52	4.51	4.76	4.44	4.58	8.98	4.66	uS/cm	0.2	---
Ammonia-N	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	125.83*
Total Organic Carbon	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	mg/L	1	---
Total Suspended Solids	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	mg/L	3	---
Turbidity	1.67	1.20	0.24	0.56	0.29	0.32	0.32	1.19	1.40	0.34	0.37	1.11	NTU	0.1	---
Organics															
Oil and Grease	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	mg/L	1	---
Total Metals															
Aluminum (Al)	0.0639	0.0494	0.0119	0.0354	0.0212	0.0159	0.0148	0.0665	0.0690	0.0154	0.0179	0.0508	mg/L	0.005	0.005**
Antimony (Sb)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.0004	---
Arsenic (As)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.0004	0.005
Barium (Ba)	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	mg/L	0.003	---
Beryllium (Be)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.001	---
Boron (B)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.05	---
Cadmium (Cd)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	mg/L	0.00001	0.00001***
Chromium (Cr)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.001	0.001
Cobalt (Co)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.002	---
Copper (Cu)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.001	0.002****
Iron (Fe)	0.048	0.039	<0.030	<0.030	<0.030	<0.030	<0.030	0.064	0.051	<0.030	<0.030	0.041	mg/L	0.03	0.3
Lead (Pb)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.0001	0.001****
Lithium (Li)	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	mg/L	0.01	---
Manganese (Mn)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.005	---
Mercury (Hg)	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	mg/L	0.00002	0.000026
Molybdenum (Mo)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.005	0.073
Nickel (Ni)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.002	0.025****
Selenium (Se)	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.0004	0.001
Silver (Ag)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.0001	0.0001
Strontium (Sr)	0.00127	0.00164	0.00143	0.00194	0.00204	0.00180	0.00169	0.00187	0.00109	0.00145	0.00335	0.00144	mg/L	0.0002	---
Thallium (Tl)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.0001	0.0008
Tin (Sn)	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.05	---
Titanium (Ti)	0.0042	0.0038	0.0011	0.0024	0.0011	0.0011	<0.0010	0.0064	0.0037	<0.0010	<0.0010	0.0028	mg/L	0.001	---
Uranium (U)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.0001	---
Vanadium (V)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.001	---
Zinc (Zn)	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	mg/L	0.004	0.03

Legend

^ Canadian Council of Ministers of the Environment - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Outside CCME Guidelines

Detection Limit above CCME Guidelines

< denotes result below detection level.

--- = No CCME Guideline.

* = CCME guideline for Ammonia-N (Total Ammonia) is pH and water temperature dependent. There is no CCME guideline value for water with pH levels less than 6.0. The CCME value presented here represents water at pH 6.0 and temperature at 5 deg. C.

** CCME guideline for Aluminum is pH dependent. The guideline presented here for Aluminum is specific to the pH of the water at this site during this particular sampling event.

*** = CCME guideline for Cadmium is dependent on hardness of the water and is calculated using the formula: Cd guideline = 10 exp {0.86[log(hardness)]-3.2}. The CCME guideline for Cadmium is specific to the average hardness of the water at this site during this particular sampling event.

**** = CCME guideline dependent on hardness of the water and is specific to the average hardness of the water at this site during this particular sampling event.

Table 14. July 26-29 Surface Water Quality Results, 2010

Analyte	Hydro 1 and 2*	WQ3	WQ4	WQ5	WQ6	WQ7	WQ8	Hydro 9	Hydro 10	Hydro 11	WQ12	Units	Detection Limit	CCME Guideline
Major Ions, Nutrients, and Inorganics														
Calcium (Ca)-Total		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.96	<0.50	mg/L	0.5	---
Phosphorus (P), Total		<0.020	<0.020	0.05	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	mg/L	0.02	---
Potassium (K)-Total		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	mg/L	0.5	---
Sodium (Na)-Total		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	<1.0	mg/L	1	---
Hardness (as CaCO ₃)		<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	<1.3	4.6	<1.3	mg/L	1.3	---
Nitrate and Nitrite as N		<0.071	0.171	<0.071	<0.071	<0.071	0.085	0.264	0.424	<0.071	0.191	mg/L	0.071	---
Total Kjeldahl Nitrogen		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	mg/L	0.2	---
pH		5.99	6.27	6.09	6.09	6.15	6.16	6.34	6.30	6.57	6.31	pH	0.1	6.5 - 9
Electrical Conductivity (EC)		3.37	6.23	5.06	4.33	4.26	6.12	5.76	5.64	13.2	6.58	uS/cm	0.2	---
Ammonia-N		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.0050	125.83*
Total Organic Carbon		<1.0	<1.0	<1.0	<1.0	<1.0	1.1	<1.0	1.2	1.8	1.3	mg/L	1	---
Total Suspended Solids		<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	<3.0	mg/L	3	---
Turbidity		0.16	1.33	0.14	0.24	0.31	1.02	1.73	0.34	0.35	1.55	NTU	0.1	---
Organics														
Oil and Grease		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	mg/L	1	---
Total Metals														
Aluminum (Al)		0.0084	0.0632	0.009	0.0138	0.0136	0.0504	0.0818	0.0215	0.0187	0.0742	mg/L	0.005	0.005**
Antimony (Sb)		<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.0004	---
Arsenic (As)		<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.0004	0.005
Barium (Ba)		<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0034	<0.0030	<0.0030	0.0044	0.0032	mg/L	0.003	---
Beryllium (Be)		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.001	---
Boron (B)		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.05	---
Cadmium (Cd)		<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	mg/L	0.00001	0.00001***
Chromium (Cr)		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.001	0.001
Cobalt (Co)		<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.002	---
Copper (Cu)		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.001	0.002****
Iron (Fe)		<0.030	0.058	<0.030	<0.030	<0.030	0.055	0.062	<0.030	<0.030	0.061	mg/L	0.03	0.3
Lead (Pb)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.0001	0.001****
Lithium (Li)		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	mg/L	0.01	---
Manganese (Mn)		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.005	---
Mercury (Hg)		<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	<0.000020	mg/L	0.00002	0.000026
Molybdenum (Mo)		<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	mg/L	0.005	0.073
Nickel (Ni)		<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	mg/L	0.002	0.025****
Selenium (Se)		<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	mg/L	0.0004	0.001
Silver (Ag)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.0001	0.0001
Strontium (Sr)		0.00116	0.00287	0.00201	0.00157	0.00170	0.00267	0.00179	0.00203	0.00521	0.00209	mg/L	0.0002	---
Thallium (Tl)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.0001	0.0008
Tin (Sn)		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	mg/L	0.05	---
Titanium (Ti)		<0.0010	0.0052	<0.0010	<0.0010	<0.0010	0.0042	0.0042	0.0011	0.0011	0.004	mg/L	0.001	---
Uranium (U)		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	mg/L	0.0001	---
Vanadium (V)		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	mg/L	0.001	---
Zinc (Zn)		<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	mg/L	0.004	0.03

Legend

^ Canadian Council of Ministers of the Environment - Canadian Water Quality Guidelines for the Protection of Freshwater Aquatic Life (December 2007).

Outside CCME Guidelines

Detection Limit above CCME Guidelines

< denotes result below detection level.

--- = No CCME Guideline.

■ = Hydrology stations Hydro 1 and -2 were dry at the time of the field event.

* = CCME guideline for Ammonia-N (Total Ammonia) is pH and water temperature dependent. There is no CCME guideline value for water with pH levels less than 6.0. The CCME value presented here represents water at pH 6.0 and temperature at 5 deg. C.

** CCME guideline for Aluminum is pH dependent. The guideline presented here for Aluminum is specific to the pH of the water at this site during this particular sampling event.

*** = CCME guideline for Cadmium is dependent on hardness of the water and is calculated using the formula: Cd guideline = $10 \exp\{0.86[\log(\text{hardness})]-3.2\}$. The CCME guideline for Cadmium is specific to the average hardness of the water at this site during this particular sampling

**** = CCME guideline dependent on hardness of the water and is specific to the average hardness of the water at this site during this particular sampling event.



Table 15. Sunrise Camp Potable Water Quality, April and July, 2010

[illegible]

Federal-Provincial-Territorial Committee on Drinking Water (2008) Guidelines for Canadian Drinking Water Quality.

Detection Limit above Canadian Drinking Water Quality Guideline

--- denotes no Canadian Drinking Water Quality guideline.

< denotes result below laboratory detection limits.



Table 16. Discovery Camp Potable Water Quality, July 12, 2010

Analyte	Travel Blank	Trip Blank	Raw Water	Kitchen Tap	Bathroom Tap	Duplicate*	Dry 1 Tap	Dry 2 Tap (Driller's Dry)	Units	Detection Limit	Drinking Water Quality Guideline^
Fecal Coliforms	<1	<1	<1	<1	<1	-	<1	<1	CFU / 100mL	1	---
Total Coliforms	<1	<1	58	<1	<1	<1	<1	<1	MPN / 100 mL	1	0
<i>Escherichia</i> Coliforms (<i>E. coli</i>)	<1	<1	<1	<1	<1	<1	<1	<1	MPN / 100 mL	1	0

Legend

^aFederal-Provincial-Territorial Committee on Drinking Water (2008) Guidelines for Canadian Drinking Water Quality.

Detection Limit above Canadian Drinking Water Quality Guideline

* denotes samples analyzed by Nunavut Research Institute laboratory.

- denotes no analytical result available from NRI Laboratory.

--- denotes no Canadian Drinking Water Quality guideline.

< denotes result below detection level.

Table 19. Fish Habitat Results Summary

Sample Site	Watercourse Type	Existing Cover Type	Substrate Composition (%)	Average Wetted Width (m)*	Max. Water Depth (m)	Morphology	Water Temperature (°C)	pH	Dissolved Oxygen (mg/L)	Conductivity (µS/cm)	Turbidity (NTUs)	Comments
Hydro 9	Large Permanent	Abundant boulders, moderate instream vegetation	80% cobbles 15% boulders 5% gravels	15.8	0.3	Riffle-run	13.1	8.5	9.01	6	2.11	Fish captured. Overall habitat value was high
Hydro 10	Large Permanent	Abundant instream vegetation, trace boulders	90% cobbles 5% boulders 5%gravels	21.5	0.3	Riffle-run	12.6	7.9	9.62	7	5.53	Fish observed. Overall habitat value was moderate
Hydro 11	Large Permanent	Abundant boulders & instream vegetation	65% cobbles 20% gravels 10% boulders 5% fines	35.4	0.3	Riffle-run	11.5	8.0	10.02	17	1.64	Fish captured. Overall habitat value was high
WQ5	Large Permanent	Abundant boulders, moderate deep pools	80%boulders 20% cobbles	21	0.5	Riffle-run	5.1	7.9	11.44	6	0.38	No fish sampling. Overall habitat value was good
WQ8	Large Permanent	Abundant boulders, moderate instream vegetation and deep pools.	90% boulders 10% cobbles	23	0.95	Riffle-run	8.6**	6.90**	N/D	7**	N/D	Fish captured. Overall habitat value was high

* Average wetted width calculated with measurements taken within the survey area of the watercourse.

** Water quality data taken from the surface water quality field program which used a different pH/EC meter.

N/D = denotes no data collected.

Table 24. Summary of Discovery and Sunrise Camps Wildlife Sighting Logs, 2010

Species	Date	Observation(s)	Location of Observation(s) (approximate)
March			
Caribou	March 24	1 observation of 10 caribou	<ul style="list-style-type: none"> Southwest of Sunrise Camp
Arctic Fox	March 24	1 observed	<ul style="list-style-type: none"> South of Sunrise Camp
Common Raven	March 24	1 observation of 2 flying	<ul style="list-style-type: none"> 40 km north of Sunrise Camp
April			
Caribou	April 4 to 23	6 distinct observations; with a total of 58 animals for this period	<ul style="list-style-type: none"> 4 km northwest of Sunrise Camp 20 km northwest of Sunrise Camp On Sunrise Camp lake 15 km northwest of Sunrise Camp 8 km south of Sunrise Camp 20 km west of Discovery Camp
Arctic Hare	April 17	1 observed	<ul style="list-style-type: none"> At Sunrise Camp
Polar Bear	April 23 and 26	2 observations of 1 bear each	<ul style="list-style-type: none"> Ptarmigan Fiord; 45 and 50 km north of Sunrise Camp, respectively
Wolf	April 25	1 observed	<ul style="list-style-type: none"> 1 km from Qilaq fuel cache (outside the study area)
Common Raven	April 26	1 observed	<ul style="list-style-type: none"> Sunrise Camp lake
Ptarmigan	April 9	1 observed	<ul style="list-style-type: none"> At CH-10 (approx. 15 km northwest of Discovery camp)
May			
Caribou	May 13	1 observed	<ul style="list-style-type: none"> Unknown location
Arctic Hare	May 14 to 24	2 observations of a single hare	<ul style="list-style-type: none"> At CHI-163 (approx. 57 km northwest of Sunrise camp) At Sunrise Camp
Seals	May 28	25 observed on the ice	<ul style="list-style-type: none"> Unknown (outside study area)
Falcon (species not listed)	May 30	1 observed	<ul style="list-style-type: none"> At CHI-290 (approx. 18 km north of Sunrise camp)
Goose	May 16 to 28	3 observations of 17 geese	<ul style="list-style-type: none"> At CHI-290 (approx. 18 km north of Sunrise camp) Over Sunrise Camp On Sunrise Camp lake edge
Ptarmigan	May 5 to 29	3 observations of 6 ptarmigan (3 ptarmigan pairs)	<ul style="list-style-type: none"> At Sunrise Camp At CHI-290 (approx. 18 km north of Sunrise camp) At CH-7 (approx. 2 km from Discovery camp)
Snow Bunting	May 27	2 observed	<ul style="list-style-type: none"> At Sunrise Camp

Table 24. Summary of Discovery and Sunrise Camps Wildlife Sighting Logs, 2010

Species	Date	Observation(s)	Location of Observation(s) (approximate)
June			
Caribou	Jun unspecified to 30	5 distinct observations; with a total of 16 caribou for this period	<ul style="list-style-type: none"> Between CH-6 and CHI-290 1 km north of Discovery Camp CHI-310 CH-6 (approx. 13 km northwest of Discovery camp) Northeast of Discovery Camp (distance unknown)
Arctic Hare	Jun 22 to 29	2 observations of 2 hares	<ul style="list-style-type: none"> At CH-6 (approx. 13 km northwest of Discovery camp)
Lemming	Jun unspecified to 13	2 observations of 2 lemmings	<ul style="list-style-type: none"> At Sunrise Camp
Canada Goose	Jun 30	1 observation of 2 geese	<ul style="list-style-type: none"> Over CH-6 (approx. 13 km northwest of Discovery camp)
Goose	Jun 19	1 observation of 1 goose	<ul style="list-style-type: none"> Over Sunrise Camp
Ptarmigan	Jun unspecified	1 observation of 2 ptarmigan	<ul style="list-style-type: none"> At Sunrise Camp
July			
Caribou	Jul 2 to 26	14 distinct observations; with a total of 35 caribou (including 1 "young" age class and "calf") for this period	<ul style="list-style-type: none"> At CH-6 (approx. 13 km northwest of Discovery camp) Between Discovery Camp and drill site At CHI-261 Northwest of Discovery Camp (distance unknown) North of Discovery Camp (distance unknown) South of Discovery Camp (distance unknown) 3.2 km east of CHI-079 At CHI-451 At CHI-482
Arctic Hare	Jul 9 to 11	2 observations of 2 hares	<ul style="list-style-type: none"> At CH-6 (approx. 13 km northwest of Discovery camp) At CHI-393
Fox	Jul 17	1 observed	<ul style="list-style-type: none"> At Discovery Camp
Wolf	Jul 17	1 observed	<ul style="list-style-type: none"> At CH-6 (approx. 13 km northwest of Discovery camp)
Peregrine Falcon	Jul 9	1 observation of 2 Peregrine Falcons	<ul style="list-style-type: none"> Flying over CH-6 (approx. 13 km northwest of Discovery camp)
Snowy Owl	Jul 15	1 observed	<ul style="list-style-type: none"> Between CH6 and Discovery Camp

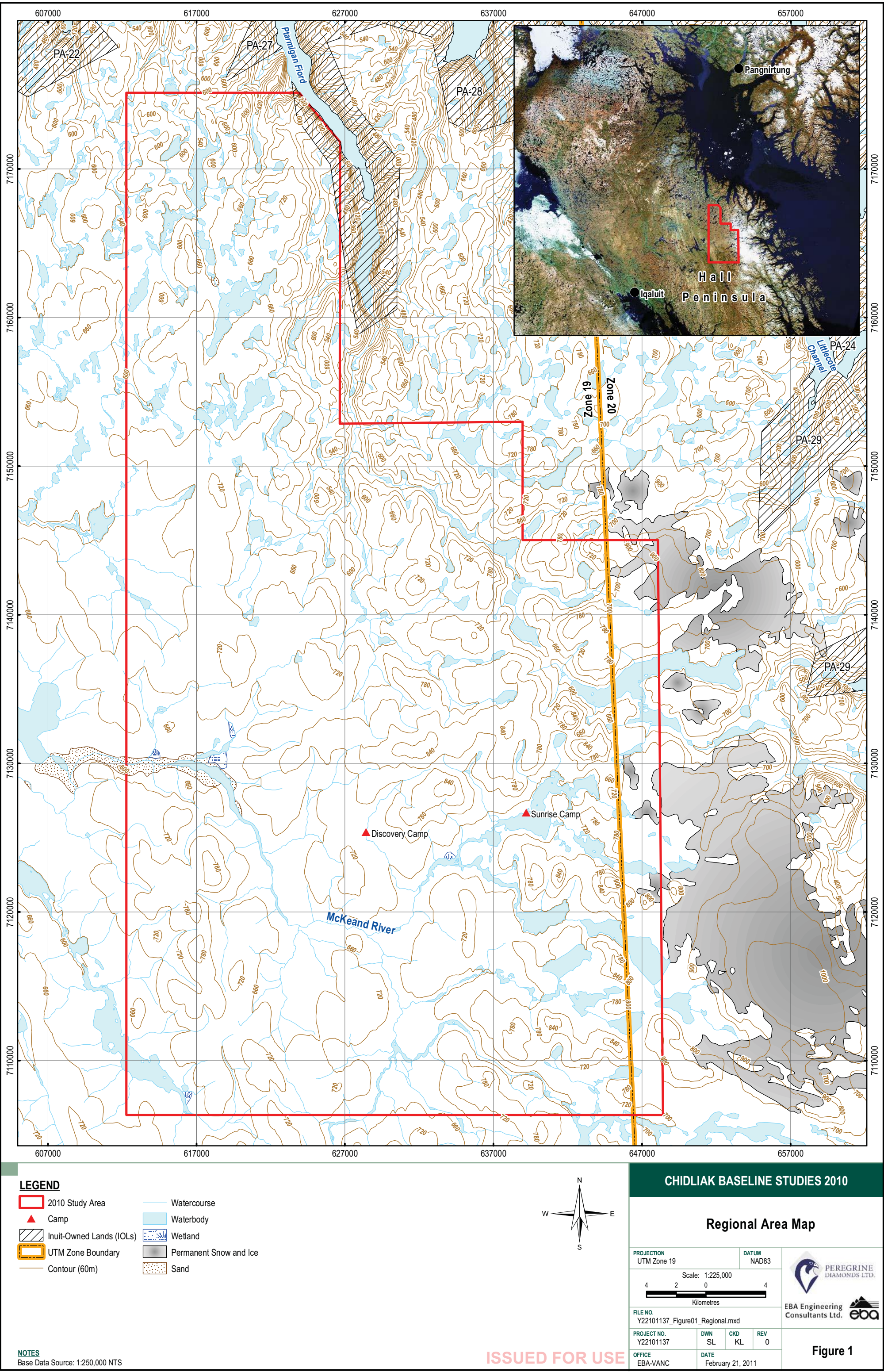
Table 24. Summary of Discovery and Sunrise Camps Wildlife Sighting Logs, 2010

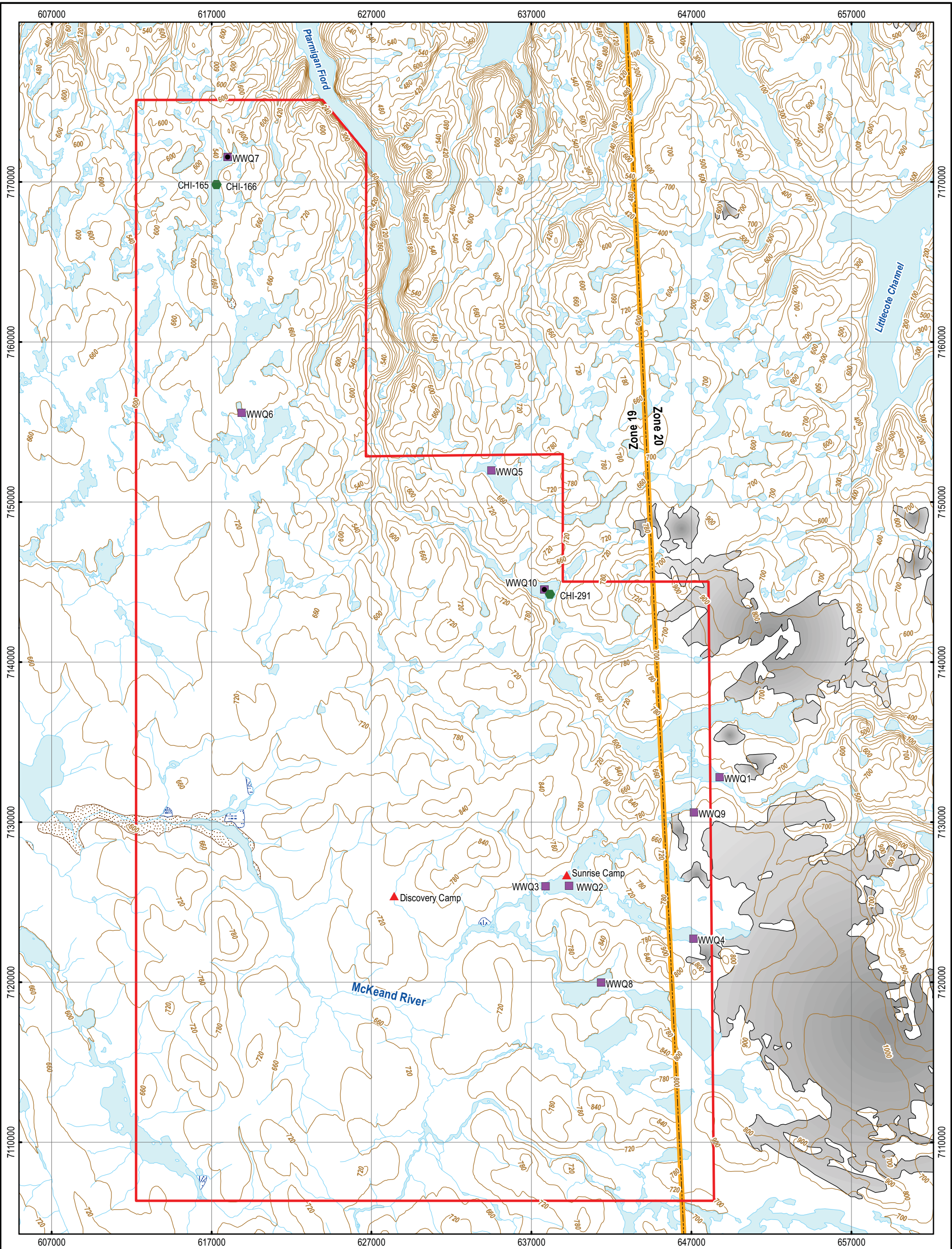
Species	Date	Observation(s)	Location of Observation(s) (approximate)
Ptarmigan	Jul 11	1 observation of 2 ptarmigan	<ul style="list-style-type: none"> At Sunrise Camp
Bird species	Jul 14	1 observed + nest with 4 eggs	<ul style="list-style-type: none"> At CHI-345
August			
Caribou	Aug 22 to 30	2 distinct observations; with a total of 3 caribou (including "calf") for this period	<ul style="list-style-type: none"> Near Discovery Camp (distance unknown) At CHI-320
Fox	Aug 5 to 9	2 observations of 2 foxes	<ul style="list-style-type: none"> At Discovery Camp
Weasel	Aug 4	1 observed	<ul style="list-style-type: none"> At Sunrise Camp
Hare	Aug 21	1 observed	<ul style="list-style-type: none"> 500 m west of Sunrise Camp
Ringed Seal	Aug 22	1 observed	<ul style="list-style-type: none"> Tawsig Fiord (approx. 30 km north of the study area)
September			
Caribou	Sept 2 to 10	4 distinct observations; with a total of 10 caribou for this period	<ul style="list-style-type: none"> 1.6 km east of Discovery Camp North of Discovery Camp (distance unknown) Near Discovery camp (distance unknown)
Hare	Sept 5	1 observed	<ul style="list-style-type: none"> 64 km north of Sunrise Camp (outside the study area)

FIGURES

Figure 1	Regional Area Map
Figure 2	Winter Water Quality Sampling Locations
Figure 3	Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 1 on April 9, 2010 (pre-drilling event)
Figure 4	Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 2 on April 8, 2010 (pre-drilling event)
Figure 5	Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 3 on April 10, 2010 (pre-drilling event)
Figure 6	Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 4 on April 8, 2010 (pre-drilling event)
Figure 7	Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 5 on April 8, 2010 (pre-drilling event)
Figure 8	Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 6 on April 8, 2010 (pre-drilling event)
Figure 9	Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 7 on April 7, 2010 (pre-drilling event)
Figure 10	Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 8 on April 9, 2010 (pre-drilling event)
Figure 11	Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 9 on April 10, 2010 (pre-drilling event)
Figure 12	Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 10 on April 10, 2010 (pre-drilling event)
Figure 13	Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 7 on June 2, 2010 (post-drilling event)
Figure 14	Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 10 on June 2, 2010 (post-drilling event)

Figure 15	Surface Water Quality and Stream Flow Stations, 2010
Figure 16	Fish and Fish Habitat Stations, 2010
Figure 17	Raptor, Waterfowl, and Water Bird Observations, 2010
Figure 18	Caribou and Carnivore Observations, 2010





LEGEND

- 2010 Study Area

Camp

Pre-Drilling Winter Water Quality Station

Post-Drilling Winter Water Quality Station

2010 Active Drill Target

UTM Zone Boundary

Contour (60m)

Watercourse

Waterbody

Wetland

Permanent Snow and Ice

Sand
-
- CHIDLIAK BASELINE STUDIES 2010
- Winter Water Quality Sampling Locations
- | | |
|---|----------------|
| PROJECTION
UTM Zone 19 | DATUM
NAD83 |
| Scale: 1:225,000 | |
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| OFFICE
EBA-VANC | CKD
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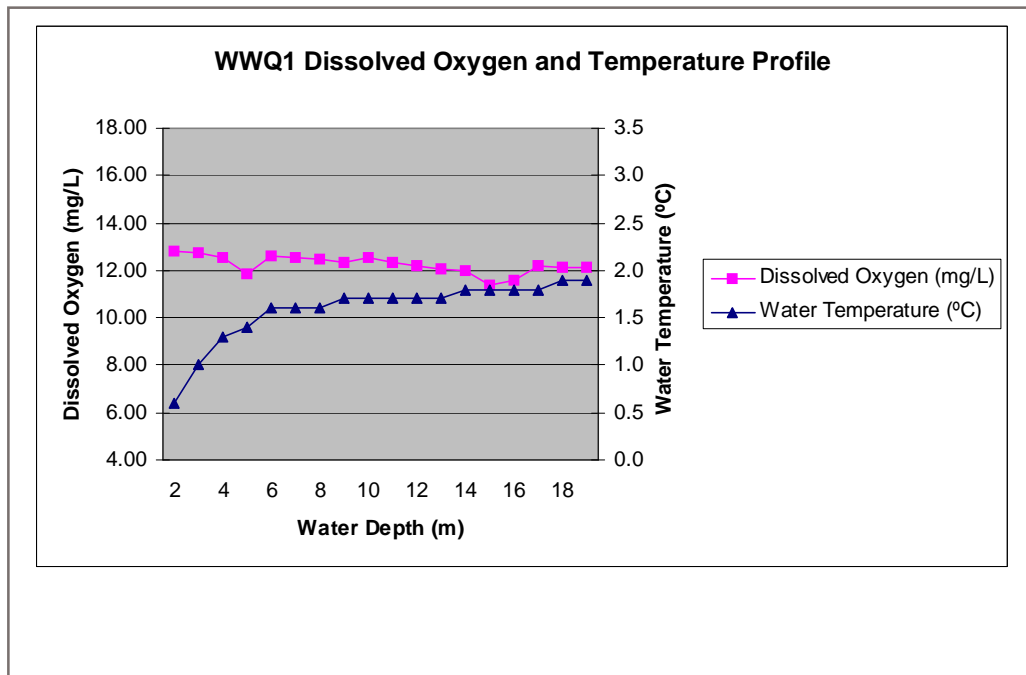


Figure 3: Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 1 on April 9, 2010 (pre-drilling event)

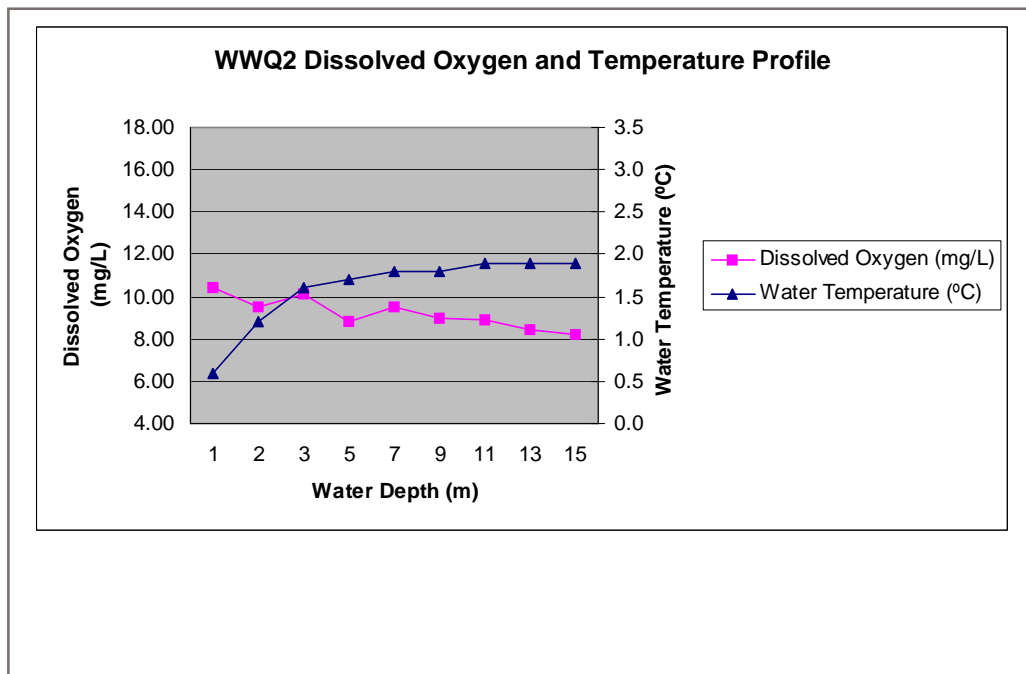


Figure 4: Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 2 on April 8, 2010 (pre-drilling event)

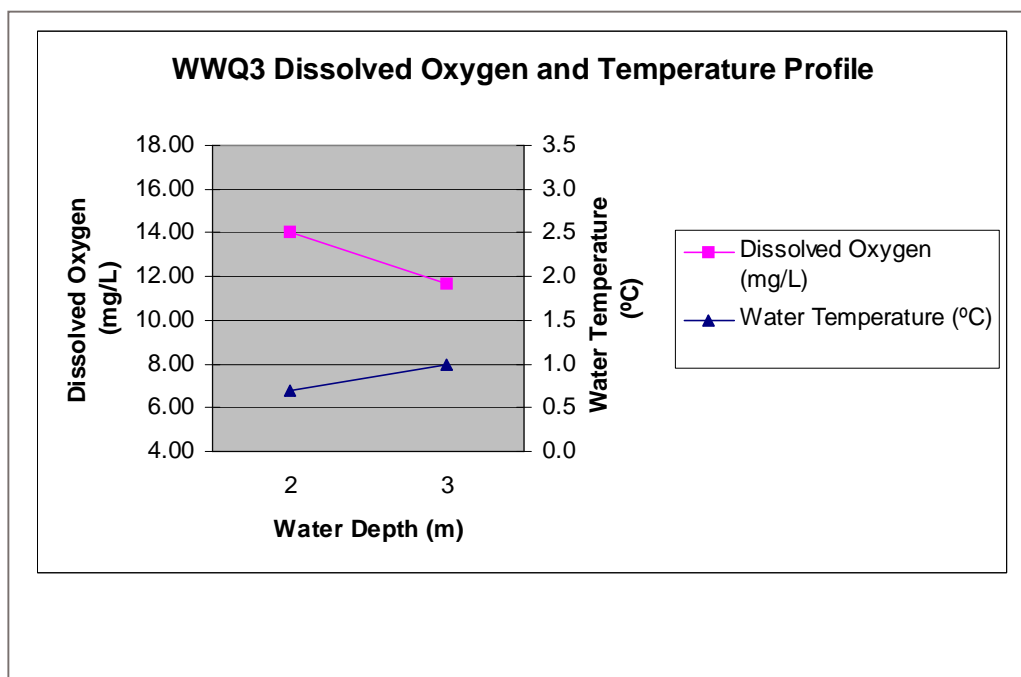


Figure 5: Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 3 on April 10, 2010 (pre-drilling event)

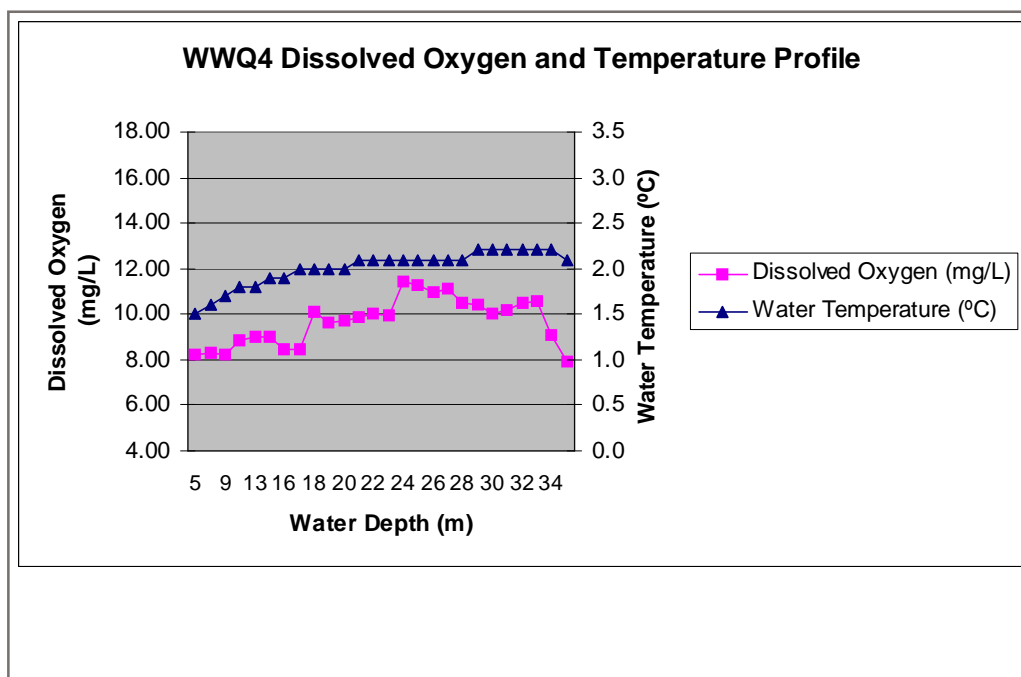


Figure 6: Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 4 on April 8, 2010 (pre-drilling event)

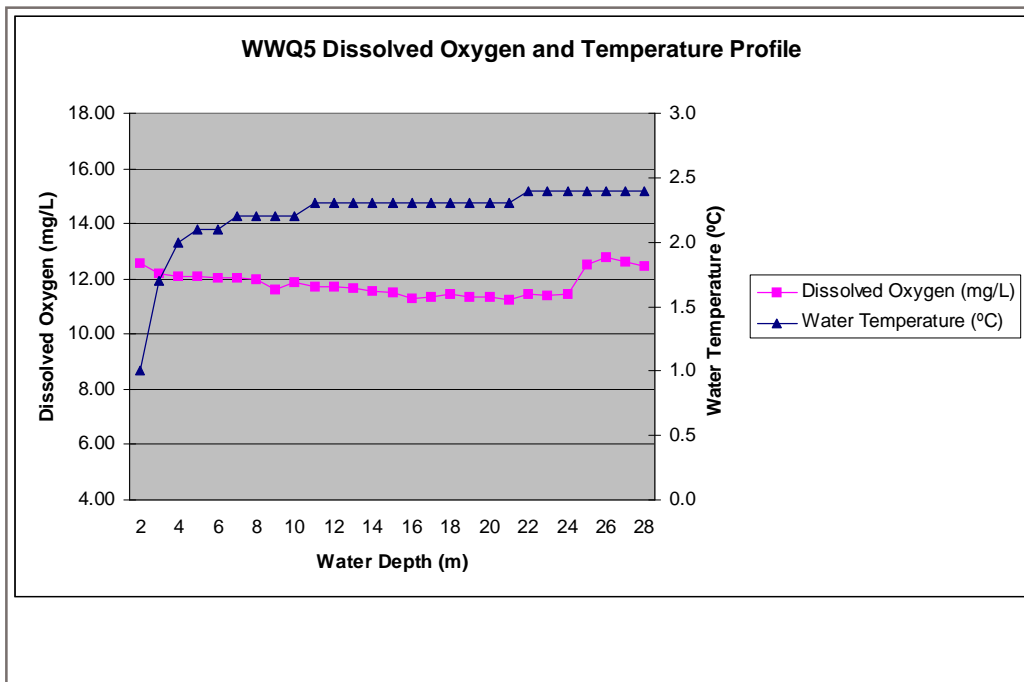


Figure 7: Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 5 on April 8, 2010 (pre-drilling event)

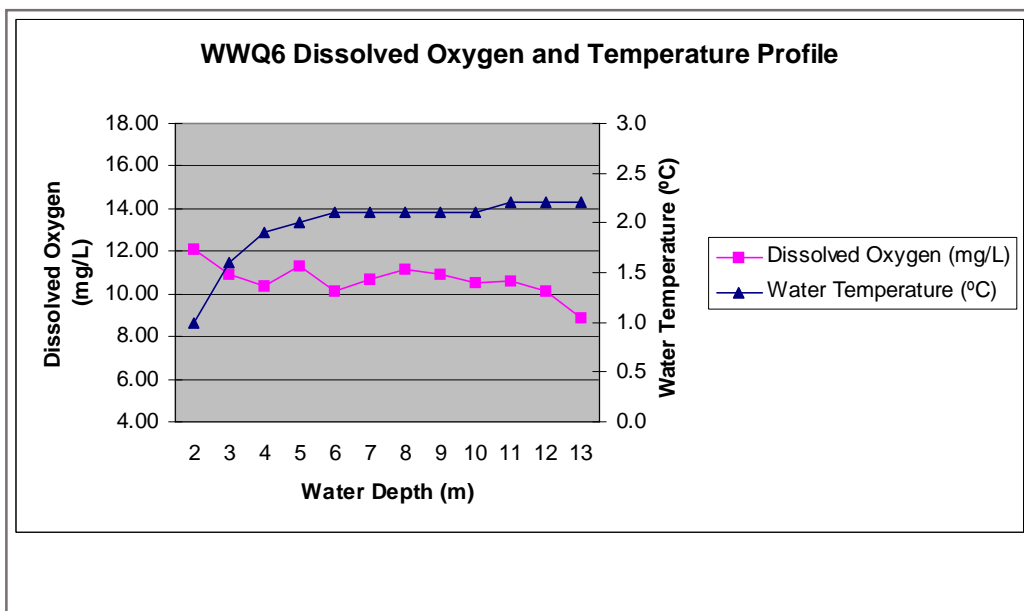


Figure 8: Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 6 on April 8, 2010 (pre-drilling event)

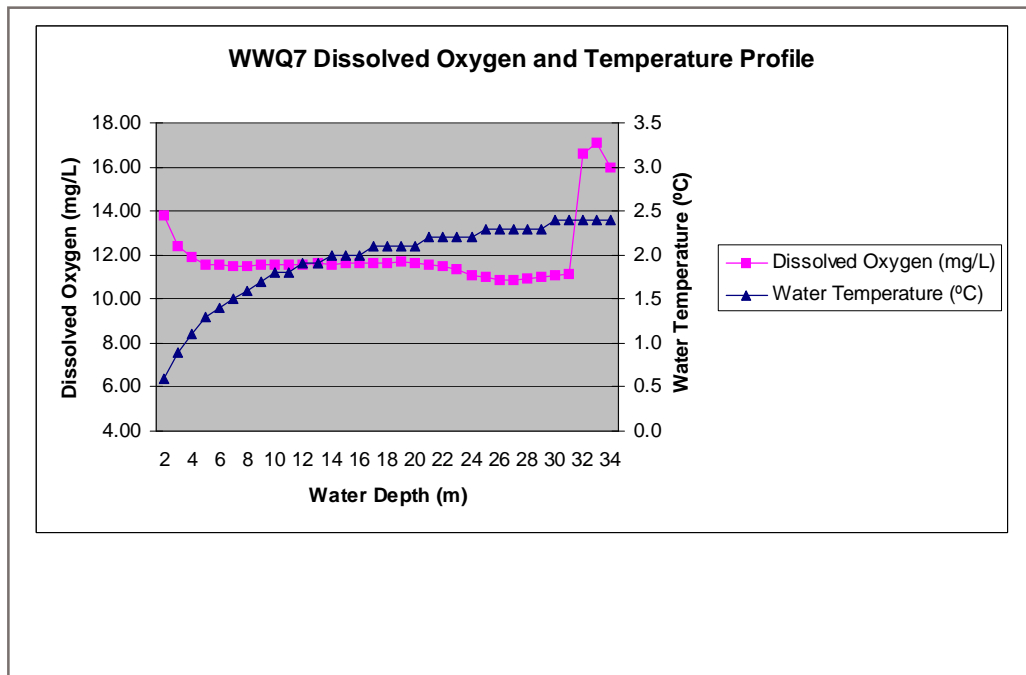


Figure 9: Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 7 on April 7, 2010 (pre-drilling event)

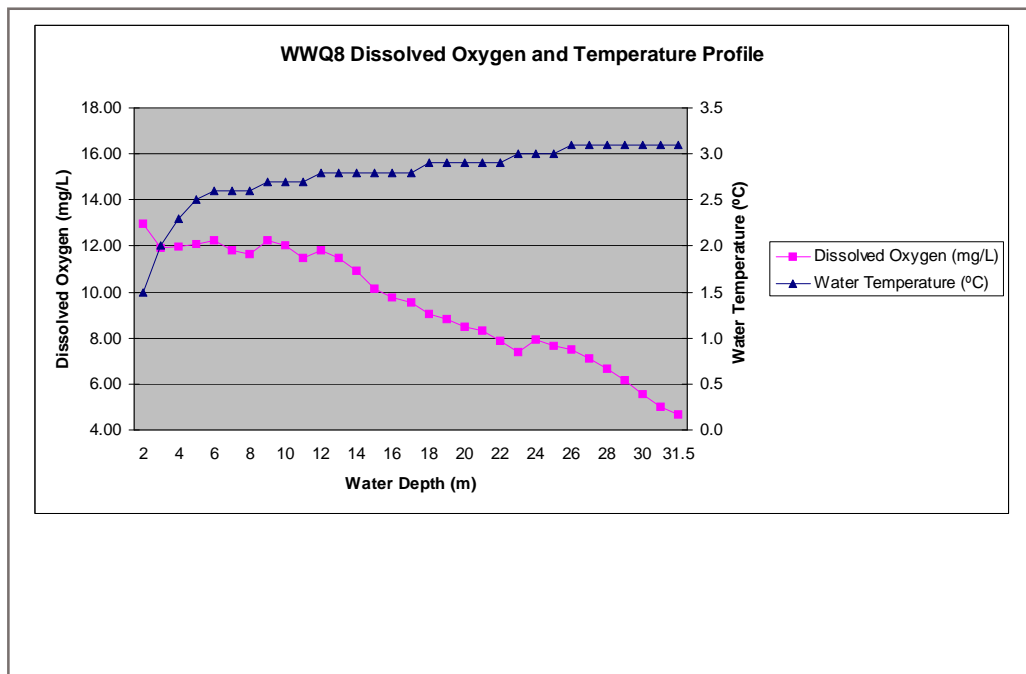


Figure 10: Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 8 on April 9, 2010 (pre-drilling event)

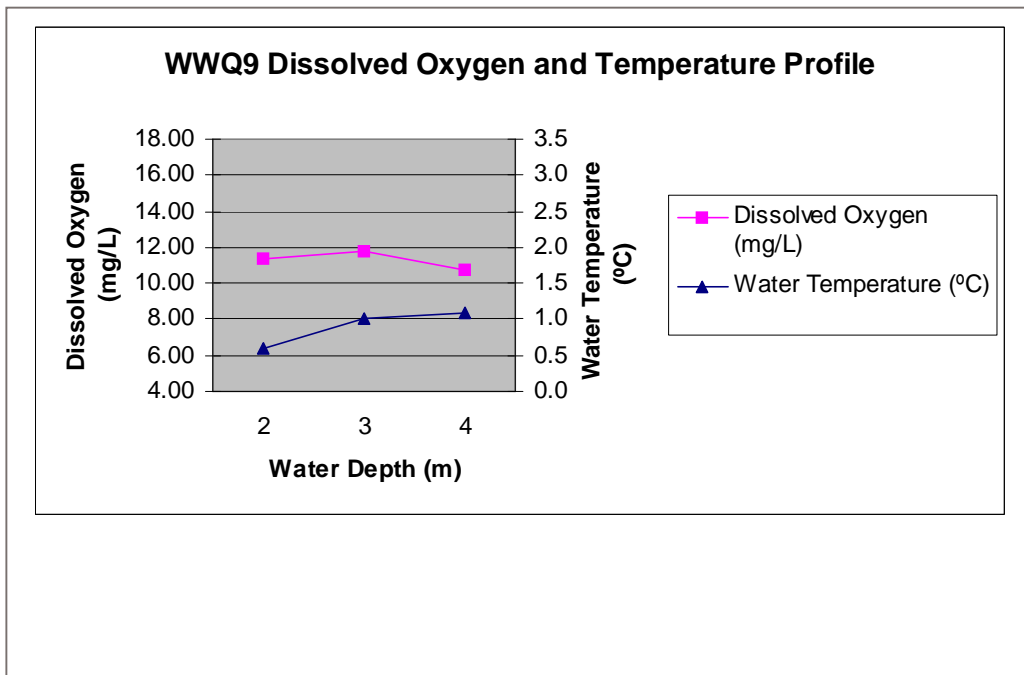


Figure 11: Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 9 on April 10, 2010 (pre-drilling event)

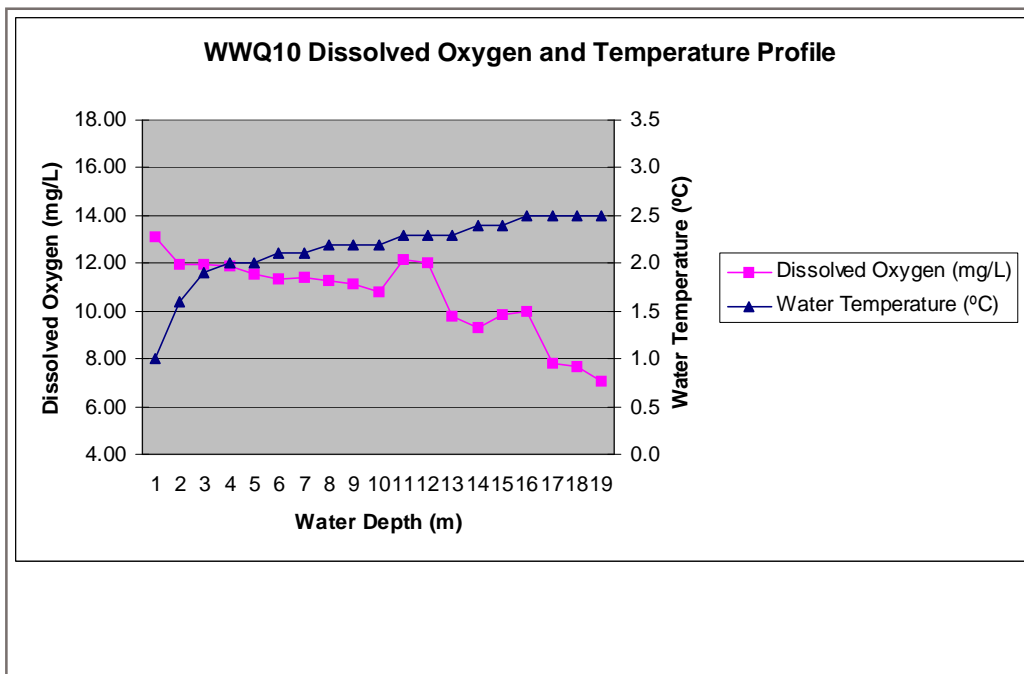


Figure 12: Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 10 on April 10, 2010 (pre-drilling event)

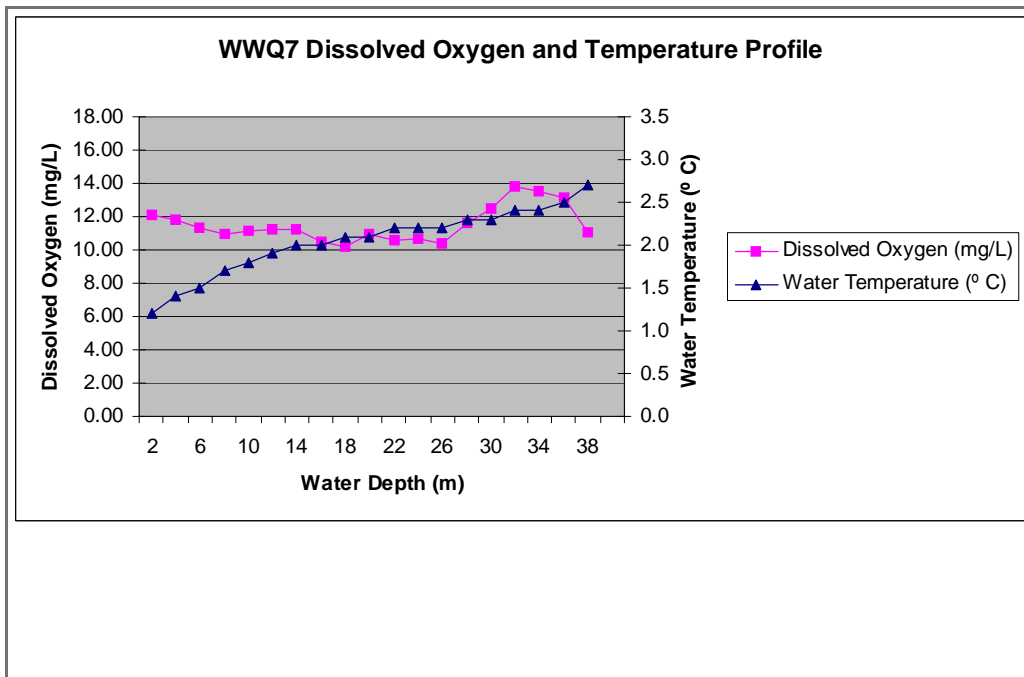


Figure 13: Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 7 on June 2, 2010 (post-drilling event)

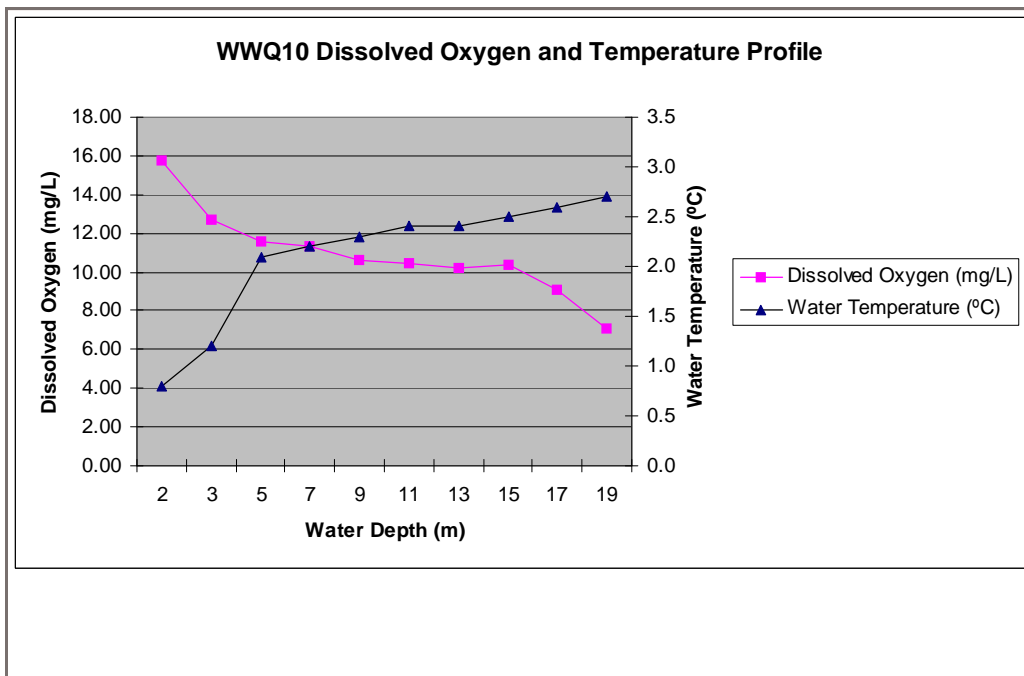
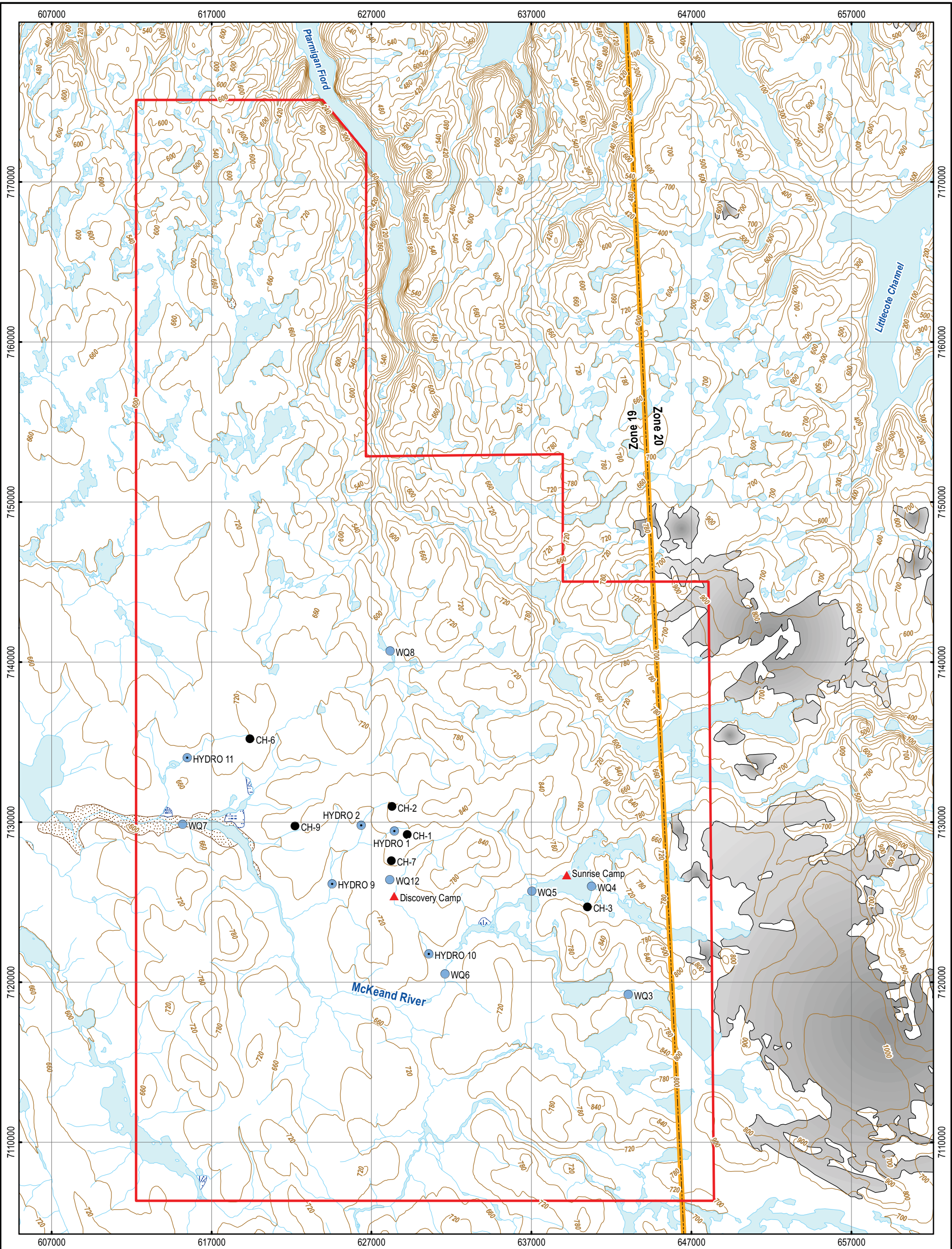


Figure 14: Dissolved Oxygen and Temperature Profile at Winter Water Quality Station 10 on June 2, 2010 (post-drilling event)



LEGEND

- 2010 Study Area

Camp

Surface Water Quality and Stream Flow Station

Surface Water Quality Station

Kimberlite Sites (CH#)

UTM Zone Boundary

Contour (60m)

Watercourse

Waterbody

Wetland

Permanent Snow and Ice

Sand
- W

E

S

CHIDLIAK BASELINE STUDIES 2010

Surface Water Quality
and
Stream Flow Stations, 2010

PROJECTION
UTM Zone 19

DATUM
NAD83

Scale: 1:225,000

4

2

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4

Kilometres

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OFFICE EBA-VANC	DATE February 21, 2011		

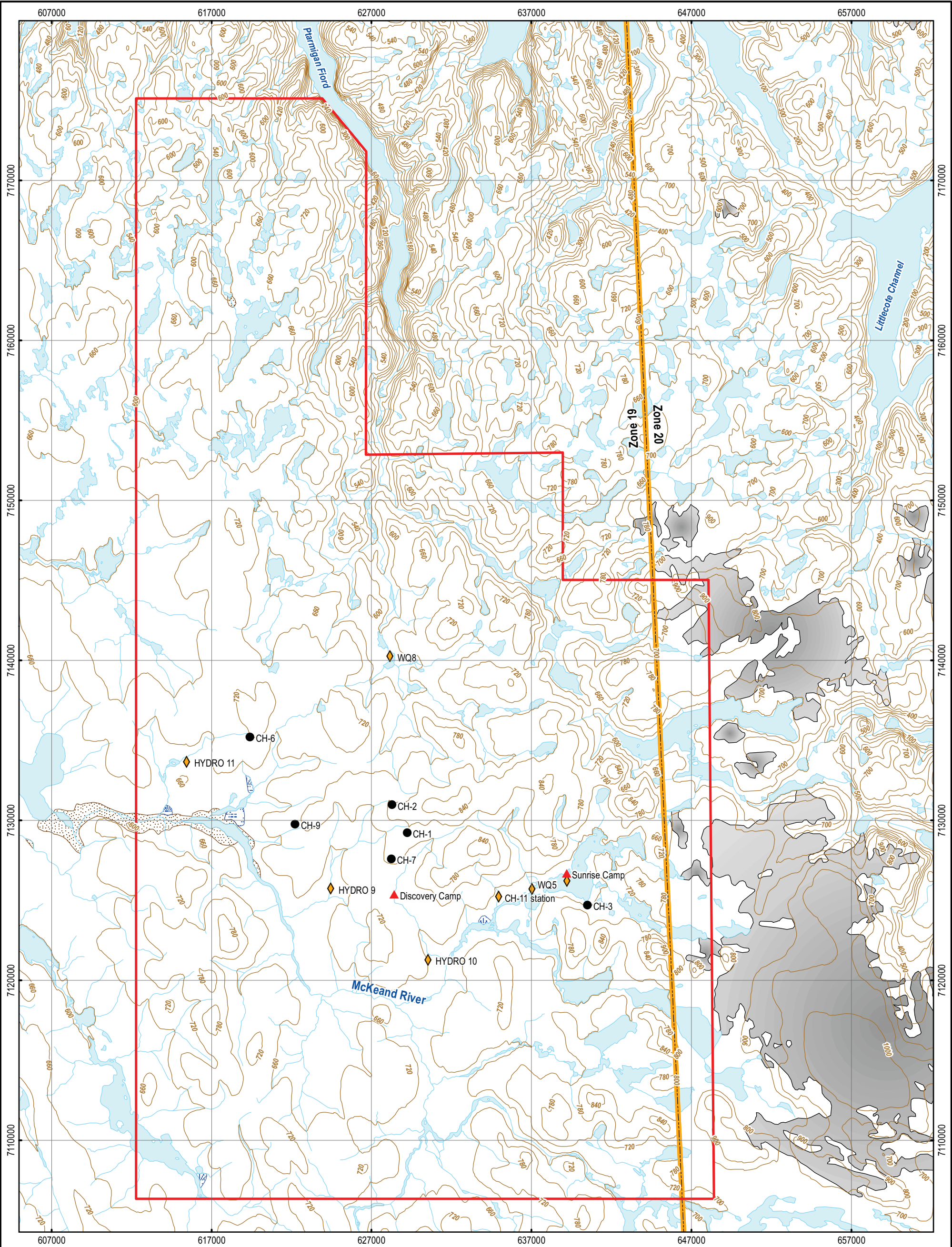
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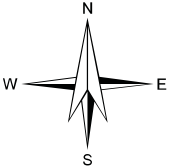
ISSUED FOR USE

Figure 15



LEGEND

- | | |
|---------------------------------------|------------------------|
| 2010 Study Area | Contour (60m) |
| Camp | Watercourse |
| Kimberlite Sites (CH#) | Waterbody |
| Fish and Fish Habitat Survey Location | Wetland |
| UTM Zone Boundary | Permanent Snow and Ice |
| | Sand |



CHIDLIAK BASELINE STUDIES 2010

Fish and Fish Habitat Stations, 2010

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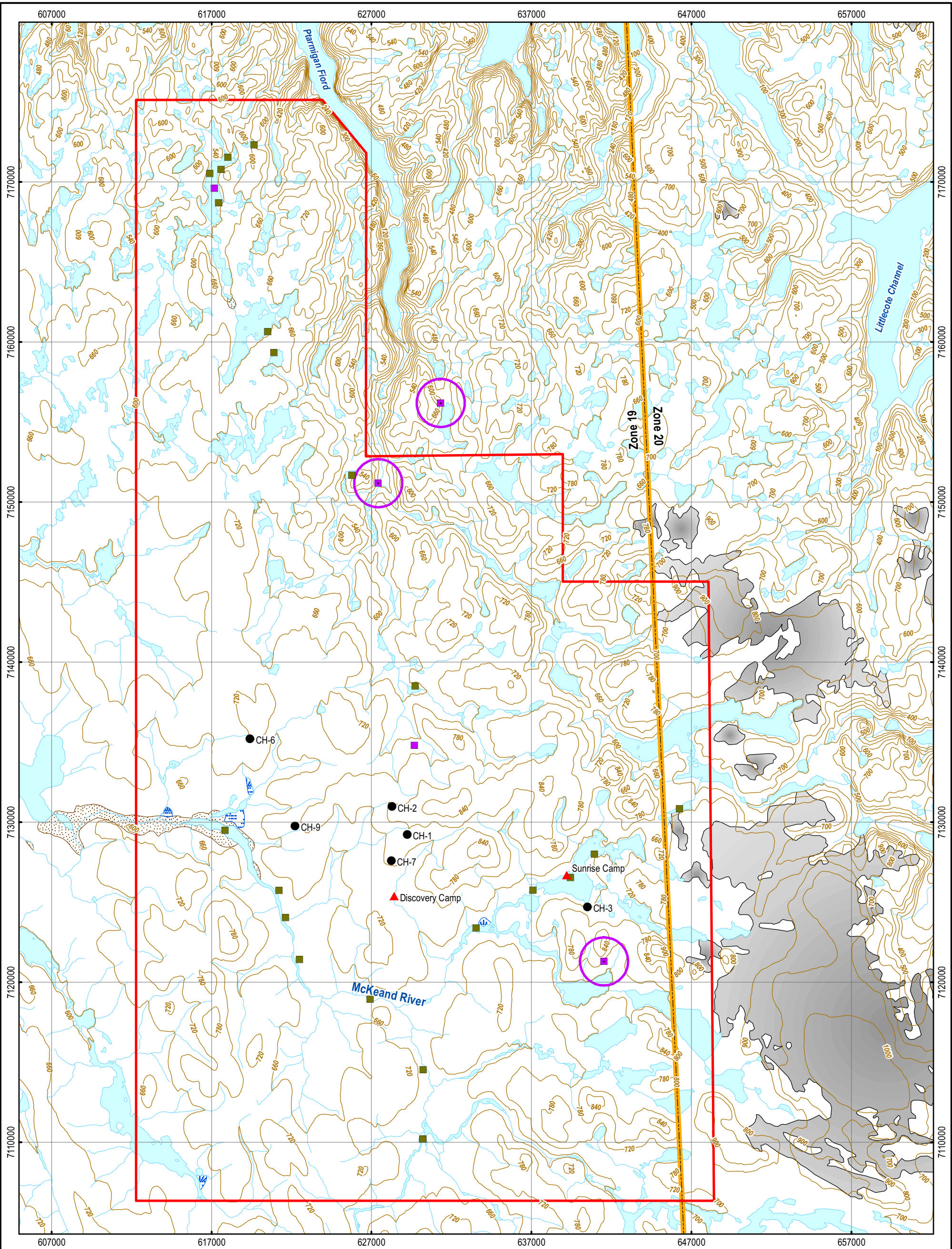
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NOTES
Base Data Source: 1:250,000 NTS

ISSUED FOR USE

Figure 16



LEGEND

- 2010 Study Area

Camp

Waterfowl/Water Bird Observation (Visual)

Raptor Observation (Visual)

Raptor Observation (Nest)

Raptor Sensitive Zone

Kimberlite Sites (CH#)
- UTM Zone Boundary

Contour (60m)

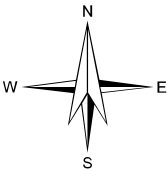
Watercourse

Waterbody

Wetland

Permanent Snow and Ice

Sand



CHIDLIAK BASELINE STUDIES 2010

Raptor, Waterfowl, and Water Bird Observations, 2010

PROJECTION UTM Zone 19	DATUM NAD83
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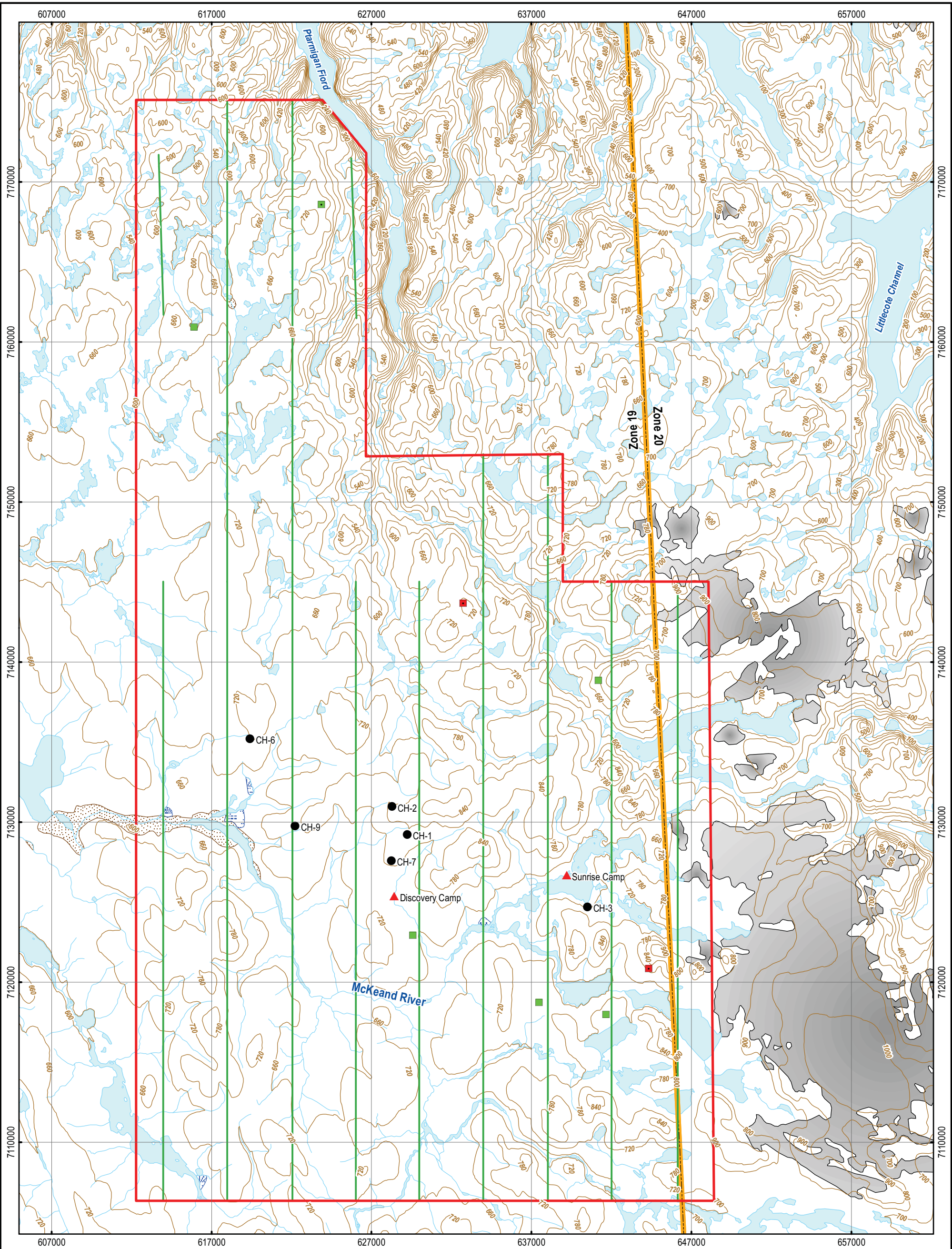
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NOTES
Base Data Source: 1:250,000 NTS

ISSUED FOR USE

Figure 17



LEGEND

- 2010 Study Area

2010 Caribou Survey Transects

Camp

Caribou Observation (Visual)

Caribou Observation (Sign)

Carnivore Observation (Sign)

Kimberlite Sites (CH#)

UTM Zone Boundary

Contour (60m)

Watercourse

Waterbody

Wetland

Permanent Snow and Ice

Sand
- North Arrow

CHIDLIAK BASELINE STUDIES 2010

Caribou and Carnivore Observations, 2010

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NOTES
Base Data Source: 1:250,000 NTS

ISSUED FOR USE

Figure 18

PHOTOGRAPHS

Photo 1	During the early July field program, ice remained on the majority of lakes; however, the inlets and outlets were open as seen here at surface water quality station WQ3.
Photo 2	During the early July field program, the upper reaches of watercourses were dry, such as at Hydro 1 seen here.
Photo 3	Hydro 2 stream flow station during the early July field program had the narrowest wetted width of measured watercourses.
Photo 4	Stream flow station Hydro 11 had the widest wetted width during the early and late July field events.
Photo 5	Hydro 9 watercourse overview, looking downstream (late July field program).
Photo 6	Hydro 9 upstream section of watercourse, upstream view (late July field program).
Photo 7	Downstream section of Hydro 9 watercourse, downstream view (late July field program).
Photo 8	Overview of Hydro 10 watercourse, upstream view (late July field program).
Photo 9	Downstream section of Hydro 10 watercourse, downstream view (late July field program).
Photo 10	Upstream section of Hydro 11 watercourse, upstream view (late July field program).
Photo 11	Downstream section of Hydro 11 watercourse, downstream view (late July field program).
Photo 12	Overview of CH 11 watercourse channel, upstream view (late July field program).
Photo 13	Overview of CH 11 watercourse channel, upstream view from a distance.
Photo 14	Overview of WQ 5 watercourse, downstream view (late July field program).
Photo 15	Upstream section of WQ 5 watercourse, upstream view.
Photo 16	Downstream section of WQ 5 watercourse, downstream view.
Photo 17	Upstream section of WQ 8 watercourse, upstream view (late July field program).
Photo 18	Downstream section of WQ 8 watercourse, downstream view.
Photo 19	Arctic char captured and released during an angling session at Sunrise Camp lake.

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- Photo 20 A probable Peregrine Falcon scrape site observed during the aerial raptor survey (early July field program).
- Photo 21 An active Rough-legged Hawk nest (adult observed in nest) documented during the aerial raptor survey (nest seen bottom centre of the photo).

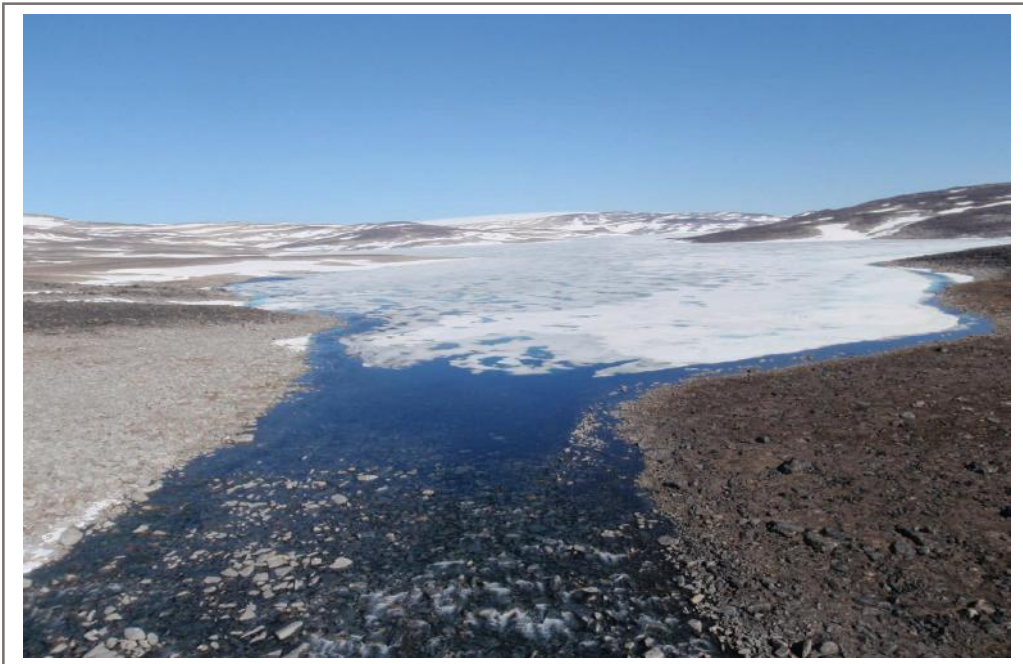


Photo 1: During the early July field program, ice remained on the majority of lakes; however, the inlets and outlets were open as seen here at surface water quality station WQ3.

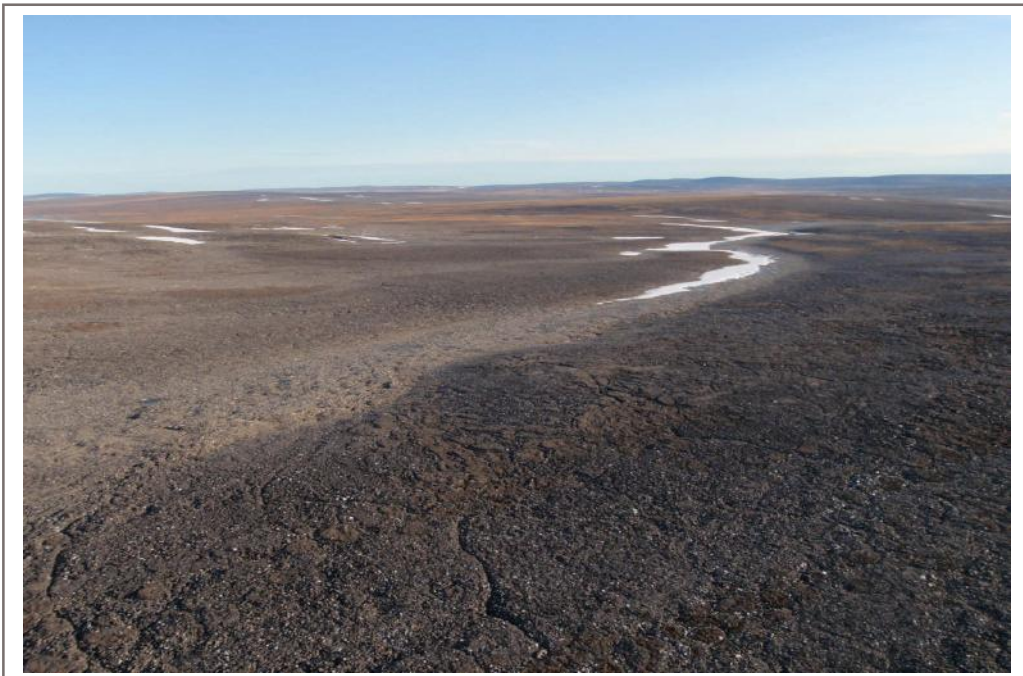


Photo 2: During the early July field program, the upper reaches of watercourses were dry, such as at Hydro 1 seen here.



Photo 3: Hydro 2 stream flow station during the early July field program had the narrowest wetted width of measured watercourses.



Photo 4: Stream flow station Hydro 11 had the widest wetted width during the early and late July field events.

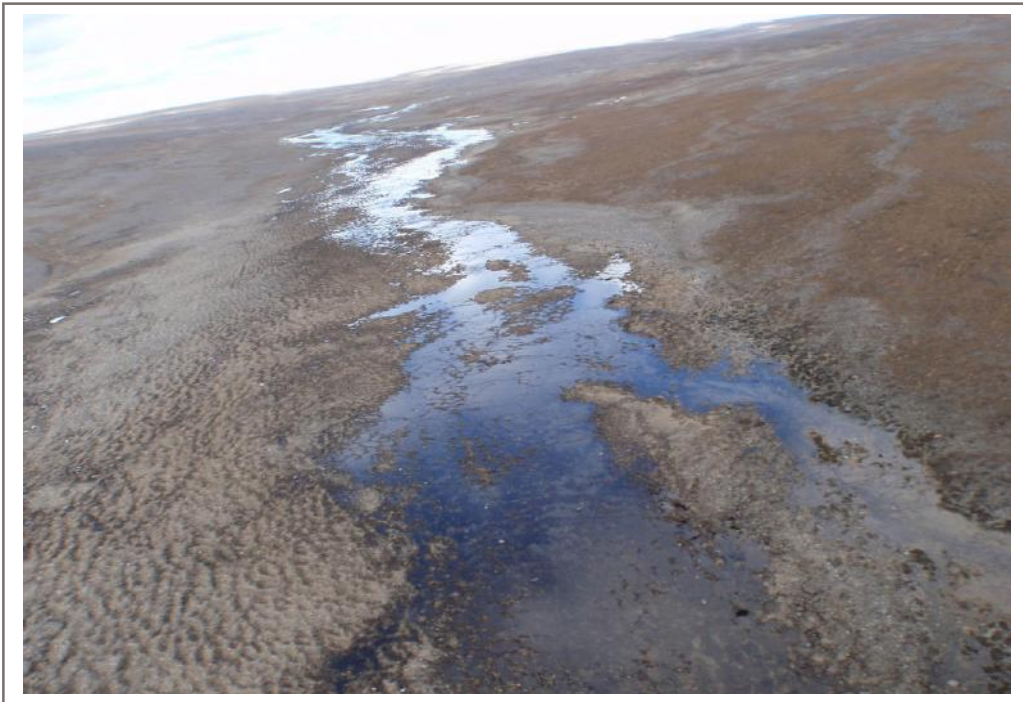


Photo 5: Hydro 9 watercourse overview, looking downstream (late July field program).



Photo 6: Hydro 9 upstream section of watercourse, upstream view (late July field program).



Photo 7: Downstream section of Hydro 9 watercourse, downstream view (late July field program).

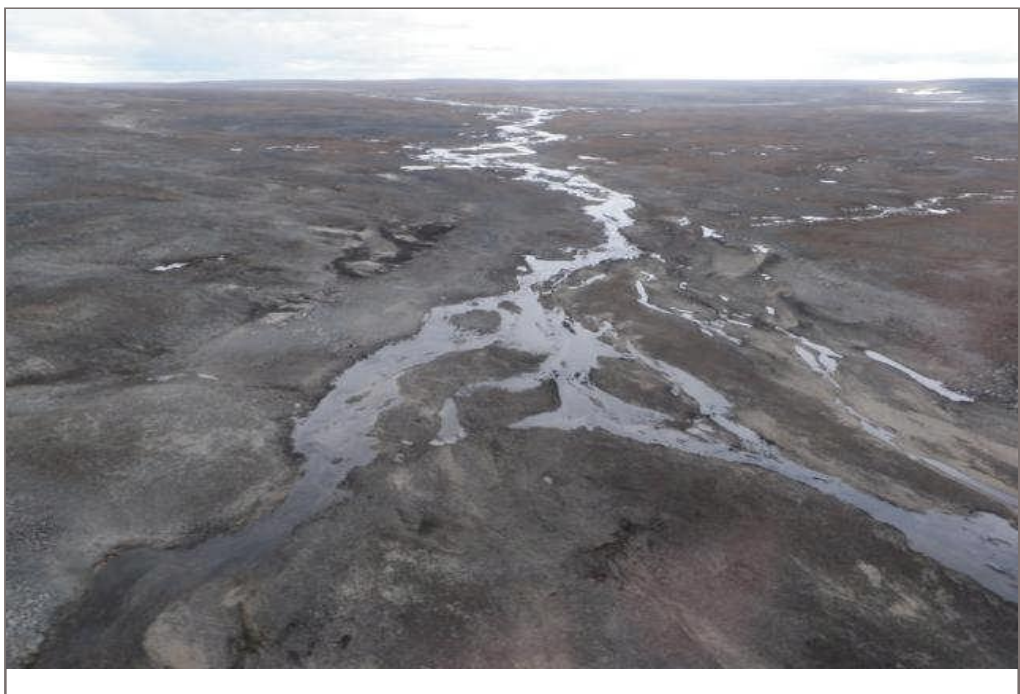


Photo 8: Overview of Hydro 10 watercourse, upstream view (late July field program).



Photo 9: Downstream section of Hydro 10 watercourse, downstream view (late July field program).



Photo 10: Upstream section of Hydro 11 watercourse, upstream view (late July field program).



Photo 11: Downstream section of Hydro 11 watercourse, downstream view (late July field program).



Photo 12: Overview of CH 11 watercourse channel, upstream view (late July field program).

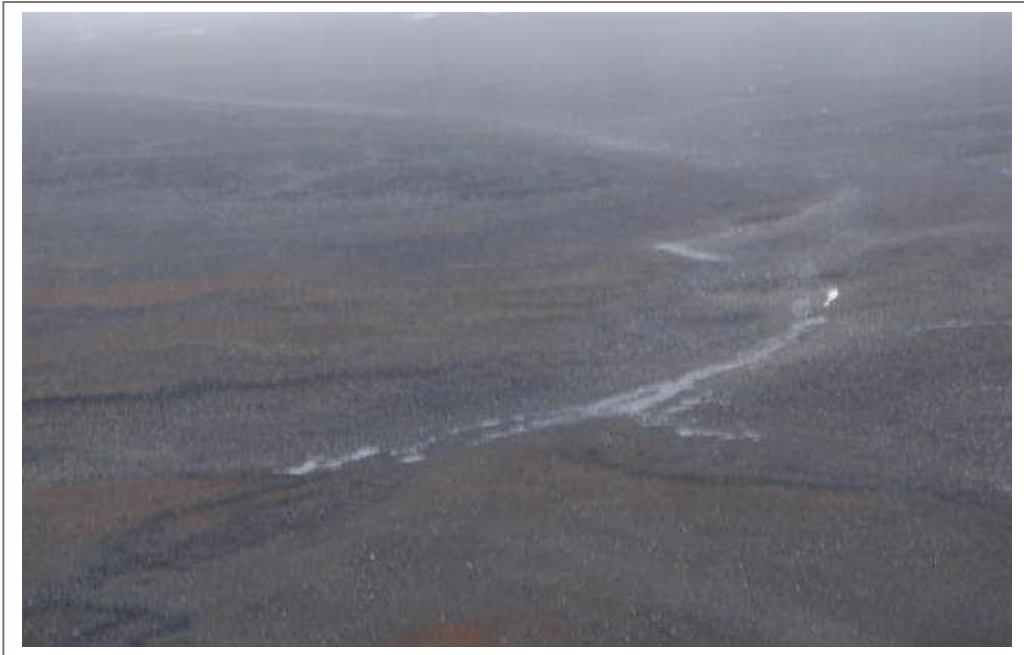


Photo 13: Overview of CH 11 watercourse channel, upstream view from a distance.



Photo 14: Overview of WQ 5 watercourse, downstream view (late July field program).



Photo 15: Upstream section of WQ 5 watercourse, upstream view.



Photo 16: Downstream section of WQ 5 watercourse, downstream view.



Photo 17: Upstream section of WQ 8 watercourse, upstream view (late July field program).



Photo 18: Downstream section of WQ 8 watercourse, downstream view.



Photo 19: Arctic char captured and released during an angling session at Sunrise Camp lake.



Photo 20: A probable Peregrine Falcon scrape site observed during the aerial raptor survey (early July field program).



Photo 21: An active Rough-legged Hawk nest (adult observed in nest) documented during the aerial raptor survey (nest seen bottom centre of the photo).

APPENDIX A

APPENDIX A EBA'S GENERAL CONDITIONS

GENERAL CONDITIONS

GEO-ENVIRONMENTAL REPORT

This report incorporates and is subject to these “General Conditions”.

1.0 USE OF REPORT AND OWNERSHIP

This report pertains to a specific site, a specific development, and a specific scope of work. It is not applicable to any other sites, nor should it be relied upon for types of development other than those to which it refers. Any variation from the site or proposed development would necessitate a supplementary investigation and assessment.

This report and the assessments and recommendations contained in it are intended for the sole use of EBA's client. EBA does not accept any responsibility for the accuracy of any of the data, the analysis or the recommendations contained or referenced in the report when the report is used or relied upon by any party other than EBA's Client unless otherwise authorized in writing by EBA. Any unauthorized use of the report is at the sole risk of the user.

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2.0 ALTERNATE REPORT FORMAT

Where EBA submits both electronic file and hard copy versions of reports, drawings and other project-related documents and deliverables (collectively termed EBA's instruments of professional service), only the signed and/or sealed versions shall be considered final and legally binding. The original signed and/or sealed version archived by EBA shall be deemed to be the original for the Project.

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4.0 INFORMATION PROVIDED TO EBA BY OTHERS

During the performance of the work and the preparation of the report, EBA may rely on information provided by persons other than the Client. While EBA endeavours to verify the accuracy of such information when instructed to do so by the Client, EBA accepts no responsibility for the accuracy or the reliability of such information which may affect the report.

APPENDIX B

APPENDIX B WINTER WATER QUALITY LABORATORY REPORTS



EBA ENG CONSULTANTS LTD
ATTN: SHIRLEY STANDAFER-PFISTER
PEREGRINE DIAMONDS LTD.
201-1250 HOMER STREET
VANCOUVER BC V6B 1C6

Phone: --

Date Received: 13-APR-10
Report Date: 07-JAN-11 13:38 (MT)
Version: FINAL REV. 3

Certificate of Analysis

Lab Work Order #: L876582
Project P.O. #: NOT SUBMITTED
Job Reference: Y22101137
Legal Site Desc:
C of C Numbers: 10-004

Comments: ADDITIONAL 25-NOV-10 13:53
ADDITIONAL 25-NOV-10 13:53

12-MAY-10: Revised Report: Cadmium included on -18.
26-NOV-10: Revised Report: Dissolved Strontium included.
07-JAN-11:

Geraldyn Gouthro
Client Services Manager

[This report shall not be reproduced except in full without the written authority of the Laboratory.]

ADDRESS: 9936-67 Avenue, Edmonton, AB T6E 0P5 Canada | Phone: +1 780 413 5227 | Fax: +1 780 437 2311
ALS CANADA LIMITED Part of the ALS Group A Campbell Brothers Limited Company

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-1 WWQ1-A Sampled By: KL on 09-APR-10 Matrix: WATER DIS Metals CCME Fresh Water Aquatic Life Diss. Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Dissolved	0.000022	RRV	0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low) Antimony (Sb)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved	<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved	<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved	0.00167		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES Calcium (Ca)-Dissolved	<.5		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	<0.10		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg) Hardness (as CaCO3)	<1.3		1.3	mg/L		19-APR-10	
Mercury (Hg) - Dissolved Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life Hardness (from Total Ca and Mg) Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg) Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total	0.000013	RRV	0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low) Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-1	WWQ1-A							
Sampled By:	KL on 09-APR-10							
Matrix:	WATER							
Total Metals in Water by ICPMS (Low)								
Chromium (Cr)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total		<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total		<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total		<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total		<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total		<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total		0.00144	RRV	0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total		<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total		<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total		<0.10		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total		<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters								
Ammonia-N		<0.0050		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		<0.10		0.10	NTU		15-APR-10	R1236188
pH and Conductivity								
pH		6.27		0.10	pH		14-APR-10	R1235627
Conductivity (EC)		4.94		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-2	WWQ1-B							
Sampled By:	KL on 09-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-2 WWQ1-B							
Sampled By: KL on 09-APR-10							
Matrix: WATER							
Diss. Metals in Water by ICPMS (Low)							
Antimony (Sb)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved	<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved	<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved	0.00171		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES							
Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	<0.10		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-2	WWQ1-B							
Sampled By:	KL on 09-APR-10							
Matrix:	WATER							
Total Metals in Water by ICPMS (Low)								
Molybdenum (Mo)-Total		<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total		<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total		<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total		0.00164	RRV	0.00020	mg/L		26-APR-10	R1242465
Thallium (Tl)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total		<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total		<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total		<0.10		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total		<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters								
Ammonia-N		<0.0050		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		<0.10		0.10	NTU		15-APR-10	R1236188
pH and Conductivity								
pH		6.10		0.10	pH		14-APR-10	R1235627
Conductivity (EC)		4.94		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-3	WWQ2-A							
Sampled By:	KL on 08-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-3 WWQ2-A							
Sampled By: KL on 08-APR-10							
Matrix: WATER							
Diss. Metals in Water by ICPMS (Low)							
Boron (B)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved	<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved	0.00219		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES							
Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	0.11		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-3	WWQ2-A							
Sampled By: KL on 08-APR-10								
Matrix: WATER								
Total Metals in Water by ICPMS (Low)								
Strontium (Sr)-Total		0.00193		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total		<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total		<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total		<0.10		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total		<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters								
Ammonia-N		0.0058		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		<0.10		0.10	NTU		15-APR-10	R1236188
pH and Conductivity								
pH		6.19		0.10	pH		14-APR-10	R1235627
Conductivity (EC)		5.11		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-4	WWQ2-B							
Sampled By: KL on 08-APR-10								
Matrix: WATER								
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981

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

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-4 WWQ2-B							
Sampled By: KL on 08-APR-10							
Matrix: WATER							
Diss. Metals in Water by ICPMS (Low)							
Lead (Pb)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved	<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved	0.00227		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES							
Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	0.13		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00203		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-4	WWQ2-B							
Sampled By:	KL on 08-APR-10							
Matrix:	WATER							
Total Metals in Water by ICPMS (Low)								
Uranium (U)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total		<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total		<0.10		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total		<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters								
Ammonia-N		0.0067		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		0.13		0.10	NTU		15-APR-10	R1236188
pH and Conductivity								
pH		6.18		0.10	pH		14-APR-10	R1235627
Conductivity (EC)		5.21		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-5	WWQ2-C							
Sampled By:	KL on 08-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-5 WWQ2-C							
Sampled By: KL on 08-APR-10							
Matrix: WATER							
Diss. Metals in Water by ICPMS (Low)							
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved	0.00229		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES							
Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	0.13		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00203		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES							

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-5	WWQ2-C							
Sampled By:	KL on 08-APR-10							
Matrix:	WATER							
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total		<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total		<0.10		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total		<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters								
Ammonia-N		0.0072		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		0.12		0.10	NTU		15-APR-10	R1236188
pH and Conductivity								
pH		6.13		0.10	pH		14-APR-10	R1235627
Conductivity (EC)		5.28		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-6	WWQ3-A							
Sampled By:	KL on 10-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved		0.00348		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-6 WWQ3-A							
Sampled By: KL on 10-APR-10							
Matrix: WATER							
Diss. Metals in Water by ICPMS (Low)							
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES							
Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	0.17		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00287		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	0.15		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		15-APR-10	R1236924

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-6	WWQ3-A							
Sampled By:	KL on 10-APR-10							
Matrix:	WATER							
Total Metals in Water by ICPOES								
Potassium (K)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total		<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters								
Ammonia-N		0.0105		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		0.12		0.10	NTU		15-APR-10	R1236188
pH and Conductivity								
pH		6.29		0.10	pH		14-APR-10	R1235627
Conductivity (EC)		6.87		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		0.44		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		0.44		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-7	WWQ4-A(HOLD)							
Sampled By:	KL on 08-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved		0.00401		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-7 WWQ4-A(HOLD) Sampled By: KL on 08-APR-10 Matrix: WATER							
Diss. Metals in Water by ICPMS (Low) Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	<0.10		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg) Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life Hardness (from Total Ca and Mg) Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg) Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low) Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00386	RRV	0.00020	mg/L		26-APR-10	R1242465
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	<0.10		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total	<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters Ammonia-N	<0.0050		0.0050	mg/L		30-APR-10	R1246041

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

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Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-7	WWQ4-A(HOLD)							
Sampled By: KL on 08-APR-10								
Matrix: WATER								
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		0.21	RRV	0.10	NTU		22-APR-10	R1241043
pH and Conductivity								
pH		6.16		0.10	pH		15-APR-10	R1236345
Conductivity (EC)		4.65		0.20	uS/cm		15-APR-10	R1236345
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		15-APR-10	R1236788
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		16-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		15-APR-10	R1236788
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-8	WWQ4-B(HOLD)							
Sampled By: KL on 08-APR-10								
Matrix: WATER								
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved		0.00384		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved		<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES								
Calcium (Ca)-Dissolved		<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved		<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved		<0.10		0.10	mg/L		16-APR-10	R1237152

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-8 WWQ4-B(HOLD)							
Sampled By: KL on 08-APR-10							
Matrix: WATER							
Dissolved Metals in Water by ICPOES							
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00384	RRV	0.00020	mg/L		26-APR-10	R1242465
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	<0.10		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total	<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters							
Ammonia-N	0.0095		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total	<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon	<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids	<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity	<0.10		0.10	NTU		20-APR-10	R1239139

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-8	WWQ4-B(HOLD)							
Sampled By:	KL on 08-APR-10							
Matrix:	WATER							
pH and Conductivity								
pH		6.05		0.10	pH		15-APR-10	R1236345
Conductivity (EC)		4.52		0.20	uS/cm		15-APR-10	R1236345
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		15-APR-10	R1236788
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		16-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		15-APR-10	R1236788
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-9	WWQ4-C(HOLD)							
Sampled By:	KL on 08-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved		0.00396		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved		<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES								
Calcium (Ca)-Dissolved		<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved		<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved		<0.10		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved		<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved		<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved		<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)								

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-9 WWQ4-C(HOLD)							
Sampled By: KL on 08-APR-10							
Matrix: WATER							
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00399	RRV	0.00020	mg/L		26-APR-10	R1242465
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	<0.10		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total	<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters							
Ammonia-N	0.0072	RRV	0.0050	mg/L		01-MAY-10	R1246205
Phosphorus, Total	<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon	<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids	<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity	0.12	RRV	0.10	NTU		20-APR-10	R1239139
pH and Conductivity							
pH	6.07		0.10	pH		15-APR-10	R1236345
Conductivity (EC)	4.66		0.20	uS/cm		15-APR-10	R1236345
Total Nitrogen							

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-9	WWQ4-C(HOLD)							
Sampled By:	KL on 08-APR-10							
Matrix:	WATER							
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		15-APR-10	R1236788
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		16-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		15-APR-10	R1236788
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-10	WWQ5-A(HOLD)							
Sampled By:	KL on 08-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		0.0015		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved		0.00154		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved		0.0087	RRVAP	0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES								
Calcium (Ca)-Dissolved		<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved		<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved		0.11		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved		<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved		<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved		<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)								
Hardness (as CaCO3)		<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved								
Mercury (Hg)-Dissolved		<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								

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

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-10 WWQ5-A(HOLD) Sampled By: KL on 08-APR-10 Matrix: WATER							
Hardness (from Total Ca and Mg) Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg) Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total	0.0077		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low) Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00139		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	0.10		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total	<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters Ammonia-N	0.0054		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total	<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon	<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids	<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity	0.13		0.10	NTU		15-APR-10	R1236188
pH and Conductivity pH	6.01		0.10	pH		15-APR-10	R1236345
Conductivity (EC)	5.24		0.20	uS/cm		15-APR-10	R1236345
Total Nitrogen Nitrate as N by IC Nitrate (as N)	<0.050		0.050	mg/L		15-APR-10	R1236788
Nitrate+Nitrite Nitrate and Nitrite as N	<0.071		0.071	mg/L		16-APR-10	
Nitrite as N by IC							

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-10	WWQ5-A(HOLD)							
Sampled By:	KL on 08-APR-10							
Matrix:	WATER							
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		15-APR-10	R1236788
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-11	WWQ5-B(HOLD)							
Sampled By:	KL on 08-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved		0.00166		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved		<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES								
Calcium (Ca)-Dissolved		<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved		<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved		0.14		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved		<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved		<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved		<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)								
Hardness (as CaCO3)		<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved								
Mercury (Hg)-Dissolved		<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								
Hardness (as CaCO3)		<1.3			mg/L		16-APR-10	
Mercury (Hg)								
Mercury (Hg)-Total		<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)								

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

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-11 WWQ5-B(HOLD)							
Sampled By: KL on 08-APR-10							
Matrix: WATER							
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	0.0087		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00144		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	0.12		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total	<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total	<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon	<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids	<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity	0.18		0.10	NTU		15-APR-10	R1236188
pH and Conductivity							
pH	6.02		0.10	pH		15-APR-10	R1236345
Conductivity (EC)	5.28		0.20	uS/cm		15-APR-10	R1236345
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		15-APR-10	R1236788
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		16-APR-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		15-APR-10	R1236788
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen							

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-11 WWQ5-B(HOLD) Sampled By: KL on 08-APR-10 Matrix: WATER Total Kjeldahl Nitrogen Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-12 WWQ5-C(HOLD) Sampled By: KL on 08-APR-10 Matrix: WATER DIS Metals CCME Fresh Water Aquatic Life Diss. Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low) Antimony (Sb)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved	<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved	<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved	0.00179		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	0.12		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg) Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life Hardness (from Total Ca and Mg) Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg) Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total	0.0069		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							

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

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-12 WWQ5-C(HOLD)							
Sampled By: KL on 08-APR-10							
Matrix: WATER							
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00152		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	0.11		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total	<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters							
Ammonia-N	0.0074		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total	<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon	<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids	<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity	0.16		0.10	NTU		15-APR-10	R1236188
pH and Conductivity							
pH	6.07		0.10	pH		15-APR-10	R1236345
Conductivity (EC)	5.50		0.20	uS/cm		15-APR-10	R1236345
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		15-APR-10	R1236788
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		16-APR-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		15-APR-10	R1236788
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-13 WWQ6-A							
Sampled By: KL on 09-APR-10							
Matrix: WATER							

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

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-13 WWQ6-A Sampled By: KL on 09-APR-10 Matrix: WATER DIS Metals CCME Fresh Water Aquatic Life Diss. Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low) Antimony (Sb)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved	<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved	0.0012		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved	<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved	0.00370		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	0.15		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg) Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life Hardness (from Total Ca and Mg) Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg) Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low) Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-13	WWQ6-A							
Sampled By:	KL on 09-APR-10							
Matrix:	WATER							
Total Metals in Water by ICPMS (Low)								
Chromium (Cr)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total		<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total		<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total		<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total		<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total		<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total		0.00340		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total		<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total		<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total		0.15		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total		<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters								
Ammonia-N		0.0075		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		0.12		0.10	NTU		15-APR-10	R1236188
pH and Conductivity								
pH		6.30		0.10	pH		14-APR-10	R1235627
Conductivity (EC)		5.85		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-14	WWQ6-B							
Sampled By:	KL on 09-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981

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

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-14 WWQ6-B							
Sampled By: KL on 09-APR-10							
Matrix: WATER							
Diss. Metals in Water by ICPMS (Low)							
Antimony (Sb)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved	<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved	<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved	0.00348		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES							
Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	0.14		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-14	WWQ6-B							
Sampled By:	KL on 09-APR-10							
Matrix:	WATER							
Total Metals in Water by ICPMS (Low)								
Molybdenum (Mo)-Total		<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total		<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total		<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total		0.00321		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total		<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total		<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total		0.13		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total		<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters								
Ammonia-N		0.0085		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		0.17		0.10	NTU		15-APR-10	R1236188
pH and Conductivity								
pH		6.35		0.10	pH		14-APR-10	R1235627
Conductivity (EC)		5.58		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-15	WWQ7-A							
Sampled By:	KL on 07-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		0.0035		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981

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

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-15 WWQ7-A							
Sampled By: KL on 07-APR-10							
Matrix: WATER							
Diss. Metals in Water by ICPMS (Low)							
Boron (B)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved	<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved	0.00396		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES							
Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	0.17		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	0.0037		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431

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

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Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-15	WWQ7-A							
Sampled By: KL on 07-APR-10								
Matrix: WATER								
Total Metals in Water by ICPMS (Low)								
Strontium (Sr)-Total		0.00417		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total		<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total		<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total		0.17		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total		<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters								
Ammonia-N		0.0080		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		1.1		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		0.16		0.10	NTU		15-APR-10	R1236188
pH and Conductivity			RRV					
pH		4.33		0.10	pH		14-APR-10	R1235627
Conductivity (EC)		26.5		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		1.14		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		1.14		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		1.14		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-16	WWQ7-B							
Sampled By: KL on 07-APR-10								
Matrix: WATER								
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		0.0034		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981

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

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-16 WWQ7-B							
Sampled By: KL on 07-APR-10							
Matrix: WATER							
Diss. Metals in Water by ICPMS (Low)							
Lead (Pb)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved	<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved	0.00388		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES							
Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	0.16		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	0.0031		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00344		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-16	WWQ7-B							
Sampled By: KL on 07-APR-10								
Matrix: WATER								
Total Metals in Water by ICPMS (Low)								
Uranium (U)-Total		<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total		<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total		<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total		0.13		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total		<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters								
Ammonia-N		0.0070		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		0.13		0.10	NTU		15-APR-10	R1236188
pH and Conductivity								
pH		6.27		0.10	pH		14-APR-10	R1235627
Conductivity (EC)		6.19		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-17	WWQ7-C							
Sampled By: KL on 07-APR-10								
Matrix: WATER								
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		0.0037		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		0.0023		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-17 WWQ7-C							
Sampled By: KL on 07-APR-10							
Matrix: WATER							
Diss. Metals in Water by ICPMS (Low)							
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved	0.00408		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES							
Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	0.17		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	0.0038		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00365		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES							

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-17	WWQ7-C							
Sampled By:	KL on 07-APR-10							
Matrix:	WATER							
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total		<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total		0.14		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total		<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters								
Ammonia-N		0.0065		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		0.16		0.10	NTU		15-APR-10	R1236188
pH and Conductivity								
pH		6.37		0.10	pH		14-APR-10	R1235627
Conductivity (EC)		6.48		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-18	WWQ8-A							
Sampled By:	KL on 09-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		0.000013	RRV	0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved		0.00160		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-18 WWQ8-A							
Sampled By: KL on 09-APR-10							
Matrix: WATER							
Diss. Metals in Water by ICPMS (Low)							
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES							
Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	<0.10		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00143	RRV	0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	<0.10		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		15-APR-10	R1236924

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-18	WWQ8-A							
Sampled By:	KL on 09-APR-10							
Matrix:	WATER							
Total Metals in Water by ICPOES								
Potassium (K)-Total		<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total		<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters								
Ammonia-N		0.0070	RRV	0.0050	mg/L		01-MAY-10	R1246205
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		0.14	RRV	0.10	NTU		20-APR-10	R1239139
pH and Conductivity								
pH		6.00		0.10	pH		14-APR-10	R1235627
Conductivity (EC)		4.35		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-19	WWQ8-B							
Sampled By:	KL on 09-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		0.0070		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved		0.00185		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-19 WWQ8-B							
Sampled By: KL on 09-APR-10							
Matrix: WATER							
Diss. Metals in Water by ICPMS (Low)							
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES							
Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	0.10		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	0.0087		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00169		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	<0.10		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total	<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters							
Ammonia-N	0.0096		0.0050	mg/L		30-APR-10	R1246041

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-19	WWQ8-B							
Sampled By: KL on 09-APR-10								
Matrix: WATER								
Phosphorus, Total		<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon		<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids		<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity		<0.10		0.10	NTU		15-APR-10	R1236188
pH and Conductivity								
pH		5.86		0.10	pH		14-APR-10	R1235627
Conductivity (EC)		5.18		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		0.081		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		0.081		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		27-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	26-APR-10	26-APR-10	R1242138
L876582-20	WWQ9-A							
Sampled By: KL on 10-APR-10								
Matrix: WATER								
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved		0.00304		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved		<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES								
Calcium (Ca)-Dissolved		<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved		<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved		0.11		0.10	mg/L		16-APR-10	R1237152

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

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-20 WWQ9-A							
Sampled By: KL on 10-APR-10							
Matrix: WATER							
Dissolved Metals in Water by ICPOES							
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00289		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	0.11		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total	<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters							
Ammonia-N	0.0107	RRV	0.0050	mg/L		01-MAY-10	R1246205
Phosphorus, Total	<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon	<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids	<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity	0.15		0.10	NTU		15-APR-10	R1236188

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

[illegible]

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

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-21 WWQ10-A							
Sampled By: KL on 10-APR-10							
Matrix: WATER							
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	0.0194		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	0.000017		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	0.0021		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00240		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	0.22		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	0.0072		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total	<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters							
Ammonia-N	0.0075		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total	<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon	<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids	<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity	0.20		0.10	NTU		15-APR-10	R1236188
pH and Conductivity							
pH	5.89		0.10	pH		14-APR-10	R1235627
Conductivity (EC)	8.44		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen							

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-21	WWQ10-A							
Sampled By:	KL on 10-APR-10							
Matrix:	WATER							
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		28-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	27-APR-10	28-APR-10	R1243564
L876582-22	WWQ10-B							
Sampled By:	KL on 10-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		0.0164		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		0.000025		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved		0.0022		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved		0.00284		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved		<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES								
Calcium (Ca)-Dissolved		<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved		<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved		0.26		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved		0.0080		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved		<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved		<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)								
Hardness (as CaCO3)		<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved								
Mercury (Hg)-Dissolved		<0.000020		0.000020	mg/L		16-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								

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

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-22 WWQ10-B							
Sampled By: KL on 10-APR-10							
Matrix: WATER							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		16-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	0.0219		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	0.000020		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	0.0022		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00257		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	0.24		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	0.0077		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total	<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters							
Ammonia-N	0.0127	RRV	0.0050	mg/L		01-MAY-10	R1246205
Phosphorus, Total	<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon	<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids	3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity	0.19		0.10	NTU		15-APR-10	R1236188
pH and Conductivity							
pH	5.90		0.10	pH		14-APR-10	R1235627
Conductivity (EC)	9.24		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	0.067		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC							

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-22	WWQ10-B							
Sampled By:	KL on 10-APR-10							
Matrix:	WATER							
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		28-APR-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	27-APR-10	28-APR-10	R1243564
L876582-23	DUPLICATE							
Sampled By:	KL on 07-APR-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved		0.0037		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved		0.0025		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved		0.00405		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved		<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved		<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved		<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES								
Calcium (Ca)-Dissolved		<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved		<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved		0.17		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved		<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved		<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved		<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg)								
Hardness (as CaCO3)		<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved								
Mercury (Hg)-Dissolved		<0.000020		0.000020	mg/L		17-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								
Hardness (as CaCO3)		<1.3			mg/L		16-APR-10	
Mercury (Hg)								
Mercury (Hg)-Total		<0.000020		0.000020	mg/L		17-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL)								

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-23 DUPLICATE							
Sampled By: KL on 07-APR-10							
Matrix: WATER							
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Barium (Ba)-Total	0.0037		0.0030	mg/L		24-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Copper (Cu)-Total	0.0029		0.0010	mg/L		24-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		24-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		24-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		24-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		24-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Strontium (Sr)-Total	0.00371		0.00020	mg/L		24-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		24-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		24-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		24-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		24-APR-10	R1241431
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	0.15		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total	<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters							
Ammonia-N	0.0099		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total	<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon	<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids	<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity	0.15		0.10	NTU		15-APR-10	R1236188
pH and Conductivity							
pH	6.36		0.10	pH		14-APR-10	R1235627
Conductivity (EC)	6.45		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		28-APR-10	
Total Kjeldahl Nitrogen							

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-23 DUPLICATE Sampled By: KL on 07-APR-10 Matrix: WATER Total Kjeldahl Nitrogen Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	27-APR-10	28-APR-10	R1243564
L876582-24 TRIP BLANK Sampled By: KL on 07-APR-10 Matrix: WATER DIS Metals CCME Fresh Water Aquatic Life Diss. Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low) Antimony (Sb)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved	<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved	<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	<0.10		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg) Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		17-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life Hardness (from Total Ca and Mg) Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg) Mercury (Hg)-Total	<0.000020		0.000020	mg/L		17-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total	<0.0050		0.0050	mg/L		23-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		23-APR-10	R1241431
Total Metals in Water by ICPMS (Low)							

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

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-24 TRIP BLANK Sampled By: KL on 07-APR-10 Matrix: WATER							
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		23-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		23-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		23-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		23-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		23-APR-10	R1241431
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		23-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		23-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		23-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		23-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		23-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		23-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		23-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		23-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		23-APR-10	R1241431
Strontium (Sr)-Total	<0.00020		0.00020	mg/L		23-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		23-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		23-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		23-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		23-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		23-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		23-APR-10	R1241431
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	<0.10		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total	<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total	<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon	<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids	<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity	<0.10		0.10	NTU		15-APR-10	R1236188
pH and Conductivity							
pH	5.74		0.10	pH		14-APR-10	R1235627
Conductivity (EC)	0.71		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		19-APR-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	17-APR-10	17-APR-10	R1237444
L876582-25 FIELD BLANK Sampled By: KL on 08-APR-10 Matrix: WATER							

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-25 FIELD BLANK Sampled By: KL on 08-APR-10 Matrix: WATER DIS Metals CCME Fresh Water Aquatic Life Diss. Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Diss. Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L		26-APR-10	R1242981
Diss. Metals in Water by ICPMS (Low) Antimony (Sb)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Arsenic (As)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Barium (Ba)-Dissolved	<0.0030		0.0030	mg/L		26-APR-10	R1242981
Beryllium (Be)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Boron (B)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Chromium (Cr)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Cobalt (Co)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Copper (Cu)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Lead (Pb)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Lithium (Li)-Dissolved	<0.010		0.010	mg/L		26-APR-10	R1242981
Molybdenum (Mo)-Dissolved	<0.0050		0.0050	mg/L		26-APR-10	R1242981
Nickel (Ni)-Dissolved	<0.0020		0.0020	mg/L		26-APR-10	R1242981
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		26-APR-10	R1242981
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Strontium (Sr)-Dissolved	0.00011	RRV	0.00010	mg/L		26-APR-10	R1242981
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		26-APR-10	R1242981
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		26-APR-10	R1242981
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		26-APR-10	R1242981
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		26-APR-10	R1242981
Dissolved Metals in Water by ICPOES Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		16-APR-10	R1237152
Magnesium (Mg)-Dissolved	<0.10		0.10	mg/L		16-APR-10	R1237152
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		16-APR-10	R1237152
Potassium (K)-Dissolved	<0.50		0.50	mg/L		16-APR-10	R1237152
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		16-APR-10	R1237152
Hardness (from Dissolved Ca and Mg) Hardness (as CaCO3)	<1.3		1.3	mg/L		17-APR-10	
Mercury (Hg) - Dissolved Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		17-APR-10	R1237478
TOT Metals CCME Fresh Water Aquatic Life Hardness (from Total Ca and Mg) Hardness (as CaCO3)	<1.3			mg/L		16-APR-10	
Mercury (Hg) Mercury (Hg)-Total	<0.000020		0.000020	mg/L		17-APR-10	R1237478
Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total	<0.0050		0.0050	mg/L		23-APR-10	R1241431
Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		23-APR-10	R1241431
Total Metals in Water by ICPMS (Low) Antimony (Sb)-Total	<0.00040		0.00040	mg/L		23-APR-10	R1241431
Arsenic (As)-Total	<0.00040		0.00040	mg/L		23-APR-10	R1241431
Barium (Ba)-Total	<0.0030		0.0030	mg/L		23-APR-10	R1241431
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		23-APR-10	R1241431
Boron (B)-Total	<0.050		0.050	mg/L		23-APR-10	R1241431

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

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876582-25 FIELD BLANK Sampled By: KL on 08-APR-10 Matrix: WATER							
Total Metals in Water by ICPMS (Low)							
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		23-APR-10	R1241431
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		23-APR-10	R1241431
Copper (Cu)-Total	<0.0010		0.0010	mg/L		23-APR-10	R1241431
Lead (Pb)-Total	<0.00010		0.00010	mg/L		23-APR-10	R1241431
Lithium (Li)-Total	<0.010		0.010	mg/L		23-APR-10	R1241431
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		23-APR-10	R1241431
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		23-APR-10	R1241431
Selenium (Se)-Total	<0.00040		0.00040	mg/L		23-APR-10	R1241431
Silver (Ag)-Total	<0.00010		0.00010	mg/L		23-APR-10	R1241431
Strontium (Sr)-Total	<0.00020		0.00020	mg/L		23-APR-10	R1241431
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		23-APR-10	R1241431
Tin (Sn)-Total	<0.050		0.050	mg/L		23-APR-10	R1241431
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		23-APR-10	R1241431
Uranium (U)-Total	<0.00010		0.00010	mg/L		23-APR-10	R1241431
Vanadium (V)-Total	<0.0010		0.0010	mg/L		23-APR-10	R1241431
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		23-APR-10	R1241431
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Iron (Fe)-Total	<0.030		0.030	mg/L		15-APR-10	R1236924
Magnesium (Mg)-Total	<0.10		0.10	mg/L		15-APR-10	R1236924
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		15-APR-10	R1236924
Potassium (K)-Total	<0.50		0.50	mg/L		15-APR-10	R1236924
Sodium (Na)-Total	<1.0		1.0	mg/L		15-APR-10	R1236924
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		30-APR-10	R1246041
Phosphorus, Total	<0.020		0.020	mg/L	16-APR-10	16-APR-10	R1237210
Total Organic Carbon	<1.0		1.0	mg/L		26-APR-10	R1242372
Total Suspended Solids	<3.0		3.0	mg/L		15-APR-10	R1236432
Turbidity	<0.10		0.10	NTU		15-APR-10	R1236188
pH and Conductivity							
pH	6.16		0.10	pH		14-APR-10	R1235627
Conductivity (EC)	1.02		0.20	uS/cm		14-APR-10	R1235627
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		15-APR-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		14-APR-10	R1236040
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		19-APR-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	17-APR-10	17-APR-10	R1237444

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

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Strontium (Sr)-Dissolved	E	L876582-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -24, -25, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	E	L876582-1, -10, -11, -12, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -24, -25, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Nitrate (as N)	MS-B	L876582-1, -13, -14, -15, -16, -17, -18, -19, -2, -20, -21, -22, -23, -24, -25, -3, -4, -5, -6

Sample Parameter Qualifier Key:

Qualifier	Description
E	Matrix Spike recovery outside ALS DQO due to analyte background in sample.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RRV	Reported Result Verified By Repeat Analysis
RRVAP	Reported Result Verified by Alternate Process

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
AL-D-CCME-FAL-MS-ED	Water	Diss. Al in Water by ICPMS (CCME - FAL)	APHA 3125-ICP-MS
AL-T-CCME-FAL-MS-ED	Water	Total Al in Water by ICPMS (CCME - FAL)	APHA 3125-ICP-MS
C-TOT-ORG-ED	Water	Total Organic Carbon	APHA 5310 B-Instrumental
CD-D-CCME-FAL-MS-ED	Water	Diss. Cd in Water by ICPMS (CCME - FAL)	APHA 3125-ICP-MS
CD-T-CCME-FAL-MS-ED	Water	Total Cd in Water by ICPMS (CCME - FAL)	APHA 3125-ICP-MS
ETL-HARDNESS-DIS-ED	Water	Hardness (from Dissolved Ca and Mg)	APHA 2340 B-Calculation
ETL-HARDNESS-TOT-ED	Water	Hardness (from Total Ca and Mg)	APHA 2340 B-Calculation
ETL-N-TOT-CALC-ED	Water	Nitrogen, Total	APHA 4500 N-Calculated
HG-D-L-CVAA-ED	Water	Mercury (Hg) - Dissolved	EPA 245.7 / EPA 245.1
HG-T-L-CVAA-ED	Water	Mercury (Hg)	EPA 245.7 / EPA 245.1
MET-D-ICP-ED	Water	Dissolved Metals in Water by ICPOES	APHA 3120 B-ICP-OES
MET-D-L-MS-ED	Water	Diss. Metals in Water by ICPMS (Low)	SW 846 - 6020-ICPMS
MET-T-ICP-ED	Water	Total Metals in Water by ICPOES	APHA 3120 B-ICP-OES
MET-T-L-MS-ED	Water	Total Metals in Water by ICPMS (Low)	SW 846 - 6020-ICPMS
N-TOTKJ-ED	Water	Total Kjeldahl Nitrogen	APHA 4500N-C -Dig.-Auto-Colorimetry
NH4-LOW-ED	Water	Ammonia-N Low Level	APHA 4500 NH3F-Colorimetry
NO2+NO3-CALC-ED	Water	Nitrate+Nitrite	CALCULATION
NO2-IC-ED	Water	Nitrite as N by IC	APHA 4110 B-ION CHROMATOGRAPHY
NO3-IC-ED	Water	Nitrate as N by IC	APHA 4110 B-ION CHROMATOGRAPHY
P-TOTAL-ED	Water	Phosphorus, Total	APHA 4500 P B,E-Auto-Colorimetry
PH/EC-ED	Water	pH and Conductivity	APHA 4500-H, 2510
SOLIDS-TOTSUS-ED	Water	Total Suspended Solids	APHA 2540 D-Gravimetric
TURBIDITY-ED	Water	Turbidity	APHA 2130 B-Nephelometer

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
Laboratory Definition Code	Laboratory Location		
ED	ALS LABORATORY GROUP - EDMONTON, ALBERTA, CANADA		

Chain of Custody Numbers:

10-004

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

- mg/kg - milligrams per kilogram based on dry weight of sample
- mg/kg wwt - milligrams per kilogram based on wet weight of sample
- mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight
- mg/L - 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.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



August 5, 2010

Peregrine Diamonds Ltd.
201 - 1250 Homer Street
Vancouver, BC, Canada, V6B1C6

ATTENTION: Shirley Standafer-Pfister

Dear Shirley,

RE: Corrective Action Report (CAR) #6080- Peregrine Diamonds Ltd.- Project # Y22101137 (ALS File L894203)

8 Water samples were submitted by Ms. Karla Langlois of EBA Engineering Consultants on behalf of Ms. Shirley Standafer-Pfister of Peregrine Diamonds Ltd. to ALS Yellowknife on June 6, 2010. All 8 water samples were labeled and logged into ALS' Laboratory Information Management System (LIMS) at ALS Yellowknife. An internal labeling error occurred in Yellowknife between the routine and nutrient bottles of samples WWQ7-C (L894203-3) and FIELD BLANK (L894203-7) due to a new analyst in training.

The water samples were shipped to ALS Edmonton for analysis. Upon receipt on June 8, 2010 at ALS Edmonton the routine bottles were preserved for samples WWQ7-C (L894203-3) and FIELD BLANK (L894203-7) as per the labeling error. The labeling error was identified at ALS Edmonton when no unpreserved routine bottle could be found for TSS and Turbidity analysis.

Karla Langlois was notified of this error on June 23, 2010 by Geraldlyn Gouthro of ALS Edmonton and in person by Sean Whitaker of ALS Yellowknife. The final report, not including TSS and Turbidity, was delivered on June 24, 2010.

As part of the investigation and resolution of this issue, ALS identified two areas where corrective actions were required. Details of these corrective actions are outlined below:

1. Review and Revision of the Sample Receipt & Labeling Procedures

ALS Yellowknife has implemented significant changes due to the error. All samples are now removed from the cooler as a pre login check to ensure all samples are present and labeled correctly by the client. If there are any discrepancies pertaining to the chain of custody or the sample bottle the client is notified immediately from ALS Yellowknife. Samples are all verified by a senior analyst before shipment south to other ALS facilities. This is again re-verified by the sublet ALS facility before analytical proceeds.

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Environmental 

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RIGHT SOLUTIONS RIGHT PARTNER



2. Review of the Issue and Corrective Actions with Sample Receiving & Login Staff

The specific details of this issue, its causes, and consequences were discussed with all Sample Receiving & Login staff.

We would like to sincerely apologize for the inconvenience caused by this error and we hope that this letter provides an explanation of the issue that occurred, how ALS has addressed the issue and also outlines the corrective actions that have been put in place to ensure that it does not occur again in the future.

If you require any additional information, please do not hesitate to contact myself, Geraldlyn Gouthro or Sean Whitaker at any time.

Yours sincerely,

Glenyss Weeks, BSc.
Technical Sales Representative
Vancouver

Geraldlyn Gouthro
Client Services Manager
Edmonton

Sean Whitaker, BSc.
Laboratory Manager
Yellowknife



Environmental Division

Certificate of Analysis

EBA ENG CONSULTANTS LTD

ATTN: KARLA LANGLOIS

201 - 4916 49 STREET
PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Report Date: 19-JUL-10 15:49 (MT)

Version: FINAL REV. 2

Lab Work Order #: L894203

Date Received: 06-JUN-10

Project P.O. #: NOT SUBMITTED

Job Reference: Y22101137

Legal Site Desc:

CofC Numbers: 08-073922

Other Information:

Comments: ADDITIONAL 16-JUL-10 09:15
ADDITIONAL 16-JUL-10 09:15

19-JUL-10: Revised Report: TSS and Turbidity added.

Geraldyn Gouthro
Client Services Manager

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L894203-1	WWQ7-A							
Sampled By: NOT PROVIDED on 02-JUN-10								
Matrix: WATER								
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		18-JUN-10	R1279985
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		0.000013		0.000010	mg/L		18-JUN-10	R1279985
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		18-JUN-10	R1279985
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		18-JUN-10	R1279985
Barium (Ba)-Dissolved		0.0044		0.0030	mg/L		18-JUN-10	R1279985
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Boron (B)-Dissolved		<0.050		0.050	mg/L		18-JUN-10	R1279985
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		18-JUN-10	R1279985
Copper (Cu)-Dissolved		0.0043	RRVAP	0.0010	mg/L		18-JUN-10	R1279985
Lead (Pb)-Dissolved		0.00011		0.00010	mg/L		18-JUN-10	R1279985
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		18-JUN-10	R1279985
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		18-JUN-10	R1279985
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		18-JUN-10	R1279985
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		18-JUN-10	R1279985
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Strontium (Sr)-Dissolved		0.00526		0.00010	mg/L		18-JUN-10	R1279985
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Tin (Sn)-Dissolved		<0.050		0.050	mg/L		18-JUN-10	R1279985
Titanium (Ti)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Vanadium (V)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Zinc (Zn)-Dissolved		<0.0040		0.0040	mg/L		18-JUN-10	R1279985
Dissolved Metals in Water by ICPOES								
Calcium (Ca)-Dissolved		0.62		0.50	mg/L		11-JUN-10	R1274311
Iron (Fe)-Dissolved		<0.030		0.030	mg/L		11-JUN-10	R1274311
Magnesium (Mg)-Dissolved		0.22		0.10	mg/L		11-JUN-10	R1274311
Manganese (Mn)-Dissolved		<0.0050		0.0050	mg/L		11-JUN-10	R1274311
Potassium (K)-Dissolved		<0.50		0.50	mg/L		11-JUN-10	R1274311
Sodium (Na)-Dissolved		<1.0		1.0	mg/L		11-JUN-10	R1274311
Hardness (from Dissolved Ca and Mg)								
Hardness (as CaCO3)		2.5		1.3	mg/L		12-JUN-10	
Mercury (Hg) - Dissolved								
Mercury (Hg)-Dissolved		<0.000020		0.000020	mg/L		10-JUN-10	R1273356
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								
Hardness (as CaCO3)		2.2			mg/L		17-JUN-10	
Mercury (Hg)								
Mercury (Hg)-Total		<0.000020		0.000020	mg/L		10-JUN-10	R1273356
Total Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Total		<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Total Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPMS (Low)								
Antimony (Sb)-Total		<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Arsenic (As)-Total		<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Barium (Ba)-Total		0.0049		0.0030	mg/L		17-JUN-10	R1277876
Beryllium (Be)-Total		<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Boron (B)-Total		<0.050		0.050	mg/L		17-JUN-10	R1277876

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L894203-1 WWQ7-A							
Sampled By: NOT PROVIDED on 02-JUN-10							
Matrix: WATER							
Total Metals in Water by ICPMS (Low)							
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Copper (Cu)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Lead (Pb)-Total	0.00011		0.00010	mg/L		17-JUN-10	R1277876
Lithium (Li)-Total	<0.010		0.010	mg/L		17-JUN-10	R1277876
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Selenium (Se)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Silver (Ag)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Strontium (Sr)-Total	0.00479		0.00020	mg/L		17-JUN-10	R1277876
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Tin (Sn)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Uranium (U)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Vanadium (V)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	0.58		0.50	mg/L		16-JUN-10	R1277983
Iron (Fe)-Total	<0.030		0.030	mg/L		16-JUN-10	R1277983
Magnesium (Mg)-Total	0.18		0.10	mg/L		16-JUN-10	R1277983
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		16-JUN-10	R1277983
Potassium (K)-Total	<0.50		0.50	mg/L		16-JUN-10	R1277983
Sodium (Na)-Total	<1.0		1.0	mg/L		16-JUN-10	R1277983
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		17-JUN-10	R1281101
Phosphorus, Total	<0.020		0.020	mg/L	10-JUN-10	11-JUN-10	R1274503
Total Organic Carbon	1.3		1.0	mg/L		18-JUN-10	R1274365
Total Suspended Solids	<3.0		3.0	mg/L		19-JUL-10	R1378283
Turbidity	<0.10		0.10	NTU		16-JUL-10	R1374004
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	0.522		0.050	mg/L		08-JUN-10	R1272251
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.522		0.071	mg/L		10-JUN-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		08-JUN-10	R1272251
Nitrogen, Total							
Nitrogen, Total	0.52		0.20	mg/L		14-JUN-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	14-JUN-10	14-JUN-10	R1275765
Routine Water Analysis							
Chloride by IC							
Chloride (Cl)	0.66		0.50	mg/L		08-JUN-10	R1272251
Ion Balance Calculation							
Ion Balance	Low EC			%		21-JUN-10	
TDS (Calculated)	4.9			mg/L		21-JUN-10	
Hardness (as CaCO3)	2.5			mg/L		21-JUN-10	
Sulfate by IC							
Sulfate (SO4)	1.06		0.50	mg/L		08-JUN-10	R1272251
pH, Conductivity and Total Alkalinity							
pH	5.62		0.10	pH		08-JUN-10	R1271171

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L894203-1	WWQ7-A							
Sampled By: NOT PROVIDED on 02-JUN-10								
Matrix: WATER								
pH, Conductivity and Total Alkalinity								
Conductivity (EC)		13.4		0.20	uS/cm		08-JUN-10	R1271171
Bicarbonate (HCO3)		<5.0		5.0	mg/L		08-JUN-10	R1271171
Carbonate (CO3)		<5.0		5.0	mg/L		08-JUN-10	R1271171
Hydroxide (OH)		<5.0		5.0	mg/L		08-JUN-10	R1271171
Alkalinity, Total (as CaCO3)		<5.0		5.0	mg/L		08-JUN-10	R1271171
L894203-2	WWQ7-B							
Sampled By: NOT PROVIDED on 02-JUN-10								
Matrix: WATER								
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		18-JUN-10	R1279985
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		18-JUN-10	R1279985
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		18-JUN-10	R1279985
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		18-JUN-10	R1279985
Barium (Ba)-Dissolved		0.0036		0.0030	mg/L		18-JUN-10	R1279985
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Boron (B)-Dissolved		<0.050		0.050	mg/L		18-JUN-10	R1279985
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		18-JUN-10	R1279985
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Lead (Pb)-Dissolved		0.00011		0.00010	mg/L		18-JUN-10	R1279985
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		18-JUN-10	R1279985
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		18-JUN-10	R1279985
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		18-JUN-10	R1279985
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		18-JUN-10	R1279985
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Strontium (Sr)-Dissolved		0.00424		0.00010	mg/L		18-JUN-10	R1279985
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Tin (Sn)-Dissolved		<0.050		0.050	mg/L		18-JUN-10	R1279985
Titanium (Ti)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Vanadium (V)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Zinc (Zn)-Dissolved		<0.0040		0.0040	mg/L		18-JUN-10	R1279985
Dissolved Metals in Water by ICPOES								
Calcium (Ca)-Dissolved		0.51		0.50	mg/L		11-JUN-10	R1274311
Iron (Fe)-Dissolved		<0.030		0.030	mg/L		11-JUN-10	R1274311
Magnesium (Mg)-Dissolved		0.20		0.10	mg/L		11-JUN-10	R1274311
Manganese (Mn)-Dissolved		<0.0050		0.0050	mg/L		11-JUN-10	R1274311
Potassium (K)-Dissolved		<0.50		0.50	mg/L		11-JUN-10	R1274311
Sodium (Na)-Dissolved		<1.0		1.0	mg/L		11-JUN-10	R1274311
Hardness (from Dissolved Ca and Mg)								
Hardness (as CaCO3)		2.1		1.3	mg/L		12-JUN-10	
Mercury (Hg) - Dissolved								
Mercury (Hg)-Dissolved		<0.000020		0.000020	mg/L		10-JUN-10	R1273356
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								
Hardness (as CaCO3)		<1.3			mg/L		17-JUN-10	
Mercury (Hg)								
Mercury (Hg)-Total		<0.000020		0.000020	mg/L		10-JUN-10	R1273356

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L894203-2 WWQ7-B							
Sampled By: NOT PROVIDED on 02-JUN-10							
Matrix: WATER							
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Arsenic (As)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Barium (Ba)-Total	0.0039		0.0030	mg/L		17-JUN-10	R1277876
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Boron (B)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Copper (Cu)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Lead (Pb)-Total	0.00010		0.00010	mg/L		17-JUN-10	R1277876
Lithium (Li)-Total	<0.010		0.010	mg/L		17-JUN-10	R1277876
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Selenium (Se)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Silver (Ag)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Strontium (Sr)-Total	0.00384		0.00020	mg/L		17-JUN-10	R1277876
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Tin (Sn)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Uranium (U)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Vanadium (V)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		16-JUN-10	R1277983
Iron (Fe)-Total	<0.030		0.030	mg/L		16-JUN-10	R1277983
Magnesium (Mg)-Total	0.13		0.10	mg/L		16-JUN-10	R1277983
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		16-JUN-10	R1277983
Potassium (K)-Total	<0.50		0.50	mg/L		16-JUN-10	R1277983
Sodium (Na)-Total	<1.0		1.0	mg/L		16-JUN-10	R1277983
Miscellaneous Parameters							
Ammonia-N	0.0065		0.0050	mg/L		17-JUN-10	R1281101
Phosphorus, Total	<0.020		0.020	mg/L	10-JUN-10	11-JUN-10	R1274503
Total Organic Carbon	1.2		1.0	mg/L		18-JUN-10	R1274365
Total Suspended Solids	5.0		3.0	mg/L		19-JUL-10	R1378283
Turbidity	<0.10		0.10	NTU		16-JUL-10	R1374004
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	0.060		0.050	mg/L		08-JUN-10	R1272251
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		10-JUN-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		08-JUN-10	R1272251
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		14-JUN-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	14-JUN-10	14-JUN-10	R1275765
Routine Water Analysis							
Chloride by IC							

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

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L894203-3 WWQ7-C Sampled By: NOT PROVIDED on 02-JUN-10 Matrix: WATER							
Hardness (from Dissolved Ca and Mg) Hardness (as CaCO3)	2.2		1.3	mg/L		12-JUN-10	
Mercury (Hg) - Dissolved Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		10-JUN-10	R1273356
TOT Metals CCME Fresh Water Aquatic Life Hardness (from Total Ca and Mg) Hardness (as CaCO3)	1.8			mg/L		17-JUN-10	
Mercury (Hg) Mercury (Hg)-Total	<0.000020		0.000020	mg/L		10-JUN-10	R1273356
Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total	<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPMS (Low) Antimony (Sb)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Arsenic (As)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Barium (Ba)-Total	0.0038		0.0030	mg/L		17-JUN-10	R1277876
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Boron (B)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Copper (Cu)-Total	0.0020		0.0010	mg/L		17-JUN-10	R1277876
Lead (Pb)-Total	0.00011		0.00010	mg/L		17-JUN-10	R1277876
Lithium (Li)-Total	<0.010		0.010	mg/L		17-JUN-10	R1277876
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Selenium (Se)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Silver (Ag)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Strontium (Sr)-Total	0.00375		0.00020	mg/L		17-JUN-10	R1277876
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Tin (Sn)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Uranium (U)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Vanadium (V)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPOES Calcium (Ca)-Total	0.51		0.50	mg/L		16-JUN-10	R1277983
Iron (Fe)-Total	<0.030		0.030	mg/L		16-JUN-10	R1277983
Magnesium (Mg)-Total	0.14		0.10	mg/L		16-JUN-10	R1277983
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		16-JUN-10	R1277983
Potassium (K)-Total	<0.50		0.50	mg/L		16-JUN-10	R1277983
Sodium (Na)-Total	<1.0		1.0	mg/L		16-JUN-10	R1277983
Miscellaneous Parameters Ammonia-N	0.0057		0.0050	mg/L		17-JUN-10	R1281101
Phosphorus, Total	<0.020		0.020	mg/L	15-JUN-10	15-JUN-10	R1276803
Total Organic Carbon	1.1		1.0	mg/L		18-JUN-10	R1274365
Total Nitrogen Total Kjeldahl Nitrogen Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	14-JUN-10	14-JUN-10	R1275765
L894203-4 WWQ10-A Sampled By: NOT PROVIDED on 02-JUN-10 Matrix: WATER							

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L894203-4 WWQ10-A							
Sampled By: NOT PROVIDED on 02-JUN-10							
Matrix: WATER							
DIS Metals CCME Fresh Water Aquatic Life							
Diss. Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Dissolved	0.0125		0.0050	mg/L		18-JUN-10	R1279985
Diss. Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Dissolved	0.000024		0.000010	mg/L		18-JUN-10	R1279985
Diss. Metals in Water by ICPMS (Low)							
Antimony (Sb)-Dissolved	<0.00040		0.00040	mg/L		18-JUN-10	R1279985
Arsenic (As)-Dissolved	<0.00040		0.00040	mg/L		18-JUN-10	R1279985
Barium (Ba)-Dissolved	<0.0030		0.0030	mg/L		18-JUN-10	R1279985
Beryllium (Be)-Dissolved	<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Boron (B)-Dissolved	<0.050		0.050	mg/L		18-JUN-10	R1279985
Chromium (Cr)-Dissolved	<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Cobalt (Co)-Dissolved	<0.0020		0.0020	mg/L		18-JUN-10	R1279985
Copper (Cu)-Dissolved	0.0021		0.0010	mg/L		18-JUN-10	R1279985
Lead (Pb)-Dissolved	0.00011		0.00010	mg/L		18-JUN-10	R1279985
Lithium (Li)-Dissolved	<0.010		0.010	mg/L		18-JUN-10	R1279985
Molybdenum (Mo)-Dissolved	<0.0050		0.0050	mg/L		18-JUN-10	R1279985
Nickel (Ni)-Dissolved	0.0022		0.0020	mg/L		18-JUN-10	R1279985
Selenium (Se)-Dissolved	<0.00040		0.00040	mg/L		18-JUN-10	R1279985
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Strontium (Sr)-Dissolved	0.00271		0.00010	mg/L		18-JUN-10	R1279985
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Tin (Sn)-Dissolved	<0.050		0.050	mg/L		18-JUN-10	R1279985
Titanium (Ti)-Dissolved	<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Zinc (Zn)-Dissolved	0.0045		0.0040	mg/L		18-JUN-10	R1279985
Dissolved Metals in Water by ICPOES							
Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		11-JUN-10	R1274311
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		11-JUN-10	R1274311
Magnesium (Mg)-Dissolved	0.24		0.10	mg/L		11-JUN-10	R1274311
Manganese (Mn)-Dissolved	0.0077		0.0050	mg/L		11-JUN-10	R1274311
Potassium (K)-Dissolved	<0.50		0.50	mg/L		11-JUN-10	R1274311
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		11-JUN-10	R1274311
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		12-JUN-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		10-JUN-10	R1273356
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		17-JUN-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		10-JUN-10	R1273356
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	0.0181		0.0050	mg/L		17-JUN-10	R1277876
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	0.000026		0.000010	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Arsenic (As)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Barium (Ba)-Total	<0.0030		0.0030	mg/L		17-JUN-10	R1277876
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Boron (B)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L894203-4 WWQ10-A							
Sampled By: NOT PROVIDED on 02-JUN-10							
Matrix: WATER							
Total Metals in Water by ICPMS (Low)							
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Copper (Cu)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Lead (Pb)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Lithium (Li)-Total	<0.010		0.010	mg/L		17-JUN-10	R1277876
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Nickel (Ni)-Total	0.0021		0.0020	mg/L		17-JUN-10	R1277876
Selenium (Se)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Silver (Ag)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Strontium (Sr)-Total	0.00247		0.00020	mg/L		17-JUN-10	R1277876
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Tin (Sn)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Uranium (U)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Vanadium (V)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		16-JUN-10	R1277983
Iron (Fe)-Total	<0.030		0.030	mg/L		16-JUN-10	R1277983
Magnesium (Mg)-Total	0.22		0.10	mg/L		16-JUN-10	R1277983
Manganese (Mn)-Total	0.0065		0.0050	mg/L		16-JUN-10	R1277983
Potassium (K)-Total	<0.50		0.50	mg/L		16-JUN-10	R1277983
Sodium (Na)-Total	<1.0		1.0	mg/L		16-JUN-10	R1277983
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		17-JUN-10	R1281101
Phosphorus, Total	<0.020		0.020	mg/L	10-JUN-10	11-JUN-10	R1274503
Total Organic Carbon	<1.0		1.0	mg/L		18-JUN-10	R1274365
Total Suspended Solids	<3.0		3.0	mg/L		19-JUL-10	R1378283
Turbidity	<0.10		0.10	NTU		16-JUL-10	R1374004
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		08-JUN-10	R1272251
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		10-JUN-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		08-JUN-10	R1272251
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		14-JUN-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	14-JUN-10	14-JUN-10	R1275765
Routine Water Analysis							
Chloride by IC							
Chloride (Cl)	0.58		0.50	mg/L		08-JUN-10	R1272251
Ion Balance Calculation							
Ion Balance	Low EC			%		21-JUN-10	
TDS (Calculated)	2.7			mg/L		21-JUN-10	
Hardness (as CaCO3)	<1.0			mg/L		21-JUN-10	
Sulfate by IC							
Sulfate (SO4)	1.91		0.50	mg/L		08-JUN-10	R1272251
pH, Conductivity and Total Alkalinity							
pH	5.98		0.10	pH		08-JUN-10	R1271171

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L894203-5 WWQ10-B							
Sampled By: NOT PROVIDED on 02-JUN-10							
Matrix: WATER							
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	0.0241		0.0050	mg/L		17-JUN-10	R1277876
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	0.000029		0.000010	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Arsenic (As)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Barium (Ba)-Total	0.0033		0.0030	mg/L		17-JUN-10	R1277876
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Boron (B)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Copper (Cu)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Lead (Pb)-Total	0.00011		0.00010	mg/L		17-JUN-10	R1277876
Lithium (Li)-Total	<0.010		0.010	mg/L		17-JUN-10	R1277876
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Nickel (Ni)-Total	0.0023		0.0020	mg/L		17-JUN-10	R1277876
Selenium (Se)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Silver (Ag)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Strontium (Sr)-Total	0.00283		0.00020	mg/L		17-JUN-10	R1277876
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Tin (Sn)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Uranium (U)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Vanadium (V)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	0.50		0.50	mg/L		16-JUN-10	R1277983
Iron (Fe)-Total	<0.030		0.030	mg/L		16-JUN-10	R1277983
Magnesium (Mg)-Total	0.22		0.10	mg/L		16-JUN-10	R1277983
Manganese (Mn)-Total	0.0100		0.0050	mg/L		16-JUN-10	R1277983
Potassium (K)-Total	<0.50		0.50	mg/L		16-JUN-10	R1277983
Sodium (Na)-Total	<1.0		1.0	mg/L		16-JUN-10	R1277983
Miscellaneous Parameters							
Ammonia-N	0.0089		0.0050	mg/L		17-JUN-10	R1281101
Phosphorus, Total	<0.020		0.020	mg/L	10-JUN-10	11-JUN-10	R1274503
Total Organic Carbon	<1.0		1.0	mg/L		18-JUN-10	R1274365
Total Suspended Solids	<3.0		3.0	mg/L		19-JUL-10	R1378283
Turbidity	<0.10		0.10	NTU		16-JUL-10	R1374004
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	0.094		0.050	mg/L		08-JUN-10	R1272251
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.094		0.071	mg/L		10-JUN-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		08-JUN-10	R1272251
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		14-JUN-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	14-JUN-10	14-JUN-10	R1275765
Routine Water Analysis							
Chloride by IC							

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

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L894203-6 DUPLICATE							
Sampled By: NOT PROVIDED on 02-JUN-10							
Matrix: WATER							
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	2.0		1.3	mg/L		12-JUN-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		10-JUN-10	R1273356
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		17-JUN-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		10-JUN-10	R1273356
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Arsenic (As)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Barium (Ba)-Total	0.0038		0.0030	mg/L		17-JUN-10	R1277876
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Boron (B)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Copper (Cu)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Lead (Pb)-Total	0.00011		0.00010	mg/L		17-JUN-10	R1277876
Lithium (Li)-Total	<0.010		0.010	mg/L		17-JUN-10	R1277876
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Selenium (Se)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Silver (Ag)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Strontium (Sr)-Total	0.00368		0.00020	mg/L		17-JUN-10	R1277876
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Tin (Sn)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Uranium (U)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Vanadium (V)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		16-JUN-10	R1277983
Iron (Fe)-Total	<0.030		0.030	mg/L		16-JUN-10	R1277983
Magnesium (Mg)-Total	0.17		0.10	mg/L		16-JUN-10	R1277983
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		16-JUN-10	R1277983
Potassium (K)-Total	<0.50		0.50	mg/L		16-JUN-10	R1277983
Sodium (Na)-Total	<1.0		1.0	mg/L		16-JUN-10	R1277983
Miscellaneous Parameters							
Ammonia-N	0.0079		0.0050	mg/L		17-JUN-10	R1281101
Phosphorus, Total	<0.020		0.020	mg/L	10-JUN-10	11-JUN-10	R1274503
Total Organic Carbon	1.0		1.0	mg/L		18-JUN-10	R1274365
Total Suspended Solids	<3.0		3.0	mg/L		19-JUL-10	R1378283
Turbidity	<0.10		0.10	NTU		16-JUL-10	R1374004
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		08-JUN-10	R1272251
Nitrate+Nitrite							

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

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L894203-7							
FIELD BLANK							
Sampled By:	NOT PROVIDED		on 02-JUN-10				
Matrix:	WATER						
Diss. Metals in Water by ICPMS (Low)							
Vanadium (V)-Dissolved	<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Zinc (Zn)-Dissolved	<0.0040		0.0040	mg/L		18-JUN-10	R1279985
Dissolved Metals in Water by ICPOES							
Calcium (Ca)-Dissolved	<0.50		0.50	mg/L		11-JUN-10	R1274311
Iron (Fe)-Dissolved	<0.030		0.030	mg/L		11-JUN-10	R1274311
Magnesium (Mg)-Dissolved	<0.10		0.10	mg/L		11-JUN-10	R1274311
Manganese (Mn)-Dissolved	<0.0050		0.0050	mg/L		11-JUN-10	R1274311
Potassium (K)-Dissolved	<0.50		0.50	mg/L		11-JUN-10	R1274311
Sodium (Na)-Dissolved	<1.0		1.0	mg/L		11-JUN-10	R1274311
Hardness (from Dissolved Ca and Mg)							
Hardness (as CaCO3)	<1.3		1.3	mg/L		12-JUN-10	
Mercury (Hg) - Dissolved							
Mercury (Hg)-Dissolved	<0.000020		0.000020	mg/L		10-JUN-10	R1273356
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		17-JUN-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		10-JUN-10	R1273356
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Arsenic (As)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Barium (Ba)-Total	<0.0030		0.0030	mg/L		17-JUN-10	R1277876
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Boron (B)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Copper (Cu)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Lead (Pb)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Lithium (Li)-Total	<0.010		0.010	mg/L		17-JUN-10	R1277876
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Selenium (Se)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Silver (Ag)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Strontium (Sr)-Total	<0.00020		0.00020	mg/L		17-JUN-10	R1277876
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Tin (Sn)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Uranium (U)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Vanadium (V)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		16-JUN-10	R1277983
Iron (Fe)-Total	<0.030		0.030	mg/L		16-JUN-10	R1277983
Magnesium (Mg)-Total	<0.10		0.10	mg/L		16-JUN-10	R1277983
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		16-JUN-10	R1277983
Potassium (K)-Total	<0.50		0.50	mg/L		16-JUN-10	R1277983
Sodium (Na)-Total	<1.0		1.0	mg/L		16-JUN-10	R1277983
Miscellaneous Parameters							

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L894203-7	FIELD BLANK							
Sampled By:	NOT PROVIDED on 02-JUN-10							
Matrix:	WATER							
Ammonia-N		<0.0050		0.0050	mg/L		17-JUN-10	R1281101
Phosphorus, Total		<0.020		0.020	mg/L	15-JUN-10	15-JUN-10	R1276803
Total Organic Carbon		<1.0		1.0	mg/L		18-JUN-10	R1274365
Total Nitrogen								
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	12-JUN-10	12-JUN-10	R1274853
L894203-8	TRIP BLANK							
Sampled By:	NOT PROVIDED on 02-JUN-10							
Matrix:	WATER							
DIS Metals CCME Fresh Water Aquatic Life								
Diss. Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Dissolved		<0.0050		0.0050	mg/L		18-JUN-10	R1279985
Diss. Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L		18-JUN-10	R1279985
Diss. Metals in Water by ICPMS (Low)								
Antimony (Sb)-Dissolved		<0.00040		0.00040	mg/L		18-JUN-10	R1279985
Arsenic (As)-Dissolved		<0.00040		0.00040	mg/L		18-JUN-10	R1279985
Barium (Ba)-Dissolved		<0.0030		0.0030	mg/L		18-JUN-10	R1279985
Beryllium (Be)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Boron (B)-Dissolved		<0.050		0.050	mg/L		18-JUN-10	R1279985
Chromium (Cr)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Cobalt (Co)-Dissolved		<0.0020		0.0020	mg/L		18-JUN-10	R1279985
Copper (Cu)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Lead (Pb)-Dissolved		<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Lithium (Li)-Dissolved		<0.010		0.010	mg/L		18-JUN-10	R1279985
Molybdenum (Mo)-Dissolved		<0.0050		0.0050	mg/L		18-JUN-10	R1279985
Nickel (Ni)-Dissolved		<0.0020		0.0020	mg/L		18-JUN-10	R1279985
Selenium (Se)-Dissolved		<0.00040		0.00040	mg/L		18-JUN-10	R1279985
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Strontium (Sr)-Dissolved		<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Tin (Sn)-Dissolved		<0.050		0.050	mg/L		18-JUN-10	R1279985
Titanium (Ti)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L		18-JUN-10	R1279985
Vanadium (V)-Dissolved		<0.0010		0.0010	mg/L		18-JUN-10	R1279985
Zinc (Zn)-Dissolved		<0.0040		0.0040	mg/L		18-JUN-10	R1279985
Dissolved Metals in Water by ICPOES								
Calcium (Ca)-Dissolved		<0.50		0.50	mg/L		11-JUN-10	R1274311
Iron (Fe)-Dissolved		<0.030		0.030	mg/L		11-JUN-10	R1274311
Magnesium (Mg)-Dissolved		<0.10		0.10	mg/L		11-JUN-10	R1274311
Manganese (Mn)-Dissolved		<0.0050		0.0050	mg/L		11-JUN-10	R1274311
Potassium (K)-Dissolved		<0.50		0.50	mg/L		11-JUN-10	R1274311
Sodium (Na)-Dissolved		<1.0		1.0	mg/L		11-JUN-10	R1274311
Hardness (from Dissolved Ca and Mg)								
Hardness (as CaCO3)		<1.3		1.3	mg/L		12-JUN-10	
Mercury (Hg) - Dissolved								
Mercury (Hg)-Dissolved		<0.000020		0.000020	mg/L		10-JUN-10	R1273356
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								
Hardness (as CaCO3)		<1.3			mg/L		17-JUN-10	
Mercury (Hg)								
Mercury (Hg)-Total		<0.000020		0.000020	mg/L		10-JUN-10	R1273356

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L894203-8 TRIP BLANK							
Sampled By: NOT PROVIDED on 02-JUN-10							
Matrix: WATER							
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Arsenic (As)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Barium (Ba)-Total	<0.0030		0.0030	mg/L		17-JUN-10	R1277876
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Boron (B)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Copper (Cu)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Lead (Pb)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Lithium (Li)-Total	<0.010		0.010	mg/L		17-JUN-10	R1277876
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		17-JUN-10	R1277876
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		17-JUN-10	R1277876
Selenium (Se)-Total	<0.00040		0.00040	mg/L		17-JUN-10	R1277876
Silver (Ag)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Strontium (Sr)-Total	<0.00020		0.00020	mg/L		17-JUN-10	R1277876
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Tin (Sn)-Total	<0.050		0.050	mg/L		17-JUN-10	R1277876
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Uranium (U)-Total	<0.00010		0.00010	mg/L		17-JUN-10	R1277876
Vanadium (V)-Total	<0.0010		0.0010	mg/L		17-JUN-10	R1277876
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		17-JUN-10	R1277876
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		16-JUN-10	R1277983
Iron (Fe)-Total	<0.030		0.030	mg/L		16-JUN-10	R1277983
Magnesium (Mg)-Total	<0.10		0.10	mg/L		16-JUN-10	R1277983
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		16-JUN-10	R1277983
Potassium (K)-Total	<0.50		0.50	mg/L		16-JUN-10	R1277983
Sodium (Na)-Total	<1.0		1.0	mg/L		16-JUN-10	R1277983
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		17-JUN-10	R1281101
Phosphorus, Total	<0.020		0.020	mg/L	10-JUN-10	11-JUN-10	R1274503
Total Organic Carbon	<1.0		1.0	mg/L		18-JUN-10	R1274365
Total Suspended Solids	<3.0		3.0	mg/L		19-JUL-10	R1378283
Turbidity	<0.10		0.10	NTU		16-JUL-10	R1374004
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		08-JUN-10	R1272251
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		10-JUN-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		08-JUN-10	R1272251
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		11-JUN-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	10-JUN-10	11-JUN-10	R1273974
Routine Water Analysis							
Chloride by IC							

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L894203-8	TRIP BLANK							
Sampled By:	NOT PROVIDED on 02-JUN-10							
Matrix:	WATER							
Chloride by IC								
Chloride (Cl)	<0.50			0.50	mg/L		08-JUN-10	R1272251
Ion Balance Calculation								
Ion Balance	Low TDS				%		21-JUN-10	
TDS (Calculated)	<1.0				mg/L		21-JUN-10	
Hardness (as CaCO3)	<1.0				mg/L		21-JUN-10	
Sulfate by IC								
Sulfate (SO4)	<0.50			0.50	mg/L		08-JUN-10	R1272251
pH, Conductivity and Total Alkalinity								
pH	5.65			0.10	pH		08-JUN-10	R1271171
Conductivity (EC)	0.22			0.20	uS/cm		08-JUN-10	R1271171
Bicarbonate (HCO3)	<5.0			5.0	mg/L		08-JUN-10	R1271171
Carbonate (CO3)	<5.0			5.0	mg/L		08-JUN-10	R1271171
Hydroxide (OH)	<5.0			5.0	mg/L		08-JUN-10	R1271171
Alkalinity, Total (as CaCO3)	<5.0			5.0	mg/L		08-JUN-10	R1271171

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

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Chloride (Cl)	MS-B	L894203-1, -2, -4, -5, -6, -8
Matrix Spike	Sulfate (SO4)	MS-B	L894203-1, -2, -4, -5, -6, -8
Matrix Spike	Chloride (Cl)	MS-B	L894203-1, -2, -4, -5, -6, -8
Matrix Spike	Sulfate (SO4)	MS-B	L894203-1, -2, -4, -5, -6, -8
Matrix Spike	Total Organic Carbon	MS-B	L894203-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Total Organic Carbon	MS-B	L894203-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Total Organic Carbon	MS-B	L894203-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Total Organic Carbon	MS-B	L894203-1, -2, -3, -4, -5, -6, -7, -8

Qualifiers for Individual Samples Listed:

Sample Number	Client ID	Qualifier	Description
L894203-3	WWQ7-C	SP	TP, TKN, NH4-low - Sample was Preserved at the laboratory
L894203-7	FIELD BLANK	SP	TP, TKN, NH4-low - Sample was Preserved at the laboratory

Sample Parameter Qualifier Key:

Qualifier	Description
E	Matrix Spike recovery outside ALS DQO due to analyte background in sample.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RRV	Reported Result Verified By Repeat Analysis
RRVAP	Reported Result Verified by Alternate Process

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
AL-D-CCME-FAL-MS-ED	Water	Diss. Al in Water by ICPMS (CCME - FAL)	APHA 3125-ICP-MS
AL-T-CCME-FAL-MS-ED	Water	Total Al in Water by ICPMS (CCME - FAL)	APHA 3125-ICP-MS
C-TOT-ORG-ED	Water	Total Organic Carbon	APHA 5310 B-Instrumental
CD-D-CCME-FAL-MS-ED	Water	Diss. Cd in Water by ICPMS (CCME - FAL)	APHA 3125-ICP-MS
CD-T-CCME-FAL-MS-ED	Water	Total Cd in Water by ICPMS (CCME - FAL)	APHA 3125-ICP-MS
CL-IC-ED	Water	Chloride by IC	APHA 4110 B-ION CHROMATOGRAPHY
ETL-HARDNESS-DIS-ED	Water	Hardness (from Dissolved Ca and Mg)	APHA 2340 B-Calculation
ETL-HARDNESS-TOT-ED	Water	Hardness (from Total Ca and Mg)	APHA 2340 B-Calculation
ETL-N-TOT-CALC-ED	Water	Nitrogen, Total	APHA 4500 N-Calculated
HG-D-L-CVAA-ED	Water	Mercury (Hg) - Dissolved	EPA 245.7 / EPA 245.1
HG-T-L-CVAA-ED	Water	Mercury (Hg)	EPA 245.7 / EPA 245.1
IONBALANCE-ED	Water	Ion Balance Calculation	APHA 1030E
MET-D-ICP-ED	Water	Dissolved Metals in Water by ICPOES	APHA 3120 B-ICP-OES
MET-D-L-MS-ED	Water	Diss. Metals in Water by ICPMS (Low)	SW 846 - 6020-ICPMS
MET-T-ICP-ED	Water	Total Metals in Water by ICPOES	APHA 3120 B-ICP-OES
MET-T-L-MS-ED	Water	Total Metals in Water by ICPMS (Low)	SW 846 - 6020-ICPMS
N-TOTKJ-ED	Water	Total Kjeldahl Nitrogen	APHA 4500N-C -Dig.-Auto-Colorimetry
NH4-LOW-ED	Water	Ammonia-N Low Level	APHA 4500 NH3F-Colorimetry
NO2+NO3-CALC-ED	Water	Nitrate+Nitrite	CALCULATION

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
NO2-IC-ED	Water	Nitrite as N by IC	APHA 4110 B-ION CHROMATOGRAPHY
NO3-IC-ED	Water	Nitrate as N by IC	APHA 4110 B-ION CHROMATOGRAPHY
P-TOTAL-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-IC-ED	Water	Sulfate by IC	APHA 4110 B-ION CHROMATOGRAPHY
SOLIDS-TOTSUS-ED	Water	Total Suspended Solids	APHA 2540 D-Gravimetric
TURBIDITY-ED	Water	Turbidity	APHA 2130 B-Nephelometer

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

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

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

Chain of Custody Numbers:

08-073922

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg ww - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - 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.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L894203

Report Date: 19-JUL-10

Page 1 of 22

Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
AL-D-CCME-FAL-MS-ED Water								
Batch	R1279985							
WG1121373-2 CRM		1643E_WATER						
Aluminum (Al)-Dissolved			106		%		80-120	18-JUN-10
WG1121373-1 MB								
Aluminum (Al)-Dissolved			<0.0050		mg/L		0.005	18-JUN-10
AL-T-CCME-FAL-MS-ED Water								
Batch	R1277876							
WG1120001-2 DUP		L894203-8						
Aluminum (Al)-Total		<0.0050	<0.0050	RPD-NA	mg/L	N/A	20	17-JUN-10
WG1120001-1 MB								
Aluminum (Al)-Total			<0.0050		mg/L		0.005	16-JUN-10
WG1120001-3 MS		L894203-8						
Aluminum (Al)-Total			97		%		70-130	17-JUN-10
C-TOT-ORG-ED Water								
Batch	R1274365							
WG1118036-12 CVS								
Total Organic Carbon			115		%		80-160	14-JUN-10
WG1118036-23 CVS								
Total Organic Carbon			117		%		80-160	16-JUN-10
WG1118036-3 CVS								
Total Organic Carbon			123		%		80-160	11-JUN-10
WG1118036-31 CVS								
Total Organic Carbon			111		%		80-160	18-JUN-10
WG1118036-34 CVS								
Total Organic Carbon			121		%		80-160	21-JUN-10
WG1118036-13 DUP		L893295-5						
Total Organic Carbon		<1.0	<1.0	RPD-NA	mg/L	N/A	20	14-JUN-10
WG1118036-15 DUP		L896110-1						
Total Organic Carbon		13.3	13.2		mg/L	0.30	20	14-JUN-10
WG1118036-17 DUP		L895168-2						
Total Organic Carbon		<1.0	<1.0	RPD-NA	mg/L	N/A	20	15-JUN-10
WG1118036-19 DUP		L896240-21						
Total Organic Carbon		15.5	16.0		mg/L	3.4	20	15-JUN-10
WG1118036-24 DUP		L896509-1						
Total Organic Carbon		5.7	5.8		mg/L	0.38	20	16-JUN-10
WG1118036-26 DUP		L894235-2						
Total Organic Carbon		4.0	4.0		mg/L	1.6	20	16-JUN-10
WG1118036-35 DUP		L896687-3						
Total Organic Carbon		36.7	40.1		mg/L	8.9	20	18-JUN-10



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YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
C-TOT-ORG-ED								
Water								
Batch	R1274365							
WG1118036-4 DUP		L895427-2						
Total Organic Carbon		67.9	69.4		mg/L	2.1	20	11-JUN-10
WG1118036-11 LCS								
Total Organic Carbon			96		%		80-120	14-JUN-10
WG1118036-2 LCS								
Total Organic Carbon			95		%		80-120	11-JUN-10
WG1118036-22 LCS								
Total Organic Carbon			97		%		80-120	16-JUN-10
WG1118036-30 LCS								
Total Organic Carbon			94		%		80-120	18-JUN-10
WG1118036-33 LCS								
Total Organic Carbon			98		%		80-120	21-JUN-10
WG1118036-1 MB								
Total Organic Carbon			<1.0		mg/L		1	11-JUN-10
WG1118036-10 MB								
Total Organic Carbon			<1.0		mg/L		1	14-JUN-10
WG1118036-21 MB								
Total Organic Carbon			<1.0		mg/L		1	15-JUN-10
WG1118036-28 MB								
Total Organic Carbon			<1.0		mg/L		1	17-JUN-10
WG1118036-29 MB								
Total Organic Carbon			<1.0		mg/L		1	17-JUN-10
WG1118036-32 MB								
Total Organic Carbon			<1.0		mg/L		1	18-JUN-10
WG1118036-14 MS		L893295-5						
Total Organic Carbon			104		%		70-130	14-JUN-10
WG1118036-16 MS		L896110-1						
Total Organic Carbon			N/A	MS-B	%		-	14-JUN-10
WG1118036-18 MS		L895168-2						
Total Organic Carbon			113		%		70-130	15-JUN-10
WG1118036-20 MS		L896240-21						
Total Organic Carbon			N/A	MS-B	%		-	15-JUN-10
WG1118036-25 MS		L896509-1						
Total Organic Carbon			100		%		70-130	16-JUN-10
WG1118036-27 MS		L894235-2						
Total Organic Carbon			105		%		70-130	16-JUN-10
WG1118036-36 MS		L896687-3						
Total Organic Carbon			N/A	MS-B	%		-	18-JUN-10
WG1118036-5		L895427-2						



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Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
C-TOT-ORG-ED								
Water								
Batch	R1274365							
WG1118036-5 MS		L895427-2						
Total Organic Carbon			N/A	MS-B	%		-	11-JUN-10
CD-D-CCME-FAL-MS-ED								
Water								
Batch	R1279985							
WG1121373-2 CRM		1643E_WATER						
Cadmium (Cd)-Dissolved			100		%		80-120	18-JUN-10
WG1121373-1 MB								
Cadmium (Cd)-Dissolved			<0.000010		mg/L		0.00001	18-JUN-10
Batch	R1282752							
WG1122930-2 CRM		1643E_WATER						
Cadmium (Cd)-Dissolved			101		%		80-120	22-JUN-10
WG1122930-1 MB								
Cadmium (Cd)-Dissolved			<0.000010		mg/L		0.00001	22-JUN-10
CD-T-CCME-FAL-MS-ED								
Water								
Batch	R1277876							
WG1120001-2 DUP		L894203-8						
Cadmium (Cd)-Total		<0.000010	<0.000010	RPD-NA	mg/L	N/A	20	17-JUN-10
WG1120001-1 MB								
Cadmium (Cd)-Total			<0.000010		mg/L		0.00001	16-JUN-10
WG1120001-3 MS		L894203-8						
Cadmium (Cd)-Total			90		%		70-130	17-JUN-10
CL-IC-ED								
Water								
Batch	R1272251							
WG1116242-3 DUP		L894734-7						
Chloride (Cl)		42.7	42.6		mg/L	0.20	20	08-JUN-10
WG1116242-5 DUP		L894608-3						
Chloride (Cl)		139	144		mg/L	3.5	20	08-JUN-10
WG1116242-7 DUP		L894394-1						
Chloride (Cl)		395	390		mg/L	1.1	20	08-JUN-10
WG1116242-2 LCS								
Chloride (Cl)			103		%		85-115	08-JUN-10
WG1116242-1 MB								
Chloride (Cl)			<0.50		mg/L		0.5	08-JUN-10
WG1116242-4 MS		L894734-7						
Chloride (Cl)			97		%		75-125	08-JUN-10
WG1116242-6 MS		L894608-3						



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Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
CL-IC-ED		Water						
Batch	R1272251							
WG1116242-6 MS		L894608-3						
Chloride (Cl)			N/A	MS-B	%		-	08-JUN-10
WG1116242-8 MS		L894394-1						
Chloride (Cl)			N/A	MS-B	%		-	08-JUN-10
HG-D-L-CVAA-ED		Water						
Batch	R1273356							
WG1117230-12 DUP		L894203-6						
Mercury (Hg)-Dissolved		<0.000020	<0.000020	RPD-NA	mg/L	N/A	20	10-JUN-10
WG1117230-14 DUP		L894849-3						
Mercury (Hg)-Dissolved		<0.000020	<0.000020	RPD-NA	mg/L	N/A	20	10-JUN-10
WG1117230-18 DUP		L895547-6						
Mercury (Hg)-Dissolved		<0.000020	<0.000020	RPD-NA	mg/L	N/A	20	10-JUN-10
WG1117230-4 DUP		L894279-7						
Mercury (Hg)-Dissolved		<0.000020	<0.000020	RPD-NA	mg/L	N/A	20	10-JUN-10
WG1117230-2 LCS			100		%		80-120	10-JUN-10
Mercury (Hg)-Dissolved								
WG1117230-3 LCSD		WG1117230-2						
Mercury (Hg)-Dissolved		100	103		%	2.7	20	10-JUN-10
WG1117230-1 MB			<0.000020		mg/L		0.00002	10-JUN-10
Mercury (Hg)-Dissolved								
WG1117230-13 MS		L894203-6	99		%		70-130	10-JUN-10
Mercury (Hg)-Dissolved								
WG1117230-15 MS		L894849-3	92		%		70-130	10-JUN-10
Mercury (Hg)-Dissolved								
WG1117230-19 MS		L895547-6	90		%		70-130	10-JUN-10
Mercury (Hg)-Dissolved								
WG1117230-5 MS		L894279-7	100		%		70-130	10-JUN-10
Mercury (Hg)-Dissolved								
HG-T-L-CVAA-ED		Water						
Batch	R1273356							
WG1117230-10 DUP		L894816-2						
Mercury (Hg)-Total		<0.020	<0.000020	RPD-NA	mg/L	N/A	20	10-JUN-10
WG1117230-16 DUP		L895351-17						
Mercury (Hg)-Total		<0.000020	<0.000020	RPD-NA	mg/L	N/A	20	10-JUN-10
WG1117230-8 DUP		L894235-2						
Mercury (Hg)-Total		<0.020	<0.000020	RPD-NA	mg/L	N/A	20	10-JUN-10
WG1117230-2 LCS			100		%		80-120	10-JUN-10
Mercury (Hg)-Total								



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Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
HG-T-L-CVAA-ED		Water						
Batch	R1273356							
WG1117230-3	LCSD	WG1117230-2						
Mercury (Hg)-Total		100	103		%	2.7	20	10-JUN-10
WG1117230-1	MB							
Mercury (Hg)-Total			<0.000020		mg/L		0.00002	10-JUN-10
WG1117230-11	MS	L894816-2						
Mercury (Hg)-Total			104		%		70-130	10-JUN-10
WG1117230-17	MS	L895351-17						
Mercury (Hg)-Total			104		%		70-130	10-JUN-10
WG1117230-9	MS	L894235-2						
Mercury (Hg)-Total			106		%		70-130	10-JUN-10
MET-D-ICP-ED		Water						
Batch	R1274311							
WG1117755-2	CRM	EU-H-3_OPTWATER						
Calcium (Ca)-Dissolved			109		%		80-120	11-JUN-10
Iron (Fe)-Dissolved			114		%		80-120	11-JUN-10
Magnesium (Mg)-Dissolved			112		%		80-120	11-JUN-10
Manganese (Mn)-Dissolved			110		%		80-120	11-JUN-10
Potassium (K)-Dissolved			103		%		80-120	11-JUN-10
Sodium (Na)-Dissolved			108		%		80-120	11-JUN-10
WG1117755-5	DUP	L894203-8						
Calcium (Ca)-Dissolved		<0.50	<0.50	RPD-NA	mg/L	N/A	20	11-JUN-10
Iron (Fe)-Dissolved		<0.030	<0.030	RPD-NA	mg/L	N/A	20	11-JUN-10
Magnesium (Mg)-Dissolved		<0.10	<0.10	RPD-NA	mg/L	N/A	20	11-JUN-10
Manganese (Mn)-Dissolved		<0.0050	<0.0050	RPD-NA	mg/L	N/A	20	11-JUN-10
Potassium (K)-Dissolved		<0.50	<0.50	RPD-NA	mg/L	N/A	20	11-JUN-10
Sodium (Na)-Dissolved		<1.0	<1.0	RPD-NA	mg/L	N/A	20	11-JUN-10
WG1117755-7	DUP	L895316-13						
Calcium (Ca)-Dissolved		98.7	95.3		mg/L	3.5	20	11-JUN-10
Iron (Fe)-Dissolved		4.41	4.33		mg/L	1.9	20	11-JUN-10
Magnesium (Mg)-Dissolved		32.6	32.3		mg/L	0.72	20	11-JUN-10
Manganese (Mn)-Dissolved		0.555	0.528		mg/L	5.0	20	11-JUN-10
Potassium (K)-Dissolved		2.23	2.03		mg/L	9.6	20	11-JUN-10
Sodium (Na)-Dissolved		13.3	13.1		mg/L	1.4	20	11-JUN-10
WG1117755-9	DUP	L896181-4						
Calcium (Ca)-Dissolved		89.9	88.1		mg/L	2.0	20	11-JUN-10
Iron (Fe)-Dissolved		<0.030	<0.030	RPD-NA	mg/L	N/A	20	11-JUN-10



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Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-MS-ED		Water						
Batch	R1279985							
WG1121373-2 CRM		1643E_WATER						
Antimony (Sb)-Dissolved			99		%		80-120	18-JUN-10
Arsenic (As)-Dissolved			99		%		80-120	18-JUN-10
Barium (Ba)-Dissolved			95		%		80-120	18-JUN-10
Beryllium (Be)-Dissolved			87		%		80-120	18-JUN-10
Boron (B)-Dissolved			92		%		80-120	18-JUN-10
Chromium (Cr)-Dissolved			105		%		80-120	18-JUN-10
Cobalt (Co)-Dissolved			103		%		80-120	18-JUN-10
Copper (Cu)-Dissolved			102		%		80-120	18-JUN-10
Lead (Pb)-Dissolved			101		%		80-120	18-JUN-10
Lithium (Li)-Dissolved			105		%		80-120	18-JUN-10
Molybdenum (Mo)-Dissolved			98		%		80-120	18-JUN-10
Nickel (Ni)-Dissolved			103		%		80-120	18-JUN-10
Selenium (Se)-Dissolved			103		%		80-120	18-JUN-10
Strontium (Sr)-Dissolved			102		%		80-120	18-JUN-10
Thallium (Tl)-Dissolved			101		%		80-120	18-JUN-10
Vanadium (V)-Dissolved			99		%		80-120	18-JUN-10
Zinc (Zn)-Dissolved			100		%		80-120	18-JUN-10
WG1121373-3 DUP		L894198-5						
Antimony (Sb)-Dissolved		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	18-JUN-10
Arsenic (As)-Dissolved		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	18-JUN-10
Barium (Ba)-Dissolved		0.00882	0.00869		mg/L	1.4	20	18-JUN-10
Beryllium (Be)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	18-JUN-10
Boron (B)-Dissolved		0.871	0.858		mg/L	1.5	20	18-JUN-10
Chromium (Cr)-Dissolved		<0.0020	0.00072		mg/L	2.2	20	18-JUN-10
Cobalt (Co)-Dissolved		0.00308	0.00311		mg/L	0.97	20	18-JUN-10
Copper (Cu)-Dissolved		0.00660	0.00712		mg/L	7.5	20	18-JUN-10
Lead (Pb)-Dissolved		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	18-JUN-10
Lithium (Li)-Dissolved		0.335	0.331		mg/L	1.3	20	18-JUN-10
Molybdenum (Mo)-Dissolved		0.00023	0.00023		mg/L	0.0	20	18-JUN-10
Nickel (Ni)-Dissolved		0.0169	0.0169		mg/L	0.24	20	18-JUN-10
Selenium (Se)-Dissolved		<0.0020	0.00090		mg/L	20	20	18-JUN-10
Silver (Ag)-Dissolved		<0.00020	<0.00010	RPD-NA	mg/L	N/A	20	18-JUN-10
Strontium (Sr)-Dissolved		3.28	3.29		mg/L	0.41	20	18-JUN-10



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Client: EBA ENG CONSULTANTS LTD
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Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-MS-ED		Water						
Batch	R1279985							
WG1121373-3 DUP		L894198-5						
Thallium (Tl)-Dissolved		<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	18-JUN-10
Tin (Sn)-Dissolved		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	18-JUN-10
Titanium (Ti)-Dissolved		0.00143	0.00138		mg/L	3.6	20	18-JUN-10
Uranium (U)-Dissolved		0.0274	0.0270		mg/L	1.6	20	18-JUN-10
Vanadium (V)-Dissolved		<0.00050	0.00034		mg/L	1.5	20	18-JUN-10
Zinc (Zn)-Dissolved		0.0042	0.0041		mg/L	1.7	20	18-JUN-10
WG1121373-5 DUP		L896920-1						
Antimony (Sb)-Dissolved		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	19-JUN-10
Arsenic (As)-Dissolved		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	19-JUN-10
Barium (Ba)-Dissolved		0.00455	0.00464		mg/L	2.0	20	19-JUN-10
Beryllium (Be)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	19-JUN-10
Boron (B)-Dissolved		<0.0020	<0.0020	RPD-NA	mg/L	N/A	20	19-JUN-10
Chromium (Cr)-Dissolved		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	19-JUN-10
Cobalt (Co)-Dissolved		0.00269	0.00267		mg/L	0.67	20	19-JUN-10
Copper (Cu)-Dissolved		0.00449	0.00440		mg/L	1.9	20	19-JUN-10
Lead (Pb)-Dissolved		0.00018	0.00018		mg/L	0.56	20	19-JUN-10
Lithium (Li)-Dissolved		<0.0030	<0.0030	RPD-NA	mg/L	N/A	20	19-JUN-10
Molybdenum (Mo)-Dissolved		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	19-JUN-10
Nickel (Ni)-Dissolved		0.0177	0.0175		mg/L	0.89	20	19-JUN-10
Selenium (Se)-Dissolved		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	19-JUN-10
Silver (Ag)-Dissolved		<0.00020	<0.00010	RPD-NA	mg/L	N/A	20	19-JUN-10
Strontium (Sr)-Dissolved		0.00518	0.00513		mg/L	1.1	20	19-JUN-10
Thallium (Tl)-Dissolved		<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	19-JUN-10
Tin (Sn)-Dissolved		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	19-JUN-10
Titanium (Ti)-Dissolved		<0.00030	<0.00030	RPD-NA	mg/L	N/A	20	19-JUN-10
Uranium (U)-Dissolved		0.00012	0.00013		mg/L	7.5	20	19-JUN-10
Vanadium (V)-Dissolved		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	19-JUN-10
Zinc (Zn)-Dissolved		0.0289	0.0287		mg/L	0.83	20	19-JUN-10
WG1121373-7 DUP		L896920-4						
Antimony (Sb)-Dissolved		0.00061	0.00060		mg/L	1.7	20	19-JUN-10
Arsenic (As)-Dissolved		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	19-JUN-10
Barium (Ba)-Dissolved		0.00186	0.00185		mg/L	0.81	20	19-JUN-10
Beryllium (Be)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	19-JUN-10



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Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-MS-ED		Water						
Batch	R1279985							
WG1121373-7 DUP		L896920-4						
Boron (B)-Dissolved		0.0031	0.0031		mg/L	2.2	20	19-JUN-10
Chromium (Cr)-Dissolved		<0.0020	<0.00040	RPD-NA	mg/L	N/A	20	19-JUN-10
Cobalt (Co)-Dissolved		0.00080	0.00081		mg/L	1.3	20	19-JUN-10
Copper (Cu)-Dissolved		0.00164	0.00158		mg/L	4.0	20	19-JUN-10
Lead (Pb)-Dissolved		0.00031	0.00032		mg/L	3.2	20	19-JUN-10
Lithium (Li)-Dissolved		<0.0030	<0.0030	RPD-NA	mg/L	N/A	20	19-JUN-10
Nickel (Ni)-Dissolved		0.00405	0.00442		mg/L	19	20	19-JUN-10
Selenium (Se)-Dissolved		<0.0020	0.00102		mg/L	1.8	20	19-JUN-10
Silver (Ag)-Dissolved		<0.00020	<0.00010	RPD-NA	mg/L	N/A	20	19-JUN-10
Strontium (Sr)-Dissolved		0.00164	0.00165		mg/L	0.91	20	19-JUN-10
Thallium (Tl)-Dissolved		<0.000050	<0.000050	RPD-NA	mg/L	N/A	20	19-JUN-10
Tin (Sn)-Dissolved		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	19-JUN-10
Titanium (Ti)-Dissolved		<0.00030	<0.00030	RPD-NA	mg/L	N/A	20	19-JUN-10
Uranium (U)-Dissolved		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	19-JUN-10
Vanadium (V)-Dissolved		<0.00050	<0.00010	RPD-NA	mg/L	N/A	20	19-JUN-10
Zinc (Zn)-Dissolved		0.0103	0.0100		mg/L	2.8	20	19-JUN-10
WG1121373-1 MB								
Antimony (Sb)-Dissolved			<0.00040		mg/L		0.0004	18-JUN-10
Arsenic (As)-Dissolved			<0.00040		mg/L		0.0004	18-JUN-10
Barium (Ba)-Dissolved			<0.00010		mg/L		0.0001	18-JUN-10
Beryllium (Be)-Dissolved			<0.00050		mg/L		0.0005	18-JUN-10
Boron (B)-Dissolved			<0.0020		mg/L		0.002	18-JUN-10
Chromium (Cr)-Dissolved			<0.00040		mg/L		0.0004	18-JUN-10
Cobalt (Co)-Dissolved			<0.00010		mg/L		0.0001	18-JUN-10
Copper (Cu)-Dissolved			<0.00060		mg/L		0.0006	18-JUN-10
Lead (Pb)-Dissolved			<0.00010		mg/L		0.0001	18-JUN-10
Lithium (Li)-Dissolved			<0.0030		mg/L		0.003	18-JUN-10
Molybdenum (Mo)-Dissolved			<0.00010		mg/L		0.0001	18-JUN-10
Nickel (Ni)-Dissolved			<0.00010		mg/L		0.0001	18-JUN-10
Selenium (Se)-Dissolved			<0.00040		mg/L		0.0004	18-JUN-10
Silver (Ag)-Dissolved			<0.00010		mg/L		0.0001	18-JUN-10
Strontium (Sr)-Dissolved			<0.00010		mg/L		0.0001	18-JUN-10
Thallium (Tl)-Dissolved			<0.000050		mg/L		0.00005	18-JUN-10



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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-MS-ED								
Water								
Batch	R1279985							
WG1121373-1 MB								
Tin (Sn)-Dissolved			<0.00020		mg/L		0.0002	18-JUN-10
Titanium (Ti)-Dissolved			<0.00030		mg/L		0.0003	18-JUN-10
Uranium (U)-Dissolved			<0.00010		mg/L		0.0001	18-JUN-10
Vanadium (V)-Dissolved			<0.00010		mg/L		0.0001	18-JUN-10
Zinc (Zn)-Dissolved			<0.0010		mg/L		0.001	18-JUN-10
WG1121373-4 MS		L894198-5						
Antimony (Sb)-Dissolved			98		%		70-130	18-JUN-10
Arsenic (As)-Dissolved			101		%		70-130	18-JUN-10
Barium (Ba)-Dissolved			97		%		70-130	18-JUN-10
Beryllium (Be)-Dissolved			91		%		70-130	18-JUN-10
Boron (B)-Dissolved			88		%		70-130	18-JUN-10
Chromium (Cr)-Dissolved			96		%		70-130	18-JUN-10
Cobalt (Co)-Dissolved			96		%		70-130	18-JUN-10
Copper (Cu)-Dissolved			94		%		70-130	18-JUN-10
Lead (Pb)-Dissolved			95		%		70-130	18-JUN-10
Lithium (Li)-Dissolved			96		%		70-130	18-JUN-10
Molybdenum (Mo)-Dissolved			98		%		70-130	18-JUN-10
Nickel (Ni)-Dissolved			94		%		70-130	18-JUN-10
Selenium (Se)-Dissolved			103		%		70-130	18-JUN-10
Silver (Ag)-Dissolved			93		%		70-130	18-JUN-10
Thallium (Tl)-Dissolved			95		%		70-130	18-JUN-10
Tin (Sn)-Dissolved			96		%		70-130	18-JUN-10
Titanium (Ti)-Dissolved			95		%		70-130	18-JUN-10
Uranium (U)-Dissolved			97		%		70-130	18-JUN-10
Vanadium (V)-Dissolved			97		%		70-130	18-JUN-10
Zinc (Zn)-Dissolved			93		%		70-130	18-JUN-10
WG1121373-6 MS		L896920-1						
Antimony (Sb)-Dissolved			93		%		70-130	19-JUN-10
Arsenic (As)-Dissolved			97		%		70-130	19-JUN-10
Barium (Ba)-Dissolved			92		%		70-130	19-JUN-10
Beryllium (Be)-Dissolved			98		%		70-130	19-JUN-10
Boron (B)-Dissolved			98		%		70-130	19-JUN-10
Chromium (Cr)-Dissolved			92		%		70-130	19-JUN-10
Cobalt (Co)-Dissolved			101		%		70-130	19-JUN-10



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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-MS-ED		Water						
Batch	R1279985							
WG1121373-6 MS		L896920-1						
Copper (Cu)-Dissolved			100		%		70-130	19-JUN-10
Lead (Pb)-Dissolved			96		%		70-130	19-JUN-10
Lithium (Li)-Dissolved			100		%		70-130	19-JUN-10
Molybdenum (Mo)-Dissolved			92		%		70-130	19-JUN-10
Nickel (Ni)-Dissolved			102		%		70-130	19-JUN-10
Selenium (Se)-Dissolved			97		%		70-130	19-JUN-10
Silver (Ag)-Dissolved			93		%		70-130	19-JUN-10
Strontium (Sr)-Dissolved			104		%		70-130	19-JUN-10
Thallium (Tl)-Dissolved			99		%		70-130	19-JUN-10
Tin (Sn)-Dissolved			93		%		70-130	19-JUN-10
Titanium (Ti)-Dissolved			93		%		70-130	19-JUN-10
Uranium (U)-Dissolved			89		%		70-130	19-JUN-10
Vanadium (V)-Dissolved			94		%		70-130	19-JUN-10
Zinc (Zn)-Dissolved			96		%		70-130	19-JUN-10
WG1121373-8 MS		L896920-4						
Antimony (Sb)-Dissolved			94		%		70-130	19-JUN-10
Arsenic (As)-Dissolved			98		%		70-130	19-JUN-10
Barium (Ba)-Dissolved			89		%		70-130	19-JUN-10
Beryllium (Be)-Dissolved			95		%		70-130	19-JUN-10
Boron (B)-Dissolved			94		%		70-130	19-JUN-10
Chromium (Cr)-Dissolved			95		%		70-130	19-JUN-10
Cobalt (Co)-Dissolved			105		%		70-130	19-JUN-10
Copper (Cu)-Dissolved			103		%		70-130	19-JUN-10
Lead (Pb)-Dissolved			96		%		70-130	19-JUN-10
Lithium (Li)-Dissolved			96		%		70-130	19-JUN-10
Molybdenum (Mo)-Dissolved			90		%		70-130	19-JUN-10
Nickel (Ni)-Dissolved			107		%		70-130	19-JUN-10
Selenium (Se)-Dissolved			97		%		70-130	19-JUN-10
Silver (Ag)-Dissolved			95		%		70-130	19-JUN-10
Strontium (Sr)-Dissolved			105		%		70-130	19-JUN-10
Thallium (Tl)-Dissolved			100		%		70-130	19-JUN-10
Tin (Sn)-Dissolved			93		%		70-130	19-JUN-10
Titanium (Ti)-Dissolved			94		%		70-130	19-JUN-10
Uranium (U)-Dissolved			87		%		70-130	19-JUN-10



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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-D-L-MS-ED		Water						
Batch	R1279985							
WG1121373-8 MS		L896920-4						
Vanadium (V)-Dissolved			94		%		70-130	19-JUN-10
Zinc (Zn)-Dissolved			94		%		70-130	19-JUN-10
Batch	R1282752							
WG1122930-2 CRM		1643E_WATER						
Arsenic (As)-Dissolved			97		%		80-120	22-JUN-10
Beryllium (Be)-Dissolved			101		%		80-120	22-JUN-10
WG1122930-11 DUP		L898966-4						
Arsenic (As)-Dissolved		<0.0016	0.00126		mg/L	4.9	20	23-JUN-10
Beryllium (Be)-Dissolved		<0.0020	<0.00050	RPD-NA	mg/L	N/A	20	23-JUN-10
WG1122930-13 DUP		L898966-6						
Arsenic (As)-Dissolved		0.00142	0.00117		mg/L	19	20	23-JUN-10
Beryllium (Be)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	23-JUN-10
WG1122930-15 DUP		L896337-1						
Arsenic (As)-Dissolved		0.00044	0.00044		mg/L	1.1	20	23-JUN-10
Beryllium (Be)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	23-JUN-10
WG1122930-3 DUP		L898929-1						
Arsenic (As)-Dissolved		0.00169	0.00171		mg/L	1.2	20	23-JUN-10
Beryllium (Be)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	23-JUN-10
WG1122930-5 DUP		L898929-3						
Arsenic (As)-Dissolved		0.00126	0.00126		mg/L	0.0	20	23-JUN-10
Beryllium (Be)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	23-JUN-10
WG1122930-7 DUP		L898929-5						
Arsenic (As)-Dissolved		0.00140	0.00136		mg/L	2.9	20	23-JUN-10
Beryllium (Be)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	23-JUN-10
WG1122930-9 DUP		L898955-3						
Arsenic (As)-Dissolved		0.00113	0.00111		mg/L	1.8	20	23-JUN-10
Beryllium (Be)-Dissolved		<0.00050	<0.00050	RPD-NA	mg/L	N/A	20	23-JUN-10
WG1122930-1 MB								
Arsenic (As)-Dissolved			<0.00040		mg/L		0.0004	22-JUN-10
Beryllium (Be)-Dissolved			<0.00050		mg/L		0.0005	22-JUN-10
WG1122930-10 MS		L898955-3						
Arsenic (As)-Dissolved			103		%		70-130	23-JUN-10
Beryllium (Be)-Dissolved			105		%		70-130	23-JUN-10
WG1122930-12 MS		L898966-4						
Arsenic (As)-Dissolved			100		%		70-130	23-JUN-10



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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-MS-ED		Water						
Batch	R1277876							
WG1120001-2 DUP		L894203-8						
Antimony (Sb)-Total		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	17-JUN-10
Arsenic (As)-Total		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	17-JUN-10
Barium (Ba)-Total		<0.0030	<0.00020	RPD-NA	mg/L	N/A	20	17-JUN-10
Beryllium (Be)-Total		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	17-JUN-10
Boron (B)-Total		<0.050	0.0045		mg/L	9.2	20	17-JUN-10
Chromium (Cr)-Total		<0.0010	<0.00080	RPD-NA	mg/L	N/A	20	17-JUN-10
Cobalt (Co)-Total		<0.0020	<0.00020	RPD-NA	mg/L	N/A	20	17-JUN-10
Copper (Cu)-Total		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	17-JUN-10
Lead (Pb)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	17-JUN-10
Lithium (Li)-Total		<0.010	<0.0060	RPD-NA	mg/L	N/A	20	17-JUN-10
Molybdenum (Mo)-Total		<0.0050	<0.00010	RPD-NA	mg/L	N/A	20	17-JUN-10
Nickel (Ni)-Total		<0.0020	<0.00020	RPD-NA	mg/L	N/A	20	17-JUN-10
Selenium (Se)-Total		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	17-JUN-10
Silver (Ag)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	17-JUN-10
Strontium (Sr)-Total		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	17-JUN-10
Thallium (Tl)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	17-JUN-10
Tin (Sn)-Total		<0.050	<0.00040	RPD-NA	mg/L	N/A	20	17-JUN-10
Titanium (Ti)-Total		<0.0010	<0.00060	RPD-NA	mg/L	N/A	20	17-JUN-10
Uranium (U)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	17-JUN-10
Vanadium (V)-Total		<0.0010	<0.00050	RPD-NA	mg/L	N/A	20	17-JUN-10
Zinc (Zn)-Total		<0.0040	<0.0040	RPD-NA	mg/L	N/A	20	17-JUN-10
WG1120001-1 MB								
Antimony (Sb)-Total			<0.00040		mg/L		0.0004	16-JUN-10
Arsenic (As)-Total			<0.00040		mg/L		0.0004	16-JUN-10
Barium (Ba)-Total			<0.00020		mg/L		0.0002	16-JUN-10
Beryllium (Be)-Total			<0.0010		mg/L		0.001	16-JUN-10
Boron (B)-Total			<0.0040		mg/L		0.004	16-JUN-10
Chromium (Cr)-Total			<0.00080		mg/L		0.0008	16-JUN-10
Cobalt (Co)-Total			<0.00020		mg/L		0.0002	16-JUN-10
Copper (Cu)-Total			<0.0010		mg/L		0.001	16-JUN-10
Lead (Pb)-Total			<0.00010		mg/L		0.0001	16-JUN-10
Lithium (Li)-Total			<0.0060		mg/L		0.006	16-JUN-10
Molybdenum (Mo)-Total			<0.00010		mg/L		0.0001	16-JUN-10



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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7
Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-MS-ED								
Water								
Batch R1277876								
WG1120001-1 MB								
Nickel (Ni)-Total			<0.00020		mg/L		0.0002	16-JUN-10
Selenium (Se)-Total			<0.00040		mg/L		0.0004	16-JUN-10
Silver (Ag)-Total			<0.00010		mg/L		0.0001	16-JUN-10
Strontium (Sr)-Total			<0.00020		mg/L		0.0002	16-JUN-10
Thallium (Tl)-Total			<0.00010		mg/L		0.0001	16-JUN-10
Tin (Sn)-Total			<0.00040		mg/L		0.0004	16-JUN-10
Titanium (Ti)-Total			<0.00060		mg/L		0.0006	16-JUN-10
Uranium (U)-Total			<0.00010		mg/L		0.0001	16-JUN-10
Vanadium (V)-Total			<0.00050		mg/L		0.0005	16-JUN-10
Zinc (Zn)-Total			<0.0040		mg/L		0.004	16-JUN-10
WG1120001-3 MS		L894203-8						
Antimony (Sb)-Total			91		%		70-130	17-JUN-10
Arsenic (As)-Total			97		%		70-130	17-JUN-10
Barium (Ba)-Total			98		%		70-130	17-JUN-10
Beryllium (Be)-Total			96		%		70-130	17-JUN-10
Boron (B)-Total			97		%		70-130	17-JUN-10
Chromium (Cr)-Total			92		%		70-130	17-JUN-10
Cobalt (Co)-Total			98		%		70-130	17-JUN-10
Copper (Cu)-Total			106		%		70-130	17-JUN-10
Lead (Pb)-Total			94		%		70-130	17-JUN-10
Lithium (Li)-Total			102		%		70-130	17-JUN-10
Molybdenum (Mo)-Total			97		%		70-130	17-JUN-10
Nickel (Ni)-Total			100		%		70-130	17-JUN-10
Selenium (Se)-Total			96		%		70-130	17-JUN-10
Silver (Ag)-Total			89		%		70-130	17-JUN-10
Strontium (Sr)-Total			99		%		70-130	17-JUN-10
Thallium (Tl)-Total			95		%		70-130	17-JUN-10
Tin (Sn)-Total			92		%		70-130	17-JUN-10
Titanium (Ti)-Total			95		%		70-130	17-JUN-10
Uranium (U)-Total			98		%		70-130	17-JUN-10
Vanadium (V)-Total			93		%		70-130	17-JUN-10
Zinc (Zn)-Total			94		%		70-130	17-JUN-10

N-TOTKJ-ED Water



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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
N-TOTKJ-ED								
Batch R1273974								
WG1117147-2 LCS								
Total Kjeldahl Nitrogen			100		%		75-125	11-JUN-10
WG1117147-3 LCS								
Total Kjeldahl Nitrogen			108		%		75-125	11-JUN-10
WG1117147-4 LCS								
Total Kjeldahl Nitrogen			98		%		75-125	11-JUN-10
WG1117147-1 MB								
Total Kjeldahl Nitrogen			<0.20		mg/L		0.2	11-JUN-10
Batch R1274853								
WG1118231-2 LCS								
Total Kjeldahl Nitrogen			103		%		75-125	12-JUN-10
WG1118231-4 LCS								
Total Kjeldahl Nitrogen			90		%		75-125	12-JUN-10
WG1118231-1 MB								
Total Kjeldahl Nitrogen			<0.20		mg/L		0.2	12-JUN-10
WG1118231-6 MS		L894203-7						
Total Kjeldahl Nitrogen			84.4		%		61-140	12-JUN-10
Batch R1275765								
WG1118542-5 DUP		L894203-5						
Total Kjeldahl Nitrogen		<0.20	<0.20	RPD-NA	mg/L	N/A	17	14-JUN-10
WG1118542-2 LCS								
Total Kjeldahl Nitrogen			98		%		75-125	14-JUN-10
WG1118542-3 LCS								
Total Kjeldahl Nitrogen			89		%		75-125	14-JUN-10
WG1118542-4 LCS								
Total Kjeldahl Nitrogen			90		%		75-125	14-JUN-10
WG1118542-1 MB								
Total Kjeldahl Nitrogen			<0.20		mg/L		0.2	14-JUN-10
WG1118542-6 MS		L894203-6						
Total Kjeldahl Nitrogen			105		%		61-140	14-JUN-10
NH4-LOW-ED								
Batch R1281101								
WG1120684-3 LCS								
Ammonia-N			93		%		85-115	17-JUN-10
WG1120684-4 LCS								
Ammonia-N			97		%		85-115	17-JUN-10
WG1120684-2 MB								
Ammonia-N			<0.0050		mg/L		0.005	17-JUN-10



Quality Control Report

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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
P-TOTAL-ED		Water						
Batch	R1274503							
WG1117443-3 DUP		L894203-8						
Phosphorus, Total		<0.020	<0.020	RPD-NA	mg/L	N/A	9.5	11-JUN-10
WG1117443-2 LCS								
Phosphorus, Total			101		%		80-120	11-JUN-10
WG1117443-1 MB								
Phosphorus, Total			<0.020		mg/L		0.02	11-JUN-10
WG1117443-4 MS		L894203-8						
Phosphorus, Total			105		%		79-122	11-JUN-10
Batch	R1276803							
WG1119302-3 DUP		L895744-1						
Phosphorus, Total		0.073	0.059	J	mg/L	0.014	0.04	15-JUN-10
WG1119302-5 DUP		L896242-1						
Phosphorus, Total		0.049	0.049		mg/L	0.0	9.5	15-JUN-10
WG1119302-2 LCS								
Phosphorus, Total			100		%		80-120	15-JUN-10
WG1119302-1 MB								
Phosphorus, Total			<0.020		mg/L		0.02	15-JUN-10
WG1119302-4 MS		L895744-1						
Phosphorus, Total			105		%		79-122	15-JUN-10
WG1119302-6 MS		L896242-1						
Phosphorus, Total			106		%		79-122	15-JUN-10
PH/EC/ALK-ED		Water						
Batch	R1271171							
WG1115599-5 DUP		L894272-2						
pH		9.26	9.26	J	pH	0.00	0.2	08-JUN-10
Conductivity (EC)		987	989		uS/cm	0.20	10	08-JUN-10
Bicarbonate (HCO3)		485	485		mg/L	0.12	25	08-JUN-10
Carbonate (CO3)		80.9	81.0		mg/L	0.16	25	08-JUN-10
Hydroxide (OH)		<5.0	<5.0	RPD-NA	mg/L	N/A	25	08-JUN-10
Alkalinity, Total (as CaCO3)		532	533		mg/L	0.13	6.5	08-JUN-10
WG1115599-6 DUP		L894813-4						
pH		7.22	7.19	J	pH	0.03	0.2	08-JUN-10
Conductivity (EC)		127	126		uS/cm	0.23	10	08-JUN-10
Bicarbonate (HCO3)		11.1	9.5		mg/L	15	25	08-JUN-10
Carbonate (CO3)		<5.0	<5.0	RPD-NA	mg/L	N/A	25	08-JUN-10
Hydroxide (OH)		<5.0	<5.0	RPD-NA	mg/L	N/A	25	08-JUN-10



Quality Control Report

Workorder: L894203

Report Date: 19-JUL-10

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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
PH/EC/ALK-ED		Water						
Batch	R1271171							
WG1115599-6	DUP	L894813-4						
Alkalinity, Total (as CaCO ₃)		9.1	7.8	J	mg/L	1.3	10	08-JUN-10
WG1115599-7	DUP	L894608-3						
pH		7.88	7.86	J	pH	0.02	0.2	08-JUN-10
Conductivity (EC)		3510	3510		uS/cm	0.0	10	08-JUN-10
Bicarbonate (HCO ₃)		732	729		mg/L	0.49	25	08-JUN-10
Carbonate (CO ₃)		<5.0	<5.0	RPD-NA	mg/L	N/A	25	08-JUN-10
Hydroxide (OH)		<5.0	<5.0	RPD-NA	mg/L	N/A	25	08-JUN-10
Alkalinity, Total (as CaCO ₃)		600	597		mg/L	0.49	6.5	08-JUN-10
WG1115599-2	LCS							
Conductivity (EC)			103		%		90-110	08-JUN-10
WG1115599-3	LCS							
pH			6.97		pH		6.9-7.1	08-JUN-10
WG1115599-4	LCS							
Alkalinity, Total (as CaCO ₃)			99		%		85-115	08-JUN-10
WG1115599-1	MB							
Bicarbonate (HCO ₃)			<5.0		mg/L		5	08-JUN-10
Carbonate (CO ₃)			<5.0		mg/L		5	08-JUN-10
Hydroxide (OH)			<5.0		mg/L		5	08-JUN-10
Alkalinity, Total (as CaCO ₃)			<5.0		mg/L		5	08-JUN-10
SO4-IC-ED		Water						
Batch	R1272251							
WG1116242-3	DUP	L894734-7						
Sulfate (SO ₄)		2.25	2.25		mg/L	0.12	20	08-JUN-10
WG1116242-5	DUP	L894608-3						
Sulfate (SO ₄)		1590	1550		mg/L	3.9	20	08-JUN-10
WG1116242-7	DUP	L894394-1						
Sulfate (SO ₄)		293	289		mg/L	1.1	20	08-JUN-10
WG1116242-2	LCS							
Sulfate (SO ₄)			103		%		85-115	08-JUN-10
WG1116242-1	MB							
Sulfate (SO ₄)			<0.50		mg/L		0.5	08-JUN-10
WG1116242-4	MS	L894734-7						
Sulfate (SO ₄)			104		%		75-125	08-JUN-10
WG1116242-6	MS	L894608-3						
Sulfate (SO ₄)			N/A	MS-B	%		-	08-JUN-10
WG1116242-8	MS	L894394-1						



Quality Control Report

Workorder: L894203

Report Date: 19-JUL-10

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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
SO4-IC-ED		Water						
Batch	R1272251							
WG1116242-8	MS	L894394-1						
Sulfate (SO4)			N/A	MS-B	%		-	08-JUN-10
SOLIDS-TOTSUS-ED		Water						
Batch	R1378283							
WG1136087-4	DUP	L909529-3						
Total Suspended Solids		4.0	5.0	J	mg/L	1.0	6	19-JUL-10
WG1136087-2	LCS							
Total Suspended Solids			94		%		85-115	19-JUL-10
WG1136087-3	LCS							
Total Suspended Solids			104		%		85-115	19-JUL-10
WG1136087-1	MB							
Total Suspended Solids			<3.0		mg/L		3	19-JUL-10
TURBIDITY-ED		Water						
Batch	R1374004							
WG1135590-2	DUP	L908008-2						
Turbidity		0.56	0.53		NTU	5.5	8.8	16-JUL-10
WG1135590-3	DUP	L908008-13						
Turbidity		0.32	0.34		NTU	6.1	8.8	16-JUL-10
WG1135590-1	MB							
Turbidity			<0.10		NTU		0.1	16-JUL-10

Quality Control Report

Workorder: L894203

Report Date: 19-JUL-10

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Legend:

Limit	99% Confidence Interval (Laboratory Control Limits)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
J	Duplicate results and limits are expressed in terms of absolute difference.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

Quality Control Report

Workorder: L894203

Report Date: 19-JUL-10

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Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
Total Suspended Solids	1	02-JUN-10	19-JUL-10 00:00	7	47	days	EHT
	2	02-JUN-10	19-JUL-10 00:00	7	47	days	EHT
	4	02-JUN-10	19-JUL-10 00:00	7	47	days	EHT
	5	02-JUN-10	19-JUL-10 00:00	7	47	days	EHT
	6	02-JUN-10	19-JUL-10 00:00	7	47	days	EHT
	8	02-JUN-10	19-JUL-10 00:00	7	47	days	EHT
Turbidity	1	02-JUN-10	16-JUL-10 00:00	48	1040	hours	EHTR
	2	02-JUN-10	16-JUL-10 00:00	48	1040	hours	EHTR
	4	02-JUN-10	16-JUL-10 00:00	48	1040	hours	EHTR
	5	02-JUN-10	16-JUL-10 00:00	48	1040	hours	EHTR
	6	02-JUN-10	16-JUL-10 00:00	48	1040	hours	EHTR
	8	02-JUN-10	16-JUL-10 00:00	48	1040	hours	EHTR
Anions and Nutrients							
Nitrate as N by IC	1	02-JUN-10	08-JUN-10 13:21	48	145	hours	EHTR
	2	02-JUN-10	08-JUN-10 13:21	48	145	hours	EHTR
	4	02-JUN-10	08-JUN-10 13:21	48	145	hours	EHTR
	5	02-JUN-10	08-JUN-10 13:21	48	145	hours	EHTR
	6	02-JUN-10	08-JUN-10 13:21	48	145	hours	EHTR
	8	02-JUN-10	08-JUN-10 13:21	48	145	hours	EHTR
Nitrite as N by IC	1	02-JUN-10	08-JUN-10 13:21	48	145	hours	EHTR
	2	02-JUN-10	08-JUN-10 13:21	48	145	hours	EHTR
	4	02-JUN-10	08-JUN-10 13:21	48	145	hours	EHTR
	5	02-JUN-10	08-JUN-10 13:21	48	145	hours	EHTR
	6	02-JUN-10	08-JUN-10 13:21	48	145	hours	EHTR
	8	02-JUN-10	08-JUN-10 13:21	48	145	hours	EHTR

Legend & Qualifier Definitions:

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.
 EHTR: Exceeded ALS recommended hold time prior to sample receipt.
 EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.
 EHT: Exceeded ALS recommended hold time prior to analysis.
 Rec. HT: ALS recommended hold time (see units).

Notes*:
 Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes.
 Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L894203 were received on 06-JUN-10 13:46.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.

REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION

APPENDIX C

APPENDIX C SURFACE WATER QUALITY LABORATORY REPORTS



Environmental Division

Certificate of Analysis

EBA ENG CONSULTANTS LTD

ATTN: KARLA LANGLOIS

201 - 4916 49 STREET
PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Report Date: 28-JUL-10 17:02 (MT)

Version: FINAL

Lab Work Order #: **L908008**

Date Received: **13-JUL-10**

Project P.O. #: NOT SUBMITTED

Job Reference: Y22101137

Legal Site Desc:

CofC Numbers:

Other Information:

Comments:

Geraldyn Gouthro
Client Services Manager

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-1 WQ3							
Sampled By: KL on 08-JUL-10							
Matrix: WATER							
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		27-JUL-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		26-JUL-10	R1400449
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	0.0119		0.0050	mg/L		26-JUL-10	R1401414
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Arsenic (As)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Barium (Ba)-Total	<0.0030		0.0030	mg/L		26-JUL-10	R1401414
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Boron (B)-Total	<0.050		0.050	mg/L		26-JUL-10	R1401414
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Copper (Cu)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Lead (Pb)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Lithium (Li)-Total	<0.010		0.010	mg/L		26-JUL-10	R1401414
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		26-JUL-10	R1401414
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Selenium (Se)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Silver (Ag)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Strontium (Sr)-Total	0.00143	RRVAP	0.00020	mg/L		26-JUL-10	R1401414
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Tin (Sn)-Total	<0.050		0.050	mg/L		26-JUL-10	R1401414
Titanium (Ti)-Total	0.0011		0.0010	mg/L		26-JUL-10	R1401414
Uranium (U)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Vanadium (V)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		23-JUL-10	R1399615
Iron (Fe)-Total	<0.030		0.030	mg/L		23-JUL-10	R1399615
Magnesium (Mg)-Total	<0.10		0.10	mg/L		23-JUL-10	R1399615
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		23-JUL-10	R1399615
Potassium (K)-Total	<0.50		0.50	mg/L		23-JUL-10	R1399615
Sodium (Na)-Total	<1.0		1.0	mg/L		23-JUL-10	R1399615
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		16-JUL-10	R1373204
Oil and Grease	<1.0		1.0	mg/L		23-JUL-10	R1398975
Phosphorus, Total	<0.020		0.020	mg/L	15-JUL-10	16-JUL-10	R1371283
Total Organic Carbon	<1.0		1.0	mg/L		24-JUL-10	R1399771
Total Suspended Solids	<3.0		3.0	mg/L		15-JUL-10	R1364123
Turbidity	0.24	RRV	0.10	NTU		16-JUL-10	R1374004
pH and Conductivity							
pH	5.94		0.10	pH		14-JUL-10	R1358123
Conductivity (EC)	4.36		0.20	uS/cm		14-JUL-10	R1358123
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		14-JUL-10	R1360083
Nitrate+Nitrite							

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

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-2	WQ4							
Sampled By: KL on 08-JUL-10								
Matrix: WATER								
Phosphorus, Total		<0.020		0.020	mg/L	15-JUL-10	16-JUL-10	R1371283
Total Organic Carbon		<1.0		1.0	mg/L		24-JUL-10	R1399771
Total Suspended Solids		<3.0		3.0	mg/L		15-JUL-10	R1364123
Turbidity		0.56	RRV	0.10	NTU		16-JUL-10	R1374004
pH and Conductivity								
pH		6.15		0.10	pH		14-JUL-10	R1358123
Conductivity (EC)		4.45		0.20	uS/cm		14-JUL-10	R1358123
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		0.060	RRV	0.050	mg/L		14-JUL-10	R1360083
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		19-JUL-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-JUL-10	R1360083
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		19-JUL-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	15-JUL-10	16-JUL-10	R1368266
L908008-3	WQ5							
Sampled By: KL on 08-JUL-10								
Matrix: WATER								
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								
Hardness (as CaCO3)		<1.3			mg/L		27-JUL-10	
Mercury (Hg)								
Mercury (Hg)-Total		<0.000020		0.000020	mg/L		26-JUL-10	R1400449
Total Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Total		0.0212		0.0050	mg/L		26-JUL-10	R1401414
Total Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPMS (Low)								
Antimony (Sb)-Total		<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Arsenic (As)-Total		<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Barium (Ba)-Total		<0.0030		0.0030	mg/L		26-JUL-10	R1401414
Beryllium (Be)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Boron (B)-Total		<0.050		0.050	mg/L		26-JUL-10	R1401414
Chromium (Cr)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Cobalt (Co)-Total		<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Copper (Cu)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Lead (Pb)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Lithium (Li)-Total		<0.010		0.010	mg/L		26-JUL-10	R1401414
Molybdenum (Mo)-Total		<0.0050		0.0050	mg/L		26-JUL-10	R1401414
Nickel (Ni)-Total		<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Selenium (Se)-Total		<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Silver (Ag)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Strontium (Sr)-Total		0.00204		0.00020	mg/L		26-JUL-10	R1401414
Thallium (Tl)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Tin (Sn)-Total		<0.050		0.050	mg/L		26-JUL-10	R1401414
Titanium (Ti)-Total		0.0011		0.0010	mg/L		26-JUL-10	R1401414
Uranium (U)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Vanadium (V)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		26-JUL-10	R1401414

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-3	WQ5							
Sampled By: KL on 08-JUL-10								
Matrix: WATER								
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		24-JUL-10	R1400501
Iron (Fe)-Total		<0.030		0.030	mg/L		24-JUL-10	R1400501
Magnesium (Mg)-Total		0.12		0.10	mg/L		24-JUL-10	R1400501
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		24-JUL-10	R1400501
Potassium (K)-Total		<0.50		0.50	mg/L		24-JUL-10	R1400501
Sodium (Na)-Total		<1.0		1.0	mg/L		24-JUL-10	R1400501
Miscellaneous Parameters								
Ammonia-N		<0.0050		0.0050	mg/L		16-JUL-10	R1373204
Oil and Grease		<1.0		1.0	mg/L		23-JUL-10	R1398975
Phosphorus, Total		<0.020		0.020	mg/L	15-JUL-10	16-JUL-10	R1371283
Total Organic Carbon		<1.0		1.0	mg/L		24-JUL-10	R1399771
Total Suspended Solids		<3.0		3.0	mg/L		15-JUL-10	R1364123
Turbidity		0.29		0.10	NTU		14-JUL-10	R1368143
pH and Conductivity								
pH		6.07		0.10	pH		14-JUL-10	R1358123
Conductivity (EC)		5.49		0.20	uS/cm		14-JUL-10	R1358123
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-JUL-10	R1360083
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-JUL-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-JUL-10	R1360083
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		16-JUL-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	15-JUL-10	16-JUL-10	R1368266
L908008-4	HYDRO2							
Sampled By: KL on 08-JUL-10								
Matrix: WATER								
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								
Hardness (as CaCO3)		<1.3			mg/L		27-JUL-10	
Mercury (Hg)								
Mercury (Hg)-Total		<0.000020		0.000020	mg/L		26-JUL-10	R1400449
Total Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Total		0.0494	RRVAP	0.0050	mg/L		26-JUL-10	R1401414
Total Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPMS (Low)								
Antimony (Sb)-Total		<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Arsenic (As)-Total		<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Barium (Ba)-Total		<0.0030		0.0030	mg/L		26-JUL-10	R1401414
Beryllium (Be)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Boron (B)-Total		<0.050		0.050	mg/L		26-JUL-10	R1401414
Chromium (Cr)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Cobalt (Co)-Total		<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Copper (Cu)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Lead (Pb)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Lithium (Li)-Total		<0.010		0.010	mg/L		26-JUL-10	R1401414
Molybdenum (Mo)-Total		<0.0050		0.0050	mg/L		26-JUL-10	R1401414

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-4HYDRO2 Sampled By: KL on 08-JUL-10 Matrix: WATER Total Metals in Water by ICPMS (Low) Nickel (Ni)-Total<0.00200.0020mg/L26-JUL-10R1401414 Selenium (Se)-Total<0.000400.00040mg/L26-JUL-10R1401414 Silver (Ag)-Total<0.000100.00010mg/L26-JUL-10R1401414 Strontium (Sr)-Total0.001640.00020mg/L26-JUL-10R1401414 Thallium (Tl)-Total<0.000100.00010mg/L26-JUL-10R1401414 Tin (Sn)-Total<0.0500.050mg/L26-JUL-10R1401414 Titanium (Ti)-Total0.00380.0010mg/L26-JUL-10R1401414 Uranium (U)-Total<0.000100.00010mg/L26-JUL-10R1401414 Vanadium (V)-Total<0.00100.0010mg/L26-JUL-10R1401414 Zinc (Zn)-Total<0.00400.0040mg/L26-JUL-10R1401414 Total Metals in Water by ICPOES Calcium (Ca)-Total<0.500.50mg/L24-JUL-10R1400501 Iron (Fe)-Total0.0390.030mg/L24-JUL-10R1400501 Magnesium (Mg)-Total<0.100.10mg/L24-JUL-10R1400501 Manganese (Mn)-Total<0.00500.0050mg/L24-JUL-10R1400501 Potassium (K)-Total<0.500.50mg/L24-JUL-10R1400501 Sodium (Na)-Total<1.01.0mg/L24-JUL-10R1400501 Miscellaneous Parameters Ammonia-N<0.00500.0050mg/L16-JUL-10R1373204 Oil and Grease<1.01.0mg/L23-JUL-10R1398975 Phosphorus, Total<0.0200.020mg/L15-JUL-10R1371283 Total Organic Carbon<1.01.0mg/L24-JUL-10R1399771 Total Suspended Solids<3.03.0mg/L15-JUL-10R1364123 Turbidity1.200.10NTU16-JUL-10R1374004 pH and Conductivity pH6.090.10pH14-JUL-10R1358123 Conductivity (EC)4.020.20uS/cm14-JUL-10R1358123 Total Nitrogen Nitrate as N by IC Nitrate (as N)0.0640.050mg/L14-JUL-10R1360083 Nitrate+Nitrite Nitrate and Nitrite as N<0.0710.071mg/L19-JUL-10 Nitrite as N by IC Nitrite (as N)<0.0500.050mg/L14-JUL-10R1360083 Nitrogen, Total Nitrogen, Total<0.200.20mg/L19-JUL-10 Total Kjeldahl Nitrogen Total Kjeldahl Nitrogen<0.200.20mg/L15-JUL-1016-JUL-10R1368266	RRVAP						
L908008-5HYDRO1 Sampled By: KL on 09-JUL-10 Matrix: WATER TOT Metals CCME Fresh Water Aquatic Life Hardness (from Total Ca and Mg) Hardness (as CaCO3)<1.3mg/L27-JUL-10 Mercury (Hg) Mercury (Hg)-Total<0.0000200.000020mg/L26-JUL-10R1400449 Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total0.06390.0050mg/L26-JUL-10R1401414 Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total<0.0000100.000010mg/L26-JUL-10R1401414 Total Metals in Water by ICPMS (Low)							

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-5 HYDRO1							
Sampled By: KL on 09-JUL-10							
Matrix: WATER							
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Arsenic (As)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Barium (Ba)-Total	<0.0030		0.0030	mg/L		26-JUL-10	R1401414
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Boron (B)-Total	<0.050		0.050	mg/L		26-JUL-10	R1401414
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Copper (Cu)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Lead (Pb)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Lithium (Li)-Total	<0.010		0.010	mg/L		26-JUL-10	R1401414
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		26-JUL-10	R1401414
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Selenium (Se)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Silver (Ag)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Strontium (Sr)-Total	0.00127	RRVAP	0.00020	mg/L		26-JUL-10	R1401414
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Tin (Sn)-Total	<0.050		0.050	mg/L		26-JUL-10	R1401414
Titanium (Ti)-Total	0.0042		0.0010	mg/L		26-JUL-10	R1401414
Uranium (U)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Vanadium (V)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		24-JUL-10	R1400501
Iron (Fe)-Total	0.048		0.030	mg/L		24-JUL-10	R1400501
Magnesium (Mg)-Total	0.11		0.10	mg/L		24-JUL-10	R1400501
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		24-JUL-10	R1400501
Potassium (K)-Total	<0.50		0.50	mg/L		24-JUL-10	R1400501
Sodium (Na)-Total	<1.0		1.0	mg/L		24-JUL-10	R1400501
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		16-JUL-10	R1373204
Oil and Grease	<1.0		1.0	mg/L		23-JUL-10	R1398975
Phosphorus, Total	<0.020		0.020	mg/L	15-JUL-10	16-JUL-10	R1371283
Total Organic Carbon	<1.0		1.0	mg/L		24-JUL-10	R1399771
Total Suspended Solids	<3.0		3.0	mg/L		15-JUL-10	R1364123
Turbidity	1.67	RRV	0.10	NTU		16-JUL-10	R1374004
pH and Conductivity							
pH	6.06		0.10	pH		14-JUL-10	R1358123
Conductivity (EC)	4.34		0.20	uS/cm		14-JUL-10	R1358123
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	0.106	RRV	0.050	mg/L		14-JUL-10	R1360083
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.106		0.071	mg/L		19-JUL-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		14-JUL-10	R1360083
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		19-JUL-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	15-JUL-10	16-JUL-10	R1368266

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-6 HYDRO9							
Sampled By: KL on 09-JUL-10							
Matrix: WATER							
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		27-JUL-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		26-JUL-10	R1400449
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	0.0690	RRVAP	0.0050	mg/L		26-JUL-10	R1401414
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Arsenic (As)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Barium (Ba)-Total	<0.0030		0.0030	mg/L		26-JUL-10	R1401414
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Boron (B)-Total	<0.050		0.050	mg/L		26-JUL-10	R1401414
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Copper (Cu)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Lead (Pb)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Lithium (Li)-Total	<0.010		0.010	mg/L		26-JUL-10	R1401414
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		26-JUL-10	R1401414
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Selenium (Se)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Silver (Ag)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Strontium (Sr)-Total	0.00109	RRVAP	0.00020	mg/L		26-JUL-10	R1401414
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Tin (Sn)-Total	<0.050		0.050	mg/L		26-JUL-10	R1401414
Titanium (Ti)-Total	0.0037		0.0010	mg/L		26-JUL-10	R1401414
Uranium (U)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Vanadium (V)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		24-JUL-10	R1400501
Iron (Fe)-Total	0.051		0.030	mg/L		24-JUL-10	R1400501
Magnesium (Mg)-Total	<0.10		0.10	mg/L		24-JUL-10	R1400501
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		24-JUL-10	R1400501
Potassium (K)-Total	<0.50		0.50	mg/L		24-JUL-10	R1400501
Sodium (Na)-Total	<1.0		1.0	mg/L		24-JUL-10	R1400501
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		16-JUL-10	R1373204
Oil and Grease	<1.0		1.0	mg/L		23-JUL-10	R1398975
Phosphorus, Total	<0.020		0.020	mg/L	15-JUL-10	16-JUL-10	R1371283
Total Organic Carbon	<1.0		1.0	mg/L		24-JUL-10	R1399771
Total Suspended Solids	<3.0		3.0	mg/L		15-JUL-10	R1364123
Turbidity	1.40	RRV	0.10	NTU		16-JUL-10	R1374004
pH and Conductivity							
pH	6.08		0.10	pH		14-JUL-10	R1358123
Conductivity (EC)	4.44		0.20	uS/cm		14-JUL-10	R1358123
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	0.082	RRV	0.050	mg/L		14-JUL-10	R1360083
Nitrate+Nitrite							

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-6	HYDRO9							
Sampled By: KL on 09-JUL-10								
Matrix: WATER								
Nitrate+Nitrite								
Nitrate and Nitrite as N		0.082		0.071	mg/L		19-JUL-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-JUL-10	R1360083
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		19-JUL-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	15-JUL-10	16-JUL-10	R1368266
L908008-7	WQ6							
Sampled By: KL on 10-JUL-10								
Matrix: WATER								
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								
Hardness (as CaCO3)		<1.3			mg/L		27-JUL-10	
Mercury (Hg)								
Mercury (Hg)-Total		<0.000020		0.000020	mg/L		26-JUL-10	R1400449
Total Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Total		0.0159		0.0050	mg/L		26-JUL-10	R1401414
Total Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPMS (Low)								
Antimony (Sb)-Total		<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Arsenic (As)-Total		<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Barium (Ba)-Total		<0.0030		0.0030	mg/L		26-JUL-10	R1401414
Beryllium (Be)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Boron (B)-Total		<0.050		0.050	mg/L		26-JUL-10	R1401414
Chromium (Cr)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Cobalt (Co)-Total		<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Copper (Cu)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Lead (Pb)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Lithium (Li)-Total		<0.010		0.010	mg/L		26-JUL-10	R1401414
Molybdenum (Mo)-Total		<0.0050		0.0050	mg/L		26-JUL-10	R1401414
Nickel (Ni)-Total		<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Selenium (Se)-Total		<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Silver (Ag)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Strontium (Sr)-Total		0.00180	RRVAP	0.00020	mg/L		26-JUL-10	R1401414
Thallium (Tl)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Tin (Sn)-Total		<0.050		0.050	mg/L		26-JUL-10	R1401414
Titanium (Ti)-Total		0.0011		0.0010	mg/L		26-JUL-10	R1401414
Uranium (U)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Vanadium (V)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		24-JUL-10	R1400501
Iron (Fe)-Total		<0.030		0.030	mg/L		24-JUL-10	R1400501
Magnesium (Mg)-Total		<0.10		0.10	mg/L		24-JUL-10	R1400501
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		24-JUL-10	R1400501
Potassium (K)-Total		<0.50		0.50	mg/L		24-JUL-10	R1400501
Sodium (Na)-Total		<1.0		1.0	mg/L		24-JUL-10	R1400501
Miscellaneous Parameters								
Ammonia-N		<0.0050		0.0050	mg/L		16-JUL-10	R1373204
Oil and Grease		<1.0		1.0	mg/L		23-JUL-10	R1398975

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-7 WQ6 Sampled By: KL on 10-JUL-10 Matrix: WATER Phosphorus, Total Total Organic Carbon Total Suspended Solids Turbidity pH and Conductivity pH Conductivity (EC) Total Nitrogen Nitrate as N by IC Nitrate (as N) Nitrate+Nitrite Nitrate and Nitrite as N Nitrite as N by IC Nitrite (as N) Nitrogen, Total Nitrogen, Total Total Kjeldahl Nitrogen Total Kjeldahl Nitrogen	<0.020 <1.0 <3.0 0.32 6.15 4.52 <0.050 <0.071 <0.050 <0.20 <0.20	RRV	0.020 1.0 3.0 0.10 0.10 0.20 0.050 0.071 0.050 0.20 0.20	mg/L mg/L mg/L NTU pH uS/cm mg/L mg/L mg/L mg/L mg/L	15-JUL-10	16-JUL-10 24-JUL-10 15-JUL-10 16-JUL-10 14-JUL-10 14-JUL-10 14-JUL-10 15-JUL-10 14-JUL-10 16-JUL-10 16-JUL-10	R1371283 R1399771 R1364123 R1374004 R1358123 R1358123 R1360083 R1360083 R1368266
L908008-8 WQ7 Sampled By: KL on 10-JUL-10 Matrix: WATER TOT Metals CCME Fresh Water Aquatic Life Hardness (from Total Ca and Mg) Hardness (as CaCO3) Mercury (Hg) Mercury (Hg)-Total Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total Total Metals in Water by ICPMS (Low) Antimony (Sb)-Total Arsenic (As)-Total Barium (Ba)-Total Beryllium (Be)-Total Boron (B)-Total Chromium (Cr)-Total Cobalt (Co)-Total Copper (Cu)-Total Lead (Pb)-Total Lithium (Li)-Total Molybdenum (Mo)-Total Nickel (Ni)-Total Selenium (Se)-Total Silver (Ag)-Total Strontium (Sr)-Total Thallium (Tl)-Total Tin (Sn)-Total Titanium (Ti)-Total Uranium (U)-Total Vanadium (V)-Total Zinc (Zn)-Total	<1.3 <0.000020 0.0148 <0.000010 <0.00040 <0.00040 <0.0030 <0.0010 <0.050 <0.0010 <0.0020 <0.0010 <0.00010 <0.010 <0.0050 <0.0020 <0.00040 <0.00010 0.00169 <0.00010 <0.050 <0.0010 <0.00010 <0.0010 <0.0040	RRVAP	0.000020 0.0050 0.000010 0.00040 0.00040 0.0030 0.0010 0.050 0.0010 0.0020 0.0010 0.00010 0.010 0.0050 0.0020 0.00040 0.00010 0.00020 0.00010 0.050 0.0010 0.00010 0.0010 0.0040	mg/L mg/L		27-JUL-10 26-JUL-10	R1400449 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-8 WQ7 Sampled By: KL on 10-JUL-10 Matrix: WATER Total Metals in Water by ICPOES Calcium (Ca)-Total <0.50 0.50 mg/L 23-JUL-10 R1399615 Iron (Fe)-Total <0.030 0.030 mg/L 23-JUL-10 R1399615 Magnesium (Mg)-Total <0.10 0.10 mg/L 23-JUL-10 R1399615 Manganese (Mn)-Total <0.0050 0.0050 mg/L 23-JUL-10 R1399615 Potassium (K)-Total <0.50 0.50 mg/L 23-JUL-10 R1399615 Sodium (Na)-Total <1.0 1.0 mg/L 23-JUL-10 R1399615 Miscellaneous Parameters Ammonia-N <0.0050 0.0050 mg/L 16-JUL-10 R1373204 Oil and Grease <1.0 1.0 mg/L 23-JUL-10 R1398975 Phosphorus, Total <0.020 0.020 mg/L 15-JUL-10 16-JUL-10 R1371283 Total Organic Carbon <1.0 1.0 mg/L 24-JUL-10 R1399771 Total Suspended Solids <3.0 3.0 mg/L 15-JUL-10 R1364123 Turbidity 0.32 RRV 0.10 NTU 16-JUL-10 R1374004 pH and Conductivity pH 6.20 0.10 pH 14-JUL-10 R1358123 Conductivity (EC) 4.51 0.20 uS/cm 14-JUL-10 R1358123 Total Nitrogen Nitrate as N by IC Nitrate (as N) <0.050 0.050 mg/L 14-JUL-10 R1360083 Nitrate+Nitrite Nitrate and Nitrite as N <0.071 0.071 mg/L 15-JUL-10 Nitrite as N by IC Nitrite (as N) <0.050 0.050 mg/L 14-JUL-10 R1360083 Nitrogen, Total Nitrogen, Total <0.20 0.20 mg/L 16-JUL-10 Total Kjeldahl Nitrogen Total Kjeldahl Nitrogen <0.20 0.20 mg/L 15-JUL-10 16-JUL-10 R1368266							
L908008-9 WQ8 Sampled By: KL on 10-JUL-10 Matrix: WATER TOT Metals CCME Fresh Water Aquatic Life Hardness (from Total Ca and Mg) Hardness (as CaCO3) <1.3 mg/L 27-JUL-10 Mercury (Hg) Mercury (Hg)-Total <0.000020 0.000020 mg/L 26-JUL-10 R1400449 Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total 0.0665 0.0050 mg/L 26-JUL-10 R1401414 Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total <0.000010 0.000010 mg/L 26-JUL-10 R1401414 Total Metals in Water by ICPMS (Low) Antimony (Sb)-Total <0.00040 0.00040 mg/L 26-JUL-10 R1401414 Arsenic (As)-Total <0.00040 0.00040 mg/L 26-JUL-10 R1401414 Barium (Ba)-Total <0.0030 0.0030 mg/L 26-JUL-10 R1401414 Beryllium (Be)-Total <0.0010 0.0010 mg/L 26-JUL-10 R1401414 Boron (B)-Total <0.050 0.050 mg/L 26-JUL-10 R1401414 Chromium (Cr)-Total <0.0010 0.0010 mg/L 26-JUL-10 R1401414 Cobalt (Co)-Total <0.0020 0.0020 mg/L 26-JUL-10 R1401414 Copper (Cu)-Total <0.0010 0.0010 mg/L 26-JUL-10 R1401414 Lead (Pb)-Total <0.00010 0.00010 mg/L 26-JUL-10 R1401414 Lithium (Li)-Total <0.010 0.010 mg/L 26-JUL-10 R1401414 Molybdenum (Mo)-Total <0.0050 0.0050 mg/L 26-JUL-10 R1401414							

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-9	WQ8							
Sampled By: KL on 10-JUL-10								
Matrix: WATER								
Total Metals in Water by ICPMS (Low)								
Nickel (Ni)-Total		<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Selenium (Se)-Total		<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Silver (Ag)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Strontium (Sr)-Total		0.00187	RRVAP	0.00020	mg/L		26-JUL-10	R1401414
Thallium (Tl)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Tin (Sn)-Total		<0.050		0.050	mg/L		26-JUL-10	R1401414
Titanium (Ti)-Total		0.0064		0.0010	mg/L		26-JUL-10	R1401414
Uranium (U)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Vanadium (V)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50	RRV	0.50	mg/L		23-JUL-10	R1399615
Iron (Fe)-Total		0.064	RRV	0.030	mg/L		23-JUL-10	R1399615
Magnesium (Mg)-Total		0.12	RRV	0.10	mg/L		23-JUL-10	R1399615
Manganese (Mn)-Total		<0.0050	RRV	0.0050	mg/L		23-JUL-10	R1399615
Potassium (K)-Total		<0.50	RRV	0.50	mg/L		23-JUL-10	R1399615
Sodium (Na)-Total		<1.0	RRV	1.0	mg/L		23-JUL-10	R1399615
Miscellaneous Parameters								
Ammonia-N		<0.0050		0.0050	mg/L		16-JUL-10	R1373204
Oil and Grease		<1.0		1.0	mg/L		23-JUL-10	R1398975
Phosphorus, Total		<0.020		0.020	mg/L	15-JUL-10	16-JUL-10	R1371283
Total Organic Carbon		<1.0		1.0	mg/L		24-JUL-10	R1399771
Total Suspended Solids		<3.0		3.0	mg/L		15-JUL-10	R1364123
Turbidity		1.19	RRV	0.10	NTU		16-JUL-10	R1374004
pH and Conductivity								
pH		6.20		0.10	pH		14-JUL-10	R1358123
Conductivity (EC)		4.76		0.20	uS/cm		14-JUL-10	R1358123
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		14-JUL-10	R1360083
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-JUL-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-JUL-10	R1360083
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		16-JUL-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	15-JUL-10	16-JUL-10	R1368266
L908008-10	HYDRO10							
Sampled By: KL on 11-JUL-10								
Matrix: WATER								
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								
Hardness (as CaCO3)		<1.3			mg/L		27-JUL-10	
Mercury (Hg)								
Mercury (Hg)-Total		<0.000020		0.000020	mg/L		26-JUL-10	R1400449
Total Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Total		0.0154		0.0050	mg/L		26-JUL-10	R1401414
Total Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPMS (Low)								

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

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-10 HYDRO10 Sampled By: KL on 11-JUL-10 Matrix: WATER							
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Arsenic (As)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Barium (Ba)-Total	<0.0030		0.0030	mg/L		26-JUL-10	R1401414
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Boron (B)-Total	<0.050		0.050	mg/L		26-JUL-10	R1401414
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Copper (Cu)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Lead (Pb)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Lithium (Li)-Total	<0.010		0.010	mg/L		26-JUL-10	R1401414
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		26-JUL-10	R1401414
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Selenium (Se)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Silver (Ag)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Strontium (Sr)-Total	0.00145	RRVAP	0.00020	mg/L		26-JUL-10	R1401414
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Tin (Sn)-Total	<0.050		0.050	mg/L		26-JUL-10	R1401414
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Uranium (U)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Vanadium (V)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		23-JUL-10	R1399615
Iron (Fe)-Total	<0.030		0.030	mg/L		23-JUL-10	R1399615
Magnesium (Mg)-Total	<0.10		0.10	mg/L		23-JUL-10	R1399615
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		23-JUL-10	R1399615
Potassium (K)-Total	<0.50		0.50	mg/L		23-JUL-10	R1399615
Sodium (Na)-Total	<1.0		1.0	mg/L		23-JUL-10	R1399615
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		16-JUL-10	R1373204
Oil and Grease	<1.0		1.0	mg/L		23-JUL-10	R1398975
Phosphorus, Total	<0.020		0.020	mg/L	15-JUL-10	16-JUL-10	R1371283
Total Organic Carbon	<1.0		1.0	mg/L		24-JUL-10	R1399771
Total Suspended Solids	<3.0		3.0	mg/L		15-JUL-10	R1364123
Turbidity	0.34	RRV	0.10	NTU		16-JUL-10	R1374004
pH and Conductivity							
pH	6.26		0.10	pH		14-JUL-10	R1358123
Conductivity (EC)	4.58		0.20	uS/cm		14-JUL-10	R1358123
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	0.068	RRV	0.050	mg/L		14-JUL-10	R1360083
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		19-JUL-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		14-JUL-10	R1360083
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		19-JUL-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	15-JUL-10	16-JUL-10	R1368266

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-11 HYDRO11							
Sampled By: KL on 11-JUL-10							
Matrix: WATER							
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	2.5			mg/L		27-JUL-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		26-JUL-10	R1400449
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	0.0179		0.0050	mg/L		26-JUL-10	R1401414
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Arsenic (As)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Barium (Ba)-Total	<0.0030		0.0030	mg/L		26-JUL-10	R1401414
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Boron (B)-Total	<0.050		0.050	mg/L		26-JUL-10	R1401414
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Copper (Cu)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Lead (Pb)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Lithium (Li)-Total	<0.010		0.010	mg/L		26-JUL-10	R1401414
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		26-JUL-10	R1401414
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Selenium (Se)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Silver (Ag)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Strontium (Sr)-Total	0.00335		0.00020	mg/L		26-JUL-10	R1401414
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Tin (Sn)-Total	<0.050		0.050	mg/L		26-JUL-10	R1401414
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Uranium (U)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Vanadium (V)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	0.55		0.50	mg/L		23-JUL-10	R1399615
Iron (Fe)-Total	<0.030		0.030	mg/L		23-JUL-10	R1399615
Magnesium (Mg)-Total	0.28		0.10	mg/L		23-JUL-10	R1399615
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		23-JUL-10	R1399615
Potassium (K)-Total	<0.50		0.50	mg/L		23-JUL-10	R1399615
Sodium (Na)-Total	<1.0		1.0	mg/L		23-JUL-10	R1399615
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		16-JUL-10	R1373204
Oil and Grease	<1.0		1.0	mg/L		23-JUL-10	R1398975
Phosphorus, Total	<0.020		0.020	mg/L	15-JUL-10	16-JUL-10	R1371283
Total Organic Carbon	<1.0		1.0	mg/L		24-JUL-10	R1399771
Total Suspended Solids	<3.0		3.0	mg/L		15-JUL-10	R1364123
Turbidity	0.37		0.10	NTU		14-JUL-10	R1368143
pH and Conductivity							
pH	6.49		0.10	pH		14-JUL-10	R1358123
Conductivity (EC)	8.98		0.20	uS/cm		14-JUL-10	R1358123
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		14-JUL-10	R1360083
Nitrate+Nitrite							

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-11	HYDRO11							
Sampled By: KL on 11-JUL-10								
Matrix: WATER								
Nitrate +Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		15-JUL-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		14-JUL-10	R1360083
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		16-JUL-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	15-JUL-10	16-JUL-10	R1368266
L908008-12	CH7							
Sampled By: KL on 11-JUL-10								
Matrix: WATER								
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								
Hardness (as CaCO3)		<1.3			mg/L		27-JUL-10	
Mercury (Hg)								
Mercury (Hg)-Total		<0.000020		0.000020	mg/L		26-JUL-10	R1400449
Total Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Total		0.0508	RRVAP	0.0050	mg/L		26-JUL-10	R1401414
Total Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPMS (Low)								
Antimony (Sb)-Total		<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Arsenic (As)-Total		<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Barium (Ba)-Total		<0.0030		0.0030	mg/L		26-JUL-10	R1401414
Beryllium (Be)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Boron (B)-Total		<0.050		0.050	mg/L		26-JUL-10	R1401414
Chromium (Cr)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Cobalt (Co)-Total		<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Copper (Cu)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Lead (Pb)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Lithium (Li)-Total		<0.010		0.010	mg/L		26-JUL-10	R1401414
Molybdenum (Mo)-Total		<0.0050		0.0050	mg/L		26-JUL-10	R1401414
Nickel (Ni)-Total		<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Selenium (Se)-Total		<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Silver (Ag)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Strontium (Sr)-Total		0.00144	RRVAP	0.00020	mg/L		26-JUL-10	R1401414
Thallium (Tl)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Tin (Sn)-Total		<0.050		0.050	mg/L		26-JUL-10	R1401414
Titanium (Ti)-Total		0.0028	RRVAP	0.0010	mg/L		26-JUL-10	R1401414
Uranium (U)-Total		<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Vanadium (V)-Total		<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		23-JUL-10	R1399615
Iron (Fe)-Total		0.041		0.030	mg/L		23-JUL-10	R1399615
Magnesium (Mg)-Total		0.16		0.10	mg/L		23-JUL-10	R1399615
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		23-JUL-10	R1399615
Potassium (K)-Total		<0.50		0.50	mg/L		23-JUL-10	R1399615
Sodium (Na)-Total		<1.0		1.0	mg/L		23-JUL-10	R1399615
Miscellaneous Parameters								
Ammonia-N		<0.0050		0.0050	mg/L		16-JUL-10	R1373204
Oil and Grease		<1.0		1.0	mg/L		23-JUL-10	R1398975

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-12 CH7 Sampled By: KL on 11-JUL-10 Matrix: WATER Phosphorus, Total Total Organic Carbon Total Suspended Solids Turbidity pH and Conductivity pH Conductivity (EC) Total Nitrogen Nitrate as N by IC Nitrate (as N) Nitrate+Nitrite Nitrate and Nitrite as N Nitrite as N by IC Nitrite (as N) Nitrogen, Total Nitrogen, Total Total Kjeldahl Nitrogen Total Kjeldahl Nitrogen	<0.020 <1.0 <3.0 1.11 6.42 4.66 <0.050 <0.071 <0.050 <0.20 <0.20	RRV	0.020 1.0 3.0 0.10 0.10 0.20 0.050 0.071 0.050 0.20 0.20	mg/L mg/L mg/L NTU pH uS/cm mg/L mg/L mg/L mg/L mg/L	15-JUL-10	16-JUL-10 24-JUL-10 15-JUL-10 16-JUL-10 14-JUL-10 14-JUL-10 14-JUL-10 15-JUL-10 14-JUL-10 16-JUL-10 16-JUL-10	R1371283 R1399771 R1364123 R1374004 R1358123 R1358123 R1360083 R1360083 R1368266
L908008-13 DUMPLICATE Sampled By: KL on 11-JUL-10 Matrix: WATER TOT Metals CCME Fresh Water Aquatic Life Hardness (from Total Ca and Mg) Hardness (as CaCO3) Mercury (Hg) Mercury (Hg)-Total Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total Total Metals in Water by ICPMS (Low) Antimony (Sb)-Total Arsenic (As)-Total Barium (Ba)-Total Beryllium (Be)-Total Boron (B)-Total Chromium (Cr)-Total Cobalt (Co)-Total Copper (Cu)-Total Lead (Pb)-Total Lithium (Li)-Total Molybdenum (Mo)-Total Nickel (Ni)-Total Selenium (Se)-Total Silver (Ag)-Total Strontium (Sr)-Total Thallium (Tl)-Total Tin (Sn)-Total Titanium (Ti)-Total Uranium (U)-Total Vanadium (V)-Total Zinc (Zn)-Total	<1.3 <0.000020 0.0180 <0.000010 <0.00040 <0.00040 <0.0030 <0.0010 <0.050 <0.0010 <0.0020 <0.0010 <0.00010 <0.010 <0.0050 <0.0020 <0.00040 <0.00010 0.00169 <0.00010 <0.050 0.0011 <0.00010 <0.0010 <0.0040	RRVAP	0.000020 0.0050 0.000010 0.00040 0.00040 0.0030 0.0010 0.050 0.0010 0.0020 0.0010 0.00010 0.010 0.0050 0.0020 0.00010 0.010 0.0050 0.0020 0.00010 0.00020 0.0010 0.0010 0.0010 0.0010 0.0040	mg/L mg/L		27-JUL-10 26-JUL-10	R1400449 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414 R1401414

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-13	DUMPLICATE							
Sampled By:	KL on 11-JUL-10							
Matrix:	WATER							
Total Metals in Water by ICPOES								
Calcium (Ca)-Total	<0.50			0.50	mg/L		23-JUL-10	R1399615
Iron (Fe)-Total	<0.030			0.030	mg/L		23-JUL-10	R1399615
Magnesium (Mg)-Total	0.11			0.10	mg/L		23-JUL-10	R1399615
Manganese (Mn)-Total	<0.0050			0.0050	mg/L		23-JUL-10	R1399615
Potassium (K)-Total	<0.50			0.50	mg/L		23-JUL-10	R1399615
Sodium (Na)-Total	<1.0			1.0	mg/L		23-JUL-10	R1399615
Miscellaneous Parameters								
Ammonia-N	<0.0050			0.0050	mg/L		16-JUL-10	R1373204
Oil and Grease	<1.0			1.0	mg/L		23-JUL-10	R1398975
Phosphorus, Total	<0.020			0.020	mg/L	15-JUL-10	16-JUL-10	R1371283
Total Organic Carbon	<1.0			1.0	mg/L		24-JUL-10	R1399771
Total Suspended Solids	<3.0			3.0	mg/L		15-JUL-10	R1364123
Turbidity	0.32	RRV		0.10	NTU		16-JUL-10	R1374004
pH and Conductivity								
pH	6.22			0.10	pH		14-JUL-10	R1358123
Conductivity (EC)	4.55			0.20	uS/cm		14-JUL-10	R1358123
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)	<0.050			0.050	mg/L		14-JUL-10	R1360083
Nitrate+Nitrite								
Nitrate and Nitrite as N	<0.071			0.071	mg/L		15-JUL-10	
Nitrite as N by IC								
Nitrite (as N)	<0.050			0.050	mg/L		14-JUL-10	R1360083
Nitrogen, Total								
Nitrogen, Total	<0.20			0.20	mg/L		16-JUL-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen	<0.20			0.20	mg/L	15-JUL-10	16-JUL-10	R1368266
L908008-14	FIELD BLANK							
Sampled By:	KL on 09-JUL-10							
Matrix:	WATER							
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								
Hardness (as CaCO3)	<1.3				mg/L		27-JUL-10	
Mercury (Hg)								
Mercury (Hg)-Total	<0.000020			0.000020	mg/L		26-JUL-10	R1400449
Total Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Total	<0.0050			0.0050	mg/L		26-JUL-10	R1401414
Total Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Total	<0.000010			0.000010	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPMS (Low)								
Antimony (Sb)-Total	<0.00040			0.00040	mg/L		26-JUL-10	R1401414
Arsenic (As)-Total	<0.00040			0.00040	mg/L		26-JUL-10	R1401414
Barium (Ba)-Total	<0.0030			0.0030	mg/L		26-JUL-10	R1401414
Beryllium (Be)-Total	<0.0010			0.0010	mg/L		26-JUL-10	R1401414
Boron (B)-Total	<0.050			0.050	mg/L		26-JUL-10	R1401414
Chromium (Cr)-Total	<0.0010			0.0010	mg/L		26-JUL-10	R1401414
Cobalt (Co)-Total	<0.0020			0.0020	mg/L		26-JUL-10	R1401414
Copper (Cu)-Total	<0.0010			0.0010	mg/L		26-JUL-10	R1401414
Lead (Pb)-Total	<0.00010			0.00010	mg/L		26-JUL-10	R1401414
Lithium (Li)-Total	<0.010			0.010	mg/L		26-JUL-10	R1401414
Molybdenum (Mo)-Total	<0.0050			0.0050	mg/L		26-JUL-10	R1401414

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

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L908008-15 TRIP BLANK							
Sampled By: KL							
Matrix: WATER							
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Arsenic (As)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Barium (Ba)-Total	<0.0030		0.0030	mg/L		26-JUL-10	R1401414
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Boron (B)-Total	<0.050		0.050	mg/L		26-JUL-10	R1401414
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Copper (Cu)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Lead (Pb)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Lithium (Li)-Total	<0.010		0.010	mg/L		26-JUL-10	R1401414
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		26-JUL-10	R1401414
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		26-JUL-10	R1401414
Selenium (Se)-Total	<0.00040		0.00040	mg/L		26-JUL-10	R1401414
Silver (Ag)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Strontium (Sr)-Total	<0.00020		0.00020	mg/L		26-JUL-10	R1401414
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Tin (Sn)-Total	<0.050		0.050	mg/L		26-JUL-10	R1401414
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Uranium (U)-Total	<0.00010		0.00010	mg/L		26-JUL-10	R1401414
Vanadium (V)-Total	<0.0010		0.0010	mg/L		26-JUL-10	R1401414
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		26-JUL-10	R1401414
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		23-JUL-10	R1399615
Iron (Fe)-Total	<0.030		0.030	mg/L		23-JUL-10	R1399615
Magnesium (Mg)-Total	<0.10		0.10	mg/L		23-JUL-10	R1399615
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		23-JUL-10	R1399615
Potassium (K)-Total	<0.50		0.50	mg/L		23-JUL-10	R1399615
Sodium (Na)-Total	<1.0		1.0	mg/L		23-JUL-10	R1399615
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		16-JUL-10	R1373204
Oil and Grease	<1.0		1.0	mg/L		26-JUL-10	R1400689
Phosphorus, Total	<0.020		0.020	mg/L	15-JUL-10	16-JUL-10	R1371283
Total Organic Carbon	<1.0		1.0	mg/L		24-JUL-10	R1399771
Total Suspended Solids	<3.0		3.0	mg/L		15-JUL-10	R1364123
Turbidity	<0.10		0.10	NTU		14-JUL-10	R1368143
pH and Conductivity							
pH	5.98		0.10	pH		14-JUL-10	R1358123
Conductivity (EC)	1.15		0.20	uS/cm		14-JUL-10	R1358123
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		14-JUL-10	R1360083
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		15-JUL-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		14-JUL-10	R1360083
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		15-JUL-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	14-JUL-10	15-JUL-10	R1363323

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

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Phosphorus, Total	MS-B	L908008-1, -10, -11, -12, -13, -14, -15, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Total Organic Carbon	MS-B	L908008-1, -10, -11, -12, -13, -14, -15, -2, -3, -4, -5, -6, -7, -8, -9

Sample Parameter Qualifier Key:

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

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
AL-T-CCME-FAL-MS-ED	Water	Total Al in Water by ICPMS (CCME - FAL)	APHA 3125-ICP-MS
C-TOT-ORG-ED	Water	Total Organic Carbon	APHA 5310 B-Instrumental
CD-T-CCME-FAL-MS-ED	Water	Total Cd in Water by ICPMS (CCME - FAL)	APHA 3125-ICP-MS
ETL-HARDNESS-TOT-ED	Water	Hardness (from Total Ca and Mg)	APHA 2340 B-Calculation
ETL-N-TOT-CALC-ED	Water	Nitrogen, Total	APHA 4500 N-Calculated
HG-T-L-CVAA-ED	Water	Mercury (Hg)	EPA 245.7 / EPA 245.1
MET-T-ICP-ED	Water	Total Metals in Water by ICPOES	APHA 3120 B-ICP-OES
MET-T-L-MS-ED	Water	Total Metals in Water by ICPMS (Low)	SW 846 - 6020-ICPMS
N-TOTKJ-ED	Water	Total Kjeldahl Nitrogen	APHA 4500N-C -Dig.-Auto-Colorimetry
NH4-LOW-ED	Water	Ammonia-N Low Level	APHA 4500 NH3F-Colorimetry
NO2+NO3-CALC-ED	Water	Nitrate+Nitrite	CALCULATION
NO2-IC-ED	Water	Nitrite as N by IC	APHA 4110 B-ION CHROMATOGRAPHY
NO3-IC-ED	Water	Nitrate as N by IC	APHA 4110 B-ION CHROMATOGRAPHY
OGG-ED	Water	Oil and Grease-Gravimetric	APHA 5520 G HEXANE MTBE EXT. GRAVIME
P-TOTAL-ED	Water	Phosphorus, Total	APHA 4500 P B,E-Auto-Colorimetry
PH/EC-ED	Water	pH and Conductivity	APHA 4500-H, 2510
SOLIDS-TOTSUS-ED	Water	Total Suspended Solids	APHA 2540 D-Gravimetric
TURBIDITY-ED	Water	Turbidity	APHA 2130 B-Nephelometer

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

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

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

Chain of Custody Numbers:

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
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GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

- mg/kg - milligrams per kilogram based on dry weight of sample
- mg/kg ww - milligrams per kilogram based on wet weight of sample
- mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight
- mg/L - 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.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Quality Control Report

Workorder: L908008

Report Date: 28-JUL-10

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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
AL-T-CCME-FAL-MS-ED								
Water								
Batch	R1401414							
WG1139032-2	DUP	L908008-15						
Aluminum (Al)-Total		<0.0050	<0.0050	RPD-NA	mg/L	N/A	20	26-JUL-10
WG1139032-1	MB							
Aluminum (Al)-Total			<0.0050		mg/L		0.005	26-JUL-10
WG1139032-3	MS	L908008-15						
Aluminum (Al)-Total			99		%		70-130	26-JUL-10
C-TOT-ORG-ED								
Water								
Batch	R1399771							
WG1139515-14	CVS							
Total Organic Carbon			130		%		80-160	27-JUL-10
WG1139515-17	CVS							
Total Organic Carbon			119		%		80-160	28-JUL-10
WG1139515-12	DUP	L909751-1						
Total Organic Carbon		1.7	1.6		mg/L	4.7	20	26-JUL-10
WG1139515-18	DUP	L909309-1						
Total Organic Carbon		<1.0	<1.0	RPD-NA	mg/L	N/A	20	27-JUL-10
WG1139515-4	DUP	L912476-1						
Total Organic Carbon		7.7	6.2	J	mg/L	1.5	2	24-JUL-10
WG1139515-8	DUP	L910849-1						
Total Organic Carbon		15.5	15.6		mg/L	0.064	20	26-JUL-10
WG1139515-11	LCS							
Total Organic Carbon			101		%		80-120	26-JUL-10
WG1139515-16	LCS							
Total Organic Carbon			95		%		80-120	28-JUL-10
WG1139515-2	LCS							
Total Organic Carbon			96		%		80-120	24-JUL-10
WG1139515-1	MB							
Total Organic Carbon			<1.0		mg/L		1	24-JUL-10
WG1139515-10	MB							
Total Organic Carbon			<1.0		mg/L		1	26-JUL-10
WG1139515-15	MB							
Total Organic Carbon			<1.0		mg/L		1	27-JUL-10
WG1139515-13	MS	L909751-1						
Total Organic Carbon			112		%		70-130	26-JUL-10
WG1139515-19	MS	L909309-1						
Total Organic Carbon			116		%		70-130	27-JUL-10
WG1139515-5	MS	L912476-1						
Total Organic Carbon			100		%		70-130	24-JUL-10



Quality Control Report

Workorder: L908008

Report Date: 28-JUL-10

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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
C-TOT-ORG-ED								
Batch R1399771								
WG1139515-9 MS		L910849-1						
Total Organic Carbon			N/A	MS-B	%		-	26-JUL-10
CD-T-CCME-FAL-MS-ED								
Batch R1401414								
WG1139032-2 DUP		L908008-15						
Cadmium (Cd)-Total		<0.000010	<0.000010	RPD-NA	mg/L	N/A	20	26-JUL-10
WG1139032-1 MB								
Cadmium (Cd)-Total			<0.000010		mg/L		0.00001	26-JUL-10
WG1139032-3 MS		L908008-15						
Cadmium (Cd)-Total			108		%		70-130	26-JUL-10
HG-T-L-CVAA-ED								
Batch R1400449								
WG1139873-8 DUP		L908008-14						
Mercury (Hg)-Total		<0.000020	<0.000020	RPD-NA	mg/L	N/A	20	26-JUL-10
WG1139873-2 LCS								
Mercury (Hg)-Total			98		%		80-120	26-JUL-10
WG1139873-3 LCSD		WG1139873-2						
Mercury (Hg)-Total		98	96		%	1.6	20	26-JUL-10
WG1139873-1 MB								
Mercury (Hg)-Total			<0.000020		mg/L		0.00002	26-JUL-10
WG1139873-9 MS		L908008-14						
Mercury (Hg)-Total			102		%		70-130	26-JUL-10
MET-T-ICP-ED								
Batch R1399615								
WG1139032-2 DUP		L908008-15						
Calcium (Ca)-Total		<0.50	<0.50	RPD-NA	mg/L	N/A	20	23-JUL-10
Iron (Fe)-Total		<0.030	<0.030	RPD-NA	mg/L	N/A	20	23-JUL-10
Magnesium (Mg)-Total		<0.10	<0.10	RPD-NA	mg/L	N/A	20	23-JUL-10
Manganese (Mn)-Total		<0.0050	<0.0050	RPD-NA	mg/L	N/A	20	23-JUL-10
Potassium (K)-Total		<0.50	<0.50	RPD-NA	mg/L	N/A	20	23-JUL-10
Sodium (Na)-Total		<1.0	<1.0	RPD-NA	mg/L	N/A	20	23-JUL-10
WG1139032-1 MB								
Calcium (Ca)-Total			<0.50		mg/L		0.5	23-JUL-10
Iron (Fe)-Total			<0.030		mg/L		0.03	23-JUL-10
Magnesium (Mg)-Total			<0.10		mg/L		0.1	23-JUL-10



Quality Control Report

Workorder: L908008

Report Date: 28-JUL-10

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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-ICP-ED		Water						
Batch	R1399615							
WG1139032-1 MB								
Manganese (Mn)-Total			<0.0050		mg/L		0.005	23-JUL-10
Potassium (K)-Total			<0.50		mg/L		0.5	23-JUL-10
Sodium (Na)-Total			<1.0		mg/L		1	23-JUL-10
WG1139032-3 MS		L908008-15						
Calcium (Ca)-Total			99		%		70-130	23-JUL-10
Iron (Fe)-Total			95		%		70-130	23-JUL-10
Magnesium (Mg)-Total			99		%		70-130	23-JUL-10
Manganese (Mn)-Total			97		%		70-130	23-JUL-10
Potassium (K)-Total			97		%		70-130	23-JUL-10
Sodium (Na)-Total			97		%		70-130	23-JUL-10
Batch	R1400501							
WG1139032-1 MB								
Calcium (Ca)-Total			<0.50		mg/L		0.5	24-JUL-10
Iron (Fe)-Total			<0.030		mg/L		0.03	24-JUL-10
Magnesium (Mg)-Total			<0.10		mg/L		0.1	24-JUL-10
Manganese (Mn)-Total			<0.0050		mg/L		0.005	24-JUL-10
Potassium (K)-Total			<0.50		mg/L		0.5	24-JUL-10
Sodium (Na)-Total			<1.0		mg/L		1	24-JUL-10
MET-T-L-MS-ED		Water						
Batch	R1401414							
WG1139032-2 DUP		L908008-15						
Antimony (Sb)-Total		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	26-JUL-10
Arsenic (As)-Total		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	26-JUL-10
Barium (Ba)-Total		<0.0030	<0.00020	RPD-NA	mg/L	N/A	20	26-JUL-10
Beryllium (Be)-Total		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	26-JUL-10
Boron (B)-Total		<0.050	<0.0040	RPD-NA	mg/L	N/A	20	26-JUL-10
Chromium (Cr)-Total		<0.0010	<0.00080	RPD-NA	mg/L	N/A	20	26-JUL-10
Cobalt (Co)-Total		<0.0020	<0.00020	RPD-NA	mg/L	N/A	20	26-JUL-10
Copper (Cu)-Total		<0.0010	<0.0010	RPD-NA	mg/L	N/A	20	26-JUL-10
Lead (Pb)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	26-JUL-10
Lithium (Li)-Total		<0.010	<0.0060	RPD-NA	mg/L	N/A	20	26-JUL-10
Molybdenum (Mo)-Total		<0.0050	<0.00010	RPD-NA	mg/L	N/A	20	26-JUL-10
Nickel (Ni)-Total		<0.0020	<0.00020	RPD-NA	mg/L	N/A	20	26-JUL-10
Selenium (Se)-Total		<0.00040	<0.00040	RPD-NA	mg/L	N/A	20	26-JUL-10



Quality Control Report

Workorder: L908008

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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-MS-ED								
Water								
Batch	R1401414							
WG1139032-2 DUP		L908008-15						
Silver (Ag)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	26-JUL-10
Strontium (Sr)-Total		<0.00020	<0.00020	RPD-NA	mg/L	N/A	20	26-JUL-10
Thallium (Tl)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	26-JUL-10
Tin (Sn)-Total		<0.050	<0.00040	RPD-NA	mg/L	N/A	20	26-JUL-10
Titanium (Ti)-Total		<0.0010	<0.00060	RPD-NA	mg/L	N/A	20	26-JUL-10
Uranium (U)-Total		<0.00010	<0.00010	RPD-NA	mg/L	N/A	20	26-JUL-10
Vanadium (V)-Total		<0.0010	<0.00050	RPD-NA	mg/L	N/A	20	26-JUL-10
Zinc (Zn)-Total		<0.0040	<0.0040	RPD-NA	mg/L	N/A	20	26-JUL-10
WG1139032-1 MB								
Antimony (Sb)-Total			<0.00040		mg/L		0.0004	26-JUL-10
Arsenic (As)-Total			<0.00040		mg/L		0.0004	26-JUL-10
Barium (Ba)-Total			<0.00020		mg/L		0.0002	26-JUL-10
Beryllium (Be)-Total			<0.0010		mg/L		0.001	26-JUL-10
Boron (B)-Total			<0.0040		mg/L		0.004	26-JUL-10
Chromium (Cr)-Total			<0.00080		mg/L		0.0008	26-JUL-10
Cobalt (Co)-Total			<0.00020		mg/L		0.0002	26-JUL-10
Copper (Cu)-Total			<0.0010		mg/L		0.001	26-JUL-10
Lead (Pb)-Total			<0.00010		mg/L		0.0001	26-JUL-10
Lithium (Li)-Total			<0.0060		mg/L		0.006	26-JUL-10
Molybdenum (Mo)-Total			<0.00010		mg/L		0.0001	26-JUL-10
Nickel (Ni)-Total			<0.00020		mg/L		0.0002	26-JUL-10
Selenium (Se)-Total			<0.00040		mg/L		0.0004	26-JUL-10
Silver (Ag)-Total			<0.00010		mg/L		0.0001	26-JUL-10
Strontium (Sr)-Total			<0.00020		mg/L		0.0002	26-JUL-10
Thallium (Tl)-Total			<0.00010		mg/L		0.0001	26-JUL-10
Tin (Sn)-Total			<0.00040		mg/L		0.0004	26-JUL-10
Titanium (Ti)-Total			<0.00060		mg/L		0.0006	26-JUL-10
Uranium (U)-Total			<0.00010		mg/L		0.0001	26-JUL-10
Vanadium (V)-Total			<0.00050		mg/L		0.0005	26-JUL-10
Zinc (Zn)-Total			<0.0040		mg/L		0.004	26-JUL-10
WG1139032-3 MS		L908008-15						
Antimony (Sb)-Total			98		%		70-130	26-JUL-10
Arsenic (As)-Total			104		%		70-130	26-JUL-10
Barium (Ba)-Total			110		%		70-130	26-JUL-10



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Client:

EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact:

KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
MET-T-L-MS-ED		Water						
Batch	R1401414							
WG1139032-3 MS		L908008-15						
Beryllium (Be)-Total			97		%		70-130	26-JUL-10
Boron (B)-Total			96		%		70-130	26-JUL-10
Chromium (Cr)-Total			108		%		70-130	26-JUL-10
Cobalt (Co)-Total			108		%		70-130	26-JUL-10
Copper (Cu)-Total			106		%		70-130	26-JUL-10
Lead (Pb)-Total			110		%		70-130	26-JUL-10
Lithium (Li)-Total			108		%		70-130	26-JUL-10
Molybdenum (Mo)-Total			101		%		70-130	26-JUL-10
Nickel (Ni)-Total			106		%		70-130	26-JUL-10
Selenium (Se)-Total			107		%		70-130	26-JUL-10
Silver (Ag)-Total			102		%		70-130	26-JUL-10
Strontium (Sr)-Total			108		%		70-130	26-JUL-10
Thallium (Tl)-Total			106		%		70-130	26-JUL-10
Tin (Sn)-Total			101		%		70-130	26-JUL-10
Titanium (Ti)-Total			98		%		70-130	26-JUL-10
Uranium (U)-Total			110		%		70-130	26-JUL-10
Vanadium (V)-Total			107		%		70-130	26-JUL-10
Zinc (Zn)-Total			106		%		70-130	26-JUL-10
N-TOTKJ-ED		Water						
Batch	R1363323							
WG1134138-2 LCS								
Total Kjeldahl Nitrogen			100		%		75-125	15-JUL-10
WG1134138-4 LCS								
Total Kjeldahl Nitrogen			99		%		75-125	15-JUL-10
WG1134138-1 MB								
Total Kjeldahl Nitrogen			<0.20		mg/L		0.2	15-JUL-10
Batch	R1368266							
WG1134593-5 DUP		L907518-3						
Total Kjeldahl Nitrogen		<0.20	<0.20	RPD-NA	mg/L	N/A	20	16-JUL-10
WG1134593-2 LCS								
Total Kjeldahl Nitrogen			87		%		75-125	16-JUL-10
WG1134593-3 LCS								
Total Kjeldahl Nitrogen			115		%		75-125	16-JUL-10
WG1134593-4 LCS								
Total Kjeldahl Nitrogen			103		%		75-125	16-JUL-10



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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
N-TOTKJ-ED								
Water								
Batch	R1368266							
WG1134593-1 MB								
Total Kjeldahl Nitrogen			<0.20		mg/L		0.2	16-JUL-10
WG1134593-6 MS		L908008-14						
Total Kjeldahl Nitrogen			62		%		61-140	16-JUL-10
NH4-LOW-ED								
Water								
Batch	R1373204							
WG1135693-10 DUP		L908008-1						
Ammonia-N		<0.0050	<0.0050	RPD-NA	mg/L	N/A	10	16-JUL-10
WG1135693-12 DUP		L908221-1						
Ammonia-N		<0.0050	<0.0050	RPD-NA	mg/L	N/A	10	16-JUL-10
WG1135693-13 DUP		L909529-3						
Ammonia-N		0.0203	0.0203		mg/L	0.0	10	16-JUL-10
WG1135693-4 DUP		L906034-1						
Ammonia-N		0.0186	0.0187		mg/L	0.54	10	16-JUL-10
WG1135693-5 DUP		L907692-1						
Ammonia-N		<0.0050	<0.0050	RPD-NA	mg/L	N/A	10	16-JUL-10
WG1135693-7 DUP		L907692-15						
Ammonia-N		<0.0050	<0.0050	RPD-NA	mg/L	N/A	10	16-JUL-10
WG1135693-9 DUP		L907889-1						
Ammonia-N		0.0287	0.0291		mg/L	1.4	10	16-JUL-10
WG1135693-2 LCS								
Ammonia-N			102		%		85-115	16-JUL-10
WG1135693-3 LCS								
Ammonia-N			107		%		85-115	16-JUL-10
WG1135693-1 MB								
Ammonia-N			<0.0050		mg/L		0.005	16-JUL-10
WG1135693-11 MS		L908008-15						
Ammonia-N			101		%		75-122	16-JUL-10
WG1135693-14 MS		L909529-9						
Ammonia-N			99		%		75-122	16-JUL-10
WG1135693-6 MS		L906727-2						
Ammonia-N			105		%		75-122	16-JUL-10
WG1135693-8 MS		L907692-8						
Ammonia-N			104		%		75-122	16-JUL-10
NO2-IC-ED								
Water								



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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
NO2-IC-ED		Water						
Batch	R1360083							
WG1134229-7	DUP	L907290-10						
Nitrite (as N)		<0.050	<0.050	RPD-NA	mg/L	N/A	20	14-JUL-10
WG1134229-9	DUP	L908008-11						
Nitrite (as N)		<0.050	<0.050	RPD-NA	mg/L	N/A	20	14-JUL-10
WG1134229-2	LCS							
Nitrite (as N)			87		%		85-115	14-JUL-10
WG1134229-1	MB							
Nitrite (as N)			<0.050		mg/L		0.05	14-JUL-10
WG1134229-10	MS	L908008-11						
Nitrite (as N)			89		%		75-125	14-JUL-10
WG1134229-8	MS	L907290-10						
Nitrite (as N)			83		%		75-125	14-JUL-10
NO3-IC-ED		Water						
Batch	R1360083							
WG1134229-7	DUP	L907290-10						
Nitrate (as N)		<0.050	<0.050	RPD-NA	mg/L	N/A	20	14-JUL-10
WG1134229-9	DUP	L908008-11						
Nitrate (as N)		<0.050	<0.050	RPD-NA	mg/L	N/A	20	14-JUL-10
WG1134229-2	LCS							
Nitrate (as N)			97		%		85-115	14-JUL-10
WG1134229-1	MB							
Nitrate (as N)			<0.050		mg/L		0.05	14-JUL-10
WG1134229-10	MS	L908008-11						
Nitrate (as N)			97		%		75-125	14-JUL-10
WG1134229-8	MS	L907290-10						
Nitrate (as N)			93		%		75-125	14-JUL-10
OGG-ED		Water						
Batch	R1398975							
WG1139086-2	LCS							
Oil and Grease			93		%		70-130	23-JUL-10
WG1139086-1	MB							
Oil and Grease			<1.0		mg/L		1	23-JUL-10
Batch	R1400689							
WG1140162-2	LCS							
Oil and Grease			89		%		70-130	26-JUL-10
WG1140162-1	MB							
Oil and Grease			<1.0		mg/L		1	26-JUL-10



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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
P-TOTAL-ED		Water						
Batch	R1371283							
WG1134409-3	DUP	L907444-1						
Phosphorus, Total		2.96	2.72		mg/L	8.4	9.5	16-JUL-10
WG1134409-5	DUP	L908008-15						
Phosphorus, Total		<0.020	<0.020	RPD-NA	mg/L	N/A	9.5	16-JUL-10
WG1134409-2	LCS							
Phosphorus, Total			106		%		80-120	16-JUL-10
WG1134409-1	MB							
Phosphorus, Total			<0.020		mg/L		0.02	16-JUL-10
WG1134409-4	MS	L907444-1						
Phosphorus, Total			N/A	MS-B	%		-	16-JUL-10
WG1134409-6	MS	L908008-15						
Phosphorus, Total			104		%		79-122	16-JUL-10
PH/EC-ED		Water						
Batch	R1358123							
WG1133895-7	DUP	L908008-13						
pH		6.22	6.20	J	pH	0.02	0.2	14-JUL-10
Conductivity (EC)		4.55	4.69		uS/cm	3.0	10	14-JUL-10
WG1133895-2	LCS							
Conductivity (EC)			100		%		90-110	14-JUL-10
WG1133895-3	LCS							
pH			7.04		pH		6.9-7.1	14-JUL-10
SOLIDS-TOTSUS-ED		Water						
Batch	R1364123							
WG1134433-3	DUP	L903811-6						
Total Suspended Solids		9.0	7.0	J	mg/L	2.0	6	15-JUL-10
WG1134433-4	DUP	L908051-1						
Total Suspended Solids		8.0	7.0		mg/L	13	20	15-JUL-10
WG1134433-2	LCS							
Total Suspended Solids			110		%		85-115	15-JUL-10
WG1134433-1	MB							
Total Suspended Solids			<3.0		mg/L		3	15-JUL-10
TURBIDITY-ED		Water						
Batch	R1368143							
WG1134073-2	DUP	L908008-7						
Turbidity		0.32	0.35		NTU	8.2	8.8	14-JUL-10
WG1134073-3	DUP	L908117-8						
Turbidity		24.6	25.1		NTU	2.0	8.8	14-JUL-10



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Client: EBA ENG CONSULTANTS LTD
201 - 4916 49 STREET PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Contact: KARLA LANGLOIS

Test	Matrix	Reference	Result	Qualifier	Units	RPD	Limit	Analyzed
TURBIDITY-ED		Water						
Batch	R1368143							
WG1134073-1	MB							
Turbidity			<0.10		NTU		0.1	14-JUL-10
Batch	R1374004							
WG1135590-2	DUP	L908008-2						
Turbidity		0.56	0.53		NTU	5.5	8.8	16-JUL-10
WG1135590-3	DUP	L908008-13						
Turbidity		0.32	0.34		NTU	6.1	8.8	16-JUL-10
WG1135590-1	MB							
Turbidity			<0.10		NTU		0.1	16-JUL-10

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Legend:

Limit	99% Confidence Interval (Laboratory Control Limits)
DUP	Duplicate
RPD	Relative Percent Difference
N/A	Not Available
LCS	Laboratory Control Sample
SRM	Standard Reference Material
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ADE	Average Desorption Efficiency
MB	Method Blank
IRM	Internal Reference Material
CRM	Certified Reference Material
CCV	Continuing Calibration Verification
CVS	Calibration Verification Standard
LCSD	Laboratory Control Sample Duplicate

Sample Parameter Qualifier Definitions:

Qualifier	Description
J	Duplicate results and limits are expressed in terms of absolute difference.
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.
RPD-NA	Relative Percent Difference Not Available due to result(s) being less than detection limit.

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Hold Time Exceedances:

ALS Product Description	Sample ID	Sampling Date	Date Processed	Rec. HT	Actual HT	Units	Qualifier
Physical Tests							
Turbidity							
	1	08-JUL-10	16-JUL-10 00:00	48	180	hours	EHTR
	2	08-JUL-10	16-JUL-10 00:00	48	180	hours	EHTR
	3	08-JUL-10	14-JUL-10 00:00	48	132	hours	EHTR
	4	08-JUL-10	16-JUL-10 00:00	48	180	hours	EHTR
	5	09-JUL-10	16-JUL-10 00:00	48	156	hours	EHTR
	6	09-JUL-10	16-JUL-10 00:00	48	156	hours	EHTR
	7	10-JUL-10	16-JUL-10 00:00	48	132	hours	EHTR
	8	10-JUL-10	16-JUL-10 00:00	48	132	hours	EHTR
	9	10-JUL-10	16-JUL-10 00:00	48	132	hours	EHTR
	10	11-JUL-10	16-JUL-10 00:00	48	108	hours	EHTR
	11	11-JUL-10	14-JUL-10 00:00	48	60	hours	EHTR
	12	11-JUL-10	16-JUL-10 00:00	48	108	hours	EHTR
	13	11-JUL-10	16-JUL-10 00:00	48	108	hours	EHTR
	14	09-JUL-10	14-JUL-10 00:00	48	108	hours	EHTR
Anions and Nutrients							
Nitrate as N by IC							
	1	08-JUL-10	14-JUL-10 13:20	48	145	hours	EHTR
	2	08-JUL-10	14-JUL-10 13:20	48	145	hours	EHTR
	3	08-JUL-10	14-JUL-10 13:20	48	145	hours	EHTR
	4	08-JUL-10	14-JUL-10 13:20	48	145	hours	EHTR
	5	09-JUL-10	14-JUL-10 13:20	48	121	hours	EHTR
	6	09-JUL-10	14-JUL-10 13:20	48	121	hours	EHTR
	7	10-JUL-10	14-JUL-10 13:20	48	97	hours	EHTR
	8	10-JUL-10	14-JUL-10 13:20	48	97	hours	EHTR
	9	10-JUL-10	14-JUL-10 13:20	48	97	hours	EHTR
	10	11-JUL-10	14-JUL-10 13:20	48	73	hours	EHTR
	11	11-JUL-10	14-JUL-10 13:20	48	73	hours	EHTR
	12	11-JUL-10	14-JUL-10 13:20	48	73	hours	EHTR
	13	11-JUL-10	14-JUL-10 13:20	48	73	hours	EHTR
	14	09-JUL-10	14-JUL-10 13:20	48	121	hours	EHTR
Nitrite as N by IC							
	1	08-JUL-10	14-JUL-10 13:20	48	145	hours	EHTR
	2	08-JUL-10	14-JUL-10 13:20	48	145	hours	EHTR
	3	08-JUL-10	14-JUL-10 13:20	48	145	hours	EHTR
	4	08-JUL-10	14-JUL-10 13:20	48	145	hours	EHTR
	5	09-JUL-10	14-JUL-10 13:20	48	121	hours	EHTR
	6	09-JUL-10	14-JUL-10 13:20	48	121	hours	EHTR
	7	10-JUL-10	14-JUL-10 13:20	48	97	hours	EHTR
	8	10-JUL-10	14-JUL-10 13:20	48	97	hours	EHTR
	9	10-JUL-10	14-JUL-10 13:20	48	97	hours	EHTR
	10	11-JUL-10	14-JUL-10 13:20	48	73	hours	EHTR
	11	11-JUL-10	14-JUL-10 13:20	48	73	hours	EHTR
	12	11-JUL-10	14-JUL-10 13:20	48	73	hours	EHTR
	13	11-JUL-10	14-JUL-10 13:20	48	73	hours	EHTR
	14	09-JUL-10	14-JUL-10 13:20	48	121	hours	EHTR

Legend & Qualifier Definitions:

EHTR-FM: Exceeded ALS recommended hold time prior to sample receipt. Field Measurement recommended.
 EHTR: Exceeded ALS recommended hold time prior to sample receipt.
 EHTR: Exceeded ALS recommended hold time prior to sample receipt.
 EHTL: Exceeded ALS recommended hold time prior to analysis. Sample was received less than 24 hours prior to expiry.
 EHT: Exceeded ALS recommended hold time prior to analysis.
 Rec. HT: ALS recommended hold time (see units).

Notes*:

Where actual sampling date is not provided to ALS, the date (& time) of receipt is used for calculation purposes.

Quality Control Report

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Where actual sampling time is not provided to ALS, the earlier of 12 noon on the sampling date or the time (& date) of receipt is used for calculation purposes. Samples for L908008 were received on 13-JUL-10 17:42.

ALS recommended hold times may vary by province. They are assigned to meet known provincial and/or federal government requirements. In the absence of regulatory hold times, ALS establishes recommendations based on guidelines published by the US EPA, APHA Standard Methods, or Environment Canada (where available). For more information, please contact ALS.

The ALS Quality Control Report is provided to ALS clients upon request. ALS includes comprehensive QC checks with every analysis to ensure our high standards of quality are met. Each QC result has a known or expected target value, which is compared against pre-determined data quality objectives to provide confidence in the accuracy of associated test results.

Please note that this report may contain QC results from anonymous Sample Duplicates and Matrix Spikes that do not originate from this Work Order.



Report To				Report Format / Distribution				Service Requested (Rush for routine analysis subject to availability)												
Company: EBA Engineering Consultants Ltd				<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Other <input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> Excel <input type="checkbox"/> Digital <input type="checkbox"/> Fax				<input checked="" type="radio"/> Regular (Default) <input type="radio"/> Priority (Specify Date Required → →) Surcharges apply <input type="radio"/> Emergency (1 Business Day) - 100% Surcharge <input type="radio"/> For Emergency < 1 Day, ASAP or Weekend - Contact ALS												
Contact: Karla Langlois				Email 1: klanglois@eba.ca																
Address: 4916-49 Street				Email 2: smoore@eba.ca																
Yellowknife, NT X1A 2P7																				
Phone: 867.920.2287 Fax: 867.873.3324																				
Invoice To Same as Report? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				Client / Project Information				Analysis Request												
Company: Peregrine Diamonds				Job #: Y22101137				Please indicate below Filtered, Preserved or both (F, P, F/P)												
Contact: Shirley Standafer-Pfister				PO / AFE:																
Address:				LSD:																
Phone:				Quote #: Q20810																
Fax:				ALS Contact:																
Lab Work Order # (Lab use only) L-908008				Sampler: KL																
Sample #	Sample Identification (This description will appear on the report)	Date (dd-mm-yy)	Time (hh:mm)	Sample Type	Total Metals	Routine	Nutrients	TOC	Oil and Grease											Number of Containers
	WQ3	08-Jul-10		Water	X	X	X	X	X											
	WQ4	08-Jul-10		Water	X	X	X	X	X											
	WQ5	08-Jul-10		Water	X	X	X	X	X											
	Hydro2	08-Jul-10		Water	X	X	X	X	X											
	Hydro1	09-Jul-10		Water	X	X	X	X	X											
	Hydro9	09-Jul-10		Water	X	X	X	X	X											
	WQ6	10-Jul-10		Water	X	X	X	X	X											
	WQ7	10-Jul-10		Water	X	X	X	X	X											
	WQ8	10-Jul-10		Water	X	X	X	X	X											
	Hydro10	11-Jul-10		Water	X	X	X	X	X											
	Hydro11	11-Jul-10		Water	X	X	X	X	X											
	CH7	11-Jul-10		Water	X	X	X	X	X											
Special Instructions / Regulations / Hazardous Details																				
Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab. Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.																				
SHIPMENT RELEASE (Lab use only)					SHIPMENT RECEPTION (Lab use only)					SHIPMENT VERIFICATION (Lab use only)										
Released by:	Date (dd-mm-yy)	Time (hh-mm)	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF										
<i>Karla Langlois</i>	13-Jul-10		<i>R</i>	13-Jul-10	17:42	8.3 °C														



Environmental Division

Certificate of Analysis

EBA ENG CONSULTANTS LTD

ATTN: KARLA LANGLOIS

201 - 4916 49 STREET
PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Report Date: 16-AUG-10 16:03 (MT)

Version: FINAL

Lab Work Order #: L915411

Date Received: 03-AUG-10

Project P.O. #: NOT SUBMITTED

Job Reference: Y22101137

Legal Site Desc:

CofC Numbers:

Other Information:

Comments:


Catherine Evaristo-Cordero
Senior Account Manager

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L915411-1 HYDRO 9							
Sampled By: KL on 26-JUL-10							
Matrix: SURFACE WATER							
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		13-AUG-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		11-AUG-10	R1433963
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	0.0818		0.0050	mg/L		13-AUG-10	R1433524
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		13-AUG-10	R1433524
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Arsenic (As)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Barium (Ba)-Total	<0.0030		0.0030	mg/L		13-AUG-10	R1433524
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Boron (B)-Total	<0.050		0.050	mg/L		13-AUG-10	R1433524
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Copper (Cu)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Lead (Pb)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Lithium (Li)-Total	<0.010		0.010	mg/L		13-AUG-10	R1433524
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		13-AUG-10	R1433524
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Selenium (Se)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Silver (Ag)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Strontium (Sr)-Total	0.00179		0.00020	mg/L		13-AUG-10	R1433524
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Tin (Sn)-Total	<0.050		0.050	mg/L		13-AUG-10	R1433524
Titanium (Ti)-Total	0.0042		0.0010	mg/L		13-AUG-10	R1433524
Uranium (U)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Vanadium (V)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		13-AUG-10	R1433524
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		12-AUG-10	R1438653
Iron (Fe)-Total	0.062		0.030	mg/L		12-AUG-10	R1438653
Magnesium (Mg)-Total	0.24		0.10	mg/L		12-AUG-10	R1438653
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		12-AUG-10	R1438653
Potassium (K)-Total	<0.50		0.50	mg/L		12-AUG-10	R1438653
Sodium (Na)-Total	1.1		1.0	mg/L		12-AUG-10	R1438653
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		06-AUG-10	R1420098
Oil and Grease	<1.0		1.0	mg/L		12-AUG-10	R1438183
Phosphorus, Total	<0.020		0.020	mg/L	04-AUG-10	04-AUG-10	R1412675
Total Organic Carbon	<1.0		1.0	mg/L		10-AUG-10	R1425963
Total Suspended Solids	<3.0		3.0	mg/L		06-AUG-10	R1419123
Turbidity	1.73		0.10	NTU		04-AUG-10	R1413104
pH and Conductivity							
pH	6.34		0.10	pH		04-AUG-10	R1411945
Conductivity (EC)	5.76		0.20	uS/cm		04-AUG-10	R1411945
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	0.264		0.050	mg/L		04-AUG-10	R1413833
Nitrate+Nitrite							

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L915411-1	HYDRO 9							
Sampled By: KL on 26-JUL-10								
Matrix: SURFACE WATER								
Nitrate+Nitrite Nitrate and Nitrite as N		0.264		0.071	mg/L		05-AUG-10	
Nitrite as N by IC Nitrite (as N)		<0.050		0.050	mg/L		04-AUG-10	R1413833
Nitrogen, Total Nitrogen, Total		0.26		0.20	mg/L		05-AUG-10	
Total Kjeldahl Nitrogen Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	04-AUG-10	04-AUG-10	R1411999
L915411-2	HYDRO 10							
Sampled By: KL on 26-JUL-10								
Matrix: SURFACE WATER								
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg) Hardness (as CaCO3)		<1.3			mg/L		13-AUG-10	
Mercury (Hg) Mercury (Hg)-Total		<0.000020		0.000020	mg/L		11-AUG-10	R1433963
Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total		0.0215		0.0050	mg/L		13-AUG-10	R1433524
Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total		<0.000010		0.000010	mg/L		13-AUG-10	R1433524
Total Metals in Water by ICPMS (Low)								
Antimony (Sb)-Total		<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Arsenic (As)-Total		<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Barium (Ba)-Total		<0.0030		0.0030	mg/L		13-AUG-10	R1433524
Beryllium (Be)-Total		<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Boron (B)-Total		<0.050		0.050	mg/L		13-AUG-10	R1433524
Chromium (Cr)-Total		<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Cobalt (Co)-Total		<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Copper (Cu)-Total		<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Lead (Pb)-Total		<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Lithium (Li)-Total		<0.010		0.010	mg/L		13-AUG-10	R1433524
Molybdenum (Mo)-Total		<0.0050		0.0050	mg/L		13-AUG-10	R1433524
Nickel (Ni)-Total		<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Selenium (Se)-Total		<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Silver (Ag)-Total		<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Strontium (Sr)-Total		0.00203		0.00020	mg/L		13-AUG-10	R1433524
Thallium (Tl)-Total		<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Tin (Sn)-Total		<0.050		0.050	mg/L		13-AUG-10	R1433524
Titanium (Ti)-Total		0.0011		0.0010	mg/L		13-AUG-10	R1433524
Uranium (U)-Total		<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Vanadium (V)-Total		<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		13-AUG-10	R1433524
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		12-AUG-10	R1438653
Iron (Fe)-Total		<0.030		0.030	mg/L		12-AUG-10	R1438653
Magnesium (Mg)-Total		0.15		0.10	mg/L		12-AUG-10	R1438653
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		12-AUG-10	R1438653
Potassium (K)-Total		<0.50		0.50	mg/L		12-AUG-10	R1438653
Sodium (Na)-Total		<1.0		1.0	mg/L		12-AUG-10	R1438653
Miscellaneous Parameters								
Ammonia-N		<0.0050		0.0050	mg/L		06-AUG-10	R1420098
Oil and Grease		<1.0		1.0	mg/L		12-AUG-10	R1438183

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

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L915411-3HYDRO 11 Sampled By: KL on 27-JUL-10 Matrix: SURFACE WATER Total Metals in Water by ICPOES Calcium (Ca)-Total0.96 Iron (Fe)-Total<0.030 Magnesium (Mg)-Total0.53 Manganese (Mn)-Total<0.0050 Potassium (K)-Total<0.50 Sodium (Na)-Total<1.0 Miscellaneous Parameters Ammonia-N<0.0050 Oil and Grease<1.0 Phosphorus, Total<0.020 Total Organic Carbon1.8 Total Suspended Solids<3.0 Turbidity0.35 pH and Conductivity pH6.57 Conductivity (EC)13.2 Total Nitrogen Nitrate as N by IC Nitrate (as N)<0.050 Nitrate+Nitrite Nitrate and Nitrite as N<0.071 Nitrite as N by IC Nitrite (as N)<0.050 Nitrogen, Total Nitrogen, Total<0.20 Total Kjeldahl Nitrogen Total Kjeldahl Nitrogen<0.20							
			0.50	mg/L		12-AUG-10	R1438653
			0.030	mg/L		12-AUG-10	R1438653
			0.10	mg/L		12-AUG-10	R1438653
			0.0050	mg/L		12-AUG-10	R1438653
			0.50	mg/L		12-AUG-10	R1438653
			1.0	mg/L		12-AUG-10	R1438653
			0.0050	mg/L		06-AUG-10	R1420098
			1.0	mg/L		12-AUG-10	R1438183
			0.020	mg/L	04-AUG-10	04-AUG-10	R1412675
			1.0	mg/L		10-AUG-10	R1425963
			3.0	mg/L		06-AUG-10	R1419123
			0.10	NTU		04-AUG-10	R1413104
			0.10	pH		04-AUG-10	R1411945
			0.20	uS/cm		04-AUG-10	R1411945
			0.050	mg/L		04-AUG-10	R1413833
			0.071	mg/L		05-AUG-10	
			0.050	mg/L		04-AUG-10	R1413833
			0.20	mg/L		05-AUG-10	
			0.20	mg/L	04-AUG-10	04-AUG-10	R1411999
L915411-4WQ5 Sampled By: KL on 27-JUL-10 Matrix: SURFACE WATER TOT Metals CCME Fresh Water Aquatic Life Hardness (from Total Ca and Mg) Hardness (as CaCO3)<1.3 Mercury (Hg) Mercury (Hg)-Total<0.000020 Total Al in Water by ICPMS (CCME - FAL) Aluminum (Al)-Total0.0090 Total Cd in Water by ICPMS (CCME - FAL) Cadmium (Cd)-Total<0.000010 Total Metals in Water by ICPMS (Low) Antimony (Sb)-Total<0.00040 Arsenic (As)-Total<0.00040 Barium (Ba)-Total<0.0030 Beryllium (Be)-Total<0.0010 Boron (B)-Total<0.050 Chromium (Cr)-Total<0.0010 Cobalt (Co)-Total<0.0020 Copper (Cu)-Total<0.0010 Lead (Pb)-Total<0.00010 Lithium (Li)-Total<0.010 Molybdenum (Mo)-Total<0.0050							
				mg/L		13-AUG-10	
			0.000020	mg/L		11-AUG-10	R1433963
			0.0050	mg/L		13-AUG-10	R1433524
			0.000010	mg/L		13-AUG-10	R1433524
			0.00040	mg/L		13-AUG-10	R1433524
			0.00040	mg/L		13-AUG-10	R1433524
			0.0030	mg/L		13-AUG-10	R1433524
			0.0010	mg/L		13-AUG-10	R1433524
			0.050	mg/L		13-AUG-10	R1433524
			0.0010	mg/L		13-AUG-10	R1433524
			0.0020	mg/L		13-AUG-10	R1433524
			0.0010	mg/L		13-AUG-10	R1433524
			0.00010	mg/L		13-AUG-10	R1433524
			0.010	mg/L		13-AUG-10	R1433524
			0.0050	mg/L		13-AUG-10	R1433524

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

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L915411-5 WQ3 Sampled By: KL on 28-JUL-10 Matrix: SURFACE WATER							
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Arsenic (As)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Barium (Ba)-Total	<0.0030		0.0030	mg/L		13-AUG-10	R1433524
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Boron (B)-Total	<0.050		0.050	mg/L		13-AUG-10	R1433524
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Copper (Cu)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Lead (Pb)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Lithium (Li)-Total	<0.010		0.010	mg/L		13-AUG-10	R1433524
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		13-AUG-10	R1433524
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Selenium (Se)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Silver (Ag)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Strontium (Sr)-Total	0.00116	RRV	0.00020	mg/L		13-AUG-10	R1439159
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Tin (Sn)-Total	<0.050		0.050	mg/L		13-AUG-10	R1433524
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Uranium (U)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Vanadium (V)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		13-AUG-10	R1433524
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		12-AUG-10	R1438653
Iron (Fe)-Total	<0.030		0.030	mg/L		12-AUG-10	R1438653
Magnesium (Mg)-Total	<0.10		0.10	mg/L		12-AUG-10	R1438653
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		12-AUG-10	R1438653
Potassium (K)-Total	<0.50		0.50	mg/L		12-AUG-10	R1438653
Sodium (Na)-Total	<1.0		1.0	mg/L		12-AUG-10	R1438653
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		06-AUG-10	R1420098
Oil and Grease	<1.0		1.0	mg/L		12-AUG-10	R1438183
Phosphorus, Total	<0.020		0.020	mg/L	04-AUG-10	04-AUG-10	R1412675
Total Organic Carbon	<1.0		1.0	mg/L		10-AUG-10	R1425963
Total Suspended Solids	<3.0		3.0	mg/L		06-AUG-10	R1419123
Turbidity	0.16	RRV	0.10	NTU		05-AUG-10	R1413104
pH and Conductivity							
pH	5.99		0.10	pH		04-AUG-10	R1411945
Conductivity (EC)	3.37		0.20	uS/cm		04-AUG-10	R1411945
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		04-AUG-10	R1413833
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		05-AUG-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		04-AUG-10	R1413833
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		05-AUG-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	04-AUG-10	04-AUG-10	R1411999

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L915411-6 WQ4							
Sampled By: KL on 28-JUL-10							
Matrix: SURFACE WATER							
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		13-AUG-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		11-AUG-10	R1433963
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	0.0632		0.0050	mg/L		13-AUG-10	R1433524
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		13-AUG-10	R1433524
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Arsenic (As)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Barium (Ba)-Total	<0.0030		0.0030	mg/L		13-AUG-10	R1433524
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Boron (B)-Total	<0.050		0.050	mg/L		13-AUG-10	R1433524
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Copper (Cu)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Lead (Pb)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Lithium (Li)-Total	<0.010		0.010	mg/L		13-AUG-10	R1433524
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		13-AUG-10	R1433524
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Selenium (Se)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Silver (Ag)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Strontium (Sr)-Total	0.00287		0.00020	mg/L		13-AUG-10	R1433524
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Tin (Sn)-Total	<0.050		0.050	mg/L		13-AUG-10	R1433524
Titanium (Ti)-Total	0.0052		0.0010	mg/L		13-AUG-10	R1433524
Uranium (U)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Vanadium (V)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		13-AUG-10	R1433524
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		12-AUG-10	R1438653
Iron (Fe)-Total	0.058		0.030	mg/L		12-AUG-10	R1438653
Magnesium (Mg)-Total	0.17		0.10	mg/L		12-AUG-10	R1438653
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		12-AUG-10	R1438653
Potassium (K)-Total	<0.50		0.50	mg/L		12-AUG-10	R1438653
Sodium (Na)-Total	<1.0		1.0	mg/L		12-AUG-10	R1438653
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		06-AUG-10	R1420098
Oil and Grease	<1.0		1.0	mg/L		12-AUG-10	R1438183
Phosphorus, Total	<0.020		0.020	mg/L	04-AUG-10	04-AUG-10	R1412675
Total Organic Carbon	<1.0		1.0	mg/L		10-AUG-10	R1425963
Total Suspended Solids	<3.0		3.0	mg/L		06-AUG-10	R1419123
Turbidity	1.33		0.10	NTU		04-AUG-10	R1413104
pH and Conductivity							
pH	6.27		0.10	pH		04-AUG-10	R1411945
Conductivity (EC)	6.23		0.20	uS/cm		04-AUG-10	R1411945
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	0.171		0.050	mg/L		04-AUG-10	R1413833
Nitrate+Nitrite							

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

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Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L915411-8	WQ7							
Sampled By:	KL on 28-JUL-10							
Matrix:	SURFACE WATER							
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		12-AUG-10	R1438653
Iron (Fe)-Total		<0.030		0.030	mg/L		12-AUG-10	R1438653
Magnesium (Mg)-Total		<0.10		0.10	mg/L		12-AUG-10	R1438653
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		12-AUG-10	R1438653
Potassium (K)-Total		<0.50		0.50	mg/L		12-AUG-10	R1438653
Sodium (Na)-Total		<1.0		1.0	mg/L		12-AUG-10	R1438653
Miscellaneous Parameters								
Ammonia-N		<0.0050		0.0050	mg/L		06-AUG-10	R1420098
Oil and Grease		<1.0		1.0	mg/L		12-AUG-10	R1438183
Phosphorus, Total		<0.020		0.020	mg/L	04-AUG-10	04-AUG-10	R1412675
Total Organic Carbon		<1.0		1.0	mg/L		10-AUG-10	R1425963
Total Suspended Solids		<3.0		3.0	mg/L		06-AUG-10	R1419123
Turbidity		0.31	RRV	0.10	NTU		05-AUG-10	R1413104
pH and Conductivity								
pH		6.15		0.10	pH		04-AUG-10	R1411945
Conductivity (EC)		4.26		0.20	uS/cm		04-AUG-10	R1411945
Total Nitrogen								
Nitrate as N by IC								
Nitrate (as N)		<0.050		0.050	mg/L		04-AUG-10	R1413833
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		05-AUG-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		04-AUG-10	R1413833
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		05-AUG-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	04-AUG-10	04-AUG-10	R1411999
L915411-9	WQ8							
Sampled By:	KL on 28-JUL-10							
Matrix:	SURFACE WATER							
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								
Hardness (as CaCO3)		<1.3			mg/L		13-AUG-10	
Mercury (Hg)								
Mercury (Hg)-Total		<0.000020		0.000020	mg/L		11-AUG-10	R1433963
Total Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Total		0.0504		0.0050	mg/L		13-AUG-10	R1433524
Total Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L		13-AUG-10	R1433524
Total Metals in Water by ICPMS (Low)								
Antimony (Sb)-Total		<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Arsenic (As)-Total		<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Barium (Ba)-Total		0.0034		0.0030	mg/L		13-AUG-10	R1433524
Beryllium (Be)-Total		<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Boron (B)-Total		<0.050		0.050	mg/L		13-AUG-10	R1433524
Chromium (Cr)-Total		<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Cobalt (Co)-Total		<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Copper (Cu)-Total		<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Lead (Pb)-Total		<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Lithium (Li)-Total		<0.010		0.010	mg/L		13-AUG-10	R1433524
Molybdenum (Mo)-Total		<0.0050		0.0050	mg/L		13-AUG-10	R1433524

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

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L915411-9 WQ8 Sampled By: KL on 28-JUL-10 Matrix: SURFACE WATER							
Total Metals in Water by ICPMS (Low)							
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Selenium (Se)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Silver (Ag)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Strontium (Sr)-Total	0.00267		0.00020	mg/L		13-AUG-10	R1433524
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Tin (Sn)-Total	<0.050		0.050	mg/L		13-AUG-10	R1433524
Titanium (Ti)-Total	0.0042		0.0010	mg/L		13-AUG-10	R1433524
Uranium (U)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Vanadium (V)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		13-AUG-10	R1433524
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		12-AUG-10	R1438653
Iron (Fe)-Total	0.055		0.030	mg/L		12-AUG-10	R1438653
Magnesium (Mg)-Total	0.19		0.10	mg/L		12-AUG-10	R1438653
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		12-AUG-10	R1438653
Potassium (K)-Total	<0.50		0.50	mg/L		12-AUG-10	R1438653
Sodium (Na)-Total	<1.0		1.0	mg/L		12-AUG-10	R1438653
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		06-AUG-10	R1420098
Oil and Grease	<1.0		1.0	mg/L		12-AUG-10	R1438183
Phosphorus, Total	<0.020		0.020	mg/L	04-AUG-10	04-AUG-10	R1412675
Total Organic Carbon	1.1		1.0	mg/L		10-AUG-10	R1425963
Total Suspended Solids	<3.0		3.0	mg/L		06-AUG-10	R1419123
Turbidity	1.02		0.10	NTU		04-AUG-10	R1413104
pH and Conductivity							
pH	6.16		0.10	pH		04-AUG-10	R1411945
Conductivity (EC)	6.12		0.20	uS/cm		04-AUG-10	R1411945
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	0.085		0.050	mg/L		04-AUG-10	R1413833
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.085		0.071	mg/L		05-AUG-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		04-AUG-10	R1413833
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		05-AUG-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	04-AUG-10	04-AUG-10	R1411999
L915411-10 CH7 Sampled By: KL on 28-JUL-10 Matrix: SURFACE WATER							
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		13-AUG-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		11-AUG-10	R1433963
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	0.0742		0.0050	mg/L		13-AUG-10	R1433524
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		13-AUG-10	R1433524
Total Metals in Water by ICPMS (Low)							

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

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L915411-10 CH7							
Sampled By: KL on 28-JUL-10							
Matrix: SURFACE WATER							
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Arsenic (As)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Barium (Ba)-Total	0.0032		0.0030	mg/L		13-AUG-10	R1433524
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Boron (B)-Total	<0.050		0.050	mg/L		13-AUG-10	R1433524
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Copper (Cu)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Lead (Pb)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Lithium (Li)-Total	<0.010		0.010	mg/L		13-AUG-10	R1433524
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		13-AUG-10	R1433524
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Selenium (Se)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Silver (Ag)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Strontium (Sr)-Total	0.00209		0.00020	mg/L		13-AUG-10	R1433524
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Tin (Sn)-Total	<0.050		0.050	mg/L		13-AUG-10	R1433524
Titanium (Ti)-Total	0.0040		0.0010	mg/L		13-AUG-10	R1433524
Uranium (U)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Vanadium (V)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		13-AUG-10	R1433524
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		12-AUG-10	R1438653
Iron (Fe)-Total	0.061		0.030	mg/L		12-AUG-10	R1438653
Magnesium (Mg)-Total	0.31		0.10	mg/L		12-AUG-10	R1438653
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		12-AUG-10	R1438653
Potassium (K)-Total	<0.50		0.50	mg/L		12-AUG-10	R1438653
Sodium (Na)-Total	<1.0		1.0	mg/L		12-AUG-10	R1438653
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		06-AUG-10	R1420098
Oil and Grease	<1.0		1.0	mg/L		12-AUG-10	R1438183
Phosphorus, Total	<0.020		0.020	mg/L	04-AUG-10	04-AUG-10	R1412675
Total Organic Carbon	1.3		1.0	mg/L		10-AUG-10	R1425963
Total Suspended Solids	<3.0		3.0	mg/L		06-AUG-10	R1419123
Turbidity	1.55		0.10	NTU		04-AUG-10	R1413104
pH and Conductivity							
pH	6.31		0.10	pH		04-AUG-10	R1411945
Conductivity (EC)	6.58		0.20	uS/cm		04-AUG-10	R1411945
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	0.191		0.050	mg/L		04-AUG-10	R1413833
Nitrate+Nitrite							
Nitrate and Nitrite as N	0.191		0.071	mg/L		05-AUG-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		04-AUG-10	R1413833
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		05-AUG-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	04-AUG-10	04-AUG-10	R1411999

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

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L915411-11 DUPLICATE							
Sampled By: KL on 27-JUL-10							
Matrix: SURFACE WATER							
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		16-AUG-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		11-AUG-10	R1433963
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	0.0088	RRV	0.0050	mg/L		14-AUG-10	R1439159
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		13-AUG-10	R1433524
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Arsenic (As)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Barium (Ba)-Total	<0.0030		0.0030	mg/L		13-AUG-10	R1433524
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Boron (B)-Total	<0.050		0.050	mg/L		13-AUG-10	R1433524
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Copper (Cu)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Lead (Pb)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Lithium (Li)-Total	<0.010		0.010	mg/L		13-AUG-10	R1433524
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		13-AUG-10	R1433524
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		13-AUG-10	R1433524
Selenium (Se)-Total	<0.00040		0.00040	mg/L		13-AUG-10	R1433524
Silver (Ag)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Strontium (Sr)-Total	0.00193	RRV	0.00020	mg/L		14-AUG-10	R1439159
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Tin (Sn)-Total	<0.050		0.050	mg/L		13-AUG-10	R1433524
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Uranium (U)-Total	<0.00010		0.00010	mg/L		13-AUG-10	R1433524
Vanadium (V)-Total	<0.0010		0.0010	mg/L		13-AUG-10	R1433524
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		13-AUG-10	R1433524
Total Metals in Water by ICPOES							
Calcium (Ca)-Total	<0.50		0.50	mg/L		12-AUG-10	R1438653
Iron (Fe)-Total	<0.030		0.030	mg/L		12-AUG-10	R1438653
Magnesium (Mg)-Total	0.11	RRV	0.10	mg/L		12-AUG-10	R1438653
Manganese (Mn)-Total	<0.0050		0.0050	mg/L		12-AUG-10	R1438653
Potassium (K)-Total	<0.50		0.50	mg/L		12-AUG-10	R1438653
Sodium (Na)-Total	<1.0		1.0	mg/L		12-AUG-10	R1438653
Miscellaneous Parameters							
Ammonia-N	<0.0050		0.0050	mg/L		06-AUG-10	R1420098
Oil and Grease	<1.0		1.0	mg/L		12-AUG-10	R1438183
Phosphorus, Total	<0.020		0.020	mg/L	06-AUG-10	09-AUG-10	R1421464
Total Organic Carbon	<1.0		1.0	mg/L		10-AUG-10	R1425963
Total Suspended Solids	<3.0		3.0	mg/L		06-AUG-10	R1419123
Turbidity	0.16	RRV	0.10	NTU		05-AUG-10	R1413104
pH and Conductivity							
pH	6.07		0.10	pH		04-AUG-10	R1411945
Conductivity (EC)	4.80		0.20	uS/cm		04-AUG-10	R1411945
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		04-AUG-10	R1413833
Nitrate+Nitrite							

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L915411-11	DUPLICATE							
Sampled By: KL on 27-JUL-10								
Matrix: SURFACE WATER								
Nitrate+Nitrite								
Nitrate and Nitrite as N		<0.071		0.071	mg/L		05-AUG-10	
Nitrite as N by IC								
Nitrite (as N)		<0.050		0.050	mg/L		04-AUG-10	R1413833
Nitrogen, Total								
Nitrogen, Total		<0.20		0.20	mg/L		05-AUG-10	
Total Kjeldahl Nitrogen								
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	04-AUG-10	04-AUG-10	R1411999
L915411-12	FIELD BLANK							
Sampled By: KL on 28-JUL-10								
Matrix: SURFACE WATER								
TOT Metals CCME Fresh Water Aquatic Life								
Hardness (from Total Ca and Mg)								
Hardness (as CaCO3)		<1.3			mg/L		13-AUG-10	
Mercury (Hg)								
Mercury (Hg)-Total		<0.000020		0.000020	mg/L		11-AUG-10	R1433963
Total Al in Water by ICPMS (CCME - FAL)								
Aluminum (Al)-Total		<0.0050		0.0050	mg/L		12-AUG-10	R1433524
Total Cd in Water by ICPMS (CCME - FAL)								
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L		12-AUG-10	R1433524
Total Metals in Water by ICPMS (Low)								
Antimony (Sb)-Total		<0.00040		0.00040	mg/L		12-AUG-10	R1433524
Arsenic (As)-Total		<0.00040		0.00040	mg/L		12-AUG-10	R1433524
Barium (Ba)-Total		<0.0030		0.0030	mg/L		12-AUG-10	R1433524
Beryllium (Be)-Total		<0.0010		0.0010	mg/L		12-AUG-10	R1433524
Boron (B)-Total		<0.050		0.050	mg/L		12-AUG-10	R1433524
Chromium (Cr)-Total		<0.0010		0.0010	mg/L		12-AUG-10	R1433524
Cobalt (Co)-Total		<0.0020		0.0020	mg/L		12-AUG-10	R1433524
Copper (Cu)-Total		<0.0010		0.0010	mg/L		12-AUG-10	R1433524
Lead (Pb)-Total		<0.00010		0.00010	mg/L		12-AUG-10	R1433524
Lithium (Li)-Total		<0.010		0.010	mg/L		12-AUG-10	R1433524
Molybdenum (Mo)-Total		<0.0050		0.0050	mg/L		12-AUG-10	R1433524
Nickel (Ni)-Total		<0.0020		0.0020	mg/L		12-AUG-10	R1433524
Selenium (Se)-Total		<0.00040		0.00040	mg/L		12-AUG-10	R1433524
Silver (Ag)-Total		<0.00010		0.00010	mg/L		12-AUG-10	R1433524
Strontium (Sr)-Total		<0.00020		0.00020	mg/L		12-AUG-10	R1433524
Thallium (Tl)-Total		<0.00010		0.00010	mg/L		12-AUG-10	R1433524
Tin (Sn)-Total		<0.050		0.050	mg/L		12-AUG-10	R1433524
Titanium (Ti)-Total		<0.0010		0.0010	mg/L		12-AUG-10	R1433524
Uranium (U)-Total		<0.00010		0.00010	mg/L		12-AUG-10	R1433524
Vanadium (V)-Total		<0.0010		0.0010	mg/L		12-AUG-10	R1433524
Zinc (Zn)-Total		<0.0040		0.0040	mg/L		12-AUG-10	R1433524
Total Metals in Water by ICPOES								
Calcium (Ca)-Total		<0.50		0.50	mg/L		12-AUG-10	R1438653
Iron (Fe)-Total		<0.030		0.030	mg/L		12-AUG-10	R1438653
Magnesium (Mg)-Total		<0.10		0.10	mg/L		12-AUG-10	R1438653
Manganese (Mn)-Total		<0.0050		0.0050	mg/L		12-AUG-10	R1438653
Potassium (K)-Total		<0.50		0.50	mg/L		12-AUG-10	R1438653
Sodium (Na)-Total		<1.0		1.0	mg/L		12-AUG-10	R1438653
Miscellaneous Parameters								
Ammonia-N		<0.0050		0.0050	mg/L		06-AUG-10	R1420098
Oil and Grease		<1.0		1.0	mg/L		12-AUG-10	R1438183

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L915411-12 FIELD BLANK Sampled By: KL on 28-JUL-10 Matrix: SURFACE WATER							
Phosphorus, Total	<0.020		0.020	mg/L	04-AUG-10	04-AUG-10	R1412675
Total Organic Carbon	<1.0		1.0	mg/L		10-AUG-10	R1425963
Total Suspended Solids	<3.0		3.0	mg/L		06-AUG-10	R1419123
Turbidity	<0.10		0.10	NTU		04-AUG-10	R1413104
pH and Conductivity							
pH	5.74		0.10	pH		04-AUG-10	R1411945
Conductivity (EC)	0.77		0.20	uS/cm		04-AUG-10	R1411945
Total Nitrogen							
Nitrate as N by IC							
Nitrate (as N)	<0.050		0.050	mg/L		04-AUG-10	R1413833
Nitrate+Nitrite							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		05-AUG-10	
Nitrite as N by IC							
Nitrite (as N)	<0.050		0.050	mg/L		04-AUG-10	R1413833
Nitrogen, Total							
Nitrogen, Total	<0.20		0.20	mg/L		05-AUG-10	
Total Kjeldahl Nitrogen							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	04-AUG-10	04-AUG-10	R1411999
L915411-13 TRIP BLANK Sampled By: KL Matrix: SURFACE WATER							
TOT Metals CCME Fresh Water Aquatic Life							
Hardness (from Total Ca and Mg)							
Hardness (as CaCO3)	<1.3			mg/L		13-AUG-10	
Mercury (Hg)							
Mercury (Hg)-Total	<0.000020		0.000020	mg/L		11-AUG-10	R1433963
Total Al in Water by ICPMS (CCME - FAL)							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L		12-AUG-10	R1433524
Total Cd in Water by ICPMS (CCME - FAL)							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L		12-AUG-10	R1433524
Total Metals in Water by ICPMS (Low)							
Antimony (Sb)-Total	<0.00040		0.00040	mg/L		12-AUG-10	R1433524
Arsenic (As)-Total	<0.00040		0.00040	mg/L		12-AUG-10	R1433524
Barium (Ba)-Total	<0.0030		0.0030	mg/L		12-AUG-10	R1433524
Beryllium (Be)-Total	<0.0010		0.0010	mg/L		12-AUG-10	R1433524
Boron (B)-Total	<0.050		0.050	mg/L		12-AUG-10	R1433524
Chromium (Cr)-Total	<0.0010		0.0010	mg/L		12-AUG-10	R1433524
Cobalt (Co)-Total	<0.0020		0.0020	mg/L		12-AUG-10	R1433524
Copper (Cu)-Total	<0.0010		0.0010	mg/L		12-AUG-10	R1433524
Lead (Pb)-Total	<0.00010		0.00010	mg/L		12-AUG-10	R1433524
Lithium (Li)-Total	<0.010		0.010	mg/L		12-AUG-10	R1433524
Molybdenum (Mo)-Total	<0.0050		0.0050	mg/L		12-AUG-10	R1433524
Nickel (Ni)-Total	<0.0020		0.0020	mg/L		12-AUG-10	R1433524
Selenium (Se)-Total	<0.00040		0.00040	mg/L		12-AUG-10	R1433524
Silver (Ag)-Total	<0.00010		0.00010	mg/L		12-AUG-10	R1433524
Strontium (Sr)-Total	<0.00020		0.00020	mg/L		12-AUG-10	R1433524
Thallium (Tl)-Total	<0.00010		0.00010	mg/L		12-AUG-10	R1433524
Tin (Sn)-Total	<0.050		0.050	mg/L		12-AUG-10	R1433524
Titanium (Ti)-Total	<0.0010		0.0010	mg/L		12-AUG-10	R1433524
Uranium (U)-Total	<0.00010		0.00010	mg/L		12-AUG-10	R1433524
Vanadium (V)-Total	<0.0010		0.0010	mg/L		12-AUG-10	R1433524
Zinc (Zn)-Total	<0.0040		0.0040	mg/L		12-AUG-10	R1433524

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

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Phosphorus, Total	MS-B	L915411-11

Sample Parameter Qualifier Key:

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

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
AL-T-CCME-FAL-MS-ED	Water	Total Al in Water by ICPMS (CCME - FAL)	APHA 3125-ICP-MS
C-TOT-ORG-ED	Water	Total Organic Carbon	APHA 5310 B-Instrumental
CD-T-CCME-FAL-MS-ED	Water	Total Cd in Water by ICPMS (CCME - FAL)	APHA 3125-ICP-MS
ETL-HARDNESS-TOT-ED	Water	Hardness (from Total Ca and Mg)	APHA 2340 B-Calculation
ETL-N-TOT-CALC-ED	Water	Nitrogen, Total	APHA 4500 N-Calculated
HG-T-L-CVAA-ED	Water	Mercury (Hg)	EPA 245.7 / EPA 245.1
MET-T-ICP-ED	Water	Total Metals in Water by ICPOES	APHA 3120 B-ICP-OES
MET-T-L-MS-ED	Water	Total Metals in Water by ICPMS (Low)	SW 846 - 6020-ICPMS
N-TOTKJ-ED	Water	Total Kjeldahl Nitrogen	APHA 4500N-C -Dig.-Auto-Colorimetry
NH4-LOW-ED	Water	Ammonia-N Low Level	APHA 4500 NH3F-Colorimetry
NO2+NO3-CALC-ED	Water	Nitrate+Nitrite	CALCULATION
NO2-IC-ED	Water	Nitrite as N by IC	APHA 4110 B-ION CHROMATOGRAPHY
NO3-IC-ED	Water	Nitrate as N by IC	APHA 4110 B-ION CHROMATOGRAPHY
OGG-ED	Water	Oil and Grease-Gravimetric	APHA 5520 G HEXANE MTBE EXT. GRAVIME
P-TOTAL-ED	Water	Phosphorus, Total	APHA 4500 P B,E-Auto-Colorimetry
PH/EC-ED	Water	pH and Conductivity	APHA 4500-H, 2510
SOLIDS-TOTSUS-ED	Water	Total Suspended Solids	APHA 2540 D-Gravimetric
TURBIDITY-ED	Water	Turbidity	APHA 2130 B-Nephelometer

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

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

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

Chain of Custody Numbers:

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
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GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample
mg/kg ww - milligrams per kilogram based on wet weight of sample
mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight
mg/L - 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.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Report To				Report Format / Distribution				Service Requested (Rush for routine analysis subject to availability)															
Company: EBA Engineering Consultants Ltd.				<input checked="" type="checkbox"/> Standard <input type="checkbox"/> Other				<input checked="" type="radio"/> Regular (Default) <input type="radio"/> Priority (Specify Date Required → →) Surcharges apply <input type="radio"/> Emergency (1 Business Day) - 100% Surcharge <input type="radio"/> For Emergency < 1 Day, ASAP or Weekend - Contact ALS															
Contact: Karla Langlois				<input checked="" type="checkbox"/> PDF <input checked="" type="checkbox"/> Excel <input type="checkbox"/> Digital <input type="checkbox"/> Fax																			
Address: Box 2244, 4916-49 street Yellowknife, NT X1A 2P7				Email 1: klanglois@eba.ca Email 2: smoores@eba.ca																			
Phone: 867.920.2287 Fax: 867.873.3324								Analysis Request															
Invoice To Same as Report ? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				Client / Project Information				Please indicate below Filtered, Preserved or both (F, P, F/P)															
Company: Peregrine Diamonds				Job #: Y22101137																			
Contact: Shirley Standafer-Pfister				PO / AFE:																			
Address:				LSD:																			
Phone:				Quote #: Q20910																			
Lab Work Order # (lab use only) L915411				ALS Contact:				Sampler: KL															
Sample #	Sample Identification (This description will appear on the report)			Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	Routine	Nutrients	Total Metals	TOC	Oil and Grease											Number of Containers	
	Hydro 9			26/Jul/10		Surface Water	✓	✓	✓	✓	✓												
	Hydro 10			"		"	✓	✓	✓	✓	✓												
	Hydro 11			27/Jul/10		"	✓	✓	✓	✓	✓												
	WQ5			"		"	✓	✓	✓	✓	✓												
	WQ3			28/Jul/10		"	✓	✓	✓	✓	✓												
	WQ4			"		"	✓	✓	✓	✓	✓												
	WQ6			"		"	✓	✓	✓	✓	✓												
	WQ7			"		"	✓	✓	✓	✓	✓												
	WQ8			"		"	✓	✓	✓	✓	✓												
	CH7			"		"	✓	✓	✓	✓	✓												
	Duplicate			27/Jul/10		"	✓	✓	✓	✓	✓												
	Field Blank			July 28/10		"	✓	✓	✓	✓	✓												
Special Instructions / Regulations / Hazardous Details																							
Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY. By the use of this form the user acknowledges and agrees with the Terms and Conditions as provided on a separate Excel tab. Also provided on another Excel tab are the ALS location addresses, phone numbers and sample container / preservation / holding time table for common analyses.																							
SHIPMENT RELEASE (client use)					SHIPMENT RECEPTION (lab use only)					SHIPMENT VERIFICATION (lab use only)													
Released by: Karla Langlois	Date (dd-mmm-yy)	Time (hh-mm)	Received by: KBL	Date: 03 AUG-10	Time: 12:15	Temperature: 7.3 °C	Verified by:	Date:	Time:	Observation: Yes / No ? If Yes add S													

[illegible]

APPENDIX D

APPENDIX D POTABLE WATER QUALITY LABORATORY REPORTS



Environmental Division

Certificate of Analysis

EBA ENG CONSULTANTS LTD
ATTN: SHIRLEY STANDAFER-PFISTER
PEREGRINE DIAMONDS LTD.
201-1250 HOMER STREET
VANCOUVER BC V6B 1C6

Report Date: 14-APR-10 15:01 (MT)

Version: FINAL

Lab Work Order #: L876589

Date Received: 13-APR-10

Project P.O. #: NOT SUBMITTED
Job Reference: Y22101137
Legal Site Desc:
CofC Numbers: 10-004775

Other Information:

Comments:

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

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L876589-1 KITCHEN Sampled By: NOT PROVIDED on 12-APR-10 @ 13:00 Matrix: WATER Miscellaneous Parameters Fecal Coliforms Total Coliform and E.coli Total Coliforms Escherichia Coli	 <1 <1 <1	 	 1 1 1	 CFU/100mL MPN/100mL MPN/100mL	 	 13-APR-10 13-APR-10 13-APR-10	 R1235450 R1235453 R1235453
L876589-2 BATHROOM Sampled By: NOT PROVIDED on 12-APR-10 @ 13:00 Matrix: WATER Miscellaneous Parameters Fecal Coliforms Total Coliform and E.coli Total Coliforms Escherichia Coli	 <1 <1 <1	 	 1 1 1	 CFU/100mL MPN/100mL MPN/100mL	 	 13-APR-10 13-APR-10 13-APR-10	 R1235450 R1235453 R1235453
L876589-3 RAW Sampled By: NOT PROVIDED on 12-APR-10 @ 12:50 Matrix: WATER Miscellaneous Parameters Fecal Coliforms Total Coliform and E.coli Total Coliforms Escherichia Coli	 <1 <1 <1	 	 1 1 1	 CFU/100mL MPN/100mL MPN/100mL	 	 13-APR-10 13-APR-10 13-APR-10	 R1235450 R1235453 R1235453
L876589-4 DUPLICATE Sampled By: NOT PROVIDED on 12-APR-10 @ 13:00 Matrix: WATER Miscellaneous Parameters Fecal Coliforms Total Coliform and E.coli Total Coliforms Escherichia Coli	 <1 <1 <1	 	 1 1 1	 CFU/100mL MPN/100mL MPN/100mL	 	 13-APR-10 13-APR-10 13-APR-10	 R1235450 R1235453 R1235453
L876589-5 TRIP BLANK Sampled By: NOT PROVIDED on 12-APR-10 Matrix: WATER Miscellaneous Parameters Fecal Coliforms Total Coliform and E.coli Total Coliforms Escherichia Coli	 <1 <1 <1	 	 1 1 1	 CFU/100mL MPN/100mL MPN/100mL	 	 13-APR-10 13-APR-10 13-APR-10	 R1235450 R1235453 R1235453
L876589-6 FIELD BLANK Sampled By: NOT PROVIDED on 12-APR-10 @ 13:10 Matrix: WATER Miscellaneous Parameters Fecal Coliforms Total Coliform and E.coli Total Coliforms Escherichia Coli	 <1 <1 <1	 	 1 1 1	 CFU/100mL MPN/100mL MPN/100mL	 	 13-APR-10 13-APR-10 13-APR-10	 R1235450 R1235453 R1235453

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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
FC-MF-YL	Water	Fecal Coliform	APHA 9222D
TC,EC-QT97-YL	Water	Total Coliform and E.coli	APHA 9223

The analysis of Total Coliform (TC) & Escherichia coli (EC) is processed by Quanti-tray (QT): Two substrates, ONPG for TC detection and MUG for EC detection are used. The substrates are added to the 100 ml sample dispensed into the 51 well tray. The tray is incubated at 35 Celcius for 24 hours. A colour reaction develops to indicate a positive reaction (presence of TC, EC). The number of positive wells are counted and converted to Most Probable Number Units (MPNU) per 100 ml. This test is also called 'rapid MPN method', therefore, the MPN results are derived from a statistical table with a 95% confidence and report as MPN units. The QT detection limit for a negative result is reported as zero.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

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

Laboratory Definition Code	Laboratory Location
YL	ALS LABORATORY GROUP - YELLOWKNIFE, NW, CANADA

Chain of Custody Numbers:

10-004775

GLOSSARY OF REPORT TERMS

Surrogates are compounds that are similar in behaviour to target analyte(s), but that do not normally occur in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery. In reports that display the D.L. column, laboratory objectives for surrogates are listed there.

mg/kg - milligrams per kilogram based on dry weight of sample

mk/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - 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.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.



Environmental Division

Certificate of Analysis

EBA ENG CONSULTANTS LTD

ATTN: KARLA LANGLOIS

201 - 4916 49 STREET
PO BOX 2244
YELLOWKNIFE NT X1A 2P7

Report Date: 19-JUL-10 16:26 (MT)

Version: FINAL

Lab Work Order #: **L907557**

Date Received: **13-JUL-10**

Project P.O. #: NOT SUBMITTED
Job Reference: PEREGRINE 18017
Legal Site Desc:
CofC Numbers: 08-073925

Other Information:

Comments:

Geraldyn Gouthro
Client Services Manager

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L907557-7 DISCOVERY-KITCHEN Sampled By: NOT PROVIDED on 12-JUL-10 @ 12:45 Matrix: WATER Total Coliform and E.coli Total Coliforms Escherichia Coli	 <1 <1		 1 1	 MPN/100mL MPN/100mL		13-JUL-10 13-JUL-10	R1363143 R1363143
L907557-8 DISCOVERY-BATHROOM Sampled By: NOT PROVIDED on 12-JUL-10 @ 12:40 Matrix: WATER Miscellaneous Parameters Fecal Coliforms Total Coliform and E.coli Total Coliforms Escherichia Coli	 <1 <1 <1		 1 1 1	 CFU/100mL MPN/100mL MPN/100mL		13-JUL-10 13-JUL-10 13-JUL-10	R1363083 R1363143 R1363143
L907557-9 DISCOVERY-DRY 1 Sampled By: NOT PROVIDED on 12-JUL-10 @ 12:45 Matrix: WATER Miscellaneous Parameters Fecal Coliforms Total Coliform and E.coli Total Coliforms Escherichia Coli	 <1 <1 <1		 1 1 1	 CFU/100mL MPN/100mL MPN/100mL		13-JUL-10 13-JUL-10 13-JUL-10	R1363083 R1363143 R1363143
L907557-10 DISCOVERY-DRY 2 Sampled By: NOT PROVIDED on 12-JUL-10 @ 12:45 Matrix: WATER Miscellaneous Parameters Fecal Coliforms Total Coliform and E.coli Total Coliforms Escherichia Coli	 <1 <1 <1		 1 1 1	 CFU/100mL MPN/100mL MPN/100mL		13-JUL-10 13-JUL-10 13-JUL-10	R1363083 R1363143 R1363143
L907557-11 DISCOVERY-RAW Sampled By: NOT PROVIDED on 12-JUL-10 @ 12:30 Matrix: WATER Miscellaneous Parameters Fecal Coliforms Total Coliform and E.coli Total Coliforms Escherichia Coli	 <1 58 <1		 1 1 1	 CFU/100mL MPN/100mL MPN/100mL		13-JUL-10 13-JUL-10 13-JUL-10	R1363083 R1363143 R1363143
L907557-12 TRIP BLANK Sampled By: NOT PROVIDED on 12-JUL-10 Matrix: WATER Miscellaneous Parameters Fecal Coliforms Total Coliform and E.coli Total Coliforms Escherichia Coli	 <1 <1 <1		 1 1 1	 CFU/100mL MPN/100mL MPN/100mL		13-JUL-10 13-JUL-10 13-JUL-10	R1363083 R1363143 R1363143

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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
FC-MF-YL	Water	Fecal Coliform	APHA 9222D
TC,EC-QT97-YL	Water	Total Coliform and E.coli	APHA 9223

The analysis of Total Coliform (TC) & Escherichia coli (EC) is processed by Quanti-tray (QT): Two substrates, ONPG for TC detection and MUG for EC detection are used. The substrates are added to the 100 ml sample dispensed into the 51 well tray. The tray is incubated at 35 Celcius for 24 hours. A colour reaction develops to indicate a positive reaction (presence of TC, EC). The number of positive wells are counted and converted to Most Probable Number Units (MPNU) per 100 ml. This test is also called 'rapid MPN method', therefore, the MPN results are derived from a statistical table with a 95% confidence and report as MPN units. The QT detection limit for a negative result is reported as zero.

** ALS test methods may incorporate modifications from specified reference methods to improve performance.

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

Laboratory Definition Code	Laboratory Location
YL	ALS LABORATORY GROUP - YELLOWKNIFE, NW, CANADA

Chain of Custody Numbers:

08-073925

GLOSSARY OF REPORT TERMS

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mg/kg - milligrams per kilogram based on dry weight of sample

mg/kg wwt - milligrams per kilogram based on wet weight of sample

mg/kg lwt - milligrams per kilogram based on lipid-adjusted weight

mg/L - 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.

Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Report to:		Report Format / Distribution		Service Requested: (rush - subject to availability)	
Company: EBA Engineering		Standard: <input checked="" type="checkbox"/> Other: <input type="checkbox"/>		Regular (Default)	
Contact: Karla Langlois		Select: PDF <input checked="" type="checkbox"/> Excel <input type="checkbox"/> Digital <input type="checkbox"/>		Priority (2-3 Business Days) - 50% Surcharge	
Address: 4916-49 st		Email 1: klanglois@eba.ca		Emergency (1 Business Day) - 100% Surcharge	
Yellowknife NT X1A 2P7		Email 2: smoores@eba.ca		For Emergency < 1 Day, ASAP or Weekend - Contact ALS	
Phone: 867-920-2887		Fax: 867-873-3324		Analysis Request	
Invoice To: Same as Report? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		Client / Project Information:		(Indicate Filtered or Preserved, F/P)	
Company: Peregrine Diamonds		Job #: 422101137		Bacteriological	
Contact: Shirley Standtfer - Pfister		PO / AFE:			
Address:		Legal Site Description:			
Phone:		Quote #: Q20910			
Lab Work Order #		ALS		Number of Containers	
(lab use only) 6907557		Contact:			
Sample		Sample Identification		Sampler:	
#		(This description will appear on the report)		Date	
1		Sunrise - Kitchen		Time	
2		Sunrise - Bathroom		Sample Type	
3		Sunrise - Dry		Water	
4		Sunrise - Raw		"	
5		Duplicate		"	
6		Field Blank		"	
7		Discovery - Kitchen		"	
8		Discovery - Bathroom		"	
9		Discovery - Dry 1		"	
10		Discovery - Dry 2		"	
11		Discovery - Raw		"	
Special Instructions / Regulations / Hazardous Details					
Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.					
By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.					
SHIPMENT RELEASE (client use)		SHIPMENT RECEPTION (lab use only)		SHIPMENT VERIFICATION (lab use only)	
Released by: Karla Langlois		Received by: [Signature]		Verified by:	
Date & Time: July 12/10		Date: 12-1-10		Date & Time:	
		Time: 9pm		Observations:	
		Temperature:		Yes / No ?	
				If Yes attach SIF	
REFER TO BACK PAGE FOR ALS LOCATIONS AND SAMPLING INFORMATION					
WHITE - REPORT COPY, PINK - FILE COPY, YELLOW - CLIENT COPY					
GENF 18.00 Front					

From: Thomas, Mary Ellen [MaryEllen.Thomas@arcticcollege.ca]
Sent: Tuesday, July 13, 2010 9:26 AM
To: Karla Langlois
Subject: FW: Query frm Peregrine about Potable Samples--Could NRI Pick up?

From: Shirley, Jamal
Sent: Tuesday, July 13, 2010 11:20 AM
To: Thomas, Mary Ellen
Cc: shirley@pdiam.com
Subject: RE: Query frm Peregrine about Potable Samples--Could NRI Pick up?

Good morning,

I received two EBA duplicate samples (labelled "bathroom") at our lab at 2pm yesterday. I tested both samples with Coli-18 reagent (IDEXX). I used the Qunati tray system which allows enumeration of total # of colony forming units per 100ml sample. Samples were treated and incubated immediatley. One combined test (for E coli and total coliforms) was performed for each sample. **No total coliforms or E coli were detected in either sample.** If you need any additional information on our testing procedure or results please let me know. Regards,

Jamal Shirley
Manager, Research Design
Nunavut Research Institute

From: Thomas, Mary Ellen
Sent: Mon 7/12/2010 4:01 PM
To: Shirley, Jamal
Subject: FW: Query frm Peregrine about Potable Samples--Could NRI Pick up?

From: Shirley Standafer-Pfister [mailto:shirley@pdiam.com]
Sent: Monday, July 12, 2010 3:58 PM
To: Thomas, Mary Ellen; Karla Langlois
Subject: RE: Query frm Peregrine about Potable Samples--Could NRI Pick up?

Greetings, Mary Ellen,

As discussed, the sample is POTABLE water for microbiological analysis (E.coli). I'm not sure what Karla submitted, but samples are collected from key points in the camp water distribution system, and one collection point is the tap in the dry and another is the tap in the hand-wash basin in the bathroom shed.

Best,

-- ssp

Shirley Standafer-Pfister | Manager – Regulatory and Environmental Affairs
PEREGRINE
DIAMONDS LTD.
201 - 1250 Homer Street
Vancouver, BC, Canada V6B1C6
Business & Mobile: 250-686-1769
Vancouver Office Tel: 604-408-8880 **Fax:** 604-408-8881
Email: shirley@pdiam.com www.pdiam.com

From: Thomas, Mary Ellen [mailto:MaryEllen.Thomas@arcticcollege.ca]

APPENDIX E

APPENDIX E DFO COLLECTION REPORT FORMS

COLLECTION REPORT FORM (D)

LICENCE NUMBER S-10/11-1024-NH

WATER BODY* Hydro 9 (see map)

WATER BODY COORDINATES (dm) 19W 0624576 7126062

COLLECTION DATE 26/07/2010 (dd/mm/yyyy)

GEAR TYPES USED Electrofishing, Dip Netting

Total Caught does not necessarily have to equal Live + Dead samples.

Species Caught	Total No. Caught	No. Live Sampled	No. Dead Sampled
Arctic Char, Landlocked			
Arctic Char, Searun	<u>6</u>	<u>6</u>	
Arctic Grayling			
Burbot			
Cisco			
Cisco, Arctic			
Cisco, Lake			
Cisco, Least			
Lake Trout			
Ninespine Stickleback			
Slimy Sculpin			
Whitefish, Lake			
Whitefish, Round			
Other (Specify) _____			
Other (Specify) _____			
Invertebrates _____			
		Kgs	

Comments

140mm, 95mm, 190mm, 140mm, 140mm, 135mm

* Note: complete one form for each water body

COLLECTION REPORT FORM (D)

LICENCE NUMBER S-10/11-1024-NH

WATER BODY* Hydro 10 (see map)

WATER BODY COORDINATES (dm) 19W 0630452 7122247

COLLECTION DATE 26/07/2010 (dd/mm/yyyy)

GEAR TYPES USED

Dip Netting

Total Caught does not necessarily have to equal Live + Dead samples.

Species Caught	Total No. Caught	No. Live Sampled	No. Dead Sampled
Arctic Char, Landlocked			
Arctic Char, Searun	<u>1</u>	<u>Ø</u>	<u>Ø</u>
Arctic Grayling			
Burbot			
Cisco			
Cisco, Arctic			
Cisco, Lake			
Cisco, Least			
Lake Trout			
Ninespine Stickleback			
Slimy Sculpin			
Whitefish, Lake			
Whitefish, Round			
Other (Specify) _____			
Other (Specify) _____			
Invertebrates			
		Kgs	

Comments

one visual observed, Ø caught with net.

* Note: complete one form for each water body

COLLECTION REPORT FORM (D)

LICENCE NUMBER S-10/11-1024-NH

WATER BODY* Hydro 11 (see map)

WATER BODY COORDINATES (dm) 19W 066141

7134256

COLLECTION DATE 27/07/2010 (dd/mm/yyyy)

GEAR TYPES USED

Gee Minnow Traps, Dipnetting

Total Caught does not necessarily have to equal Live + Dead samples.

Species Caught	Total No. Caught	No. Live Sampled	No. Dead Sampled
Arctic Char, Landlocked			
Arctic Char, Searun	<u>7</u>	<u>7</u>	
Arctic Grayling			
Burbot			
Cisco			
Cisco, Arctic			
Cisco, Lake			
Cisco, Least			
Lake Trout			
Ninespine Stickleback			
Slimy Sculpin			
Whitefish, Lake			
Whitefish, Round			
Other (Specify) _____			
Other (Specify) _____			
Invertebrates			
		Kgs	

Comments

95mm - 9.1 g 115mm - 16.2 g 135mm - 28.2 g
 95mm - 10.4g 120mm - 19.5g 150mm - 40.1 g
 130mm - 22.9 g

* Note: complete one form for each water body

COLLECTION REPORT FORM (D)

LICENCE NUMBER S-10/11-1024-NH

WATER BODY* WQ 8 (see map)

WATER BODY COORDINATES (dm) 19W 0628167 7140678

COLLECTION DATE 29/07/2010 (dd/mm/yyyy)

GEAR TYPES USED Gee Minnow Traps, Dipnets

Total Caught does not necessarily have to equal Live + Dead samples.

Species Caught	Total No. Caught	No. Live Sampled	No. Dead Sampled
Arctic Char, Landlocked			
Arctic Char, Searun	<u>1</u>	<u>1</u>	
Arctic Grayling			
Burbot			
Cisco			
Cisco, Arctic			
Cisco, Lake			
Cisco, Least			
Lake Trout			
Ninespine Stickleback			
Slimy Sculpin			
Whitefish, Lake			
Whitefish, Round			
Other (Specify) _____			
Other (Specify) _____			
Invertebrates _____			
		Kgs	

Comments

110mm - 14.3g

* Note: complete one form for each water body

COLLECTION REPORT FORM (D)

LICENCE NUMBER S-10/11-1024-NU

WATER BODY* Sunrise Lake (see map)

WATER BODY COORDINATES (dm) 19N 0639253 7126615

COLLECTION DATE 28/07/2010 (dd/mm/yyyy)

GEAR TYPES USED Angling

Total Caught does not necessarily have to equal Live + Dead samples.

Species Caught	Total No. Caught	No. Live Sampled	No. Dead Sampled
Arctic Char, Landlocked	<u>3</u>	<u>3</u>	<u> </u>
Arctic Char, Searun	<u> </u>	<u> </u>	<u> </u>
Arctic Grayling	<u> </u>	<u> </u>	<u> </u>
Burbot	<u> </u>	<u> </u>	<u> </u>
Cisco	<u> </u>	<u> </u>	<u> </u>
Cisco, Arctic	<u> </u>	<u> </u>	<u> </u>
Cisco, Lake	<u> </u>	<u> </u>	<u> </u>
Cisco, Least	<u> </u>	<u> </u>	<u> </u>
Lake Trout	<u> </u>	<u> </u>	<u> </u>
Ninespine Stickleback	<u> </u>	<u> </u>	<u> </u>
Slimy Sculpin	<u> </u>	<u> </u>	<u> </u>
Whitefish, Lake	<u> </u>	<u> </u>	<u> </u>
Whitefish, Round	<u> </u>	<u> </u>	<u> </u>
Other (Specify) <u> </u>	<u> </u>	<u> </u>	<u> </u>
Other (Specify) <u> </u>	<u> </u>	<u> </u>	<u> </u>
Invertebrates <u> </u>	<u> </u>	<u> </u>	<u> </u>

Kgs

Comments

590 mm, 460 mm, 630 mm

* Note: complete one form for each water body

APPENDIX F

APPENDIX F WILDLIFE SPECIES OCCURRING OR POTENTIALLY OCCURRING WITHIN THE STUDY AREA

Appendix F. Wildlife Species Occurring or Potentially Occurring Within the Study Area

Common Name	Scientific Name	Conservation Status		
		NU	SARA	COSEWIC
Mammals*				
Arctic Hare	<i>Lepus arcticus</i>	Secure	-	Not Assessed
Neoarctic Brown Lemming	<i>Lemmus trimucronatus</i>	Secure	-	Not Assessed
Neoarctic Collared Lemming	<i>Dicrostonyx groenlandicus</i>	Secure	-	Not Assessed
Gray Wolf	<i>Canis lupus arctos</i>	Secure	-	Not At Risk
Arctic Fox	<i>Vulpes lagopus</i>	Secure	-	Not Assessed
Red Fox	<i>Vulpes vulpes</i>	Secure	-	Not Assessed
Ermine	<i>Mustela erminea</i>	Secure	-	Not Assessed
Polar Bear	<i>Ursus maritimus</i>	Sensitive	No Status	Special Concern
Wolverine	<i>Gulo gulo</i>	Secure	No Status	Special Concern
Barren-ground Caribou	<i>Rangifer tarandus groenlandicus</i>	Secure	-	Not Assessed
Birds*				
Snow Goose	<i>Chen caerulescens</i>	Secure	-	Not Assessed
Canada Goose	<i>Branta canadensis</i>	Secure	-	Not Assessed
Tundra Swan	<i>Cygnus columbianus</i>	Secure	-	Not Assessed
Harlequin Duck	<i>Histrionicus histrionicus</i>	Sensitive	Special Concern (Schedule 1)	Special Concern
Long-tailed Duck	<i>Clangula hyemalis</i>	Secure	-	Not Assessed
Red-breasted Merganser	<i>Mergus serrator</i>	Secure	-	Not Assessed
Rock Ptarmigan	<i>Lagopus muta</i>	Secure	-	Not Assessed
Red-throated Loon	<i>Gavia stellata</i>	Secure	-	Not Assessed
Pacific Loon	<i>Gavia pacifica</i>	Secure	-	Not Assessed
Common Loon	<i>Gavia immer</i>	Secure	-	Not At Risk
Rough-legged Hawk	<i>Buteo lagopus</i>	Secure	-	Not At Risk
Gyrfalcon	<i>Falco rusticolus</i>	Secure	-	Not At Risk
Peregrine Falcon	<i>Falco peregrinus anatum/tundrius</i>	Secure	No Status	Special Concern
Semipalmated Plover	<i>Charadrius semipalmatus</i>	Secure	-	Not Assessed
Semipalmated Sandpiper	<i>Calidris pusilla</i>	Sensitive	-	Not Assessed
White-rumped Sandpiper	<i>Calidris fuscicollis</i>	Secure	-	Not Assessed
Baird's Sandpiper	<i>Calidris bairdii</i>	Secure	-	Not Assessed

Appendix F. Wildlife Species Occurring or Potentially Occurring Within the Study Area

Common Name	Scientific Name	Conservation Status		
		NU	SARA	COSEWIC
Purple Sandpiper	<i>Calidris maritima</i>	Secure	-	Not Assessed
Red-necked Phalarope	<i>Phalaropus lobatus</i>	Secure	-	Not Assessed
Red Phalarope	<i>Phalaropus fulicaria</i>	Sensitive	-	Not Assessed
Pomarine Jaeger	<i>Stercorarius pomarinus</i>	Secure	-	Not Assessed
Parasitic Jaeger	<i>Stercorarius parasiticus</i>	Secure	-	Not Assessed
Long-tailed Jaeger	<i>Stercorarius longicaudus</i>	Secure	-	Not Assessed
Herring Gull	<i>Larus argentatus</i>	Secure	-	Not Assessed
Iceland Gull	<i>Larus glaucoides</i>	Secure	-	Not Assessed
Glaucous Gull	<i>Larus hyperboreus</i>	Secure	-	Not Assessed
Arctic Tern	<i>Sterna paradisaea</i>	Secure	-	Not Assessed
Snowy Owl	<i>Bubo scandiacus</i>	Secure	-	Not At Risk
Short-eared Owl	<i>Asio flammeus</i>	Sensitive	Special Concern (Schedule 3)	Special Concern
Common Raven	<i>Corvus corax</i>	Secure	-	Not Assessed
Horned Lark	<i>Eremophila alpestris</i>	Secure	-	Not Assessed
Northern Wheatear	<i>Oenanthe oenanthe</i>	Undetermined	-	Not Assessed
American Pipit	<i>Anthus rubescens</i>	Secure	-	Not Assessed
Lapland Longspur	<i>Calcarius lapponicus</i>	Secure	-	Not Assessed
Snow Bunting	<i>Plectrophenax nivalis</i>	Sensitive	-	Not Assessed
Common Redpoll	<i>Carduelis flammea</i>	Secure	-	Not Assessed
Hoary Redpoll	<i>Carduelis hornemanni</i>	Secure	-	Not Assessed

* species list does not include marine mammals (other than polar bear) or sea birds that may be present in Ptarmigan Fiord.

(Banfield 1977; CESSC 2006; Cornell Lab of Ornithology and the American Ornithologists' Union 2010; COSEWIC 2010; Government of Canada 2010; Sale 2006; Sibley 2003)