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Appendix A4

Report: *2010 Causeway and Dike Construction Monitoring Report*

AGNICO-EAGLE MINES: MEADOWBANK DIVISION

**2010 CAUSEWAY AND DIKE CONSTRUCTION MONITORING
REPORT**

MARCH 2011

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SECTION 1 • INTRODUCTION

1.1 BACKGROUND

Agnico- Eagle Mines Ltd.: Meadowbank Division (AEM) conducted causeway and in-water dike construction monitoring for the Bay-Goose phase II dike construction in accordance with the approved *Water Quality Monitoring and Management Plan for Dike Construction and Dewatering* (AEM, 2010). This monitoring and management plan was approved prior to the commencement of dike construction as a requirement of the Nunavut Water Board (NWB) Type A Water Licence (2AM-MEA0815).

The water quality monitoring and management plan identified the TSS management strategy for 2010 in-water dike construction. Specifically, it outlined the winter construction of a causeway which was to provide wind and water current protection during the open water season; the installation of two layers of turbidity curtains during the open water season, one layer that was to be anchored by the causeway and another outside of the first layer; and the installation of a pumping system during open water to remove the highest concentrations of TSS water nearest to the construction zone, which would be pumped into the attenuation area. Additionally, the plan outlined the monitoring standard operating procedures which focused on routine monitoring at moving stations during causeway construction and fixed stations outside of the turbidity curtains during the open water season. These stations were monitored daily and broad monitoring stations (including high value habitat stations and stations in third portage north basin and second portage identified in 2009) were to be monitored weekly. Furthermore the water quality management plan provided an overview of the impacts of TSS on aquatic biota, the basis for the license limits and TSS management and mitigation. Adapted from AEM (2010), the following section provides a summary of the license limits and details the specific TSS management plan used during the 2010 Bay-Goose Dike phase II construction.

1.1.1 License Limits

As stipulated in the water license, Part D, Items 12 and 14, trigger values were developed in AEM (2010), with corresponding management action plans. In the case that TSS concentrations at pre-established monitoring locations exceeded the trigger values during either causeway construction or dike construction, additional management action or mitigation were to be undertaken. The trigger value for the short term maximum (STM) concentration during open water dike construction is defined as a single TSS monitoring value that exceeds the STM concentration. The license limit is the maximum monthly mean which is a 7-day moving average concentration (MMM). Table 1.1.1 outlines the maximum monthly mean (MMM) and short term maximum (STM) TSS concentrations, in accordance with the NWB Type A water license, Part D, Item 15.

Table 1.1.1: Maximum Allowable TSS Concentrations During Dike Construction

Parameter	Maximum Monthly Mean (mg/L)	Short Term Maximum (mg/L)
TSS in areas where there is spawning habitat and at times when eggs or larvae are expected to be present (applied at monitoring stations located closest to the high value shoal areas starting Sept 1, 2008)	6	25
TSS in all other areas and at times when eggs/larvae are not present	15	50
TSS in impounded areas (e.g. northwest arm of Second Portage Lake) at all times in all areas	15	50

During the winter on-ice causeway construction, no turbidity curtains could be installed. Therefore as outlined in AEM (2010), a conservative approach of applying the short term maximum of 25 mg/L after September 1st to mid July was adopted. For causeway construction the monthly mean and the 7- day moving average TSS concentration was not applicable. If the short-term limit of 25 mg/L was exceeded, the deposition was stop and resumed when the TSS concentration were lower then 15 mg/L.

1.1.2 2010 TSS Management

Based on previous in-water dike construction experience (i.e. East dike in 2008 and Bay-Goose Dike Phase I), both the dike material itself as well as the disturbed material on the lake bottom (particularly in the deep areas of the lakes) are likely to contribute to increased concentrations of TSS in the water column. During the open water season, in the absence of sediment control measures, suspended sediment plumes could migrate to the southeast with wind-driven currents (prevailing winds from the northwest).

Based on manufacturer specifications and available information, in 2008 and 2009 the best in-water construction management practices to minimize the suspended sediment discharges from the dike construction zones primarily involved the deployment of turbidity curtains. As outlined in AEM (2010) the TSS management and mitigation measures applied during the construction of the Bay-goose Dike Phase II improved on these past experiences and applied the following elements for TSS management:

- ***The construction of the causeway in the winter:*** The causeway construction during the winter reduced the spread of suspended solids due to wind driven currents (i.e. ice cover contained sediment deposition near to the construction zone). Furthermore, during the summer the causeway was to provide an anchor for the nearby turbidity curtains and a wind-breaker to protect the turbidity curtains against the effects of high winds. The concept of the causeway was developed based on observations from the 2009 wind storm event that found

the integrity of the inner curtain closest to the rock platform was not affected by wind activity. As in 2009, the 2010 approach greatly improved the ability of the turbidity curtains to allow for the TSS to settle inside the impoundment.

- **Installation of 2 layers of turbidity curtains:** Locations for the installation of the turbidity curtains were selected to reduce the depth and length of the curtains as much as possible to make them less prone to breakage from wind action; this was achieved by 1) installing an inner turbidity curtain in a small cell-like pattern along the causeway to prevent entire breakage of the curtain due to the effects of high winds, and 2) the installation of an outer layer of curtains, in shallow depths to reduce the effects of high winds.
- **Reduce the outflow of turbid water:** To minimize the potential outflow of turbid water, open-water dike construction involved the installation of pumps in front of the rock platform creating a no-current or influx zone inside the turbidity curtains. Theoretically this pumping created an average negative flux which caused 'clean' water to move through the causeway and replace the Bay-Goose dike construction water, which generally has the highest concentrations of TSS. Furthermore, the water from the trench was also pumped to create a net influx or at least neutral outflow of clean water near the construction area. All of the water pumped from the Bay-Goose area was sent to the Second Portage Attenuation area and treated at the dewatering water treatment plant prior to discharge.
- **Low-impact construction techniques:** AEM used a low-impact construction technique for the placement of the rock platform beginning with the rock selection process in the open pit. Rock material containing higher fines were not selected for causeway or dike construction. During the platform construction, to minimise the impact of material deposition, the rock was deposited on the platform and at a controlled rate, pushed with a dozer or placed with an excavator into the lake.

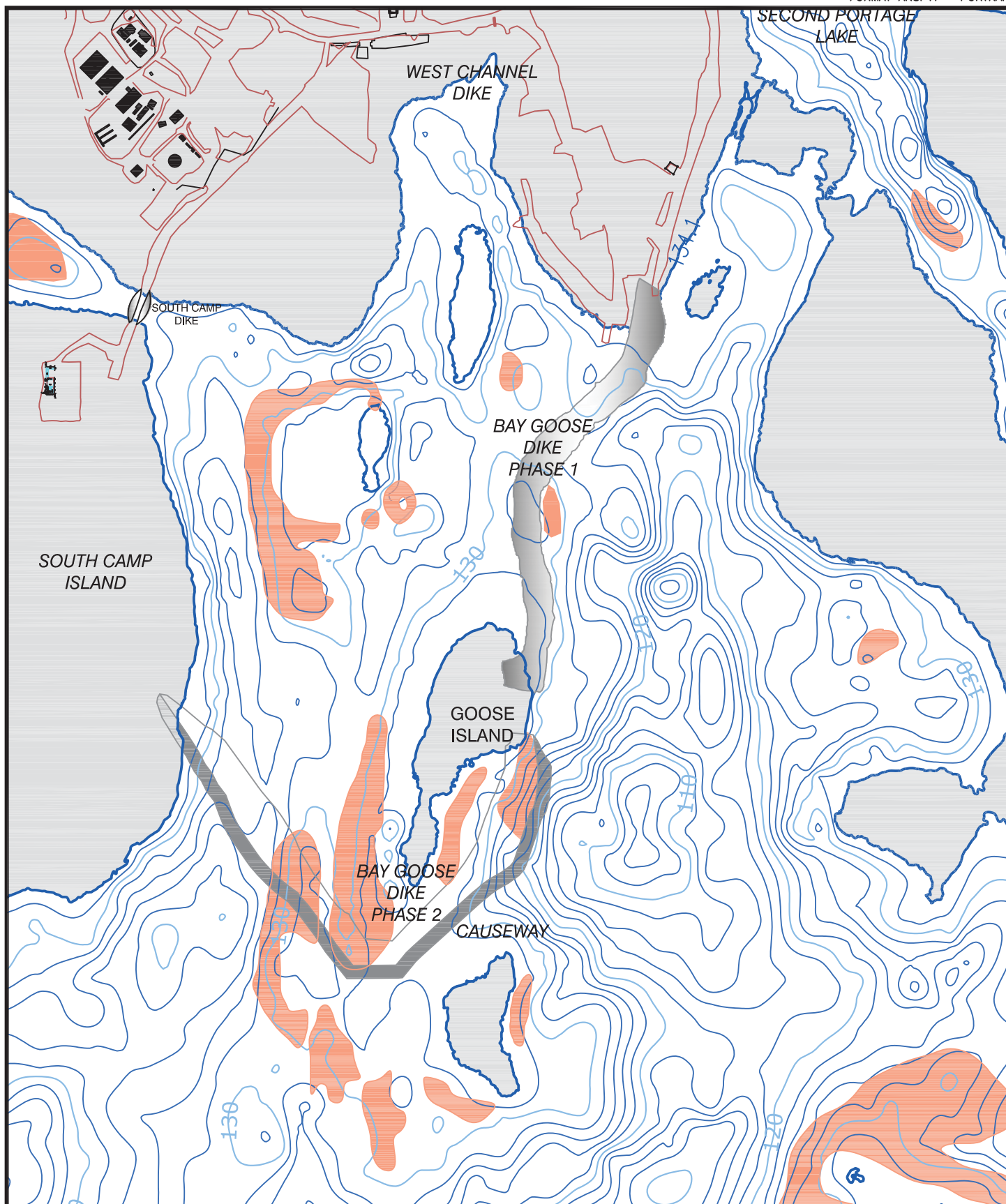
1.2 OBJECTIVES

In 2010, the in-water dike construction was focused on the completion of the Bay-Goose Dike Phase II which included the construction of the causeway during the ice-cover period and the completion of the dike during the open water period (See Figure 1). During these construction activities Total Suspended Solids (TSS) and turbidity (as a surrogate for TSS) were the major drivers of management actions during dike construction as outlined in the NWB license. Additionally, during open water construction general water chemistry samples were also taken (i.e. TSS, general parameters, total and dissolved metals, nutrients and anions) to confirm field monitoring results. The use of in-field turbidity monitoring and application of a pre-established TSS/turbidity predictive model based on a site-specific data sets allows for direct monitoring of TSS in "real time" and subsequently, timely identification and mitigation of potential issues related to dike construction. The major purpose of the dike construction monitoring is to ensure that the construction activity continues within the NWB limits and that if there is an exceedance, mitigative and management actions are prompted.

This document reports the methods and results of the routine causeway monitoring during the winter of 2010, the methods and results of the routine and broad during open water dike construction

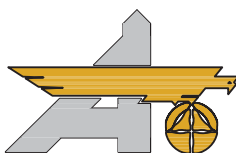
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monitoring and discusses the management and mitigative actions related to the 2010 Bay-Goose dike construction at the Meadowbank mine.



LEGEND

● HIGH VALUE HABITAT



AGNICO-EAGLE

TITLE
AGNICO-EAGLE - MEADOWBANK DIVISION

FIGURE - 1

PROJECT No.	DATE	NOV. 16, 2009
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APPROVED BY		REVISION
DRAWING NO.		

SECTION 2 • METHODOLOGY

2.1 FIELD TURBIDITY MEASUREMENTS

Turbidity sampling during the winter causeway and open water dike construction monitoring in 2010 was completed in the field using a McVan's Analite NEP160-3-05R portable turbidity meter/logger with a high sensitivity NEP260 90° probe. The probe cable lengths were 10, 20 and 25 m to allow full water column profiling. The unit has a range (0 to 3000 NTU) easily covering expected environment conditions and is highly precise (resolution varies with sub-range as follows: <0.1 to 20 NTU [0.02 NTU], <1 to 200 NTU [0.1 NTU], <10 to 2,000 NTU [1 NTU]) and accurate (repeatability = 2%). This probe measures turbidity following the ISO 7027 method. Probes were calibrated daily prior to sampling throughout the 2010 program.

2.2 TURBIDITY- TSS RELATIONSHIPS

The monitoring program was designed to provide quick feedback for TSS management and mitigation during causeway and dike construction. This is not possible using TSS as a direct measure, because of the time required to analyze TSS samples collected in the field and submitted to the laboratory is approximate 5 to 7 days. Consequently, and consistent with the recommendations of the DFO (DFO, 2000), AEM has developed a relationship between turbidity and TSS, allowing the use of turbidity as a surrogate for TSS and obtaining real time results. The TSS-turbidity relationship was developed using paired data collected across a range of TSS sources and concentrations. The resulting linear regression used for the monitoring was as follows:

$$\log_{10}(\text{turbidity}) = 0.62196 + (0.95619 * \log_{10}(\text{TSS})) \quad [p < 0.001; r^2\text{-adj} = 0.81]$$

where turbidity is measured in NTUs in the field using an Analite NEP 160 meter, and TSS is measured in the lab as mg/L.

This relationship was used throughout the 2010 season. Refer to the Azimuth memo in Appendix B for the detailed analysis of the TSS-turbidity relationship (Azimuth Feb 2010 v3).

2.3 CAUSEWAY ROUTINE TURBIDITY MONITORING

As outlined in the plan (AEM, 2010), routine turbidity monitoring in advance of the causeway was completed at least once per day. Three stations were 100m from the causeway and moved in advance of the causeway construction. The causeway was constructed on two fronts: from the west, adjacent to the south camp and to the north east, as an extension of the Bay-Goose Dike phase I. These two directions of advancement provided the opportunity to alter between two construction fronts and ultimately minimize the concentration of TSS introduced into the system. In order to monitor these two fronts under certain circumstances, six stations were monitored- 3 stations 100m from the western front and eastern front (See example of stations in Figure 2.3). As the causeway fronts converged, only 3 stations were monitored 100m from the advancing front.

A single causeway monitoring event for a station occurred as follows. The current progress of the causeway was surveyed and three (3) GPS coordinates were provided by operations to the environmental technicians approximately 100m from the causeway. The GPS coordinates were inputted into a Garmin handheld GPS and the environmental technicians would transport the monitoring equipment in the tundra buggy or a pick-up truck and locate the station. The distance from the face of the causeway was confirmed in the field using a standard hand-held garmin range finder. A two-stroke powered ice-auger was used and the probe was lowered into the hole. Because the ice thickness was usually greater than 1.5m, the measurements were generally taken from 2.0m below surface to depth, on 1 m intervals. The data was recorded and turbidity readings was inputted, converted into TSS using the correlation and screened against the license limits. On a weekly basis TSS and turbidity water samples were collected at maximum turbidity readings for laboratory analysis.

If the TSS concentration exceeded the short term limit of 25 mg/L the construction front was stopped management measures were reviewed and corrective action was implemented to prevent a repeat occurrence.

2.4 OPEN-WATER ROUTINE TURBIDITY MONITORING

As outlined in the plan (AEM, 2010), routine turbidity open-water monitoring was completed at seven (7) stations and targeted 2 monitoring events per day, once in the morning and once in the afternoon (weather and logistics permitting) (see Figure 2.4.1 for station locations and Table 2.4 for GPS locations). Anchored floats were set at the routine stations and a hand-held garmin GPS unit was used to locate the stations. These stations were located approximately 50 to 100m from the outside of the second layer of turbidity curtains. The turbidity curtains were inspected by boat daily or by helicopter (approximately weekly) to ensure the integrity of the curtains were maintained.

Table 2.4: Routine Open-water Sampling Locations

Station ID	GPS Coordinate	
	UTM NAD 83 14W	
BGE-1	639,391	7,213,184
BGS-1	638,192	7,211,894
BGS-2	638,318	7,211,718
BGS-3	638,603	7,211,607
BGS-4	638,987	7,211,711
BGS-5	639,403	7,211,625
BGS-6	639,712	7,211,828

A single monitoring event for open water routine turbidity monitoring occurred as follows: an aluminum boat would be navigated to the station and depending on the wind conditions would remain stationary relative to the station marker (buoy) by shifting the motor in- and out of gear. The boat was not anchored to avoid disturbing bottom sediments during windy conditions that might cause anchor drag. After noting the time and depth (measured with a Hawk Eye® Digital depth finder), turbidity measurements were recorded at the surface and at each meter through the water column, stopping approximately 0.5 to 1 meter off the bottom (i.e., to avoid inadvertent sediment re-suspension). The

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maximum turbidity value for each profile was also noted as it was the only value used for subsequent calculations. The turbidity data was inputted, converted into TSS using the correlation and screened against the license limits.

During the 2010 open water season, when the monitoring indicated that the TSS levels in a single sample (i.e. the maximum turbidity at one of the 7 stations) were increasing, the turbidity curtain was inspected in more detail to identify any obvious problems. If there are no obvious problems, mitigative measures were considered such as adjusting construction practices (e.g., more careful selection or placement of materials) and fixing or deploying additional curtains.

2.5 OPEN-WATER BROAD TURBIDITY MONITORING

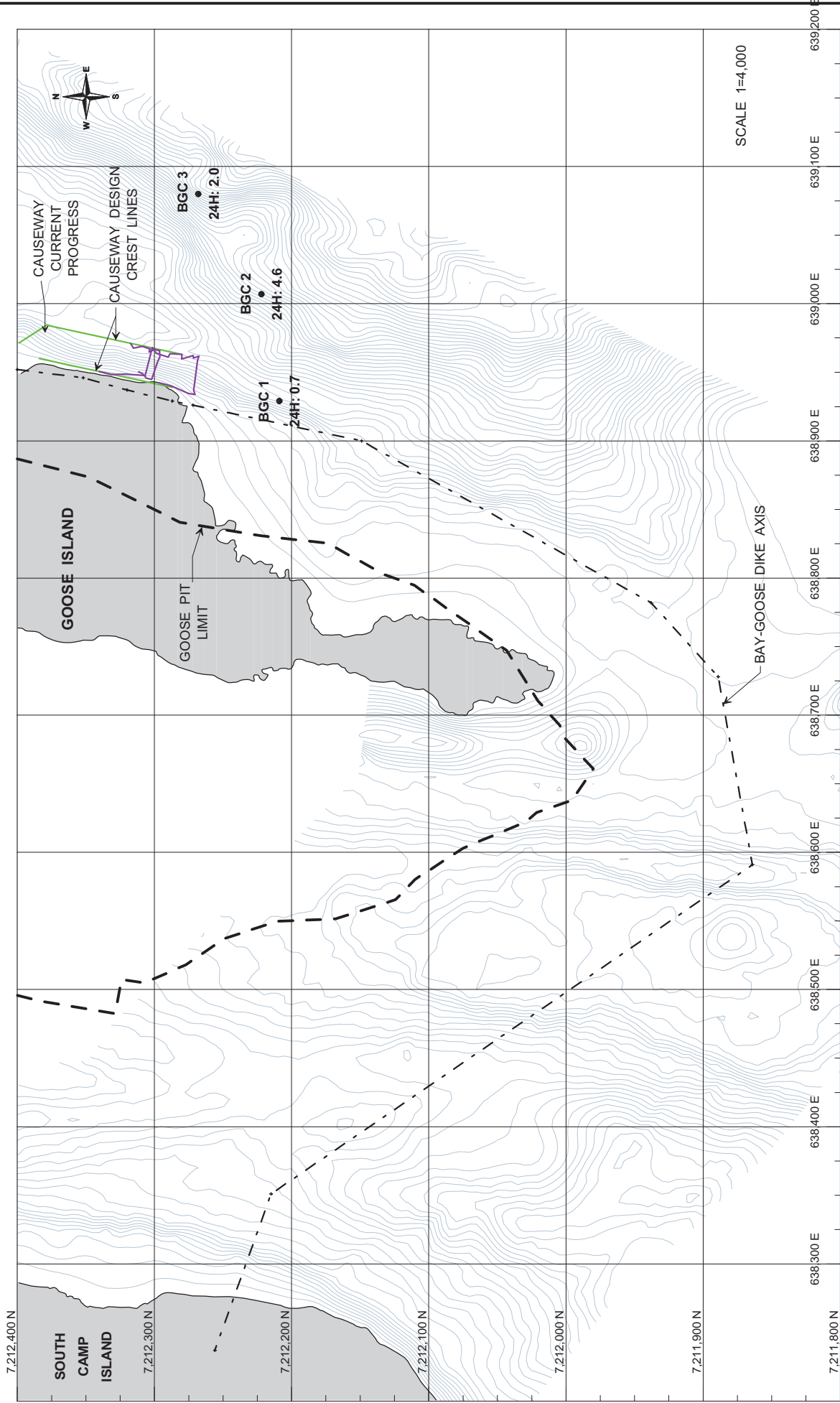
Broad surveys were conducted in the north (TPN) and east (TPE) basins of Third Portage Lake, Second Portage Lake (SP) and Tehek Lake (TE), to characterize the far-field lake basins that could potentially be affected during the Bay-Goose Phase II dike construction (see Figure 2.5 and Table 2.5 for locations). A complete survey of all the stations was completed prior to construction and follow-up monitoring was completed only at stations immediately adjacent to the construction area until turbidity levels returned to background. Broad surveys were completed weekly and TSS estimates from turbidity monitoring measurements followed the same procedure as the routine monitoring.

Table 2.5: Broad Monitoring Station Sample Locations

Lake ID	Station ID	GPS Coordinates	
		UTM NAD 83 14W	
Third Portage Lake North Basin	TPN-1	636783	7215130
	TPN-2	636612	7215737
	TPN-3	635773	7216052
	TPN-4	635992	7215130
	TPN-5	635797	7214329
	TPN-6	636381	7214329
	TPN-7	634703	7215567
	TPN-8	634860	7214087
	TPN-9	635311	7213359
	TPN-10	636174	7213346
	TPN-11	636916	7213334
	TPN-12	636016	7212582
	TPN-13	636977	7212509
Third Portage Lake East Basin	TPE-1	637476	7211696
	TPE-2	638194	7211757
	TPE-3	638303	7211211
	TPE-4	638534	7210762
	TPE-5	637938	7210252
	TPE-6	639216	7210459
Second Portage Lake	SP-1	639532	7213723
	SP-2	639544	7214329
	SP-3	639872	7213917

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	SP-4	640298	7213820
	SP-5	640347	7213310
	SP-6	640663	7212630
	SP-7	640200	7212752
	SP-8	639812	7213189
	SP-9	641052	7213128
	SP-10	641295	7213589
	SP-11	641454	7213917
Tehek Lake	TE-1	642731	7212218
	TE-2	643059	7212836
	TE-3	643144	7212376
	TE-4	643680	7212667
	TE-5	643035	7213274
	TE-6	643996	7213419
	TE-7	644567	7213249
	TE-8	644203	7212873
	TE-9	644422	7212327
	TE-10	644008	7211926
	TE-11	644957	7212023
	TE-12	645699	7211999
	TE-13	645213	7211454
	TE-14	646428	7211248
	TE-15	645432	7210714
	TE-16	644786	7210701
	TE-17	645480	7210082
	TE-18	645492	7209366
	TE-19	646235	7209779
	TE-20	646684	7210556
	TE-21	646952	7209342
	TE-22	646319	7208565
Third Portage East High Value Habitat Areas	BG-HVH1	638711	7211761
	BG-HVH2	639016	7211788
	BG-HVH3	639535	7211811
	BG-HVH4	639521	7212410
	BG-HVH5	639012	7211243



NOTES:

FIELD READINGS BY AEM

REPORTED TSS IS THE MAXIMUM VALUE ALONG THE PROFILE

LIMIT 24 HOURS : 25MG/L

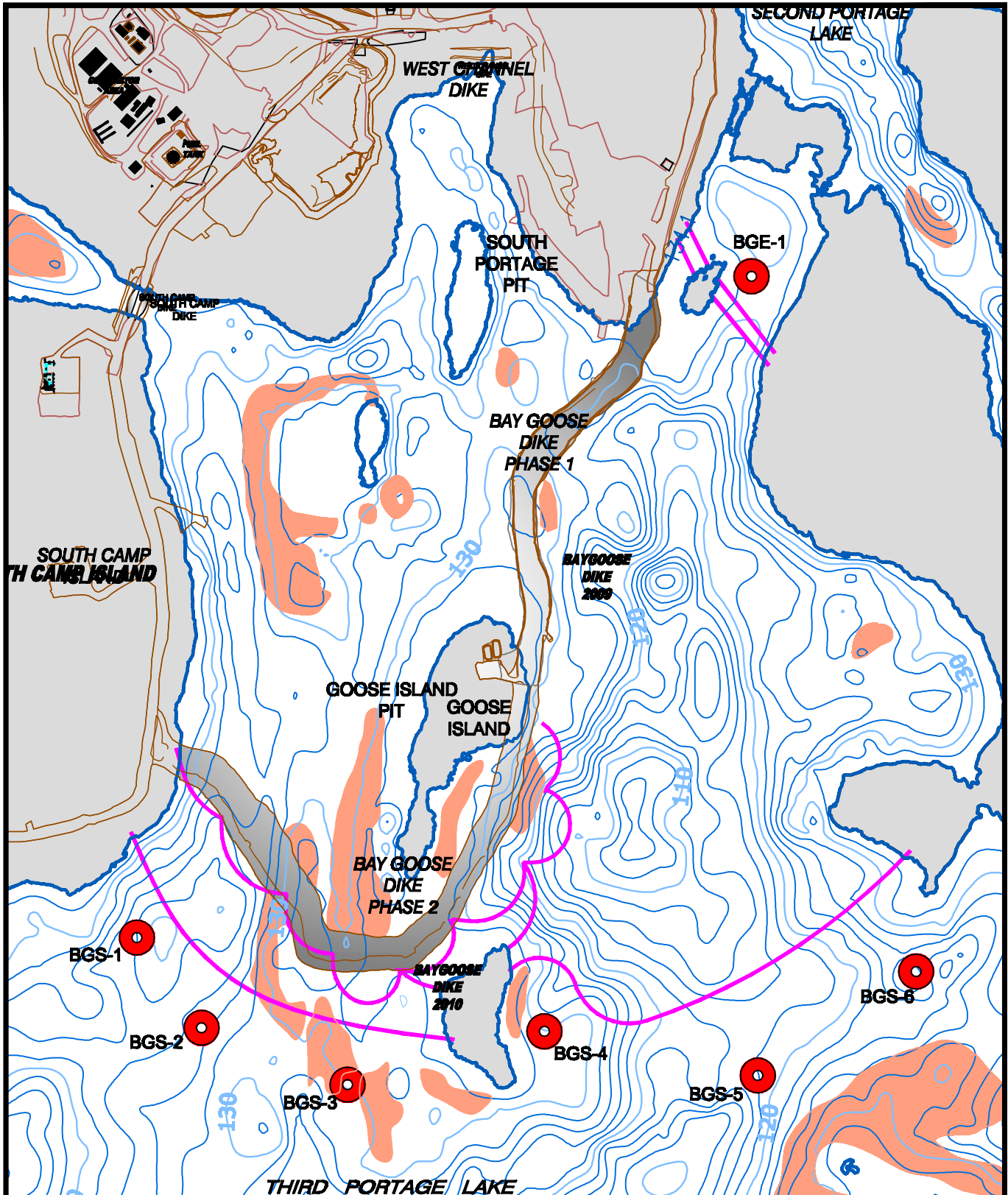
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BAY-GOOSE DIKE CONSTRUCTION

TSS MONITORING DURING CAUSEWAY CONSTRUCTION

LATEST READINGS DATE : 27-Feb-2010

FIGURE 2.3



LEGEND

- PUMP AND PIPELIN
- MONITORING STATION
- CURTAIN
- CURTAIN
- HIGH VALUE HABITAT



TITLE
AGNICO-EAGLE - MEADOWBANK DIVISION
ROUTINE MONITORING STATIONS
FIGURE 2.4.1

PROJECT No.	DATE	MARCH. 5, 2009	SHEET
DRAWN BY	P. DAUDELIN		1 / 1
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DRAWING NO.			REVISION

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2.6 SCREENING AGAINST TSS LIMITS

All turbidity field values were recorded in 1 m intervals at each station and for compliance purposes the maximum value in the profile was converted into TSS and compared to the TSS limits. The field turbidity data was screened by the following:

Comparisons to Short-Term Maximum (STM)

1. Calculate the 24-hr station mean for turbidity for each station based on the measured maximum values over the past 24 hours.
2. Use the TSS-turbidity regression (using the site-specific TSS:Turbidity predictive model) to estimate the 24-hr maximum.
3. Compare this value to the appropriate STM value.

Comparisons to Maximum Monthly Mean (MMM)

1. Calculate the 30-day moving average by taking the maximum daily value by station (24-hr mean TSS values) for the previous 30 days.
2. Compare this value to the appropriate MMM value.

2.7 WATER CHEMISTRY MONITORING

Weekly water samples were collected for analysis of TSS, turbidity and periodically pH during causeway monitoring (AEM, 2010). Water samples were collected during turbidity monitoring using a thoroughly rinsed Kemmerer multi-purpose sampler¹, and samples were placed in laboratory provided bottles and kept in the refrigerator or on ice prior-to and during shipment to the laboratory.

Limnological data was collected in the field using a field YSI 556 MPS to verify physical conditions and trends in the case of TSS exceedances but are not reported in this document². Dissolved oxygen (mg/L), conductivity (mS/cm) and temperature (deg C) profiles were collected at 1 m intervals at each station. Water chemical parameters that were collected in the field and analyzed at a certified laboratory (ALS Winnipeg, Man.) included: general parameters, total phosphorus, total nitrogen, total dissolved solids (TDS), dissolved nutrients (ammonia, nitrate, nitrite, ortho-phosphate), total dissolved nitrogen, dissolved calcium and magnesium, total and dissolved organic carbon (TOC, DOC) and chlorophyll a. These water chemistry samples were taken following limnology and turbidity

¹ The Kemmerer was used to avoid equipment freezing as the pumping system and tubes used during open water was difficult to maintain during winter sampling.

² As a pro-active measure, AEM collected limnological data along-side phytoplankton and zooplankton samples at CREMP and High Value Habitat stations throughout dike construction for use in biological studies in the case of a TSS exceedance during open water. These biological data were archived and are not presented in this report.

monitoring, at the depth where the maximum turbidity reading occurred (i.e. if turbidity was greatest at 5m below surface, the water chemistry sample was taken at 5m).

Consistent with core receiving environmental management program (CREMP) sampling, during the open water season, samples were collected using a diaphragm pump with Teflon-lined tubing. The tube was lowered to the specific depth and the respective jars and bottles were filled. Jar types and preservation followed the ALS laboratory instructions and were kept in the refrigerator or on ice prior to and during shipment to the laboratory.

2.8 QA/QC

The purpose of quality assurance and quality control (QA/QC) for turbidity measurements is to ensure that the field data collected are representative of the water sampled. Since turbidity was used as a surrogate for Total Suspended Solids (TSS) there are two important objectives to ensure the turbidity measurements meet the QA/QC standard: ensure the turbidity meters are properly calibrated (i.e. their readings have high precision and accuracy) and periodically collect a TSS sample to i) ensure the water quality does not exceed TSS limits for discrete samples and ii) to confirm the TSS-turbidity correlation (i.e. complete a paired TSS-turbidity predictive model comparison to TSS laboratory measurements). Furthermore, data quality is assured throughout the collection and analysis of samples using standard procedures, certified laboratories and by staffing trained technicians.

2.8.1 Water Chemistry QA/QC

The objective of quality assurance and quality control (QA/QC) for water chemistry monitoring is to ensure that the chemical and field data collected are representative of the material sampled. Data quality is assured throughout the collection and analysis of samples using standard procedures, certified laboratories and by staffing with trained technicians (AEM, 2008).

Field QA/QC duplicate results were assessed using the relative percent difference (RPD) between measurements: The equation used to calculate a RPD is:

$$RPD = [(A-B)/((A+B)/2)] \times 100$$

For the purposes of QA/QC screening a RPD of 50% for concentrations that exceed 10x the Method Detection Limits (MDL) is considered unacceptable. RPD values may be either positive or negative and ideally should provide a mix of the two, with values clustered around zero. Biases may be evident if there are consistently positive or negative values. Large variations in RPD values will often occur when duplicate sample concentrations are low and near the analytical detection limit. As an example, if the concentration of an analyte is 0.0005 and 0.0007 mg/L, there is a very small difference between these values, yet the RPD value is 33.3%; consideration for RPD outputs such as this example are important to judge.

As outlined in AEM (2008), a target of 10% field duplicates are submitted for QA/QC analysis to assess the variability and sample homogeneity.

2.8.2 Paired Turbidity-TSS Comparison to Established Turbidity-TSS Correlation

Weekly samples were submitted for TSS analysis to an accredited laboratory. These laboratory TSS results were paired with the field turbidity data and statistically compared to the TSS-turbidity correlation regression (i.e. using regression analysis and ANCOVA) to provide an analysis of the ability of the field turbidity data and subsequent conversion using the TSS/Turbidity model, to predict dike construction TSS concentrations.

SECTION 3 • RESULTS AND DISCUSSION

3.1 CAUSEWAY CONSTRUCTION MONITORING

3.1.1 Routine Turbidity/TSS Monitoring

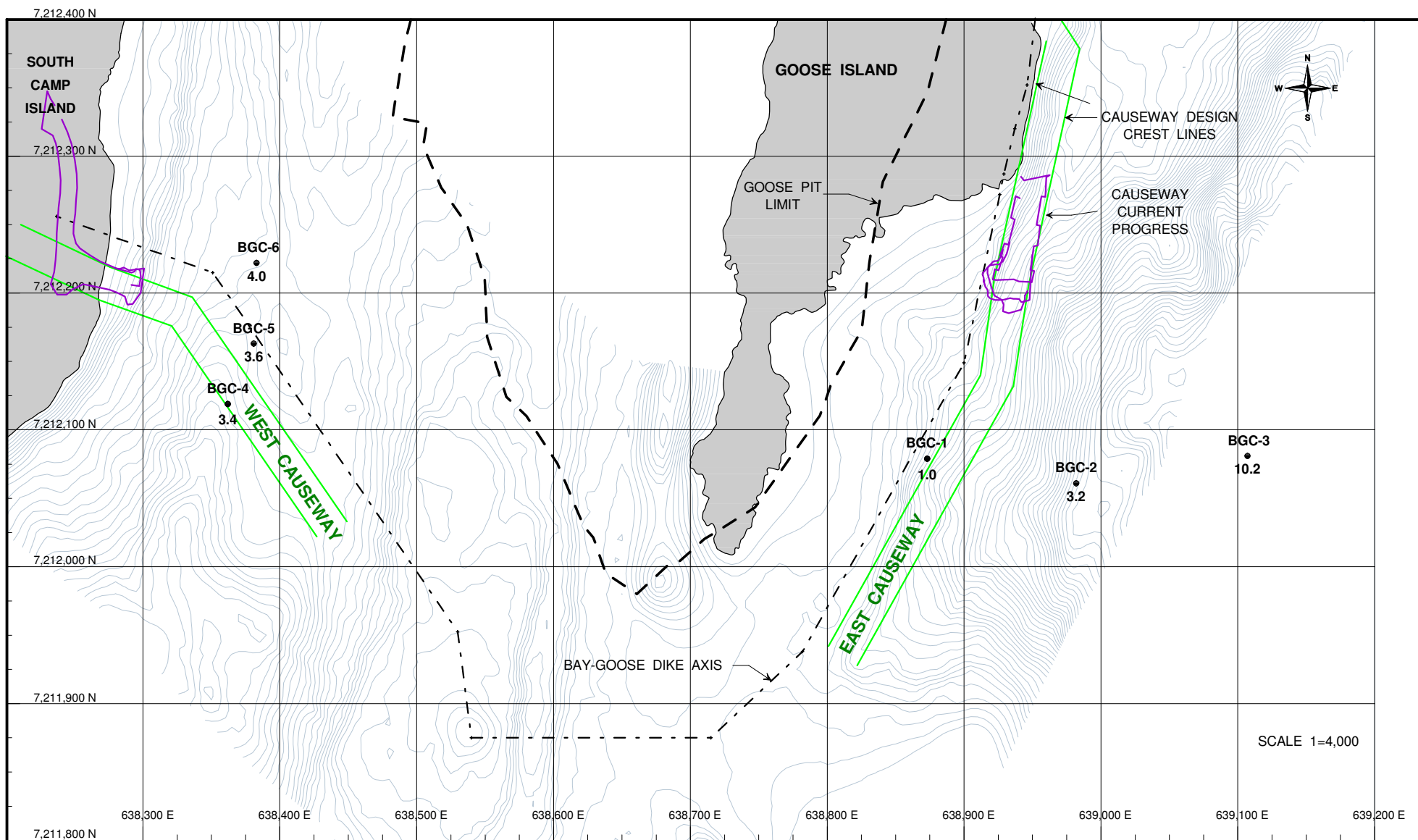
On February 4th, 2010 causeway monitoring data was collected at 3 stations prior to the commencement of causeway construction. On February 17th, causeway rockfill began and the first causeway monitoring data was collected on February 18th, 2010. Based on the results of the causeway monitoring, the construction alternated between the west and east side of the causeway front. Monitoring stations identified as BGC 1 to 3 were representative of the east side and BGC-4 to 6 were representative stations of the west side causeway construction advancement (See figure 3.1.1 as an example). As the west and east-causeway construction fronts converged only 3 stations were monitored. Between February 17th and May 22nd, the highest short term value was 18 mg/L, which was well below the short term limit of 25 mg/L.

By the end of April, approximately 50% of the causeway was completed as turbidity levels remained below the short term maximum. With approximately 1.5 months remaining to complete the causeway, before the ice was likely to thaw reducing construction and monitoring safety, production increased in mid May. On May 23rd the maximum TSS concentration was 37 mg/L, exceeding the short term limit of 25 mg/L (see Appendix A for figures and monitoring results). Construction was immediately halted and a focused survey was completed to determine the characteristics of the plume. The plume appeared confined to below 8 and 10m around station BGC-3 with results above this depth around 1.1mg/L. On May 24th the highest TSS result was 6 mg/L and construction resumed on May 25th. Daily Maximum TSS results are presented in Table 3.1.1 and illustrated in Figure 3.1. Weekly TSS and turbidity (and pH on three occasions) water chemistry results from Multilab Direct (Certified Chemical Laboratory based out of Rouyn-Noranda, Que) are presented in Table 3.1.

Between May 24th and June 26th, the limits were not exceeded with a maximum level of TSS of 20.3 mg/L. The causeway was completed on June 27th.

3.2 MITIGATION FOR CAUSEWAY CONSTRUCTION DURING ICE COVER

Since turbidity curtains could not be deployed during the causeway construction, AEM adopted a conservative approach of using the license limit after September 1 with the short term maximum of 25 mg/L. On one occasion the short term limit was exceeded which prompted the stoppage of construction until the levels subsided. Overall, TSS inputs were controlled within the license limits as a result of the on-ice advancement of the causeway, the slower pace of causeway construction (approximately 2400 tonnes per day), and daily monitoring which provided immediate feedback for adaptive management (which often included altering the advancement of the causeway by switching from the east and west side).



NOTES:

FIELD READINGS BY AEM

REPORTED TSS IS THE MAXIMUM VALUE ALONG THE PROFILE

LIMIT 24 HOURS : 25MG/L

AGNICO-EAGLE MINES LIMITED - MEADOWBANK DIVISION

BAY-GOOSE DIKE CONSTRUCTION

TSS MONITORING DURING CAUSEWAY CONSTRUCTION

LATEST READINGS DATE : 18-Mar-2010 FIGURE 3.1.1

TURBIDITY MONITORING CAUSEWAY.GRF

Table 3.1.1: Causeway monitoring results by station by date

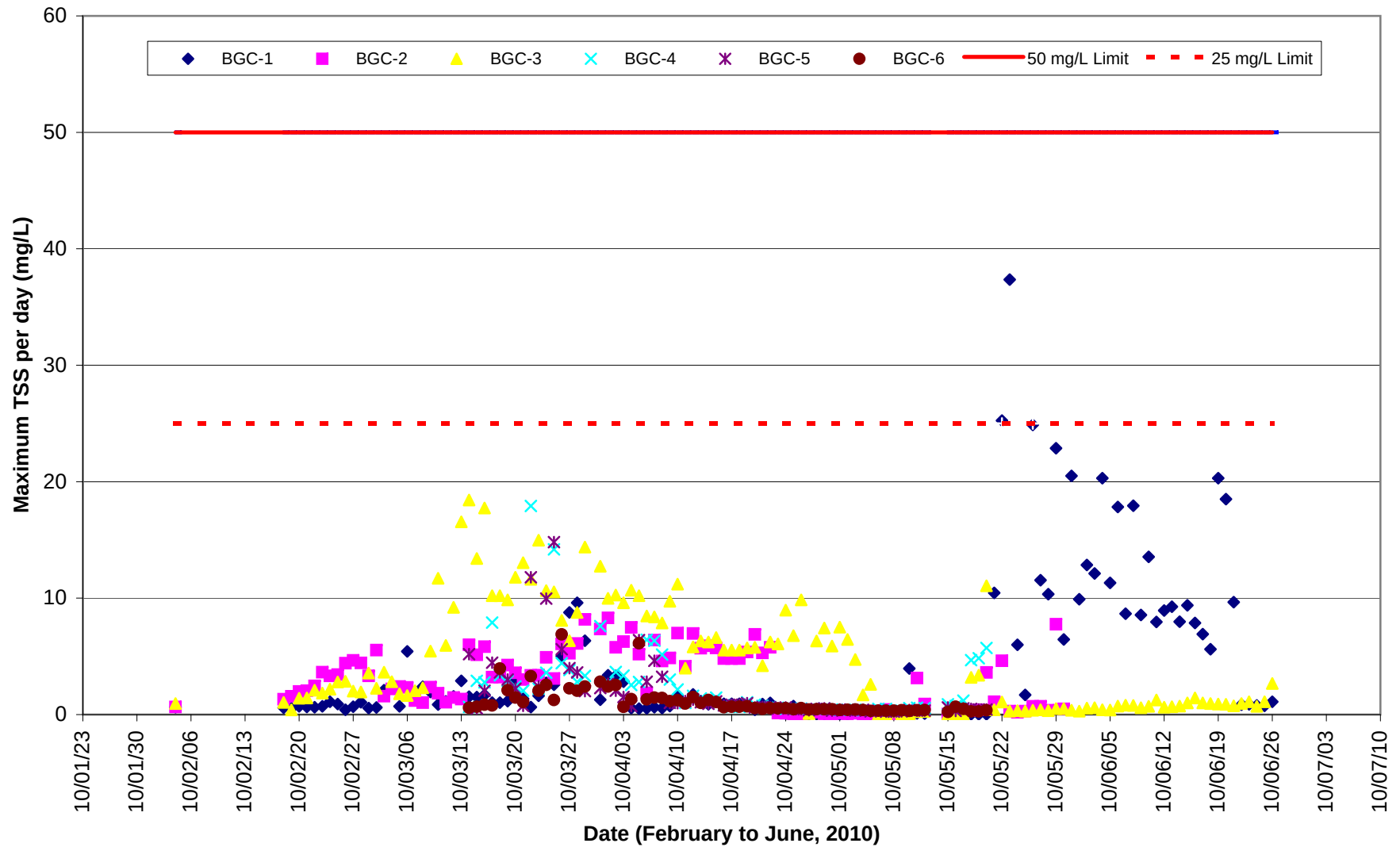
Date	BGC-1		BGC-2		BGC-3		BGC-4		BGC-5		BGC-6	
	Max NTU of day	Max TSS per day	Max NTU of day	Max TSS per day	Max NTU of day	Max TSS per day	Max NTU of day	Max TSS per day	Max NTU of day	Max TSS per day	Max NTU of day	Max TSS per day
2010-02-04	2.7	0.6	2.8	0.7	4.0	1.0						
2010-02-18	2.5	0.6	5.5	1.3	4.4	1.1						
2010-02-19	2.3	0.5	6.5	1.6	1.8	0.4						
2010-02-20	3.0	0.7	8.1	2.0	5.8	1.4						
2010-02-21	2.8	0.7	8.3	2.0	5.9	1.4						
2010-02-22	2.7	0.6	9.9	2.5	8.5	2.1						
2010-02-23	3.0	0.7	14.4	3.6	7.5	1.8						
2010-02-24	4.6	1.1	13.2	3.3	8.8	2.2						
2010-02-25	3.8	0.9	13.6	3.4	11.2	2.8						
2010-02-26	1.8	0.4	17.3	4.4	11.4	2.9						
2010-02-27	2.9	0.7	18.2	4.6	8.2	2.0						
2010-02-28	4.4	1.1	17.4	4.4	7.9	1.9						
2010-03-01	2.4	0.6	13.2	3.3	14.1	3.6						
2010-03-02	2.6	0.6	21.5	5.5	9.1	2.3						
2010-03-03	8.5	2.1	6.5	1.6	14.4	3.6						
2010-03-04	9.5	2.4	8.9	2.2	11.3	2.8						
2010-03-05	3.0	0.7	9.7	2.4	7.3	1.8						
2010-03-06	21.1	5.4	9.4	2.3	6.7	1.6						
2010-03-07	7.8	1.9	5.0	1.2	8.3	2.0						
2010-03-08	9.6	2.4	4.3	1.0	9.3	2.3						
2010-03-09	7.9	1.9	9.5	2.4	21.2	5.5						
2010-03-10	3.6	0.9	7.5	1.8	44.0	11.7						
2010-03-11	4.7	1.1	4.4	1.1	23.0	5.9						
2010-03-12	6.4	1.6	6.0	1.5	35.0	9.2						
2010-03-13	11.6	2.9	5.5	1.3	61.3	16.6						
2010-03-14	6.3	1.5	23.2	6.0	67.9	18.4	2.8	0.7	20.2	5.2	2.5	0.6
2010-03-15	6.2	1.5	20.0	5.1	50.1	13.4	11.6	2.9	2.3	0.5	2.9	0.7
2010-03-16	6.9	1.7	22.6	5.8	65.5	17.7	11.1	2.8	8.3	2.0	3.6	0.9
2010-03-17	4.3	1.0	12.8	3.2	38.6	10.2	30.2	7.9	17.5	4.5	3.3	0.8
2010-03-18	4.3	1.0	12.8	3.2	38.6	10.2	13.4	3.4	14.3	3.6	15.6	4.0
2010-03-19	4.8	1.2	16.7	4.2	37.3	9.8	11.6	2.9	12.0	3.0	8.5	2.1
2010-03-20	11.5	2.9	14.2	3.6	44.3	11.8	9.7	2.4	9.0	2.2	6.0	1.5
2010-03-21	5.6	1.4	12.0	3.0	48.8	13.0	8.3	2.0	3.2	0.8	4.5	1.1
2010-03-22	2.7	0.6	13.4	3.4	43.7	11.6	66.1	17.9	44.3	11.8	13.1	3.3
2010-03-23	6.6	1.6	13.4	3.4	55.7	15.0	9.0	2.2	9.7	2.4	8.3	2.0
2010-03-24	10.9	2.7	19.2	4.9	40.2	10.6	14.2	3.6	37.7	10.0	10.2	2.5
2010-03-25	10.3	2.6	12.4	3.1	39.8	10.5	52.9	14.2	55.1	14.8	5.2	1.3
2010-03-26	19.6	5.0	23.5	6.1	30.9	8.1	17.3	4.4	21.8	5.6	26.5	6.9
2010-03-27	33.4	8.8	20.5	5.3	24.5	6.3	15.1	3.8	15.7	4.0	9.1	2.3
2010-03-28	36.4	9.6	23.6	6.1	33.4	8.8	11.2	2.8	14.3	3.6	8.3	2.0
2010-03-29	24.5	6.3	31.2	8.2	53.6	14.4	13.2	3.3	8.2	2.0	9.7	2.4
2010-03-30												
2010-03-31	5.3	1.3	28.2	7.3	47.7	12.7	29.1	7.6	9.2	2.3	11.3	2.8
2010-04-01	13.4	3.4	31.7	8.3	37.8	10.0	11.1	2.8	10.6	2.6	9.7	2.4
2010-04-02	13.2	3.3	22.4	5.8	38.8	10.3	14.5	3.7	8.3	2.0	10.2	2.5
2010-04-03	11.3	2.8	24.2	6.3	36.4	9.6	13.3	3.3	6.2	1.5	2.8	0.7
2010-04-04	2.4	0.6	28.7	7.5	40.3	10.7	10.2	2.5	3.1	0.7	5.5	1.3
2010-04-05	2.2	0.5	20.2	5.2	38.6	10.2	11.2	2.8	24.7	6.4	23.7	6.1
2010-04-06	2.3	0.5	7.6	1.9	32.3	8.5	24.8	6.4	11.3	2.8	5.4	1.3
2010-04-07	2.7	0.6	24.7	6.4	32.0	8.4	24.5	6.3	18.1	4.6	6.0	1.5
2010-04-08	2.4	0.6	18.0	4.6	30.1	7.9	20.1	5.2	12.9	3.2	5.9	1.4
2010-04-09	3.1	0.7	19.0	4.9	36.9	9.7	12.0	3.0	4.2	1.0	4.8	1.2
2010-04-10	6.5	1.6	26.9	7.0	42.2	11.2	8.8	2.2	4.1	1.0	5.1	1.2
2010-04-11	4.2	1.0	16.3	4.1	15.7	4.0	4.2	1.0	4.8	1.2	4.0	1.0
2010-04-12	7.1	1.7	26.8	7.0	22.5	5.8	6.6	1.6	5.3	1.3	6.2	1.5
2010-04-13	4.8	1.2	22.1	5.7	24.4	6.3	5.7	1.4	4.4	1.1	4.2	1.0
2010-04-14	3.7	0.9	22.9	5.9	24.1	6.2	4.5	1.1	3.9	0.9	5.2	1.3
2010-04-15	4.6	1.1	22.2	5.7	25.5	6.6	6.0	1.5	4.7	1.1	4.5	1.1
2010-04-16	3.9	0.9	18.8	4.8	21.5	5.5	3.5	0.8	3.3	0.8	2.7	0.6
2010-04-17	3.9	0.9	18.8	4.8	21.5	5.5	2.8	0.7	3.6	0.9	2.9	0.7
2010-04-18	3.9	0.9	18.8	4.8	21.5	5.5	2.8	0.7	3.6	0.9	2.9	0.7
2010-04-19	3.4	0.8	20.9	5.4	22.2	5.7	4.4	1.1	4.1	1.0	3.0	0.7
2010-04-20	1.8	0.4	26.5	6.9	22.4	5.8	3.6	0.9	2.6	0.6	2.4	0.6

2010-04-21	3.8	0.9	20.6	5.3	16.5	4.2	3.2	0.8	2.8	0.7	2.1	0.5
2010-04-22	4.2	1.0	22.4	5.8	24.1	6.2	2.8	0.7	2.7	0.6	2.4	0.6
2010-04-23	1.7	0.4	0.6	0.1	23.5	6.1	2.5	0.6	2.2	0.5	2.3	0.5
2010-04-24	0.4	0.1	0.5	0.1	34.1	9.0	2.1	0.5	2.6	0.6	2.4	0.6
2010-04-25	3.1	0.7	0.1	0.0	26.1	6.8	2.2	0.5	2.0	0.5	2.0	0.5
2010-04-26	0.8	0.2	0.2	0.0	37.3	9.8	2.2	0.5	2.0	0.5	2.4	0.6
2010-04-27	0.1	0.0	1.0	0.2	0.4	0.1	1.9	0.4	1.6	0.4	1.9	0.4
2010-04-28	0.2	0.0	0.9	0.2	24.4	6.3	2.0	0.5	2.1	0.5	2.0	0.5
2010-04-29	0.2	0.0	0.3	0.1	28.5	7.4	2.2	0.5	2.3	0.5	2.0	0.5
2010-04-30	0.1	0.0	0.1	0.0	22.8	5.9	1.9	0.4	1.5	0.3	2.0	0.5
2010-05-01	0.1	0.0	0.5	0.1	28.8	7.5	1.7	0.4	1.9	0.4	1.7	0.4
2010-05-02	0.1	0.0	0.3	0.1	24.9	6.5	1.8	0.4	1.7	0.4	1.8	0.4
2010-05-03	0.6	0.1	0.5	0.1	18.5	4.7	1.8	0.4	1.5	0.3	1.9	0.4
2010-05-04	0.1	0.0	0.2	0.0	6.9	1.7	1.6	0.4	1.8	0.4	1.7	0.4
2010-05-05	0.2	0.0	0.3	0.1	10.4	2.6	1.5	0.3	1.2	0.3	1.4	0.3
2010-05-06	0.1	0.0	0.1	0.0	0.1	0.0	2.1	0.5	1.5	0.3	1.5	0.3
2010-05-07	0.1	0.0	1.9	0.4	0.2	0.0	2.1	0.5	1.1	0.2	1.5	0.3
2010-05-08	0.3	0.1	0.1	0.0	1.1	0.2	1.4	0.3	1.1	0.2	1.5	0.3
2010-05-09	0.1	0.0	0.1	0.0	0.1	0.0	1.5	0.3	1.2	0.3	1.6	0.4
2010-05-10	15.6	4.0	0.1	0.0	0.1	0.0	2.4	0.6	1.7	0.4	1.4	0.3
2010-05-11	0.5	0.1	12.5	3.1	1.1	0.2	2.5	0.6	1.5	0.3	1.6	0.4
2010-05-12	0.4	0.1	3.8	0.9	1.2	0.3	2.4	0.6	1.5	0.3	1.7	0.4
2010-05-15	0.1	0.0	0.2	0.0	0.1	0.0	3.7	0.9	2.6	0.6	1.0	0.2
2010-05-16	0.1	0.0	0.1	0.0	0.1	0.0	3.1	0.7	1.4	0.3	2.9	0.7
2010-05-17	0.2	0.0	1.3	0.3	0.1	0.0	5.0	1.2	2.3	0.5	2.1	0.5
2010-05-18	0.1	0.0	1.5	0.3	12.7	3.2	18.3	4.7	2.1	0.5	1.2	0.3
2010-05-19	0.1	0.0	1.8	0.4	13.4	3.4	18.9	4.8	1.9	0.4	1.2	0.3
2010-05-20	0.1	0.0	14.3	3.6	41.7	11.1	22.2	5.7	1.9	0.4	1.6	0.4
2010-05-21	39.5	10.5	4.6	1.1	1.8	0.4						
2010-05-22	91.8	25.3	18.1	4.6	4.5	1.1						
2010-05-23	133.5	37.4	1.3	0.3	1.3	0.3						
2010-05-24	23.2	6.0	0.9	0.2	1.5	0.3						
2010-05-25	6.9	1.7	1.3	0.3	1.3	0.3						
2010-05-26	90.5	24.9	3.0	0.7	1.6	0.4						
2010-05-27	43.4	11.5	3.0	0.7	1.8	0.4						
2010-05-28	39.1	10.3	1.6	0.4	1.5	0.3						
2010-05-29	83.5	22.9	29.7	7.8	2.2	0.5						
2010-05-30	24.9	6.5	2.1	0.5	2.2	0.5						
2010-05-31	75.2	20.5			1.6	0.4						
2010-06-01	37.5	9.9			1.3	0.3						
2010-06-02	48.1	12.8			2.4	0.6						
2010-06-03	45.5	12.1			2.5	0.6						
2010-06-04	74.5	20.3			1.8	0.4						
2010-06-05	42.6	11.3			1.7	0.4						
2010-06-06	65.8	17.8			3.1	0.7						
2010-06-07	33.0	8.7			3.4	0.8						
2010-06-08	66.2	17.9			3.3	0.8						
2010-06-09	32.6	8.6			2.5	0.6						
2010-06-10	50.6	13.5			3.0	0.7						
2010-06-11	30.4	7.9			5.2	1.3						
2010-06-12	34.0	8.9			2.7	0.6						
2010-06-13	35.2	9.3			2.9	0.7						
2010-06-14	30.5	8.0			3.1	0.7						
2010-06-15	35.6	9.4			4.2	1.0						
2010-06-16	30.1	7.9			5.9	1.4						
2010-06-17	26.6	6.9			4.2	1.0						
2010-06-18	21.8	5.6			4.0	1.0						
2010-06-19	74.5	20.3			3.8	0.9						
2010-06-20	68.2	18.5			3.7	0.9						
2010-06-21	36.6	9.7			3.2	0.8						
2010-06-22	3.6	0.9			4.0	1.0						
2010-06-23	3.7	0.9			4.6	1.1						
2010-06-24	3.3	0.8			3.0	0.7						
2010-06-25	3.2	0.8			4.6	1.1						
2010-06-26	4.6	1.1			10.7	2.7						

Note:

Highlighted cell indicates 25mg/L limit exceedance

Figure 3.1: Causeway TSS Monitoring Results



3.3 OPEN-WATER BAY-GOOSE DIKE CONSTRUCTION MONITORING

As discussed previously, during open water construction turbidity curtains were installed in 2 layers and a pumping system was installed in the construction zone to create a net influx of clean water within the high turbidity dike construction zone. With all of the TSS management planning and mitigation in place, the Bay-Goose dike construction began on July 18th, 2010. Rockfill and trenching of the Bay-Goose dike construction continued from July 18th to October 1st, 2010.

3.3.1 Routine Turbidity/TSS Monitoring

Data was collected at all routine monitoring stations on July 14 and 15th prior to the start of the Bay-Goose dike construction. Dike Construction monitoring during open water began on July 18th, 2010. Routine turbidity monitoring was conducted once daily and periodically twice per day, weather permitting. Turbidity data indicated that the TSS concentrations at the routine monitoring stations did not exceed the limits throughout the open water season. All of the daily Maximum TSS results are presented in Table 3.3 and the trends by station are presented in Figure 3.3 by station. See Appendix A for all of the monitoring results and representative monitoring figures.

A summary of the short term maximum (STM; 24 hour) and maximum monthly mean (MMM; 30 day) TSS values by month are presented in Table 3.3.1.

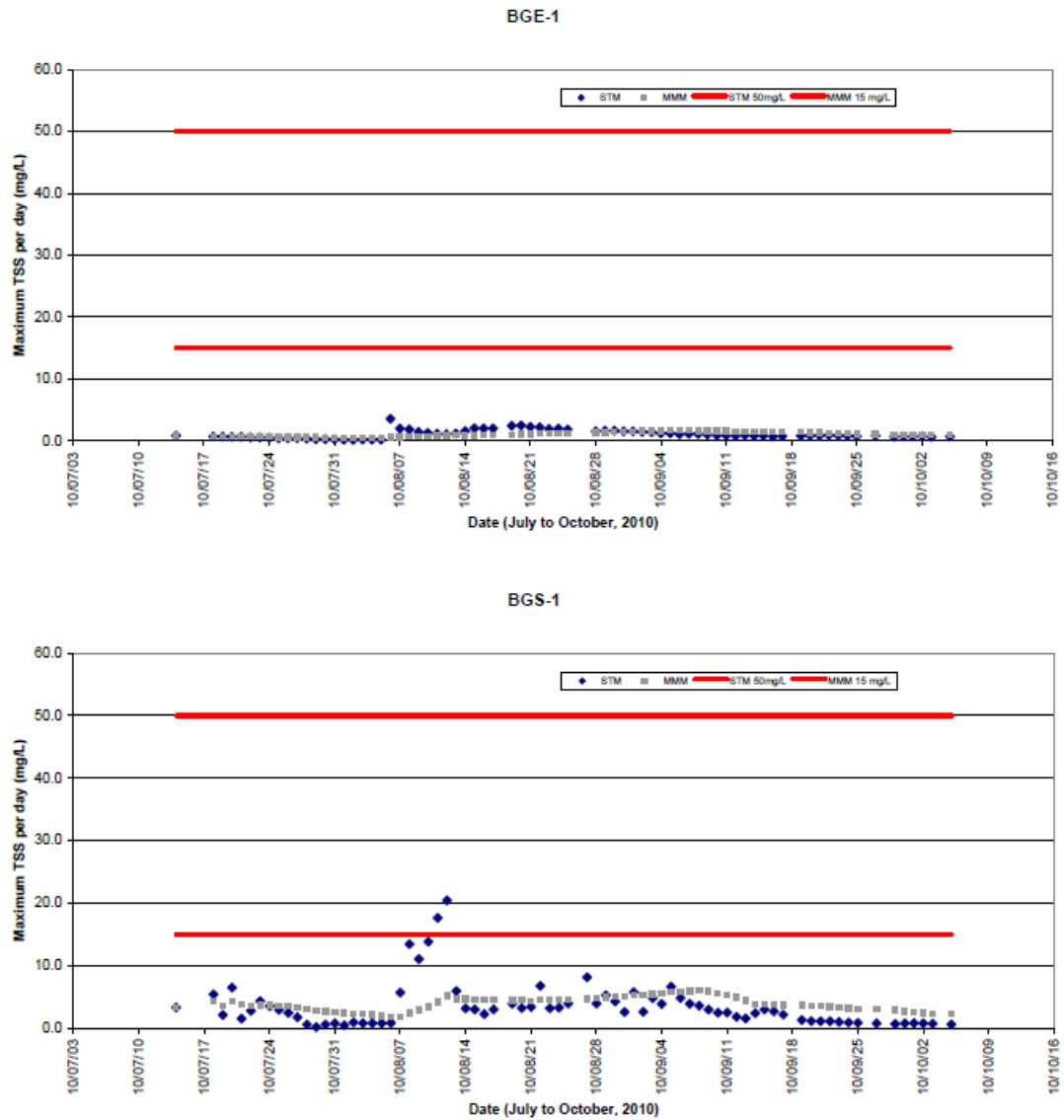
Table 3.3.1: Summary of the STM and MMM TSS Values by Month by Station.

	Month							
	July		August		September		October	
	MMM	STM	MMM	STM	MMM	STM	MMM	STM
<u>Licence Limits</u>	mg/L		mb/L		mg/L		mg/L	
For areas outside HVH areas:	15	50	15	50	15	50	15	50
Limit after September 1st near HVH areas:					6	25	6	25
Station ID								
BGE-1, BGS-1, BGS-2, BGS-5 & BGS-6	NA	6.5	5.2	20.5	6	6.7	2.5	0.9
BGS-3 & BGS-4 *			1.4	3.9	1.8	3.4	1.4	0.8

* On September 1st the limits changed for these stations as they are near High Value Habitat Areas

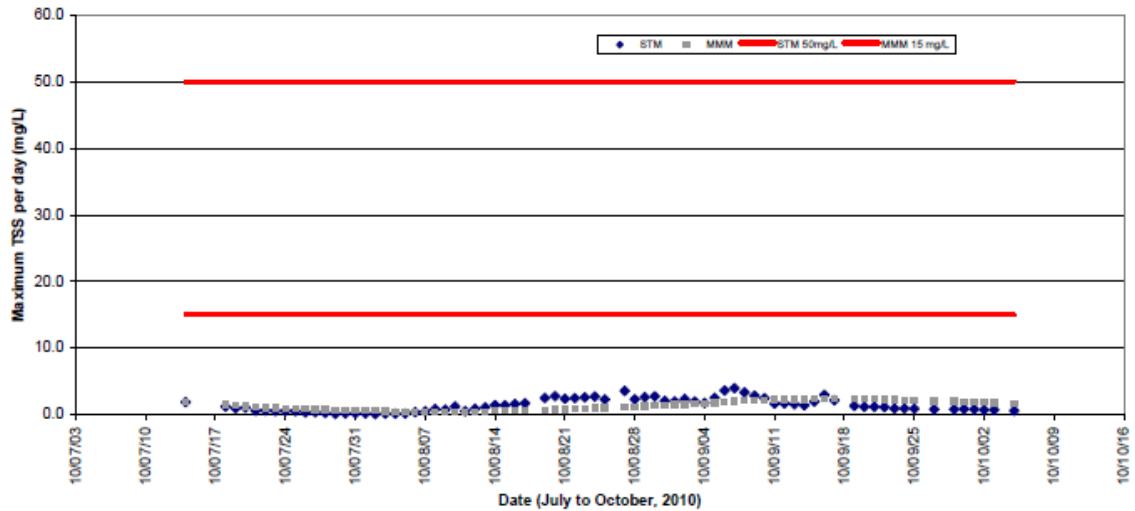
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DIKE CONSTRUCTION MONITORING

Figure 3.3: TSS concentrations (in mg/L) by station by date

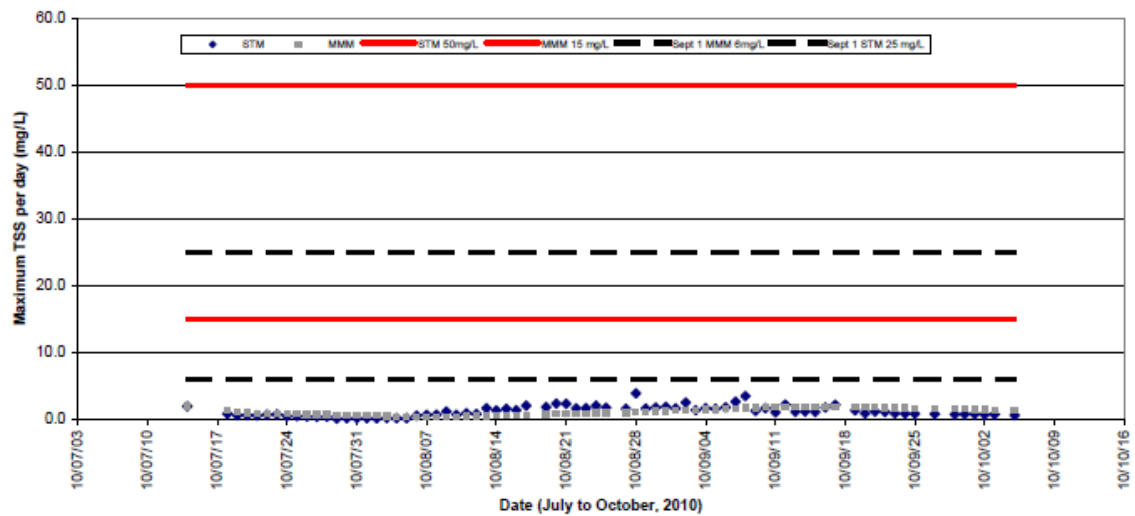


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DIKE CONSTRUCTION MONITORING

BGS-2

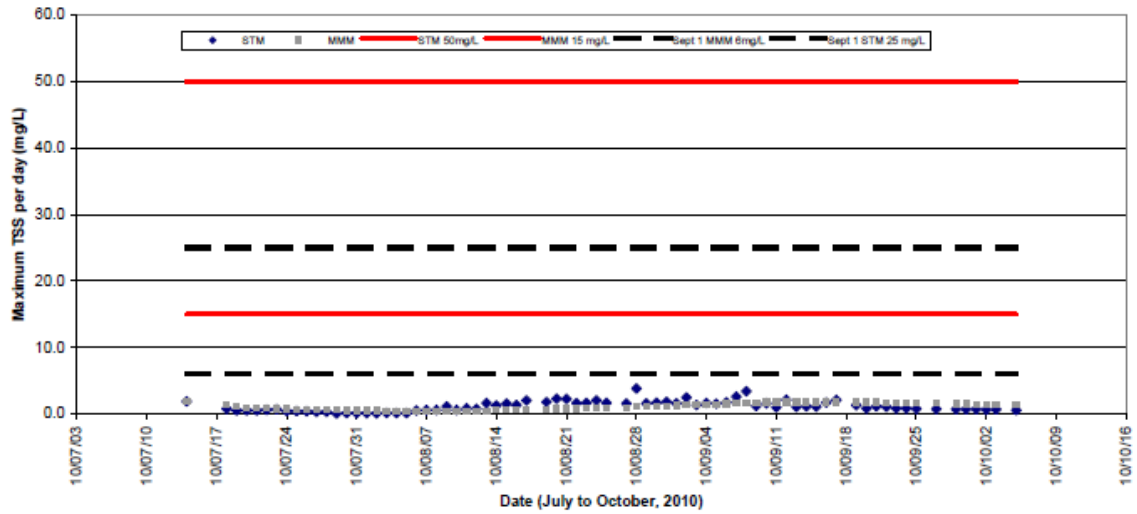


BGS-3

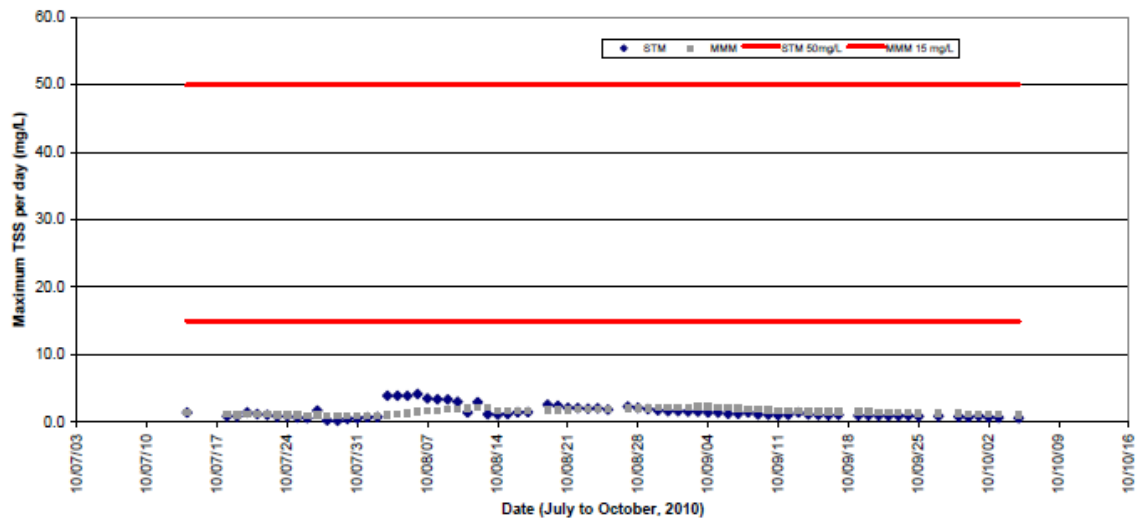


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BGS-4



BGS-5



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DIKE CONSTRUCTION MONITORING

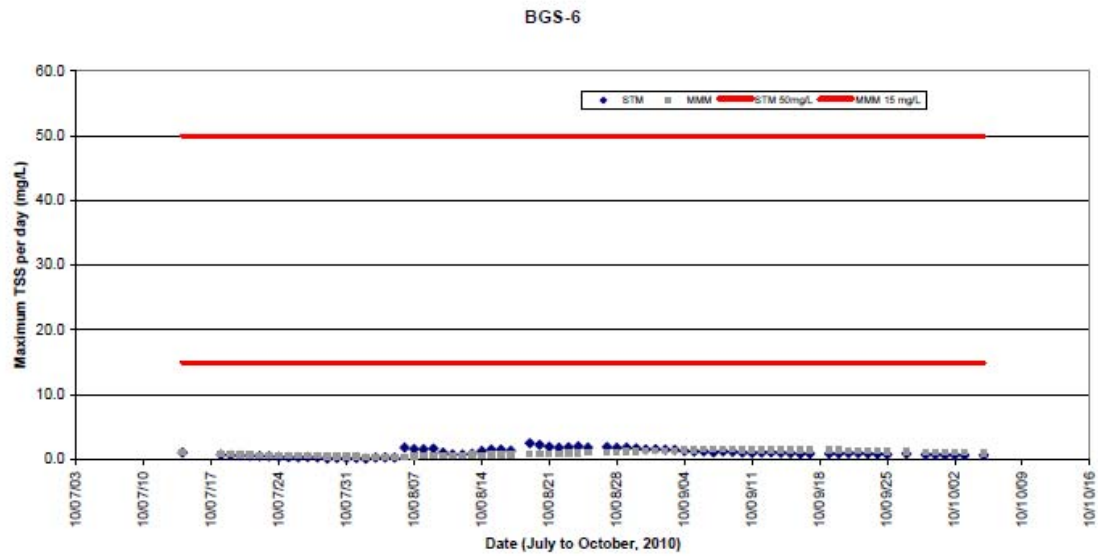


Table 3.3: Bay-Goose Dike Construction Routine Monitoring Results

Date	BGE-1			BGS-1			BGS-2			BGS-3			BGS-4			BGS-5			BGS-6		
	Max Turbidity	STM	MMM	Max Turbidity	STM	MMM	Max Turbidity	STM	MMM	Max Turbidity	STM	MMM	Max Turbidity	STM	MMM	Max Turbidity	STM	MMM	Max Turbidity	STM	MMM
	NTU	mg/L TSS	mg/L TSS	NTU	mg/L TSS	mg/L TSS	NTU	mg/L TSS	mg/L TSS	NTU	mg/L TSS	mg/L TSS	NTU	mg/L TSS	mg/L TSS	NTU	mg/L TSS	mg/L TSS	NTU	mg/L TSS	mg/L TSS
2010-07-14	3.5	0.8	0.8	13.2	3.3	3.3	7.5	1.8	1.8	7.7	1.9	1.9	5.6	1.3	1.3	5.9	1.4	1.4	4.5	1.1	1.1
2010-07-18	2.9	0.7	0.8	21.1	5.4	4.4	4.9	1.2	1.5	3.3	0.8	1.3	4.7	1.1	1.2	3.7	0.9	1.2	3.1	0.7	0.9
2010-07-19	2.9	0.7	0.7	8.6	2.1	3.6	3.9	0.9	1.3	2.4	0.6	1.1	3.8	0.9	1.1	3.6	0.9	1.1	2.7	0.6	0.8
2010-07-20	2.8	0.7	0.7	25.1	6.5	4.3	4.2	1.0	1.2	2.4	0.6	0.9	2.9	0.7	1.0	6.0	1.5	1.2	2.6	0.6	0.8
2010-07-21	2.8	0.7	0.7	6.2	1.5	3.8	2.4	0.6	1.1	2.3	0.5	0.9	3.0	0.7	1.0	4.9	1.2	1.2	2.4	0.6	0.7
2010-07-22	2.4	0.6	0.7	11.1	2.8	3.6	2.5	0.6	1.0	2.7	0.6	0.8	3.0	0.7	0.9	4.4	1.1	1.1	2.3	0.5	0.7
2010-07-23	2.3	0.5	0.7	17.0	4.3	3.7	2.2	0.5	0.9	2.9	0.7	0.8	2.7	0.6	0.9	3.5	0.8	1.1	2.2	0.5	0.7
2010-07-24	2.1	0.5	0.6	14.0	3.5	3.7	2.3	0.5	0.9	1.9	0.4	0.8	2.8	0.7	0.8	3.7	0.9	1.1	1.8	0.4	0.6
2010-07-25	1.7	0.4	0.6	11.8	3.0	3.6	2.2	0.5	0.8	1.9	0.4	0.7	2.9	0.7	0.8	3.0	0.7	1.0	1.6	0.4	0.6
2010-07-26	1.8	0.4	0.6	9.8	2.4	3.5	1.3	0.3	0.8	1.7	0.4	0.7	4.2	1.0	0.8	2.6	0.6	1.0	1.5	0.3	0.6
2010-07-27	1.8	0.4	0.6	7.2	1.8	3.3	1.4	0.3	0.8	1.4	0.3	0.7	1.9	0.4	0.8	7.0	1.7	1.1	1.7	0.4	0.6
2010-07-28	1.5	0.3	0.6	2.6	0.6	3.1	1.0	0.2	0.7	1.5	0.3	0.6	1.8	0.4	0.8	1.2	0.3	1.0	1.5	0.3	0.5
2010-07-29	1.1	0.2	0.5	0.8	0.2	2.9	0.3	0.1	0.7	0.3	0.1	0.6	0.8	0.2	0.7	0.9	0.2	0.9	0.7	0.2	0.5
2010-07-30	1.2	0.3	0.5	2.6	0.6	2.7	0.6	0.1	0.6	0.6	0.1	0.6	1.0	0.2	0.7	2.1	0.5	0.9	1.0	0.2	0.5
2010-07-31	1.0	0.2	0.5	3.4	0.8	2.6	0.7	0.2	0.6	0.6	0.1	0.5	0.7	0.2	0.7	2.4	0.6	0.9	0.9	0.2	0.5
2010-08-01	0.7	0.2	0.5	2.1	0.5	2.5	0.6	0.1	0.6	0.5	0.1	0.5	0.8	0.2	0.6	3.1	0.7	0.9	1.0	0.2	0.5
2010-08-02	0.5	0.1	0.5	4.0	1.0	2.4	0.3	0.1	0.5	0.5	0.1	0.5	1.0	0.2	0.6	3.3	0.8	0.9	0.6	0.1	0.4
2010-08-03	0.9	0.2	0.4	3.5	0.8	2.3	0.5	0.1	0.5	0.6	0.1	0.5	0.7	0.2	0.6	15.4	3.9	1.0	1.3	0.3	0.4
2010-08-04	0.9	0.2	0.4	3.5	0.8	2.1	0.5	0.1	0.4	0.6	0.1	0.4	0.7	0.2	0.5	15.4	3.9	1.2	1.3	0.3	0.4
2010-08-05	0.9	0.2	0.4	3.5	0.8	1.9	0.5	0.1	0.4	0.6	0.1	0.3	0.7	0.2	0.5	15.4	3.9	1.3	1.3	0.3	0.4
2010-08-06	14.1	3.6	0.5	3.6	0.9	1.8	1.5	0.3	0.3	2.3	0.5	0.3	6.5	1.6	0.5	16.4	4.2	1.5	7.5	1.8	0.4
2010-08-07	8.0	2.0	0.6	22.2	5.7	1.8	2.0	0.5	0.3	2.6	0.6	0.3	5.0	1.2	0.5	13.9	3.5	1.6	6.6	1.6	0.5
2010-08-08	7.6	1.9	0.7	50.3	13.5	2.4	3.4	0.8	0.3	2.7	0.6	0.3	5.2	1.3	0.6	13.4	3.4	1.8	6.5	1.6	0.5
2010-08-09	6.0	1.5	0.7	41.7	11.1	2.9	3.0	0.7	0.3	4.7	1.1	0.4	5.2	1.3	0.6	13.3	3.3	1.9	6.9	1.7	0.6
2010-08-10	5.3	1.3	0.8	51.7	13.9	3.4	5.0	1.2	0.3	2.7	0.6	0.4	4.6	1.1	0.6	12.1	3.0	2.0	4.5	1.1	0.6
2010-08-11	4.7	1.1	0.8	65.1	17.6	4.2	2.1	0.5	0.3	3.7	0.9	0.4	3.6	0.9	0.6	5.8	1.4	2.0	3.3	0.8	0.7
2010-08-12	4.5	1.1	0.8	75.1	20.5	5.2	3.6	0.9	0.4	3.2	0.8	0.4	3.4	0.8	0.6	11.8	3.0	2.2	3.2	0.8	0.7
2010-08-13	4.8	1.2	0.9	23.1	6.0	4.7	4.4	1.1	0.4	6.7	1.6	0.5	4.0	1.0	0.6	4.8	1.2	2.2	3.7	0.9	0.7
2010-08-14	6.5	1.6	0.8	12.6	3.2	4.7	5.7	1.4	0.6	5.3	1.3	0.6	5.9	1.4	0.7	4.5	1.1	1.7	5.4	1.3	0.7
2010-08-15	8.3	2.0	0.8	12.0	3.0	4.6	5.7	1.4	0.6	6.4	1.6	0.6	6.2	1.5	0.8	4.9	1.2	1.7	6.3	1.5	0.7
2010-08-16	8.2	2.0	0.9	9.2	2.3	4.5	6.4	1.6	0.6	5.5	1.3	0.6	5.5	1.3	0.8	6.0	1.5	1.7	6.4	1.6	0.7

Table 3.3: Bay-Goose Dike Construction Routine Monitoring Results

Date	BGE-1			BGS-1			BGS-2			BGS-3			BGS-4			BGS-5			BGS-6		
	Max Turbidity	STM	MMM	Max Turbidity	STM	MMM	Max Turbidity	STM	MMM	Max Turbidity	STM	MMM	Max Turbidity	STM	MMM	Max Turbidity	STM	MMM	Max Turbidity	STM	MMM
	NTU	mg/L TSS	mg/L TSS	NTU	mg/L TSS	mg/L TSS	NTU	mg/L TSS	mg/L TSS	NTU	mg/L TSS	mg/L TSS	NTU	mg/L TSS	mg/L TSS	NTU	mg/L TSS	mg/L TSS	NTU	mg/L TSS	mg/L TSS
2010-08-17	8.1	2.0	0.9	12.1	3.0	4.5	6.9	1.7	0.6	8.2	2.0	0.6	8.3	2.0	0.8	6.1	1.5	1.7	5.6	1.4	0.7
2010-08-19	9.8	2.4	1.0	15.5	3.9	4.5	10.0	2.5	0.7	7.3	1.8	0.7	11.8	3.0	0.9	10.4	2.6	1.8	10.1	2.5	0.8
2010-08-20	10.0	2.5	1.0	12.9	3.2	4.5	11.0	2.7	0.7	9.3	2.3	0.7	10.4	2.6	0.9	9.8	2.4	1.8	9.1	2.3	0.9
2010-08-21	9.1	2.3	1.1	13.5	3.4	4.4	9.5	2.4	0.8	9.2	2.3	0.8	8.4	2.1	1.0	8.6	2.1	1.8	8.0	2.0	0.9
2010-08-22	8.8	2.2	1.1	26.0	6.8	4.6	9.8	2.4	0.8	6.6	1.6	0.8	9.0	2.2	1.0	8.5	2.1	1.9	7.4	1.8	0.9
2010-08-23	7.8	1.9	1.2	12.7	3.2	4.6	10.3	2.6	0.9	6.8	1.7	0.8	7.9	1.9	1.0	8.1	2.0	1.9	7.7	1.9	1.0
2010-08-24	8.1	2.0	1.2	13.1	3.3	4.6	10.8	2.7	1.0	8.2	2.0	0.9	8.4	2.1	1.1	8.4	2.1	1.9	8.2	2.0	1.0
2010-08-25	7.5	1.8	1.3	15.6	4.0	4.6	9.1	2.3	1.0	6.9	1.7	0.9	7.6	1.9	1.1	7.6	1.9	2.0	7.5	1.8	1.1
2010-08-27	No data - too windy			31.1	8.1	4.7	14.0	3.5	1.1	6.4	1.6	1.0	9.0	2.2	1.2	9.3	2.3	2.0	7.9	1.9	1.1
2010-08-28	6.4	1.6	1.3	15.6	4.0	4.8	9.1	2.3	1.2	15.2	3.9	1.1	8.0	2.0	1.2	8.6	2.1	2.1	7.4	1.8	1.2
2010-08-29	6.7	1.6	1.4	20.5	5.3	4.9	10.4	2.6	1.3	6.5	1.6	1.1	8.0	2.0	1.3	7.8	1.9	2.1	7.5	1.8	1.2
2010-08-30	6.7	1.6	1.4	16.8	4.3	5.0	10.8	2.7	1.3	7.0	1.7	1.2	7.6	1.9	1.3	7.1	1.7	2.1	7.0	1.7	1.3
2010-08-31	6.3	1.5	1.5	10.4	2.6	5.1	8.2	2.0	1.4	7.4	1.8	1.2	6.6	1.6	1.4	6.6	1.6	2.2	6.4	1.6	1.3
2010-09-01	6.2	1.5	1.5	22.5	5.8	5.3	8.0	2.0	1.5	6.6	1.6	1.3	6.2	1.5	1.4	6.6	1.6	2.2	6.5	1.6	1.4
2010-09-02	5.9	1.4	1.5	10.5	2.6	5.3	9.4	2.3	1.5	9.9	2.5	1.3	6.4	1.6	1.4	6.3	1.5	2.2	6.3	1.5	1.4
2010-09-03	5.7	1.4	1.6	18.9	4.8	5.5	7.9	1.9	1.6	5.5	1.3	1.4	6.3	1.5	1.5	6.3	1.5	2.3	6.1	1.5	1.4
2010-09-04	5.1	1.2	1.6	15.3	3.9	5.6	7.0	1.7	1.6	6.8	1.7	1.4	5.7	1.4	1.5	5.9	1.4	2.3	5.5	1.3	1.5
2010-09-05	5.0	1.2	1.7	25.7	6.7	5.7	9.9	2.5	1.7	6.3	1.5	1.5	5.0	1.2	1.6	5.7	1.4	2.2	5.1	1.2	1.5
2010-09-06	4.5	1.1	1.7	19.0	4.9	5.9	14.2	3.6	1.8	7.1	1.7	1.5	5.3	1.3	1.6	5.1	1.2	2.1	5.2	1.3	1.5
2010-09-07	4.7	1.1	1.7	15.4	3.9	6.0	15.5	3.9	2.0	10.5	2.6	1.6	5.0	1.2	1.6	5.1	1.2	2.0	4.6	1.1	1.6
2010-09-08	4.6	1.1	1.6	14.2	3.6	6.1	13.2	3.3	2.0	13.6	3.4	1.7	5.0	1.2	1.6	5.9	1.4	1.9	5.2	1.3	1.6
2010-09-09	4.2	1.0	1.6	11.9	3.0	6.0	11.2	2.8	2.1	5.0	1.2	1.7	5.1	1.2	1.6	4.7	1.1	1.9	5.0	1.2	1.5
2010-09-10	3.7	0.9	1.6	10.0	2.5	5.6	9.8	2.4	2.2	6.6	1.6	1.8	4.6	1.1	1.6	4.5	1.1	1.8	4.4	1.1	1.5
2010-09-11	3.5	0.8	1.6	10.0	2.5	5.3	6.7	1.6	2.2	4.2	1.0	1.7	4.3	1.0	1.6	4.3	1.0	1.7	4.2	1.0	1.5
2010-09-12	3.4	0.8	1.5	7.4	1.8	5.0	6.7	1.6	2.2	8.7	2.1	1.8	4.1	1.0	1.6	4.5	1.1	1.7	4.5	1.1	1.5
2010-09-13	3.7	0.9	1.5	6.4	1.6	4.4	6.2	1.5	2.3	4.5	1.1	1.8	4.3	1.0	1.6	5.8	1.4	1.7	4.6	1.1	1.5
2010-09-14	3.4	0.8	1.5	9.7	2.4	3.8	5.6	1.4	2.3	4.7	1.1	1.8	4.8	1.2	1.6	4.6	1.1	1.6	4.3	1.0	1.5
2010-09-15	3.5	0.8	1.5	11.9	3.0	3.8	7.9	1.9	2.3	4.5	1.1	1.8	4.2	1.0	1.6	4.4	1.1	1.6	4.0	1.0	1.5
2010-09-16	2.9	0.7	1.5	10.9	2.7	3.7	11.7	2.9	2.3	7.0	1.7	1.8	3.9	0.9	1.6	4.2	1.0	1.6	3.7	0.9	1.5
2010-09-17	3.2	0.8	1.4	8.8	2.2	3.7	8.7	2.1	2.4	8.6	2.1	1.8	3.6	0.9	1.6	4.5	1.1	1.6	3.7	0.9	1.5
2010-09-19	3.3	0.8	1.4	5.4	1.3	3.7	5.3	1.3	2.4	5.4	1.3	1.8	3.4	0.8	1.6	4.1	1.0	1.6	3.7	0.9	1.5
2010-09-20	3.5	0.8	1.4	4.8	1.2	3.6	4.8	1.2	2.3	3.6	0.9	1.8	4.0	1.0	1.5	4.1	1.0	1.6	3.9	0.9	1.4
2010-09-21	3.6	0.9	1.3	4.6	1.1	3.5	4.7	1.1	2.3	4.7	1.1	1.8	4.0	1.0	1.5	4.0	1.0	1.5	4.0	1.0	1.4
2010-09-22	3.8	0.9	1.2	4.7	1.1	3.5	4.5	1.1	2.2	4.5	1.1	1.7	3.9	0.9	1.4	3.9	0.9	1.5	4.0	1.0	1.4
2010-09-23	3.5	0.8	1.2	4.2	1.0	3.4	3.8	0.9	2.2	3.6	0.9	1.7	3.7	0.9	1.4	3.9	0.9	1.4	3.8	0.9	1.3
2010-09-24	3.4	0.8	1.2	3.9	0.9	3.2	3.8	0.9	2.2	3.5	0.8	1.7	3.7	0.9	1.3	3.9	0.9	1.4	3.6	0.9	1.3
2010-09-25	3.0	0.7	1.1	3.6	0.9	3.1	3.6	0.9	2.1	3.3	0.8	1.6	3.6	0.9	1.3	3.5	0.8	1.3	3.4	0.8	1.3
2010-09-27	3.3	0.8	1.1	3.3	0.8	3.0	3.3	0.8	2.0	3.2	0.8	1.6	3.5	0.8	1.2	3.6	0.9	1.3	3.7	0.9	1.2
2010-09-29	2.8	0.7	1.0	2.9	0.7	2.9	3.3	0.8	2.0	3.0	0.7	1.6	3.8	0.9	1.2	3.5	0.8	1.3	3.2	0.8	1.2
2010-09-30	3.0	0.7	1.0	3.3	0.8	2.7	3.3	0.8	1.9	3.0	0.7	1.5	3.2	0.8	1.2	3.1	0.7	1.2	3.2	0.8	1.1
2010-10-01	2.9	0.7	1.0	3.5	0.8	2.6	3.3	0.8	1.9	3.1	0.7	1.4	3.5	0.8	1.1	3.7	0.9	1.2	3.0	0.7	1.1
2010-10-02	3.1	0.7	1.0	3.3	0.8	2.4	2.8	0.7	1.8	2.8	0.7	1.4	3.1	0.7	1.1	3.0	0.7	1.1	3.0	0.7	1.1
2010-10-03	2.7	0.6	0.9	3.1	0.7	2.3	2.8	0.7	1.7	2.9	0.7	1.4	3.2	0.8	1.1	2.8	0.7	1.1	2.8	0.7	1.0
2010-10-05	2.9	0.7	0.9	2.7	0.6	2.3	2.4	0.6	1.7	2.5	0.6	1.3	2.5	0.6	1.0	2.5	0.6	1.1	2.8	0.7	1.0

3.3.2 Broad Turbidity/ TSS Monitoring

Turbidity data was collected at all broad monitoring stations in Third Portage East (TPE) (including high value habitat areas), Third Portage North (TPN) and Third Portage South (TPS) were monitored on July 14 and 15th prior to the start of the Bay-Goose Dike construction. Furthermore, stations in Second Portage Lake (SP) and Tehek Lake (TE) were sampled as third portage lake east basin drains south east toward through Second Portage Lake into Tehek Lake (See figure 3.3.2). At this time, background water chemistry samples were also collected at selected locations nearest to the construction area within Third Portage Lake East Basin and Second Portage Lake nearest to the outflow (See table 3.3.2). Follow-up water chemistry monitoring at these stations was not deemed necessary given that TSS monitoring results did not exceed license limits.

Throughout the summer, broad turbidity monitoring was completed weekly. Turbidity was primarily focused on Third Portage Lake east basin (nearest to the construction) and Second Portage Lake to characterize the receiving environment. In-line with routine stations, none of the broad stations exceeded the TSS limits, which confirms that construction related TSS was contained within the turbidity curtains.

3.3.3 Water Chemistry

Water chemistry samples were collected weekly at stations BGE-1, BGS-1 to 6 from July 15th until September 25th³ for general parameters (including TSS, TDS, pH, and conductivity), total phosphorus, total nitrogen, total dissolved solids (TDS), dissolved nutrients (ammonia, nitrate, nitrite, ortho-phosphate), total dissolved nitrogen, dissolved calcium and magnesium, total and dissolved organic carbon (TOC, DOC), total and dissolved metals and chlorophyll a (results are presented in Table 3.3: Routine stations; and Table 3.3.2: other stations for background purposes).

Water chemistry results for conductivity demonstrated similar trends to the field collected data; conductivity remained consistent throughout the open water season (between 16.3 and 22 mhos/cm). Total suspended solids were between 1.6 and 6.7 mg/L with a mean of 3.0 mg/L from July 15 until September 25th. TSS was greatest on September 21st (BGS-1 of 6.7 mg/L) but did not exceed license limits at any station throughout the open water season. Laboratory turbidity was between 0.85 NTU and 6.65 NTU. pH was circumneutral throughout the open water season with low hardness and alkalinity, predominated by bicarbonate which remained the same throughout the season.

Nutrients were generally low throughout the summer. Total phosphorus exceeded the CCME (2007) guidelines on a couple of occasions at stations BGE-1, BGS-1 and BGS-5 with no apparent pattern. On August 7th, all stations but BGS-2 exceeded CCME (2007) guidelines for total phosphorus. Increased phosphorus may offset diminished light penetration with respect to productivity, however chlorophyll a concentrations remained consistent throughout the summer.

³ During the week of September 14th, samples were not collected due to an unanticipated personnel leave of absence. Samples were not collected during the first week of October due to poor weather conditions.

Table 3.3.2: Water Chemistry Results of Analysis for Additional Baseline Stations

Sample ID			BGE-3 7/14/2010 14:30	BG-VH-4 7/14/2010 14:00	BG-VH-5 7/14/2010 17:45	TPE-1 7/14/2010 -	TPE-4 -	SP-1 7/16/2010 18:05	SP-8 7/16/2010 17:45	SP-9 7/16/2010 17:10
Date Sampled										
Time Sampled										
Dup related to										
ALS Sample ID										
	CCME (2007) Guideline	Detection	14.30	14.00	17.45	-	-	18.05	17.45	17.10
	Limits		L909917-8	L909917-9	L909917-10	L909917-12	L909917-13	L911040-4	L911040-5	L911040-6
Physical Tests										
Conductivity (mhos/cm)	NG	0.40	20.2	17.7	17.5	16.1	17.3	22.3	23.6	25.0
Hardness (as CaCO3) (mg/L)	NG	0.30	6.88	6.65	6.26	5.49	6.11	7.92	8.65	9.33
pH	6.5 - 9.0	0.10	7.11	7.07	7.09	6.99	7.07	7.29	7.33	7.35
Total Suspended Solids (mg/L)	15-50	2.0	2.4	<2.0	<2.0	<2.0	2.4	4.4	3.6	3.6
Total Dissolved Solids (mg/L)	NG	5.0	12.0	<5.0	<5.0	<5.0	<5.0	18.5	9.7	20.0
Turbidity (NTU)	NG	0.10	1.42	1.91	2.00	0.53	1.73	1.03	0.80	0.68
Anions and Nutrients (mg/L)										
Alkalinity, Total (as CaCO3)	NG	1.0	7.6	7.4	7.5	6.6	7.3	8.8	9.3	9.8
Ammonia as N	See fact sheet	0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bicarbonate (HCO3)	NG	2.0	9.2	9.1	9.1	8.1	8.9	10.7	11.4	11.9
Carbonate (CO3)	NG	0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60
Chloride	NG	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.57	<0.50	<0.50
Fluoride	NG	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hydroxide (OH)	NG	0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Nitrate and Nitrite as N	290000	0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrate-N	NG	0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrite-N	NG	0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Kjeldahl Nitrogen	NG	0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ortho Phosphorus Soluble As P	NG	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus, Total	0.004	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Sulfate	NG	0.50	1.55	1.52	1.52	1.62	1.47	2.23	1.88	2.12
Organic / Inorganic Carbon (mg/L)										
Dissolved Organic Carbon	NG	1.0	1.5	1.6	1.5	1.5	1.4	1.9	1.8	2.1
Total Organic Carbon	NG	1.0	1.6	1.5	1.5	1.7	1.4	1.6	1.9	2.0
Total Metals (mg/L)										
Aluminum (Al)-Total	0.1 @ pH>6.5	0.0050	0.117	0.111	0.104	0.0349	0.112	0.0681	0.0476	0.0279
Antimony (Sb)-Total	NG	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Arsenic (As)-Total	0.005	0.00020	0.00066	0.00051	0.00046	<0.00020	0.00043	0.00043	0.00034	0.00023
Barium (Ba)-Total	NG	0.00020	0.00061	0.00342	0.00347	0.00249	0.00344	0.00293	0.00298	0.00238
Beryllium (Be)-Total	NG	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	NG	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Boron (B)-Total	NG	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	0.00017	0.000010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Calcium (Ca)-Total	NG	0.10	1.50	1.41	1.44	1.21	1.36	2.18	2.35	2.51
Cesium (Cs)-Total	NG	0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	0.001	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	NG	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Copper (Cu)-Total	0.002 @ hrdrns <120mg/L	0.00020	0.00106	0.00078	0.00073	0.00068	0.00094	0.00118	0.00086	0.00086
Iron (Fe)-Total	0.30	0.020	0.115	0.114	0.111	0.084	0.113	0.072	0.050	0.037
Lead (Pb)-Total	0.001 @ hrdrns <60 mg/L	0.000090	0.000099	0.000092	<0.000090	<0.000090	0.000100	<0.000090	<0.000090	<0.000090
Lithium (Li)-Total	NG	0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Magnesium (Mg)-Total	NG	0.010	0.693	0.646	0.663	0.565	0.624	0.757	0.786	0.792
Manganese (Mn)-Total	NG	0.00030	0.00417	0.00404	0.00395	0.00241	0.00397	0.00249	0.00217	0.00187
Mercury (Hg)-Total	NG	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Molybdenum (Mo)-Total	0.073	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Nickel (Ni)-Total	0.025 @ hrdrns <60mg/L	0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Phosphorus (P)-Total	NG	0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Potassium (K)-Total	NG	0.020	0.466	0.427	0.429	0.360	0.402	0.440	0.425	0.369
Rubidium (Rb)-Total	NG	0.00020	0.00086	0.00084	0.00082	0.00059	0.00090	0.00072	0.00064	0.00056
Selenium (Se)-Total	0.001	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	NG	0.050	0.435	0.421	0.380	0.185	0.390	0.353	0.336	0.345
Silver (Ag)-Total	0.0001	0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	NG	0.30	0.460	0.425	0.439	0.453	0.432	0.509	0.488	0.463
Strontium (Sr)-Total	NG	0.00010	0.00725	0.00721	0.00727	0.00630	0.00762	0.00903	0.00973	0.0108
Tellurium (Te)-Total	NG	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	0.0008	0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	NG	0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	NG	0.00020	<0.00020	<0.00020	0.00044	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Titanium (Ti)-Total	NG	0.00020	0.00371	0.00434	0.00346	0.00087	0.00298	0.00197	0.00140	0.00096
Tungsten (W)-Total	NG	0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	NG	0.00010	0.00015	0.00016	0.00016	<0.00010	0.00018	0.00010	<0.00010	<0.00010
Vanadium (V)-Total	NG	0.00020	<0.00020	0.00021	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Zinc (Zn)-Total	0.03	0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Zirconium (Zr)-Total	NG	0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Dissolved Metals (mg/L)										
Aluminum (Al)-Dissolved	-	0.0020	0.0037	0.0037	0.0041	0.0034	0.0043	0.0101	0.0063	0.0049
Antimony (Sb)-Dissolved	-	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Arsenic (As)-Dissolved	-	0.00020	0.00060	0.00044	0.00041	<0.00020	0.00037	0.00035	0.00028	<0.00020
Barium (Ba)-Dissolved	-	0.00020	0.00240	0.00247	0.00244	0.00224	0.00237	0.00261	0.00238	0.00241
Beryllium (Be)-Dissolved	-	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Dissolved	-	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Boron (B)-Dissolved	-	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium (Cd)-Dissolved	-	0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Calcium (Ca)-Dissolved	-	0.050	1.78	1.70	1.58	1.36	1.53	1.94	2.17	2.33
Cesium (Cs)-Dissolved	-	0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Dissolved	-	0.00020	0.00024	0.00027	<0.00020	<0.00020	0.00020	<0.00020	<0.00020	<0.00020
Cobalt (Co)-Dissolved	-	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Copper (Cu)-Dissolved	-	0.00020	0.00071	0.00052	0.00047	0.00039	0.00044	0.00089	0.00063	0.00071
Iron (Fe)-Dissolved	-	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Lead (Pb)-Dissolved	-	0.000090	<0.000090	<0.000090	<0.000090	<0.000090	<0.000090	0.000190	<0.000090	<0.000090
Lithium (Li)-Dissolved	-	0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Magnesium (Mg)-Dissolved	-	0.010	0.592	0.584	0.560	0.507	0.553	0.747	0.786	0.855
Manganese (Mn)-Dissolved	-	0.00020	0.00248	0.00245	0.00238	0.00171	0.00243	0.00154	0.00129	0.00113
Molybdenum (Mo)-Dissolved	-	0.00010	0.00022	0.00018	0.00017	0.00010	0.00015	0.00015	0.00011	<0.00010
Nickel (Ni)-Dissolved	-	0.00020	0.00033	0.00032	0.00034	0.00020	0.00036	0.00050	0.00045	0.00047
Phosphorus (P)-Dissolved	-	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Potassium (K)-Dissolved</										

Sample ID	Date Sampled	Time Sampled	Dup related to	Detection
ALS Sample ID	CCME (2007) Guideline	Limits:		

[illegible]

Dissolved Organic Carbon	NG	1.0	1.5	1.9	1.2	1.6	1.7	1.8	1.6	1.7	1.6	1.5	1.3	1.7	1.7	1.3
Total Organic Carbon	NG	1.0	1.7	4.3	2.3	2.0	1.9	1.8	1.6	2.2	1.9	1.5	1.5	1.7	1.7	1.5

Aluminum (Al)-Total	0.1 g pH=6.5	0.0050	0.107	0.165	0.163	0.102	0.109	0.0820	0.113	0.0744	0.0443	0.0414	0.0496	0.0444	0.0464	0.0396
Antimony (Sb)-Total	NG	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Arsenic (As)-Total	0.005	0.00020	0.00054	0.00046	0.00046	0.00053	0.00056	0.00048	0.00049	0.00054	0.00039	0.00039	0.00042	0.00043	0.00039	0.00039
Boron (B)-Total	NG	0.00020	0.00043	0.00043	0.00043	0.00043	0.00054	0.00048	0.00054	0.00048	0.00039	0.00039	0.00042	0.00043	0.00039	0.00039
Beryllium (Be)-Total	0.0001	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	0.0001	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Boron (B)-Total	NG	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	0.00017	0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Calcium (Ca)-Total	NG	0.10	1.95	1.67	1.63	1.72	1.76	1.75	1.50	1.77	1.70	1.76	1.78	1.71	1.88	1.60
Cobalt (Co)-Total	0.0001	0.00020	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	0.001	0.0010	<0.0010	<0.0010	0.0011	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	NG	0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Copper (Cu)-Total	0.002 g/hr <120mg/L	0.00020	0.00100	0.00100	0.00137	0.00095	0.00088	0.0157	0.00778	0.00080	0.00070	0.00067	0.00074	0.00067	0.00068	0.00058
Iron (Fe)-Total	0.3	0.020	0.118	0.163	0.167	0.114	0.116	0.093	0.110	0.076	0.052	0.049	0.054	0.056	0.048	0.046
Lead (Pb)-Total	0.001 g/hr <60 mg/L	0.00010	<0.00050	<0.00050	<0.00010	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Lithium (Li)-Total	NG	0.00020	<0.00020	<0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020	0.00020
Magnesium (Mg)-Total	NG	0.010	0.644	0.693	0.666	0.678	0.667	0.667	0.677	0.723	0.673	0.655	0.677	0.668	0.630	0.638
Manganese (Mn)-Total	NG	0.00030	0.00385	0.00460	0.00457	0.00399	0.00391	0.00367	0.00409	0.00328	0.00276	0.00264	0.00271	0.00269	0.00238	0.00234
Mercury (Hg)-Total	NG	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Molybdenum (Mo)-Total	0.073	0.00020	<0													

Antimony (As)-Dissolved	0.00020	0.00507	0.0044	0.0047	0.0055	0.0029	0.0034	0.0036	0.0050	0.0089	0.0042	0.0046	0.0056	0.0057	0.0053
Antimony (Sb)-Dissolved	0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020
Arsenic (As)-Dissolved	0.00020	0.00049	0.00047	0.00039	0.00048	0.00046	0.00045	0.00045	0.00052	0.00039	0.00037	0.00037	0.00042	0.00039	0.00038
Barium (Ba)-Dissolved	0.00020	0.00048	0.00044	0.00039	0.00044	0.00043	0.00042	0.00042	0.00051	0.00037	0.00035	0.00035	0.00042	0.00037	0.00037
Beryllium (Be)-Dissolved	0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020
Bismuth (Bi)-Dissolved	0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020
Boron (B)-Dissolved	0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010	-0.010
Cadmium (Cd)-Dissolved	0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010
Calcium (Ca)-Dissolved	0.050	1.18	1.74	1.71	1.71	1.76	1.74	1.68	1.44	1.47	1.44	1.44	1.44	1.44	1.44
Cesium (Cs)-Dissolved	0.00010	-0.00010	0.00011	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010	-0.00010
Chromium (Cr)-Dissolved	0.00020	0.00023	0.00023	0.00028	0.00032	0.00021	0.00026	0.00026	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020
Cobalt (Co)-Dissolved	0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020	-0.00020
Copper (Cu)-Dissolved	0.00020	0.00019	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016	0.00016
Iron (Fe)-Dissolved	0.010	0.011	0.012	0.011	0.011	0.010	-0.010	-0.010	-0.010	0.011	-0.010	-0.010	-0.010	-0.010	-0.010
Lead (Pb)-Dissolved	0.00090	-0.00090	-0.00090	-0.00090	-0.00090	-0.00090	-0.00090	-0.00090	-0.00090	-0.00090	-0.00090	-0.00090	-0.00090	-0.00090	-0.00090
Lithium (Li)-Dissolved	0.020	-0.020	0.028	0.022	-0.020	0.027	-0.020	-0.020	-0.020	-0.020	-0.020	-0.020	-0.020	-0.020	-0.020
Magnesium (Mg)-Dissolved	0.010	0.588	0.591	0.572	0.593	0.588	0.579	0.582	0.693	0.714	0.675	0.666	0.707	0.703	0.659
Manganese (Mn)-Dissolved	0.00020	0.00025	0.00025	0.00029	0.00032	0.00029	0.00032	0.00029	0.00032	0.00031	0.00031	0.00031	0.00031	0.00031	0.00031
Molybdenum (Mo)-Dissolved	0.00010	0.00018	0.00024	0.00019	0.00015	0.00020	0.00017	0.00019	0.00015	0.00014	0.00013	0.00013	0.00017	0.00015	0.00015
Nickel (Ni)-Dissolved	0.00020	0.00037	0.00044	0.00039	0.00032	0.00035	0.00031	0.00031	0.00055	0.00061	0.00053	0.00055	0.00060	0.00050	0.00050
Phosphorus (P)-Dissolved	0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10	-0.10
Potassium (K)-Dissolved	0.020	0.451	0.484	0.456	0.454	0.445	0.446	0.432	0.407	0.412	0.398	0.380	0.408	0.402	0.378
Rubidium (Rb															

[illegible]

NG = no guideline
 Canadian Water Quality Guidelines for the Protection of Aquatic Life, CCME, Update 7.0, September 2007.
 Cadmium guideline calculated using measured hardness concentration per sample
 Chromium guideline is for Cr VI, which yields the most conservative guideline
 Trigger Range for Total Phosphorus (see guidance Framework for Phosphorus factsheet); ultra-oligotrophic <4 µg/L
 NWB Licensee A 2AM-MEAGB15 maximum monthly mean is 15 mg/L; Short term Maximum is 50 mg/L
 Due to laboratory error, annual results analyzed by ICP were not provided to AEM

Possible field sampling error

TABLE 3.3: Water Chemistry Results of Analysis for Routine Weekly

Sample ID		BGE-1	BGS-1	BGS-2	BGS-3	BGS-4	BGS-5	BGS-6		BGS-1	BGS-2	BGS-3	BGS-4	BGS-5	BGS-6
Date Sampled		7/31/2010	7/31/2010	7/31/2010	7/31/2010	7/31/2010	7/31/2010	7/31/2010		07-AUG-10	07-AUG-10	07-AUG-10	07-AUG-10	07-AUG-10	07-AUG-10
Time Sampled		17:30	16:45	16:00	15:40	15:00	14:30	14:00		17:10	16:10	15:50	15:30	15:15	15:00
Dup related to															
ALS Sample ID		CCME (2007) Guideline	L916677-1	L916677-2	L916677-3	L916677-4	L916677-5	L916677-6		L918296-1	L918296-2	L918296-3	L918296-4	L918296-5	L918296-6
Physical Tests															
Conductivity (microhm/cm)	NG	17.6	16.8	16.6	17.1	17.1	17.9	17.9	20.5	16.5	16.5	17.0	17.5	17.4	20.3
Hardness (as CaCO3) (mg/L)	NG	7.02	6.4	6.23	6.28	6.43	6.38	6.52	7.41	6.41	6.32	6.66	6.98	7.07	7.31
pH	6.5 - 9.0	7.09	7.1	7.07	7.14	7.11	7.2	7.19	7.21	7.18	7.16	7.21	7.23	7.22	7.23
Total Suspended Solids (mg/L)	15.50	2.7	1.8	1.9	1.6	1.6	1.8	2.4	4.8	3.6	2.4	2.4	2.4	2.4	3.6
Total Dissolved Solids (mg/L)	NG	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	6.7	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Turbidity (NTU)	NG	3.2	2.4	2.4	2.4	2.4	2	2	3.99	1.20	1.07	1.69	2.56	2.29	3.37
Anions and Nutrients (mg/L)															
Alkalinity, Total (as CaCO3)	NG	7.2	6.9	6.8	7.1	7.0	7.5	7.5	7.7	7.0	7.1	7.3	7.5	7.4	7.6
Ammonia as N	See fact sheet	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.064
Bicarbonate (HCO3-)	NG	8.7	8.4	8.3	8.6	8.6	9.2	9.2	8.4	8.6	8.9	9.1	9.0	9.0	9.3
Carbonate (CO3-)	NG	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60
Chloride	NG	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Fluoride	NG	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hydroxide (OH)	NG	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Nitrate and Nitrite as N	290000	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrate-N	NG	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrite-N	NG	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Kjeldahl Nitrogen	NG	10.0	6.0	12.0	10.0	7.0	12.0	11.9	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ortho Phosphorus Soluble As P	NG	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus, Total	0.004	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Sulfate	NG	1.55	1.50	1.49	1.49	1.50	1.49	1.49	1.55	1.45	1.50	1.51	1.53	1.52	1.54
Organic / Inorganic Carbon (mg/L)															
Dissolved Organic Carbon	NG	1.9	1.9	1.8	2.3	1.8	1.6	1.7	2.0	2.0	1.8	1.5	2.0	2.1	1.6
Total Organic Carbon	NG	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	<0.0040	2.8	2.4	1.8	1.5	2.1	1.6	1.5
Total Metals (mg/L)															
Aluminum (Al)-Total	0.1 @ pH=6.5	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.194	0.0326	0.0328	0.0825	0.147	0.131	0.157
Antimony (Sb)-Total	NG	0.0310	0.0258	0.0311	0.0337	0.0328	0.0330	0.0373	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Arsenic (As)-Total	0.005	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.00076	0.00057	0.00058	0.00059	0.00059	0.00059	0.00069
Barium (Ba)-Total	NG	0.00069	0.00038	0.00037	0.00040	0.00053	0.00050	0.00046	0.00049	0.00028	0.00073	0.00301	0.00365	0.00348	0.00394
Beryllium (Be)-Total	NG	0.00277	0.00262	0.00258	0.00267	0.00272	0.00265	0.00274	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Bismuth (Bi)-Total	NG	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Boron (B)-Total	NG	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Calcium (Ca)-Total	0.00017	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Cadmium (Cd)-Total	NG	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	1.74	1.54	1.50	1.57	1.64	1.67	1.74
Cesium (Cs)-Total	NG	1.70	1.55	1.51	1.59	1.58	1.61	1.55	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Chromium (Cr)-Total	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cobalt (Co)-Total	NG	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Copper (Cu)-Total	0.002 @ hrds <120mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.00075	0.00058	0.00055	0.00062	0.00067	0.00066	0.00071
Iron (Fe)-Total	0.3	0.0059	0.0054	0.0056	0.0057	0.0058	0.0057	0.0057	0.0217	0.052	0.044	0.079	0.159	0.146	0.184
Lead (Pb)-Total	0.001 @ hrds <60 mg/L	0.038	0.025	0.032	0.038	0.039	0.040	0.041	0.000165	<0.000090	<0.000090	<0.000090	0.000115	0.000110	0.000135
Lithium (Li)-Total	NG	<0.000090	<0.000090	<0.000090	<0.000090	<0.000090	<0.000090	<0.000090	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Magnesium (Mg)-Total	NG	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.744	0.622	0.625	0.662	0.703	0.705	0.723
Manganese (Mn)-Total	NG	0.676	0.638	0.638	0.648	0.647	0.687	0.646	0.00455	0.00245	0.00211	0.00228	0.00350	0.00353	0.00405
Mercury (Hg)-Total	0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Molybdenum (Mo)-Total	0.073	0.00236	0.00207	0.00182	0.00187	0.00211	0.00211	0.00207	0.00022	<0.0020	<0.0020	<0.0020	<0.0020	0.00020	0.00021
Nickel (Ni)-Total	0.025 @ hrds <60mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Phosphorus (P)-Total	NG	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Potassium (K)-Total	NG	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.481	0.403	0.407	0.429	0.447	0.458	0.466
Rubidium (Rb)-Total	NG	0.420	0.398	0.393	0.406	0.404	0.428	0.407	0.00125	0.00068	0.00067	0.00081	0.00108	0.00099	0.00109
Selenium (Se)-Total	0.001	0.00067	0.00063	0.00061	0.00063	0.00067	0.00062	0.00067	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	NG	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.488	0.182	0.187	0.290	0.398	0.373	0.419
Silver (Ag)-Total	0.0001	0.196	0.198	0.172	0.200	0.198	0.195	0.217	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	NG	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.522	0.512	0.501	0.505	0.514	0.518	0.521
Strontium (Sr)-Total	NG	0.490	0.491	0.481	0.489	0.486	0.491	0.483	0.00847	0.00700	0.00695	0.00724	0.00801	0.00802	0.00828
Tellurium (Te)-Total	NG	0.00708	0.00666	0.00678	0.00674	0.00681	0.00686	0.00681	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Thallium (Tl)-Total	0.0008	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Thorium (Th)-Total	NG	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	0.00017	<0.0010	<0.0010	<0.0010	0.00012	0.00010	0.00013
Tin (Sn)-Total	NG	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Titanium (Ti)-Total	NG	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	0.00129	0.00088	0.00226	0.00541	0.00452	0.00464	0.00484

TABLE 3.3: Water Chemistry Results of Analysis for Routine Weekly

Water Chemistry Results or Analysis for Routine weekly																
Sample ID		BGS-1	BGS-1	BGS-2	BGS-3	BGS-4	BGS-5	BGS-6		BGS-1	BGS-1	BGS-2	BGS-3	BGS-4	BGS-5	BGS-6
Date Sampled	22-AUG-10	22-AUG-10	22-AUG-10	22-AUG-10	22-AUG-10	22-AUG-10	22-AUG-10	22-AUG-10	22-AUG-10	23-AUG-10	23-AUG-10	24-AUG-10	24-AUG-10	26-AUG-10	27-Aug-10	28-Aug-10
Time Sampled	08:10	06:00	06:30	06:47	07:55	07:33	07:00			16:32	15:45	15:30	15:14	14:05	14:30	14:50
Dup related to																
ALS Sample ID																
	CCME (2007) Guideline	L924262-1	L924262-2	L924262-3	L924262-4	L924262-5	L924262-6	L924262-7		L926625-1	L926625-2	L926625-3	L926625-4	L926625-5	L926625-6	L926625-7
Physical Tests																
Conductivity (mhos/cm)	NG	22.0	17.4	17.1	20.2	20.8	20.3	20.2		18.2	17.9	18.0	17.9	18.4	18.2	18.4
Hardness (as CaCO3) (mg/L)	NG	7.99	6.87	6.75	6.99	7.71	7.41	7.05		7.46	7.54	7.23	8.17	7.53	7.60	7.74
pH	6.5 - 9.0	7.17	7.14	7.13	7.23	7.17	7.17	7.18		6.75	6.76	6.79	6.80	6.78	6.83	6.83
Total Suspended Solids (mg/L)	15; 50	2.0	5.2	2.8	<2.0	2.8	2.4	2.0		3.2	5.2	2.8	5.2	2.8	3.6	3.6
Total Dissolved Solids (mg/L)	NG	18.0	10.0	6.0	12.0	18.0	16.0	16.0		<5.0	<5.0	14.0	<5.0	<5.0	20.0	14.0
Turbidity (NTU)	NG	4.11	6.65	4.84	3.06	4.57	4.28	3.94		2.75	5.34	4.06	5.46	3.63	3.54	3.21
Anions and Nutrients (mg/L)																
Alkalinity, Total (as CaCO3)	NG	7.9	7.3	7.1	7.6	7.6	7.5	7.5		8.0	7.7	7.7	7.8	8.0	7.9	8.0
Ammonia as N	See fact sheet	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bicarbonate (HCO3)	NG	9.6	8.8	8.7	9.3	9.3	9.1	9.1		9.7	9.4	9.3	9.5	9.7	9.7	9.7
Carbonate (CO3)	NG	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60		<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60
Chloride	NG	<0.50	0.51	<0.50	<0.50	<0.50	<0.50	<0.50		<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Fluoride	NG	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10		<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hydroxide (OH)	NG	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40		<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Nitrate and Nitrite as N	290000	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071		<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrate-N	NG	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrite-N	NG	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050		<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Kjeldahl Nitrogen	NG	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ortho Phosphorus Soluble As P	NG	<0.010	0.0124	0.0110	<0.010	0.0109	0.0104	0.0108		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus, Total	0.004	0.0106	0.0151	0.0130	0.0129	0.0131	0.0111	0.0119		<0.010	<0.010	0.0138	<0.010	<0.010	<0.010	<0.010
Sulfate	NG	1.57	1.58	1.53	1.54	1.57	1.57	1.58		1.56	1.52	1.51	1.52	1.54	1.52	1.57
Organic / Inorganic Carbon (mg/L)																
Dissolved Organic Carbon	NG	2.0	3.2	1.9	1.9	1.9	1.9	1.9		1.4	1.2	1.4	1.3	1.3	1.4	1.4
Total Organic Carbon	NG	2.0	1.9	2.1	1.9	2.3	2.0	2.0		1.6	1.4	1.4	1.5	1.4	1.6	1.6
Total Metals (mg/L)																
Aluminum (Al)-Total	0.1 @ pH>6.5	0.313	0.0093	0.259	0.189	0.246	0.237	0.236		0.176	0.274	0.208	0.386	0.196	0.184	0.201
Antimony (Sb)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Arsenic (As)-Total	0.005	0.0086	0.0061	0.0061	0.0061	0.0062	0.0072	0.0069		0.0063	0.0062	0.0045	0.0065	0.0060	0.0060	0.0061
Barium (Ba)-Total	NG	0.00536	0.00265	0.00482	0.00421	0.00484	0.00463	0.00458		0.00516	0.00442	0.00917	0.00439	0.00417	0.00417	0.00429
Beryllium (Be)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Bismuth (Bi)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Boron (B)-Total	NG	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010		<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	0.00017	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Calcium (Ca)-Total	NG	1.86	1.53	1.65	1.67	1.79	1.74	1.65		1.73	1.68	1.82	1.78	1.81	1.81	1.81
Cesium (Cs)-Total	NG	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	0.00012	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	0.001	0.014	<0.010	0.0012	<0.010	0.0012	0.0010	<0.010		<0.010	0.0015	0.0011	0.0020	<0.010	<0.010	<0.010
Cobalt (Co)-Total	NG	0.00022	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	0.00021	<0.00020	0.00049	<0.00020	<0.00020	<0.00020
Copper (Cu)-Total	0.002 @ hrds <120mg/L	0.00092	0.00066	0.00084	0.00076	0.00085	0.00078	0.00072		0.00073	0.000213	0.00082	0.00199	0.00078	0.00098	0.00098
Iron (Fe)-Total	0.3	0.345	<0.020	0.296	0.207	0.277	0.288	0.301		0.292	0.284	0.284	0.266	0.239	0.222	0.222
Lead (Pb)-Total	0.001 @ hrds <60 mg/L	0.000218	<0.000090	0.000212	0.000138	0.000195	0.000206	0.000174		<0.000090	0.000252	0.000177	0.000708	0.000163	0.000147	<0.000090
Lithium (Li)-Total	NG	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020		<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Magnesium (Mg)-Total	NG	0.816	0.645	0.739	0.709	0.784	0.745	0.733		0.746	0.786	0.740	0.878	0.749	0.747	0.858
Manganese (Mn)-Total	NG	0.00014	0.00054	0.00067	0.00052	0.00054	0.00069	0.00069		0.00048	0.00063	0.00046	0.00060	0.00040	0.00042	0.00042
Mercury (Hg)-Total	NG	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050		<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Molybdenum (Mo)-Total	0.073	0.00025	0.00022	<0.00020	<0.00020	0.00023	0.00023	0.00024		0.00023	<0.00020	0.00020	<0.00020	0.00021	<0.00020	0.00020
Nickel (Ni)-Total	0.025 @ hrds <60mg/L	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020		<0.020	<0.020	<0.020	0.00025	<0.020	<0.020	<0.020
Phosphorus (P)-Total	NG	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20		<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Potassium (K)-Total	NG	0.565	0.402	0.510	0.480	0.524	0.505	0.484		0.493	0.526	0.489	0.560	0.493	0.488	0.488
Rubidium (Rb)-Total	NG	0.00012	0.00064	0.00122	0.00144	0.00144	0.00136	0.00134		0.00125	0.00162	0.00137	0.00218	0.00137	0.00128	0.00115
Selenium (Se)-Total	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010		<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	NG	1.11	0.148	0.933	0.476	1.08	1.19	0.896		0.423	0.560	0.489	0.550	0.462	0.435	0.511
Silver (Ag)-Total	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	NG	0.587	0.712	0.543	0.527	0.540	0.520	0.502		0.473	0.479	0.477	0.471	0.466	0.468	0.468
Strontium (Sr)-Total	NG	0.00081	0.00061	0.00084	0.00068	0.00071	0.00066	0.00061		0.00081	0.00069	0.00085	0.00091	0.00082	0.00083	0.00074
Tellurium (Te)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	0.0008	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010		<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	NG	0.00026	<0.00010	0.00022	0.00018	0.00022	0.00020	0.00020		0.00017	0.00029	0.00020	0.00118	0.00019	0.00018	0.00019
Tin (Sn)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020		<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	&	

TABLE 3.3: Water Chemistry Results of Analysis for Routine Weekly

Sample ID		BGS-1	BGS-1	BGS-2	BGS-3	BGS-4	BGS-5	BGS-6	BGS-1	BGS-1	BGS-2	BGS-3	BGS-4	BGS-5	BGS-6	
Date Sampled		04-SEP-10	04-SEP-10	04-SEP-10	04-SEP-10	04-SEP-10	04-SEP-10	04-SEP-10	11-SEP-10	11-SEP-10	11-SEP-10	11-SEP-10	11-SEP-10	11-SEP-10	11-SEP-10	
Time Sampled		14:00	14:30	15:00	15:30	16:00	16:30	17:00	09:00	12:40	12:10	11:45	11:11	10:40	10:05	
Dup related to																
ALS Sample ID																
CCME (2007) Guideline		L929414-1	L929414-2	L929414-3	L929414-4	L929414-5	L929414-6	L929414-7	L931706-1	L931706-2	L931706-3	L931706-4	L931706-5	L931706-6	L931706-7	
Physical Tests																
Conductivity (mhos/cm)	NG	20.8	20.1	20.0	20.1	20.2	20.4	20.4	20.1	17.8	17.7	17.8	17.9	20.2	17.9	
Hardness (as CaCO3) (mg/L)	NG	7.10	6.65	6.65	6.61	6.67	7.15	6.89	8.09	6.69	7.72	6.72	6.66	7.64	8.05	
pH	6.5 - 9.0	7.22	7.21	7.21	7.22	7.22	7.23	7.23	7.22	7.20	7.23	7.21	7.21	7.23	7.23	
Total Suspended Solids (mg/L)	15, 50	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	3.6	2.0	2.0	<2.0	<2.0	<2.0	
Total Dissolved Solids (mg/L)	NG	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0	10.0	<5.0	12.0	10.0	12.0	20.0	18.0	
Turbidity (NTU)	NG	2.64	2.96	3.13	2.96	2.76	2.49	2.29	1.52	2.90	2.10	1.63	1.59	1.55	1.50	
Anions and Nutrients (mg/L)																
Alkalinity, Total (as CaCO3)	NG	8.0	7.7	7.7	7.7	7.8	7.9	7.9	7.7	7.5	7.4	7.4	7.5	7.5	7.5	
Ammonia as N	See fact sheet	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
Bicarbonate (HCO3)	NG	9.8	9.4	9.4	9.4	9.5	9.6	9.6	9.3	9.1	9.0	9.0	9.1	9.2	9.1	
Carbonate (CO3)	NG	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	
Chloride	NG	-	-	-	-	-	-	-	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
Fluoride	NG	-	-	-	-	-	-	-	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	
Hydroxide (OH)	NG	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	
Nitrate and Nitrite as N	290000	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<1.4	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	
Nitrate-N	NG	-	-	-	-	-	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
Nitrite-N	NG	-	-	-	-	-	-	-	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	
Total Kjeldahl Nitrogen	NG	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
Ortho Phosphorus Soluble As P	NG	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.0104	<0.010	<0.010	<0.010	<0.010	<0.010	
Phosphorus, Total	0.004	0.0150	0.0111	<0.010	0.0104	<0.010	<0.010	<0.010	<0.010	0.0121	<0.010	<0.010	0.0281	<0.010	<0.010	
Sulfate	NG	-	-	-	-	-	-	-	1.50	1.48	1.51	1.47	1.48	1.49	1.48	
Organic / Inorganic Carbon (mg/L)																
Dissolved Organic Carbon	NG	1.8	1.6	1.8	1.5	1.8	1.6	1.4	2.3	2.5	2.6	2.6	2.6	2.7	2.8	
Total Organic Carbon	NG	2.2	1.8	1.8	1.6	1.8	1.6	1.4	3.4	2.9	2.5	2.3	2.3	3.1	2.8	
Total Metals (mg/L)																
Aluminum (Al)-Total	0.1 @ pH<6.5	0.0904	0.208	0.182	0.184	0.175	0.145	0.149	0.144	0.285	0.189	0.151	0.153	0.169	0.138	
Antimony (Sb)-Total	NG	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	
Arsenic (As)-Total	0.005	0.0072	0.0047	0.0043	0.0049	0.0049	0.0052	0.0052	0.0056	0.0057	0.0051	0.0056	0.0056	0.0056	0.0056	
Barium (Ba)-Total	NG	0.00313	0.00391	0.00380	0.00394	0.00378	0.00375	0.00365	0.00346	0.00458	0.00372	0.00350	0.00362	0.00364	0.00343	
Beryllium (Be)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Bismuth (Bi)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Boron (B)-Total	NG	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	
Cadmium (Cd)-Total	0.00017	0.00050	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Calcium (Ca)-Total	NG	1.74	1.70	1.59	1.73	1.70	1.68	1.74	1.96	1.91	1.83	1.88	1.83	1.84	1.95	
Cesium (Cs)-Total	NG	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Chromium (Cr)-Total	0.001	<0.0010	<0.0010	<0.0010	<0.0010	0.0014	<0.0010	0.0013	<0.0010	0.0012	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Cobalt (Co)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Copper (Cu)-Total	0.002 @ hrds <120mg/L	0.00061	0.00072	0.00068	0.00069	0.00071	0.00070	0.00070	0.00073	0.00059	0.00086	0.00069	0.00081	0.00096	0.00062	
Iron (Fe)-Total	0.3	0.109	0.203	0.191	0.188	0.179	0.156	0.156	0.127	0.348	0.169	0.146	0.146	0.145	0.138	
Lead (Pb)-Total	0.001 @ hrds <60 mg/L	0.000205	0.000117	0.000125	0.000128	0.000122	0.000111	0.000120	<0.00090	0.000144	0.000105	0.000111	0.000121	0.000092	0.000092	
Lithium (Li)-Total	NG	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	
Magnesium (Mg)-Total	NG	0.719	0.696	0.656	0.708	0.697	0.683	0.693	0.774	0.819	0.767	0.767	0.759	0.742	0.772	
Manganese (Mn)-Total	NG	0.00271	0.00358	0.00342	0.00326	0.00344	0.00299	0.00314	0.00271	0.00468	0.00303	0.00279	0.00284	0.00273	0.00278	
Mercury (Hg)-Total	NG	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	
Molybdenum (Mo)-Total	0.073	0.00021	<0.00010	<0.00020	0.00020	0.00025	0.00020	0.00029	0.00022	0.00024	0.00021	0.00024	0.00023	0.00022	0.00025	
Nickel (Ni)-Total	0.025 @ hrds <60mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	
Phosphorus (P)-Total	NG	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	
Potassium (K)-Total	NG	0.458	0.496	0.454	0.484	0.474	0.462	0.480	0.503	0.569	0.515	0.519	0.508	0.499	0.520	
Rubidium (Rb)-Total	NG	0.00096	0.00122	0.00118	0.00114	0.00117	0.00106	0.00109	0.00101	0.00140	0.00112	0.00106	0.00105	0.00104	0.00103	
Selenium (Se)-Total	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	
Silicon (Si)-Total	NG	0.283	0.521	0.474	0.478	0.456	0.438	0.427	0.417	0.704	0.485	0.419	0.423	0.456	0.386	
Silver (Ag)-Total	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Sodium (Na)-Total	NG	0.501	0.486	0.457	0.511	0.484	0.472	0.497	0.541	0.551	0.535	0.535	0.538	0.514	0.551	
Strontium (Sr)-Total	NG	0.00631	0.00767	0.00778	0.00777	0.00778	0.00770	0.00785	0.00781	0.00801	0.00748	0.00764	0.00764	0.00757	0.00763	
Tellurium (Te)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Thallium (Tl)-Total	0.0008	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	
Thorium (Th)-Total	NG	<0.00010	0.00016	0.00015	0.00014	0.00013	0.00011	0.00011	<0.00010	0.00020	0.00015	0.00011	0.00011	0.00011	0.00012	
Tin (Sn)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	
Titanium (Ti)-Total	NG	0.00421	0.00793	0.00734	0.00673	0.00648	0.00563	0.00581	0.00528							

TABLE 3.3: Water Chemistry Results of Analysis for Routine Weekly

		BGS-1	BGS-1	BGS-2	BGS-3	BGS-4	BGS-5	BGS-6	BGS-1	BGS-2	BGS-3	BGS-4	BGS-5	BGS-6
Date Sampled		21-SEP-10	21-SEP-10	21-SEP-10	21-SEP-10	21-SEP-10	21-SEP-10	21-SEP-10	25-SEP-10	25-SEP-10	25-SEP-10	25-SEP-10	25-SEP-10	25-SEP-10
Time Sampled		11:15	10:00	10:27	10:35	11:03	11:05	10:47	07:50	10:00	09:40	09:25		
Dup related to														
ALS Sample ID														
		CCME (2007) Guideline	L935131-1	L935131-2	L935131-3	L935131-4	L935131-5	L935131-6	L937072-1	L937072-2	L937072-3	L937072-4	L937072-5	L937072-6
Physical Tests														
Conductivity (nmos/cm)	NG	17.8	17.4	17.4	17.4	18.0	17.7	17.7	20.9	20.3	20.4	20.7	20.8	20.8
Hardness (as CaCO3) (mg/L)	NG	6.85	6.58	6.64	6.57	7.04	6.95	7.02	7.23	6.98	6.99	7.31	7.02	7.16
pH	6.5 - 9.0	7.16	7.15	7.14	7.15	7.15	7.17	7.14	7.18	7.19	7.17	7.19	7.21	7.19
Total Suspended Solids (mg/L)	15-50	6.7	4.8	4.4	4.4	4.0	2.8	4.4	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Total Dissolved Solids (mg/L)	NG	32.0	40.0	28.0	32.0	38.0	32.0	22.0	<5.0	<5.0	<5.0	<5.0	<5.0	<5.0
Turbidity (NTU)	NG	2.23	3.01	2.55	2.51	2.48	2.43	2.38	1.40	1.57	1.53	1.50	1.61	1.49
Anions and Nutrients (mg/L)														
Alkalinity, Total (as CaCO3)	NG	7.5	7.2	7.2	7.2	7.5	7.4	7.5	8.0	7.8	7.8	7.9	8.0	7.9
Ammonia as N	See fact sheet	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Bicarbonate (HCO3)	NG	8.8	8.8	8.8	8.8	9.2	9.1	9.1	9.5	9.5	9.5	9.7	9.8	9.7
Carbonate (CO3)	NG	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60
Chloride	NG	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Fluoride	NG	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hydroxide (OH)	NG	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Nitrate and Nitrite as N	290000	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071	<0.071
Nitrate-N	NG	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrite-N	NG	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Total Kjeldahl Nitrogen	NG	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Ortho Phosphorus Soluble As P	NG	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Phosphorus (P)-Dissolved	0.004	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Sulfate	NG	1.48	1.48	1.47	1.48	1.50	1.49	1.49	1.51	1.50	1.50	1.51	1.51	1.50
Organic / Inorganic Carbon (mg/L)														
Dissolved Organic Carbon	NG	3.5	2.5	2.0	2.6	2.5	2.4	2.3	1.9	1.9	1.9	2.0	1.9	1.9
Total Organic Carbon	NG	4.1	3.1	2.4	2.4	2.4	2.4	2.4	2.2	1.9	2.0	1.9	1.9	2.9
Total Metals (mg/L)														
Aluminum (Al)-Total	0.1 at pH<6.5	0.162	0.211	0.184	0.176	0.147	0.153	0.163	0.0067	0.138	0.123	0.135	<0.0050	0.129
Antimony (Sb)-Total	NG	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Arsenic (As)-Total	0.005	0.0060	0.0047	0.0045	0.0044	0.0060	0.0060	0.0051	0.0050	0.0049	0.0044	0.0044	0.0050	0.0046
Barium (Ba)-Total	NG	0.00368	0.00408	0.00402	0.00411	0.00365	0.00371	0.00370	0.00242	0.00365	0.00359	0.00363	0.00249	0.00232
Beryllium (Be)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	0.00020	0.00032	<0.00020	0.00050	<0.00020	0.00033
Bismuth (Bi)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Boron (B)-Total	NG	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	0.00017	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Calcium (Ca)-Total	NG	1.89	1.72	1.81	1.68	1.77	1.72	1.79	1.68	1.67	1.79	1.76	1.69	1.83
Cesium (Cs)-Total	NG	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Chromium (Cr)-Total	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Copper (Cu)-Total	0.002 at hrds <120mg/L	0.00072	0.00063	0.00076	0.00077	0.00072	0.00068	0.00074	0.00044	0.00074	0.00062	0.00070	0.00045	0.00087
Iron (Fe)-Total	0.3	0.144	0.199	0.171	0.161	0.132	0.139	0.139	<0.020	0.125	0.116	0.116	<0.020	0.117
Lead (Pb)-Total	0.001 at hrds <60 mg/L	<0.000090	0.000134	0.000092	0.000110	0.000114	0.000126	0.000094	<0.000090	0.000092	0.000091	<0.000090	<0.000090	0.000113
Lithium (Li)-Total	NG	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Magnesium (Mg)-Total	NG	0.787	0.750	0.784	0.734	0.745	0.732	0.767	0.634	0.685	0.694	0.709	0.633	0.615
Manganese (Mn)-Total	NG	0.00287	0.00387	0.00322	0.00342	0.00272	0.00263	0.00275	0.00046	0.00258	0.00244	0.00258	0.00031	0.00030
Mercury (Hg)-Total	NG	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Molybdenum (Mo)-Total	0.073	0.00025	0.00022	0.00023	0.00021	0.00025	0.00024	0.00025	0.00021	0.00025	0.00023	0.00025	0.00021	0.00020
Nickel (Ni)-Total	0.025 at hrds <60mg/L	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Phosphorus (P)-Total	NG	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Potassium (K)-Total	NG	0.522	0.505	0.514	0.481	0.476	0.477	0.490	0.455	0.477	0.470	0.484	0.458	0.442
Rubidium (Rb)-Total	NG	0.00108	0.00122	0.00113	0.00109	0.00101	0.00106	0.00104	0.00063	0.00103	0.00098	0.00101	0.00063	0.00097
Selenium (Se)-Total	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	NG	0.427	0.476	0.436	0.436	0.409	0.413	0.389	0.114	0.357	0.328	0.354	0.113	0.102
Silver (Ag)-Total	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	NG	0.584	0.547	0.560	0.526	0.522	0.519	0.549	0.481	0.477	0.476	0.488	0.462	0.452
Strontium (Sr)-Total	NG	0.00792	0.00772	0.00781	0.00767	0.00785	0.00778	0.00786	0.00768	0.00784	0.00785	0.00821	0.00763	0.00755
Tellurium (Te)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Thallium (Tl)-Total	0.0008	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Thorium (Th)-Total	NG	0.00011	0.00018	0.00013	0.00013	0.00010	0.00012	0.00011	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	NG	0.00190	0.00192	0.00195	0.00212	0.00224	0.00188	0.00204	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Titanium (Ti)-Total	NG	0.00046	0.00026	0.00015	0.00033	0.00046	0.00046	0.00055	<0.00020	0.00049	0.00036	0.000430	<0.00020	0.000412
Tungsten (W)-Total	NG	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	NG	0.00013	0.00017	0.00014	0.00014	0.00013	0.00016	0.00013	<0.00010	0.00013	0.00013	0.00014	<0.00010	0.00014
Vanadium (V)-Total	NG	0.00028	0.00033	0.00027	0.00025	<0.00020	0.00022	0.00023	<0.00020	0.00021	0.00020	0.00021	<0.00020	0.00022
Zinc (Zn)-Total	0.03	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	&			

Total Aluminum CCME (2007) guidelines were exceeded at many of the stations throughout the open water season. This is not unexpected as reference areas in the Core Receiving Environmental Management (CREMP) stations periodically exceed Total Aluminum guidelines (AEM, 2011). Total lead and total silver concentrations exceeded CCME (2007) guidance levels on July 31st at all stations. This appears to be an anomaly and may be a result of field sampling error or equipment contamination. Unfortunately a duplicate was not taken during this sample event to determine or narrow the likely cause of these outliers. Lastly, there was one CCME (2007) exceedance of total copper at BGS-1 on August 23rd. The concentrations of these total metals parameters do not follow total suspended solids concentrations that are slightly elevated as compared to background, therefore these CCME (2007) exceedances are not likely related to dike construction inputs, rather may be natural occurrences. Previous water chemistry results have also noted infrequent exceedances in total aluminium and total copper within the project lakes. The CCME (2007) values are generally regarded as conservative measures for the protection of broad aquatic effects, thus exceedances such as these do not necessarily indicate potential ecological effects.

3.4 MITIGATION FOR DIKE CONSTRUCTION DURING THE OPEN WATER PERIOD

The TSS management plans outlined were followed according to the water quality monitoring and management plan (AEM, 2010). During open water dike construction approximately 4km of turbidity curtains were deployed with 2 layers nearest to the dike construction. To reduce the length of the curtains and thus reduce susceptibility to wind damage, the inner layer of turbidity curtains were effectively deployed in short spans using the causeway as an anchor. The outer curtain was predominantly deployed in shallower areas, however a few curtains were deployed in deeper zones that were more susceptible to high wind. In August and September, to ensure maximum control of TSS and prevent TSS exceedances, outer curtains in deeper zones periodically required adjustments and repair as a result of high winds. As planned, the pumping system assisted in the control of sediment dispersion and the low impact construction methods including material selection and a controlled pace of dike construction that responded to the routine TSS monitoring results, provided overall management of TSS.

The combination of these management measures (causeway construction during the winter, two layers of turbidity curtains and a pumping system) effectively controlled TSS inputs within the construction zone, therefore aside from turbidity curtain maintenance, mitigative actions were not required during the Bay-Goose Phase II open water construction (i.e. the TSS results did not prompt additional installation of curtains or an effects assessment biological study of Third Portage East basin).

3.5 QA/QC

3.5.1 Water Chemistry QA/QC

All laboratory analysis was completed by Multilab Direct in Rouyn-Noranda, Que and ALS Laboratories: Winnipeg, Man, which are accredited laboratories by the Canadian Association for Laboratories Accreditation (CALA) Inc. The results met laboratory QA/QC internal data quality objectives for precision and completeness. The certificate of analyses from Multilab and ALS are presented in Appendix D.

A total of five (5) field duplicate water samples were collected during the open water season; which is less than the target of 10% duplicates for QA/QC. The field QA/QC results are summarized in Table 3.5.1. The results of this evaluation indicate a high consistency between the original field sample and the field duplicate sample. In five (5) cases the samples exceeded the RPD of 50%. Four (4) of the RPD exceedences were lower than 10 times the method detection limits, therefore these met the QA/QC objectives.

One chlorophyll a sample did not meet the QA/QC objectives. This QA/QC exceedance may be due to improper field recordings. Chlorophyll a samples were collected in 1L bottles, taken into the field lab and filtered using ALS laboratory provided filters, preserved, frozen and then shipped to ALS Winnipeg. Unless otherwise recorded, the typical volume filtered is 500mL. Despite this being a likely source of error, field sheets were double checked and did not indicate a volume difference in the chlorophyll a recording that exceeded the RPD of 50%. In general, this one QA/QC exceedance does not affect the overall interpretation of the water chemistry results. Future field sampling QA will aim to eliminate such errors.

3.5.2 Equipment Calibration QA/QC

To meet the QA/QC objectives, turbidity was measured using the approved McVan's Analite NEP160-3-05R portable turbidity meter/logger with a high sensitivity NEP260 90° probe. The meter was calibrated by qualified technicians and properly maintained following the manufacturers instructions. Turbidity meters were calibrated before each sampling event (i.e. daily, in most cases), using the manufactured specified calibration solution. Due to the sensitivity of the meter, slightly negative values were periodically recorded in the field during broad surveys (i.e. in un-impacted stations in SP or TPN, recordings may be -0.2 NTU). On these occasions the meters were checked against the calibration solution in the lab. These small discrepancies did not effect the conversion of turbidity into TSS concentrations (as they are very small) and were inconsistent occurrences that may be a result of slightly contaminated calibration solutions. No calibration errors were noted.

3.5.3 Turbidity-TSS Relationship QA/QC

The establishment of a site specific TSS-turbidity relationship at Meadowbank was based on the most representative data from 2008 and 2009 dike construction (which also used McVan's Analite NEP160-3-05R portable turbidity meter/logger with a high sensitivity NEP260 90° probe). These turbidity data collected and paired with representative TSS water samples were statistically analyzed to produce a site specific TSS-turbidity correlation that was used throughout the 2010 causeway and dike construction (Azimuth, 2010, Appendix B). The QA/QC approach followed the methods used in Azimuth (2010) which truncated the data set to meet statistical conditions. All data were analyzed in Sigma-Stat version 3.5 (2006).

Thirty one (n=31) data points, 28 from causeway construction and 3 from open water dike construction from Bay-goose Dike Phase 2, were evaluated against the TSS-turbidity predictive correlation model results. As outlined in AEM (2010), a simple linear regression comparing predicted TSS results to laboratory TSS results demonstrated a difference between the predicted/modelled

TSS and laboratory TSS results ($R^2 = 0.791$, $p < 0.05^4$) (See Figure 3.5.3). As well, the data was Log transformed and evaluated using analysis of covariance which also found a significant differences ($R^2 = 0.754$ $p < 0.05$). The QA/QC comparison suggested that the turbidity-TSS relationship underestimated laboratory TSS concentrations.

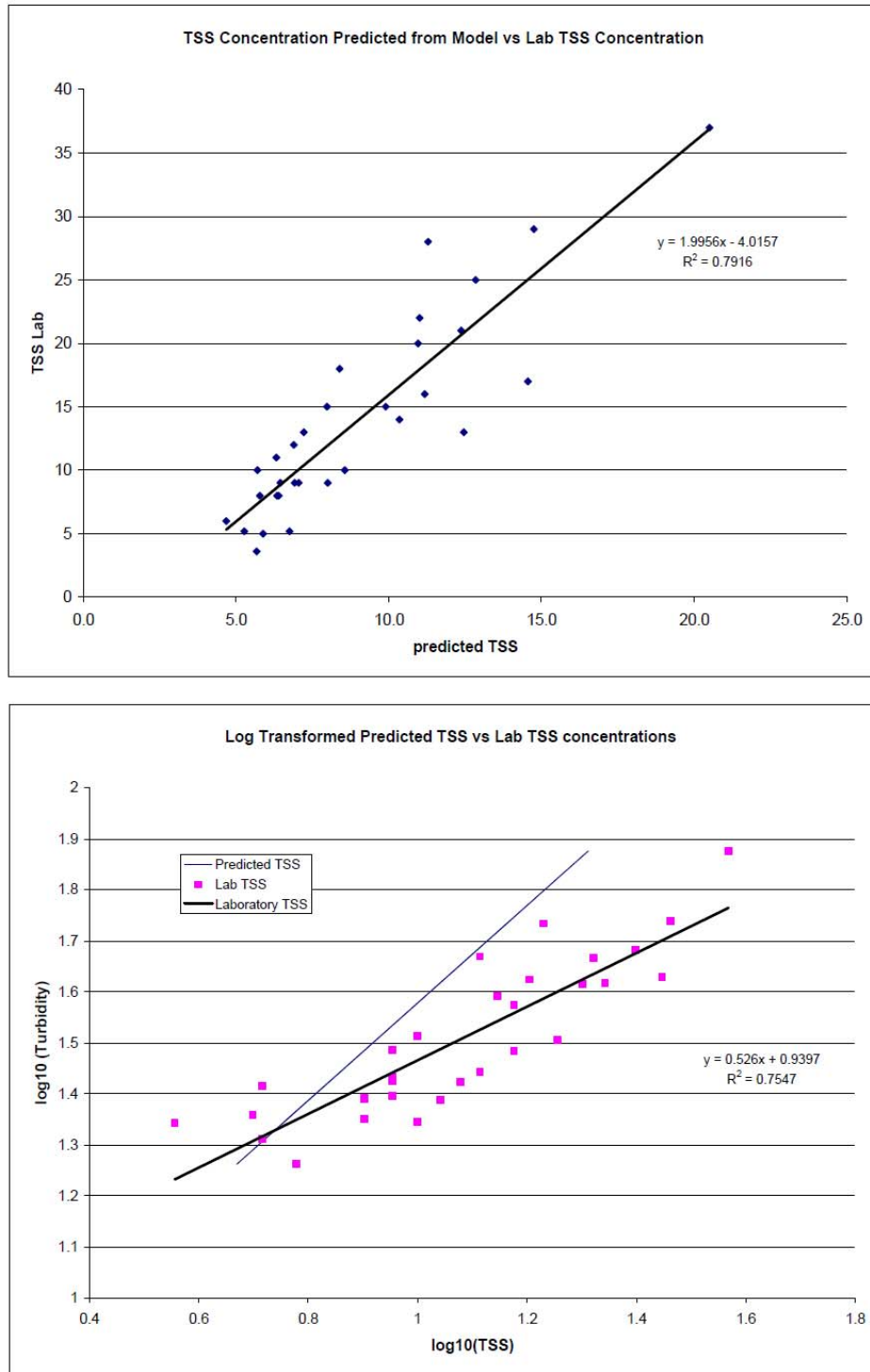
In follow-up, additional regression analysis was conducted only on the laboratory TSS results vs field turbidity which found that these data were also significantly different ($R^2 = 0.792$; $p < 0.05$)⁵. This indicates that significant differences in the QA/QC analysis may be explained by the inherent variability of the laboratory data compared to field turbidity measurements. With a larger-wide ranged data set, similar to that used in Azimuth (2010), it is expected that the lab correlation would improve, meeting the statistical conditions and better aligning lab TSS with the TSS-turbidity predictive model.

Overall, this QA/QC comparison did not impact the monitoring studies ability to respond to elevated TSS based on the TSS-turbidity correlation. Ultimately, the TSS concentrations based on field turbidity readings predicted TSS with enough accuracy to allow for AEM to forecast and respond to dike construction activity over an eight month period.

⁴ These data passed the test for normality but did not pass the test for constant variance.

⁵ These data passed the test for normality and constant variance

Figure 3.5.3: Comparison of Laboratory TSS Concentrations vs TSS predicted Concentrations



SECTION 4 • SUMMARY

The environment department of the Agnico-Eagle Mines Ltd. Meadowbank Division (AEM) conducted causeway and in-water dike construction monitoring for the Bay-Goose phase II dike construction in accordance with the approved Water Quality Monitoring and Management Plan for Dike Construction and Dewatering (AEM, 2010). The in-water dike construction Total Suspended Solids (TSS) management included the construction of the causeway during the ice-cover period and the installation of 2 layers of turbidity curtains and a water pumping system to prevent TSS from entering the receiving environment for the completion of the dike during the open water period.

During winter construction of the causeway and dike construction during the open-water season turbidity was used as a surrogate for TSS (using a TSS/turbidity correlation) which provided AEM with the ability to forecast TSS levels and manage construction activity to avoid licence limit exceedances. Routine monitoring was completed during the causeway construction at 3 stations that moved with the advancement of the causeway construction front. During open water dike construction, routine monitoring was completed at seven (7) fixed stations daily and weekly at broad stations. Water chemistry samples were collected on a weekly basis and submitted to a CALA certified laboratory to verify TSS, general parameters such as pH, conductivity, and hardness, nutrients, anions, total metals and dissolved metals concentrations.

Throughout the construction of the Bay-Goose dike phase II (from February 18th until October 1st, 2010), the maximum monthly mean (MMM) of 15 mg/L and short term maximum (STM) TSS concentrations of 50 mg/L⁶ were not exceeded during the open water season. During causeway construction from February 18th to mid June an STM of 25 mg/L was adopted to protect fish habitat during sensitive life stages. This limit was exceeded only once on May 23rd. No weekly laboratory TSS levels exceeded the license limits throughout causeway and open water dike construction. As a result, no mitigative action was deemed necessary.

Collectively, the construction of the causeway which was to provide wind and water current protection; the installation of two layers of turbidity curtains, one layer that was anchored by the causeway and another outside of the first layer, in shallow areas; as well, strategically placed pumps that provided a net influx of clean water within the construction zone were very effective in controlling the amount of TSS escaping into the receiving environment. The planning, management and monitoring approach used in 2010 allowed timely completion of the Bay-Goose Dike phase II generally within the NWB licensed TSS limits.

⁶ During open water at BGS-3 and 4, the STM and MMM limit on Sept 1st was 25mg/L and 6 mg/L, as these stations were close to high value habitat areas (i.e. potential fish spawning habitat).

SECTION 5 • REFERENCES

AEM, 2011. Meadowbank Mine: Core Receiving Environment Monitoring Program. Completed as part of the 2010 Annual report by Azimuth Consulting group on behalf of AEM. March 2011.

AEM. 2010. Meadowbank Gold Project: Water Quality Monitoring and Management Plan for Dike Construction and Dewatering. Prepared by AEM, Version 4, April 2010.

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AEM (2008). Quality Assurance/ Quality Control Plan: Meadowbank Division, December 2008. Prepared by Agnico-Eagle Mines Limited- Meadowbank Division.

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APPENDIX A:

TURBIDITY FIELD RESULTS AND FIGURES

MARCH 2011

Appendix A: Dike Construction Routine Survey Turbidity Profiles by Day

Date	Station	Time	Maximum Depth(m)	Max NTU	Turbidity Depth Profile (meters below surface; units: NTU)																		
					0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m
2010-07-14	BGS-1	17:30	14.0	13.2	13.2	6.7	6.8	6.5	6.4	6.6	6.9	8.2	10.4	10.6	11.0	10.7							
2010-07-14	BGS-2	17:00	10.0	7.7	6.4	6.2	6.6	6.8	6.9	5.7	6.4	6.8	7.5	7.7									
2010-07-14	BGS-3	16:42	3.4	10.4	7.7	4.0	3.8	10.4															
2010-07-14	BGS-4	16:13	12.5	5.6	3.6	3.7	4.1	4.1	4.1	3.9	4.4	4.6	4.4	4.9	5.5	5.6	5.5						
2010-07-14	BGS-5	15:43	17.5	7.8	3.8	3.8	3.6	3.8	3.7	3.9	3.8	4.3	4.0	4.2	5.0	4.9	5.4	5.2	5.6	5.5	5.9	7.8	
2010-07-14	BGS-6	15:13	6.0	4.9	3.8	3.9	3.8	4.3	4.5	4.9													
2010-07-14	BGE-1	12:45	5.4	3.8	3.3	3.5	3.5	3.5	3.4	3.8													
2010-07-18	BGS-1	15:07	14.0	21.1	3.5	4.2	3.6	3.5	3.6	3.8	3.0	3.1	3.1	5.1	8.0	10.7	18.1	21.1					
2010-07-18	BGS-2	15:39	10.0	4.9	4.2	3.7	3.7	3.8	3.9	3.6	3.0	3.2	3.4	4.9									
2010-07-18	BGS-3	15:52	3.4	3.3	2.9	3.2	3.3	3.3															
2010-07-18	BGS-4	16:16	12.5	4.7	3.0	3.1	3.1	3.0	3.1	3.2	3.2	3.2	3.4	3.2	3.3	3.4	3.4	4.7					
2010-07-18	BGS-5	16:36	17.5	3.7	3.0	2.9	3.1	3.3	3.1	3.0	3.1	3.1	3.2	3.2	3.1	3.2	3.1	3.4	3.6	3.7	3.7		
2010-07-18	BGS-6	16:55	6.0	3.1	2.8	3.0	3.1	3.0	3.0	2.8													
2010-07-18	BGE-1	18:37	5.4	2.9	2.5	2.9	2.9	2.9	2.9	2.9	2.8												
2010-07-19	BGS-1	15:12	14.0	8.6	2.6	2.8	2.4	2.2	3.0	2.7	2.5	2.5	3.2	3.3	7.8	8.6							
2010-07-19	BGS-2	15:01	10.0	3.9	2.5	2.6	2.4	2.4	2.5	2.8	2.9	3.9	3.4										
2010-07-19	BGS-3	15:29	3.4	2.4	2.4	2.4																	
2010-07-19	BGS-4	14:22	12.5	3.8	2.7	2.7	2.8	2.6	2.8	2.9	3.0	2.9	2.9	3.3	3.8								
2010-07-19	BGS-5	14:40	17.5	3.6	2.3	2.4	2.6	2.5	2.6	2.8	2.7	2.9	2.8	2.9	2.9	2.8	3.0	3.2	3.6	3.4			
2010-07-19	BGS-6	14:51	6.0	2.7	2.3	2.3	2.3	2.7	2.7														
2010-07-19	BGE-1	16:17	5.4	2.9	2.9	2.7	2.8	2.7															
2010-07-20	BGS-1	15:12	14.0	25.1	2.3	2.1	2.3	2.0	2.2	2.3	2.5	2.3	2.5	2.4	2.5	10.5	25.1						
2010-07-20	BGS-2	15:01	10.0	4.2	2.5	2.1	2.2	2.4	2.3	2.6	2.9	4.2	3.7										
2010-07-20	BGS-3	15:29	3.4	2.4	2.3	2.3	2.4																
2010-07-20	BGS-4	14:22	12.5	2.9	2.5	2.9	2.7	2.7	2.7	2.7	2.7	2.8	2.7	2.9	2.9								
2010-07-20	BGS-5	14:40	17.5	6.0	2.4	2.4	2.6	2.5	2.5	2.6	2.6	2.5	2.5	2.6	2.8	2.9	3.0	6.0					
2010-07-20	BGS-6	14:51	6.0	2.6	2.6	2.5	2.5	2.5	2.6														
2010-07-20	BGE-1	16:17	5.4	2.8	2.6	2.7	2.6	2.8															
2010-07-21	BGS-1	14:14	14.0	6.2	2.0	2.1	2.2	1.9	2.0	1.9	2.2	3.0	2.7	3.3	2.9	6.2	3.6						
2010-07-21	BGS-2	13:44	10.0	2.4	2.0	2.0	2.2	2.2	2.4	2.4	2.4	2.4	2.4										
2010-07-21	BGS-3	13:22	3.4	2.3	2.0	2.1	2.3																
2010-07-21	BGS-4	12:58	12.5	3.0	2.1	2.2	2.3	2.3	2.6	2.6	2.5	3.0	2.6	2.9	2.9								
2010-07-21	BGS-5	13:09	17.5	4.9	3.0	2.4	2.2	2.5	2.3	2.6	2.7	2.9	2.9	2.8	2.8	2.8	3.2	2.9	4.9	3.5			
2010-07-21	BGS-6	12:45	6.0	2.4	2.2	2.1	2.4	2.4	2.3														
2010-07-21	BGE-1	16:10	5.4	2.8	2.8	2.6	2.3	2.3															
2010-07-22	BGS-1	9:28	14.0	11.1	4.0	4.7	4.1	3.5	3.1	2.8	2.9	2.7	2.5	3.0	5.5	9.7	11.1						
2010-07-22	BGS-2	9:20	10.0	2.5	1.9	1.9	2.0	2.0	2.0	2.2	2.2	2.1	2.5										
2010-07-22	BGS-3	9:15	3.4	2.7	2.4	2.4	2.7																
2010-07-22	BGS-4	9:05	12.5	3.0	2.6	2.2	2.2	2.3	2.4	2.6	2.4	3.0	3.0	2.7	3.0								
2010-07-22	BGS-5	8:49	17.5	4.4	2.0	2.0	2.3	2.4	2.2	2.3	2.6	2.3	2.8	2.7	2.8	2.9	3.2	3.4	4.0	4.4			
2010-07-22	BGS-6	8:38	6.0	2.3	2.3	2.1	2.2	2.3															
2010-07-22	BGE-1	9:42	5.4	2.4	2.4	2.2	2.2	2.3															
2010-07-23	BGS-1	14:38	14.0	17.0	1.5	1.6	1.7	1.6	1.6	1.6	1.8	1.8	2.1	3.0	4.9	10.0	17.0						
2010-07-23	BGS-2	14:36	10.0	2.2	1.7	1.7	1.6	1.6	1.5	1.5	1.8	2.0	2.2										
2010-07-23	BGS-3	14:32	3.4	2.9	2.0	2.0	2.9																
2010-07-23	BGS-4	14:26	12.5	2.7	2.1	2.0	2.1	2.1	2.2	2.1	2.2	2.3	2.5	2.7	2.7								
2010-07-23	BGS-5	14:20	17.5	3.5	2.0	2.0	2.0	2.1	2.1	2.1	2.2	2.2	2.3	2.4	2.8	2.8	3.0	3.4	3.5	3.3			
2010-07-23	BGS-6	14:15	6.0	2.2	2.1	2.2	2.0	2.1	2.1														
2010-07-23	BGE-1	17:15	5.4	2.3	2.0	2.1	2.3	2.3															
2010-07-24	BGS-1	14:38	14.0	14.0	1.5	1.6	1.6	1.6	1.6	1.6	2.0	2.1	3.4	4.9	11.8	14.0							
2010-07-24	BGS-2	14:36	10.0	2.3	1.6	1.7	1.6	1.5	1.5	1.9	1.7	1.7	2.3										
2010-07-24	BGS-3	14:32	3.4	1.9	1.9	1.6	1.6																

Appendix A: Dike Construction Routine Survey Turbidity Profiles by Day																						
Date	Station	Time	Maximum	Max	Turbidity Depth Profile (meters below surface; units: NTU)																	
			Depth(m)	NTU	0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m
2010-07-24	BGS-4	14:26	12.5	2.8	1.8	1.7	1.7	1.8	2.0	2.0	2.1	2.1	2.2	2.8	2.6							
2010-07-24	BGS-5	14:20	17.5	3.7	1.7	1.7	1.5	1.6	1.7	1.8	2.0	2.1	3.7	2.5	3.2	2.5	2.7	2.7	3.0	3.1	3.2	
2010-07-24	BGS-6	14:15	6.0	1.8	1.7	1.8	1.5	1.6	1.6													
2010-07-24	BGE-1	17:15	5.4	2.1	1.8	1.7	1.7	1.8	2.1	2.0												
2010-07-25	BGS-1	10:12	14.0	11.8	1.4	1.3	1.4	1.5	1.5	1.5	1.4	1.4	1.3	1.7	2.2	2.1	5.4	11.2	11.8			
2010-07-25	BGS-2	10:08	10.0	2.2	1.5	1.4	1.5	1.5	1.4	1.4	1.3	1.7	2.2									
2010-07-25	BGS-3	10:05	3.4	1.6	1.5	1.5	1.6															
2010-07-25	BGS-4	9:35	12.5	2.9	1.7	1.8	1.6	1.6	1.7	1.7	1.8	2.0	2.5	2.2	2.9							
2010-07-25	BGS-5	9:40	17.5	3.0	1.7	1.6	1.5	1.7	1.6	1.7	1.8	2.1	2.2	2.8	3.0	2.4	2.4	2.8	2.9	3.0		
2010-07-25	BGS-6	9:55	6.0	1.6	1.6	1.5	1.5	1.5	1.5													
2010-07-25	BGE-1	13:30	5.4	1.7	1.7	1.7	1.6	1.6														
7/26/2010	BGS-1	11:29	14.0	9.8	1.1	1.0	1.0	1.0	1.2	1.0	1.2	1.4	1.4	2.3	3.5	7.7	9.8					
7/26/2010	BGS-2	11:19	10.0	1.3	1.3	1.2	1.0	1.0	0.9	0.7	0.9	1.0	1.1									
7/26/2010	BGS-3	11:10	3.4	1.7	1.4	1.7	1.7															
7/26/2010	BGS-4	10:31	12.5	4.2	1.6	1.6	1.4	1.4	1.5	1.5	1.8	1.4	2.9	4.2	3.5							
7/26/2010	BGS-5	10:59	17.5	2.6	1.8	1.6	1.5	1.5	1.5	1.6	1.2	1.8	2.3	2.6	2.0	2.2	2.3	2.6	2.6	2.5		
7/26/2010	BGS-6	11:04	6.0	1.5	1.4	1.3	1.4	1.4	1.5													
7/26/2010	BGE-1	14:00	5.4	1.8	1.3	1.3	1.4	1.8														
7/27/2010	BGS-1	11:29	12.0	7.2	1.4	1.4	1.4	1.3	1.0	0.8	0.8	1.0	1.0	1.6	3.2	7.2						
7/27/2010	BGS-2	11:19	8.0	1.4	1.4	1.4	1.3	0.9	0.8	0.9	0.9											
7/27/2010	BGS-3	11:10	3.0	1.4	1.4	1.4	1.1															
7/27/2010	BGS-4	10:31	5.0	1.9	1.3	1.4	1.3	1.2	1.3	1.6	1.8	1.8	1.7	1.9	1.7							
7/27/2010	BGS-5	10:59	15.0	7.0	1.4	1.3	1.3	1.3	1.2	1.3	1.5	1.7	2.0	1.9	2.0	2.0	2.2	2.6	5.3	7.0		
7/27/2010	BGS-6	11:04	8.0	1.4	1.4	1.3	1.3	1.3	1.4													
7/27/2010	BGE-1	14:00	5.0	1.8	1.5	1.4	1.8	1.7														
7/28/2010	BGS-1	10:30	12.0	2.6	0.9	0.9	0.9	0.8	0.8	0.7	0.8	0.9	1.0	1.2	2.6							
7/28/2010	BGS-2	10:30	8.0	1.0	0.9	0.9	0.9	1.0	0.9	0.8	0.8											
7/28/2010	BGS-3	10:30	3.0	1.0	0.9	0.9	1.0															
7/28/2010	BGS-4	10:30	5.0	1.5	1.3	1.4	1.4	1.5														
7/28/2010	BGS-5	14:00	15.0	1.8	1.1	1.4	1.2	1.3	1.3	1.3	1.1	1.2	1.2	1.1	1.2	1.8	1.3	1.8	1.8			
7/28/2010	BGS-6	14:00	8.0	1.2	1.0	1.0	1.1	1.2	1.2	1.1	1.2											
7/28/2010	BGE-1	9:30	5.0	1.5	1.4	1.5	1.5	1.4														
7/29/2010	BGS-1	10:30	12.0	0.8	0.3	0.3	0.2	0.2	0.3	0.3	0.2	0.3	0.3	0.4	0.8							
7/29/2010	BGS-2	10:30	8.0	0.3	0.3	0.3	0.2	0.2	0.2	0.3	0.3											
7/29/2010	BGS-3	10:30	3.0	0.3	0.3	0.2	0.3															
7/29/2010	BGS-4	10:30	5.0	0.8	0.8	0.7	0.7	0.7														
7/29/2010	BGS-5	14:00	15.0	0.9	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.7	0.9	0.9	0.6				
7/29/2010	BGS-6	14:00	8.0	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6											
7/29/2010	BGE-1	9:30	5.0	1.1	1.1	1.1	1.0	1.1														
7/30/2010	BGS-1	10:30	12.0	2.6	0.6	0.6	0.6	0.7	0.6	0.6	0.5	0.6	0.8	1.0	2.6							
7/30/2010	BGS-2	10:30	8.0	0.6	0.6	0.6	0.5	0.5	0.6	0.6	0.5											
7/30/2010	BGS-3	10:30	3.0	0.6	0.6	0.6	0.6															
7/30/2010	BGS-4	10:30	5.0	1.0	1.0	1.0	1.0	1.0														
7/30/2010	BGS-5	14:00	15.0	2.1	0.9	0.9	0.8	0.9	0.8	0.8	0.9	0.9	0.9	1.5	1.4	1.8	1.8	2.1				
7/30/2010	BGS-6	14:00	8.0	1.0	1.0	0.9	1.0	0.8	0.9	0.9	1.0											
7/30/2010	BGE-1	9:30	5.0	1.2	1.1	1.1	1.1	1.2														
7/31/2010	BGS-1	15:00	12.0	3.4	0.7	0.7	0.7	0.7	0.5	0.6	0.5	0.4	0.7	1.3	3.4							
7/31/2010	BGS-2	15:20	8.0	0.7	0.6	0.7	0.5	0.6	0.5	0.5	0.6											
7/31/2010	BGS-3	15:50	3.0	0.6	0.6	0.6	0.6															
7/31/2010	BGS-4	16:20	5.0	0.7	0.7	0.7	0.7	0.7														
7/31/2010	BGS-5	17:00	15.0	2.4	0.8	0.8	0.8	0.8	0.8	1.0	0.8	1.4	1.2	1.1	1.3	1.7	2.4	2.4				
7/31/2010	BGS-6	17:30	8.0	0.9	0.8	0.8	0.8	0.9	0.8	0.8	0.9											
7/31/2010	BGE-1	18:00	5.0	1.0	0.8	0.9	1.0	1.0														

Appendix A: Dike Construction Routine Survey Turbidity Profiles by Day

Date	Station	Time	Maximum Depth(m)	Max NTU	Turbidity Depth Profile (meters below surface; units: NTU)																		
					0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m
8/1/2010	BGS-1	15:00	12.0	2.1	0.4	0.4	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.9	2.1								
8/1/2010	BGS-2	15:20	8.0	0.6	0.6	0.5	0.5	0.3	0.4	0.2	0.3												
8/1/2010	BGS-3	15:50	3.0	0.5	0.5	0.5	0.5																
8/1/2010	BGS-4	16:20	5.0	0.8	0.7	0.8	0.6	0.6															
8/1/2010	BGS-5	17:00	15.0	3.1	0.5	0.5	0.6	0.6	0.6	0.7	0.6	0.5	0.9	2.1	1.4	1.9	2.4	3.1					
8/1/2010	BGS-6	17:30	8.0	1.0	0.5	0.6	0.7	0.7	0.6	0.6	1.0												
8/1/2010	BGE-1	18:00	5.0	0.7	0.6	0.6	0.7	0.6															
8/2/2010	BGS-1	8:08	12.0	4.0	0.4	0.4	0.4	0.4	0.4	0.3	0.1	0.1	0.5	1.1	4.0	2.1							
8/2/2010	BGS-2	8:15	8.0	0.3	0.3	0.2	0.3	0.3	0.3	0.2	0.2												
8/2/2010	BGS-3	8:22	3.0	0.5	0.4	0.4	0.5																
8/2/2010	BGS-4	8:48	5.0	1.0	0.6	0.7	0.8	1.0															
8/2/2010	BGS-5	8:39	15.0	3.3	0.4	0.4	0.4	0.5	0.5	0.4	0.4	0.6	0.8	1.4	1.7	1.8	3.3	2.6					
8/2/2010	BGS-6	8:30	8.0	0.6	0.5	0.4	0.5	0.5	0.5	0.5	0.6												
8/2/2010	BGE-1	7:00	5.0	0.5	0.5	0.5	0.5	0.5															
8/3/2010	BGS-1	8:08	12.0	3.5	0.6	0.6	0.6	0.6	0.7	0.4	0.2	0.3	0.4	0.4	3.5								
8/3/2010	BGS-2	8:15	8.0	0.5	0.5	0.5	0.5	0.4	0.4	0.2	0.4												
8/3/2010	BGS-3	8:22	3.0	0.6	0.6	0.6	0.6																
8/3/2010	BGS-4	8:48	5.0	0.7	0.7	0.7	0.7	0.7															
8/3/2010	BGS-5	8:39	15.0	15.4	0.5	0.5	0.5	0.6	0.6	0.5	0.5	0.7	1.1	6.1	6.4	8.2	7.6	15.4					
8/3/2010	BGS-6	8:30	8.0	1.3	0.5	0.5	0.6	0.5	0.5	0.6	1.3												
8/3/2010	BGE-1	7:00	5.0	0.9	0.7	0.7	0.7	0.9															
8/4/2010																							
2010-08-05																							
8/6/2010	BGS-1	8:08	12.0	3.6	1.2	1.3	1.4	1.1	1.3	1.2	2.0	1.8	1.5	1.5	3.6								
8/6/2010	BGS-2	8:15	9.0	1.5	1.3	1.0	1.2	1.4	1.2	1.5	1.2	1.1											
8/6/2010	BGS-3	8:22	3.0	2.3	2.3	2.2	2.0																
8/6/2010	BGS-4	8:48	5.0	6.5	5.3	5.6	5.7	5.9	6.5														
8/6/2010	BGS-5	8:39	15.0	16.4	5.5	5.2	5.4	5.3	5.3	5.5	5.8	7.0	9.9	10.0	12.0	12.1	13.1	16.4					
8/6/2010	BGS-6	8:30	8.0	7.5	6.3	6.2	6.4	6.3	6.5	6.9	7.5												
8/6/2010	BGE-1	7:00	5.0	14.1	10.3	11.8	14.1	14.0															
8/7/2010	BGS-1	14:30	11.0	22.2	2.0	2.2	1.7	1.6	1.1	1.4	1.7	1.4	2.1	22.2									
8/7/2010	BGS-2	14:45	8.0	2.0	2.0	2.0	1.9	1.7	1.0	1.0	1.2												
8/7/2010	BGS-3	15:05	3.0	2.6	2.4	2.5	2.6																
8/7/2010	BGS-4	15:30	5.0	5.0	3.1	3.6	4.6	5.0															
8/7/2010	BGS-5	15:54	15.0	13.9	3.4	3.5	3.5	3.6	4.0	4.4	5.6	7.2	7.5	9.0	11.4	12.7	13.9	13.4					
8/7/2010	BGS-6	16:05	8.0	6.6	5.0	5.0	5.0	5.2	4.7	6.0	6.6												
8/7/2010	BGE-1	17:00	5.0	8.0	6.5	6.6	7.4	8.0															
8/8/2010	BGS-1	14:30	11.0	50.3	1.9	1.9	1.4	1.3	0.9	1.3	2.2	3.2	4.5	50.3									
8/8/2010	BGS-2	14:45	8.0	3.4	1.9	1.8	1.6	1.1	0.9	0.8	3.4												
8/8/2010	BGS-3	15:05	3.0	2.7	2.7	2.5	2.1																
8/8/2010	BGS-4	15:30	5.0	5.2	4.8	4.5	5.2	5.2															
8/8/2010	BGS-5	15:54	15.0	13.4	4.2	4.3	4.4	5.0	4.2	3.9	6.4	8.2	8.4	10.6	11.3	13.4	12.7	13.3					
8/8/2010	BGS-6	16:05	8.0	6.5	5.3	5.6	5.1	4.6	5.8	6.5	5.9												
8/8/2010	BGE-1	17:00	5.0	7.6	5.2	5.1	5.5	7.6															
8/9/2010	BGS-1	14:30	11.0	41.7	2.5	2.6	2.6	1.8	1.9	1.5	2.3	4.6	10.0	41.7									
8/9/2010	BGS-2	14:45	8.0	3.0	2.4	2.6	3.0	1.8	1.4	2.1	3.0												
8/9/2010	BGS-3	15:05	3.0	4.7	4.0	4.6	4.7																
8/9/2010	BGS-4	15:30	5.0	5.2	4.4	4.9	5.2	5.2															
8/9/2010	BGS-5	15:54	15.0	13.3	3.9	3.8	4.2	4.1	4.3	4.3	7.9	9.5	11.2	10.9	10.9	11.7	12.4	13.3					
8/9/2010	BGS-6	16:05	8.0	6.9	4.6	4.7	4.8	5.6	5.0	6.0	6.9												
8/9/2010	BGE-1	17:00	5.0	6.0	4.8	5.5	5.8	6.0															
8/10/2010	BGS-1	14:30	11.0	51.7	2.2	2.1	2.0	2.0	1.9	5.4	4.3	11.7	51.7	32.7									

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Date	Station	Time	Maximum Depth(m)	Max NTU	Turbidity Depth Profile (meters below surface; units: NTU)																		
					0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m
8/10/2010	BGS-2	14:45	8.0	5.0	1.9	1.9	1.9	1.8	1.8	1.8	5.0												
8/10/2010	BGS-3	15:05	3.0	2.7	2.7	2.6	2.6																
8/10/2010	BGS-4	15:30	5.0	4.6	4.6	4.5	4.6	4.2															
8/10/2010	BGS-5	15:54	15.0	12.1	3.6	3.3	3.2	2.9	2.8	2.7	5.0	5.9	6.5	7.4	7.0	10.5	11.2	12.1					
8/10/2010	BGS-6	16:05	8.0	4.5	3.4	3.6	3.3	3.1	2.7	2.7	4.5												
8/10/2010	BGE-1	17:00	5.0	5.3	5.1	5.3	5.3	5.1															
8/11/2010	BGS-1	9:09	11.0	65.1	2.3	2.5	2.4	2.4	2.5	3.0	3.1	3.3	2.6	65.1									
8/11/2010	BGS-2	9:05	8.0	2.1	1.9	2.0	2.0	2.0	2.0	2.0	2.1												
8/11/2010	BGS-3	9:00	3.0	3.7	3.4	3.4	3.7																
8/11/2010	BGS-4	8:57	5.0	3.6	3.4	3.4	3.4	3.6															
8/11/2010	BGS-5	8:43	15.0	5.8	3.2	3.2	3.1	3.1	3.2	3.1	2.9	2.9	3.0	3.0	3.0	3.5	4.6	5.8					
8/11/2010	BGS-6	8:38	8.0	3.3	3.3	3.2	3.2	3.2	3.1	3.2	3.2												
8/11/2010	BGE-1	10:01	5.0	4.7	4.5	4.4	4.0	4.7															
8/12/2010	BGS-1	9:09	11.0	75.1	4.7	4.7	4.6	4.5	4.8	4.7	4.6	7.6	18.1	75.1									
8/12/2010	BGS-2	9:05	8.0	3.6	3.3	3.4	3.6	3.3	3.3	3.6	3.2												
8/12/2010	BGS-3	9:00	3.0	3.2	3.2	3.0	3.1																
8/12/2010	BGS-4	8:57	5.0	3.4	3.4	3.3	3.4																
8/12/2010	BGS-5	8:43	15.0	11.8	3.2	3.1	3.4	3.3	3.1	2.9	3.7	3.6	3.5	3.6	3.6	4.0	6.8	8.4	9.2	11.8			
8/12/2010	BGS-6	8:38	8.0	3.2	3.1	3.0	3.0	2.9	3.0	3.2	3.2												
8/12/2010	BGE-1	10:01	5.0	4.5	3.9	4.0	3.8	4.5															
8/13/2010	BGS-1	8:00	11.0	23.1	3.8	3.8	4.7	4.2	4.8	5.6	6.6	6.4	5.7	23.1									
8/13/2010	BGS-2	8:10	8.0	4.4	3.3	3.7	3.3	3.4	3.8	3.7	4.4												
8/13/2010	BGS-3	8:17	3.0	6.7	5.8	6.7	5.8																
8/13/2010	BGS-4	8:28	5.0	4.0	3.6	3.9	4.0	3.5															
8/13/2010	BGS-5	8:33	15.0	4.8	3.6	3.7	3.6	3.6	3.7	3.5	3.6	4.0	3.8	3.9	3.7	3.9	4.3	4.8					
8/13/2010	BGS-6	8:40	8.0	3.7	3.3	3.4	3.3	3.7	3.5	3.6	3.6												
8/13/2010	BGE-1	11:02	5.0	4.8	4.8	4.2	4.3	4.0															
8/14/2010	BGS-1	9:15	11.0	12.6	10.3	9.2	9.3	10.9	11.3	12.4	12.6	10.4	10.8	10.5									
8/14/2010	BGS-2	9:30	8.0	5.7	4.8	4.4	4.7	4.9	4.8	5.7	5.5												
8/14/2010	BGS-3	9:44	3.0	5.3	5.3	4.8	5.3																
8/14/2010	BGS-4	9:50	5.0	5.9	4.8	4.3	4.2	5.9															
8/14/2010	BGS-5	9:55	15.0	4.5	4.0	4.1	4.2	4.0	4.0	3.7	3.9	4.1	4.1	4.1	4.1	3.8	4.5	4.3					
8/14/2010	BGS-6	10:03	8.0	5.4	4.8	4.8	4.8	5.0	5.2	5.4	5.3												
8/14/2010	BGE-1	11:30	5.0	6.5	6.5	5.8	5.7	6.2															
8/15/2010	BGS-1	12:18	11.0	12.0	10.2	10.2	10.2	11.3	11.5	11.9	11.9	11.9	12.0										
8/15/2010	BGS-2	12:06	8.0	5.7	5.4	5.3	5.4	5.4	5.5	5.7	5.6												
8/15/2010	BGS-3	12:12	3.0	6.4	6.4	6.4	6.1																
8/15/2010	BGS-4	11:51	5.0	6.2	5.5	5.8	6.0	6.2															
8/15/2010	BGS-5	11:46	15.0	4.9	4.3	4.7	4.5	4.8	4.6	4.6	4.8	4.9	4.5	4.5	4.4	4.4	4.4	4.8					
8/15/2010	BGS-6	11:27	8.0	6.3	4.9	4.9	5.2	5.1	5.3	5.5	6.3												
8/15/2010	BGE-1	9:07	5.0	8.3	8.0	8.1	8.3	7.9															
8/16/2010	BGS-1	9:20	11.0	9.2	9.2	8.3	8.8	8.1	7.3	8.5	7.6	8.1	8.4	8.7									
8/16/2010	BGS-2	9:30	8.0	6.4	5.7	5.8	6.3	6.3	5.8	6.2	6.4												
8/16/2010	BGS-3	9:40	3.0	5.5	5.3	5.5	5.3																
8/16/2010	BGS-4	9:50	5.0	5.5	5.2	5.5	5.2	5.4															
8/16/2010	BGS-5	10:00	15.0	6.0	5.1	5.2	5.3	5.3	5.2	5.0	4.9	5.2	5.4	5.8	5.7	6.0	5.9	5.9					
8/16/2010	BGS-6	10:10	8.0	6.4	5.9	5.6	5.8	6.0	6.1	6.2	6.4												
8/16/2010	BGE-1	10:30	5.0	8.2	8.2	7.6	7.8	7.8															
8/17/2010	BGS-1	8:35	11.0	12.1	11.1	11.4	11.3	11.2	12.1	10.8	11.1	11.3	11.0	11.1									
8/17/2010	BGS-2	8:45	8.0	6.9	6.0	6.4	6.1	6.5	6.4	6.3	6.9												
8/17/2010	BGS-3	8:50	3.0	8.2	6.8	8.2	6.4																
8/17/2010	BGS-4	8:55	5.0	8.3	7.4	6.8	7.4	8.3															
8/17/2010	BGS-5	8:57	15.0	6.1	5.1	5.3	5.4	5.6	5.4	5.4	5.5	5.8	5.8	5.6	5.5	6.0	5.6	6.1					
8/17/2010	BGS-6	9:05	8.0	5.6	5.1	5.4	5.5	5.2	5.3	5.6	5.6												

Appendix A: Dike Construction Routine Survey Turbidity Profiles by Day

Date	Station	Time	Maximum Depth(m)	Max NTU	Turbidity Depth Profile (meters below surface; units: NTU)																		
8/17/2010	BGE-1	9:40	5.0	8.1	0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m
8/18/2010																							
8/19/2010	BGS-1	9:08	11.0	15.5	14.5	14.0	13.8	15.5	14.3	15.2	15.4	14.0	15.3	14.3									
8/19/2010	BGS-2	9:00	8.0	10.0	9.9	10.0	8.2	9.7	9.5	9.4	8.9												
8/19/2010	BGS-3	8:56	3.0	7.3	6.4	7.3	7.2																
8/19/2010	BGS-4	8:49	5.0	11.8	11.8	10.3	10.4	11.7															
8/19/2010	BGS-5	8:42	15.0	10.4	10.1	9.1	10.4	9.7	9.9	10.4	9.9	9.6	9.3	9.2	9.5	9.7	9.5	9.4					
8/19/2010	BGS-6	8:35	8.0	10.1	10.1	9.6	9.0	8.9	9.5	9.6	9.3												
8/19/2010	BGE-1	9:30	5.0	9.8	9.8	8.6	9.6	8.7															
8/20/2010																							
8/20/2010	BGS-1	8:36	11.0	12.9	8.5	8.7	8.8	9.3	9.6	9.8	9.2	9.7	10.6	12.9									
8/20/2010	BGS-2	8:41	8.0	11.0	8.2	8.0	7.8	9.3	10.1	10.4	11.0												
8/20/2010	BGS-3	8:46	3.0	9.3	9.1	9.3	9.1																
8/20/2010	BGS-4	8:50	5.0	10.4	10.1	9.7	9.7	10.4															
8/20/2010	BGS-5	8:54	15.0	9.8	9.8	8.9	9.0	9.2	9.2	9.1	9.1	9.4	8.9	8.4	8.2	7.8	7.1						
8/20/2010	BGS-6	9:02	8.0	9.1	9.1	8.5	8.5	8.5	8.0	8.0	8.0												
8/20/2010	BGE-1	9:30	5.0	10.0	9.1	9.5	9.7	10.0															
8/21/2010																							
8/21/2010	BGS-1	8:39	11.0	13.5	8.3	8.5	8.3	8.9	9.0	8.6	8.5	8.5	9.4	13.5									
8/21/2010	BGS-2	8:46	8.0	9.5	8.6	8.2	7.9	7.9	8.1	8.5	9.5												
8/21/2010	BGS-3	8:51	3.0	9.2	8.0	8.5	9.2																
8/21/2010	BGS-4	9:00	5.0	8.4	8.4	8.1	8.1	8.0															
8/21/2010	BGS-5	9:04	15.0	8.6	8.4	8.3	8.2	8.3	8.0	8.0	8.2	8.0	8.0	8.0	8.0	8.1	8.2	8.6					
8/21/2010	BGS-6	9:10	8.0	8.0	7.5	7.2	7.3	7.4	7.3	7.8	8.0												
8/21/2010	BGE-1	9:30	5.0	9.1	8.3	8.4	9.0	9.1															
8/22/2010																							
8/22/2010	BGS-1	6:00	11.0	26.0	12.1	11.9	11.1	11.2	12.7	13.3	13.1	14.5	18.6	26.0									
8/22/2010	BGS-2	6:30	8.0	9.8	9.4	9.5	9.5	9.3	9.0	9.0	9.8												
8/22/2010	BGS-3	6:47	3.0	6.6	6.3	6.4	6.6																
8/22/2010	BGS-4	7:55	5.0	9.0	9.0	9.0	8.8	8.7															
8/22/2010	BGS-5	7:20	15.0	8.5	8.3	8.3	8.2	7.8	7.9	7.5	7.9	8.0	8.4	8.5	8.2	8.4	8.2	8.2					
8/22/2010	BGS-6	7:00	8.0	7.4	7.4	7.4	7.1	7.0	7.2	7.2	7.0												
8/22/2010	BGE-1	8:40	5.0	8.8	8.4	8.2	8.1	8.8															
8/23/2010																							
8/23/2010	BGS-1	10:00	11.0	12.7	11.6	12.7	9.9	9.1	8.7	8.9	9.5	10.7	12.5	11.5									
8/23/2010	BGS-2	10:15	8.0	10.3	9.1	9.6	10.1	10.3	9.2	8.7	8.4												
8/23/2010	BGS-3	10:30	3.0	6.8	6.8	6.7	6.4																
8/23/2010	BGS-4	10:45	5.0	7.9	7.7	7.4	7.9	7.9															
8/23/2010	BGS-5	11:00	15.0	8.1	7.8	8.1	7.8	7.8	7.4	7.9	7.9	7.4	7.5	7.7	7.6	7.2	7.5	7.8					
8/23/2010	BGS-6	11:15	8.0	7.7	7.7	7.4	7.5	7.0	7.1	7.6													
8/23/2010	BGE-1	11:30	5.0	7.8	7.5	7.5	7.8	7.7															
8/24/2010																							
8/24/2010	BGS-1	10:00	11.0	13.1	8.6	8.2	8.1	8.2	8.5	8.5	13.1	9.2	10.1	11.6									
8/24/2010	BGS-2	10:15	8.0	10.8	8.6	8.5	8.6	8.5	9.2	9.7	10.8												
8/24/2010	BGS-3	10:30	3.0	8.2	8.2	7.8	7.6																
8/24/2010	BGS-4	10:45	5.0	8.4	8.4	7.8	8.0	8.1															
8/24/2010	BGS-5	11:00	15.0	8.4	7.6	7.6	7.9	7.7	7.8	8.2	8.0	7.3	7.3	7.3	7.4	7.3	7.7	8.4					
8/24/2010	BGS-6	11:15	8.0	8.2	7.1	7.5	7.4	7.5	7.8	8.2	8.1												
8/24/2010	BGE-1	11:30	5.0	8.1	7.6	7.9	7.9	8.1															
8/25/2010																							
8/25/2010	BGS-1	11:00	11.0	15.6	12.7	13.0	13.1	13.7	13.5	13.4	14.0	13.5	13.3	15.6									
8/25/2010	BGS-2	10:55	8.0	9.1	8.1	8.0	7.8	7.8	7.7	7.8	9.1												
8/25/2010	BGS-3	10:45	3.0	6.9	6.9	6.4	6.4																
8/25/2010	BGS-4	10:15	5.0	7.6	7.0	7.4	7.6	7.5															
8/25/2010	BGS-5	10:30	15.0	7.6	7.1	7.4	7.4	7.4	7.4	7.5	7.4	7.3	7.5	7.4	7.5	7.6	7.5	7.5					
8/25/2010	BGS-6	10:40	8.0	7.5	7.2	6.6	7.2	7.4	7.5	7.4	7.5												
8/25/2010	BGE-1	11:45	5.0	7.5	7.3	6.9	7.5	7.2															
8/26/2010																							

Appendix A: Dike Construction Routine Survey Turbidity Profiles by Day																						
Date	Station	Time	Maximum	Max	Turbidity Depth Profile (meters below surface; units: NTU)																	
			Depth(m)	NTU	0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m
8/27/2010	BGS-1	15:49	11.0	31.1	20.9	21.7	23	22.9	23.1	24.4	24.3	25.8	23.4	31.1								
8/27/2010	BGS-2	15:37	8.0	14.0	14.02	12.61	12.72	13.24	11.21	11.71	12.08											
8/27/2010	BGS-3	15:27	3.0	6.4	6.16	6.39	5.96															
8/27/2010	BGS-4	15:05	5.0	9.0	8.95	7.87	8.41	8.2														
8/27/2010	BGS-5	15:10	15.0	9.3	7.93	7.66	7.71	8	7.16	7.59	7.89	7.6	8.11	8.42	8.25	7.79	8.28	9.34				
8/27/2010	BGS-6	15:17	8.0	7.9	7.38	7.75	7.3	7.33	7.91	7.44	7.34											
8/27/2010	BGE-1	No turbidity monitoring (Strong winds)																				
8/28/2010	BGS-1	15:49	11.0	15.6	11.3	11.5	12.4	12.2	13.6	13.1	14.5	14.9	15.4	15.6								
8/28/2010	BGS-2	15:27	8.0	9.1	8.8	8.9	9.0	8.8	9.1	9.0	8.9											
8/28/2010	BGS-3	15:15	3.0	15.2	11.8	13.1	15.2															
8/28/2010	BGS-4	14:00	5.0	8.0	7.3	7.7	8.0	7.6														
8/28/2010	BGS-5	14:25	15.0	8.6	7.7	7.5	7.7	7.6	7.6	7.6	7.5	7.3	7.5	7.7	7.8	8.1	8.6	7.8				
8/28/2010	BGS-6	14:50	8.0	7.4	7.0	7.0	6.9	7.1	7.0	7.0	7.4											
8/28/2010	BGE-1	16:30	5.0			6.4	6.4	6.2														
8/29/2010	BGS-1	15:49	11.0	20.5	12.9	14.5	13.8	13.6	12.9	12.1	13.6	13.4	17.0	20.5								
8/29/2010	BGS-2	15:27	8.0	10.4	7.5	7.4	8.7	8.3	8.9	10.4	10.3											
8/29/2010	BGS-3	15:15	3.0	6.5	6.5	6.0	6.1															
8/29/2010	BGS-4	14:00	5.0	8.0	7.8	7.5	7.3	8.0														
8/29/2010	BGS-5	14:25	15.0	7.8	7.0	7.7	7.7	7.8	7.6	7.4	7.8	7.3	7.4	7.7	7.8	7.4	7.4	7.8				
8/29/2010	BGS-6	14:50	8.0	7.5	7.5	7.3	7.2	7.1	7.1	7.3	7.1											
8/29/2010	BGE-1	16:30	5.0	6.7	6.6	6.1	6.7	6.6														
8/30/2010	BGS-1	11:00	11.0	16.8	10.5	11.5	10.9	12.7	11.9	11.9	12.7	14.3	16.1	16.8								
8/30/2010	BGS-2	11:15	8.0	10.8	10.2	10.0	9.9	9.6	9.4	10.7	10.8											
8/30/2010	BGS-3	11:30	3.0	7.0	6.5	6.4	7.0															
8/30/2010	BGS-4	11:45	5.0	7.6	7.5	7.6	7.5	7.2														
8/30/2010	BGS-5	12:00	15.0	7.1	7.0	6.6	6.7	6.8	6.6	6.7	6.9	7.1	7.0	6.8	7.0	7.1	7.1	7.1				
8/30/2010	BGS-6	12:15	8.0	7.0	6.9	6.4	6.4	6.7	6.7	7.0	6.7											
8/30/2010	BGE-1	12:30	5.0	6.7	6.7	6.5	6.5	6.2														
8/31/2010	BGS-1	11:00	11.0	10.4	7.8	7.7	7.2	8.3	9.1	10.4	9.1	9.5	9.9	9.3								
8/31/2010	BGS-2	11:15	8.0	8.2	7.7	7.3	7.3	8.0	8.0	7.7	8.2											
8/31/2010	BGS-3	11:30	3.0	7.4	7.2	6.4	7.4															
8/31/2010	BGS-4	11:45	5.0	6.6	6.6	6.3	6.6	6.2														
8/31/2010	BGS-5	12:00	15.0	6.6	6.6	5.9	6.0	6.3	6.2	6.5	6.5	6.6	6.5	6.6	6.2	6.3	6.5	6.6				
8/31/2010	BGS-6	12:15	8.0	6.4	6.1	5.6	6.4	6.4	6.2	6.1	6.0											
8/31/2010	BGE-1	12:30	5.0	6.3	6.3	6.1	6.2	6.2														
9/1/2010	BGS-1	13:45	11.0	22.5	7.5	7.2	7.2	7.2	7.0	7.4	7.2	17.1	14.2	22.5								
9/1/2010	BGS-2	14:00	8.0	8.0	7.1	6.9	6.5	6.8	7.1	7.3	8.0											
9/1/2010	BGS-3	14:15	3.0	6.6	6.5	6.1	6.6															
9/1/2010	BGS-4	14:30	5.0	6.2	6.2	6.0	6.2	5.9														
9/1/2010	BGS-5	14:45	15.0	6.6	5.8	5.9	5.7	5.7	5.6	5.6	5.5	5.8	5.7	5.6	5.7	5.9	6.1	6.6				
9/1/2010	BGS-6	15:00	8.0	6.5	6.5	5.6	5.6	5.5	5.7	6.0	5.7											
9/1/2010	BGE-1	15:15	5.0	6.2	5.9	6.2	6.2	6.1														
9/2/2010	BGS-1	9:30	11.0	10.5	7.6	7.5	8.2	7.8	7.9	7.5	8.7	8.8	9.3	10.5								
9/2/2010	BGS-2	9:45	8.0	9.4	6.4	6.7	6.3	6.2	6.4	6.6	9.4											
9/2/2010	BGS-3	10:00	3.0	9.9	9.9	9.3	9.3															
9/2/2010	BGS-4	10:15	5.0	6.4	6.4	6.2	6.4	6.3														
9/2/2010	BGS-5	10:30	15.0	6.3	6.0	5.8	5.9	5.9	5.9	6.0	6.1	5.8	5.8	5.9	5.8	5.9	6.1	6.3				
9/2/2010	BGS-6	10:45	8.0	6.3	6.3	5.5	5.7	5.8	5.8	5.9	6.1											
9/2/2010	BGE-1	11:00	5.0	5.9	5.8	5.9	5.9	5.6														
9/3/2010	BGS-1	11:25	11.0	18.9	6.1	6.6	7.0	6.8	7.3	8.1	7.9	7.3	7.6	18.9								
9/3/2010	BGS-2	11:15	8.0	7.9	6.0	6.9	6.8	6.9	7.1	7.9	7.8											
9/3/2010	BGS-3	11:05	3.0	5.5	5.4	5.5	5.3															
9/3/2010	BGS-4	10:55	5.0	6.3	5.9	6.1	6.3	5.7	5.5													

Appendix A: Dike Construction Routine Survey Turbidity Profiles by Day

Date	Station	Time	Maximum Depth(m)	Max NTU	Turbidity Depth Profile (meters below surface; units: NTU)																		
					0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m
9/3/2010	BGS-5	10:45	15.0	6.3	5.8	6.1	5.8	6.0	5.9	6.0	5.9	6.1	6.0	6.0	6.0	6.0	6.3	6.1					
9/3/2010	BGS-6	10:35	8.0	6.1	5.6	5.8	6.1	6.0	6.1	5.7	6.1												
9/3/2010	BGE-1	13:15	5.0	5.7	5.3	5.7	5.7	5.6															
9/4/2010	BGS-1	14:00	11.0	15.3	6.9	6.7	6.7	7.0	7.3	7.8	8.3	8.0	9.8	15.3									
9/4/2010	BGS-2	14:25	8.0	7.0	6.8	6.7	7.0	7.0	7.0	6.5	6.5												
9/4/2010	BGS-3	14:50	3.0	6.8	6.2	6.4	6.8																
9/4/2010	BGS-4	15:15	5.0	5.7	5.7	5.7	5.3	5.7															
9/4/2010	BGS-5	15:40	15.0	5.9	5.4	5.6	5.7	5.3	5.5	5.3	5.4	5.7	5.5	5.9	5.9	5.8	5.7	5.9	5.7				
9/4/2010	BGS-6	16:05	8.0	5.5	5.5	5.3	5.1	5.3	5.1														
9/4/2010	BGE-1	16:30	5.0	5.1	5.0	5.1	5.1	4.9															
9/5/2010	BGS-1	9:30	11.0	25.7	7.3	7.0	7.8	7.8	8.5	8.3	8.1	8.5	9.1	25.7									
9/5/2010	BGS-2	9:45	8.0	9.9	8.2	8.4	9.3	8.5	9.4	9.9	9.9												
9/5/2010	BGS-3	10:00	3.0	6.3	6.3	6.1	6.0																
9/5/2010	BGS-4	10:15	5.0	5.0	4.8	4.9	5.0	4.9															
9/5/2010	BGS-5	10:30	15.0	5.7	5.1	4.9	4.8	5.1	5.2	5.3	5.1	5.3	5.7	5.2	5.1	5.2	5.0	5.0					
9/5/2010	BGS-6	10:45	8.0	5.1	4.9	4.8	4.4	4.6	4.9	4.9	5.1												
9/5/2010	BGE-1	11:00	5.0	5.0	4.8	4.9	4.9	5.0															
9/6/2010	BGS-1	9:30	11.0	19.0	16.3	16.6	16.5	16.9	16.8	17.1	17.7	16.2	17.2	19.0									
9/6/2010	BGS-2	9:45	8.0	14.2	13.2	13.0	13.8	12.5	12.6	13.6	14.2												
9/6/2010	BGS-3	10:00	3.0	7.1	7.1	6.4	6.3																
9/6/2010	BGS-4	10:15	5.0	5.3	5.1	4.7	5.3	5.3															
9/6/2010	BGS-5	10:30	15.0	5.1	5.0	4.6	4.7	5.0	4.7	4.5	4.8	4.8	4.7	5.1	4.7	4.7	4.7	5.0					
9/6/2010	BGS-6	10:45	8.0	5.2	4.9	4.9	4.9	5.0	4.9	5.2	4.5												
9/6/2010	BGE-1	11:00	5.0	4.5	4.3	4.0	3.9	4.5															
9/7/2010	BGS-1	12:15	11.0	15.4	14.3	13.2	14.9	14.4	13.7	14.9	15.2	14.4	15.4	14.9									
9/7/2010	BGS-2	12:10	8.0	15.5	15.2	14.4	15.5	15.4	14.5	14.0	14.7												
9/7/2010	BGS-3	12:00	3.0	10.5	10.5	9.7	9.9																
9/7/2010	BGS-4	12:20	5.0	5.0	5.0	4.9	4.7	4.6															
9/7/2010	BGS-5	11:50	15.0	5.1	4.3	4.6	4.4	4.6	4.9	4.8	4.5	4.4	4.7	4.9	4.7	5.1	4.6	4.8					
9/7/2010	BGS-6	11:35	8.0	4.6	4.3	4.6	4.3	4.3	4.6	4.5	4.5												
9/7/2010	BGE-1	8:30	5.0	4.7	4.5	4.4	4.1	4.7															
9/8/2010	BGS-1	12:15	11.0	14.2	14.2	13.0	13.9	13.4	13.2	13.3	13.6	13.4	13.2	14.1									
9/8/2010	BGS-2	12:10	8.0	13.2	13.0	11.1	12.1	13.0	13.2	12.4	12.8												
9/8/2010	BGS-3	12:00	3.0	13.6	13.6	13.2	13.5																
9/8/2010	BGS-4	12:20	5.0	5.0	4.6	5.0	4.9	4.8															
9/8/2010	BGS-5	11:50	15.0	5.9	5.4	4.8	4.9	5.2	5.1	5.2	5.6	5.5	5.4	5.4	5.9	5.4	5.7	5.4					
9/8/2010	BGS-6	11:35	8.0	5.2	5.2	4.8	4.9	4.9	4.9	4.7	4.8												
9/8/2010	BGE-1	8:30	5.0	4.6	4.4	4.6	4.4	4.5															
9/9/2010	BGS-1	10:00	11.0	11.9	11.7	11.5	11.4	11.0	11.6	11.7	11.7	11.8	11.6	11.9									
9/9/2010	BGS-2	10:10	8.0	11.2	11.1	10.7	11.0	10.9	11.2	9.9	9.6												
9/9/2010	BGS-3	10:13	3.0	5.0	5.0	5.0	4.9																
9/9/2010	BGS-4	10:23	5.0	5.1	5.1	4.7	4.7	4.8															
9/9/2010	BGS-5	10:33	15.0	4.7	4.5	4.6	4.6	4.5	4.5	4.5	4.6	4.6	4.6	4.7	4.6	4.6	4.6	4.6					
9/9/2010	BGS-6	10:40	8.0	5.0	5.0	4.9	4.7	4.7	4.8	5.0	4.9												
9/9/2010	BGE-1	11:20	5.0	4.2	4.2	4.2	4.1	4.1															
9/10/2010	BGS-1	9:55	11.0	10.0	8.8	8.4	8.8	9.4	9.5	8.7	9.6	10.0	9.6	9.8									
9/10/2010	BGS-2	9:48	8.0	9.8	8.9	9.1	9.3	9.3	9.3	9.8	9.1												
9/10/2010	BGS-3	9:40	3.0	6.6	6.2	6.2	6.6																
9/10/2010	BGS-4	9:37	5.0	4.6	4.4	4.5	4.6	4.3															
9/10/2010	BGS-5	9:33	15.0	4.5	4.3	4.3	4.5	4.4	4.5	4.5	4.4	4.5	4.5	4.4	4.4	4.5	4.4	4.4					
9/10/2010	BGS-6	9:28	8.0	4.4	4.3	4.4	4.2	4.2	4.2	4.0	4.2												
9/10/2010	BGE-1	9:14	5.0	3.7	3.6	3.5	3.5	3.7															
9/11/2010	BGS-1	12:40	11.0	10.0	9.2	10.0	9.3	9.3	8.8	9.3	9.8	9.0	9.7	9.2									

Appendix A: Dike Construction Routine Survey Turbidity Profiles by Day

Date	Station	Time	Maximum Depth(m)	Max NTU	Turbidity Depth Profile (meters below surface; units: NTU)																		
					0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m
9/11/2010	BGS-2	12:10	8.0	6.7	5.4	5.1	5.3	5.8	6.2	6.5	6.7												
9/11/2010	BGS-3	11:45	3.0	4.2	4.2	4.0	4.2																
9/11/2010	BGS-4	11:11	5.0	4.3	4.0	4.3	4.3	4.3															
9/11/2010	BGS-5	10:40	15.0	4.3	4.1	4.1	4.2	4.1	4.1	4.2	4.0	3.9	4.0	4.1	4.2	4.1	4.2	4.3					
9/11/2010	BGS-6	10:05	8.0	4.2	4.2	4.0	3.9	4.1	3.9	3.7	3.8												
9/11/2010	BGE-1	9:00	5.0	3.5	3.4	3.5	3.2	3.1															
9/12/2010	BGS-1	10:19	11.0	7.4	7.2	6.9	6.8	7.0	7.2	7.2	6.9	7.0	7.4	7.4									
9/12/2010	BGS-2	10:15	8.0	6.7	6.6	6.6	6.7	6.2	6.3	6.3	6.3												
9/12/2010	BGS-3	10:12	3.0	8.7	7.5	8.7	7.7																
9/12/2010	BGS-4	10:08	5.0	4.1	4.1	3.7	3.7	4.1															
9/12/2010	BGS-5	10:04	15.0	4.5	4.4	4.4	4.5	4.3	4.3	4.5	4.5	4.4	4.4	4.4	4.5	4.5	4.5						
9/12/2010	BGS-6	9:57	8.0	4.5	4.0	4.0	4.5	4.2	4.1	4.1	4.2												
9/12/2010	BGE-1	9:46	5.0	3.4	3.4	3.4	3.4	3.4															
9/13/2010	BGS-1	9:44	11.0	6.4	6.0	5.6	6.0	6.1	6.1	6.4	6.3	6.2	6.4	6.2									
9/13/2010	BGS-2	9:41	8.0	6.2	6.1	6.1	6.2	6.1	6.0	6.1	6.1												
9/13/2010	BGS-3	9:38	3.0	4.5	4.5	4.5	4.3																
9/13/2010	BGS-4	9:35	5.0	4.3	4.2	4.3	4.3	4.3															
9/13/2010	BGS-5	9:37	15.0	5.8	4.4	4.8	4.8	5.1	5.2	4.9	5.1	5.3	4.9	5.1	5.6	5.7	5.7	5.8					
9/13/2010	BGS-6	9:28	8.0	4.6	4.4	4.5	4.4	4.4	4.6	4.3	4.3												
9/13/2010	BGE-1	9:20	5.0	3.7	3.6	3.5	3.7	3.6															
9/14/2010	BGS-1	8:59	11.0	9.7	7.4	7.8	8.1	9.7	8.3	7.6	7.8	7.0	7.0	7.4									
9/14/2010	BGS-2	8:55	8.0	5.6	5.6	5.6	5.4	5.4	5.6	5.6	5.5												
9/14/2010	BGS-3	8:52	3.0	4.7	4.6	4.3	4.7																
9/14/2010	BGS-4	8:48	5.0	4.8	4.6	4.6	4.7	4.8															
9/14/2010	BGS-5	8:45	15.0	4.6	4.5	4.3	4.4	4.3	4.4	4.3	4.4	4.5	4.5	4.6	4.5	4.5	4.6	4.4					
9/14/2010	BGS-6	8:41	8.0	4.3	4.3	4.0	3.9	3.7	3.8	3.8	3.9												
9/14/2010	BGE-1	8:32	5.0	3.4	3.3	3.4	3.3	3.3															
9/15/2010	BGS-1	8:28	11.0	11.9	11.6	11.7	11.9	11.8	11.7	11.3	11.8	11.9	10.7	9.8									
9/15/2010	BGS-2	8:25	8.0	7.9	7.8	7.5	7.9	7.0	6.8	7.0	6.9												
9/15/2010	BGS-3	8:23	3.0	4.5	4.5	4.4	4.3																
9/15/2010	BGS-4	8:18	5.0	4.2	4.2	4.0	4.1	4.2															
9/15/2010	BGS-5	8:10	15.0	4.4	3.9	3.9	4.0	4.1	4.3	4.3	4.1	4.2	4.2	4.2	4.1	4.3	4.2	4.4					
9/15/2010	BGS-6	8:05	8.0	4.0	3.9	4.0	3.9	3.8	3.9	3.9	4.0												
9/15/2010	BGE-1	7:55	5.0	3.5	3.2	3.3	3.5	3.4															
9/16/2010	BGS-1	8:34	11.0	10.9	9.9	10.1	10.2	10.6	10.5	10.7	10.8	10.8	10.4	10.9									
9/16/2010	BGS-2	8:30	8.0	11.7	11.2	11.2	11.5	11.6	11.6	11.2	11.7												
9/16/2010	BGS-3	8:26	3.0	7.0	6.1	6.4	7.0																
9/16/2010	BGS-4	8:21	5.0	3.9	3.9	3.8	3.8	3.9															
9/16/2010	BGS-5	8:17	15.0	4.2	3.9	3.8	3.8	4.1	3.9	3.9	4.0	3.8	3.8	3.8	3.8	3.9	4.0	4.2					
9/16/2010	BGS-6	8:11	8.0	3.7	3.3	3.3	3.2	3.3	3.3	3.5	3.7												
9/16/2010	BGE-1	7:57	5.0	2.9	2.7	2.8	2.8	2.9															
9/17/2010	BGS-1		11.0	8.8	8.5	7.5	7.7	8.4	8.7	8.4	8.8	8.5	8.5	8.3									
9/17/2010	BGS-2		8.0	8.7	8.1	7.4	8.4	8.2	8.1	8.3	8.7												
9/17/2010	BGS-3		3.0	8.6	8.6	8.5	8.4																
9/17/2010	BGS-4		5.0	3.6	3.6	3.2	3.4	3.4															
9/17/2010	BGS-5		15.0	4.5	4.1	4.0	4.1	3.8	3.8	4.0	4.1	4.1	4.2	4.1	4.2	4.2	4.3	4.5					
9/17/2010	BGS-6		8.0	3.7	3.6	3.5	3.5	3.7	3.6	3.6	3.4												
9/17/2010	BGE-1		5.0	3.2	3.2	3.1	3.1	3.1															
9/18/2010																							
9/19/2010	BGS-1		11.0	5.4	5.3	5.2	5.3	5.3	5.3	5.3	5.4	5.3	5.2	5.1									
9/19/2010	BGS-2		8.0	5.3	5.2	5.3	5.3	5.2	5.3	5.2	5.1												
9/19/2010	BGS-3		3.0	5.4	5.0	5.4	4.8																
9/19/2010	BGS-4		5.0	3.4	3.4	3.4	3.4	3.4															

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Date	Station	Time	Maximum Depth(m)	Max NTU	Turbidity Depth Profile (meters below surface; units: NTU)																		
					0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m
9/19/2010	BGS-5		15.0	4.1	4.0	4.0	3.8	3.8	4.1	4.0	3.9	3.9	3.9	4.1	3.9	4.0	4.1	4.0					
9/19/2010	BGS-6		8.0	3.7	3.4	3.5	3.3	3.4	3.6	3.7	3.6												
9/19/2010	BGE-1		5.0	3.3	3.2	3.0	3.1	3.3															
9/20/2010	BGS-1		11.0	4.8	4.8	4.8	4.6	4.5	4.7	4.8	4.7	4.6	4.7	4.8									
9/20/2010	BGS-2		8.0	4.8	4.7	4.6	4.7	4.6	4.6	4.8	4.8												
9/20/2010	BGS-3		3.0	3.6	3.5	3.3	3.6																
9/20/2010	BGS-4		5.0	4.0	3.7	3.6	4.0	4.0															
9/20/2010	BGS-5		15.0	4.1	4.0	3.8	3.9	3.7	4.0	4.0	4.1	4.1	3.9	4.1	4.0	3.9	3.8	4.0					
9/20/2010	BGS-6		8.0	3.9	3.8	3.9	3.8	3.8	3.8	3.7	3.8												
9/20/2010	BGE-1		5.0	3.5	3.2	3.5	3.4	3.3															
9/21/2010	BGS-1			4.6	4.4	4.5	4.5	4.6	4.4	4.5	4.5	4.5	4.6	4.6									
9/21/2010	BGS-2			4.6	4.5	4.1	4.6	4.3	4.5	4.4	4.4												
9/21/2010	BGS-3			4.7	4.7	4.2	4.7																
9/21/2010	BGS-4			4.0	4.0	3.9	3.7	3.9															
9/21/2010	BGS-5			4.0	4.0	3.7	3.9	3.7	3.8	3.7	3.8	3.8	3.9	3.8	3.9	3.9	3.9	3.9					
9/21/2010	BGS-6			4.0	3.8	3.8	3.9	3.9	4.0	3.9	3.9												
9/21/2010	BGE-1			3.6	3.3	3.4	3.6	3.6															
9/22/2010	BGS-1			4.7	4.5	4.5	4.5	4.4	4.7	4.3	4.6	4.3	4.5	4.5									
9/22/2010	BGS-2			4.5	4.3	4.4	4.4	4.4	4.3	4.3	4.5												
9/22/2010	BGS-3			4.5	4.4	4.5	4.4																
9/22/2010	BGS-4			3.9	3.9	3.8	3.9	3.7															
9/22/2010	BGS-5			3.9	3.9	3.8	3.8	3.8	3.9	3.8	3.7	3.8	3.8	3.8	3.8	3.9	3.8	3.9					
9/22/2010	BGS-6			4.0	3.9	3.8	3.8	3.8	3.8	4.0	4.0												
9/22/2010	BGE-1			3.8	3.7	3.8	3.8	3.8															
9/23/2010	BGS-1	8:45 AM		4.2	4.11	3.8	4.0	4.0	4.2	4.1	4.2	4.1	4.1	4.2									
9/23/2010	BGS-2	8:50 AM		3.8	3.79	3.8	3.7	3.6	3.5	3.5	3.6												
9/23/2010	BGS-3	8:50		3.6	3.58	3.6	3.4																
9/23/2010	BGS-4	8:55 AM		3.7	3.72	3.6	3.7	3.7															
9/23/2010	BGS-5	9:00 AM		3.9	3.87	3.8	3.8	3.8	3.8	3.9	3.7	3.8	3.7	3.8	3.8	3.8	3.8	3.8					
9/23/2010	BGS-6			3.8	3.7	3.7	3.7	3.7	3.8	3.7	3.7												
9/23/2010	BGE-1			3.5	3.5	3.5	3.4	3.4															
9/24/2010	BGS-1	9:55	11.0	3.9	3.7	3.7	3.8	3.9	3.6	3.7	3.6	3.7	3.8	3.8									
9/24/2010	BGS-2	9:33	8.0	3.8	3.6	3.6	3.7	3.7	3.7	3.7	3.8												
9/24/2010	BGS-3	9:50	3.0	3.5	3.5	3.2	3.2																
9/24/2010	BGS-4	9:47	5.0	3.7	3.5	3.6	3.6	3.7															
9/24/2010	BGS-5	9:42	15.0	3.9	3.7	3.9	3.7	3.5	3.6	3.8	3.7	3.8	3.6	3.6	3.7	3.5	3.6	3.6					
9/24/2010	BGS-6	9:37	8.0	3.6	3.6	3.5	3.5	3.5	3.4	3.4	3.2												
9/24/2010	BGE-1	9:30	5.0	3.4	3.4	3.3	3.4	3.3															
9/25/2010	BGS-1	10:00	11.0	3.6	3.5	3.6	3.6	3.3	3.5	3.5	3.4	3.5	3.5	3.3									
9/25/2010	BGS-2	9:40	8.0	3.6	3.3	3.3	3.3	3.5	3.4	3.6	3.6												
9/25/2010	BGS-3	9:25	3.0	3.3	3.3	3.3	3.3																
9/25/2010	BGS-4	9:10	5.0	3.6	3.3	3.6	3.5	3.6															
9/25/2010	BGS-5	8:45	15.0	3.5	3.3	3.4	3.4	3.5	3.4	3.4	3.5	3.4	3.4	3.4	3.4	3.4	3.5	3.4					
9/25/2010	BGS-6	8:25	8.0	3.4	3.3	3.2	3.2	3.3	3.4	3.3	3.4												
9/25/2010	BGE-1	7:50	5.0	3.0	3.0	3.0	3.0	3.0															
9/27/2010	BGS-1	10:46	11.0	3.3	3.0	3.0	2.9	2.9	2.9	3.0	3.0	3.0	3.1	3.3									
9/27/2010	BGS-2	10:50	8.0	3.3	3.0	3.1	3.1	3.0	3.0	3.3	3.2												
9/27/2010	BGS-3	10:59	3.0	3.2	3.2	3.2	3.2																
9/27/2010	BGS-4	11:02	5.0	3.5	3.5	3.5	3.4	3.2															
9/27/2010	BGS-5	11:08	15.0	3.6	3.4	3.5	3.4	3.4	3.4	3.5	3.5	3.4	3.4	3.4	3.5	3.6	3.6	3.5					
9/27/2010	BGS-6	11:11	8.0	3.7	3.1	3.1	3.1	3.0	3.2	3.4	3.7												
9/27/2010	BGE-1	12:00	5.0	3.3	3.3	3.0	3.0	3.3															
9/29/2010	BGS-1	9:26	11.0	2.9	2.8	2.7	2.7	2.7	2.8	2.9	2.8	2.8	2.8	2.9									

Appendix A: Dike Construction Routine Survey Turbidity Profiles by Day

Date	Station	Time	Maximum Depth(m)	Max NTU	Turbidity Depth Profile (meters below surface; units: NTU)																		
					0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m
9/29/2010	BGS-2	9:24	8.0	3.3	2.8	2.8	2.8	2.8	2.9	3.1	3.3												
9/29/2010	BGS-3	9:22	3.0	3.0	3.0	2.9	3.0																
9/29/2010	BGS-4	9:30	5.0	3.8	3.0	3.0	3.4	3.8															
9/29/2010	BGS-5	9:19	15.0	3.4	3.1	3.0	3.0	3.1	3.2	3.4	3.3	3.2	3.1	3.1	3.2	3.2	3.2	3.3					
9/29/2010	BGS-6	9:16	8.0	3.2	3.0	3.2	3.2	3.1	3.1	3.1	3.2												
9/29/2010	BGE-1	9:35	5.0	2.8	2.6	2.6	2.7	2.8															
9/30/2010	BGS-1	8:19	11.0	3.3	2.7	2.7	2.7	2.7	2.7	2.8	2.9	2.9	3.0	3.3									
9/30/2010	BGS-2	8:14	8.0	3.3	2.7	2.7	2.8	2.8	3.0	3.1	3.3												
9/30/2010	BGS-3	8:12	3.0	3.0	3.0	3.0	3.0																
9/30/2010	BGS-4	8:09	5.0	3.2	3.1	3.1	3.2	3.2															
9/30/2010	BGS-5	8:05	15.0	3.1	2.9	2.8	2.9	2.9	2.9	3.0	3.0	3.1	3.1	3.1	3.1	3.0	3.1	3.0					
9/30/2010	BGS-6	8:02	8.0	3.2	3.0	3.0	3.0	3.1	3.0	3.1	3.2												
9/30/2010	BGE-1	7:55	5.0	3.0	2.7	2.9	2.9	3.0															
10/1/2010	BGS-1	8:47	11.0	3.5	3.1	3.1	3.1	3.2	3.1	3.1	3.2	3.3	3.3	3.5									
10/1/2010	BGS-2	8:43	8.0	3.3	2.6	2.6	2.7	2.7	2.7	2.8	3.3												
10/1/2010	BGS-3	8:40	3.0	3.1	2.7	2.8	3.1																
10/1/2010	BGS-4	8:37	5.0	3.5	2.9	3.0	3.2	3.5															
10/1/2010	BGS-5	8:33	15.0	3.7	3.0	3.1	3.1	3.1	3.1	3.0	3.0	3.0	3.0	2.9	3.1	3.1	3.1	3.7					
10/1/2010	BGS-6	8:29	8.0	3.0	2.9	2.8	2.9	2.9	3.0	3.0	3.0												
10/1/2010	BGE-1	8:20	5.0	2.9	2.8	2.8	2.9	2.8															
10/2/2010	BGS-1	8:19	11.0	3.3	2.6	2.7	2.6	2.7	2.7	3.0	3.1	3.3	3.3	3.3									
10/2/2010	BGS-2	8:16	8.0	2.8	2.7	2.7	2.6	2.7	2.7	2.7	2.8												
10/2/2010	BGS-3	8:13	3.0	2.8	2.5	2.6	2.8																
10/2/2010	BGS-4	8:11	5.0	3.1	2.8	2.8	2.9	3.1															
10/2/2010	BGS-5	8:07	15.0	3.0	2.7	2.8	2.7	2.7	2.8	2.8	2.8	3.0	2.8	2.7	2.7	2.8	3.0	3.0					
10/2/2010	BGS-6	8:04	8.0	3.0	2.7	2.8	2.7	2.8	2.8	2.8	3.0												
10/2/2010	BGE-1	7:55	5.0	3.1	2.7	2.7	2.6	3.1															
10/3/2010	BGS-1	8:19	11.0	3.1	2.6	2.7	2.7	2.7	2.8	2.8	2.9	3.0	3.1	3.1									
10/3/2010	BGS-2	8:14	8.0	2.8	2.5	2.4	2.4	2.4	2.5	2.5	2.8												
10/3/2010	BGS-3	8:11	3.0	2.9	2.6	2.6	2.9																
10/3/2010	BGS-4	8:08	5.0	3.2	2.6	2.6	2.9	3.2															
10/3/2010	BGS-5	8:05	15.0	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.6	2.7	2.7	2.7	2.7	2.7	2.8	2.8					
10/3/2010	BGS-6	8:02	8.0	2.8	2.8	2.7	2.7	2.7	2.8	2.7	2.8												
10/3/2010	BGE-1	7:55	5.0	2.7	2.3	2.5	2.4	2.7															
10/5/2010	BGS-1	8:41	11.0	2.7	2.3	2.3	2.3	2.3	2.4	2.4	2.4	2.5	2.6	2.7									
10/5/2010	BGS-2	8:37	8.0	2.4	2.4	2.3	2.3	2.3	2.3	2.4	2.4												
10/5/2010	BGS-3	8:35	3.0	2.5	2.4	2.5	2.5																
10/5/2010	BGS-4	8:32	5.0	2.5	2.4	2.4	2.5	2.5															
10/5/2010	BGS-5	8:29	15.0	2.5	2.5	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.4	2.4					
10/5/2010	BGS-6	8:25	8.0	2.8	2.5	2.5	2.5	2.5	2.5	2.6	2.8												
10/5/2010	BGE-1	8:15	5.0	2.9	2.4	2.5	2.7	2.9															

Appendix A: Dike Construction Broad Survey Turbidity Profiles by Day

Date	Station	Time	Easting	Northing	Turbidity Depth Profile (meters below surface; units: NTU)																									
					Maximum Depth(m)	Max	0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m	21m	22m	23m
2010-07-14	BGE-2	13:35	639,267	7,212,854	13.5	4.5	3.7	3.9	4.4	4.1	4.1	3.8	3.6	3.9	4.5	4.0	3.9	4.1	4.4	4.3										
2010-07-14	BGE-3	13:45	639,171	7,212,591	17	24.5	3.7	4.5	4.4	4.2	3.9	4.4	4.5	3.8	3.9	4.1	3.7	3.8	4.2	4.0	4.0	3.9	3.9	3.7	3.9	3.9	24.5			
2010-07-14	BGE-4	14:00	639,162	7,212,351	14.7	4.8	3.8	4.3	3.9	4.1	4.0	4.6	4.4	4.1	4.1	4.1	4.8	4.7	4.8	4.8	4.8									
2010-07-14	BGE-5		639,057	7,212,110	22	6.4	3.1	3.7	4.2	4.1	4.2	4.5	4.6	3.9	4.1	4.0	4.6	4.8	4.4	4.4	4.5	4.5	4.5	4.7	4.5	4.0	6.4	4.4		
2010-07-14	BGHVH-4		639,521	7,212,410	6.0	4.3	3.2	3.5	4.1	4.3	4.3	4.3																		
2010-07-14	BGHVH-5		639,012	7,211,243	11.3	5.6	3.6	4.2	4.2	4.2	4.3	4.2	4.1	4.7	4.4	5.1	5.6													
2010-07-14	TPE-1	18:30	637,476	7,211,696	7.4	4.5	4.5	1.0	0.6	0.8	0.6	0.7	0.7	0.8																
2010-07-14	TPE-4	18:13	638,534	7,210,762	6.9	5.9	3.7	3.9	4.2	4.1	4.2	5.7	5.9																	
2010-07-15	BGW-1	14:30	638,870	7,213,327	5.8	15.8	12.9	12.5	11.2	12.2	12.2	15.8																		
2010-07-15	BGW-2	15:20	638,725	7,213,000	5.7	15.2	14.4	13.5	15.2	12.4	13.6	14.6																		
2010-07-15	BGW-3	14:50	638,725	7,212,637	6.3	15.3	13.8	13.7	15.3	13.4	14.8	15.3	14.5																	
2010-07-15	BGW-4	15:10			7.3	16.4	15.6	14.8	15.3	12.7	14.8	14.6	16.4	14.1																
2010-07-16	SP-1	16:00	639,532	7,213,723	9.2	2.0	1.6	1.5	1.5	1.4	1.5	1.6	1.5	1.8	2.0															
2010-07-16	SP-2	16:05	639,544	7,214,329	8.4	1.1	0.8	0.7	0.8	0.9	0.9	1.1	1.0																	
2010-07-16	SP-3	16:10	639,872	7,213,917	16.7	1.1	1.1	0.9	0.8	1.0	1.0	1.0	0.9	0.9	1.0	0.8	0.7	0.7	0.7	0.7	0.8	0.7	0.9							
2010-07-16	SP-4	16:17	640,298	7,213,820	6.8	0.6	0.6	0.5	0.6	0.6	0.5	0.6																		
2010-07-16	SP-5	16:25	640,347	7,213,310	5.8	0.6	0.4	0.4	0.5	0.6	0.6	0.6																		
2010-07-16	SP-6	16:32	640,663	7,212,630	4.9	1.0	0.7	0.7	0.8	1.0	0.9																			
2010-07-16	SP-7	17:37	640,200	7,212,752	7.5	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.6																	
2010-07-16	SP-8	17:45	639,812	7,213,189	7.8	1.4	1.2	1.0	0.9	1.1	1.1	1.2	1.4	1.3																
2010-07-16	SP-9	17:10	641,052	7,213,128	17.8	0.6	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.4	0.4							
2010-07-16	SP-10	16:45	641,295	7,213,589	11.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0												
2010-07-16	SP-11	16:55	641,454	7,213,917	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0																		
2010-07-17	TPN-1	16:00	636,783	7,215,130	19.7	-0.1	-0.2	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
2010-07-17	TPN-2	15:35	636,612	7,215,737	14.9	-0.1	-0.2	-0.2	-0.2	-0.1	-0.1	-0.2	-0.2	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
2010-07-17	TPN-3	15:30	635,773	7,216,052	8.9	-0.1	-0.3	-0.3	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.1														
2010-07-17	TPN-4	15:45	635,992	7,215,130	32.5	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.2	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	-0.3	-0.2	-0.2	-0.2	-0.3	-0.2	-0.2	-0.3	-21.0	-0.2
2010-07-17	TPN-5	16:23	635,797	7,214,329	19.6	-0.2	-0.2	-0.3	-0.2	-0.2	-0.2	-0.3	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.3	-0.3	-0.3	-0.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3
2010-07-17	TPN-6	16:04	636,381	7,214,329	13.2	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.3	-0.3	-0.3	-0.2	-0.3	-0.3	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
2010-07-17	TPN-7	15:20	634,703	7,215,567	31.1	-0.2	-0.3	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
2010-07-17	TPN-8	14:45	634,860	7,214,087	21	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
2010-07-17	TPN-9	14:40	635,311	7,213,359	14.5	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
2010-07-17	TPN-10	14:30	636,174	7,213,346	9.5	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
2010-07-17	TPN-11	16:40	636,916	7,213,334		-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3	-0.4	-0.4	-0.3	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3
2010-07-17	TPN-12	14:15	636,016	7,212,582		-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3	-0.4	-0.4	-0.4	-0.4	-0.4	-0.3	-0.4	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
2010-07-17	TPN-13	17:00	636,977	7,212,509		-0.3	-0.4	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3
2010-07-18	BGHVH-4	17:14	639,521	7,212,410	3	3.1	2.8	2.8	3.0	3.0	3.0	3.1																		
2010-07-18	BGHVH-5	16:05	639,012	7,211,243	7	3.3	2.7	2.7	2.9	3.0	3.1	3.2	3.2	3.2	3.2	3.2	3.2	3.3												
2010-07-18	BGE-2	17:58	639,267	7,212,854	13	3.6	2.7	2.8	2.8	2.9	2.9	3.0	3.0	3.1	3.2	3.6	3.6	3.4	3.3	3.6	3.5									
2010-07-18	BGE-3	17:25	639,171	7,212,591	9	4.0	2.9	3.0	3.0	3.0	2.9	3.0	3.0	3.0	3.6	4.0	3.3	3.6	3.6	3.4	3.6									
2010-07-21	TE-1	9:20			13	0.4	0.1	0.1	0.1	0.2	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.4											
2010-07-21	TE-2	9:15			8.3	0.3	0.1	0.2	0.2	0.2	0.2	0.1	0.2	0.3																

Date	Station	Time	Easting	Northing	Maximum Depth(m)	Turbidity Depth Profile (meters below surface; units: NTU)																								
					Max	0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m	21m	22m	23m	24m
2010-07-21	TE-17	11:15			10	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4														
2010-07-21	TE-18	11:10			12	-0.1	-0.2	-0.2	-0.1	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3	-0.3	-0.2	-0.2												
2010-07-21	TE-20	10:45			12	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4												
2010-07-21	TE-21	10:55			5	-0.1	-0.1	-0.1	-0.1	-0.2	-0.4																			
2010-07-21	TE-22	11:00			11	0.4	-0.3	-0.3	-0.3	-0.3	-0.4	-0.4	-0.4	-0.4	0.4	0.4	0.4													
2010-07-23	SP-1	12:10	639,532	7,213,723	7.8	1.4	0.7	0.8	1.0	1.0	1.0	1.3	1.4																	
2010-07-23	SP-2	12:00	639,544	7,214,329	8.9	0.8	0.7	0.8	0.7	0.7	0.7	0.7	0.8	0.6																
2010-07-23	SP-3	12:05	639,872	7,213,917	18	0.8	0.4	0.3	0.4	0.4	0.5	0.6	0.8	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.6							
2010-07-23	SP-4	11:50	640,298	7,213,820	6.0	0.5	0.3	0.3	0.3	0.3	0.4	0.5																		
2010-07-23	SP-5	11:45	640,347	7,213,310	6.1	0.4	0.4	0.3	0.2	0.2	0.3	0.3																		
2010-07-23	SP-6	10:00	640,663	7,212,630	5.2	0.2	0.1	0.2	0.2	0.2	0.1	0.2																		
2010-07-23	SP-7	9:50	640,200	7,212,752	7.5	0.5	0.4	0.3	0.4	0.3	0.4	0.3	0.5																	
2010-07-23	SP-8	9:45	639,812	7,213,189	7.5	1.3	0.6	0.6	0.6	0.7	0.8	1.0	1.3																	
2010-07-23	SP-9	10:10	641,052	7,213,128	17	0.4	0.1	0.0	0.1	0.1	0.3	0.4	0.4	0.4	0.3	0.3	0.4	0.3	0.4	0.4	0.4									
2010-07-23	SP-10	10:17	641,295	7,213,589	12.0	0.0	-0.3	-0.3	-0.2	-0.3	-0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0									
2010-07-23	SP-11	10:30	641,454	7,213,917	6.5	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4	-0.4																	
2010-07-25	HVH-2	9:32			6.4	1.8	1.6	1.6	1.6	1.7	1.8	1.7																		
2010-07-25	HVH-4	11:44			11.4	1.7	1.6	1.7	1.7	1.6	1.6	1.6																		
2010-07-25	HVH-5	9:58			6	2.2	1.5	1.6	1.6	1.6	1.6	1.7																		

Appendix A: Dike Construction Broad Survey Turbidity Profiles by Day

Date	Station	Time	Easting	Northing	Turbidity Depth Profile (meters below surface; units: NTU)																										
					Maximum Depth(m)	Max	0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m	21m	22m	23m	24m
8/6/2010	SP-4	14:20	640,298	7,213,820	6	0.1	0.0	0.1	0.1	0.1	0.0	0.1																			
8/6/2010	SP-5	14:25	640,347	7,213,310	6	0.1	0.0	0.1	0.1	0.1	0.1	0.0																			
8/6/2010	SP-6	14:50	640,663	7,212,630	6	0.3	0.3	0.2	0.2	0.3	0.3																				
8/6/2010	SP-7	14:31	640,200	7,212,752	7.0	0.4	0.4	0.4	0.3	0.2	0.2	0.2																			
8/6/2010	SP-8	14:37	639,812	7,213,189	8.0	3.5	0.5	0.4	1.2	1.5	1.6	1.6	3.5																		
8/6/2010	SP-9	15:04	641,052	7,213,128	18	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8/6/2010	SP-10	15:15	641,295	7,213,589	15	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		
8/6/2010	SP-11	15:22	658,796	7,213,905	7	0.0	0.0	0.0	0.0	0.0	0.0	0.0																			
8/6/2010	BGHVH-1	9:44	638,711	7,211,761	3.0	2.4	2.3	2.4	2.3																						
8/6/2010	BGHVH-2	11:48	639,016	7,211,788	7.0	7.7	4.0	4.5	6.5	7.1	7.7	7.0																			
8/6/2010	BGHVH-3	9:11	639,535	7,211,811	15.0	14.9	6.5	6.4	6.0	5.9	6.0	6.3	6.7	7.0	7.2	7.1	8.0	10.8	13.0	14.9											
8/6/2010	BGHVH-4	8:25	639,521	7,212,410	6.0	8.0	7.7	7.8	7.9	7.8	8.0																				
8/6/2010	BGHVH-5	9:32	639,012	7,211,243	12.0	11.9	3.4	3.4	3.2	3.2	4.0	3.7	4.4	5.6	6.3	9.9	11.9														
8/6/2010	TPE-1	10:11	637,476	7,211,696	3.0	1.0	1.0	0.9	0.3																						
8/6/2010	TPE-2	9:54	638,194	7,211,757	11	1.3	1.0	1.1	1.2	1.2	1.1	1.0	1.1	1.1	1.3	1.2															
8/6/2010	TPE-3	11:37	638,303	7,211,211	7	2.0	2.0	2.0	1.7	1.5	1.4	1.2																			
8/6/2010	TPE-4	11:31	638,534	7,210,762	4	2.7	2.7	2.7	2.3																						
8/6/2010	TPE-5	11:07	637,938	7,210,252	19.0	1.4	1.4	1.3	0.7	0.6	0.7	0.6	0.7	0.8	0.7	0.7	0.7	0.8	0.7	0.8	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7		
8/6/2010	TPE-6	11:22	639,216	7,210,459	7.0	5.5	4.6	4.9	4.7	4.9	5.5	4.9																			
8/14/2010	BGHVH-1	12:03	638,711	7,211,761	3.5	8.4	7.2	7.6	8.4																						
8/14/2010	BGHVH-2	11:19	639,016	7,211,788	7.0	5.6	5.3	5.4	5.4	5.4	5.2	5.6																			
8/14/2010	BGHVH-3	11:35	639,535	7,211,811	15.0	5.7	4.9	4.8	5.0	5.0	5.1	5.1	4.9	5.0	4.9	5.2	5.6	5.6	5.7	5.7											
8/14/2010	BGHVH-4	11:45	639,521	7,212,410	5.0	8.3	7.4	7.3	7.6	8.3	8.2																				
8/14/2010	BGHVH-5	11:56	639,012	7,211,243	12.0	5.0	4.8	5.0	4.6	4.8	4.2	4.4	4.3	4.3	4.5	4.4	4.5														
8/14/2010	TPE-1	12:24	637,476	7,211,696	3.0	4.3	4.2	4.3	4.3																						
8/14/2010	TPE-2	13:05	638,194	7,211,757	11	4.3	4.2	4.2	4.3	4.2	4.2	4.3	4.3	4.3	4.3	4.3															
8/14/2010	TPE-3	13:15	638,303	7,211,211	6.5	4.3	4.3	4.3	4.3	4.3	4.3	4.3																			
8/14/2010	TPE-4	13:20	638,534	7,210,762	4	4.4	4.4	4.2	4.2																						
8/14/2010	TPE-5	13:25	637,938	7,210,252	19.0	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2	4.2		
8/14/2010	TPE-6	13:30	639,216	7,210,459	6.5	4.3	4.3	4.3	4.3	4.2	4.2	4.2																			
8/14/2010	SP-1	15:47	639,532	7,213,723	7	0.9	0.7	0.8	0.9	0.8	0.9	0.9	0.9																		
8/14/2010	SP-2	16:02	639,544	7,214,329	7	0.7	0.6	0.6	0.7	0.7	0.7	0.6																			
8/14/2010	SP-3	16:15	639,872	7,213,917	17	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6		
8/14/2010	SP-4	16:30	640,298	7,213,820	5	0.6	0.6	0.6	0.6	0.6	0.6	0.6																			
8/14/2010	SP-5	16:41	640,347	7,213,310	5	0.6	0.6	0.5	0.6	0.6	0.6	0.6																			
8/14/2010	SP-6	16:50	640,663	7,212,630	5	0.6	0.6	0.6	0.6	0.6	0.6	0.6																			
8/15/2010	SP-7	9:10	640,200	7,212,752	8.0	0.7	0.6	0.7	0.6	0.7	0.7	0.6																			
8/15/2010	SP-8	9:20	639,812	7,213,189	8.0	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.7																		
8/15/2010	SP-9	9:25	641,052	7,213,128	18	0.7	0.7	0.7	0.6	0.7	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.7	0.7								
8/15/2010	SP-10	9:30	641,295	7,213,589	15	0.7	0.6	0.6	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6		
8/15/2010	SP-11	9:45	658,796	7,213,905	7	0.7	0.7	0.6	0.7	0.6	0.6	0.6	0.7																		
8/15/2010	TPN-10	12:48	636,174	7,213,346	10	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3															
8/15/2010	TPN-11	12:41	636,916	7,213,334	18	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3		
8/15/2010	TPN-12	12:52	636,016	7,212,582	10	0.3	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2	0.3	0.3															
8/15/2010	TPN-13	12:31	636,977	7,212,509	16	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.2	0.2	0.2	0.2								
8/21/2010	SP-1	2:10 PM	639,532	7,213,723	9	1.3	1.2	1.1	1.1	1.1	1.3	1.1	1.2	1.2	1.2																
8/21/2010	SP-2	4:13 PM	639,544	7,214,329	8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6																	
8/21/2010	SP-3	4:00 PM	639,872	7,213,917	17	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		
8/21/2010	SP-4	3:37 PM	640,298	7,213,820	6	0.6	0.5	0.5	0.5	0.5	0.6	0.4	0.5																		
8/21/2010	SP-5	3:26 PM	640,347	7,213,310	6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5																		
8/21/2010	SP-6	2:59 PM	640,663	7,212,630	5	0.5	0.5	0.5	0.5	0.5	0.5	0.5																			
8/21/2010	SP-7	2:45 PM	640,200	7,212,752	7	0.8	0.7	0.7	0.7	0.8	0.7	0.7	0.8																		
8/21/2010	SP-8	2:25 PM	639,812	7,213,189	8	0.8	0.7	0.7	0.8	0.7	0.8	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6		
8/21/2010	SP-9	11:20 PM	641,052	7,213,128	17	0.7	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5		

Appendix A: Dike Construction Broad Survey Turbidity Profiles by Day

Date	Station	Time	Easting	Northing	Maximum Depth(m)	Turbidity Depth Profile (meters below surface; units: NTU)																								
						Max	0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m	21m	22m	23m
8/21/2010	SP-10	1:00 PM	641,295	7,213,589	10	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
8/22/2010	TPE-1		637,476	7,211,696	3.1	4.9	4.1	4.9	4.5																					
8/22/2010	TPE-2		638,194	7,211,757	11	7.7	7.0	7.1	7.0	7.3	7.2	7.7	7.3	7.2	7.1	7.6														
8/22/2010	TPE-3		638,303	7,211,211	6.5	9.5	9.2	9.5	9.3	9.4	9.5	9.0																		
8/22/2010	TPE-4		638,534	7,210,762	3.7	8.1	8.1	7.5	7.7																					
8/22/2010	TPE-5		637,938	7,210,252	18	5.4	5.2	5.1	5.3	5.3	5.2	5.3	5.1	5.1	5.1	4.9	5.1	5.4	5.0	4.9	4.8	4.8	4.6							
8/22/2010	TPE-6		639,216	7,210,459	7.2	8.0	7.8	7.8	8.0	7.8	7.9	7.9																		
8/22/2010	TPN-10		636,174	7,213,346	9	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8/22/2010	TPN-11		636,916	7,213,334	19	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8/22/2010	TPN-12		636,016	7,212,582	10	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
8/22/2010	TPN-13		636,977	7,212,509	17	0.5	0.5	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
8/22/2010	BGHVH-2		639,535	7,211,811	8	9.5	8.7	8.6	9.3	8.9	9.1	9.2	9.5																	
8/22/2010	BGHVH-4	11:18 AM	639,521	7,212,410	6	9.4	8.0	9.2	9.4	9.1	9.1																			
8/22/2010	BGHVH-5	11:39 AM	639,012	7,211,243	11	8.5	7.3	8.1	8.5	7.8	8.3	7.8	7.1	7.1	7.8															
8/28/2010	SP-1	2:10 PM	639,532	7,213,723	7	1.0	0.8	0.8	0.8	0.9	0.9	0.9	1.0																	
8/28/2010	SP-2	4:13 PM	639,544	7,214,329	8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7																
8/28/2010	SP-3	4:00 PM	639,872	7,213,917	17	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6
8/28/2010	SP-4	3:37 PM	640,298	7,213,820	6	0.7	0.6	0.6	0.7	0.6	0.7	0.7	0.6																	
8/28/2010	SP-5	3:26 PM	640,347	7,213,310	6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6																	
8/28/2010	SP-6	2:59 PM	640,663	7,212,630	5	0.6	0.6	0.6	0.6	0.6	0.6																			
8/28/2010	SP-7	2:45 PM	640,200	7,212,752	7	1.0	1.0	1.0	0.9	0.9	0.9	0.7																		
8/28/2010	SP-8	2:25 PM	639,812	7,213,189	8	1.9	1.5	1.5	1.4	1.5	1.7	1.9	1.9																	
8/28/2010	SP-9	11:20 PM	641,052	7,213,128	17	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
8/28/2010	SP-10	1:00 PM	641,295	7,213,589	10	0.3	0.2	0.2	0.2	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.3											
8/28/2010	TPE-1		637,476	7,211,696	3.1	3.6	3.5	3.6	3.2																					
8/28/2010	TPE-2		638,194	7,211,757	11	9.0	8.3	8.4	8.7	8.9	8.5	8.2	8.3	8.3	8.8	9.0														
8/28/2010	TPE-3		638,303	7,211,211	6.5	8.6	8.1	7.7	8.4	8.4	8.6																			
8/28/2010	TPE-4		638,534	7,210,762	3.7	8.1	8.1	7.5	7.7																					
8/28/2010	TPE-5		637,938	7,210,252	18	5.1	4.8	4.9	4.8	4.8	4.6	4.5	4.6	4.8	4.8	4.9	4.8	5.0	5.0	5.1	5.0	5.1	4.6							
8/28/2010	TPE-6		639,216	7,210,459	7.2	8.1	7.9	7.9	8.1	7.7	7.8	7.9	7.9																	
8/29/2010	TPN-10		636,174	7,213,346	9	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2																
8/29/2010	TPN-11		636,916	7,213,334	19	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8/29/2010	TPN-12		636,016	7,212,582	10	0.2	0.2	0.1	0.1	0.1	0.2	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
8/29/2010	TPN-13		636,977	7,212,509	17	0.3	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
8/28/2010	BGHVH-4	11:18 AM	639,521	7,212,410	6	7.6	7.6	7.6	7.2	7.4	7.2	7.3																		
8/28/2010	BGHVH-5	11:39 AM	639,012	7,211,243	11	7.4	6.8	6.3	6.6	6.7	6.9	7.4	7.0	6.9	7.0	6.9	7.1													
9/3/2010	SP-1	10:34 AM	639,532	7,213,723	8	1.3	0.8	0.8	0.9	0.8	0.7	1.0	1.3																	
9/3/2010	SP-2	10:44 AM	639,544	7,214,329	7	0.6	0.6	0.4	0.5	0.4	0.5	0.5																		
9/3/2010	SP-3	10:54 AM	639,872	7,213,917	17	0.7	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.5	0.4	0.4	0.7	0.5	0.5	0.5	0.5							
9/3/2010	SP-4	11:04 AM	640,298	7,213,820	5	0.6	0.6	0.5	0.5	0.5																				
9/3/2010	SP-5	11:14 AM	640,347	7,213,310	5	0.5	0.5	0.4	0.5	0.5																				
9/3/2010	SP-6	11:24 AM	640,663	7,212,630	5	0.7	0.7	0.6	0.6	0.6																				
9/3/2010	SP-7	11:34 AM	640,200	7,212,752	7	0.9	0.9	0.9	0.9	0.9	0.9	0.9																		
9/3/2010	SP-8	11:44 AM	639,812	7,213,189	8	1.3	1.0	1.0	1.0	1.0	1.1	1.3	1.3																	
9/3/2010	SP-9	11:54 AM	641,052	7,213,128	18	0.5	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
9/3/2010	SP-10	12:04 PM	641,295	7,213,589	11	0.2	0.1	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
9/3/2010	TPE-1	11:35	637,476	7,211,696	3.1	5.8	5.8	3.7	2.4																					
9/3/2010	TPE-2	11:45	638,194	7,211,757	11	22.1	6.3	6.5	6.6	7.3	6.6	8.5	7.1	7.6	9.4	22.1														
9/3/2010	TPE-3	11:55	638,303	7,211,211	6.5	6.7	5.7	6.7	6.7	6.5	6.1																			
9/3/2010	TPE-4	12:05	638,534	7,210,762	3.7	5.3	5.3	5.3</																						

Appendix A: Dike Construction Broad Survey Turbidity Profiles by Day

Date	Station	Time	Easting	Northing	Maximum Depth(m)	Turbidity Depth Profile (meters below surface; units: NTU)																							
						Max	0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m	21m	22m
9/3/2010	TPN-10	12:35	636,174	7,213,346	10	0.2	0.1	0.2	0.1	0.2	0.2	0.1	0.1	0.1	0.1														
9/3/2010	TPN-11	12:45	636,916	7,213,334	19	0.3	0.2	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2						
9/3/2010	TPN-12	12:55	636,016	7,212,582	11	0.2	0.1	0.1	0.2	0.2	0.1	0.1	0.1	0.2	0.1	0.1													
9/3/2010	TPN-13	13:05	636,977	7,212,509	17	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.3	0.2	0.2	0.2	0.2	0.3	0.2	0.3							
9/3/2010	BGHVH-2	9:55	639,016	7,211,788	8	6.1	5.9	5.7	5.9	6.1	6.0	6.0	5.7																
9/3/2010	BGHVH-3	10:05	639,535	7,211,811	15	6.1	6.0	6.1	6.0	6.1	5.8	5.9	5.8	6.1	6.1	5.9	5.7	5.6	5.7	5.5									
9/3/2010	BGHVH-4	10:15	639,521	7,212,410	6	6.0	5.7	5.8	5.9	6.0	5.7																		
9/3/2010	BGHVH-5	10:25	639,012	7,211,243	11	6.1	5.6	5.8	5.8	5.7	5.8	5.8	5.9	6.1	6.0	5.8													
9/9/2010	SP-1	2:16 PM	639,532	7,213,723	8	0.9	0.8	0.8	0.8	0.8	0.9	0.8	0.8																
9/9/2010	SP-2	3:23 PM	639,544	7,214,329	8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6																
9/9/2010	SP-3	3:19 PM	639,872	7,213,917	17	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.6	0.6	0.5							
9/9/2010	SP-4	3:15 PM	640,298	7,213,820	5	0.5	0.4	0.5	0.4	0.4																			
9/9/2010	SP-5	3:08 PM	640,347	7,213,310	5	0.5	0.4	0.5	0.5	0.4																			
9/9/2010	SP-6	2:40 PM	640,663	7,212,630	6	0.5	0.5	0.5	0.5	0.5		0.5																	
9/9/2010	SP-7	2:30 PM	640,200	7,212,752	7	0.6	0.6	0.5	0.5	0.6	0.5	0.5			0.5														
9/9/2010	SP-8	2:20 PM	639,812	7,213,189	8	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7		0.7														
9/9/2010	SP-9	2:48 PM	641,052	7,213,128	18	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4	0.4	0.4	0.4	0.4	0.4				
9/9/2010	SP-10	2:58 PM	641,295	7,213,589	11	0.2	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.1	0.2											
9/9/2010	TPE-1	9:25 AM	637,476	7,211,696	3	2.2	2.2	1.9	1.8																				
9/9/2010	TPE-2	9:59 AM	638,194	7,211,757	8	12.7	12.2	11.7	12.0	11.9	12.2	12.2	12.7																
9/9/2010	TPE-3	9:54 AM	638,303	7,211,211	6	10.7	10.7	9.7	10.0	9.7	8.8																		
9/9/2010	TPE-4	9:47 AM	638,534	7,210,762	4	5.0	5.0	5.0	5.0																				
9/9/2010	TPE-5	9:33 AM	637,938	7,210,252	17	5.8	5.8	5.6	5.6	5.6	5.6	5.6	5.6	5.7	5.8	5.6	5.7	5.8	5.8	5.8	5.6	5.7							
9/9/2010	TPE-6	9:42 AM	639,216	7,210,459	6	4.6	4.6	4.6	4.3	4.4	4.6																		
9/9/2010	TPN-10	9:02 AM	636,174	7,213,346	8	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1																
9/9/2010	TPN-11	9:05 AM	636,916	7,213,334	17	0.2	0.1	0.1	0.2	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1							
9/9/2010	TPN-12	9:00 AM	636,016	7,212,582	11	0.1	0.1	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.1	0.1													
9/9/2010	TPN-13	8:50 AM	636,977	7,212,509	11	0.3	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.3	0.3	0.2												
9/9/2010	BGHVH-2	10:26 AM	639,016	7,211,788	8	5.2	4.9	4.7	4.7	4.7	4.8	4.9	5.2																
9/9/2010	BGHVH-3	10:37 AM	639,535	7,211,811	15	5.0	4.9	4.7	4.7	4.6	4.8	5.0	5.0	4.9	4.8	4.8	4.9	4.7	4.8	4.7									
9/9/2010	BGHVH-4	11:02 AM	639,521	7,212,410	6	4.8	4.6	4.3	4.5	4.5	4.8																		
9/9/2010	BGHVH-5	10:19 AM	639,012	7,211,243	11	5.1	5.1	5.0	5.1	5.1	5.1	5.0	5.1	5.0	5.0	4.9													
9/19/2010	BGHVH-2	10:50 AM	639,016	7,211,788	8	3.6	3.6	3.5	3.4	3.3	3.5	3.3																	
9/19/2010	BGHVH-3		639,535	7,211,811	15	0.0	Curtains in the way																						
9/19/2010	BGHVH-4	11:40 AM	639,521	7,212,410	6	3.7	3.7	3.6	3.4	3.5	3.6																		
9/19/2010	BGHVH-5	11:20 AM	639,012	7,211,243	11	4.6	4.4	4.3	4.4	4.6	4.4	4.5	4.6	4.3	4.4	4.0	3.8												
9/20/2010	SP-1	4:16 PM	639,532	7,213,723	8	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3															
9/20/2010	SP-2	4:30 PM	639,544	7,214,329	8	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3														
9/20/2010	SP-3	4:35 PM	639,872	7,213,917	17	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3			
9/20/2010	SP-4	3:15 PM	640,298	7,213,820	5	0.3	0.3	0.3	0.3	0.3	0.3	0.3																	
9/20/2010	SP-5	3:08 PM	640,347	7,213,310	5	0.3	0.3	0.3	0.3	0.3	0.3																		
9/20/2010	SP-6	2:40 PM	640,663	7,212,630	6	0.3	0.3	0.3	0.3	0.3	0.3																		
9/20/2010	SP-7	2:58 PM	640,200	7,212,752	7	0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.3		0.3														
9/20/2010	SP-8	3:20 PM	639,812	7,213,189	8	0.4	0.4	0.4	0.4	0.4	0.3	0.4	0.4																
9/20/2010	SP-9	3:48 PM	641,052	7,213,128	18	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2					
9/20/2010	SP-10	3:58 PM	641,295	7,213,589	11	0.1	0.0	0.1	0.1	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1												
9/20/2010	TPE-1	11:23 AM	637,476	7,211,696	3.1	0.8	0.8	0.8	0.6																				
9/20/2010	TPE-2	11:35 AM	638,194	7,211,757	8	4.7	4.3	4.5	4.6	4.6	4.4	4.3	4.7	4.3	4.6	4.5													
9/20/2010	TPE-3	11:45 AM	638,303	7,211,211	6	3.7	3.7	3.7	3.4	3.4	3.4																		
9/20/2010	TPE-4	11:56 AM	638,534	7,210,762	4	3.6	3.5	3.5	3.6																				
9/20/2010	TPE-5	3:50 PM	637,938	7,210,252	17	4.1	3.8	3.8	3.9	3.8	3.8	3.8	3.9	3.9	4.0	4.0	4.0	3.9	3.8	3.9	4.1	3.6	3.7	3.7					
9/20/2010	TPE-6	3:30 PM	639,216	7,210,459	6		3.5	3.3	3.3	3.6	3.5	3.6																	

Appendix A: Dike Construction Broad Survey Turbidity Profiles by Day

Date	Station	Time	Easting	Northing	Maximum Depth(m)	Turbidity Depth Profile (meters below surface; units: NTU)																								
						Max	0m	1m	2m	3m	4m	5m	6m	7m	8m	9m	10m	11m	12m	13m	14m	15m	16m	17m	18m	19m	20m	21m	22m	23m
9/20/2010	TPN-10	3:30 PM				0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3														
9/20/2010	TPN-11					0.4	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.4	0.3	0.3	0.4	0.4	0.4	0.4	0.4								
9/20/2010	TPN-12					0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3													
9/20/2010	TPN-13	4:00 PM				0.4	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.4								
9/27/2010	SP-1	9:40 AM	639,532	7,213,723	8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8																	
9/27/2010	SP-2	9:45 AM	639,544	7,214,329	8	0.8	0.8	0.8	0.7	0.7	0.8	0.7	0.7	0.7																
9/27/2010	SP-3	9:50 AM	639,872	7,213,917	17	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6								
9/27/2010	SP-4	9:55 AM	640,298	7,213,820	5	0.6	0.6	0.6	0.6	0.6	0.6																			
9/27/2010	SP-5	10:00 AM	640,347	7,213,310	5	0.6	0.6	0.6	0.6	0.5	0.6																			
9/27/2010	SP-6	10:05 AM	640,663	7,212,630	6	0.7	0.7	0.7	0.7	0.7	0.7	0.7																		
9/27/2010	SP-7	10:10 AM	640,200	7,212,752	7	0.9	0.9	0.8	0.9	0.9	0.8	0.9	0.9																	
9/27/2010	SP-8	10:15 AM	639,812	7,213,189	8	0.9	0.8	0.8	0.8	0.8	0.8	0.9	0.8	0.8																
9/27/2010	SP-9	10:20 AM	641,052	7,213,128	18	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.7	0.7	0.7	0.7					
9/27/2010	SP-10	10:23 AM	641,295	7,213,589	11	0.8	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.8	0.8													
9/27/2010	TPE-1	2:00 PM	637,476	7,211,696	3	1.4	1.1	1.4	1.3																					
9/27/2010	TPE-2	2:05 PM	638,194	7,211,757	8	3.4	3.3	3.3	3.1	3.3	3.3	3.3	3.4																	
9/27/2010	TPE-3	2:10 PM	638,303	7,211,211	6	3.3	3.0	3.1	3.2	3.2	3.3																			
9/27/2010	TPE-4	2:15 PM	638,534	7,210,762	4	3.1	3.1	3.0	3.1																					
9/27/2010	TPE-5	2:20 PM	637,938	7,210,252	17	3.1	2.9	3.0	3.0	3.0	3.1	3.0	2.9	3.0	3.0	3.0	2.9	2.9	2.9	2.9	2.9	2.9	2.9							
9/27/2010	TPE-6	2:25 PM	639,216	7,210,459	6	3.3	3.3	3.3	3.2	3.2	3.3																			
9/27/2010	TPN-10	10:55 AM	636,174	7,213,346	8	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3																	
9/27/2010	TPN-11	11:00 AM	636,916	7,213,334	17	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3							
9/27/2010	TPN-12	11:05 AM	636,016	7,212,582	11	0.3	0.3	0.3	0.3	0.3	0.2	0.3	0.2	0.3	0.2	0.3	0.3	0.3												
9/27/2010	TPN-13	11:10 AM	636,977	7,212,509	11	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3													
9/27/2010	BGHVH-2	11:15 AM	639,016	7,211,788	8	3.5	3.2	3.3	3.4	3.3	3.3	3.4	3.4	3.5																
9/27/2010	BGHVH-3	11:20 AM	639,535	7,211,811	15	3.5	3.3	3.2	3.3	3.4	3.3	3.3	3.3	3.5	3.3	3.4	3.4	3.4	3.3	3.3										
9/27/2010	BGHVH-4	11:25 AM	639,521	7,212,410	6	3.5	3.2	3.3	3.4	3.5	3.3																			
9/27/2010	BGHVH-5	11:30 AM	639,012	7,211,243	11	3.4	3.2	3.3	3.2	3.1	3.2	3.2	3.3	3.3	3.4	3.4														

APPENDIX B:

AZIMUTH TSS-TURBIDITY MEMORANDUM 2010

MARCH 2011



Technical Memorandum

Date: February 5, 2010
To: Stéphane Robert (Agnico-Eagle Mines Ltd.)
From: Ryan Hill and Gary Mann (Azimuth Consulting Group Inc.)
RE: **Proposed revision to the TSS-turbidity relationship used for dike construction monitoring and dewatering (untreated water) monitoring**

Field measurements of turbidity are used as a surrogate for TSS during dike construction monitoring and dewatering monitoring. Prior to 2009, a limited data set was available, and was used to develop a single relationship that was applied to dike construction monitoring and to dewatering (of untreated water¹) monitoring. Intensive sampling during 2009 has now provided a data set that could support development of distinct relationships for dike construction monitoring and dewatering monitoring – the relationships should be distinct in theory because conditions during dewatering are fundamentally different from conditions during dike construction.

Dike Construction Monitoring – The new proposed TSS-turbidity relationship for dike construction monitoring is:

$$\log_{10}(\text{turbidity}) = 0.62196 + (0.95619 * \log_{10}(\text{TSS})),$$

where TSS is measured in the lab in mg/L and turbidity is measured in NTUs in the field using an Analite NEP 160 meter².

This relationship is based on data from targeted TSS samples collected during construction of the Bay-Goose dike in 2009, as well as other relevant data collected in 2009 in Second and Third Portage Lakes (sampling associated with the AEMP, the Effects Assessment for the Bay-Goose dike construction, and weekly dike construction water quality). The 2008 data associated with the East Dike were not included because (a) the 2009 data set was very large and covered a range of conditions, and could therefore support derivation of a rigorous relationship without additional data; (b) there was some *a priori* expectation of differences between the two data sets because the nature of construction material used and the placement methods may have changed slightly in

¹ All discussions herein regarding dewatering refer to untreated water and are not applicable to monitoring of treated water.

² Different turbidity probes often differ systematically in their NTU readings. Results from other meters could only be used with the reported TSS-turbidity relationships if they are first converted to Analite NEP 160 equivalence (i.e., by deriving the relationship between observed NTU values for both meter types).

2009; and (c) statistical analysis confirmed a significant difference between the 2008 and 2009 data sets.

Dewatering Monitoring (see footnote 1) – The new proposed TSS-turbidity relationship for dewatering monitoring is:

$$\log_{10}(\text{turbidity}) = 0.53276 + (0.99276 * \log_{10}(\text{TSS})),$$

where TSS is measured in the lab in mg/L and turbidity is measured in NTUs in the field using an Analite NEP 160 meter¹.

This is based on data from 2009 dewatering of the impounded arm of Second Portage Lake, as well as all of the data related to dike construction from 2008 and 2009. The dewatering data alone are insufficient because (a) they cover only a very limited range of turbidity and TSS values, and cannot be easily extrapolated to higher values; and (b) the data were collected during a narrow time window and their applicability to dewatering conditions in general is unknown. In future it may be possible to exclude the dike construction monitoring data and use only dewatering data, if additional dewatering data are collected across a higher range of turbidity values and at different times of year.

Details regarding the selection of data sets and statistical methods are provided in **Appendix A**.

APPENDIX A – DERIVATION OF TSS-TURBIDITY RELATIONSHIPS FOR DIKE CONSTRUCTION MONITORING AND DEWATERING MONITORING

1. INTRODUCTION

Turbidity is measured in the field during dike construction as a surrogate for total suspended solids (TSS). It is well known that the relationship between turbidity and TSS is site-specific, in part because of site-specific variation in the size, shape and other properties of the suspended particulates.

A TSS-turbidity relationship for dike construction monitoring and dewatering monitoring was developed prior to construction of the East Dike in 2008, based on limited available data. As additional and more relevant data became available, the relationship was updated during construction of the East Dike. The updated relationship was applied to construction of the Bay-Goose dike in 2009.

During 2009, a significant number of paired TSS-turbidity samples were collected, including targeted sampling as well as sampling conducted as part of routine weekly water quality monitoring, the AEMP, and the Effects Assessment Strategy.

This technical appendix develops an updated TSS-turbidity relationship that could be used for dike construction monitoring in 2010, and a second TSS-turbidity relationship that is more appropriate for dewatering monitoring (for untreated water only). **Section 2** reviews the general statistical framework used to analyze the TSS-turbidity relationship. **Section 3** reviews and selects the data to be used for each analysis. **Section 4** presents the new TSS-turbidity relationships.

2. GENERAL STATISTICAL FRAMEWORK

Federal guidance on the use of turbidity as a surrogate for TSS (CCME 1999) provides an example relationship, which has log-turbidity (in NTUs) as a function of log-TSS (in mg/L). The 2008 Meadowbank data set was well described by a similar relationship (i.e., log data), so we used the same type of simple linear regression at that time. In theory, it is suspended solids that cause turbidity, not the other way around, so it makes sense to use TSS as the independent (x) variable. On the other hand, we are measuring turbidity and using it to estimate TSS, so argument could be made to make turbidity the x-variable. For this analysis we use TSS as the x-variable, consistent with the example provided by CCME (1999).

One assumption of linear regression is that data points are independent. In our case, the data points come from distinct data sets. Since the nature of the TSS-turbidity relationship may vary somewhat among these data sets, the assumption of independence may be violated. In such cases, it may be preferable to either exclude certain data sets, or to incorporate multiple data sets

using a mixed-effect modeling approach, or to combine multiple data sets in spite of the violation of independence. We provide rationale for our approaches in this regard in **Section 3**.

Finally, all analyses are conducted by excluding data points where TSS concentrations were below laboratory method detection limits (DLs). We had included those data in earlier analyses (using $\frac{1}{2}$ of the DL) due to the limited number of data points. Now that we have more data, we exclude any data points where measured TSS was below laboratory detection limits. In a case where regression is based on log-values, the low values at or below detection limits have considerable influence on the predicted relationship. From a regulatory perspective, the range of TSS values that we need to characterize accurately does not include the low values around the detection limits, and error at those values has relatively little impact on estimated long-term average TSS levels. It would therefore be preferable to drop some of the data at low TSS concentrations (below DLs) in order to avoid bias at higher, more relevant TSS concentrations.

All statistical analyses reported in this technical memo were implemented using R software version 2.9.0, using methods outlined in Dalgaard (2008) and Venables and Ripley (2002).

3. REVIEW AND SELECTION OF DATA

3.1. General Considerations

This section reviews the available data sets and their relevance to dike construction. There are a few considerations that apply to all of the data sets:

1. *Probe Type* – All of the data sets were generated using the same model of turbidity probe, the Analite NEP 160. It is important that the data are either based on the same probe, or are corrected for differences among probes.
2. *Spatial Bias* – All of the data collected in Second and Third Portage Lakes during dike construction activities share a common limitation which can be expected to bias any derived TSS-turbidity relationship. Specifically, the data points with high TSS / high turbidity tend to be collected near the construction zones (including inside the turbidity barriers) where we expect proportionately more large suspended particles, while the data points with low TSS / low turbidity tend to be collected further away from the construction zone where we expect fewer large suspended particles (because they would have settled out). Particle size influences any TSS-turbidity relationship – TSS is more affected by heavy particles (e.g., sand), while turbidity is more affected by the presence of lots of small particles (e.g., clay)³. Therefore, any TSS-turbidity relationship that is derived has an inherent spatial element – the relationship works well if applied to high turbidity values near the construction zone and to low turbidity values away from the

³ In addition, according to the EPA (1993), coarse particles that settle out rapidly are a source of interference for measurements of turbidity by nephelometry.

construction zone, but the opposite may not be true. Fortunately, the usual pattern is to see high TSS levels near the construction zone and lower TSS levels at a distance.

3. *Temporal Bias* – In addition, since large particles settle out over time, we would also expect data collected several weeks or months after the end of construction activities to consist of proportionately fewer large particles. Therefore, given the effect of particle size on the TSS-turbidity relationship, the relationship during construction would not necessarily be the same as the relationship long after construction, particularly at locations close to the construction zones.

3.2. Description of Available Data Sets

The available data sets are summarized as follows.

East Dike 2008 – These data were collected during the early part of east dike construction in 2008. Many of the samples were taken from inside the turbidity barriers in order to characterize the high end of the TSS-turbidity relationship. Data for the East Dike are shown in **Table 1**.

Bay-Goose Dike 2009 – These data were collected during construction of the Bay-Goose dike in 2009. The Bay-Goose data were collected from all around the dike, both inside and outside the curtains, as well as far out into Third and Second Portage Lakes. Collection of the Bay-Goose data spanned a long time frame, and included many samples of turbid water in areas away from the construction zone, after a major wind event dispersed turbid water beyond the construction zone. Data for the Bay-Goose Dike are also shown in **Table 1**.

Weekly Dike Construction Monitoring Data – During construction of the East Dike in 2008 and the Bay-Goose Dike in 2009, weekly water quality monitoring was conducted at stations close to and away from the construction zone. When vertical profiles existed in the water column, various depths were sometimes targeted. The data include collection of water samples (including for TSS) at a specified depth, plus vertical profiles of turbidity. The turbidity measured at the closest depth interval to the depth of water samples can be paired with the TSS data. Since there may be a time delay in the field (e.g., a couple of minutes) between evaluation of the turbidity profile and collection of the water samples, we can expect slightly more imprecision with these data than with the targeted TSS sampling, but there is no reason to expect bias. The weekly dike construction monitoring data are shown in **Table 2**.

AEMP Water Quality Data – AEMP data are similar to the weekly dike construction monitoring data, involving collection of water samples (including TSS) and vertical profiles of turbidity. Most of the AEMP data are not useful for a TSS-turbidity relationship since they occur at sites not affected by dike construction, and where TSS is often below detection limits. However, samples taken in Second Portage Lake during dike construction activities in 2008/2009, as well as samples taken in the east basin of Third Portage Lake in 2009 can be used. The relevant AEMP data are shown in **Table 2**.

EAS Water Quality Data – As part of the assessment of potential ecological effects of dike construction, limited water quality data have been collected in both 2008 and 2009 in Second

Portage Lake and the east basin of Third Portage Lake. These data are similar to the weekly dike construction monitoring data and the AEMP data described above. The relevant EAS data are shown in **Table 2**.

Dewatering Data 2009 – Dewatering of the impoundment in Second Portage Lake began in winter/spring 2009. Starting in the spring of 2009, data collection included field turbidity, lab turbidity and lab TSS. Field turbidity measurements were taken incorrectly⁴ for the first few months, but methodology was corrected and field data on or after June 20th can be used. In addition, there is a strong correlation between field and lab turbidity, so lab data can be used to predict field turbidity for the earlier period June 9-19. Dewatering data are shown in **Table 3**, with the relationship between field and lab turbidity explained in the footnote. Only those records with simultaneous water collection for field and lab were used (i.e., the water samples for both were collected at the same time). Dewatering data collected over the winter (i.e., earlier in 2009; data not shown) had consistently low turbidity, generally in the range of 2 to 5 NTU. This indicates that most of the turbidity associated with dike construction had settled out by the winter. The higher turbidity over the June-July period shown in **Table 3** is therefore reflective of newly suspended sediments – one potential explanation is erosion of newly exposed banks during freshet, but other explanations are also possible.

AWPAR and Quarry Data – The AWPAP and Quarry data collected since 2007 come from locations around Meadowbank camp and along the road between Meadowbank camp and Baker Lake. The data primarily characterize sediment introduced from quarried construction material contacting water (i.e., either runoff flowing through the road and picking up fines or material placed within stream channels), or ponded water that occurs in quarries or other areas. The quarried construction material may be similar to material used for dike construction. However, the setting for the turbid water is not the same as a lake, occurring instead in ponded water or in streams or runoff areas. In addition, the effect of erosion or resuspension of lake bottom materials would not be captured at all by the AWPAP and Quarry data. The AWPAP and Quarry data are not shown, because they are not relevant to either dike construction or dewatering; there are sufficient other data to allow us to ignore the AWPAP and Quarry data.

3.3. Data Selection for Dike Construction

For the TSS-turbidity relationship for dike construction monitoring, it is appropriate to consider all data except for the dewatering data and the AWPAP & Quarry data (i.e., we initially consider all data in **Table 1** and **Table 2**). These data sets are inherently different from data collected in the lakes during dike construction.

The remaining data sets are all directly relevant to dike construction. The only variable which could potentially differentiate among the data sets is the year (2008 vs. 2009). For example, if construction materials used to build the two dikes were different, or if placement methods changed, the TSS-turbidity relationships may also be different.

⁴ Field crews stirred the water as they measured, which creates air bubbles that interfere with probe function.

The 2008 and 2009 data relevant to dike construction are shown together in **Figure 1** (excluding data points below lab detection limits as discussed above). Log values are used to spread out the data and facilitate visual interpretation. Due to differences in detection limits between 2008 and 2009, the earlier data set lacks values at the low end.

Next, we considered alternative data transformation that would facilitate linear modeling. We evaluated various log and root transformations for both TSS and turbidity (log base 10, natural log, square root, fourth root). In each case we (a) evaluated how effectively the transformation spread the data across each axis, (b) evaluated apparent normality based on plots of the residuals, and (c) tested for normality of the residuals using a Shapiro-Wilks normality test. Our judgment was that the log base 10 transformation (for both variables) performed best overall.

The log-log data shown in **Figure 1** appear to be linear over most of the range, except at low TSS values. Given the log-scale, a log value of 0.50 on the x-axis corresponds to TSS of 3.16 mg/L, so all data to the left of log-TSS of 0.50 are close to detection limits (the detection limit was 3 mg/L for most of the 2008 data, and 1 mg/L for most of the 2009 data). It is not surprising that there is considerably more variability about the relationship at these low values, given their proximity to detection limits (in fact, there hardly appears to be any slope to the data in that range). Rather than try to fit a non-linear relationship to the data, we dropped all of the data points where TSS was less than 3.16 mg/L. Data below that range are unimportant from a decision-making perspective, since the lowest management threshold is at 6 mg/L, and long-term average estimates of TSS levels are not strongly affected by imprecision in low numbers. This cropping of the data set allows more rigorous application of a linear model across the data range from 3.16 mg/L upwards, which should result in better characterization of the relationship at higher TSS levels.

We also deleted one obvious outlier in the 2009 data set, shown in the figure at a log-TSS of 1.15 and log-turbidity of 0.66. This data point is associated with sample BG-TSS-36. The lab-measured turbidity was more than 5-fold higher than field-measured turbidity, suggesting a measurement error in the field.

Finally, we tested for differences between the 2008 and 2009 data sets using Analysis of Covariance. Analysis of covariance indicated no difference in slopes between the two data sets ($p > 0.10$), but there was a significant difference in the intercepts ($p < 0.01$). Visually, it does appear that the 2008 data are shifted slightly down relative to the 2009 data (keeping in mind that data below log TSS of 0.5 are not included). This could be explained by a difference in construction materials or construction practices between 2008 and 2009. Given that future dike construction monitoring is more likely to use materials and practices consistent with 2009 and not 2008, it is appropriate to drop the 2008 data.

In summary, the 2009 data in Second and Third Portage Lakes at TSS values above 3.16 mg/L were retained for derivation of the TSS-turbidity relationship for dike construction monitoring, with the exception of one outlier that was deleted.

3.4. Data Selection for Dewatering

The dewatering data (**Table 3 and Figure 2**) collected in the impoundment of Second Portage Lake are the only data that we know for certain are directly relevant to dewatering monitoring. However, the data have several limitations. First, they cover a narrow range of turbidity and TSS values, so any relationship derived solely on the dewatering data could not easily be extrapolated to higher turbidity levels. Second, they were collected during a relatively narrow time window (June-July 2009) so we do not know how applicable the data would be to the full range of dewatering conditions that may exist over time. Overall, our understanding of the applicability of the data to the full range of dewatering conditions is limited.

For these two reasons, it is appropriate to consider using the dike construction data to supplement the dewatering data. The dike construction data are somewhat relevant to dewatering since some residual East Dike construction material can be expected to be suspended in the impoundment, and because construction of other smaller dikes in the impoundment may overlap in time with dewatering. **Figure 3** shows the dewatering data together with the dike construction data. If we ignore data near the detection limits (i.e., data below log-TSS of 0.5, in accordance with the analysis in **Section 3.3**), the dewatering data appear relatively similar to the dike construction data over the narrow range of overlap. Nevertheless, analysis of covariance of the two data sets (ignoring the data below log-TSS of 0.5, and deleting the outlier point BG-TSS-36 as discussed in **Section 3.3**) indicates significant differences in slope and intercept ($p < 0.01$). In spite of the results of the analysis of covariance, we retain all of the data because of the limitations in the dewatering data.

In summary, all dike construction and dewatering data at TSS values above 3.16 mg/L were retained for derivation of the TSS-turbidity relationship for dewatering monitoring (except for one outlier which was deleted). In future it may be possible to exclude the dike construction monitoring data if additional dewatering data are collected across a higher range of turbidity values and across longer time periods relevant to dewatering.

4. DERIVATION OF NEW RELATIONSHIPS

4.1. Dike Construction

Results of linear regression are shown in **Figure 4**. The precise model is:

$$\log_{10}(\text{turbidity}) = 0.62196 + (0.95619 * \log_{10}(\text{TSS})) \quad [p < 0.001; r^2\text{-adj} = 0.81]$$

where turbidity is measured in NTUs in the field using an Analite NEP 160 meter, and TSS is measured in the lab as mg/L.

4.2. Dewatering

Results of linear regression are shown in **Figure 5**. The precise model is:

$$\log_{10}(\text{turbidity}) = 0.53276 + (0.99276 * \log_{10}(\text{TSS})) \quad [p < 0.001; r^2\text{-adj} = 0.85]$$

where turbidity is measured in NTUs in the field using an Analite NEP 160 meter, and TSS is measured in the lab as mg/L.

5. REFERENCES

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EPA (United States Environmental Protection Agency). 1993. Method 180.1 – Determination of turbidity by nephelometry. Environmental Monitoring Systems Laboratory, Office of Research and Development, USEPA, Cincinnati, Ohio. Revision 2.0, August 1993. Available at http://www.epa.gov/waterscience/methods/method/files/180_1.pdf.

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Table 1. Targeted Turbidity-TSS Data for East Dike and Bay-Goose North Dike

2008 East Dike Data				2009 Bay-Goose Dike Data			
Sample ID	Date	Turbidity (NTU)	TSS (mg/L)	Sample ID	Date	Turbidity (NTU)	TSS (mg/L)
DC1	July/Aug 08	17.9	5.8	BG-TSS-1	30-Jul-09	95.9	35
DC10	July/Aug 08	230	89.8	BG-TSS-2	30-Jul-09	103.4	31
DC11	July/Aug 08	157	59.8	BG-TSS-3	30-Jul-09	49.5	12
DC12	July/Aug 08	223	88.4	BG-TSS-4	30-Jul-09	123.5	44
DC13	July/Aug 08	430	181	BG-TSS-5	30-Jul-09	160.4	53
DC14	July/Aug 08	178	69.1	BG-TSS-6	30-Jul-09	5.4	1
DC15	July/Aug 08	59	22.4	BG-TSS-7	30-Jul-09	1.3	<1
DC16	July/Aug 08	66	19.8	BG-TSS-8	30-Jul-09	12.4	2
DC17	July/Aug 08	5.3	<3	BG-TSS-9	30-Jul-09	2.7	<1
DC18	July/Aug 08	2.7	<3	BG-TSS-10	30-Jul-09	38.2	9
DC19	July/Aug 08	3.3	<3	BG-TSS-11	1-Aug-09	56.1	14
DC2	July/Aug 08	8.3	3.8	BG-TSS-12	1-Aug-09	39.6	12
DC20	July/Aug 08	1.3	<3	BG-TSS-13	1-Aug-09	17.4	12
DC21	July/Aug 08	4.2	<3	BG-TSS-14	1-Aug-09	3.3	<1
DC22	July/Aug 08	10.1	4.4	BG-TSS-15	1-Aug-09	1.7	<1
DC23	July/Aug 08	10.9	4.4	BG-TSS-16	1-Aug-09	14.2	4
DC24	July/Aug 08	21	9.8	BG-TSS-17	1-Aug-09	58.0	26
DC25	July/Aug 08	12.6	3.8	BG-TSS-18	1-Aug-09	40.6	8
DC26	July/Aug 08	14	4.4	BG-TSS-19	1-Aug-09	38.1	10
DC27	July/Aug 08	13.2	4.4	BG-TSS-20	1-Aug-09	38.6	9
DC28	July/Aug 08	8.5	3.8	BG-TSS-21	3-Aug-09	20.4	5
DC29	July/Aug 08	8.3	<3	BG-TSS-22	3-Aug-09	5.1	3
DC3	July/Aug 08	7.5	4.4	BG-TSS-23	3-Aug-09	35.4	8
DC30	July/Aug 08	7.6	<3	BG-TSS-24	3-Aug-09	17.3	<1
DC31	July/Aug 08	7.9	<3	BG-TSS-25	3-Aug-09	10.3	2
DC32	July/Aug 08	8.8	3.1	BG-TSS-26	3-Aug-09	71.5	18
DC33	July/Aug 08	20	7.8	BG-TSS-27	3-Aug-09	68.3	18
DC34	July/Aug 08	11.9	3.8	BG-TSS-28	3-Aug-09	65.9	19
DC4	July/Aug 08	36.7	15.8	BG-TSS-29	3-Aug-09	60.5	15
DC5	July/Aug 08	41.5	15.8	BG-TSS-30	3-Aug-09	69.5	16
DC6	July/Aug 08	53.5	19.1	BG-TSS-31	8/9/2009	10.2	4
DC7	July/Aug 08	32	11.8	BG-TSS-32	8/9/2009	40.5	16
DC8	July/Aug 08	19.5	<3	BG-TSS-33	8/9/2009	1.3	2
DC9	July/Aug 08	36.5	7.8	BG-TSS-34	8/9/2009	35.2	12
				BG-TSS-35	8/9/2009	1.35	<1
				BG-TSS-36	8/9/2009	4.55	14
				BG-TSS-37	8/9/2009	43.8	10
				BG-TSS-38	8/9/2009	61.1	19
				BG-TSS-39	8/9/2009	52.9	12
				BG-TSS-40	8/9/2009	50.2	16
				BG-TSS-41	8/9/2009	59.1	15
				BG-TSS-42	8/9/2009	62.2	20
				BG-TSS-43	8/9/2009	31.2	10
				BG-TSS-44	8/9/2009	57.0	14
				BG-TSS-45	8/9/2009	35.9	7
				BG-TSS-46	8/9/2009	62.7	16
				BG-TSS-47	8/9/2009	40.5	14
				BG-TSS-48	8/9/2009	56.9	12
				BG-TSS-49	8/9/2009	34.9	12
				BG-TSS-50	8/9/2009	61.5	16
				BG-TSS-51	8/9/2009	30.0	8
				BG-TSS-52	8/9/2009	31.7	9
				BG-TSS-53	8/9/2009	40.3	10
				BG-TSS-54	8/9/2009	40.1	10
				BG-TSS-55	8/9/2009	30.0	7
				BG-TSS-56	8/9/2009	34.4	8
				BG-TSS-57	8/9/2009	33.2	10
				BG-TSS-58	8/9/2009	39.9	8
				BG-TSS-59	8/9/2009	38.3	6
				BG-TSS-60	8/9/2009	37.0	10
				BG-TSS-61	9/9/2009	102.1	26
				BG-TSS-62	9/9/2009	69.4	12
				BG-TSS-63	9/9/2009	89.9	32
				BG-TSS-64	9/9/2009	52.9	11
				BG-TSS-65	9/9/2009	51.0	15
				BG-TSS-66	9/9/2009	14.3	2
				BG-TSS-67	9/9/2009	9.9	<1
				BG-TSS-68	9/9/2009	34.3	5
				BG-TSS-69	9/9/2009	0.9	2
				BG-TSS-70	9/9/2009	20.6	3
				SP-1	9/12/2009	4.7	3
				Outlet 1	9/12/2009	42.7	13
				Outlet 2	9/12/2009	28.5	8
				SP-10	9/12/2009	0.8	<1
				BGE-5	9/12/2009	33.7	8
				BGE-3	9/12/2009	34.9	8
				BGW-2	9/12/2009	29.5	8
				DUP	9/12/2009	29.5	8

Table 2. Additional Turbidity-TSS Data Collected During Construction of the East Dike (2008) and Bay-Goose North Dike (2009)

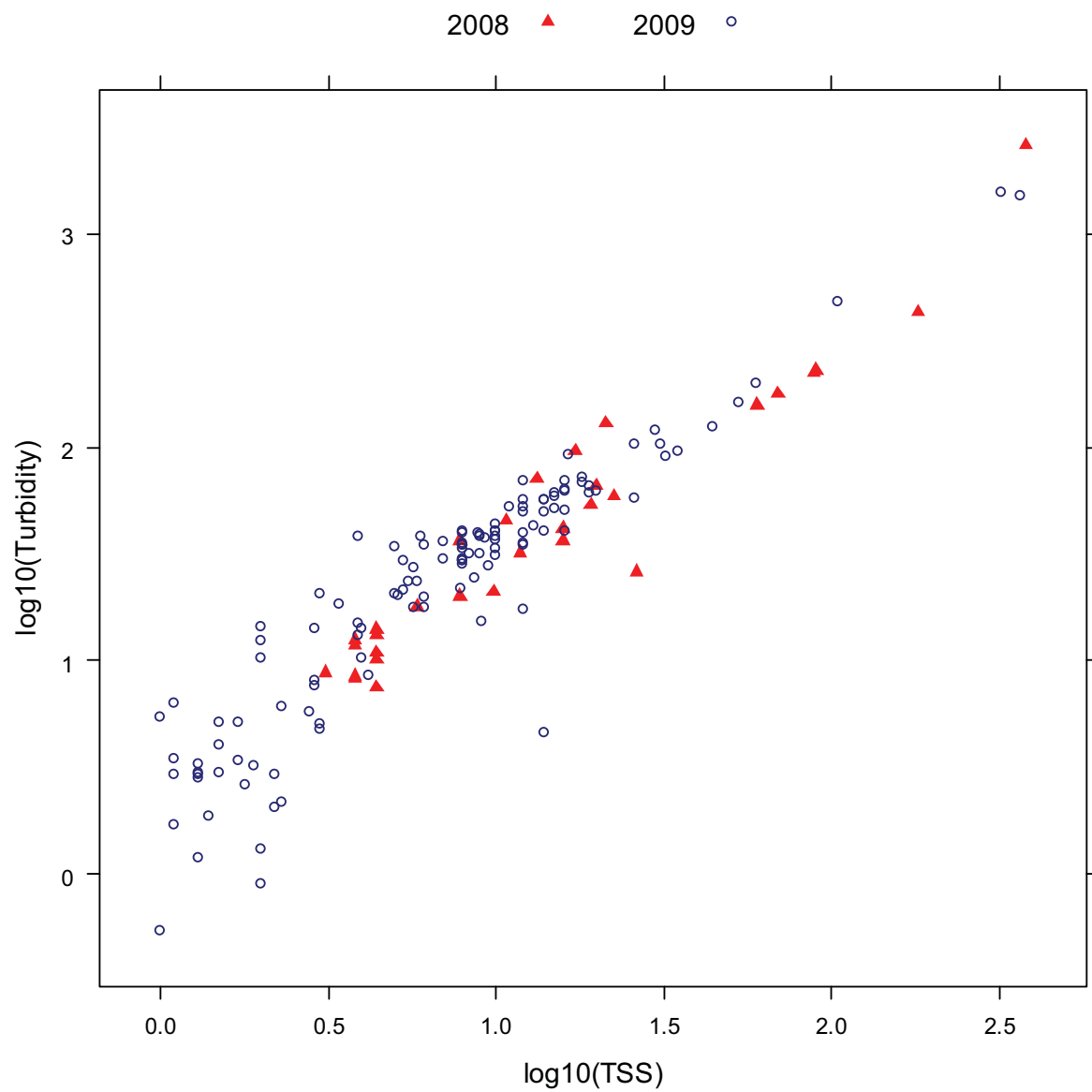
Program	Year	Date	Lake	Station ID/Rep	Field Turb (NTU)	Lab TSS (mg/L)	Lab Turb (NTU)
AEMP	2008	22-Aug-08	SPL	SP	45.5	11	NA
East Dike Construction Weekly Water Quality	2008	22-Aug-08	SPL	E214	96	17.2	NA
East Dike Construction Weekly Water Quality	2008	22-Aug-08	SPL	E214	2600	378	NA
East Dike Construction Weekly Water Quality	2008	22-Aug-08	SPL	A3	71	13.2	NA
East Dike Construction Weekly Water Quality	2008	22-Aug-08	SPL	A3	129	21.2	NA
East Dike Construction Weekly Water Quality	2008	12-Sep-08	SPL	SE2	26	26.2	NA
AEMP	2009	16-Aug-09	TPL	TPE-7	2.16	2.3	0.98
AEMP	2009	11-Sep-09	TPL	TPE-10	23.2	5.5	11
AEMP	2009	11-Sep-09	TPL	TPE-8	27.1	5.7	12.2
AEMP	2009	11-Sep-09	TPL	TPE-9	21.5	5.3	11.1
AEMP	2009	12-Aug-09	SPL	SP-7	0.54	1.00	0.52
AEMP	2009	15-Sep-09	SPL	SP-10	2.91	1.10	2.57
AEMP	2009	15-Sep-09	SPL	SP-8	2.80	1.30	2.15
Bay-Goose Dike Construction Weekly Water Quality	2009	31-Jul-09	TPL	DC-WQ-BGE1	1.2	1.3	0.76
Bay-Goose Dike Construction Weekly Water Quality	2009	31-Jul-09	TPL	DC-WQ-BGW1	17.8	5.7	10.3
Bay-Goose Dike Construction Weekly Water Quality	2009	31-Jul-09	TPL	DC-WQ-BGW2	17.7	6.1	8.54
Bay-Goose Dike Construction Weekly Water Quality	2009	31-Jul-09	TPL	DC-WQ-HVH4	1.71	1.1	1.2
Bay-Goose Dike Construction Weekly Water Quality	2009	08-Aug-09	TPL	DC-WQ-BGE1	8.47	4.2	3.13
Bay-Goose Dike Construction Weekly Water Quality	2009	08-Aug-09	TPL	DC-WQ-BGE3	18.3	3.4	4.22
Bay-Goose Dike Construction Weekly Water Quality	2009	08-Aug-09	TPL	DC-WQ-BGE5	1.85	1.4	1.66
Bay-Goose Dike Construction Weekly Water Quality	2009	08-Aug-09	TPL	DC-WQ-BGW2	5.78	2.8	2.16
Bay-Goose Dike Construction Weekly Water Quality	2009	08-Aug-09	TPL	DC-WQ-HVH2	2.04	2.2	1.36
Bay-Goose Dike Construction Weekly Water Quality	2009	08-Aug-09	TPL	DC-WQ-HVH4	2.92	2.2	1.71
Bay-Goose Dike Construction Weekly Water Quality	2009	16-Aug-09	TPL	DC-WQ-BGE1	14.2	2.9	8.83
Bay-Goose Dike Construction Weekly Water Quality	2009	16-Aug-09	TPL	DC-WQ-BGE3	6.03	2.3	5.8
Bay-Goose Dike Construction Weekly Water Quality	2009	16-Aug-09	TPL	DC-WQ-BGE5	4.05	1.5	3.32
Bay-Goose Dike Construction Weekly Water Quality	2009	16-Aug-09	TPL	DC-WQ-BGW3	3.49	1.1	3.75
Bay-Goose Dike Construction Weekly Water Quality	2009	16-Aug-09	TPL	DC-WQ-HVH2	3.4	1.7	3.46
Bay-Goose Dike Construction Weekly Water Quality	2009	16-Aug-09	TPL	DC-WQ-HVH4	5.11	1.7	3.93
Bay-Goose Dike Construction Weekly Water Quality	2009	21-Aug-09	TPL	DC-WQ-BGE2	1560	320	469
Bay-Goose Dike Construction Weekly Water Quality	2009	22-Aug-09	TPL	DC-WQ-BGE1	37.8	3.9	28
Bay-Goose Dike Construction Weekly Water Quality	2009	22-Aug-09	TPL	DC-WQ-BGW3	8.1	2.9	3.01
Bay-Goose Dike Construction Weekly Water Quality	2009	22-Aug-09	TPL	DC-WQ-HVH4	29.1	5.3	12.4
Bay-Goose Dike Construction Weekly Water Quality	2009	29-Aug-09	TPL	DC-WQ-BGE1	19.6	6.1	9.91
Bay-Goose Dike Construction Weekly Water Quality	2009	29-Aug-09	TPL	DC-WQ-BGE2	1511	367	260
Bay-Goose Dike Construction Weekly Water Quality	2009	29-Aug-09	TPL	DC-WQ-BGE3	200	59.5	86
Bay-Goose Dike Construction Weekly Water Quality	2009	29-Aug-09	TPL	DC-WQ-BGW2	480	105	206
Bay-Goose Dike Construction Weekly Water Quality	2009	29-Aug-09	TPL	DC-WQ-BGW3	6.3	1.1	3.7
Bay-Goose Dike Construction Weekly Water Quality	2009	29-Aug-09	TPL	DC-WQ-HVH4	14.9	3.9	6.3
Bay-Goose Dike Construction Weekly Water Quality	2009	04-Sep-09	TPL	DC-WQ-BGE2	92.1	16.5	32.6
Bay-Goose Dike Construction Weekly Water Quality	2009	04-Sep-09	TPL	DC-WQ-BGE5	39.5	8.9	18.4
Bay-Goose Dike Construction Weekly Water Quality	2009	04-Sep-09	TPL	DC-WQ-BGW2	120	29.7	53
Bay-Goose Dike Construction Weekly Water Quality	2009	04-Sep-09	TPL	DC-WQ-HVH5	34.5	6.1	19.7
Bay-Goose Dike Construction Weekly Water Quality	2009	11-Sep-09	TPL	DC-WQ-BGE3	49.5	13.9	27.6
Bay-Goose Dike Construction Weekly Water Quality	2009	11-Sep-09	TPL	DC-WQ-BGE5	37.7	9.3	23.7
Bay-Goose Dike Construction Weekly Water Quality	2009	11-Sep-09	TPL	DC-WQ-BGW2	20.2	5.1	13.2
Bay-Goose Dike Construction Weekly Water Quality	2009	11-Sep-09	TPL	DC-WQ-HVH5	31.5	8.3	22.8
Bay-Goose Dike Construction Weekly Water Quality	2009	04-Sep-09	TPE	DC-WQ-TPE6	27.5	9.5	21.3
Bay-Goose Dike Construction Weekly Water Quality	2009	21-Aug-09	SPL	DC-WQ-SP8	5.1	1.5	4.99
Bay-Goose Dike Construction Weekly Water Quality	2009	29-Aug-09	SPL	DC-WQ-SP6	2.93	1.3	1.89
Bay-Goose Dike Construction Weekly Water Quality	2009	29-Aug-09	SPL	DC-WQ-SP8	13.1	3.9	5.16
Bay-Goose Dike Construction Weekly Water Quality	2009	04-Sep-09	SPL	DC-WQ-SP6	3.00	1.5	5.03
Bay-Goose Dike Construction Weekly Water Quality	2009	11-Sep-09	SPL	DC-WQ-SP1	3.2	1.9	1.95
Bay-Goose Dike Construction Weekly Water Quality	2009	11-Sep-09	SPL	DC-WQ-SP6	3.27	1.3	3.09
Bay-Goose Dike Construction Weekly Water Quality	2009	11-Sep-09	SPL	DC-WQ-SP8	7.6	2.9	4.27
Bay-Goose Dike Effects Assessment	2009	18-Sep-09	TPL	EAS-BGW-1	23.5	5.8	9.47
Bay-Goose Dike Effects Assessment	2009	18-Sep-09	TPL	EAS-BGE-1	24.1	8.6	12.5
Bay-Goose Dike Effects Assessment	2009	24-Sep-09	TPL	EAS-BGW-1	15.1	9.1	11.2
Bay-Goose Dike Effects Assessment	2009	26-Sep-09	TPL	EAS-BGE-1	21.9	7.9	16.3
Bay-Goose Dike Effects Assessment	2009	19-Sep-09	SPL	EAS-SPC-1	2.6	1.8	2.06
Bay-Goose Dike Effects Assessment	2009	26-Sep-09	SPL	EAS-SPC-1	2.97	1.3	2.7

Table 3. Turbidity-TSS Data for 2009 Dewatering of the Impounded Arm of Second Portage Lake ¹

Sample ID	Date	Time	Measured Field Turbidity	Predicted Field Turbidity	Time	Lab Turbidity	Lab TSS (mg/L)
Intake Unit 1	6/10/2009	8:30	22.40	15.42	8:30	11.00	2
Intake Unit 2	6/10/2009	8:30	22.20	16.80	8:30	12.80	2
Intake Unit 3	6/10/2009	8:30	20.50	15.58	8:30	11.20	1
Intake Unit 4	6/10/2009	8:30	21.50	37.67	8:30	40.10	3
Intake Unit 5	6/10/2009	8:30	17.94	14.89	8:30	10.30	2
Intake Unit 6	6/10/2009	8:30	17.82	14.89	8:30	10.30	2
Intake Unit 1	6/11/2009	8:00	27.10	17.79	8:00	14.10	5
Intake Unit 2	6/11/2009	8:00	27.50	17.41	8:00	13.60	4
Intake Unit 3	6/11/2009	8:00	26.70	16.95	8:00	13.00	4
Intake Unit 4	6/11/2009	8:00	26.70	18.48	8:00	15.00	5
Intake Unit 5	6/11/2009	8:00	20.50	16.03	8:00	11.80	2
Intake Unit 6	6/11/2009	8:00	21.10	15.73	8:00	11.40	3
Intake Unit 1	6/12/2009	7:00	25.10	18.48	7:00	15.00	4
Intake Unit 2	6/12/2009	7:00	23.70	18.10	7:00	14.50	4
Intake Unit 3	6/12/2009	7:00	24.20	17.26	7:00	13.40	4
Intake Unit 4	6/12/2009	7:00	23.70	15.81	7:00	11.50	5
Intake Unit 5	6/12/2009	7:00	22.40	16.95	7:00	13.00	3
Intake Unit 6	6/12/2009	7:00	22.50	16.03	7:00	11.80	3
Intake Unit 5	6/19/2009	17:00	29.90	18.94	17:00	15.60	6
Intake Unit 6	6/19/2009	17:00	32.50	18.79	17:00	15.40	4
Intake Unit 1	6/21/2009	17:30	22.10		17:30	19.80	10
Intake Unit 2	6/21/2009	17:30	21.80		17:30	19.30	10
Intake Unit 3	6/21/2009	17:30	21.30		17:30	21.60	10
Intake Unit 4	6/21/2009	17:30	22.30		17:30	19.60	9
Intake Unit 5	6/21/2009	17:30	17.28		17:30	16.36	7
Intake Unit 6	6/21/2009	17:30	19.01		17:30	17.30	7
Intake Unit 1	6/22/2009	6:30	23.20		6:30	20.40	9
Intake Unit 2	6/22/2009	6:30	21.80		6:30	18.70	9
Intake Unit 3	6/22/2009	6:30	21.40		6:30	17.90	8
Intake Unit 4	6/22/2009	6:30	21.90		6:30	18.90	9
Intake Unit 5	6/22/2009	6:30	16.74		6:30	15.50	6
Intake Unit 6	6/22/2009	6:30	18.18		6:30	15.60	7
Intake Unit 1	6/23/2009	6:30	23.90		6:30	25.60	7
Intake Unit 2	6/23/2009	6:30	20.50		6:30	20.40	5
Intake Unit 3	6/23/2009	6:30	19.52		6:30	20.80	8
Intake Unit 4	6/23/2009	6:30	20.10		6:30	21.00	7
Intake Unit 5	6/23/2009	6:30	22.00		6:30	22.50	7
Intake Unit 6	6/23/2009	6:30	22.10		6:30	22.30	6
Intake Unit 1	6/24/2009	17:30	23.90		17:30	20.30	8
Intake Unit 2	6/24/2009	17:30	23.40		17:30	16.90	7
Intake Unit 3	6/24/2009	17:30	23.80		17:30	17.40	7
Intake Unit 4	6/24/2009	17:30	22.80		17:30	16.60	8
Intake Unit 5	6/24/2009	17:30	18.75		17:30	16.90	7
Intake Unit 6	6/24/2009	17:30	19.07		17:30	17.50	8
Intake Unit 1	6/25/2009	6:30	24.90		6:30	20.70	8
Intake Unit 2	6/25/2009	6:30	22.50		6:30	17.10	8
Intake Unit 3	6/25/2009	6:30	24.50		6:30	17.90	8
Intake Unit 4	6/25/2009	6:30	25.10		6:30	18.80	10
Intake Unit 5	6/25/2009	6:30	20.80		6:30	15.70	7
Intake Unit 6	6/25/2009	6:30	21.90		6:30	17.90	7
Intake Unit 1	6/25/2009	17:30	23.80		17:30	21.20	8
Intake Unit 2	6/25/2009	17:30	22.50		17:30	21.10	6
Intake Unit 3	6/25/2009	17:30	20.10		17:30	19.60	6
Intake Unit 4	6/25/2009	17:30	21.10		17:30	19.80	6
Intake Unit 5	6/25/2009	17:30	17.30		17:30	16.10	4
Intake Unit 6	6/25/2009	17:30	24.40		17:30	24.80	6
Intake Unit 1	6/28/2009	17:30	27.30		17:30	24.00	8
Intake Unit 2	6/28/2009	17:30	24.20		17:30	19.20	7
Intake Unit 3	6/28/2009	17:30	22.60		17:30	19.80	8
Intake Unit 4	6/28/2009	17:30	22.90		17:30	21.40	6
Intake Unit 5	6/28/2009	17:30	17.37		17:30	16.50	6
Intake Unit 6	6/28/2009	17:30	35.10		17:30	35.10	13
Intake Unit 1	7/5/2009	17:30	23.00		17:30	18.30	8
Intake Unit 2	7/5/2009	17:30	22.90		17:30	17.70	8
Intake Unit 6	7/5/2009	17:30	11.97		17:30	10.30	5
Intake Unit 1	7/6/2009	7:00	21.00		7:00	16.30	7
Intake Unit 2	7/6/2009	7:00	17.24		7:00	14.30	8
Intake Unit 6	7/6/2009	7:00	13.16		7:00	12.00	7
Intake Unit 1	7/7/2009	18:00	23.90		18:00	21.50	7
Intake Unit 2	7/7/2009	18:00	24.40		18:00	21.90	9
Intake Unit 1	7/8/2009	18:00	22.60		18:00	16.90	7
Intake Unit 2	7/8/2009	18:00	22.20		18:00	19.80	6
Intake Unit 1	7/9/2009	6:40	22.30		6:40	21.40	8
Intake Unit 2	7/9/2009	6:40	22.80		6:40	22.30	8

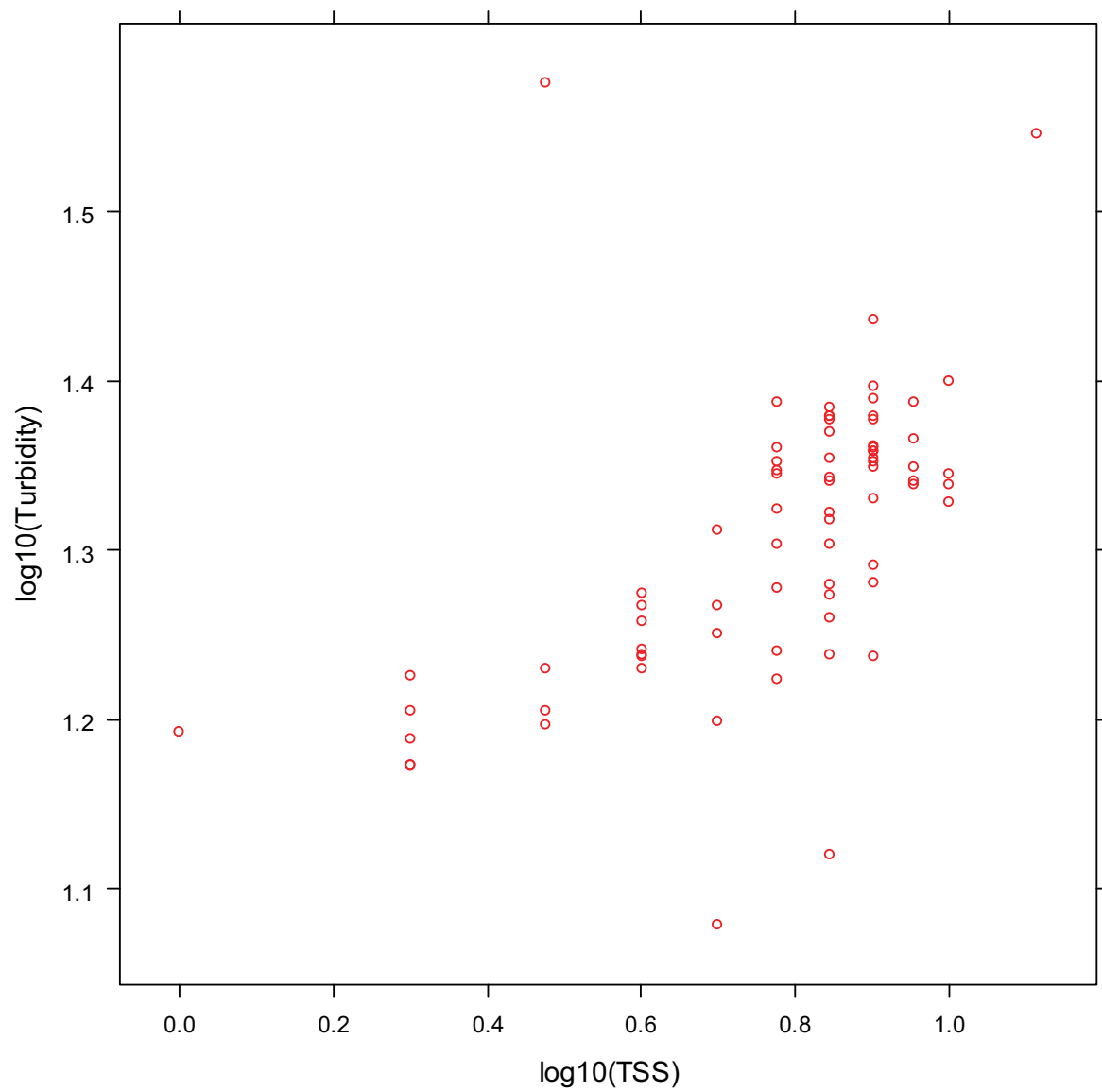
¹ For grey-shaded cells, field turbidity was measured incorrectly so predicted field turbidity is used. Predictions are based on the relationship between field and lab turbidity for other data points ($\text{Field} = 7.014 + (0.7645 * \text{lab})$; $p < 0.001$; $r^2 = 0.66$)

Figure 1. All paired TSS-turbidity data relevant to dike construction monitoring⁵ (2008 and 2009)



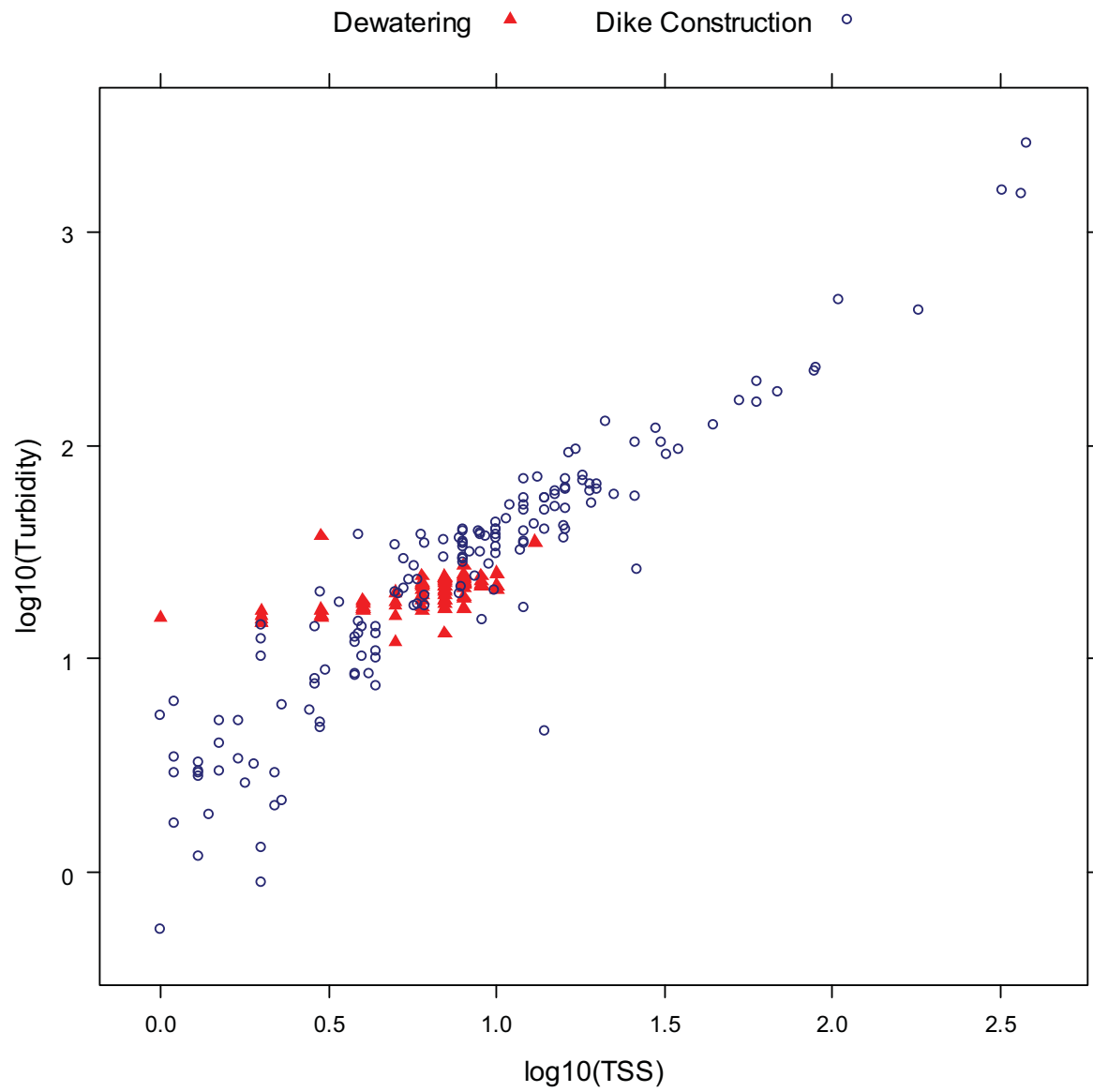
⁵ This figure shows all data contained in Tables 1 and 2, except for data below detection limits.

Figure 2. Paired TSS-turbidity data for dewatering of the impoundment⁶.



⁶ This figure shows all data contained in Table 3, except for data below detection limits

Figure 3. All paired TSS-turbidity data for dewatering and dike construction⁷.



⁷ This figure shows all data contained in Tables 1 to 3, except for data below detection limits

Figure 4. Final data set and recommended TSS-turbidity relationship for dike construction monitoring

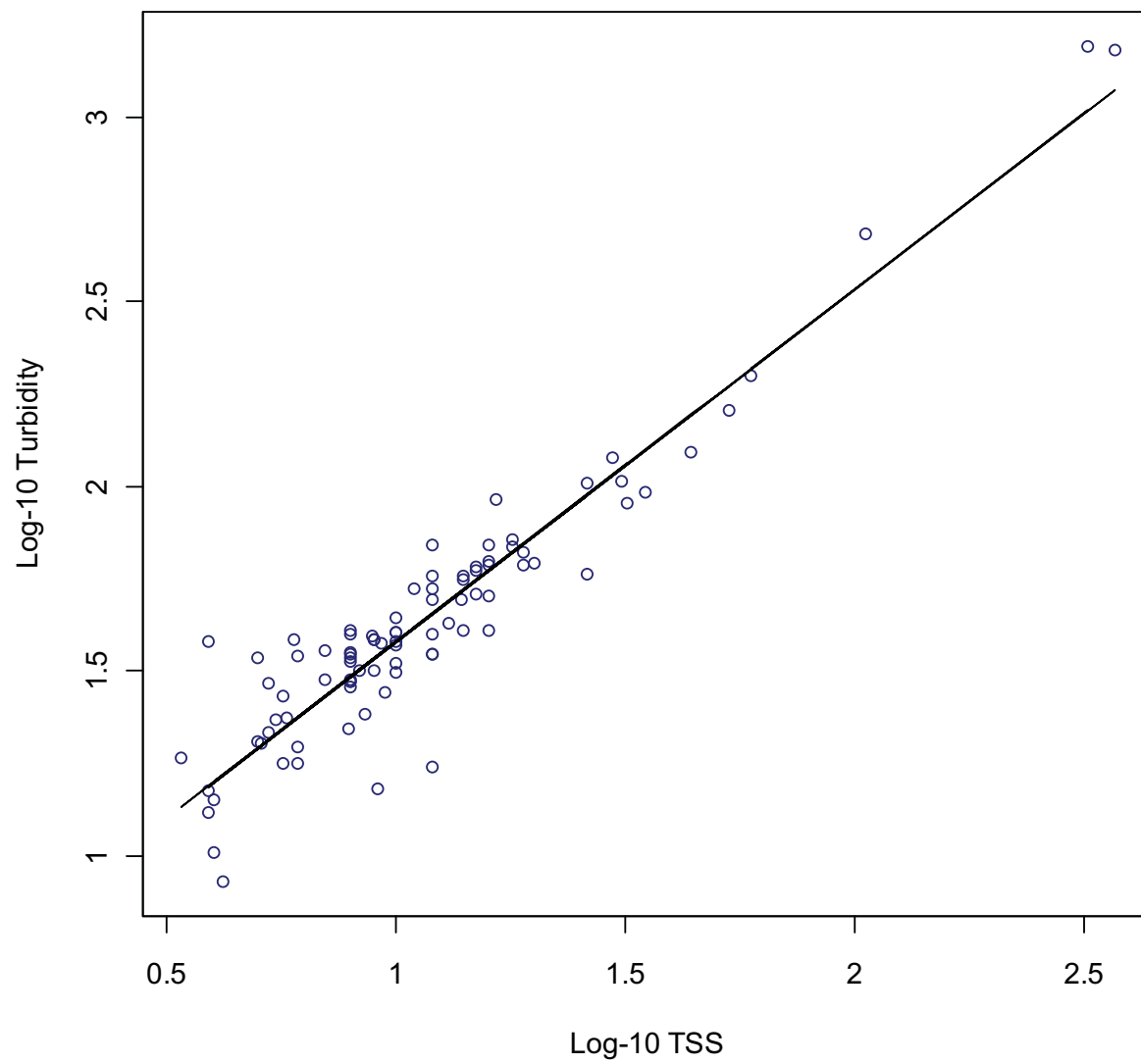
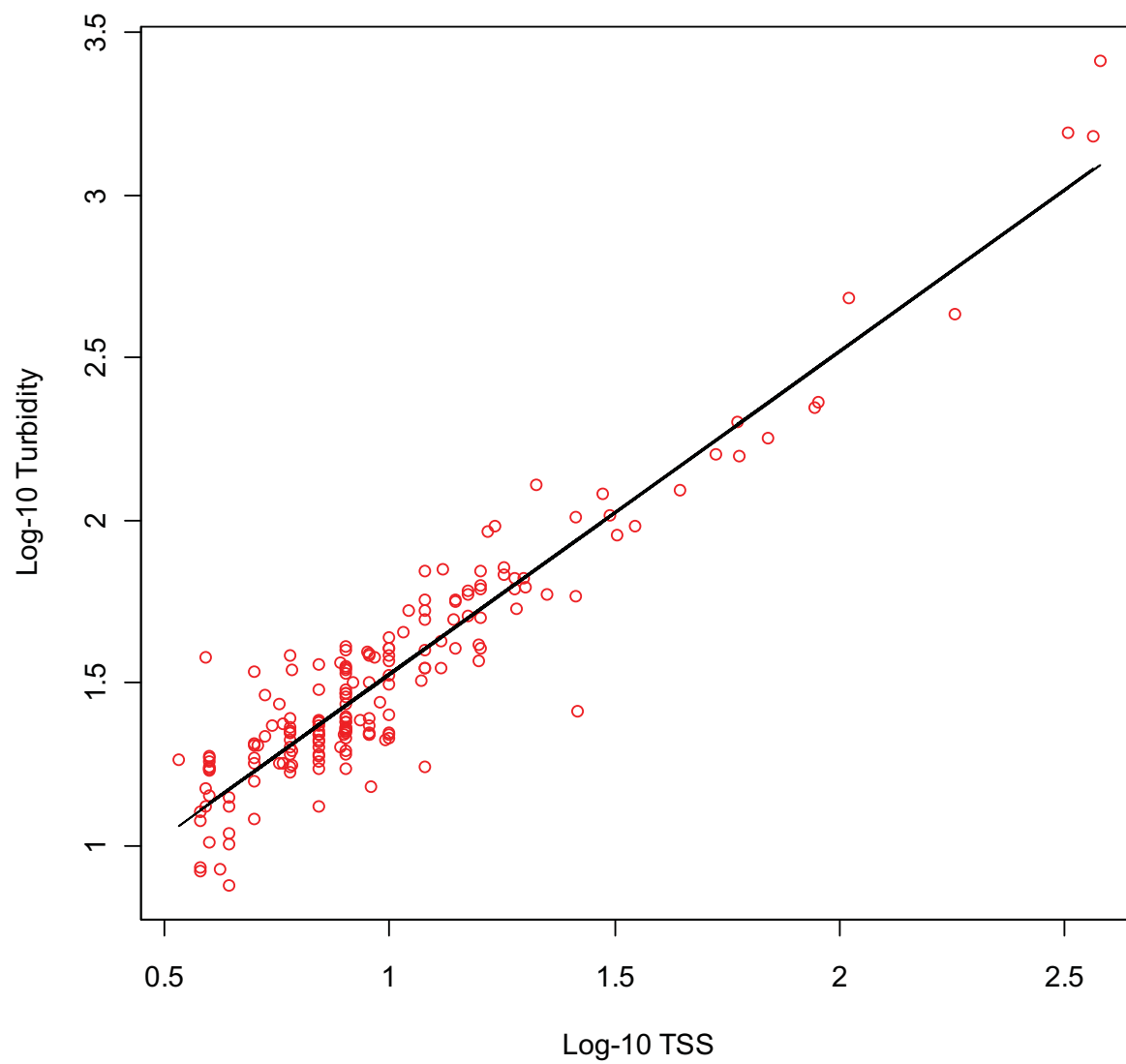


Figure 5. Final data set and recommended TSS-turbidity relationship for dewatering monitoring



APPENDIX C:

PHOTOGRAPHIC DOCUMENTATION

MARCH 2011



Photo No 1 : July 17th aerial photo of Bay-Goose Dike construction



Photo No 2 : July 21, 2010 -platform advancement along causeway (bottom right hand corner)



Photo No 3: July 21st - 2 layers of turbidity curtains; one anchored by the causeway, the other deployed in shallower areas



Photo No 4 : July 25th : dike advancement along causeway



Photo No 5 : July 25th- turbidity curtains deployed as outlined in AEM (2010)



Photo No 6 : July 25th – note water colour differences between cells along the causeway and the second layer of curtains



Photo No 7 : August 1st- dike and trenching advancement



Photo No 8 : August 1st aerial photo of the entire Bay Goose dike construction area



Photo No 9 : August 9th Trenching in the deepest zone of Bay-Goose Dike phase II



Photo No 10 : August 20th aerial photo

APPENDIX D:

MULTILAB AND ALS LABORATORY CERTIFICATES OF ANALYSES

MARCH 2011

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: February 26, 2010

Sampled by: ND

Matrix: Water

Parameter	Blank	Standard		Sample duplicate	
		Name	Result	Limit	1 2
M.E.S. mg/L	<1	MES 24-02-2010	243	194 - 306	
Turbidité UTN		DMR-0899-2009-Turb	7.1	5.6 - 8.8	

Reported on: March 02, 2010
Lab number: 77065:77067

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: February 26, 2010

Sampled by: ND

Matrix: Water

Lab number:	77065	77066	77067
Sample name:	BGC-1	BGC-2	BGC-3
Sampling date:	23-02-2010	23-02-2010	23-02-2010
Total Suspended Solids mg/L	<1	<1	1
Turbidity NTU	1.3	1.4	1.8

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: March 02, 2010

Page 1 of 2

F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: February 26, 2010

Sampled by: ND

Matrix: Water

Commentaire

Sampling date:

Projet 77065

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : Turbidité.

Projet 77066

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : Turbidité.

Projet 77067

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : Turbidité.

These results are as followed on the Certificate's analysis of the corresponding project number.

In case of difference between these files , the results are signed on the results summary

Reported on: March 02, 2010

Page 2 of 2

F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: March 09, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Lab number:	77505	77506	77507	77508	77509	77504
Sample name:	BGC-1-6m	BGC-2-5m	BGC-2-12m	BGC-3-10m	BGC-3-20m	BGC-1-2m
Sampling date:	06-03-2010	06-03-2010	06-03-2010	06-03-2010	06-03-2010	06-03-2010
Total Suspended Solids mg/L	<1	2	4	3	14	1
pH	6.75	6.76	6.71	6.71	6.70	6.84
Turbidity NTU	2.3	2.4	7.1	3.8	12.3	3.0

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: March 11, 2010

Page 1 of 1

F-02-13
Version 2ième: 18/10/2006

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: March 09, 2010

Sampled by: S.Gaudreault/J.Kataluk

Matrix: Water

Parameter	Blank	Standard		Sample duplicate	
		Name	Result	Limit	1 2
M.E.S. mg/L	<1	MES 24-02-2010	245	194 - 306	
pH		Std pH 7.00	7.04	6.96 - 7.04	6.75 6.76
pH		Std pH 7.00	7.04	6.96 - 7.04	
Turbidité UTN		DMR-0103-2010-4	6.60	4.65 - 7.35	

Reported on: March 11, 2010
Lab number: 77504:77509

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: March 26, 2010

Sampled by: Martin Thériault

Matrix: Water

Lab number:	78212	78213	78214	78215	78216	78217	78209
Sample name:	BGC-1	BGC-2	BGC-3	BGC-4	BGC-5	BGC-6	DD-TPL-ENV
Sampling date:	23-03-2010	23-03-2010	23-03-2010	23-03-2010	23-03-2010	23-03-2010	24-03-2010
Total Suspended Solids mg/L	3	5	29	10	2	3	2
pH	6.61	6.57	6.57	6.67	6.66	6.67	6.63
Turbidity NTU	4.8	7.7	41.2	9.1	3.3	4.3	0.74

Commentaire

Sampling date:

Projet 78212 : 78217, 78209

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : pH et Turbidité.

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: March 30, 2010

Page 1 of 2

F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: March 26, 2010

Sampled by: Martin Thériault

Matrix: Water

Parameter	Detection limit

Valeur

Total Suspended Solids	1	mg/L	M-SOLI-1.0
pH	N.D.		M-PH-2.0
Turbidity	0.02	NTU	M-TURB-1.0

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: March 30, 2010

Page 2 of 2

F-02-13
Version 2ième: 18/10/2006

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: March 26, 2010

Sampled by: Martin Thériault

Matrix: Water

Parameter	Blank	Standard		Sample duplicate	
		Name	Result	Limit	
M.E.S. mg/L	<1	MES 16-03-2010	249	194 - 306	
pH		Std pH 7.00	6.97	6.96 - 7.04	
Turbidité UTN		DMR-0103-2010-4	6.00	4.65 - 7.35	4.8
Turbidité UTN		DMR-0103-2010-4	6.00	4.65 - 7.35	4.7

Reported on: March 30, 2010
Lab number: 78209,78212:78217

Results relate only to the sample tested.

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.

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: April 06, 2010

Sampled by: S. Gaudreault/J. Kataluk

Matrix: Water

Parameter	Blank	Standard		Limit	Sample duplicate	
		Name	Result		1	2
M.E.S. mg/L	<1	MES 16-03-2010	251	194 - 306	6	7
M.E.S. mg/L	<1	MES 16-03-2010	251	194 - 306		
Turbidité UTN		DMR-0103-2010-4	5.80	4.65 - 7.35	2.6	2.5
Turbidité UTN		DMR-0103-2010-4	5.80	4.65 - 7.35		

Reported on: April 07, 2010

Lab number: 78465:78472,78481:78486

Results relate only to the sample tested.

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.

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: April 13, 2010

Sampled by: S. Gaudreault/J. Kataluk

Matrix: Water

Parameter	Blank	Standard		Sample duplicate	
		Name	Result	Limit	
M.E.S. mg/L	<1	MES 16-03-2010	251	194 - 306	
pH		Std pH 7.00	6.98	6.96 - 7.04	
Turbidité UTN		DMR-0103-2010-4	5.90	4.65 - 7.35	
Turbidité UTN		DMR-0103-2010-4	5.90	4.65 - 7.35	3.3 3.4

Reported on: April 19, 2010
Lab number: 78961:78966

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: April 13, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Lab number:	78961	78962	78963	78964	78965	78966
Sample name:	BGC-1	BGC-2	BGC-3	BGC-4	BGC-5	BGC-6
Sampling date:	07-04-2010	07-04-2010	07-04-2010	07-04-2010	07-04-2010	07-04-2010
Total Suspended Solids mg/L	<1	8	18	8	<1	<1
pH	6.87	6.84	6.90	6.96	6.80	6.81
Turbidity NTU	1.8	14.1	26.7	16.0	3.3	3.3

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: April 19, 2010

Page 1 of 3

F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: April 13, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Commentaire

Sampling date:

Projet 78961 : 78966

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : pH et Turbidité.

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: April 19, 2010

Page 2 of 3

F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: April 13, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Parameter	Detection limit
Total Suspended Solids	1 mg/L
pH	N.D.
Turbidity	0.02 NTU

Parameter	Detection limit
Total Suspended Solids	1 mg/L
pH	N.D.
Turbidity	0.02 NTU

Parameter	Detection limit
Total Suspended Solids	1 mg/L
pH	N.D.
Turbidity	0.02 NTU

Parameter	Detection limit
Total Suspended Solids	1 mg/L
pH	N.D.
Turbidity	0.02 NTU

Parameter	Detection limit
Total Suspended Solids	1 mg/L
pH	N.D.
Turbidity	0.02 NTU

Parameter	Detection limit
Total Suspended Solids	1 mg/L
pH	N.D.
Turbidity	0.02 NTU

Parameter	Detection limit
Total Suspended Solids	1 mg/L
pH	N.D.
Turbidity	0.02 NTU

Parameter	Detection limit
Total Suspended Solids	1 mg/L
pH	N.D.
Turbidity	0.02 NTU

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: April 19, 2010

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F-02-13
Version 2ième: 18/10/2006

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: April 16, 2010
Sampled by: M.Thériault/N.Saucier
Matrix: Water

Parameter	Blank	Standard		Sample duplicate		
		Name	Result	Limit	1	2
M.E.S. mg/L	<1	MES 16-03-2010	249	194 - 306		
M.E.S. mg/L	<1	MES 16-03-2010	249	194 - 306	10	9

Reported on: April 20, 2010
Lab number: 79198:79203

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: April 16, 2010

Sampled by: Martin Thériault/Nicolas Saucier

Matrix: Water

Lab number:	79198	79199	79200	79201	79202	79203
Sample name:	BGC-1	BGC-2	BGC-3	BGC-4	BGC-5	BGC-6
Sampling date:	13-04-2010	13-04-2010	13-04-2010	13-04-2010	13-04-2010	13-04-2010
Total Suspended Solids mg/L	3	10	11	2	<1	3

These results are as followed on the Certificate's analysys of the corresponding project number.

In case of difference between these files , the results are singed on the results summary

Reported on: April 20, 2010

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F-02-13

Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: April 22, 2010

Sampled by: Martin Thériault

Matrix: Water

Lab number:	79437	79438	79439	79440	79441	79442
Sample name:	BGC-1	BGC-2	BGC-3	BGC-4	BGC-5	BGC-6
Sampling date:	20-04-2010	20-04-2010	20-04-2010	20-04-2010	20-04-2010	20-04-2010
Total Suspended Solids mg/L	<1	12	8	<1	<1	<1

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: April 23, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: April 22, 2010

Sampled by: Martin Thériault

Matrix: Water

Parameter	Detection limit

	Valeur

Total Suspended Solids	1	mg/L	M-SOLI-1.0

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: April 23, 2010

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F-02-13

Version 2ième: 18/10/2006

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: April 22, 2010

Sampled by: Martin Thériault

Matrix: Water

Parameter	Blank	Standard		Limit	Sample duplicate	
		Name	Result		1	2
M.E.S. mg/L	<1	MES 16-03-2010	246	194 - 306		
M.E.S. mg/L	<1	MES 16-03-2010	246	194 - 306	12	11

Reported on: April 23, 2010
Lab number: 79437:79442

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: April 30, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Lab number:	79831	79832	79833	79834	79835	79836
Sample name:	BGC-1	BGC-2	BGC-3	BGC-4	BGC-5	BGC-6
Sampling date:	27-04-2010	27-04-2010	27-04-2010	27-04-2010	27-04-2010	27-04-2010
Total Suspended Solids mg/L	<1	2	5	2	<1	<1
Turbidity NTU	1.1	1.4	2.7	2.6	1.7	2.1

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: May 03, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: April 30, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Commentaire

Sampling date:

Projet 79831 to 79836

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : Turbidité.

These results are as followed on the Certificate's analysis of the corresponding project number.

In case of difference between these files , the results are signed on the results summary

Reported on: May 03, 2010

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F-02-13

Version 2ième: 18/10/2006

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: April 30, 2010

Sampled by: S.Gaudreault/J.Kataluk

Matrix: Water

Parameter	Blank	Standard		Limit	Sample duplicate	
		Name	Result		1	2
M.E.S. mg/L	<1	MES 16-03-2010	245	194 - 306	<1	<1
M.E.S. mg/L	<1	MES 16-03-2010	246	194 - 306		
Turbidité UTN		DMR-0175-2010-turb	6.30	4.65 - 7.35		

Reported on: May 03, 2010
Lab number: 79831:79836

Results relate only to the sample tested.

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.

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: May 07, 2010

Sampled by: S.Gaudreault/J.Kataluk

Matrix: Water

Parameter	Blank	Standard		Sample duplicate	
		Name	Result	Limit	1 2
M.E.S. mg/L	<1	MES 16-03-2010	248	194 - 306	
Turbidité UTN		DMR-0175-2010-turb	5.80	4.65 - 7.35	

Reported on: May 10, 2010
Lab number: 80239,80244,80246

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: May 07, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Lab number:	80239	80244	80246
Sample name:	DD-WTP-01	BGC-2	BGC-4
Sampling date:	04-05-2010	04-05-2010	04-05-2010
Total Suspended Solids mg/L	5	2	<1
Turbidity NTU	0.87	1.4	1.2

These results are as followed on the Certificate's analysys of the corresponding project number.

In case of difference between these files , the results are singed on the results summary

Reported on: May 10, 2010

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Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: May 07, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Lab number:	80243	80245	80247	80248
Sample name:	BGC-1	BGC-3	BGC-5	BGC-6
Sampling date:	04-05-2010	04-05-2010	04-05-2010	04-05-2010
Total Suspended Solids mg/L	<1	4	<1	<1
Turbidity NTU	0.75	3.4	1.3	0.69

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: May 14, 2010

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Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: May 07, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Parameter	Detection limit	
	Valeur	
Total Suspended Solids	1	mg/L
Turbidity	0.02	NTU
		M-SOLI-1.0
		M-TURB-1.0

Reported on: May 14, 2010

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Version 2ième: 18/10/2006

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (---)
Fax: (604) 677-0687

Lab number: Multiple

Date received: May 07, 2010

Sampled by: S. Gaudreault/J. Kataluk

Matrix: Water

Parameter	Blank	Standard		Sample duplicate	
		Name	Result	Limit	1 2
M.E.S. mg/L	<1	MES 16-03-2010	248	194 - 306	
Turbidité UTN		DMR-0282-2010-Turb	6.30	4.65 - 7.35	

Reported on: May 14, 2010
Lab number: 80243,80245,80247:80248

Results relate only to the sample tested.

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.

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: May 13, 2010

Sampled by: Martin Thériault

Matrix: Water

Parameter	Blank	Standard		Sample duplicate	
		Name	Result	Limit	
M.E.S. mg/L	<1	MES 16-03-2010	247	194 - 306	
Turbidité UTN		DMR-0282-2010-Turb	6.10	4.65 - 7.35	
Turbidité UTN		DMR-0282-2010-Turb	6.10	4.65 - 7.35	2.0 1.9

Reported on: May 14, 2010
Lab number: 80535:80542

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: May 13, 2010

Sampled by: Martin Thériault

Matrix: Water

Lab number:	80535	80536	80537	80538	80539	80540	80541	80542
Sample name:	DD-WTP-01	DD-WTP-02	BGC-1	BGC-2	BGC-3	BGC-4	BGC-5	BGC-6
Sampling date:	11-05-2010	11-05-2010	11-05-2010	11-05-2010	11-05-2010	11-05-2010	11-05-2010	11-05-2010
Total Suspended Solids mg/L	6	14	1	2	<1	<1	<1	<1
Turbidity NTU	6.5	12.1	1.4	2.6	0.61	2.0	2.0	1.3

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: May 14, 2010

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Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: May 13, 2010

Sampled by: Martin Thériault

Matrix: Water

Parameter	Detection limit	
	Valeur	
Total Suspended Solids	1	mg/L
Turbidity	0.02	NTU
		M-SOLI-1.0
		M-TURB-1.0

Reported on: May 14, 2010

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Version 2ième: 18/10/2006

These results are as followed on the Certificate's analysys of the corresponding project number.

In case of difference between these files , the results are singed on the results summary

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: May 20, 2010

Sampled by: Martin Thériault

Matrix: Water

Lab number:	80871	80872	80873	80874	80875	80876
Sample name:	BGC-1	BGC-2	BGC-3	BGC-4	BGC-5	BGC-6
Sampling date:	18-05-2010	18-05-2010	18-05-2010	18-05-2010	18-05-2010	18-05-2010
Total Suspended Solids mg/L	5	5	7	8	7	5
Turbidity NTU	0.88	1.0	6.2	8.6	1.5	1.0

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: May 25, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: May 20, 2010

Sampled by: Martin Thériault

Matrix: Water

Parameter	Detection limit	
	Valeur	
Total Suspended Solids	1	mg/L
Turbidity	0.02	NTU
		M-SOLI-1.0
		M-TURB-1.0

Reported on: May 25, 2010

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Version 2ième: 18/10/2006

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: May 20, 2010

Sampled by: Martin Thériault

Matrix: Water

Parameter	Blank	Standard		Limit	Sample duplicate	
		Name	Result		1	2
M.E.S. mg/L	<1	MES 14-05-2010	257	194 - 306		
M.E.S. mg/L	<1	MES 14-05-2010	257	194 - 306	7	7
Turbidité UTN		DMR-0282-2010-Turb	5.90	4.65 - 7.35		

Reported on: May 25, 2010
Lab number: 80871:80876

Results relate only to the sample tested.

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.

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: June 07, 2010

Sampled by: S.Tapp/J. Kataluk

Matrix: Water

Parameter	Blank	Standard		Sample duplicate	
		Name	Result	Limit	1 2
M.E.S. mg/L	<1	MES 31-05-2010	250	194 - 306	

Reported on: June 11, 2010
Lab number: 81753:81761

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: June 07, 2010

Sampled by: Samuel Tapp/Jamie Kataluk

Matrix: Water

Lab number:	81753	81754	81755	81756	81757	81758	81759	81760
Sample name:	DD-WTP-01	DD-WTP-02	DD-WTP-02	DD-WTP-01	BGC-1	BGC-2	BGC-3	BGC-1
Sampling date:	27-05-2010	27-05-2010	29-05-2010	30-05-2010	28-05-2010	28-05-2010	28-05-2010	30-05-2010
Total Suspended Solids mg/L	7	7	4	<1	14	<1	<1	9
Turbidity NTU	2.6	5.2	<0.1	0.4	4.6	0.5	0.2	3.7

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 11, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: June 07, 2010

Sampled by: Samuel Tapp/Jamie Kataluk

Matrix: Water

Lab number: 81761

Sample name: BGC-3

Sampling date: 30-05-2010

Total Suspended Solids mg/L <1

Turbidity NTU 0.5

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 11, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: June 07, 2010

Sampled by: Samuel Tapp/Jamie Kataluk

Matrix: Water

Commentaire

Sampling date:

Projet 81753 : 81761

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : M.E.S. et Turbidité.

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 11, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: June 07, 2010

Sampled by: Samuel Tapp/Jamie Kataluk

Matrix: Water

Parameter	Detection limit

Valeur

Total Suspended Solids	1	mg/L	M-SOLI-1.0

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 11, 2010

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F-02-13
Version 2ième: 18/10/2006

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: June 04, 2010

Sampled by: N/D

Matrix: Water

Parameter	Blank	Standard		Limit	Sample duplicate	
		Name	Result		1	2
Conductivité µmhos/cm		Std-Cond-03/06/2010	1423	1204 - 1630		
M.E.S. mg/L	<1	MES 31-05-2010	247	194 - 306		
M.E.S. mg/L	<1	MES 31-05-2010	247	194 - 306	14	14
pH		Std pH 7.00	7.01	6.96 - 7.04		

Reported on: June 11, 2010
Lab number: 81667:81674

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: June 04, 2010

Sampled by: N/D

Matrix: Water

Lab number:	81667	81668	81669	81670	81671	81672	81673	81674
Sample name:	DD-WTP-01	DD-WTP-02	DD-WTP-01	DD-WTP-01	DD-WTP-02	DD-WTP-01	DD-WTP-02	BGC-3
Sampling date:	28-05-2010	28-05-2010	29-05-2010	30-05-2010	30-05-2010	31-05-2010	31-05-2010	29-05-2010
Conductivity µmhos/cm	95	91	94	89	89	95	94	23
Total Suspended Solids mg/L	7	6	7	22	14	15	11	2
pH	6.91	6.92	6.89	6.94	7.01	6.90	6.94	6.42
Turbidity NTU	0.2	<0.1	<0.1	<0.1	0.2	<0.1	<0.1	0.5

These results are as followed on the Certificate's analysys of the corresponding project number.

In case of difference between these files , the results are singed on the results summary

Reported on: June 11, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: June 04, 2010

Sampled by: N/D

Matrix: Water

Commentaire

Sampling date:

Projet 81667

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : pH et Turbidité.

Projet 81668

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : pH et Turbidité.

Projet 81669

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : pH et Turbidité.

Projet 81670

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : pH et Turbidité.

These results are as followed on the Certificate's analysis of the corresponding project number.

In case of difference between these files , the results are signed on the results summary

Reported on: June 11, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: June 04, 2010

Sampled by: N/D

Matrix: Water

Commentaire

Sampling date:

Projet 81671

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : pH et Turbidité.

Projet 81672

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : pH et Turbidité.

Projet 81673

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : pH et Turbidité.

Projet 81674

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : pH et Turbidité.

These results are as followed on the Certificate's analysis of the corresponding project number.

In case of difference between these files , the results are signed on the results summary

Reported on: June 11, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: June 04, 2010

Sampled by: N/D

Matrix: Water

Parameter	Detection limit		
	Valeur		
Conductivity	1	µmhos/cm	M-COND-2.0
Total Suspended Solids	1	mg/L	M-SOLI-1.0
pH	N.D.		M-PH-2.0

These results are as followed on the Certificate's analysis of the corresponding project number.

In case of difference between these files , the results are singed on the results summary

Reported on: June 11, 2010

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Version 2ième: 18/10/2006

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: June 03, 2010

Sampled by: S. Gaudreault/J. Kataluk

Matrix: Water

Parameter	Blank	Standard			Sample duplicate	
		Name	Result	Limit	1	2
M.E.S. mg/L	<1	MES 31-05-2010	239	194 - 306		
M.E.S. mg/L	<1	MES 31-05-2010	239	194 - 306	2	1
pH		Std pH 7.00	6.99	6.96 - 7.04	6.53	6.51
pH		Std pH 7.00	6.99	6.96 - 7.04		

Reported on: June 11, 2010

Lab number: 81585:81588,81590,81592:81599

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: June 03, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Lab number:	81585	81586	81587	81588	81590	81592	81593	81594
Sample name:	DD-WTP-01	DD-WTP-02	DD-WTP-01	DD-WTP-02	DD-TPL	BGC-1	BGC-3	BGC-1
Sampling date:	02-06-2010	02-06-2010	01-06-2010	01-06-2010	02-06-2010	01-06-2010	01-06-2010	01-06-2010
Total Suspended Solids mg/L	19	9	13	12	1	22	<1	15
pH	6.98	6.97	6.92	6.96	6.43	6.54	6.37	6.53
Turbidity NTU	0.5	0.5	0.2	0.3	<0.1	5.9	0.6	5.2

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 11, 2010

Page 1 of 3

F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: June 03, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Lab number:	81595	81596	81597	81598	81599
Sample name:	BGC-3	BGC-1	BGC-3	BGC-1	BGC-3
Sampling date:	01-06-2010	31-05-2010	31-05-2010	31-05-2010	31-05-2010
Total Suspended Solids mg/L	<1	17	<1	37	2
pH	6.37	6.54	6.37	6.58	6.40
Turbidity NTU	0.8	3.5	0.6	13	0.9

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 11, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: June 03, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Parameter	Detection limit

Valeur

Total Suspended Solids	1 mg/L	M-SOLI-1.0
pH	N.D.	M-PH-2.0

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 11, 2010

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F-02-13
Version 2ième: 18/10/2006

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: June 08, 2010
Sampled by: S. Tapp/P.Roy/S.Doire
Matrix: Water

Parameter	Blank	Standard		Limit	Sample duplicate	
		Name	Result		1	2
M.E.S. mg/L	<1	MES 31-05-2010	256	194 - 306		
M.E.S. mg/L	<1	MES 31-05-2010	256	194 - 306	19	17

Reported on: June 15, 2010
Lab number: 81876:81883,81886:81892

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: June 08, 2010

Sampled by: Samuel Tapp/Philip Roy/Sylvain Doire

Matrix: Water

Lab number:	81876	81877	81878	81879	81880	81881	81882	81883
Sample name:	DD-WTP-01	DD-WTP-02	DD-WTP-01	DD-WTP-02	DD-WTP-01	DD-WTP-02	DD-WTP-01	DD-WTP-02
Sampling date:	03-06-2010	03-06-2010	04-06-2010	04-06-2010	05-06-2010	05-06-2010	06-06-2010	06-06-2010
Total Suspended Solids mg/L	25	19	11	14	11	19	8	11
Turbidity NTU	<0.1	<0.1	<0.1	<0.1	0.1	0.4	<0.1	0.1

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 15, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: June 08, 2010

Sampled by: Samuel Tapp/Philip Roy/Sylvain Doire

Matrix: Water

Lab number:	81886	81887	81888	81889	81890	81891	81892
Sample name:	BGC-1	BGC-3	BGC-1	BGC-3	BGC-1	BGC-3	BGC-1
Sampling date:	02-06-2010	02-06-2010	03-06-2010	03-06-2010	04-06-2010	04-06-2010	05-06-2010
Total Suspended Solids mg/L	25	4	28	1	20	5	16
Turbidity NTU	2.7	0.7	7.7	0.4	2.7	0.8	4.1

These results are as followed on the Certificate's analysis of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 15, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: June 08, 2010

Sampled by: Samuel Tapp/Philip Roy/Sylvain Doire

Matrix: Water

Parameter	Detection limit

Valeur

Total Suspended Solids	1	mg/L	M-SOLI-1.0

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 15, 2010

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F-02-13
Version 2ième: 18/10/2006

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: June 10, 2010

Sampled by: Samuel Tapp/Philip Roy

Matrix: Water

Parameter	Blank	Standard		Sample duplicate	
		Name	Result	Limit	1 2
M.E.S. mg/L	<1	MES 31-05-2010	253	194 - 306	
M.E.S. mg/L	<1	MES 31-05-2010	253	194 - 306	13 11
Turbidité UTN		DMR-0347-2010-4	5.4	4.7 - 7.4	
Turbidité UTN		DMR-0347-2010-4	5.4	4.7 - 7.4	8.5 8.4
Turbidité UTN		DMR-0347-2010-4	5.4	4.7 - 7.4	22.1 22.4

Reported on: June 11, 2010

Lab number: 82120:82121,82126,82128:82133

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: June 10, 2010

Sampled by: Samuel Tapp/Philip Roy

Matrix: Water

Lab number:	82120	82121	82126	82128	82129	82130	82131	82132
Sample name:	DD-WTP-01	DD-WTP-02	DD-TPL	BGC-1	BGC-2	BGC-3	BGC-1	BGC-2
Sampling date:	08-06-2010	08-06-2010	09-06-2010	07-06-2010	07-06-2010	07-06-2010	08-06-2010	08-06-2010
Total Suspended Solids mg/L	10	20	2	13	9	2	21	13
Turbidity NTU	8.5	5.3	1.2	15.1	13.1	0.17	22.1	21.4

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 11, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: June 10, 2010

Sampled by: Samuel Tapp/Philip Roy

Matrix: Water

Lab number: 82133

Sample name: BGC-3

Sampling date: 08-06-2010

Total Suspended Solids mg/L 2

Turbidity NTU 2.6

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 11, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: June 10, 2010

Sampled by: Samuel Tapp/Philip Roy

Matrix: Water

Parameter	Detection limit	
	Valeur	
Total Suspended Solids	1	mg/L
Turbidity	0.02	NTU
		M-SOLI-1.0
		M-TURB-1.0

Reported on: June 11, 2010

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Version 2ième: 18/10/2006

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: June 15, 2010

Sampled by: Martin Thériault/Philip Roy

Matrix: Water

Lab number:	82304	82305	82306	82307	82308	82309
Sample name:	BGC-1	BGC-2	BGC-3	BGC-1	BGC-2	BGC-3
Sampling date:	09-06-2010	09-06-2010	09-06-2010	10-06-2010	10-06-2010	10-06-2010
Total Suspended Solids mg/L	10	2	1	9	9	3
Turbidity NTU	12.1	7.9	2.6	9.0	10.5	2.3

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 16, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: June 15, 2010

Sampled by: Martin Thériault/Philip Roy

Matrix: Water

Commentaire

Sampling date:

Projet 82304 : 82309

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : Turbidité.

These results are as followed on the Certificate's analysys of the coresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 16, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: June 15, 2010

Sampled by: Martin Thériault/Philip Roy

Matrix: Water

Parameter	Detection limit	
	Valeur	
Total Suspended Solids	1	mg/L
Turbidity	0.02	NTU
		M-SOLI-1.0
		M-TURB-1.0

These results are as followed on the Certificate's analysys of the corresponding project number.

In case of difference between these files , the results are singed on the results summary

Reported on: June 16, 2010

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F-02-13

Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: June 17, 2010

Sampled by: Martin Theriault / Philip Roy

Matrix: Water

Lab number:	82467	82468	82469	82470	82471	82472	82474	82476
Sample name:	DD-WTP-02	BGC-1	BGC-2	BGC-3	Dup-1 BGC-1	Dup-2 WTP-2	DD-WTP-02	Dup-1 WTP-2
Sampling date:	15-06-2010	15-06-2010	15-06-2010	15-06-2010	15-06-2010	15-06-2010	16-06-2010	16-06-2010
Total Suspended Solids mg/L	13	15	10	2	13	13	17	18
Turbidity NTU	9.5	25.6	14.2	2.5	24.9	10.1	14.4	8.4

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 18, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: June 17, 2010

Sampled by: Martin Theriault / Philip Roy

Matrix: Water

Parameter	Detection limit	
	Valeur	
Total Suspended Solids	1	mg/L
Turbidity	0.02	NTU
		M-SOLI-1.0
		M-TURB-1.0

Reported on: June 18, 2010

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F-02-13

Version 2ième: 18/10/2006

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: June 17, 2010

Sampled by: M.Theriault / P.Roy

Matrix: Water

Parameter	Blank	Standard		Sample duplicate	
		Name	Result	Limit	1 2
M.E.S. mg/L	<1	MES 31-05-2010	243	194 - 306	
M.E.S. mg/L	<1	MES 17-06-2010	224	194 - 306	
M.E.S. mg/L	<1	MES 31-05-2010	243	194 - 306	17 17
Turbidité UTN		DMR-0444-2010-4	5.40	4.65 - 7.35	
Turbidité UTN		DMR-0444-2010-4	5.40	4.65 - 7.35	25.6 26.0

Reported on: June 18, 2010

Lab number: 82467:82472,82474,82476

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: June 22, 2010

Sampled by: Steve Gaudreault

Matrix: Water

Lab number:	82734	82735	82736	82737	82738	82739	82740	82741
Sample name:	DD-WTP-02	DD-WTP-02	up-01 (WTP-0up-01	(WTP-0up-01	(WTP-0	DD-WTP-02	up-01 (WTP-0	DD-WTP-02
Sampling date:	20-06-2010	18-06-2010	20-06-2010	18-06-2010	19-06-2010	19-06-2010	17-06-2010	17-06-2010
Total Suspended Solids mg/L	18	32	20	35	17	22	18	18
Turbidity NTU	15.0	17.7	17.3	14.0	13.4	12.7	11.5	10.9

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 23, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: June 22, 2010

Sampled by: Steve Gaudreault

Matrix: Water

Lab number:	82744	82745	82746	82750	82752
Sample name:	BGC-1	BGC-2	BGC-3	DD-TPL	Dup-01 (TPL)
Sampling date:	21-06-2010	21-06-2010	21-06-2010	21-06-2010	21-06-2010
Total Suspended Solids mg/L	34	6	5	2	4
Turbidity NTU	59.5	6.5	2.6	0.55	0.82

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: June 23, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: June 22, 2010

Sampled by: Steve Gaudreault

Matrix: Water

Parameter	Detection limit	
	Valeur	
Total Suspended Solids	1	mg/L
Turbidity	0.02	NTU
		M-SOLI-1.0
		M-TURB-1.0

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: June 22, 2010

Sampled by: Steve Gaudreault

Matrix: Water

Parameter	Blank	Standard		Sample duplicate	
		Name	Result	Limit	1 2
M.E.S. mg/L	<1	MES 17-06-2010	246	194 - 306	
M.E.S. mg/L	<1	MES 17-06-2010	246	194 - 306	5 5
Turbidité UTN		DMR-0444-2010-4	5.50	4.65 - 7.35	17.7 17.9
Turbidité UTN		DMR-0444-2010-4	5.50	4.65 - 7.35	

Reported on: June 23, 2010

Lab number: 82734:82741,82744:82746,82750,82752

Results relate only to the sample tested.

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.

Analytical Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: C-81670

Sampling date: May 29, 2010
Sampling hour: 08:30
Date received: June 04, 2010
Sampling location: Meadowbank
Sampled by: N/D
Matrix: Water
Sample name: BGC-1

Parameter	Result	Method name	Date analyzed
Conductivity	89 µmhos/cm	M-COND-2.0	June 04, 2010
Total Suspended Solids	22 mg/L	M-SOLI-1.0	June 07, 2010
pH	6.94	M-PH-2.0	June 04, 2010
Turbidity	<0.1 NTU	Sous-traitance\Maxxam	June 06, 2010

Reported on: June 30, 2010

Corrected certificate, replacing the certificate C-81670 done on June 29 2010

Results relate only to the sample tested.

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.

Analytical Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: C-81670
Sampling date: May 29, 2010
Sampling hour: 08:30
Date received: June 04, 2010
Sampling location: Meadowbank
Sampled by: N/D
Matrix: Water
Sample name: BGC-1

Commentaire

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : pH et Turbidité.

Reported on: June 30, 2010

Corrected certificate, replacing the certificate C-81670 done on June 29 2010

Results relate only to the sample tested.

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.

Analytical Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: C-81670

Sampling date: May 29, 2010
Sampling hour: 08:30
Date received: June 04, 2010
Sampling location: Meadowbank
Sampled by: N/D
Matrix: Water
Sample name: BGC-1

Parameter	Detection limit		Method name
	Valeur	Unité	
Conductivity	1	µmhos/cm	M-COND-2.0
Total Suspended Solids	1	mg/L	M-SOLI-1.0
pH	N.D.		M-PH-2.0

Reported on: June 30, 2010

Corrected certificate, replacing the certificate C-81670 done on June 29 2010

Results relate only to the sample tested.

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.

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: C-81670
Sampling date: May 29, 2010
Sampling hour: 08:30
Date received: June 04, 2010
Sampling location: Meadowbank
Sampled by: N/D
Matrix: Water
Sample name: BGC-1

Parameter	Blank	Standard		Sample duplicate	
		Name	Result	Limit	1 2
Conductivity $\mu\text{mhos/cm}$		Std-Cond-03/06/2010	1423	1204 - 1630	
Total Suspended Solids mg/L	<1	MES 31-05-2010	247	194 - 306	
pH		Std pH 7.00	7.01	6.96 - 7.04	

Reported on: June 30, 2010

Corrected certificate, replacing the certificate C-81670 done on June 29 2010

Results relate only to the sample tested.

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All samples will be disposed of after 30 days following analysis.

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: May 13, 2010

Sampled by: Martin Thériault

Matrix: Water

Parameter	Blank	Standard		Sample duplicate	
		Name	Result	Limit	
M.E.S. mg/L	<1	MES 16-03-2010	247	194 - 306	
Turbidité UTN		DMR-0282-2010-Turb	6.10	4.65 - 7.35	
Turbidité UTN		DMR-0282-2010-Turb	6.10	4.65 - 7.35	2.0 1.9

Reported on: May 14, 2010
Lab number: 80535:80542

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: May 13, 2010

Sampled by: Martin Thériault

Matrix: Water

Lab number:	80535	80536	80537	80538	80539	80540	80541	80542
Sample name:	DD-WTP-01	DD-WTP-02	BGC-1	BGC-2	BGC-3	BGC-4	BGC-5	BGC-6
Sampling date:	11-05-2010	11-05-2010	11-05-2010	11-05-2010	11-05-2010	11-05-2010	11-05-2010	11-05-2010
Total Suspended Solids mg/L	6	14	1	2	<1	<1	<1	<1
Turbidity NTU	6.5	12.1	1.4	2.6	0.61	2.0	2.0	1.3

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: May 14, 2010

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Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: May 13, 2010

Sampled by: Martin Thériault

Matrix: Water

Parameter	Detection limit	
	Valeur	
Total Suspended Solids	1	mg/L
Turbidity	0.02	NTU
		M-SOLI-1.0
		M-TURB-1.0

Reported on: May 14, 2010

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Version 2ième: 18/10/2006

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Quality control Report

Company: **Agnico Eagle Division Meadowbank**

Client: M. Sylvain Doire
Address: General Delivery
Baker Lake Nunavut X0C 0A0
Phone: (604) 677-0689 (--)
Fax: (604) 677-0687

Lab number: Multiple

Date received: May 27, 2010

Sampled by: S. Gaudreault/J. Kataluk

Matrix: Water

Parameter	Blank	Standard		Limit	Sample duplicate	
		Name	Result		1	2
M.E.S. mg/L	<1	MES 14-05-2010	250	194 - 306		
M.E.S. mg/L	<1	MES 14-05-2010	249	194 - 306	3	3
M.E.S. mg/L	<1	MES 14-05-2010	250	194 - 306	4	5
M.E.S. mg/L	<1	MES 14-05-2010	249	194 - 306		
Turbidité UTN		DMR-0282-2010-Turb	6.00	4.65 - 7.35		

Reported on: May 28, 2010
Lab number: 81173:81177

Results relate only to the sample tested.

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.

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: May 27, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Lab number:	81173	81174	81175	81176	81177
Sample name:	DD-WTP-01	DD-WTP-02	BGC-1	BGC-2	BGC-3
Sampling date:	25-05-2010	25-05-2010	25-05-2010	25-05-2010	25-05-2010
Total Suspended Solids mg/L	3	4	3	2	1
Turbidity NTU	3.0	4.3	2.3	0.84	0.95

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: May 28, 2010

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Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: May 27, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Parameter	Detection limit	
	Valeur	
Total Suspended Solids	1	mg/L
Turbidity	0.02	NTU
		M-SOLI-1.0
		M-TURB-1.0

Reported on: May 28, 2010

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These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: April 06, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Lab number:	78465	78466	78467	78468	78469	78470	78471	78472
Sample name:	DD-WTP-01	DD-WTP-02	DD-WTP-01	DD-WTP-02	DD-WTP-01	DD-WTP-02	DD-WTP-01	DD-WTP-02
Sampling date:	01-04-2010	01-04-2010	02-04-2010	02-04-2010	03-04-2010	03-04-2010	04-04-2010	04-04-2010
Total Suspended Solids mg/L	6	6	6	4	3	2	6	6
Turbidity NTU	4.0	2.6	4.4	4.0	2.3	2.3	7.7	6.1

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: April 07, 2010

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F-02-13
Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (–)

Fax: (604) 677-0687

Date received: April 06, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Lab number:	78481	78482	78483	78484	78485	78486
Sample name:	BGC-1	BGC-2	BGC-3	BGC-4	BGC-5	BGC-6
Sampling date:	30-03-2010	30-03-2010	30-03-2010	30-03-2010	30-03-2010	30-03-2010
Total Suspended Solids mg/L	2	9	20	28	8	<1
Turbidity NTU	4.6	14.1	26.7	24.6	9.5	3.1

These results are as followed on the Certificate's analysys of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: April 07, 2010

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Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: April 06, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Commentaire

Sampling date:

Projet 78465 : 78470

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : Turbidité.

Projet 78481 : 78486

Délai dépassé, résultats à titre indicatif seulement, pour les paramètres suivant(s) : Turbidité.

These results are as followed on the Certificate's analysis of the corresponding project number.
In case of difference between these files , the results are singed on the results summary

Reported on: April 07, 2010

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Version 2ième: 18/10/2006

Results summary

Client: **Agnico Eagle Division Meadowbank**

Company: M. Sylvain Doire

Address: General Delivery

Baker Lake Nunavut X0C 0A0

Phone: (604) 677-0689 (--)

Fax: (604) 677-0687

Date received: April 06, 2010

Sampled by: Steve Gaudreault/Jamie Kataluk

Matrix: Water

Parameter	Detection limit	
	Valeur	
Total Suspended Solids	1	mg/L
Turbidity	0.02	NTU
		M-SOLI-1.0
		M-TURB-1.0

These results are as followed on the Certificate's analysys of the corresponding project number.

In case of difference between these files , the results are singed on the results summary

Reported on: April 07, 2010

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Version 2ième: 18/10/2006



Environmental Division

Certificate of Analysis

AGNICO-EAGLE MINING LTD

ATTN: RYAN VANENGEN

MEADOWBANK DIV.

P.O. BOX 540

BAKER LAKE NU X0X 0A0

Report Date: 03-AUG-10 13:53 (MT)

Version: FINAL

Lab Work Order #: **L909917**

Date Received: **19-JUL-10**

Project P.O. #: NOT SUBMITTED

Job Reference: MEADOWBANK - AW

Legal Site Desc:

CofC Numbers:

Other Information:

Comments:

Gail Hill
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
L909917-1 BGS-1 Sampled By: CLIENT on 14-JUL-10 @ 17:30 Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		20-JUL-10	R1399143
Chlorophyll a	0.253		0.020	ug/L	26-JUL-10	27-JUL-10	R1403854
Dissolved Organic Carbon	1.9		1.0	mg/L		20-JUL-10	R1409428
Hardness (as CaCO3)	6.78		0.30	mg/L		22-JUL-10	
Hardness (as CaCO3)	6.78		0.20	mg/L		22-JUL-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	26-JUL-10	26-JUL-10	R1405037
Nitrate and Nitrite as N	<0.071		0.071	mg/L		28-JUL-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		20-JUL-10	R1407172
Phosphorus, Total	<0.010	DLA	0.010	mg/L		20-JUL-10	R1384743
Total Dissolved Solids	10.0		5.0	mg/L		21-JUL-10	R1392684
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	20-JUL-10	21-JUL-10	R1390323
Total Organic Carbon	4.3		1.0	mg/L		20-JUL-10	R1409428
Total Suspended Solids	3.6		2.0	mg/L		21-JUL-10	R1392684
Turbidity	2.50		0.10	NTU		19-JUL-10	R1380483
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		20-JUL-10	R1388283
Fluoride	<0.10		0.10	mg/L		20-JUL-10	R1388283
Nitrite-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Nitrate-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Sulfate	1.51		0.50	mg/L		20-JUL-10	R1388283
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.165		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Arsenic (As)-Total	0.00046		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Barium (Ba)-Total	0.00433		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Boron (B)-Total	<0.010		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	20-JUL-10	22-JUL-10	R1392067
Calcium (Ca)-Total	1.67		0.10	mg/L	20-JUL-10	20-JUL-10	R1387184
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Copper (Cu)-Total	0.00137		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Iron (Fe)-Total	0.163		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Lead (Pb)-Total	0.000129		0.000090	mg/L	20-JUL-10	20-JUL-10	R1387184
Lithium (Li)-Total	0.0030		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Magnesium (Mg)-Total	0.693		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Manganese (Mn)-Total	0.00460		0.00030	mg/L	20-JUL-10	20-JUL-10	R1387184
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Phosphorus (P)-Total	<0.20		0.20	mg/L	20-JUL-10	20-JUL-10	R1387184
Potassium (K)-Total	0.475		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Rubidium (Rb)-Total	0.00086		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Selenium (Se)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Silicon (Si)-Total	0.490		0.050	mg/L	20-JUL-10	20-JUL-10	R1387184
Silver (Ag)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Sodium (Na)-Total	0.467		0.030	mg/L	20-JUL-10	20-JUL-10	R1387184
Strontium (Sr)-Total	0.00707		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184

* 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
L909917-1	BGS-1						
Sampled By:	CLIENT on 14-JUL-10 @ 17:30						
Matrix:	WATER						
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Thorium (Th)-Total	0.00014		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tin (Sn)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Titanium (Ti)-Total	0.00422		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Tungsten (W)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Uranium (U)-Total	0.00023		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Vanadium (V)-Total	0.00022		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Zirconium (Zr)-Total	0.00042		0.00040	mg/L	20-JUL-10	20-JUL-10	R1387184
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0044		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Arsenic (As)-Dissolved	0.00047		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Barium (Ba)-Dissolved	0.00259		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Boron (B)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	19-JUL-10	21-JUL-10	R1392067
Calcium (Ca)-Dissolved	1.74		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Cesium (Cs)-Dissolved	0.00011		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Chromium (Cr)-Dissolved	0.00023		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Copper (Cu)-Dissolved	0.00066		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Iron (Fe)-Dissolved	0.012		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	19-JUL-10	20-JUL-10	R1387291
Lithium (Li)-Dissolved	0.0028		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Magnesium (Mg)-Dissolved	0.591		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Manganese (Mn)-Dissolved	0.00285		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Molybdenum (Mo)-Dissolved	0.00024		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Nickel (Ni)-Dissolved	0.00044		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	19-JUL-10	20-JUL-10	R1387291
Potassium (K)-Dissolved	0.484		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	19-JUL-10	20-JUL-10	R1387291
Silicon (Si)-Dissolved	0.186		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Sodium (Na)-Dissolved	0.491		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Strontium (Sr)-Dissolved	0.00709		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Titanium (Ti)-Dissolved	0.00028		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	19-JUL-10	20-JUL-10	R1387291
Uranium (U)-Dissolved	0.00015		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Vanadium (V)-Dissolved	0.00021		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	19-JUL-10	20-JUL-10	R1387291
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.2		1.0	mg/L		20-JUL-10	R1387344

* 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
L909917-2 BGS-2							
Sampled By: CLIENT on 14-JUL-10 @ 17:00							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Phosphorus (P)-Total	<0.20		0.20	mg/L	20-JUL-10	20-JUL-10	R1387184
Potassium (K)-Total	0.452		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Rubidium (Rb)-Total	0.00083		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Selenium (Se)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Silicon (Si)-Total	0.479		0.050	mg/L	20-JUL-10	20-JUL-10	R1387184
Silver (Ag)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Sodium (Na)-Total	0.439		0.030	mg/L	20-JUL-10	20-JUL-10	R1387184
Strontium (Sr)-Total	0.00654		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Thorium (Th)-Total	0.00014		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tin (Sn)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Titanium (Ti)-Total	0.00472		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Tungsten (W)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Uranium (U)-Total	0.00023		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Vanadium (V)-Total	0.00023		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Zirconium (Zr)-Total	0.00042		0.00040	mg/L	20-JUL-10	20-JUL-10	R1387184
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0047		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Arsenic (As)-Dissolved	0.00039		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Barium (Ba)-Dissolved	0.00256		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Boron (B)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	19-JUL-10	20-JUL-10	R1387291
Calcium (Ca)-Dissolved	1.67		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Chromium (Cr)-Dissolved	0.00028		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Copper (Cu)-Dissolved	0.00100		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Iron (Fe)-Dissolved	0.018		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	19-JUL-10	20-JUL-10	R1387291
Lithium (Li)-Dissolved	0.0022		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Magnesium (Mg)-Dissolved	0.572		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Manganese (Mn)-Dissolved	0.00284		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Molybdenum (Mo)-Dissolved	0.00019		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Nickel (Ni)-Dissolved	0.00039		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	19-JUL-10	20-JUL-10	R1387291
Potassium (K)-Dissolved	0.456		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Rubidium (Rb)-Dissolved	0.00054		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	19-JUL-10	20-JUL-10	R1387291
Silicon (Si)-Dissolved	0.184		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Sodium (Na)-Dissolved	0.478		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Strontium (Sr)-Dissolved	0.00713		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L909917-3 BGS-3							
Sampled By: CLIENT on 14-JUL-10 @ 16:42							
Matrix: WATER							
Total Metals by ICP-MS							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	20-JUL-10	20-JUL-10	R1387184
Calcium (Ca)-Total	1.72		0.10	mg/L	20-JUL-10	20-JUL-10	R1387184
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Copper (Cu)-Total	0.00088		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Iron (Fe)-Total	0.114		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Lead (Pb)-Total	<0.000090		0.000090	mg/L	20-JUL-10	20-JUL-10	R1387184
Lithium (Li)-Total	0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Magnesium (Mg)-Total	0.678		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Manganese (Mn)-Total	0.00399		0.00030	mg/L	20-JUL-10	20-JUL-10	R1387184
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Phosphorus (P)-Total	<0.20		0.20	mg/L	20-JUL-10	20-JUL-10	R1387184
Potassium (K)-Total	0.477		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Rubidium (Rb)-Total	0.00080		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Selenium (Se)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Silicon (Si)-Total	0.371		0.050	mg/L	20-JUL-10	20-JUL-10	R1387184
Silver (Ag)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Sodium (Na)-Total	0.438		0.030	mg/L	20-JUL-10	20-JUL-10	R1387184
Strontium (Sr)-Total	0.00719		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Thorium (Th)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tin (Sn)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Titanium (Ti)-Total	0.00324		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Tungsten (W)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Uranium (U)-Total	0.00016		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Vanadium (V)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	20-JUL-10	20-JUL-10	R1387184
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0055		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Arsenic (As)-Dissolved	0.00048		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Barium (Ba)-Dissolved	0.00248		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Boron (B)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	19-JUL-10	20-JUL-10	R1387291
Calcium (Ca)-Dissolved	1.77		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Chromium (Cr)-Dissolved	0.00032		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Copper (Cu)-Dissolved	0.00054		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Iron (Fe)-Dissolved	0.011		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	19-JUL-10	20-JUL-10	R1387291
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Magnesium (Mg)-Dissolved	0.593		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Manganese (Mn)-Dissolved	0.00249		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Molybdenum (Mo)-Dissolved	0.00015		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L909917-4	BGS-4						
Sampled By:	CLIENT on 14-JUL-10 @ 16:13						
Matrix:	WATER						
Anions scan (IC)							
Nitrite-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Nitrate-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Sulfate	1.50		0.50	mg/L		20-JUL-10	R1388283
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.109		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Arsenic (As)-Total	0.00056		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Barium (Ba)-Total	0.00357		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Boron (B)-Total	<0.010		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	20-JUL-10	20-JUL-10	R1387184
Calcium (Ca)-Total	1.76		0.10	mg/L	20-JUL-10	20-JUL-10	R1387184
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Copper (Cu)-Total	0.00157		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Iron (Fe)-Total	0.116		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Lead (Pb)-Total	0.000102		0.000090	mg/L	20-JUL-10	20-JUL-10	R1387184
Lithium (Li)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Magnesium (Mg)-Total	0.667		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Manganese (Mn)-Total	0.00391		0.00030	mg/L	20-JUL-10	20-JUL-10	R1387184
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Phosphorus (P)-Total	<0.20		0.20	mg/L	20-JUL-10	20-JUL-10	R1387184
Potassium (K)-Total	0.455		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Rubidium (Rb)-Total	0.00082		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Selenium (Se)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Silicon (Si)-Total	0.411		0.050	mg/L	20-JUL-10	20-JUL-10	R1387184
Silver (Ag)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Sodium (Na)-Total	0.432		0.030	mg/L	20-JUL-10	20-JUL-10	R1387184
Strontium (Sr)-Total	0.00666		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Thorium (Th)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tin (Sn)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Titanium (Ti)-Total	0.00334		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Tungsten (W)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Uranium (U)-Total	0.00015		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Vanadium (V)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	20-JUL-10	20-JUL-10	R1387184
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0029		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Arsenic (As)-Dissolved	0.00046		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Barium (Ba)-Dissolved	0.00244		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Boron (B)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	19-JUL-10	20-JUL-10	R1387291

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L909917-5 BGS-5							
Sampled By: CLIENT on 14-JUL-10 @ 15:43							
Matrix: WATER							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		28-JUL-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		20-JUL-10	R1407172
Phosphorus, Total	<0.010	DLA	0.010	mg/L		20-JUL-10	R1384743
Total Dissolved Solids	<5.0		5.0	mg/L		21-JUL-10	R1392684
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	20-JUL-10	21-JUL-10	R1390323
Total Organic Carbon	1.8		1.0	mg/L		20-JUL-10	R1409428
Total Suspended Solids	2.0		2.0	mg/L		21-JUL-10	R1392684
Turbidity	1.58		0.10	NTU		19-JUL-10	R1380483
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		20-JUL-10	R1388283
Fluoride	<0.10		0.10	mg/L		20-JUL-10	R1388283
Nitrite-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Nitrate-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Sulfate	1.52		0.50	mg/L		20-JUL-10	R1388283
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0820		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Arsenic (As)-Total	0.00048		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Barium (Ba)-Total	0.00348		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Boron (B)-Total	<0.010		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	20-JUL-10	20-JUL-10	R1387184
Calcium (Ca)-Total	1.75		0.10	mg/L	20-JUL-10	20-JUL-10	R1387184
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Copper (Cu)-Total	0.00078		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Iron (Fe)-Total	0.093		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Lead (Pb)-Total	<0.000090		0.000090	mg/L	20-JUL-10	20-JUL-10	R1387184
Lithium (Li)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Magnesium (Mg)-Total	0.667		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Manganese (Mn)-Total	0.00367		0.00030	mg/L	20-JUL-10	20-JUL-10	R1387184
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Phosphorus (P)-Total	<0.20		0.20	mg/L	20-JUL-10	20-JUL-10	R1387184
Potassium (K)-Total	0.448		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Rubidium (Rb)-Total	0.00076		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Selenium (Se)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Silicon (Si)-Total	0.326		0.050	mg/L	20-JUL-10	20-JUL-10	R1387184
Silver (Ag)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Sodium (Na)-Total	0.434		0.030	mg/L	20-JUL-10	20-JUL-10	R1387184
Strontium (Sr)-Total	0.00652		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Thorium (Th)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tin (Sn)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Titanium (Ti)-Total	0.00259		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Tungsten (W)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Uranium (U)-Total	0.00015		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Vanadium (V)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184

* 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
L909917-5 BGS-5 Sampled By: CLIENT on 14-JUL-10 @ 15:43 Matrix: WATER							
Total Metals by ICP-MS							
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	20-JUL-10	20-JUL-10	R1387184
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0034		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Arsenic (As)-Dissolved	0.00045		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Barium (Ba)-Dissolved	0.00254		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Boron (B)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	19-JUL-10	20-JUL-10	R1387291
Calcium (Ca)-Dissolved	1.71		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Chromium (Cr)-Dissolved	0.00026		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Copper (Cu)-Dissolved	0.00056		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	19-JUL-10	20-JUL-10	R1387291
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Magnesium (Mg)-Dissolved	0.579		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Manganese (Mn)-Dissolved	0.00249		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Molybdenum (Mo)-Dissolved	0.00017		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Nickel (Ni)-Dissolved	0.00031		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	19-JUL-10	20-JUL-10	R1387291
Potassium (K)-Dissolved	0.446		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Rubidium (Rb)-Dissolved	0.00055		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	19-JUL-10	20-JUL-10	R1387291
Silicon (Si)-Dissolved	0.193		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Sodium (Na)-Dissolved	0.466		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Strontium (Sr)-Dissolved	0.00709		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	19-JUL-10	20-JUL-10	R1387291
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	19-JUL-10	20-JUL-10	R1387291
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.5		1.0	mg/L		20-JUL-10	R1387344
Bicarbonate (HCO3)	9.1		2.0	mg/L		20-JUL-10	R1387344
Carbonate (CO3)	<0.60		0.60	mg/L		20-JUL-10	R1387344
Hydroxide (OH)	<0.40		0.40	mg/L		20-JUL-10	R1387344
Conductivity							
Conductivity	17.8		0.40	umhos/cm		20-JUL-10	R1384003
pH							
pH	7.10		0.10	pH units		19-JUL-10	R1381463

* 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
L909917-6 BGS-6 Sampled By: CLIENT on 14-JUL-10 @ 15:13 Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		20-JUL-10	R1399143
Chlorophyll a	0.257		0.020	ug/L	26-JUL-10	27-JUL-10	R1403854
Dissolved Organic Carbon	1.6		1.0	mg/L		20-JUL-10	R1409428
Hardness (as CaCO3)	6.64		0.20	mg/L		21-JUL-10	
Hardness (as CaCO3)	6.64		0.30	mg/L		21-JUL-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	26-JUL-10	26-JUL-10	R1405037
Nitrate and Nitrite as N	<0.071		0.071	mg/L		28-JUL-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		20-JUL-10	R1407172
Phosphorus, Total	<0.010	DLA	0.010	mg/L		20-JUL-10	R1384743
Total Dissolved Solids	<5.0		5.0	mg/L		21-JUL-10	R1392684
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	20-JUL-10	21-JUL-10	R1390323
Total Organic Carbon	1.6		1.0	mg/L		20-JUL-10	R1409428
Total Suspended Solids	2.0		2.0	mg/L		21-JUL-10	R1392684
Turbidity	1.73		0.10	NTU		19-JUL-10	R1380483
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		20-JUL-10	R1388283
Fluoride	<0.10		0.10	mg/L		20-JUL-10	R1388283
Nitrite-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Nitrate-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Sulfate	1.50		0.50	mg/L		20-JUL-10	R1388283
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.113		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Arsenic (As)-Total	0.00049		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Barium (Ba)-Total	0.00354		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Boron (B)-Total	<0.010		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	20-JUL-10	20-JUL-10	R1387184
Calcium (Ca)-Total	1.50		0.10	mg/L	20-JUL-10	20-JUL-10	R1387184
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Copper (Cu)-Total	0.00080		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Iron (Fe)-Total	0.110		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Lead (Pb)-Total	<0.000090		0.000090	mg/L	20-JUL-10	20-JUL-10	R1387184
Lithium (Li)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Magnesium (Mg)-Total	0.677		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Manganese (Mn)-Total	0.00409		0.00030	mg/L	20-JUL-10	20-JUL-10	R1387184
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Phosphorus (P)-Total	<0.20		0.20	mg/L	20-JUL-10	20-JUL-10	R1387184
Potassium (K)-Total	0.459		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Rubidium (Rb)-Total	0.00086		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Selenium (Se)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Silicon (Si)-Total	0.379		0.050	mg/L	20-JUL-10	20-JUL-10	R1387184
Silver (Ag)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Sodium (Na)-Total	0.443		0.030	mg/L	20-JUL-10	20-JUL-10	R1387184
Strontium (Sr)-Total	0.00729		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184

* 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
L909917-6 BGS-6							
Sampled By: CLIENT on 14-JUL-10 @ 15:13							
Matrix: WATER							
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Thorium (Th)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tin (Sn)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Titanium (Ti)-Total	0.00301		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Tungsten (W)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Uranium (U)-Total	0.00016		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Vanadium (V)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	20-JUL-10	20-JUL-10	R1387184
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0036		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Arsenic (As)-Dissolved	0.00045		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Barium (Ba)-Dissolved	0.00260		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Boron (B)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	19-JUL-10	20-JUL-10	R1387291
Calcium (Ca)-Dissolved	1.70		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Chromium (Cr)-Dissolved	0.00026		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Copper (Cu)-Dissolved	0.00096		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	19-JUL-10	20-JUL-10	R1387291
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Magnesium (Mg)-Dissolved	0.582		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Manganese (Mn)-Dissolved	0.00252		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Molybdenum (Mo)-Dissolved	0.00019		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Nickel (Ni)-Dissolved	0.00031		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	19-JUL-10	20-JUL-10	R1387291
Potassium (K)-Dissolved	0.432		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Rubidium (Rb)-Dissolved	0.00055		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	19-JUL-10	20-JUL-10	R1387291
Silicon (Si)-Dissolved	0.188		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Sodium (Na)-Dissolved	0.460		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Strontium (Sr)-Dissolved	0.00718		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	19-JUL-10	20-JUL-10	R1387291
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	19-JUL-10	20-JUL-10	R1387291
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.5		1.0	mg/L		20-JUL-10	R1387344

* 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
L909917-7	BGE-1						
Sampled By:	CLIENT on 14-JUL-10 @ 12:45						
Matrix:	WATER						
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Phosphorus (P)-Total	<0.20		0.20	mg/L	20-JUL-10	20-JUL-10	R1387184
Potassium (K)-Total	0.441		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Rubidium (Rb)-Total	0.00081		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Selenium (Se)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Silicon (Si)-Total	0.405		0.050	mg/L	20-JUL-10	20-JUL-10	R1387184
Silver (Ag)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Sodium (Na)-Total	0.431		0.030	mg/L	20-JUL-10	20-JUL-10	R1387184
Strontium (Sr)-Total	0.00711		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Thorium (Th)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tin (Sn)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Titanium (Ti)-Total	0.00328		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Tungsten (W)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Uranium (U)-Total	0.00014		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Vanadium (V)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	20-JUL-10	20-JUL-10	R1387184
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0057		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Arsenic (As)-Dissolved	0.00049		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Barium (Ba)-Dissolved	0.00266		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Boron (B)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	19-JUL-10	20-JUL-10	R1387291
Calcium (Ca)-Dissolved	1.68		0.050	mg/L	19-JUL-10	21-JUL-10	R1392067
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Chromium (Cr)-Dissolved	0.00023		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Copper (Cu)-Dissolved	0.00109		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Iron (Fe)-Dissolved	0.011		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	19-JUL-10	20-JUL-10	R1387291
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Magnesium (Mg)-Dissolved	0.588		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Manganese (Mn)-Dissolved	0.00246		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Molybdenum (Mo)-Dissolved	0.00018		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Nickel (Ni)-Dissolved	0.00037		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	19-JUL-10	20-JUL-10	R1387291
Potassium (K)-Dissolved	0.451		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Rubidium (Rb)-Dissolved	0.00060		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	19-JUL-10	20-JUL-10	R1387291
Silicon (Si)-Dissolved	0.195		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Sodium (Na)-Dissolved	0.476		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Strontium (Sr)-Dissolved	0.00755		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L909917-8	BGE-3						
Sampled By:	CLIENT on 14-JUL-10 @ 14:30						
Matrix:	WATER						
Total Metals by ICP-MS							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	20-JUL-10	20-JUL-10	R1387184
Calcium (Ca)-Total	1.50		0.10	mg/L	20-JUL-10	20-JUL-10	R1387184
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Copper (Cu)-Total	0.00106		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Iron (Fe)-Total	0.115		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Lead (Pb)-Total	0.000099		0.000090	mg/L	20-JUL-10	20-JUL-10	R1387184
Lithium (Li)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Magnesium (Mg)-Total	0.693		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Manganese (Mn)-Total	0.00417		0.00030	mg/L	20-JUL-10	20-JUL-10	R1387184
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Phosphorus (P)-Total	<0.20		0.20	mg/L	20-JUL-10	20-JUL-10	R1387184
Potassium (K)-Total	0.466		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Rubidium (Rb)-Total	0.00086		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Selenium (Se)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Silicon (Si)-Total	0.435		0.050	mg/L	20-JUL-10	20-JUL-10	R1387184
Silver (Ag)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Sodium (Na)-Total	0.460		0.030	mg/L	20-JUL-10	20-JUL-10	R1387184
Strontium (Sr)-Total	0.00725		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Thorium (Th)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tin (Sn)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Titanium (Ti)-Total	0.00371		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Tungsten (W)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Uranium (U)-Total	0.00015		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Vanadium (V)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	20-JUL-10	20-JUL-10	R1387184
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0037		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Arsenic (As)-Dissolved	0.00060		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Barium (Ba)-Dissolved	0.00240		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Boron (B)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	19-JUL-10	20-JUL-10	R1387291
Calcium (Ca)-Dissolved	1.78		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Chromium (Cr)-Dissolved	0.00024		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Copper (Cu)-Dissolved	0.00071		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	19-JUL-10	20-JUL-10	R1387291
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Magnesium (Mg)-Dissolved	0.592		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Manganese (Mn)-Dissolved	0.00248		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Molybdenum (Mo)-Dissolved	0.00022		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L909917-9 BG-HVH-4							
Sampled By: CLIENT on 14-JUL-10 @ 14:00							
Matrix: WATER							
Anions scan (IC)							
Nitrite-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Nitrate-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Sulfate	1.52		0.50	mg/L		20-JUL-10	R1388283
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.111		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Arsenic (As)-Total	0.00051		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Barium (Ba)-Total	0.00342		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Boron (B)-Total	<0.010		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	20-JUL-10	20-JUL-10	R1387184
Calcium (Ca)-Total	1.41		0.10	mg/L	20-JUL-10	20-JUL-10	R1387184
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Copper (Cu)-Total	0.00078		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Iron (Fe)-Total	0.114		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Lead (Pb)-Total	0.000092		0.000090	mg/L	20-JUL-10	20-JUL-10	R1387184
Lithium (Li)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Magnesium (Mg)-Total	0.646		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Manganese (Mn)-Total	0.00404		0.00030	mg/L	20-JUL-10	20-JUL-10	R1387184
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Phosphorus (P)-Total	<0.20		0.20	mg/L	20-JUL-10	20-JUL-10	R1387184
Potassium (K)-Total	0.427		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Rubidium (Rb)-Total	0.00084		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Selenium (Se)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Silicon (Si)-Total	0.421		0.050	mg/L	20-JUL-10	20-JUL-10	R1387184
Silver (Ag)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Sodium (Na)-Total	0.425		0.030	mg/L	20-JUL-10	20-JUL-10	R1387184
Strontium (Sr)-Total	0.00721		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Thorium (Th)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tin (Sn)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Titanium (Ti)-Total	0.00434		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Tungsten (W)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Uranium (U)-Total	0.00016		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Vanadium (V)-Total	0.00021		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	20-JUL-10	20-JUL-10	R1387184
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0037		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Arsenic (As)-Dissolved	0.00044		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Barium (Ba)-Dissolved	0.00247		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Boron (B)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	19-JUL-10	20-JUL-10	R1387291

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L909917-10 BG-HVH-5							
Sampled By: CLIENT on 14-JUL-10 @ 17:45							
Matrix: WATER							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		28-JUL-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		20-JUL-10	R1407172
Phosphorus, Total	<0.010	DLA	0.010	mg/L		20-JUL-10	R1384743
Total Dissolved Solids	<5.0		5.0	mg/L		21-JUL-10	R1392684
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	20-JUL-10	21-JUL-10	R1390323
Total Organic Carbon	1.5		1.0	mg/L		20-JUL-10	R1409428
Total Suspended Solids	<2.0		2.0	mg/L		21-JUL-10	R1392684
Turbidity	2.00		0.10	NTU		19-JUL-10	R1380483
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		20-JUL-10	R1388283
Fluoride	<0.10		0.10	mg/L		20-JUL-10	R1388283
Nitrite-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Nitrate-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Sulfate	1.52		0.50	mg/L		20-JUL-10	R1388283
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.104		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Arsenic (As)-Total	0.00046		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Barium (Ba)-Total	0.00347		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Boron (B)-Total	<0.010		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	20-JUL-10	20-JUL-10	R1387184
Calcium (Ca)-Total	1.44		0.10	mg/L	20-JUL-10	20-JUL-10	R1387184
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Copper (Cu)-Total	0.00073		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Iron (Fe)-Total	0.111		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Lead (Pb)-Total	<0.000090		0.000090	mg/L	20-JUL-10	20-JUL-10	R1387184
Lithium (Li)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Magnesium (Mg)-Total	0.663		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Manganese (Mn)-Total	0.00395		0.00030	mg/L	20-JUL-10	20-JUL-10	R1387184
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Phosphorus (P)-Total	<0.20		0.20	mg/L	20-JUL-10	20-JUL-10	R1387184
Potassium (K)-Total	0.429		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Rubidium (Rb)-Total	0.00082		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Selenium (Se)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Silicon (Si)-Total	0.380		0.050	mg/L	20-JUL-10	20-JUL-10	R1387184
Silver (Ag)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Sodium (Na)-Total	0.439		0.030	mg/L	20-JUL-10	20-JUL-10	R1387184
Strontium (Sr)-Total	0.00727		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Thorium (Th)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tin (Sn)-Total	0.00044		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Titanium (Ti)-Total	0.00346		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Tungsten (W)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Uranium (U)-Total	0.00016		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Vanadium (V)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184

* 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
L909917-10 BG-HVH-5 Sampled By: CLIENT on 14-JUL-10 @ 17:45 Matrix: WATER							
Total Metals by ICP-MS							
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	20-JUL-10	20-JUL-10	R1387184
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0041		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Arsenic (As)-Dissolved	0.00041		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Barium (Ba)-Dissolved	0.00247		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Boron (B)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	19-JUL-10	20-JUL-10	R1387291
Calcium (Ca)-Dissolved	1.58		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Copper (Cu)-Dissolved	0.00047		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	19-JUL-10	20-JUL-10	R1387291
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Magnesium (Mg)-Dissolved	0.560		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Manganese (Mn)-Dissolved	0.00238		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Molybdenum (Mo)-Dissolved	0.00017		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Nickel (Ni)-Dissolved	0.00034		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	19-JUL-10	20-JUL-10	R1387291
Potassium (K)-Dissolved	0.415		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Rubidium (Rb)-Dissolved	0.00056		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	19-JUL-10	20-JUL-10	R1387291
Silicon (Si)-Dissolved	0.183		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Sodium (Na)-Dissolved	0.450		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Strontium (Sr)-Dissolved	0.00699		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	19-JUL-10	20-JUL-10	R1387291
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	19-JUL-10	20-JUL-10	R1387291
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.5		1.0	mg/L		20-JUL-10	R1387344
Bicarbonate (HCO3)	9.1		2.0	mg/L		20-JUL-10	R1387344
Carbonate (CO3)	<0.60		0.60	mg/L		20-JUL-10	R1387344
Hydroxide (OH)	<0.40		0.40	mg/L		20-JUL-10	R1387344
Conductivity							
Conductivity	17.5		0.40	umhos/cm		20-JUL-10	R1384003
pH							
pH	7.09		0.10	pH units		19-JUL-10	R1381463

* 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
L909917-11 DUP-1							
Sampled By: CLIENT on 14-JUL-10							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		20-JUL-10	R1399143
Chlorophyll a	0.383		0.020	ug/L	26-JUL-10	27-JUL-10	R1403854
Dissolved Organic Carbon	1.5		1.0	mg/L		20-JUL-10	R1409428
Hardness (as CaCO3)	6.40		0.30	mg/L		21-JUL-10	
Hardness (as CaCO3)	6.40		0.20	mg/L		21-JUL-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	26-JUL-10	26-JUL-10	R1405037
Nitrate and Nitrite as N	<0.071		0.071	mg/L		28-JUL-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		20-JUL-10	R1407172
Phosphorus, Total	<0.010	DLA	0.010	mg/L		20-JUL-10	R1384743
Total Dissolved Solids	<5.0		5.0	mg/L		21-JUL-10	R1392684
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	20-JUL-10	21-JUL-10	R1390323
Total Organic Carbon	1.5		1.0	mg/L		20-JUL-10	R1409428
Total Suspended Solids	2.8		2.0	mg/L		21-JUL-10	R1392684
Turbidity	1.65		0.10	NTU		19-JUL-10	R1380483
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		20-JUL-10	R1388283
Fluoride	<0.10		0.10	mg/L		20-JUL-10	R1388283
Nitrite-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Nitrate-N	<0.050		0.050	mg/L		20-JUL-10	R1388283
Sulfate	1.50		0.50	mg/L		20-JUL-10	R1388283
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.120		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Arsenic (As)-Total	0.00051		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Barium (Ba)-Total	0.00353		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Boron (B)-Total	<0.010		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	20-JUL-10	20-JUL-10	R1387184
Calcium (Ca)-Total	1.42		0.10	mg/L	20-JUL-10	20-JUL-10	R1387184
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Copper (Cu)-Total	0.00080		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Iron (Fe)-Total	0.120		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Lead (Pb)-Total	0.000093		0.000090	mg/L	20-JUL-10	20-JUL-10	R1387184
Lithium (Li)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Magnesium (Mg)-Total	0.666		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Manganese (Mn)-Total	0.00400		0.00030	mg/L	20-JUL-10	20-JUL-10	R1387184
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Phosphorus (P)-Total	<0.20		0.20	mg/L	20-JUL-10	20-JUL-10	R1387184
Potassium (K)-Total	0.423		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Rubidium (Rb)-Total	0.00092		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Selenium (Se)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Silicon (Si)-Total	0.411		0.050	mg/L	20-JUL-10	20-JUL-10	R1387184
Silver (Ag)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Sodium (Na)-Total	0.441		0.030	mg/L	20-JUL-10	20-JUL-10	R1387184
Strontium (Sr)-Total	0.00732		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184

* 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
L909917-11 DUP-1							
Sampled By: CLIENT on 14-JUL-10							
Matrix: WATER							
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Thorium (Th)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tin (Sn)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Titanium (Ti)-Total	0.00357		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Tungsten (W)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Uranium (U)-Total	0.00016		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Vanadium (V)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	20-JUL-10	20-JUL-10	R1387184
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0027		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Arsenic (As)-Dissolved	0.00046		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Barium (Ba)-Dissolved	0.00238		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Boron (B)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	19-JUL-10	20-JUL-10	R1387291
Calcium (Ca)-Dissolved	1.63		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Chromium (Cr)-Dissolved	0.00023		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Copper (Cu)-Dissolved	0.00047		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	19-JUL-10	20-JUL-10	R1387291
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Magnesium (Mg)-Dissolved	0.565		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Manganese (Mn)-Dissolved	0.00239		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Molybdenum (Mo)-Dissolved	0.00017		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Nickel (Ni)-Dissolved	0.00034		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	19-JUL-10	20-JUL-10	R1387291
Potassium (K)-Dissolved	0.419		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Rubidium (Rb)-Dissolved	0.00057		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	19-JUL-10	20-JUL-10	R1387291
Silicon (Si)-Dissolved	0.190		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Sodium (Na)-Dissolved	0.449		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Strontium (Sr)-Dissolved	0.00752		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	19-JUL-10	20-JUL-10	R1387291
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	19-JUL-10	20-JUL-10	R1387291
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.6		1.0	mg/L		20-JUL-10	R1387344

* 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
L909917-12 TPE-1							
Sampled By: CLIENT on 14-JUL-10							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Phosphorus (P)-Total	<0.20		0.20	mg/L	20-JUL-10	20-JUL-10	R1387184
Potassium (K)-Total	0.360		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Rubidium (Rb)-Total	0.00059		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Selenium (Se)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Silicon (Si)-Total	0.185		0.050	mg/L	20-JUL-10	20-JUL-10	R1387184
Silver (Ag)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Sodium (Na)-Total	0.453		0.030	mg/L	20-JUL-10	20-JUL-10	R1387184
Strontium (Sr)-Total	0.00630		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Thorium (Th)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tin (Sn)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Titanium (Ti)-Total	0.00087		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Tungsten (W)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Uranium (U)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Vanadium (V)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	20-JUL-10	20-JUL-10	R1387184
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0034		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Barium (Ba)-Dissolved	0.00224		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Boron (B)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	19-JUL-10	20-JUL-10	R1387291
Calcium (Ca)-Dissolved	1.36		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Copper (Cu)-Dissolved	0.00039		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	19-JUL-10	20-JUL-10	R1387291
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Magnesium (Mg)-Dissolved	0.507		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Manganese (Mn)-Dissolved	0.00171		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Molybdenum (Mo)-Dissolved	0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Nickel (Ni)-Dissolved	0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	19-JUL-10	20-JUL-10	R1387291
Potassium (K)-Dissolved	0.366		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Rubidium (Rb)-Dissolved	0.00052		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	19-JUL-10	20-JUL-10	R1387291
Silicon (Si)-Dissolved	0.134		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Sodium (Na)-Dissolved	0.481		0.020	mg/L	19-JUL-10	20-JUL-10	R1387291
Strontium (Sr)-Dissolved	0.00641		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291

* 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
L909917-13 TPE-4 Sampled By: CLIENT on 14-JUL-10 Matrix: WATER							
Total Metals by ICP-MS							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	20-JUL-10	20-JUL-10	R1387184
Calcium (Ca)-Total	1.36		0.10	mg/L	20-JUL-10	20-JUL-10	R1387184
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Copper (Cu)-Total	0.00094		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Iron (Fe)-Total	0.113		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Lead (Pb)-Total	0.000100		0.000090	mg/L	20-JUL-10	20-JUL-10	R1387184
Lithium (Li)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Magnesium (Mg)-Total	0.624		0.010	mg/L	20-JUL-10	20-JUL-10	R1387184
Manganese (Mn)-Total	0.00397		0.00030	mg/L	20-JUL-10	20-JUL-10	R1387184
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	20-JUL-10	20-JUL-10	R1387184
Phosphorus (P)-Total	<0.20		0.20	mg/L	20-JUL-10	20-JUL-10	R1387184
Potassium (K)-Total	0.402		0.020	mg/L	20-JUL-10	20-JUL-10	R1387184
Rubidium (Rb)-Total	0.00090		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Selenium (Se)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Silicon (Si)-Total	0.390		0.050	mg/L	20-JUL-10	20-JUL-10	R1387184
Silver (Ag)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Sodium (Na)-Total	0.432		0.030	mg/L	20-JUL-10	20-JUL-10	R1387184
Strontium (Sr)-Total	0.00762		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Thorium (Th)-Total	0.00010		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Tin (Sn)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Titanium (Ti)-Total	0.00298		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Tungsten (W)-Total	<0.0010		0.0010	mg/L	20-JUL-10	20-JUL-10	R1387184
Uranium (U)-Total	0.00018		0.00010	mg/L	20-JUL-10	20-JUL-10	R1387184
Vanadium (V)-Total	<0.00020		0.00020	mg/L	20-JUL-10	20-JUL-10	R1387184
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	20-JUL-10	20-JUL-10	R1387184
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	20-JUL-10	20-JUL-10	R1387184
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0043		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Arsenic (As)-Dissolved	0.00037		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Barium (Ba)-Dissolved	0.00237		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Boron (B)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	19-JUL-10	20-JUL-10	R1387291
Calcium (Ca)-Dissolved	1.53		0.050	mg/L	19-JUL-10	20-JUL-10	R1387291
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291
Chromium (Cr)-Dissolved	0.00021		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Copper (Cu)-Dissolved	0.00044		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	19-JUL-10	20-JUL-10	R1387291
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	19-JUL-10	20-JUL-10	R1387291
Magnesium (Mg)-Dissolved	0.553		0.010	mg/L	19-JUL-10	20-JUL-10	R1387291
Manganese (Mn)-Dissolved	0.00243		0.00020	mg/L	19-JUL-10	20-JUL-10	R1387291
Molybdenum (Mo)-Dissolved	0.00015		0.00010	mg/L	19-JUL-10	20-JUL-10	R1387291

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

* 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)
Duplicate	Ortho Phosphorus Soluble As P	DLA	L909917-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Total Kjeldahl Nitrogen	MS-B	L909917-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -7, -8, -9

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

ALK-TOT-WP	Water	Alkalinity	APHA 2320B

Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO₃⁻ and H₂CO₃ endpoints indicated electrometrically.

ANIONS5-IC-WP	Water	Anions scan (IC)	EPA 300.1 IC

This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".

C-DIS-ORG-WP	Water	Dissolved Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

C-TOT-ORG-WP	Water	Total Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

CHLOROA-VA	Water	Chlorophyll a by Fluorometer	EPA 445.0

Chlorophyll and Pheopigments by Fluorometry analysis is carried out using procedures adapted from USEPA Method 445.0. The sample is filtered using either a glass fiber filter or a 0.45 micron Membrane filter. The pigments are extracted from the filter with 90% aqueous acetone. For chlorophyll-a analysis the extract is read using a fluorometer. For pheopigments the extract is first acidified then read. This method is not subject to interferences from chlorophyll b.

EC-WP	Water	Conductivity	APHA 2510B

Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.

ETL-HARDNESS-DIS-WP	Water	Hardness Calculated	Calculated

ETL-HARDNESS-TOT-WP	Water	Hardness Calculated	Calculated

HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0

Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.

MET-D-L-MS-WP	Water	Dissolved Metals by ICP-MS	U.S. EPA 200.8-DL

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
Dissolved Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the Examination of Water and Wastewater method 3030B for filtration through a 0.45 um filter and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
MET-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
N-TOTKJ-WP	Water	Total Kjeldahl Nitrogen	Quickchem method 10-107-06-2-E Lachat
Samples are digested with a sulphuric acid solution, cooled, diluted with water, and analyzed for ammonia. Total Kjeldahl nitrogen is the sum of free-ammonia and organic nitrogen compounds which are converted to ammonium sulphate through this digestion process. Analysis is performed by Flow Injection Analysis (FIA). The pH of the digested sample is raised to a known, basic pH by neutralization with a concentrated buffer solution. This neutralization converts the ammonium cation to ammonia. The ammonia produced is heated with salicylate and hypochlorite to produce blue colour which is proportional to the ammonia concentration.			
NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
Ammonia - Colourimetric using Salicylate-nitroprusside and hypochlorite, in an alkaline phosphate buffer.			
NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
P-ORTHO-SOL-WP	Water	Ortho Phosphorous Soluble	APHA, 1998 P-OS
Quantitative orthophosphorous values are determined without prior digestion of the sample. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
P-TOTAL-WP	Water	Phosphorus, Total	APHA, 1998 P-T
Samples are digested using a sulphuric acid-persulfate mixture to convert organic phosphorous to orthophosphate. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
PH-WP	Water	pH	APHA 4500H
pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.			
SOLIDS-TDS-WP	Water	Total Dissolved Solids	APHA 2540
The residue remaining in a prepared casserole after passing the sample through a 1.2 um Whatman GF/C glass microfibre filter and drying at 180 degrees C. Samples may be dried at 105 degrees C if the client specifically requests this drying temperature.			
SOLIDS-TOTSUS-LR-WP	Water	Total Suspended Solids	APHA 2540 LR
The residue retained by a prepared 1.5 um Whatman 934-AH glass microfibre filter dried at 105 degrees C. A method detection limit of 2 mg/L can be achieved when 500 mL of sample is used.			
TURBIDITY-WP	Water	Turbidity	APHA, 1998, 2130B
A strong light beam is sent through a transparent tube containing the sample. Light that is reflected at 90 degrees to the axis by suspended particles is detected by the photocell. The electrical response is proportional to the sample turbidity.			

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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

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
WP	ALS LABORATORY GROUP - WINNIPEG, MANITOBA, CANADA
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

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.



Report to:						Report Format / Distribution						Service Requested:						
Company: Agnico-Eagle Mines Ltd.						☒ Standard	☐ Other	☒ Regular Service (Default)										
Contact: Ryan VanEngen						☒ PDF	☒ Excel	☐ Fax	☒ Rush Service (2-3 Days)									
Address: Meadowbank Division PO Box 540 Baker Lake Nun.						Email 1: rvanengen@agnico-eagle.com						☐ Priority Service (1 Day or ASAP)						
						Email 2: sdbire@agnico-eagle.com						☐ Emergency Service (<1 Day / Wkend) - Contact ALS						
Phone: 867 793 4610x6759 Fax:						Analysis Request												
Invoice To: ☒ Same as Report						Indicate Bottles: Filtered / Preserved (F/P) → --												
Company: Agnico-Eagle Mining Ltd.						Client / Project Information:												
Contact: Accounts Payable-Meadowbank Division						Job #: Meadowbank: AW												
Address: email electronic invoice to rvanengen@agnico-eagle.com						PO/AFE:												
Sample						Legal Site Description:												
Phone:						Quote #: Q21514												
Fax:						ALS Contact:												
Lab Work Order # (lab use only)						Date						Sampler (Initials):						
Sample Identification (This description will appear on the report)						dd-mm-yy						hh:mm						
BGS-1						14-Jul-10						17:30 Water						
BGS-2						14-Jul-10						17:00 Water						
BGS-3						14-Jul-10						16:42 Water						
BGS-4						14-Jul-10						16:13 Water						
BGS-5						14-Jul-10						15:43 Water						
BGS-6						14-Jul-10						15:13 Water						
BGE-1						14-Jul-10						12:45 Water						
BGE-3						14-Jul-10						14:30 Water						
BG-HVH-4						14-Jul-10						14:00 Water						
BG-HVH-5						14-Jul-10						17:45 Water						
Guidelines / Regulations						Special Instructions / 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 adjacent worksheet.																		
Relinquished By:		Ryan V		Date & Time: 23-05-2010		Received By:		Date & Time:		Temperature		Samples Received in Good Condition? Y / N (if no provided details)		Sample Condition (lab use only)				
Relinquished By:				Date & Time:		Received By:		Date & Time:		19.9				19 Jul 10				

[illegible]



Environmental Division

Certificate of Analysis

AGNICO-EAGLE MINING LTD

ATTN: RYAN VANENGEN

MEADOWBANK DIV.

P.O. BOX 540

BAKER LAKE NU X0X 0A0

Report Date: 17-AUG-10 14:39 (MT)

Version: FINAL

Lab Work Order #: **L911040**

Date Received: **21-JUL-10**

Project P.O. #: NOT SUBMITTED

Job Reference: MEADOWBANK : AW

Legal Site Desc:

CofC Numbers:

Other Information:

Comments:

Gail Hill
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
L911040-1 BGW-2							
Sampled By: CLIENT on 15-JUL-10 @ 15:30							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		27-JUL-10	R1405003
Chlorophyll a	0.785		0.020	ug/L	26-JUL-10	27-JUL-10	R1403854
Dissolved Organic Carbon	1.6		1.0	mg/L		23-JUL-10	R1409535
Hardness (as CaCO3)	9.92		0.20	mg/L		23-JUL-10	
Hardness (as CaCO3)	9.92		0.30	mg/L		23-JUL-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	26-JUL-10	26-JUL-10	R1405037
Nitrate and Nitrite as N	0.170		0.071	mg/L		28-JUL-10	
Ortho Phosphorus Soluble As P	0.0146		0.0010	mg/L		22-JUL-10	R1406895
Phosphorus, Total	0.0147		0.0030	mg/L		22-JUL-10	R1406910
Total Dissolved Solids	28.0		5.0	mg/L		28-JUL-10	R1405264
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	22-JUL-10	23-JUL-10	R1399979
Total Organic Carbon	1.8		1.0	mg/L		23-JUL-10	R1409535
Total Suspended Solids	7.6		2.0	mg/L		22-JUL-10	R1400063
Turbidity	5.72		0.10	NTU		21-JUL-10	R1397886
Anions scan (IC)							
Chloride	0.65		0.50	mg/L		21-JUL-10	R1394384
Fluoride	<0.10		0.10	mg/L		21-JUL-10	R1394384
Nitrite-N	<0.050		0.050	mg/L		21-JUL-10	R1394384
Nitrate-N	0.170		0.050	mg/L		21-JUL-10	R1394384
Sulfate	2.27		0.50	mg/L		21-JUL-10	R1394384
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.291		0.0050	mg/L	22-JUL-10	22-JUL-10	R1398303
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Arsenic (As)-Total	0.00147		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Barium (Ba)-Total	0.00489		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Boron (B)-Total	<0.010		0.010	mg/L	22-JUL-10	22-JUL-10	R1398303
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	22-JUL-10	22-JUL-10	R1398303
Calcium (Ca)-Total	2.95		0.10	mg/L	22-JUL-10	22-JUL-10	R1398303
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Chromium (Cr)-Total	0.0021		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Cobalt (Co)-Total	0.00024		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Copper (Cu)-Total	0.00122		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Iron (Fe)-Total	0.319		0.020	mg/L	22-JUL-10	22-JUL-10	R1398303
Lead (Pb)-Total	0.000224		0.000090	mg/L	22-JUL-10	22-JUL-10	R1398303
Lithium (Li)-Total	0.0035		0.0020	mg/L	22-JUL-10	22-JUL-10	R1398303
Magnesium (Mg)-Total	1.01		0.010	mg/L	22-JUL-10	22-JUL-10	R1398303
Manganese (Mn)-Total	0.00950		0.00030	mg/L	22-JUL-10	22-JUL-10	R1398303
Molybdenum (Mo)-Total	0.00039		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	22-JUL-10	22-JUL-10	R1398303
Phosphorus (P)-Total	<0.20		0.20	mg/L	22-JUL-10	22-JUL-10	R1398303
Potassium (K)-Total	0.701		0.020	mg/L	22-JUL-10	22-JUL-10	R1398303
Rubidium (Rb)-Total	0.00136		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Selenium (Se)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Silicon (Si)-Total	0.997		0.050	mg/L	22-JUL-10	22-JUL-10	R1398303
Silver (Ag)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Sodium (Na)-Total	0.573		0.030	mg/L	22-JUL-10	22-JUL-10	R1398303
Strontium (Sr)-Total	0.0106		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303

* 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
L911040-1 BGW-2							
Sampled By: CLIENT on 15-JUL-10 @ 15:30							
Matrix: WATER							
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Thorium (Th)-Total	0.00024		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Tin (Sn)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Titanium (Ti)-Total	0.00882		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Tungsten (W)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Uranium (U)-Total	0.00053		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Vanadium (V)-Total	0.00052		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	22-JUL-10	22-JUL-10	R1398303
Zirconium (Zr)-Total	0.00076		0.00040	mg/L	22-JUL-10	22-JUL-10	R1398303
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0087		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Arsenic (As)-Dissolved	0.00121		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Barium (Ba)-Dissolved	0.00310		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Boron (B)-Dissolved	<0.010		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Cadmium (Cd)-Dissolved	0.000011		0.000010	mg/L	21-JUL-10	22-JUL-10	R1398725
Calcium (Ca)-Dissolved	2.47		0.050	mg/L	21-JUL-10	22-JUL-10	R1398725
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Chromium (Cr)-Dissolved	0.00022		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Copper (Cu)-Dissolved	0.00070		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	21-JUL-10	22-JUL-10	R1398725
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Magnesium (Mg)-Dissolved	0.909		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Manganese (Mn)-Dissolved	0.00492		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Molybdenum (Mo)-Dissolved	0.00041		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Nickel (Ni)-Dissolved	0.00086		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	21-JUL-10	22-JUL-10	R1398725
Potassium (K)-Dissolved	0.495		0.020	mg/L	21-JUL-10	22-JUL-10	R1398725
Rubidium (Rb)-Dissolved	0.00076		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	21-JUL-10	22-JUL-10	R1398725
Silicon (Si)-Dissolved	0.157		0.050	mg/L	21-JUL-10	22-JUL-10	R1398725
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Sodium (Na)-Dissolved	0.572		0.020	mg/L	21-JUL-10	22-JUL-10	R1398725
Strontium (Sr)-Dissolved	0.0105		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	21-JUL-10	22-JUL-10	R1398725
Uranium (U)-Dissolved	0.00020		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	21-JUL-10	22-JUL-10	R1398725
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	9.7		1.0	mg/L		21-JUL-10	R1392263

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L911040-2 BGW-3							
Sampled By: CLIENT on 15-JUL-10 @ 14:55							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	0.00041		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	22-JUL-10	22-JUL-10	R1398303
Phosphorus (P)-Total	<0.20		0.20	mg/L	22-JUL-10	22-JUL-10	R1398303
Potassium (K)-Total	0.645		0.020	mg/L	22-JUL-10	22-JUL-10	R1398303
Rubidium (Rb)-Total	0.00127		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Selenium (Se)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Silicon (Si)-Total	0.520		0.050	mg/L	22-JUL-10	22-JUL-10	R1398303
Silver (Ag)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Sodium (Na)-Total	0.564		0.030	mg/L	22-JUL-10	22-JUL-10	R1398303
Strontium (Sr)-Total	0.0110		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Thorium (Th)-Total	0.00018		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Tin (Sn)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Titanium (Ti)-Total	0.00651		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Tungsten (W)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Uranium (U)-Total	0.00052		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Vanadium (V)-Total	0.00039		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	22-JUL-10	22-JUL-10	R1398303
Zirconium (Zr)-Total	0.00055		0.00040	mg/L	22-JUL-10	22-JUL-10	R1398303
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0072		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Arsenic (As)-Dissolved	0.00116		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Barium (Ba)-Dissolved	0.00301		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Boron (B)-Dissolved	<0.010		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	21-JUL-10	22-JUL-10	R1398725
Calcium (Ca)-Dissolved	2.40		0.050	mg/L	21-JUL-10	22-JUL-10	R1398725
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Copper (Cu)-Dissolved	0.00043		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	21-JUL-10	22-JUL-10	R1398725
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Magnesium (Mg)-Dissolved	0.907		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Manganese (Mn)-Dissolved	0.00469		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Molybdenum (Mo)-Dissolved	0.00040		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Nickel (Ni)-Dissolved	0.00086		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	21-JUL-10	22-JUL-10	R1398725
Potassium (K)-Dissolved	0.514		0.020	mg/L	21-JUL-10	22-JUL-10	R1398725
Rubidium (Rb)-Dissolved	0.00075		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	21-JUL-10	22-JUL-10	R1398725
Silicon (Si)-Dissolved	0.155		0.050	mg/L	21-JUL-10	22-JUL-10	R1398725
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Sodium (Na)-Dissolved	0.561		0.020	mg/L	21-JUL-10	22-JUL-10	R1398725
Strontium (Sr)-Dissolved	0.0103		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L911040-3 DUP-2							
Sampled By: CLIENT on 15-JUL-10 @ 14:55							
Matrix: WATER							
Total Metals by ICP-MS							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	22-JUL-10	22-JUL-10	R1398303
Calcium (Ca)-Total	2.66		0.10	mg/L	22-JUL-10	22-JUL-10	R1398303
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Chromium (Cr)-Total	0.0015		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Cobalt (Co)-Total	0.00021		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Copper (Cu)-Total	0.00120		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Iron (Fe)-Total	0.252		0.020	mg/L	22-JUL-10	22-JUL-10	R1398303
Lead (Pb)-Total	0.000204		0.000090	mg/L	22-JUL-10	22-JUL-10	R1398303
Lithium (Li)-Total	0.0030		0.0020	mg/L	22-JUL-10	22-JUL-10	R1398303
Magnesium (Mg)-Total	0.926		0.010	mg/L	22-JUL-10	22-JUL-10	R1398303
Manganese (Mn)-Total	0.00840		0.00030	mg/L	22-JUL-10	22-JUL-10	R1398303
Molybdenum (Mo)-Total	0.00035		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	22-JUL-10	22-JUL-10	R1398303
Phosphorus (P)-Total	<0.20		0.20	mg/L	22-JUL-10	22-JUL-10	R1398303
Potassium (K)-Total	0.601		0.020	mg/L	22-JUL-10	22-JUL-10	R1398303
Rubidium (Rb)-Total	0.00124		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Selenium (Se)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Silicon (Si)-Total	0.519		0.050	mg/L	22-JUL-10	22-JUL-10	R1398303
Silver (Ag)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Sodium (Na)-Total	0.533		0.030	mg/L	22-JUL-10	22-JUL-10	R1398303
Strontium (Sr)-Total	0.0103		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Thorium (Th)-Total	0.00019		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Tin (Sn)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Titanium (Ti)-Total	0.00650		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Tungsten (W)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Uranium (U)-Total	0.00052		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Vanadium (V)-Total	0.00037		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	22-JUL-10	22-JUL-10	R1398303
Zirconium (Zr)-Total	0.00047		0.00040	mg/L	22-JUL-10	22-JUL-10	R1398303
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0065		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Arsenic (As)-Dissolved	0.00115		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Barium (Ba)-Dissolved	0.00292		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Boron (B)-Dissolved	<0.010		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	21-JUL-10	22-JUL-10	R1398725
Calcium (Ca)-Dissolved	2.52		0.050	mg/L	21-JUL-10	22-JUL-10	R1398725
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Copper (Cu)-Dissolved	0.00044		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	21-JUL-10	22-JUL-10	R1398725
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Magnesium (Mg)-Dissolved	0.950		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Manganese (Mn)-Dissolved	0.00473		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Molybdenum (Mo)-Dissolved	0.00040		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725

* 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
L911040-3 DUP-2 Sampled By: CLIENT on 15-JUL-10 @ 14:55 Matrix: WATER Dissolved Metals by ICP-MS Nickel (Ni)-Dissolved Phosphorus (P)-Dissolved Potassium (K)-Dissolved Rubidium (Rb)-Dissolved Selenium (Se)-Dissolved Silicon (Si)-Dissolved Silver (Ag)-Dissolved Sodium (Na)-Dissolved Strontium (Sr)-Dissolved Tellurium (Te)-Dissolved Thallium (Tl)-Dissolved Thorium (Th)-Dissolved Tin (Sn)-Dissolved Titanium (Ti)-Dissolved Tungsten (W)-Dissolved Uranium (U)-Dissolved Vanadium (V)-Dissolved Zinc (Zn)-Dissolved Zirconium (Zr)-Dissolved pH, Conductivity and Total Alkalinity Alkalinity Alkalinity, Total (as CaCO3) Bicarbonate (HCO3) Carbonate (CO3) Hydroxide (OH) Conductivity Conductivity pH pH	0.00081 <0.10 0.527 0.00075 <0.0010 0.159 <0.00010 0.589 0.0104 <0.00020 <0.00010 <0.00010 <0.00020 <0.00020 0.00020 <0.00020 <0.00020 0.00020 0.00020 0.00040		0.00020 0.10 0.020 0.00020 0.0010 0.050 0.00010 0.020 0.00010 0.00020 0.00010 0.00010 0.00020 0.00020 0.00010 0.0010 0.00010 0.00020 0.0020 0.00040	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10	22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10 22-JUL-10	R1398725 R1398725 R1398725 R1398725 R1398725 R1398725 R1398725 R1398725 R1398725 R1398725 R1398725 R1398725 R1398725 R1398725 R1398725 R1398725 R1398725 R1398725 R1398725
L911040-4 SP-1 Sampled By: CLIENT on 16-JUL-10 @ 18:05 Matrix: WATER Miscellaneous Parameters Ammonia as N Chlorophyll a Dissolved Organic Carbon Hardness (as CaCO3) Hardness (as CaCO3) Mercury (Hg)-Total Nitrate and Nitrite as N Ortho Phosphorus Soluble As P Phosphorus, Total Total Dissolved Solids Total Kjeldahl Nitrogen Total Organic Carbon Total Suspended Solids Turbidity Anions scan (IC) Chloride Fluoride	<0.050 0.355 1.9 7.92 7.92 <0.000050 <0.071 <0.010 <0.010 18.5 <0.20 1.6 4.4 1.03 0.57 <0.10		0.050 0.020 1.0 0.20 0.30 0.000050 0.071 0.010 0.010 5.0 0.20 1.0 2.0 0.10 0.50 0.10	mg/L ug/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	26-JUL-10 26-JUL-10 26-JUL-10 26-JUL-10 26-JUL-10 26-JUL-10 26-JUL-10 26-JUL-10 26-JUL-10 26-JUL-10 26-JUL-10 26-JUL-10 26-JUL-10 26-JUL-10 26-JUL-10 26-JUL-10	27-JUL-10 27-JUL-10 23-JUL-10 23-JUL-10 23-JUL-10 26-JUL-10 28-JUL-10 22-JUL-10 22-JUL-10 28-JUL-10 23-JUL-10 23-JUL-10 22-JUL-10 21-JUL-10 21-JUL-10 21-JUL-10	R1405003 R1403854 R1409535 R1409535 R1409535 R1405037 R1405037 R1406895 R1406910 R1405264 R1399979 R1409535 R1400063 R1397886 R1394384 R1394384

* 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
L911040-4 SP-1							
Sampled By: CLIENT on 16-JUL-10 @ 18:05							
Matrix: WATER							
Anions scan (IC)							
Nitrite-N	<0.050		0.050	mg/L		21-JUL-10	R1394384
Nitrate-N	<0.050		0.050	mg/L		21-JUL-10	R1394384
Sulfate	2.23		0.50	mg/L		21-JUL-10	R1394384
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0681		0.0050	mg/L	22-JUL-10	22-JUL-10	R1398303
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Arsenic (As)-Total	0.00043		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Barium (Ba)-Total	0.00293		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Boron (B)-Total	<0.010		0.010	mg/L	22-JUL-10	22-JUL-10	R1398303
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	22-JUL-10	22-JUL-10	R1398303
Calcium (Ca)-Total	2.18		0.10	mg/L	22-JUL-10	22-JUL-10	R1398303
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Copper (Cu)-Total	0.00118		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Iron (Fe)-Total	0.072		0.020	mg/L	22-JUL-10	22-JUL-10	R1398303
Lead (Pb)-Total	<0.000090		0.000090	mg/L	22-JUL-10	22-JUL-10	R1398303
Lithium (Li)-Total	<0.0020		0.0020	mg/L	22-JUL-10	22-JUL-10	R1398303
Magnesium (Mg)-Total	0.757		0.010	mg/L	22-JUL-10	22-JUL-10	R1398303
Manganese (Mn)-Total	0.00249		0.00030	mg/L	22-JUL-10	22-JUL-10	R1398303
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	22-JUL-10	22-JUL-10	R1398303
Phosphorus (P)-Total	<0.20		0.20	mg/L	22-JUL-10	22-JUL-10	R1398303
Potassium (K)-Total	0.440		0.020	mg/L	22-JUL-10	22-JUL-10	R1398303
Rubidium (Rb)-Total	0.00072		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Selenium (Se)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Silicon (Si)-Total	0.353		0.050	mg/L	22-JUL-10	22-JUL-10	R1398303
Silver (Ag)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Sodium (Na)-Total	0.509		0.030	mg/L	22-JUL-10	22-JUL-10	R1398303
Strontium (Sr)-Total	0.00903		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Thorium (Th)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Tin (Sn)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Titanium (Ti)-Total	0.00197		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Tungsten (W)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Uranium (U)-Total	0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Vanadium (V)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	22-JUL-10	22-JUL-10	R1398303
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	22-JUL-10	22-JUL-10	R1398303
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0101		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Arsenic (As)-Dissolved	0.00035		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Barium (Ba)-Dissolved	0.00261		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Boron (B)-Dissolved	<0.010		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	21-JUL-10	22-JUL-10	R1398725

* 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
L911040-5 SP-8							
Sampled By: CLIENT on 16-JUL-10 @ 17:45							
Matrix: WATER							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		28-JUL-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		22-JUL-10	R1406895
Phosphorus, Total	<0.010	DLA	0.010	mg/L		22-JUL-10	R1406910
Total Dissolved Solids	9.7		5.0	mg/L		28-JUL-10	R1405264
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	22-JUL-10	23-JUL-10	R1399979
Total Organic Carbon	1.9		1.0	mg/L		23-JUL-10	R1409535
Total Suspended Solids	3.6		2.0	mg/L		22-JUL-10	R1400063
Turbidity	0.80		0.10	NTU		21-JUL-10	R1397886
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		21-JUL-10	R1394384
Fluoride	<0.10		0.10	mg/L		21-JUL-10	R1394384
Nitrite-N	<0.050		0.050	mg/L		21-JUL-10	R1394384
Nitrate-N	<0.050		0.050	mg/L		21-JUL-10	R1394384
Sulfate	1.88		0.50	mg/L		21-JUL-10	R1394384
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0476		0.0050	mg/L	22-JUL-10	22-JUL-10	R1398303
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Arsenic (As)-Total	0.00034		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Barium (Ba)-Total	0.00260		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Boron (B)-Total	<0.010		0.010	mg/L	22-JUL-10	22-JUL-10	R1398303
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	22-JUL-10	22-JUL-10	R1398303
Calcium (Ca)-Total	2.35		0.10	mg/L	22-JUL-10	22-JUL-10	R1398303
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Copper (Cu)-Total	0.00066		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Iron (Fe)-Total	0.050		0.020	mg/L	22-JUL-10	22-JUL-10	R1398303
Lead (Pb)-Total	<0.000090		0.000090	mg/L	22-JUL-10	22-JUL-10	R1398303
Lithium (Li)-Total	0.0021		0.0020	mg/L	22-JUL-10	22-JUL-10	R1398303
Magnesium (Mg)-Total	0.786		0.010	mg/L	22-JUL-10	22-JUL-10	R1398303
Manganese (Mn)-Total	0.00217		0.00030	mg/L	22-JUL-10	22-JUL-10	R1398303
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	22-JUL-10	22-JUL-10	R1398303
Phosphorus (P)-Total	<0.20		0.20	mg/L	22-JUL-10	22-JUL-10	R1398303
Potassium (K)-Total	0.425		0.020	mg/L	22-JUL-10	22-JUL-10	R1398303
Rubidium (Rb)-Total	0.00064		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Selenium (Se)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Silicon (Si)-Total	0.336		0.050	mg/L	22-JUL-10	22-JUL-10	R1398303
Silver (Ag)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Sodium (Na)-Total	0.488		0.030	mg/L	22-JUL-10	22-JUL-10	R1398303
Strontium (Sr)-Total	0.00973		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Thorium (Th)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Tin (Sn)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Titanium (Ti)-Total	0.00140		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Tungsten (W)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Uranium (U)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Vanadium (V)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	22-JUL-10	22-JUL-10	R1398303

* 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
L911040-5 SP-8							
Sampled By: CLIENT on 16-JUL-10 @ 17:45							
Matrix: WATER							
Total Metals by ICP-MS							
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	22-JUL-10	22-JUL-10	R1398303
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0063		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Arsenic (As)-Dissolved	0.00028		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Barium (Ba)-Dissolved	0.00238		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Boron (B)-Dissolved	<0.010		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	21-JUL-10	22-JUL-10	R1398725
Calcium (Ca)-Dissolved	2.17		0.050	mg/L	21-JUL-10	22-JUL-10	R1398725
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Copper (Cu)-Dissolved	0.00063		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	21-JUL-10	22-JUL-10	R1398725
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Magnesium (Mg)-Dissolved	0.786		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Manganese (Mn)-Dissolved	0.00129		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Molybdenum (Mo)-Dissolved	0.00011		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Nickel (Ni)-Dissolved	0.00045		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	21-JUL-10	22-JUL-10	R1398725
Potassium (K)-Dissolved	0.360		0.020	mg/L	21-JUL-10	22-JUL-10	R1398725
Rubidium (Rb)-Dissolved	0.00052		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	21-JUL-10	22-JUL-10	R1398725
Silicon (Si)-Dissolved	0.258		0.050	mg/L	21-JUL-10	22-JUL-10	R1398725
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Sodium (Na)-Dissolved	0.515		0.020	mg/L	21-JUL-10	22-JUL-10	R1398725
Strontium (Sr)-Dissolved	0.00951		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Titanium (Ti)-Dissolved	0.00050		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	21-JUL-10	22-JUL-10	R1398725
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	21-JUL-10	22-JUL-10	R1398725
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	9.3		1.0	mg/L		21-JUL-10	R1392263
Bicarbonate (HCO3)	11.4		2.0	mg/L		21-JUL-10	R1392263
Carbonate (CO3)	<0.60		0.60	mg/L		21-JUL-10	R1392263
Hydroxide (OH)	<0.40		0.40	mg/L		21-JUL-10	R1392263
Conductivity							
Conductivity	23.6		0.40	umhos/cm		21-JUL-10	R1392263
pH							
pH	7.33		0.10	pH units		21-JUL-10	R1392263

* 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
L911040-6 SP-9							
Sampled By: CLIENT on 16-JUL-10 @ 17:10							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		27-JUL-10	R1405003
Chlorophyll a	0.422		0.020	ug/L	26-JUL-10	27-JUL-10	R1403854
Dissolved Organic Carbon	2.1		1.0	mg/L		10-AUG-10	R1438749
Hardness (as CaCO3)	9.33		0.20	mg/L		23-JUL-10	
Hardness (as CaCO3)	9.33		0.30	mg/L		23-JUL-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	26-JUL-10	26-JUL-10	R1405037
Nitrate and Nitrite as N	<0.071		0.071	mg/L		28-JUL-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		22-JUL-10	R1406895
Phosphorus, Total	<0.010	DLA	0.010	mg/L		22-JUL-10	R1406910
Total Dissolved Solids	20.0		5.0	mg/L		28-JUL-10	R1405264
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	22-JUL-10	23-JUL-10	R1399979
Total Organic Carbon	2.0		1.0	mg/L		23-JUL-10	R1409535
Total Suspended Solids	3.6		2.0	mg/L		22-JUL-10	R1400063
Turbidity	0.68		0.10	NTU		21-JUL-10	R1397886
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		22-JUL-10	R1397903
Fluoride	<0.10		0.10	mg/L		22-JUL-10	R1397903
Nitrite-N	<0.050		0.050	mg/L		22-JUL-10	R1397903
Nitrate-N	<0.050		0.050	mg/L		22-JUL-10	R1397903
Sulfate	2.12		0.50	mg/L		22-JUL-10	R1397903
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0279		0.0050	mg/L	22-JUL-10	22-JUL-10	R1398303
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Arsenic (As)-Total	0.00023		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Barium (Ba)-Total	0.00238		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Boron (B)-Total	<0.010		0.010	mg/L	22-JUL-10	22-JUL-10	R1398303
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	22-JUL-10	22-JUL-10	R1398303
Calcium (Ca)-Total	2.51		0.10	mg/L	22-JUL-10	22-JUL-10	R1398303
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Copper (Cu)-Total	0.00086		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Iron (Fe)-Total	0.037		0.020	mg/L	22-JUL-10	22-JUL-10	R1398303
Lead (Pb)-Total	<0.000090		0.000090	mg/L	22-JUL-10	22-JUL-10	R1398303
Lithium (Li)-Total	<0.0020		0.0020	mg/L	22-JUL-10	22-JUL-10	R1398303
Magnesium (Mg)-Total	0.792		0.010	mg/L	22-JUL-10	22-JUL-10	R1398303
Manganese (Mn)-Total	0.00187		0.00030	mg/L	22-JUL-10	22-JUL-10	R1398303
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	22-JUL-10	22-JUL-10	R1398303
Phosphorus (P)-Total	<0.20		0.20	mg/L	22-JUL-10	22-JUL-10	R1398303
Potassium (K)-Total	0.369		0.020	mg/L	22-JUL-10	22-JUL-10	R1398303
Rubidium (Rb)-Total	0.00056		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Selenium (Se)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Silicon (Si)-Total	0.345		0.050	mg/L	22-JUL-10	22-JUL-10	R1398303
Silver (Ag)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Sodium (Na)-Total	0.463		0.030	mg/L	22-JUL-10	22-JUL-10	R1398303
Strontium (Sr)-Total	0.0108		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303

* 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
L911040-6 SP-9							
Sampled By: CLIENT on 16-JUL-10 @ 17:10							
Matrix: WATER							
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Thorium (Th)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Tin (Sn)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Titanium (Ti)-Total	0.00096		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Tungsten (W)-Total	<0.0010		0.0010	mg/L	22-JUL-10	22-JUL-10	R1398303
Uranium (U)-Total	<0.00010		0.00010	mg/L	22-JUL-10	22-JUL-10	R1398303
Vanadium (V)-Total	<0.00020		0.00020	mg/L	22-JUL-10	22-JUL-10	R1398303
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	22-JUL-10	22-JUL-10	R1398303
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	22-JUL-10	22-JUL-10	R1398303
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0049		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Barium (Ba)-Dissolved	0.00241		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Boron (B)-Dissolved	<0.010		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	21-JUL-10	22-JUL-10	R1398725
Calcium (Ca)-Dissolved	2.33		0.050	mg/L	21-JUL-10	22-JUL-10	R1398725
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Copper (Cu)-Dissolved	0.00071		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	21-JUL-10	22-JUL-10	R1398725
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Magnesium (Mg)-Dissolved	0.855		0.010	mg/L	21-JUL-10	22-JUL-10	R1398725
Manganese (Mn)-Dissolved	0.00113		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Molybdenum (Mo)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Nickel (Ni)-Dissolved	0.00047		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	21-JUL-10	22-JUL-10	R1398725
Potassium (K)-Dissolved	0.351		0.020	mg/L	21-JUL-10	22-JUL-10	R1398725
Rubidium (Rb)-Dissolved	0.00049		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	21-JUL-10	22-JUL-10	R1398725
Silicon (Si)-Dissolved	0.307		0.050	mg/L	21-JUL-10	22-JUL-10	R1398725
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Sodium (Na)-Dissolved	0.516		0.020	mg/L	21-JUL-10	22-JUL-10	R1398725
Strontium (Sr)-Dissolved	0.0110		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	21-JUL-10	22-JUL-10	R1398725
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	21-JUL-10	22-JUL-10	R1398725
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	21-JUL-10	22-JUL-10	R1398725
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	21-JUL-10	22-JUL-10	R1398725
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	21-JUL-10	22-JUL-10	R1398725
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	9.8		1.0	mg/L		21-JUL-10	R1392263

* 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	Total Kjeldahl Nitrogen	MS-B	L911040-1, -2, -3, -4, -5, -6
Matrix Spike	Phosphorus, Total	MS-B	L911040-1, -2, -3, -4, -5, -6

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

ALK-TOT-WP	Water	Alkalinity	APHA 2320B

Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO₃⁻ and H₂CO₃ endpoints indicated electrometrically.

ANIONS5-IC-WP	Water	Anions scan (IC)	EPA 300.1 IC

This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".

C-DIS-ORG-WP	Water	Dissolved Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

C-TOT-ORG-WP	Water	Total Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

CHLOROA-VA	Water	Chlorophyll a by Fluorometer	EPA 445.0

Chlorophyll and Pheopigments by Fluorometry analysis is carried out using procedures adapted from USEPA Method 445.0. The sample is filtered using either a glass fiber filter or a 0.45 micron Membrane filter. The pigments are extracted from the filter with 90% aqueous acetone. For chlorophyll-a analysis the extract is read using a fluorometer. For pheopigments the extract is first acidified then read. This method is not subject to interferences from chlorophyll b.

EC-WP	Water	Conductivity	APHA 2510B

Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.

ETL-HARDNESS-DIS-WP	Water	Hardness Calculated	Calculated

ETL-HARDNESS-TOT-WP	Water	Hardness Calculated	Calculated

HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0

Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.

MET-D-L-MS-WP	Water	Dissolved Metals by ICP-MS	U.S. EPA 200.8-DL

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
Dissolved Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the Examination of Water and Wastewater method 3030B for filtration through a 0.45 um filter and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
MET-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
N-TOTKJ-WP	Water	Total Kjeldahl Nitrogen	Quickchem method 10-107-06-2-E Lachat
Samples are digested with a sulphuric acid solution, cooled, diluted with water, and analyzed for ammonia. Total Kjeldahl nitrogen is the sum of free-ammonia and organic nitrogen compounds which are converted to ammonium sulphate through this digestion process. Analysis is performed by Flow Injection Analysis (FIA). The pH of the digested sample is raised to a known, basic pH by neutralization with a concentrated buffer solution. This neutralization converts the ammonium cation to ammonia. The ammonia produced is heated with salicylate and hypochlorite to produce blue colour which is proportional to the ammonia concentration.			
NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
Ammonia - Colourimetric using Salicylate-nitroprusside and hypochlorite, in an alkaline phosphate buffer.			
NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
P-ORTHO-SOL-WP	Water	Ortho Phosphorous Soluble	APHA, 1998 P-OS
Quantitative orthophosphorous values are determined without prior digestion of the sample. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
P-TOTAL-WP	Water	Phosphorus, Total	APHA, 1998 P-T
Samples are digested using a sulphuric acid-persulfate mixture to convert organic phosphorous to orthophosphate. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
PH-WP	Water	pH	APHA 4500H
pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.			
SOLIDS-TDS-WP	Water	Total Dissolved Solids	APHA 2540
The residue remaining in a prepared casserole after passing the sample through a 1.2 um Whatman GF/C glass microfibre filter and drying at 180 degrees C. Samples may be dried at 105 degrees C if the client specifically requests this drying temperature.			
SOLIDS-TOTSUS-LR-WP	Water	Total Suspended Solids	APHA 2540 LR
The residue retained by a prepared 1.5 um Whatman 934-AH glass microfibre filter dried at 105 degrees C. A method detection limit of 2 mg/L can be achieved when 500 mL of sample is used.			
TURBIDITY-WP	Water	Turbidity	APHA, 1998, 2130B
A strong light beam is sent through a transparent tube containing the sample. Light that is reflected at 90 degrees to the axis by suspended particles is detected by the photocell. The electrical response is proportional to the sample turbidity.			

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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

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
WP	ALS LABORATORY GROUP - WINNIPEG, MANITOBA, CANADA
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

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.

[illegible]



Environmental Division

Certificate of Analysis

AGNICO-EAGLE MINING LTD

ATTN: RYAN VANENGEN

MEADOWBANK DIV.

P.O. BOX 540

BAKER LAKE NU X0X 0A0

Report Date: 17-AUG-10 15:45 (MT)

Version: FINAL

Lab Work Order #: **L913531**

Date Received: **28-JUL-10**

Project P.O. #: NOT SUBMITTED

Job Reference: MEADOWBANK:AW

Legal Site Desc:

CofC Numbers:

Other Information:

Comments:

Gail Hill
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
L913531-1	BGE-1						
Sampled By:	CLIENT on 24-JUL-10 @ 14:45						
Matrix:	WATER						
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		29-JUL-10	R1409518
Chlorophyll a	0.483		0.020	ug/L	03-AUG-10	04-AUG-10	R1415125
Dissolved Organic Carbon	1.7		1.0	mg/L		30-JUL-10	R1418783
Hardness (as CaCO3)	6.94		0.20	mg/L		30-JUL-10	
Hardness (as CaCO3)	6.94		0.30	mg/L		30-JUL-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	05-AUG-10	05-AUG-10	R1441563
Nitrate and Nitrite as N	<0.071		0.071	mg/L		29-JUL-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		29-JUL-10	R1406878
Phosphorus, Total	<0.010	DLA	0.010	mg/L		29-JUL-10	R1405923
Total Dissolved Solids	15.6		5.0	mg/L		30-JUL-10	R1409043
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	29-JUL-10	30-JUL-10	R1407696
Total Organic Carbon	2.2		1.0	mg/L		30-JUL-10	R1418783
Total Suspended Solids	<2.0		2.0	mg/L		30-JUL-10	R1409043
Turbidity	1.28		0.10	NTU		28-JUL-10	R1404939
Anions scan (IC)							
Chloride	0.53		0.50	mg/L		28-JUL-10	R1405632
Fluoride	<0.10		0.10	mg/L		28-JUL-10	R1405632
Nitrite-N	<0.050		0.050	mg/L		28-JUL-10	R1405632
Nitrate-N	<0.050		0.050	mg/L		28-JUL-10	R1405632
Sulfate	1.58		0.50	mg/L		28-JUL-10	R1405632
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0744		0.0050	mg/L	29-JUL-10	29-JUL-10	R1406987
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Arsenic (As)-Total	0.00054		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Barium (Ba)-Total	0.00294		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Boron (B)-Total	<0.010		0.010	mg/L	29-JUL-10	29-JUL-10	R1406987
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	29-JUL-10	29-JUL-10	R1406987
Calcium (Ca)-Total	1.99		0.10	mg/L	29-JUL-10	29-JUL-10	R1406987
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Copper (Cu)-Total	0.00070		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Iron (Fe)-Total	0.076		0.020	mg/L	29-JUL-10	29-JUL-10	R1406987
Lead (Pb)-Total	<0.000090		0.000090	mg/L	29-JUL-10	29-JUL-10	R1406987
Lithium (Li)-Total	0.0032		0.0020	mg/L	29-JUL-10	29-JUL-10	R1406987
Magnesium (Mg)-Total	0.723		0.010	mg/L	29-JUL-10	29-JUL-10	R1406987
Manganese (Mn)-Total	0.00328		0.00030	mg/L	29-JUL-10	29-JUL-10	R1406987
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	29-JUL-10	29-JUL-10	R1406987
Phosphorus (P)-Total	<0.20		0.20	mg/L	29-JUL-10	29-JUL-10	R1406987
Potassium (K)-Total	0.468		0.020	mg/L	29-JUL-10	29-JUL-10	R1406987
Rubidium (Rb)-Total	0.00078		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Selenium (Se)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Silicon (Si)-Total	0.319		0.050	mg/L	29-JUL-10	29-JUL-10	R1406987
Silver (Ag)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Sodium (Na)-Total	0.602		0.030	mg/L	29-JUL-10	29-JUL-10	R1406987
Strontium (Sr)-Total	0.00829		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987

* 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
L913531-1	BGE-1						
Sampled By:	CLIENT on 24-JUL-10 @ 14:45						
Matrix:	WATER						
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Thorium (Th)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Tin (Sn)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Titanium (Ti)-Total	0.00284		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Tungsten (W)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Uranium (U)-Total	0.00015		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Vanadium (V)-Total	0.00025		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	29-JUL-10	29-JUL-10	R1406987
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	29-JUL-10	29-JUL-10	R1406987
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0050		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Arsenic (As)-Dissolved	0.00052		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Barium (Ba)-Dissolved	0.00259		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Boron (B)-Dissolved	<0.010		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	28-JUL-10	29-JUL-10	R1407356
Calcium (Ca)-Dissolved	1.64		0.050	mg/L	28-JUL-10	29-JUL-10	R1407356
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Copper (Cu)-Dissolved	0.00054		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	28-JUL-10	29-JUL-10	R1407356
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Magnesium (Mg)-Dissolved	0.693		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Manganese (Mn)-Dissolved	0.00184		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Molybdenum (Mo)-Dissolved	0.00016		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Nickel (Ni)-Dissolved	0.00055		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	28-JUL-10	29-JUL-10	R1407356
Potassium (K)-Dissolved	0.407		0.020	mg/L	28-JUL-10	29-JUL-10	R1407356
Rubidium (Rb)-Dissolved	0.00058		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	28-JUL-10	29-JUL-10	R1407356
Silicon (Si)-Dissolved	0.176		0.050	mg/L	28-JUL-10	29-JUL-10	R1407356
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Sodium (Na)-Dissolved	0.531		0.020	mg/L	28-JUL-10	29-JUL-10	R1407356
Strontium (Sr)-Dissolved	0.00711		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	28-JUL-10	29-JUL-10	R1407356
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	28-JUL-10	29-JUL-10	R1407356
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.3		1.0	mg/L		29-JUL-10	R1406908

* 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
L913531-2 BGS-1							
Sampled By: CLIENT on 24-JUL-10 @ 15:15							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	29-JUL-10	29-JUL-10	R1406987
Phosphorus (P)-Total	<0.20		0.20	mg/L	29-JUL-10	29-JUL-10	R1406987
Potassium (K)-Total	0.444		0.020	mg/L	29-JUL-10	29-JUL-10	R1406987
Rubidium (Rb)-Total	0.00071		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Selenium (Se)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Silicon (Si)-Total	0.258		0.050	mg/L	29-JUL-10	29-JUL-10	R1406987
Silver (Ag)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Sodium (Na)-Total	0.536		0.030	mg/L	29-JUL-10	29-JUL-10	R1406987
Strontium (Sr)-Total	0.00748		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Thorium (Th)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Tin (Sn)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Titanium (Ti)-Total	0.00138		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Tungsten (W)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Uranium (U)-Total	0.00014		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Vanadium (V)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	29-JUL-10	29-JUL-10	R1406987
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	29-JUL-10	29-JUL-10	R1406987
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0089		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Arsenic (As)-Dissolved	0.00039		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Barium (Ba)-Dissolved	0.00277		0.00020	mg/L	28-JUL-10	31-JUL-10	R1409447
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Boron (B)-Dissolved	<0.010		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	28-JUL-10	29-JUL-10	R1407356
Calcium (Ca)-Dissolved	1.66		0.050	mg/L	28-JUL-10	29-JUL-10	R1407356
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Copper (Cu)-Dissolved	0.00061		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Iron (Fe)-Dissolved	0.011		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	28-JUL-10	31-JUL-10	R1409447
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Magnesium (Mg)-Dissolved	0.714		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Manganese (Mn)-Dissolved	0.00204		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Molybdenum (Mo)-Dissolved	0.00014		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Nickel (Ni)-Dissolved	0.00061		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	28-JUL-10	29-JUL-10	R1407356
Potassium (K)-Dissolved	0.412		0.020	mg/L	28-JUL-10	29-JUL-10	R1407356
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	28-JUL-10	29-JUL-10	R1407356
Silicon (Si)-Dissolved	0.180		0.050	mg/L	28-JUL-10	29-JUL-10	R1407356
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Sodium (Na)-Dissolved	0.559		0.020	mg/L	28-JUL-10	29-JUL-10	R1407356
Strontium (Sr)-Dissolved	0.00734		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L913531-3 BGS-2							
Sampled By: CLIENT on 24-JUL-10 @ 16:00							
Matrix: WATER							
Total Metals by ICP-MS							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	29-JUL-10	29-JUL-10	R1406987
Calcium (Ca)-Total	1.70		0.10	mg/L	29-JUL-10	29-JUL-10	R1406987
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Copper (Cu)-Total	0.00074		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Iron (Fe)-Total	0.049		0.020	mg/L	29-JUL-10	29-JUL-10	R1406987
Lead (Pb)-Total	<0.000090		0.000090	mg/L	29-JUL-10	29-JUL-10	R1406987
Lithium (Li)-Total	0.0026		0.0020	mg/L	29-JUL-10	29-JUL-10	R1406987
Magnesium (Mg)-Total	0.655		0.010	mg/L	29-JUL-10	29-JUL-10	R1406987
Manganese (Mn)-Total	0.00264		0.00030	mg/L	29-JUL-10	29-JUL-10	R1406987
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	29-JUL-10	29-JUL-10	R1406987
Phosphorus (P)-Total	<0.20		0.20	mg/L	29-JUL-10	29-JUL-10	R1406987
Potassium (K)-Total	0.427		0.020	mg/L	29-JUL-10	29-JUL-10	R1406987
Rubidium (Rb)-Total	0.00069		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Selenium (Se)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Silicon (Si)-Total	0.226		0.050	mg/L	29-JUL-10	29-JUL-10	R1406987
Silver (Ag)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Sodium (Na)-Total	0.516		0.030	mg/L	29-JUL-10	29-JUL-10	R1406987
Strontium (Sr)-Total	0.00725		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Thorium (Th)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Tin (Sn)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Titanium (Ti)-Total	0.00119		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Tungsten (W)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Uranium (U)-Total	0.00013		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Vanadium (V)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	29-JUL-10	29-JUL-10	R1406987
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	29-JUL-10	29-JUL-10	R1406987
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0042		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Arsenic (As)-Dissolved	0.00037		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Barium (Ba)-Dissolved	0.00256		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Boron (B)-Dissolved	<0.010		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	28-JUL-10	29-JUL-10	R1407356
Calcium (Ca)-Dissolved	1.57		0.050	mg/L	28-JUL-10	29-JUL-10	R1407356
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Copper (Cu)-Dissolved	0.00056		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	28-JUL-10	29-JUL-10	R1407356
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Magnesium (Mg)-Dissolved	0.675		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Manganese (Mn)-Dissolved	0.00164		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Molybdenum (Mo)-Dissolved	0.00013		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356

* 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
L913531-4 BGS-3							
Sampled By: CLIENT on 24-JUL-10 @ 17:00							
Matrix: WATER							
Anions scan (IC)							
Nitrite-N	<0.050		0.050	mg/L		28-JUL-10	R1405632
Nitrate-N	<0.050		0.050	mg/L		28-JUL-10	R1405632
Sulfate	1.54		0.50	mg/L		28-JUL-10	R1405632
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0496		0.0050	mg/L	29-JUL-10	29-JUL-10	R1406987
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Arsenic (As)-Total	0.00042		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Barium (Ba)-Total	0.00292		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Boron (B)-Total	<0.010		0.010	mg/L	29-JUL-10	29-JUL-10	R1406987
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	29-JUL-10	29-JUL-10	R1406987
Calcium (Ca)-Total	1.76		0.10	mg/L	29-JUL-10	29-JUL-10	R1406987
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Copper (Cu)-Total	0.00067		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Iron (Fe)-Total	0.054		0.020	mg/L	29-JUL-10	29-JUL-10	R1406987
Lead (Pb)-Total	<0.000090		0.000090	mg/L	29-JUL-10	29-JUL-10	R1406987
Lithium (Li)-Total	<0.0020		0.0020	mg/L	29-JUL-10	29-JUL-10	R1406987
Magnesium (Mg)-Total	0.677		0.010	mg/L	29-JUL-10	29-JUL-10	R1406987
Manganese (Mn)-Total	0.00271		0.00030	mg/L	29-JUL-10	29-JUL-10	R1406987
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	29-JUL-10	29-JUL-10	R1406987
Phosphorus (P)-Total	<0.20		0.20	mg/L	29-JUL-10	29-JUL-10	R1406987
Potassium (K)-Total	0.447		0.020	mg/L	29-JUL-10	29-JUL-10	R1406987
Rubidium (Rb)-Total	0.00073		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Selenium (Se)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Silicon (Si)-Total	0.255		0.050	mg/L	29-JUL-10	29-JUL-10	R1406987
Silver (Ag)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Sodium (Na)-Total	0.528		0.030	mg/L	29-JUL-10	29-JUL-10	R1406987
Strontium (Sr)-Total	0.00749		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Thorium (Th)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Tin (Sn)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Titanium (Ti)-Total	0.00130		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Tungsten (W)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Uranium (U)-Total	0.00014		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Vanadium (V)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	29-JUL-10	29-JUL-10	R1406987
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	29-JUL-10	29-JUL-10	R1406987
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0046		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Arsenic (As)-Dissolved	0.00037		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Barium (Ba)-Dissolved	0.00253		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Boron (B)-Dissolved	<0.010		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	28-JUL-10	29-JUL-10	R1407356

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L913531-5 BGS-4							
Sampled By: CLIENT on 24-JUL-10 @ 17:45							
Matrix: WATER							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		29-JUL-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		29-JUL-10	R1406878
Phosphorus, Total	<0.010	DLA	0.010	mg/L		29-JUL-10	R1405923
Total Dissolved Solids	9.7		5.0	mg/L		30-JUL-10	R1409043
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	29-JUL-10	30-JUL-10	R1407696
Total Organic Carbon	1.7		1.0	mg/L		30-JUL-10	R1418783
Total Suspended Solids	<2.0		2.0	mg/L		30-JUL-10	R1409043
Turbidity	0.95		0.10	NTU		28-JUL-10	R1404939
Anions scan (IC)							
Chloride	0.51		0.50	mg/L		28-JUL-10	R1405632
Fluoride	<0.10		0.10	mg/L		28-JUL-10	R1405632
Nitrite-N	<0.050		0.050	mg/L		28-JUL-10	R1405632
Nitrate-N	<0.050		0.050	mg/L		28-JUL-10	R1405632
Sulfate	1.56		0.50	mg/L		28-JUL-10	R1405632
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0444		0.0050	mg/L	29-JUL-10	29-JUL-10	R1406987
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Arsenic (As)-Total	0.00043		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Barium (Ba)-Total	0.00298		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Boron (B)-Total	<0.010		0.010	mg/L	29-JUL-10	29-JUL-10	R1406987
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	29-JUL-10	29-JUL-10	R1406987
Calcium (Ca)-Total	1.71		0.10	mg/L	29-JUL-10	29-JUL-10	R1406987
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Copper (Cu)-Total	0.00060		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Iron (Fe)-Total	0.056		0.020	mg/L	29-JUL-10	29-JUL-10	R1406987
Lead (Pb)-Total	<0.000090		0.000090	mg/L	29-JUL-10	29-JUL-10	R1406987
Lithium (Li)-Total	<0.0020		0.0020	mg/L	29-JUL-10	29-JUL-10	R1406987
Magnesium (Mg)-Total	0.668		0.010	mg/L	29-JUL-10	29-JUL-10	R1406987
Manganese (Mn)-Total	0.00269		0.00030	mg/L	29-JUL-10	29-JUL-10	R1406987
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	29-JUL-10	29-JUL-10	R1406987
Phosphorus (P)-Total	<0.20		0.20	mg/L	29-JUL-10	29-JUL-10	R1406987
Potassium (K)-Total	0.437		0.020	mg/L	29-JUL-10	29-JUL-10	R1406987
Rubidium (Rb)-Total	0.00071		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Selenium (Se)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Silicon (Si)-Total	0.252		0.050	mg/L	29-JUL-10	29-JUL-10	R1406987
Silver (Ag)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Sodium (Na)-Total	0.513		0.030	mg/L	29-JUL-10	29-JUL-10	R1406987
Strontium (Sr)-Total	0.00734		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Thorium (Th)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Tin (Sn)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Titanium (Ti)-Total	0.00146		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Tungsten (W)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Uranium (U)-Total	0.00014		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Vanadium (V)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	29-JUL-10	29-JUL-10	R1406987

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L913531-5 BGS-4 Sampled By: CLIENT on 24-JUL-10 @ 17:45 Matrix: WATER							
Total Metals by ICP-MS							
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	29-JUL-10	29-JUL-10	R1406987
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0056		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Arsenic (As)-Dissolved	0.00042		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Barium (Ba)-Dissolved	0.00277		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Boron (B)-Dissolved	<0.010		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	28-JUL-10	29-JUL-10	R1407356
Calcium (Ca)-Dissolved	1.67		0.050	mg/L	28-JUL-10	29-JUL-10	R1407356
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Copper (Cu)-Dissolved	0.00059		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	28-JUL-10	29-JUL-10	R1407356
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Magnesium (Mg)-Dissolved	0.707		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Manganese (Mn)-Dissolved	0.00182		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Molybdenum (Mo)-Dissolved	0.00017		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Nickel (Ni)-Dissolved	0.00060		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	28-JUL-10	29-JUL-10	R1407356
Potassium (K)-Dissolved	0.408		0.020	mg/L	28-JUL-10	29-JUL-10	R1407356
Rubidium (Rb)-Dissolved	0.00060		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	28-JUL-10	29-JUL-10	R1407356
Silicon (Si)-Dissolved	0.177		0.050	mg/L	28-JUL-10	29-JUL-10	R1407356
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Sodium (Na)-Dissolved	0.547		0.020	mg/L	28-JUL-10	29-JUL-10	R1407356
Strontium (Sr)-Dissolved	0.00720		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	28-JUL-10	29-JUL-10	R1407356
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	28-JUL-10	29-JUL-10	R1407356
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.2		1.0	mg/L		29-JUL-10	R1406908
Bicarbonate (HCO3)	8.7		2.0	mg/L		29-JUL-10	R1406908
Carbonate (CO3)	<0.60		0.60	mg/L		29-JUL-10	R1406908
Hydroxide (OH)	<0.40		0.40	mg/L		29-JUL-10	R1406908
Conductivity							
Conductivity	16.7		0.40	umhos/cm		04-AUG-10	R1411367
pH							
pH	7.10		0.10	pH units		28-JUL-10	R1405022

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L913531-6 BGS-5							
Sampled By: CLIENT on 24-JUL-10 @ 21:15							
Matrix: WATER							
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Thorium (Th)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Tin (Sn)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Titanium (Ti)-Total	0.00109		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Tungsten (W)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Uranium (U)-Total	0.00013		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Vanadium (V)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	29-JUL-10	29-JUL-10	R1406987
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	29-JUL-10	29-JUL-10	R1406987
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0057		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Arsenic (As)-Dissolved	0.00039		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Barium (Ba)-Dissolved	0.00267		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Boron (B)-Dissolved	<0.010		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	28-JUL-10	29-JUL-10	R1407356
Calcium (Ca)-Dissolved	1.64		0.050	mg/L	28-JUL-10	29-JUL-10	R1407356
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Copper (Cu)-Dissolved	0.00048		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	28-JUL-10	29-JUL-10	R1407356
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Magnesium (Mg)-Dissolved	0.703		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Manganese (Mn)-Dissolved	0.00164		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Molybdenum (Mo)-Dissolved	0.00015		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Nickel (Ni)-Dissolved	0.00050		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	28-JUL-10	29-JUL-10	R1407356
Potassium (K)-Dissolved	0.402		0.020	mg/L	28-JUL-10	29-JUL-10	R1407356
Rubidium (Rb)-Dissolved	0.00061		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	28-JUL-10	29-JUL-10	R1407356
Silicon (Si)-Dissolved	0.178		0.050	mg/L	28-JUL-10	29-JUL-10	R1407356
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Sodium (Na)-Dissolved	0.547		0.020	mg/L	28-JUL-10	29-JUL-10	R1407356
Strontium (Sr)-Dissolved	0.00721		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	28-JUL-10	29-JUL-10	R1407356
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	28-JUL-10	29-JUL-10	R1407356
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.1		1.0	mg/L		29-JUL-10	R1406908

* 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
L913531-7 BGS-6							
Sampled By: CLIENT on 24-JUL-10 @ 21:00							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	29-JUL-10	29-JUL-10	R1406987
Phosphorus (P)-Total	<0.20		0.20	mg/L	29-JUL-10	29-JUL-10	R1406987
Potassium (K)-Total	0.406		0.020	mg/L	29-JUL-10	29-JUL-10	R1406987
Rubidium (Rb)-Total	0.00067		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Selenium (Se)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Silicon (Si)-Total	0.226		0.050	mg/L	29-JUL-10	29-JUL-10	R1406987
Silver (Ag)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Sodium (Na)-Total	0.489		0.030	mg/L	29-JUL-10	29-JUL-10	R1406987
Strontium (Sr)-Total	0.00675		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Thorium (Th)-Total	<0.00010		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Tin (Sn)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Titanium (Ti)-Total	0.00121		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Tungsten (W)-Total	<0.0010		0.0010	mg/L	29-JUL-10	29-JUL-10	R1406987
Uranium (U)-Total	0.00013		0.00010	mg/L	29-JUL-10	29-JUL-10	R1406987
Vanadium (V)-Total	<0.00020		0.00020	mg/L	29-JUL-10	29-JUL-10	R1406987
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	29-JUL-10	29-JUL-10	R1406987
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	29-JUL-10	29-JUL-10	R1406987
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0053		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Arsenic (As)-Dissolved	0.00038		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Barium (Ba)-Dissolved	0.00240		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Boron (B)-Dissolved	<0.010		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	28-JUL-10	29-JUL-10	R1407356
Calcium (Ca)-Dissolved	1.55		0.050	mg/L	28-JUL-10	29-JUL-10	R1407356
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Copper (Cu)-Dissolved	0.00045		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	28-JUL-10	29-JUL-10	R1407356
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	28-JUL-10	29-JUL-10	R1407356
Magnesium (Mg)-Dissolved	0.659		0.010	mg/L	28-JUL-10	29-JUL-10	R1407356
Manganese (Mn)-Dissolved	0.00152		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Molybdenum (Mo)-Dissolved	0.00015		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Nickel (Ni)-Dissolved	0.00050		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	28-JUL-10	29-JUL-10	R1407356
Potassium (K)-Dissolved	0.378		0.020	mg/L	28-JUL-10	29-JUL-10	R1407356
Rubidium (Rb)-Dissolved	0.00056		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	28-JUL-10	29-JUL-10	R1407356
Silicon (Si)-Dissolved	0.165		0.050	mg/L	28-JUL-10	29-JUL-10	R1407356
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Sodium (Na)-Dissolved	0.514		0.020	mg/L	28-JUL-10	29-JUL-10	R1407356
Strontium (Sr)-Dissolved	0.00671		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	28-JUL-10	29-JUL-10	R1407356
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	28-JUL-10	29-JUL-10	R1407356

* 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	MS-B	L913531-1, -2, -3, -4, -5, -6, -7
Matrix Spike	Sulfate	MS-B	L913531-1, -2, -3, -4, -5, -6, -7

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

ALK-TOT-WP	Water	Alkalinity	APHA 2320B

Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO₃⁻ and H₂CO₃ endpoints indicated electrometrically.

ANIONS5-IC-WP	Water	Anions scan (IC)	EPA 300.1 IC

This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".

C-DIS-ORG-WP	Water	Dissolved Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

C-TOT-ORG-WP	Water	Total Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

CHLOROA-VA	Water	Chlorophyll a by Fluorometer	EPA 445.0

Chlorophyll and Pheopigments by Fluorometry analysis is carried out using procedures adapted from USEPA Method 445.0. The sample is filtered using either a glass fiber filter or a 0.45 micron Membrane filter. The pigments are extracted from the filter with 90% aqueous acetone. For chlorophyll-a analysis the extract is read using a fluorometer. For pheopigments the extract is first acidified then read. This method is not subject to interferences from chlorophyll b.

EC-WP	Water	Conductivity	APHA 2510B

Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.

ETL-HARDNESS-DIS-WP	Water	Hardness Calculated	Calculated

ETL-HARDNESS-TOT-WP	Water	Hardness Calculated	Calculated

HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0

Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.

MET-D-L-MS-WP	Water	Dissolved Metals by ICP-MS	U.S. EPA 200.8-DL

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
Dissolved Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the Examination of Water and Wastewater method 3030B for filtration through a 0.45 um filter and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
MET-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
N-TOTKJ-WP	Water	Total Kjeldahl Nitrogen	Quickchem method 10-107-06-2-E Lachat
Samples are digested with a sulphuric acid solution, cooled, diluted with water, and analyzed for ammonia. Total Kjeldahl nitrogen is the sum of free-ammonia and organic nitrogen compounds which are converted to ammonium sulphate through this digestion process. Analysis is performed by Flow Injection Analysis (FIA). The pH of the digested sample is raised to a known, basic pH by neutralization with a concentrated buffer solution. This neutralization converts the ammonium cation to ammonia. The ammonia produced is heated with salicylate and hypochlorite to produce blue colour which is proportional to the ammonia concentration.			
NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
Ammonia - Colourimetric using Salicylate-nitroprusside and hypochlorite, in an alkaline phosphate buffer.			
NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
P-ORTHO-SOL-WP	Water	Ortho Phosphorous Soluble	APHA, 1998 P-OS
Quantitative orthophosphorous values are determined without prior digestion of the sample. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
P-TOTAL-WP	Water	Phosphorus, Total	APHA, 1998 P-T
Samples are digested using a sulphuric acid-persulfate mixture to convert organic phosphorous to orthophosphate. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
PH-WP	Water	pH	APHA 4500H
pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.			
SOLIDS-TDS-WP	Water	Total Dissolved Solids	APHA 2540
The residue remaining in a prepared casserole after passing the sample through a 1.2 um Whatman GF/C glass microfibre filter and drying at 180 degrees C. Samples may be dried at 105 degrees C if the client specifically requests this drying temperature.			
SOLIDS-TOTSUS-LR-WP	Water	Total Suspended Solids	APHA 2540 LR
The residue retained by a prepared 1.5 um Whatman 934-AH glass microfibre filter dried at 105 degrees C. A method detection limit of 2 mg/L can be achieved when 500 mL of sample is used.			
TURBIDITY-WP	Water	Turbidity	APHA, 1998, 2130B
A strong light beam is sent through a transparent tube containing the sample. Light that is reflected at 90 degrees to the axis by suspended particles is detected by the photocell. The electrical response is proportional to the sample turbidity.			

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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

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
WP	ALS LABORATORY GROUP - WINNIPEG, MANITOBA, CANADA
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

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.



Environmental Division

Certificate of Analysis

AGNICO-EAGLE MINING LTD

ATTN: RYAN VANENGEN

MEADOWBANK DIVISION

P.O. Box 540

BAKER LAKE NU X0X 0A0

Report Date: 18-AUG-10 12:41 (MT)

Version: FINAL

Lab Work Order #: **L916677**

Date Received: **05-AUG-10**

Project P.O. #: NOT SUBMITTED

Job Reference: MEADOWBANK : AW

Legal Site Desc:

CofC Numbers:

Other Information:

Comments:

Gail Hill
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
L916677-1	BGE-1						
Sampled By:	CLIENT on 31-JUL-10 @ 17:30						
Matrix:	WATER						
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		06-AUG-10	R1421414
Chlorophyll a	0.274		0.020	ug/L	12-AUG-10	13-AUG-10	R1439167
Dissolved Organic Carbon	1.9		1.0	mg/L		05-AUG-10	R1421623
Hardness (as CaCO3)	7.02		0.30	mg/L		10-AUG-10	
Hardness (as CaCO3)	6.74		0.20	mg/L		09-AUG-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	13-AUG-10	13-AUG-10	R1441342
Nitrate and Nitrite as N	<0.071		0.071	mg/L		06-AUG-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		06-AUG-10	R1426084
Phosphorus, Total	<0.010	DLA	0.010	mg/L		09-AUG-10	R1422723
Silica Reactive Soluble	<0.10		0.10	mg/L		07-AUG-10	R1423044
Total Dissolved Solids	10.0		5.0	mg/L		06-AUG-10	R1421401
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	05-AUG-10	11-AUG-10	R1432883
Total Organic Carbon	2.7		1.0	mg/L		05-AUG-10	R1421623
Total Suspended Solids	3.2		2.0	mg/L		06-AUG-10	R1421401
Turbidity	0.81		0.10	NTU		05-AUG-10	R1418303
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		05-AUG-10	R1419170
Fluoride	<0.10		0.10	mg/L		05-AUG-10	R1419170
Nitrite-N	<0.050		0.050	mg/L		05-AUG-10	R1419170
Nitrate-N	<0.050		0.050	mg/L		05-AUG-10	R1419170
Sulfate	1.55		0.50	mg/L		05-AUG-10	R1419170
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0310		0.0050	mg/L	09-AUG-10	09-AUG-10	R1425683
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Arsenic (As)-Total	0.00069		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Barium (Ba)-Total	0.00277		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Boron (B)-Total	<0.010		0.010	mg/L	09-AUG-10	09-AUG-10	R1425683
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	09-AUG-10	09-AUG-10	R1425683
Calcium (Ca)-Total	1.70		0.10	mg/L	09-AUG-10	09-AUG-10	R1425683
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Copper (Cu)-Total	0.00059		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Iron (Fe)-Total	0.038		0.020	mg/L	09-AUG-10	09-AUG-10	R1425683
Lead (Pb)-Total	<0.000090		0.000090	mg/L	09-AUG-10	09-AUG-10	R1425683
Lithium (Li)-Total	<0.0020		0.0020	mg/L	09-AUG-10	09-AUG-10	R1425683
Magnesium (Mg)-Total	0.676		0.010	mg/L	09-AUG-10	09-AUG-10	R1425683
Manganese (Mn)-Total	0.00236		0.00030	mg/L	09-AUG-10	09-AUG-10	R1425683
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	09-AUG-10	09-AUG-10	R1425683
Phosphorus (P)-Total	<0.20		0.20	mg/L	09-AUG-10	09-AUG-10	R1425683
Potassium (K)-Total	0.420		0.020	mg/L	09-AUG-10	09-AUG-10	R1425683
Rubidium (Rb)-Total	0.00067		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Selenium (Se)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Silicon (Si)-Total	0.196		0.050	mg/L	09-AUG-10	09-AUG-10	R1425683
Silver (Ag)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Sodium (Na)-Total	0.490		0.030	mg/L	09-AUG-10	09-AUG-10	R1425683
Strontium (Sr)-Total	0.00708		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683

* 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
L916677-1	BGE-1						
Sampled By:	CLIENT on 31-JUL-10 @ 17:30						
Matrix:	WATER						
Total Metals by ICP-MS							
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Thorium (Th)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tin (Sn)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Titanium (Ti)-Total	0.00097		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Tungsten (W)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Uranium (U)-Total	0.00012		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Vanadium (V)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	09-AUG-10	09-AUG-10	R1425683
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	09-AUG-10	09-AUG-10	R1425683
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0073		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Arsenic (As)-Dissolved	0.00060		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Barium (Ba)-Dissolved	0.00248		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Boron (B)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	05-AUG-10	07-AUG-10	R1421086
Calcium (Ca)-Dissolved	1.60		0.050	mg/L	05-AUG-10	07-AUG-10	R1421086
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Copper (Cu)-Dissolved	0.00044		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	05-AUG-10	07-AUG-10	R1421086
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Magnesium (Mg)-Dissolved	0.667		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Manganese (Mn)-Dissolved	0.00156		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Molybdenum (Mo)-Dissolved	0.00017		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Nickel (Ni)-Dissolved	0.00053		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	05-AUG-10	07-AUG-10	R1421086
Potassium (K)-Dissolved	0.401		0.020	mg/L	05-AUG-10	07-AUG-10	R1421086
Rubidium (Rb)-Dissolved	0.00067		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	05-AUG-10	07-AUG-10	R1421086
Silicon (Si)-Dissolved	0.156		0.050	mg/L	05-AUG-10	07-AUG-10	R1421086
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Sodium (Na)-Dissolved	0.493		0.020	mg/L	05-AUG-10	07-AUG-10	R1421086
Strontium (Sr)-Dissolved	0.00741		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	05-AUG-10	07-AUG-10	R1421086
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	05-AUG-10	07-AUG-10	R1421086
pH, Conductivity and Total Alkalinity							
Alkalinity							

* 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
L916677-2 BGS-1							
Sampled By: CLIENT on 31-JUL-10 @ 16:45							
Matrix: WATER							
Total Metals by ICP-MS							
Magnesium (Mg)-Total	0.638		0.010	mg/L	09-AUG-10	09-AUG-10	R1425683
Manganese (Mn)-Total	0.00207		0.00030	mg/L	09-AUG-10	09-AUG-10	R1425683
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	09-AUG-10	09-AUG-10	R1425683
Phosphorus (P)-Total	<0.20		0.20	mg/L	09-AUG-10	09-AUG-10	R1425683
Potassium (K)-Total	0.398		0.020	mg/L	09-AUG-10	09-AUG-10	R1425683
Rubidium (Rb)-Total	0.00063		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Selenium (Se)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Silicon (Si)-Total	0.198		0.050	mg/L	09-AUG-10	09-AUG-10	R1425683
Silver (Ag)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Sodium (Na)-Total	0.491		0.030	mg/L	09-AUG-10	09-AUG-10	R1425683
Strontium (Sr)-Total	0.00666		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Thorium (Th)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tin (Sn)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Titanium (Ti)-Total	0.00063		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Tungsten (W)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Uranium (U)-Total	0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Vanadium (V)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	09-AUG-10	09-AUG-10	R1425683
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	09-AUG-10	09-AUG-10	R1425683
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0059		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Arsenic (As)-Dissolved	0.00033		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Barium (Ba)-Dissolved	0.00239		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Boron (B)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	05-AUG-10	07-AUG-10	R1421086
Calcium (Ca)-Dissolved	1.53		0.050	mg/L	05-AUG-10	07-AUG-10	R1421086
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Copper (Cu)-Dissolved	0.00042		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	05-AUG-10	07-AUG-10	R1421086
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Magnesium (Mg)-Dissolved	0.627		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Manganese (Mn)-Dissolved	0.00110		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Molybdenum (Mo)-Dissolved	0.00013		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Nickel (Ni)-Dissolved	0.00048		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	05-AUG-10	07-AUG-10	R1421086
Potassium (K)-Dissolved	0.383		0.020	mg/L	05-AUG-10	07-AUG-10	R1421086
Rubidium (Rb)-Dissolved	0.00060		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	05-AUG-10	07-AUG-10	R1421086
Silicon (Si)-Dissolved	0.142		0.050	mg/L	05-AUG-10	07-AUG-10	R1421086
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Sodium (Na)-Dissolved	0.496		0.020	mg/L	05-AUG-10	07-AUG-10	R1421086
Strontium (Sr)-Dissolved	0.00708		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086

* 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
L916677-3 BGS-2							
Sampled By: CLIENT on 31-JUL-10 @ 16:00							
Matrix: WATER							
Total Metals by ICP-MS							
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Boron (B)-Total	<0.010		0.010	mg/L	09-AUG-10	09-AUG-10	R1425683
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	09-AUG-10	09-AUG-10	R1425683
Calcium (Ca)-Total	1.51		0.10	mg/L	09-AUG-10	09-AUG-10	R1425683
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Copper (Cu)-Total	0.00056		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Iron (Fe)-Total	0.032		0.020	mg/L	09-AUG-10	09-AUG-10	R1425683
Lead (Pb)-Total	<0.000090		0.000090	mg/L	09-AUG-10	09-AUG-10	R1425683
Lithium (Li)-Total	<0.0020		0.0020	mg/L	09-AUG-10	09-AUG-10	R1425683
Magnesium (Mg)-Total	0.638		0.010	mg/L	09-AUG-10	09-AUG-10	R1425683
Manganese (Mn)-Total	0.00182		0.00030	mg/L	09-AUG-10	09-AUG-10	R1425683
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	09-AUG-10	09-AUG-10	R1425683
Phosphorus (P)-Total	<0.20		0.20	mg/L	09-AUG-10	09-AUG-10	R1425683
Potassium (K)-Total	0.393		0.020	mg/L	09-AUG-10	09-AUG-10	R1425683
Rubidium (Rb)-Total	0.00061		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Selenium (Se)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Silicon (Si)-Total	0.172		0.050	mg/L	09-AUG-10	09-AUG-10	R1425683
Silver (Ag)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Sodium (Na)-Total	0.481		0.030	mg/L	09-AUG-10	09-AUG-10	R1425683
Strontium (Sr)-Total	0.00678		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Thorium (Th)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tin (Sn)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Titanium (Ti)-Total	0.00076		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Tungsten (W)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Uranium (U)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Vanadium (V)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	09-AUG-10	09-AUG-10	R1425683
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	09-AUG-10	09-AUG-10	R1425683
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0083		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Arsenic (As)-Dissolved	0.00034		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Barium (Ba)-Dissolved	0.00235		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Boron (B)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	05-AUG-10	07-AUG-10	R1421086
Calcium (Ca)-Dissolved	1.48		0.050	mg/L	05-AUG-10	07-AUG-10	R1421086
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Copper (Cu)-Dissolved	0.00041		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	05-AUG-10	07-AUG-10	R1421086
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086

* 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
L916677-4 BGS-3							
Sampled By: CLIENT on 31-JUL-10 @ 15:40							
Matrix: WATER							
Turbidity	1.11		0.10	NTU		05-AUG-10	R1418303
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		05-AUG-10	R1419170
Fluoride	<0.10		0.10	mg/L		05-AUG-10	R1419170
Nitrite-N	<0.050		0.050	mg/L		05-AUG-10	R1419170
Nitrate-N	<0.050		0.050	mg/L		05-AUG-10	R1419170
Sulfate	1.49		0.50	mg/L		05-AUG-10	R1419170
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0337		0.0050	mg/L	09-AUG-10	09-AUG-10	R1425683
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Arsenic (As)-Total	0.00040		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Barium (Ba)-Total	0.00267		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Boron (B)-Total	<0.010		0.010	mg/L	09-AUG-10	09-AUG-10	R1425683
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	09-AUG-10	09-AUG-10	R1425683
Calcium (Ca)-Total	1.59		0.10	mg/L	09-AUG-10	09-AUG-10	R1425683
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Copper (Cu)-Total	0.00057		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Iron (Fe)-Total	0.038		0.020	mg/L	09-AUG-10	09-AUG-10	R1425683
Lead (Pb)-Total	<0.000090		0.000090	mg/L	09-AUG-10	09-AUG-10	R1425683
Lithium (Li)-Total	<0.0020		0.0020	mg/L	09-AUG-10	09-AUG-10	R1425683
Magnesium (Mg)-Total	0.648		0.010	mg/L	09-AUG-10	09-AUG-10	R1425683
Manganese (Mn)-Total	0.00187		0.00030	mg/L	09-AUG-10	09-AUG-10	R1425683
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	09-AUG-10	09-AUG-10	R1425683
Phosphorus (P)-Total	<0.20		0.20	mg/L	09-AUG-10	09-AUG-10	R1425683
Potassium (K)-Total	0.406		0.020	mg/L	09-AUG-10	09-AUG-10	R1425683
Rubidium (Rb)-Total	0.00063		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Selenium (Se)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Silicon (Si)-Total	0.200		0.050	mg/L	09-AUG-10	09-AUG-10	R1425683
Silver (Ag)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Sodium (Na)-Total	0.489		0.030	mg/L	09-AUG-10	09-AUG-10	R1425683
Strontium (Sr)-Total	0.00674		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Thorium (Th)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tin (Sn)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Titanium (Ti)-Total	0.00099		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Tungsten (W)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Uranium (U)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Vanadium (V)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	09-AUG-10	09-AUG-10	R1425683
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	09-AUG-10	09-AUG-10	R1425683
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0064		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Arsenic (As)-Dissolved	0.00035		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Barium (Ba)-Dissolved	0.00237		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086

* 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
L916677-5 BGS-4							
Sampled By: CLIENT on 31-JUL-10 @ 15:00							
Matrix: WATER							
Hardness (as CaCO3)	6.60		0.30	mg/L		10-AUG-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	13-AUG-10	13-AUG-10	R1441342
Nitrate and Nitrite as N	<0.071		0.071	mg/L		06-AUG-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		06-AUG-10	R1426084
Phosphorus, Total	<0.010	DLA	0.010	mg/L		09-AUG-10	R1422723
Silica Reactive Soluble	<0.10		0.10	mg/L		07-AUG-10	R1423044
Total Dissolved Solids	7.0		5.0	mg/L		12-AUG-10	R1439124
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	05-AUG-10	11-AUG-10	R1432883
Total Organic Carbon	1.6		1.0	mg/L		06-AUG-10	R1421623
Total Suspended Solids	2.4		2.0	mg/L		06-AUG-10	R1421401
Turbidity	0.80		0.10	NTU		05-AUG-10	R1418303
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		05-AUG-10	R1419170
Fluoride	<0.10		0.10	mg/L		05-AUG-10	R1419170
Nitrite-N	<0.050		0.050	mg/L		05-AUG-10	R1419170
Nitrate-N	<0.050		0.050	mg/L		05-AUG-10	R1419170
Sulfate	1.50		0.50	mg/L		05-AUG-10	R1419170
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0328		0.0050	mg/L	09-AUG-10	09-AUG-10	R1425683
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Arsenic (As)-Total	0.00053		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Barium (Ba)-Total	0.00272		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Boron (B)-Total	<0.010		0.010	mg/L	09-AUG-10	09-AUG-10	R1425683
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	09-AUG-10	09-AUG-10	R1425683
Calcium (Ca)-Total	1.58		0.10	mg/L	09-AUG-10	09-AUG-10	R1425683
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Copper (Cu)-Total	0.00058		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Iron (Fe)-Total	0.039		0.020	mg/L	09-AUG-10	09-AUG-10	R1425683
Lead (Pb)-Total	<0.000090		0.000090	mg/L	09-AUG-10	09-AUG-10	R1425683
Lithium (Li)-Total	<0.0020		0.0020	mg/L	09-AUG-10	09-AUG-10	R1425683
Magnesium (Mg)-Total	0.647		0.010	mg/L	09-AUG-10	09-AUG-10	R1425683
Manganese (Mn)-Total	0.00211		0.00030	mg/L	09-AUG-10	09-AUG-10	R1425683
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	09-AUG-10	09-AUG-10	R1425683
Phosphorus (P)-Total	<0.20		0.20	mg/L	09-AUG-10	09-AUG-10	R1425683
Potassium (K)-Total	0.404		0.020	mg/L	09-AUG-10	09-AUG-10	R1425683
Rubidium (Rb)-Total	0.00067		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Selenium (Se)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Silicon (Si)-Total	0.198		0.050	mg/L	09-AUG-10	09-AUG-10	R1425683
Silver (Ag)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Sodium (Na)-Total	0.486		0.030	mg/L	09-AUG-10	09-AUG-10	R1425683
Strontium (Sr)-Total	0.00681		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Thorium (Th)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tin (Sn)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Titanium (Ti)-Total	0.00107		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683

* 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
L916677-5 BGS-4							
Sampled By: CLIENT on 31-JUL-10 @ 15:00							
Matrix: WATER							
Total Metals by ICP-MS							
Tungsten (W)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Uranium (U)-Total	0.00011		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Vanadium (V)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	09-AUG-10	09-AUG-10	R1425683
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	09-AUG-10	09-AUG-10	R1425683
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0074		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Arsenic (As)-Dissolved	0.00049		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Barium (Ba)-Dissolved	0.00243		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Boron (B)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	05-AUG-10	07-AUG-10	R1421086
Calcium (Ca)-Dissolved	1.53		0.050	mg/L	05-AUG-10	07-AUG-10	R1421086
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Copper (Cu)-Dissolved	0.00040		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	05-AUG-10	07-AUG-10	R1421086
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Magnesium (Mg)-Dissolved	0.636		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Manganese (Mn)-Dissolved	0.00126		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Molybdenum (Mo)-Dissolved	0.00016		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Nickel (Ni)-Dissolved	0.00052		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	05-AUG-10	07-AUG-10	R1421086
Potassium (K)-Dissolved	0.389		0.020	mg/L	05-AUG-10	07-AUG-10	R1421086
Rubidium (Rb)-Dissolved	0.00063		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	05-AUG-10	07-AUG-10	R1421086
Silicon (Si)-Dissolved	0.156		0.050	mg/L	05-AUG-10	07-AUG-10	R1421086
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Sodium (Na)-Dissolved	0.481		0.020	mg/L	05-AUG-10	07-AUG-10	R1421086
Strontium (Sr)-Dissolved	0.00719		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	05-AUG-10	07-AUG-10	R1421086
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	05-AUG-10	07-AUG-10	R1421086
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.0		1.0	mg/L		09-AUG-10	R1423023
Bicarbonate (HCO3)	8.6		2.0	mg/L		09-AUG-10	R1423023
Carbonate (CO3)	<0.60		0.60	mg/L		09-AUG-10	R1423023
Hydroxide (OH)	<0.40		0.40	mg/L		09-AUG-10	R1423023
Conductivity							
Conductivity	17.1		0.40	umhos/cm		09-AUG-10	R1421352

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L916677-6 BGS-5							
Sampled By: CLIENT on 31-JUL-10 @ 14:30							
Matrix: WATER							
Total Metals by ICP-MS							
Selenium (Se)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Silicon (Si)-Total	0.195		0.050	mg/L	09-AUG-10	09-AUG-10	R1425683
Silver (Ag)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Sodium (Na)-Total	0.491		0.030	mg/L	09-AUG-10	09-AUG-10	R1425683
Strontium (Sr)-Total	0.00686		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Thorium (Th)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tin (Sn)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Titanium (Ti)-Total	0.00107		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Tungsten (W)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Uranium (U)-Total	0.00011		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Vanadium (V)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	09-AUG-10	09-AUG-10	R1425683
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	09-AUG-10	09-AUG-10	R1425683
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0050		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Arsenic (As)-Dissolved	0.00042		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Barium (Ba)-Dissolved	0.00238		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Boron (B)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	05-AUG-10	07-AUG-10	R1421086
Calcium (Ca)-Dissolved	1.51		0.050	mg/L	05-AUG-10	07-AUG-10	R1421086
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Copper (Cu)-Dissolved	0.00039		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	05-AUG-10	07-AUG-10	R1421086
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Magnesium (Mg)-Dissolved	0.634		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Manganese (Mn)-Dissolved	0.00118		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Molybdenum (Mo)-Dissolved	0.00014		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Nickel (Ni)-Dissolved	0.00050		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	05-AUG-10	07-AUG-10	R1421086
Potassium (K)-Dissolved	0.392		0.020	mg/L	05-AUG-10	07-AUG-10	R1421086
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	05-AUG-10	07-AUG-10	R1421086
Silicon (Si)-Dissolved	0.151		0.050	mg/L	05-AUG-10	07-AUG-10	R1421086
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Sodium (Na)-Dissolved	0.472		0.020	mg/L	05-AUG-10	07-AUG-10	R1421086
Strontium (Sr)-Dissolved	0.00683		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	05-AUG-10	07-AUG-10	R1421086
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086

* 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
L916677-7 BGS-6							
Sampled By: CLIENT on 31-JUL-10 @ 14:00							
Matrix: WATER							
Total Metals by ICP-MS							
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Copper (Cu)-Total	0.00057		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Iron (Fe)-Total	0.041		0.020	mg/L	09-AUG-10	09-AUG-10	R1425683
Lead (Pb)-Total	<0.000090		0.000090	mg/L	09-AUG-10	09-AUG-10	R1425683
Lithium (Li)-Total	<0.0020		0.0020	mg/L	09-AUG-10	09-AUG-10	R1425683
Magnesium (Mg)-Total	0.646		0.010	mg/L	09-AUG-10	09-AUG-10	R1425683
Manganese (Mn)-Total	0.00207		0.00030	mg/L	09-AUG-10	09-AUG-10	R1425683
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	09-AUG-10	09-AUG-10	R1425683
Phosphorus (P)-Total	<0.20		0.20	mg/L	09-AUG-10	09-AUG-10	R1425683
Potassium (K)-Total	0.407		0.020	mg/L	09-AUG-10	09-AUG-10	R1425683
Rubidium (Rb)-Total	0.00067		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Selenium (Se)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Silicon (Si)-Total	0.217		0.050	mg/L	09-AUG-10	09-AUG-10	R1425683
Silver (Ag)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Sodium (Na)-Total	0.483		0.030	mg/L	09-AUG-10	09-AUG-10	R1425683
Strontium (Sr)-Total	0.00681		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Thorium (Th)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tin (Sn)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Titanium (Ti)-Total	0.00114		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Tungsten (W)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Uranium (U)-Total	0.00011		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Vanadium (V)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	09-AUG-10	09-AUG-10	R1425683
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	09-AUG-10	09-AUG-10	R1425683
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0051		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Arsenic (As)-Dissolved	0.00041		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Barium (Ba)-Dissolved	0.00236		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Boron (B)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	05-AUG-10	07-AUG-10	R1421086
Calcium (Ca)-Dissolved	1.53		0.050	mg/L	05-AUG-10	07-AUG-10	R1421086
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Copper (Cu)-Dissolved	0.00058		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	05-AUG-10	07-AUG-10	R1421086
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Magnesium (Mg)-Dissolved	0.626		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Manganese (Mn)-Dissolved	0.00116		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Molybdenum (Mo)-Dissolved	0.00014		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Nickel (Ni)-Dissolved	0.00045		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	05-AUG-10	07-AUG-10	R1421086
Potassium (K)-Dissolved	0.380		0.020	mg/L	05-AUG-10	07-AUG-10	R1421086
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086

* 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
L916677-8 DUP-1							
Sampled By: CLIENT on 31-JUL-10 @ 15:00							
Matrix: WATER							
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0327		0.0050	mg/L	09-AUG-10	09-AUG-10	R1425683
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Arsenic (As)-Total	0.00053		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Barium (Ba)-Total	0.00267		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Boron (B)-Total	<0.010		0.010	mg/L	09-AUG-10	09-AUG-10	R1425683
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	09-AUG-10	09-AUG-10	R1425683
Calcium (Ca)-Total	1.59		0.10	mg/L	09-AUG-10	09-AUG-10	R1425683
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Copper (Cu)-Total	0.00056		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Iron (Fe)-Total	0.039		0.020	mg/L	09-AUG-10	09-AUG-10	R1425683
Lead (Pb)-Total	<0.000090		0.000090	mg/L	09-AUG-10	09-AUG-10	R1425683
Lithium (Li)-Total	<0.0020		0.0020	mg/L	09-AUG-10	09-AUG-10	R1425683
Magnesium (Mg)-Total	0.648		0.010	mg/L	09-AUG-10	09-AUG-10	R1425683
Manganese (Mn)-Total	0.00207		0.00030	mg/L	09-AUG-10	09-AUG-10	R1425683
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	09-AUG-10	09-AUG-10	R1425683
Phosphorus (P)-Total	<0.20		0.20	mg/L	09-AUG-10	09-AUG-10	R1425683
Potassium (K)-Total	0.406		0.020	mg/L	09-AUG-10	09-AUG-10	R1425683
Rubidium (Rb)-Total	0.00065		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Selenium (Se)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Silicon (Si)-Total	0.203		0.050	mg/L	09-AUG-10	09-AUG-10	R1425683
Silver (Ag)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Sodium (Na)-Total	0.486		0.030	mg/L	09-AUG-10	09-AUG-10	R1425683
Strontium (Sr)-Total	0.00679		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Thorium (Th)-Total	<0.00010		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Tin (Sn)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Titanium (Ti)-Total	0.00086		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Tungsten (W)-Total	<0.0010		0.0010	mg/L	09-AUG-10	09-AUG-10	R1425683
Uranium (U)-Total	0.00011		0.00010	mg/L	09-AUG-10	09-AUG-10	R1425683
Vanadium (V)-Total	<0.00020		0.00020	mg/L	09-AUG-10	09-AUG-10	R1425683
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	09-AUG-10	09-AUG-10	R1425683
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	09-AUG-10	09-AUG-10	R1425683
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0064		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Arsenic (As)-Dissolved	0.00048		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Barium (Ba)-Dissolved	0.00236		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Boron (B)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	05-AUG-10	07-AUG-10	R1421086
Calcium (Ca)-Dissolved	1.50		0.050	mg/L	05-AUG-10	07-AUG-10	R1421086
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086

* 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
L916677-8 DUP-1 Sampled By: CLIENT on 31-JUL-10 @ 15:00 Matrix: WATER							
Dissolved Metals by ICP-MS							
Copper (Cu)-Dissolved	0.00042		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	05-AUG-10	07-AUG-10	R1421086
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Magnesium (Mg)-Dissolved	0.622		0.010	mg/L	05-AUG-10	07-AUG-10	R1421086
Manganese (Mn)-Dissolved	0.00124		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Molybdenum (Mo)-Dissolved	0.00015		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Nickel (Ni)-Dissolved	0.00050		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	05-AUG-10	07-AUG-10	R1421086
Potassium (K)-Dissolved	0.388		0.020	mg/L	05-AUG-10	07-AUG-10	R1421086
Rubidium (Rb)-Dissolved	0.00059		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	05-AUG-10	07-AUG-10	R1421086
Silicon (Si)-Dissolved	0.151		0.050	mg/L	05-AUG-10	07-AUG-10	R1421086
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Sodium (Na)-Dissolved	0.462		0.020	mg/L	05-AUG-10	07-AUG-10	R1421086
Strontium (Sr)-Dissolved	0.00687		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	05-AUG-10	07-AUG-10	R1421086
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	05-AUG-10	07-AUG-10	R1421086
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	05-AUG-10	07-AUG-10	R1421086
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	05-AUG-10	07-AUG-10	R1421086
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	05-AUG-10	07-AUG-10	R1421086
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.2		1.0	mg/L		09-AUG-10	R1423023
Bicarbonate (HCO3)	8.8		2.0	mg/L		09-AUG-10	R1423023
Carbonate (CO3)	<0.60		0.60	mg/L		09-AUG-10	R1423023
Hydroxide (OH)	<0.40		0.40	mg/L		09-AUG-10	R1423023
Conductivity							
Conductivity	17.4		0.40	umhos/cm		09-AUG-10	R1421352
pH							
pH	7.15		0.10	pH units		05-AUG-10	R1417010

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

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
EXTEMP10	Samples Received with temperature >10 Degrees C
EHR	Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

ALK-TOT-WP	Water	Alkalinity	APHA 2320B

Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO₃⁻ and H₂CO₃ endpoints indicated electrometrically.

ANIONS5-IC-WP	Water	Anions scan (IC)	EPA 300.1 IC

This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".

C-DIS-ORG-WP	Water	Dissolved Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

C-TOT-ORG-WP	Water	Total Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

CHLOROA-VA	Water	Chlorophyll a by Fluorometer	EPA 445.0

Chlorophyll and Pheopigments by Fluorometry analysis is carried out using procedures adapted from USEPA Method 445.0. The sample is filtered using either a glass fiber filter or a 0.45 micron Membrane filter. The pigments are extracted from the filter with 90% aqueous acetone. For chlorophyll-a analysis the extract is read using a fluorometer. For pheopigments the extract is first acidified then read. This method is not subject to interferences from chlorophyll b.

EC-WP	Water	Conductivity	APHA 2510B

Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.

ETL-HARDNESS-DIS-WP	Water	Hardness Calculated	Calculated

ETL-HARDNESS-TOT-WP	Water	Hardness Calculated	Calculated

HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0

Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.

MET-D-L-MS-WP	Water	Dissolved Metals by ICP-MS	U.S. EPA 200.8-DL

Dissolved Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the Examination of

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
Water and Wastewater method 3030B for filtration through a 0.45 um filter and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
MET-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
N-TOTKJ-WP	Water	Total Kjeldahl Nitrogen	Quickchem method 10-107-06-2-E Lachat
Samples are digested with a sulphuric acid solution, cooled, diluted with water, and analyzed for ammonia. Total Kjeldahl nitrogen is the sum of free-ammonia and organic nitrogen compounds which are converted to ammonium sulphate through this digestion process. Analysis is performed by Flow Injection Analysis (FIA). The pH of the digested sample is raised to a known, basic pH by neutralization with a concentrated buffer solution. This neutralization converts the ammonium cation to ammonia. The ammonia produced is heated with salicylate and hypochlorite to produce blue colour which is proportional to the ammonia concentration.			
NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
Ammonia - Colourimetric using Salicylate-nitroprusside and hypochlorite, in an alkaline phosphate buffer.			
NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
P-ORTHO-SOL-WP	Water	Ortho Phosphorous Soluble	APHA, 1998 P-OS
Quantitative orthophosphorous values are determined without prior digestion of the sample. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
P-TOTAL-WP	Water	Phosphorus, Total	APHA, 1998 P-T
Samples are digested using a sulphuric acid-persulfate mixture to convert organic phosphorous to orthophosphate. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
PH-WP	Water	pH	APHA 4500H
pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.			
SILICA-REAC-SOL-WP	Water	Reactive Silica	TECHNICON 105-71W; APHA 4500E S
Ammonium molybdate at approximately pH 1.2 reacts with silica and phosphate to produce heteropoly acids. Oxalic acid is added to destroy the molybdosilicic acid but not the molybdosilicic acid. The yellow molybdosilicic acid is reduced by ascorbic acid to heteropoly blue. The intensity of the blue colour measured spectrophotometrically at 600 nm is proportional to the concentration of molybdate-reactive silica and is reported as soluble. Results reported as dissolved indicate the sample was filtered prior to analysis.			
SOLIDS-TDS-WP	Water	Total Dissolved Solids	APHA 2540
The residue remaining in a prepared casserole after passing the sample through a 1.2 um Whatman GF/C glass microfibre filter and drying at 180 degrees C. Samples may be dried at 105 degrees C if the client specifically requests this drying temperature.			
SOLIDS-TOTSUS-LR-WP	Water	Total Suspended Solids	APHA 2540 LR
The residue retained by a prepared 1.5 um Whatman 934-AH glass microfibre filter dried at 105 degrees C. A method detection limit of 2 mg/L can be achieved when 500 mL of sample is used.			
TURBIDITY-WP	Water	Turbidity	APHA, 1998, 2130B

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

A strong light beam is sent through a transparent tube containing the sample. Light that is reflected at 90 degrees to the axis by suspended particles is detected by the photocell. The electrical response is proportional to the sample turbidity.

** 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
WP	ALS LABORATORY GROUP - WINNIPEG, MANITOBA, CANADA
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

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.

[illegible]

Samples over 48 hrs

- CHL/A Filters in Soil in Inorganics Squeezer * DR.



Environmental Division

Certificate of Analysis

AGNICO-EAGLE MINING LTD

ATTN: RYAN VANENGEN

MEADOWBANK DIV.

P.O. BOX 540

BAKER LAKE NU X0X 0A0

Report Date: 25-AUG-10 08:08 (MT)

Version: FINAL

Lab Work Order #: **L918296**

Date Received: **10-AUG-10**

Project P.O. #: NOT SUBMITTED

Job Reference: DIKE

Legal Site Desc:

CofC Numbers:

Other Information:

Comments:

Gail Hill
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
L918296-1 BGE-1							
Sampled By: CLIENT on 07-AUG-10 @ 17:10							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		13-AUG-10	R1439777
Chlorophyll a	0.136		0.020	ug/L	23-AUG-10	24-AUG-10	R1448129
Dissolved Organic Carbon	2.0		1.0	mg/L		11-AUG-10	R1438749
Hardness (as CaCO3)	7.41		0.20	mg/L		12-AUG-10	
Hardness (as CaCO3)	7.41		0.30	mg/L		12-AUG-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	13-AUG-10	13-AUG-10	R1441342
Nitrate and Nitrite as N	<0.071		0.071	mg/L		24-AUG-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		11-AUG-10	R1438945
Phosphorus, Total	<0.010	DLA	0.010	mg/L		11-AUG-10	R1433085
Total Dissolved Solids	6.7		5.0	mg/L		16-AUG-10	R1441173
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	10-AUG-10	12-AUG-10	R1439166
Total Organic Carbon	2.8		1.0	mg/L		11-AUG-10	R1438749
Total Suspended Solids	4.8		2.0	mg/L		16-AUG-10	R1441173
Turbidity	3.99		0.10	NTU		10-AUG-10	R1434143
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		23-AUG-10	R1448147
Fluoride	<0.10		0.10	mg/L		23-AUG-10	R1448147
Nitrite-N	<0.050		0.050	mg/L		23-AUG-10	R1448147
Nitrate-N	<0.050		0.050	mg/L		23-AUG-10	R1448147
Sulfate	1.55		0.50	mg/L		23-AUG-10	R1448147
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.194		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Arsenic (As)-Total	0.00076		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total	0.00409		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Boron (B)-Total	<0.010		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	11-AUG-10	11-AUG-10	R1436563
Calcium (Ca)-Total	1.74		0.10	mg/L	11-AUG-10	11-AUG-10	R1436563
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Copper (Cu)-Total	0.00075		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.217		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total	0.000165		0.000090	mg/L	11-AUG-10	11-AUG-10	R1436563
Lithium (Li)-Total	<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Magnesium (Mg)-Total	0.744		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.00455		0.00030	mg/L	11-AUG-10	11-AUG-10	R1436563
Molybdenum (Mo)-Total	0.00022		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Phosphorus (P)-Total	<0.20		0.20	mg/L	11-AUG-10	11-AUG-10	R1436563
Potassium (K)-Total	0.481		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00125		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Selenium (Se)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Silicon (Si)-Total	0.488		0.050	mg/L	11-AUG-10	11-AUG-10	R1436563
Silver (Ag)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Sodium (Na)-Total	0.522		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.00847		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563

* 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
L918296-1	BGE-1							
Sampled By:	CLIENT on 07-AUG-10 @ 17:10							
Matrix:	WATER							
Total Metals by ICP-MS								
Thallium (Tl)-Total		<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Thorium (Th)-Total		0.00017		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tin (Sn)-Total		<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total		0.00721		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Tungsten (W)-Total		<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Uranium (U)-Total		0.00022		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Vanadium (V)-Total		0.00031		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Zinc (Zn)-Total		<0.0050		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Zirconium (Zr)-Total		<0.00040		0.00040	mg/L	11-AUG-10	11-AUG-10	R1436563
Dissolved Metals by ICP-MS								
Aluminum (Al)-Dissolved		0.0030		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Antimony (Sb)-Dissolved		<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Arsenic (As)-Dissolved		0.00067		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Barium (Ba)-Dissolved		0.00285		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Beryllium (Be)-Dissolved		<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Bismuth (Bi)-Dissolved		<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Boron (B)-Dissolved		<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Cadmium (Cd)-Dissolved		<0.000010		0.000010	mg/L	10-AUG-10	11-AUG-10	R1435566
Calcium (Ca)-Dissolved		1.79		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Cesium (Cs)-Dissolved		<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Chromium (Cr)-Dissolved		<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Cobalt (Co)-Dissolved		<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Copper (Cu)-Dissolved		0.00051		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Iron (Fe)-Dissolved		<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Lead (Pb)-Dissolved		<0.000090		0.000090	mg/L	10-AUG-10	11-AUG-10	R1435566
Lithium (Li)-Dissolved		<0.0020		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Magnesium (Mg)-Dissolved		0.687		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Manganese (Mn)-Dissolved		0.00162		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Molybdenum (Mo)-Dissolved		0.00023		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Nickel (Ni)-Dissolved		0.00051		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Phosphorus (P)-Dissolved		<0.10		0.10	mg/L	10-AUG-10	11-AUG-10	R1435566
Potassium (K)-Dissolved		0.431		0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Rubidium (Rb)-Dissolved		0.00064		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Selenium (Se)-Dissolved		<0.0010		0.0010	mg/L	10-AUG-10	11-AUG-10	R1435566
Silicon (Si)-Dissolved		0.161		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Sodium (Na)-Dissolved		0.503		0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Strontium (Sr)-Dissolved		0.00750		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Tellurium (Te)-Dissolved		<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Thorium (Th)-Dissolved		<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Tin (Sn)-Dissolved		<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Titanium (Ti)-Dissolved		<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Tungsten (W)-Dissolved		<0.0010		0.0010	mg/L	10-AUG-10	11-AUG-10	R1435566
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Vanadium (V)-Dissolved		<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Zinc (Zn)-Dissolved		<0.0020		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Zirconium (Zr)-Dissolved		<0.00040		0.00040	mg/L	10-AUG-10	11-AUG-10	R1435566
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		7.7		1.0	mg/L		11-AUG-10	R1435808

* 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
L918296-2 BGS-1							
Sampled By: CLIENT on 07-AUG-10 @ 16:10							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Phosphorus (P)-Total	<0.20		0.20	mg/L	11-AUG-10	11-AUG-10	R1436563
Potassium (K)-Total	0.403		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00068		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Selenium (Se)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Silicon (Si)-Total	0.182		0.050	mg/L	11-AUG-10	11-AUG-10	R1436563
Silver (Ag)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Sodium (Na)-Total	0.512		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.00700		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Thorium (Th)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tin (Sn)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.00129		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Tungsten (W)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Uranium (U)-Total	0.00012		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Vanadium (V)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	11-AUG-10	11-AUG-10	R1436563
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0027		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Arsenic (As)-Dissolved	0.00035		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Barium (Ba)-Dissolved	0.00208		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Boron (B)-Dissolved	<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	10-AUG-10	11-AUG-10	R1435566
Calcium (Ca)-Dissolved	1.57		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Copper (Cu)-Dissolved	0.00047		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	10-AUG-10	11-AUG-10	R1435566
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Magnesium (Mg)-Dissolved	0.617		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Manganese (Mn)-Dissolved	0.00097		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Molybdenum (Mo)-Dissolved	0.00015		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Nickel (Ni)-Dissolved	0.00046		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	10-AUG-10	11-AUG-10	R1435566
Potassium (K)-Dissolved	0.413		0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Rubidium (Rb)-Dissolved	0.00054		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	10-AUG-10	11-AUG-10	R1435566
Silicon (Si)-Dissolved	0.140		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Sodium (Na)-Dissolved	0.516		0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Strontium (Sr)-Dissolved	0.00674		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566

* 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
L918296-3 BGS-2							
Sampled By: CLIENT on 07-AUG-10 @ 15:50							
Matrix: WATER							
Total Metals by ICP-MS							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	11-AUG-10	11-AUG-10	R1436563
Calcium (Ca)-Total	1.50		0.10	mg/L	11-AUG-10	11-AUG-10	R1436563
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Copper (Cu)-Total	0.00055		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.044		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total	<0.000090		0.000090	mg/L	11-AUG-10	11-AUG-10	R1436563
Lithium (Li)-Total	<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Magnesium (Mg)-Total	0.625		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.00211		0.00030	mg/L	11-AUG-10	11-AUG-10	R1436563
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Phosphorus (P)-Total	<0.20		0.20	mg/L	11-AUG-10	11-AUG-10	R1436563
Potassium (K)-Total	0.407		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00067		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Selenium (Se)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Silicon (Si)-Total	0.187		0.050	mg/L	11-AUG-10	11-AUG-10	R1436563
Silver (Ag)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Sodium (Na)-Total	0.501		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.00695		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Thorium (Th)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tin (Sn)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.00088		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Tungsten (W)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Uranium (U)-Total	0.00011		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Vanadium (V)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	11-AUG-10	11-AUG-10	R1436563
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0027		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Arsenic (As)-Dissolved	0.00032		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Barium (Ba)-Dissolved	0.00217		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Boron (B)-Dissolved	<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	10-AUG-10	11-AUG-10	R1435566
Calcium (Ca)-Dissolved	1.57		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Copper (Cu)-Dissolved	0.00042		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	10-AUG-10	11-AUG-10	R1435566
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Magnesium (Mg)-Dissolved	0.612		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Manganese (Mn)-Dissolved	0.00092		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Molybdenum (Mo)-Dissolved	0.00014		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566

* 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
L918296-4 BGS-3							
Sampled By: CLIENT on 07-AUG-10 @ 15:30							
Matrix: WATER							
Anions scan (IC)							
Nitrite-N	<0.050		0.050	mg/L		23-AUG-10	R1448147
Nitrate-N	<0.050		0.050	mg/L		23-AUG-10	R1448147
Sulfate	1.51		0.50	mg/L		23-AUG-10	R1448147
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0825		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Arsenic (As)-Total	0.00058		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total	0.00301		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Boron (B)-Total	<0.010		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	11-AUG-10	11-AUG-10	R1436563
Calcium (Ca)-Total	1.57		0.10	mg/L	11-AUG-10	11-AUG-10	R1436563
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Copper (Cu)-Total	0.00062		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.079		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total	<0.000090		0.000090	mg/L	11-AUG-10	11-AUG-10	R1436563
Lithium (Li)-Total	<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Magnesium (Mg)-Total	0.662		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.00228		0.00030	mg/L	11-AUG-10	11-AUG-10	R1436563
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Phosphorus (P)-Total	<0.20		0.20	mg/L	11-AUG-10	11-AUG-10	R1436563
Potassium (K)-Total	0.429		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00081		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Selenium (Se)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Silicon (Si)-Total	0.290		0.050	mg/L	11-AUG-10	11-AUG-10	R1436563
Silver (Ag)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Sodium (Na)-Total	0.505		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.00724		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Thorium (Th)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tin (Sn)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.00226		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Tungsten (W)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Uranium (U)-Total	0.00014		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Vanadium (V)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	11-AUG-10	11-AUG-10	R1436563
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0027		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Arsenic (As)-Dissolved	0.00043		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Barium (Ba)-Dissolved	0.00231		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Boron (B)-Dissolved	<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	10-AUG-10	11-AUG-10	R1435566

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L918296-4	BGS-3							
Sampled By: CLIENT on 07-AUG-10 @ 15:30								
Matrix: WATER								
Dissolved Metals by ICP-MS								
Calcium (Ca)-Dissolved	1.55			0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Cesium (Cs)-Dissolved	<0.00010			0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Chromium (Cr)-Dissolved	<0.00020			0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Cobalt (Co)-Dissolved	<0.00020			0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Copper (Cu)-Dissolved	0.00047			0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Iron (Fe)-Dissolved	<0.010			0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Lead (Pb)-Dissolved	<0.000090			0.000090	mg/L	10-AUG-10	11-AUG-10	R1435566
Lithium (Li)-Dissolved	<0.0020			0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Magnesium (Mg)-Dissolved	0.624			0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Manganese (Mn)-Dissolved	0.00097			0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Molybdenum (Mo)-Dissolved	0.00019			0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Nickel (Ni)-Dissolved	0.00044			0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Phosphorus (P)-Dissolved	<0.10			0.10	mg/L	10-AUG-10	11-AUG-10	R1435566
Potassium (K)-Dissolved	0.409			0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Rubidium (Rb)-Dissolved	0.00057			0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Selenium (Se)-Dissolved	<0.0010			0.0010	mg/L	10-AUG-10	11-AUG-10	R1435566
Silicon (Si)-Dissolved	0.141			0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Silver (Ag)-Dissolved	<0.00010			0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Sodium (Na)-Dissolved	0.511			0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Strontium (Sr)-Dissolved	0.00694			0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Tellurium (Te)-Dissolved	<0.00020			0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Thallium (Tl)-Dissolved	<0.00010			0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Thorium (Th)-Dissolved	<0.00010			0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Tin (Sn)-Dissolved	<0.00020			0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Titanium (Ti)-Dissolved	<0.00020			0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Tungsten (W)-Dissolved	<0.0010			0.0010	mg/L	10-AUG-10	11-AUG-10	R1435566
Uranium (U)-Dissolved	<0.00010			0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Vanadium (V)-Dissolved	<0.00020			0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Zinc (Zn)-Dissolved	<0.0020			0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Zirconium (Zr)-Dissolved	<0.00040			0.00040	mg/L	10-AUG-10	11-AUG-10	R1435566
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)	7.3			1.0	mg/L		11-AUG-10	R1435808
Bicarbonate (HCO3)	8.9			2.0	mg/L		11-AUG-10	R1435808
Carbonate (CO3)	<0.60			0.60	mg/L		11-AUG-10	R1435808
Hydroxide (OH)	<0.40			0.40	mg/L		11-AUG-10	R1435808
Conductivity								
Conductivity	17.0			0.40	umhos/cm		13-AUG-10	R1439867
pH								
pH	7.21			0.10	pH units		10-AUG-10	R1428944
L918296-5	BGS-4							
Sampled By: CLIENT on 07-AUG-10 @ 15:15								
Matrix: WATER								
Miscellaneous Parameters								
Ammonia as N	<0.050			0.050	mg/L		13-AUG-10	R1439777
Chlorophyll a	0.184			0.020	ug/L	23-AUG-10	24-AUG-10	R1448129
Dissolved Organic Carbon	2.0			1.0	mg/L		11-AUG-10	R1438749
Hard								

* 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
L918296-5 BGS-4							
Sampled By: CLIENT on 07-AUG-10 @ 15:15							
Matrix: WATER							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		24-AUG-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		11-AUG-10	R1438945
Phosphorus, Total	<0.010	DLA	0.010	mg/L		11-AUG-10	R1433085
Total Dissolved Solids	<5.0		5.0	mg/L		16-AUG-10	R1441173
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	10-AUG-10	12-AUG-10	R1439166
Total Organic Carbon	2.1		1.0	mg/L		11-AUG-10	R1438749
Total Suspended Solids	2.4		2.0	mg/L		16-AUG-10	R1441173
Turbidity	2.56		0.10	NTU		10-AUG-10	R1434143
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		23-AUG-10	R1448147
Fluoride	<0.10		0.10	mg/L		23-AUG-10	R1448147
Nitrite-N	<0.050		0.050	mg/L		23-AUG-10	R1448147
Nitrate-N	<0.050		0.050	mg/L		23-AUG-10	R1448147
Sulfate	1.53		0.50	mg/L		23-AUG-10	R1448147
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.147		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Arsenic (As)-Total	0.00059		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total	0.00365		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Boron (B)-Total	<0.010		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	11-AUG-10	11-AUG-10	R1436563
Calcium (Ca)-Total	1.64		0.10	mg/L	11-AUG-10	11-AUG-10	R1436563
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Copper (Cu)-Total	0.00067		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.159		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total	0.000115		0.000090	mg/L	11-AUG-10	11-AUG-10	R1436563
Lithium (Li)-Total	<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Magnesium (Mg)-Total	0.703		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.00350		0.00030	mg/L	11-AUG-10	11-AUG-10	R1436563
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Phosphorus (P)-Total	<0.20		0.20	mg/L	11-AUG-10	11-AUG-10	R1436563
Potassium (K)-Total	0.447		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00108		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Selenium (Se)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Silicon (Si)-Total	0.398		0.050	mg/L	11-AUG-10	11-AUG-10	R1436563
Silver (Ag)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Sodium (Na)-Total	0.514		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.00801		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Thorium (Th)-Total	0.00012		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tin (Sn)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.00541		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Tungsten (W)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Uranium (U)-Total	0.00018		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Vanadium (V)-Total	0.00028		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563

* 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
L918296-5 BGS-4							
Sampled By: CLIENT on 07-AUG-10 @ 15:15							
Matrix: WATER							
Total Metals by ICP-MS							
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	11-AUG-10	11-AUG-10	R1436563
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0026		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Arsenic (As)-Dissolved	0.00054		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Barium (Ba)-Dissolved	0.00215		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Boron (B)-Dissolved	<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	10-AUG-10	11-AUG-10	R1435566
Calcium (Ca)-Dissolved	1.68		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Copper (Cu)-Dissolved	0.00043		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	10-AUG-10	11-AUG-10	R1435566
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Magnesium (Mg)-Dissolved	0.658		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Manganese (Mn)-Dissolved	0.00117		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Molybdenum (Mo)-Dissolved	0.00019		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Nickel (Ni)-Dissolved	0.00049		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	10-AUG-10	11-AUG-10	R1435566
Potassium (K)-Dissolved	0.425		0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	10-AUG-10	11-AUG-10	R1435566
Silicon (Si)-Dissolved	0.151		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Sodium (Na)-Dissolved	0.509		0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Strontium (Sr)-Dissolved	0.00726		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	10-AUG-10	11-AUG-10	R1435566
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	10-AUG-10	11-AUG-10	R1435566
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.5		1.0	mg/L		11-AUG-10	R1435808
Bicarbonate (HCO3)	9.1		2.0	mg/L		11-AUG-10	R1435808
Carbonate (CO3)	<0.60		0.60	mg/L		11-AUG-10	R1435808
Hydroxide (OH)	<0.40		0.40	mg/L		11-AUG-10	R1435808
Conductivity							
Conductivity	17.5		0.40	umhos/cm		13-AUG-10	R1439867
pH							
pH	7.23		0.10	pH units		10-AUG-10	R1428944

* 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
L918296-6 BGS-5 Sampled By: CLIENT on 07-AUG-10 @ 15:00 Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		13-AUG-10	R1439777
Chlorophyll a	0.207		0.020	ug/L	23-AUG-10	24-AUG-10	R1448129
Dissolved Organic Carbon	2.1		1.0	mg/L		11-AUG-10	R1438749
Hardness (as CaCO3)	7.07		0.20	mg/L		12-AUG-10	
Hardness (as CaCO3)	7.07		0.30	mg/L		12-AUG-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	13-AUG-10	13-AUG-10	R1441342
Nitrate and Nitrite as N	<0.071		0.071	mg/L		24-AUG-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		11-AUG-10	R1438945
Phosphorus, Total	<0.010	DLA	0.010	mg/L		11-AUG-10	R1433085
Total Dissolved Solids	<5.0		5.0	mg/L		16-AUG-10	R1441173
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	10-AUG-10	12-AUG-10	R1439166
Total Organic Carbon	1.6		1.0	mg/L		11-AUG-10	R1438749
Total Suspended Solids	2.4		2.0	mg/L		16-AUG-10	R1441173
Turbidity	2.29		0.10	NTU		10-AUG-10	R1434143
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		23-AUG-10	R1448147
Fluoride	<0.10		0.10	mg/L		23-AUG-10	R1448147
Nitrite-N	<0.050		0.050	mg/L		23-AUG-10	R1448147
Nitrate-N	<0.050		0.050	mg/L		23-AUG-10	R1448147
Sulfate	1.52		0.50	mg/L		23-AUG-10	R1448147
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.131		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Arsenic (As)-Total	0.00058		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total	0.00348		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Boron (B)-Total	<0.010		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	11-AUG-10	11-AUG-10	R1436563
Calcium (Ca)-Total	1.67		0.10	mg/L	11-AUG-10	11-AUG-10	R1436563
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Copper (Cu)-Total	0.00066		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.146		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total	0.000110		0.000090	mg/L	11-AUG-10	11-AUG-10	R1436563
Lithium (Li)-Total	<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Magnesium (Mg)-Total	0.705		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.00333		0.00030	mg/L	11-AUG-10	11-AUG-10	R1436563
Molybdenum (Mo)-Total	0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Phosphorus (P)-Total	<0.20		0.20	mg/L	11-AUG-10	11-AUG-10	R1436563
Potassium (K)-Total	0.458		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00099		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Selenium (Se)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Silicon (Si)-Total	0.373		0.050	mg/L	11-AUG-10	11-AUG-10	R1436563
Silver (Ag)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Sodium (Na)-Total	0.518		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.00802		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563

* 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
L918296-6 BGS-5							
Sampled By: CLIENT on 07-AUG-10 @ 15:00							
Matrix: WATER							
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Thorium (Th)-Total	0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tin (Sn)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.00452		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Tungsten (W)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Uranium (U)-Total	0.00017		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Vanadium (V)-Total	0.00024		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	11-AUG-10	11-AUG-10	R1436563
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0028		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Arsenic (As)-Dissolved	0.00052		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Barium (Ba)-Dissolved	0.00228		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Boron (B)-Dissolved	<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	10-AUG-10	11-AUG-10	R1435566
Calcium (Ca)-Dissolved	1.67		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Copper (Cu)-Dissolved	0.00042		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	10-AUG-10	11-AUG-10	R1435566
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Magnesium (Mg)-Dissolved	0.642		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Manganese (Mn)-Dissolved	0.00117		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Molybdenum (Mo)-Dissolved	0.00018		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Nickel (Ni)-Dissolved	0.00050		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	10-AUG-10	11-AUG-10	R1435566
Potassium (K)-Dissolved	0.434		0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Rubidium (Rb)-Dissolved	0.00057		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	10-AUG-10	11-AUG-10	R1435566
Silicon (Si)-Dissolved	0.156		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Sodium (Na)-Dissolved	0.523		0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Strontium (Sr)-Dissolved	0.00686		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	10-AUG-10	11-AUG-10	R1435566
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	10-AUG-10	11-AUG-10	R1435566
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.4		1.0	mg/L		11-AUG-10	R1435808

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L918296-6	BGS-5							
Sampled By:	CLIENT on 07-AUG-10 @ 15:00							
Matrix:	WATER							
Alkalinity								
Bicarbonate (HCO3)		9.0		2.0	mg/L		11-AUG-10	R1435808
Carbonate (CO3)		<0.60		0.60	mg/L		11-AUG-10	R1435808
Hydroxide (OH)		<0.40		0.40	mg/L		11-AUG-10	R1435808
Conductivity								
Conductivity		17.4		0.40	umhos/cm		13-AUG-10	R1439867
pH								
pH		7.22		0.10	pH units		10-AUG-10	R1428944
L918296-7	BGS-6							
Sampled By:	CLIENT on 07-AUG-10 @ 14:45							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N		0.064		0.050	mg/L		13-AUG-10	R1439777
Chlorophyll a		0.545		0.020	ug/L	23-AUG-10	24-AUG-10	R1448129
Dissolved Organic Carbon		1.6		1.0	mg/L		11-AUG-10	R1438749
Hardness (as CaCO3)		7.31		0.30	mg/L		12-AUG-10	
Hardness (as CaCO3)		7.31		0.20	mg/L		12-AUG-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	13-AUG-10	13-AUG-10	R1441342
Nitrate and Nitrite as N		<0.071		0.071	mg/L		24-AUG-10	
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		11-AUG-10	R1438945
Phosphorus, Total		<0.010	DLA	0.010	mg/L		12-AUG-10	R1438970
Total Dissolved Solids		<5.0		5.0	mg/L		16-AUG-10	R1441173
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	10-AUG-10	12-AUG-10	R1439166
Total Organic Carbon		1.5		1.0	mg/L		11-AUG-10	R1438749
Total Suspended Solids		3.6		2.0	mg/L		16-AUG-10	R1441173
Turbidity		3.37		0.10	NTU		10-AUG-10	R1434143
Anions scan (IC)								
Chloride		<0.50		0.50	mg/L		23-AUG-10	R1448147
Fluoride		<0.10		0.10	mg/L		23-AUG-10	R1448147
Nitrite-N		<0.050		0.050	mg/L		23-AUG-10	R1448147
Nitrate-N		<0.050		0.050	mg/L		23-AUG-10	R1448147
Sulfate		1.54		0.50	mg/L		23-AUG-10	R1448147
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.157		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Arsenic (As)-Total		0.00069		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total		0.00394		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Boron (B)-Total		<0.010		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	11-AUG-10	11-AUG-10	R1436563
Calcium (Ca)-Total		1.74		0.10	mg/L	11-AUG-10	11-AUG-10	R1436563
Cesium (Cs)-Total		<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Chromium (Cr)-Total		<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cobalt (Co)-Total		<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Copper (Cu)-Total		0.00071		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total		0.184		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total		0.000135		0.000090	mg/L	11-AUG-10	11-AUG-10	R1436563
Lithium (Li)-Total		<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Magnesium (Mg)-Total		0.723		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total		0.00405		0.00030	mg/L	11-AUG-10	11-AUG-10	R1436563

* 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
L918296-7 BGS-6							
Sampled By: CLIENT on 07-AUG-10 @ 14:45							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	0.00021		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Phosphorus (P)-Total	<0.20		0.20	mg/L	11-AUG-10	11-AUG-10	R1436563
Potassium (K)-Total	0.466		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00109		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Selenium (Se)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Silicon (Si)-Total	0.419		0.050	mg/L	11-AUG-10	11-AUG-10	R1436563
Silver (Ag)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Sodium (Na)-Total	0.521		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.00828		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Thorium (Th)-Total	0.00013		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tin (Sn)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.00584		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Tungsten (W)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Uranium (U)-Total	0.00019		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Vanadium (V)-Total	0.00033		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	11-AUG-10	11-AUG-10	R1436563
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0043		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Arsenic (As)-Dissolved	0.00060		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Barium (Ba)-Dissolved	0.00230		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Boron (B)-Dissolved	<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	10-AUG-10	11-AUG-10	R1435566
Calcium (Ca)-Dissolved	1.68		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Copper (Cu)-Dissolved	0.00047		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	10-AUG-10	11-AUG-10	R1435566
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Magnesium (Mg)-Dissolved	0.662		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Manganese (Mn)-Dissolved	0.00134		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Molybdenum (Mo)-Dissolved	0.00020		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Nickel (Ni)-Dissolved	0.00049		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	10-AUG-10	11-AUG-10	R1435566
Potassium (K)-Dissolved	0.421		0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	10-AUG-10	11-AUG-10	R1435566
Silicon (Si)-Dissolved	0.161		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Sodium (Na)-Dissolved	0.486		0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Strontium (Sr)-Dissolved	0.00743		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566

* 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
L918296-8 BGW-2							
Sampled By: CLIENT on 07-AUG-10 @ 16:30							
Matrix: WATER							
Total Metals by ICP-MS							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	11-AUG-10	11-AUG-10	R1436563
Calcium (Ca)-Total	3.63		0.10	mg/L	11-AUG-10	11-AUG-10	R1436563
Cesium (Cs)-Total	0.00017		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Chromium (Cr)-Total	0.0071		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cobalt (Co)-Total	0.00056		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Copper (Cu)-Total	0.00187		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.894		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total	0.000642		0.000090	mg/L	11-AUG-10	11-AUG-10	R1436563
Lithium (Li)-Total	<0.0020		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Magnesium (Mg)-Total	1.52		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.0168		0.00030	mg/L	11-AUG-10	11-AUG-10	R1436563
Molybdenum (Mo)-Total	0.00069		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Nickel (Ni)-Total	0.0047		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Phosphorus (P)-Total	<0.20		0.20	mg/L	11-AUG-10	11-AUG-10	R1436563
Potassium (K)-Total	0.917		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00288		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Selenium (Se)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Silicon (Si)-Total	1.90		0.050	mg/L	11-AUG-10	11-AUG-10	R1436563
Silver (Ag)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Sodium (Na)-Total	0.685		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.0170		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Thorium (Th)-Total	0.00056		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tin (Sn)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.0212		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Tungsten (W)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Uranium (U)-Total	0.00086		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Vanadium (V)-Total	0.00113		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Zirconium (Zr)-Total	0.00130		0.00040	mg/L	11-AUG-10	11-AUG-10	R1436563
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0954		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Arsenic (As)-Dissolved	0.00210		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Barium (Ba)-Dissolved	0.00420		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Boron (B)-Dissolved	<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	10-AUG-10	11-AUG-10	R1435566
Calcium (Ca)-Dissolved	3.69		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Chromium (Cr)-Dissolved	0.00037		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Copper (Cu)-Dissolved	0.00081		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Iron (Fe)-Dissolved	0.141		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Lead (Pb)-Dissolved	0.000160		0.000090	mg/L	10-AUG-10	11-AUG-10	R1435566
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Magnesium (Mg)-Dissolved	1.26		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Manganese (Mn)-Dissolved	0.00829		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Molybdenum (Mo)-Dissolved	0.00074		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566

* 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
L918296-9 BGW-3							
Sampled By: CLIENT on 07-AUG-10 @ 14:00							
Matrix: WATER							
Anions scan (IC)							
Nitrite-N	<0.050		0.050	mg/L		23-AUG-10	R1448147
Nitrate-N	0.313		0.050	mg/L		23-AUG-10	R1448147
Sulfate	3.03		0.50	mg/L		23-AUG-10	R1448147
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.742		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Arsenic (As)-Total	0.00289		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total	0.00934		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Boron (B)-Total	<0.010		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	11-AUG-10	11-AUG-10	R1436563
Calcium (Ca)-Total	3.70		0.10	mg/L	11-AUG-10	11-AUG-10	R1436563
Cesium (Cs)-Total	0.00017		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Chromium (Cr)-Total	0.0079		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Cobalt (Co)-Total	0.00062		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Copper (Cu)-Total	0.00170		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.950		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total	0.000592		0.000090	mg/L	11-AUG-10	11-AUG-10	R1436563
Lithium (Li)-Total	0.0021		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Magnesium (Mg)-Total	1.55		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.0175		0.00030	mg/L	11-AUG-10	11-AUG-10	R1436563
Molybdenum (Mo)-Total	0.00074		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Nickel (Ni)-Total	0.0048		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Phosphorus (P)-Total	<0.20		0.20	mg/L	11-AUG-10	11-AUG-10	R1436563
Potassium (K)-Total	0.940		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00312		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Selenium (Se)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Silicon (Si)-Total	2.24		0.050	mg/L	11-AUG-10	11-AUG-10	R1436563
Silver (Ag)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Sodium (Na)-Total	0.693		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.0173		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Thorium (Th)-Total	0.00064		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Tin (Sn)-Total	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.0247		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Tungsten (W)-Total	<0.0010		0.0010	mg/L	11-AUG-10	11-AUG-10	R1436563
Uranium (U)-Total	0.00089		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Vanadium (V)-Total	0.00138		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Zirconium (Zr)-Total	0.00133		0.00040	mg/L	11-AUG-10	11-AUG-10	R1436563
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0480		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Arsenic (As)-Dissolved	0.00195		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Barium (Ba)-Dissolved	0.00377		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Boron (B)-Dissolved	<0.010		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	10-AUG-10	11-AUG-10	R1435566

* 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
L918296-9 BGW-3 Sampled By: CLIENT on 07-AUG-10 @ 14:00 Matrix: WATER							
Dissolved Metals by ICP-MS							
Calcium (Ca)-Dissolved	3.63		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Copper (Cu)-Dissolved	0.00063		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Iron (Fe)-Dissolved	0.050		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	10-AUG-10	11-AUG-10	R1435566
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Magnesium (Mg)-Dissolved	1.17		0.010	mg/L	10-AUG-10	11-AUG-10	R1435566
Manganese (Mn)-Dissolved	0.00673		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Molybdenum (Mo)-Dissolved	0.00080		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Nickel (Ni)-Dissolved	0.00109		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	10-AUG-10	11-AUG-10	R1435566
Potassium (K)-Dissolved	0.781		0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Rubidium (Rb)-Dissolved	0.00125		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	10-AUG-10	11-AUG-10	R1435566
Silicon (Si)-Dissolved	0.269		0.050	mg/L	10-AUG-10	11-AUG-10	R1435566
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Sodium (Na)-Dissolved	0.649		0.020	mg/L	10-AUG-10	11-AUG-10	R1435566
Strontium (Sr)-Dissolved	0.0153		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Titanium (Ti)-Dissolved	0.00148		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	10-AUG-10	11-AUG-10	R1435566
Uranium (U)-Dissolved	0.00031		0.00010	mg/L	10-AUG-10	11-AUG-10	R1435566
Vanadium (V)-Dissolved	0.00033		0.00020	mg/L	10-AUG-10	11-AUG-10	R1435566
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	10-AUG-10	11-AUG-10	R1435566
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	10-AUG-10	11-AUG-10	R1435566
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	13.2		1.0	mg/L		11-AUG-10	R1435808
Bicarbonate (HCO3)	16.1		2.0	mg/L		11-AUG-10	R1435808
Carbonate (CO3)	<0.60		0.60	mg/L		11-AUG-10	R1435808
Hydroxide (OH)	<0.40		0.40	mg/L		11-AUG-10	R1435808
Conductivity							
Conductivity	38.6		0.40	umhos/cm		10-AUG-10	R1428944
pH							
pH	7.50		0.10	pH units		10-AUG-10	R1428944

* 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)
Duplicate	Ortho Phosphorus Soluble As P	DLA	L918296-1, -2, -3, -4, -5, -6, -7, -8, -9
Duplicate	Ortho Phosphorus Soluble As P	DLA	L918296-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sulfate	MS-B	L918296-1, -2, -3, -4, -5, -6, -7, -8, -9

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ALK-TOT-WP	Water	Alkalinity	APHA 2320B
Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO3- and H2CO3 endpoints indicated electrometrically.			
ANIONS5-IC-WP	Water	Anions scan (IC)	EPA 300.1 IC
This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".			
C-DIS-ORG-WP	Water	Dissolved Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP
This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.			
The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC. TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.			
C-TOT-ORG-WP	Water	Total Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP
This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.			
The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC. TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.			
CHLOROA-VA	Water	Chlorophyll a by Fluorometer	EPA 445.0
Chlorophyll and Pheopigments by Fluorometry analysis is carried out using procedures adapted from USEPA Method 445.0. The sample is filtered using either a glass fiber filter or a 0.45 micron Membrane filter. The pigments are extracted from the filter with 90% aqueous acetone. For chlorophyll-a analysis the extract is read using a fluorometer. For pheopigments the extract is first acidified then read. This method is not subject to interferences from chlorophyll b.			
EC-WP	Water	Conductivity	APHA 2510B
Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.			
ETL-HARDNESS-DIS-WP	Water	Hardness Calculated	Calculated
ETL-HARDNESS-TOT-WP	Water	Hardness Calculated	Calculated
HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0
Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.			
MET-D-L-MS-WP	Water	Dissolved Metals by ICP-MS	U.S. EPA 200.8-DL

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
Dissolved Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the Examination of Water and Wastewater method 3030B for filtration through a 0.45 um filter and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
MET-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
N-TOTKJ-WP	Water	Total Kjeldahl Nitrogen	Quickchem method 10-107-06-2-E Lachat
Samples are digested with a sulphuric acid solution, cooled, diluted with water, and analyzed for ammonia. Total Kjeldahl nitrogen is the sum of free-ammonia and organic nitrogen compounds which are converted to ammonium sulphate through this digestion process. Analysis is performed by Flow Injection Analysis (FIA). The pH of the digested sample is raised to a known, basic pH by neutralization with a concentrated buffer solution. This neutralization converts the ammonium cation to ammonia. The ammonia produced is heated with salicylate and hypochlorite to produce blue colour which is proportional to the ammonia concentration.			
NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
Ammonia - Colourimetric using Salicylate-nitroprusside and hypochlorite, in an alkaline phosphate buffer.			
NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
P-ORTHO-SOL-WP	Water	Ortho Phosphorous Soluble	APHA, 1998 P-OS
Quantitative orthophosphorous values are determined without prior digestion of the sample. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
P-TOTAL-WP	Water	Phosphorus, Total	APHA, 1998 P-T
Samples are digested using a sulphuric acid-persulfate mixture to convert organic phosphorous to orthophosphate. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
PH-WP	Water	pH	APHA 4500H
pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.			
SOLIDS-TDS-WP	Water	Total Dissolved Solids	APHA 2540
The residue remaining in a prepared casserole after passing the sample through a 1.2 um Whatman GF/C glass microfibre filter and drying at 180 degrees C. Samples may be dried at 105 degrees C if the client specifically requests this drying temperature.			
SOLIDS-TOTSUS-LR-WP	Water	Total Suspended Solids	APHA 2540 LR
The residue retained by a prepared 1.5 um Whatman 934-AH glass microfibre filter dried at 105 degrees C. A method detection limit of 2 mg/L can be achieved when 500 mL of sample is used.			
TURBIDITY-WP	Water	Turbidity	APHA, 1998, 2130B
A strong light beam is sent through a transparent tube containing the sample. Light that is reflected at 90 degrees to the axis by suspended particles is detected by the photocell. The electrical response is proportional to the sample turbidity.			

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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

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
WP	ALS LABORATORY GROUP - WINNIPEG, MANITOBA, CANADA
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

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.



Report Format / Distribution					
☒ Standard ☐ Other ☒ PDF ☒ Excel ☐ Fax					
Email 1: rvanengen@agnico-eagle.com					
Email 2: sdoire@agnico-eagle.com					
Phone: 867 793 4610x6759 Fax:					
Invoice To: ☒ Same as Report					
Company: Agnico-Eagle Mining Ltd.					
Contact: Accounts Payable-Meadowbank Division					
Address: email electronic invoice to rvanengen@agnico-eagle.com					
Sample					
Phone:					
Fax:					
Lab Work Order # (lab use only)					
ALS Contact:		Christine Herrod		Sampler (Initials):	
Date		dd-mm-yy		Time hh:mm	
07-Aug-10		17:10		Water	
07-Aug-10		16:10		Water	
07-Aug-10		15:50		Water	
07-Aug-10		15:30		Water	
07-Aug-10		15:15		Water	
07-Aug-10		15:00		Water	
07-Aug-10		14:45		Water	
07-Aug-10		16:30		Water	
07-Aug-10		14:00			
Special Instructions / Hazardous Details					
Guidelines / Regulations					
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 adjacent worksheet.					
Received By: Martin T.		Date & Time: 2010-08-07		Temperature 21.0	
Relinquished By:		Date & Time:		Sample Condition (lab use only) Samples Received in Good Condition? Y / N (if no further details)	



Environmental Division

Certificate of Analysis

AGNICO-EAGLE MINING LTD

ATTN: RYAN VANENGEN

MEADOWBANK DIV.

P.O. BOX 540

BAKER LAKE NU X0X 0A0

Report Date: 10-SEP-10 13:47 (MT)

Version: FINAL

Lab Work Order #: **L924262**

Date Received: **25-AUG-10**

Project P.O. #: NOT SUBMITTED

Job Reference: DIKE

Legal Site Desc:

CofC Numbers:

Other Information:

Comments:

Paul Nicolas
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
L924262-1 BGE-1							
Sampled By: CLIENT on 22-AUG-10 @ 08:10							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		01-SEP-10	R1456565
Chlorophyll a	0.559		0.020	ug/L	04-SEP-10	04-SEP-10	R1461211
Dissolved Organic Carbon	2.0		1.0	mg/L		26-AUG-10	R1453199
Hardness (as CaCO3)	7.99		0.30	mg/L		27-AUG-10	
Hardness (as CaCO3)	7.18		0.20	mg/L		27-AUG-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	31-AUG-10	31-AUG-10	R1455724
Nitrate and Nitrite as N	<0.071		0.071	mg/L		26-AUG-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		26-AUG-10	R1449988
Phosphorus, Total	0.0106		0.0020	mg/L		26-AUG-10	R1449952
Total Dissolved Solids	18.0		5.0	mg/L		01-SEP-10	R1456693
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	25-AUG-10	30-AUG-10	R1456004
Total Organic Carbon	2.0		1.0	mg/L		26-AUG-10	R1453199
Total Suspended Solids	2.0		2.0	mg/L		27-AUG-10	R1452886
Turbidity	4.11		0.10	NTU		25-AUG-10	R1449743
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		25-AUG-10	R1450226
Fluoride	<0.10		0.10	mg/L		25-AUG-10	R1450226
Nitrite-N	<0.050		0.050	mg/L		25-AUG-10	R1450226
Nitrate-N	<0.050		0.050	mg/L		25-AUG-10	R1450226
Sulfate	1.57		0.50	mg/L		25-AUG-10	R1450226
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.313		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Arsenic (As)-Total	0.00086		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Barium (Ba)-Total	0.00536		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Boron (B)-Total	<0.010		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	26-AUG-10	26-AUG-10	R1451325
Calcium (Ca)-Total	1.86		0.10	mg/L	26-AUG-10	26-AUG-10	R1451325
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Chromium (Cr)-Total	0.0014		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cobalt (Co)-Total	0.00022		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Copper (Cu)-Total	0.00092		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Iron (Fe)-Total	0.345		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Lead (Pb)-Total	0.000218		0.000090	mg/L	26-AUG-10	26-AUG-10	R1451325
Lithium (Li)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Magnesium (Mg)-Total	0.816		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Manganese (Mn)-Total	0.00616		0.00030	mg/L	26-AUG-10	26-AUG-10	R1451325
Molybdenum (Mo)-Total	0.00025		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Phosphorus (P)-Total	<0.20		0.20	mg/L	26-AUG-10	26-AUG-10	R1451325
Potassium (K)-Total	0.565		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Rubidium (Rb)-Total	0.00162		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Selenium (Se)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Silicon (Si)-Total	1.11		0.050	mg/L	26-AUG-10	26-AUG-10	R1451325
Silver (Ag)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Sodium (Na)-Total	0.587		0.030	mg/L	26-AUG-10	26-AUG-10	R1451325
Strontium (Sr)-Total	0.00881		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325

* 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
L924262-1 BGE-1							
Sampled By: CLIENT on 22-AUG-10 @ 08:10							
Matrix: WATER							
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Thorium (Th)-Total	0.00026		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tin (Sn)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Titanium (Ti)-Total	0.0122		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Tungsten (W)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Uranium (U)-Total	0.00025		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Vanadium (V)-Total	0.00049		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Zirconium (Zr)-Total	0.00088		0.00040	mg/L	26-AUG-10	26-AUG-10	R1451325
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0096		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Arsenic (As)-Dissolved	0.00061		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Barium (Ba)-Dissolved	0.00257		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Boron (B)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Cadmium (Cd)-Dissolved	0.000019		0.000010	mg/L	25-AUG-10	26-AUG-10	R1451179
Calcium (Ca)-Dissolved	1.82		0.050	mg/L	25-AUG-10	26-AUG-10	R1451179
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Copper (Cu)-Dissolved	0.00038		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	25-AUG-10	26-AUG-10	R1451179
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Magnesium (Mg)-Dissolved	0.641		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Manganese (Mn)-Dissolved	0.00032		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Molybdenum (Mo)-Dissolved	0.00025		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Nickel (Ni)-Dissolved	0.00042		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	25-AUG-10	26-AUG-10	R1451179
Potassium (K)-Dissolved	0.406		0.020	mg/L	25-AUG-10	26-AUG-10	R1451179
Rubidium (Rb)-Dissolved	0.00061		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	25-AUG-10	26-AUG-10	R1451179
Silicon (Si)-Dissolved	0.154		0.050	mg/L	25-AUG-10	26-AUG-10	R1451179
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Sodium (Na)-Dissolved	0.485		0.020	mg/L	25-AUG-10	26-AUG-10	R1451179
Strontium (Sr)-Dissolved	0.00702		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Titanium (Ti)-Dissolved	0.00024		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	25-AUG-10	26-AUG-10	R1451179
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	25-AUG-10	26-AUG-10	R1451179
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.9		1.0	mg/L		27-AUG-10	R1453065

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L924262-1	BGE-1							
Sampled By:	CLIENT on 22-AUG-10 @ 08:10							
Matrix:	WATER							
Alkalinity								
Bicarbonate (HCO3)		9.6		2.0	mg/L		27-AUG-10	R1453065
Carbonate (CO3)		<0.60		0.60	mg/L		27-AUG-10	R1453065
Hydroxide (OH)		<0.40		0.40	mg/L		27-AUG-10	R1453065
Conductivity								
Conductivity		22.0		0.40	umhos/cm		26-AUG-10	R1450046
pH								
pH		7.17		0.10	pH units		26-AUG-10	R1450046
L924262-2	BGS-1							
Sampled By:	CLIENT on 22-AUG-10 @ 06:00							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		01-SEP-10	R1456565
Chlorophyll a		0.602		0.020	ug/L	04-SEP-10	04-SEP-10	R1461211
Dissolved Organic Carbon		3.2		1.0	mg/L		26-AUG-10	R1453199
Hardness (as CaCO3)		6.87		0.20	mg/L		27-AUG-10	
Hardness (as CaCO3)		6.47		0.30	mg/L		27-AUG-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	31-AUG-10	31-AUG-10	R1455724
Nitrate and Nitrite as N		<0.071		0.071	mg/L		26-AUG-10	
Ortho Phosphorus Soluble As P		0.0124		0.0010	mg/L		26-AUG-10	R1449988
Phosphorus, Total		0.0151		0.0020	mg/L		26-AUG-10	R1449952
Total Dissolved Solids		10.0		5.0	mg/L		27-AUG-10	R1452886
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	25-AUG-10	30-AUG-10	R1456004
Total Organic Carbon		1.9		1.0	mg/L		26-AUG-10	R1453199
Total Suspended Solids		5.2		2.0	mg/L		27-AUG-10	R1452886
Turbidity		6.65		0.10	NTU		25-AUG-10	R1449743
Anions scan (IC)								
Chloride		0.51		0.50	mg/L		25-AUG-10	R1450226
Fluoride		<0.10		0.10	mg/L		25-AUG-10	R1450226
Nitrite-N		<0.050		0.050	mg/L		25-AUG-10	R1450226
Nitrate-N		<0.050		0.050	mg/L		25-AUG-10	R1450226
Sulfate		1.58		0.50	mg/L		25-AUG-10	R1450226
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.0093		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Arsenic (As)-Total		0.00051		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Barium (Ba)-Total		0.00265		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Boron (B)-Total		<0.010		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	26-AUG-10	26-AUG-10	R1451325
Calcium (Ca)-Total		1.53		0.10	mg/L	26-AUG-10	26-AUG-10	R1451325
Cesium (Cs)-Total		<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Chromium (Cr)-Total		<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cobalt (Co)-Total		<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Copper (Cu)-Total		0.00056		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Iron (Fe)-Total		<0.020		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Lead (Pb)-Total		<0.000090		0.000090	mg/L	26-AUG-10	26-AUG-10	R1451325
Lithium (Li)-Total		<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Magnesium (Mg)-Total		0.645		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Manganese (Mn)-Total		0.00104		0.00030	mg/L	26-AUG-10	26-AUG-10	R1451325

* 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
L924262-2 BGS-1							
Sampled By: CLIENT on 22-AUG-10 @ 06:00							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	0.00022		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Phosphorus (P)-Total	<0.20		0.20	mg/L	26-AUG-10	26-AUG-10	R1451325
Potassium (K)-Total	0.402		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Rubidium (Rb)-Total	0.00064		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Selenium (Se)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Silicon (Si)-Total	0.148		0.050	mg/L	26-AUG-10	26-AUG-10	R1451325
Silver (Ag)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Sodium (Na)-Total	0.712		0.030	mg/L	26-AUG-10	26-AUG-10	R1451325
Strontium (Sr)-Total	0.00801		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Thorium (Th)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tin (Sn)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Titanium (Ti)-Total	0.00040		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Tungsten (W)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Uranium (U)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Vanadium (V)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	26-AUG-10	26-AUG-10	R1451325
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0055		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Arsenic (As)-Dissolved	0.00046		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Barium (Ba)-Dissolved	0.00265		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Boron (B)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	25-AUG-10	26-AUG-10	R1451179
Calcium (Ca)-Dissolved	1.64		0.050	mg/L	25-AUG-10	26-AUG-10	R1451179
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Copper (Cu)-Dissolved	0.00040		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	25-AUG-10	26-AUG-10	R1451179
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Magnesium (Mg)-Dissolved	0.675		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Manganese (Mn)-Dissolved	0.00072		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Molybdenum (Mo)-Dissolved	0.00024		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Nickel (Ni)-Dissolved	0.00041		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	25-AUG-10	26-AUG-10	R1451179
Potassium (K)-Dissolved	0.439		0.020	mg/L	25-AUG-10	26-AUG-10	R1451179
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	25-AUG-10	26-AUG-10	R1451179
Silicon (Si)-Dissolved	0.143		0.050	mg/L	25-AUG-10	26-AUG-10	R1451179
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Sodium (Na)-Dissolved	0.526		0.020	mg/L	25-AUG-10	26-AUG-10	R1451179
Strontium (Sr)-Dissolved	0.00716		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L924262-2	BGS-1							
Sampled By: CLIENT on 22-AUG-10 @ 06:00								
Matrix: WATER								
Dissolved Metals by ICP-MS								
Thorium (Th)-Dissolved		<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Tin (Sn)-Dissolved		<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Titanium (Ti)-Dissolved		<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Tungsten (W)-Dissolved		<0.0010		0.0010	mg/L	25-AUG-10	26-AUG-10	R1451179
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Vanadium (V)-Dissolved		<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Zinc (Zn)-Dissolved		<0.0020		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Zirconium (Zr)-Dissolved		<0.00040		0.00040	mg/L	25-AUG-10	26-AUG-10	R1451179
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		7.3		1.0	mg/L		27-AUG-10	R1453065
Bicarbonate (HCO3)		8.8		2.0	mg/L		27-AUG-10	R1453065
Carbonate (CO3)		<0.60		0.60	mg/L		27-AUG-10	R1453065
Hydroxide (OH)		<0.40		0.40	mg/L		27-AUG-10	R1453065
Conductivity								
Conductivity		17.4		0.40	umhos/cm		27-AUG-10	R1451870
pH								
pH		7.14		0.10	pH units		26-AUG-10	R1450046
L924262-3	BGS-2							
Sampled By: CLIENT on 22-AUG-10 @ 06:30								
Matrix: WATER								
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		01-SEP-10	R1456565
Chlorophyll a		0.625		0.020	ug/L	04-SEP-10	04-SEP-10	R1461211
Dissolved Organic Carbon		1.9		1.0	mg/L		26-AUG-10	R1453199
Hardness (as CaCO3)		7.17		0.30	mg/L		27-AUG-10	
Hardness (as CaCO3)		6.75		0.20	mg/L		27-AUG-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	31-AUG-10	31-AUG-10	R1455724
Nitrate and Nitrite as N		<0.071		0.071	mg/L		26-AUG-10	
Ortho Phosphorus Soluble As P		0.0110		0.0010	mg/L		26-AUG-10	R1449988
Phosphorus, Total		<0.010	DLA	0.010	mg/L		26-AUG-10	R1449952
Total Dissolved Solids		6.0		5.0	mg/L		27-AUG-10	R1452886
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	25-AUG-10	30-AUG-10	R1456004
Total Organic Carbon		2.1		1.0	mg/L		26-AUG-10	R1453199
Total Suspended Solids		2.8		2.0	mg/L		27-AUG-10	R1452886
Turbidity		4.84		0.10	NTU		25-AUG-10	R1449743
Anions scan (IC)								
Chloride		<0.50		0.50	mg/L		25-AUG-10	R1450226
Fluoride		<0.10		0.10	mg/L		25-AUG-10	R1450226
Nitrite-N		<0.050		0.050	mg/L		25-AUG-10	R1450226
Nitrate-N		<0.050		0.050	mg/L		25-AUG-10	R1450226
Sulfate		1.53		0.50	mg/L		25-AUG-10	R1450226
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.259		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Arsenic (As)-Total		0.00061		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Barium (Ba)-Total		0.00482		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Boron (B)-Total		<0.010		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325

* 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
L924262-3 BGS-2							
Sampled By: CLIENT on 22-AUG-10 @ 06:30							
Matrix: WATER							
Total Metals by ICP-MS							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	26-AUG-10	26-AUG-10	R1451325
Calcium (Ca)-Total	1.65		0.10	mg/L	26-AUG-10	26-AUG-10	R1451325
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Chromium (Cr)-Total	0.0012		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Copper (Cu)-Total	0.00084		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Iron (Fe)-Total	0.296		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Lead (Pb)-Total	0.000212		0.000090	mg/L	26-AUG-10	26-AUG-10	R1451325
Lithium (Li)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Magnesium (Mg)-Total	0.739		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Manganese (Mn)-Total	0.00544		0.00030	mg/L	26-AUG-10	26-AUG-10	R1451325
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Phosphorus (P)-Total	<0.20		0.20	mg/L	26-AUG-10	26-AUG-10	R1451325
Potassium (K)-Total	0.510		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Rubidium (Rb)-Total	0.00140		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Selenium (Se)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Silicon (Si)-Total	0.933		0.050	mg/L	26-AUG-10	26-AUG-10	R1451325
Silver (Ag)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Sodium (Na)-Total	0.543		0.030	mg/L	26-AUG-10	26-AUG-10	R1451325
Strontium (Sr)-Total	0.00804		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Thorium (Th)-Total	0.00022		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tin (Sn)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Titanium (Ti)-Total	0.0103		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Tungsten (W)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Uranium (U)-Total	0.00022		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Vanadium (V)-Total	0.00041		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Zirconium (Zr)-Total	0.00054		0.00040	mg/L	26-AUG-10	26-AUG-10	R1451325
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.197		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Arsenic (As)-Dissolved	0.00051		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Barium (Ba)-Dissolved	0.00429		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Boron (B)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	25-AUG-10	26-AUG-10	R1451179
Calcium (Ca)-Dissolved	1.59		0.050	mg/L	25-AUG-10	26-AUG-10	R1451179
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Chromium (Cr)-Dissolved	0.00046		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Copper (Cu)-Dissolved	0.00064		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Iron (Fe)-Dissolved	0.164		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Lead (Pb)-Dissolved	0.000127		0.000090	mg/L	25-AUG-10	26-AUG-10	R1451179
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Magnesium (Mg)-Dissolved	0.677		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Manganese (Mn)-Dissolved	0.00330		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Molybdenum (Mo)-Dissolved	0.00021		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179

* 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
L924262-4 BGS-3							
Sampled By: CLIENT on 22-AUG-10 @ 06:47							
Matrix: WATER							
Anions scan (IC)							
Nitrite-N	<0.050		0.050	mg/L		25-AUG-10	R1450226
Nitrate-N	<0.050		0.050	mg/L		25-AUG-10	R1450226
Sulfate	1.54		0.50	mg/L		25-AUG-10	R1450226
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.189		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Arsenic (As)-Total	0.00061		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Barium (Ba)-Total	0.00421		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Boron (B)-Total	<0.010		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	26-AUG-10	26-AUG-10	R1451325
Calcium (Ca)-Total	1.67		0.10	mg/L	26-AUG-10	26-AUG-10	R1451325
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Copper (Cu)-Total	0.00076		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Iron (Fe)-Total	0.207		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Lead (Pb)-Total	0.000138		0.000090	mg/L	26-AUG-10	26-AUG-10	R1451325
Lithium (Li)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Magnesium (Mg)-Total	0.709		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Manganese (Mn)-Total	0.00397		0.00030	mg/L	26-AUG-10	26-AUG-10	R1451325
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Phosphorus (P)-Total	<0.20		0.20	mg/L	26-AUG-10	26-AUG-10	R1451325
Potassium (K)-Total	0.480		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Rubidium (Rb)-Total	0.00122		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Selenium (Se)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Silicon (Si)-Total	0.476		0.050	mg/L	26-AUG-10	26-AUG-10	R1451325
Silver (Ag)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Sodium (Na)-Total	0.527		0.030	mg/L	26-AUG-10	26-AUG-10	R1451325
Strontium (Sr)-Total	0.00808		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Thorium (Th)-Total	0.00018		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tin (Sn)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Titanium (Ti)-Total	0.00702		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Tungsten (W)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Uranium (U)-Total	0.00018		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Vanadium (V)-Total	0.00031		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Zirconium (Zr)-Total	0.00043		0.00040	mg/L	26-AUG-10	26-AUG-10	R1451325
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0058		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Arsenic (As)-Dissolved	0.00046		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Barium (Ba)-Dissolved	0.00267		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Boron (B)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	25-AUG-10	26-AUG-10	R1451179

* 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
L924262-5 BGS-4							
Sampled By: CLIENT on 22-AUG-10 @ 07:55							
Matrix: WATER							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		26-AUG-10	
Ortho Phosphorus Soluble As P	0.0109		0.0010	mg/L		26-AUG-10	R1449988
Phosphorus, Total	0.0131		0.0020	mg/L		26-AUG-10	R1449952
Total Dissolved Solids	18.0		5.0	mg/L		01-SEP-10	R1456693
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	25-AUG-10	30-AUG-10	R1456004
Total Organic Carbon	2.3		1.0	mg/L		26-AUG-10	R1453199
Total Suspended Solids	2.8		2.0	mg/L		27-AUG-10	R1452886
Turbidity	4.57		0.10	NTU		25-AUG-10	R1449743
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		25-AUG-10	R1450226
Fluoride	<0.10		0.10	mg/L		25-AUG-10	R1450226
Nitrite-N	<0.050		0.050	mg/L		25-AUG-10	R1450226
Nitrate-N	<0.050		0.050	mg/L		25-AUG-10	R1450226
Sulfate	1.57		0.50	mg/L		25-AUG-10	R1450226
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.246		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Arsenic (As)-Total	0.00082		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Barium (Ba)-Total	0.00484		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Boron (B)-Total	<0.010		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	26-AUG-10	26-AUG-10	R1451325
Calcium (Ca)-Total	1.79		0.10	mg/L	26-AUG-10	26-AUG-10	R1451325
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Chromium (Cr)-Total	0.0012		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Copper (Cu)-Total	0.00085		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Iron (Fe)-Total	0.277		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Lead (Pb)-Total	0.000195		0.000090	mg/L	26-AUG-10	26-AUG-10	R1451325
Lithium (Li)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Magnesium (Mg)-Total	0.784		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Manganese (Mn)-Total	0.00552		0.00030	mg/L	26-AUG-10	26-AUG-10	R1451325
Molybdenum (Mo)-Total	0.00023		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Phosphorus (P)-Total	<0.20		0.20	mg/L	26-AUG-10	26-AUG-10	R1451325
Potassium (K)-Total	0.524		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Rubidium (Rb)-Total	0.00144		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Selenium (Se)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Silicon (Si)-Total	1.08		0.050	mg/L	26-AUG-10	26-AUG-10	R1451325
Silver (Ag)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Sodium (Na)-Total	0.540		0.030	mg/L	26-AUG-10	26-AUG-10	R1451325
Strontium (Sr)-Total	0.00871		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Thorium (Th)-Total	0.00022		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tin (Sn)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Titanium (Ti)-Total	0.0121		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Tungsten (W)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Uranium (U)-Total	0.00024		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Vanadium (V)-Total	0.00040		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L924262-5 BGS-4							
Sampled By: CLIENT on 22-AUG-10 @ 07:55							
Matrix: WATER							
Total Metals by ICP-MS							
Zirconium (Zr)-Total	0.00048		0.00040	mg/L	26-AUG-10	26-AUG-10	R1451325
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0111		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Arsenic (As)-Dissolved	0.00065		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Barium (Ba)-Dissolved	0.00245		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Boron (B)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	25-AUG-10	26-AUG-10	R1451179
Calcium (Ca)-Dissolved	1.73		0.050	mg/L	25-AUG-10	26-AUG-10	R1451179
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Copper (Cu)-Dissolved	0.00039		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	25-AUG-10	26-AUG-10	R1451179
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Magnesium (Mg)-Dissolved	0.683		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Manganese (Mn)-Dissolved	0.00025		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Molybdenum (Mo)-Dissolved	0.00024		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Nickel (Ni)-Dissolved	0.00045		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	25-AUG-10	26-AUG-10	R1451179
Potassium (K)-Dissolved	0.431		0.020	mg/L	25-AUG-10	26-AUG-10	R1451179
Rubidium (Rb)-Dissolved	0.00063		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	25-AUG-10	26-AUG-10	R1451179
Silicon (Si)-Dissolved	0.164		0.050	mg/L	25-AUG-10	26-AUG-10	R1451179
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Sodium (Na)-Dissolved	0.517		0.020	mg/L	25-AUG-10	26-AUG-10	R1451179
Strontium (Sr)-Dissolved	0.00733		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Titanium (Ti)-Dissolved	0.00022		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	25-AUG-10	26-AUG-10	R1451179
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	25-AUG-10	26-AUG-10	R1451179
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.6		1.0	mg/L		27-AUG-10	R1453065
Bicarbonate (HCO3)	9.3		2.0	mg/L		27-AUG-10	R1453065
Carbonate (CO3)	<0.60		0.60	mg/L		27-AUG-10	R1453065
Hydroxide (OH)	<0.40		0.40	mg/L		27-AUG-10	R1453065
Conductivity							
Conductivity	20.8		0.40	umhos/cm		26-AUG-10	R1450046
pH							
pH	7.17		0.10	pH units		26-AUG-10	R1450046

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L924262-6 BGS-5							
Sampled By: CLIENT on 22-AUG-10 @ 07:33							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		01-SEP-10	R1456565
Chlorophyll a	0.617		0.020	ug/L	04-SEP-10	04-SEP-10	R1461211
Dissolved Organic Carbon	1.9		1.0	mg/L		26-AUG-10	R1453199
Hardness (as CaCO3)	7.41		0.30	mg/L		27-AUG-10	
Hardness (as CaCO3)	7.08		0.20	mg/L		27-AUG-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	31-AUG-10	31-AUG-10	R1455724
Nitrate and Nitrite as N	<0.071		0.071	mg/L		26-AUG-10	
Ortho Phosphorus Soluble As P	0.0104		0.0010	mg/L		26-AUG-10	R1449988
Phosphorus, Total	0.0111		0.0020	mg/L		26-AUG-10	R1449952
Total Dissolved Solids	16.0		5.0	mg/L		01-SEP-10	R1456693
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	25-AUG-10	30-AUG-10	R1456004
Total Organic Carbon	2.0		1.0	mg/L		26-AUG-10	R1453199
Total Suspended Solids	2.4		2.0	mg/L		27-AUG-10	R1452886
Turbidity	4.28		0.10	NTU		25-AUG-10	R1449743
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		25-AUG-10	R1450226
Fluoride	<0.10		0.10	mg/L		25-AUG-10	R1450226
Nitrite-N	<0.050		0.050	mg/L		25-AUG-10	R1450226
Nitrate-N	<0.050		0.050	mg/L		25-AUG-10	R1450226
Sulfate	1.57		0.50	mg/L		25-AUG-10	R1450226
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.237		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Arsenic (As)-Total	0.00072		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Barium (Ba)-Total	0.00463		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Boron (B)-Total	<0.010		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	26-AUG-10	26-AUG-10	R1451325
Calcium (Ca)-Total	1.74		0.10	mg/L	26-AUG-10	26-AUG-10	R1451325
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Chromium (Cr)-Total	0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Copper (Cu)-Total	0.00078		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Iron (Fe)-Total	0.268		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Lead (Pb)-Total	0.000206		0.000090	mg/L	26-AUG-10	26-AUG-10	R1451325
Lithium (Li)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Magnesium (Mg)-Total	0.745		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Manganese (Mn)-Total	0.00514		0.00030	mg/L	26-AUG-10	26-AUG-10	R1451325
Molybdenum (Mo)-Total	0.00023		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Phosphorus (P)-Total	<0.20		0.20	mg/L	26-AUG-10	26-AUG-10	R1451325
Potassium (K)-Total	0.505		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Rubidium (Rb)-Total	0.00136		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Selenium (Se)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Silicon (Si)-Total	1.19		0.050	mg/L	26-AUG-10	26-AUG-10	R1451325
Silver (Ag)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Sodium (Na)-Total	0.520		0.030	mg/L	26-AUG-10	26-AUG-10	R1451325
Strontium (Sr)-Total	0.00806		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325

* 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
L924262-6 BGS-5							
Sampled By: CLIENT on 22-AUG-10 @ 07:33							
Matrix: WATER							
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Thorium (Th)-Total	0.00020		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tin (Sn)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Titanium (Ti)-Total	0.00928		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Tungsten (W)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Uranium (U)-Total	0.00023		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Vanadium (V)-Total	0.00040		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Zirconium (Zr)-Total	0.00046		0.00040	mg/L	26-AUG-10	26-AUG-10	R1451325
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0154		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Arsenic (As)-Dissolved	0.00060		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Barium (Ba)-Dissolved	0.00250		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Boron (B)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	25-AUG-10	26-AUG-10	R1451179
Calcium (Ca)-Dissolved	1.73		0.050	mg/L	25-AUG-10	26-AUG-10	R1451179
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Copper (Cu)-Dissolved	0.00039		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	25-AUG-10	26-AUG-10	R1451179
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Magnesium (Mg)-Dissolved	0.672		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Manganese (Mn)-Dissolved	0.00034		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Molybdenum (Mo)-Dissolved	0.00022		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Nickel (Ni)-Dissolved	0.00042		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	25-AUG-10	26-AUG-10	R1451179
Potassium (K)-Dissolved	0.431		0.020	mg/L	25-AUG-10	26-AUG-10	R1451179
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	25-AUG-10	26-AUG-10	R1451179
Silicon (Si)-Dissolved	0.178		0.050	mg/L	25-AUG-10	26-AUG-10	R1451179
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Sodium (Na)-Dissolved	0.499		0.020	mg/L	25-AUG-10	26-AUG-10	R1451179
Strontium (Sr)-Dissolved	0.00713		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Titanium (Ti)-Dissolved	0.00035		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	25-AUG-10	26-AUG-10	R1451179
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	25-AUG-10	26-AUG-10	R1451179
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.5		1.0	mg/L		27-AUG-10	R1453065

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L924262-6	BGS-5							
Sampled By:	CLIENT on 22-AUG-10 @ 07:33							
Matrix:	WATER							
Alkalinity								
Bicarbonate (HCO3)		9.1		2.0	mg/L		27-AUG-10	R1453065
Carbonate (CO3)		<0.60		0.60	mg/L		27-AUG-10	R1453065
Hydroxide (OH)		<0.40		0.40	mg/L		27-AUG-10	R1453065
Conductivity								
Conductivity		20.3		0.40	umhos/cm		26-AUG-10	R1450046
pH								
pH		7.17		0.10	pH units		26-AUG-10	R1450046
L924262-7	BGS-6							
Sampled By:	CLIENT on 22-AUG-10 @ 07:00							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		01-SEP-10	R1456565
Chlorophyll a		0.688		0.020	ug/L	04-SEP-10	04-SEP-10	R1461211
Dissolved Organic Carbon		1.9		1.0	mg/L		26-AUG-10	R1453199
Hardness (as CaCO3)		7.05		0.20	mg/L		27-AUG-10	
Hardness (as CaCO3)		7.14		0.30	mg/L		27-AUG-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	31-AUG-10	31-AUG-10	R1455724
Nitrate and Nitrite as N		<0.071		0.071	mg/L		26-AUG-10	
Ortho Phosphorus Soluble As P		0.0108		0.0010	mg/L		26-AUG-10	R1449988
Phosphorus, Total		0.0119		0.0020	mg/L		26-AUG-10	R1449952
Total Dissolved Solids		16.0		5.0	mg/L		01-SEP-10	R1456693
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	25-AUG-10	30-AUG-10	R1456004
Total Organic Carbon		2.0		1.0	mg/L		26-AUG-10	R1453199
Total Suspended Solids		2.0		2.0	mg/L		27-AUG-10	R1452886
Turbidity		3.94		0.10	NTU		25-AUG-10	R1449743
Anions scan (IC)								
Chloride		<0.50		0.50	mg/L		25-AUG-10	R1450226
Fluoride		<0.10		0.10	mg/L		25-AUG-10	R1450226
Nitrite-N		<0.050		0.050	mg/L		25-AUG-10	R1450226
Nitrate-N		<0.050		0.050	mg/L		25-AUG-10	R1450226
Sulfate		1.58		0.50	mg/L		25-AUG-10	R1450226
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.236		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Arsenic (As)-Total		0.00069		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Barium (Ba)-Total		0.00458		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Boron (B)-Total		<0.010		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	26-AUG-10	26-AUG-10	R1451325
Calcium (Ca)-Total		1.65		0.10	mg/L	26-AUG-10	26-AUG-10	R1451325
Cesium (Cs)-Total		<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Chromium (Cr)-Total		<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cobalt (Co)-Total		<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Copper (Cu)-Total		0.00072		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Iron (Fe)-Total		0.301		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Lead (Pb)-Total		0.000174		0.000090	mg/L	26-AUG-10	26-AUG-10	R1451325
Lithium (Li)-Total		<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Magnesium (Mg)-Total		0.733		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Manganese (Mn)-Total		0.00495		0.00030	mg/L	26-AUG-10	26-AUG-10	R1451325

* 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
L924262-7 BGS-6							
Sampled By: CLIENT on 22-AUG-10 @ 07:00							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	0.00024		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Phosphorus (P)-Total	<0.20		0.20	mg/L	26-AUG-10	26-AUG-10	R1451325
Potassium (K)-Total	0.484		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Rubidium (Rb)-Total	0.00134		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Selenium (Se)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Silicon (Si)-Total	0.896		0.050	mg/L	26-AUG-10	26-AUG-10	R1451325
Silver (Ag)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Sodium (Na)-Total	0.502		0.030	mg/L	26-AUG-10	26-AUG-10	R1451325
Strontium (Sr)-Total	0.00819		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Thorium (Th)-Total	0.00020		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tin (Sn)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Titanium (Ti)-Total	0.00961		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Tungsten (W)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Uranium (U)-Total	0.00021		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Vanadium (V)-Total	0.00035		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Zirconium (Zr)-Total	0.00054		0.00040	mg/L	26-AUG-10	26-AUG-10	R1451325
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0117		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Arsenic (As)-Dissolved	0.00057		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Barium (Ba)-Dissolved	0.00242		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Boron (B)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	25-AUG-10	26-AUG-10	R1451179
Calcium (Ca)-Dissolved	1.71		0.050	mg/L	25-AUG-10	26-AUG-10	R1451179
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Copper (Cu)-Dissolved	0.00040		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	25-AUG-10	26-AUG-10	R1451179
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Magnesium (Mg)-Dissolved	0.676		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Manganese (Mn)-Dissolved	0.00047		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Molybdenum (Mo)-Dissolved	0.00021		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Nickel (Ni)-Dissolved	0.00043		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	25-AUG-10	26-AUG-10	R1451179
Potassium (K)-Dissolved	0.428		0.020	mg/L	25-AUG-10	26-AUG-10	R1451179
Rubidium (Rb)-Dissolved	0.00063		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	25-AUG-10	26-AUG-10	R1451179
Silicon (Si)-Dissolved	0.169		0.050	mg/L	25-AUG-10	26-AUG-10	R1451179
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Sodium (Na)-Dissolved	0.504		0.020	mg/L	25-AUG-10	26-AUG-10	R1451179
Strontium (Sr)-Dissolved	0.00707		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179

* 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
L924262-8 DUP-2							
Sampled By: CLIENT on 22-AUG-10 @ 07:55							
Matrix: WATER							
Total Metals by ICP-MS							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	26-AUG-10	26-AUG-10	R1451325
Calcium (Ca)-Total	1.72		0.10	mg/L	26-AUG-10	26-AUG-10	R1451325
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Chromium (Cr)-Total	0.0011		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Copper (Cu)-Total	0.00077		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Iron (Fe)-Total	0.297		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Lead (Pb)-Total	0.000333		0.000090	mg/L	26-AUG-10	26-AUG-10	R1451325
Lithium (Li)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Magnesium (Mg)-Total	0.753		0.010	mg/L	26-AUG-10	26-AUG-10	R1451325
Manganese (Mn)-Total	0.00547		0.00030	mg/L	26-AUG-10	26-AUG-10	R1451325
Molybdenum (Mo)-Total	0.00022		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	26-AUG-10	26-AUG-10	R1451325
Phosphorus (P)-Total	<0.20		0.20	mg/L	26-AUG-10	26-AUG-10	R1451325
Potassium (K)-Total	0.507		0.020	mg/L	26-AUG-10	26-AUG-10	R1451325
Rubidium (Rb)-Total	0.00143		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Selenium (Se)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Silicon (Si)-Total	0.949		0.050	mg/L	26-AUG-10	26-AUG-10	R1451325
Silver (Ag)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Sodium (Na)-Total	0.518		0.030	mg/L	26-AUG-10	26-AUG-10	R1451325
Strontium (Sr)-Total	0.00825		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Thorium (Th)-Total	0.00022		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Tin (Sn)-Total	<0.00020		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Titanium (Ti)-Total	0.0104		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Tungsten (W)-Total	<0.0010		0.0010	mg/L	26-AUG-10	26-AUG-10	R1451325
Uranium (U)-Total	0.00023		0.00010	mg/L	26-AUG-10	26-AUG-10	R1451325
Vanadium (V)-Total	0.00045		0.00020	mg/L	26-AUG-10	26-AUG-10	R1451325
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	26-AUG-10	26-AUG-10	R1451325
Zirconium (Zr)-Total	0.00054		0.00040	mg/L	26-AUG-10	26-AUG-10	R1451325
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0101		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Arsenic (As)-Dissolved	0.00064		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Barium (Ba)-Dissolved	0.00276		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Boron (B)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Cadmium (Cd)-Dissolved	0.000010		0.000010	mg/L	25-AUG-10	26-AUG-10	R1451179
Calcium (Ca)-Dissolved	1.85		0.050	mg/L	25-AUG-10	26-AUG-10	R1451179
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Copper (Cu)-Dissolved	0.00040		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	25-AUG-10	26-AUG-10	R1451179
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	25-AUG-10	26-AUG-10	R1451179
Magnesium (Mg)-Dissolved	0.686		0.010	mg/L	25-AUG-10	26-AUG-10	R1451179
Manganese (Mn)-Dissolved	0.00028		0.00020	mg/L	25-AUG-10	26-AUG-10	R1451179
Molybdenum (Mo)-Dissolved	0.00023		0.00010	mg/L	25-AUG-10	26-AUG-10	R1451179

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

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
EHR	Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

ALK-TOT-WP	Water	Alkalinity	APHA 2320B

Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO₃⁻ and H₂CO₃ endpoints indicated electrometrically.

ANIONS5-IC-WP	Water	Anions scan (IC)	EPA 300.1 IC

This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".

C-DIS-ORG-WP	Water	Dissolved Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

C-TOT-ORG-WP	Water	Total Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

CHLOROA-VA	Water	Chlorophyll a by Fluorometer	EPA 445.0

Chlorophyll and Pheopigments by Fluorometry analysis is carried out using procedures adapted from USEPA Method 445.0. The sample is filtered using either a glass fiber filter or a 0.45 micron Membrane filter. The pigments are extracted from the filter with 90% aqueous acetone. For chlorophyll-a analysis the extract is read using a fluorometer. For pheopigments the extract is first acidified then read. This method is not subject to interferences from chlorophyll b.

EC-WP	Water	Conductivity	APHA 2510B

Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.

ETL-HARDNESS-DIS-WP	Water	Hardness Calculated	Calculated

ETL-HARDNESS-TOT-WP	Water	Hardness Calculated	Calculated

HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0

Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.

MET-D-L-MS-WP	Water	Dissolved Metals by ICP-MS	U.S. EPA 200.8-DL

Dissolved Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the Examination of Water and Wastewater method 3030B for filtration through a 0.45 um filter and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
MET-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
N-TOTKJ-WP	Water	Total Kjeldahl Nitrogen	Quickchem method 10-107-06-2-E Lachat
Samples are digested with a sulphuric acid solution, cooled, diluted with water, and analyzed for ammonia. Total Kjeldahl nitrogen is the sum of free-ammonia and organic nitrogen compounds which are converted to ammonium sulphate through this digestion process. Analysis is performed by Flow Injection Analysis (FIA). The pH of the digested sample is raised to a known, basic pH by neutralization with a concentrated buffer solution. This neutralization converts the ammonium cation to ammonia. The ammonia produced is heated with salicylate and hypochlorite to produce blue colour which is proportional to the ammonia concentration.			
NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
Ammonia - Colourimetric using Salicylate-nitroprusside and hypochlorite, in an alkaline phosphate buffer.			
NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
P-ORTHO-SOL-WP	Water	Ortho Phosphorous Soluble	APHA, 1998 P-OS
Quantitative orthophosphorous values are determined without prior digestion of the sample. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
P-TOTAL-WP	Water	Phosphorus, Total	APHA, 1998 P-T
Samples are digested using a sulphuric acid-persulfate mixture to convert organic phosphorous to orthophosphate. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
PH-WP	Water	pH	APHA 4500H
pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.			
SOLIDS-TDS-WP	Water	Total Dissolved Solids	APHA 2540
The residue remaining in a prepared casserole after passing the sample through a 1.2 um Whatman GF/C glass microfibre filter and drying at 180 degrees C. Samples may be dried at 105 degrees C if the client specifically requests this drying temperature.			
SOLIDS-TOTSUS-LR-WP	Water	Total Suspended Solids	APHA 2540 LR
The residue retained by a prepared 1.5 um Whatman 934-AH glass microfibre filter dried at 105 degrees C. A method detection limit of 2 mg/L can be achieved when 500 mL of sample is used.			
TURBIDITY-WP	Water	Turbidity	APHA, 1998, 2130B
A strong light beam is sent through a transparent tube containing the sample. Light that is reflected at 90 degrees to the axis by suspended particles is detected by the photocell. The electrical response is proportional to the sample turbidity.			

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

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

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
WP	ALS LABORATORY GROUP - WINNIPEG, MANITOBA, CANADA
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

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_t - milligrams per kilogram based on wet weight of sample

mg/kg l_w_t - 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.

[illegible]



AGNICO- EAGLE MINING LTD
ATTN: RYAN VANENGEN
MEADOWBANK DIV.
P.O. BOX 540
BAKER LAKE NU X0X 0A0
Phone: 604- 622- 6527

Date Received: 01- SEP- 10
Report Date: 20- SEP- 10 14:43 (MT)
Version: FINAL

Certificate of Analysis

Lab Work Order #: L926625
Project P.O. #: NOT SUBMITTED
Job Reference: DIKE
Legal Site Desc:
C of C Numbers:

Paul Nicolas
Account Manager

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ADDRESS: 1329 Niakwa Road East, Unit 12, Winnipeg, MB R2J 3T4 Canada | Phone: +1 204 255 9720 | Fax: +1 204 255 9721
MANITOBA TECHNOLOGY CENTRE LTD. 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
L926625-1 BGE-1							
Sampled By: CLIENT on 29-AUG-10 @ 16:32							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		08-SEP-10	R1461490
Chlorophyll a	0.421		0.010	ug/L	15-SEP-10	16-SEP-10	R1468325
Dissolved Organic Carbon	1.4		1.0	mg/L		02-SEP-10	R1458364
Hardness (as CaCO3)	7.46		0.20	mg/L		09-SEP-10	
Hardness (as CaCO3)	7.46		0.30	mg/L		09-SEP-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	03-SEP-10	03-SEP-10	R1459886
Nitrate and Nitrite as N	<0.071		0.071	mg/L		02-SEP-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		02-SEP-10	R1457124
Phosphorus, Total	<0.010	DLA	0.010	mg/L		02-SEP-10	R1457090
Total Dissolved Solids	<5.0		5.0	mg/L		03-SEP-10	R1459943
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	01-SEP-10	02-SEP-10	R1457940
Total Organic Carbon	1.6		1.0	mg/L		02-SEP-10	R1458364
Total Suspended Solids	3.2		2.0	mg/L		03-SEP-10	R1459943
Turbidity	2.75		0.10	NTU		01-SEP-10	R1456621
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		01-SEP-10	R1457084
Fluoride	<0.10		0.10	mg/L		01-SEP-10	R1457084
Nitrite-N	<0.050		0.050	mg/L		01-SEP-10	R1457084
Nitrate-N	<0.050		0.050	mg/L		01-SEP-10	R1457084
Sulfate	1.56		0.50	mg/L		01-SEP-10	R1457084
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.176		0.0050	mg/L	02-SEP-10	02-SEP-10	R1459209
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Arsenic (As)-Total	0.00063		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Barium (Ba)-Total	0.00415		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Boron (B)-Total	<0.010		0.010	mg/L	02-SEP-10	02-SEP-10	R1459209
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	02-SEP-10	02-SEP-10	R1459209
Calcium (Ca)-Total	1.76		0.10	mg/L	02-SEP-10	02-SEP-10	R1459209
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Copper (Cu)-Total	0.00073		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Iron (Fe)-Total	0.208		0.020	mg/L	02-SEP-10	02-SEP-10	R1459209
Lead (Pb)-Total	<0.000090		0.000090	mg/L	02-SEP-10	08-SEP-10	R1461820
Lithium (Li)-Total	<0.0020		0.0020	mg/L	02-SEP-10	02-SEP-10	R1459209
Magnesium (Mg)-Total	0.746		0.010	mg/L	02-SEP-10	02-SEP-10	R1459209
Manganese (Mn)-Total	0.00448		0.00030	mg/L	02-SEP-10	02-SEP-10	R1459209
Molybdenum (Mo)-Total	0.00023		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	02-SEP-10	02-SEP-10	R1459209
Phosphorus (P)-Total	<0.20		0.20	mg/L	02-SEP-10	02-SEP-10	R1459209
Potassium (K)-Total	0.493		0.020	mg/L	02-SEP-10	02-SEP-10	R1459209
Rubidium (Rb)-Total	0.00125		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Selenium (Se)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Silicon (Si)-Total	0.423		0.050	mg/L	02-SEP-10	02-SEP-10	R1459209
Silver (Ag)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Sodium (Na)-Total	0.473		0.030	mg/L	02-SEP-10	02-SEP-10	R1459209
Strontium (Sr)-Total	0.00831		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209

* 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
L926625-1	BGE-1						
Sampled By:	CLIENT on 29-AUG-10 @ 16:32						
Matrix:	WATER						
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Thorium (Th)-Total	0.00017		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tin (Sn)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Titanium (Ti)-Total	0.00711		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Tungsten (W)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Uranium (U)-Total	0.00019		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Vanadium (V)-Total	0.00035		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	02-SEP-10	02-SEP-10	R1459209
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	02-SEP-10	02-SEP-10	R1459209
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0032		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Arsenic (As)-Dissolved	0.00043		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Barium (Ba)-Dissolved	0.00234		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Boron (B)-Dissolved	<0.010		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	01-SEP-10	03-SEP-10	R1459207
Calcium (Ca)-Dissolved	1.73		0.050	mg/L	01-SEP-10	03-SEP-10	R1459207
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Copper (Cu)-Dissolved	0.00041		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	01-SEP-10	08-SEP-10	R1461820
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Magnesium (Mg)-Dissolved	0.669		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Manganese (Mn)-Dissolved	0.00064		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Molybdenum (Mo)-Dissolved	0.00023		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Nickel (Ni)-Dissolved	0.00033		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	01-SEP-10	03-SEP-10	R1459207
Potassium (K)-Dissolved	0.435		0.020	mg/L	01-SEP-10	03-SEP-10	R1459207
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	01-SEP-10	03-SEP-10	R1459207
Silicon (Si)-Dissolved	0.130		0.050	mg/L	01-SEP-10	03-SEP-10	R1459207
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Sodium (Na)-Dissolved	0.489		0.020	mg/L	01-SEP-10	03-SEP-10	R1459207
Strontium (Sr)-Dissolved	0.00743		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	01-SEP-10	03-SEP-10	R1459207
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	01-SEP-10	03-SEP-10	R1459207
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	8.0		1.0	mg/L		01-SEP-10	R1456608

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L926625-1	BGE-1							
Sampled By:	CLIENT on 29-AUG-10 @ 16:32							
Matrix:	WATER							
Alkalinity								
Bicarbonate (HCO3)		9.7		2.0	mg/L		01-SEP-10	R1456608
Carbonate (CO3)		<0.60		0.60	mg/L		01-SEP-10	R1456608
Hydroxide (OH)		<0.40		0.40	mg/L		01-SEP-10	R1456608
Conductivity								
Conductivity		18.2		0.40	umhos/cm		20-SEP-10	R1471515
pH								
pH		6.75		0.10	pH units		01-SEP-10	R1456608
L926625-2	BGS-1							
Sampled By:	CLIENT on 29-AUG-10 @ 15:45							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		08-SEP-10	R1461490
Chlorophyll a		0.427		0.020	ug/L	15-SEP-10	16-SEP-10	R1468325
Dissolved Organic Carbon		1.2		1.0	mg/L		02-SEP-10	R1458364
Hardness (as CaCO3)		7.54		0.20	mg/L		07-SEP-10	
Hardness (as CaCO3)		7.54		0.30	mg/L		07-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	03-SEP-10	03-SEP-10	R1459886
Nitrate and Nitrite as N		<0.071		0.071	mg/L		02-SEP-10	
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		02-SEP-10	R1457124
Phosphorus, Total		<0.010	DLA	0.010	mg/L		02-SEP-10	R1457090
Total Dissolved Solids		<5.0		5.0	mg/L		03-SEP-10	R1459943
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	01-SEP-10	02-SEP-10	R1457940
Total Organic Carbon		1.4		1.0	mg/L		02-SEP-10	R1458364
Total Suspended Solids		5.2		2.0	mg/L		03-SEP-10	R1459943
Turbidity		5.34		0.10	NTU		01-SEP-10	R1456621
Anions scan (IC)								
Chloride		<0.50		0.50	mg/L		01-SEP-10	R1457084
Fluoride		<0.10		0.10	mg/L		01-SEP-10	R1457084
Nitrite-N		<0.050		0.050	mg/L		01-SEP-10	R1457084
Nitrate-N		<0.050		0.050	mg/L		01-SEP-10	R1457084
Sulfate		1.52		0.50	mg/L		01-SEP-10	R1457084
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.274		0.0050	mg/L	02-SEP-10	02-SEP-10	R1459209
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Arsenic (As)-Total		0.00052		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Barium (Ba)-Total		0.00516		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Boron (B)-Total		<0.010		0.010	mg/L	02-SEP-10	02-SEP-10	R1459209
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	02-SEP-10	02-SEP-10	R1459209
Calcium (Ca)-Total		1.73		0.10	mg/L	02-SEP-10	02-SEP-10	R1459209
Cesium (Cs)-Total		<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Chromium (Cr)-Total		0.0015		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Cobalt (Co)-Total		0.00021		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Copper (Cu)-Total		0.00213		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Iron (Fe)-Total		0.392		0.020	mg/L	02-SEP-10	02-SEP-10	R1459209
Lead (Pb)-Total		0.000252		0.000090	mg/L	02-SEP-10	02-SEP-10	R1459209
Lithium (Li)-Total		<0.0020		0.0020	mg/L	02-SEP-10	02-SEP-10	R1459209
Magnesium (Mg)-Total		0.786		0.010	mg/L	02-SEP-10	02-SEP-10	R1459209
Manganese (Mn)-Total		0.00693		0.00030	mg/L	02-SEP-10	02-SEP-10	R1459209

* 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
L926625-2 BGS-1							
Sampled By: CLIENT on 29-AUG-10 @ 15:45							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	02-SEP-10	02-SEP-10	R1459209
Phosphorus (P)-Total	<0.20		0.20	mg/L	02-SEP-10	02-SEP-10	R1459209
Potassium (K)-Total	0.526		0.020	mg/L	02-SEP-10	02-SEP-10	R1459209
Rubidium (Rb)-Total	0.00162		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Selenium (Se)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Silicon (Si)-Total	0.560		0.050	mg/L	02-SEP-10	02-SEP-10	R1459209
Silver (Ag)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Sodium (Na)-Total	0.479		0.030	mg/L	02-SEP-10	02-SEP-10	R1459209
Strontium (Sr)-Total	0.00829		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Thorium (Th)-Total	0.00029		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tin (Sn)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Titanium (Ti)-Total	0.0135		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Tungsten (W)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Uranium (U)-Total	0.00026		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Vanadium (V)-Total	0.00059		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	02-SEP-10	02-SEP-10	R1459209
Zirconium (Zr)-Total	0.00056		0.00040	mg/L	02-SEP-10	02-SEP-10	R1459209
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0041		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Arsenic (As)-Dissolved	0.00022		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Barium (Ba)-Dissolved	0.00225		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Boron (B)-Dissolved	<0.010		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	01-SEP-10	03-SEP-10	R1459207
Calcium (Ca)-Dissolved	1.60		0.050	mg/L	01-SEP-10	03-SEP-10	R1459207
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Copper (Cu)-Dissolved	0.00046		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	01-SEP-10	03-SEP-10	R1459207
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Magnesium (Mg)-Dissolved	0.638		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Manganese (Mn)-Dissolved	0.00076		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Molybdenum (Mo)-Dissolved	0.00021		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Nickel (Ni)-Dissolved	0.00032		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	01-SEP-10	03-SEP-10	R1459207
Potassium (K)-Dissolved	0.436		0.020	mg/L	01-SEP-10	03-SEP-10	R1459207
Rubidium (Rb)-Dissolved	0.00063		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	01-SEP-10	03-SEP-10	R1459207
Silicon (Si)-Dissolved	0.119		0.050	mg/L	01-SEP-10	03-SEP-10	R1459207
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Sodium (Na)-Dissolved	0.487		0.020	mg/L	01-SEP-10	03-SEP-10	R1459207
Strontium (Sr)-Dissolved	0.00722		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L926625-2	BGS-1							
Sampled By: CLIENT on 29-AUG-10 @ 15:45								
Matrix: WATER								
Dissolved Metals by ICP-MS								
Thorium (Th)-Dissolved		<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Tin (Sn)-Dissolved		<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Titanium (Ti)-Dissolved		<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Tungsten (W)-Dissolved		<0.0010		0.0010	mg/L	01-SEP-10	03-SEP-10	R1459207
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Vanadium (V)-Dissolved		<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Zinc (Zn)-Dissolved		<0.0020		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Zirconium (Zr)-Dissolved		<0.00040		0.00040	mg/L	01-SEP-10	03-SEP-10	R1459207
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		7.7		1.0	mg/L		01-SEP-10	R1456608
Bicarbonate (HCO3)		9.4		2.0	mg/L		01-SEP-10	R1456608
Carbonate (CO3)		<0.60		0.60	mg/L		01-SEP-10	R1456608
Hydroxide (OH)		<0.40		0.40	mg/L		01-SEP-10	R1456608
Conductivity								
Conductivity		17.9		0.40	umhos/cm		14-SEP-10	R1465804
pH								
pH		6.76		0.10	pH units		01-SEP-10	R1456608
L926625-3	BGS-2							
Sampled By: CLIENT on 29-AUG-10 @ 15:30								
Matrix: WATER								
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		08-SEP-10	R1461490
Chlorophyll a		0.426		0.020	ug/L	15-SEP-10	16-SEP-10	R1468325
Dissolved Organic Carbon		1.4		1.0	mg/L		02-SEP-10	R1458364
Hardness (as CaCO3)		7.23		0.30	mg/L		07-SEP-10	
Hardness (as CaCO3)		7.23		0.20	mg/L		07-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	03-SEP-10	03-SEP-10	R1459886
Nitrate and Nitrite as N		<0.071		0.071	mg/L		02-SEP-10	
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		02-SEP-10	R1457124
Phosphorus, Total		0.0138		0.0020	mg/L		02-SEP-10	R1457090
Total Dissolved Solids		14.0		5.0	mg/L		03-SEP-10	R1459943
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	01-SEP-10	02-SEP-10	R1457940
Total Organic Carbon		1.4		1.0	mg/L		02-SEP-10	R1458364
Total Suspended Solids		2.8		2.0	mg/L		03-SEP-10	R1459943
Turbidity		4.06		0.10	NTU		01-SEP-10	R1456621
Anions scan (IC)								
Chloride		<0.50		0.50	mg/L		01-SEP-10	R1457084
Fluoride		<0.10		0.10	mg/L		01-SEP-10	R1457084
Nitrite-N		<0.050		0.050	mg/L		01-SEP-10	R1457084
Nitrate-N		<0.050		0.050	mg/L		01-SEP-10	R1457084
Sulfate		1.51		0.50	mg/L		01-SEP-10	R1457084
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.208		0.0050	mg/L	02-SEP-10	02-SEP-10	R1459209
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Arsenic (As)-Total		0.00045		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Barium (Ba)-Total		0.00442		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Boron (B)-Total		<0.010		0.010	mg/L	02-SEP-10	02-SEP-10	R1459209

* 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
L926625-3 BGS-2							
Sampled By: CLIENT on 29-AUG-10 @ 15:30							
Matrix: WATER							
Total Metals by ICP-MS							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	02-SEP-10	02-SEP-10	R1459209
Calcium (Ca)-Total	1.68		0.10	mg/L	02-SEP-10	02-SEP-10	R1459209
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Chromium (Cr)-Total	0.0011		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Copper (Cu)-Total	0.00082		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Iron (Fe)-Total	0.284		0.020	mg/L	02-SEP-10	02-SEP-10	R1459209
Lead (Pb)-Total	0.000177		0.000090	mg/L	02-SEP-10	02-SEP-10	R1459209
Lithium (Li)-Total	<0.0020		0.0020	mg/L	02-SEP-10	02-SEP-10	R1459209
Magnesium (Mg)-Total	0.740		0.010	mg/L	02-SEP-10	02-SEP-10	R1459209
Manganese (Mn)-Total	0.00540		0.00030	mg/L	02-SEP-10	02-SEP-10	R1459209
Molybdenum (Mo)-Total	0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	02-SEP-10	02-SEP-10	R1459209
Phosphorus (P)-Total	<0.20		0.20	mg/L	02-SEP-10	02-SEP-10	R1459209
Potassium (K)-Total	0.489		0.020	mg/L	02-SEP-10	02-SEP-10	R1459209
Rubidium (Rb)-Total	0.00137		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Selenium (Se)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Silicon (Si)-Total	0.489		0.050	mg/L	02-SEP-10	02-SEP-10	R1459209
Silver (Ag)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Sodium (Na)-Total	0.477		0.030	mg/L	02-SEP-10	02-SEP-10	R1459209
Strontium (Sr)-Total	0.00815		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Thorium (Th)-Total	0.00020		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tin (Sn)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Titanium (Ti)-Total	0.00928		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Tungsten (W)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Uranium (U)-Total	0.00021		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Vanadium (V)-Total	0.00040		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	02-SEP-10	02-SEP-10	R1459209
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	02-SEP-10	02-SEP-10	R1459209
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0063		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Barium (Ba)-Dissolved	0.00232		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Boron (B)-Dissolved	<0.010		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	01-SEP-10	03-SEP-10	R1459207
Calcium (Ca)-Dissolved	1.61		0.050	mg/L	01-SEP-10	03-SEP-10	R1459207
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Copper (Cu)-Dissolved	0.00050		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	01-SEP-10	03-SEP-10	R1459207
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Magnesium (Mg)-Dissolved	0.633		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Manganese (Mn)-Dissolved	0.00057		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Molybdenum (Mo)-Dissolved	0.00019		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207

* 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
L926625-4 BGS-3							
Sampled By: CLIENT on 29-AUG-10 @ 15:14							
Matrix: WATER							
Anions scan (IC)							
Nitrite-N	<0.050		0.050	mg/L		01-SEP-10	R1457084
Nitrate-N	<0.050		0.050	mg/L		01-SEP-10	R1457084
Sulfate	1.52		0.50	mg/L		01-SEP-10	R1457084
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.386		0.0050	mg/L	02-SEP-10	02-SEP-10	R1459209
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Arsenic (As)-Total	0.00085		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Barium (Ba)-Total	0.00917		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Boron (B)-Total	<0.010		0.010	mg/L	02-SEP-10	02-SEP-10	R1459209
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	02-SEP-10	02-SEP-10	R1459209
Calcium (Ca)-Total	1.82		0.10	mg/L	02-SEP-10	02-SEP-10	R1459209
Cesium (Cs)-Total	0.00012		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Chromium (Cr)-Total	0.0020		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Cobalt (Co)-Total	0.00049		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Copper (Cu)-Total	0.00199		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Iron (Fe)-Total	0.634		0.020	mg/L	02-SEP-10	02-SEP-10	R1459209
Lead (Pb)-Total	0.000708		0.000090	mg/L	02-SEP-10	02-SEP-10	R1459209
Lithium (Li)-Total	<0.0020		0.0020	mg/L	02-SEP-10	02-SEP-10	R1459209
Magnesium (Mg)-Total	0.878		0.010	mg/L	02-SEP-10	02-SEP-10	R1459209
Manganese (Mn)-Total	0.0310		0.00030	mg/L	02-SEP-10	02-SEP-10	R1459209
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Nickel (Ni)-Total	0.0025		0.0020	mg/L	02-SEP-10	02-SEP-10	R1459209
Phosphorus (P)-Total	<0.20		0.20	mg/L	02-SEP-10	02-SEP-10	R1459209
Potassium (K)-Total	0.560		0.020	mg/L	02-SEP-10	02-SEP-10	R1459209
Rubidium (Rb)-Total	0.00218		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Selenium (Se)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Silicon (Si)-Total	0.550		0.050	mg/L	02-SEP-10	02-SEP-10	R1459209
Silver (Ag)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Sodium (Na)-Total	0.471		0.030	mg/L	02-SEP-10	02-SEP-10	R1459209
Strontium (Sr)-Total	0.00911		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Thorium (Th)-Total	0.00118		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tin (Sn)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Titanium (Ti)-Total	0.0173		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Tungsten (W)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Uranium (U)-Total	0.00067		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Vanadium (V)-Total	0.00077		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	02-SEP-10	02-SEP-10	R1459209
Zirconium (Zr)-Total	0.00061		0.00040	mg/L	02-SEP-10	02-SEP-10	R1459209
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0034		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Arsenic (As)-Dissolved	0.00031		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Barium (Ba)-Dissolved	0.00289		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Boron (B)-Dissolved	<0.010		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	01-SEP-10	03-SEP-10	R1459207

* 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
L926625-5 BGS-4							
Sampled By: CLIENT on 29-AUG-10 @ 14:05							
Matrix: WATER							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		02-SEP-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		02-SEP-10	R1457124
Phosphorus, Total	<0.010	DLA	0.010	mg/L		02-SEP-10	R1457090
Total Dissolved Solids	<5.0		5.0	mg/L		03-SEP-10	R1459943
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	01-SEP-10	02-SEP-10	R1457940
Total Organic Carbon	1.4		1.0	mg/L		02-SEP-10	R1458364
Total Suspended Solids	2.8		2.0	mg/L		03-SEP-10	R1459943
Turbidity	3.63		0.10	NTU		01-SEP-10	R1456621
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		01-SEP-10	R1457084
Fluoride	<0.10		0.10	mg/L		01-SEP-10	R1457084
Nitrite-N	<0.050		0.050	mg/L		01-SEP-10	R1457084
Nitrate-N	<0.050		0.050	mg/L		01-SEP-10	R1457084
Sulfate	1.54		0.50	mg/L		01-SEP-10	R1457084
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.196		0.0050	mg/L	02-SEP-10	02-SEP-10	R1459209
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Arsenic (As)-Total	0.00060		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Barium (Ba)-Total	0.00439		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Boron (B)-Total	<0.010		0.010	mg/L	02-SEP-10	02-SEP-10	R1459209
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	02-SEP-10	02-SEP-10	R1459209
Calcium (Ca)-Total	1.78		0.10	mg/L	02-SEP-10	02-SEP-10	R1459209
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Copper (Cu)-Total	0.00078		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Iron (Fe)-Total	0.266		0.020	mg/L	02-SEP-10	02-SEP-10	R1459209
Lead (Pb)-Total	0.000163		0.000090	mg/L	02-SEP-10	02-SEP-10	R1459209
Lithium (Li)-Total	<0.0020		0.0020	mg/L	02-SEP-10	02-SEP-10	R1459209
Magnesium (Mg)-Total	0.749		0.010	mg/L	02-SEP-10	02-SEP-10	R1459209
Manganese (Mn)-Total	0.00502		0.00030	mg/L	02-SEP-10	02-SEP-10	R1459209
Molybdenum (Mo)-Total	0.00021		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	02-SEP-10	02-SEP-10	R1459209
Phosphorus (P)-Total	<0.20		0.20	mg/L	02-SEP-10	02-SEP-10	R1459209
Potassium (K)-Total	0.493		0.020	mg/L	02-SEP-10	02-SEP-10	R1459209
Rubidium (Rb)-Total	0.00137		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Selenium (Se)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Silicon (Si)-Total	0.462		0.050	mg/L	02-SEP-10	02-SEP-10	R1459209
Silver (Ag)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Sodium (Na)-Total	0.466		0.030	mg/L	02-SEP-10	02-SEP-10	R1459209
Strontium (Sr)-Total	0.00862		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Thorium (Th)-Total	0.00019		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tin (Sn)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Titanium (Ti)-Total	0.00851		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Tungsten (W)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Uranium (U)-Total	0.00021		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Vanadium (V)-Total	0.00037		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	02-SEP-10	02-SEP-10	R1459209

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L926625-5 BGS-4							
Sampled By: CLIENT on 29-AUG-10 @ 14:05							
Matrix: WATER							
Total Metals by ICP-MS							
Zirconium (Zr)-Total	0.00049		0.00040	mg/L	02-SEP-10	02-SEP-10	R1459209
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0051		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Arsenic (As)-Dissolved	0.00062		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Barium (Ba)-Dissolved	0.00233		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Boron (B)-Dissolved	<0.010		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	01-SEP-10	03-SEP-10	R1459207
Calcium (Ca)-Dissolved	1.64		0.050	mg/L	01-SEP-10	03-SEP-10	R1459207
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Copper (Cu)-Dissolved	0.00038		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	01-SEP-10	03-SEP-10	R1459207
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Magnesium (Mg)-Dissolved	0.650		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Manganese (Mn)-Dissolved	0.00046		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Molybdenum (Mo)-Dissolved	0.00020		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Nickel (Ni)-Dissolved	0.00030		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	01-SEP-10	03-SEP-10	R1459207
Potassium (K)-Dissolved	0.421		0.020	mg/L	01-SEP-10	03-SEP-10	R1459207
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	01-SEP-10	03-SEP-10	R1459207
Silicon (Si)-Dissolved	0.137		0.050	mg/L	01-SEP-10	03-SEP-10	R1459207
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Sodium (Na)-Dissolved	0.497		0.020	mg/L	01-SEP-10	03-SEP-10	R1459207
Strontium (Sr)-Dissolved	0.00735		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	01-SEP-10	03-SEP-10	R1459207
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	01-SEP-10	03-SEP-10	R1459207
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	8.0		1.0	mg/L		01-SEP-10	R1456608
Bicarbonate (HCO3)	9.7		2.0	mg/L		01-SEP-10	R1456608
Carbonate (CO3)	<0.60		0.60	mg/L		01-SEP-10	R1456608
Hydroxide (OH)	<0.40		0.40	mg/L		01-SEP-10	R1456608
Conductivity							
Conductivity	18.4		0.40	umhos/cm		20-SEP-10	R1471515
pH							
pH	6.78		0.10	pH units		01-SEP-10	R1456608

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L926625-6 BGS-5							
Sampled By: CLIENT on 29-AUG-10 @ 14:30							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		08-SEP-10	R1461490
Chlorophyll a	0.293		0.020	ug/L	15-SEP-10	16-SEP-10	R1468325
Dissolved Organic Carbon	1.4		1.0	mg/L		02-SEP-10	R1458364
Hardness (as CaCO3)	7.60		0.30	mg/L		07-SEP-10	
Hardness (as CaCO3)	7.60		0.20	mg/L		07-SEP-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	03-SEP-10	03-SEP-10	R1459886
Nitrate and Nitrite as N	<0.071		0.071	mg/L		02-SEP-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		02-SEP-10	R1457124
Phosphorus, Total	<0.010	DLA	0.010	mg/L		02-SEP-10	R1457090
Total Dissolved Solids	20.0		5.0	mg/L		03-SEP-10	R1459943
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	01-SEP-10	02-SEP-10	R1457940
Total Organic Carbon	1.6		1.0	mg/L		02-SEP-10	R1458364
Total Suspended Solids	3.6		2.0	mg/L		03-SEP-10	R1459943
Turbidity	3.54		0.10	NTU		01-SEP-10	R1456621
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		01-SEP-10	R1457084
Fluoride	<0.10		0.10	mg/L		01-SEP-10	R1457084
Nitrite-N	<0.050		0.050	mg/L		01-SEP-10	R1457084
Nitrate-N	<0.050		0.050	mg/L		01-SEP-10	R1457084
Sulfate	1.52		0.50	mg/L		01-SEP-10	R1457084
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.184		0.0050	mg/L	02-SEP-10	02-SEP-10	R1459209
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Arsenic (As)-Total	0.00060		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Barium (Ba)-Total	0.00417		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Boron (B)-Total	<0.010		0.010	mg/L	02-SEP-10	02-SEP-10	R1459209
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	02-SEP-10	02-SEP-10	R1459209
Calcium (Ca)-Total	1.81		0.10	mg/L	02-SEP-10	02-SEP-10	R1459209
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Copper (Cu)-Total	0.00098		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Iron (Fe)-Total	0.239		0.020	mg/L	02-SEP-10	02-SEP-10	R1459209
Lead (Pb)-Total	0.000147		0.000090	mg/L	02-SEP-10	02-SEP-10	R1459209
Lithium (Li)-Total	<0.0020		0.0020	mg/L	02-SEP-10	02-SEP-10	R1459209
Magnesium (Mg)-Total	0.747		0.010	mg/L	02-SEP-10	02-SEP-10	R1459209
Manganese (Mn)-Total	0.00480		0.00030	mg/L	02-SEP-10	02-SEP-10	R1459209
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	02-SEP-10	02-SEP-10	R1459209
Phosphorus (P)-Total	<0.20		0.20	mg/L	02-SEP-10	02-SEP-10	R1459209
Potassium (K)-Total	0.488		0.020	mg/L	02-SEP-10	02-SEP-10	R1459209
Rubidium (Rb)-Total	0.00128		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Selenium (Se)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Silicon (Si)-Total	0.435		0.050	mg/L	02-SEP-10	02-SEP-10	R1459209
Silver (Ag)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Sodium (Na)-Total	0.468		0.030	mg/L	02-SEP-10	02-SEP-10	R1459209
Strontium (Sr)-Total	0.00853		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209

* 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
L926625-6 BGS-5							
Sampled By: CLIENT on 29-AUG-10 @ 14:30							
Matrix: WATER							
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Thorium (Th)-Total	0.00018		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tin (Sn)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Titanium (Ti)-Total	0.00834		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Tungsten (W)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Uranium (U)-Total	0.00021		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Vanadium (V)-Total	0.00036		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	02-SEP-10	02-SEP-10	R1459209
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	02-SEP-10	02-SEP-10	R1459209
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0038		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Arsenic (As)-Dissolved	0.00085		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Barium (Ba)-Dissolved	0.00235		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Boron (B)-Dissolved	<0.010		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	01-SEP-10	03-SEP-10	R1459207
Calcium (Ca)-Dissolved	1.62		0.050	mg/L	01-SEP-10	03-SEP-10	R1459207
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Copper (Cu)-Dissolved	0.00035		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Lead (Pb)-Dissolved	0.000120		0.000090	mg/L	01-SEP-10	03-SEP-10	R1459207
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Magnesium (Mg)-Dissolved	0.635		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Manganese (Mn)-Dissolved	0.00043		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Molybdenum (Mo)-Dissolved	0.00021		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Nickel (Ni)-Dissolved	0.00029		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	01-SEP-10	03-SEP-10	R1459207
Potassium (K)-Dissolved	0.413		0.020	mg/L	01-SEP-10	03-SEP-10	R1459207
Rubidium (Rb)-Dissolved	0.00060		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	01-SEP-10	03-SEP-10	R1459207
Silicon (Si)-Dissolved	0.123		0.050	mg/L	01-SEP-10	03-SEP-10	R1459207
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Sodium (Na)-Dissolved	0.478		0.020	mg/L	01-SEP-10	03-SEP-10	R1459207
Strontium (Sr)-Dissolved	0.00737		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	01-SEP-10	03-SEP-10	R1459207
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	01-SEP-10	03-SEP-10	R1459207
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.9		1.0	mg/L		01-SEP-10	R1456608

* 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
L926625-7 BGS-6							
Sampled By: CLIENT on 29-AUG-10 @ 14:50							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	02-SEP-10	02-SEP-10	R1459209
Phosphorus (P)-Total	<0.20		0.20	mg/L	02-SEP-10	02-SEP-10	R1459209
Potassium (K)-Total	0.509		0.020	mg/L	02-SEP-10	02-SEP-10	R1459209
Rubidium (Rb)-Total	0.00115		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Selenium (Se)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Silicon (Si)-Total	0.511		0.050	mg/L	02-SEP-10	02-SEP-10	R1459209
Silver (Ag)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Sodium (Na)-Total	0.612		0.030	mg/L	02-SEP-10	02-SEP-10	R1459209
Strontium (Sr)-Total	0.00764		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Thorium (Th)-Total	0.00019		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Tin (Sn)-Total	<0.00020		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Titanium (Ti)-Total	0.00746		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Tungsten (W)-Total	<0.0010		0.0010	mg/L	02-SEP-10	02-SEP-10	R1459209
Uranium (U)-Total	0.00019		0.00010	mg/L	02-SEP-10	02-SEP-10	R1459209
Vanadium (V)-Total	0.00028		0.00020	mg/L	02-SEP-10	02-SEP-10	R1459209
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	02-SEP-10	02-SEP-10	R1459209
Zirconium (Zr)-Total	0.00055		0.00040	mg/L	02-SEP-10	02-SEP-10	R1459209
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0135		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	08-SEP-10	R1461820
Barium (Ba)-Dissolved	0.00262		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Boron (B)-Dissolved	<0.010		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	01-SEP-10	03-SEP-10	R1459207
Calcium (Ca)-Dissolved	1.67		0.050	mg/L	01-SEP-10	03-SEP-10	R1459207
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Chromium (Cr)-Dissolved	0.00078		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Copper (Cu)-Dissolved	0.00047		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Iron (Fe)-Dissolved	0.032		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	01-SEP-10	08-SEP-10	R1461820
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Magnesium (Mg)-Dissolved	0.662		0.010	mg/L	01-SEP-10	03-SEP-10	R1459207
Manganese (Mn)-Dissolved	0.00100		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Molybdenum (Mo)-Dissolved	0.00020		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Nickel (Ni)-Dissolved	0.00039		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	01-SEP-10	03-SEP-10	R1459207
Potassium (K)-Dissolved	0.418		0.020	mg/L	01-SEP-10	03-SEP-10	R1459207
Rubidium (Rb)-Dissolved	0.00063		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	01-SEP-10	03-SEP-10	R1459207
Silicon (Si)-Dissolved	0.134		0.050	mg/L	01-SEP-10	03-SEP-10	R1459207
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Sodium (Na)-Dissolved	0.497		0.020	mg/L	01-SEP-10	03-SEP-10	R1459207
Strontium (Sr)-Dissolved	0.00741		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L926625-7	BGS-6							
Sampled By:	CLIENT on 29-AUG-10 @ 14:50							
Matrix:	WATER							
Dissolved Metals by ICP-MS								
Thorium (Th)-Dissolved	<0.00010			0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Tin (Sn)-Dissolved	<0.00020			0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Titanium (Ti)-Dissolved	0.00024			0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Tungsten (W)-Dissolved	<0.0010			0.0010	mg/L	01-SEP-10	03-SEP-10	R1459207
Uranium (U)-Dissolved	<0.00010			0.00010	mg/L	01-SEP-10	03-SEP-10	R1459207
Vanadium (V)-Dissolved	<0.00020			0.00020	mg/L	01-SEP-10	03-SEP-10	R1459207
Zinc (Zn)-Dissolved	<0.0020			0.0020	mg/L	01-SEP-10	03-SEP-10	R1459207
Zirconium (Zr)-Dissolved	<0.00040			0.00040	mg/L	01-SEP-10	03-SEP-10	R1459207
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)	8.0			1.0	mg/L		01-SEP-10	R1456608
Bicarbonate (HCO3)	9.7			2.0	mg/L		01-SEP-10	R1456608
Carbonate (CO3)	<0.60			0.60	mg/L		01-SEP-10	R1456608
Hydroxide (OH)	<0.40			0.40	mg/L		01-SEP-10	R1456608
Conductivity								
Conductivity	18.4			0.40	umhos/cm		20-SEP-10	R1471515
pH								
pH	6.81			0.10	pH units		01-SEP-10	R1456608

* 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	L926625-1, -2, -3, -4, -5, -6, -7

Qualifiers for Sample Submission Listed:

Qualifier	Description
EHR	Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

ALK-TOT-WP	Water	Alkalinity	APHA 2320B

Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO₃⁻ and H₂CO₃ endpoints indicated electrometrically.

ANIONS5-IC-WP	Water	Anions scan (IC)	EPA 300.1 IC

This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".

C-DIS-ORG-WP	Water	Dissolved Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

C-TOT-ORG-WP	Water	Total Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

CHLOROA-VA	Water	Chlorophyll a by Fluorometer	EPA 445.0

Chlorophyll and Pheopigments by Fluorometry analysis is carried out using procedures adapted from USEPA Method 445.0. The sample is filtered using either a glass fiber filter or a 0.45 micron Membrane filter. The pigments are extracted from the filter with 90% aqueous acetone. For chlorophyll-a analysis the extract is read using a fluorometer. For pheopigments the extract is first acidified then read. This method is not subject to interferences from chlorophyll b.

EC-WP	Water	Conductivity	APHA 2510B

Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.

ETL-HARDNESS-DIS-WP	Water	Hardness Calculated	Calculated

ETL-HARDNESS-TOT-WP	Water	Hardness Calculated	Calculated

HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.			
MET-D-L-MS-WP	Water	Dissolved Metals by ICP-MS	U.S. EPA 200.8-DL
Dissolved Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the Examination of Water and Wastewater method 3030B for filtration through a 0.45 um filter and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
MET-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
N-TOTKJ-WP	Water	Total Kjeldahl Nitrogen	Quickchem method 10-107-06-2-E Lachat
Samples are digested with a sulphuric acid solution, cooled, diluted with water, and analyzed for ammonia. Total Kjeldahl nitrogen is the sum of free-ammonia and organic nitrogen compounds which are converted to ammonium sulphate through this digestion process. Analysis is performed by Flow Injection Analysis (FIA). The pH of the digested sample is raised to a known, basic pH by neutralization with a concentrated buffer solution. This neutralization converts the ammonium cation to ammonia. The ammonia produced is heated with salicylate and hypochlorite to produce blue colour which is proportional to the ammonia concentration.			
NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
Ammonia - Colourimetric using Salicylate-nitroprusside and hypochlorite, in an alkaline phosphate buffer.			
NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
P-ORTHO-SOL-WP	Water	Ortho Phosphorous Soluble	APHA, 1998 P-OS
Quantitative orthophosphorous values are determined without prior digestion of the sample. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
P-TOTAL-WP	Water	Phosphorus, Total	APHA, 1998 P-T
Samples are digested using a sulphuric acid-persulfate mixture to convert organic phosphorous to orthophosphate. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
PH-WP	Water	pH	APHA 4500H
pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.			
SOLIDS-TDS-WP	Water	Total Dissolved Solids	APHA 2540
The residue remaining in a prepared casserole after passing the sample through a 1.2 um Whatman GF/C glass microfibre filter and drying at 180 degrees C. Samples may be dried at 105 degrees C if the client specifically requests this drying temperature.			
SOLIDS-TOTSUS-LR-WP	Water	Total Suspended Solids	APHA 2540 LR
The residue retained by a prepared 1.5 um Whatman 934-AH glass microfibre filter dried at 105 degrees C. A method detection limit of 2 mg/L can be achieved when 500 mL of sample is used.			
TURBIDITY-WP	Water	Turbidity	APHA, 1998, 2130B

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

A strong light beam is sent through a transparent tube containing the sample. Light that is reflected at 90 degrees to the axis by suspended particles is detected by the photocell. The electrical response is proportional to the sample turbidity.

** 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
WP	ALS LABORATORY GROUP - WINNIPEG, MANITOBA, CANADA
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

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.

[illegible]

* BLS-6 preserved 100 mL amber was broken *



AGNICO- EAGLE MINING LTD
ATTN: RYAN VANENGEN
MEADOWBANK DIV.
P.O. BOX 540
BAKER LAKE NU X0X 0A0
Phone: 604- 622- 6527

Date Received: 09- SEP- 10
Report Date: 18- MAR- 11 12:23 (MT)
Version: FINAL REV. 2

Certificate of Analysis

Lab Work Order #: L929414
Project P.O. #: NOT SUBMITTED
Job Reference: DIKE
Legal Site Desc:
C of C Numbers:

Comments:

18- MAR- 11: This is a revised report. Anion results have been removed from all samples due to analytical error.

Paul Nicolas
Account Manager

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

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MANITOBA TECHNOLOGY CENTRE LTD. 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
L929414-1 BGE-1							
Sampled By: CLIENT on 04-SEP-10 @ 14:00							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		15-SEP-10	R1467976
Chlorophyll a	0.100		0.010	ug	20-SEP-10	21-SEP-10	R1473012
Dissolved Organic Carbon	1.8		1.0	mg/L		09-SEP-10	R1463865
Hardness (as CaCO3)	7.10		0.30	mg/L		15-SEP-10	
Hardness (as CaCO3)	7.10		0.20	mg/L		15-SEP-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		10-SEP-10	R1463895
Phosphorus, Total	0.0150		0.0020	mg/L		10-SEP-10	R1462916
Total Dissolved Solids	<5.0		5.0	mg/L		10-SEP-10	R1464127
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	09-SEP-10	14-SEP-10	R1466040
Total Organic Carbon	2.2		1.0	mg/L		09-SEP-10	R1463865
Total Suspended Solids	<2.0		2.0	mg/L		10-SEP-10	R1464127
Turbidity	2.64		0.10	NTU		09-SEP-10	R1462440
Note: Anion results unavailable due to lab error.							
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0904		0.0050	mg/L	10-SEP-10	11-SEP-10	R1463946
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Arsenic (As)-Total	0.00072		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Barium (Ba)-Total	0.00313		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Boron (B)-Total	<0.010		0.010	mg/L	10-SEP-10	11-SEP-10	R1463946
Cadmium (Cd)-Total	0.000050		0.000010	mg/L	10-SEP-10	14-SEP-10	R1466436
Calcium (Ca)-Total	1.74		0.10	mg/L	10-SEP-10	11-SEP-10	R1463946
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	10-SEP-10	11-SEP-10	R1463946
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	10-SEP-10	11-SEP-10	R1463946
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Copper (Cu)-Total	0.00061		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Iron (Fe)-Total	0.109		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Lead (Pb)-Total	0.000205		0.000090	mg/L	10-SEP-10	14-SEP-10	R1466436
Lithium (Li)-Total	<0.0020		0.0020	mg/L	10-SEP-10	11-SEP-10	R1463946
Magnesium (Mg)-Total	0.719		0.010	mg/L	10-SEP-10	11-SEP-10	R1463946
Manganese (Mn)-Total	0.00271		0.00030	mg/L	10-SEP-10	11-SEP-10	R1463946
Molybdenum (Mo)-Total	0.00021		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	10-SEP-10	11-SEP-10	R1463946
Phosphorus (P)-Total	<0.20		0.20	mg/L	10-SEP-10	11-SEP-10	R1463946
Potassium (K)-Total	0.458		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Rubidium (Rb)-Total	0.00096		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Selenium (Se)-Total	<0.0010		0.0010	mg/L	10-SEP-10	11-SEP-10	R1463946
Silicon (Si)-Total	0.283		0.050	mg/L	10-SEP-10	11-SEP-10	R1463946
Silver (Ag)-Total	<0.00010		0.00010	mg/L	10-SEP-10	11-SEP-10	R1463946
Sodium (Na)-Total	0.501		0.030	mg/L	10-SEP-10	11-SEP-10	R1463946
Strontium (Sr)-Total	0.00831		0.00010	mg/L	10-SEP-10	11-SEP-10	R1463946
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	10-SEP-10	11-SEP-10	R1463946
Thorium (Th)-Total	<0.00010		0.00010	mg/L	10-SEP-10	11-SEP-10	R1463946
Tin (Sn)-Total	<0.00020		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Titanium (Ti)-Total	0.00421		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Tungsten (W)-Total	<0.0010		0.0010	mg/L	10-SEP-10	11-SEP-10	R1463946
Uranium (U)-Total	0.00015		0.00010	mg/L	10-SEP-10	11-SEP-10	R1463946

* 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
L929414-1	BGE-1						
Sampled By:	CLIENT on 04-SEP-10 @ 14:00						
Matrix:	WATER						
Total Metals by ICP-MS							
Vanadium (V)-Total	<0.00020		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	10-SEP-10	11-SEP-10	R1463946
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	10-SEP-10	11-SEP-10	R1463946
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0032		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Arsenic (As)-Dissolved	0.00076		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Barium (Ba)-Dissolved	0.00185		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Cadmium (Cd)-Dissolved	0.000028		0.000010	mg/L	09-SEP-10	14-SEP-10	R1466436
Calcium (Ca)-Dissolved	1.70		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Cesium (Cs)-Dissolved	0.00013		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Copper (Cu)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-SEP-10	14-SEP-10	R1466436
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Magnesium (Mg)-Dissolved	0.694		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Manganese (Mn)-Dissolved	0.00080		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Molybdenum (Mo)-Dissolved	0.00037		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Nickel (Ni)-Dissolved	0.00052		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-SEP-10	10-SEP-10	R1464386
Potassium (K)-Dissolved	0.443		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Rubidium (Rb)-Dissolved	0.00064		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Silicon (Si)-Dissolved	0.131		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Silver (Ag)-Dissolved	0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Sodium (Na)-Dissolved	0.515		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Strontium (Sr)-Dissolved	0.00795		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Thallium (Tl)-Dissolved	0.00013		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Uranium (U)-Dissolved	0.00022		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	09-SEP-10	10-SEP-10	R1464386
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	8.0		1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)	9.8		2.0	mg/L		09-SEP-10	R1462485
Carbonate (CO3)	<0.60		0.60	mg/L		09-SEP-10	R1462485
Hydroxide (OH)	<0.40		0.40	mg/L		09-SEP-10	R1462485
Conductivity							
Conductivity	20.8		0.40	umhos/cm		09-SEP-10	R1462485
pH							
pH	7.22		0.10	pH units		09-SEP-10	R1462485

* 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
L929414-1 BGE-1 Sampled By: CLIENT on 04-SEP-10 @ 14:00 Matrix: WATER							
L929414-2 BGS-1 Sampled By: CLIENT on 04-SEP-10 @ 14:30 Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		15-SEP-10	R1467976
Chlorophyll a	0.186		0.010	ug	20-SEP-10	21-SEP-10	R1473012
Dissolved Organic Carbon	1.6		1.0	mg/L		09-SEP-10	R1463865
Hardness (as CaCO3)	6.65		0.20	mg/L		14-SEP-10	
Hardness (as CaCO3)	6.65		0.30	mg/L		14-SEP-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		10-SEP-10	R1463895
Phosphorus, Total	0.0111		0.0020	mg/L		10-SEP-10	R1462916
Total Dissolved Solids	<5.0		5.0	mg/L		10-SEP-10	R1464127
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	09-SEP-10	14-SEP-10	R1466040
Total Organic Carbon	1.8		1.0	mg/L		09-SEP-10	R1463865
Total Suspended Solids	<2.0		2.0	mg/L		10-SEP-10	R1464127
Turbidity	2.96		0.10	NTU		09-SEP-10	R1462440
Note: Anion results unavailable due to lab error.							
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.208		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Arsenic (As)-Total	0.00047		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Barium (Ba)-Total	0.00391		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Boron (B)-Total	<0.010		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	10-SEP-10	10-SEP-10	R1463946
Calcium (Ca)-Total	1.70		0.10	mg/L	10-SEP-10	10-SEP-10	R1463946
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Copper (Cu)-Total	0.00072		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Iron (Fe)-Total	0.203		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Lead (Pb)-Total	0.000117		0.000090	mg/L	10-SEP-10	10-SEP-10	R1463946
Lithium (Li)-Total	<0.0020		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Magnesium (Mg)-Total	0.696		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Manganese (Mn)-Total	0.00358		0.00030	mg/L	10-SEP-10	10-SEP-10	R1463946
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Phosphorus (P)-Total	<0.20		0.20	mg/L	10-SEP-10	10-SEP-10	R1463946
Potassium (K)-Total	0.496		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Rubidium (Rb)-Total	0.00122		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Selenium (Se)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Silicon (Si)-Total	0.521		0.050	mg/L	10-SEP-10	10-SEP-10	R1463946
Silver (Ag)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Sodium (Na)-Total	0.486		0.030	mg/L	10-SEP-10	10-SEP-10	R1463946
Strontium (Sr)-Total	0.00756		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Thorium (Th)-Total	0.00016		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tin (Sn)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946

* 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
L929414-2 BGS-1							
Sampled By: CLIENT on 04-SEP-10 @ 14:30							
Matrix: WATER							
Total Metals by ICP-MS							
Titanium (Ti)-Total	0.00793		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Tungsten (W)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Uranium (U)-Total	0.00016		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Vanadium (V)-Total	0.00030		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	10-SEP-10	10-SEP-10	R1463946
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0030		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Arsenic (As)-Dissolved	0.00047		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Barium (Ba)-Dissolved	0.00245		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-SEP-10	10-SEP-10	R1464386
Calcium (Ca)-Dissolved	1.57		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Copper (Cu)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-SEP-10	10-SEP-10	R1464386
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Magnesium (Mg)-Dissolved	0.661		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Manganese (Mn)-Dissolved	0.00052		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Molybdenum (Mo)-Dissolved	0.00020		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Nickel (Ni)-Dissolved	0.00040		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-SEP-10	10-SEP-10	R1464386
Potassium (K)-Dissolved	0.424		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Silicon (Si)-Dissolved	0.119		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Sodium (Na)-Dissolved	0.506		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Strontium (Sr)-Dissolved	0.00758		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	09-SEP-10	10-SEP-10	R1464386
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.7		1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)	9.4		2.0	mg/L		09-SEP-10	R1462485
Carbonate (CO3)	<0.60		0.60	mg/L		09-SEP-10	R1462485
Hydroxide (OH)	<0.40		0.40	mg/L		09-SEP-10	R1462485
Conductivity							

* 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
L929414-2	BGS-1							
Sampled By: CLIENT on 04-SEP-10 @ 14:30								
Matrix: WATER								
Conductivity								
Conductivity		20.1		0.40	umhos/cm		09-SEP-10	R1462485
pH								
pH		7.21		0.10	pH units		09-SEP-10	R1462485
L929414-3	BGS-2							
Sampled By: CLIENT on 04-SEP-10 @ 15:00								
Matrix: WATER								
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		15-SEP-10	R1467976
Chlorophyll a		0.190		0.010	ug	20-SEP-10	21-SEP-10	R1473012
Dissolved Organic Carbon		1.8		1.0	mg/L		09-SEP-10	R1463865
Hardness (as CaCO3)		6.65		0.30	mg/L		14-SEP-10	
Hardness (as CaCO3)		6.65		0.20	mg/L		14-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		10-SEP-10	R1463895
Phosphorus, Total		<0.010	DLA	0.010	mg/L		10-SEP-10	R1462916
Total Dissolved Solids		<5.0		5.0	mg/L		10-SEP-10	R1464127
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	09-SEP-10	14-SEP-10	R1466040
Total Organic Carbon		1.8		1.0	mg/L		09-SEP-10	R1463865
Total Suspended Solids		<2.0		2.0	mg/L		10-SEP-10	R1464127
Turbidity		3.13		0.10	NTU		09-SEP-10	R1462440
Note: Anion results unavailable due to lab error.								
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.182		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Arsenic (As)-Total		0.00043		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Barium (Ba)-Total		0.00380		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Boron (B)-Total		<0.010		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	10-SEP-10	10-SEP-10	R1463946
Calcium (Ca)-Total		1.59		0.10	mg/L	10-SEP-10	10-SEP-10	R1463946
Cesium (Cs)-Total		<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Chromium (Cr)-Total		<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cobalt (Co)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Copper (Cu)-Total		0.00068		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Iron (Fe)-Total		0.191		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Lead (Pb)-Total		0.000125		0.000090	mg/L	10-SEP-10	10-SEP-10	R1463946
Lithium (Li)-Total		<0.0020		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Magnesium (Mg)-Total		0.656		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Manganese (Mn)-Total		0.00332		0.00030	mg/L	10-SEP-10	10-SEP-10	R1463946
Molybdenum (Mo)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Nickel (Ni)-Total		<0.0020		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Phosphorus (P)-Total		<0.20		0.20	mg/L	10-SEP-10	10-SEP-10	R1463946
Potassium (K)-Total		0.454		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Rubidium (Rb)-Total		0.00118		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Selenium (Se)-Total		<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Silicon (Si)-Total		0.474		0.050	mg/L	10-SEP-10	10-SEP-10	R1463946
Silver (Ag)-Total		<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Sodium (Na)-Total		0.457		0.030	mg/L	10-SEP-10	10-SEP-10	R1463946
Strontium (Sr)-Total		0.00741		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946

* 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
L929414-3 BGS-2							
Sampled By: CLIENT on 04-SEP-10 @ 15:00							
Matrix: WATER							
Total Metals by ICP-MS							
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Thorium (Th)-Total	0.00015		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tin (Sn)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Titanium (Ti)-Total	0.00734		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Tungsten (W)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Uranium (U)-Total	0.00016		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Vanadium (V)-Total	0.00029		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Zirconium (Zr)-Total	0.00056		0.00040	mg/L	10-SEP-10	10-SEP-10	R1463946
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0026		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Arsenic (As)-Dissolved	0.00043		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Barium (Ba)-Dissolved	0.00232		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-SEP-10	10-SEP-10	R1464386
Calcium (Ca)-Dissolved	1.57		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Copper (Cu)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-SEP-10	10-SEP-10	R1464386
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Magnesium (Mg)-Dissolved	0.665		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Manganese (Mn)-Dissolved	0.00040		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Molybdenum (Mo)-Dissolved	0.00020		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Nickel (Ni)-Dissolved	0.00040		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-SEP-10	10-SEP-10	R1464386
Potassium (K)-Dissolved	0.422		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Silicon (Si)-Dissolved	0.123		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Sodium (Na)-Dissolved	0.514		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Strontium (Sr)-Dissolved	0.00749		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	09-SEP-10	10-SEP-10	R1464386
pH, Conductivity and Total Alkalinity							
Alkalinity							

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L929414-3	BGS-2							
Sampled By:	CLIENT on 04-SEP-10 @ 15:00							
Matrix:	WATER							
Alkalinity								
Alkalinity, Total (as CaCO3)	7.7			1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)	9.4			2.0	mg/L		09-SEP-10	R1462485
Carbonate (CO3)	<0.60			0.60	mg/L		09-SEP-10	R1462485
Hydroxide (OH)	<0.40			0.40	mg/L		09-SEP-10	R1462485
Conductivity								
Conductivity	20.0			0.40	umhos/cm		09-SEP-10	R1462485
pH								
pH	7.21			0.10	pH units		09-SEP-10	R1462485
L929414-4	BGS-3							
Sampled By:	CLIENT on 04-SEP-10 @ 15:30							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N	<0.050			0.050	mg/L		15-SEP-10	R1467976
Chlorophyll a	0.171			0.010	ug	20-SEP-10	21-SEP-10	R1473012
Dissolved Organic Carbon	1.5			1.0	mg/L		09-SEP-10	R1463865
Hardness (as CaCO3)	6.61			0.20	mg/L		14-SEP-10	
Hardness (as CaCO3)	6.61			0.30	mg/L		14-SEP-10	
Mercury (Hg)-Total	<0.000050			0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Ortho Phosphorus Soluble As P	<0.010		DLA	0.010	mg/L		10-SEP-10	R1463895
Phosphorus, Total	0.0104			0.0020	mg/L		10-SEP-10	R1462916
Total Dissolved Solids	<5.0			5.0	mg/L		10-SEP-10	R1464127
Total Kjeldahl Nitrogen	<0.20			0.20	mg/L	09-SEP-10	14-SEP-10	R1466040
Total Organic Carbon	1.6			1.0	mg/L		09-SEP-10	R1463865
Total Suspended Solids	<2.0			2.0	mg/L		10-SEP-10	R1464127
Turbidity	2.96			0.10	NTU		09-SEP-10	R1462440
Note: Anion results unavailable due to lab error.								
Total Metals by ICP-MS								
Aluminum (Al)-Total	0.184			0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Antimony (Sb)-Total	<0.00020			0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Arsenic (As)-Total	0.00049			0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Barium (Ba)-Total	0.00394			0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Beryllium (Be)-Total	<0.00020			0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Bismuth (Bi)-Total	<0.00020			0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Boron (B)-Total	<0.010			0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cadmium (Cd)-Total	<0.000010			0.000010	mg/L	10-SEP-10	10-SEP-10	R1463946
Calcium (Ca)-Total	1.73			0.10	mg/L	10-SEP-10	10-SEP-10	R1463946
Cesium (Cs)-Total	<0.00010			0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Chromium (Cr)-Total	<0.0010			0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cobalt (Co)-Total	<0.00020			0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Copper (Cu)-Total	0.00069			0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Iron (Fe)-Total	0.188			0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Lead (Pb)-Total	0.000128			0.000090	mg/L	10-SEP-10	10-SEP-10	R1463946
Lithium (Li)-Total	<0.0020			0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Magnesium (Mg)-Total	0.708			0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Manganese (Mn)-Total	0.00326			0.00030	mg/L	10-SEP-10	10-SEP-10	R1463946
Molybdenum (Mo)-Total	0.00020			0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Nickel (Ni)-Total	<0.0020			0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Phosphorus (P)-Total	<0.20			0.20	mg/L	10-SEP-10	10-SEP-10	R1463946
Potassium (K)-Total	0.484			0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Rubidium (Rb)-Total	0.00114							

* 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
L929414-4 BGS-3							
Sampled By: CLIENT on 04-SEP-10 @ 15:30							
Matrix: WATER							
Total Metals by ICP-MS							
Selenium (Se)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Silicon (Si)-Total	0.478		0.050	mg/L	10-SEP-10	10-SEP-10	R1463946
Silver (Ag)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Sodium (Na)-Total	0.511		0.030	mg/L	10-SEP-10	10-SEP-10	R1463946
Strontium (Sr)-Total	0.00767		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Thorium (Th)-Total	0.00014		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tin (Sn)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Titanium (Ti)-Total	0.00673		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Tungsten (W)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Uranium (U)-Total	0.00015		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Vanadium (V)-Total	0.00029		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	10-SEP-10	10-SEP-10	R1463946
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0040		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Arsenic (As)-Dissolved	0.00044		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Barium (Ba)-Dissolved	0.00240		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-SEP-10	10-SEP-10	R1464386
Calcium (Ca)-Dissolved	1.56		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Copper (Cu)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-SEP-10	10-SEP-10	R1464386
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Magnesium (Mg)-Dissolved	0.663		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Manganese (Mn)-Dissolved	0.00035		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Molybdenum (Mo)-Dissolved	0.00019		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Nickel (Ni)-Dissolved	0.00036		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-SEP-10	10-SEP-10	R1464386
Potassium (K)-Dissolved	0.417		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Silicon (Si)-Dissolved	0.125		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Sodium (Na)-Dissolved	0.510		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Strontium (Sr)-Dissolved	0.00739		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L929414-4	BGS-3							
Sampled By: CLIENT on 04-SEP-10 @ 15:30								
Matrix: WATER								
Dissolved Metals by ICP-MS								
Vanadium (V)-Dissolved		<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zinc (Zn)-Dissolved		<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zirconium (Zr)-Dissolved		<0.00040		0.00040	mg/L	09-SEP-10	10-SEP-10	R1464386
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		7.7		1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)		9.4		2.0	mg/L		09-SEP-10	R1462485
Carbonate (CO3)		<0.60		0.60	mg/L		09-SEP-10	R1462485
Hydroxide (OH)		<0.40		0.40	mg/L		09-SEP-10	R1462485
Conductivity								
Conductivity		20.1		0.40	umhos/cm		09-SEP-10	R1462485
pH								
pH		7.22		0.10	pH units		09-SEP-10	R1462485
L929414-5	BGS-4							
Sampled By: CLIENT on 04-SEP-10 @ 16:00								
Matrix: WATER								
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		15-SEP-10	R1467976
Chlorophyll a		0.196		0.010	ug	20-SEP-10	21-SEP-10	R1473012
Dissolved Organic Carbon		1.8		1.0	mg/L		10-SEP-10	R1463865
Hardness (as CaCO3)		6.67		0.30	mg/L		14-SEP-10	
Hardness (as CaCO3)		6.67		0.20	mg/L		14-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		10-SEP-10	R1463895
Phosphorus, Total		<0.010	DLA	0.010	mg/L		10-SEP-10	R1462916
Total Dissolved Solids		<5.0		5.0	mg/L		10-SEP-10	R1464127
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	09-SEP-10	14-SEP-10	R1466040
Total Organic Carbon		1.8		1.0	mg/L		10-SEP-10	R1463865
Total Suspended Solids		<2.0		2.0	mg/L		10-SEP-10	R1464127
Turbidity		2.76		0.10	NTU		09-SEP-10	R1462440
Note: Anion results unavailable due to lab error.								
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.175		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Arsenic (As)-Total		0.00049		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Barium (Ba)-Total		0.00378		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Boron (B)-Total		<0.010		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	10-SEP-10	10-SEP-10	R1463946
Calcium (Ca)-Total		1.70		0.10	mg/L	10-SEP-10	10-SEP-10	R1463946
Cesium (Cs)-Total		<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Chromium (Cr)-Total		0.0014		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cobalt (Co)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Copper (Cu)-Total		0.00071		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Iron (Fe)-Total		0.179		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Lead (Pb)-Total		0.000122		0.000090	mg/L	10-SEP-10	10-SEP-10	R1463946
Lithium (Li)-Total		<0.0020		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Magnesium (Mg)-Total		0.697		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Manganese (Mn)-Total		0.00324		0.00030	mg/L	10-SEP-10	10-SEP-10	R146394

* 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
L929414-5 BGS-4							
Sampled By: CLIENT on 04-SEP-10 @ 16:00							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	0.00025		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Phosphorus (P)-Total	<0.20		0.20	mg/L	10-SEP-10	10-SEP-10	R1463946
Potassium (K)-Total	0.474		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Rubidium (Rb)-Total	0.00117		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Selenium (Se)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Silicon (Si)-Total	0.456		0.050	mg/L	10-SEP-10	10-SEP-10	R1463946
Silver (Ag)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Sodium (Na)-Total	0.484		0.030	mg/L	10-SEP-10	10-SEP-10	R1463946
Strontium (Sr)-Total	0.00778		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Thorium (Th)-Total	0.00013		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tin (Sn)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Titanium (Ti)-Total	0.00648		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Tungsten (W)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Uranium (U)-Total	0.00015		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Vanadium (V)-Total	0.00026		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	10-SEP-10	10-SEP-10	R1463946
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0032		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Arsenic (As)-Dissolved	0.00045		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Barium (Ba)-Dissolved	0.00236		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-SEP-10	10-SEP-10	R1464386
Calcium (Ca)-Dissolved	1.57		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Copper (Cu)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-SEP-10	10-SEP-10	R1464386
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Magnesium (Mg)-Dissolved	0.670		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Manganese (Mn)-Dissolved	0.00030		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Molybdenum (Mo)-Dissolved	0.00018		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Nickel (Ni)-Dissolved	0.00039		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-SEP-10	10-SEP-10	R1464386
Potassium (K)-Dissolved	0.415		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Rubidium (Rb)-Dissolved	0.00061		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Silicon (Si)-Dissolved	0.125		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Sodium (Na)-Dissolved	0.508		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Strontium (Sr)-Dissolved	0.00762		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L929414-5	BGS-4							
Sampled By: CLIENT on 04-SEP-10 @ 16:00								
Matrix: WATER								
Dissolved Metals by ICP-MS								
Thorium (Th)-Dissolved		<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tin (Sn)-Dissolved		<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Titanium (Ti)-Dissolved		<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Tungsten (W)-Dissolved		<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Vanadium (V)-Dissolved		<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zinc (Zn)-Dissolved		<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zirconium (Zr)-Dissolved		<0.00040		0.00040	mg/L	09-SEP-10	10-SEP-10	R1464386
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		7.8		1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)		9.5		2.0	mg/L		09-SEP-10	R1462485
Carbonate (CO3)		<0.60		0.60	mg/L		09-SEP-10	R1462485
Hydroxide (OH)		<0.40		0.40	mg/L		09-SEP-10	R1462485
Conductivity								
Conductivity		20.2		0.40	umhos/cm		09-SEP-10	R1462485
pH								
pH		7.22		0.10	pH units		09-SEP-10	R1462485
L929414-6	BGS-5							
Sampled By: CLIENT on 04-SEP-10 @ 16:30								
Matrix: WATER								
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		15-SEP-10	R1467976
Chlorophyll a		0.434		0.010	ug/L	20-SEP-10	21-SEP-10	R1473012
Dissolved Organic Carbon		1.6		1.0	mg/L		10-SEP-10	R1463865
Hardness (as CaCO3)		7.15		0.30	mg/L		14-SEP-10	
Hardness (as CaCO3)		7.15		0.20	mg/L		14-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		10-SEP-10	R1463895
Phosphorus, Total		<0.010	DLA	0.010	mg/L		10-SEP-10	R1462916
Total Dissolved Solids		<5.0		5.0	mg/L		10-SEP-10	R1464127
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	09-SEP-10	14-SEP-10	R1466040
Total Organic Carbon		1.6		1.0	mg/L		10-SEP-10	R1463865
Total Suspended Solids		<2.0		2.0	mg/L		10-SEP-10	R1464127
Turbidity		2.49		0.10	NTU		09-SEP-10	R1462440
Note: Anion results unavailable due to lab error.								
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.145		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Arsenic (As)-Total		0.00052		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Barium (Ba)-Total		0.00375		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Boron (B)-Total		<0.010		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	10-SEP-10	10-SEP-10	R1463946
Calcium (Ca)-Total		1.68		0.10	mg/L	10-SEP-10	10-SEP-10	R1463946
Cesium (Cs)-Total		<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Chromium (Cr)-Total		<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cobalt (Co)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Copper (Cu)-Total		0.00070		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946

* 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
L929414-6 BGS-5							
Sampled By: CLIENT on 04-SEP-10 @ 16:30							
Matrix: WATER							
Total Metals by ICP-MS							
Iron (Fe)-Total	0.156		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Lead (Pb)-Total	0.000111		0.000090	mg/L	10-SEP-10	10-SEP-10	R1463946
Lithium (Li)-Total	<0.0020		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Magnesium (Mg)-Total	0.683		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Manganese (Mn)-Total	0.00299		0.00030	mg/L	10-SEP-10	10-SEP-10	R1463946
Molybdenum (Mo)-Total	0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Phosphorus (P)-Total	<0.20		0.20	mg/L	10-SEP-10	10-SEP-10	R1463946
Potassium (K)-Total	0.462		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Rubidium (Rb)-Total	0.00106		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Selenium (Se)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Silicon (Si)-Total	0.438		0.050	mg/L	10-SEP-10	10-SEP-10	R1463946
Silver (Ag)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Sodium (Na)-Total	0.472		0.030	mg/L	10-SEP-10	10-SEP-10	R1463946
Strontium (Sr)-Total	0.00740		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Thorium (Th)-Total	0.00011		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tin (Sn)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Titanium (Ti)-Total	0.00563		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Tungsten (W)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Uranium (U)-Total	0.00016		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Vanadium (V)-Total	0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	10-SEP-10	10-SEP-10	R1463946
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0092		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Arsenic (As)-Dissolved	0.00050		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Barium (Ba)-Dissolved	0.00284		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-SEP-10	10-SEP-10	R1464386
Calcium (Ca)-Dissolved	1.76		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Copper (Cu)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-SEP-10	10-SEP-10	R1464386
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Magnesium (Mg)-Dissolved	0.672		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Manganese (Mn)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Molybdenum (Mo)-Dissolved	0.00021		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Nickel (Ni)-Dissolved	0.00040		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-SEP-10	10-SEP-10	R1464386
Potassium (K)-Dissolved	0.418		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Rubidium (Rb)-Dissolved	0.00063		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Silicon (Si)-Dissolved	0.142		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L929414-6 BGS-5 Sampled By: CLIENT on 04-SEP-10 @ 16:30 Matrix: WATER Dissolved Metals by ICP-MS Silver (Ag)-Dissolved Sodium (Na)-Dissolved Strontium (Sr)-Dissolved Tellurium (Te)-Dissolved Thallium (Tl)-Dissolved Thorium (Th)-Dissolved Tin (Sn)-Dissolved Titanium (Ti)-Dissolved Tungsten (W)-Dissolved Uranium (U)-Dissolved Vanadium (V)-Dissolved Zinc (Zn)-Dissolved Zirconium (Zr)-Dissolved pH, Conductivity and Total Alkalinity Alkalinity Alkalinity, Total (as CaCO3) Bicarbonate (HCO3) Carbonate (CO3) Hydroxide (OH) Conductivity Conductivity pH pH	<0.00010 0.505 0.00765 <0.00020 <0.00010 <0.00010 <0.00020 <0.00020 <0.0010 <0.00010 <0.00020 <0.00020 <0.0020 <0.00040 7.9 9.6 <0.60 <0.40 20.4 7.23		0.00010 0.020 0.00010 0.00020 0.00010 0.00010 0.00020 0.00020 0.0010 0.00010 0.00020 0.0020 0.00040 1.0 2.0 0.60 0.40 0.40 0.10	mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L umhos/cm pH units	09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10	10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10 09-SEP-10	R1464386 R1464386 R1464386 R1464386 R1464386 R1464386 R1464386 R1464386 R1464386 R1464386 R1464386 R1464386 R1464386 R1462485 R1462485 R1462485 R1462485 R1462485 R1462485
L929414-7 BGS-6 Sampled By: CLIENT on 04-SEP-10 @ 17:00 Matrix: WATER Miscellaneous Parameters Ammonia as N Chlorophyll a Dissolved Organic Carbon Hardness (as CaCO3) Hardness (as CaCO3) Mercury (Hg)-Total Ortho Phosphorus Soluble As P Phosphorus, Total Total Dissolved Solids Total Kjeldahl Nitrogen Total Organic Carbon Total Suspended Solids Turbidity Note: Anion results unavailable due to lab error. Total Metals by ICP-MS Aluminum (Al)-Total Antimony (Sb)-Total Arsenic (As)-Total Barium (Ba)-Total Beryllium (Be)-Total Bismuth (Bi)-Total Boron (B)-Total Cadmium (Cd)-Total	<0.050 0.361 1.4 6.89 6.89 <0.000050 <0.010 <0.010 <5.0 <0.20 1.4 <2.0 2.29 0.149 <0.00020 0.00053 0.00365 <0.00020 <0.00020 <0.010 <0.000010	DLA DLA	0.050 0.010 1.0 0.30 0.20 0.000050 0.010 0.010 5.0 0.20 1.0 2.0 0.10 0.0050 0.00020 0.00020 0.00020 0.00020 0.00020 0.010 0.000010	mg/L ug/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L NTU mg/L mg/L mg/L mg/L mg/L mg/L mg/L mg/L	20-SEP-10 10-SEP-10 14-SEP-10 14-SEP-10 10-SEP-10 09-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10	15-SEP-10 21-SEP-10 10-SEP-10 14-SEP-10 14-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 14-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 09-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10 10-SEP-10	R1467976 R1473012 R1463865 R1465384 R1463895 R1462916 R1464127 R1466040 R1463865 R1464127 R1462440 R1463946 R1463946 R1463946 R1463946 R1463946 R1463946 R1463946 R1463946 R1463946 R1463946

* 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
L929414-7 BGS-6							
Sampled By: CLIENT on 04-SEP-10 @ 17:00							
Matrix: WATER							
Total Metals by ICP-MS							
Calcium (Ca)-Total	1.74		0.10	mg/L	10-SEP-10	10-SEP-10	R1463946
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Chromium (Cr)-Total	0.0013		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Copper (Cu)-Total	0.00073		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Iron (Fe)-Total	0.156		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Lead (Pb)-Total	0.000120		0.000090	mg/L	10-SEP-10	10-SEP-10	R1463946
Lithium (Li)-Total	<0.0020		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Magnesium (Mg)-Total	0.693		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Manganese (Mn)-Total	0.00314		0.00030	mg/L	10-SEP-10	10-SEP-10	R1463946
Molybdenum (Mo)-Total	0.00029		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Phosphorus (P)-Total	<0.20		0.20	mg/L	10-SEP-10	10-SEP-10	R1463946
Potassium (K)-Total	0.480		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Rubidium (Rb)-Total	0.00109		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Selenium (Se)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Silicon (Si)-Total	0.427		0.050	mg/L	10-SEP-10	10-SEP-10	R1463946
Silver (Ag)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Sodium (Na)-Total	0.497		0.030	mg/L	10-SEP-10	10-SEP-10	R1463946
Strontium (Sr)-Total	0.00785		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Thorium (Th)-Total	0.00011		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tin (Sn)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Titanium (Ti)-Total	0.00581		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Tungsten (W)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Uranium (U)-Total	0.00015		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Vanadium (V)-Total	0.00024		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	10-SEP-10	10-SEP-10	R1463946
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0131		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Arsenic (As)-Dissolved	0.00050		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Barium (Ba)-Dissolved	0.00252		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-SEP-10	10-SEP-10	R1464386
Calcium (Ca)-Dissolved	1.61		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Copper (Cu)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-SEP-10	10-SEP-10	R1464386
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Magnesium (Mg)-Dissolved	0.695		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Manganese (Mn)-Dissolved	0.00036		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Molybdenum (Mo)-Dissolved	0.00020		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Nickel (Ni)-Dissolved	0.00040		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L929414-7	BGS-6							
Sampled By: CLIENT on 04-SEP-10 @ 17:00								
Matrix: WATER								
Dissolved Metals by ICP-MS								
Phosphorus (P)-Dissolved		<0.10		0.10	mg/L	09-SEP-10	10-SEP-10	R1464386
Potassium (K)-Dissolved		0.426		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Rubidium (Rb)-Dissolved		0.00063		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Selenium (Se)-Dissolved		<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Silicon (Si)-Dissolved		0.134		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Sodium (Na)-Dissolved		0.519		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Strontium (Sr)-Dissolved		0.00767		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tellurium (Te)-Dissolved		<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Thorium (Th)-Dissolved		<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tin (Sn)-Dissolved		<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Titanium (Ti)-Dissolved		<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Tungsten (W)-Dissolved		<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Vanadium (V)-Dissolved		<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zinc (Zn)-Dissolved		<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zirconium (Zr)-Dissolved		<0.00040		0.00040	mg/L	09-SEP-10	10-SEP-10	R1464386
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		7.9		1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)		9.6		2.0	mg/L		09-SEP-10	R1462485
Carbonate (CO3)		<0.60		0.60	mg/L		09-SEP-10	R1462485
Hydroxide (OH)		<0.40		0.40	mg/L		09-SEP-10	R1462485
Conductivity								
Conductivity		20.4		0.40	umhos/cm		09-SEP-10	R1462485
pH								
pH		7.23		0.10	pH units		09-SEP-10	R1462485
L929414-8	BGW-2							
Sampled By: CLIENT on 04-SEP-10 @ 17:30								
Matrix: WATER								
Miscellaneous Parameters								
Ammonia as N		0.160		0.050	mg/L		15-SEP-10	R1467976
Chlorophyll a		0.245		0.010	ug	20-SEP-10	21-SEP-10	R1473012
Dissolved Organic Carbon		1.5		1.0	mg/L		10-SEP-10	R1463865
Hardness (as CaCO3)		18.2		0.30	mg/L		14-SEP-10	
Hardness (as CaCO3)		18.2		0.20	mg/L		14-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Ortho Phosphorus Soluble As P		0.0227		0.0010	mg/L		14-SEP-10	R1465765
Phosphorus, Total		0.0218		0.0020	mg/L		10-SEP-10	R1462916
Total Dissolved Solids		14.0		5.0	mg/L		10-SEP-10	R1464127
Total Kjeldahl Nitrogen		0.26		0.20	mg/L	09-SEP-10	14-SEP-10	R1466040
Total Organic Carbon		1.2		1.0	mg/L		10-SEP-10	R1463865
Total Suspended Solids		16.8		2.0	mg/L		10-SEP-10	R1464127
Turbidity		29.0		0.10	NTU		09-SEP-10	R1462440
Note: Anion results unavailable due to lab error.								
Total Metals by ICP-MS								
Aluminum (Al)-Total		2.06		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Arsenic (As)-Total		0.00317		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946

* 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
L929414-8 BGW-2							
Sampled By: CLIENT on 04-SEP-10 @ 17:30							
Matrix: WATER							
Total Metals by ICP-MS							
Barium (Ba)-Total	0.0176		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Boron (B)-Total	<0.010		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	10-SEP-10	10-SEP-10	R1463946
Calcium (Ca)-Total	5.09		0.10	mg/L	10-SEP-10	10-SEP-10	R1463946
Cesium (Cs)-Total	0.00038		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Chromium (Cr)-Total	0.0158		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cobalt (Co)-Total	0.00146		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Copper (Cu)-Total	0.00431		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Iron (Fe)-Total	2.44		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Lead (Pb)-Total	0.00103		0.000090	mg/L	10-SEP-10	10-SEP-10	R1463946
Lithium (Li)-Total	0.0039		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Magnesium (Mg)-Total	2.63		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Manganese (Mn)-Total	0.0301		0.00030	mg/L	10-SEP-10	10-SEP-10	R1463946
Molybdenum (Mo)-Total	0.00117		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Nickel (Ni)-Total	0.0097		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Phosphorus (P)-Total	<0.20		0.20	mg/L	10-SEP-10	10-SEP-10	R1463946
Potassium (K)-Total	1.58		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Rubidium (Rb)-Total	0.00671		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Selenium (Se)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Silicon (Si)-Total	4.64		0.050	mg/L	10-SEP-10	10-SEP-10	R1463946
Silver (Ag)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Sodium (Na)-Total	0.877		0.030	mg/L	10-SEP-10	10-SEP-10	R1463946
Strontium (Sr)-Total	0.0234		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Thorium (Th)-Total	0.00204		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tin (Sn)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Titanium (Ti)-Total	0.0695		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Tungsten (W)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Uranium (U)-Total	0.00107		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Vanadium (V)-Total	0.00298		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Zinc (Zn)-Total	0.0053		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Zirconium (Zr)-Total	0.00308		0.00040	mg/L	10-SEP-10	10-SEP-10	R1463946
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0052		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Arsenic (As)-Dissolved	0.00113		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Barium (Ba)-Dissolved	0.00469		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-SEP-10	10-SEP-10	R1464386
Calcium (Ca)-Dissolved	4.62		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Copper (Cu)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-SEP-10	10-SEP-10	R1464386

* 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
L929414-8 BGW-2 Sampled By: CLIENT on 04-SEP-10 @ 17:30 Matrix: WATER Dissolved Metals by ICP-MS Lithium (Li)-Dissolved <0.0020 0.0020 mg/L 09-SEP-10 10-SEP-10 R1464386 Magnesium (Mg)-Dissolved 1.61 0.010 mg/L 09-SEP-10 10-SEP-10 R1464386 Manganese (Mn)-Dissolved 0.00037 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Molybdenum (Mo)-Dissolved 0.00114 0.00010 mg/L 09-SEP-10 10-SEP-10 R1464386 Nickel (Ni)-Dissolved 0.00079 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Phosphorus (P)-Dissolved <0.10 0.10 mg/L 09-SEP-10 10-SEP-10 R1464386 Potassium (K)-Dissolved 0.968 0.020 mg/L 09-SEP-10 10-SEP-10 R1464386 Rubidium (Rb)-Dissolved 0.00162 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Selenium (Se)-Dissolved <0.0010 0.0010 mg/L 09-SEP-10 10-SEP-10 R1464386 Silicon (Si)-Dissolved 0.309 0.050 mg/L 09-SEP-10 10-SEP-10 R1464386 Silver (Ag)-Dissolved <0.00010 0.00010 mg/L 09-SEP-10 10-SEP-10 R1464386 Sodium (Na)-Dissolved 0.782 0.020 mg/L 09-SEP-10 10-SEP-10 R1464386 Strontium (Sr)-Dissolved 0.0198 0.00010 mg/L 09-SEP-10 10-SEP-10 R1464386 Tellurium (Te)-Dissolved <0.00020 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Thallium (Tl)-Dissolved <0.00010 0.00010 mg/L 09-SEP-10 10-SEP-10 R1464386 Thorium (Th)-Dissolved <0.00010 0.00010 mg/L 09-SEP-10 10-SEP-10 R1464386 Tin (Sn)-Dissolved <0.00020 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Titanium (Ti)-Dissolved <0.00020 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Tungsten (W)-Dissolved <0.0010 0.0010 mg/L 09-SEP-10 10-SEP-10 R1464386 Uranium (U)-Dissolved 0.00019 0.00010 mg/L 09-SEP-10 10-SEP-10 R1464386 Vanadium (V)-Dissolved <0.00020 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Zinc (Zn)-Dissolved <0.0020 0.0020 mg/L 09-SEP-10 10-SEP-10 R1464386 Zirconium (Zr)-Dissolved <0.00040 0.00040 mg/L 09-SEP-10 10-SEP-10 R1464386 pH, Conductivity and Total Alkalinity Alkalinity Alkalinity, Total (as CaCO3) 16.3 1.0 mg/L 09-SEP-10 R1462485 Bicarbonate (HCO3) 19.9 2.0 mg/L 09-SEP-10 R1462485 Carbonate (CO3) <0.60 0.60 mg/L 09-SEP-10 R1462485 Hydroxide (OH) <0.40 0.40 mg/L 09-SEP-10 R1462485 Conductivity Conductivity 49.0 0.40 umhos/cm 09-SEP-10 R1462485 pH pH 7.54 0.10 pH units 09-SEP-10 R1462485							
L929414-9 BGW-3 Sampled By: CLIENT on 04-SEP-10 @ 18:00 Matrix: WATER Miscellaneous Parameters Ammonia as N 0.158 0.050 mg/L 15-SEP-10 R1467976 Chlorophyll a 0.247 0.010 ug/L 20-SEP-10 21-SEP-10 R1473012 Dissolved Organic Carbon 1.2 1.0 mg/L 10-SEP-10 R1463865 Hardness (as CaCO3) 17.5 0.30 mg/L 14-SEP-10 Hardness (as CaCO3) 17.5 0.20 mg/L 14-SEP-10 Mercury (Hg)-Total <0.000050 0.000050 mg/L 10-SEP-10 10-SEP-10 R1465384 Ortho Phosphorus Soluble As P 0.0206 0.0010 mg/L 14-SEP-10 R1465765 Phosphorus, Total 0.0249 0.0020 mg/L 10-SEP-10 R1462916 Total Dissolved Solids <5.0 5.0 mg/L 10-SEP-10 R1464127 Total Kjeldahl Nitrogen 0.23 0.20 mg/L 09-SEP-10 14-SEP-10 R1466040 Total Organic Carbon <1.0 1.0 mg/L 10-SEP-10 R1463865 Total Suspended Solids 18.4 2.0 mg/L 10-SEP-10 R1464127 Turbidity 28.7 0.10 NTU 09-SEP-10 R1462440							

* 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
L929414-9 BGW-3							
Sampled By: CLIENT on 04-SEP-10 @ 18:00							
Matrix: WATER							
Note: Anion results unavailable due to lab error.							
Total Metals by ICP-MS							
Aluminum (Al)-Total	1.44		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Arsenic (As)-Total	0.00274		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Barium (Ba)-Total	0.0148		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Boron (B)-Total	<0.010		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	10-SEP-10	10-SEP-10	R1463946
Calcium (Ca)-Total	4.76		0.10	mg/L	10-SEP-10	10-SEP-10	R1463946
Cesium (Cs)-Total	0.00028		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Chromium (Cr)-Total	0.0103		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cobalt (Co)-Total	0.00103		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Copper (Cu)-Total	0.00340		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Iron (Fe)-Total	1.65		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Lead (Pb)-Total	0.000904		0.000090	mg/L	10-SEP-10	10-SEP-10	R1463946
Lithium (Li)-Total	0.0029		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Magnesium (Mg)-Total	2.25		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Manganese (Mn)-Total	0.0217		0.00030	mg/L	10-SEP-10	10-SEP-10	R1463946
Molybdenum (Mo)-Total	0.00094		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Nickel (Ni)-Total	0.0066		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Phosphorus (P)-Total	<0.20		0.20	mg/L	10-SEP-10	10-SEP-10	R1463946
Potassium (K)-Total	1.37		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Rubidium (Rb)-Total	0.00525		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Selenium (Se)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Silicon (Si)-Total	3.42		0.050	mg/L	10-SEP-10	10-SEP-10	R1463946
Silver (Ag)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Sodium (Na)-Total	0.813		0.030	mg/L	10-SEP-10	10-SEP-10	R1463946
Strontium (Sr)-Total	0.0216		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Thorium (Th)-Total	0.00153		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tin (Sn)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Titanium (Ti)-Total	0.0490		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Tungsten (W)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Uranium (U)-Total	0.00102		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Vanadium (V)-Total	0.00230		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Zirconium (Zr)-Total	0.00299		0.00040	mg/L	10-SEP-10	10-SEP-10	R1463946
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0043		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Arsenic (As)-Dissolved	0.00112		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Barium (Ba)-Dissolved	0.00443		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-SEP-10	10-SEP-10	R1464386
Calcium (Ca)-Dissolved	4.41		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386

* 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
L929414-9 BGW-3 Sampled By: CLIENT on 04-SEP-10 @ 18:00 Matrix: WATER Dissolved Metals by ICP-MS Copper (Cu)-Dissolved <0.00020 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Iron (Fe)-Dissolved <0.010 0.010 mg/L 09-SEP-10 10-SEP-10 R1464386 Lead (Pb)-Dissolved 0.000174 0.000090 mg/L 09-SEP-10 10-SEP-10 R1464386 Lithium (Li)-Dissolved <0.0020 0.0020 mg/L 09-SEP-10 10-SEP-10 R1464386 Magnesium (Mg)-Dissolved 1.58 0.010 mg/L 09-SEP-10 10-SEP-10 R1464386 Manganese (Mn)-Dissolved 0.00030 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Molybdenum (Mo)-Dissolved 0.00112 0.00010 mg/L 09-SEP-10 10-SEP-10 R1464386 Nickel (Ni)-Dissolved 0.00075 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Phosphorus (P)-Dissolved <0.10 0.10 mg/L 09-SEP-10 10-SEP-10 R1464386 Potassium (K)-Dissolved 0.925 0.020 mg/L 09-SEP-10 10-SEP-10 R1464386 Rubidium (Rb)-Dissolved 0.00162 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Selenium (Se)-Dissolved <0.0010 0.0010 mg/L 09-SEP-10 10-SEP-10 R1464386 Silicon (Si)-Dissolved 0.293 0.050 mg/L 09-SEP-10 10-SEP-10 R1464386 Silver (Ag)-Dissolved <0.00010 0.00010 mg/L 09-SEP-10 10-SEP-10 R1464386 Sodium (Na)-Dissolved 0.745 0.020 mg/L 09-SEP-10 10-SEP-10 R1464386 Strontium (Sr)-Dissolved 0.0199 0.00010 mg/L 09-SEP-10 10-SEP-10 R1464386 Tellurium (Te)-Dissolved <0.00020 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Thallium (Tl)-Dissolved <0.00010 0.00010 mg/L 09-SEP-10 10-SEP-10 R1464386 Thorium (Th)-Dissolved <0.00010 0.00010 mg/L 09-SEP-10 10-SEP-10 R1464386 Tin (Sn)-Dissolved <0.00020 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Titanium (Ti)-Dissolved <0.00020 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Tungsten (W)-Dissolved <0.0010 0.0010 mg/L 09-SEP-10 10-SEP-10 R1464386 Uranium (U)-Dissolved 0.00019 0.00010 mg/L 09-SEP-10 10-SEP-10 R1464386 Vanadium (V)-Dissolved <0.00020 0.00020 mg/L 09-SEP-10 10-SEP-10 R1464386 Zinc (Zn)-Dissolved <0.0020 0.0020 mg/L 09-SEP-10 10-SEP-10 R1464386 Zirconium (Zr)-Dissolved <0.00040 0.00040 mg/L 09-SEP-10 10-SEP-10 R1464386 pH, Conductivity and Total Alkalinity Alkalinity Alkalinity, Total (as CaCO3) 16.4 1.0 mg/L 09-SEP-10 R1462485 Bicarbonate (HCO3) 20.0 2.0 mg/L 09-SEP-10 R1462485 Carbonate (CO3) <0.60 0.60 mg/L 09-SEP-10 R1462485 Hydroxide (OH) <0.40 0.40 mg/L 09-SEP-10 R1462485 Conductivity Conductivity 49.4 0.40 umhos/cm 09-SEP-10 R1462485 pH pH 7.57 0.10 pH units 09-SEP-10 R1462485							
L929414-10 DUP-1-(BGS-5) Sampled By: CLIENT on 04-SEP-10 @ 18:30 Matrix: WATER Miscellaneous Parameters Ammonia as N <0.050 0.050 mg/L 15-SEP-10 R1467976 Chlorophyll a 0.488 0.010 ug/L 20-SEP-10 21-SEP-10 R1473012 Dissolved Organic Carbon 1.3 1.0 mg/L 10-SEP-10 R1463865 Hardness (as CaCO3) 6.77 0.30 mg/L 14-SEP-10 Hardness (as CaCO3) 6.77 0.20 mg/L 14-SEP-10 Mercury (Hg)-Total <0.000050 0.000050 mg/L 10-SEP-10 10-SEP-10 R1465384 Ortho Phosphorus Soluble As P <0.010 DLA 0.010 mg/L 10-SEP-10 R1463895 Phosphorus, Total <0.010 DLA 0.010 mg/L 10-SEP-10 R1462916 Total Dissolved Solids <5.0 5.0 mg/L 10-SEP-10 R1464127 Total Kjeldahl Nitrogen <0.20 0.20 mg/L 09-SEP-10 14-SEP-10 R1466040							

* 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
L929414-10 DUP-1-(BGS-5)							
Sampled By: CLIENT on 04-SEP-10 @ 18:30							
Matrix: WATER							
Total Organic Carbon	1.7		1.0	mg/L		10-SEP-10	R1463865
Total Suspended Solids	<2.0		2.0	mg/L		10-SEP-10	R1464127
Turbidity	2.52		0.10	NTU		09-SEP-10	R1462440
Note: Anion results unavailable due to lab error.							
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.181		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Arsenic (As)-Total	0.00051		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Barium (Ba)-Total	0.00387		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Boron (B)-Total	<0.010		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	10-SEP-10	10-SEP-10	R1463946
Calcium (Ca)-Total	1.67		0.10	mg/L	10-SEP-10	10-SEP-10	R1463946
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Copper (Cu)-Total	0.00068		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Iron (Fe)-Total	0.177		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Lead (Pb)-Total	0.000132		0.000090	mg/L	10-SEP-10	10-SEP-10	R1463946
Lithium (Li)-Total	<0.0020		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Magnesium (Mg)-Total	0.707		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Manganese (Mn)-Total	0.00319		0.00030	mg/L	10-SEP-10	10-SEP-10	R1463946
Molybdenum (Mo)-Total	0.00023		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	10-SEP-10	10-SEP-10	R1463946
Phosphorus (P)-Total	<0.20		0.20	mg/L	10-SEP-10	10-SEP-10	R1463946
Potassium (K)-Total	0.467		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Rubidium (Rb)-Total	0.00121		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Selenium (Se)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Silicon (Si)-Total	0.518		0.050	mg/L	10-SEP-10	10-SEP-10	R1463946
Silver (Ag)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Sodium (Na)-Total	0.490		0.030	mg/L	10-SEP-10	10-SEP-10	R1463946
Strontium (Sr)-Total	0.00785		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Thorium (Th)-Total	0.00014		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Tin (Sn)-Total	<0.00020		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Titanium (Ti)-Total	0.00671		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Tungsten (W)-Total	<0.0010		0.0010	mg/L	10-SEP-10	10-SEP-10	R1463946
Uranium (U)-Total	0.00015		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Vanadium (V)-Total	0.00021		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Zirconium (Zr)-Total	0.00040		0.00040	mg/L	10-SEP-10	10-SEP-10	R1463946
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0047		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Arsenic (As)-Dissolved	0.00048		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Barium (Ba)-Dissolved	0.00253		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-SEP-10	10-SEP-10	R1464386

* 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
L929414-10 DUP-1-(BGS-5) Sampled By: CLIENT on 04-SEP-10 @ 18:30 Matrix: WATER							
Dissolved Metals by ICP-MS							
Calcium (Ca)-Dissolved	1.60		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Copper (Cu)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-SEP-10	10-SEP-10	R1464386
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Magnesium (Mg)-Dissolved	0.674		0.010	mg/L	09-SEP-10	10-SEP-10	R1464386
Manganese (Mn)-Dissolved	0.00026		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Molybdenum (Mo)-Dissolved	0.00019		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Nickel (Ni)-Dissolved	0.00038		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-SEP-10	10-SEP-10	R1464386
Potassium (K)-Dissolved	0.425		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Rubidium (Rb)-Dissolved	0.00064		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Silicon (Si)-Dissolved	0.134		0.050	mg/L	09-SEP-10	10-SEP-10	R1464386
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Sodium (Na)-Dissolved	0.515		0.020	mg/L	09-SEP-10	10-SEP-10	R1464386
Strontium (Sr)-Dissolved	0.00768		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	09-SEP-10	10-SEP-10	R1464386
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	09-SEP-10	10-SEP-10	R1464386
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	09-SEP-10	10-SEP-10	R1464386
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	09-SEP-10	10-SEP-10	R1464386
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.9		1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)	9.6		2.0	mg/L		09-SEP-10	R1462485
Carbonate (CO3)	<0.60		0.60	mg/L		09-SEP-10	R1462485
Hydroxide (OH)	<0.40		0.40	mg/L		09-SEP-10	R1462485
Conductivity							
Conductivity	20.5		0.40	umhos/cm		09-SEP-10	R1462485
pH							
pH	7.25		0.10	pH units		09-SEP-10	R1462485

* 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)
Duplicate	Ortho Phosphorus Soluble As P	DLA	L929414-1, -10, -2, -3, -4, -5, -6, -7
Duplicate	Ortho Phosphorus Soluble As P	DLA	L929414-1, -10, -2, -3, -4, -5, -6, -7

Qualifiers for Sample Submission Listed:

Qualifier	Description
EHR	Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

ALK-TOT-WP	Water	Alkalinity	APHA 2320B

Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO₃⁻ and H₂CO₃ endpoints indicated electrometrically.

ANIONS5-IC-WP	Water	Anions scan (IC)	EPA 300.1 IC

This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".

C-DIS-ORG-WP	Water	Dissolved Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

C-TOT-ORG-WP	Water	Total Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

CHLOROA-VA	Water	Chlorophyll a by Fluorometer	EPA 445.0

Chlorophyll and Pheopigments by Fluorometry analysis is carried out using procedures adapted from USEPA Method 445.0. The sample is filtered using either a glass fiber filter or a 0.45 micron Membrane filter. The pigments are extracted from the filter with 90% aqueous acetone. For chlorophyll-a analysis the extract is read using a fluorometer. For pheopigments the extract is first acidified then read. This method is not subject to interferences from chlorophyll b.

EC-WP	Water	Conductivity	APHA 2510B

Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.

ETL-HARDNESS-DIS-WP	Water	Hardness Calculated	HARDNESS CALCULATED

ETL-HARDNESS-TOT-WP	Water	Hardness Calculated	HARDNESS CALCULATED

HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.			
MET-D-L-MS-WP	Water	Dissolved Metals by ICP-MS	U.S. EPA 200.8-DL
Dissolved Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the Examination of Water and Wastewater method 3030B for filtration through a 0.45 um filter and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
MET-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
N-TOTKJ-WP	Water	Total Kjeldahl Nitrogen	Quickchem method 10-107-06-2-E Lachat
Samples are digested with a sulphuric acid solution, cooled, diluted with water, and analyzed for ammonia. Total Kjeldahl nitrogen is the sum of free-ammonia and organic nitrogen compounds which are converted to ammonium sulphate through this digestion process. Analysis is performed by Flow Injection Analysis (FIA). The pH of the digested sample is raised to a known, basic pH by neutralization with a concentrated buffer solution. This neutralization converts the ammonium cation to ammonia. The ammonia produced is heated with salicylate and hypochlorite to produce blue colour which is proportional to the ammonia concentration.			
NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
Ammonia - Colourimetric using Salicylate-nitroprusside and hypochlorite, in an alkaline phosphate buffer.			
NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
P-ORTHO-SOL-WP	Water	Ortho Phosphorous Soluble	APHA, 1998 P-OS
Quantitative orthophosphorous values are determined without prior digestion of the sample. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
P-TOTAL-WP	Water	Phosphorus, Total	APHA, 1998 P-T
Samples are digested using a sulphuric acid-persulfate mixture to convert organic phosphorous to orthophosphate. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
PH-WP	Water	pH	APHA 4500H
pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode			
SOLIDS-TDS-WP	Water	Total Dissolved Solids	APHA 2540C
The residue remaining in a prepared casserole after passing the sample through a 1.2 um Whatman GF/C glass microfibre filter and drying at 180 degrees C. Samples may be dried at 105 degrees C if the client specifically requests this drying temperature.			
SOLIDS-TOTSUS-LR-WP	Water	Total Suspended Solids	APHA 2540 LR
The residue retained by a prepared 1.5 um Whatman 934-AH glass microfibre filter dried at 105 degrees C. A method detection limit of 2 mg/L can be achieved when 500 mL of sample is used.			
TURBIDITY-WP	Water	Turbidity	APHA, 1998, 2130B
A strong light beam is sent through a transparent tube containing the sample. Light that is reflected at 90 degrees to the axis by suspended particles is			

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

detected by the photocell. The electrical response is proportional to the sample turbidity.

** 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
WP	ALS LABORATORY GROUP - WINNIPEG, MANITOBA, CANADA
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

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.

Report to:						Report Format / Distribution				Service Requested:																													
Company: Agnico-Eagle Mines Ltd.						☒ Standard	☐ Other	☒	Regular Service (Default)																														
Contact: Ryan VanEngen						☒ PDF	☒ Excel	☐ Fax	Rush Service (2-3 Days)																														
Address: Meadowbank Division PO Box 540 Baker Lake Nun.						Email 1: rVanengen@agnico-eagle.com			Prior Service (1 Day or ASAP)																														
						Email 2: sdoire@agnico-eagle.com			Emergency Service (<1 Day / Wknd) - Contact ALS																														
Phone: 867 793 4610x6759 Fax:						Analysis Request																																	
Invoice To: ☒ Same as Report						Indicate Bottles: Filtered / Preserved (F/P) →																																	
Company: Agnico-Eagle Mining Ltd.																																							
Contact: Accounts Payable-Meadowbank Division																																							
Address: email electronic invoice to rvanengen@agnico-eagle.com																																							
Sample																																							
Phone:																																							
Fax:																																							
Lab Work Order #																																							
(lab use only)																																							
Sample #		Sample Identification (This description will appear on the report)				ALS Contact:		Sampler (Initials):		Date		Time		Sample Type (Select from drop-down list)		C.I. F, NO ₂ , NO ₃ , SO ₄		TOC/DOC * & 2 bottles		Metals & Hg (total)		Dissolved Metals		P-Total & Ortho		PH, EC, Alkalinity		Turbidity		TKN, NH ₃		Chlor-a		Hazardous?		Highly Contaminated?		Number of Containers	
BGE-1								Christine Herrod		04-Sep-10		14:00		Water		X		X		X		X		X		X		X		X		X		X		X		X	
BGS-1										04-Sep-10		14:30		Water		X		X		X		X		X		X		X		X		X		X		X		X	
BGS-2										04-Sep-10		15:00		Water		X		X		X		X		X		X		X		X		X		X		X		X	
BGS-3										04-Sep-10		15:30		Water		X		X		X		X		X		X		X		X		X		X		X		X	
BGS-4										04-Sep-10		16:00		Water		X		X		X		X		X		X		X		X		X		X		X		X	
BGS-5										04-Sep-10		16:30		Water		X		X		X		X		X		X		X		X		X		X		X		X	
BGS-6										04-Sep-10		17:00		Water		X		X		X		X		X		X		X		X		X		X		X		X	
BGW-2										04-Sep-10		17:30		Water		X		X		X		X		X		X		X		X		X		X		X		X	
BGW-3										04-Sep-10		18:00		Water		X		X		X		X		X		X		X		X		X		X		X		X	
DUP - 1 - (BGS-5)										04-Sep-10		18:30		Water		X		X		X		X		X		X		X		X		X		X		X		X	
Guidelines / Regulations						Special Instructions / 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 adjacent worksheet.																																							
Relinquished By:		Martin T		Date & Time: 05-sept-10		Received By:		[Signature]		Date & Time: 09-10 9:50		Temperature		Samples Received in Good Condition? Y / N (if no details)		Sample Condition (lab use only)																							
Relinquished By:				Date & Time:		Received By:				Date & Time:		10-6																											



AGNICO- EAGLE MINING LTD
ATTN: Ryan VanEngen
MEADOWBANK DIVISION
P.O. Box 540
BAKER LAKE NU X0X 0A0
Phone: 867- 793- 4160

Date Received: 15- SEP- 10
Report Date: 04- OCT- 10 14:42 (MT)
Version: FINAL

Certificate of Analysis

Lab Work Order #: L931706
Project P.O. #: NOT SUBMITTED
Job Reference: DIKE
Legal Site Desc:
C of C Numbers:

Gail Hill
Account Manager

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ADDRESS: 1329 Niakwa Road East, Unit 12, Winnipeg, MB R2J 3T4 Canada | Phone: + 1 204 255 9720 | Fax: + 1 204 255 9721
MANITOBA TECHNOLOGY CENTRE LTD. 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
L931706-1	BGE-1							
Sampled By:	CLIENT on 11-SEP-10 @ 09:00							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N	<0.050			0.050	mg/L		21-SEP-10	R1473786
Chlorophyll a	0.206			0.010	ug	24-SEP-10	25-SEP-10	R1477937
Dissolved Organic Carbon	2.3			1.0	mg/L		28-SEP-10	R1481147
Hardness (as CaCO3)	8.09			0.20	mg/L		17-SEP-10	
Hardness (as CaCO3)	8.09			0.30	mg/L		17-SEP-10	
Mercury (Hg)-Total	<0.000050			0.000050	mg/L	17-SEP-10	17-SEP-10	R1473006
Nitrate and Nitrite as N	<0.071			0.071	mg/L		17-SEP-10	
Ortho Phosphorus Soluble As P	<0.010	DLA		0.010	mg/L		16-SEP-10	R1468604
Phosphorus, Total	<0.010	DLA		0.010	mg/L		16-SEP-10	R1468384
Silica, Reactive (as SiO2)	0.218			0.0050	mg/L		18-SEP-10	R1470846
Total Dissolved Solids	10.0			5.0	mg/L		20-SEP-10	R1472829
Total Kjeldahl Nitrogen	<0.20			0.20	mg/L	15-SEP-10	17-SEP-10	R1470252
Total Organic Carbon	3.4			1.0	mg/L		28-SEP-10	R1481147
Total Suspended Solids	<2.0			2.0	mg/L		20-SEP-10	R1472829
Turbidity	1.52			0.10	NTU		17-SEP-10	R1470768
Anions scan (IC)								
Chloride	<0.50			0.50	mg/L		16-SEP-10	R1470272
Fluoride	<0.10			0.10	mg/L		16-SEP-10	R1470272
Nitrite-N	<0.050			0.050	mg/L		16-SEP-10	R1470272
Nitrate-N	<0.050			0.050	mg/L		16-SEP-10	R1470272
Sulfate	1.50			0.50	mg/L		16-SEP-10	R1470272
Total Metals by ICP-MS								
Aluminum (Al)-Total	0.144			0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Antimony (Sb)-Total	<0.00020			0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Arsenic (As)-Total	0.00056			0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Barium (Ba)-Total	0.00346			0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Beryllium (Be)-Total	<0.00020			0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Bismuth (Bi)-Total	<0.00020			0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Boron (B)-Total	<0.010			0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cadmium (Cd)-Total	<0.000010			0.000010	mg/L	16-SEP-10	16-SEP-10	R1469666
Calcium (Ca)-Total	1.96			0.10	mg/L	16-SEP-10	16-SEP-10	R1469666
Cesium (Cs)-Total	<0.00010			0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Chromium (Cr)-Total	<0.0010			0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cobalt (Co)-Total	<0.00020			0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Copper (Cu)-Total	0.00059			0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Iron (Fe)-Total	0.127			0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Lead (Pb)-Total	<0.000090			0.000090	mg/L	16-SEP-10	16-SEP-10	R1469666
Lithium (Li)-Total	<0.0020			0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Magnesium (Mg)-Total	0.774			0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Manganese (Mn)-Total	0.00271			0.00030	mg/L	16-SEP-10	16-SEP-10	R1469666
Molybdenum (Mo)-Total	0.00022			0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Nickel (Ni)-Total	<0.0020			0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Phosphorus (P)-Total	<0.20			0.20	mg/L	16-SEP-10	16-SEP-10	R1469666
Potassium (K)-Total	0.503			0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Rubidium (Rb)-Total	0.00101			0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Selenium (Se)-Total	<0.0010			0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Silicon (Si)-Total	0.417			0.050	mg/L	16-SEP-10	16-SEP-10	R1469666
Silver (Ag)-Total	<0.00010			0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Sodium (Na)-Total	0.541			0.030	mg/L	16-SEP-10	16-SEP-10	R1469666
Strontium (Sr)-Total	0.00781			0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666

* 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
L931706-1	BGE-1						
Sampled By:	CLIENT on 11-SEP-10 @ 09:00						
Matrix:	WATER						
Total Metals by ICP-MS							
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Thorium (Th)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tin (Sn)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Titanium (Ti)-Total	0.00528		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Tungsten (W)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Uranium (U)-Total	0.00011		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Vanadium (V)-Total	0.00022		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	16-SEP-10	16-SEP-10	R1469666
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0512		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Arsenic (As)-Dissolved	0.00053		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Barium (Ba)-Dissolved	0.00281		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Boron (B)-Dissolved	<0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	15-SEP-10	16-SEP-10	R1469485
Calcium (Ca)-Dissolved	2.09		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Copper (Cu)-Dissolved	0.00061		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Iron (Fe)-Dissolved	0.011		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Lead (Pb)-Dissolved	0.000166		0.000090	mg/L	15-SEP-10	16-SEP-10	R1469485
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Magnesium (Mg)-Dissolved	0.701		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Manganese (Mn)-Dissolved	0.00210		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Molybdenum (Mo)-Dissolved	0.00022		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Nickel (Ni)-Dissolved	0.00045		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	15-SEP-10	16-SEP-10	R1469485
Potassium (K)-Dissolved	0.422		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Rubidium (Rb)-Dissolved	0.00067		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Silicon (Si)-Dissolved	0.143		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Sodium (Na)-Dissolved	0.567		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Strontium (Sr)-Dissolved	0.00844		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	15-SEP-10	16-SEP-10	R1469485
pH, Conductivity and Total Alkalinity							
Alkalinity							

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L931706-1	BGE-1							
Sampled By:	CLIENT on 11-SEP-10 @ 09:00							
Matrix:	WATER							
Alkalinity								
Alkalinity, Total (as CaCO3)		7.7		1.0	mg/L		15-SEP-10	R1467947
Bicarbonate (HCO3)		9.3		2.0	mg/L		15-SEP-10	R1467947
Carbonate (CO3)		<0.60		0.60	mg/L		15-SEP-10	R1467947
Hydroxide (OH)		<0.40		0.40	mg/L		15-SEP-10	R1467947
Conductivity								
Conductivity		20.1		0.40	umhos/cm		15-SEP-10	R1467947
pH								
pH		7.22		0.10	pH units		15-SEP-10	R1467947
L931706-2	BGS-1							
Sampled By:	CLIENT on 11-SEP-10 @ 12:40							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		21-SEP-10	R1473786
Chlorophyll a		0.527		0.010	ug/L	24-SEP-10	25-SEP-10	R1477937
Dissolved Organic Carbon		2.5		1.0	mg/L		28-SEP-10	R1481147
Hardness (as CaCO3)		8.14		0.30	mg/L		17-SEP-10	
Hardness (as CaCO3)		6.69		0.20	mg/L		17-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	17-SEP-10	17-SEP-10	R1473006
Nitrate and Nitrite as N		<0.071		0.071	mg/L		17-SEP-10	
Ortho Phosphorus Soluble As P		0.0104		0.0010	mg/L		16-SEP-10	R1468604
Phosphorus, Total		0.0121		0.0020	mg/L		16-SEP-10	R1468384
Silica, Reactive (as SiO2)		0.242		0.0050	mg/L		18-SEP-10	R1470846
Total Dissolved Solids		<5.0		5.0	mg/L		20-SEP-10	R1472829
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	15-SEP-10	17-SEP-10	R1470252
Total Organic Carbon		2.9		1.0	mg/L		28-SEP-10	R1481147
Total Suspended Solids		3.6		2.0	mg/L		20-SEP-10	R1472829
Turbidity		2.90		0.10	NTU		17-SEP-10	R1470768
Anions scan (IC)								
Chloride		<0.50		0.50	mg/L		16-SEP-10	R1470272
Fluoride		<0.10		0.10	mg/L		16-SEP-10	R1470272
Nitrite-N		<0.050		0.050	mg/L		16-SEP-10	R1470272
Nitrate-N		<0.050		0.050	mg/L		16-SEP-10	R1470272
Sulfate		1.48		0.50	mg/L		16-SEP-10	R1470272
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.285		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Arsenic (As)-Total		0.00057		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Barium (Ba)-Total		0.00458		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Boron (B)-Total		<0.010		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	16-SEP-10	16-SEP-10	R1469666
Calcium (Ca)-Total		1.91		0.10	mg/L	16-SEP-10	16-SEP-10	R1469666
Cesium (Cs)-Total		<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Chromium (Cr)-Total		0.0012		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cobalt (Co)-Total		<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Copper (Cu)-Total		0.00086		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Iron (Fe)-Total		0.348		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Lead (Pb)-Total		0.000144		0.000090	mg/L	16-SEP-10	16-SEP-10	R1469666
Lithium (Li)-Total		<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L931706-2 BGS-1							
Sampled By: CLIENT on 11-SEP-10 @ 12:40							
Matrix: WATER							
Total Metals by ICP-MS							
Magnesium (Mg)-Total	0.819		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Manganese (Mn)-Total	0.00488		0.00030	mg/L	16-SEP-10	16-SEP-10	R1469666
Molybdenum (Mo)-Total	0.00024		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Phosphorus (P)-Total	<0.20		0.20	mg/L	16-SEP-10	16-SEP-10	R1469666
Potassium (K)-Total	0.569		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Rubidium (Rb)-Total	0.00140		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Selenium (Se)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Silicon (Si)-Total	0.704		0.050	mg/L	16-SEP-10	16-SEP-10	R1469666
Silver (Ag)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Sodium (Na)-Total	0.551		0.030	mg/L	16-SEP-10	16-SEP-10	R1469666
Strontium (Sr)-Total	0.00801		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Thorium (Th)-Total	0.00020		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tin (Sn)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Titanium (Ti)-Total	0.0102		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Tungsten (W)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Uranium (U)-Total	0.00019		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Vanadium (V)-Total	0.00043		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Zirconium (Zr)-Total	0.00064		0.00040	mg/L	16-SEP-10	16-SEP-10	R1469666
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0030		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Arsenic (As)-Dissolved	0.00046		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Barium (Ba)-Dissolved	0.00244		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Boron (B)-Dissolved	<0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	15-SEP-10	16-SEP-10	R1469485
Calcium (Ca)-Dissolved	1.60		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Copper (Cu)-Dissolved	0.00040		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	15-SEP-10	16-SEP-10	R1469485
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Magnesium (Mg)-Dissolved	0.652		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Manganese (Mn)-Dissolved	0.00051		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Molybdenum (Mo)-Dissolved	0.00022		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Nickel (Ni)-Dissolved	0.00041		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	15-SEP-10	16-SEP-10	R1469485
Potassium (K)-Dissolved	0.411		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Rubidium (Rb)-Dissolved	0.00063		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Silicon (Si)-Dissolved	0.123		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Sodium (Na)-Dissolved	0.487		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Strontium (Sr)-Dissolved	0.00762		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L931706-3 BGS-2							
Sampled By: CLIENT on 11-SEP-10 @ 12:10							
Matrix: WATER							
Total Metals by ICP-MS							
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Boron (B)-Total	<0.010		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	16-SEP-10	16-SEP-10	R1469666
Calcium (Ca)-Total	1.83		0.10	mg/L	16-SEP-10	16-SEP-10	R1469666
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Copper (Cu)-Total	0.00069		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Iron (Fe)-Total	0.169		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Lead (Pb)-Total	0.000105		0.000090	mg/L	16-SEP-10	16-SEP-10	R1469666
Lithium (Li)-Total	<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Magnesium (Mg)-Total	0.767		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Manganese (Mn)-Total	0.00303		0.00030	mg/L	16-SEP-10	16-SEP-10	R1469666
Molybdenum (Mo)-Total	0.00021		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Phosphorus (P)-Total	<0.20		0.20	mg/L	16-SEP-10	16-SEP-10	R1469666
Potassium (K)-Total	0.515		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Rubidium (Rb)-Total	0.00112		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Selenium (Se)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Silicon (Si)-Total	0.485		0.050	mg/L	16-SEP-10	16-SEP-10	R1469666
Silver (Ag)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Sodium (Na)-Total	0.535		0.030	mg/L	16-SEP-10	16-SEP-10	R1469666
Strontium (Sr)-Total	0.00748		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Thorium (Th)-Total	0.00015		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tin (Sn)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Titanium (Ti)-Total	0.0103		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Tungsten (W)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Uranium (U)-Total	0.00014		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Vanadium (V)-Total	0.00028		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	16-SEP-10	16-SEP-10	R1469666
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0029		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Arsenic (As)-Dissolved	0.00047		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Barium (Ba)-Dissolved	0.00252		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Boron (B)-Dissolved	<0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	15-SEP-10	16-SEP-10	R1469485
Calcium (Ca)-Dissolved	1.62		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Copper (Cu)-Dissolved	0.00039		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	15-SEP-10	16-SEP-10	R1469485
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485

* 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
L931706-3	BGS-2							
Sampled By: CLIENT on 11-SEP-10 @ 12:10								
Matrix: WATER								
Dissolved Metals by ICP-MS								
Magnesium (Mg)-Dissolved		0.658		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Manganese (Mn)-Dissolved		0.00036		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Molybdenum (Mo)-Dissolved		0.00022		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Nickel (Ni)-Dissolved		0.00050		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Phosphorus (P)-Dissolved		<0.10		0.10	mg/L	15-SEP-10	16-SEP-10	R1469485
Potassium (K)-Dissolved		0.416		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Rubidium (Rb)-Dissolved		0.00062		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Selenium (Se)-Dissolved		<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Silicon (Si)-Dissolved		0.125		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Sodium (Na)-Dissolved		0.492		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Strontium (Sr)-Dissolved		0.00756		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tellurium (Te)-Dissolved		<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Thorium (Th)-Dissolved		<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tin (Sn)-Dissolved		<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Titanium (Ti)-Dissolved		<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Tungsten (W)-Dissolved		<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Vanadium (V)-Dissolved		<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zinc (Zn)-Dissolved		<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zirconium (Zr)-Dissolved		<0.00040		0.00040	mg/L	15-SEP-10	16-SEP-10	R1469485
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		7.4		1.0	mg/L		15-SEP-10	R1467947
Bicarbonate (HCO3)		9.0		2.0	mg/L		15-SEP-10	R1467947
Carbonate (CO3)		<0.60		0.60	mg/L		15-SEP-10	R1467947
Hydroxide (OH)		<0.40		0.40	mg/L		15-SEP-10	R1467947
Conductivity								
Conductivity		17.7		0.40	umhos/cm		16-SEP-10	R1468490
pH								
pH		7.23		0.10	pH units		15-SEP-10	R1467947
L931706-4	BGS-3							
Sampled By: CLIENT on 11-SEP-10 @ 11:45								
Matrix: WATER								
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		21-SEP-10	R1473786
Chlorophyll a		0.503		0.010	ug/L	24-SEP-10	25-SEP-10	R1477937
Dissolved Organic Carbon		2.6		1.0	mg/L		28-SEP-10	R1481147
Hardness (as CaCO3)		7.85		0.30	mg/L		17-SEP-10	
Hardness (as CaCO3)		6.72		0.20	mg/L		17-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	17-SEP-10	17-SEP-10	R1473006
Nitrate and Nitrite as N		<0.071		0.071	mg/L		17-SEP-10	
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		16-SEP-10	R1468604
Phosphorus, Total		<0.010	DLA	0.010	mg/L		16-SEP-10	R1468384
Silica, Reactive (as SiO2)		0.227		0.0050	mg/L		18-SEP-10	R1470846
Total Dissolved Solids		10.0		5.0	mg/L		20-SEP-10	R1472829
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	15-SEP-10	17-SEP-10	R1470252
Total Organic Carbon		2.3		1.0	mg/L		28-SEP-10	R1481147
Total Suspended Solids		2.0		2.0	mg/L		20-SEP-10	R1472829

* 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
L931706-4 BGS-3							
Sampled By: CLIENT on 11-SEP-10 @ 11:45							
Matrix: WATER							
Turbidity	1.63		0.10	NTU		17-SEP-10	R1470768
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		16-SEP-10	R1470272
Fluoride	<0.10		0.10	mg/L		16-SEP-10	R1470272
Nitrite-N	<0.050		0.050	mg/L		16-SEP-10	R1470272
Nitrate-N	<0.050		0.050	mg/L		16-SEP-10	R1470272
Sulfate	1.47		0.50	mg/L		16-SEP-10	R1470272
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.151		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Arsenic (As)-Total	0.00056		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Barium (Ba)-Total	0.00350		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Boron (B)-Total	<0.010		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	16-SEP-10	16-SEP-10	R1469666
Calcium (Ca)-Total	1.88		0.10	mg/L	16-SEP-10	16-SEP-10	R1469666
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Copper (Cu)-Total	0.00081		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Iron (Fe)-Total	0.146		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Lead (Pb)-Total	0.000111		0.000090	mg/L	16-SEP-10	16-SEP-10	R1469666
Lithium (Li)-Total	<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Magnesium (Mg)-Total	0.767		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Manganese (Mn)-Total	0.00279		0.00030	mg/L	16-SEP-10	16-SEP-10	R1469666
Molybdenum (Mo)-Total	0.00024		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Phosphorus (P)-Total	<0.20		0.20	mg/L	16-SEP-10	16-SEP-10	R1469666
Potassium (K)-Total	0.519		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Rubidium (Rb)-Total	0.00106		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Selenium (Se)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Silicon (Si)-Total	0.419		0.050	mg/L	16-SEP-10	16-SEP-10	R1469666
Silver (Ag)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Sodium (Na)-Total	0.535		0.030	mg/L	16-SEP-10	16-SEP-10	R1469666
Strontium (Sr)-Total	0.00764		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Thorium (Th)-Total	0.00011		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tin (Sn)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Titanium (Ti)-Total	0.00548		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Tungsten (W)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Uranium (U)-Total	0.00013		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Vanadium (V)-Total	0.00025		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	16-SEP-10	16-SEP-10	R1469666
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0033		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Arsenic (As)-Dissolved	0.00050		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Barium (Ba)-Dissolved	0.00246		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485

* 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
L931706-4 BGS-3 Sampled By: CLIENT on 11-SEP-10 @ 11:45 Matrix: WATER							
Dissolved Metals by ICP-MS							
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Boron (B)-Dissolved	<0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	15-SEP-10	16-SEP-10	R1469485
Calcium (Ca)-Dissolved	1.61		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Copper (Cu)-Dissolved	0.00038		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	15-SEP-10	16-SEP-10	R1469485
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Magnesium (Mg)-Dissolved	0.655		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Manganese (Mn)-Dissolved	0.00030		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Molybdenum (Mo)-Dissolved	0.00021		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Nickel (Ni)-Dissolved	0.00040		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	15-SEP-10	16-SEP-10	R1469485
Potassium (K)-Dissolved	0.414		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Rubidium (Rb)-Dissolved	0.00064		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Silicon (Si)-Dissolved	0.128		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Sodium (Na)-Dissolved	0.480		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Strontium (Sr)-Dissolved	0.00769		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	15-SEP-10	16-SEP-10	R1469485
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.4		1.0	mg/L		15-SEP-10	R1467947
Bicarbonate (HCO3)	9.0		2.0	mg/L		15-SEP-10	R1467947
Carbonate (CO3)	<0.60		0.60	mg/L		15-SEP-10	R1467947
Hydroxide (OH)	<0.40		0.40	mg/L		15-SEP-10	R1467947
Conductivity							
Conductivity	17.8		0.40	umhos/cm		16-SEP-10	R1468490
pH							
pH	7.21		0.10	pH units		15-SEP-10	R1467947
L931706-5 BGS-4 Sampled By: CLIENT on 11-SEP-10 @ 11:11 Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		21-SEP-10	R1473786
Chlorophyll a	0.574		0.010	ug/L	24-SEP-10	25-SEP-10	R1477937
Dissolved Organic Carbon	2.6		1.0	mg/L		28-SEP-10	R1481147
Hardness (as CaCO3)	6.66		0.20	mg/L		17-SEP-10	

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L931706-5 BGS-4							
Sampled By: CLIENT on 11-SEP-10 @ 11:11							
Matrix: WATER							
Hardness (as CaCO3)	7.69		0.30	mg/L		17-SEP-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	17-SEP-10	17-SEP-10	R1473006
Nitrate and Nitrite as N	<0.071		0.071	mg/L		17-SEP-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		16-SEP-10	R1468604
Phosphorus, Total	0.0281		0.0020	mg/L		16-SEP-10	R1468384
Silica, Reactive (as SiO2)	0.227		0.0050	mg/L		18-SEP-10	R1470846
Total Dissolved Solids	12.0		5.0	mg/L		20-SEP-10	R1472829
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	15-SEP-10	17-SEP-10	R1470252
Total Organic Carbon	2.3		1.0	mg/L		28-SEP-10	R1481147
Total Suspended Solids	<2.0		2.0	mg/L		20-SEP-10	R1472829
Turbidity	1.59		0.10	NTU		17-SEP-10	R1470768
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		16-SEP-10	R1470272
Fluoride	<0.10		0.10	mg/L		16-SEP-10	R1470272
Nitrite-N	<0.050		0.050	mg/L		16-SEP-10	R1470272
Nitrate-N	<0.050		0.050	mg/L		16-SEP-10	R1470272
Sulfate	1.48		0.50	mg/L		16-SEP-10	R1470272
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.153		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Arsenic (As)-Total	0.00058		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Barium (Ba)-Total	0.00362		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Boron (B)-Total	<0.010		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	16-SEP-10	16-SEP-10	R1469666
Calcium (Ca)-Total	1.83		0.10	mg/L	16-SEP-10	16-SEP-10	R1469666
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Copper (Cu)-Total	0.00196		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Iron (Fe)-Total	0.146		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Lead (Pb)-Total	0.000121		0.000090	mg/L	16-SEP-10	16-SEP-10	R1469666
Lithium (Li)-Total	<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Magnesium (Mg)-Total	0.759		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Manganese (Mn)-Total	0.00284		0.00030	mg/L	16-SEP-10	16-SEP-10	R1469666
Molybdenum (Mo)-Total	0.00023		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Phosphorus (P)-Total	<0.20		0.20	mg/L	16-SEP-10	16-SEP-10	R1469666
Potassium (K)-Total	0.508		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Rubidium (Rb)-Total	0.00105		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Selenium (Se)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Silicon (Si)-Total	0.423		0.050	mg/L	16-SEP-10	16-SEP-10	R1469666
Silver (Ag)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Sodium (Na)-Total	0.538		0.030	mg/L	16-SEP-10	16-SEP-10	R1469666
Strontium (Sr)-Total	0.00764		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Thorium (Th)-Total	0.00011		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tin (Sn)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Titanium (Ti)-Total	0.00529		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666

* 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
L931706-5 BGS-4							
Sampled By: CLIENT on 11-SEP-10 @ 11:11							
Matrix: WATER							
Total Metals by ICP-MS							
Tungsten (W)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Uranium (U)-Total	0.00015		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Vanadium (V)-Total	0.00025		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	16-SEP-10	16-SEP-10	R1469666
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0031		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Arsenic (As)-Dissolved	0.00054		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Barium (Ba)-Dissolved	0.00252		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Boron (B)-Dissolved	<0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	15-SEP-10	16-SEP-10	R1469485
Calcium (Ca)-Dissolved	1.60		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Copper (Cu)-Dissolved	0.00037		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	15-SEP-10	16-SEP-10	R1469485
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Magnesium (Mg)-Dissolved	0.645		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Manganese (Mn)-Dissolved	0.00030		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Molybdenum (Mo)-Dissolved	0.00021		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Nickel (Ni)-Dissolved	0.00037		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	15-SEP-10	16-SEP-10	R1469485
Potassium (K)-Dissolved	0.408		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Rubidium (Rb)-Dissolved	0.00064		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Silicon (Si)-Dissolved	0.122		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Sodium (Na)-Dissolved	0.485		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Strontium (Sr)-Dissolved	0.00763		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	15-SEP-10	16-SEP-10	R1469485
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.5		1.0	mg/L		15-SEP-10	R1467947
Bicarbonate (HCO3)	9.1		2.0	mg/L		15-SEP-10	R1467947
Carbonate (CO3)	<0.60		0.60	mg/L		15-SEP-10	R1467947
Hydroxide (OH)	<0.40		0.40	mg/L		15-SEP-10	R1467947
Conductivity							
Conductivity	17.9		0.40	umhos/cm		16-SEP-10	R1468490

* 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
L931706-5	BGS-4							
Sampled By: CLIENT on 11-SEP-10 @ 11:11								
Matrix: WATER								
pH								
pH		7.21		0.10	pH units		15-SEP-10	R1467947
L931706-6	BGS-5							
Sampled By: CLIENT on 11-SEP-10 @ 10:40								
Matrix: WATER								
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		21-SEP-10	R1473786
Chlorophyll a		0.699		0.010	ug/L	24-SEP-10	25-SEP-10	R1477937
Dissolved Organic Carbon		2.7		1.0	mg/L		30-SEP-10	R1484485
Hardness (as CaCO3)		6.71		0.20	mg/L		17-SEP-10	
Hardness (as CaCO3)		7.64		0.30	mg/L		17-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	17-SEP-10	17-SEP-10	R1473006
Nitrate and Nitrite as N		<0.071		0.071	mg/L		17-SEP-10	
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		16-SEP-10	R1468604
Phosphorus, Total		<0.010	DLA	0.010	mg/L		16-SEP-10	R1468384
Silica, Reactive (as SiO2)		0.231		0.0050	mg/L		18-SEP-10	R1470846
Total Dissolved Solids		20.0		5.0	mg/L		20-SEP-10	R1472829
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	15-SEP-10	17-SEP-10	R1470252
Total Organic Carbon		3.1		1.0	mg/L		30-SEP-10	R1484485
Total Suspended Solids		<2.0		2.0	mg/L		20-SEP-10	R1472829
Turbidity		1.55		0.10	NTU		17-SEP-10	R1470768
Anions scan (IC)								
Chloride		<0.50		0.50	mg/L		16-SEP-10	R1470272
Fluoride		<0.10		0.10	mg/L		16-SEP-10	R1470272
Nitrite-N		<0.050		0.050	mg/L		16-SEP-10	R1470272
Nitrate-N		<0.050		0.050	mg/L		16-SEP-10	R1470272
Sulfate		1.49		0.50	mg/L		16-SEP-10	R1470272
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.169		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Arsenic (As)-Total		0.00058		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Barium (Ba)-Total		0.00364		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Boron (B)-Total		<0.010		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	16-SEP-10	16-SEP-10	R1469666
Calcium (Ca)-Total		1.84		0.10	mg/L	16-SEP-10	16-SEP-10	R1469666
Cesium (Cs)-Total		<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Chromium (Cr)-Total		<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cobalt (Co)-Total		<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Copper (Cu)-Total		0.00062		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Iron (Fe)-Total		0.145		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Lead (Pb)-Total		0.000092		0.000090	mg/L	16-SEP-10	16-SEP-10	R1469666
Lithium (Li)-Total		<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Magnesium (Mg)-Total		0.742		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Manganese (Mn)-Total		0.00273		0.00030	mg/L	16-SEP-10	16-SEP-10	R1469666
Molybdenum (Mo)-Total		0.00022		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Nickel (Ni)-Total		<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Phosphorus (P)-Total		<0.20		0.20	mg/L	16-SEP-10	16-SEP-10	R1469666
Potassium (K)-Total		0.499		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Rubidium (Rb)-Total		0.00104		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666

* 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
L931706-6 BGS-5							
Sampled By: CLIENT on 11-SEP-10 @ 10:40							
Matrix: WATER							
Total Metals by ICP-MS							
Selenium (Se)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Silicon (Si)-Total	0.456		0.050	mg/L	16-SEP-10	16-SEP-10	R1469666
Silver (Ag)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Sodium (Na)-Total	0.514		0.030	mg/L	16-SEP-10	16-SEP-10	R1469666
Strontium (Sr)-Total	0.00757		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Thorium (Th)-Total	0.00011		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tin (Sn)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Titanium (Ti)-Total	0.00567		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Tungsten (W)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Uranium (U)-Total	0.00013		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Vanadium (V)-Total	0.00023		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	16-SEP-10	16-SEP-10	R1469666
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0049		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Arsenic (As)-Dissolved	0.00056		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Barium (Ba)-Dissolved	0.00251		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Boron (B)-Dissolved	<0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	15-SEP-10	16-SEP-10	R1469485
Calcium (Ca)-Dissolved	1.61		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Copper (Cu)-Dissolved	0.00035		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	15-SEP-10	16-SEP-10	R1469485
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Magnesium (Mg)-Dissolved	0.653		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Manganese (Mn)-Dissolved	0.00033		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Molybdenum (Mo)-Dissolved	0.00021		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Nickel (Ni)-Dissolved	0.00040		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	15-SEP-10	16-SEP-10	R1469485
Potassium (K)-Dissolved	0.415		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Rubidium (Rb)-Dissolved	0.00063		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Silicon (Si)-Dissolved	0.124		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Sodium (Na)-Dissolved	0.480		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Strontium (Sr)-Dissolved	0.00768		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L931706-6	BGS-5							
Sampled By:	CLIENT on 11-SEP-10 @ 10:40							
Matrix:	WATER							
Dissolved Metals by ICP-MS								
Vanadium (V)-Dissolved		<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zinc (Zn)-Dissolved		<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zirconium (Zr)-Dissolved		<0.00040		0.00040	mg/L	15-SEP-10	16-SEP-10	R1469485
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		7.5		1.0	mg/L		15-SEP-10	R1467947
Bicarbonate (HCO3)		9.2		2.0	mg/L		15-SEP-10	R1467947
Carbonate (CO3)		<0.60		0.60	mg/L		15-SEP-10	R1467947
Hydroxide (OH)		<0.40		0.40	mg/L		15-SEP-10	R1467947
Conductivity								
Conductivity		20.2		0.40	umhos/cm		15-SEP-10	R1467947
pH								
pH		7.23		0.10	pH units		15-SEP-10	R1467947
L931706-7	BGS-6							
Sampled By:	CLIENT on 11-SEP-10 @ 10:05							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		21-SEP-10	R1473786
Chlorophyll a		0.204		0.010	ug	24-SEP-10	25-SEP-10	R1477937
Dissolved Organic Carbon		2.8		1.0	mg/L		28-SEP-10	R1481147
Hardness (as CaCO3)		6.68		0.20	mg/L		17-SEP-10	
Hardness (as CaCO3)		8.05		0.30	mg/L		18-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	17-SEP-10	17-SEP-10	R1473006
Nitrate and Nitrite as N		<0.071		0.071	mg/L		17-SEP-10	
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		16-SEP-10	R1468604
Phosphorus, Total		<0.010	DLA	0.010	mg/L		16-SEP-10	R1468384
Silica, Reactive (as SiO2)		0.223		0.0050	mg/L		18-SEP-10	R1470846
Total Dissolved Solids		18.0		5.0	mg/L		20-SEP-10	R1472829
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	15-SEP-10	17-SEP-10	R1470252
Total Organic Carbon		2.8		1.0	mg/L		28-SEP-10	R1481147
Total Suspended Solids		<2.0		2.0	mg/L		20-SEP-10	R1472829
Turbidity		1.50		0.10	NTU		17-SEP-10	R1470768
Anions scan (IC)								
Chloride		<0.50		0.50	mg/L		16-SEP-10	R1470272
Fluoride		<0.10		0.10	mg/L		16-SEP-10	R1470272
Nitrite-N		<0.050		0.050	mg/L		16-SEP-10	R1470272
Nitrate-N		<0.050		0.050	mg/L		16-SEP-10	R1470272
Sulfate		1.48		0.50	mg/L		16-SEP-10	R1470272
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.138		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Arsenic (As)-Total		0.00062		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Barium (Ba)-Total		0.00343		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Boron (B)-Total		<0.010		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	16-SEP-10	17-SEP-10	R1470702
Calcium (Ca)-Total		1.95		0.10	mg/L	16-SEP-10	16-SEP-10	R1469666
Cesium (Cs)-Total		<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Chromium (Cr)-Total		<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666

* 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
L931706-7 BGS-6							
Sampled By: CLIENT on 11-SEP-10 @ 10:05							
Matrix: WATER							
Total Metals by ICP-MS							
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Copper (Cu)-Total	0.00062		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Iron (Fe)-Total	0.138		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Lead (Pb)-Total	0.000092		0.000090	mg/L	16-SEP-10	16-SEP-10	R1469666
Lithium (Li)-Total	<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Magnesium (Mg)-Total	0.772		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Manganese (Mn)-Total	0.00278		0.00030	mg/L	16-SEP-10	16-SEP-10	R1469666
Molybdenum (Mo)-Total	0.00025		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Phosphorus (P)-Total	<0.20		0.20	mg/L	16-SEP-10	16-SEP-10	R1469666
Potassium (K)-Total	0.520		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Rubidium (Rb)-Total	0.00103		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Selenium (Se)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Silicon (Si)-Total	0.386		0.050	mg/L	16-SEP-10	16-SEP-10	R1469666
Silver (Ag)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Sodium (Na)-Total	0.551		0.030	mg/L	16-SEP-10	16-SEP-10	R1469666
Strontium (Sr)-Total	0.00793		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Thorium (Th)-Total	0.00012		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tin (Sn)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Titanium (Ti)-Total	0.00485		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Tungsten (W)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Uranium (U)-Total	0.00014		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Vanadium (V)-Total	0.00023		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	16-SEP-10	16-SEP-10	R1469666
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0105		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Arsenic (As)-Dissolved	0.00059		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Barium (Ba)-Dissolved	0.00264		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Boron (B)-Dissolved	<0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	15-SEP-10	17-SEP-10	R1470702
Calcium (Ca)-Dissolved	1.60		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Copper (Cu)-Dissolved	0.00042		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Iron (Fe)-Dissolved	0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	15-SEP-10	16-SEP-10	R1469485
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Magnesium (Mg)-Dissolved	0.650		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Manganese (Mn)-Dissolved	0.00043		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Molybdenum (Mo)-Dissolved	0.00025		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Nickel (Ni)-Dissolved	0.00047		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	15-SEP-10	16-SEP-10	R1469485
Potassium (K)-Dissolved	0.414		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Rubidium (Rb)-Dissolved	0.00070		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485

* 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
L931706-7	BGS-6							
Sampled By: CLIENT on 11-SEP-10 @ 10:05								
Matrix: WATER								
Dissolved Metals by ICP-MS								
Selenium (Se)-Dissolved		<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Silicon (Si)-Dissolved		0.138		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Sodium (Na)-Dissolved		0.481		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Strontium (Sr)-Dissolved		0.00786		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tellurium (Te)-Dissolved		<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Thorium (Th)-Dissolved		<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tin (Sn)-Dissolved		<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Titanium (Ti)-Dissolved		0.00022		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Tungsten (W)-Dissolved		<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Uranium (U)-Dissolved		0.00011		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Vanadium (V)-Dissolved		<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zinc (Zn)-Dissolved		<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zirconium (Zr)-Dissolved		<0.00040		0.00040	mg/L	15-SEP-10	16-SEP-10	R1469485
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		7.5		1.0	mg/L		15-SEP-10	R1467947
Bicarbonate (HCO3)		9.1		2.0	mg/L		15-SEP-10	R1467947
Carbonate (CO3)		<0.60		0.60	mg/L		15-SEP-10	R1467947
Hydroxide (OH)		<0.40		0.40	mg/L		15-SEP-10	R1467947
Conductivity								
Conductivity		17.9		0.40	umhos/cm		16-SEP-10	R1468490
pH								
pH		7.23		0.10	pH units		15-SEP-10	R1467947
L931706-8	DUP 1							
Sampled By: CLIENT on 11-SEP-10								
Matrix: WATER								
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		21-SEP-10	R1473786
Chlorophyll a		0.248		0.010	ug/L	24-SEP-10	25-SEP-10	R1477937
Dissolved Organic Carbon		3.1		1.0	mg/L		29-SEP-10	R1482811
Hardness (as CaCO3)		6.93		0.20	mg/L		17-SEP-10	
Hardness (as CaCO3)		7.84		0.30	mg/L		17-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	17-SEP-10	17-SEP-10	R1473006
Nitrate and Nitrite as N		<0.071		0.071	mg/L		17-SEP-10	
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		16-SEP-10	R1468604
Phosphorus, Total		<0.010	DLA	0.010	mg/L		16-SEP-10	R1468384
Silica, Reactive (as SiO2)		0.204		0.0050	mg/L		18-SEP-10	R1470846
Total Dissolved Solids		12.0		5.0	mg/L		20-SEP-10	R1472829
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	15-SEP-10	17-SEP-10	R1470252
Total Organic Carbon		2.9		1.0	mg/L		29-SEP-10	R1482811
Total Suspended Solids		<2.0		2.0	mg/L		20-SEP-10	R1472829
Turbidity		1.49		0.10	NTU		17-SEP-10	R1470768
Anions scan (IC)								
Chloride		<0.50		0.50	mg/L		16-SEP-10	R1470272
Fluoride		<0.10		0.10	mg/L		16-SEP-10	R1470272
Nitrite-N		<0.050		0.050	mg/L		16-SEP-10	R1470272
Nitrate-N		<0.050		0.050	mg/L		16-SEP-10	R1470272
Sulfate		1.50		0.50	mg/L		16-SEP-10	R1470272

* 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
L931706-8 DUP 1							
Sampled By: CLIENT on 11-SEP-10							
Matrix: WATER							
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.146		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Arsenic (As)-Total	0.00054		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Barium (Ba)-Total	0.00347		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Boron (B)-Total	<0.010		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	16-SEP-10	16-SEP-10	R1469666
Calcium (Ca)-Total	1.90		0.10	mg/L	16-SEP-10	16-SEP-10	R1469666
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Copper (Cu)-Total	0.00062		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Iron (Fe)-Total	0.129		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Lead (Pb)-Total	<0.000090		0.000090	mg/L	16-SEP-10	16-SEP-10	R1469666
Lithium (Li)-Total	<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Magnesium (Mg)-Total	0.755		0.010	mg/L	16-SEP-10	16-SEP-10	R1469666
Manganese (Mn)-Total	0.00267		0.00030	mg/L	16-SEP-10	16-SEP-10	R1469666
Molybdenum (Mo)-Total	0.00022		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	16-SEP-10	16-SEP-10	R1469666
Phosphorus (P)-Total	<0.20		0.20	mg/L	16-SEP-10	16-SEP-10	R1469666
Potassium (K)-Total	0.513		0.020	mg/L	16-SEP-10	16-SEP-10	R1469666
Rubidium (Rb)-Total	0.00102		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Selenium (Se)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Silicon (Si)-Total	0.397		0.050	mg/L	16-SEP-10	16-SEP-10	R1469666
Silver (Ag)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Sodium (Na)-Total	0.531		0.030	mg/L	16-SEP-10	16-SEP-10	R1469666
Strontium (Sr)-Total	0.00778		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Thorium (Th)-Total	<0.00010		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Tin (Sn)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Titanium (Ti)-Total	0.00644		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Tungsten (W)-Total	<0.0010		0.0010	mg/L	16-SEP-10	16-SEP-10	R1469666
Uranium (U)-Total	0.00012		0.00010	mg/L	16-SEP-10	16-SEP-10	R1469666
Vanadium (V)-Total	<0.00020		0.00020	mg/L	16-SEP-10	16-SEP-10	R1469666
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	16-SEP-10	16-SEP-10	R1469666
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	16-SEP-10	16-SEP-10	R1469666
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0152		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Arsenic (As)-Dissolved	0.00052		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Barium (Ba)-Dissolved	0.00260		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Boron (B)-Dissolved	<0.010		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	15-SEP-10	16-SEP-10	R1469485
Calcium (Ca)-Dissolved	1.68		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L931706-8 DUP 1								
Sampled By: CLIENT on 11-SEP-10								
Matrix: WATER								
Dissolved Metals by ICP-MS								
Copper (Cu)-Dissolved		0.00034		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Iron (Fe)-Dissolved		0.011		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Lead (Pb)-Dissolved		<0.000090		0.000090	mg/L	15-SEP-10	16-SEP-10	R1469485
Lithium (Li)-Dissolved		<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Magnesium (Mg)-Dissolved		0.665		0.010	mg/L	15-SEP-10	16-SEP-10	R1469485
Manganese (Mn)-Dissolved		0.00057		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Molybdenum (Mo)-Dissolved		0.00021		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Nickel (Ni)-Dissolved		0.00043		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Phosphorus (P)-Dissolved		<0.10		0.10	mg/L	15-SEP-10	16-SEP-10	R1469485
Potassium (K)-Dissolved		0.420		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Rubidium (Rb)-Dissolved		0.00069		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Selenium (Se)-Dissolved		<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Silicon (Si)-Dissolved		0.145		0.050	mg/L	15-SEP-10	16-SEP-10	R1469485
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Sodium (Na)-Dissolved		0.491		0.020	mg/L	15-SEP-10	16-SEP-10	R1469485
Strontium (Sr)-Dissolved		0.00770		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tellurium (Te)-Dissolved		<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Thorium (Th)-Dissolved		<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Tin (Sn)-Dissolved		<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Titanium (Ti)-Dissolved		0.00029		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Tungsten (W)-Dissolved		<0.0010		0.0010	mg/L	15-SEP-10	16-SEP-10	R1469485
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L	15-SEP-10	16-SEP-10	R1469485
Vanadium (V)-Dissolved		<0.00020		0.00020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zinc (Zn)-Dissolved		<0.0020		0.0020	mg/L	15-SEP-10	16-SEP-10	R1469485
Zirconium (Zr)-Dissolved		<0.00040		0.00040	mg/L	15-SEP-10	16-SEP-10	R1469485
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		7.6		1.0	mg/L		15-SEP-10	R1467947
Bicarbonate (HCO3)		9.3		2.0	mg/L		15-SEP-10	R1467947
Carbonate (CO3)		<0.60		0.60	mg/L		15-SEP-10	R1467947
Hydroxide (OH)		<0.40		0.40	mg/L		15-SEP-10	R1467947
Conductivity								
Conductivity		20.2		0.40	umhos/cm		15-SEP-10	R1467947
pH								
pH		7.23		0.10	pH units		15-SEP-10	R1467947

* 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)
Duplicate	Ortho Phosphorus Soluble As P	DLA	L931706-1, -2, -3, -4, -5, -6, -7, -8
Duplicate	Ortho Phosphorus Soluble As P	DLA	L931706-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Nitrate-N	MS-B	L931706-1, -2, -3, -4, -5, -6, -7, -8

Qualifiers for Sample Submission Listed:

Qualifier	Description
EHR	Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

ALK-TOT-WP	Water	Alkalinity	APHA 2320B

Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO₃⁻ and H₂CO₃ endpoints indicated electrometrically.

ANIONS5-IC-WP	Water	Anions scan (IC)	EPA 300.1 IC

This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".

C-DIS-ORG-WP	Water	Dissolved Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

C-TOT-ORG-WP	Water	Total Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

CHLOROA-VA	Water	Chlorophyll a by Fluorometer	EPA 445.0

Chlorophyll and Pheopigments by Fluorometry analysis is carried out using procedures adapted from USEPA Method 445.0. The sample is filtered using either a glass fiber filter or a 0.45 micron Membrane filter. The pigments are extracted from the filter with 90% aqueous acetone. For chlorophyll-a analysis the extract is read using a fluorometer. For pheopigments the extract is first acidified then read. This method is not subject to interferences from chlorophyll b.

EC-WP	Water	Conductivity	APHA 2510B

Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.

ETL-HARDNESS-DIS-WP	Water	Hardness Calculated	Calculated

ETL-HARDNESS-TOT-WP	Water	Hardness Calculated	Calculated

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0
Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.			
MET-D-L-MS-WP	Water	Dissolved Metals by ICP-MS	U.S. EPA 200.8-DL
Dissolved Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the Examination of Water and Wastewater method 3030B for filtration through a 0.45 um filter and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
MET-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
N-TOTKJ-WP	Water	Total Kjeldahl Nitrogen	Quickchem method 10-107-06-2-E Lachat
Samples are digested with a sulphuric acid solution, cooled, diluted with water, and analyzed for ammonia. Total Kjeldahl nitrogen is the sum of free-ammonia and organic nitrogen compounds which are converted to ammonium sulphate through this digestion process. Analysis is performed by Flow Injection Analysis (FIA). The pH of the digested sample is raised to a known, basic pH by neutralization with a concentrated buffer solution. This neutralization converts the ammonium cation to ammonia. The ammonia produced is heated with salicylate and hypochlorite to produce blue colour which is proportional to the ammonia concentration.			
NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
Ammonia - Colourimetric using Salicylate-nitroprusside and hypochlorite, in an alkaline phosphate buffer.			
NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
P-ORTHO-SOL-WP	Water	Ortho Phosphorous Soluble	APHA, 1998 P-OS
Quantitative orthophosphorous values are determined without prior digestion of the sample. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
P-TOTAL-WP	Water	Phosphorus, Total	APHA, 1998 P-T
Samples are digested using a sulphuric acid-persulfate mixture to convert organic phosphorous to orthophosphate. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
PH-WP	Water	pH	APHA 4500H
pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.			
SIO2-L-COL-WP	Water	Reactive Silica by colour	APHA 4500 SIO2
This analysis is carried out using procedures adapted from APHA Method 4500-SiO2 "Silica". Molybdate Reactive Silica is determined by analysis of the sample using the heteropoly blue colourimetric method.			
SOLIDS-TDS-WP	Water	Total Dissolved Solids	APHA 2540
The residue remaining in a prepared casserole after passing the sample through a 1.2 um Whatman GF/C glass microfibre filter and drying at 180 degrees C. Samples may be dried at 105 degrees C if the client specifically requests this drying temperature.			
SOLIDS-TOTSUS-LR-WP	Water	Total Suspended Solids	APHA 2540 LR

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

The residue retained by a prepared 1.5 um Whatman 934-AH glass microfibre filter dried at 105 degrees C. A method detection limit of 2 mg/L can be achieved when 500 mL of sample is used.

TURBIDITY-WP	Water	Turbidity	APHA, 1998, 2130B

A strong light beam is sent through a transparent tube containing the sample. Light that is reflected at 90 degrees to the axis by suspended particles is detected by the photocell. The electrical response is proportional to the sample turbidity.

** 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
WP	ALS LABORATORY GROUP - WINNIPEG, MANITOBA, CANADA
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

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:																	
Company: Agnico-Eagle Mines Ltd.																	
Contact: Ryan VanEngen																	
Address: Meadowbank Division PO Box 540 Baker Lake Nun.																	
Phone: 867 793 4610x6759 Fax:																	
Invoice To: Same as Report																	
Company: Agnico-Eagle Mining Ltd.																	
Contact: Accounts Payable-Meadowbank Division																	
Address: email electronic invoice to rvanengen@agnico-eagle.com																	
Sample																	
Phone: Fax:																	
Quote #: Q21514																	
Legal Site Description:																	
ALS Chrisine Herrod																	
(lab use only)																	
Sample Identification (This description will appear on the report)																	
#	Date	Time	Sample Type	CI, F, NO ₂ , NO ₃ , SO ₄	TOC/DOC	Metals & Hg (total)	Dissolved Metals	P-Total & Ortho	pH, EC, Alkalinity	Turbidity	TSS, TDS	TKN, NH ₃	Chloro-a	Hazardous?	Highly Contaminated?	Number of Containers	
1	BGE-1	dd-mm-yy	hh:mm	(Select from drop-down list)	X	X	X	X	X	X	X	X	X	X			X
2	BGS-1	11-Sep-10	9:00	Water	X	X	X	X	X	X	X	X	X	X			X
3	BGS-2	11-Sep-10	12:40	Water	X	X	X	X	X	X	X	X	X	X			X
4	BGS-3	11-Sep-10	12:10	Water	X	X	X	X	X	X	X	X	X	X			X
5	BGS-4	11-Sep-10	11:45	Water	X	X	X	X	X	X	X	X	X	X			X
6	BGS-5	11-Sep-10	11:11	Water	X	X	X	X	X	X	X	X	X	X			X
7	BGS-6	11-Sep-10	10:40	Water	X	X	X	X	X	X	X	X	X	X			X
8	DUP-1	11-Sep-10	10:05	Water	X	X	X	X	X	X	X	X	X	X			X
			-	Water	X	X	X	X	X	X	X	X	X	X			X
Special Instructions / Hazardous Details																	
Guidelines / Regulations																	
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 adjacent worksheet.																	
Relinquished By: Jessica F	Date & Time: 11/09/2010	Received By: [Signature]	Date & Time: Sept 15/10	Temperature: 7°C	Samples Received in Good Condition? Y/N (if no provided details)												
Relinquished By:	Date & Time:	Received By:	Date & Time:	Temperature:	Samples Received in Good Condition? Y/N (if no provided details)												



AGNICO- EAGLE MINING LTD
ATTN: Ryan VanEngen
MEADOWBANK DIVISION
P.O. Box 540
BAKER LAKE NU X0X 0A0
Phone: 867- 793- 4160

Date Received: 23- SEP- 10
Report Date: 20- OCT- 10 14:54 (MT)
Version: FINAL

Certificate of Analysis

Lab Work Order #: L935131
Project P.O. #: NOT SUBMITTED
Job Reference: DIKE
Legal Site Desc:
C of C Numbers:

Comments: NOTE: Fraction - 1: Insufficient sample remaining for analysis of Reactive Silica as SiO₂

Gail Hill
Account Manager

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

ADDRESS: 1329 Niakwa Road East, Unit 12, Winnipeg, MB R2J 3T4 Canada | Phone: + 1 204 255 9720 | Fax: + 1 204 255 9721
MANITOBA TECHNOLOGY CENTRE LTD. 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
L935131-1 BGE-1							
Sampled By: CLIENT on 21-SEP-10 @ 11:15							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L	28-SEP-10	28-SEP-10	R1481265
Chlorophyll a	0.758		0.010	ug/L	30-SEP-10	01-OCT-10	R1485485
Dissolved Organic Carbon	3.5		1.0	mg/L		04-OCT-10	R1487989
Hardness (as CaCO3)	6.85		0.30	mg/L		25-SEP-10	
Hardness (as CaCO3)	6.85		0.20	mg/L		25-SEP-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	24-SEP-10	24-SEP-10	R1479223
Nitrate and Nitrite as N	<0.071		0.071	mg/L		24-SEP-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		29-SEP-10	R1482674
Phosphorus, Total	<0.010	DLA	0.010	mg/L		27-SEP-10	R1478844
Total Dissolved Solids	32.0		5.0	mg/L		28-SEP-10	R1481547
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	23-SEP-10	28-SEP-10	R1480570
Total Organic Carbon	4.1		1.0	mg/L		04-OCT-10	R1487989
Total Suspended Solids	6.7		2.0	mg/L		28-SEP-10	R1481547
Turbidity	2.23		0.10	NTU		23-SEP-10	R1476648
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		23-SEP-10	R1477239
Fluoride	<0.10		0.10	mg/L		23-SEP-10	R1477239
Nitrite-N	<0.050		0.050	mg/L		23-SEP-10	R1477239
Nitrate-N	<0.050		0.050	mg/L		23-SEP-10	R1477239
Sulfate	1.48		0.50	mg/L		23-SEP-10	R1477239
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.162		0.0050	mg/L	24-SEP-10	24-SEP-10	R1477712
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Arsenic (As)-Total	0.00060		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Barium (Ba)-Total	0.00368		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Boron (B)-Total	<0.010		0.010	mg/L	24-SEP-10	24-SEP-10	R1477712
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	24-SEP-10	24-SEP-10	R1477712
Calcium (Ca)-Total	1.89		0.10	mg/L	24-SEP-10	24-SEP-10	R1477712
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Copper (Cu)-Total	0.00072		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Iron (Fe)-Total	0.144		0.020	mg/L	24-SEP-10	24-SEP-10	R1477712
Lead (Pb)-Total	<0.000090		0.000090	mg/L	24-SEP-10	24-SEP-10	R1477712
Lithium (Li)-Total	<0.0020		0.0020	mg/L	24-SEP-10	24-SEP-10	R1477712
Magnesium (Mg)-Total	0.787		0.010	mg/L	24-SEP-10	24-SEP-10	R1477712
Manganese (Mn)-Total	0.00287		0.00030	mg/L	24-SEP-10	24-SEP-10	R1477712
Molybdenum (Mo)-Total	0.00025		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	24-SEP-10	24-SEP-10	R1477712
Phosphorus (P)-Total	<0.20		0.20	mg/L	24-SEP-10	24-SEP-10	R1477712
Potassium (K)-Total	0.522		0.020	mg/L	24-SEP-10	24-SEP-10	R1477712
Rubidium (Rb)-Total	0.00108		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Selenium (Se)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Silicon (Si)-Total	0.427		0.050	mg/L	24-SEP-10	24-SEP-10	R1477712
Silver (Ag)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Sodium (Na)-Total	0.584		0.030	mg/L	24-SEP-10	24-SEP-10	R1477712
Strontium (Sr)-Total	0.00792		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712

* 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
L935131-1	BGE-1						
Sampled By:	CLIENT on 21-SEP-10 @ 11:15						
Matrix:	WATER						
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Thorium (Th)-Total	0.00011		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tin (Sn)-Total	0.00190		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Titanium (Ti)-Total	0.00549		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Tungsten (W)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Uranium (U)-Total	0.00013		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Vanadium (V)-Total	0.00028		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	24-SEP-10	24-SEP-10	R1477712
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	24-SEP-10	24-SEP-10	R1477712
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0075		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Arsenic (As)-Dissolved	0.00051		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Barium (Ba)-Dissolved	0.00262		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Boron (B)-Dissolved	<0.010		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	23-SEP-10	24-SEP-10	R1477740
Calcium (Ca)-Dissolved	1.64		0.050	mg/L	23-SEP-10	24-SEP-10	R1477740
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Chromium (Cr)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Copper (Cu)-Dissolved	0.00045		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	23-SEP-10	24-SEP-10	R1477740
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Magnesium (Mg)-Dissolved	0.669		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Manganese (Mn)-Dissolved	0.00038		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Molybdenum (Mo)-Dissolved	0.00023		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Nickel (Ni)-Dissolved	<0.0010		0.0010	mg/L	23-SEP-10	24-SEP-10	R1477740
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	23-SEP-10	24-SEP-10	R1477740
Potassium (K)-Dissolved	0.429		0.020	mg/L	23-SEP-10	24-SEP-10	R1477740
Rubidium (Rb)-Dissolved	0.00070		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	23-SEP-10	24-SEP-10	R1477740
Silicon (Si)-Dissolved	0.110		0.050	mg/L	23-SEP-10	24-SEP-10	R1477740
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Sodium (Na)-Dissolved	0.465		0.020	mg/L	23-SEP-10	24-SEP-10	R1477740
Strontium (Sr)-Dissolved	0.00838		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Tungsten (W)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	23-SEP-10	24-SEP-10	R1477740
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.5		1.0	mg/L		23-SEP-10	R1476556

* 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
L935131-2 BGS-1							
Sampled By: CLIENT on 21-SEP-10 @ 10:00							
Matrix: WATER							
Total Metals by ICP-MS							
Manganese (Mn)-Total	0.00387		0.00030	mg/L	24-SEP-10	24-SEP-10	R1477712
Molybdenum (Mo)-Total	0.00022		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	24-SEP-10	24-SEP-10	R1477712
Phosphorus (P)-Total	<0.20		0.20	mg/L	24-SEP-10	24-SEP-10	R1477712
Potassium (K)-Total	0.505		0.020	mg/L	24-SEP-10	24-SEP-10	R1477712
Rubidium (Rb)-Total	0.00122		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Selenium (Se)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Silicon (Si)-Total	0.476		0.050	mg/L	24-SEP-10	24-SEP-10	R1477712
Silver (Ag)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Sodium (Na)-Total	0.547		0.030	mg/L	24-SEP-10	24-SEP-10	R1477712
Strontium (Sr)-Total	0.00772		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Thorium (Th)-Total	0.00018		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tin (Sn)-Total	0.00192		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Titanium (Ti)-Total	0.00926		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Tungsten (W)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Uranium (U)-Total	0.00017		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Vanadium (V)-Total	0.00033		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	24-SEP-10	24-SEP-10	R1477712
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	24-SEP-10	24-SEP-10	R1477712
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0068		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Arsenic (As)-Dissolved	0.00039		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Barium (Ba)-Dissolved	0.00250		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Boron (B)-Dissolved	<0.010		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	23-SEP-10	24-SEP-10	R1477740
Calcium (Ca)-Dissolved	1.58		0.050	mg/L	23-SEP-10	24-SEP-10	R1477740
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Chromium (Cr)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Copper (Cu)-Dissolved	0.00048		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	23-SEP-10	24-SEP-10	R1477740
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Magnesium (Mg)-Dissolved	0.642		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Manganese (Mn)-Dissolved	0.00042		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Molybdenum (Mo)-Dissolved	0.00020		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Nickel (Ni)-Dissolved	<0.0010		0.0010	mg/L	23-SEP-10	24-SEP-10	R1477740
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	23-SEP-10	24-SEP-10	R1477740
Potassium (K)-Dissolved	0.421		0.020	mg/L	23-SEP-10	24-SEP-10	R1477740
Rubidium (Rb)-Dissolved	0.00066		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	23-SEP-10	24-SEP-10	R1477740
Silicon (Si)-Dissolved	0.106		0.050	mg/L	23-SEP-10	24-SEP-10	R1477740
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Sodium (Na)-Dissolved	0.458		0.020	mg/L	23-SEP-10	24-SEP-10	R1477740
Strontium (Sr)-Dissolved	0.00771		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L935131-3 BGS-2							
Sampled By: CLIENT on 21-SEP-10 @ 10:27							
Matrix: WATER							
Total Metals by ICP-MS							
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Boron (B)-Total	<0.010		0.010	mg/L	24-SEP-10	24-SEP-10	R1477712
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	24-SEP-10	24-SEP-10	R1477712
Calcium (Ca)-Total	1.81		0.10	mg/L	24-SEP-10	24-SEP-10	R1477712
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Copper (Cu)-Total	0.00076		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Iron (Fe)-Total	0.171		0.020	mg/L	24-SEP-10	24-SEP-10	R1477712
Lead (Pb)-Total	0.000092		0.000090	mg/L	24-SEP-10	24-SEP-10	R1477712
Lithium (Li)-Total	<0.0020		0.0020	mg/L	24-SEP-10	24-SEP-10	R1477712
Magnesium (Mg)-Total	0.784		0.010	mg/L	24-SEP-10	24-SEP-10	R1477712
Manganese (Mn)-Total	0.00322		0.00030	mg/L	24-SEP-10	24-SEP-10	R1477712
Molybdenum (Mo)-Total	0.00023		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	24-SEP-10	24-SEP-10	R1477712
Phosphorus (P)-Total	<0.20		0.20	mg/L	24-SEP-10	24-SEP-10	R1477712
Potassium (K)-Total	0.514		0.020	mg/L	24-SEP-10	24-SEP-10	R1477712
Rubidium (Rb)-Total	0.00113		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Selenium (Se)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Silicon (Si)-Total	0.436		0.050	mg/L	24-SEP-10	24-SEP-10	R1477712
Silver (Ag)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Sodium (Na)-Total	0.560		0.030	mg/L	24-SEP-10	24-SEP-10	R1477712
Strontium (Sr)-Total	0.00781		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Thorium (Th)-Total	0.00013		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tin (Sn)-Total	0.00195		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Titanium (Ti)-Total	0.00615		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Tungsten (W)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Uranium (U)-Total	0.00014		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Vanadium (V)-Total	0.00027		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	24-SEP-10	24-SEP-10	R1477712
Zirconium (Zr)-Total	0.00041		0.00040	mg/L	24-SEP-10	24-SEP-10	R1477712
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0116		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Arsenic (As)-Dissolved	0.00040		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Barium (Ba)-Dissolved	0.00262		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Boron (B)-Dissolved	<0.010		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	23-SEP-10	24-SEP-10	R1477740
Calcium (Ca)-Dissolved	1.57		0.050	mg/L	23-SEP-10	24-SEP-10	R1477740
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Chromium (Cr)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Copper (Cu)-Dissolved	0.00049		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	23-SEP-10	24-SEP-10	R1477740
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Magnesium (Mg)-Dissolved	0.659		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L935131-4 BGS-3							
Sampled By: CLIENT on 21-SEP-10 @ 10:35							
Matrix: WATER							
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		23-SEP-10	R1477239
Fluoride	<0.10		0.10	mg/L		23-SEP-10	R1477239
Nitrite-N	<0.050		0.050	mg/L		23-SEP-10	R1477239
Nitrate-N	<0.050		0.050	mg/L		23-SEP-10	R1477239
Sulfate	1.48		0.50	mg/L		23-SEP-10	R1477239
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.176		0.0050	mg/L	24-SEP-10	24-SEP-10	R1477712
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Arsenic (As)-Total	0.00044		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Barium (Ba)-Total	0.00411		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Boron (B)-Total	<0.010		0.010	mg/L	24-SEP-10	24-SEP-10	R1477712
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	24-SEP-10	27-SEP-10	R1480526
Calcium (Ca)-Total	1.68		0.10	mg/L	24-SEP-10	24-SEP-10	R1477712
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Copper (Cu)-Total	0.00077		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Iron (Fe)-Total	0.161		0.020	mg/L	24-SEP-10	24-SEP-10	R1477712
Lead (Pb)-Total	0.000110		0.000090	mg/L	24-SEP-10	24-SEP-10	R1477712
Lithium (Li)-Total	<0.0020		0.0020	mg/L	24-SEP-10	24-SEP-10	R1477712
Magnesium (Mg)-Total	0.734		0.010	mg/L	24-SEP-10	24-SEP-10	R1477712
Manganese (Mn)-Total	0.00342		0.00030	mg/L	24-SEP-10	24-SEP-10	R1477712
Molybdenum (Mo)-Total	0.00021		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	24-SEP-10	24-SEP-10	R1477712
Phosphorus (P)-Total	<0.20		0.20	mg/L	24-SEP-10	24-SEP-10	R1477712
Potassium (K)-Total	0.481		0.020	mg/L	24-SEP-10	24-SEP-10	R1477712
Rubidium (Rb)-Total	0.00109		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Selenium (Se)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Silicon (Si)-Total	0.430		0.050	mg/L	24-SEP-10	24-SEP-10	R1477712
Silver (Ag)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Sodium (Na)-Total	0.526		0.030	mg/L	24-SEP-10	24-SEP-10	R1477712
Strontium (Sr)-Total	0.00767		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Thorium (Th)-Total	0.00013		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tin (Sn)-Total	0.00212		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Titanium (Ti)-Total	0.00593		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Tungsten (W)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Uranium (U)-Total	0.00014		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Vanadium (V)-Total	0.00025		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	24-SEP-10	24-SEP-10	R1477712
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	24-SEP-10	24-SEP-10	R1477712
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0080		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Arsenic (As)-Dissolved	0.00042		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Barium (Ba)-Dissolved	0.00252		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L935131-5 BGS-4							
Sampled By: CLIENT on 21-SEP-10 @ 11:04							
Matrix: WATER							
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	24-SEP-10	24-SEP-10	R1479223
Nitrate and Nitrite as N	<0.071		0.071	mg/L		24-SEP-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		29-SEP-10	R1482674
Phosphorus, Total	<0.010	DLA	0.010	mg/L		27-SEP-10	R1478844
Silica, Reactive (as SiO2)	0.212		0.0050	mg/L		09-OCT-10	R1501463
Total Dissolved Solids	38.0		5.0	mg/L		28-SEP-10	R1481547
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	23-SEP-10	28-SEP-10	R1480570
Total Organic Carbon	2.4		1.0	mg/L		04-OCT-10	R1487989
Total Suspended Solids	4.0		2.0	mg/L		28-SEP-10	R1481547
Turbidity	2.48		0.10	NTU		23-SEP-10	R1476648
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		23-SEP-10	R1477239
Fluoride	<0.10		0.10	mg/L		23-SEP-10	R1477239
Nitrite-N	<0.050		0.050	mg/L		23-SEP-10	R1477239
Nitrate-N	<0.050		0.050	mg/L		23-SEP-10	R1477239
Sulfate	1.50		0.50	mg/L		23-SEP-10	R1477239
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.147		0.0050	mg/L	24-SEP-10	24-SEP-10	R1477712
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Arsenic (As)-Total	0.00060		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Barium (Ba)-Total	0.00365		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Boron (B)-Total	<0.010		0.010	mg/L	24-SEP-10	24-SEP-10	R1477712
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	24-SEP-10	24-SEP-10	R1477712
Calcium (Ca)-Total	1.77		0.10	mg/L	24-SEP-10	24-SEP-10	R1477712
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Copper (Cu)-Total	0.00072		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Iron (Fe)-Total	0.132		0.020	mg/L	24-SEP-10	24-SEP-10	R1477712
Lead (Pb)-Total	0.000114		0.000090	mg/L	24-SEP-10	24-SEP-10	R1477712
Lithium (Li)-Total	<0.0020		0.0020	mg/L	24-SEP-10	24-SEP-10	R1477712
Magnesium (Mg)-Total	0.745		0.010	mg/L	24-SEP-10	24-SEP-10	R1477712
Manganese (Mn)-Total	0.00272		0.00030	mg/L	24-SEP-10	24-SEP-10	R1477712
Molybdenum (Mo)-Total	0.00025		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	24-SEP-10	24-SEP-10	R1477712
Phosphorus (P)-Total	<0.20		0.20	mg/L	24-SEP-10	24-SEP-10	R1477712
Potassium (K)-Total	0.476		0.020	mg/L	24-SEP-10	24-SEP-10	R1477712
Rubidium (Rb)-Total	0.00101		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Selenium (Se)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Silicon (Si)-Total	0.409		0.050	mg/L	24-SEP-10	24-SEP-10	R1477712
Silver (Ag)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Sodium (Na)-Total	0.522		0.030	mg/L	24-SEP-10	24-SEP-10	R1477712
Strontium (Sr)-Total	0.00785		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Thorium (Th)-Total	0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tin (Sn)-Total	0.00224		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Titanium (Ti)-Total	0.00456		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Tungsten (W)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Uranium (U)-Total	0.00013		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712

* 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
L935131-5 BGS-4							
Sampled By: CLIENT on 21-SEP-10 @ 11:04							
Matrix: WATER							
Total Metals by ICP-MS							
Vanadium (V)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	24-SEP-10	24-SEP-10	R1477712
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	24-SEP-10	24-SEP-10	R1477712
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0066		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Arsenic (As)-Dissolved	0.00057		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Barium (Ba)-Dissolved	0.00262		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Boron (B)-Dissolved	<0.010		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	23-SEP-10	24-SEP-10	R1477740
Calcium (Ca)-Dissolved	1.70		0.050	mg/L	23-SEP-10	24-SEP-10	R1477740
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Chromium (Cr)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Copper (Cu)-Dissolved	0.00048		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Lead (Pb)-Dissolved	0.000156		0.000090	mg/L	23-SEP-10	24-SEP-10	R1477740
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Magnesium (Mg)-Dissolved	0.680		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Manganese (Mn)-Dissolved	0.00037		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Molybdenum (Mo)-Dissolved	0.00023		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Nickel (Ni)-Dissolved	<0.0010		0.0010	mg/L	23-SEP-10	24-SEP-10	R1477740
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	23-SEP-10	24-SEP-10	R1477740
Potassium (K)-Dissolved	0.453		0.020	mg/L	23-SEP-10	24-SEP-10	R1477740
Rubidium (Rb)-Dissolved	0.00068		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	23-SEP-10	24-SEP-10	R1477740
Silicon (Si)-Dissolved	0.116		0.050	mg/L	23-SEP-10	24-SEP-10	R1477740
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Sodium (Na)-Dissolved	0.469		0.020	mg/L	23-SEP-10	24-SEP-10	R1477740
Strontium (Sr)-Dissolved	0.00812		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Tungsten (W)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	23-SEP-10	24-SEP-10	R1477740
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.5		1.0	mg/L		23-SEP-10	R1476556
Bicarbonate (HCO3)	9.2		2.0	mg/L		23-SEP-10	R1476556
Carbonate (CO3)	<0.60		0.60	mg/L		23-SEP-10	R1476556
Hydroxide (OH)	<0.40		0.40	mg/L		23-SEP-10	R1476556
Conductivity							
Conductivity	18.0		0.40	umhos/cm		24-SEP-10	R1477183
pH							
pH	7.15		0.10	pH units		23-SEP-10	R1476556

* 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
L935131-5	BGS-4							
Sampled By: CLIENT on 21-SEP-10 @ 11:04								
Matrix: WATER								
L935131-6	BGS-5							
Sampled By: CLIENT on 21-SEP-10 @ 10:55								
Matrix: WATER								
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L	28-SEP-10	28-SEP-10	R1481265
Chlorophyll a		0.823		0.010	ug/L	30-SEP-10	01-OCT-10	R1485485
Dissolved Organic Carbon		2.4		1.0	mg/L		04-OCT-10	R1487989
Hardness (as CaCO3)		6.95		0.30	mg/L		25-SEP-10	
Hardness (as CaCO3)		6.95		0.20	mg/L		25-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	24-SEP-10	24-SEP-10	R1479223
Nitrate and Nitrite as N		<0.071		0.071	mg/L		24-SEP-10	
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		29-SEP-10	R1482674
Phosphorus, Total		<0.010	DLA	0.010	mg/L		27-SEP-10	R1478844
Silica, Reactive (as SiO2)		0.208		0.0050	mg/L		09-OCT-10	R1501463
Total Dissolved Solids		32.0		5.0	mg/L		28-SEP-10	R1481547
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	23-SEP-10	28-SEP-10	R1480570
Total Organic Carbon		2.4		1.0	mg/L		04-OCT-10	R1487989
Total Suspended Solids		2.8		2.0	mg/L		28-SEP-10	R1481547
Turbidity		2.43		0.10	NTU		23-SEP-10	R1476648
Anions scan (IC)								
Chloride		<0.50		0.50	mg/L		23-SEP-10	R1477239
Fluoride		<0.10		0.10	mg/L		23-SEP-10	R1477239
Nitrite-N		<0.050		0.050	mg/L		23-SEP-10	R1477239
Nitrate-N		<0.050		0.050	mg/L		23-SEP-10	R1477239
Sulfate		1.49		0.50	mg/L		23-SEP-10	R1477239
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.153		0.0050	mg/L	24-SEP-10	24-SEP-10	R1477712
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Arsenic (As)-Total		0.00051		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Barium (Ba)-Total		0.00371		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Boron (B)-Total		<0.010		0.010	mg/L	24-SEP-10	24-SEP-10	R1477712
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	24-SEP-10	24-SEP-10	R1477712
Calcium (Ca)-Total		1.72		0.10	mg/L	24-SEP-10	24-SEP-10	R1477712
Cesium (Cs)-Total		<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Chromium (Cr)-Total		<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Cobalt (Co)-Total		<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Copper (Cu)-Total		0.00068		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Iron (Fe)-Total		0.139		0.020	mg/L	24-SEP-10	24-SEP-10	R1477712
Lead (Pb)-Total		0.000126		0.000090	mg/L	24-SEP-10	24-SEP-10	R1477712
Lithium (Li)-Total		<0.0020		0.0020	mg/L	24-SEP-10	24-SEP-10	R1477712
Magnesium (Mg)-Total		0.732		0.010	mg/L	24-SEP-10	24-SEP-10	R1477712
Manganese (Mn)-Total		0.00263		0.00030	mg/L	24-SEP-10	24-SEP-10	R1477712
Molybdenum (Mo)-Total		0.00024		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Nickel (Ni)-Total		<0.0020		0.0020	mg/L	24-SEP-10	24-SEP-10	R1477712
Phosphorus (P)-Total		<0.20		0.20	mg/L	24-SEP-10	24-SEP-10	R1477712
Potassium (K)-Total		0.477		0.020	mg/L	24-SEP-10	24-SEP-10	R1477712
Rubidium (Rb)-Total		0.00106		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Selenium (Se)-Total		<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Silicon (Si)-Total		0.413		0.050	mg/L	24-SEP-10	24-SEP-10	R1477712

* 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
L935131-6 BGS-5							
Sampled By: CLIENT on 21-SEP-10 @ 10:55							
Matrix: WATER							
Total Metals by ICP-MS							
Silver (Ag)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Sodium (Na)-Total	0.519		0.030	mg/L	24-SEP-10	24-SEP-10	R1477712
Strontium (Sr)-Total	0.00768		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Thorium (Th)-Total	0.00012		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tin (Sn)-Total	0.00188		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Titanium (Ti)-Total	0.00509		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Tungsten (W)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Uranium (U)-Total	0.00016		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Vanadium (V)-Total	0.00022		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	24-SEP-10	24-SEP-10	R1477712
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	24-SEP-10	24-SEP-10	R1477712
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0064		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Arsenic (As)-Dissolved	0.00050		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Barium (Ba)-Dissolved	0.00257		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Boron (B)-Dissolved	<0.010		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	23-SEP-10	24-SEP-10	R1477740
Calcium (Ca)-Dissolved	1.66		0.050	mg/L	23-SEP-10	24-SEP-10	R1477740
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Chromium (Cr)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Copper (Cu)-Dissolved	0.00046		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	23-SEP-10	24-SEP-10	R1477740
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Magnesium (Mg)-Dissolved	0.681		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Manganese (Mn)-Dissolved	0.00032		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Molybdenum (Mo)-Dissolved	0.00022		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Nickel (Ni)-Dissolved	<0.0010		0.0010	mg/L	23-SEP-10	24-SEP-10	R1477740
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	23-SEP-10	24-SEP-10	R1477740
Potassium (K)-Dissolved	0.453		0.020	mg/L	23-SEP-10	24-SEP-10	R1477740
Rubidium (Rb)-Dissolved	0.00068		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	23-SEP-10	24-SEP-10	R1477740
Silicon (Si)-Dissolved	0.114		0.050	mg/L	23-SEP-10	24-SEP-10	R1477740
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Sodium (Na)-Dissolved	0.472		0.020	mg/L	23-SEP-10	24-SEP-10	R1477740
Strontium (Sr)-Dissolved	0.00799		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Tungsten (W)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740

* 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
L935131-7 BGS-6							
Sampled By: CLIENT on 21-SEP-10 @ 10:47							
Matrix: WATER							
Total Metals by ICP-MS							
Iron (Fe)-Total	0.139		0.020	mg/L	24-SEP-10	24-SEP-10	R1477712
Lead (Pb)-Total	0.000094		0.000090	mg/L	24-SEP-10	24-SEP-10	R1477712
Lithium (Li)-Total	<0.0020		0.0020	mg/L	24-SEP-10	24-SEP-10	R1477712
Magnesium (Mg)-Total	0.767		0.010	mg/L	24-SEP-10	24-SEP-10	R1477712
Manganese (Mn)-Total	0.00275		0.00030	mg/L	24-SEP-10	24-SEP-10	R1477712
Molybdenum (Mo)-Total	0.00025		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	24-SEP-10	24-SEP-10	R1477712
Phosphorus (P)-Total	<0.20		0.20	mg/L	24-SEP-10	24-SEP-10	R1477712
Potassium (K)-Total	0.490		0.020	mg/L	24-SEP-10	24-SEP-10	R1477712
Rubidium (Rb)-Total	0.00104		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Selenium (Se)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Silicon (Si)-Total	0.389		0.050	mg/L	24-SEP-10	24-SEP-10	R1477712
Silver (Ag)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Sodium (Na)-Total	0.549		0.030	mg/L	24-SEP-10	24-SEP-10	R1477712
Strontium (Sr)-Total	0.00774		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Thorium (Th)-Total	0.00011		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Tin (Sn)-Total	0.00204		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Titanium (Ti)-Total	0.00523		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Tungsten (W)-Total	<0.0010		0.0010	mg/L	24-SEP-10	24-SEP-10	R1477712
Uranium (U)-Total	0.00013		0.00010	mg/L	24-SEP-10	24-SEP-10	R1477712
Vanadium (V)-Total	0.00023		0.00020	mg/L	24-SEP-10	24-SEP-10	R1477712
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	24-SEP-10	24-SEP-10	R1477712
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	24-SEP-10	24-SEP-10	R1477712
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0087		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Arsenic (As)-Dissolved	0.00050		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Barium (Ba)-Dissolved	0.00268		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Boron (B)-Dissolved	<0.010		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	23-SEP-10	24-SEP-10	R1477740
Calcium (Ca)-Dissolved	1.68		0.050	mg/L	23-SEP-10	24-SEP-10	R1477740
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Chromium (Cr)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Copper (Cu)-Dissolved	0.00055		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Lead (Pb)-Dissolved	0.000203		0.000090	mg/L	23-SEP-10	24-SEP-10	R1477740
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Magnesium (Mg)-Dissolved	0.684		0.010	mg/L	23-SEP-10	24-SEP-10	R1477740
Manganese (Mn)-Dissolved	0.00035		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Molybdenum (Mo)-Dissolved	0.00023		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Nickel (Ni)-Dissolved	<0.0010		0.0010	mg/L	23-SEP-10	24-SEP-10	R1477740
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	23-SEP-10	24-SEP-10	R1477740
Potassium (K)-Dissolved	0.459		0.020	mg/L	23-SEP-10	24-SEP-10	R1477740
Rubidium (Rb)-Dissolved	0.00069		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	23-SEP-10	24-SEP-10	R1477740
Silicon (Si)-Dissolved	0.116		0.050	mg/L	23-SEP-10	24-SEP-10	R1477740

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L935131-7 BGS-6								
Sampled By: CLIENT on 21-SEP-10 @ 10:47								
Matrix: WATER								
Dissolved Metals by ICP-MS								
Silver (Ag)-Dissolved		<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Sodium (Na)-Dissolved		0.474		0.020	mg/L	23-SEP-10	24-SEP-10	R1477740
Strontium (Sr)-Dissolved		0.00816		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Tellurium (Te)-Dissolved		<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Thallium (Tl)-Dissolved		<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Thorium (Th)-Dissolved		<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Tin (Sn)-Dissolved		<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Titanium (Ti)-Dissolved		<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Tungsten (W)-Dissolved		<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L	23-SEP-10	24-SEP-10	R1477740
Vanadium (V)-Dissolved		<0.00020		0.00020	mg/L	23-SEP-10	24-SEP-10	R1477740
Zinc (Zn)-Dissolved		<0.0020		0.0020	mg/L	23-SEP-10	24-SEP-10	R1477740
Zirconium (Zr)-Dissolved		<0.00040		0.00040	mg/L	23-SEP-10	24-SEP-10	R1477740
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		7.5		1.0	mg/L		23-SEP-10	R1476556
Bicarbonate (HCO3)		9.1		2.0	mg/L		23-SEP-10	R1476556
Carbonate (CO3)		<0.60		0.60	mg/L		23-SEP-10	R1476556
Hydroxide (OH)		<0.40		0.40	mg/L		23-SEP-10	R1476556
Conductivity								
Conductivity		17.7		0.40	umhos/cm		24-SEP-10	R1477183
pH								
pH		7.14		0.10	pH units		23-SEP-10	R1476556

* 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	Total Kjeldahl Nitrogen	MS-B	L935131-1, -2, -3, -4, -5, -6
Matrix Spike	Silica, Reactive (as SiO ₂)	MS-B	L935131-2, -3, -4, -5, -6, -7

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution
MS-B	Matrix Spike recovery could not be accurately calculated due to high analyte background in sample.

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

ALK-TOT-WP	Water	Alkalinity	APHA 2320B

Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO₃⁻ and H₂CO₃ endpoints indicated electrometrically.

ANIONS5-IC-WP	Water	Anions scan (IC)	EPA 300.1 IC

This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".

C-DIS-ORG-WP	Water	Dissolved Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

C-TOT-ORG-WP	Water	Total Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.

TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

CHLOROA-VA	Water	Chlorophyll a by Fluorometer	EPA 445.0

Chlorophyll and Pheopigments by Fluorometry analysis is carried out using procedures adapted from USEPA Method 445.0. The sample is filtered using either a glass fiber filter or a 0.45 micron Membrane filter. The pigments are extracted from the filter with 90% aqueous acetone. For chlorophyll-a analysis the extract is read using a fluorometer. For pheopigments the extract is first acidified then read. This method is not subject to interferences from chlorophyll b.

EC-WP	Water	Conductivity	APHA 2510B

Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.

ETL-HARDNESS-DIS-WP	Water	Hardness Calculated	Calculated

ETL-HARDNESS-TOT-WP	Water	Hardness Calculated	Calculated

HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0

Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.

MET-D-L-MS-WP	Water	Dissolved Metals by ICP-MS	U.S. EPA 200.8-DL

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
Dissolved Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the Examination of Water and Wastewater method 3030B for filtration through a 0.45 um filter and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
MET-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
N-TOTKJ-WP	Water	Total Kjeldahl Nitrogen	Quickchem method 10-107-06-2-E Lachat
Samples are digested with a sulphuric acid solution, cooled, diluted with water, and analyzed for ammonia. Total Kjeldahl nitrogen is the sum of free-ammonia and organic nitrogen compounds which are converted to ammonium sulphate through this digestion process. Analysis is performed by Flow Injection Analysis (FIA). The pH of the digested sample is raised to a known, basic pH by neutralization with a concentrated buffer solution. This neutralization converts the ammonium cation to ammonia. The ammonia produced is heated with salicylate and hypochlorite to produce blue colour which is proportional to the ammonia concentration.			
NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
Ammonia - Colourimetric using Salicylate-nitroprusside and hypochlorite, in an alkaline phosphate buffer.			
NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
P-ORTHO-SOL-WP	Water	Ortho Phosphorous Soluble	APHA, 1998 P-OS
Quantitative orthophosphorous values are determined without prior digestion of the sample. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
P-TOTAL-WP	Water	Phosphorus, Total	APHA, 1998 P-T
Samples are digested using a sulphuric acid-persulfate mixture to convert organic phosphorous to orthophosphate. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
PH-WP	Water	pH	APHA 4500H
pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.			
SIO2-L-COL-WP	Water	Reactive Silica by colour	APHA 4500 SIO2
This analysis is carried out using procedures adapted from APHA Method 4500-SiO2 "Silica". Molybdate Reactive Silica is determined by analysis of the sample using the heteropoly blue colourimetric method.			
SOLIDS-TDS-WP	Water	Total Dissolved Solids	APHA 2540
The residue remaining in a prepared casserole after passing the sample through a 1.2 um Whatman GF/C glass microfibre filter and drying at 180 degrees C. Samples may be dried at 105 degrees C if the client specifically requests this drying temperature.			
SOLIDS-TOTSUS-LR-WP	Water	Total Suspended Solids	APHA 2540 LR
The residue retained by a prepared 1.5 um Whatman 934-AH glass microfibre filter dried at 105 degrees C. A method detection limit of 2 mg/L can be achieved when 500 mL of sample is used.			
TURBIDITY-WP	Water	Turbidity	APHA, 1998, 2130B

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

A strong light beam is sent through a transparent tube containing the sample. Light that is reflected at 90 degrees to the axis by suspended particles is detected by the photocell. The electrical response is proportional to the sample turbidity.

** 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
WP	ALS LABORATORY GROUP - WINNIPEG, MANITOBA, CANADA
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

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:			
Company: Agnico-Eagle Mines Ltd.						☒ Standard	☐ Other	☒	Regular Service (Default)				
Contact: Ryan VanEngen						☒ PDF	☒ Excel	☐ Fax	Rush Service (2-3 Days)				
Address: Meadowbank Division PO Box 540 Baker Lake Nun.						Email 1: rVanengen@agnico-eagle.com						☐ Priority Service (1 Day or ASAP)	
						Email 2: sdoire@agnico-eagle.com						☐ Emergency Service (<1 Day / Wkend) - Contact ALS	
Phone: 867 793 4610x6759 Fax:						Analysis Request							
Invoice To: ☒ Same as Report						Indicate Bottles: Filtered / Preserved (F/P) → --							
Company: Agnico-Eagle Mining Ltd.						Client / Project Information:							
Contact: Accounts Payable-Meadowbank Division						Job #: Diike							
Address: email electronic invoice to rvanengen@agnico-eagle.com						PO/A/E:							
Sample						Legal Site Description:							
Phone:						Quote #: Q21514							
Lab Work Order #						ALS							
(lab use only)						Contact: Christine Herrod							
Sample #		Sample Identification (This description will appear on the report)				Date dd-mm-yy		Time hh:mm		Sampler (Initials):		Sample Type (Select from drop-down list)	
1		BGE-1				21-Sep-10		11:15		Water		Water	
2		BGS-1				21-Sep-10		10:00		Water		Water	
3		BGS-2				21-Sep-10		10:27		Water		Water	
4		BGS-3				21-Sep-10		10:35		Water		Water	
5		BGS-4				21-Sep-10		11:04		Water		Water	
6		BGS-5				21-Sep-10		10:47		Water		Water	
7		BGS-6				21-Sep-10		10:47		Water		Water	
Guidelines / Regulations						Special Instructions / 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 adjacent worksheet.													
Relinquished By:		Jessica F		Date & Time: 21-Sep-10		Received By:		Date & Time: 23-Sep-10 1:30		Temperature		Sample Condition (lab use only)	
Relinquished By:				Date & Time:		Received By:		Date & Time:		Samples Received in Good Condition? Y / N (if no further details)			

6.9



AGNICO- EAGLE MINING LTD
ATTN: RYAN VANENGEN
MEADOWBANK DIV.
P.O. BOX 540
BAKER LAKE NU X0X 0A0
Phone: 604- 622- 6527

Date Received: 29- SEP- 10
Report Date: 14- OCT- 10 09:20 (MT)
Version: FINAL

Certificate of Analysis

Lab Work Order #: L937072
Project P.O. #: NOT SUBMITTED
Job Reference: DIKE
Legal Site Desc:
C of C Numbers:

Paul Nicolas
Account Manager

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

ADDRESS: 1329 Niakwa Road East, Unit 12, Winnipeg, MB R2J 3T4 Canada | Phone: +1 204 255 9720 | Fax: +1 204 255 9721
MANITOBA TECHNOLOGY CENTRE LTD. 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
L937072-1	BGE-1						
Sampled By:	CLIENT on 25-SEP-10 @ 07:50						
Matrix:	WATER						
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L	05-OCT-10	05-OCT-10	R1489244
Chlorophyll a	0.819		0.010	ug/L	01-OCT-10	01-OCT-10	R1485406
Dissolved Organic Carbon	1.9		1.0	mg/L		08-OCT-10	R1498676
Hardness (as CaCO3)	7.23		0.20	mg/L		13-OCT-10	
Hardness (as CaCO3)	6.81		0.30	mg/L		01-OCT-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	04-OCT-10	04-OCT-10	R1489689
Nitrate and Nitrite as N	<0.071		0.071	mg/L		30-SEP-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		30-SEP-10	R1484007
Phosphorus, Total	<0.010	DLA	0.010	mg/L		30-SEP-10	R1483827
Total Dissolved Solids	<5.0		5.0	mg/L		01-OCT-10	R1486403
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	29-SEP-10	30-SEP-10	R1483389
Total Organic Carbon	2.2		1.0	mg/L		08-OCT-10	R1498676
Total Suspended Solids	<2.0		2.0	mg/L		01-OCT-10	R1486403
Turbidity	1.40		0.10	NTU		29-SEP-10	R1482703
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		29-SEP-10	R1483164
Fluoride	<0.10		0.10	mg/L		29-SEP-10	R1483164
Nitrite-N	<0.050		0.050	mg/L		29-SEP-10	R1483164
Nitrate-N	<0.050		0.050	mg/L		29-SEP-10	R1483164
Sulfate	1.51		0.50	mg/L		29-SEP-10	R1483164
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0067		0.0050	mg/L	30-SEP-10	30-SEP-10	R1484961
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Arsenic (As)-Total	0.00049		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Barium (Ba)-Total	0.00242		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Beryllium (Be)-Total	0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Boron (B)-Total	<0.010		0.010	mg/L	30-SEP-10	30-SEP-10	R1484961
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	30-SEP-10	30-SEP-10	R1484961
Calcium (Ca)-Total	1.68		0.10	mg/L	30-SEP-10	30-SEP-10	R1484961
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Copper (Cu)-Total	0.00044		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Iron (Fe)-Total	<0.020		0.020	mg/L	30-SEP-10	30-SEP-10	R1484961
Lead (Pb)-Total	<0.000090		0.000090	mg/L	30-SEP-10	30-SEP-10	R1484961
Lithium (Li)-Total	<0.0020		0.0020	mg/L	30-SEP-10	30-SEP-10	R1484961
Magnesium (Mg)-Total	0.634		0.010	mg/L	30-SEP-10	30-SEP-10	R1484961
Manganese (Mn)-Total	0.00046		0.00030	mg/L	30-SEP-10	30-SEP-10	R1484961
Molybdenum (Mo)-Total	0.00021		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	30-SEP-10	30-SEP-10	R1484961
Phosphorus (P)-Total	<0.20		0.20	mg/L	30-SEP-10	30-SEP-10	R1484961
Potassium (K)-Total	0.455		0.020	mg/L	30-SEP-10	30-SEP-10	R1484961
Rubidium (Rb)-Total	0.00063		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Selenium (Se)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Silicon (Si)-Total	0.114		0.050	mg/L	30-SEP-10	30-SEP-10	R1484961
Silver (Ag)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Sodium (Na)-Total	0.481		0.030	mg/L	30-SEP-10	30-SEP-10	R1484961
Strontium (Sr)-Total	0.00768		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961

* 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
L937072-1	BGE-1						
Sampled By:	CLIENT on 25-SEP-10 @ 07:50						
Matrix:	WATER						
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Thorium (Th)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tin (Sn)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Titanium (Ti)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Tungsten (W)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Uranium (U)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Vanadium (V)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	30-SEP-10	30-SEP-10	R1484961
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	30-SEP-10	30-SEP-10	R1484961
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0072		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Arsenic (As)-Dissolved	0.00066		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Barium (Ba)-Dissolved	0.00260		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Beryllium (Be)-Dissolved	0.00024		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Boron (B)-Dissolved	<0.010		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	29-SEP-10	07-OCT-10	R1500078
Calcium (Ca)-Dissolved	1.75		0.050	mg/L	29-SEP-10	02-OCT-10	R1487867
Cesium (Cs)-Dissolved	0.00013		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Chromium (Cr)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Copper (Cu)-Dissolved	0.00060		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Lead (Pb)-Dissolved	0.000139		0.000090	mg/L	29-SEP-10	02-OCT-10	R1487867
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Magnesium (Mg)-Dissolved	0.695		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Manganese (Mn)-Dissolved	0.00055		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Molybdenum (Mo)-Dissolved	0.00049		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Nickel (Ni)-Dissolved	<0.0010		0.0010	mg/L	29-SEP-10	02-OCT-10	R1487867
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	29-SEP-10	02-OCT-10	R1487867
Potassium (K)-Dissolved	0.442		0.020	mg/L	29-SEP-10	02-OCT-10	R1487867
Rubidium (Rb)-Dissolved	0.00077		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	29-SEP-10	02-OCT-10	R1487867
Silicon (Si)-Dissolved	0.121		0.050	mg/L	29-SEP-10	02-OCT-10	R1487867
Silver (Ag)-Dissolved	0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Sodium (Na)-Dissolved	0.476		0.020	mg/L	29-SEP-10	02-OCT-10	R1487867
Strontium (Sr)-Dissolved	0.00809		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Thallium (Tl)-Dissolved	0.00011		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Tungsten (W)-Dissolved	0.00024		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Uranium (U)-Dissolved	0.00021		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	29-SEP-10	02-OCT-10	R1487867
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	8.0		1.0	mg/L		29-SEP-10	R1482723

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

BIKE

* 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
L937072-2 BGS-1							
Sampled By: CLIENT on 25-SEP-10 @ 10:00							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	0.00025		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	30-SEP-10	30-SEP-10	R1484961
Phosphorus (P)-Total	<0.20		0.20	mg/L	30-SEP-10	30-SEP-10	R1484961
Potassium (K)-Total	0.477		0.020	mg/L	30-SEP-10	30-SEP-10	R1484961
Rubidium (Rb)-Total	0.00103		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Selenium (Se)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Silicon (Si)-Total	0.357		0.050	mg/L	30-SEP-10	30-SEP-10	R1484961
Silver (Ag)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Sodium (Na)-Total	0.477		0.030	mg/L	30-SEP-10	30-SEP-10	R1484961
Strontium (Sr)-Total	0.00794		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Thorium (Th)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tin (Sn)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Titanium (Ti)-Total	0.00489		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Tungsten (W)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Uranium (U)-Total	0.00013		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Vanadium (V)-Total	0.00021		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	30-SEP-10	30-SEP-10	R1484961
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	30-SEP-10	30-SEP-10	R1484961
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0025		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Arsenic (As)-Dissolved	0.00037		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Barium (Ba)-Dissolved	0.00252		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Boron (B)-Dissolved	<0.010		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	29-SEP-10	02-OCT-10	R1487867
Calcium (Ca)-Dissolved	1.67		0.050	mg/L	29-SEP-10	02-OCT-10	R1487867
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Chromium (Cr)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Copper (Cu)-Dissolved	0.00045		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	29-SEP-10	02-OCT-10	R1487867
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Magnesium (Mg)-Dissolved	0.646		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Manganese (Mn)-Dissolved	0.00029		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Molybdenum (Mo)-Dissolved	0.00021		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Nickel (Ni)-Dissolved	<0.0010		0.0010	mg/L	29-SEP-10	02-OCT-10	R1487867
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	29-SEP-10	02-OCT-10	R1487867
Potassium (K)-Dissolved	0.442		0.020	mg/L	29-SEP-10	02-OCT-10	R1487867
Rubidium (Rb)-Dissolved	0.00062		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	29-SEP-10	02-OCT-10	R1487867
Silicon (Si)-Dissolved	0.106		0.050	mg/L	29-SEP-10	02-OCT-10	R1487867
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Sodium (Na)-Dissolved	0.471		0.020	mg/L	29-SEP-10	02-OCT-10	R1487867
Strontium (Sr)-Dissolved	0.00755		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L937072-2	BGS-1							
Sampled By:	CLIENT on 25-SEP-10 @ 10:00							
Matrix:	WATER							
Dissolved Metals by ICP-MS								
Thorium (Th)-Dissolved		<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Tin (Sn)-Dissolved		<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Titanium (Ti)-Dissolved		<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Tungsten (W)-Dissolved		<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Vanadium (V)-Dissolved		<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Zinc (Zn)-Dissolved		<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Zirconium (Zr)-Dissolved		<0.00040		0.00040	mg/L	29-SEP-10	02-OCT-10	R1487867
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		7.8		1.0	mg/L		29-SEP-10	R1482723
Bicarbonate (HCO3)		9.5		2.0	mg/L		29-SEP-10	R1482723
Carbonate (CO3)		<0.60		0.60	mg/L		29-SEP-10	R1482723
Hydroxide (OH)		<0.40		0.40	mg/L		29-SEP-10	R1482723
Conductivity								
Conductivity		20.3		0.40	umhos/cm		29-SEP-10	R1482723
pH								
pH		7.19		0.10	pH units		29-SEP-10	R1482723
L937072-3	BGS-2							
Sampled By:	CLIENT on 25-SEP-10 @ 09:40							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L	05-OCT-10	05-OCT-10	R1489244
Chlorophyll a		0.787		0.010	ug/L	01-OCT-10	01-OCT-10	R1485406
Dissolved Organic Carbon		1.9		1.0	mg/L		08-OCT-10	R1498676
Hardness (as CaCO3)		7.32		0.30	mg/L		01-OCT-10	
Hardness (as CaCO3)		6.99		0.20	mg/L		05-OCT-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	04-OCT-10	04-OCT-10	R1489689
Nitrate and Nitrite as N		<0.071		0.071	mg/L		30-SEP-10	
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		30-SEP-10	R1484007
Phosphorus, Total		<0.010	DLA	0.010	mg/L		30-SEP-10	R1483827
Total Dissolved Solids		<5.0		5.0	mg/L		01-OCT-10	R1486403
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	29-SEP-10	30-SEP-10	R1483389
Total Organic Carbon		2.0		1.0	mg/L		08-OCT-10	R1498676
Total Suspended Solids		<2.0		2.0	mg/L		01-OCT-10	R1486403
Turbidity		1.53		0.10	NTU		29-SEP-10	R1482703
Anions scan (IC)								
Chloride		<0.50		0.50	mg/L		29-SEP-10	R1483164
Fluoride		<0.10		0.10	mg/L		29-SEP-10	R1483164
Nitrite-N		<0.050		0.050	mg/L		29-SEP-10	R1483164
Nitrate-N		<0.050		0.050	mg/L		29-SEP-10	R1483164
Sulfate		1.50		0.50	mg/L		29-SEP-10	R1483164
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.123		0.0050	mg/L	30-SEP-10	30-SEP-10	R1484961
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Arsenic (As)-Total		0.00044		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Barium (Ba)-Total		0.00359		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Boron (B)-Total		<0.010		0.010	mg/L	30-SEP-10	30-SEP-10	R1484961

* 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
L937072-3 BGS-2							
Sampled By: CLIENT on 25-SEP-10 @ 09:40							
Matrix: WATER							
Total Metals by ICP-MS							
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	30-SEP-10	30-SEP-10	R1484961
Calcium (Ca)-Total	1.79		0.10	mg/L	30-SEP-10	30-SEP-10	R1484961
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Copper (Cu)-Total	0.00062		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Iron (Fe)-Total	0.116		0.020	mg/L	30-SEP-10	30-SEP-10	R1484961
Lead (Pb)-Total	0.000091		0.000090	mg/L	30-SEP-10	30-SEP-10	R1484961
Lithium (Li)-Total	<0.0020		0.0020	mg/L	30-SEP-10	30-SEP-10	R1484961
Magnesium (Mg)-Total	0.694		0.010	mg/L	30-SEP-10	30-SEP-10	R1484961
Manganese (Mn)-Total	0.00244		0.00030	mg/L	30-SEP-10	30-SEP-10	R1484961
Molybdenum (Mo)-Total	0.00023		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	30-SEP-10	30-SEP-10	R1484961
Phosphorus (P)-Total	<0.20		0.20	mg/L	30-SEP-10	30-SEP-10	R1484961
Potassium (K)-Total	0.470		0.020	mg/L	30-SEP-10	30-SEP-10	R1484961
Rubidium (Rb)-Total	0.00098		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Selenium (Se)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Silicon (Si)-Total	0.328		0.050	mg/L	30-SEP-10	30-SEP-10	R1484961
Silver (Ag)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Sodium (Na)-Total	0.476		0.030	mg/L	30-SEP-10	30-SEP-10	R1484961
Strontium (Sr)-Total	0.00796		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Thorium (Th)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tin (Sn)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Titanium (Ti)-Total	0.00396		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Tungsten (W)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Uranium (U)-Total	0.00013		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Vanadium (V)-Total	0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	30-SEP-10	30-SEP-10	R1484961
Zirconium (Zr)-Total	0.00049		0.00040	mg/L	30-SEP-10	30-SEP-10	R1484961
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0028		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Arsenic (As)-Dissolved	0.00039		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Barium (Ba)-Dissolved	0.00245		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Beryllium (Be)-Dissolved	0.00042		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Boron (B)-Dissolved	<0.010		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	29-SEP-10	02-OCT-10	R1487867
Calcium (Ca)-Dissolved	1.71		0.050	mg/L	29-SEP-10	02-OCT-10	R1487867
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Chromium (Cr)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Copper (Cu)-Dissolved	0.00038		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	29-SEP-10	02-OCT-10	R1487867
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Magnesium (Mg)-Dissolved	0.660		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Manganese (Mn)-Dissolved	0.00031		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Molybdenum (Mo)-Dissolved	0.00021		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867

* 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
L937072-4 BGS-3							
Sampled By: CLIENT on 25-SEP-10 @ 09:25							
Matrix: WATER							
Anions scan (IC)							
Nitrite-N	<0.050		0.050	mg/L		29-SEP-10	R1483164
Nitrate-N	<0.050		0.050	mg/L		29-SEP-10	R1483164
Sulfate	1.51		0.50	mg/L		29-SEP-10	R1483164
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.135		0.0050	mg/L	30-SEP-10	30-SEP-10	R1484961
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Arsenic (As)-Total	0.00050		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Barium (Ba)-Total	0.00363		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Beryllium (Be)-Total	0.00050		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Boron (B)-Total	<0.010		0.010	mg/L	30-SEP-10	30-SEP-10	R1484961
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	30-SEP-10	30-SEP-10	R1484961
Calcium (Ca)-Total	1.76		0.10	mg/L	30-SEP-10	30-SEP-10	R1484961
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Copper (Cu)-Total	0.00070		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Iron (Fe)-Total	0.116		0.020	mg/L	30-SEP-10	30-SEP-10	R1484961
Lead (Pb)-Total	<0.000090		0.000090	mg/L	30-SEP-10	30-SEP-10	R1484961
Lithium (Li)-Total	<0.0020		0.0020	mg/L	30-SEP-10	30-SEP-10	R1484961
Magnesium (Mg)-Total	0.709		0.010	mg/L	30-SEP-10	30-SEP-10	R1484961
Manganese (Mn)-Total	0.00238		0.00030	mg/L	30-SEP-10	30-SEP-10	R1484961
Molybdenum (Mo)-Total	0.00025		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	30-SEP-10	30-SEP-10	R1484961
Phosphorus (P)-Total	<0.20		0.20	mg/L	30-SEP-10	30-SEP-10	R1484961
Potassium (K)-Total	0.484		0.020	mg/L	30-SEP-10	30-SEP-10	R1484961
Rubidium (Rb)-Total	0.00101		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Selenium (Se)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Silicon (Si)-Total	0.354		0.050	mg/L	30-SEP-10	30-SEP-10	R1484961
Silver (Ag)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Sodium (Na)-Total	0.488		0.030	mg/L	30-SEP-10	30-SEP-10	R1484961
Strontium (Sr)-Total	0.00821		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Thorium (Th)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tin (Sn)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Titanium (Ti)-Total	0.00430		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Tungsten (W)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Uranium (U)-Total	0.00014		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Vanadium (V)-Total	0.00021		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	30-SEP-10	30-SEP-10	R1484961
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	30-SEP-10	30-SEP-10	R1484961
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0040		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Arsenic (As)-Dissolved	0.00045		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Barium (Ba)-Dissolved	0.00252		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Boron (B)-Dissolved	<0.010		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	29-SEP-10	02-OCT-10	R1487867

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L937072-4	BGS-3							
Sampled By:	CLIENT on 25-SEP-10 @ 09:25							
Matrix:	WATER							
Dissolved Metals by ICP-MS								
Calcium (Ca)-Dissolved	1.79			0.050	mg/L	29-SEP-10	02-OCT-10	R1487867
Cesium (Cs)-Dissolved	<0.00010			0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Chromium (Cr)-Dissolved	<0.0020			0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Cobalt (Co)-Dissolved	<0.00020			0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Copper (Cu)-Dissolved	0.00043			0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Iron (Fe)-Dissolved	<0.010			0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Lead (Pb)-Dissolved	<0.000090			0.000090	mg/L	29-SEP-10	02-OCT-10	R1487867
Lithium (Li)-Dissolved	<0.0020			0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Magnesium (Mg)-Dissolved	0.673			0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Manganese (Mn)-Dissolved	0.00025			0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Molybdenum (Mo)-Dissolved	0.00021			0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Nickel (Ni)-Dissolved	<0.0010			0.0010	mg/L	29-SEP-10	02-OCT-10	R1487867
Phosphorus (P)-Dissolved	<0.10			0.10	mg/L	29-SEP-10	02-OCT-10	R1487867
Potassium (K)-Dissolved	0.467			0.020	mg/L	29-SEP-10	02-OCT-10	R1487867
Rubidium (Rb)-Dissolved	0.00063			0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Selenium (Se)-Dissolved	<0.0010			0.0010	mg/L	29-SEP-10	02-OCT-10	R1487867
Silicon (Si)-Dissolved	0.112			0.050	mg/L	29-SEP-10	02-OCT-10	R1487867
Silver (Ag)-Dissolved	<0.00010			0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Sodium (Na)-Dissolved	0.478			0.020	mg/L	29-SEP-10	02-OCT-10	R1487867
Strontium (Sr)-Dissolved	0.00769			0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Tellurium (Te)-Dissolved	<0.00020			0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Thallium (Tl)-Dissolved	<0.00010			0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Thorium (Th)-Dissolved	<0.00010			0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Tin (Sn)-Dissolved	<0.00020			0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Titanium (Ti)-Dissolved	<0.00020			0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Tungsten (W)-Dissolved	<0.00020			0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Uranium (U)-Dissolved	<0.00010			0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Vanadium (V)-Dissolved	<0.00020			0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Zinc (Zn)-Dissolved	<0.0020			0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Zirconium (Zr)-Dissolved	<0.00040			0.00040	mg/L	29-SEP-10	02-OCT-10	R1487867
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)	7.9			1.0	mg/L		29-SEP-10	R1482723
Bicarbonate (HCO3)	9.6			2.0	mg/L		29-SEP-10	R1482723
Carbonate (CO3)	<0.60			0.60	mg/L		29-SEP-10	R1482723
Hydroxide (OH)	<0.40			0.40	mg/L		29-SEP-10	R1482723
Conductivity								
Conductivity	20.7			0.40	umhos/cm		29-SEP-10	R1482723
pH								
pH	7.19			0.10	pH units		29-SEP-10	R1482723
L937072-5	BGS-4							
Sampled By:	CLIENT on 25-SEP-10 @ 09:10							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N	<0.050			0.050	mg/L	05-OCT-10	05-OCT-10	R1489244
Chlorophyll a	0.799			0.010	ug/L	01-OCT-10	01-OCT-10	R1485406
Dissolved Organic Carbon	1.9			1.0	mg/L		08-OCT-10	R149

* 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
L937072-5 BGS-4							
Sampled By: CLIENT on 25-SEP-10 @ 09:10							
Matrix: WATER							
Nitrate and Nitrite as N	<0.071		0.071	mg/L		30-SEP-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		30-SEP-10	R1484007
Phosphorus, Total	<0.010	DLA	0.010	mg/L		30-SEP-10	R1483827
Total Dissolved Solids	<5.0		5.0	mg/L		01-OCT-10	R1486403
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	29-SEP-10	30-SEP-10	R1483389
Total Organic Carbon	1.9		1.0	mg/L		08-OCT-10	R1498676
Total Suspended Solids	<2.0		2.0	mg/L		01-OCT-10	R1486403
Turbidity	1.61		0.10	NTU		29-SEP-10	R1482703
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		29-SEP-10	R1483164
Fluoride	<0.10		0.10	mg/L		29-SEP-10	R1483164
Nitrite-N	<0.050		0.050	mg/L		29-SEP-10	R1483164
Nitrate-N	<0.050		0.050	mg/L		29-SEP-10	R1483164
Sulfate	1.51		0.50	mg/L		29-SEP-10	R1483164
Total Metals by ICP-MS							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L	30-SEP-10	30-SEP-10	R1484961
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Arsenic (As)-Total	0.00050		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Barium (Ba)-Total	0.00249		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Boron (B)-Total	<0.010		0.010	mg/L	30-SEP-10	30-SEP-10	R1484961
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	30-SEP-10	30-SEP-10	R1484961
Calcium (Ca)-Total	1.69		0.10	mg/L	30-SEP-10	30-SEP-10	R1484961
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Copper (Cu)-Total	0.00045		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Iron (Fe)-Total	<0.020		0.020	mg/L	30-SEP-10	30-SEP-10	R1484961
Lead (Pb)-Total	<0.000090		0.000090	mg/L	30-SEP-10	30-SEP-10	R1484961
Lithium (Li)-Total	<0.0020		0.0020	mg/L	30-SEP-10	30-SEP-10	R1484961
Magnesium (Mg)-Total	0.633		0.010	mg/L	30-SEP-10	30-SEP-10	R1484961
Manganese (Mn)-Total	0.00031		0.00030	mg/L	30-SEP-10	30-SEP-10	R1484961
Molybdenum (Mo)-Total	0.00021		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	30-SEP-10	30-SEP-10	R1484961
Phosphorus (P)-Total	<0.20		0.20	mg/L	30-SEP-10	30-SEP-10	R1484961
Potassium (K)-Total	0.458		0.020	mg/L	30-SEP-10	30-SEP-10	R1484961
Rubidium (Rb)-Total	0.00063		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Selenium (Se)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Silicon (Si)-Total	0.113		0.050	mg/L	30-SEP-10	30-SEP-10	R1484961
Silver (Ag)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Sodium (Na)-Total	0.462		0.030	mg/L	30-SEP-10	30-SEP-10	R1484961
Strontium (Sr)-Total	0.00763		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Thorium (Th)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tin (Sn)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Titanium (Ti)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Tungsten (W)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Uranium (U)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Vanadium (V)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	30-SEP-10	30-SEP-10	R1484961

* 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
L937072-5 BGS-4							
Sampled By: CLIENT on 25-SEP-10 @ 09:10							
Matrix: WATER							
Total Metals by ICP-MS							
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	30-SEP-10	30-SEP-10	R1484961
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0049		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Arsenic (As)-Dissolved	0.00050		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Barium (Ba)-Dissolved	0.00274		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Beryllium (Be)-Dissolved	0.00023		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Boron (B)-Dissolved	<0.010		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	29-SEP-10	02-OCT-10	R1487867
Calcium (Ca)-Dissolved	1.70		0.050	mg/L	29-SEP-10	02-OCT-10	R1487867
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Chromium (Cr)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Copper (Cu)-Dissolved	0.00039		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	29-SEP-10	02-OCT-10	R1487867
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Magnesium (Mg)-Dissolved	0.676		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Manganese (Mn)-Dissolved	0.00031		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Molybdenum (Mo)-Dissolved	0.00023		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Nickel (Ni)-Dissolved	<0.0010		0.0010	mg/L	29-SEP-10	02-OCT-10	R1487867
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	29-SEP-10	02-OCT-10	R1487867
Potassium (K)-Dissolved	0.460		0.020	mg/L	29-SEP-10	02-OCT-10	R1487867
Rubidium (Rb)-Dissolved	0.00064		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	29-SEP-10	02-OCT-10	R1487867
Silicon (Si)-Dissolved	0.119		0.050	mg/L	29-SEP-10	02-OCT-10	R1487867
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Sodium (Na)-Dissolved	0.478		0.020	mg/L	29-SEP-10	02-OCT-10	R1487867
Strontium (Sr)-Dissolved	0.00763		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Tungsten (W)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	29-SEP-10	02-OCT-10	R1487867
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	8.0		1.0	mg/L		29-SEP-10	R1482723
Bicarbonate (HCO3)	9.7		2.0	mg/L		29-SEP-10	R1482723
Carbonate (CO3)	<0.60		0.60	mg/L		29-SEP-10	R1482723
Hydroxide (OH)	<0.40		0.40	mg/L		29-SEP-10	R1482723
Conductivity							
Conductivity	20.8		0.40	umhos/cm		29-SEP-10	R1482723
pH							
pH	7.19		0.10	pH units		29-SEP-10	R1482723

* 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
L937072-6 BGS-5 Sampled By: CLIENT on 25-SEP-10 @ 08:45 Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L	05-OCT-10	06-OCT-10	R1492405
Chlorophyll a	0.799		0.010	ug/L	01-OCT-10	01-OCT-10	R1485406
Dissolved Organic Carbon	1.9		1.0	mg/L		08-OCT-10	R1498676
Hardness (as CaCO3)	6.60		0.30	mg/L		01-OCT-10	
Hardness (as CaCO3)	7.16		0.20	mg/L		05-OCT-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	04-OCT-10	04-OCT-10	R1489689
Nitrate and Nitrite as N	<0.071		0.071	mg/L		30-SEP-10	
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		30-SEP-10	R1484007
Phosphorus, Total	<0.010	DLA	0.010	mg/L		30-SEP-10	R1483827
Total Dissolved Solids	<5.0		5.0	mg/L		01-OCT-10	R1486403
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	29-SEP-10	30-SEP-10	R1483389
Total Organic Carbon	2.0		1.0	mg/L		08-OCT-10	R1498676
Total Suspended Solids	<2.0		2.0	mg/L		01-OCT-10	R1486403
Turbidity	1.49		0.10	NTU		29-SEP-10	R1482703
Anions scan (IC)							
Chloride	<0.50		0.50	mg/L		29-SEP-10	R1483164
Fluoride	<0.10		0.10	mg/L		29-SEP-10	R1483164
Nitrite-N	<0.050		0.050	mg/L		29-SEP-10	R1483164
Nitrate-N	<0.050		0.050	mg/L		29-SEP-10	R1483164
Sulfate	1.50		0.50	mg/L		29-SEP-10	R1483164
Total Metals by ICP-MS							
Aluminum (Al)-Total	<0.0050		0.0050	mg/L	30-SEP-10	30-SEP-10	R1484961
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Arsenic (As)-Total	0.00046		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Barium (Ba)-Total	0.00232		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Beryllium (Be)-Total	0.00033		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Boron (B)-Total	<0.010		0.010	mg/L	30-SEP-10	30-SEP-10	R1484961
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	30-SEP-10	30-SEP-10	R1484961
Calcium (Ca)-Total	1.63		0.10	mg/L	30-SEP-10	30-SEP-10	R1484961
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Copper (Cu)-Total	0.00045		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Iron (Fe)-Total	<0.020		0.020	mg/L	30-SEP-10	30-SEP-10	R1484961
Lead (Pb)-Total	<0.000090		0.000090	mg/L	30-SEP-10	30-SEP-10	R1484961
Lithium (Li)-Total	<0.0020		0.0020	mg/L	30-SEP-10	30-SEP-10	R1484961
Magnesium (Mg)-Total	0.615		0.010	mg/L	30-SEP-10	30-SEP-10	R1484961
Manganese (Mn)-Total	<0.00030		0.00030	mg/L	30-SEP-10	30-SEP-10	R1484961
Molybdenum (Mo)-Total	0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	30-SEP-10	30-SEP-10	R1484961
Phosphorus (P)-Total	<0.20		0.20	mg/L	30-SEP-10	30-SEP-10	R1484961
Potassium (K)-Total	0.442		0.020	mg/L	30-SEP-10	30-SEP-10	R1484961
Rubidium (Rb)-Total	0.00063		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Selenium (Se)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Silicon (Si)-Total	0.102		0.050	mg/L	30-SEP-10	30-SEP-10	R1484961
Silver (Ag)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Sodium (Na)-Total	0.452		0.030	mg/L	30-SEP-10	30-SEP-10	R1484961
Strontium (Sr)-Total	0.00755		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961

* 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
L937072-6 BGS-5							
Sampled By: CLIENT on 25-SEP-10 @ 08:45							
Matrix: WATER							
Total Metals by ICP-MS							
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Thorium (Th)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tin (Sn)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Titanium (Ti)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Tungsten (W)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Uranium (U)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Vanadium (V)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	30-SEP-10	30-SEP-10	R1484961
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	30-SEP-10	30-SEP-10	R1484961
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0027		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Arsenic (As)-Dissolved	0.00045		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Barium (Ba)-Dissolved	0.00256		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Boron (B)-Dissolved	<0.010		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	29-SEP-10	02-OCT-10	R1487867
Calcium (Ca)-Dissolved	1.76		0.050	mg/L	29-SEP-10	02-OCT-10	R1487867
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Chromium (Cr)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Copper (Cu)-Dissolved	0.00044		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	29-SEP-10	02-OCT-10	R1487867
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Magnesium (Mg)-Dissolved	0.674		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Manganese (Mn)-Dissolved	0.00024		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Molybdenum (Mo)-Dissolved	0.00022		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Nickel (Ni)-Dissolved	<0.0010		0.0010	mg/L	29-SEP-10	02-OCT-10	R1487867
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	29-SEP-10	02-OCT-10	R1487867
Potassium (K)-Dissolved	0.455		0.020	mg/L	29-SEP-10	02-OCT-10	R1487867
Rubidium (Rb)-Dissolved	0.00063		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	29-SEP-10	02-OCT-10	R1487867
Silicon (Si)-Dissolved	0.111		0.050	mg/L	29-SEP-10	02-OCT-10	R1487867
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Sodium (Na)-Dissolved	0.474		0.020	mg/L	29-SEP-10	02-OCT-10	R1487867
Strontium (Sr)-Dissolved	0.00780		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Tungsten (W)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	29-SEP-10	02-OCT-10	R1487867
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	7.9		1.0	mg/L		29-SEP-10	R1482723

* 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
L937072-7 BGS-6							
Sampled By: CLIENT on 25-SEP-10 @ 08:25							
Matrix: WATER							
Total Metals by ICP-MS							
Molybdenum (Mo)-Total	0.00024		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	30-SEP-10	30-SEP-10	R1484961
Phosphorus (P)-Total	<0.20		0.20	mg/L	30-SEP-10	30-SEP-10	R1484961
Potassium (K)-Total	0.513		0.020	mg/L	30-SEP-10	30-SEP-10	R1484961
Rubidium (Rb)-Total	0.00097		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Selenium (Se)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Silicon (Si)-Total	0.379		0.050	mg/L	30-SEP-10	30-SEP-10	R1484961
Silver (Ag)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Sodium (Na)-Total	0.598		0.030	mg/L	30-SEP-10	30-SEP-10	R1484961
Strontium (Sr)-Total	0.00824		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Thorium (Th)-Total	<0.00010		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Tin (Sn)-Total	<0.00020		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Titanium (Ti)-Total	0.00412		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Tungsten (W)-Total	<0.0010		0.0010	mg/L	30-SEP-10	30-SEP-10	R1484961
Uranium (U)-Total	0.00014		0.00010	mg/L	30-SEP-10	30-SEP-10	R1484961
Vanadium (V)-Total	0.00022		0.00020	mg/L	30-SEP-10	30-SEP-10	R1484961
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	30-SEP-10	30-SEP-10	R1484961
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	30-SEP-10	30-SEP-10	R1484961
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0042		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Arsenic (As)-Dissolved	0.00047		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Barium (Ba)-Dissolved	0.00257		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Boron (B)-Dissolved	<0.010		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	29-SEP-10	02-OCT-10	R1487867
Calcium (Ca)-Dissolved	1.76		0.050	mg/L	29-SEP-10	02-OCT-10	R1487867
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Chromium (Cr)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Copper (Cu)-Dissolved	0.00040		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	29-SEP-10	02-OCT-10	R1487867
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Magnesium (Mg)-Dissolved	0.675		0.010	mg/L	29-SEP-10	02-OCT-10	R1487867
Manganese (Mn)-Dissolved	0.00027		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Molybdenum (Mo)-Dissolved	0.00021		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Nickel (Ni)-Dissolved	<0.0010		0.0010	mg/L	29-SEP-10	02-OCT-10	R1487867
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	29-SEP-10	02-OCT-10	R1487867
Potassium (K)-Dissolved	0.464		0.020	mg/L	29-SEP-10	02-OCT-10	R1487867
Rubidium (Rb)-Dissolved	0.00063		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	29-SEP-10	02-OCT-10	R1487867
Silicon (Si)-Dissolved	0.123		0.050	mg/L	29-SEP-10	02-OCT-10	R1487867
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Sodium (Na)-Dissolved	0.481		0.020	mg/L	29-SEP-10	02-OCT-10	R1487867
Strontium (Sr)-Dissolved	0.00778		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867

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

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L937072-7	BGS-6							
Sampled By: CLIENT on 25-SEP-10 @ 08:25								
Matrix: WATER								
Dissolved Metals by ICP-MS								
Thorium (Th)-Dissolved		<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Tin (Sn)-Dissolved		<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Titanium (Ti)-Dissolved		<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Tungsten (W)-Dissolved		<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Uranium (U)-Dissolved		<0.00010		0.00010	mg/L	29-SEP-10	02-OCT-10	R1487867
Vanadium (V)-Dissolved		<0.00020		0.00020	mg/L	29-SEP-10	02-OCT-10	R1487867
Zinc (Zn)-Dissolved		<0.0020		0.0020	mg/L	29-SEP-10	02-OCT-10	R1487867
Zirconium (Zr)-Dissolved		<0.00040		0.00040	mg/L	29-SEP-10	02-OCT-10	R1487867
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		8.0		1.0	mg/L		29-SEP-10	R1482723
Bicarbonate (HCO3)		9.7		2.0	mg/L		29-SEP-10	R1482723
Carbonate (CO3)		<0.60		0.60	mg/L		29-SEP-10	R1482723
Hydroxide (OH)		<0.40		0.40	mg/L		29-SEP-10	R1482723
Conductivity								
Conductivity		20.8		0.40	umhos/cm		29-SEP-10	R1482723
pH								
pH		7.19		0.10	pH units		29-SEP-10	R1482723

* 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)
Duplicate	Ortho Phosphorus Soluble As P	DLA	L937072-1, -2, -3, -4, -5, -6, -7

Qualifiers for Sample Submission Listed:

Qualifier	Description
EHR	Exceeded Recommended Holding Time On Receipt: Proceed With Analysis As Requested

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ALK-TOT-WP	Water	Alkalinity	APHA 2320B

Alkalinity of water is a measure of its acid neutralizing capacity. Alkalinity is imparted by bicarbonate, carbonate and hydroxide components of water. It is determined by titration with a standard solution of strong mineral acid to the successive HCO₃⁻ and H₂CO₃ endpoints indicated electrometrically.

ANIONS5-IC-WP	Water	Anions scan (IC)	EPA 300.1 IC

This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".

C-DIS-ORG-WP	Water	Dissolved Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.
TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

C-TOT-ORG-WP	Water	Total Organic Carbon	APHA 5310 B-INSTRUMENTAL-WP

This method is applicable to the analysis of ground water, wastewater, and surface water samples. The form detected depends upon sample pretreatment: Unfiltered sample = TC, 0.45um filtered = TDC. Samples are injected into a combustion tube containing an oxidation catalyst. The carrier gas containing the combustion product from the combustion tube flows through an inorganic carbon reactor vessel and is then sent through a halogen scrubber into a sample cell set in a non-dispersive infrared gas analyzer (NDIR) where carbon dioxide is detected. For total inorganic carbon and dissolved inorganic carbon, the sample is injected into an IC reactor vessel where only the IC component is decomposed to become carbon dioxide.

The peak area generated by the NDIR indicates the TC/TDC or TIC/DIC as applicable. The total organic carbon content of the sample is calculated by subtracting the TIC from the TC.
TOC = TC-TIC, DOC = TDC-DIC, Particulate = Total - Dissolved.

CHLOROA-VA	Water	Chlorophyll a by Fluorometer	EPA 445.0

Chlorophyll and Pheopigments by Fluorometry analysis is carried out using procedures adapted from USEPA Method 445.0. The sample is filtered using either a glass fiber filter or a 0.45 micron Membrane filter. The pigments are extracted from the filter with 90% aqueous acetone. For chlorophyll-a analysis the extract is read using a fluorometer. For pheopigments the extract is first acidified then read. This method is not subject to interferences from chlorophyll b.

EC-WP	Water	Conductivity	APHA 2510B

Conductivity of an aqueous solution refers to its ability to carry an electric current. Conductance of a solution is measured between two spatially fixed and chemically inert electrodes.

ETL-HARDNESS-DIS-WP	Water	Hardness Calculated	Calculated
ETL-HARDNESS-TOT-WP	Water	Hardness Calculated	Calculated
HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0

Mercury in filtered and unfiltered waters is oxidized with Bromine monochloride and analyzed by cold-vapour atomic fluorescence spectrometry.

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
MET-D-L-MS-WP	Water	Dissolved Metals by ICP-MS	U.S. EPA 200.8-DL
Dissolved Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the Examination of Water and Wastewater method 3030B for filtration through a 0.45 um filter and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
MET-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
Total Metals by ICP-MS: This analysis is carried out using sample preparation procedures adapted from Standard Methods for the examination of Water and Wastewater Method 3030E and analytical procedures adapted from U.S EPA Method 200.8 for analysis of metals by inductively coupled-mass spectrometry.			
N-TOTKJ-WP	Water	Total Kjeldahl Nitrogen	Quickchem method 10-107-06-2-E Lachat
Samples are digested with a sulphuric acid solution, cooled, diluted with water, and analyzed for ammonia. Total Kjeldahl nitrogen is the sum of free-ammonia and organic nitrogen compounds which are converted to ammonium sulphate through this digestion process. Analysis is performed by Flow Injection Analysis (FIA). The pH of the digested sample is raised to a known, basic pH by neutralization with a concentrated buffer solution. This neutralization converts the ammonium cation to ammonia. The ammonia produced is heated with salicylate and hypochlorite to produce blue colour which is proportional to the ammonia concentration.			
NH3-COL-WP	Water	Ammonia by colour	APHA 4500 NH3 F
Ammonia - Colourimetric using Salicylate-nitroprusside and hypochlorite, in an alkaline phosphate buffer.			
NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
P-ORTHO-SOL-WP	Water	Ortho Phosphorous Soluble	APHA, 1998 P-OS
Quantitative orthophosphorous values are determined without prior digestion of the sample. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
P-TOTAL-WP	Water	Phosphorus, Total	APHA, 1998 P-T
Samples are digested using a sulphuric acid-persulfate mixture to convert organic phosphorous to orthophosphate. The samples are analyzed by either the Flow Injection Analysis (FIA) or the Segmented Flow Analysis (SFA) method. The absorbance measured by the instrument is proportional to the concentration of orthophosphate in the sample, and is reported as phosphorous.			
PH-WP	Water	pH	APHA 4500H
pH of a sample is the determination of the activity of the hydrogen ions by potentiometric measurement using a standard hydrogen electrode and a reference electrode.			
SOLIDS-TDS-WP	Water	Total Dissolved Solids	APHA 2540
The residue remaining in a prepared casserole after passing the sample through a 1.2 um Whatman GF/C glass microfibre filter and drying at 180 degrees C. Samples may be dried at 105 degrees C if the client specifically requests this drying temperature.			
SOLIDS-TOTSUS-LR-WP	Water	Total Suspended Solids	APHA 2540 LR
The residue retained by a prepared 1.5 um Whatman 934-AH glass microfibre filter dried at 105 degrees C. A method detection limit of 2 mg/L can be achieved when 500 mL of sample is used.			
TURBIDITY-WP	Water	Turbidity	APHA, 1998, 2130B
A strong light beam is sent through a transparent tube containing the sample. Light that is reflected at 90 degrees to the axis by suspended particles is detected by the photocell. The electrical response is proportional to the sample turbidity.			

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**

** 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
WP	ALS LABORATORY GROUP - WINNIPEG, MANITOBA, CANADA
VA	ALS LABORATORY GROUP - VANCOUVER, BC, CANADA

Chain of Custody Numbers:

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.



Chain of Custody / Analytical Request Form
Canada Toll Free: 1 800 668 9878
www.alsglobal.com

COC #

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