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Appendix C1

Report: *All Weather Private Access Road: 2010 Water Quality Management Report*

AGNICO-EAGLE MINES LTD: MEADOWBANK DIVISION

**ALL WEATHER PRIVATE ACCESS ROAD: 2010 WATER
QUALITY MANAGEMENT REPORT**

FEBRUARY 2011

**AEM: MEADOWBANK DIVISION
AWPAR AND QUARRIES WATER QUALITY
MANAGEMENT REPORT**

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SECTION 1 • INTRODUCTION AND OBJECTIVES

Agnico-Eagle Mines Ltd. (AEM) is responsible to manage erosion, water quality, and the introduction of sediment along the 110 km all weather private access road (AWPAR) that connects the Hamlet of Baker Lake to the Meadowbank mine site. As part of the water quality management, AEM personnel completed routine and event inspections at all of the crossings pre-freshet and post-freshet. The purpose was to prevent and monitor erosion at all stream crossings, and completed routine water quality monitoring at all large crossings from July until September, and where possible collected water samples at representative quarries and DFO defined habitat altered, destructed or disturbed (HADD) crossings as required.

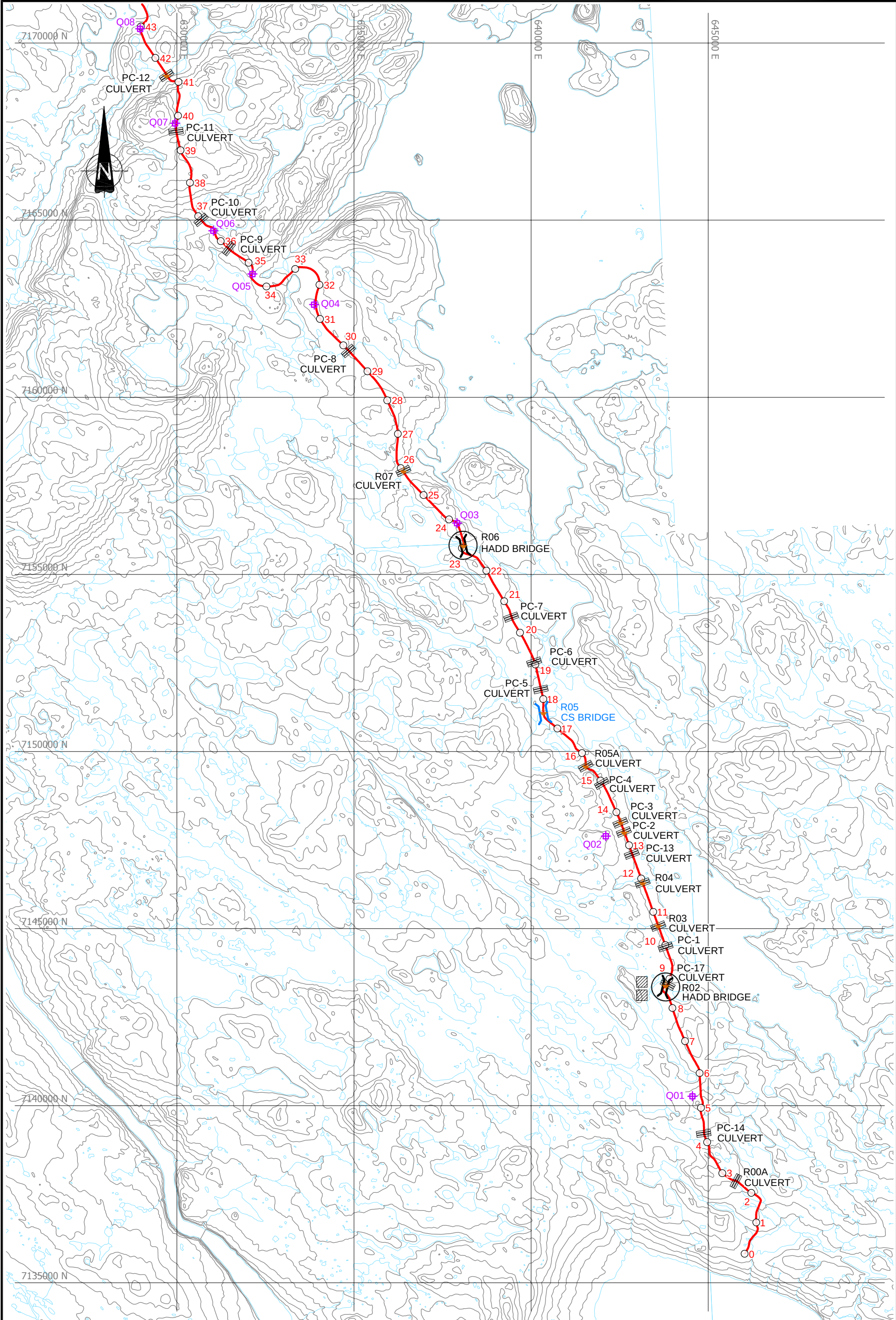
As per the water quality management plan, a tiered approach was taken in 2010 to evaluate and monitor erosion and turbidity along the AWPAP. To prioritize monitoring at crossings, all crossings were visually inspected for erosion and turbidity on a daily basis during freshet and immediately after freshet (late June to early July). For the remainder of the open water season, inspections were completed following rain events or if during weekly inspections turbidity was observed, the characteristics of the plume were monitored at the respective locations. If warranted, water samples were collected for laboratory analysis.

Water quality sampling was primarily focused on crossings that are considered fish-bearing watercourses where permitted Habitat Altered, Destructed or Disturbed (HADD) for bridge and road construction had occurred (as per DFO Authorization) (See Figure 1 for sample locations). Water samples were collected at least on a monthly basis upstream of the crossings and immediately downstream of the crossings to evaluate the water quality along the AWPAP.

In follow-up to the 2008 Geochemical Characterization Study for the AWPAP (AEM, 2009b), water samples were collected in July and August in 2009 at quarries where water accumulation was enough to warrant surface water collection and subsequent water quality analysis. Based on the recommendations of the 2009 report, additional water samples were collected in 2010 at quarries where water accumulated and provided the opportunity to collect representative samples.

This report documents the 2010 AWPAP water quality management and reports the: AWPAP turbidity and erosion monitoring, AWPAP watercourse crossing water quality, AWPAP Quarry water quality, QA/ QC, provides the field and laboratory results and a discussion of the results. A summary of the monitoring data has been provided in the monthly reports to the NWB.

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LEGEND

- CULVERT
- HADD BRIDGE
- CLEAR-SPAN BRIDGE
- HOOP NETS INSTALLED
- LARVAL DRIFT TRAP
- EXISTING QUARRY
- KILOMETER MARKER

REFERENCES

- ROAD ALIGNMENT, BRIDGE, CULVERT AND QUARRY LOCATIONS FROM NUNA M&T SERVICES Ltd.
- BASE DRAWING FROM GOLDER ASSOCIATES Ltd.

PROJECT

AEM

AGNICO-EAGLE MINES LIMITED
MEADOWBANK DIVISION

TITLE

ALL-WEATHER PRIVATE ACCESS ROAD
MONITORING LOCATIONS

PROJECT No.	FILE No. 0714130119-1000_B_Fig-01	
DESIGN	EA/GG	SCALE AS SHOWN
CADD	16MAR08	REV.
CHECK		
REVIEW		

FIGURE 1a

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LEGEND

- CULVERT
- HADD BRIDGE
- CLEAR-SPAN BRIDGE
- HOOP NETS INSTALLED
- LARVAL DRIFT TRAP
- EXISTING QUARRY
- KILOMETER MARKER

REFERENCES

- ROAD ALIGNMENT, BRIDGE, CULVERT AND QUARRY LOCATIONS FROM NUNA M&T SERVICES Ltd.
- BASE DRAWING FROM GOLDER ASSOCIATES Ltd.

PROJECT

AEM

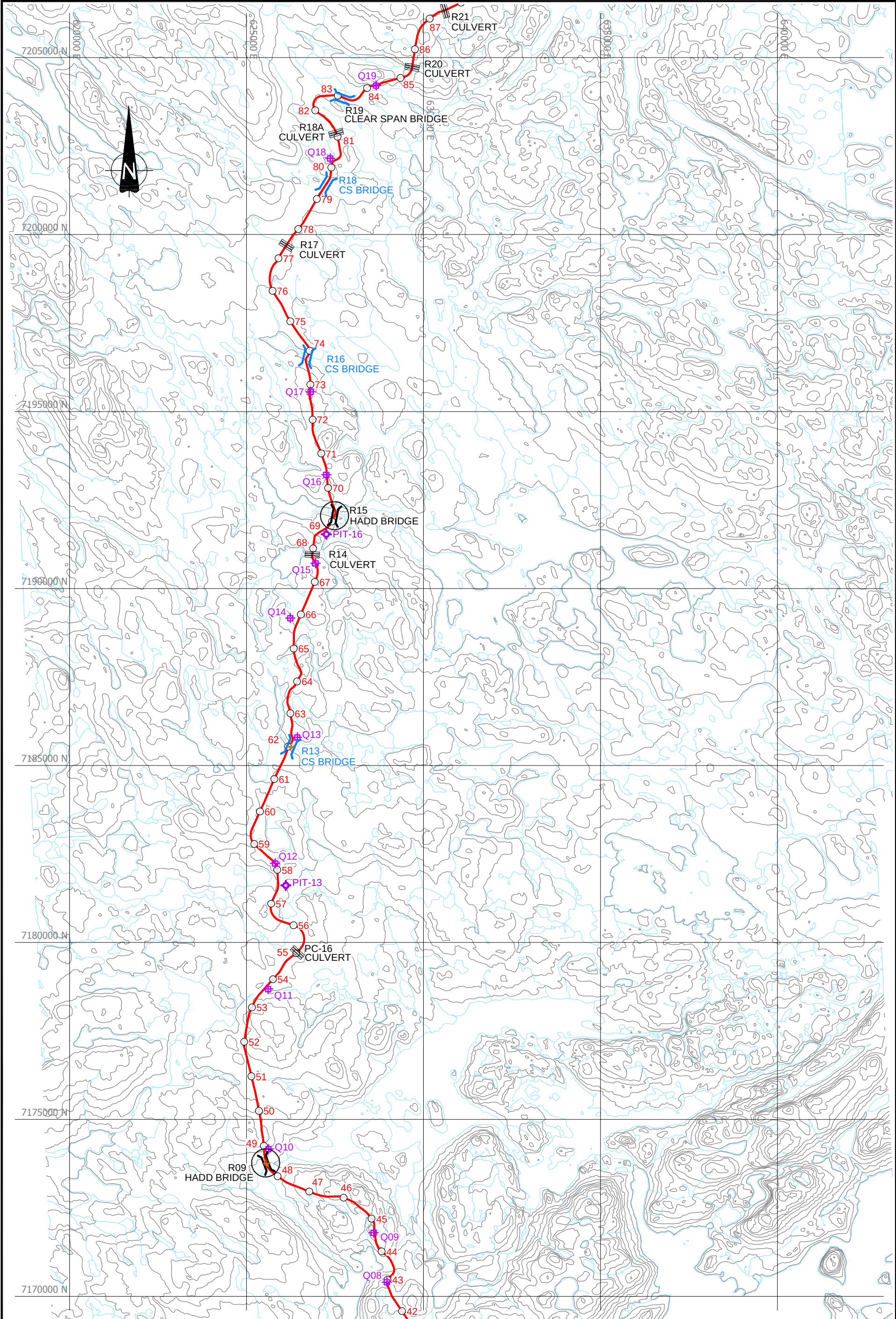
AGNICO-EAGLE MINES LIMITED
MEADOWBANK DIVISION

TITLE

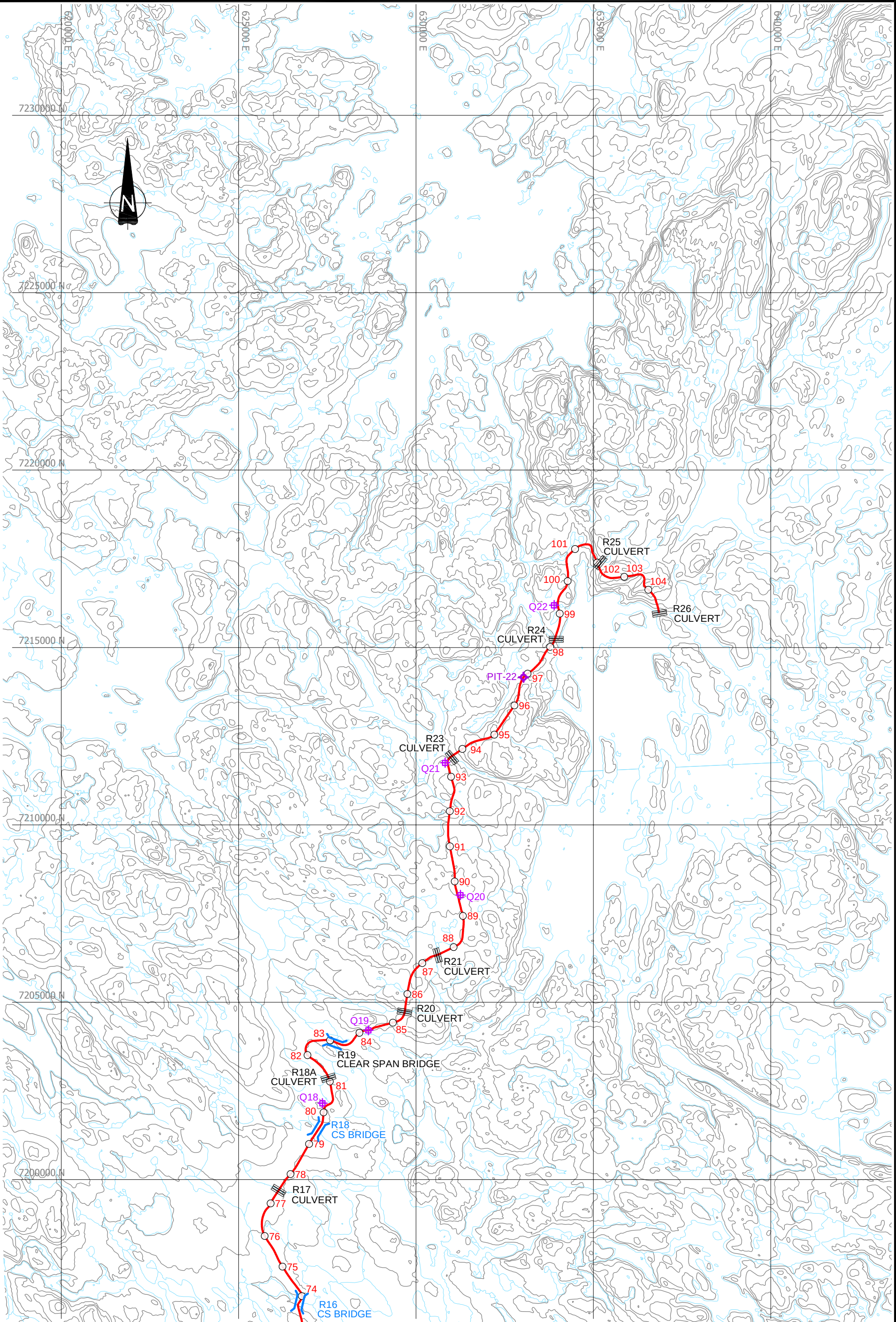
ALL-WEATHER PRIVATE ACCESS ROAD
MONITORING LOCATIONS

PROJECT No.	FILE No. 0714130119-1000_B_Fig-02	
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FIGURE 1b



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LEGEND

- CULVERT
- HADD BRIDGE
- CLEAR-SPAN BRIDGE
- HOOP NETS INSTALLED
- LARVAL DRIFT TRAP
- EXISTING QUARRY
- KILOMETER MARKER

REFERENCES

- ROAD ALIGNMENT, BRIDGE, CULVERT AND QUARRY LOCATIONS FROM NUNA M&T SERVICES Ltd.
- BASE DRAWING FROM GOLDER ASSOCIATES Ltd.

PROJECT

 **AGNICO-EAGLE MINES LIMITED
MEADOWBANK DIVISION**

TITLE

**ALL-WEATHER PRIVATE ACCESS ROAD
MONITORING LOCATIONS**

PROJECT No.			FILE No. 0714130119-1000_B_Fig-03	
DESIGN	EA/GG	16MAR08	SCALE	AS SHOWN REV.
CADD				
CHECK				
REVIEW				

FIGURE 1c

SECTION 2 • AWPARTURBIDITY AND EROSION MONITORING

2.1 JUNE WATER QUALITY MONITORING

On June 9th, 2010 pre-freshet erosional inspections at all culvert crossings and bridge crossings were conducted along the AWPART to evaluate the integrity of the bridges, evaluate the potential depositional sources due to winter activity and complete inspections for potential erosion (See appendix A photos). No potential issues were noted as all of the crossings were snow-filled and/or frozen.

On June 11th, the first stream, R15 was observed to be flowing. On June 13th, 2010, the road supervisor determined there was a potential for the road washing out at KM 19 and excavated a section of the road to allow water to pass and minimize the possibility of a wash-out. According to the supervisor, the Km 19 culvert was unable to handle the flow at the crossing during peak freshet. This small ephemeral stream drains thru the tundra to a fishless pond approximately 400m to the west. In follow-up, on June 14th, the environmental team conducted an inspection at KM 19 and did not identify any potential issues as water levels subsided. No turbidity was observed. Following the inspection the road supervisor was made aware of rising water levels and increasing volume of flow at bridge 1 (R02) that was caused by snow and ice build up under the bridge.

To prevent potential erosion of the bridge, an excavator was brought in to remove snow and ice from below and near the bridge. Additionally part of the road, above the ordinary high water mark, was excavated to accommodate the unusually high freshet flow at R02. Few fines were observed during the excavation, but due to the high volume of water, this was only momentary. The water was allowed to pass by for 24hrs and at that point the water levels subsided to allow for the installation of culverts. To minimize the introduction of fines, a clean boulder berm was initially constructed upstream to reduce flow and to allow the maintenance to place 4 additional culverts. This was completed with few fines observed entering the receiving environment. A small deposit of gravel material was observed downstream on June 21st (once the water level subsided). No turbidity plumes or sources of turbidity were observed.

On June 21st 2010, all crossings were inspected for turbidity and erosion. The monitoring focussed on R02, R06, R09, R15 crossings, especially evaluating water quality downstream compared to upstream (reference) water quality. Monitoring measurements taken at the crossings did not indicate any water quality issues that have a potential to impact nearby receiving environments (i.e. turbidity below 1 NTUs at all crossings see Appendix B for field monitoring data sheets). Table 2.1 summarizes the erosion observations for the month of June. Table 2.2 summarizes the monitoring data collected on June 21st, 22nd, 28th, July 3rd, 12th and August 3rd. Furthermore, quarries 2, 4, 6, 7, 16, 17 and 20 were inspected for water quality of the standing pools on June 21st. Most of the quarries inspected were snow filled. No water samples were collected in June. Follow-up monitoring and water sampling was conducted in early July.

2.2 JULY WATER QUALITY MONITORING

On July 3rd water samples were taken at R02, R06, R09, R15, and Quarry 4, 7 and 16. The results for these analyses are presented and discussed in Section 3 and 4.

Furthermore, daily observations were made at all HADD crossings (R02, R06, R09, R15 crossings) for visual turbidity. Weekly field water quality monitoring at HADD crossings included comparing turbidity (NTUs), temperature, conductivity and dissolved oxygen of downstream areas to upstream (reference) areas. Monitoring measurements taken at the crossings did not indicate any water quality issues that have a potential to impact nearby receiving environments (i.e. turbidity below 1 NTUs at all crossings). Furthermore, quarries 2, 4, 6, 7, 16, 17 and 20 were inspected for standing pools. Pools were observed at Quarry 2, 4, 7 and 16, these pools either dried up later in the summer or simply escaped to the nearby tundra.

2.3 AUGUST WATER QUALITY MONITORING

As water levels subsided during the open water season, no turbidity issues were observed during the month of August. Similar to July, water samples were collected on August 3, 2010 at a few quarries and at all of the HADD crossings. Results of these analyses are presented in Section 3 and 4.

2.4 SEPTEMBER WATER QUALITY MONITORING

As in the past, water levels were at their lowest in September. No turbidity issues were observed during the month of September. Similar to July and August, water samples were collected on September 1, 2010 at a few quarries and at all of the HADD crossings. Results of these analyses are presented in Section 3 and 4.

SECTION 3 • AWP PAR WATERCOURSE CROSSINGS

Water quality sampling was completed together with the water quality monitoring along the AWP PAR. In total, 14 water quality samples were collected by qualified technicians and submitted to ALS Laboratories Winnipeg, Man. (a CALA certified laboratory). Sampling locations are illustrated in Figure 1 and included: upstream (US: reference) and immediately downstream (DS) at HADD crossings. All water quality results for the watercourses are presented in Table 3.1

3.1 HADD CROSSING SURFACE WATER QUALITY RESULTS

Water samples were collected US and DS on July 3, 2010 at R02, R06, R09, and R15. Samples were analyzed for general parameters (pH, Conductivity, Hardness, Alkalinity, Total Suspended Solids, Total Dissolved Solids and Turbidity), anions and nutrients, total metals and dissolved metals. Results are presented in Table 3.1.

Water quality samples were also collected US and DS on August 3, 2010, at R02, R06, R09 and R15. Samples were analyzed for general parameters (pH, Conductivity, Hardness, Alkalinity, Total Suspended Solids, Total Dissolved Solids and Turbidity), anions and nutrients, total metals and dissolved metals. Results are presented in Table 3.1.

Water quality samples were also collected US and DS on September 1, 2010, at R02, R06, R09 and R15. Samples were analyzed for general parameters (pH, Conductivity, Hardness, Alkalinity, Total Suspended Solids, Total Dissolved Solids and Turbidity), anions and nutrients, total metals and dissolved metals. Results are presented in Table 3.1.

The 2010 analytical water chemistry results indicated that Total phosphorus exceeded Canadian Council of Ministers of the Environment (CCME, 2007) Guidelines for the protection of aquatic life at stations R02 DS DUP on August 3 & September 1; R09 US on July 3 and September 1; and at R15 US & DS on September 1. Total Copper was exceeded at R02 US on August 3, 2010; R06 DS on July 3 and August 3; R06 US on September 1, 2010; and R09 US and DS on August 3, 2010. No other parameters exceeded CCME (2007) guidelines at HADD crossings.

3.2 HADD CROSSING DISCUSSION

By comparing upstream (reference water quality) to downstream water quality, the July 3, August 3 and September 1, 2010 surface water samples did not demonstrate that preceding construction activity, bridge abutments or nearby road activity altered the water quality in 2010. The results of the July 3rd monitoring at R02 confirmed the observations following the emergency road construction and near washout of the road at R02. These results did not demonstrate any elevated TSS, turbidity or total metal concentrations downstream compared to upstream.

This report uses the CCME (2007) guidelines as a benchmark for evaluating the potential environment effects of road use and historical construction. The CCME (2007) values are conservative measures for the protection of broad aquatic effects, thus exceedances do not always signify ecological effects rather a comparison to reference site conditions provides valuable insight

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into the natural conditions of the site. The sample ID R02 DS DUP exceeded CCME guidelines however the same duplicate sample did not. These results are discussed in Section 5. Samples collected at R15 watercourse on September 1st exceeded total phosphorus CCME (2007) guidelines, at both downstream and reference site (upstream) conditions also exceed CCME (2007) guidelines, with a slightly higher reference value; this exceedance is likely due to natural variability and is not a concern. These results are similar to 2009 data which also demonstrated a few CCME (2007) exceedences likely due to natural variability.

The 2007 and 2008 AWPARG water quality monitoring results at HADD crossings (AEM, 2008 & 2009a) demonstrated few exceedances of CCME (2007) for total metals (AEM, 2010). In 2007, CCME (2007) for Al and pH guideline values were slightly exceeded at R09 US and DS. In 2008, CCME (2007) for Cr, Cu and Se guideline values were exceeded at R02US & R02 DS, R09 US & DS, and R15 US & DS. In all cases historical CCME (2007) exceedances demonstrated downstream water quality similar to reference site conditions and results were near to the analytical method detection limit (thus may simply reflect QA/QC sampling issues). Overall, the 2009 and 2010 data suggests slight improvement from historical water quality data with mine operations road activity causing no significant effects on the receiving environment.

SECTION 4 • QUARRIES

4.1 OBSERVED DRAINAGE AND WATER POOLING

Following the spring freshet which began approximately June 11th, water samples were collected on July 3rd, August 3rd and September 1st from quarries where standing water was present. The objective of the water sampling was to re-sample quarries identified in the Geochemical Characterization Study (AEM, 2009b) as having exceeded CCME (2007) and MMER parameters or sample quarries that demonstrated concerns as a follow-up from the 2008 and 2009 sampling. These quarries included: Quarry 2, 6, 7, 16 and 20 as either having exceeded TSS guidelines or had low pH; Quarry 6 and 17 had low (near 0) neutralizing potential ratios (NPR). Quarry 4 was sampled as it appears to be influenced by a perched groundwater feature.

In 2010, AEM did not actively discharge water from the quarries along the AWPAP.

Table 4.1 summarizes the 2010 June and July observations and provided the basis for sampling at the specific locations. Few standing pools were present in the quarries were isolated and only a few appeared to drain onto the nearby tundra (Quarry 4).

4.2 SURFACE WATER QUALITY RESULTS

Surface water samples were collected at Quarries 4, 7, and 16 on July 3rd, August 3rd and September 1st, 2010 (see Figure 1 for quarry locations). Samples were analyzed for general parameters (pH, Conductivity, Hardness, Alkalinity, Total Suspended Solids, Total Dissolved Solids and Turbidity), anions and nutrients, total metals and dissolved metals. Results are presented in Table 4.2.

All of the quarries sampled exceeded CCME (2007) guidelines for total aluminum and copper during all 3 sample events. Quarries 4 and 7 exceeded CCME (2007) total chromium guidelines; Quarries 7 and 16 exceeded CCME (2007) guidelines for total lead, cadmium and zinc; Quarry 7 exceeded CCME (2007) guidelines for pH and nickel. Quarry 4, 7 and 16 exceeded Total Phosphorus CCME (2007) guidelines. See table 4.2 for exact dates for the respective exceedences.

4.3 DISCUSSION

In 2010, qualified technicians collected water samples at quarries 4, 7 and 16 where standing pools of water provided the opportunity to collect representative water samples. These samples were a follow-up on 2008 and 2009 analytical results that were used to assist in evaluating the results of the 2008 geochemical characterization and water sample results (AEM 2009b). In 2010, of the quarries with representative standing pools, only quarry 7 was identified in 2008 as having exceeded CCME (2007) guidelines for pH and having low leachate pH in one of the Shake Flask Extraction (SFE) composite samples (AEM 2009b). In 2010, AEM sampled quarries 4 and 16 (not identified in the 2008 geochemical study as having concerns) were sampled as references for a comparison to quarry

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7. In 2010, Quarry 7 exceeded pH and a few additional metals in July and August¹. The variability in water chemistry between quarries 4 and 16 in comparison to Quarry 7 is consistent as a few total metal exceedances are noted. Based on these results it is difficult to make assertions related to the acid generating potential especially given that the total sulphur levels are low in all of these quarries. Similar to 2008 and 2009, technicians noted that the standing pool was small and less than half the size of the quarry. Due to the standing pools isolation from watercourses or waterbodies, there is no evidence that there is a pathway to the receiving environment and thus, there are no anticipated effects to the aquatic receiving environment. As well, by September all of the water accumulated in the quarry 7 had likely evaporated or naturally seeped.

¹ The pH exceedances are below pH 5.6 what is expected for rain water without dissolved substances other than atmospheric gases (Laws, 2000).

SECTION 5 • QUALITY ASSURANCE AND QUALITY CONTROL

5.1 OBJECTIVES

The objective of quality assurance and quality control (QA/QC) for water quality 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 or at least one sample per event are submitted for QA/QC analysis to assess the variability and sample homogeneity.

5.2 RESULTS AND DISCUSSION

All laboratory analysis were completed by ALS Laboratories: Winnipeg, Man which is an accredited laboratory 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 ALS is presented in Appendix C.

Five (5) field duplicate water samples were collected; at least one duplicate per sample event which is greater than the target of 10 % duplicate for QA/QC. Duplicate samples were collected at R02 DS during all the sample events and at Quarry 4 in August and September. The field QA/QC results are summarized in Table 5.2. The results of this evaluation indicate a high consistency between the original field sample and the field duplicate sample. In seven cases the samples exceeded the RPD of 50%. Five (5) RPD exceedences were samples collected at R02 DS on July 3 and two (2) were collected at R02 DS in August. However, these meet the QA/QC objectives as the concentrations measured were lower than 10 times the MDL.

SECTION 6 • CONCLUSIONS AND RECOMMENDATIONS

As in the past, the 2010 AWPAP water quality management consisted of routine and event inspections at all of the crossings pre-freshet and post-freshet for potential or current erosional issues at all stream crossings, completed regular water quality monitoring at all major crossings from July until September, and surface water sample collection at HADD crossings, representative watercourses and quarries as a follow-up from AEM (2009b).

The monitoring results did not indicate erosional issues or inputs due to preceding or current bridge construction or road activity. Post freshet follow-up water quality monitoring and water chemistry collected on July 3rd did not identify any elevated turbidity, TSS or total metals in surface water samples taken downstream of the emergency construction site.

Similar to 2009, HADD crossings R02, R06, R09 and R15 water quality results suggest a slight improvement from historical water quality data as mine operations road activity (including the deposition of dust) did not cause any observable significant effects on the receiving environment. Additional AWPAP surface water quality results did not present concerns to the receiving environment. Overall, the results show low risks to aquatic life.

The 2008 Geochemical Characterization of the AWPAP Quarries required follow-up re-sampling in quarries that presented a concern due to low neutralizing potential, low pH or elevated TSS (AEM, 2009b). Of the quarries identified in AEM (2009b) only Quarry 7 had sufficient pooling to warrant surface water sampling. The fact that many of the quarries identified in AEM (2009b) of concern did not contain pooling due to snow melt or precipitation during the summer period confirms low risks to aquatic life. As was documented in the 2008 report, the follow-up surface water sampling program did not provide evidence of any significant acid generation or metal leaching issues associated with the road quarries sampled in 2010.

It is recommended that water quality management along the AWPAP continue in 2011 in-line with sampling in 2010. As in 2010, priority should be placed on visual identification and turbidity monitoring to evaluate road related erosional inputs. Unless turbidity issues are visually observed, surface water quality sampling is not deemed necessary at non-HADD crossings or contact pools.

Water quality monitoring should continue to be focused at HADD crossings and chemistry samples should be collected as early into the open water season as possible, when erosional issues are most likely to occur. It is recommended that rather than completing monthly chemistry sampling, a thorough sampling program be complete in late June or early July or as soon after freshet as possible. If deemed necessary, follow-up sampling or monitoring could take place in August. Unless there are significant changes during reclamation, it is recommended that quarry surface water sampling not be completed on an annual basis as follow-up water sampling has not provided evidence of geochemical issues in the quarries. Furthermore, the collection of representative water samples has been limited to Quarry 7 (the only quarry identified in the geochemical report (AEM, 2009b) as having geochemical issues). The water chemistry in this quarry remains consistent between years and due to the isolated nature of the pool, the water collected in the quarry does not likely pose a risk to the aquatic environment.

SECTION 7 • REFERENCES

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

AEM (2008). Agnico-Eagle Mines- Meadowbank Mines: 2007 All Weather Private Access Road Annual report. Prepared by Azimuth Consulting Group.

AEM (2009a). Meadowbank Gold Project. 2008 Annual Report. Prepared by Agnico-Eagle Mines Limited- Meadowbank Division. March 2009.

AEM (2009b). Geochemical Characterization Study: All Weather Private Access Road and Airstrip Quarries. March 2009.

AEM (2010). Agnico-Eagle Mines- Meadowbank Gold Mine Annual Report Appendix C1: All Weather Private Access Road: 2009 Water Quality Management Report.

Golder (2009). Fish Habitat Compensation Construction at R02, All Weather Private Access Road, Meadowbank Gold Project, Nunavut. As-Built Report. June 9, 2009

Laws, Edward (2000). Aquatic Pollution: An Introductory Text. 3rd edition. Pg 540.

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TABLES

Table 2.1: 2010 AWR Erosion Inspections Summary

<u>Date</u>	<u>Visual Turbidity Observed?</u>	<u>Where?</u>	<u>Comment</u>	<u>Field Crew</u>
9-Jun-10	No	Km-0 to MBK	No flow along AWR at all crossings No erosion issues evident	PR, IC
11-Jun-10	No	Km-0 to MBK	R15 opening up/ flowing	SR
13-Jun-10	Yes	Km 19	~ 2 ft of flow causing AWR closure Small plume near the road observed	MD
14-Jun-10	No	R19		RV, TT, JF
	No	R16		
	No	R15		
	No	R13	Flowing at high levels	
	No	R09	Bridge effective cascading	
	No	R06		
	Yes	Km19	Road was excavated for water to pass. After a day, levels subsided and road was reconstructed.	
	No	R05		
	No	R02	Snow blocking bridge flow Excavator opened the snow north of the culverts.	
15-Jun-10	No	R02	Road closure	RV, TT, JF
	No	Airplane Road (km 2 in town)	Road closure and repaired at night.	
16-Jun-10	No	R02	Road re-opened	RV, TT, JF
23-Jun-10	No	Km-0 to MBK	No erosion concerns at all crossings	TT, JF
25-Jun-10	No	Km-0 to MBK	No erosion concerns at all crossings	TT, JF
28-Jun-10	No	Km-0 to MBK	No erosion concerns at all crossings	TT, JF. PA
Follow-up turbidity monitoring completed at all HADD crossings in July and August				

Table 2.2: AWPARG Field Water Monitoring Data Summary 2010

<i>Date</i>	<i>Location ID</i>	<i>Temp</i>	<i>Conductivity</i>	<i>Turbidity/NTU</i>
		<i>deg C</i>	<i>us/cm</i>	<i>NTU</i>
June 21/10	R02 US - A	2.4	52	0.18
RV, TT, JF	R02 DS -A	2.98	54	0.21
	R02 US - B	2.78	50	0.22
	R02 DS- B	2.58	52	0.59
	R06 US	4.72	46	0.45
	R06 DS	4.46	46	0.28
June 22/10	R09 US	2.24	57	0.37
RV, TT, JF	R09 DS	2.19	56	0.4
	R15 US	1.94	18	0.51
	R15 DS	1.95	18	0.55
June 28/10	R02 US	9.18	48	0.22
JF, TT	R02 DS	8.05	47	0.24
	R06 US	9.02	50	0.45
	R06 DS	8.71	54	1.65
	R09 US	9.15	46	0.18
	R09 DS	9.17	47	0.15
	R15 US	7.08	15	0.78
	R15 DS	6.98	15	0.56
July 3/10	R02 US	6.03	49	0.28
TT, PA	R02 DS	5.81	47	0.22
	R06 US	5.08	45	0.19
	R06 DS	4.72	67	0.28
	R09 US	6.01	44	0.12
	R09 DS	6.13	42	0.14
	R15 US	6.28	14	0.13
	R15 DS	6.11	15	0.18
July 12/10	R02 US	10.5	45	0.36
RV, PA	R02 DS	9.94	45	0.59
	R06 US	6.78	42	0.45
	R06 DS	6.84	43	0.36
	R09 US	11.53	54	0.79
	R09 DS	11.5	54	0.58
	R15 US	13.76	17	0.66
	R15 DS	14.01	17	0.71

August 3/10	R02 US	13.65	46	0
TT, PA	R02 DS	13.66	46	0
	R06 US	13.62	42	0
	R06 DS	12.84	44	0
	R09 US	15.29	59	0
	R09 DS	14.81	76	0
	R15 US	13.86	21	0.57
	R15 DS	13.63	20	0

Table 3.1 AWPAP Water Chemistry Results

Sample ID	R02 US 3-Jul-10	R02 US 03-AUG-10	R02 DS 3-Jul-10	R02 DS 03-AUG-10	R02 US 01-SEP-10	R02 DS 01-SEP-10	R06 US 3-Jul-10	R06 DS 3-Jul-10	R06 US 03-AUG-10	R06 DS 03-AUG-10	R06 US 01-SEP-10	R06 DS 01-SEP-10
Date Sampled	08:48	00:00	07:51	00:00	12:00	11:57	09:20	10:18	00:00	00:00	11:30	11:18
Time Sampled												
ALS Sample ID	L906568-1	L918303-1	L906568-2	L918303-2	L929426-1	L929426-2	L906568-4	L906568-5	L918303-4	L918303-5	L929426-4	L929426-5
Matrix	WATER	Water	WATER	Water	Water	Water	WATER	WATER	Water	Water	Water	Water
CCME (2007) Guideline												
Physical Tests												
Conductivity (umhos/cm)	NG	45.2	40.9	45.1	41.3	48.3	43.6	41.9	52.9	38.3	39.7	39.3
Hardness (as CaCO3)	NG	-	13.6	-	13.2	18.2	14.8	-	-	11.2	11.6	12.6
pH	6.5 - 9.0	7.30	7.46	7.33	7.43	7.39	7.47	7.14	7.25	7.38	7.38	7.33
Total Suspended Solids (mg/L)	NG	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	16.0	2	2.0	<2.0	<2.0
Total Dissolved Solids (mg/L)	NG	22	<5.0	20	<5.0	<5.0	<5.0	<2.0	20	25.0	<5.0	<5.0
Turbidity (NTU)	NG	0.37	0.44	0.37	0.37	0.29	0.25	0.35	0.52	0.67	0.44	0.26
Anions and Nutrients (mg/L)												
Alkalinity, Total (as CaCO3)	NG	14.6	13.6	14.7	13.7	16.0	14.3	12.1	17.2	10.9	11.6	11.3
Ammonia as N	See test sheet	<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	17.8	16.5	17.9	16.7	19.6	17.4	14.8	20.9	13.3	14.1	13.8
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
Chloride	NG	3.87	17.1	3.70	3.39	3.50	3.43	4.00	3.73	3.75	18.8	3.73
Fluoride	NG	<0.10	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50	<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
Nitrate-N	NG	<0.050	<0.25	<0.050	<0.050	0.083	<0.050	<0.050	0.132	<0.050	<0.25	<0.050
Nitrite-N	NG	<0.010	<0.25	<0.010	<0.050	<0.050	<0.050	<0.010	<0.010	<0.050	<0.25	<0.050
Total Kjeldahl Nitrogen	NG	<0.20	<0.20	<0.20	<0.20	<0.20	0.24	<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
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
Sulfate	NG	3.0	5.7	3.4	1.14	1.51	1.23	4.0	4.5	1.56	7.9	1.85
Total Organic Carbon	NG	3.5	-	3.5	-	-	-	3.5	4.0	-	-	-
Dissolved Organic Carbon	NG	3.1	-	3.3	-	-	-	3.5	4.3	-	-	-
Nitrate + Nitrite-N- Soluble	290000	<0.050	-	<0.050	-	0.083	<0.071	<0.050	0.132	-	-	<0.071
Total Metals (mg/L)												
Aluminum (Al)-Total	0.1 @ pH<4.5 or 0.005 @ pH>4.5	0.0025	0.0118	0.0152	0.0280	0.0066	<0.0050	0.0261	0.0394	0.0185	0.0219	0.0076
Antimony (Sb)-Total	NG	<0.00020	0.00047	<0.00020	<0.00020	0.00036	0.00051	<0.00020	<0.00020	<0.00020	0.00068	0.00056
Arsenic (As)-Total	0.005	0.00028	0.00021	<0.00020	<0.00020	0.00028	0.00025	0.00020	0.00026	<0.00020	0.00020	0.00029
Barium (Ba)-Total	NG	0.0144	0.0119	0.0133	0.0115	0.0144	0.0110	0.00352	0.00405	0.00311	0.00408	0.00306
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
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
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
Cadmium (Cd)-Total	0.00017	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00012	<0.00010
Calcium (Ca)-Total	NG	4.92	4.16	4.86	4.08	5.44	4.48	3.89	5.95	3.01	3.14	3.37
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
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
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
Copper (Cu)-Total	0.002 @ Inerts <120mg/L	0.00129	0.00299	0.00088	0.00144	0.00083	0.00081	0.00181	0.00394	0.00148	0.00493	0.00250
Iron (Fe)-Total	0.1	0.109	0.056	0.029	0.042	0.028	0.025	<0.020	0.025	0.037	0.068	0.021
Lead (Pb)-Total	0.001 @ Inerts <400 mg/L	0.000165	0.000357	<0.000090	0.000094	<0.000090	<0.000090	<0.000090	<0.000090	0.000133	0.000965	<0.000090
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
Magnesium (Mg)-Total	NG	1.10	0.771	1.04	0.739	1.11	0.891	1.12	1.14	0.903	0.918	1.02
Manganese (Mn)-Total	NG	0.0178	0.00378	0.00302	0.00273	0.00116	0.00132	0.00259	0.00587	0.00192	0.00267	0.00200
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
Molybdenum (Mo)-Total	0.013	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Nickel (Ni)-Total	0.025 @ Inerts <60mg/L	<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
Potassium (K)-Total	NG	0.539	0.485	0.548	0.497	0.559	0.472	0.451	0.492	0.396	0.404	0.415
Rubidium (Rb)-Total	NG	0.00059	0.00051	0.00054	0.00053	0.00058	0.00050	0.00040	0.00049	0.00039	0.00042	0.00036
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
Silicon (Si)-Total	NG	0.242	0.197	0.194	0.214	0.287	0.152	0.270	0.490	0.220	0.232	0.211
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
Sodium (Na)-Total	NG	2.47	1.86	2.43	1.84	2.30	1.97	2.29	2.58	1.80	1.83	2.02
Strontium (Sr)-Total	NG	0.0233	0.0190	0.0240	0.0192	0.0258	0.0212	0.0164	0.0199	0.0133	0.0133	0.0141
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
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
Thoron (Th)-Total	NG	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	NG	0.00056	<0.00020	0.00023	0.00044	<0.00020	<0.00020	0.00065	0.00041	0.00053	0.00034	<0.00020
Titanium (Ti)-Total	NG	0.00218	0.00185	0.00025	0.00029	<0.00020	<0.00020	0.00036	0.00071	0.00035	0.00070	0.00064
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
Uranium (U)-Total	NG	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<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	0.0094	<0.0050	0.0119	<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	<0.00040	<0.00040
Dissolved Metals (mg/L)												
Aluminum (Al)-Dissolved	-	0.0049	-	0.0038	-	-	-	0.0179	-	-	-	0.002
Antimony (Sb)-Dissolved	-	<0.00020	-	<0.00020	-	-	-	<0.00020	-	-	-	0.0002
Arsenic (As)-Dissolved	-	<0.00020	-	<0.00020	-	-	-	0.00021	-	-	-	0.0002
Barium (Ba)-Dissolved	-	0.0125	-	0.0122	-	-	-	0.00379	-	-	-	0.0002
Beryllium (Be)-Dissolved	-	<0.00020	-	<0.00020	-	-	-	<0.00020	-	-	-	0.0002
Bismuth (Bi)-Dissolved	-	<0.00020	-	<0.00020	-	-	-	<0.00020	-	-	-	0.0002
Boron (B)-Dissolved	-	<0.010	-	<0.010	-	-	-	<0.010	-	-	-	0.01
Cadmium (Cd)-Dissolved	-	<0.000010	-	<0.000010	-	-	-	<0.000010	-	-	-	0.00001
Calcium (Ca)-Dissolved	-	4.57	-	4.48	-	-	-	5.86	-	-	-	0.05
Cesium (Cs)-Dissolved	-	<0.00010	-	<0.00010	-	-	-	<0.00010	-	-	-	0.0001
Chromium (Cr)-Dissolved	-	<0.00020	-	<0.00020	-	-	-	<0.00020	-	-	-	0.0002
Cobalt (Co)-Dissolved	-	<0.00020	-	<0.00020	-							

Table 3.1 AWPAP Water Chemistry Results

Sample ID	R09 U.S.	R09 D.S.	R09 U.S.	R09 D.S.	R09 U.S.	R09 D.S.	R15 U.S.	R15 D.S.	R15 U.S.	R15 D.S.	R15 U.S.	R15 D.S.
Date Sampled	3-Jul-10	3-Jul-10	03-AUG-10	03-AUG-10	03-AUG-10	03-AUG-10	3-Jul-10	3-Jul-10	03-AUG-10	03-AUG-10	01-SEP-10	01-SEP-10
Time Sampled	11:30	12:20	00:00	00:00	10:22	10:15	12:30	12:30	00:00	00:00	09:35	09:25
ALS Sample ID			L906568-9	L906568-10	L918303-6	L918303-7	L929426-8	L929426-9	L906568-11	L906568-12	L918303-8	L929426-10
Matrix			Water	Water	Water	Water	Water	Water	Water	Water	Water	Water
Physical Tests	CCME (2007) Guideline											
Conductivity (umhos/cm)	NG	41.1	40.6	72.6	66.2	74.8	77.6	13.7	13.8	17.3	20.1	20.2
Hardness (as CaCO ₃)	NG	-	-	29.0	26.2	30.7	31.3	-	-	5.12	5.31	5.38
pH	6.5 - 14.0	7.35	7.39	7.50	7.72	7.75	7.77	6.83	6.84	6.97	6.97	7.09
Total Suspended Solids (mg/L)	NG	34	2.4	<2.0	<2.0	<2.0	<2.0	2	2	<2.0	2.4	<2.0
Total Dissolved Solids (mg/L)	NG	22.4	16	36.7	13.3	22.0	22.0	12	<5.0	<5.0	<5.0	<5.0
Turbidity (NTU)	NG	1.01	0.50	0.43	<0.10	2.80	0.27	0.62	0.59	0.45	0.83	0.34
Anions and Nutrients (mg/L)												
Alkalinity, Total (as CaCO ₃)	NG	16.2	16.1	28.2	25.6	27.9	29.1	5.5	5.6	6.5	6.6	6.6
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
Bicarbonate (HCO ₃)	NG	19.8	19.6	34.3	31.2	34.0	35.5	6.8	6.8	8.0	8.0	8.0
Carbonate (CO ₃)	NG	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60
Chloride	NG	1.33	1.28	2.07	1.98	2.37	2.82	0.91	0.92	1.12	1.22	1.33
Fluoride	NG	<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
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
Nitrite-N	NG	<0.010	<0.010	<0.050	<0.050	<0.050	<0.050	<0.010	<0.010	<0.050	<0.050	<0.050
Total Kjeldahl Nitrogen	NG	0.21	<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
Phosphorus, Total	0.004	0.0137	<0.010	<0.010	<0.010	0.0151	<0.010	<0.010	<0.010	<0.010	0.0308	0.0153
Sulfate	NG	4.5	4.7	4.22	3.88	4.84	8.62	2.8	3.1	1.02	1.17	1.11
Total Organic Carbon	NG	3.4	3.4	-	-	-	-	2.7	2.7	-	-	-
Dissolved Organic Carbon	NG	3.1	3.5	-	-	-	-	2.6	2.7	-	-	-
Nitrate + Nitrite-N - Soluble	280000	<0.050	<0.050	-	-	<0.071	<0.071	<0.050	<0.050	-	-	<0.071
Total Metals (mg/L)												
Aluminum (Al)-Total	3.1 @ pH=6.5 or 0.005 @ pH=6.5	0.0100	0.0357	0.0188	0.0153	0.0060	0.0061	0.0471	0.0390	0.0274	0.0293	0.0235
Antimony (Sb)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	0.00059	0.00055	<0.00020	<0.00020	<0.00020	<0.00020	0.00052
Arsenic (As)-Total	0.005	<0.00020	0.00022	0.00039	0.00033	0.00037	0.00036	<0.00020	<0.00020	<0.00020	<0.00020	0.00035
Barium (Ba)-Total	NG	0.00254	0.00301	0.00533	0.00420	0.00325	0.00354	0.00266	0.00268	0.00324	0.00357	0.00283
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
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
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
Cadmium (Cd)-Total	0.00017	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00011	<0.00010	0.00013
Calcium (Ca)-Total	NG	4.39	4.70	7.98	7.28	8.34	8.57	0.90	0.87	1.02	1.07	1.04
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
Chromium (Cr)-Total	0.001	<0.00020	<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	0.00073	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Copper (Cu)-Total	0.002 @ trace <10mg/L	0.00149	0.00176	0.00261	0.00283	0.00171	0.00174	0.00127	0.00117	0.00138	0.00164	0.00134
Iron (Fe)-Total	0.3	0.023	0.103	0.184	0.103	0.045	0.046	0.059	0.036	0.037	0.040	0.034
Lead (Pb)-Total	0.001 @ trace <60 mg/L	<0.00050	0.000092	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	0.000166	<0.00050	0.000214
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
Magnesium (Mg)-Total	NG	1.19	1.27	2.21	1.96	2.41	2.41	0.553	0.524	0.627	0.640	0.674
Manganese (Mn)-Total	NG	0.00154	0.00958	0.109	0.0102	0.00496	0.00486	0.00199	0.00131	0.00279	0.00134	0.00193
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
Molybdenum (Mo)-Total	0.019	<0.00010	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Nickel (Ni)-Total	0.025 @ trace <60mg/L	0.00081	<0.0020	0.00022	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Phosphorus (P)-Total	NG	<0.10	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Potassium (K)-Total	NG	0.245	0.274	0.458	0.387	0.409	0.397	0.390	0.383	0.486	0.511	0.485
Rubidium (Rb)-Total	NG	0.00025	0.00031	0.00062	0.00045	0.00044	0.00042	0.00058	0.00059	0.00075	0.00081	0.00078
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
Silicon (Si)-Total	NG	0.313	0.239	1.16	1.01	0.475	0.540	0.180	0.159	0.265	0.260	0.189
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
Sodium (Na)-Total	NG	0.911	0.994	1.78	1.53	1.85	1.84	0.728	0.689	0.885	0.912	1.03
Strontium (Sr)-Total	NG	0.0221	0.0240	0.0371	0.0358	0.0410	0.0446	0.00653	0.00661	0.00725	0.00745	0.00712
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
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
Thorium (Th)-Total	NG	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Tin (Sn)-Total	NG	0.00039	<0.00020	0.00060	0.00033	<0.00020	<0.00020	0.00050	0.00051	<0.00020	<0.00020	<0.00020
Titanium (Ti)-Total	NG	<0.00020	0.00096	0.00038	0.00037	0.00025	0.00029	0.00139	0.00088	0.00065	0.00070	0.00130
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
Uranium (U)-Total	NG	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Vanadium (V)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Zinc (Zn)-Total	0.03	<0.0020	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0051	<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	<0.00040	<0.00040
Dissolved Metals (mg/L)												
Aluminum (Al)-Dissolved	-	0.0480	-	-	-	-	0.0179	0.0194	-	-	-	-
Antimony (Sb)-Dissolved	-	<0.00020	-	-	-	-	<0.00020	<0.00020	-	-	-	-
Arsenic (As)-Dissolved	-	0.00021	-	-	-	-	<0.00020	<0.00020	-	-	-	-
Barium (Ba)-Dissolved	-	0.00007	-	-	-	-	0.00218	0.00227	-	-	-	-
Beryllium (Be)-Dissolved	-	<0.00020	-	-	-	-	<0.00020	<0.00020	-	-	-	-
Bismuth (Bi)-Dissolved	-	<0.00020	-	-	-	-	<0.00020	<0.00020	-	-	-	-
Boron (B)-Dissolved	-	<0.010	-	-	-	-	<0.010	<0.010	-	-	-	-
Cadmium (Cd)-Dissolved	-	<0.000010	-	-	-	-	<0.000010	<0.000010	-	-	-	-
Calcium (Ca)-Dissolved	-	4.76	-	-	-	-	0.819	0.843	-	-	-	-
Cesium (Cs)-Dissolved	-	<0.00010	-	-	-	-	<0.00010	<0.00010	-	-	-	-
Chromium (Cr)-Dissolved	-	<0.0010	-	-	-	-	<0.00020	<0.00020	-	-	-	-
Cobalt (Co)-Dissolved	-	<0.00020	-	-	-	-	<0.00020	<0.00020	-	-	-	-
Copper (Cu)-Dissolved	-	0.00194	-	-	-	-	0.00106	0.00110	-	-	-	-
Iron (Fe)-Dissolved	-	0.103	-	-	-	-	0.015	0.016	-	-	-	-
Lead (Pb)-Dissolved	-	0.000137	-	-	-	-	<0.000090	<0.000090	-	-	-	-
Lithium (Li)-Dissolved	-	<0.0020	-	-	-	-	<0.0020	<0.0020	-	-	-	-
Magnesium (Mg)-Dissolved	-	1.39	-	-	-	-	0.496	0.538	-	-	-	-
Manganese (Mn)-Dissolved	-	0.00912	-	-	-	-	0.00047	0.00086	-	-	-	-
Molybden												

Table 4.1: Visual Observations at Quarries, 2010

Date	Quarry ID	Is there Water in the Quarry?	Is Drainage Contained within the Quarry?	Does Water Pool in the Quarry?	Is Pool Greater than 50%?
06/28/2010	Q20	No	-	-	-
06/28/2010	Q17	No	-	-	-
06/28/2010	Q16	Yes	Yes	Yes	No
06/28/2010	Q7	Yes	Yes	Yes	No
06/28/2010	Q6	No	-	-	-
06/28/2010	Q4	Yes	Yes	Yes	Y
06/28/2010	Q2	No	-	-	-
07/30/2010	Q20	No	-	-	-
07/30/2010	Q17	No	-	-	-
07/30/2010	Q16	No	-	-	-
07/30/2010	Q7	Yes	Yes	Yes	Yes
07/30/2010	Q6	No	-	-	-
07/30/2010	Q4	Yes	Yes	Yes	Yes
07/30/2010	Q20	No	-	-	-

General Notes	Field Crew
Snow Covered No Pooling Water	TT & JF
Snow Covered No Pooling Water	TT & JF
Small Standing Pool	TT & JF
Small Standing Pool	TT & JF
Full of Contaminated Soil and Gravel	TT & JF
Permanent Pool	TT & JF
Snow Covered No Pooling Water	TT & JF
Dry - No Pooling Water	TT & PA
Dry - No Pooling Water	TT & PA
Dry - No Pooling Water	TT & PA
Small Standing Pool	TT & PA
Full of Contaminated Soil and Gravel	TT & PA
Permanent Pool	TT & PA
Dry - No Pooling Water	TT & PA

Table 4.1: Quarry Water Chemistry Results

Sample ID		Q4	Q4	Q4	Q7	Q7	Q16
Date Sampled		3-Jul-10	03-AUG-10	01-SEP-10	3-Jul-10	03-AUG-10	3-Jul-10
Time Sampled		11:10	00:00	10:58	11:20	00:00	-
ALS Sample ID		L906568-6	L918303-10	L929426-6	L906568-8	L918303-12	L906568-13
Matrix		WATER	Water	Water	WATER	Water	WATER
CCME (2007) Guideline¹							
Physical Tests							
Conductivity (umhos/cm)	NG	92.5	116	173	31.6	137	138
Hardness (as CaCO ₃)	NG	-	47.4	73.8	-	21.4	-
pH	6.5 - 9.0	7.83	8.08	8.21	4.63	4.07	6.82
Total Suspended Solids (mg/L)	NG	80	2.8	<2.0	30.4	<2.0	13.2
Total Dissolved Solids (mg/L)	NG	58	27.3	84.0	18	25.8	86.0
Turbidity (NTU)	NG	30.0	7.01	3.20	18.0	1.44	11.8
Anions and Nutrients (mg/L)							
Alkalinity, Total (as CaCO ₃)	NG	33.8	44.2	66.8	<1.0	<1.0	8.3
Ammonia as N	See fact sheet	<0.050	<0.050	<0.050	0.199	0.166	0.474
Bicarbonate (HCO ₃)	NG	41.3	53.9	81.5	<2.0	<2.0	10.1
Carbonate (CO ₃)	NG	<0.60	<0.60	<0.60	<0.60	<0.60	<0.60
Chloride	NG	1.31	1.20	1.69	0.54	<0.50	0.54
Fluoride	NG	<0.10	<0.10	<0.10	<0.10	0.13	0.59
Hydroxide (OH)	NG	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
Nitrate-N	NG	1.77	1.88	2.51	0.237	0.237	1.44
Nitrite-N	NG	0.023	<0.050	<0.050	0.011	<0.050	<0.010
Total Kjeldahl Nitrogen	NG	0.26	<0.20	0.23	0.23	<0.20	0.48
Ortho Phosphorus Soluble As P	NG	0.0187	<0.010	<0.010	0.0182	<0.010	<0.010
Phosphorus, Total	0.004	0.0623	<0.010	<0.010	0.0215	<0.010	0.0106
Sulfate	NG	7.0	4.53	7.34	9.3	46.7	44.2
Total Organic Carbon	NG	1.6	-	-	1.1	-	<1.0
Dissolved Organic Carbon	NG	2.5	-	-	<1.0	-	<1.0
Nitrate + Nitrite-N - Soluble	290000	1.79	-	2.51	0.248	-	1.44
Total Metals (mg/L)							
Aluminum (Al)-Total	0.1 @ pH<4.5	0.801	0.368	0.253	0.980	2.93	0.720
Antimony (Sb)-Total	NG	<0.00020	<0.00020	0.00066	<0.00020	0.00033	<0.00020
Arsenic (As)-Total	0.005	0.00072	0.00065	0.00055	0.00116	0.00096	<0.00020
Barium (Ba)-Total	NG	0.0215	0.0205	0.0272	0.0305	0.0462	0.0217
Beryllium (Be)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	0.00074	<0.00020
Bismuth (Bi)-Total	NG	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020	<0.00020
Boron (B)-Total	NG	<0.010	<0.010	0.012	<0.010	<0.010	<0.010
Cadmium (Cd)-Total	0.00017	<0.000010	<0.000010	<0.000010	0.000111	0.000317	0.000331
Calcium (Ca)-Total	NG	10.8	14.6	23.2	1.06	5.83	13.1
Cesium (Cs)-Total	NG	0.00012	<0.00010	<0.00010	<0.00010	<0.00010	0.00025
Chromium (Cr)-Total	0.001	0.00015	<0.0010	<0.0010	0.0012	<0.0010	<0.0010
Cobalt (Co)-Total	NG	0.00055	0.00025	<0.00020	0.0198	0.106	0.00629
Copper (Cu)-Total	0.002 @ 100°C <120mg/L	0.00291	0.00434	0.00295	0.0253	0.113	0.00401
Iron (Fe)-Total	0.3	0.888	0.386	0.241	0.727	0.199	0.876
Lead (Pb)-Total	0.001 @ 100°C <50 mg/L	0.000781	0.000391	0.000198	0.00107	0.00177	0.00165
Lithium (Li)-Total	NG	0.0024	<0.0020	<0.0020	0.0023	0.0066	0.0051
Magnesium (Mg)-Total	NG	2.70	2.67	3.88	0.483	1.65	3.38
Manganese (Mn)-Total	NG	0.0261	0.00655	0.00445	0.0869	0.460	0.184
Mercury (Hg)-Total	NG	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050	<0.000050
Molybdenum (Mo)-Total	0.073	0.00044	0.00078	0.00120	<0.00020	<0.00020	0.00188
Nickel (Ni)-Total	0.025 @ 100°C <120mg/L	<0.0020	<0.0020	<0.0020	0.0296	0.155	0.0150
Phosphorus (P)-Total	NG	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
Potassium (K)-Total	NG	1.41	1.74	2.67	0.314	1.07	3.73
Rubidium (Rb)-Total	NG	0.00182	0.00119	0.00103	0.00122	0.00226	0.00685
Selenium (Se)-Total	0.001	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silicon (Si)-Total	NG	1.06	1.84	1.33	2.35	1.61	1.35
Silver (Ag)-Total	0.0001	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Total	NG	4.36	3.22	4.56	0.847	0.662	3.11
Strontium (Sr)-Total	NG	0.0634	0.0612	0.139	0.00851	0.0462	0.0627
Tellurium (Te)-Total	NG	<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	0.00013	<0.00010
Thorium (Th)-Total	NG	0.00027	0.00013	<0.00010	0.00029	<0.00010	0.00030
Tin (Sn)-Total	NG	0.00044	0.00057	<0.00020	0.00037	0.00060	<0.00020
Titanium (Ti)-Total	NG	0.0491	0.00776	0.00483	0.0151	0.00130	0.0155
Tungsten (W)-Total	NG	<0.00010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Uranium (U)-Total	NG	0.00084	0.00078	0.00124	0.00147	0.00660	0.00271
Vanadium (V)-Total	NG	0.00013	0.00075	0.00052	0.00063	<0.00020	0.00067
Zinc (Zn)-Total	0.03	<0.0050	<0.0050	<0.0050	0.0157	0.0476	0.0518
Zirconium (Zr)-Total	NG	0.00079	0.00059	0.00042	0.00080	<0.00040	<0.00040
Dissolved Metals (mg/L)							
Aluminum (Al)-Dissolved	-	0.0033	-	-	0.575	-	0.124
Antimony (Sb)-Dissolved	-	<0.00020	-	-	<0.00020	-	<0.00020
Arsenic (As)-Dissolved	-	<0.00020	-	-	<0.00020	-	<0.00020
Barium (Ba)-Dissolved	-	0.0132	-	-	0.00776	-	0.0189
Beryllium (Be)-Dissolved	-	<0.00020	-	-	<0.00020	-	<0.00020
Bismuth (Bi)-Dissolved	-	<0.00020	-	-	<0.00020	-	<0.00020
Boron (B)-Dissolved	-	<0.010	-	-	<0.010	-	<0.010
Cadmium (Cd)-Dissolved	-	<0.000010	-	-	0.000115	-	0.000315
Calcium (Ca)-Dissolved	-	10.2	-	-	0.958	-	12.5
Cesium (Cs)-Dissolved	-	<0.00010	-	-	<0.00010	-	0.00012
Chromium (Cr)-Dissolved	-	<0.00020	-	-	0.00025	-	<0.00020
Cobalt (Co)-Dissolved	-	<0.00020	-	-	0.0188	-	0.00571
Copper (Cu)-Dissolved	-	0.00061	-	-	0.0240	-	0.00181
Iron (Fe)-Dissolved	-	<0.010	-	-	0.205	-	0.273
Lead (Pb)-Dissolved	-	<0.000090	-	-	0.000134	-	0.000670
Lithium (Li)-Dissolved	-	<0.0020	-	-	<0.0020	-	0.0037
Magnesium (Mg)-Dissolved	-	2.13	-	-	0.317	-	3.09
Manganese (Mn)-Dissolved	-	0.0127	-	-	0.0745	-	0.192
Molybdenum (Mo)-Dissolved	-	0.00041	-	-	<0.00010	-	0.00181
Nickel (Ni)-Dissolved	-	<0.00020	-	-	0.0288	-	0.0140
Phosphorus (P)-Dissolved	-	<0.10	-	-	<0.10	-	<0.10
Potassium (K)-Dissolved	-	1.08	-	-	0.191	-	3.67
Rubidium (Rb)-Dissolved	-	0.00025	-	-	0.00047	-	0.00574
Selenium (Se)-Dissolved	-	<0.0010	-	-	<0.0010	-	<0.0010
Silicon (Si)-Dissolved	-	0.452	-	-	0.545	-	1.14
Silver (Ag)-Dissolved	-	<0.00010	-	-	<0.00010	-	<0.00010
Sodium (Na)-Dissolved	-	2.70	-	-	0.254	-	2.89
Strontium (Sr)-Dissolved	-	0.0638	-	-	0.00720	-	0.0635
Tellurium (Te)-Dissolved	-	<0.00020	-	-	<0.00020	-	<0.00020
Thallium (Tl)-Dissolved	-	<0.00010	-	-	<0.00010	-	<0.00010
Thorium (Th)-Dissolved	-	<0.00010	-	-	<0.00010	-	<0.00010
Tin (Sn)-Dissolved	-	0.00056	-	-	0.00057	-	<0.00020
Titanium (Ti)-Dissolved	-	<0.00020	-	-	0.00030	-	0.00032
Tungsten (W)-Dissolved	-	<0.0010	-	-	<0.0010	-	<0.0010
Uranium (U)-Dissolved	-	0.00061	-	-	0.00080	-	0.00080
Vanadium (V)-Dissolved	-	<0.00020	-	-	<0.00020	-	<0.00020
Zinc (Zn)-Dissolved	-	<0.0020	-	-	0.0168	-	0.0442
Zirconium (Zr)-Dissolved	-	<0.00040	-	-	<0.00040	-	<0.00040

Notes:

NG = no guideline

¹ Canadian Water Quality Guidelines for the Protection of Aquatic Life, CCME, Update 7.0, September 2007.² Cadmium guideline calculated using measured hardness concentration per sample.³ Chromium guideline is for Cr VI, which yields the most conservative guideline.⁴ Trigger Range for Total Phosphorus (see guidance Framework for Phosphorus factsheet): ultra-oligotrophic <4 µg/L

Highlighted concentrations exceed the CCME guideline.

Table 5.2: Water Quality Quality Assurance and Quality Control Results

Sample ID	R02 DS	R02 D.S DUPLICATE	RPD	R02 DS	R02 DS DUP	RPD	R02 DS	R02 DS DUP	RPD	Q4	Q4 DUP	RPD	Q4	Q4 DUP	RPD	
Date Sampled	3-Jul-10	3-Jul-10		03-AUG-10	03-AUG-10		01-SEP-10	01-SEP-10		03-AUG-10	03-AUG-10		01-SEP-10	01-SEP-10		
Time Sampled	07:51	09:10		00:00	00:00		11:57	11:57		00:00	00:00		10:58	10:58		
ALS Sample ID	L906568-2	L906568-3		L918303-2	L918303-3		L929426-2	L929426-3		L918303-10	L918303-11		L929426-6	L929426-7		
Matrix	WATER	WATER		Water	Water		Water	Water		Water	Water		Water	Water		
Physical Tests																
Conductivity (umhos/cm)	0.40	45.1	45.0	0.22	41.3	41.5	-0.48	43.6	43.4	0.46	116	117	-0.86	173	172	0.58
Hardness (as CaCO3)	0.30	-	-	-	13.2	13.4	-1.50	14.8	15.0	-1.34	47.4	47.1	0.63	73.8	75.5	-2.28
pH	0.10	7.33	7.34	-0.14	7.43	7.44	-0.13	7.47	7.45	0.27	8.08	8.09	-0.12	8.21	8.20	0.12
Total Suspended Solids (mg/L)	2.0	2	-	-33.33	<2.0	2.8	-	<2.0	<2.0	-	2.8	2.8	0.00	<2.0	<2.0	-
Total Dissolved Solids (mg/L)	5.0	20	16	22.22	<5.0	<5.0	-	<5.0	<5.0	-	27.3	34.4	-23.01	84.0	72.0	15.38
Turbidity (NTU)	0.10	0.37	0.42	-12.66	0.37	0.76	-59.03	0.25	0.33	-27.59	7.01	7.27	-3.64	3.20	3.51	-9.24
Anions and Nutrients (mg/L)																
Alkalinity, Total (as CaCO3)	1.0	14.7	14.7	0.00	13.7	13.7	0.00	14.3	14.2	0.70	44.2	44.3	-0.23	66.8	66.7	0.15
Ammonia as N	0.050	<0.050	<0.050	-	<0.050	<0.050	-	<0.050	<0.050	-	<0.050	<0.050	-	<0.050	<0.050	-
Bicarbonate (HCO3)	2.0	17.9	18.0	-0.56	16.7	16.7	0.00	17.4	17.4	0.00	53.9	54.0	-0.19	81.5	81.4	0.12
Carbonate (CO3)	0.60	<0.60	<0.60	-	<0.60	<0.60	-	<0.60	<0.60	-	<0.60	<0.60	-	<0.60	<0.60	-
Chloride	2.5	3.70	3.66	1.09	3.39	3.41	-0.59	3.43	3.44	-0.29	1.20	1.25	-4.08	1.69	1.69	0.00
Fluoride	0.10	<0.10	<0.10	-	<0.10	<0.10	-	<0.10	<0.10	-	<0.10	<0.10	-	<0.10	<0.10	-
Hydroxide (OH)	0.40	<0.40	<0.40	-	<0.40	<0.40	-	<0.40	<0.40	-	<0.40	<0.40	-	<0.40	<0.40	-
Nitrate-N	0.25	<0.050	<0.050	-	<0.050	<0.050	-	<0.050	<0.050	-	1.86	1.86	1.07	2.51	2.51	0.00
Nitrite-N	0.05	<0.010	<0.010	-	<0.050	<0.050	-	<0.050	<0.050	-	<0.050	<0.050	-	<0.050	<0.050	-
Total Kjeldahl Nitrogen	0.20	<0.20	0.21	-	<0.20	<0.20	-	0.24	<0.20	-	<0.20	<0.20	-	0.23	<0.20	-
Ortho Phosphorus Soluble As P	0.010	<0.010	<0.010	-	<0.010	<0.010	-	<0.010	<0.010	-	<0.010	<0.010	-	<0.010	<0.010	-
Phosphorus, Total	0.010	<0.010	<0.010	-	<0.010	0.0102	-	<0.010	0.0102	-	<0.010	<0.010	-	<0.010	0.0101	-
Sulfate	2.5	3.4	3.3	2.99	1.14	1.17	-2.60	1.23	1.20	-	4.53	4.62	-1.97	7.34	7.33	0.14
Total Organic Carbon		3.5	3.7	-5.56	-	-	-	-	-	2.47	-	-	-	-	-	-
Dissolved Organic Carbon		3.3	3.2	3.08	-	-	-	-	-	-	-	-	-	-	-	-
Nitrate + Nitrite-N- Soluble	0.1	<0.050	<0.050	-	-	-	-	<0.071	<0.071	-	-	-	-	2.51	2.51	0.00
Total Metals (mg/L)																
Aluminum (Al)-Total	0.0050	0.0152	0.0518	-109.25	0.0280	0.0105	90.91	<0.0050	<0.0050	-	0.368	0.323	13.02	0.253	0.174	37.00
Antimony (Sb)-Total	0.00020	<0.00020	<0.00020	-	<0.00020	<0.00020	-	0.00051	<0.00020	-	<0.00020	<0.00020	-	0.00066	0.00064	3.08
Arsenic (As)-Total	0.00020	<0.00020	0.00021	-	<0.00020	<0.00020	-	0.00025	0.00023	8.33	0.00066	0.00062	6.25	0.00055	0.00053	3.70
Barium (Ba)-Total	0.00020	0.0133	0.0139	-4.41	0.0115	0.0115	0.00	0.0111	-0.90	0.0205	0.0198	3.47	0.0275	0.0274	-0.73	
Beryllium (Be)-Total	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	0.00020	<0.00020	<0.00020	-	<0.00020	<0.00020	-	<0.00020	<0.00020	-	<0.00020	<0.00020	-	<0.00020	<0.00020	-
Boron (B)-Total	0.010	<0.010	<0.010	-	<0.010	<0.010	-	<0.010	<0.010	-	<0.010	<0.010	-	0.012	0.011	8.70
Cadmium (Cd)-Total	0.000010	<0.000010	<0.000010	-	<0.000010	<0.000010	-	<0.000010	<0.000010	-	<0.000010	<0.000010	-	<0.000010	<0.000010	-
Calcium (Ca)-Total	0.10	4.86	4.84	0.41	4.08	4.15	-1.70	4.48	4.57	-1.99	14.6	14.5	0.69	23.2	23.9	-2.97
Cesium (Cs)-Total	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	0.0010	<0.0010	<0.0010	-	<0.0010	<0.0010	-	<0.0010	<0.0010	-	<0.0010	<0.0010	-	<0.0010	<0.0010	-
Cobalt (Co)-Total	0.00020	<0.00020	<0.00020	-	<0.00020	<0.00020	-	<0.00020	<0.00020	-	0.00025	0.00024	4.08	<0.00020	<0.00020	-
Copper (Cu)-Total	0.00020	0.00098	0.00122	-32.38	0.00144	0.00163	-12.38	0.00061	0.00071	13.16	0.00434	0.00278	43.82	0.00285	0.00276	3.21
Iron (Fe)-Total	0.020	0.029	0.082	-95.50	0.042	0.045	-4.90	0.025	<0.020	-	0.386	0.347	10.64	0.241	0.177	30.62
Lead (Pb)-Total	0.000090	<0.000090	0.000149	-	0.000094	0.000149	-45.27	<0.000090	<0.000090	-	0.000391	0.000363	7.43	0.000198	0.000219	-10.07
Lithium (Li)-Total	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	0.010	1.04	1.05	-0.96	0.739	0.751	-1.61	0.891	0.867	2.73	2.67	2.63	1.51	3.88	3.84	1.04
Manganese (Mn)-Total	0.00030	0.00302	0.00895	-99.08	0.00273	0.00266	2.60	0.00132	0.00091	36.77	0.00655	0.00627	4.37	0.00445	0.00373	17.60
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	-
Molybdenum (Mo)-Total	0.00020	<0.00020	<0.00020	-	<0.00020	<0.00020	-	<0.00020	<0.00020	-	0.00078	0.00072	8.00	0.00120	0.00125	-4.08
Nickel (Ni)-Total	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	0.020	<0.20	<0.20	-	<0.20	<0.20	-	<0.20	<0.20	-	<0.20	<0.20	-	<0.20	<0.20	-
Potassium (K)-Total	0.020	0.548	0.545	0.55	0.497	0.497	0.00	0.472	0.477	-1.05	1.74	1.67	4.11	2.67	2.65	0.75
Rubidium (Rb)-Total	0.00020	0.00054	0.00056	-3.64	0.00053	0.00052	1.90	0.00050	0.00050	0.00	0.00119	0.00093	14.41	0.00103	0.00095	8.08
Selenium (Se)-Total	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	0.050	0.194	0.225	-14.80	0.214	0.203	5.28	0.152	0.157	-3.24	1.84	1.75	5.01	1.33	1.19	11.11
Silver (Ag)-Total	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	0.030	2.43	2.40	1.24	1.84	1.83	0.54	1.97	1.93	2.05	3.22	3.15	2.20	4.56	4.58	-0.44
Strontium (Sr)-Total	0.00010	0.0240	0.0233	2.96	0.0192	0.0190	1.05	0.0212	0.0211	0.47	0.0812	0.0792	2.49	0.139	0.140	-0.72
Tellurium (Te)-Total	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	0.00010	<0.00010	<0.00010	-	<0.00010	<0.00010	-	<0.00010	<0.00010	-	<0.00010	<0.00010	-	<0.00010	<0.00010	-
Thorium (Th)-Total	0.00010	<0.00010	<0.00010	-	<0.00010	<0.00010	-	<0.00010	<0.00010	-	0.00013	0.00014	-7.41	<0.00010	<0.00010	-
Tin (Sn)-Total	0.00020	0.00023	0.00064	-94.25	0.00044	0.00050	-12.77	<0.00020	<0.00020	-	0.00057	<0.00020	-	<0.00020	<0.00020	-
Titanium (Ti)-Total	0.00020	0.00025	0.00023	-159.68	0.00029	0.00029	0.00	<0.00020	<0.00020	-	0.00076	0.00678	13.48	0.00483	0.00342	34.18
Tungsten (W)-Total	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	0.00010	<0.00010	<0.00010	-	<0.00010	<0.00010	-	<0.00010	<0.00010	-	0.00078	0.00077	1.29	0.00124	0.00126	-1.60
Vanadium (V)-Total	0.00020	<0.00020	<0.00020	-	<0.00020	<0.00020	-	<0.00020	<0.00020	-	0.00075	0.00068	9.79	0.00052	0.00041	23.66
Zinc (Zn)-Total	0.0050	<0.0050	<0.0050	-	<0.0050	<0.0050	-	<0.0050	<0.0050	-	<0.0050	<0.0050	-	<0.0050	<0.0050	-
Zirconium (Zr)-Total	0.00040	<0.00040	<0.00040	-	<0.00040	<0.00040	-	<0.00040	<0.00040	-	0.00059	0.00055	7.02	0.00042	<0.00040	-
Dissolved Metals (mg/L)																
Aluminum (Al)-Dissolved		0.0038	0.0042	-10.00	-	-	-	-	-	-	-	-	-	-	-	-
Antimony (Sb)-Dissolved		<0.00020	<0.00020	-	<0.00020	<0.00020	-	<0.00020	<0.00020	-	<0.00020	<0.00020	-	<0.00020	<	

APPENDIX A:

PHOTOGRAPHIC DOCUMENTATION

FEBRUARY 2011



Photo No 1 : Upstream of R02- ice and snow blocking the bridge (June 14, 2010)



Photo No 2 : Upstream of R02- water level increasing and advancing over the road potentially causing a road washout. No observed turbidity downstream. (June 14, 2010)



Photo No 3: R02 downstream following excavation of accumulated snow and ice below the bridge (June 15, 2010)



Photo No 4: R02 emergency excavation completed above the high water mark to prevent the road from washing out (June 15, 2010).



Photo No 5 : R02 water level at permanent culverts (June 15,2010)



Photo No 6: Water flowing below the bridge following excavation of snow accumulated under the bridge (June 15, 2010).



Photo No 7 : R02 temporary culverts installed on June 16, 2010 above the ordinary high water mark to accomodate freshet water flows.



Photo No 8 : R02 temporary culverts with upstream clean boulder berm to reduce flows on temporary culverts (June 16, 2010).



Photo No 9 : Immediately downstream of the bridge R02 - water levels subsided significantly (June 28, 2010).



Photo No 10 : Water levels at R06 (June 28, 2010).



Photo No 11 : R09 water level on June 28, 2010.



Photo No 12 : Water level at R15 on June 28, 2010.



Photo No 13 : Many of the quarries along the AWR remained snow filled for most of June and early July; This photo is of Quarry 20: on June 21 until July 3 the quarry was snow filled and on July 28 the snow had melted and the quarry was dry.



Photo No 14 : Quarry 2 snow filled on June 28,2010



Photo No 15 : Quarry 4 has a perched groundwater source - photo taken with technicians collecting water monitoring data (June 21, 2010)



Photo No 16 : Quarry 4 (July 30, 2010)



Photo No 17 : Quarry 7 (June 21, 2010)



Photo No 18 : Small isolated standing pool on the face of Quarry 7 (July 30, 2010).



Photo No 19 : Technicians collecting monitoring data in standing pool in Quarry 16 on June 21, 2010.



Photo No 20: Evaporated standing pool in Quarry 16 (July 30, 2010).

APPENDIX B:

WATER QUALITY MONITORING FIELD SHEETS

FEBRUARY 2011

Water Monitoring Form

Agnico Eagle Mines: Meadowbank Division

Environment

		Field Personnel: <u>RV TT JF</u>				Date: <u>6/21/2010</u>				
		Task: <u>Quarry and Road Crossing Monitoring</u>								
		Scope of Work: <u>Evaluate HADD crossings and Quarries</u>								
		Comments: <u>Sunny, 5 °C</u>								
H & S and gear: ☐ Health and Safety Officer informed (specific plan in place): ☐ Gear requirements: water quality meter, field book, camera, radio ☐ Special Requirements: <u>YSI and Turbidity meters</u>										
Weather: Cloudy Snow Rain Sunny Ambient Temperature: 5 °C										
Sample ID	Date	Time	Temperature (°C)	pH	DO (%)	DO (mg/L)	Specific Conductivity	ORP	Turbidity	Other:
Q 20	6/21/2010		Snow covered							photo # 1 and # 2
Q 17	6/21/2010		Snow covered/ filled							photo # 3 and # 4
Q 16	6/21/2010	11:15	5.90	-	-	-	0.229	-	7.56	photo # 5 and # 6
Q7	6/21/2010		Snow covered/ filled							photo # 9
Q6	6/21/2010		Snow covered/ filled							photo # 10
Q4	6/21/2010	13:25	2.28	6.15	-	-	0.27		80.30	photo # 11 snow on shores, long open water
R06 US	6/21/2010	13:45	4.72	6.80	-	-	0.046		0.45	
R06 DS	6/21/2010	13:55	4.46	6.01	-	-	0.046		0.28	no visual turbidity
Q2	6/21/2010	15:30	Snow covered/ filled							
R02 US-A	6/21/2010	15:50	2.40	6.95	-	-	0.052	-	0.18	No visual turbidity DS of the bridge
R02 US-B	6/21/2010	15:50	2.78	6.30	-	-	0.05	-	0.22	
R02 DS-A	6/21/2010	15:50	2.98	7.24	-	-	0.054	-	0.21	
R02 DS-B	6/21/2010	15:50	2.58	6.75	-	-	0.052	-	0.59	
R09 US	6/22/2010	10:00	2.24	7.50	-	-	0.057	-	0.37	No visual turbidity DS of the bridge
R09 DS	6/22/2010	10:00	2.19	6.3	-	-	0.056	-	0.4	
R15 US	6/22/2010	10:47	1.94	6.71	-	-	0.018	-	0.51	No visual turbidity DS of the bridge
R15 DS	6/22/2010	10:47	1.95	5.03	-	-	0.016	-	0.55	
Parameters for Analysis: <u>None.</u>										
pH readings are not correct on the YSI meter. Please refer to the lab results (if available)										
Laboratory contacted? Yes ☐ No ☒										
(dd/mm/yy)										
Field Personnel Signature: _____					Date: _____ Page: 1 of 1					

Water Monitoring Form

Agnico Eagle Mines: Meadowbank Division

Environment

		Field Personnel: <u>TT JF</u>		Date: <u>6/28/2010</u>						
		Task: <u>Quarry and Road Crossing Monitoring</u>								
		Scope of Work: <u>Evaluate HADD crossings and Quarries</u>								
		Comments: <u>Sunny, 13 °C</u>								
H & S and gear: ☐ Health and Safety Officer informed (specific plan in place): ☐ Gear requirements: water quality meter, field book, camera, radio ☐ Special Requirements: <u>YSI and Turbidity meters</u>										
Weather: Cloudy Snow Rain Sunny Ambient Temperature: 13 °C										
Sample ID	Date	Time	Temperature (°C)	pH *	DO (%)	DO (mg/L)	Specific Conductivity	ORP	Turbidity	Other:
Q 20	6/28/2010	10:41	Snow covered							photo #118
Q 17	6/28/2010	11:14	Snow covered							photo #119
Q 16	6/28/2010	12:08	10.47	7.44	-	-	0.0164	-	10.86	photo #120/121
R15 US	6/28/2010	12:40	7.08	6.5	-	-	0.015	-	0.78	photo #122
No visual turbidity DS of the bridge										
R15 DS	6/28/2010	12:45	6.98	5.62	-	-	0.015	-	0.56	photo #123
R09 US	6/28/2010	13:17	9.15	5.97	-	-	0.046	-	0.18	photo #124
No visual turbidity DS of the bridge										
R09 DS	6/28/2010	13:23	9.17	5.18	-	-	0.047	-	0.15	photo #125
Q7	6/28/2010	13:40	6.28	2.93	-	-	0.02	-	28.1	photo #126
Q6	6/28/2010	13:55	Snow covered/ filled							photo #127
Q4	6/28/2010	14:10	2.61	3.92	-	-	0.103		63.50	photo #128
R06 US	6/28/2010	14:25	9.02	5.56	-	-	0.05		0.45	photo #129
No visual turbidity DS of the bridge										
R06 DS	6/28/2010	14:30	8.71	3.88	-	-	0.054		1.63	photo #130
Q2	6/28/2010	15:00	Snow covered/ filled							photo #137
R02 US	6/28/2010	15:15	9.18	5.38	-	-	0.048	-	0.22	photo #138
No visual turbidity DS of the bridge										
R02 DS	6/28/2010	15:20	8.05	5.22	-	-	0.047	-	0.24	photo #139
Parameters for Analysis: None.										
* pH readings are not correct on the YSI meter. Please refer to the lab results (if available)										
Laboratory contacted? Yes ☐ No ☒										
(dd/mm/yy)										
Field Personnel Signature: _____						Date: _____ Page: 1 of 1				

Water Monitoring Form

Agnico Eagle Mines: Meadow

Environment

		Field Personnel <u>TT & PA</u>				Date: <u>July 3/10</u> (dd/mm/yy)										
		Task: <u>Water Monitoring at HADD Crossing R02, R06, R09, R15 and Quarries Q2, Q4, Q6, Q7, Q16, Q17, Q20</u>														
		Scope of Work: _____														
Comments: <u>pH not reading accurately on YSI machine. Received Rain for past 2 days prior to monitoring/sampling. Water Samples Collected were returned to warehouse for shipping on July 3/2010</u>																
H & S and gear: ☐ Health and Safety Officer informed (specific plan in place): ☐ Gear requirements: Nitrile gloves, water quality meter, pre-labelled bottles, field book, camera, radio ☐ Special Requirements: _____																
<table style="width:100%; border: none;"> <tr> <td style="width:10%;">Weather:</td> <td style="width:15%;">Cloudy</td> <td style="width:15%;">Snow</td> <td style="width:15%;">Rain</td> <td style="width:15%;">Sunny</td> <td style="width:20%;">Ambient Temperature:</td> <td style="width:10%;">°C</td> </tr> </table>										Weather:	Cloudy	Snow	Rain	Sunny	Ambient Temperature:	°C
Weather:	Cloudy	Snow	Rain	Sunny	Ambient Temperature:	°C										
Sample ID	Date	Time	Temperature (°C)	pH	DO (%)	DO (mg/L)	Specific Conductivity	ORP	Turbidity	Other:						
R02 DS	3/7/2010	7:51am	5.81				0.047		0.22							
R02 US	3/7/2010	8:48am	6.03				0.049		0.28							
Q2	3/7/2010	9:10am	Snow Covered - No pooling water													
R06 DS	3/7/2010	9:20am	4.72				0.067		0.28							
R06 US	3/7/2010	9:30am	5.08				0.045		0.19							
Q4	3/7/2010	10:18am	1.82				0.102		31.60							
Q6	3/7/2010	10:35am	No Pooling Water - Full of Contaminated Soil													
Q7	3/7/2010	11:10am	5.09				0.037		80.60							
R09 DS	3/7/2010	11:20am	6.13				0.042		0.14							
R09 US	3/7/2010	11:30am	6.01				0.044		0.12							
R15 DS	3/7/2010	12:36pm	6.11				0.015		0.18							
R15 US	3/7/2010	12:45pm	6.28				0.014		0.13							
Q16	3/7/2010	1:00pm	11.88				0.149		16.07							
Q17	3/7/2010	1:15pm	Snow Covered - No Pooling Water													
Q20	3/7/2010	2:00pm	Snow Covered - No Pooling Water													
Parameters for Analysis: _____ _____ _____																
Laboratory contacted? Yes ☐ No ☐																
Field Personnel Signature: _____						Date: _____										
						Page: 1 of 1										

Agnico Eagle Mines: Meadow

Date: 3-Aug-10 (dd/mm/yy)

Scope of Work: Water Sampling as part of monthly monitoring program

Comments: Sunny - Received rain on evening August 2, 2010

- ☐ Health and Safety Officer informed (specific plan in place):
- ☐ Gear requirements: Nitrile gloves, water quality meter, pre-labelled bottles, field book, camera, radio
- ☐ Special Requirements:

Parameters for Analysis:		YSI and Turbidity meter were calibrated at camp prior to our use. Turbidity probe readings are off and do	
		appear correct	
Laboratory contacted?		Yes ☐	No ☐
Field Personnel Signature: TT		Date: ####	(dd/mm/yy)
		Page: 1	of 1

APPENDIX C:

ALS WINNIPEG LABORATORY CERTIFICATE OF ANALYSIS

FEBRUARY 2011



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: 01-AUG-10 13:00 (MT)

Version: FINAL

Lab Work Order #: L906568

Date Received: 09-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.

Manitoba Technology Centre Ltd.

Part of the **ALS Laboratory Group**

1329 Niakwa Road East, Unit 12, Winnipeg, MB R2J 3T4

Phone: +1 204 255 9720 Fax: +1 204 255 9721 www.alsglobal.com

A Campbell Brothers Limited Company

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L906568-1 R02 U.S							
Sampled By: T.T on 03-JUL-10 @ 08:48							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia (NH3) - Soluble	<0.050		0.050	mg/L		20-JUL-10	R1387183
Chloride (Cl) - Soluble	3.87		0.40	mg/L		16-JUL-10	R1371463
Dissolved Organic Carbon	3.1		1.0	mg/L		09-JUL-10	R1368626
Fluoride (F) - Soluble	<0.10		0.10	mg/L		13-JUL-10	R1353203
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	16-JUL-10	16-JUL-10	R1389507
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		14-JUL-10	R1367423
Phosphorus, Total	<0.010	DLA	0.010	mg/L		14-JUL-10	R1367385
Sulphate (SO4) - Soluble	3.0		2.0	mg/L		16-JUL-10	R1375663
Total Dissolved Solids	22.0		5.0	mg/L		12-JUL-10	R1353684
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	09-JUL-10	12-JUL-10	R1349903
Total Organic Carbon	3.5		1.0	mg/L		09-JUL-10	R1368626
Total Suspended Solids	<2.0		2.0	mg/L		12-JUL-10	R1353684
Turbidity	0.37		0.10	NTU		09-JUL-10	R1345583
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0625		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Arsenic (As)-Total	0.00028		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Barium (Ba)-Total	0.0144		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Boron (B)-Total	<0.010		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	12-JUL-10	12-JUL-10	R1352104
Calcium (Ca)-Total	4.92		0.10	mg/L	12-JUL-10	12-JUL-10	R1352104
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Copper (Cu)-Total	0.00129		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Iron (Fe)-Total	0.109		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Lead (Pb)-Total	0.000165		0.000090	mg/L	12-JUL-10	12-JUL-10	R1352104
Lithium (Li)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Magnesium (Mg)-Total	1.10		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Manganese (Mn)-Total	0.0178		0.00030	mg/L	12-JUL-10	12-JUL-10	R1352104
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Phosphorus (P)-Total	<0.20		0.20	mg/L	12-JUL-10	12-JUL-10	R1352104
Potassium (K)-Total	0.539		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Rubidium (Rb)-Total	0.00059		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Selenium (Se)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Silicon (Si)-Total	0.242		0.050	mg/L	12-JUL-10	12-JUL-10	R1352104
Silver (Ag)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Sodium (Na)-Total	2.47		0.030	mg/L	12-JUL-10	12-JUL-10	R1352104
Strontium (Sr)-Total	0.0233		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Thorium (Th)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tin (Sn)-Total	0.00056		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Titanium (Ti)-Total	0.00218		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Tungsten (W)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Uranium (U)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Vanadium (V)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104

* 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
L906568-1 R02 U.S							
Sampled By: T.T on 03-JUL-10 @ 08:48							
Matrix: WATER							
Total Metals by ICP-MS							
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	12-JUL-10	12-JUL-10	R1352104
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0049		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Barium (Ba)-Dissolved	0.0125		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-JUL-10	10-JUL-10	R1345545
Calcium (Ca)-Dissolved	4.57		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Copper (Cu)-Dissolved	0.00077		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Iron (Fe)-Dissolved	0.019		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-JUL-10	10-JUL-10	R1345545
Lithium (Li)-Dissolved	0.0023		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Magnesium (Mg)-Dissolved	0.860		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Manganese (Mn)-Dissolved	0.00095		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Molybdenum (Mo)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Nickel (Ni)-Dissolved	0.00029		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-JUL-10	10-JUL-10	R1345545
Potassium (K)-Dissolved	0.518		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Rubidium (Rb)-Dissolved	0.00046		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Silicon (Si)-Dissolved	0.202		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Sodium (Na)-Dissolved	2.01		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Strontium (Sr)-Dissolved	0.0213		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	09-JUL-10	10-JUL-10	R1345545
Nitrate							
Nitrate (NO3) - Soluble	<0.050		0.050	mg/L		21-JUL-10	
Nitrate + Nitrite Soluble							
Nitrate+Nitrite-N - Soluble	<0.050		0.050	mg/L		20-JUL-10	R1387183
Nitrite							
Nitrite-N Soluble	<0.010		0.010	mg/L		09-JUL-10	R1345103
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	14.6		1.0	mg/L		12-JUL-10	R1350443
Bicarbonate (HCO3)	17.8		2.0	mg/L		12-JUL-10	R1350443

* 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
L906568-1	R02 U.S							
Sampled By:	T.T on 03-JUL-10 @ 08:48							
Matrix:	WATER							
Alkalinity								
Carbonate (CO3)		<0.60		0.60	mg/L		12-JUL-10	R1350443
Hydroxide (OH)		<0.40		0.40	mg/L		12-JUL-10	R1350443
Conductivity								
Conductivity		45.2		0.40	umhos/cm		09-JUL-10	R1344583
pH								
pH		7.30		0.10	pH units		09-JUL-10	R1344583
L906568-2	R02 D.S							
Sampled By:	T.T on 03-JUL-10 @ 07:51							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia (NH3) - Soluble		<0.050		0.050	mg/L		20-JUL-10	R1387183
Chloride (Cl) - Soluble		3.70		0.40	mg/L		16-JUL-10	R1371463
Dissolved Organic Carbon		3.3		1.0	mg/L		09-JUL-10	R1368626
Fluoride (F) - Soluble		<0.10		0.10	mg/L		13-JUL-10	R1353203
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	16-JUL-10	16-JUL-10	R1389507
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		14-JUL-10	R1367423
Phosphorus, Total		<0.010	DLA	0.010	mg/L		14-JUL-10	R1367385
Sulphate (SO4) - Soluble		3.4		2.0	mg/L		16-JUL-10	R1375663
Total Dissolved Solids		20.0		5.0	mg/L		12-JUL-10	R1353684
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	09-JUL-10	12-JUL-10	R1349903
Total Organic Carbon		3.5		1.0	mg/L		09-JUL-10	R1368626
Total Suspended Solids		2.0		2.0	mg/L		12-JUL-10	R1353684
Turbidity		0.37		0.10	NTU		09-JUL-10	R1345583
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.0152		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Antimony (Sb)-Total		<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Arsenic (As)-Total		<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Barium (Ba)-Total		0.0133		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Beryllium (Be)-Total		<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Bismuth (Bi)-Total		<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Boron (B)-Total		<0.010		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	12-JUL-10	12-JUL-10	R1352104
Calcium (Ca)-Total		4.86		0.10	mg/L	12-JUL-10	12-JUL-10	R1352104
Cesium (Cs)-Total		<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Chromium (Cr)-Total		<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cobalt (Co)-Total		<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Copper (Cu)-Total		0.00088		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Iron (Fe)-Total		0.029		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Lead (Pb)-Total		<0.000090		0.000090	mg/L	12-JUL-10	12-JUL-10	R1352104
Lithium (Li)-Total		<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Magnesium (Mg)-Total		1.04		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Manganese (Mn)-Total		0.00302		0.00030	mg/L	12-JUL-10	12-JUL-10	R1352104
Molybdenum (Mo)-Total		<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Nickel (Ni)-Total		<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Phosphorus (P)-Total		<0.20		0.20	mg/L	12-JUL-10	12-JUL-10	R1352104
Potassium (K)-Total		0.548		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Rubidium (Rb)-Total		0.00054		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Selenium (Se)-Total		<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Silicon (Si)-Total		0.194		0.050	mg/L	12-JUL-10	12-JUL-10	R1352104
Silver (Ag)-Total		<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104

* 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
L906568-2 R02 D.S							
Sampled By: T.T on 03-JUL-10 @ 07:51							
Matrix: WATER							
Total Metals by ICP-MS							
Sodium (Na)-Total	2.43		0.030	mg/L	12-JUL-10	12-JUL-10	R1352104
Strontium (Sr)-Total	0.0240		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Thorium (Th)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tin (Sn)-Total	0.00023		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Titanium (Ti)-Total	0.00025		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Tungsten (W)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Uranium (U)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Vanadium (V)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	12-JUL-10	12-JUL-10	R1352104
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0038		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Barium (Ba)-Dissolved	0.0122		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-JUL-10	10-JUL-10	R1345545
Calcium (Ca)-Dissolved	4.48		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Copper (Cu)-Dissolved	0.00066		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Iron (Fe)-Dissolved	0.018		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-JUL-10	10-JUL-10	R1345545
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Magnesium (Mg)-Dissolved	0.869		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Manganese (Mn)-Dissolved	0.00078		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Molybdenum (Mo)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Nickel (Ni)-Dissolved	0.00029		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-JUL-10	10-JUL-10	R1345545
Potassium (K)-Dissolved	0.487		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Rubidium (Rb)-Dissolved	0.00045		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Silicon (Si)-Dissolved	0.201		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Sodium (Na)-Dissolved	2.03		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Strontium (Sr)-Dissolved	0.0213		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	09-JUL-10	10-JUL-10	R1345545

* 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
L906568-3	R02 D.S DUPLICATE						
Sampled By:	T.T on 03-JUL-10 @ 08:48						
Matrix:	WATER						
Total Metals by ICP-MS							
Manganese (Mn)-Total	0.00895		0.00030	mg/L	12-JUL-10	12-JUL-10	R1352104
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Phosphorus (P)-Total	<0.20		0.20	mg/L	12-JUL-10	12-JUL-10	R1352104
Potassium (K)-Total	0.545		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Rubidium (Rb)-Total	0.00056		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Selenium (Se)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Silicon (Si)-Total	0.225		0.050	mg/L	12-JUL-10	12-JUL-10	R1352104
Silver (Ag)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Sodium (Na)-Total	2.40		0.030	mg/L	12-JUL-10	12-JUL-10	R1352104
Strontium (Sr)-Total	0.0233		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Thorium (Th)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tin (Sn)-Total	0.00064		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Titanium (Ti)-Total	0.00223		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Tungsten (W)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Uranium (U)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Vanadium (V)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	12-JUL-10	12-JUL-10	R1352104
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0042		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Barium (Ba)-Dissolved	0.0125		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-JUL-10	10-JUL-10	R1345545
Calcium (Ca)-Dissolved	4.52		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Copper (Cu)-Dissolved	0.00075		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Iron (Fe)-Dissolved	0.020		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-JUL-10	10-JUL-10	R1345545
Lithium (Li)-Dissolved	0.0021		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Magnesium (Mg)-Dissolved	0.872		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Manganese (Mn)-Dissolved	0.00082		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Molybdenum (Mo)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Nickel (Ni)-Dissolved	0.00030		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-JUL-10	10-JUL-10	R1345545
Potassium (K)-Dissolved	0.502		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Rubidium (Rb)-Dissolved	0.00045		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Silicon (Si)-Dissolved	0.208		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Sodium (Na)-Dissolved	2.00		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Strontium (Sr)-Dissolved	0.0210		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545

* 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
L906568-3	R02 D.S DUPLICATE							
Sampled By:	T.T on 03-JUL-10 @ 08:48							
Matrix:	WATER							
Dissolved Metals by ICP-MS								
Thallium (Tl)-Dissolved	<0.00010			0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Thorium (Th)-Dissolved	<0.00010			0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tin (Sn)-Dissolved	0.00051			0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Titanium (Ti)-Dissolved	<0.00020			0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Tungsten (W)-Dissolved	<0.0010			0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Uranium (U)-Dissolved	<0.00010			0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Vanadium (V)-Dissolved	<0.00020			0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zinc (Zn)-Dissolved	<0.0020			0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zirconium (Zr)-Dissolved	<0.00040			0.00040	mg/L	09-JUL-10	10-JUL-10	R1345545
Nitrate								
Nitrate (NO3) - Soluble	<0.050			0.050	mg/L		21-JUL-10	
Nitrate + Nitrite Soluble								
Nitrate+Nitrite-N - Soluble	<0.050			0.050	mg/L		20-JUL-10	R1387183
Nitrite								
Nitrite-N Soluble	<0.010			0.010	mg/L		12-JUL-10	R1349963
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)	14.7			1.0	mg/L		12-JUL-10	R1350443
Bicarbonate (HCO3)	18.0			2.0	mg/L		12-JUL-10	R1350443
Carbonate (CO3)	<0.60			0.60	mg/L		12-JUL-10	R1350443
Hydroxide (OH)	<0.40			0.40	mg/L		12-JUL-10	R1350443
Conductivity								
Conductivity	45.0			0.40	umhos/cm		09-JUL-10	R1344583
pH								
pH	7.34			0.10	pH units		09-JUL-10	R1344583
L906568-4	R06 U.S							
Sampled By:	T.T on 03-JUL-10 @ 09:10							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia (NH3) - Soluble	<0.050			0.050	mg/L		20-JUL-10	R1387183
Chloride (Cl) - Soluble	4.00			0.40	mg/L		16-JUL-10	R1371463
Dissolved Organic Carbon	3.5			1.0	mg/L		09-JUL-10	R1368626
Fluoride (F) - Soluble	<0.10			0.10	mg/L		13-JUL-10	R1353203
Mercury (Hg)-Total	<0.000050			0.000050	mg/L	16-JUL-10	16-JUL-10	R1389507
Ortho Phosphorus Soluble As P	<0.010	DLA		0.010	mg/L		14-JUL-10	R1367423
Phosphorus, Total	<0.010	DLA		0.010	mg/L		14-JUL-10	R1367385
Sulphate (SO4) - Soluble	4.0			2.0	mg/L		16-JUL-10	R1375663
Total Dissolved Solids	16.0			5.0	mg/L		12-JUL-10	R1353684
Total Kjeldahl Nitrogen	<0.20			0.20	mg/L	09-JUL-10	12-JUL-10	R1349903
Total Organic Carbon	3.5			1.0	mg/L		09-JUL-10	R1368626
Total Suspended Solids	<2.0			2.0	mg/L		12-JUL-10	R1353684
Turbidity	0.35			0.10	NTU		09-JUL-10	R1345583
Total Metals by ICP-MS								
Aluminum (Al)-Total	0.0261			0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Antimony (Sb)-Total	<0.00020			0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Arsenic (As)-Total	0.00020			0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Barium (Ba)-Total	0.00352			0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Beryllium (Be)-Total	<0.00020			0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Bismuth (Bi)-Total	<0.00020			0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L906568-4 R06 U.S							
Sampled By: T.T on 03-JUL-10 @ 09:10							
Matrix: WATER							
Total Metals by ICP-MS							
Boron (B)-Total	<0.010		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	12-JUL-10	12-JUL-10	R1352104
Calcium (Ca)-Total	3.89		0.10	mg/L	12-JUL-10	12-JUL-10	R1352104
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Copper (Cu)-Total	0.00181		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Iron (Fe)-Total	<0.020		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Lead (Pb)-Total	<0.000090		0.000090	mg/L	12-JUL-10	12-JUL-10	R1352104
Lithium (Li)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Magnesium (Mg)-Total	1.12		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Manganese (Mn)-Total	0.00259		0.00030	mg/L	12-JUL-10	12-JUL-10	R1352104
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Phosphorus (P)-Total	<0.20		0.20	mg/L	12-JUL-10	12-JUL-10	R1352104
Potassium (K)-Total	0.451		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Rubidium (Rb)-Total	0.00040		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Selenium (Se)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Silicon (Si)-Total	0.270		0.050	mg/L	12-JUL-10	12-JUL-10	R1352104
Silver (Ag)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Sodium (Na)-Total	2.29		0.030	mg/L	12-JUL-10	12-JUL-10	R1352104
Strontium (Sr)-Total	0.0164		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Thorium (Th)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tin (Sn)-Total	0.00065		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Titanium (Ti)-Total	0.00036		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Tungsten (W)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Uranium (U)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Vanadium (V)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	12-JUL-10	12-JUL-10	R1352104
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0133		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Barium (Ba)-Dissolved	0.00327		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Cadmium (Cd)-Dissolved	0.000019		0.000010	mg/L	09-JUL-10	10-JUL-10	R1345545
Calcium (Ca)-Dissolved	3.65		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Copper (Cu)-Dissolved	0.00175		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Iron (Fe)-Dissolved	0.012		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-JUL-10	10-JUL-10	R1345545
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Magnesium (Mg)-Dissolved	0.985		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Manganese (Mn)-Dissolved	0.00093		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L906568-5 R06 D.S							
Sampled By: T.T on 03-JUL-10 @ 09:20							
Matrix: WATER							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	09-JUL-10	12-JUL-10	R1349903
Total Organic Carbon	4.0		1.0	mg/L		09-JUL-10	R1368626
Total Suspended Solids	2.0		2.0	mg/L		12-JUL-10	R1353684
Turbidity	0.52		0.10	NTU		09-JUL-10	R1345583
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0394		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Arsenic (As)-Total	0.00026		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Barium (Ba)-Total	0.00405		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Boron (B)-Total	<0.010		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	12-JUL-10	12-JUL-10	R1352104
Calcium (Ca)-Total	5.95		0.10	mg/L	12-JUL-10	12-JUL-10	R1352104
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Copper (Cu)-Total	0.00354		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Iron (Fe)-Total	0.025		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Lead (Pb)-Total	<0.000090		0.000090	mg/L	12-JUL-10	12-JUL-10	R1352104
Lithium (Li)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Magnesium (Mg)-Total	1.14		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Manganese (Mn)-Total	0.00587		0.00030	mg/L	12-JUL-10	12-JUL-10	R1352104
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Phosphorus (P)-Total	<0.20		0.20	mg/L	12-JUL-10	12-JUL-10	R1352104
Potassium (K)-Total	0.492		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Rubidium (Rb)-Total	0.00049		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Selenium (Se)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Silicon (Si)-Total	0.490		0.050	mg/L	12-JUL-10	14-JUL-10	R1363763
Silver (Ag)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Sodium (Na)-Total	2.58		0.030	mg/L	12-JUL-10	12-JUL-10	R1352104
Strontium (Sr)-Total	0.0199		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Thorium (Th)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tin (Sn)-Total	0.00041		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Titanium (Ti)-Total	0.00071		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Tungsten (W)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Uranium (U)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Vanadium (V)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Zinc (Zn)-Total	0.0094		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	12-JUL-10	12-JUL-10	R1352104
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0179		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Arsenic (As)-Dissolved	0.00021		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Barium (Ba)-Dissolved	0.00379		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-JUL-10	10-JUL-10	R1345545

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L906568-6 Q4							
Sampled By: T.T on 03-JUL-10 @ 10:18							
Matrix: WATER							
Ammonia (NH3) - Soluble	<0.050		0.050	mg/L		20-JUL-10	R1387183
Chloride (Cl) - Soluble	1.31		0.40	mg/L		16-JUL-10	R1371463
Dissolved Organic Carbon	2.5		1.0	mg/L		10-JUL-10	R1368626
Fluoride (F) - Soluble	<0.10		0.10	mg/L		13-JUL-10	R1353203
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	16-JUL-10	16-JUL-10	R1389507
Ortho Phosphorus Soluble As P	0.0187		0.0010	mg/L		14-JUL-10	R1367423
Phosphorus, Total	0.0623		0.0030	mg/L		14-JUL-10	R1367385
Sulphate (SO4) - Soluble	7.0		2.0	mg/L		16-JUL-10	R1375663
Total Dissolved Solids	58.0		5.0	mg/L		12-JUL-10	R1353684
Total Kjeldahl Nitrogen	0.26		0.20	mg/L	09-JUL-10	12-JUL-10	R1349903
Total Organic Carbon	1.6		1.0	mg/L		10-JUL-10	R1368626
Total Suspended Solids	80.0		2.0	mg/L		12-JUL-10	R1353684
Turbidity	30.0		0.10	NTU		09-JUL-10	R1345583
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.801		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Arsenic (As)-Total	0.00072		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Barium (Ba)-Total	0.0215		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Boron (B)-Total	<0.010		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	12-JUL-10	12-JUL-10	R1352104
Calcium (Ca)-Total	10.8		0.10	mg/L	12-JUL-10	12-JUL-10	R1352104
Cesium (Cs)-Total	0.00012		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Chromium (Cr)-Total	0.0015		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cobalt (Co)-Total	0.00056		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Copper (Cu)-Total	0.00291		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Iron (Fe)-Total	0.888		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Lead (Pb)-Total	0.000781		0.000090	mg/L	12-JUL-10	12-JUL-10	R1352104
Lithium (Li)-Total	0.0024		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Magnesium (Mg)-Total	2.70		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Manganese (Mn)-Total	0.0261		0.00030	mg/L	12-JUL-10	12-JUL-10	R1352104
Molybdenum (Mo)-Total	0.00044		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Phosphorus (P)-Total	<0.20		0.20	mg/L	12-JUL-10	12-JUL-10	R1352104
Potassium (K)-Total	1.41		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Rubidium (Rb)-Total	0.00182		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Selenium (Se)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Silicon (Si)-Total	1.06		0.050	mg/L	12-JUL-10	12-JUL-10	R1352104
Silver (Ag)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Sodium (Na)-Total	3.06		0.030	mg/L	12-JUL-10	12-JUL-10	R1352104
Strontium (Sr)-Total	0.0634		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Thorium (Th)-Total	0.00027		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tin (Sn)-Total	0.00044		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Titanium (Ti)-Total	0.0491		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Tungsten (W)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Uranium (U)-Total	0.00084		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Vanadium (V)-Total	0.00153		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L906568-6 Q4							
Sampled By: T.T on 03-JUL-10 @ 10:18							
Matrix: WATER							
Total Metals by ICP-MS							
Zirconium (Zr)-Total	0.00079		0.00040	mg/L	12-JUL-10	12-JUL-10	R1352104
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0033		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Barium (Ba)-Dissolved	0.0132		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-JUL-10	10-JUL-10	R1345545
Calcium (Ca)-Dissolved	10.2		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Copper (Cu)-Dissolved	0.00081		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Iron (Fe)-Dissolved	<0.010		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-JUL-10	10-JUL-10	R1345545
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Magnesium (Mg)-Dissolved	2.13		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Manganese (Mn)-Dissolved	0.0127		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Molybdenum (Mo)-Dissolved	0.00041		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Nickel (Ni)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-JUL-10	10-JUL-10	R1345545
Potassium (K)-Dissolved	1.08		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Rubidium (Rb)-Dissolved	0.00025		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Silicon (Si)-Dissolved	0.452		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Sodium (Na)-Dissolved	2.70		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Strontium (Sr)-Dissolved	0.0638		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tin (Sn)-Dissolved	0.00056		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Uranium (U)-Dissolved	0.00061		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	09-JUL-10	10-JUL-10	R1345545
Nitrate							
Nitrate (NO3) - Soluble	1.77		0.050	mg/L		21-JUL-10	
Nitrate + Nitrite Soluble							
Nitrate+Nitrite-N - Soluble	1.79		0.050	mg/L		20-JUL-10	R1387183
Nitrite							
Nitrite-N Soluble	0.023		0.010	mg/L		09-JUL-10	R1345103
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	33.8		1.0	mg/L		09-JUL-10	R1344583
Bicarbonate (HCO3)	41.3		2.0	mg/L		09-JUL-10	R1344583
Carbonate (CO3)	<0.60		0.60	mg/L		09-JUL-10	R1344583

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L906568-8 Q7							
Sampled By: T.T on 03-JUL-10 @ 11:10							
Matrix: WATER							
Total Metals by ICP-MS							
Strontium (Sr)-Total	0.00851		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Thorium (Th)-Total	0.00029		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tin (Sn)-Total	0.00037		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Titanium (Ti)-Total	0.0151		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Tungsten (W)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Uranium (U)-Total	0.00147		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Vanadium (V)-Total	0.00063		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Zinc (Zn)-Total	0.0157		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Zirconium (Zr)-Total	0.00080		0.00040	mg/L	12-JUL-10	12-JUL-10	R1352104
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.575		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Barium (Ba)-Dissolved	0.00775		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Cadmium (Cd)-Dissolved	0.000115		0.000010	mg/L	09-JUL-10	10-JUL-10	R1345545
Calcium (Ca)-Dissolved	0.958		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Chromium (Cr)-Dissolved	0.00025		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Cobalt (Co)-Dissolved	0.0188		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Copper (Cu)-Dissolved	0.0240		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Iron (Fe)-Dissolved	0.205		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Lead (Pb)-Dissolved	0.000134		0.000090	mg/L	09-JUL-10	10-JUL-10	R1345545
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Magnesium (Mg)-Dissolved	0.317		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Manganese (Mn)-Dissolved	0.0745		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Molybdenum (Mo)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Nickel (Ni)-Dissolved	0.0288		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-JUL-10	10-JUL-10	R1345545
Potassium (K)-Dissolved	0.191		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Rubidium (Rb)-Dissolved	0.00047		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Silicon (Si)-Dissolved	0.545		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Sodium (Na)-Dissolved	0.254		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Strontium (Sr)-Dissolved	0.00720		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tin (Sn)-Dissolved	0.00057		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Titanium (Ti)-Dissolved	0.00030		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Uranium (U)-Dissolved	0.00080		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zinc (Zn)-Dissolved	0.0168		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	09-JUL-10	10-JUL-10	R1345545
Nitrate							

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L906568-9 R09 U.S							
Sampled By: T.T on 03-JUL-10 @ 11:20							
Matrix: WATER							
Total Metals by ICP-MS							
Manganese (Mn)-Total	0.00912		0.00030	mg/L	12-JUL-10	12-JUL-10	R1352104
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Phosphorus (P)-Total	<0.20		0.20	mg/L	12-JUL-10	12-JUL-10	R1352104
Potassium (K)-Total	0.281		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Rubidium (Rb)-Total	0.00037		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Selenium (Se)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Silicon (Si)-Total	0.252		0.050	mg/L	12-JUL-10	12-JUL-10	R1352104
Silver (Ag)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Sodium (Na)-Total	1.02		0.030	mg/L	12-JUL-10	12-JUL-10	R1352104
Strontium (Sr)-Total	0.0243		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Thorium (Th)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tin (Sn)-Total	0.00065		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Titanium (Ti)-Total	0.00152		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Tungsten (W)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Uranium (U)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Vanadium (V)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	12-JUL-10	12-JUL-10	R1352104
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0100		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Barium (Ba)-Dissolved	0.00254		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-JUL-10	10-JUL-10	R1345545
Calcium (Ca)-Dissolved	4.39		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Copper (Cu)-Dissolved	0.00149		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Iron (Fe)-Dissolved	0.023		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-JUL-10	10-JUL-10	R1345545
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Magnesium (Mg)-Dissolved	1.19		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Manganese (Mn)-Dissolved	0.00154		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Molybdenum (Mo)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Nickel (Ni)-Dissolved	0.00081		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-JUL-10	10-JUL-10	R1345545
Potassium (K)-Dissolved	0.245		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Rubidium (Rb)-Dissolved	0.00025		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Silicon (Si)-Dissolved	0.313		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Sodium (Na)-Dissolved	0.911		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Strontium (Sr)-Dissolved	0.0221		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545

* 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
L906568-9	R09 U.S							
Sampled By:	T.T on 03-JUL-10 @ 11:20							
Matrix:	WATER							
Dissolved Metals by ICP-MS								
Thallium (Tl)-Dissolved	<0.00010			0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Thorium (Th)-Dissolved	<0.00010			0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tin (Sn)-Dissolved	0.00039			0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Titanium (Ti)-Dissolved	<0.00020			0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Tungsten (W)-Dissolved	<0.0010			0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Uranium (U)-Dissolved	<0.00010			0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Vanadium (V)-Dissolved	<0.00020			0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zinc (Zn)-Dissolved	<0.0020			0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zirconium (Zr)-Dissolved	<0.00040			0.00040	mg/L	09-JUL-10	10-JUL-10	R1345545
Nitrate								
Nitrate (NO3) - Soluble	<0.050			0.050	mg/L		21-JUL-10	
Nitrate + Nitrite Soluble								
Nitrate+Nitrite-N - Soluble	<0.050			0.050	mg/L		20-JUL-10	R1387183
Nitrite								
Nitrite-N Soluble	<0.010			0.010	mg/L		09-JUL-10	R1345103
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)	16.2			1.0	mg/L		12-JUL-10	R1350443
Bicarbonate (HCO3)	19.8			2.0	mg/L		12-JUL-10	R1350443
Carbonate (CO3)	<0.60			0.60	mg/L		12-JUL-10	R1350443
Hydroxide (OH)	<0.40			0.40	mg/L		12-JUL-10	R1350443
Conductivity								
Conductivity	41.1			0.40	umhos/cm		09-JUL-10	R1344583
pH								
pH	7.35			0.10	pH units		09-JUL-10	R1344583
L906568-10	R09 D.S							
Sampled By:	T.T on 03-JUL-10 @ 11:30							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia (NH3) - Soluble	<0.050			0.050	mg/L		26-JUL-10	R1401703
Chloride (Cl) - Soluble	1.28			0.40	mg/L		16-JUL-10	R1371463
Dissolved Organic Carbon	3.5			1.0	mg/L		10-JUL-10	R1368626
Fluoride (F) - Soluble	<0.10			0.10	mg/L		13-JUL-10	R1353203
Mercury (Hg)-Total	<0.000050			0.000050	mg/L	16-JUL-10	16-JUL-10	R1389507
Ortho Phosphorus Soluble As P	<0.010	DLA		0.010	mg/L		14-JUL-10	R1367423
Phosphorus, Total	<0.010	DLA		0.010	mg/L		14-JUL-10	R1367385
Sulphate (SO4) - Soluble	4.7			2.0	mg/L		16-JUL-10	R1375663
Total Dissolved Solids	16.0			5.0	mg/L		12-JUL-10	R1353684
Total Kjeldahl Nitrogen	<0.20			0.20	mg/L	09-JUL-10	12-JUL-10	R1349903
Total Organic Carbon	3.4			1.0	mg/L		10-JUL-10	R1368626
Total Suspended Solids	2.4			2.0	mg/L		12-JUL-10	R1353684
Turbidity	0.50			0.10	NTU		09-JUL-10	R1345583
Total Metals by ICP-MS								
Aluminum (Al)-Total	0.0357			0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Antimony (Sb)-Total	<0.00020			0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Arsenic (As)-Total	0.00022			0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Barium (Ba)-Total	0.00301			0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Beryllium (Be)-Total	<0.00020			0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Bismuth (Bi)-Total	<0.00020			0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L906568-10 R09 D.S							
Sampled By: T.T on 03-JUL-10 @ 11:30							
Matrix: WATER							
Total Metals by ICP-MS							
Boron (B)-Total	<0.010		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	12-JUL-10	12-JUL-10	R1352104
Calcium (Ca)-Total	4.70		0.10	mg/L	12-JUL-10	12-JUL-10	R1352104
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Copper (Cu)-Total	0.00176		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Iron (Fe)-Total	0.103		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Lead (Pb)-Total	0.000092		0.000090	mg/L	12-JUL-10	12-JUL-10	R1352104
Lithium (Li)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Magnesium (Mg)-Total	1.27		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Manganese (Mn)-Total	0.00958		0.00030	mg/L	12-JUL-10	12-JUL-10	R1352104
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Phosphorus (P)-Total	<0.20		0.20	mg/L	12-JUL-10	12-JUL-10	R1352104
Potassium (K)-Total	0.274		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Rubidium (Rb)-Total	0.00031		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Selenium (Se)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Silicon (Si)-Total	0.230		0.050	mg/L	12-JUL-10	12-JUL-10	R1352104
Silver (Ag)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Sodium (Na)-Total	0.994		0.030	mg/L	12-JUL-10	12-JUL-10	R1352104
Strontium (Sr)-Total	0.0240		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Thorium (Th)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tin (Sn)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Titanium (Ti)-Total	0.00096		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Tungsten (W)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Uranium (U)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Vanadium (V)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	12-JUL-10	12-JUL-10	R1352104
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0102		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Barium (Ba)-Dissolved	0.00256		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-JUL-10	10-JUL-10	R1345545
Calcium (Ca)-Dissolved	4.55		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Copper (Cu)-Dissolved	0.00155		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Iron (Fe)-Dissolved	0.026		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-JUL-10	10-JUL-10	R1345545
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Magnesium (Mg)-Dissolved	1.23		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Manganese (Mn)-Dissolved	0.00116		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L906568-11 R15 U.S							
Sampled By: T.T on 03-JUL-10 @ 12:20							
Matrix: WATER							
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	09-JUL-10	12-JUL-10	R1349903
Total Organic Carbon	2.7		1.0	mg/L		10-JUL-10	R1368626
Total Suspended Solids	2.0		2.0	mg/L		12-JUL-10	R1353684
Turbidity	0.62		0.10	NTU		09-JUL-10	R1345583
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0471		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Arsenic (As)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Barium (Ba)-Total	0.00266		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Boron (B)-Total	<0.010		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	12-JUL-10	12-JUL-10	R1352104
Calcium (Ca)-Total	0.90		0.10	mg/L	12-JUL-10	12-JUL-10	R1352104
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Copper (Cu)-Total	0.00127		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Iron (Fe)-Total	0.059		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Lead (Pb)-Total	<0.000090		0.000090	mg/L	12-JUL-10	12-JUL-10	R1352104
Lithium (Li)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Magnesium (Mg)-Total	0.553		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Manganese (Mn)-Total	0.00308		0.00030	mg/L	12-JUL-10	12-JUL-10	R1352104
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Phosphorus (P)-Total	<0.20		0.20	mg/L	12-JUL-10	12-JUL-10	R1352104
Potassium (K)-Total	0.390		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Rubidium (Rb)-Total	0.00058		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Selenium (Se)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Silicon (Si)-Total	0.180		0.050	mg/L	12-JUL-10	12-JUL-10	R1352104
Silver (Ag)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Sodium (Na)-Total	0.728		0.030	mg/L	12-JUL-10	12-JUL-10	R1352104
Strontium (Sr)-Total	0.00653		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Thorium (Th)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tin (Sn)-Total	0.00050		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Titanium (Ti)-Total	0.00139		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Tungsten (W)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Uranium (U)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Vanadium (V)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	12-JUL-10	12-JUL-10	R1352104
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0179		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Barium (Ba)-Dissolved	0.00218		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-JUL-10	10-JUL-10	R1345545

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L906568-12 R15 D.S							
Sampled By: T.T on 03-JUL-10 @ 12:30							
Matrix: WATER							
Ammonia (NH3) - Soluble	<0.050		0.050	mg/L		26-JUL-10	R1401703
Chloride (Cl) - Soluble	0.92		0.40	mg/L		16-JUL-10	R1371463
Dissolved Organic Carbon	2.7		1.0	mg/L		10-JUL-10	R1368626
Fluoride (F) - Soluble	<0.10		0.10	mg/L		13-JUL-10	R1353203
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	16-JUL-10	16-JUL-10	R1389507
Ortho Phosphorus Soluble As P	<0.010	DLA	0.010	mg/L		14-JUL-10	R1367423
Phosphorus, Total	<0.010	DLA	0.010	mg/L		14-JUL-10	R1367385
Sulphate (SO4) - Soluble	3.1		2.0	mg/L		16-JUL-10	R1375663
Total Dissolved Solids	<5.0		5.0	mg/L		12-JUL-10	R1353684
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	09-JUL-10	12-JUL-10	R1349903
Total Organic Carbon	2.7		1.0	mg/L		10-JUL-10	R1368626
Total Suspended Solids	2.0		2.0	mg/L		12-JUL-10	R1353684
Turbidity	0.59		0.10	NTU		09-JUL-10	R1345583
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0390		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Antimony (Sb)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Arsenic (As)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Barium (Ba)-Total	0.00268		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Beryllium (Be)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Bismuth (Bi)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Boron (B)-Total	<0.010		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cadmium (Cd)-Total	<0.000010		0.000010	mg/L	12-JUL-10	12-JUL-10	R1352104
Calcium (Ca)-Total	0.87		0.10	mg/L	12-JUL-10	12-JUL-10	R1352104
Cesium (Cs)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Chromium (Cr)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Cobalt (Co)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Copper (Cu)-Total	0.00117		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Iron (Fe)-Total	0.038		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Lead (Pb)-Total	<0.000090		0.000090	mg/L	12-JUL-10	12-JUL-10	R1352104
Lithium (Li)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Magnesium (Mg)-Total	0.524		0.010	mg/L	12-JUL-10	12-JUL-10	R1352104
Manganese (Mn)-Total	0.00199		0.00030	mg/L	12-JUL-10	12-JUL-10	R1352104
Molybdenum (Mo)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Nickel (Ni)-Total	<0.0020		0.0020	mg/L	12-JUL-10	12-JUL-10	R1352104
Phosphorus (P)-Total	<0.20		0.20	mg/L	12-JUL-10	12-JUL-10	R1352104
Potassium (K)-Total	0.383		0.020	mg/L	12-JUL-10	12-JUL-10	R1352104
Rubidium (Rb)-Total	0.00059		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Selenium (Se)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Silicon (Si)-Total	0.159		0.050	mg/L	12-JUL-10	12-JUL-10	R1352104
Silver (Ag)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Sodium (Na)-Total	0.689		0.030	mg/L	12-JUL-10	12-JUL-10	R1352104
Strontium (Sr)-Total	0.00661		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Thorium (Th)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tin (Sn)-Total	0.00051		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Titanium (Ti)-Total	0.00088		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Tungsten (W)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Uranium (U)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Vanadium (V)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Zinc (Zn)-Total	<0.0050		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104

* 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
L906568-12 R15 D.S							
Sampled By: T.T on 03-JUL-10 @ 12:30							
Matrix: WATER							
Total Metals by ICP-MS							
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	12-JUL-10	12-JUL-10	R1352104
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.0194		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Barium (Ba)-Dissolved	0.00227		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Cadmium (Cd)-Dissolved	<0.000010		0.000010	mg/L	09-JUL-10	10-JUL-10	R1345545
Calcium (Ca)-Dissolved	0.843		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Cesium (Cs)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Cobalt (Co)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Copper (Cu)-Dissolved	0.00110		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Iron (Fe)-Dissolved	0.016		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Lead (Pb)-Dissolved	<0.000090		0.000090	mg/L	09-JUL-10	10-JUL-10	R1345545
Lithium (Li)-Dissolved	<0.0020		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Magnesium (Mg)-Dissolved	0.538		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Manganese (Mn)-Dissolved	0.00086		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Molybdenum (Mo)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Nickel (Ni)-Dissolved	0.00041		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-JUL-10	10-JUL-10	R1345545
Potassium (K)-Dissolved	0.386		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Rubidium (Rb)-Dissolved	0.00048		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Silicon (Si)-Dissolved	0.234		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Sodium (Na)-Dissolved	0.687		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Strontium (Sr)-Dissolved	0.00567		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tin (Sn)-Dissolved	0.00041		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Titanium (Ti)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Uranium (U)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zinc (Zn)-Dissolved	<0.0020		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	09-JUL-10	10-JUL-10	R1345545
Nitrate							
Nitrate (NO3) - Soluble	<0.050		0.050	mg/L		31-JUL-10	
Nitrate + Nitrite Soluble							
Nitrate+Nitrite-N - Soluble	<0.050		0.050	mg/L		28-JUL-10	R1408231
Nitrite							
Nitrite-N Soluble	<0.010		0.010	mg/L		09-JUL-10	R1345103
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	5.6		1.0	mg/L		12-JUL-10	R1350443
Bicarbonate (HCO3)	6.8		2.0	mg/L		12-JUL-10	R1350443
Carbonate (CO3)	<0.60		0.60	mg/L		12-JUL-10	R1350443

* 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
L906568-13 Q16							
Sampled By: T.T on 03-JUL-10 @ 13:00							
Matrix: WATER							
Total Metals by ICP-MS							
Strontium (Sr)-Total	0.0627		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tellurium (Te)-Total	<0.00020		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Thallium (Tl)-Total	<0.00010		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Thorium (Th)-Total	0.00030		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Tin (Sn)-Total	<0.00020		0.00020	mg/L	12-JUL-10	14-JUL-10	R1363763
Titanium (Ti)-Total	0.0155		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Tungsten (W)-Total	<0.0010		0.0010	mg/L	12-JUL-10	12-JUL-10	R1352104
Uranium (U)-Total	0.00271		0.00010	mg/L	12-JUL-10	12-JUL-10	R1352104
Vanadium (V)-Total	0.00067		0.00020	mg/L	12-JUL-10	12-JUL-10	R1352104
Zinc (Zn)-Total	0.0518		0.0050	mg/L	12-JUL-10	12-JUL-10	R1352104
Zirconium (Zr)-Total	<0.00040		0.00040	mg/L	12-JUL-10	12-JUL-10	R1352104
Dissolved Metals by ICP-MS							
Aluminum (Al)-Dissolved	0.124		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Antimony (Sb)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Arsenic (As)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Barium (Ba)-Dissolved	0.0189		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Beryllium (Be)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Bismuth (Bi)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Boron (B)-Dissolved	<0.010		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Cadmium (Cd)-Dissolved	0.000315		0.000010	mg/L	09-JUL-10	10-JUL-10	R1345545
Calcium (Ca)-Dissolved	12.5		0.050	mg/L	09-JUL-10	10-JUL-10	R1345545
Cesium (Cs)-Dissolved	0.00012		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Chromium (Cr)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Cobalt (Co)-Dissolved	0.00571		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Copper (Cu)-Dissolved	0.00168		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Iron (Fe)-Dissolved	0.273		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Lead (Pb)-Dissolved	0.000670		0.000090	mg/L	09-JUL-10	10-JUL-10	R1345545
Lithium (Li)-Dissolved	0.0037		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Magnesium (Mg)-Dissolved	3.09		0.010	mg/L	09-JUL-10	10-JUL-10	R1345545
Manganese (Mn)-Dissolved	0.192		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Molybdenum (Mo)-Dissolved	0.00181		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Nickel (Ni)-Dissolved	0.0140		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Phosphorus (P)-Dissolved	<0.10		0.10	mg/L	09-JUL-10	10-JUL-10	R1345545
Potassium (K)-Dissolved	3.67		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Rubidium (Rb)-Dissolved	0.00574		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Selenium (Se)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Silicon (Si)-Dissolved	1.14		0.050	mg/L	09-JUL-10	14-JUL-10	R1363763
Silver (Ag)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Sodium (Na)-Dissolved	2.89		0.020	mg/L	09-JUL-10	10-JUL-10	R1345545
Strontium (Sr)-Dissolved	0.0635		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tellurium (Te)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Thallium (Tl)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Thorium (Th)-Dissolved	<0.00010		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Tin (Sn)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	14-JUL-10	R1363763
Titanium (Ti)-Dissolved	0.00032		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Tungsten (W)-Dissolved	<0.0010		0.0010	mg/L	09-JUL-10	10-JUL-10	R1345545
Uranium (U)-Dissolved	0.00080		0.00010	mg/L	09-JUL-10	10-JUL-10	R1345545
Vanadium (V)-Dissolved	<0.00020		0.00020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zinc (Zn)-Dissolved	0.0442		0.0020	mg/L	09-JUL-10	10-JUL-10	R1345545
Zirconium (Zr)-Dissolved	<0.00040		0.00040	mg/L	09-JUL-10	10-JUL-10	R1345545
Nitrate							

* 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
L906568-13 Q16								
Sampled By: T.T on 03-JUL-10 @ 13:00								
Matrix: WATER								
Nitrate								
Nitrate (NO3) - Soluble		1.44		0.050	mg/L		23-JUL-10	
Nitrate + Nitrite Soluble								
Nitrate+Nitrite-N - Soluble		1.44		0.050	mg/L		22-JUL-10	R1398912
Nitrite								
Nitrite-N Soluble		<0.010		0.010	mg/L		09-JUL-10	R1345103
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		8.3		1.0	mg/L		12-JUL-10	R1350443
Bicarbonate (HCO3)		10.1		2.0	mg/L		12-JUL-10	R1350443
Carbonate (CO3)		<0.60		0.60	mg/L		12-JUL-10	R1350443
Hydroxide (OH)		<0.40		0.40	mg/L		12-JUL-10	R1350443
Conductivity								
Conductivity		138		0.40	umhos/cm		09-JUL-10	R1344583
pH								
pH		6.82		0.10	pH units		09-JUL-10	R1344583

* 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	L906568-1, -10, -11, -12, -13, -2, -3, -4, -5, -6, -8, -9

Sample Parameter Qualifier Key:

Qualifier	Description
DLA	Detection Limit Adjusted For required dilution

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
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ALK-TOT-WP	Water	Alkalinity	APHA 2320B
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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.

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

CL-SOL-LOW-WP	Water	Chloride Soluble	APHA4500/LACHAT LR
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The thiocyanate ion is liberated from mercuric thiocyanate by the formation of soluble mercuric chloride. In the presence of ferric ion, the free thiocyanate forms a highly colored ferric thiocyanate complex. The intensity of the complex is proportional to the original chloride concentration and is measured by a colorimeter at 480 nm.

EC-WP	Water	Conductivity	APHA 2510B
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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-NO3-SOL-WP	Water	Nitrate	CALCULATED-S
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F-SOL-WP	Water	Fluoride Soluble	APHA4500/LACHAT
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Fluoride - Ion selective electrode

HG-T-CVAF-WP	Water	Mercury Total	EPA245.7 V2.0
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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
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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.			
N2N3-SOL-WP	Water	Nitrate + Nitrite Soluble	APHA4500;2005/LACHAT;1997,1999
NH3-SOL-WP	Water	Ammonia Soluble	LACHAT;2003
Ammonia - Colourimetric using Salicylate-nitroprusside and hypochlorite, in an alkaline phosphate buffer.			
NO2-SOL-WP	Water	Nitrite	Lachat Quikchem 10-107-04-1-F Rev 1997
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.			
SO4-SOL-LOW-WP	Water	Sulphate Soluble	APHA4500/LACHAT LR
The sample reacts with barium chloride in an acidic medium and precipitates the sulphate ion SO ₄ ²⁻ , which forms barium sulphate crystals of uniform size. The turbidity produced by the sulphate suspension is measured by a colorimeter at 420 nm.			
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**
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** 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

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)	
Phone: 867 793 4610x6759 Fax:		Email 2: meadowbank.aquatictech@agnico-eagle.com		☐ Emergency Service (<1 Day / Weekend) - Contact ALS	
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: AV			
Address: email electronic invoice to rvanengen@agnico-eagle.com		PO/A/E:			
Sample		Legal Site Description:			
Phone:		Quote #: Q21514			
Fax:		ALS Contact: Christine Herrod			
Lab Work Order # (lab use only)		Sampler (Initials): J.T.			
Sample #	Sample Identification (This description will appear on the report)	Date dd-mm-yy	Time hh:mm	Sample Type (Select from drop-down list)	
1	R02 U.S	03/07/10	8:48am	Water	
2	R02 D.S		7:51am		
3	R02 D.S Duplicate		8:48am		
4	R06 U.S		9:10am		
5	R06 D.S		9:20am		
6	Q4		10:18am		
7	Q4 Duplicate		10:18am		
					TOC/DOC
					Metals & Hg (total)
					Dissolved Metals
					P-Total & Ortho
					pH, EC, Alkalinity
					Turbidity
					TSS, TDS
					TKN, NH3
					Hazardous?
					Highly Contaminated?
					Number of Containers
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:	Date & Time:	Received By:	Date & Time:	Sample Condition (lab use only): Temperature: 20.9 Samples Received in Good Condition? Y / N (if no provided details)	
Ryan V	02/03/10	Sm	9-7-10		
Relinquished By:	Date & Time:	Received By:	Date & Time:		

L906568



ALS Laboratory Group
HEAVY METALS & TESTING SERVICES

Environmental Division

Chain of Custody / Analytical Request Form
Canada Toll Free: 1 800 668 9878
www.alsglobal.com

COC #

Page 2 of 2

Report to: Company: Agnico-Eagle Mines Ltd. Contact: Ryan VanEngen Address: Meadowbank Division PO Box 540 Baker Lake Nun. Phone: 867 793 4610x6759 Fax:		Report Format / Distribution ☒ Standard ☐ Other ☒ PDF ☐ Excel ☐ Fax Email 1: rvanengen@agnico-eagle.com Email 2: meadowbank.aquatictech@agnico-eagle.com		Service Requested: ☒ Regular Service (Default) ☐ Rush Service (2-3 Days) ☐ Priority Service (1 Day or ASAP) ☐ Emergency Service (<1 Day / Wkend) - Contact ALS	
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:		Client / Project Information: Job #: Meadowbank: AV PO/AFE: Legal Site Description: Quote #: Q21514		Analysis Request Indicate Bottles: Filtered / Preserved (F/P) → → →	
ALS Work Order # (This description will appear on the report) Q27 R09 US R09 DS R15 US R15 DS Q16		ALS Contact: Christine Herrod Date: 03/07/10 Time: 11:10am 11:28am 11:30am 12:20pm 12:30pm 1:00pm		Sample Type (Select from drop-down list) water	
Sample Identification (This description will appear on the report)		Date dd-mm-yy		Time hh:mm	
Sample		Sampler (Initials):		Number of Containers	
Phone:		Fax:		Highly Contaminated?	
Company:		Contact:		Hazardous?	
Address:		Legal Site Description:		TKN, NH3	
Sample:		Quote #:		TSS, TDS	
Phone:		ALS Work Order #		Turbidity	
Company:		Contact:		pH, EC, Alkalinity	
Address:		Legal Site Description:		P-Total & Ortho	
Sample:		Quote #:		Dissolved Metals	
Phone:		ALS Work Order #		Metals & Hg (total)	
Company:		Contact:		TOC/DOC	
Address:		Legal Site Description:		Cl, F, NO2, NO3, SO4	
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Address:		Legal Site Description:		P-Total & Ortho	
Sample:		Quote #:		Dissolved Metals	



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 13:27 (MT)

Version: FINAL

Lab Work Order #: L918303

Date Received: 10-AUG-10

Project P.O. #: NOT SUBMITTED

Job Reference: MEADOWBANK

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.

Manitoba Technology Centre Ltd.

Part of the **ALS Laboratory Group**

1329 Niakwa Road East, Unit 12, Winnipeg, MB R2J 3T4

Phone: +1 204 255 9720 Fax: +1 204 255 9721 www.alsglobal.com

A Campbell Brothers Limited Company

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L918303-1 R02 US							
Sampled By: CLIENT on 03-AUG-10							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		13-AUG-10	R1439777
Hardness (as CaCO3)	13.6		0.30	mg/L		12-AUG-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	13-AUG-10	13-AUG-10	R1441342
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 Suspended Solids	<2.0		2.0	mg/L		12-AUG-10	R1439124
Turbidity	0.44		0.10	NTU		10-AUG-10	R1434143
Anions scan (IC)							
Chloride	17.1		2.5	mg/L		19-AUG-10	R1445153
Fluoride	<0.50		0.50	mg/L		19-AUG-10	R1445153
Nitrite-N	<0.25		0.25	mg/L		19-AUG-10	R1445153
Nitrate-N	<0.25		0.25	mg/L		19-AUG-10	R1445153
Sulfate	5.7		2.5	mg/L		19-AUG-10	R1445153
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0118		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Antimony (Sb)-Total	0.00047		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Arsenic (As)-Total	0.00021		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total	0.0119		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	4.16		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	0.00209		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.056		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total	0.000357		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	0.771		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.00378		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	0.485		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00051		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	0.197		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	1.86		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.0190		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	0.00185		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	<0.00010		0.00010	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
L918303-1R02 US Sampled By: CLIENT on 03-AUG-10 Matrix: WATER Total Metals by ICP-MS Vanadium (V)-Total Zinc (Zn)-Total Zirconium (Zr)-Total pH, Conductivity and Total Alkalinity Alkalinity Alkalinity, Total (as CaCO3) Bicarbonate (HCO3) Carbonate (CO3) Hydroxide (OH) Conductivity Conductivity pH pH	<0.00020 <0.0050 <0.00040 13.6 16.5 <0.60 <0.40 40.9 7.46		0.00020 0.0050 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 umhos/cm pH units	11-AUG-10 11-AUG-10 11-AUG-10 10-AUG-10 10-AUG-10	11-AUG-10 11-AUG-10 11-AUG-10 12-AUG-10 12-AUG-10 12-AUG-10 12-AUG-10 10-AUG-10 10-AUG-10	R1436563 R1436563 R1436563 R1438777 R1438777 R1438777 R1438777 R1428944 R1428944
L918303-2R02 DS Sampled By: CLIENT on 03-AUG-10 Matrix: WATER Miscellaneous Parameters Ammonia as N Hardness (as CaCO3) Mercury (Hg)-Total Ortho Phosphorus Soluble As P Phosphorus, Total Total Dissolved Solids Total Kjeldahl Nitrogen Total Suspended Solids Turbidity Anions scan (IC) Chloride Fluoride Nitrite-N Nitrate-N Sulfate 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 Calcium (Ca)-Total Cesium (Cs)-Total Chromium (Cr)-Total Cobalt (Co)-Total Copper (Cu)-Total Iron (Fe)-Total Lead (Pb)-Total Lithium (Li)-Total Magnesium (Mg)-Total	<0.050 13.2 <0.000050 <0.010 <0.010 <5.0 <0.20 <2.0 0.37 3.39 <0.10 <0.050 <0.050 1.14 0.0280 <0.00020 <0.00020 0.0115 <0.00020 <0.00020 <0.010 <0.000010 4.08 <0.00010 <0.0010 <0.00020 0.00144 0.042 0.000094 <0.0020 0.739	DLA DLA	0.050 0.30 0.000050 0.010 0.010 5.0 0.20 2.0 0.10 0.50 0.10 0.050 0.050 0.50 0.0050 0.00020 0.00020 0.00020 0.00020 0.00020 0.010 0.000010 0.10 0.00010 0.0010 0.00020 0.00020 0.020 0.000090 0.0020 0.010	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 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	13-AUG-10 12-AUG-10 13-AUG-10 11-AUG-10 12-AUG-10 17-AUG-10 10-AUG-10 12-AUG-10 12-AUG-10 10-AUG-10 19-AUG-10 19-AUG-10 19-AUG-10 19-AUG-10 19-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10	13-AUG-10 12-AUG-10 13-AUG-10 11-AUG-10 12-AUG-10 17-AUG-10 10-AUG-10 12-AUG-10 12-AUG-10 10-AUG-10 19-AUG-10 19-AUG-10 19-AUG-10 19-AUG-10 19-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10	R1439777 R1441342 R1438945 R1438970 R1442166 R1439166 R1439124 R1434143 R1445153 R1445153 R1445153 R1445153 R1445153 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563

* 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
L918303-3 R02 DS DUP Sampled By: CLIENT on 03-AUG-10 Matrix: WATER							
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0105		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	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total	0.0115		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	4.15		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	0.00163		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.045		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total	0.000149		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	0.751		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.00266		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	0.497		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00052		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	0.203		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	1.83		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.0190		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	0.00050		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.00029		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	<0.00010		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
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	13.7		1.0	mg/L		12-AUG-10	R1438777
Bicarbonate (HCO3)	16.7		2.0	mg/L		12-AUG-10	R1438777
Carbonate (CO3)	<0.60		0.60	mg/L		12-AUG-10	R1438777
Hydroxide (OH)	<0.40		0.40	mg/L		12-AUG-10	R1438777
Conductivity							
Conductivity	41.5		0.40	umhos/cm		10-AUG-10	R1428944
pH							
pH	7.44		0.10	pH units		10-AUG-10	R1428944
L918303-4 R06 US Sampled By: CLIENT on 03-AUG-10 Matrix: WATER							

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L918303-4 R06 US							
Sampled By: CLIENT on 03-AUG-10							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		13-AUG-10	R1439777
Hardness (as CaCO3)	11.2		0.30	mg/L		12-AUG-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	13-AUG-10	13-AUG-10	R1441342
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	25.0		5.0	mg/L		17-AUG-10	R1442166
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	10-AUG-10	12-AUG-10	R1439166
Total Suspended Solids	2.0		2.0	mg/L		12-AUG-10	R1439124
Turbidity	0.67		0.10	NTU		10-AUG-10	R1434143
Anions scan (IC)							
Chloride	3.75		0.50	mg/L		19-AUG-10	R1445153
Fluoride	<0.10		0.10	mg/L		19-AUG-10	R1445153
Nitrite-N	<0.050		0.050	mg/L		19-AUG-10	R1445153
Nitrate-N	<0.050		0.050	mg/L		19-AUG-10	R1445153
Sulfate	1.56		0.50	mg/L		19-AUG-10	R1445153
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0185		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	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total	0.00311		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	3.01		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	0.00148		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.037		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total	0.000133		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	0.903		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.00192		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	0.396		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00039		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	0.220		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	1.80		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.0133		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	0.00053		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.00035		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	<0.00010		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L918303-6R09 US Sampled By: CLIENT on 03-AUG-10 Matrix: WATER							
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0188		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	0.00039		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total	0.00533		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	7.98		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	0.00073		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Copper (Cu)-Total	0.00261		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	<0.000090		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	2.21		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.109		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	0.0022		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	0.00062		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	1.16		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	1.78		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.0371		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	0.00060		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.00038		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	<0.00010		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
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	28.2		1.0	mg/L		12-AUG-10	R1438777
Bicarbonate (HCO3)	34.3		2.0	mg/L		12-AUG-10	R1438777
Carbonate (CO3)	<0.60		0.60	mg/L		12-AUG-10	R1438777
Hydroxide (OH)	<0.40		0.40	mg/L		12-AUG-10	R1438777
Conductivity							
Conductivity	72.6		0.40	umhos/cm		10-AUG-10	R1428944
pH							
pH	7.50		0.10	pH units		10-AUG-10	R1428944
L918303-7R09 DS Sampled By: CLIENT on 03-AUG-10 Matrix: WATER							

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L918303-7 R09 DS							
Sampled By: CLIENT on 03-AUG-10							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		13-AUG-10	R1439777
Hardness (as CaCO3)	26.2		0.30	mg/L		12-AUG-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	13-AUG-10	13-AUG-10	R1441342
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	13.3		5.0	mg/L		17-AUG-10	R1442166
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	10-AUG-10	12-AUG-10	R1439166
Total Suspended Solids	<2.0		2.0	mg/L		12-AUG-10	R1439124
Turbidity	<0.10		0.10	NTU		10-AUG-10	R1434143
Anions scan (IC)							
Chloride	1.98		0.50	mg/L		19-AUG-10	R1445153
Fluoride	<0.10		0.10	mg/L		19-AUG-10	R1445153
Nitrite-N	<0.050		0.050	mg/L		19-AUG-10	R1445153
Nitrate-N	<0.050		0.050	mg/L		19-AUG-10	R1445153
Sulfate	3.88		0.50	mg/L		19-AUG-10	R1445153
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0153		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	0.00033		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total	0.00420		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	7.28		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	0.00203		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.103		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	1.96		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.0102		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	0.387		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00045		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	1.01		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	1.53		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.0358		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	0.00033		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.00037		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	<0.00010		0.00010	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
L918303-7R09 DS Sampled By: CLIENT on 03-AUG-10 Matrix: WATER Total Metals by ICP-MS Vanadium (V)-Total Zinc (Zn)-Total Zirconium (Zr)-Total pH, Conductivity and Total Alkalinity Alkalinity Alkalinity, Total (as CaCO3) Bicarbonate (HCO3) Carbonate (CO3) Hydroxide (OH) Conductivity Conductivity pH pH	<0.00020 <0.0050 <0.00040 25.6 31.2 <0.60 <0.40 66.2 7.72		0.00020 0.0050 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 umhos/cm pH units	11-AUG-10 11-AUG-10 11-AUG-10 10-AUG-10 10-AUG-10	11-AUG-10 11-AUG-10 11-AUG-10 12-AUG-10 12-AUG-10 12-AUG-10 12-AUG-10 10-AUG-10 10-AUG-10	R1436563 R1436563 R1436563 R1438777 R1438777 R1438777 R1438777 R1428944 R1428944
L918303-8R15 US Sampled By: CLIENT on 03-AUG-10 Matrix: WATER Miscellaneous Parameters Ammonia as N Hardness (as CaCO3) Mercury (Hg)-Total Ortho Phosphorus Soluble As P Phosphorus, Total Total Dissolved Solids Total Kjeldahl Nitrogen Total Suspended Solids Turbidity Anions scan (IC) Chloride Fluoride Nitrite-N Nitrate-N Sulfate 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 Calcium (Ca)-Total Cesium (Cs)-Total Chromium (Cr)-Total Cobalt (Co)-Total Copper (Cu)-Total Iron (Fe)-Total Lead (Pb)-Total Lithium (Li)-Total Magnesium (Mg)-Total	<0.050 5.12 <0.000050 <0.010 <0.010 <5.0 <0.20 <2.0 0.45 1.12 <0.10 <0.050 <0.050 1.02 0.0274 <0.00020 <0.00020 0.00324 <0.00020 <0.00020 <0.00020 <0.010 <0.000010 1.02 <0.00010 <0.0010 <0.00020 0.00138 0.037 <0.000090 <0.0020 0.627	DLA DLA	0.050 0.30 0.000050 0.010 0.010 5.0 0.20 2.0 0.10 0.50 0.10 0.050 0.050 0.50 0.0050 0.00020 0.00020 0.00020 0.00020 0.00020 0.00020 0.010 0.000010 0.10 0.00010 0.0010 0.00020 0.00020 0.020 0.000090 0.0020 0.010	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 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	13-AUG-10 13-AUG-10 10-AUG-10 10-AUG-10 10-AUG-10	13-AUG-10 12-AUG-10 13-AUG-10 11-AUG-10 12-AUG-10 17-AUG-10 12-AUG-10 12-AUG-10 10-AUG-10 19-AUG-10 19-AUG-10 19-AUG-10 19-AUG-10 19-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10 11-AUG-10	R1439777 R1441342 R1438945 R1438970 R1442166 R1439166 R1439124 R1434143 R1445153 R1445153 R1445153 R1445153 R1445153 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563 R1436563

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L918303-9 R15 DS Sampled By: CLIENT on 03-AUG-10 Matrix: WATER							
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0293		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	<0.00020		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total	0.00357		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	0.000011		0.000010	mg/L	11-AUG-10	11-AUG-10	R1436563
Calcium (Ca)-Total	1.07		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	0.00164		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.040		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total	0.000166		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	0.640		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.00279		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	0.511		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	0.260		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	0.912		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.00745		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	0.00070		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	<0.00010		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	0.0051		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
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	6.6		1.0	mg/L		12-AUG-10	R1438777
Bicarbonate (HCO3)	8.0		2.0	mg/L		12-AUG-10	R1438777
Carbonate (CO3)	<0.60		0.60	mg/L		12-AUG-10	R1438777
Hydroxide (OH)	<0.40		0.40	mg/L		12-AUG-10	R1438777
Conductivity							
Conductivity	20.1		0.40	umhos/cm		10-AUG-10	R1428944
pH							
pH	6.97		0.10	pH units		10-AUG-10	R1428944
L918303-10 Q4 Sampled By: CLIENT on 03-AUG-10 Matrix: WATER							

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

ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L918303-10 Q4							
Sampled By: CLIENT on 03-AUG-10							
Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		13-AUG-10	R1439777
Hardness (as CaCO3)	47.4		0.30	mg/L		12-AUG-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	13-AUG-10	13-AUG-10	R1441342
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	27.3		5.0	mg/L		17-AUG-10	R1442166
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L	10-AUG-10	12-AUG-10	R1439166
Total Suspended Solids	2.8		2.0	mg/L		12-AUG-10	R1439124
Turbidity	7.01		0.10	NTU		10-AUG-10	R1434143
Anions scan (IC)							
Chloride	1.20		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	1.88		0.050	mg/L		23-AUG-10	R1448147
Sulfate	4.53		0.50	mg/L		23-AUG-10	R1448147
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.368		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	0.00066		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total	0.0205		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	14.6		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	0.00025		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Copper (Cu)-Total	0.00434		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.386		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total	0.000391		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	2.67		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.00655		0.00030	mg/L	11-AUG-10	11-AUG-10	R1436563
Molybdenum (Mo)-Total	0.00078		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	1.74		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00119		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	1.84		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	3.22		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.0812		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	0.00057		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.00776		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	0.00078		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563

* 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
L918303-11 Q4 DUP								
Sampled By: CLIENT on 03-AUG-10								
Matrix: WATER								
Total Metals by ICP-MS								
Manganese (Mn)-Total		0.00627		0.00030	mg/L	11-AUG-10	11-AUG-10	R1436563
Molybdenum (Mo)-Total		0.00072		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		1.67		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total		0.00103		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		1.75		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		3.15		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total		0.0792		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		0.00014		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		0.00678		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		0.00077		0.00010	mg/L	11-AUG-10	11-AUG-10	R1436563
Vanadium (V)-Total		0.00068		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		0.00055		0.00040	mg/L	11-AUG-10	11-AUG-10	R1436563
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		44.3		1.0	mg/L		10-AUG-10	R1428944
Bicarbonate (HCO3)		54.0		2.0	mg/L		10-AUG-10	R1428944
Carbonate (CO3)		<0.60		0.60	mg/L		10-AUG-10	R1428944
Hydroxide (OH)		<0.40		0.40	mg/L		10-AUG-10	R1428944
Conductivity								
Conductivity		117		0.40	umhos/cm		10-AUG-10	R1428944
pH								
pH		8.09		0.10	pH units		10-AUG-10	R1428944
L918303-12 Q7								
Sampled By: CLIENT on 03-AUG-10								
Matrix: WATER								
Miscellaneous Parameters								
Ammonia as N		0.166		0.050	mg/L		13-AUG-10	R1439777
Hardness (as CaCO3)		21.4		0.30	mg/L		12-AUG-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	13-AUG-10	13-AUG-10	R1441342
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		25.8		5.0	mg/L		17-AUG-10	R1442166
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	10-AUG-10	12-AUG-10	R1439166
Total Suspended Solids		<2.0		2.0	mg/L		12-AUG-10	R1439124
Turbidity		1.44		0.10	NTU		10-AUG-10	R1434143
Anions scan (IC)								
Chloride		<0.50		0.50	mg/L		23-AUG-10	R1448147
Fluoride		0.13		0.10	mg/L		23-AUG-10	R1448147
Nitrite-N		<0.050		0.050	mg/L		23-AUG-10	R1448147
Nitrate-N		0.237		0.050	mg/L		23-AUG-10	R1448147
Sulfate		46.7		0.50	mg/L		23-AUG-10	R14

* 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
L918303-12 Q7							
Sampled By: CLIENT on 03-AUG-10							
Matrix: WATER							
Total Metals by ICP-MS							
Aluminum (Al)-Total	2.93		0.0050	mg/L	11-AUG-10	11-AUG-10	R1436563
Antimony (Sb)-Total	0.00033		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Arsenic (As)-Total	0.00086		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Barium (Ba)-Total	0.0462		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Beryllium (Be)-Total	0.00074		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	0.000317		0.000010	mg/L	11-AUG-10	11-AUG-10	R1436563
Calcium (Ca)-Total	5.83		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	0.106		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Copper (Cu)-Total	0.113		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Iron (Fe)-Total	0.199		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Lead (Pb)-Total	0.00177		0.000090	mg/L	11-AUG-10	11-AUG-10	R1436563
Lithium (Li)-Total	0.0066		0.0020	mg/L	11-AUG-10	11-AUG-10	R1436563
Magnesium (Mg)-Total	1.65		0.010	mg/L	11-AUG-10	11-AUG-10	R1436563
Manganese (Mn)-Total	0.460		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	0.155		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	1.07		0.020	mg/L	11-AUG-10	11-AUG-10	R1436563
Rubidium (Rb)-Total	0.00226		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	1.61		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	0.862		0.030	mg/L	11-AUG-10	11-AUG-10	R1436563
Strontium (Sr)-Total	0.0462		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	0.00013		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	0.00060		0.00020	mg/L	11-AUG-10	11-AUG-10	R1436563
Titanium (Ti)-Total	0.00130		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	0.00660		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	0.0476		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
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	<1.0		1.0	mg/L		12-AUG-10	R1438777
Bicarbonate (HCO3)	<2.0		2.0	mg/L		12-AUG-10	R1438777
Carbonate (CO3)	<0.60		0.60	mg/L		12-AUG-10	R1438777
Hydroxide (OH)	<0.40		0.40	mg/L		12-AUG-10	R1438777
Conductivity							
Conductivity	137		0.40	umhos/cm		10-AUG-10	R1428944
pH							
pH	4.07		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	L918303-1, -10, -11, -12, -2, -3, -4, -5, -6, -7, -8, -9
Duplicate	Ortho Phosphorus Soluble As P	DLA	L918303-1, -10, -11, -12, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Chloride	MS-B	L918303-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sulfate	MS-B	L918303-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sulfate	MS-B	L918303-10, -11, -12

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 HCO ₃ ⁻ and H ₂ CO ₃ 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".			
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-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-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.			
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			

Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
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orthophosphate in the sample, and is reported as phosphorous.

P-TOTAL-WP	Water	Phosphorus, Total	APHA, 1998 P-T
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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
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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
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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
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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
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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

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]

708303

[illegible]



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

Date Received: 09-SEP-10
Report Date: 21-SEP-10 08:56 (MT)
Version: FINAL

Certificate of Analysis

Lab Work Order #: L929426
Project P.O. #: NOT SUBMITTED
Job Reference: AVR
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
L929426-1 R02 US Sampled By: CLIENT on 01-SEP-10 @ 12:00 Matrix: WATER							
Miscellaneous Parameters							
Ammonia as N	<0.050		0.050	mg/L		15-SEP-10	R1467976
Hardness (as CaCO3)	18.2		0.30	mg/L		14-SEP-10	
Mercury (Hg)-Total	<0.000050		0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Nitrate and Nitrite as N	0.083		0.071	mg/L		10-SEP-10	
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 Suspended Solids	<2.0		2.0	mg/L		10-SEP-10	R1464127
Turbidity	0.29		0.10	NTU		09-SEP-10	R1462440
Anions scan (IC)							
Chloride	3.50		0.50	mg/L		09-SEP-10	R1462976
Fluoride	<0.10		0.10	mg/L		09-SEP-10	R1462976
Nitrite-N	<0.050		0.050	mg/L		09-SEP-10	R1462976
Nitrate-N	0.083		0.050	mg/L		09-SEP-10	R1462976
Sulfate	1.51		0.50	mg/L		09-SEP-10	R1462976
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0066		0.0050	mg/L	10-SEP-10	11-SEP-10	R1463946
Antimony (Sb)-Total	0.00036		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Arsenic (As)-Total	0.00028		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Barium (Ba)-Total	0.0144		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	<0.000010		0.000010	mg/L	10-SEP-10	11-SEP-10	R1463946
Calcium (Ca)-Total	5.44		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	0.00083		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Iron (Fe)-Total	0.028		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Lead (Pb)-Total	<0.000090		0.000090	mg/L	10-SEP-10	11-SEP-10	R1463946
Lithium (Li)-Total	<0.0020		0.0020	mg/L	10-SEP-10	11-SEP-10	R1463946
Magnesium (Mg)-Total	1.11		0.010	mg/L	10-SEP-10	11-SEP-10	R1463946
Manganese (Mn)-Total	0.00116		0.00030	mg/L	10-SEP-10	11-SEP-10	R1463946
Molybdenum (Mo)-Total	<0.00020		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	0.559		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Rubidium (Rb)-Total	0.00058		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	0.287		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	2.30		0.030	mg/L	10-SEP-10	11-SEP-10	R1463946
Strontium (Sr)-Total	0.0258		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	<0.00020		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

* 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
L929426-1	R02 US							
Sampled By:	CLIENT on 01-SEP-10 @ 12:00							
Matrix:	WATER							
Total Metals by ICP-MS								
Uranium (U)-Total		<0.00010		0.00010	mg/L	10-SEP-10	11-SEP-10	R1463946
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
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		16.0		1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)		19.6		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		48.3		0.40	umhos/cm		09-SEP-10	R1462485
pH								
pH		7.39		0.10	pH units		09-SEP-10	R1462485
L929426-2	R02 DS							
Sampled By:	CLIENT on 01-SEP-10 @ 11:57							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		15-SEP-10	R1467976
Hardness (as CaCO3)		14.8		0.30	mg/L		14-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Nitrate and Nitrite as N		<0.071		0.071	mg/L		10-SEP-10	
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		0.24		0.20	mg/L	09-SEP-10	14-SEP-10	R1466040
Total Suspended Solids		<2.0		2.0	mg/L		10-SEP-10	R1464127
Turbidity		0.25		0.10	NTU		09-SEP-10	R1462440
Anions scan (IC)								
Chloride		3.43		0.50	mg/L		09-SEP-10	R1462976
Fluoride		<0.10		0.10	mg/L		09-SEP-10	R1462976
Nitrite-N		<0.050		0.050	mg/L		09-SEP-10	R1462976
Nitrate-N		<0.050		0.050	mg/L		09-SEP-10	R1462976
Sulfate		1.23		0.50	mg/L		09-SEP-10	R1462976
Total Metals by ICP-MS								
Aluminum (Al)-Total		<0.0050		0.0050	mg/L	10-SEP-10	11-SEP-10	R1463946
Antimony (Sb)-Total		0.00051		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Arsenic (As)-Total		0.00025		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Barium (Ba)-Total		0.0110		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		<0.000010		0.000010	mg/L	10-SEP-10	11-SEP-10	R1463946
Calcium (Ca)-Total		4.48		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		0.00081		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Iron (Fe)-Total		0.025		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Lead (Pb)-Total		<0.000090		0.000090	mg/L	10-SEP-10	11-SEP-10	R146394

* 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
L929426-3 R02 DS DUP							
Sampled By: CLIENT on 01-SEP-10 @ 11:57							
Matrix: WATER							
Anions scan (IC)							
Nitrite-N	<0.050		0.050	mg/L		09-SEP-10	R1462976
Nitrate-N	<0.050		0.050	mg/L		09-SEP-10	R1462976
Sulfate	1.20		0.50	mg/L		09-SEP-10	R1462976
Total Metals by ICP-MS							
Aluminum (Al)-Total	<0.0050		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	0.00023		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Barium (Ba)-Total	0.0111		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	<0.000010		0.000010	mg/L	10-SEP-10	11-SEP-10	R1463946
Calcium (Ca)-Total	4.57		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	0.00071		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Iron (Fe)-Total	<0.020		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Lead (Pb)-Total	<0.000090		0.000090	mg/L	10-SEP-10	11-SEP-10	R1463946
Lithium (Li)-Total	<0.0020		0.0020	mg/L	10-SEP-10	11-SEP-10	R1463946
Magnesium (Mg)-Total	0.867		0.010	mg/L	10-SEP-10	11-SEP-10	R1463946
Manganese (Mn)-Total	0.00091		0.00030	mg/L	10-SEP-10	11-SEP-10	R1463946
Molybdenum (Mo)-Total	<0.00020		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	0.477		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Rubidium (Rb)-Total	0.00050		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	0.157		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	1.93		0.030	mg/L	10-SEP-10	11-SEP-10	R1463946
Strontium (Sr)-Total	0.0211		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	<0.00020		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	<0.00010		0.00010	mg/L	10-SEP-10	11-SEP-10	R1463946
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
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	14.2		1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)	17.4		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	43.4		0.40	umhos/cm		09-SEP-10	R1462485
pH							
pH	7.45		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
L929426-3	R02 DS DUP							
Sampled By: CLIENT on 01-SEP-10 @ 11:57								
Matrix: WATER								
L929426-4	R06 US							
Sampled By: CLIENT on 01-SEP-10 @ 11:30								
Matrix: WATER								
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		15-SEP-10	R1467976
Hardness (as CaCO3)		12.6		0.30	mg/L		14-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Nitrate and Nitrite as N		<0.071		0.071	mg/L		10-SEP-10	
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 Suspended Solids		<2.0		2.0	mg/L		10-SEP-10	R1464127
Turbidity		0.26		0.10	NTU		09-SEP-10	R1462440
Anions scan (IC)								
Chloride		3.73		0.50	mg/L		09-SEP-10	R1462976
Fluoride		<0.10		0.10	mg/L		09-SEP-10	R1462976
Nitrite-N		<0.050		0.050	mg/L		09-SEP-10	R1462976
Nitrate-N		<0.050		0.050	mg/L		09-SEP-10	R1462976
Sulfate		1.55		0.50	mg/L		09-SEP-10	R1462976
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.0076		0.0050	mg/L	10-SEP-10	11-SEP-10	R1463946
Antimony (Sb)-Total		0.00068		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Arsenic (As)-Total		0.00028		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Barium (Ba)-Total		0.00306		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		<0.000010		0.000010	mg/L	10-SEP-10	11-SEP-10	R1463946
Calcium (Ca)-Total		3.37		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		0.00250		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Iron (Fe)-Total		0.021		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Lead (Pb)-Total		<0.000090		0.000090	mg/L	10-SEP-10	11-SEP-10	R1463946
Lithium (Li)-Total		<0.0020		0.0020	mg/L	10-SEP-10	11-SEP-10	R1463946
Magnesium (Mg)-Total		1.02		0.010	mg/L	10-SEP-10	11-SEP-10	R1463946
Manganese (Mn)-Total		0.00200		0.00030	mg/L	10-SEP-10	11-SEP-10	R1463946
Molybdenum (Mo)-Total		<0.00020		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		0.415		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Rubidium (Rb)-Total		0.00036		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		0.220		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		2.02		0.030	mg/L	10-SEP-10	11-SEP-10	R1463946
Strontium (Sr)-Total		0.0141		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

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L929426-5	R06 DS							
Sampled By:	CLIENT on 01-SEP-10 @ 11:18							
Matrix:	WATER							
Total Metals by ICP-MS								
Cobalt (Co)-Total		<0.00020		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Copper (Cu)-Total		0.00137		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Iron (Fe)-Total		<0.020		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Lead (Pb)-Total		<0.000090		0.000090	mg/L	10-SEP-10	11-SEP-10	R1463946
Lithium (Li)-Total		<0.0020		0.0020	mg/L	10-SEP-10	11-SEP-10	R1463946
Magnesium (Mg)-Total		0.990		0.010	mg/L	10-SEP-10	11-SEP-10	R1463946
Manganese (Mn)-Total		0.00100		0.00030	mg/L	10-SEP-10	11-SEP-10	R1463946
Molybdenum (Mo)-Total		<0.00020		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		0.405		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Rubidium (Rb)-Total		0.00038		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		0.211		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		1.85		0.030	mg/L	10-SEP-10	11-SEP-10	R1463946
Strontium (Sr)-Total		0.0146		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		<0.00020		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		<0.00010		0.00010	mg/L	10-SEP-10	11-SEP-10	R1463946
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
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		12.0		1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)		14.6		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		40.8		0.40	umhos/cm		09-SEP-10	R1462485
pH								
pH		7.35		0.10	pH units		09-SEP-10	R1462485
L929426-6	Q4							
Sampled By:	CLIENT on 01-SEP-10 @ 10:58							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		15-SEP-10	R1467976
Hardness (as CaCO3)		73.8		0.30	mg/L		14-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Nitrate and Nitrite as N		2.51		0.071	mg/L		10-SEP-10	
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		84.0		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 Suspended Solids		<2.0		2.0	mg/L		10-SEP-10	R1464127

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L929426-6 Q4							
Sampled By: CLIENT on 01-SEP-10 @ 10:58							
Matrix: WATER							
Turbidity	3.20		0.10	NTU		09-SEP-10	R1462440
Anions scan (IC)							
Chloride	1.69		0.50	mg/L		09-SEP-10	R1462976
Fluoride	<0.10		0.10	mg/L		09-SEP-10	R1462976
Nitrite-N	<0.050		0.050	mg/L		09-SEP-10	R1462976
Nitrate-N	2.51		0.050	mg/L		09-SEP-10	R1462976
Sulfate	7.34		0.50	mg/L		09-SEP-10	R1462976
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.253		0.0050	mg/L	10-SEP-10	10-SEP-10	R1463946
Antimony (Sb)-Total	0.00066		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Arsenic (As)-Total	0.00055		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Barium (Ba)-Total	0.0272		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	0.012		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	23.2		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	0.00285		0.00020	mg/L	10-SEP-10	10-SEP-10	R1463946
Iron (Fe)-Total	0.241		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Lead (Pb)-Total	0.000198		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	3.88		0.010	mg/L	10-SEP-10	10-SEP-10	R1463946
Manganese (Mn)-Total	0.00445		0.00030	mg/L	10-SEP-10	10-SEP-10	R1463946
Molybdenum (Mo)-Total	0.00120		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	2.67		0.020	mg/L	10-SEP-10	10-SEP-10	R1463946
Rubidium (Rb)-Total	0.00103		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	1.33		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	4.56		0.030	mg/L	10-SEP-10	10-SEP-10	R1463946
Strontium (Sr)-Total	0.139		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	<0.00010		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	0.00483		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	0.00124		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Vanadium (V)-Total	0.00052		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	0.00042		0.00040	mg/L	10-SEP-10	10-SEP-10	R1463946
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	66.8		1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)	81.5		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

* 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
L929426-7	Q4 DUP							
Sampled By:	CLIENT on 01-SEP-10 @ 10:58							
Matrix:	WATER							
Total Metals by ICP-MS								
Sodium (Na)-Total		4.58		0.030	mg/L	10-SEP-10	10-SEP-10	R1463946
Strontium (Sr)-Total		0.140		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		<0.00010		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		0.00342		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		0.00126		0.00010	mg/L	10-SEP-10	10-SEP-10	R1463946
Vanadium (V)-Total		0.00041		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
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		66.7		1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)		81.4		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		172		0.40	umhos/cm		09-SEP-10	R1462485
pH								
pH		8.20		0.10	pH units		09-SEP-10	R1462485
L929426-8	R09 US							
Sampled By:	CLIENT on 01-SEP-10 @ 10:22							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		15-SEP-10	R1467976
Hardness (as CaCO3)		30.7		0.30	mg/L		14-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Nitrate and Nitrite as N		<0.071		0.071	mg/L		10-SEP-10	
Ortho Phosphorus Soluble As P		<0.010	DLA	0.010	mg/L		10-SEP-10	R1463895
Phosphorus, Total		0.0151		0.0020	mg/L		10-SEP-10	R1462916
Total Dissolved Solids		22.0		5.0	mg/L		13-SEP-10	R1465224
Total Kjeldahl Nitrogen		<0.20		0.20	mg/L	09-SEP-10	13-SEP-10	R1464547
Total Suspended Solids		<2.0		2.0	mg/L		10-SEP-10	R1464127
Turbidity		2.80		0.10	NTU		09-SEP-10	R1462440
Anions scan (IC)								
Chloride		2.37		0.50	mg/L		09-SEP-10	R1462976
Fluoride		<0.10		0.10	mg/L		09-SEP-10	R1462976
Nitrite-N		<0.050		0.050	mg/L		09-SEP-10	R1462976
Nitrate-N		<0.050		0.050	mg/L		09-SEP-10	R1462976
Sulfate		4.84		0.50	mg/L		09-SEP-10	R1462976
Total Metals by ICP-MS								
Aluminum (Al)-Total		0.0060		0.0050	mg/L	10-SEP-10	11-SEP-10	R1463946
Antimony (Sb)-Total		0.00059		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Arsenic (As)-Total		0.00037		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Barium (Ba)-Total		0.00325		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

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ALS LABORATORY GROUP ANALYTICAL REPORT

Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L929426-8	R09 US							
Sampled By:	CLIENT on 01-SEP-10 @ 10:22							
Matrix:	WATER							
Total Metals by ICP-MS								
Cadmium (Cd)-Total		<0.000010		0.000010	mg/L	10-SEP-10	11-SEP-10	R1463946
Calcium (Ca)-Total		8.34		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		0.00171		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Iron (Fe)-Total		0.046		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Lead (Pb)-Total		<0.000090		0.000090	mg/L	10-SEP-10	11-SEP-10	R1463946
Lithium (Li)-Total		<0.0020		0.0020	mg/L	10-SEP-10	11-SEP-10	R1463946
Magnesium (Mg)-Total		2.41		0.010	mg/L	10-SEP-10	11-SEP-10	R1463946
Manganese (Mn)-Total		0.00496		0.00030	mg/L	10-SEP-10	11-SEP-10	R1463946
Molybdenum (Mo)-Total		<0.00020		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		0.409		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Rubidium (Rb)-Total		0.00044		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		0.475		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		1.85		0.030	mg/L	10-SEP-10	11-SEP-10	R1463946
Strontium (Sr)-Total		0.0410		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		0.00025		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		<0.00010		0.00010	mg/L	10-SEP-10	11-SEP-10	R1463946
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
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)		27.9		1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)		34.0		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		74.8		0.40	umhos/cm		09-SEP-10	R1462485
pH								
pH		7.75		0.10	pH units		09-SEP-10	R1462485
L929426-9	R09 DS							
Sampled By:	CLIENT on 01-SEP-10 @ 10:15							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N		<0.050		0.050	mg/L		15-SEP-10	R1467976
Hardness (as CaCO3)		31.3		0.30	mg/L		14-SEP-10	
Mercury (Hg)-Total		<0.000050		0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Nitrate and Nitrite as N		<0.071		0.071	mg/L		10-SEP-10	
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

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Sample Details/Parameters	Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L929426-9 R09 DS							
Sampled By: CLIENT on 01-SEP-10 @ 10:15							
Matrix: WATER							
Total Dissolved Solids	22.0		5.0	mg/L	09-SEP-10	13-SEP-10	R1465224
Total Kjeldahl Nitrogen	<0.20		0.20	mg/L		13-SEP-10	R1464547
Total Suspended Solids	<2.0		2.0	mg/L		10-SEP-10	R1464127
Turbidity	0.27		0.10	NTU		09-SEP-10	R1462440
Anions scan (IC)							
Chloride	2.82		0.50	mg/L		09-SEP-10	R1462976
Fluoride	<0.10		0.10	mg/L		09-SEP-10	R1462976
Nitrite-N	<0.050		0.050	mg/L		09-SEP-10	R1462976
Nitrate-N	<0.050		0.050	mg/L		09-SEP-10	R1462976
Sulfate	8.62		0.50	mg/L		09-SEP-10	R1462976
Total Metals by ICP-MS							
Aluminum (Al)-Total	0.0061		0.0050	mg/L	10-SEP-10	11-SEP-10	R1463946
Antimony (Sb)-Total	0.00055		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Arsenic (As)-Total	0.00036		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Barium (Ba)-Total	0.00354		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	<0.000010		0.000010	mg/L	10-SEP-10	11-SEP-10	R1463946
Calcium (Ca)-Total	8.57		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	0.00174		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Iron (Fe)-Total	0.046		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Lead (Pb)-Total	<0.000090		0.000090	mg/L	10-SEP-10	11-SEP-10	R1463946
Lithium (Li)-Total	<0.0020		0.0020	mg/L	10-SEP-10	11-SEP-10	R1463946
Magnesium (Mg)-Total	2.41		0.010	mg/L	10-SEP-10	11-SEP-10	R1463946
Manganese (Mn)-Total	0.00486		0.00030	mg/L	10-SEP-10	11-SEP-10	R1463946
Molybdenum (Mo)-Total	<0.00020		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	0.397		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Rubidium (Rb)-Total	0.00042		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	0.540		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	1.84		0.030	mg/L	10-SEP-10	11-SEP-10	R1463946
Strontium (Sr)-Total	0.0446		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	0.00029		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	<0.00010		0.00010	mg/L	10-SEP-10	11-SEP-10	R1463946
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
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	29.1		1.0	mg/L		09-SEP-10	R1462485

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Sample Details/Parameters		Result	Qualifier*	D.L.	Units	Extracted	Analyzed	Batch
L929426-10	R15 US							
Sampled By:	CLIENT on 01-SEP-10 @ 09:35							
Matrix:	WATER							
Total Metals by ICP-MS								
Rubidium (Rb)-Total	0.00072			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	0.189			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	1.03			0.030	mg/L	10-SEP-10	11-SEP-10	R1463946
Strontium (Sr)-Total	0.00712			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	0.00071			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	<0.00010			0.00010	mg/L	10-SEP-10	11-SEP-10	R1463946
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
pH, Conductivity and Total Alkalinity								
Alkalinity								
Alkalinity, Total (as CaCO3)	6.6			1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)	8.0			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	20.2			0.40	umhos/cm		09-SEP-10	R1462485
pH								
pH	7.09			0.10	pH units		09-SEP-10	R1462485
L929426-11	R15 DS							
Sampled By:	CLIENT on 01-SEP-10 @ 09:25							
Matrix:	WATER							
Miscellaneous Parameters								
Ammonia as N	<0.050			0.050	mg/L		15-SEP-10	R1467976
Hardness (as CaCO3)	5.76			0.30	mg/L		14-SEP-10	
Mercury (Hg)-Total	<0.000050			0.000050	mg/L	10-SEP-10	10-SEP-10	R1465384
Nitrate and Nitrite as N	<0.071			0.071	mg/L		10-SEP-10	
Ortho Phosphorus Soluble As P	<0.010		DLA	0.010	mg/L		10-SEP-10	R1463895
Phosphorus, Total	0.0153			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	13-SEP-10	R1464547
Total Suspended Solids	<2.0			2.0	mg/L		10-SEP-10	R1464127
Turbidity	0.50			0.10	NTU		09-SEP-10	R1462440
Anions scan (IC)								
Chloride	1.31			0.50	mg/L		09-SEP-10	R1462976
Fluoride	<0.10			0.10	mg/L		09-SEP-10	R1462976
Nitrite-N	<0.050			0.050	mg/L		09-SEP-10	R1462976
Nitrate-N	<0.050			0.050	mg/L		09-SEP-10	R1462976
Sulfate	1.11			0.50	mg/L		09-SEP-10	R1462976
Total Metals by ICP-MS								
Aluminum (Al)-Total	0.0367			0.0050	mg/L	10-SEP-10	11-SEP-10	R1463946
Antimony (Sb)-Total	0.00064			0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Arsenic (As)-Total	0.00035			0.00020	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
L929426-11 R15 DS							
Sampled By: CLIENT on 01-SEP-10 @ 09:25							
Matrix: WATER							
Total Metals by ICP-MS							
Barium (Ba)-Total	0.00346		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	0.000013		0.000010	mg/L	10-SEP-10	11-SEP-10	R1463946
Calcium (Ca)-Total	1.14		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	0.00164		0.00020	mg/L	10-SEP-10	11-SEP-10	R1463946
Iron (Fe)-Total	0.049		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Lead (Pb)-Total	0.000214		0.000090	mg/L	10-SEP-10	11-SEP-10	R1463946
Lithium (Li)-Total	<0.0020		0.0020	mg/L	10-SEP-10	11-SEP-10	R1463946
Magnesium (Mg)-Total	0.707		0.010	mg/L	10-SEP-10	11-SEP-10	R1463946
Manganese (Mn)-Total	0.00193		0.00030	mg/L	10-SEP-10	11-SEP-10	R1463946
Molybdenum (Mo)-Total	<0.00020		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	0.508		0.020	mg/L	10-SEP-10	11-SEP-10	R1463946
Rubidium (Rb)-Total	0.00078		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	0.235		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	1.11		0.030	mg/L	10-SEP-10	11-SEP-10	R1463946
Strontium (Sr)-Total	0.00748		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	0.00130		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	<0.00010		0.00010	mg/L	10-SEP-10	11-SEP-10	R1463946
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
pH, Conductivity and Total Alkalinity							
Alkalinity							
Alkalinity, Total (as CaCO3)	6.6		1.0	mg/L		09-SEP-10	R1462485
Bicarbonate (HCO3)	8.0		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	20.7		0.40	umhos/cm		09-SEP-10	R1462485
pH							
pH	7.05		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	L929426-1, -10, -11, -2, -3, -4, -5, -6, -7, -8, -9
Duplicate	Ortho Phosphorus Soluble As P	DLA	L929426-1, -10, -11, -2, -3, -4, -5, -6, -7, -8, -9

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**
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ALK-TOT-WP	Water	Alkalinity	APHA 2320B
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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
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This analysis is carried out using procedures adapted from EPA Method 300.1 "Determination of Inorganic Anions in Drinking Water by Ion Chromatography".

EC-WP	Water	Conductivity	APHA 2510B
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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-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-T-L-MS-WP	Water	Total Metals by ICP-MS	U.S. EPA 200.8-TL
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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
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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
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Ammonia - Colourimetric using Salicylate-nitroprusside and hypochlorite, in an alkaline phosphate buffer.

NO2+NO3-CALC-WP	Water	Nitrate+Nitrite	CALCULATION
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P-ORTHO-SOL-WP	Water	Ortho Phosphorous Soluble	APHA, 1998 P-OS
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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
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Reference Information

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
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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
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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
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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
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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
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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

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.