APPENDIX G

REPORT ON METAL LEACHING / ACID ROCK DRAINAGE CHARACTERIZATION OF MINE ROCK AND TAILINGS



RAINY RIVER

RAINY RIVER GOLD PROJECT
REPORT ON METAL LEACHING AND ACID ROCK DRAINAGE CHARACTERIZATION OF MINE ROCK AND TAILINGS

Submitted to:

Rainy River Resources Ltd.
1111 Victoria Avenue East
Thunder Bay, Ontario
P7C 1B7

Submitted by:

AMEC Environment & Infrastructure
a Division of AMEC Americas Limited
160 Traders Blvd., Suite 110
Mississauga, Ontario
L4Z 3K7

May 2013
TC111504

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May 16, 2013
TC111504

Mr. Kyle Stanfield, P.Eng.
Vice President, Environment & Sustainability
Rainy River Resources Ltd.
1111 Victoria Avenue East
Thunder Bay, Ontario
P7C 1B7

Dear Mr. Stanfield,

AMEC Environment & Infrastructure is pleased to submit the attached *Report on Metal Leaching and Acid Rock Drainage Characterization of Mine Rock and Tailings* for the Rainy River Gold Project. This document expands upon and updates the previously issued, *Interim Report Metal Leaching and Acid Rock Drainage Characterization of Mine Rock, Rainy River Gold Project*.

We greatly appreciate the opportunity to provide support to Rainy River Resources.

Should you have any questions regarding the study, please do not hesitate to contact us.

Yours sincerely,
AMEC Environment & Infrastructure,
a Division of AMEC Americas Limited



Sheila Daniel, M.Sc. P.Geo.
Senior Associate Geoscientist
Head, Environmental Management



Steve Sibbick, M.Sc., P.Geo.
Principal Geochemist

AMEC Environment & Infrastructure
a Division of AMEC Americas Limited
160 Traders Blvd. East, Suite 110
Mississauga, Ontario, Canada L4Z 3K7
Tel (905) 568-2929
Fax (905) 568-1686
www.amec.com

EXECUTIVE SUMMARY

AMEC Environment & Infrastructure (AMEC) was retained by Rainy River Resources Ltd. to conduct geochemical characterization of mine rock and tailings for the Rainy River Gold Project located in northwestern Ontario. This report documents a geochemical investigation to assess the metal leaching and acid rock drainage (ML/ARD) potential of mine rock to be generated during operations. Geochemical assessment of both mine rock and tailings is advanced and ongoing with laboratory and field kinetic testing continuing.

AMEC has evaluated previous geochemical studies and completed additional sampling of rock materials from drill core that are expected to be representative of the mine rock produced during mining. Geochemical characterization of mine rock and overburden from this and previous studies was completed using standardized ML/ARD assessment techniques. This report provides results and interpretation on static and kinetic testing completed on project samples and documents development of a block model to further support planning and development of site management options.

A subset of 362 acid base accounting (ABA) mine rock sample results have been carefully screened from a larger set of site mine rock ABA results collected since 2008. The focused subset of results have been identified as representing all major lithology types and broad spatial coverage of non-ore mine rock in the vicinity of the proposed pit development. Results of this testing determined that approximately 50% of the mine rock samples had an NPR>2 and were unlikely to generate acidic drainage in the future according to MEND (2009). The remainder of the samples were classified as potentially acid generating (PAG) materials with NPR<2. Development of a preliminary ARD block model has also been completed using the large exploration drill core database with results indicating approximately 41% of non-ore mine rock is PAG based on NPR<2. Continued refinement and testing of the block model is planned to further develop this as a tool to assist in the management of mine rock for the RRGP.

Mine rock samples were enriched in sulphur, bismuth, and selenium and less frequently silver, arsenic, cadmium and zinc. Based on short term leaching tests there is little evidence of concern for metal leaching under neutral drainage conditions.

Overburden testing has identified that some samples of locally derived till in contact with bedrock are PAG due to the presence of locally derived mineralized clasts. Testing of three simulated tailings samples produced during metallurgical testing determined they had NPR<0.9, but exhibit relatively long lag times to ARD (30 years) if left exposed.

Potential metal leaching from mine rock and tailings is being more completely assessed by ongoing kinetic testing.

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1.0 INTRODUCTION

AMEC Environment & Infrastructure (AMEC) was retained by Rainy River Resources Ltd. (RRR) to conduct geochemical characterization of mine rock and tailings for the Rainy River Gold Project (RRGP) located in northwestern Ontario. Information gathered during this work will provide input and support for the environmental approvals processes and project engineering studies.

1.1 Site Description

RRR is planning to develop and operate a mine, the RRGP, in the Township of Chapple (the RRGP site) approximately 65 kilometres (km) by road, northwest of Fort Frances, Ontario in northwestern Ontario. Exploration in the area until the 1990's was hampered by a paucity of outcrop; however, interpretation of aeromagnetic maps and successive overburden drilling programs were successful in identifying a potential gold resource by the mid-1990's. Since that time, extensive exploration drilling programs have successfully delineated and defined the current RRGP deposit.

The current mine plan for the RRGP open pit includes production of approximately 113 million tonnes (Mt) of ore, 80 Mt of overburden and 350 Mt of mine rock over 17 years of production (BBA 2013). Plans are currently under development for future underground mining operations. Characterization specific to these operations will be completed and reported on separately once mine plan details are available.

1.2 Objective and Scope of Work

The overall objectives of the geochemical characterization work being conducted by AMEC are to:

- Assess the ML/ARD characteristics of the mine rock and tailings that will be produced during the mine life;
- Estimate the future seepage quality from the mine rock and tailings; and
- Identify appropriate ML/ARD management strategies for mine rock and tailings including identification where possible of suitable construction materials.

The work documented in this report represents a comprehensive evaluation of available static and kinetic testing results and includes the following:

- Summary of previous baseline geochemical work;
- Current static testing results for overburden and rock core samples representing materials to be placed in stockpiles and potentially exposed on pit walls;
- Results from ten mine rock humidity cells initiated by Klohn Crippen Berger (KCB) in 2010, ten mine rock humidity cells initiated by AMEC in May 2012 and seven field test cells initiated by AMEC in 2011 (kinetic testing);
- Application of results of the ML/ARD program to the extensive exploration database to develop an ARD block model; and
- Results of static and kinetic testing of tailings samples produced in metallurgical test work completed in 2012.

This report summarizes the understanding of the RRGP ML/ARD characteristics for mine rock and tailings based on the results of testing available up to February 2013.

2.0 PHYSIOGRAPHY AND GEOLOGY

2.1 Physiography

The physiography of the region is described in detail by Bajc (2001). The Fort Frances–Rainy River area is located within the Severn Upland of the Canadian Shield and within the Arctic watershed. The physiographic region of the site is identified as lowland (Zone 2) with two distinct characters. Zone 2a exhibits a highly irregular bedrock surface that outcrops in places and imparts strong control on local topography. Zone 2b exhibits scarce bedrock outcrops with bedrock topography masked by thick deposits of Quaternary sediments commonly in excess of 30 metres (m).

Relief within areas of thick drift is controlled to a large extent by either the underlying bedrock surface or by the physiographic features produced by glacial and postglacial erosional and depositional events. Variations in surface topography and relief are a reflection of the degree of weathering and peneplanation of the bedrock surface since the Cretaceous Period and not typically a result of lithological variation as is the case in highland (Zone 1) regions.

2.2 Surficial Geology

Late Wisconsinan glaciation in the region was affected by ice originating from both the Labradorean and Keewatin sectors of the Laurentide Ice Sheet. An initial strong southwesterly flow of Labradorean ice was followed by a late-glacial advance of Keewatin ice flowing from the west. Glacial Lake Agassiz was also present in the region over long periods and is responsible for wide-spread deposition of glaciolacustrine deposits (Bajc 2001).

Surficial mapping in the area of the RRGP site (Bajc and Gray 2001) identified primarily fine grained (silt and clay) glaciolacustrine deposits and Keewatin (Whitemouth Lake) clayey silt to silty clay till. Localized areas of peat and muck have also been mapped presumably due to the presence of the low permeability silts and clays at surface.

Lowland physiographic regions such as those observed at the site are therefore typically characterized by the presence of a deeper Labradorean (Whiteshell formation) basal till in contact with the bedrock and a younger Keewatin till (Whitemouth Lake formation) above. The Keewatin till may be in contact with the Labradorean till or the two tills can be separated by glaciolacustrine (or sometimes glaciofluvial) sediments. The Keewatin till can also be overlain by younger glaciolacustrine deposits of silt and clay. In regions of shallow bedrock the sequence can be compressed with Labradorean till veneer occurring near surface in contact with the bedrock.

Overburden drilling in the region of the site has intersected sediments consistent with regional glacial stratigraphy and mapping. Overburden thicknesses up to 47 m have been reported

(Jones 1997). Labradorean till rests on bedrock in most drill holes with a thickness ranging from less than 1 m to greater than 20 m. The Labradorean till is sympathetic to bedrock topography with thin till on bedrock highs, and thicker till containing interlayers of ice contact glaciofluvial sand/gravel and glaciolacustrine clay, silt and sand in bedrock depressions.

Labradorean till is characterized by a high content of locally derived material, and has a silty to sandy texture with little to no clay and carbonate contents typically between 0 and 5%. The proportion of calcite to dolomite is typically around 0.5. Unoxidized till is typically grey to olive-grey in colour. When present at shallow depths it can be oxidized and attains a reddish-brown to brownish-grey colour depending on the degree of oxidation. This till has been found to contain anomalous concentrations of gold grains, auriferous pyrite and copper-zinc sulphides. Keewatin till is typically characterized by a high content of distally derived material, a clast-poor massive silty clay to clayey silt texture and high matrix carbonate content typically around 28%. The proportion of calcite to dolomite is also typically around 0.5.

Local geotechnical drilling (AMEC 2012) in the vicinity of the future pit has identified overburden thickness ranging from 7.6 to 40.4 m and predominantly composed of silty clay till or silty clay lacustrine sediments. The deeper sandy Labradorean till is generally in contact with the bedrock and in the vicinity of the pit typically ranges from 0 m to a few metres thick. In the southwestern portion of the pit this material is bouldery and inferred to be up to 13 m thick in a bedrock trough.

2.3 Regional Bedrock Geology

The following description of bedrock geology is summarized from RRR (2011) and Mackie et al. (2003). The RRGP falls within the 2.7 billion year old Rainy River Greenstone Belt that forms part of the Wabigoon Subprovince. The Wabigoon Subprovince is a 900 km long east-west trending area of komatiitic to calc-alkaline metavolcanics that are, in turn, succeeded by clastic and chemical sediments. Granitoid batholiths have intruded into these rocks, forming synformal structures in the supracrustal rocks that often have shear zones along their axial planes. The Wabigoon Subprovince basement lithologies were overlain by Mesozoic (Jurassic and Cretaceous) sediments and were subjected to deep lateritic weathering, followed by Quaternary glaciations previously described. Limited preservation of the Mesozoic cover sediments and saprolite occurs in localized palaeo-lows. In general, the bedrock geology of the Rainy River Greenstone Belt is poorly understood because of limited outcrop exposure.

The RRGP is primarily underlain by a series of tholeiitic mafic rocks that are structurally overlain by calc-alkalic intermediate to felsic metavolcanic rocks. Intermediate rocks (dacites) host most of the gold mineralization. At a regional scale, the strongest and earliest deformation event produced a well-defined penetrative fabric. This foliation is approximately parallel to the trend of the metavolcanic rocks, which strike at approximately 120 degrees and dip 50 to 70 degrees to the south. Structural geology interpretation suggests that the current geometry and plunge of the gold mineralization is the result of high strain deforming features associated with gold

mineralization and rotating the mineralization plunge parallel to the stretching direction (Siddorn, 2007; Hrabi and Vos, 2010).

Regional metamorphic grade has been identified as generally greenschist to lower-middle amphibolite facies. Adjacent to late post-tectonic stocks, rocks may attain upper amphibolite facies, with possible local partial re-melting.

2.4 Site Geology

The following description of site geology (Hercun 2012, personal communication) is summarized from recent interpretations of deposit geology determined by past and recent drilling investigations. The descriptions detail a series of mostly steeply dipping volcanic and sedimentary successions and related intrusive rocks progressing generally from the north end of the RRGP area to the south (Figures 2-1 and 2-2). Several later intrusive events (ultramafic to mafic instrusions, Black Hawk Stock to the east and a cross cutting late diabase dike) are also described. The geological interpretation of the site, based on extensive site drilling, is continuing.

2.4.1 Lower Mafic Volcanic Succession

The RRGP area is primarily underlain by tholeiitic metavolcanic rocks of the western Wabigoon subprovince – the Rainy River Greenstone Belt. Geochemically they are high-iron and high-magnesium basalts comprising coarse grained massive lava flows, massive and pillow flows and flow breccia. Subordinate dacitic tuff and intrusive quartz-feldspar porphyry dikes and sills are commonly interbedded throughout the mafic volcanics.

2.4.2 Intermediate-Felsic Porphyritic Intrusives

Swarms of porphyritic intermediate to felsic dikes cut through the Lower Mafic Succession. They range in thickness of up to several tens of metres. It has been suggested that these dikes may have been the conduits that fed the overlying Intermediate Succession hosting the mineralization. They have been variably interpreted and often described as dacitic tuffs due to their similar composition and appearance to units noted within the overlying Intermediate Succession. Historically, these complex and strongly deformed units have been denoted as the Georgeson / Feeder Porphyries.

2.4.3 Pyritic Sediment Succession

Conformably overlying the Lower Mafic Volcanics are a series of pyrite bearing siliceous to chloritic wackes, interpreted as containing variably intermediate to mafic derived sediment. These horizons are increasingly interbedded with homogenous and nondescript to quartz-eye

dacite tuff horizons as the upper contact is approached. The tuff horizons likely represent onset of the lateral equivalent of subsequent intermediate volcanism.

2.4.4 Intermediate Fragmental Volcanic Succession

The Intermediate Succession is complex. Immediately overlying the pyritic sediment horizon in Richardson Township, these volcaniclastic rocks are composed of fine-grained quartz-eye dacite and fine-grained ash horizons with subordinate interbedded coarse grained lapilli tuff and localized sedimentary and exhalative horizons. A high proportion of what appear to be coarse volcaniclastic rocks may in fact be massive flows or tuffs overprinted by strong, anastomosing foliation and sericite alteration. Geochemically these intermediate rocks have been interpreted as calc-alkaline dacite with subordinate rhyolite and andesite. Some blocks of tuff breccia have been observed juxtaposed against the Black Hawk Stock which intrudes and notably alters the volcaniclastic rocks to the east. The rocks of the intermediate succession dip 50 to 70 degrees to the south in the RRGP area and are the principal host of the mineralization at the site with the exception of mineralization in the Upper Diverse Mafic Volcanics (Cap zone mineralization) and the Ultramafic Intrusion (34 zone mineralization).

2.4.5 Massive Lava Flows

Immediately overlying the Intermediate Fragmental Volcanic rocks are a series of intermediate to mafic volcanic massive lava flows, ranging from fine grained porphyritic quartz dacite, to massive magnetite-bearing mafic volcanics, with localized pillowed mafic flows. These units are notably homogenous, and the intermediate volcanic units often show a diagnostic deformed sericitic net-textured compression fracture pattern. Upper and lower contacts display a centimetre scale shear fabric at the margins.

2.4.6 Upper Diverse Mafic Volcanics

The Upper Diverse Mafic Volcanic Succession is composed of a series of mafic tuffs, massive to glomeroporphyritic mafic flows, localized pillowed flows, interflow sediment and hyaloclastite, and minor subordinate intermediate volcanic tuffs. The rocks of the Upper Diverse Mafic Volcanics are the principal host of the Cap Zone mineralization.

2.4.7 Pinewood Sediment Succession

The Pinewood Sediment package is composed of predominantly clastic intermediate derived wackes and argillites. The sequence conformably overlies the Upper Diverse Mafic Volcanics, and the contact is typically marked by a pyritic heavy metal-bearing graphitic horizon. The upper contact of the succession is interbedded with the Upper Felsic Succession.

2.4.8 Upper Felsic Succession

The Upper Felsic Succession overlies the Intermediate Succession along the southern boundary of Richardson geographic Township. The Upper Felsic Succession is a few hundred metres thick and has been traced for 4 km westwards from the Black Hawk Stock. It has been interpreted as a quartz-phyric rhyolite.

2.4.9 Ultramafic-Mafic Intrusion

Thin zones of ultramafic to mafic intrusive material have been noted in drill core. They form dikes or sills intruding the volcanic stratigraphy at different times. Their sulphide content is typically below 2%. The 34 Zone mineralization is hosted in a late-stage mafic-ultramafic intrusion, crosscutting the 17 Zone mineralization. The main lithological units include dunite, pyroxenite, pyroxene-gabbro and gabbro. The lowermost units contain significant sulphide mineralization enriched in copper, nickel, gold and platinum group metals.

2.4.10 Black Hawk Stock

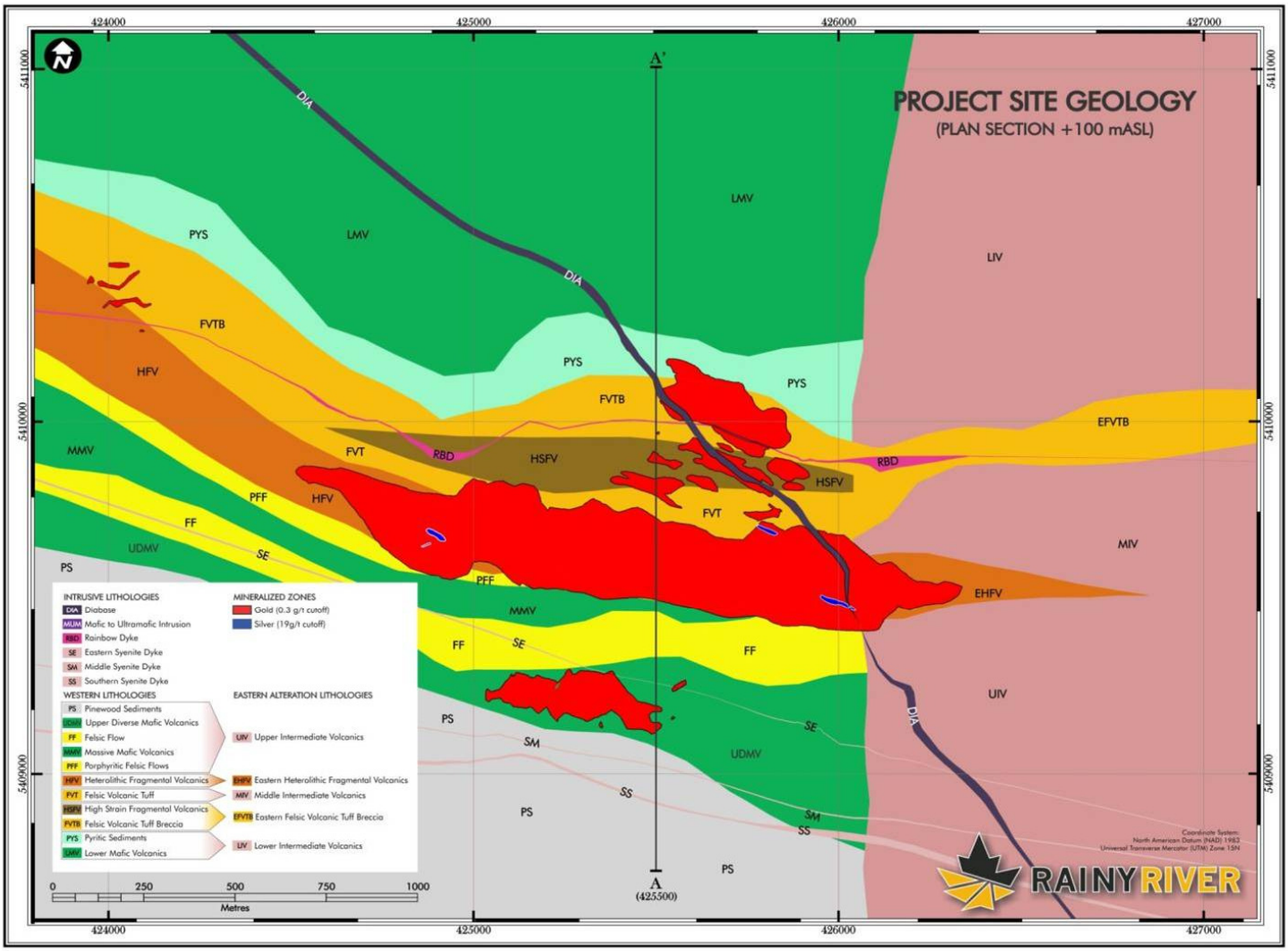
This quartz monzonitic to granodioritic stock consists of two phases and represents a topographic high to the east. The early phase forms the rim of the stock, and is weakly foliated, notably magnetic, massive to pegmatitic quartz monzonite with minor subordinate granodiorite. The late phase consists of equigranular coarse grained granodiorite, and forms the central core of the stock. Associated magnetic aplitic to pegmatitic dikes compositionally similar to the early phase intrude the surrounding metavolcanics.

2.4.11 Proterozoic Diabase Dike

A northwest-striking, steeply dipping diabase dike extends across the entire Project area.

2.5 Mine Rock Lithological Interpretation

The lithostratigraphic interpretation presented above identifies the highly intercalated and complex nature of the site geology. The various major lithological subdivisions may be important in terms of ML/ARD assessment. Therefore, for planning purposes, sampling and interpretation has focused on mine rock subdivisions on the basis of primary logged lithological rock types (mafic to felsic metavolcanics, metasediments and various intrusive units). A list of lithology types and codes is provided in Appendix A (Table A-1) for reference. The principal waste lithological units identified in drill core within the project area in order of relative abundance are felsic metavolcanics, mafic metavolcanics, and metasediments.

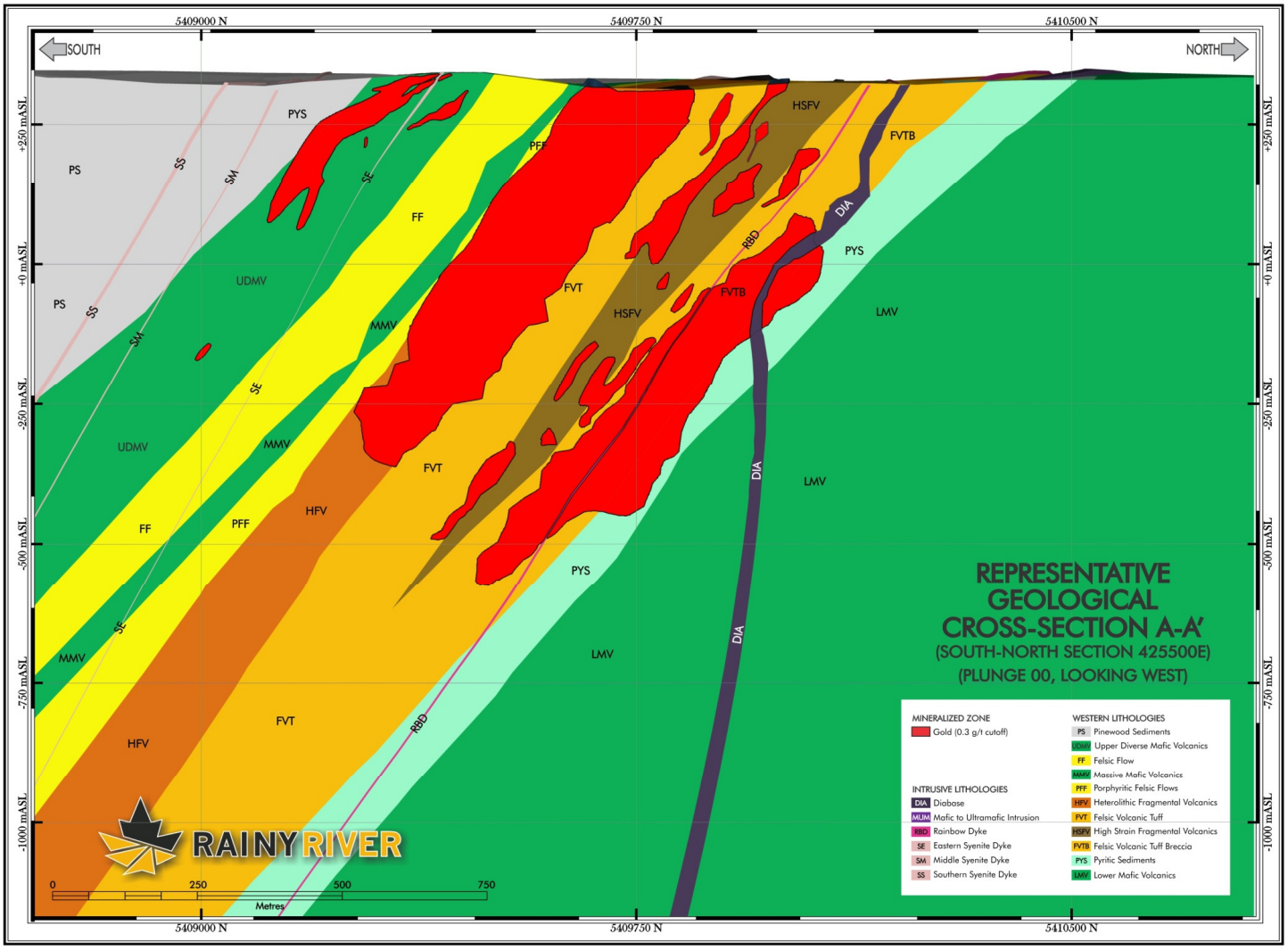


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RRGP Site Geology

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 2-1



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Rainy River Gold Project

RRGP Site Geology Section A-A'

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 2-2

3.0 PREVIOUS GEOCHEMICAL STUDIES

AMEC conducted a review of baseline geochemical testwork conducted by KCB (2011) for the RRGP between 2008 and 2010. Summary comments of this review are provided below.

3.1 Overburden

Nineteen overburden samples including 14 Labradorean till and 5 Keewatin till / Lake Agassiz sediment were analyzed for acid base accounting (ABA) and 28 samples were analyzed for total element content and readily leachable metals (shake flask extraction; SFE). Key findings of the previous baseline work include the following:

- Labradorean till generally has lower neutralization potential (NP) than Keewatin till / Lake Agassiz sediment;
- The sulphide content of the Labradorean till ranged from <0.01% to 2.9%;
- Four of 14 samples of Labradorean till had a neutralization potential ratio[1] (NPR) of <2 with one of these having an NPR of <1;
- Labradorean till contained anomalous levels (compared to 5 times crustal abundance) of sulphur and sometimes silver and arsenic; and
- SFE results for the 19 overburden samples indicated a potential for metal leaching of aluminum and copper from Keewatin till.

3.2 Mine Rock

A total of 444 rock samples were submitted for ABA and total element characterization with a subset of these selected for SFE and net acid generation (NAG) testing and the initiation of 10 humidity cells. Key findings of the previous geochemistry baseline work include the following:

- Mine rock at the RRGP was generally characterized in the 2010 study as representing a high risk for acid generation with potentially acid generating (PAG) materials dependent not only on sulphide content, but by the spatial and lithological variability in NP;
- More than half of the samples characterized were felsic metavolcanics with most of the remainder of the samples representing clastic and chemical metasediments, mafic

[1] Neutralization potential ratio (NPR), the ratio of the Neutralization Potential (NP) to Acid Potential (AP), where NPR = NP/AP.

metavolcanics, intermediate metavolcanics and felsic to intermediate intrusives and a few samples from other intrusive units, as well as late structural and diabase rocks;

- For the most heavily sampled units the proportion of rock on the basis of NPR was identified as follows:

  - Felsic metavolcanics had approximately 50% of samples with NPR <1 and 83% with NPR <2;
  - Mafic metavolcanics had approximately 28% of samples with NPR <1 and 51% with NPR <2;
  - Clastic metasediments had approximately 61% of samples with NPR <1 and 84% with NPR <2;
  - Chemical metasediments had approximately 42% of samples with NPR <1 and 57% with NPR <2;
  - Intermediate metavolcanics had approximately 49% of samples with NPR <1 and 61% with NPR <2; and
  - Felsic to intermediate intrusive rocks had approximately 19% of samples with NPR <1 and 32% with NPR <2.

- For the subset of samples tested, there was good agreement between classification of PAG rock on the basis of NAG testing and ABA;

- Concentrations of gold, silver, arsenic and sulphur for most samples and cadmium, selenium and zinc for isolated samples exceeded the five times crustal abundance screening criteria used; and

- Results of SFE tests indicated neutral to slightly alkaline pH (pH 6.7 to pH 8.2) and generally low dissolved metal release.

4.0 PROGRAM DESIGN

4.1 Regulatory Context

The approach and methodology for the collection and characterization of mine rock materials was based upon the requirements described under the Ontario *Mining Act*; namely guidance found within the document *Prediction Manual for Drainage Chemistry from Sulphidic Geologic Materials* (MEND 2009). This document is the updated version of the document *DRAFT Guidelines and Recommended Methods for the Prediction of Metal Leaching and Acid Rock Drainage at Minesites in British Columbia* (Price 1997). The MEND (2009) document represents best practice and industry standard approaches and methodologies for ML/ARD sampling and characterization in Canada.

The objective of the sampling plan for ML/ARD characterization was to obtain samples that accurately represent the geochemical variation of the lithology types to be mined. Samples were selected to capture both the spatial and geochemical variability of mine rock in the region of the proposed open pit. The specifics of the mine plan in terms of pit design, lithology type and geological models have evolved over the life of the project.

4.2 Acid Base Accounting

ML/ARD characterization conducted in this study follows the testing methods outlined in the standard described above. Assessment of the potential for a sample to generate acidity is defined by the NPR. As an initial screening value, the threshold separating PAG rock from NPAG is an NPR value of 2. This value is generally accepted as industry best practice (MEND 2009). Values of NPR between 1 and 2 are considered to have an uncertain acid generating potential, whereas rock with NPR <1 are considered to be likely acid generating.

4.3 Metal Content

There are no regulatory standards that apply directly to the elemental content of mine rock. For comparative purposes, the elemental content of mine rock was evaluated against average elemental crustal compositions. For screening purposes, samples with more than 10 times the average crustal amount of each element were considered to be enriched in that element.

4.4 Leachable Metals

The results of SFE testing are used as a screening tool to assess whether metal leaching could potentially occur from a sample. They are generally not a direct measure of the potential site water quality.

For comparison purposes only, the SFE results were also reviewed in relation to Ontario Regulation 560/94 and Ontario Provincial Water Quality Objectives (PWQO) for the protection of aquatic life. These values are not directly comparable to leachates from source materials. This comparison is strictly for reference purposes and implies neither compliance nor non-compliance with the specified guideline.

4.5 Kinetic Tests

Similar to SFE test results, there are no criteria that are directly applicable to assess metal leaching data from kinetic tests such as humidity cells or field test cells. Kinetic test results in the form of standard humidity cells and field test cells (which are ongoing) are interpreted and inform the project in terms of:

- Rates of sulphide oxidation, neutralization potential depletion and metal leaching rates;
- Site-specific PAG and NPAG thresholds; and
- Interpreted timing of the onset of acidic conditions in PAG materials.

4.6 Site Characterization Data Set

The evolving nature of the mine plan and pit design was anticipated over the course of the RRGP characterization study. From the outset of AMEC's work, the existence of the large exploration database was considered an integral part of the characterization program. Surrogate relationships for acid potential (AP) and neutralization potential (NP) were identified early by comparing direct measurements in the ABA data set and corresponding chemical data in the exploration data set (Section 8.2.1). Therefore the site characterization approach instituted by AMEC in 2011 included assessment of sample coverage within the pit design at key intervals with the understanding that this data would be supported by the extensive exploration sample results.

4.7 Exploration Data Base and Block Model

The comprehensive exploration drilling investigation for the site provides near continuous sampling and analysis of rock typically at a 2 m sample interval (similar to that of the ABA sampling programs). The suite of analyses by aqua-regia ICP include: Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Ti, Tl, V, W, Y, Zn and S. The exploration borehole and sample coverage is sufficient to support development of a 5 x 5 x 5 m block model (completed by others) throughout the entire pit volume. Using surrogate relationships for AP (S) and NP (Ca) an ARD block model was developed by RRR in conjunction with the resource block model.

5.0 SAMPLING PROGRAM

Based on the review of previous geochemical studies and mine plan information at the time, AMEC developed a geochemical testing program in 2011 to augment the existing geochemical database for the RRGP. The program included a review of the existing exploration geochemical database which consisted of 51,834 samples analyzed for multi-elements from over 73,000 m of drill core recovered within the mine rock pit volume. This data was reviewed in relation to a preliminary pit design and the existing sample set; the subsequent selection of additional samples for ABA characterization was carried out to increase the representativity of the data. The current exploration database used to support the ARD block model development was based on over 127,000 m of core and 91,669 samples.

Excavation to expose ore (Cap Zone) in late 2011 also afforded the opportunity of additional targeted sampling of overburden and mine rock in this area.

5.1 Sampling Plan

Based on mine plan information AMEC received, the proposed open pit will produce ore, overburden, three major types of mine rock and a number of minor types of mine rock. The types of mine rock and approximate proportions within both the preliminary pit at the time of the additional 2011 sampling and the current Feasibility Study pit design are presented in Table 5-1.

AMEC selected samples from the drill core that were spatially representative of the mine rock types from the vicinity of a preliminary open pit. Samples were generally selected as discrete 1.5 m intervals of drill core which is consistent with previous sampling compiled by KCB. As a result of the large exploration drill hole geochemical database available, the sampling approach proceeded in the following stages with assistance from RRR; and based on the existing RRGP sample database, preliminary resource block model and preliminary pit dimensions:

- The previous 444 sample static geochemical set was vetted against the waste volume within the preliminary pit;
- A subset of these samples that were spatially located outside of ore shells, and within the pit volume were identified and retained;
- This subset of samples was supplemented with selection of an additional 214 mine rock samples identified from the major lithologies and within regions of the preliminary pit that contained little or sparse sampling (particularly from peripheral areas of the pit); and,
- A single surface channel sample of mafic metavolcanic rock (obtained by RRR geologists from mineral waste at the base of the Cap Zone excavation) was collected.

In December 2012, the total set of 659 samples was re-vetted against an updated pit design (BBA Feasibility Study Pit C) and is tabulated in Table A-1 (Appendix A). The pit volume used in this process included an approximately 50 m buffer beyond the actual pit limit since it was deemed that any samples in this zone should be considered representative of the pit and pit wall materials. Hereafter, in-pit is inclusive of both the pit and pit buffer zone. In total 362 in-pit mine rock samples were obtained in this process. It is noted that the final Feasibility Study pit developed for the RRGP (Pit F) varied slightly from the Pit C identified above, but generally falls within the same overall volume as Pit C including the buffer region.

5.2 Sample Selection and Collection

5.2.1 Overburden

A specific program to expand on the previous baseline geochemistry overburden sampling program was not completed for this study. The excavation to expose the Cap Zone in late 2011 did expose overburden within the pit area. In conjunction with geotechnical sampling at the site, three approximately 10 kg samples of overburden material (two of Labradorean till and one of Keewatin clay) were collected by RRR on behalf of AMEC for ML/ARD characterization. The three samples were submitted to SGS Burnaby, homogenized and a subsample screened to <9.5 mm and submitted for ML/ARD characterization. A summary of the overburden samples collected is provided in Table 5-2.

5.2.2 Mine Rock

The sampling program conducted in July 2011 by AMEC targeted the most recently recovered drill core from the 2010 and 2011 drilling programs. Samples were obtained from a predetermined target list meant to augment the previous sampling and establish full coverage of future pit volumes.

In total, 213 drill core samples and the single surface chip sample (Cap Zone) were collected during the 2011 sampling program. These samples were screened (with the existing mine rock samples) to be within close proximity of the proposed future pit volume in order to provide total sample coverage by lithology as described in Table 5-3. Sampled intervals were approximately 1.5 m in length (of ¼ cut or ½ cut core) with an approximate total weight 1.2 to 3 kg per sample. The spatial distribution and lithologies of samples within the pit is provided in Figure 5-1.

5.2.3 Tailings

Three simulated tailings samples were produced during metallurgical testing of ore composite materials developed jointly by RRR and SGS Lakefield. The ore composites produced and resulting tailings represent three different types of ore. The tailings types tested include

materials produced from early stage ore (Starter Pit), ore from remainder of mine life (ROM) after the Starter Pit and the main (ODM) ore zone.

5.2.4 Humidity Cell Selection

Twenty samples of mine rock were chosen to undergo testing in humidity cells. The first set of 10 selected from initial KCB sampling, was initiated by KCB in February, 2010. A second set was selected from the 2011 AMEC sample set was initiated by AMEC in May, 2012. These samples were selected to cover the range of NP and AP for PAG material with NPR <2 for major lithologies comprising mine rock from the proposed pit (Table 5-4, Figure 5-1). Several selected samples approaching median NPR for the major lithologies were also included as well as a few samples containing elevated Zn.

In addition, each of the three simulated tailings materials were selected to undergo humidity cell testing.

5.3 Field Cell Construction

Field cells are kinetic tests constructed to provide site specific drainage quality information under field, rather than laboratory, conditions. The objective of a field cell is to expose selected drill core material to weathering conditions at the site and collect drainage water over time for laboratory analysis. The key components of the design are a clean drum with a sand filter bed and drainage hole constructed at the base. Drill core material (selected to simulate mine rock) is then placed on the filter bed in the drum. Drainage is directed to a sampling pail located beneath or beside the drum via a pipe or flexible tubing connection. A schematic showing the setup each field cell is shown in Figure 5-2.

Seven field cells were constructed on the RRGP site in October 2011. Each field cell at the RRGP was constructed identically (Figure 5-2). Core from various lithologies were preselected from the major lithologies expected from the future pit mine rock at the site. Sample selection was made from long sections of generally consistent lithology and further guided by Ca and S contents from exploration data. Lithologies targeted for this work included felsic and intermediate volcanics, mafic volcanics, metasediments along with a single cell for pyritic metasediment.

Targeted total intervals in the order of 50 to 80 m were chosen from borehole logs. Single intervals were utilized where possible, or in the case of the two metasediment samples, several intervals from different boreholes were targeted for a single cell to meet the material requirement. Identified sections (already half cut and sampled by RRR) were retrieved from the RRGP core library, selectively photographed and documented particularly with respect to evidence of sulphide and carbonate, quarter cut with half of the quarter cut core loaded into temporary labelled buckets. Each bucket corresponded to a composite sample. Competent

sections of core were segmented into approximately 7 centimetre (cm) intervals before transfer into buckets. Composite samples were obtained during sampling by retaining approximately 7 cm intervals from each approximately 4.2 m interval. Samples were selected semi-randomly to represent the range of material observed. Where present, veining and highly mineralized zones were documented and included in the cells, but were not included in the composite samples. Two to four composite samples were collected for each cell.

Labelled buckets were transferred and carefully loaded into cells pre-constructed by RRR. Selected photos and site location of the cells are provided in Appendix B.

Table 5-1: Estimated Mine Rock Proportions

Lithology	Rock Code	Preliminary Pit Proportions		Pit Proportions as of December 12, 2012*	
		Length Intersected** (m)	Proportion of Rock Types	Length Intersected** (m)	Proportion of Rock Types
Felsic Metavolcanic	4	44,173	60.2%	82,844	64.9%
Mafic Metavolcanic	2	12,293	16.8%	15,686	12.3%
Metasediment	5	8,031	10.9%	14,060	11.0%
Felsic-Intermediate Intrusive	8	3,044	4.1%	2,904	2.3%
Intermediate Metavolcanic	3	2,379	3.2%	7,225	5.7%
Chemical Meta-sediment	6	998	1.4%	939	0.7%
Late Mafic-Ultramafic Intrusive	9	708	1.0%	1,242	1.0%
Late Felsic-Intermediate Intrusive	10	690	0.9%	811	0.6%
Late Structural Zone	11	432	0.6%	1,169	0.9%
Diabase	13	329	0.4%	450	0.4%
Early Mafic-Ultramafic Intrusive	7	303	0.4%	412	0.3%
Total		73,380		127,734	

*BBA Feasibility Pit C, including buffer region

**Length of borehole intersections recorded in non-ore mine rock within pit volume

Table 5-2: Overburden Sample Summary

Sample	Type	Easting	Northing	Depth (m)
44070-1	Labradorean Till	425485	5409400	4.2
44070-2	Keewatin Varved Clay	425485	5409400	3.8
44314-1	Labradorean Till	425495	5409409	2

Table 5-3: Summary of In-Pit Mine Rock Samples

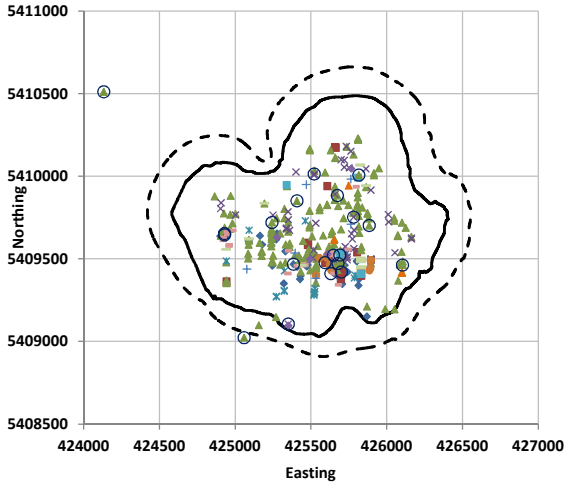
Lithology	Lithology Code	Number of Samples
Felsic Metavolcanic	4	158
Mafic Metavolcanic	2	56
Metasediment	5	60
Felsic-Intermediate Intrusive	8	24
Intermediate Metavolcanic	3	20
Chemical Metasediment	6	14
Late Mafic-Ultramafic Intrusive	9	12
Late Felsic-Intermediate Intrusive	10	5
Late Structural Zone	11	4
Diabase	13	3
Early Mafic-Ultramafic Intrusive	7	6
Total		362

Table 5-4: HUMIDITY CELL SELECTION SUMMARY

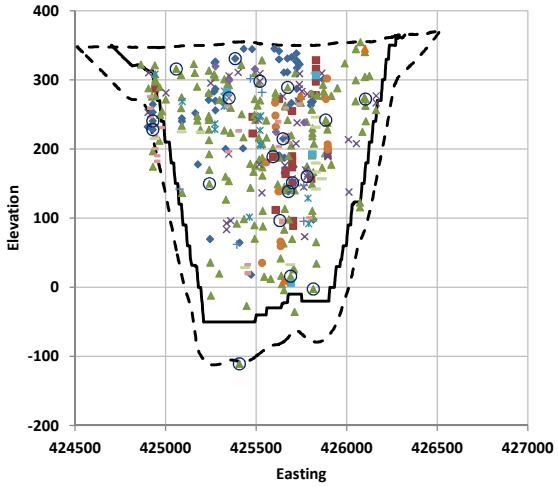
Cell Number	Sample Number	Lithology	Program	NPR	Carbonate NPR	Paste pH	Zn (ppm)	Cu (ppm)	Status*	Comments
HC-1	638478	4aa	KCB	0.1	0.01	6.3	69	430	Shut down on week 75	Outside pit footprint; already acidic sample.
HC-2	RRR04250	4cf	KCB	0.2	0.1	8.3	931	213	In operation 159 weeks	Within pit footprint
HC-3	588142	4cfb	KCB	1.1	1.1	9.1	28	10	In operation 159 weeks	In pit
HC-4	731259	4b	KCB	2.1	1.4	9.1	91	30	In operation 159 weeks	In pit
HC-5	ALT-09-13	2	KCB	0.7	0.7	8.6	162	938	In operation 159 weeks	In pit
HC-6	ALT-09-01	3b	KCB	1.0	0.8	8.3	286	85	In operation 159 weeks	In pit
HC-7	ALT-09-08	3b	KCB	1.9	1.3	9.3	135	21	In operation 159 weeks	In pit
HC-8	ALT-09-07	4b	KCB	0.2	0.05	9.3	40	20	In operation 159 weeks	Within pit footprint
HC-9	ALT-09-11	5dac	KCB	0.4	0.1	9.1	192	67	In operation 159 weeks	In pit
HC-10	ALT-09-20	8d	KCB	3.2	1.8	9.7	129	67	In operation 159 weeks	In pit
HC-11	L032107	4c	AMEC	1.1	0.3	9.4	123	21	In operation 42 weeks	In pit
HC-12	L032174	4cb	AMEC	1.5	0.8	9.4	88	13	In operation 42 weeks	In pit
HC-13	L032154	4cfa	AMEC	1.6	0.6	8.9	524	26	In operation 42 weeks	In pit
HC-14	L032135	4ca	AMEC	3.2	3.4	9.5	97	9.0	In operation 42 weeks	Within pit footprint
HC-15	L032201	2b	AMEC	1.9	1.0	9.3	38	323	In operation 42 weeks	In pit
HC-16	L032044	2a	AMEC	2.1	1.4	8.8	282	156	In operation 42 weeks	In pit
HC-17	L032104	2a	AMEC	1.3	0.5	8.8	1390	157	In operation 42 weeks	In pit
HC-18	L032148	2	AMEC	4.3	2.8	9.6	56	190	In operation 42 weeks	In pit
HC-19	L032097	5da	AMEC	0.7	0.4	9.1	68	34	In operation 42 weeks	In pit
HC-20	L032066	5ce	AMEC	1.9	1.7	8.8	62	24	In operation 42 weeks	Within pit footprint

*Note: As of February 12, 2013

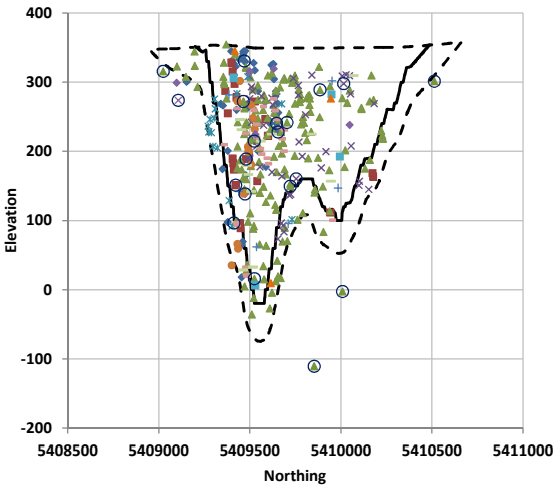
Plan View



Cross Section (View North)



Cross Section (View West)



- Mafic Metavolcanics (2)
- Felsic Metavolcanics (4)
- Pyritic Metasediments (5f)
- Early Mafic-Ultramafic Intrusives (7)
- Mafic-Ultramafic Intrusives (9)
- Late Structural (11)
- Humidity Cell Locations
- Intermediate Metavolcanics (3)
- Clastic Metasediments (5)
- Chemical Metasediments (6)
- Early Felsic-Intermediate Intrusives
- Felsic-Intermediate Intrusives (10)
- Diabase (13)

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- Felsic Metavolcanics (4)
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RAINYRIVER

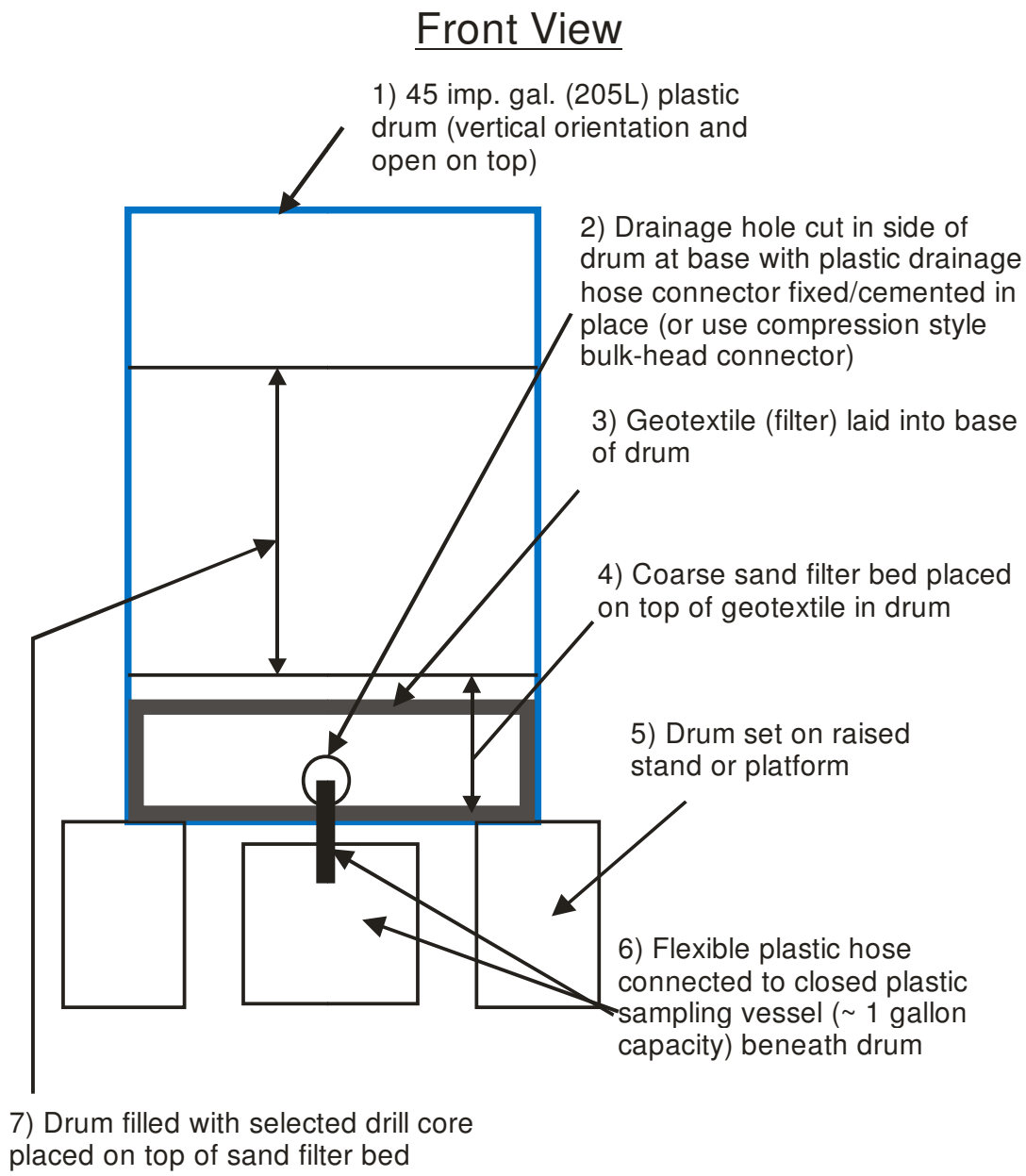
amec

Rainy River Gold Project

ML/ARD Mine Rock Sample Locations

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 5-1

Figure 5-2: Schematic of Waste Rock Field Test Cells



6.0 LABORATORY ANALYTICAL METHODS

6.1 Background

The collected mine rock samples were shipped to SGS Burnaby for laboratory geochemical testing. Geochemical testing consists of an array of analytical procedures that determine the chemical characteristics of a mineral sample. Static tests assess the current geochemical characteristics of materials while kinetic tests are used to evaluate the evolution of a material's geochemical characteristics with time.

For consistency, the analytical methods used were comparable to those completed in the previous geochemical investigation (KCB 2011). These analytical methods also represent industry best practise methods.

Tables 6-1 and 6-2 summarize the number of samples committed to the various testing procedures used in the ML/ARD characterization program.

The following sections describe in more detail the analytical methods used in this study.

6.2 Static Testing

6.2.1 Acid Base Accounting

Acid Base Accounting is a testing method to assess the acid generation and neutralization potential of the geologic material. ABA consists of the following testing techniques and calculations that are described below.

6.2.1.1 Paste pH

Paste pH is a method used to assess the current balance of acidity / alkalinity of a sample. The pH has a large effect on the drainage chemistry since pH is the principal determinant of mineral solubility for many trace elements and metals in water. The measurement was conducted on one part of sample mixed with one part of de-ionized water.

6.2.1.2 Forms of Sulphur and Acid Potential

Sulphur in a geologic sample can be represented in several forms including sulphide, acid-leachable sulphate, acid-insoluble sulphate, organic sulphur and elemental sulphur. ABA testing consisted of the analysis of total sulphur, leachable sulphate sulphur and sulphide. Total sulphur in the samples was determined by a Leco carbon/sulphur analyzer. Sulphate sulphur was determined by dilute hydrochloric acid digestion and colorimetry. Sulphide sulphur was determined using the Sobek method (using one part nitric acid and seven parts water) with

gravimetric finish. The difference between the total sulphur, sulphate and sulphide analysis was considered as insoluble sulphur. For consistency with previous baseline analyses, calculated sulphide sulphur was also determined as total sulphur less sulphate sulphur.

The Acid Potential is a measure of a samples potential to generate acidity from sulphur bearing minerals, and is generally attributed to result from the oxidation of sulphide minerals. Subsequently AP was calculated based on the sulphide sulphur content. For the AP calculation the calculated sulphide sulphur value (determined by difference between total sulphur and sulphate analyses) was used instead of the measured sulphide value since the calculated value was a more conservative value for ARD characterization.

6.2.1.3 Forms of Neutralization Potential

Neutralization Potential is a measure of the ability of a sample to neutralize acid. Two complimentary methods were used to assess the sample NP namely the Sobek method (with siderite correction) and measurement of carbonate carbon based on the analysis of total inorganic carbon. The Sobek method measures the ability of the sample to neutralize a known volume of acid for a short exposure period. For consistency with previous geochemistry investigations (KCB 2011) the siderite corrected method was used. This method minimizes the reporting of potentially unavailable NP due to iron carbonates such as siderite ($Fe^{2+}CO_3$) and ankerite ($Ca(Fe^{2+},Mg,Mn)(CO_3)_2$). Measurement of total inorganic carbon (by coulometric titration) was used to determine the carbonate content of the samples. This provides an estimate of the NP attributable to carbonate minerals, known as carbonate NP (Carb NP). This estimate of NP includes iron carbonates such as siderite and ankerite which are slow to react. Further, the iron fractions of the iron carbonates (100% of siderite and approximately 50% of ankerite) also do not provide acid neutralization capacity under oxidizing conditions. The types of carbonate minerals present in a sample are typically determined by mineralogical analyses.

Splits from a subset of 30 samples covering a range of lithologies and sub-lithologies were also analyzed using the commonly utilized modified Sobek NP (Modified NP) method as a check against the method used in the study.

It should be noted that the KCB (2011) report stated that NP determinations utilized the modified Sobek NP method with siderite correction. According to the analyzing laboratory the actual method used was the original Sobek method with siderite correction.

A single small set of samples from this program (three overburden samples and the single chip sample from the CAP zone excavation) were analyzed for the modified Sobek NP determination with siderite correction. Analysis was completed on the sieved (<9.5 mm) fraction as identified previously.

6.2.1.4 Neutralization Potential Ratio

The NPR is a widely accepted criterion to characterize the potential of geologic materials to produce net acidity. Values less than one indicate that the AP exceeds NP, and values greater than one indicate that a sample has excess NP. As previously described, an initial screening value separating PAG rock from NPAG is an NPR value of 2 (MEND 2009). Values of NPR between 1 and 2 are considered to have an uncertain acid generating potential, whereas rock with NPR<1 are considered to be likely acid generating.

For this study, where the AP value was below detection (i.e., the sample has no measurable sulphide content) the detection limit value of 0.3 kg $CaCO_3$/t was substituted for the AP.

6.2.2 Net Acid Generation Testing

The single addition NAG test was conducted on mine rock samples. The NAG test is a complimentary test to ABA which provides an assessment of the potential of a sample to generate acid (AMIRA 2000). NAG tests use hydrogen peroxide to rapidly oxidize sulphide minerals in a sample and determine if a sample has enough neutralization capacity to buffer the acidity generated during sulphide oxidation. Approximately 2.5 g of pulverized sample was reacted with 250 mL of 15% hydrogen peroxide at room temperature until effervescence ceased. The sample was then heated for a minimum of two hours and boiled rapidly for several minutes to decompose remaining peroxide. De-ionized water was added to the sample volume to maintain a volume of 250 mL. The resulting pH of this solution is called the NAG_{pH}. Values for NAG_{pH} greater than 4.5 indicate that a sample has little potential to produce net acidity in the future, whereas values less than 4.5 suggest that the sample has the potential to produce net acidity.

A subset of samples with elevated sulphide content was checked using the sequential NAG test where the single NAG test is repeated in series. For higher sulphide content samples the minimum pH may not be achieved in the initial single stage test.

6.2.3 Elemental Analyses

Elemental analysis was used to quantify the concentration of elements in rock samples, and was determined by aqua regia digestion followed by an Inductively Coupled Plasma-Mass Spectrometry (ICP-MS) scan. Aqua regia digestion is considered a near total digestion since the majority of minerals in the rocks are dissolved (including sulphides, carbonates) with the exception of some resistate minerals such as silicates that may only be partially decomposed by the aqua regia leach. Dissolution of most environmentally significant metal phases is achieved by this technique.

6.2.4 Leachable Metals

Leachable metal tests are used to assess the presence of potentially soluble elements and their release during initial stages of weathering. The leachable metal test completed was the SFE test conducted using a 3:1 de-ionized water to solid ratio agitated for 24 hours. The resulting leachates were analyzed for pH, conductivity, hardness, sulphate and dissolved metals.

6.2.5 Mineralogy (Rietveld XRD)

Mineralogical analysis was conducted by x-ray diffraction (XRD) with Rietveld refinement (Rietveld-XRD). This technique provides a semi-quantitative to quantitative assessment of the mineral composition of a sample. Sub-samples of the selected samples were crushed to less than 10 µm then analyzed as random powder mounts using an x-ray diffractometer equipped with a step-scanning goniometer. The amounts reported represent the relative amounts of crystalline mineral phases in the mounted specimens normalized to 100%. This method is effective at identifying crystalline phases present in abundance greater than a few weight percent. With favourable peak profiles and minimal overlapping peaks, phases may be detected at less than one weight percent.

Mineralogical analysis provides information on the major mineralogical phases in a sample, which can be used to determine the forms of potentially acid generating and acid neutralizing minerals.

6.3 Kinetic Testing

Kinetic test procedures are used to determine drainage chemistry and weathering and leaching rates of a sample. Kinetic tests also provide information on relative rates of acid generation and acid neutralization, which can be used to determine the lag time before net acidic conditions occur. A number of kinetic test procedures exist, including humidity cells, leach columns and field cells. Variations of each of these tests are also available, depending upon the testing requirements. The kinetic testing program for this project is summarized in Table 6-2 and includes the following: mine rock humidity cells, tailings humidity cells and mine rock field cells.

6.3.1 Humidity Cells

Humidity cell tests are a standardized procedure designed to determine primary reaction rates of mine materials under accelerated subaerial weathering conditions. Samples are crushed, placed in specifically designed cells, leached with deionized water under controlled conditions (temperature and humidity). Leachate is collected from the cells weekly and analyzed for dissolved metals, anions and general parameters. Humidity cell testing generally continues until leaching rates become stable. The standardized nature of humidity cell testing allows the comparison of results with those from other sites.

Analyses of mine rock humidity cell leachates included: pH, oxidation reduction potential (ORP), conductivity, acidity and alkalinity, sulphate, chloride, fluoride and hardness, as well as a range of dissolved metals of interest. Metals analyses on leachates from the humidity cells were analyzed by ICP-MS for the following 35 elements: Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Se, Si, Sn, Sr, Ti, Tl, U, V, Zn and Zr.

Analyses of tailings humidity cell leachates included: pH, conductivity, acidity and alkalinity, and sulphate as well as a range of dissolved metals of interest. Metals analyses on leachates from the humidity cells were analyzed by ICP-MS for the following 36 elements: Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Li, Mg, Mn, Mo, Na, Ni, P, Pb, Sb, Se, Si, Sn, Sr, Ti, Th, Tl, U, V, W, Y and Zn.

The results of humidity cell testing are not compared against regulatory criteria but instead are used to estimate: the flux of metals from mine materials, the rates of NP depletion and the lag time until net acidic conditions occur for the sample. In order to remove the effect of weekly variances in the results, average loading calculations are generally determined from stable rates.

Humidity cell testing for mine rock is ongoing at SGS Burnaby according to standard humidity cell procedures outlined in MEND (2009). Humidity cell testing for tailings materials is ongoing at SGS Lakefield.

6.3.2 Depletion Rate Estimates

Whether or not mine rock or tailings will produce acid, is a function of the balance between the rate and duration, of acid generation and neutralization. Estimates of the time until sulphide and NP exhaustion in kinetic tests can be used to infer if a material has the potential to generate acid at some point in the future.

Estimated depletion rates for mine rock and tailings humidity cells were calculated by determining the average loss of sulphide and carbonate NP (represented as molar calcium plus magnesium) for each cell. These estimated depletion rates were applied to the measured sulphide and NP contents to: determine the time until sulphide and NP exhaustion; to provide guidance on whether kinetic testing is suggesting materials are PAG or NPAG; and for PAG materials, an estimated time to acid onset. Such depletion times from standard humidity cells when combined with experience can guide interpretation of the timing of future acid onset for materials being tested.

6.3.3 Field Cells

Field cells are used to determine site specific weathering rates in comparison to laboratory testing including humidity cells. They usually contain a larger volume of mine rock than is

possible to test in a laboratory setting, often on the order of several hundred kilograms to tens of tonnes of rock. In the absence of blasted mine rock, earlier testing can be accomplished by using available drill core in smaller field vessels such as drums. The rock is placed in container or on a lined surface that is exposed to the environment, including direct precipitation. A drainage collection system beneath the sample allows the collection of seepage from the rock for analysis. Field cells are considered to be a more realistic method of estimating the seepage quality of mine rock where seepage monitoring data is unavailable.

Analyses of mine rock field cell leachates from the RRGP included: pH, conductivity, acidity and alkalinity, sulphate, chloride, and fluoride, as well as a range of dissolved metals of interest. Metals analyses on leachates from the field cells were analyzed by ICP-MS for the following 34 elements: Ag, Al, As, B, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Hg, K, Li, Mg, Mn, Mo, Na, Ni, Pb, Sb, Se, Sn, Sr, Te, Ti, Tl, U, V, W, Zn and Zr.

Where comparison of field cell release rates were made to mine rock humidity cell rates in this report, this was done of the basis of surface area estimates. Estimated surface areas of humidity cells were derived from geometric estimates by grain size measured in a sieved subsample. Estimated surface areas for field cells were derived by assuming an estimated surface area of the target core segment size (7 cm of ¼ core) and the estimated number of core segments. The value was adjusted upward according to quantities of more finely broken core identified during sampling for each cell.

Table 6-1: ML/ARD Static Testing Program

Analytical Procedure	In-pit Mine Rock	Field Cells	Tailings	Overburden
Sobek with Siderite Correction ABA	362	21*	6	0
Modified Sobek ABA	30	0	6	3
Net Acid Generation test	176	21*	6	3
Elemental Content	362	21*	6	3
SFE	74	0	6	2
Rietveld XRD	39	0	6	0

*Seven field cells were made up of material represented by 21 individual samples

Table 6-2: ML/ARD Kinetic Testing Program

Analytical Procedure	Mine Rock	Tailings
Humidity Cells	20	6
Field Cells	7	0

7.0 GEOCHEMICAL TESTING RESULTS

Detailed characterization results are discussed below for each analytical test method in the geochemical testing program.

7.1 Overburden Static Test Results

7.1.1 Acid Base Accounting Test Results

Two samples of Labradorean till and one sample of Keewatin clay obtained by RRR staff in support of a geotechnical sampling program were submitted for ABA analysis. Results are provided in Table 7-1 and summarized for the three samples as follows.

- Paste pH ranged from 7.5 to 8.6;
- The two Labradorean till samples contained 3% and 0.6% sulphide and the Keewatin clay contained 0.03%;
- NP ranged from 24 to 120 kg $CaCO_3$/t for the Labradorean till samples and was 66 kg $CaCO_3$/t for the Keewatin clay sample;
- Carb NP for the samples was similar, but slightly lower at 18 to 75 kg $CaCO_3$/t for Labradorean till and 51 kg $CaCO_3$/t for the Keewatin sample;
- The resulting NPR and Carb NPR for the Labradorean samples were 1.2 to 1.3 and 0.8 to 1, respectively; and
- The resulting NPR and Carb NPR for the Keewatin sample were 70 and 54, respectively.

7.1.2 Elemental Content

For comparative purposes, elemental content of the overburden samples were compared to 10 times average continental crust values (Price 1997). Results are presented in Table 7-2. Overall, bismuth was detected in excess of 10 times the average crustal abundance for all samples. Sulphur was detected in excess of the 10 times screening criteria for both Labradorean till samples, but not the Keewatin sample. Arsenic and silver were above the 10 times screening criteria in one of the Labradorean till samples, and cadmium and zinc were above the 10 times screening criteria in the other Labradorean sample.

7.1.3 Leachable Metals

Short-term leach test results suggested generally low potential for metal leaching for the overburden samples tested. Results are presented in Table 7-3. The SFE results for both the Keewatin and Labradorean samples are all below O.Reg. 560/94 effluent discharge criteria and mostly below PWQO. The copper and aluminum concentrations from the Keewatin till sample marginally exceeded the PWQO.

7.2 Mine Rock Static Test Results

The following subsections discuss the results of static testing on in-pit mine rock samples by test type, including ABA, elemental content, leachable metals testing and mineralogy. For the purpose of statistical analysis, method detection limit (MDL) values were assumed when analytical values were reported to be less than the MDL.

7.2.1 Acid Base Accounting Test Results

A statistical summary of ABA results for mine rock samples are presented in Table 7-4. The statistical analyses represent the combined ABA results of the 2011 sampling program and previous work (KCB 2011) for mine rock samples within the Feasibility Pit volume. Detailed ABA analytical results for all project samples are presented in Appendix A (Table A-2) and identified as being in-pit mine rock, ore or outside pit according to the current mine development plan. The distribution of in-pit samples on the basis of NPR is summarized in Table 7-5. Similar to ABA results, all NAG test results are presented in Appendix A (Table A-3). It should be noted that for previous work (KCB 2011), NAG testing was only completed on select samples with NP less than 60 kg $CaCO_3$/t.

All in-pit mine rock samples (n = 362) had paste pH values between 4.7 and 9.9, with a median value of 9.0. Concentrations of total sulphur ranged from 0.02 to 9.0% with most samples in the range of 0.1 to 5%. Most samples in excess of 5% total sulphur were from relatively minor sub-lithologies of pyritic metasediments. The relationship of total sulphur and calculated sulphide sulphur (Figure 7-1) confirms that sulphide is the main source of sulphur for the majority of the rock types.

The siderite corrected Sobek NP for the entire sample set ranged between 6 and 338 kg $CaCO_3$/t with mean and median values of 84 and 59 kg $CaCO_3$/t, respectively (Table 7-4). Carb NP values ranged between 0.8 and 342 kg $CaCO_3$/t with mean and median values of 62 and 45 kg $CaCO_3$/t. In general, most samples exhibit Sobek NP greater than Carb NP. More specifically, there was a clear increasing trend in NP with increasing Carb NP confirming the importance of Carb NP in samples especially at NP in excess of 30 kg $CaCO_3$/t (Figure 7-2). A few rare samples contain Carb NP greater than NP suggesting these samples are influenced to some degree by iron/manganese carbonates.

The calculated NPR values ranged from 0.1 to 529 with mean and median values of 1.9 for both (Table 7-4). Carb NPR values ranged from 0.01 to 248 with mean and median values of 1.4 for both.

Based on the total dataset, 28% of mine rock samples had an NPR less than 1 and 50% had an NPR greater than 2 (Table 7-5 and Figure 7-3). Similarly, 40% of samples had Carb NPR <1 and 38% of samples had Carb NPR >2. Based on MEND guidelines, approximately 50% to 62% of the samples would be classified as PAG (NPR<2) based on NPR and Carb NPR, respectively.

In general, samples with NPR <1 had NAG_{pH} values near or less than 4.5 (Figure 7-4). Samples with NPR >2 recorded NAG_{pH} values greater than 4.5 indicating that those samples had little potential to produce net acidity in the future. The majority of samples with NPR between 1 and 2 had NAG_{pH} values above 4.5 and were classified as uncertain in terms of future acid generation. Close inspection of the data indicates that no samples with an NPR above 1.65 generated a NAG_{pH} <4.5. This suggests that materials with a NPR >1.65 may potentially be considered NPAG.

The following sections discuss the ABA results by rock type.

7.2.1.1 Felsic Metavolcanics

A total of 158 in-pit felsic metavolcanic samples have been analyzed (Table 7-4 and Appendix A) with results summarized below.

Paste pH

The paste pH ranged from 4.7 to 9.9 with a median paste pH of 9.0.

Forms of Sulphur and Acid Potential

Concentrations of total sulphur in the felsic metavolcanic samples ranged from 0.14 to 7.8%, with mean and median values of 1.3 and 1.0%, respectively. Sulphide was the primary form of sulphur in the majority of the samples. Concentrations of sulphate sulphur in the felsic metavolcanic samples were reported over a very narrow range from below MDL (0.01%) to a maximum of 0.09%. The resulting calculated concentration ranges and statistics for sulphide sulphur were thus essentially the same or very similar to total sulphur (Table 7-4).

The AP ranged from 2.8 to 244 kg $CaCO_3$/t with mean and median values of 41 and 32 kg $CaCO_3$/t, respectively.

Forms of Neutralization Potential

Siderite corrected NP of felsic metavolcanic rock samples ranged from 6 to 274 kg $CaCO_3$/t, with a mean and median of 55 and 46 kg $CaCO_3$/t, respectively. The Carb NP varied from 0.8 to 194 kg $CaCO_3$/t, with mean and median values of 41 and 33 kg $CaCO_3$/t, respectively. The Carb NP of felsic metavolcanic samples was generally lower when compared to the corresponding siderite corrected NP with increasing divergence below an NP of about 20 (Figure 7-5). A small grouping of samples of moderate NP in the range of 80 kg $CaCO_3$/t had Carb NP greater than the siderite corrected NP suggesting the presence of iron/manganese carbonates in these samples.

Neutralization Potential Ratios

The NPR values of the felsic metavolcanic samples varied from 0.10 to 44 with mean and median values of 1.3 and 1.5, respectively (Figure 7-6). Carb NPR values ranged from 0.01 to 36 with mean and median values reported at 1.0 for both.

Approximately 62% of the samples (98 of 159 samples) had NPR <2 and 33% of the samples (52 of 159 samples) had NPR <1 (Table 7-5). Some 77% of the samples (121 of 158) had a Carb NPR <2 and 33% of the samples (52 of 158) had Carb NPR <1.

7.2.1.2 Mafic Metavolcanics

A total of 56 in-pit mafic metavolcanic samples were analyzed (Table 7-4 and Appendix A) with results summarized below.

Paste pH

The mafic metavolcanic rock samples had generally alkaline paste pH values, ranging from 7.8 to 9.6 with a median paste pH of 8.8.

Forms of Sulphur and Acid Potential

Concentrations of total sulphur in the mafic metavolcanic samples ranged from 0.11% to 8.1%, with mean and median values of 1.7% and 1.3%, respectively. Sulphide was the primary form of the sulphur in the majority of the samples. Concentrations of sulphate sulphur in the mafic metavolcanic samples ranged from below MDL (0.01%) to a maximum of 0.16%. The resulting calculated concentration ranges and statistics for sulphide sulphur were very similar to total sulphur (Table 7-4).

The AP ranged from 0.9 to 252 kg $CaCO_3$/t with mean and median values of 50 and 39 kg $CaCO_3$/t, respectively.

Forms of Neutralization Potential

The NP values for mafic metavolcanic samples varied from 34 to 287 kg $CaCO_3$/t with mean and median values of 152 and 159 kg $CaCO_3$/t, respectively. The Carb NP varied from 16 to 269 kg $CaCO_3$/t, with mean and median values of 121 and 122 kg $CaCO_3$/t, respectively. The Carb NP of mafic metavolcanic samples was generally lower when compared to the corresponding Sobek NP (Figure 7-7) with two isolated samples showing the opposite relationship suggesting the presence of iron/manganese carbonates.

Neutralization Potential Ratios

The NPR of mafic metavolcanic samples ranged from 0.44 to 169 with mean and median values of 3.0 and 4.7, respectively (Figure 7-8). Carb NPR values ranged from 0.40 to 127 with mean and median values of 2.4 and 4.0, respectively.

Approximately 34% of the samples (19 of 56 samples) had NPR <2 and 13% of the samples (7 of 56 samples) had NPR <1 (Table 7-5 and Figure 7-8). Some 39% of the samples (22 of 56) had a Carb NPR <2 and 23% of the samples (13 of 56) had Carb NPR <1.

7.2.1.3 Intermediate Metavolcanics

A total of 20 in-pit intermediate metavolcanic samples were analyzed (Table 7-4 and Appendix A) with results summarized below.

Paste pH

The intermediate metavolcanic rock samples had generally alkaline paste pH values, ranging from 8.2 to 9.7 with a median paste pH of 8.8.

Forms of Sulphur and Acid Potential

Concentrations of total sulphur in the intermediate metavolcanic samples ranged from 0.05 to 6.1%, with mean and median values of 1.4 and 0.9%, respectively. Sulphide was the primary form of sulphur in the majority of the samples with concentrations of sulphate sulphur ranging from below MDL (0.01%) to a maximum of 0.10%. The resulting calculated concentration ranges and statistics for sulphide sulphur were very similar to total sulphur (Table 7-4).

The AP ranged from 0.9 to 188 kg $CaCO_3$/t with mean and median values of 42 and 27 kg $CaCO_3$/t, respectively.

Forms of Neutralization Potential

The NP values for intermediate metavolcanic samples varied from 18 to 305 kg $CaCO_3$/t with mean and median values of 83 and 47 kg $CaCO_3$/t, respectively. The Carb NP varied from 4.2 to 309 kg $CaCO_3$/t, with mean and median values of 61 and 36 kg $CaCO_3$/t, respectively. The Carb NP of intermediate metavolcanic samples was generally lower than the corresponding Sobek NP (Figure 7-9) with a single sample showing the opposite relationship suggesting the presence of iron/manganese carbonates.

Neutralization Potential Ratios

The NPR of intermediate metavolcanic samples ranged from 0.27 to 28 with mean and median values of 2.0 (Figure 7-10). Carb NPR values ranged from 0.07 to 37 with mean and median values of 1.4 and 1.3, respectively.

One half (10 of 20) of the intermediate metavolcanic samples had NPR <2 and 6 of these had NPR <1 (Table 7-5, Figure 7-10). Eleven of 20 of the samples had a Carb NPR <2 and 8 of these had Carb NPR <1.

7.2.1.4 Metasediments

A total of 74 in-pit metasediment samples were analyzed from various sublithologies (Table 7-4 and Appendix A) and of these 45 were clastic metasediments, 15 were pyritic metasediments and 14 were chemical metasediments. Results for metasedimentary samples are summarized below.

Paste pH

The paste pH of all metasedimentary rock samples ranged from 7.7 to 9.6 with similar distributions among the various sublithologies.

Forms of Sulphur and Acid Potential

The total sulphur content of the clastic metasediment samples (excluding pyritic sediments - 5f) ranged from 0.12 to 5.8% with a mean of 1.5% and a median of 1.1%. The total sulphur content of the chemical metasediments was similar to the clastic metasediments and ranged from 0.17 to 4.3% with mean and median concentrations of 1.6 and 1.4%, respectively. The total sulphur content of the clastic pyritic metasediment samples were higher overall than the other metasediments and ranged from 0.68% to 9.0% with mean and median concentrations of 3.6 and 2.1%, respectively. Concentrations of sulphate sulphur in all metasediment samples were low and ranged from below MDL (0.01%) to a maximum of 0.1%. The resulting calculated

concentration ranges and statistics for sulphide sulphur were very similar to total sulphur (Table 7-4).

The AP for the clastic metasediments ranged from 2.5 to 177 kg $CaCO_3$/t with mean and median values of 46 and 34 kg $CaCO_3$/t, respectively. The AP for the chemical metasediments ranged from 5 to 133 kg $CaCO_3$/t with mean and median values of 48 and 42 kg $CaCO_3$/t, respectively. The AP for the pyritic metasediments were higher overall due to the greater sulphur content and ranged from 21 to 281 kg $CaCO_3$/t with mean and median values of 114 and 65 kg $CaCO_3$/t, respectively.

Forms of Neutralization Potential

Values of siderite corrected NP for clastic metasediments ranged from 6.8 to 143 kg $CaCO_3$/t, while for pyritic metasediments the range was 27 to 216 kg $CaCO_3$/t. Carbonate NP for clastic metasediments ranged from 0.8 to 97 kg $CaCO_3$/t, while for pyritic metasediments the range was 14 to 175 kg $CaCO_3$/t.

Among the total population of clastic metasediment and pyritic metasediment samples, 10% (6 of 63 samples) had Carb NP greater than the corresponding siderite corrected NP values, suggesting the presence of (non-acid neutralizing) iron/manganese carbonates (Figure 7-11). For the remaining samples the Carb NP was generally lower than the NP.

Values of siderite corrected NP for chemical metasediments ranged from 34 to 327 kg $CaCO_3$/t and Carb NP ranged from 18 to 342 kg $CaCO_3$/t. The Carb NP of chemical metasediment samples was generally lower when compared to the corresponding siderite corrected NP (Figure 7-11).

Neutralization Potential Ratio

The NPR of clastic metasediment samples ranged from 0.30 to 21 with mean and median values reported at 1.0 for both. Carb NPR values for clastic metasediments ranged from 0.09 to 21 with mean and median values of 0.7 and 0.6, respectively. Approximately 75% of clastic metasediment samples (34 of 45 samples) had NPR <2 and 53% of samples (24 of 45 samples) had NPR <1 (Table 7-5 and Figure 7-12). Some 84% of the clastic metasediment samples (38 of 45) had a Carb NPR <2 and 69% of the samples (31 of 45) had Carb NPR <1.

The NPR of chemical metasediment samples ranged from 0.56 to 37 and Carb NPR ranged from 0.27 to 33. Five of 14 chemical metasediment samples had NPR <2 and 3 of these had NPR <1. Nine of 14 chemical metasediment samples had Carb NPR <2 and 4 of these had Carb NPR <1.

The NPR of pyritic metasediments ranged from 0.31 to 7.1 and Carb NPR ranged from 0.22 to 5.4. Eight of 15 pyritic metasediment samples had NPR <2 and six of these had NPR <1. Ten of 15 pyritic metasediment samples had NPR <2 and 6 of these had NPR <1.

7.2.1.5 Intrusives

A total of 47 in-pit intrusive samples (excluding diabase) were analyzed from various sublithologies (Table 7-4 and Appendix A) and of these 6 were early mafic to ultramafic intrusive, 24 were early felsic to intermediate intrusive, 12 were later mafic to ultramafic intrusives and 5 were later felsic to intermediate intrusives. Results for intrusive samples are summarized below.

Paste pH

Alkaline paste pH values were measured in all intrusive rock samples ranging from 8.1 to 9.9 with similar distributions among the different intrusive units.

Forms of Sulphur and Acid Potential

The total sulphur content for all intrusive samples ranged from 0.02 to 3.3% with the early intrusive units 7 and 8 having generally higher maximum sulphur contents. All units had generally similar median sulphur contents (median for each unit was in the range of 0.23 to 0.39%). Concentrations of sulphate sulphur in all intrusive samples were low and ranged from below MDL (0.01%) to a maximum of 0.12%. The resulting calculated concentration ranges and statistics for sulphide sulphur were very similar to total sulphur (Table 7-4).

Several of the intrusive samples contain sufficient Ba (>700 ppm) that if present as barite ($BaSO_4$) would need to be considered as a potential non-acid producing sulphur source (>0.02%). In all cases total S for these samples is low and the Ba content (if present as barite) could account for a significant portion of the sulphur present. However, this has no material significance on the ABA status of these samples (see further discussion below).

The AP for the intrusive units ranged from 0.3 to 99 kg $CaCO_3$/t.

Forms of Neutralization Potential

The NP values for all intrusive samples ranged from 27 to 338 kg $CaCO_3$/t (Table 7-4). The Carb NP for all intrusive samples ranged from 10 to 273 kg $CaCO_3$/t. The Carb NP of intrusive samples was generally similar to somewhat lower than corresponding NP (Figure 7-13).

Based on the results, early mafic to ultramafic intrusive samples exhibit a generally narrow range in siderite corrected NP and Carb NP with median values of 263 and 180 kg $CaCO_3$/t,

respectively. Late felsic to intermediate intrusive samples also exhibited a generally narrow, but lower range in siderite corrected NP and Carb NP with median values of 80 and 70 kg $CaCO_3$/t, respectively. Early felsic to intermediate intrusive samples and late mafic to ultramafic intrusive samples had a wider range in NP. Late mafic to ultramafic intrusive samples had siderite corrected (Sobek) NP consistently higher than Carb NP suggesting non-carbonate minerals could contribute to the NP of these rocks.

Neutralization Potential Ratio

All intrusive samples except the early felsic to intermediate intrusives and late mafic to ultramafic intrusives had an NPR >2 (Figure 7-14). Six of 20 early felsic to intermediate intrusive samples had NPR <2 and 2 of these had NPR <1 (Table 7-5, Figure 7-14). Two of 12 late mafic to ultramafic intrusive samples had NPR <2 (none with NPR <1).

As discussed above, a number of the intrusive samples have been identified as having a potential for barite as a significant portion of total sulphur in samples. However, in each case the samples with elevated Ba also contain elevated NP and Carb NP (>70 kg $CaCO_3$/t) resulting in elevated NPR and no potential misidentification of the ABA status of the samples,

7.2.1.6 Late Structural Zones and Diabase

A total of four in-pit late structural zone samples and three in-pit diabase samples were analyzed (Table 7-4 and Appendix A) with results summarized below.

Paste pH

Paste pH values of all late structural and diabase samples were alkaline and ranged from 8.1 to 9.5. Overall, the distributions of results were similar with late structural samples having a median pH of 8.6 and diabase samples having a median pH of 9.0.

Forms of Sulphur and Acid Potential

The content of total sulphur for late structural samples ranged from 0.45 to 4.4%, with sulphide present as the primary sulphur species. The total sulphur content of the diabase samples ranged from 0.09 to 0.50%.

The AP for the late structural samples ranged from 13.8 to 137 kg $CaCO_3$/t. The AP for the diabase ranged from 2.5 to 11 kg $CaCO_3$/t.

Forms of Neutralization Potential

The NP values of the late structural samples ranged from 8 to 101 kg $CaCO_3$/t, while the NP of the diabase samples was in a narrower range of 20 to 52 kg $CaCO_3$/t. The Carb NP for the late structural samples ranged from 0.8 to 63 kg $CaCO_3$/t and was generally lower than the corresponding NP (Figure 7-15). The range in NP for the diabase was also narrower and between 3.3 and 27.5 kg $CaCO_3$/t.

Neutralization Potential Ratio

The NPR values for the late structural samples ranged from 0.2 to 2.9, with a median NPR of 0.6. The NPR values for the diabase samples ranged from 4.8 to 7.9 with a median NPR of 5.3. Three of four late structural samples had an NPR value less than 2 all of which have an NPR <1. All of the six diabase samples had an NPR >4. (Figure 7-16).

7.2.2 Elemental Content

Statistical summaries of elemental contents for the in-pit mine rock sample set are presented in Table 7-6. The complete dataset, including individual in-pit, ore and out of pit samples are presented in Table A-4 (Appendix A).

For comparative purposes, elemental content of the mine rock samples were compared to 10 times average continental crust values (Price 1997). Overall, sulphur, bismuth, and selenium stand out as anomalous with respect to 10 times average crustal abundance. The mean and median concentration for sulphur for the entire ABA sample set was 1.4% and 1.0%, respectively, in comparison to 0.35% for 10 times the average crustal abundance. The mean and median concentration for bismuth for all samples was 0.6 and 0.2 ppm, respectively in comparison to 0.085 ppm for the 10 times average crustal abundance. The mean and median concentration for selenium for all samples was 0.8 and 0.5 ppm, respectively in comparison to 0.5 ppm for 10 times average crustal abundance. It should be noted that the detection limit for selenium in the current work is at the reported 10 times crustal abundance concentration of 0.5 ppm.

Several other elements including silver, arsenic, cadmium and zinc sometimes had concentrations in excess of 10 times the crustal abundance. Copper, chromium, mercury, molybdenum, antimony, lithium, lead, cesium, rhenium and tungsten had isolated occurrences where an elemental concentration was in excess of the 10 times crustal abundance screening criteria.

As previously identified, sulphur, bismuth and selenium were elevated in all rock units sampled. The other elements that were occasionally or infrequently elevated tended to vary among the rock types. The variations in distribution of these elements (by lithology) are identified in Table 7-7.

7.2.3 Leachable Metals

A total of 74 in-pit samples representing different lithologies and metal contents were analyzed by the SFE test to assess the presence of potentially leachable metals. These test methods are not intended to simulate site-specific leaching conditions, but to provide a screening assessment of the potential for metal leachability. The SFE testing results are presented in Table A-4 (Appendix A) along with comparison to regulated effluent discharge values (O.Reg. 560/94). The more stringent PWQO values are also provided for reference purposes only. These values are useful in identifying parameters of interest when evaluating final discharge to receiving waters.

All samples exhibited neutral to slightly alkaline pH in the range of pH 7.4 to a maximum of pH 8.3. Dissolved metal concentrations in the SFE tests were generally low with no results reported at concentrations above O.Reg 560/94. Aluminum concentrations were consistently elevated in comparison to PWQO. Six samples that included felsic metavolcanic, chemical metasediment, felsic intrusive and mafic to ultramafic rocks exhibited dissolved chromium at very low concentrations in the range of 0.001 to 0.002 mg/L. Six samples that included clastic metasediment and felsic metavolcanic rocks and mafic to ultramafic rocks exhibited dissolved copper at low concentrations of 0.007 to 0.04 mg/L. Antimony, arsenic, cadmium, cobalt and phosphorus also all had one or two samples in a variety of lithologies that had concentrations that were elevated in comparison to PWQO.

7.2.4 Mineralogy

Mineralogy examination by Rietveld-XRD was conducted on 39 samples representing the range of mine rock units (Table 7-8). The complete set of Rietveld-XRD samples including those currently identified as outside the Feasibility Pit limit (or in one case now residing within an ore block) are discussed. Discussion of all results is included in this case since the mineralogy speaks to the logged lithological units more generally and is deemed useful, even though a given sample may not be specifically within the proposed pit. Table 7-8 identifies whether samples are located within the current pit volume or outside the pit and all samples are in generally close proximity to the pit and pit footprint.

Rietveld-XRD is capable of quantifying minerals at concentrations to fractions of a weight % when suitable diffraction conditions exist.

All samples analyzed contained detectable sulphides (most often pyrite) and almost all samples contained carbonates with calcite being the most common carbonate mineral. The mineralogical composition of each rock type is discussed below with an emphasis upon the identified acid generating and acid neutralizing minerals.

7.2.4.1 Felsic metavolcanics

Each of the 16 felsic metavolcanic samples analyzed contained pyrite at concentrations of 0.8 to 6.8%. No other sulphides were detected by Rietveld-XRD. Calcite was detected at 0.2 to 9.7% in 12 of the 16 felsic metavolcanic samples. The other four samples contained no detectable calcite, but two contained dolomite at concentrations of 0.5 and 2%.

7.2.4.2 Mafic metavolcanics

Pyrrhotite at 1.2 and 3.9% was the identified in two of the six mafic metavolcanic samples. Pyrite was identified in five of the six samples with concentrations ranging from 2.2 to 16.4%. Sphalerite was also identified in one sample with a concentration of 0.3%. Calcite was the primary carbonate present in these samples with concentrations ranging from 4.9 to 10.6%. Dolomite was present in two samples with concentrations of 1.3 and 11.7%. Ankerite was also identified in one sample at 11.6%.

7.2.4.3 Intermediate metavolcanics

Pyrite at 5.9 and 12.7% was the identified in the two intermediate metavolcanic samples analyzed. Calcite was identified in both samples at 6.4 and 16%. Dolomite was also identified in one sample at 6.8%.

7.2.4.4 Metasediments

Each of the six clastic metasediment samples analyzed contained pyrite at concentrations of 1.1 to 3.4%. No other sulphides were detected by Rietveld-XRD in these samples. Calcite was detected at 0.4 to 5.7% in all of the clastic metasediment samples. Dolomite was detected at 0.4 to 14.2% in three of the samples. Siderite at 0.3% was also detected in one of the clastic metasediment samples.

The sulphides pyrite (at 2.3%) and sphalerite (at 0.4%) were detected in the pyritic sediment sample analyzed. Calcite at 6.3% and dolomite-ankerite at 10.9% were the carbonates detected in this sample.

The chemical metasediment sample analyzed by Rietveld-XRD contained pyrite at 0.6% and pyrrhotite at 2.1%. The carbonate minerals calcite and dolomite-ankerite were detected at 2.6 and 3.5%, respectively.

7.2.4.5 Intrusives

Pyrite was detected in each of the five intrusive samples ranging from 0.3 to 1.0%. Calcite was detected in all five samples at 2.9 to 14.3% and dolomite was detected in four of the five intrusive samples at 0.4 to 5.6%.

7.2.4.6 Late Structural and Diabase

The single late structural zone sample (in current block model now residing in an ore block) contained pyrite at 1.2% and carbonate predominantly as dolomite at 12.6%. Trace calcite (0.2%) was also detected in this sample. The diabase sample analyzed contained pyrite at 0.7% and calcite at 1%.

7.2.5 Sobek Sulphide Determination

For the 2011 sample set the 1:7 Sobek nitric acid leach was completed that is a method largely selective for the direct quantification of sulphide in rock samples. Figure 7-17 contains a comparison of Sobek sulphide and calculated sulphide (total sulphur – weak acid leachable sulphate). Results are generally in good agreement reflecting the presence of little insoluble sulphur species. However, there is a small subset of samples in the range of 0.02% to 1.3% calculated sulphide where the Sobek determined sulphide values are significantly less than the calculated values (Figure 7-17). These samples are from the pyritic metasediment, chemical metasediment and mafic metavolcanic units.

The presence of acid insoluble sulphates (for example barite, alunites and jarosites) in these cases would ordinarily be suspected by such results. There is however, insufficient barium present to account for the refractory sulphate and given the largely neutral pH of the rock materials present alunites and jarosites are unlikely.

A more probable explanation is that a significant fraction of sulphide in these isolated samples is present as less reactive coarse pyrite known to be refractory to this test. Other sulphides including chalcopyrite and sphalerite are ruled out on the basis of insufficient copper and zinc in the elemental analysis results.

7.2.6 Forms of Neutralization Potential

The siderite corrected NP method used in this study was selected for consistency with previous ABA work at the site (KCB 2011). A subset of 30 samples was submitted in replicate for both the siderite corrected method and the modified Sobek NP method as a comparison and check of the siderite corrected method. The majority of these samples fall within pit limits, however when the samples were re-vetted against Pit C, nine fell outside the new limits. All of the

samples are included in this comparison due to the small number of samples. Comparison of the modified Sobek results against the siderite corrected results indicates a reasonably similar response between the two methods (Figure 7-18). Close inspection of the data and plotting the data grouped by the Sobek fizz rating however, reveals that trends develop in the siderite corrected Sobek results according to the aggressiveness of the Sobek NP leach (which is based on the fizz rating). The anomalous nature of the response is further confirmed by plotting Carb NP vs. modified Sobek NP (Figure 7-19). The relationship in this case is what is generally expected with a good match between Carb NP and modified Sobek NP down to an NP of around 10 kg $CaCO_3$/t. Below 10 kg $CaCO_3$/t additional NP is observed for the modified Sobek method in comparison to the carbonate NP due to neutralization provided by non-carbonate minerals.

Over-prediction of NP by the original Sobek method in relation to the modified Sobek method has been well documented, so this effect may be related to the use of this technique as the basis of the test rather than the addition of the siderite correction step.

7.2.7 Assessment of Aging Effects on Stored Rock Core

All core for the RRGP is currently stored in a covered, outdoor core library and a random inspection of the core by AMEC in mid-2011 indicated only minor visual evidence of weathering and oxidation of older core.

For completeness, a small subset of samples was selected to assess potential effects of weathering on old core. Core from 1995 and 1997 were stratigraphically aligned as closely as possible with adjacent recent 2010 and 2011 core. The old and new core samples were inspected, photographed and submitted for the standard suite of ABA and metals analysis. Comparative ABA results are presented in Table 7-9 and selected photographs are provided in Figure 7-20. The results of this inspection and analysis indicate relatively minor surface weathering of the core with variability in the ABA analytical results probably explained by sample variability rather than weathering effects. Rare features such as small voids (suggesting leaching of soluble minerals) are also present in both fresh and aged core (Figure 7-20).

7.3 Mine Rock Humidity Cells

Nineteen mine rock humidity cells are currently in operation and one cell has been shut down. These cells simulate a variety of lithologies and spatial locations in and around the proposed pit. The details and location of each humidity cell are provided in Table 7-10 and Figure 5-1. Humidity cells HC-2 to HC-10 have been in operation for 159 weeks as of February 12, 2013 with HC-1 having been shut down in week 75. Humidity cell HC-1 was a material selected from outside the future pit and represented weathered, already acidic rock. Therefore data to week 75 was deemed sufficient for testing of this material. Humidity cells HC11-HC20 have been in

operation for 42 weeks as of February 12, 2013. Detailed results of weekly loadings for mine rock humidity cells are presented in Appendix B.

7.3.1 pH

The pH of 18 of the 20 mine rock humidity cells (HC-2 through HC-7 and HC-9 through HC-20) has remained relatively constant over the duration of testing. The median pH value for these circumneutral cells was 7.4. Two of the humidity cells (HC-1 and HC-8) exhibited significant declines in pH over the course of testing. The pH values for HC-1 began to decline immediately after the cell was initiated, with a near steady acidic pH (median pH 3.6) reached after week 40. HC-8 exhibited circumneutral pH prior to week 80 at which point pH declined rapidly over several weeks. A near steady pH of approximately 4.0 was observed in HC-8 after about week 120.

7.3.2 Alkalinity and Acidity

Consistent with cell pH described above, low acidity loading rates were observed in all pH neutral cells (average 1.5 mg/kg/wk). In the two acidic cells (HC-1 and HC-8) maximum acidity loading rates were recorded at 43 and 23 mg/kg/wk, respectively.

Alkalinity loadings from pH neutral cells exhibited generally stable to slightly declining trends and were typically in the range of 4 to 10 mg/kg/wk over the duration of testing for all cells except acidic cells HC-1 and HC-8. As expected alkalinity in HC-1 dropped rapidly after initiation, stabilizing briefly at a rate of about 0.4 to 0.7 mg/kg/wk for several weeks and then dropped to detection limit (0.04 mg/kg/wk) just after week 20 when pH dropped below 5 (consistent with expected carbonate speciation behaviour). HC-8 exhibited a gradual decline in alkalinity and similarly dropped to below detection limit when the pH fell below 5.

7.3.3 Sulphate

Sulphate loads for all neutral pH mine rock humidity cells have exhibited a generally steady state throughout the duration of testing with the exception of an initial drop within the first 20 weeks of operation. Median steady state loading rates ranged from 1.4 to 22.9 mg/kg/wk in all cells The highest sulphate loading rate for the non-acid cells was for a low NPR (0.7) mafic volcanic sample with 8.1% sulphide. HC-1 and HC-8 exhibited increasing sulphate release rates, beginning at approximately 20 weeks and 60 weeks, respectively. Both cells reached a maximum steady sulphate release rate of approximately 23 mg/kg/week after acid onset.

7.3.4 Metals

For circumneutral humidity cells (HC-2 through HC-7, HC-8 prior to acid onset, and HC-9 through HC-20), 10 elements (Ag, Be, Bi, Cr, Fe, Hg, P, Tl, Ti, Zr) had leachate concentrations

at or near detection limits. For six elements (Cd, Cu, Li, Ni, Se, Zn) two to four cells exhibited somewhat elevated leachate concentrations (maximum 50 times detection limit values), but were more typically at or near detection limit values. Eight elements (B, Ca, K, Mg, Na, S, Si, Sr) had loadings that consistently decreased throughout the duration of testing. The remaining 10 elements (Al, As, Ba, Co, Mn, Mo, Pb, Sn, V, U) all had loadings consistently above detection limit and generally remained steady throughout the testing period. Humidity cell HC-2 contains elevated Cd and Zn (Table 5-4) and exhibited anomalous release rates for these two elements in comparison to other humidity cells. Cadmium and Zn release rates for HC-2 exhibited generally increasing release rates to week 80 and fairly steady release rates after that time. The observed anomalous neutral leaching was considered in selecting the recent additional humidity cells. Presently two of the more recently initiated cells (HC-14 and HC-17) containing elevated Cd and Zn are also exhibiting slightly elevated Cd and Zn release in comparison to most other cells. These release rates are however, about an order of magnitude lower than those observed in cell HC-2 during the corresponding time interval (ca. 28 weeks).

For the acidic humidity cells (HC-1 and HC-8), notable increases in loading rates were observed after the cells went acid for the following 14 elements Al, Be, Cd, Co, Cr, Cu, Fe, Li, Ni, Pb, Si, Sr, U and Zn.

7.3.5 Depletion Rates and Time to Acid Onset

Estimated depletion rates were calculated by determining the average loss of sulphide and NP (represented as molar calcium plus magnesium) for each cell. These estimated depletion rates were applied to the measured sulphide and NP contents to determine the time until sulphide and NP exhaustion (Table 7-10).

Calculated sulphide depletion times estimated from the above calculations are hundreds of years. In comparison, calculated carbonate depletion times range from several years to hundreds of years.

7.4 Mine Rock Field Cell Results

As described previously, samples were taken from the drill core material prior to setting up the field cells, and were analyzed for ABA and total elemental content. Each field cell contains drill core specific to a rock code lithology, and subclasses of those lithologies: FC-1, FC-2, and FC-3 contain felsic metavolcanic material; FC-4 contains mafic metavolcanics; FC-5 contains intermediate metavolcanics; and FC-6 and FC-7 contain metasediments. A summary of ABA and metals content is provided in Table 7-11 and Appendix B respectively, and described in the following sections.

7.4.1 Acid Base Accounting Results

The paste pH of the composite samples ranged from 8.6 to 9.6. The field cells containing clastic metasediment (FC-6 and FC-7) had slightly lower paste pH values (8.8 and 8.9) relative to the other field cells (>9).

Total sulphur content ranged from 0.34 to 6.4% for all field cell composite samples. Calculated sulphide sulphur content ranged from 0.34 to 6.4%, and sulphate sulphur content was very low in all composite samples (<0.01%) consistent with overall mine rock ABA sampling. The average sulphide sulphur contents in FC-2, FC-4 and FC-5 were <2%, whereas sulphide sulphur content in FC-1, FC-3, FC-6 and FC-7 were 2% or greater.

Values for AP range from 11 to 201 kg $CaCO_3$/t for all field cell composite samples. Elevated AP values were observed for composite samples of metasediment FC-6 and FC-7, with an average AP of 75 and 151 kg $CaCO_3$/t, respectively.

Values for siderite corrected NP ranged from 15 to 214 kg $CaCO_3$/t for all field cell composite samples. Average NP values were elevated for FC-4 (185 kg $CaCO_3$/t) and FC-7 (149 kg $CaCO_3$/t), relative to average NP values for the other field cells (<61 kg $CaCO_3$/t). Values for carbonate NP ranged from 3.3 to 178 kg $CaCO_3$/t, and were generally less than values for siderite corrected NP for the same samples, particularly for drill core material in FC-4 and FC-7.

The NPR values were calculated based on siderite corrected NP, and ranged from 0.2 to 76, with a median value of 0.9. The average NPR values were less than 1 for composite samples from FC-1, FC-3, FC-6 and FC-7, and were greater than 2 for composites of FC-2, FC-4 and FC-5.

7.4.2 Elemental Content

The drill core composite material that was used to fill the field test cell barrels was also tested for total elemental content. Results for elemental content of composite samples are provided in Appendix B. For comparative purposes, elemental content of the drill core samples were compared to 10 times the average continental crust values (Price 1997). Elements that exceeded the average crustal abundance by greater than a factor of 10 are summarized in Table 7-12.

The field cell composite sample results were similar to elemental concentrations in mine rock more generally (section 7.2.2). On the whole, sulphur, bismuth and phosphorous were elevated relative to 10 times the average crustal abundance for most of the field cell composite samples. One sample in FC-2 had silver and arsenic content greater than 10 times the average crustal abundance. Core in FC-3 had greater than 10 times the average crustal concentration of silver and cadmium. One sample in FC-4 and one sample in FC-5 had elevated concentrations of

arsenic and cadmium, respectively. Composite samples in FC-7 had content of silver, arsenic, cadmium, selenium and zinc that were greater than 10 times the average crustal abundance.

7.4.3 Kinetic Results

A maximum of 14 sampling events were captured between October 2011 and November 2012. The volume of leachate collected from FC-1 was often less than other field cells. A small hidden crack near the base of the cell was identified and has since been repaired. Loading rates for FC-1 were calculated based on the average volume collected for the six other field cells. The field cell loading rates were compared to the range of steady state loadings observed in the humidity cell leachate (Figures B-80 to B-92; Appendix B). The loading rates were normalized to account for differences in the surface area of the crushed core in the humidity cells, and the larger core fragments in the field cells.

7.4.3.1 pH

The pH values of the field cell leachate ranged from 7.4 to 8 for all field cells exhibiting a generally declining trend for most of 2012. The field cell leachate pH values were generally above the average steady state pH range observed in the humidity cell leachate (7.0 to 7.6).

7.4.3.2 Alkalinity and Acidity

Acidity loading rates are similar for all field cells, and range from 0.08 to 1.6 mg/m^2/wk, and increased to some extent over the course of the experiments. The field cell loading rates were similar to the average steady state loading rates of the humidity cells (0.08 to 0.7 mg/m^2/wk), particularly during the initial 35 weeks of field cell operation.

Alkalinity loadings varied over time and were similar for all field cells. Loading rates ranged from 1.4 to 2.2 mg/m^2/wk, and generally decreased over the course of sampling. Rates were generally elevated relative to the average steady state loading rates observed in the humidity cell leachate (0.06-3.4 mg/m^2/wk).

7.4.3.3 Sulphate

Sulphate loading for all field cells were elevated for the initial sampling event, particularly for FC-1, FC-3, FC-5, FC-6, and FC-7, and ranged from 5.5 to 10 mg/m^2/wk. Sulphate loading rates declined over time in all field cell leachates, and ranged from 0.2 to 6.0 mg/m^2/wk for the remainder of samples collected. Leachate collected from FC-2 and FC-4 generally had lower sulphate loadings relative to the other field cells. In general, sulphate loading rates were elevated relative to humidity cell average steady state loading rates (0.002-2.5 mg/m^2/wk).

Sulphate loading rates were occasionally elevated in FC-5 leachate, although the elemental analysis for total sulphur suggested that the FC-5 core had relatively low total sulphur content (average of 0.84%). Sulphate loadings were elevated for FC-6 and FC-7, which were identified to have elevated content of sulphur and AP.

7.4.3.4 Calcium and Magnesium

Loadings for Ca were elevated relative to the average steady state loadings in the humidity cells, and ranged from 0.5 to 8.3 with a median of 3.3 mg/m^2/wk. Loadings for Mg ranged from 0.1 to 3.2 mg/m2/wk with a median of 0.96 mg/m2/wk, and were similar to loadings observed in the average steady state loadings of the humidity cells. Release of Ca and Mg were initially higher for FC-3, FC-5, FC-6 and FC-7. The release rates for Ca and Mg were positively correlated and suggest that Ca was released at a rate approximately 1.6 times that of Mg.

(Ca+Mg)/SO_4

The release rates of Ca and Mg were compared to the release rates of SO_4, and suggest that Ca+Mg release ranged from 2-18 times that of SO_4. The ratios are generally lower for FC-5 (intermediate metavolcanic) and are likely due to elevated SO_4 release rates for this field cell. Relatively elevated (Ca+Mg)/SO_4 ratios were observed for FC-2 (felsic metavolcanic), and may be attributed to low total sulphur content measured in the composite core material.

Overall, the Ca+Mg loading rates indicated a slight increase relative to SO_4 loading rates over time. Increased Ca and Mg loading rates in leachate collected in early spring (weeks 32 to 35) may be due to concentration from evaporation of the winter season, or may be a function of increased carbonate dissolution relative to sulphide oxidation.

Metals

Metals analyses on leachates from the field cells had concentrations near or at the detection limit for Ba, Be, Bi, B, Cd, Cr, Co, Fe, Pb, Li, Mn, Hg, Ni, Se, Ag, Te, TI, Si, Sn, Ti, W, U, V, Zn and Zr. All detectable field cell loading rates were elevated for the initial 3 weeks of flushing and increased again in the early spring (weeks 32-35). Generally the field cell loading rates were variable, although a general decreasing trend over time was observed for most constituents.

Loadings for Mo were elevated relative to the average steady state loadings in the humidity cells, with median loadings of 0.001 mg/m^2/wk. Loading rates for Mo were relatively low in FC-4 leachate. Loading rates for Na, Sb and K were similar or slightly elevated relative to the average steady state humidity cell loadings. Sodium rates were generally elevated for felsic metavolcanics (FC-1, FC-2 and FC-3) and one of the metasediment samples FC-6. Antimony and potassium release rates were similar in all field cell leachate, however Sb rates remained constant over time, whereas K loadings decreased.

Loadings for arsenic ranged from 0.000007 to 0.002 mg/m^2/wk, and were similar to loadings observed in the average steady state loadings of the humidity cells. Arsenic release was observed to slightly increase over time for all field cell experiments. Low arsenic loading rates were observed for FC-5 relative to other field cell results. Aluminum loading rates remained constant throughout the field cell leachate collection period (median of 0.003 mg/m^2/wk), and were similar or lower than average steady state loading rates determined from the humidity cell leachate.

7.5 Tailings Static Test Results

Currently three simulated tailings samples have been produced through bench scale processing of several ore composite materials. The three ore composites were developed by RRR and SGS Lakefield to be representative of the main ODM ore zone, early ore (Starter Pit) and later ore (ROM) expected to be produced over the life of mine. The following subsections discuss the results of static testing on tailings samples by test type, including ABA, elemental content, leachability testing and mineralogy. MDL values were assumed when analytical values were reported to be less than the MDL. Detailed results on the tailings samples are provided in Appendix A.

7.5.1 Acid Base Accounting Test Results

A summary of ABA results for the tailings samples is presented in Table 7-13. NAG and sequential NAG test results are presented in Appendix A (Tables A-6 and A-7).

All of the tailings samples had consistent slightly alkaline paste pH values (8.2 to 8.8) with the ROM samples having higher paste pH values that the ODM and Starter Pit samples. Concentrations of total sulphur were also consistent throughout all of the samples with values ranging from 2.1 to 2.3% (Table 7-13). The ODM samples had the highest overall sulphur content. The relationship between total sulphur and sulphide sulphur shows that sulphide and sulphate are both contributing to the total sulphur content (Figure 7-21).

The siderite corrected Sobek NP values ranged from 107 to 186 kg $CaCO_3$/t, while the modified Sobek NP values ranged from 41 to 46 kg $CaCO_3$/t. Carb NP values ranged from 33 to 41 kg $CaCO_3$/t (Table 7-13). Siderite corrected values seem high in comparison, but were verified by retest by the laboratory. Higher siderite corrected values are probably related to fine grain size of the tailings and in part due to higher fizz test classification than the waste rock. For tailings the modified Sobek NP is inferred to represent the most reasonable overall assessment of NP.

The calculated NPR values (based on the modified Sobek NP) ranged from 0.74 to 0.91 (Table 7-13). Based on these values all of the tailings samples would be classified as PAG (NPR <2) based on the MEND guidelines (Figure 7-22).

All of the tailings samples had NAG_{pH} values less than 4.5.

7.5.2 Elemental Content

A summary of total metal contents for the tailings samples is presented in Table 7-14. For comparative purposes, the elemental content of the tailings were compared to 10 times the average continental crust values (Price 1997). Overall, arsenic, bismuth, cadmium, selenium and silver stand out as anomalous with respect to 10 times average crustal abundance. The mean and median concentrations for arsenic of entire dataset were 70 ppm and 65 ppm, respectively, in comparison to 18 ppm for 10 times the crustal abundance. The mean and median concentrations for bismuth in the dataset were 1.2 ppm and 0.89 ppm, respectively, in comparison to 0.085 ppm for 10 times the crustal abundance. The mean and median concentrations for cadmium in the dataset were 4.3 ppm and 4.6 ppm, respectively, in comparison to 1.5 ppm for 10 times the crustal abundance. The mean and median concentrations for selenium were 0.7 ppm in comparison to 0.5 ppm for 10 times the crustal abundance. It should be noted that the detection limit for selenium in the tailings is reported to be higher than 10 times the crustal abundance at 0.7 ppm. The mean and median concentrations for silver were 0.86 ppm and 0.87 ppm, respectively, in comparison to 0.75 ppm for 10 times the crustal abundance.

Antimony and zinc were also identified as elements that had concentrations in excess of 10 times the crustal abundance and were elevated in all but the ROM samples.

7.5.3 Leachable Metals

All of the tailings samples were analyzed by the SFE test to assess the presence of potentially leachable metals. The results are presented in Table 7-15 along with comparison to regulated effluent discharge values (O.Reg. 560/94). The more stringent PWQO are also provided for reference purposes only.

All of the tailings samples exhibited neutral to slightly alkaline pH in the range of pH 7.3 to 8.5. Dissolved metal concentrations in the SFE tests were generally low with no results reported at concentrations above O.Reg 560/94. Aluminum concentrations were consistently elevated in comparison to PWQO. The ROM samples exhibited silver concentrations elevated in comparison to PWQO and the Starter Pit samples exhibited antimony concentrations elevated in comparison to PWQO.

7.5.4 Mineralogy

Mineralogical examination by Rietveld-XRD was conducted on all of the tailings samples (Table 7-16). All samples analyzed had detectible pyrite around 1%. All of the samples contained calcite between 1.4% and 2.4% and dolomite between 0.9% and 1.6%. The ROM and Starter Pit samples also contained ankerite at 0.9% to 1.4%. The sulphate alunite was also detected in the ROM samples at 0.4% and 0.1%; however, identification should be considered preliminary at the concentrations indicated.

7.6 Tailings Humidity Cell Results

Six tailings humidity cells are currently in operation representing three tailings types (each in duplicate). The types of tailings undergoing testing include tailings derived from bench scale processing of an ODM ore zone composite sample, a Starter Pit composite sample and a remainder of mine life (ROM) composite sample. As of February 13, 2013 the ODM cells were in operation for 40 weeks, Starter Pit cells were in operation for 33 weeks and the ROM cells were in operation for 41 weeks. Detailed results for the tailings humidity cells can be found in Appendix B.

7.6.1 pH

The pH of the tailings cells remained relatively constant with a slightly downward trend. Values for pH range between 6.6 and 8.1, with a median pH value of 7.2. The pH for all cells remained relatively constant around pH 7.0 after week 10.

7.6.2 Alkalinity and Acidity

Acidity loading rates have remained constant around 2.0 mg/kg/wk throughout the entirety of the testing period. Alkalinity loading rates were initially high (up to 80 mg/kg/wk), but declined to around 2 mg/kg/wk as testing progressed. The humidity cell containing ROM Sample B has seen the loading rates for alkalinity sharply increase in the last 10 weeks of testing to a peak of 46.5 mg/kg/wk.

7.6.3 Sulphate

Sulphate loading rates follow a similar trend as alkalinity with high initial loadings (up to 280 mg/kg/wk), declining by week five to fairly steady rates between 10 and 20 mg/kg/wk. ROM and Starter Pit steady rates were generally higher than those of the ODM rates by approximately 5 to 10 mg/kg/wk. ROM Sample B is higher than the other cells having loading rates that increased around week 30. The loading rates have since stabilized around 30 mg/kg/wk.

7.6.4 Metals

Eighteen elements (Ag, As, Be, Bi, Ca, Cr, Cu, Hg, Li, Ni, P, Se, Tl, Th, Ti, V, W, Y, Zn) had loading rates near or at detection limit for the all cells. The following observations are provided for early stage (21 to 30 weeks of operation) metal loadings from the tailings humidity cells:

- Major elements (Al, Ca, Fe, K, Mg, Na and Si) all exhibited loading under 10 mg/kg/wk with the exception of Ca which had loading rates as high as 100 mg/kg/wk.

- Most trace elements exhibited loading rates below 0.01 mg/kg/ wk (As, Ba, Mo, Ni, Sb and Sn) and with some consistently lower than 0.001 mg/kg/wk (Cd, Co, Pb, Th, U and Y).

- A few metals (B, Mn, Sr and Zn) exhibited elevated loading rates in comparison to others. B exhibited fluctuating release rates in the range of 0.03 to 0.001 mg/kg/wk with an overall declining trend for all cells. Sr and Mn exhibited initial loadings above 0.1 mg/kg/wk approaching more steady rates below 0.05 mg/kg/wk after several weeks in all cells. Zn exhibited elevated initial loadings at up to 0.04 mg/kg/wk approaching more steady rates around 0.003 mg/kg/wk after several weeks for all cells. An increasing loading trend in Zn has been identified in all cells by week 25.

7.6.5 Depletion Rates and Times

Estimated depletion rates were calculated by determining the average loss of sulphide and NP (represented as molar calcium plus magnesium) for each cell based on the most recent 20 weeks of data. These estimated depletion rates were applied to the measured sulphide and NP contents to determine the time until sulphide and NP exhaustion (Table 7-17).

Calculated sulphide depletion times estimated from the above calculations ranged from 53 to 120 years. In comparison, calculated carbonate depletion times for all but one cell are in a comparatively narrow range of 32 to 43 years. As identified previously, apparent carbonate release rates have increased in the most recent 10 weeks of data for one of the two duplicate tailings cells for ROM (late mine life tailings). This has lead to an anomalous decrease in carbonate depletion time to 17 years for this cell that is not observed in the duplicate cell. Testing of all tailings humidity cells is continuing. Depletion times are consistent with the PAG nature of the tailings identified, but with relatively long lag times inferred to acid onset.

7.7 Tailings Decant Solution Results

Two decant solution samples (CND-1 and CND-2) were analyzed to assess the water quality of the tailings. The results are presented in Table 7-18 along with comparison to regulated effluent discharge values (O.Reg. 560/94). The more stringent PWQO are also provided from reference purposes only.

Both samples exhibited neutral to slightly alkaline pH in the range of pH 7.8 and 7.7. Dissolved metal concentrations in the decant water were generally low with no results reported at concentrations above O.Reg 560/94. Aluminum, silver, cobalt, molybdenum and antimony concentrations were elevated in comparison to PWQO in both samples. Cadmium and zinc were also elevated in CND-2 in comparison to PWQO.

TABLE 7-1:
OVERBURDEN ACID BASE ACCOUNTING RESULTS

Sample No.		44070-2	44314-1	44070-1
Unit Name		Keewatin	Labradorean	Labradorean
Fizz Test		Slight	Moderate	Slight
Paste pH		7.53	8.28	8.63
TIC	%	0.61	0.90	0.22
Carb-NP	kg $CaCO_3$/t	50.8	75.0	18.3
S(T)	%	0.04	3.1	0.59
S(SO_4)	%	<0.01	<0.01	<0.01
S(S-2) Sobek	%	0.02	3.1	0.51
S insoluble*	%	0.02	<0.01	0.08
S(S-2) calculated**	%	0.03	3.1	0.58
AP	kg $CaCO_3$/t	0.94	96.6	18.1
NP***	kg $CaCO_3$/t	65.9	120	24.0
NPR		70.3	1.24	1.32
Carb-NPR		54.2	0.78	1.01
NAG pH		6.82	7.54	6.03

* S insoluble = S(T) - S(SO4) - S(S-2)
** S(S-2) = S(T) - S(SO4)
*** Modified Sobek NP with Siderite Correction

TABLE 7-2:
OVERBURDEN ELEMENTAL ANALYSES

Sample No.		44070-2	44314-1	44070-1
Parameter	10x Crustal Abundance*	Keewatin	Labradorean	Labradorean
Ag (ppm)	0.75	0.06	1.16	0.31
Al (%)	82.0	1.56	3.30	1.11
As (ppm)	18.0	4.00	23.0	11.0
B (ppm)	100	40.0	20.0	30.0
Ba (ppm)	4250	114	44.0	26.0
Be (ppm)	30.0	0.50	0.20	<0.10
Bi (ppm)	0.085	0.22	0.35	0.2
Ca (%)	42.0	1.70	4.36	0.96
Cd (ppm)	1.50	0.14	0.18	2.24
Ce (ppm)	665	47.2	5.50	16.2
Co (ppm)	250	13.7	37.7	12.8
Cr (ppm)	1020	63.0	105	70.0
Cs (ppm)	-	1.84	3.82	1.05
Cu (ppm)	600	31.1	174	44.0
Fe (%)	56.0	2.73	7.23	2.53
Ga (ppm)	190	6.00	10.6	3.40
Ge (ppm)	15.0	<0.10	1.00	<0.10
Hf (ppm)	30.0	0.53	<0.05	0.14
Hg (ppm)	0.85	0.02	0.06	0.08
In (ppm)	2.50	<0.02	0.03	0.03
K (%)	20.0	0.34	0.32	0.11
La (ppm)	390	24.0	2.30	7.80
Li (ppm)	200	25.00	61.00	19.00
Lu (ppm)	-	0.09	0.08	0.04
Mg (%)	24.0	1.32	2.25	0.78
Mn (ppm)	9500	421	1010	375
Mo (ppm)	12.0	0.58	0.56	0.41
Na (%)	24.0	0.04	0.09	0.05
Nb (ppm)	200	0.56	0.10	0.15
Ni (ppm)	840	33.9	44.8	22.1
P (ppm)	10400	630	480	460
Pb (ppm)	140	7.50	4.30	6.20
Rb (ppm)	900	27.5	10.9	4.40
S (%)	0.35	0.03	3.56	0.67
Sb (ppm)	2.00	0.12	0.42	0.16
Sc (ppm)	220	5.20	8.20	2.40
Se (ppm)	0.50	<1.00	<1.00	<1.00
Sn (ppm)	24.0		<0.30	<0.30
Sr (ppm)	3700	36.8	40.1	19.4
Ta (ppm)	20.0	<0.05	<0.05	<0.05
Tb (ppm)	-	0.35	0.18	0.13
Te (ppm)	-	<0.10	1.67	0.10
Th (ppm)	12.0	7.30	0.30	1.10
Ti (%)	5.65	0.10	0.10	0.10
Tl (ppm)	8.60	0.23	0.14	0.06
U (ppm)	28.0	0.94	0.10	0.20
V (ppm)	1200	52.0	278	33.0
W (ppm)	12.5	0.10	0.60	0.30
Y (ppm)	330	7.95	4.70	3.00
Yb (ppm)	32.0	0.70	0.50	0.30
Zn (ppm)	700	61.0	134	479
Zr (ppm)	1650	19.8	4.40	4.80

* Price 1997

TABLE 7-3:
OVERBURDEN SHAKE FLASK EXTRACTION RESULTS

Sample No.			44070-2	44070-1
Parameter	**PWQO**	**O. Reg 560/94**	**Keewatin**	**Labradorean**
pH	6.5-8.5	6.0-9.5	8.03	7.91
Redox (mV)	-	-	247	267
Conductivity (uS/cm)	-	-	298	213
Total Acidity (to pH 8.3) (mg $CaCO_3$/L)	-	-	2.90	3.20
Alkalinity (mg $CaCO_3$/L)	-	-	88.8	55.6
Chloride (mg/L)	-	-	0.8	0.3
Fluoride (mg/L)	-	-	0.33	0.08
Sulphate (mg/L)	-	-	64	53
Hardness $CaCO_3$ (mg/L)	-	-	121	94.9
Aluminum Al (mg/L)	0.015 -0.075*	-	0.145	0.0457
Antimony Sb (mg/L)	0.02	-	4.00E-04	9.00E-04
Arsenic As (mg/L)	0.1	0.5	0.0019	0.001
Barium Ba (mg/L)	-	-	0.0559	0.0292
Beryllium Be (mg/L)	0.011 -1.1**	-	<2E-05	<2E-05
Bismuth Bi (mg/L)	-	-	<1E-05	<1E-05
Boron B (mg/L)	0.2	-	0.034	0.0121
Cadmium Cd (mg/L)	2.00E-04	-	2.20E-05	6.90E-05
Calcium Ca (mg/L)	-	-	28.7	28.5
Chromium Cr (mg/L)	0.001	-	<0.0001	0.0001
Cobalt Co (mg/L)	9.00E-04	-	1.27E-04	2.13E-04
Copper Cu (mg/L)	0.005	0.3	0.0057	0.0019
Iron Fe (mg/L)	0.3	-	0.087	0.018
Lead Pb (mg/L)	0.005-0.025***	0.2	0.0001	6.00E-05
Lithium Li (mg/L)	-	-	0.026	0.005
Magnesium Mg (mg/L)	-	-	11.9	5.76
Manganese Mn (mg/L)	-	-	0.0375	0.141
Mercury Hg (µg/L)	0.2	-	<0.01	0.01
Molybdenum Mo (mg/L)	0.04	-	0.00964	8.00E-05
Nickel Ni (mg/L)	0.025	0.5	8.00E-04	6.00E-04
Phosphorus P (mg/L)	0.01 - 0.02	-	<0.009	<0.009
Potassium K (mg/L)	-	-	7.09	2.45
Selenium Se (mg/L)	0.1	-	0.012	0.00117
Silicon Si (mg/L)	-	-	3.44	1.1
Silver Ag (mg/L)	1.00E-04	-	1.00E-06	<1E-05
Sodium Na (mg/L)	-	-	5.58	1.29
Strontium Sr (mg/L)	-	-	0.128	0.085
Thallium Tl (mg/L)	3.00E-04	-	3.00E-05	<2E-05
Sulphur (mg/L)	-		23.6	20
Tin Sn (mg/L)	-	-	2.00E-05	<1E-05
Titanium Ti (mg/L)	-	-	0.0096	0.0013
Uranium U (mg/L)	0.005	-	6.65E-04	1.82E-03
Vanadium V (mg/L)	0.006	-	4.11E-03	6.50E-04
Zinc Zn (mg/L)	0.03	0.5	0.003	0.003
Zirconium Zr (mg/L)	0.004	-	0.00027	6.00E-05

* Dependant on pH

** Dependant on Hardness

*** Dependant on Alkalinity

TABLE 7-4:
SUMMARY OF ACID BASE ACCOUNTING RESULTS FOR MINE ROCK SAMPLES

Sample	Paste pH	TIC	S(T)	$S(SO_4)$	Calculated $S(S^{-2})$	Carb NP	AP	NP	NPR	Carb NPR
		%	%	%	%	kg $CaCO_3$/t	kg $CaCO_3$/t	kg $CaCO_3$/t		
All Samples (n = 362)										
Count	362	362	362	362	362	362	362	362	362	362
Minimum	4.73	0.01	0.02	0.01	0.01	0.80	0.31	6.00	0.10	0.01
Maximum	9.93	4.10	9.00	0.16	8.99	342	281	338	529	248
Average	7.27	0.75	1.41	0.03	1.38	62.5	43.3	84.3	1.95	1.44
Median	8.95	0.54	1.00	0.01	0.98	45.0	30.5	59.0	1.92	1.37
Standard Deviation		0.71	1.41	0.03	1.40	59.0	43.9	67.6	42.7	22.1
25th Percentile	8.64	0.23	0.47	0.01	0.44	19.2	13.8	36.0	0.89	0.53
75th Percentile	9.31	1.00	1.87	0.03	1.86	83.3	58.1	116	5.31	3.84
90th Percentile	9.51	1.77	2.94	0.06	2.91	148	90.9	197	16.2	11.8
2 (n = 56)										
Count	56	56	56	56	56	56	56	56	56	56
Minimum	7.78	0.19	0.11	0.01	0.03	15.8	0.94	34.2	0.44	0.40
Maximum	9.64	3.23	8.09	0.16	8.06	269	252	287	169	127
Average	8.56	1.45	1.65	0.05	1.60	121	50.1	152	3.0	2.4
Median	8.78	1.46	1.29	0.04	1.25	122	39.1	159	4.69	3.98
Standard Deviation		0.80	1.53	0.04	1.52	67.0	47.5	67.4	27.1	22.8
25th Percentile	8.47	0.77	0.40	0.01	0.39	64.0	12.2	101	1.54	1.13
75th Percentile	9.11	2.03	2.45	0.08	2.37	169	74.1	202	12.1	9.18
90th Percentile	9.27	2.56	3.44	0.10	3.37	213	105	227	20.3	13.7
3 (n = 20)										
Count	20	20	20	20	20	20	20	20	20	20
Minimum	8.19	0.05	0.05	0.01	0.03	4.20	0.94	18.1	0.27	0.07
Maximum	9.69	3.71	6.05	0.10	6.01	309	188	305	27.6	37.3
Average	8.82	0.73	1.38	0.03	1.35	60.6	42.3	82.5	1.95	1.43
Median	8.96	0.44	0.89	0.02	0.87	36.3	27.2	46.7	1.96	1.30
Standard Deviation		0.88	1.49	0.02	1.48	73.5	46.3	78.5	6.82	8.78
25th Percentile	8.82	0.20	0.56	0.01	0.53	16.3	16.6	28.8	0.80	0.35
75th Percentile	9.21	0.95	1.33	0.02	1.29	78.9	40.2	105	4.68	3.93
90th Percentile	9.50	1.65	3.10	0.04	3.07	138	95.9	189	9.5	6.8

TABLE 7-4:
SUMMARY OF ACID BASE ACCOUNTING RESULTS FOR MINE ROCK SAMPLES

Sample	Paste pH	TIC	S(T)	$S(SO_4)$	Calculated $S(S^{-2})$	Carb NP	AP	NP	NPR	Carb NPR
4 (n = 158)										
Count	158	158	158	158	158	158	158	158	158	158
Minimum	4.73	0.01	0.14	0.01	0.09	0.80	2.81	6.00	0.10	0.01
Maximum	9.93		7.83	0.09	7.81	194	244	274	44.2	35.8
Average	6.92	0.49	1.34	0.02	1.32	40.5	41.1	55.1	1.34	0.99
Median	8.98	0.40	1.04	0.01	1.03	33.3	32.0	46.4	1.49	1.02
Standard Deviation		0.42	1.11	0.02	1.10	35.1	34.5	38.1	4.54	3.89
25th Percentile	8.65	0.18	0.61	0.01	0.58	14.6	18.2	29.4	0.73	0.37
75th Percentile	9.35	0.68	1.82	0.03	1.81	56.5	56.5	70.1	2.84	1.82
90th Percentile	9.53	0.98	2.44	0.04	2.43	81.7	75.9	90.1	6.10	4.60
5 (n = 45)										
Count	45	45	45	45	45	45	45	45	45	45
Minimum	7.72	0.01	0.12	0.01	0.08	0.80	2.50	6.80	0.30	0.09
Maximum	9.57	1.16	5.77	0.12	5.65	96.7	177	143	20.8	21.3
Average	8.65	0.37	1.51	0.02	1.48	31.0	46.4	48.6	1.05	0.67
Median	8.88	0.31	1.11	0.01	1.08	25.8	33.8	38.4	0.96	0.56
Standard Deviation		0.31	1.09	0.02	1.07	25.8	33.5	32.0	3.24	3.22
25th Percentile	8.67	0.14	0.89	0.01	0.88	11.7	27.5	28.9	0.54	0.22
75th Percentile	9.24	0.46	1.98	0.03	1.95	38.3	60.9	58.5	1.75	1.41
90th Percentile	9.39	0.90	2.98	0.04	2.94	74.7	91.8	96.6	4.55	3.05
5f (n = 15)										
Count	15	15	15	15	15	15	15	15	15	15
Minimum	8.49	0.17	0.68	0.01	0.67	14.2	20.9	26.8	0.31	0.22
Maximum	9.52	2.10	9.00	0.02	8.99	175	281	216	7.13	5.42
Average	8.84	1.28	3.64	0.01	3.63	107	114	135	1.19	0.94
Median	8.86	1.23	2.08	0.01	2.07	103	64.7	131	1.21	1.05
Standard Deviation		0.56	3.08	0.00	3.08	46.6	96.2	55.9	2.18	1.53
25th Percentile	8.69	1.00	0.97	0.01	0.96	83.3	29.8	99.9	0.84	0.65
75th Percentile	9.21	1.71	5.47	0.01	5.46	142	170	177	3.54	2.72
90th Percentile	9.42	1.99	8.58	0.02	8.57	166	268	200	5.46	3.61

TABLE 7-4:
SUMMARY OF ACID BASE ACCOUNTING RESULTS FOR MINE ROCK SAMPLES

Sample	Paste pH	TIC	S(T)	$S(SO_4)$	Calculated $S(S^{-2})$	Carb NP	AP	NP	NPR	Carb NPR
6 (n = 14)										
Count	14	14	14	14	14	14	14	14	14	14
Minimum	8.14	0.21	0.17	0.01	0.16	17.5	5.00	33.9	0.56	0.27
Maximum	9.44	4.10	4.29	0.08	4.25	342	133	327	37	33.4
Average	8.53	1.01	1.57	0.03	1.54	84.5	48.2	119	2.5	1.75
Median	8.57	0.63	1.39	0.01	1.34	52.5	41.9	110	2.62	1.61
Standard Deviation		1.03	1.14	0.02	1.13	85.7	35	79	10.3	8.8
25th Percentile	8.45	0.49	0.82	0.01	0.81	41.1	25.3	55.5	1.28	1.02
75th Percentile	8.79	1.22	2.09	0.04	2.04	102	63.8	156	4.90	2.58
90th Percentile	9.17	1.90	2.78	0.06	2.73	159	85	190	16.4	8.6
7 (n = 6)										
Count	6	6	6	6	6	6	6	6	6	6
Minimum	8.83	1.57	0.13	0.01	0.06	131	1.88	199	3.78	3.06
Maximum	9.55	3.28	2.87	0.07	2.86	273	89.4	338	146	88.9
Average	9.09	2.33	0.77	0.02	0.75	194	23.4	262	11.2	8.3
Median	9.11	2.16	0.38	0.01	0.37	180	11.4	263	20.2	14.1
Standard Deviation		0.61	1.06	0.02	1.06	51.1	33.2	49.3	54.3	33.2
25th Percentile	8.97	2.01	0.16	0.01	0.15	168	4.77	231	13.3	10.6
75th Percentile	9.34	2.66	0.67	0.01	0.66	221	20.6	284	56.9	41.9
90th Percentile	9.46	3.04	1.80	0.04	1.79	253	55.9	313	107	69.6
8 (n = 24)										
Count	24	24	24	24	24	24	24	24	24	24
Minimum	8.08	0.12	0.02	0.01	0.01	10.0	0.31	26.5	0.66	0.56
Maximum	9.84	2.11	3.27	0.10	3.17	176	99.1	190	229	117
Average	9.02	0.72	0.69	0.02	0.67	59.7	20.8	78.5	3.8	2.86
Median	9.42	0.64	0.39	0.01	0.38	52.9	11.7	68.2	5.33	4.39
Standard Deviation		0.47	0.83	0.02	0.82	39.2	25.8	44.8	54.0	29.9
25th Percentile	9.12	0.45	0.17	0.01	0.15	37.3	4.77	48.9	2.22	1.79
75th Percentile	9.58	0.80	0.82	0.03	0.81	66.7	25	89	20.0	14.2
90th Percentile	9.71	1.37	1.59	0.05	1.58	114	49	153	90.5	60.8

TABLE 7-4:
SUMMARY OF ACID BASE ACCOUNTING RESULTS FOR MINE ROCK SAMPLES

Sample	Paste pH	TIC	S(T)	$S(SO_4)$	Calculated $S(S^{-2})$	Carb NP	AP	NP	NPR	Carb NPR
9 (n = 12)										
Count	12	12	12	12	12	12	12	12	12	12
Minimum	8.67	0.20	0.05	0.01	0.01	16.7	0.31	36.4	3.81	1.40
Maximum	9.65	2.02	0.68	0.12	0.67	168	20.9	244	472	205
Average	9.05	1.01	0.30	0.02	0.28	84.2	8.65	138	15.9	9.7
Median	9.35	0.93	0.31	0.01	0.30	77	9.38	153	16.1	10.0
Standard Deviation		0.67	0.22	0.03	0.21	56.1	6.46	79.0	133.1	58.2
25th Percentile	8.86	0.37	0.11	0.01	0.10	31.0	2.97	57.8	7.43	5.30
75th Percentile	9.48	1.63	0.40	0.01	0.39	135	12.0	207	51.2	31.2
90th Percentile	9.52	1.77	0.63	0.04	0.52	147	16.2	217	128	70.1
10 (n=5)										
Count	5	5	5	5	5	5	5	5	5	5
Minimum	8.81	0.36	0.03	0.01	0.01	30.0	0.31	40.7	4.98	3.61
Maximum	9.93	0.97	0.63	0.03	0.62	80.8	19.4	165	529	248
Average	9.06	0.73	0.26	0.02	0.25	60.7	7.69	86.0	11.2	7.89
Median	9.08	0.84	0.23	0.01	0.22	70.0	6.88	79.5	11.6	11.8
Standard Deviation		0.27	0.24	0.01	0.24	22.2	7.44	50.2	233	107
25th Percentile	8.98	0.54	0.09	0.01	0.08	45.0	2.50	46.7	5.05	4.80
75th Percentile	9.08	0.93	0.33	0.02	0.30	77.5	9.38	97.8	16.3	12.0
90th Percentile	9.59	0.95	0.51	0.03	0.49	79.5	15.4	138	324	154
11 (n = 4)										
Count	4	4	4	4	4	4	4	4	4	4
Minimum	8.12	0.01	0.45	0.01	0.44	0.80	13.8	8.23	0.22	0.06
Maximum	9.51	0.76	4.40	0.03	4.37	63.3	137	101	2.87	1.79
Average	8.42	0.30	2.01	0.02	1.99	25.0	62.3	43.2	0.69	0.40
Median	8.60	0.22	1.59	0.01	1.58	17.9	49.4	31.5	0.56	0.23
Standard Deviation		0.33	1.72	0.01	1.71	27.3	53.5	40.4	1.22	0.82
25th Percentile	8.18	0.11	0.97	0.01	0.96	8.98	29.9	24.1	0.45	0.08
75th Percentile	9.12	0.41	2.63	0.02	2.62	34.0	81.7	50.6	1.17	0.73
90th Percentile	9.35	0.62	3.69	0.02	3.67	51.6	115	81.1	2.19	1.37

TABLE 7-4:
SUMMARY OF ACID BASE ACCOUNTING RESULTS FOR MINE ROCK SAMPLES

Sample	Paste pH	TIC	S(T)	$S(SO_4)$	Calculated $S(S^{-2})$	Carb NP	AP	NP	NPR	Carb NPR
13 (n = 3)										
Count	3	3	3	3	3	3	3	3	3	3
Minimum	8.49	0.04	0.09	0.01	0.08	3.33	2.50	19.8	4.84	1.11
Maximum	9.10	0.33	0.50	0.16	0.34	27.5	10.6	51.5	7.91	2.59
Average	8.77	0.14	0.24	0.06	0.18	11.7	5.63	30.4	5.41	2.07
Median	8.99	0.05	0.13	0.01	0.12	4.17	3.75	20.0	5.34	1.33
Standard Deviation		0.16	0.23	0.09	0.14	13.7	4.38	18.2	1.65	0.80
25th Percentile	8.74	0.05	0.11	0.01	0.10	3.75	3.13	19.9	5.09	1.22
75th Percentile	9.05	0.19	0.32	0.09	0.23	15.8	7.19	35.7	6.63	1.96
90th Percentile	9.08	0.27	0.43	0.13	0.30	22.8	9.25	45.2	7.40	2.34

Notes:

AP = Acid potential in tonnes $CaCO_3$ equivalent per 1000 tonnes of material. AP is determined from calculated sulphide sulphur content: S(T) - $S(SO_4)$.

NP = Neutralization potential in tonnes $CaCO_3$ equivalent per 1000 tonnes of material.

Carbonate NP is calculated from TIC originating from carbonates and is expressed in kg $CaCO_3$/tonne.

NPR = Net Potential Ratio = NP/AP

TIC= Total Inorganic Carbon

*Where NP or AP values are equal to or less than zero, NPR is calculated assuming detection limit (NP = 0.2 kg $CaCO_3$/tonne, AP = 0.03 kg $CaCO_3$/tonne).

TABLE 7-5:
SUMMARY OF MINE ROCK NPR AND CARBONATE NPR DISTRIBUTION

	NPR Distribution based on ABA Samples					
	NPR < 1	NPR 1-2	NPR 2-3	NPR 3-4	NPR >4	Total
2	7	12	4	2	31	56
3	6	4	2	1	7	20
4	52	46	24	11	25	158
5	24	10	4	1	6	45
5f	6	2	3	0	4	15
6	3	2	3	2	4	14
7	0	0	0	1	5	6
8	2	4	1	2	15	24
9	0	0	0	1	11	12
10	0	0	0	0	5	5
11	3	0	1	0	0	4
13	0	0	0	0	3	3
Total	103	80	42	21	116	362
Percent	28%	22%	12%	6%	32%	100%
	Carbonate NPR Distribution based on ABA Samples					
	NPR < 1	NPR 1-2	NPR 2-3	NPR 3-4	NPR >4	Total
2	13	9	4	2	28	56
3	8	3	3	1	5	20
4	77	44	10	8	19	158
5	31	7	2	3	2	45
5f	7	3	2	2	1	15
6	4	5	3	0	2	14
7	0	0	0	1	5	6
8	2	4	1	2	15	24
9	0	2	0	1	9	12
10	0	0	0	1	4	5
11	3	1	0	0	0	4
13	0	2	1	0	0	3
Total	145	80	26	21	90	362
Percent	40%	22%	7%	6%	25%	100%

TABLE 7-6:
SUMMARY OF ELEMENTAL ANALYSES FOR MINE ROCK SAMPLES

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	V	W	Y	Yb	Zn	Zr
Unit	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppb**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**
Average Crustal Abundance*	0.075	8.23	1.8	10	425	3	0.0085	4.15	0.15	66.5	25	102	3	60	5.63	19	1.5	3	0.085	0.25	2.085	39	20	-	2.33	950	1.2	2.355	20	84	1050	14	90	0.7	0.04	0.20	22.00	0.05	2.30	370.00	2.00	1.2	-	9.60	0.57	0.85	2.70	120.00	1.25	33.00	3.20	70.00	165.00
Ten Times Average Crustal Abundance*	**0.75**	**82.3**	**18**	**100**	**4250**	**30**	**0.085**	**41.5**	**1.5**	**665**	**250**	**1020**	30	**600**	**56.3**	**190**	**15**	**30**	**0.85**	**2.5**	**20.85**	**390**	**200**	-	**23.3**	**9500**	**12**	**23.55**	**200**	**840**	**10500**	**140**	**900**	**7**	**0.35**	**2**	**220**	**0.5**	**23**	**3700**	**20**	**12**	-	**96**	**5.65**	**8.5**	**27**	**1200**	**12.5**	**330**	**32**	**700**	**1650**
All Samples (n = 362)																																																							
Count	362	362	362	143	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362	143	362	362	362	362	362	362	362	362	362	219	362	362	362	362	362	362	362	362	362	362	362	362	362	362	362	143	362	362
Minimum	0.02	0.17	0.50	20.0	2.00	0.10	0.02	0.08	0.01	0.90	3.00	12.0	0.13	3.70	0.59	1.00	0.10	0.05	0.01	0.01	0.01	0.50	1.80	0.01	0.10	63.0	0.09	0.01	0.05	2.40	120.00	0.10	0.20	5.00	0.01	0.05	0.30	0.50	0.10	6.00	0.05	0.05	0.05	0.10	0.01	0.02	0.05	2.00	0.10	0.60	0.10	7.00	0.40
Maximum	6.00	6.07	345	50.0	3220	3.70	27.7	10.1	34.6	271	66.9	1160	59.7	938	11.5	16.3	0.50	0.90	2.4	1.22	3.46	130	215	0.21	6.39	2860	46.2	0.55	0.70	491	5640	555	185	25.0	7.82	18.8	33.5	5.50	2.00	1840	0.10	2.54	11.3	17.1	0.51	1.75	2.10	668	94.9	40.8	1.50	6930	50.3
Average	0.68	1.79	16.9	34.6	59.6	0.68	0.59	2.36	0.83	27.8	18.7	98.0	3.10	74.4	3.52	5.66	0.12	0.24	0.08	0.04	0.19	13.5	43.7	0.06	1.25	754	1.25	0.07	0.12	35.8	534	13.1	7.51	5.23	1.38	0.41	3.91	0.75	0.23	65.4	0.08	0.22	0.48	1.65	0.05	0.12	0.26	52.3	0.97	4.23	0.38	241	9.20
Median	0.40	1.48	8.70	30.0	29.0	1.00	0.20	1.82	0.11	25.0	9.50	59.0	1.59	38.3	2.32	5.00	0.10	0.20	0.05	0.02	0.12	12.0	36.7	0.04	0.92	606	0.60	0.04	0.10	11.6	430.00	3.80	3.95	5.00	1.02	0.23	1.30	0.50	0.20	45.0	0.10	0.15	0.20	1.50	0.02	0.10	0.20	13.0	0.10	2.87	0.20	91.0	7.40
Standard Deviation	0.76	1.08	26.7	5.79	196	0.44	1.73	1.72	3.46	28.2	15.5	139	4.77	101.8	2.51	3.25	0.06	0.16	0.22	0.10	0.30	13.7	30.3	0.04	1.00	509	3.03	0.06	0.07	55.8	426	45.9	13.4	1.61	1.21	1.08	5.10	0.41	0.17	106	0.02	0.24	1.03	1.77	0.06	0.13	0.23	75.7	5.66	3.63	0.30	689	6.97
25th Percentile	0.20	0.94	4.70	30.0	20.0	0.20	0.10	1.24	0.10	13.8	7.90	43.0	0.80	18.6	1.78	3.00	0.10	0.10	0.01	0.01	0.09	6.00	23.3	0.02	0.66	391	0.40	0.03	0.08	9.10	372.50	1.75	2.50	5.00	0.47	0.10	0.80	0.50	0.10	28.3	0.05	0.12	0.10	0.73	0.01	0.06	0.10	6.00	0.10	2.10	0.20	56.0	5.03
75th Percentile	0.80	2.54	20.0	40.0	40.0	1.00	0.49	2.82	0.40	30.0	31.5	76.0	3.58	88.0	4.67	7.60	0.10	0.30	0.05	0.03	0.18	15.0	57.5	0.08	1.32	1020	1.04	0.09	0.10	49.1	550	8.25	7.25	5.00	1.92	0.43	5.35	1.00	0.30	73.0	0.10	0.25	0.50	1.90	0.07	0.10	0.30	78.8	0.20	5.23	0.50	183	11.8
90th Percentile	1.60	3.17	36.8	40.0	84.7	1.00	1.30	4.85	1.19	44.9	43.9	154	7.34	183	7.81	10.0	0.20	0.44	0.10	0.06	0.39	22.0	78.9	0.13	2.69	1458	2.30	0.14	0.20	79.2	769	22.1	17.2	5.00	2.95	0.80	11.2	1.00	0.30	124	0.10	0.44	1.10	2.59	0.12	0.23	0.40	160	1.28	9.30	0.80	340	17.0
2 (n = 56)																																																						
Count	56	56	56	23	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	23	56	56	56	56	56	56	56	56	56	33	56	56	56	56	56	56	56	56	56	56	56	56	56	56	56	23	56	56
Minimum	0.04	0.17	1.00	20.0	2.00	0.10	0.02	1.06	0.01	0.90	6.80	12.0	0.21	17.0	2.10	2.00	0.10	0.05	0.006	0.01	0.01	0.50	16.3	0.04	0.56	391	0.15	0.01	0.05	2.40	0.012	0.30	0.20	5.00	0.08	0.05	0.70	0.50	0.10	13.2	0.05	0.05	0.05	0.10	0.01	0.02	0.05	2.00	0.10	1.30	0.30	30.0	0.40
Maximum	5.50	4.95	117	50.0	163	1.00	5.00	8.25	15.3	82.9	59.7	649	13.2	938	10.1	16.3	0.30	0.45	0.80	0.37	0.75	37.3	173	0.19	5.22	2430	12.9	0.28	0.44	204	1990	29.6	28.6	7.00	7.82	0.90	27.9	1.40	1.00	221	0.10	0.51	10.6	3.60	0.25	0.40	1.10	668	13.0	14.5	1.40	3103	17.8
Average	0.75	2.86	20.9	34.3	43.8	0.66	0.36	4.20	0.61	11.2	40.1	184	3.90	151	6.75	9.31	0.17	0.10	0.08	0.05	0.20	4.90	65.3	0.10	2.02	1184	1.67	0.07	0.17	78.3	208	3.71	8.72	5.15	1.62	0.37	9.21	0.75	0.29	74.6	0.08	0.23	0.88	0.47	0.10	0.14	0.12	149	1.12	7.19	0.67	211	3.45
Median	0.50	2.85	12.5	30.0	24.0	1.00	0.18	4.33	0.10	10.0	39.1	87.0	2.26	99.9	7.00	9.65	0.15	0.10	0.05	0.03	0.11	4.00	59.8	0.09	1.65	1099	0.85	0.04	0.20	60.0	0.065	3.00	4.20	5.00	1.26	0.40	9.30	0.50	0.30	66.0	0.10	0.21	0.36	0.40	0.09	0.10	0.10	151	0.25	8.09	0.60	114	2.60
Standard Deviation	0.82	0.87	23.1	6.62	42.4	0.43	0.78	1.84	2.14	12.9	10.5	165	3.86	157	2.02	3.12	0.08	0.06	0.14	0.05	0.22	5.96	26.8	0.04	1.11	456	2.14	0.07	0.08	43.5	350	4.26	9.32	0.44	1.49	0.23	5.25	0.28	0.17	43.6	0.02	0.17	1.76	0.55	0.05	0.11	0.16	96.7	2.52	3.47	0.31	437	2.95
25th Percentile	0.30	2.49	6.83	30.0	8.75	0.10	0.08	2.64	0.08	3.44	34.0	69.0	0.48	80.1	5.57	7.30	0.10	0.07	0.03	0.02	0.01	1.58	48.4	0.07	1.07	877	0.60	0.02	0.10	51.2	0.05	1.18	0.50	5.00	0.41	0.20	5.15	0.50	0.20	46.8	0.05	0.07	0.18	0.18	0.07	0.02	0.05	89.8	0.10	3.66	0.40	56.8	1.20
75th Percentile	0.93	3.30	27.5	40.0	78.0	1.00	0.30	5.38	0.40	12.2	46.7	303	6.88	165	8.29	11.0	0.20	0.10	0.07	0.04	0.38	5.00	74.9	0.14	2.80	1419	1.90	0.10	0.20	103	330	4.78	16.8	5.00	2.44	0.50	11.4	1.00	0.30	89.3	0.10	0.39	0.73	0.50	0.12	0.20	0.10	185	0.83	9.50	0.90	230	4.78
90th Percentile	1.55	4.01	47.9	40.0	101	1.00	0.56	6.59	0.60	16.0	54.3	449	9.30	258	9.12	13.2	0.30	0.10	0.16	0.09	0.54	7.00	93.9	0.16	3.25	1751	3.60	0.18	0.25	147	590	7.05	22.7	5.80	3.36	0.70	14.8	1.00	0.45	134	0.10	0.49	1.33	0.75	0.17	0.30	0.14	235	1.75	11.4	1.06	289	6.40
3 (n = 20)																																																					
Count	20	20	20	4	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20	4	20	20	20	20	20	20	20	20	20	16	20	20	20	20	20	20	20	4	20	20	20	20	20	20	20	4	20	20
Minimum	0.06	0.78	0.80	30.0	19.0	0.10	0.07	0.41	0.10	3.86	5.50	32.0	0.90	6.50	1.47	4.00	0.10	0.05	0.01	0.01	0.05	1.90	19.5	0.02	0.49	270	0.10	0.02	0.05	4.10	0.04	0.30	2.50	5.00	0.05	0.10	0.80	0.50	0.10	17.0	0.05	0.11	0.05	0.20	0.01	0.03	0.05	7.00	0.10	2.00	0.20	42.0	0.90
Maximum	2.10	3.54	76.9	40.0	128	1.00	1.40	8.31	29.5	68.0	66.9	112	9.90	662	10.0	10.0	0.20	0.60	2.41	0.12	0.62	32.0	88.4	0.09	4.29	2400	1.40	0.18	0.20	111	790	12.4	24.2	5.00	6.14	0.90	10.0	2.80	0.30	246	0.10	0.23	1.70	3.00	0.14	0.30	0.50	154	6.70	9.00	0.60	6930	21.9
Average	0.50	1.90	11.5	37.5	45.4	0.84	0.35	2.23	2.08	32.1	18.8	58.5	3.55	74.8	3.35	6.16	0.11	0.27	0.17	0.03	0.22	15.2	49.6	0.05	1.19	756	0.63	0.07	0.12	26.9	115	3.52	8.31	5.00	1.35	0.24	3.28	0.72	0.16	62.1	0.09	0.18	0.30	1.70	0.04	0.13	0.27	46.8	0.86	4.51	0.38	551	9.87
Median	0.30	1.61	6.05	40.0	35.0	1.00	0.15	1.72	0.20	30.5	10.0	55.0	2.60	32.1	2.19	5.50	0.10	0.23	0.05	0.02	0.16	14.5	50.6	0.05	0.97	609	0.56	0.07	0.10	13.0	0.06	2.75	5.55	5.00	0.92	0.20	1.85	0.50	0.10	36.0	0.10	0.20	0.10	1.80	0.04	0.10	0.29	17.5	0.15	3.55	0.35	118	9.90
Standard Deviation	0.55	0.82	16.9	5.00	28.9	0.33	0.41	1.86	6.65	17.8	16.9	22.4	2.80	144	2.36	1.97	0.03	0.16	0.53	0.03	0.17	8.49	19.0	0.04	0.82	535	0.36	0.04	0.05	28.1	255	2.73	7.07	0.00	1.48	0.18	2.87	0.53	0.09	57.9	0.02	0.05	0.38	0.87	0.04	0.07	0.13	50.1	1.64	2.26	0.21	1528	6.09
25th Percentile	0.20	1.30	3.93	37.5	30.5	1.00	0.10	1.04	0.10	24.2	7.85	42.5	1.59	13.2	1.78	4.63	0.10	0.13	0.02	0.01	0.12	11.6	35.7	0.02	0.70	357	0.40	0.04	0.10	8.65	0.05	1.68	4.20	5.00	0.56	0.10	1.10	0.50	0.10	30.0	0.10	0.17	0.10	1.28	0.01	0.10	0.19	10.8	0.10	2.69	0.20	68.0	5.55
75th Percentile	0.50	2.69	8.88	40.0	49.3	1.00	0.41	2.62	0.51	40.8	23.9	63.5	4.79	83.7	4.56	8.00	0.10	0.40	0.06	0.03	0.18	20.5	61.0	0.08	1.32	846	0.75	0.09	0.13	34.3	0.08	5.03	7.45	5.00	1.48	0.30	5.03	0.63	0.23	80.0	0.10	0.21	0.40	2.30	0.06	0.13	0.40	74.0	0.40	6.61	0.53	288	13.5
90th Percentile	1.09	2.84	22.8	40.0	88.1	1.00	1.03	4.06	1.45	53.4	42.1	89.3	7.91	114	6.87	8.82	0.11	0.50	0.20	0.08	0.56	25.4	72.6	0.08	1.68	1360	1.12	0.11	0.20	60.7	473	5.79	22.0	5.00	2.60	0.40	7.52	1.00	0.30	128	0.10	0.22	0.60	2.90	0.09	0.21	0.41	120	2.57	7.82	0.57	503	19.4
4 (n = 158)																																																					
Count	158	158	158	55	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	158	55	158	158	158	158	158	158	158	158	158	103	158	158	158	158	158	158	158	55	158	158	158	158	158	158	158	55	158	158
Minimum	0.04	0.24	0.50	30.0	4.00	0.10	0.02	0.08	0.02	8.00	3.00	19.0	0.30	3.70	0.70	1.00	0.10	0.10	0.01	0.01	0.02	4.00	1.80	0.01	0.10	73.0	0.10	0.01	0.05	4.60	220.00	0.10	0.70	5.00	0.08	0.05	0.30	0.50	0.10	6.00	0.05	0.09	0.05	0.30	0.01	0.02	0.07	2.00	0.10	0.80	0.10	12.0	1.00
Maximum	6.00	4.54	345	50.0	214	1.00	27.7	7.29	27.3	73.0	52.1	504	16.1	373	7.67	11.0	0.20	0.82	0.68	1.22	0.71	42.0	148	0.06	4.04	2105	14.4	0.23	0.30	167	740	555	24.2	8.00	5.41	18.8	14.8	5.50	0.70	230	0.10	0.31	11.3	3.40	0.12	0.42	0.70	242	12.6	9.60	0.40	5444	27.9
Average	0.76	1.23	19.7	34.2	30.3	0.71	0.84	1.62	0.72	26.6	10.1	52.3	1.83	46.2	2.18	3.87	0.10	0.27	0.06	0.04	0.14	13.3	29.1	0.03	0.79	573	1.09	0.06	0.10	13.1	429	18.5	4.80	5.03	1.35	0.53	1.28	0.72	0.18	46.4	0.08	0.15	0.43	1.61	0.02	0.10	0.26	12.1	0.38	2.57	0.18	212	9.47
Median	0.44	1.06	10.3	30.0	28.0	1.00	0.20	1.52	0.12	26.0	8.35	48.0	1.20	26.8	1.95	3.80	0.10	0.23	0.05	0.02	0.11	13.0	26.4	0.02	0.70	478	0.55	0.04	0.10	9.75	410.00	5.10	3.55	5.00	1.10	0.24	0.95	0.50	0.10	38.5	0.10	0.14	0.15	1.60	0.01	0.10	0.27	7.00	0.10	2.31	0.20	84.0	8.30
Standard Deviation	0.87	0.66	33.6	5.99	19.7	0.40	2.48	0.95	2.40	9.17	7.36	39.3	1.89	59.1	1.01	1.84	0.01	0.13	0.09	0.10	0.08	4.62	17.1	0.01	0.40	347	1.88	0.05	0.04	15.4	89	60.2	3.92	0.30	0.95	1.59	1.59	0.47	0.11	36.4	0.02	0.05	1.02	0.51	0.02	0.07	0.12	23.6	1.37	1.34	0.08	513	4.65
25th Percentile	0.22	0.78	4.43	30.0	21.0	0.20	0.10	1.07	0.10	22.0	7.40	37.0	0.80	15.7	1.71	2.55	0.10	0.20	0.02	0.01	0.09	11.0	19.4	0.02	0.57	346	0.40	0.03	0.06	8.60	370.00	1.90	2.63	5.00	0.63	0.10	0.70	0.50	0.10	23.3	0.05	0.11	0.10	1.33	0.01	0.06	0.20	4.00	0.10	1.74	0.10	48.5	6.20
75th Percentile	0.90	1.50	21.2	40.0	33.8	1.0	0.70	2.03	0.48	30.0	9.58	61.8	2.09	51.3	2.38	5.00	0.10	0.34	0.05	0.02	0.15	15.0	36.8	0.03	0.95	662	1.00	0.07	0.10	11.8	460	11.7	5.08	5.00	1.88	0.44	1.30	1.00	0.30	55.5	0.10	0.17	0.42	1.90	0.02	0.10	0.30	13.0	0.18	3.00	0.20	149	12.2
90th Percentile	1.83	2.19	40.4	40.0	41.0	1.00	1.51	2.52	1.43	34.3	12.4	71.0	3.46	90.8	2.86	6.00	0.10	0.43	0.10	0.06	0.22	18.0	45.1	0.04	1.15	1098	1.86	0.13	0.11	15.4	543	33.7	9.42	5.00	2.63	0.90	1.93	1.00	0.30	84.6	0.10	0.21	0.82	2.20	0.04	0.10	0.40	19.0	0.30	3.73	0.30	405	15.0
5 (n = 45)																																																					
Count	45	45	45	5	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	5	45	45	45	45	45	45	45	45	45	40	45	45	45	45	45	45	45	5	45	45	45	45	45	45	45	5	45	45
Minimum	0.10	0.39	1.50	30.0	16.0	0.10	0.10	0.11	0.03	10.0	4.90	14.0	0.40	6.90	0.59	1.00	0.10	0.10	0.01	0.01	0.06	5.00	4.40	0.02	0.14	63.0	0.30	0.01	0.05	5.20	310.00	0.80	1.60	5.00	0.06	0.05	0.40	0.50	0.10	8.00	0.05	0.12	0.06	0.50	0.01	0.02	0.10	2.00	0.10	0.60	0.10	34.0	2.60
Maximum	2.90	3.10	157	40.0	80.0	1.00	3.80	2.94	4.50	44.0	38.3	91.0	8.55	292	10.0	11.0	0.20	0.53	0.90	0.11	0.43	22.0	78.3	0.05	1.68	1537	18.3	0.25	0.30	49.8	820	391	18.3	15.0	4.81	2.00	6.50	1.00	0.40	148	0.10	0.24	3.00	3.30	0.12	0.20	0.45	157	37.1	11.2	0.40	1160	20.2
Average	0.77	1.38	21.0	36.0	28.0	0.90	0.65	1.33	0.60	25.2	9.43	46.4	2.15	49.3	2.26	4.19	0.10	0.28	0.08	0.02	0.14	12.4	29.6	0.03	0.78	561	1.35	0.07	0.10	10.8	422.2	26.2	5.29	5.28	1.48	0.45	1.25	0.56	0.14	46.8	0.09	0.16	0.36	1.68	0.02	0.11	0.24	14.8	1.17	2.61	0.20	190	10.3
Median	0.6	1.17	11.7	40.0	26.0	1.00	0.20	1.37	0.20	26.0	8.10	46.0	1.80	23.1	1.77	4.00	0.10	0.30	0.05	0.01	0.13	13.0	27.1	0.02	0.78	520	0.60	0.06	0.10	9.00	410.00	6.90	5.00	5.00	1.10	0.40	1.00	0.50	0.10	38.0	0.10	0.13	0.20	1.60	0.01	0.10	0.20	8.00	0.10	2.16	0.20	98	9.9
Standard Deviation	0.65	0.69	25.9	5.48	12.3	0.28	0.88	0.63	0.97	8.55	5.89	17.0	1.68	63.9	1.66	2.04	0.02	0.11	0.14	0.03	0.06	4.19	15.9	0.01	0.31	320	2.73	0.05	0.04	7.57	99	60.8	3.11	1.58	0.97	0.38	1.21	0.16	0.08	32.9	0.02	0.05	0.55	0.67	0.02	0.04	0.09	29.3	5.52	2.02	0.12	233	4.39
25th Percentile	0.30	0.84	6.80	30.0	19.0	1.00	0.14	0.87	0.10	19.0	6.80	34.0	0.80	15.7	1.54	3.00	0.10	0.20	0.02	0.01	0.09	9.00	18.9	0.02	0.64	381	0.40	0.03	0.10	8.30	360.00	3.50	3.20	5.00	0.94	0.19	0.70	0.50	0.10	22.0	0.10	0.13	0.10	1.30	0.01	0.10	0.20	4.00	0.10	1.70	0.10	61.0	7.40
75th Percentile	1.00	1.84	23.0	40.0	31.0	1.00	1.10	1.64	0.70	30.0	9.50	55.0	3.10	53.7	2.44	5.00	0.10	0.35	0.07	0.03	0.15	15.0	37.8	0.03	0.91	715	1.10	0.10	0.10	9.9	450.00	21.4	5.90	5.00	1.98	0.60	1.20	0.50	0.10	67.0	0.10	0.17	0.30	2.10	0.03	0.10	0.30	13.0	0.20	2.90	0.20	220	13.3
90th Percentile	1.74	2.53	39.6	40.0	41.4	1.00	1.82	2.05	1.44	36.0	12.5	69.8	3.96	106.8	3.01	5.60	0.10	0.40	0.11	0.04	0.20	17.6	53.9	0.04	1.12	931	2.46	0.15	0.10	12.3	546	48.4	9.08	5.00	2.93	0.96	1.60	0.80	0.30	93.2	0.10	0.21	0.76	2.52	0.04	0.16	0.40	16.0	1.04	3.40	0.32	386	16.1
5f (n = 15)																																																					
Count	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	0	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
Minimum	0.10	1.09	3.00	20.0	6.00	0.10	0.04	1.11	0.04	4.40	8.00	42.0	0.67	25.1	1.90	2.90	0.10	0.05	0.01	0.02	0.05	1.90	27.0	0.03	0.94	582	0.22	0.02	0.05	9.60	390	0.70	1.00	0.00	0.76	0.07	0.90	1.00	0.30	22.5	0.05	0.10	0.11	0.20	0.01	0.02	0.05	6.00	0.10	2.67	0.20

RAINY RIVER

TABLE 7-6:
SUMMARY OF ELEMENTAL ANALYSES FOR MINE ROCK SAMPLES

	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Tb	Te	Th	Ti	Tl	U	V	W	Y	Yb	Zn	Zr
Unit	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppb**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**%**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**	**ppm**
Average Crustal Abundance*	0.075	8.23	1.8	10	425	3	0.0085	4.15	0.15	66.5	25	102	3	60	5.63	19	1.5	3	0.085	0.25	2.085	39	20	-	2.33	950	1.2	2.355	20	84	1050	14	90	0.7	0.04	0.20	22.00	0.05	2.30	370.00	2.00	1.2	-	9.60	0.57	0.85	2.70	120.00	1.25	33.00	3.20	70.00	165.00
Ten Times Average Crustal Abundance*	**0.75**	**82.3**	**18**	**100**	**4250**	**30**	**0.085**	**41.5**	**1.5**	**665**	**250**	**1020**	30	**600**	**56.3**	**190**	**15**	**30**	**0.85**	**2.5**	**20.85**	**390**	**200**	-	**23.3**	**9500**	**12**	**23.55**	**200**	**840**	**10500**	**140**	**900**	**7**	**0.35**	**2**	**220**	**0.5**	**23**	**3700**	**20**	**12**	-	**96**	**5.65**	**8.5**	**27**	**1200**	**12.5**	**330**	**32**	**700**	**1650**
7 (n = 6)																																																							
Count	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	0	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Minimum	0.07	2.04	3.00	30.0	5.00	0.10	0.04	4.98	0.08	45.8	24.6	79.0	0.36	27.4	3.88	6.50	0.20	0.05	0.01	0.02	0.01	22.5	64.0	0.05	2.36	859	0.09	0.01	0.05	42.6	1260	2.10	0.20	0.0	0.12	0.10	7.40	1.00	0.30	50.4	0.05	0.25	0.05	3.70	0.01	0.02	0.45	67.0	0.10	3.48	0.30	52.0	14.4
Maximum	0.61	4.32	17.0	40.0	3220	3.70	1.66	10.1	0.36	227	55.0	773	59.7	69.7	6.28	13.3	0.50	0.88	0.69	0.06	3.46	104	215	0.21	5.16	2180	0.44	0.03	0.70	164	5640	27.3	185	0.0	3.47	0.32	24.5	1.00	2.00	1840	0.05	2.54	1.34	11.2	0.51	1.75	1.46	176	94.9	40.8	1.50	397	43.8
Average	0.36	3.29	8.67	35.0	769	0.98	0.47	7.21	0.17	112	38.7	449	18.6	55.4	4.84	9.85	0.33	0.45	0.13	0.04	1.19	52.7	122	0.10	4.08	1432	0.20	0.02	0.20	111	2623	9.42	56.3		0.91	0.20	14.7	1.00	0.65	464	0.05	0.86	0.44	5.87	0.18	0.53	0.69	111	15.9	14.2	0.70	158	25.7
Median	0.39	3.30	7.50	35.0	324	0.45	0.27	6.77	0.10	92.8	35.1	453	7.02	58.0	4.36	9.45	0.30	0.44	0.01	0.04	0.39	43.2	100	0.09	4.29	1200	0.17	0.03	0.08	134	2325	4.55	15.9		0.42	0.20	13.4	1.00	0.30	242	0.05	0.57	0.09	4.65	0.10	0.20	0.57	94.5	0.10	9.50	0.60	112	22.4
Standard Deviation	0.22	0.82	5.16	5.48	1239	1.36	0.61	1.97	0.13	68.5	11.9	254	23.8	14.8	1.14	2.69	0.10	0.28	0.27	0.02	1.56	31.1	64.1	0.06	0.93	565	0.12	0.01	0.26	49.3	1602	9.98	77.7		1.29	0.09	6.85	0.00	0.68	680	0.00	0.86	0.59	2.87	0.20	0.70	0.38	46.4	38.7	13.5	0.42	129	10.8
25th Percentile	0.18	2.87	5.25	30.0	26.5	0.33	0.12	5.85	0.09	62.7	32.2	308	3.35	54.7	3.93	8.10	0.30	0.33	0.01	0.02	0.06	31.0	73.3	0.07	4.08	1065	0.14	0.01	0.05	75.6	1565	3.18	2.98		0.16	0.13	9.48	1.00	0.30	154	0.05	0.38	0.06	4.08	0.04	0.05	0.49	75.3	0.10	7.67	0.50	74.8	18.9
75th Percentile	0.54	3.84	11.3	40.0	691	0.80	0.43	8.50	0.26	142	47.4	622	28.2	63.6	5.85	11.9	0.38	0.57	0.04	0.06	2.32	68.1	167	0.10	4.33	1898	0.21	0.03	0.21	136	2740	12.6	95.7		0.82	0.26	19.3	1.00	0.60	273	0.05	0.82	0.81	6.50	0.28	0.81	0.63	146	0.10	13.6	0.70	187	30.6
90th Percentile	0.59	4.14	14.5	40.0	1978	2.30	1.07	9.54	0.34	190	53.3	714	47.4	67.3	6.27	13.0	0.45	0.73	0.37	0.06	3.18	89.1	202	0.16	4.75	2135	0.33	0.03	0.48	151	4200	21.3	153		2.19	0.30	22.4	1.00	1.35	1059	0.05	1.69	1.20	9.10	0.42	1.37	1.06	168	47.5	27.6	1.10	300	38.2
8 (n = 24)																																																						
Count	24	24	24	13	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24	13	24	24	24	24	24	24	24	24	24	11	24	24	24	24	24	24	24	24	24	13	24	24	24	24	24	24	24	24	24
Minimum	0.02	0.51	0.50	30.0	15.0	0.10	0.02	0.82	0.02	6.00	5.60	25.0	0.42	9.70	1.59	2.20	0.10	0.08	0.007	0.01	0.06	2.00	10.0	0.02	0.40	67.0	0.10	0.02	0.05	9.40	0.032	0.10	1.50	5.00	0.01	0.05	0.50	0.50	0.10	24.0	0.05	0.11	0.05	0.30	0.01	0.02	0.10	4.00	0.10	1.61	0.20	7.00	1.80
Maximum	1.30	3.31	27.6	40.0	364	1.00	0.50	4.86	0.80	184	36.4	392	7.20	188	8.32	11.0	0.20	0.90	0.05	0.08	0.64	92.0	117	0.08	3.05	1852	5.55	0.20	0.30	112	890	10.0	26.8	5.00	3.09	0.74	14.2	1.00	0.30	173	0.10	0.25	1.50	10.9	0.13	0.21	1.60	152	1.30	9.30	0.50	226	41.2
Average	0.24	1.48	4.60	35.4	62.1	0.53	0.14	2.29	0.16	40.1	12.5	81.9	3.00	49.6	2.67	5.49	0.11	0.29	0.03	0.02	0.19	19.3	46.2	0.04	0.96	485	1.02	0.07	0.11	24.0	274	2.31	7.31	5.00	0.72	0.15	3.10	0.77	0.23	65.2	0.07	0.17	0.19	2.39	0.04	0.10	0.33	32.0	0.20	3.80	0.26	75.7	11.1
Median	0.12	1.34	2.60	40.0	38.0	0.20	0.10	2.08	0.10	29.2	9.05	65.0	1.45	36.3	2.17	5.50	0.10	0.25	0.02	0.02	0.11	14.8	41.4	0.03	0.84	399	0.44	0.05	0.10	13.3	375	1.60	3.35	5.00	0.41	0.10	1.50	1.00	0.30	56.6	0.05	0.17	0.10	1.60	0.02	0.10	0.30	13.5	0.10	3.05	0.20	62.5	9.9
Standard Deviation	0.28	0.79	5.6	5.19	72.1	0.45	0.12	0.95	0.20	33.2	7.65	69.5	2.62	50.7	1.62	2.56	0.03	0.18	0.02	0.01	0.16	16.5	25.2	0.02	0.58	393	1.38	0.04	0.06	25.5	277	2.04	7.03	0.00	0.87	0.15	3.76	0.25	0.09	39.2	0.03	0.05	0.30	2.12	0.04	0.07	0.28	41.6	0.26	1.94	0.10	63.5	8.65
25th Percentile	0.09	0.88	2.00	30.0	30.0	0.10	0.06	1.61	0.06	26.4	8.03	56.8	0.64	14.8	1.75	3.00	0.10	0.20	0.01	0.02	0.08	13.0	27.0	0.03	0.58	161	0.27	0.04	0.06	11.1	0	1.18	2.20	5.00	0.17	0.07	1.03	0.50	0.10	39.5	0.05	0.14	0.05	1.40	0.01	0.02	0.21	6.00	0.10	2.69	0.20	29.5	5.85
75th Percentile	0.30	1.85	5.25	40.0	60.3	1.00	0.17	2.70	0.13	43.8	14.5	77.0	5.47	52.0	2.71	7.00	0.10	0.31	0.05	0.02	0.23	19.8	63.8	0.05	1.06	626	1.01	0.07	0.10	24.3	483	2.83	9.28	5.00	0.87	0.15	3.35	1.00	0.30	70.5	0.10	0.21	0.16	2.43	0.05	0.15	0.33	36.8	0.20	4.14	0.30	96.5	12.9
90th Percentile	0.47	2.61	7.56	40.0	103	1.00	0.30	3.62	0.35	55.8	23.7	111	6.85	114	4.21	9.28	0.10	0.46	0.05	0.02	0.46	25.4	71.6	0.06	1.62	802	2.57	0.13	0.20	57.8	547	4.29	16.5	5.00	1.77	0.28	9.13	1.00	0.30	122	0.10	0.24	0.38	3.63	0.08	0.20	0.40	69.6	0.37	6.81	0.38	177	19.2
9 (n = 12)																																																					
Count	12	12	12	10	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12	10	12	12	12	12	12	12	12	12	12	2	12	12	12	12	12	12	12	12	12	10	12	12	12	12	12	12	12	12	12
Minimum	0.07	1.45	2.90	30.0	5.00	0.10	0.03	1.10	0.07	4.59	19.7	22.0	0.44	9.70	1.95	2.50	0.10	0.05	0.01	0.02	0.01	2.10	9.00	0.02	1.55	281	0.10	0.01	0.05	10.7	0.17	1.30	0.20	5.00	0.02	0.05	2.40	0.50	0.30	34.7	0.05	0.05	0.05	0.10	0.01	0.02	0.05	32.0	0.10	1.16	0.10	17.0	3.80
Maximum	0.34	6.07	38.0	40.0	1270	1.00	0.40	5.94	0.36	271	61.2	1160	24.6	438	7.66	13.5	0.40	0.74	0.05	0.08	2.22	130	171	0.13	6.39	1545	2.15	0.06	0.30	491	2730	33.1	62.2	5.00	0.80	0.39	33.5	1.00	0.70	345	0.10	0.50	0.40	17.1	0.27	0.89	2.10	207	0.50	12.1	0.80	326	39.9
Average	0.21	3.03	10.4	36.0	255	0.34	0.13	3.32	0.13	63.2	39.2	468	8.00	134	4.11	7.83	0.19	0.27	0.02	0.03	0.43	31.1	80.0	0.06	3.38	832	0.59	0.04	0.10	195	671	6.84	17.2	5.00	0.30	0.16	10.2	0.92	0.37	129	0.06	0.21	0.12	4.18	0.09	0.22	0.54	94.8	0.14	5.13	0.38	96.6	14.1
Median	0.20	2.68	5.30	40.0	40.5	0.20	0.10	2.71	0.10	21.1	37.7	476	3.83	79.7	3.82	7.40	0.15	0.13	0.02	0.02	0.14	10.1	70.5	0.05	3.09	779	0.35	0.04	0.07	134	400	5.00	6.05	5.00	0.34	0.16	5.60	1.00	0.30	121	0.05	0.16	0.09	1.25	0.08	0.07	0.19	81.5	0.10	5.16	0.25	82.5	6.70
Standard Deviation	0.10	1.34	11.4	5.16	375	0.34	0.11	1.93	0.08	81.6	13.5	356	9.05	143	1.58	3.73	0.11	0.26	0.01	0.02	0.65	39.7	46.5	0.04	1.38	403	0.60	0.02	0.08	175	757	8.54	21.3	0.00	0.23	0.09	9.68	0.19	0.14	89.8	0.02	0.15	0.11	5.31	0.08	0.28	0.65	56.6	0.12	3.34	0.26	81.0	13.3
25th Percentile	0.13	2.24	3.75	30.0	17.8	0.10	0.06	1.66	0.10	7.97	30.6	178	1.36	36.8	3.25	4.98	0.10	0.07	0.01	0.02	0.06	4.25	55.0	0.03	2.34	467	0.26	0.02	0.05	71.0	330	2.95	2.33	5.00	0.11	0.10	3.80	1.00	0.30	50.7	0.05	0.09	0.05	0.88	0.02	0.02	0.12	46.3	0.10	2.09	0.20	60.3	4.05
75th Percentile	0.30	3.52	12.0	40.0	390	0.43	0.13	5.26	0.13	84.2	49.6	716	13.2	175	4.34	11.1	0.30	0.42	0.02	0.03	0.46	42.3	89.0	0.08	4.25	1163	0.74	0.05	0.10	272	725	6.20	27.7	5.00	0.43	0.18	14.5	1.00	0.33	166	0.05	0.30	0.11	5.43	0.15	0.38	0.78	145	0.10	7.04	0.55	98.5	26.4
90th Percentile	0.34	4.56	27.3	40.0	524	0.95	0.25	5.72	0.23	143	57.2	847	22.9	367	6.26	12.4	0.30	0.68	0.05	0.06	0.99	71.9	152	0.12	4.63	1290	1.17	0.06	0.19	471	1238	7.88	48.8	5.00	0.47	0.23	22.2	1.00	0.58	201	0.10	0.40	0.27	10.5	0.16	0.50	1.28	152	0.19	8.3	0.80	150	31.7
10 (n = 5)																																																					
Count	5	5	5	3	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	5	5	2	5	5	5	5	5	5	5	5	5	3	5	5	5	5	5	5	5	5	5
Minimum	0.06	0.77	2.10	30.0	5.00	0.10	0.03	1.28	0.02	21.7	6.10	45.0	0.13	4.40	1.43	3.00	0.10	0.10	0.01	0.01	0.01	11.3	18.0	0.02	0.61	305	0.17	0.02	0.05	8.50	0	1.20	0.30	5.00	0.05	0.10	0.70	0.50	0.10	18.4	0.05	0.12	0.05	1.50	0.01	0.02	0.20	6.00	0.10	2.09	0.10	38.0	4.00
Maximum	0.40	2.66	9.00	40.0	777	1.00	0.20	3.22	0.25	217	22.4	242	11.3	31.8	3.44	9.00	0.30	0.85	0.09	0.02	1.28	106	63.6	0.06	2.24	777	0.78	0.05	0.30	72.3	1850	11.9	40.5	5.00	0.71	0.47	12.0	1.00	0.50	302	0.10	0.78	0.20	14.9	0.19	0.30	1.60	98.0	0.40	9.24	0.50	92.0	50.3
Average	0.16	1.30	4.10	36.7	208	0.54	0.08	2.21	0.11	82.8	11.7	96.2	3.24	17.1	2.25	5.34	0.16	0.44	0.04	0.02	0.36	40.9	38.6	0.04	1.08	576	0.33	0.04	0.14	24.5	554	5.10	11.7	5.00	0.29	0.27	3.62	0.80	0.30	103	0.07	0.35	0.10	5.96	0.05	0.11	0.73	32.2	0.16	4.94	0.30	60.2	19.6
Median	0.10	0.93	3.00	40.0	37.0	0.40	0.05	2.59	0.10	28.0	10.1	66.0	1.26	17.6	2.32	5.50	0.10	0.27	0.05	0.02	0.12	13.0	35.0	0.04	0.79	721	0.20	0.04	0.10	13.8	410	2.00	3.30	5.00	0.26	0.24	1.80	1.00	0.30	47.2	0.05	0.15	0.10	2.0	0.02	0.10	0.31	13.0	0.10	3.15	0.30	48.0	8.50
Standard Deviation	0.14	0.78	2.83	5.77	326	0.43	0.07	0.85	0.08	85.8	6.22	82.0	4.59	12.0	0.77	2.44	0.09	0.36	0.03	0.00	0.52	42.3	18.6	0.02	0.68	232	0.26	0.01	0.10	26.9	761	4.89	16.6	0.00	0.26	0.18	4.73	0.27	0.14	119	0.03	0.37	0.06	6.14	0.07	0.11	0.64	38.9	0.13	3.22	0.20	23.5	20.0
25th Percentile	0.09	0.86	2.40	35.0	31.0	0.20	0.04	1.38	0.09	26.1	9.40	62.0	0.90	6.00	1.71	3.20	0.10	0.16	0.01	0.02	0.10	12.4	25.4	0.03	0.65	343	0.20	0.03	0.09	11.1	0.16	1.70	2.90	5.00	0.09	0.10	1.10	0.50	0.30	24.0	0.05	0.14	0.05	1.50	0.01	0.04	0.30	7.00	0.10	2.70	0.20	45.0	5.90
75th Percentile	0.16	1.27	4.00	40.0	190	1.00	0.10	2.59	0.10	121	10.6	66.0	2.59	25.5	2.33	6.00	0.20	0.80	0.05	0.02	0.30	62.0	51.0	0.05	1.11	736	0.30	0.04	0.18	16.6	510	8.70	11.6	5.00	0.32	0.44	2.50	1.00	0.30	121	0.10	0.47	0.10	9.9	0.05	0.10	1.24	37.0	0.10	7.50	0.40	78.0	29.4
90th Percentile	0.30	2.10	7.00	40.0	542	1.00	0.16	2.97	0.19	179	17.7	172	7.82	29.3	3.00	7.80	0.26	0.83	0.07	0.02	0.89	88.4	58.6	0.06	1.79	761	0.59	0.05	0.25	50.0	1314	10.6	28.9	5.00	0.55	0.46	8.20	1.00	0.42	230	0.10	0.65	0.16	12.9	0.13	0.22	1.46	73.6	0.28	8.54	0.46	86.4	41.9
11 (n = 4)																																																					
Count	4	4	4	3	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4	1	4	4	4	4	4	4	4	4	4	3	4	4	4	4	4	4	4	4	4
Minimum	0.07	0.78	4.00	30.0	6.00	0.10	0.13	0.13	0.01	10.30	5.00	56.0	0.61	11.5	1.10	2.30	0.10	0.14	0.02	0.02	0.02	5.00	14.0	0.01	0.35	99.0	0.42	0.02	0.05	8.80	0.04	0.20	0.70	5.00	0.42	0.10	0.60	0.50	0.20	8.20	0.05	0.06	0.05	0.70	0.01	0.02	0.07	3.00	0.10	0.72	0.10	30.0	5.20
Maximum	1.86	2.13	14.2	40.0	32.0	1.00	2.70	2.73	0.21	34.9	11.8	97.0	1.52	334	4.93	6.00	0.10	0.31	0.05	0.09	0.14	17.7	55.0	0.02	1.22	649	1.90	0.06	0.20	14.1	810	7.20	3.60	5.00	4.29	2.12	1.20	1.00	0.30	74.0	0.10	0.14	0.87	1.70	0.01	0.10	0.30	13.0	4.20	1.95	0.10	95.0	13.5
Average	0.75	1.27	9.30	33.3	22.5	0.38	1.44	1.18	0.10	22.1	8.58	68.8	1.15	147	2.56	4.03	0.10	0.23	0.03	0.04	0.09	11.0	30.8	0.02	0.76	375	0.84	0.04	0.09	11.2	375	3.50	2.60	5.00	2.08	0.65	0.88	0.88	0.28	32.7	0.06	0.10	0.33	1.25	0.01	0.05	0.16	7.5	1.15	1.60	0.10	67.8	9.18
Median	0.53	1.08	9.50	30.0	26.0	0.20	1.46	0.93	0.10	21.6	8.75	61.0	1.24	122	2.10	3.90	0.10	0.24	0.03	0.03	0.11	10.7	27.2	0.02	0.74	376	0.53	0.04	0.05	11.0	345	3.30	3.05	5.00	1.80	0.19	0.85	1.00	0.30	24.4	0.05	0.09	0.21	1.30	0.01	0.04	0.14	7.00	0.15	1.86	0.10	73.0	9.00
Standard Deviation	0.83	0.64	4.64	5.77	11.4	0.42	1.45	1.10	0.08	11.7	2.83	19.1	0.41	158	1.66	1.69	0.00	0.09	0.01	0.03	0.05	5.88	17.5	0.01	0.37	226	0.71	0.02	0.08	2.18	341	3.57	1.29		1.68	0.98	0.32	0.25	0.05	28.7	0.03	0.04	0.37	0.42	0.00	0.03	0.10	4.4	2.03	0.59	0.00	29.5	4.09
25th Percentile	0.14	0.79	6.25	30.0	21.0	0.18	0.21	0.66	0.07	13.2	7.33	58.3	0.96	18.0	1.69	2.83	0.10	0.16	0.02	0.02	0.08	6.73	21.5	0.02	0.54	284	0.48	0.02	0.05	10.5	188	0.58	2.43	5.00	1.03	0.16	0.60	0.88	0.28	17.5	0.05	0.08	0.10	1.08	0.01	0.04	0.10	4.50	0.10	1.54	0.10	51.8	5.95
75th Percentile	1.14	1.55	12.6	35.0	27.5	0.40	2.69	1.44	0.13	30.5	10.0	71.5	1.43	252	2.97	5.10	0.10	0.30	0.04	0.05	0.12	14.9	36.5	0.02	0.96	468	0.89	0.05	0.09	11.8	533	6.23	3.23	5.00	2.85	0.68	1.13	1.00	0.30	39.6	0.06	0.12	0.44	1.48	0.01	0.06	0.20	10.0	1.20	1.91	0.10	89.0	12.2
90th Percentile	1.57	1.90	13.5	38.0	30.2	0.76	2.69	2.21	0.18	33.1	11.1	86.8	1.48	301	4.14	5.64	0.10	0.31	0.04	0.08	0.13	16.6	47.6	0.02	1.12	576	1.50	0.06	0.16	13.2	699	6.81	3.45	5.00	3.71	1.54	1.17	1.00	0.30	60.2	0.09	0.13	0.70	1.61	0.01	0.08	0.26	11.8	3.00	1.94	0.10	92.6	13.0
13 (n = 3)																																																					
Count	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	0	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Minimum	0.05	3.04	1.00	30.0	10.0	0.10	0.02	2.27	0.02	2.70	21.8	56.0	2.40	63.7	3.03	7.30	0.10	0.10	0.01	0.02	0.03	1.20	12.0	0.04	1.32	383	0.25	0.02	0.08	37.4	190	1.30	1.00	0.00	0.07	0.06	2.50	1.00	0.30	50.3	0.05	0.10	0.05	0.10	0.16	0.05	0.05	51.0	0.10	3.00	0.20	39.0	5.30
Maximum	0.36	5.27	5.00	40.0	124	0.30	0.10	3.02	0.09	58.3	31.3	109	6.03	117	3.73	8.30	0.

Table 7-7: Distribution of Elements Observed by Lithology

Lithology		Number of Samples Encountered in Excess of 10 times Continental Crustal Abundance													
		Frequent				Infrequent									
	n	Ag	As	Cd	Zn	Cu	Cr	Hg	Li	Mo	Pb	Sb	Re	Cs	W
Felsic metavolcanic	159	52	55	14	8	0	0	0	0	2	0	4	1	0	1
Mafic metavolcanic	56	18	22	2	2	2	0	0	0	1	0	0	0	0	2
Intermediate metavolcanic	20	3	3	2	2	1	0	1	0	0	0	0	0	0	0
Clastic metasediment	48	17	18	5	3	0	0	1	0	1	1	0	1	0	1
Pyritic metasediment	15	3	1	1	1	0	0	1	0	1	0	0	0	0	0
Chemical metasediment	14	9	3	2	1	0	0	1	0	0	0	0	3	0	2
Intrusive	47	1	3	0	0	0	1	0	1	0	0	0	0	2	1
Late structural	4	2	0	0	0	0	0	0	0	0	0	1	0	0	0
Diabase	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0

[1] Sulphur, bismuth and selenium are not included since they are frequently observed in excess of 10 times continental crustal abundance for all units.

TABLE 7-8:
MINERALOGY (RIETVELD-XRD) TESTING RESULTS OF MINE ROCK SAMPLES*

Mineral		Ideal Formula	Sample	L032182	L032183	L032188	L032189	L032185	L032023	L032180	L032135	638478	ALT-09-07	L032107	L032154	L032174	588142	731259	RRR04250	L032101	L032044	L032104	L032148	L032201	ALT-09-13
			Borehole ID	NR10555	NR9527	NR9717	NR11647	NR11656	NR11717	NR10555	NR10526	NR0512	NR06109	NR10598	NR10561	NR09384	NR08264	NR08281	NR09333	NR10588	NR10607	NR10588	NR10459	NR10459	NR06131A
			From	60.0	60.0	71.0	78.0	54.2	27.0	210.1	33.0	68.8	557.0	368.5	59.0	104.0	233.0	140.0	420.5	104.6	149.0	235.0	125.1	140.0	27.4
			To	61.5	61.5	72.0	79.0	55.2	28.5	211.6	34.5	69.3	557.6	370.0	60.5	105.5	234.5	141.5	422.0	106.1	150.5	236.5	126.5	141.5	28.1
			Lithology	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Felsic Metavolcanics	Mafic Metavolcanics	Mafic Metavolcanics	Mafic Metavolcanics	Mafic Metavolcanics	Mafic Metavolcanics	Mafic Metavolcanics
			Waste Classification	Waste	Waste	Waste	Outside Pit	Waste	Waste	Waste	Outside Pit	Outside Pit	Outside Pit	Waste	Waste	Waste	Waste	Waste	Outside Pit	Waste	Waste	Waste	Waste	Waste	Waste
			Lithology Code	4a	4b	5dap	4c	4cf	4cfa	4cfb	4ca	4aa	4b	4c	4cfa	4cb	4cfb	4b	4cf	2a	2a	2a	2	2b	2
Calcite	Carbonates		$CaCO_3$	5.0	4.6			5.3	9.7	3.1	0.2		0.3	0.7	0.8	2.1	2.1		0.6	9.5	7.8	4.9	10.6	6.2	8.9
Dolomite			$CaMg(CO_3)_2$			0.5	2.0	3.3	1.8	0.4	6		0.3	0.1	1	1.5	4.8				1.3				11.7
Dolomite-Ankerite			$Ca(Fe,Mg,Mn)(CO_3)_2$																	11.6					
Siderite			$FeCO_3$																						
Quartz			SiO_2	37.2	34.9	59.0	50.7	47.8	45.4	53.0	53.1	59.2	46.3	51.7	55.5	43.9	48.2	41.3	42.3	25.7	30.3	22.8	20.3	24.9	18.7
K-Feldspar	Feldspars		$KAlSi_3O_8$	1.0	0.8			1.3	1.1	1.4	1.7	1.6	1.5	2.8	1.1		2.1	21.5	1.2						1.3
Plagioclase			$CaAl_2Si_2O_8$ - $NaAlSi_3O_8$	36.0	39.4		1.0	1.9					25.9	6.1	3.5	25.9	3.6	3.8	18.8	18.3	20.6	18.7	27.8	18.0	13.7
Enstatite (orthopyroxene)	Pyroxenes		$(Mg, Fe)_2Si_2O_6$																						
Augite			$Ca_{0.8}Mg_{0.7}Fe_{0.5}(SiO_3)_2$																						
Actinolite	Amphibole		$Ca_2(Mg,Fe^{2+})_5Si_8O_{22}(OH)_2$																	17.5		20.9			
Muscovite	Phyllosilcates		$KAl_2(AlSi_3O_{10})(OH)_2$	13.9	12.9	23.7	39.4	25.6	33.1	20.7	23.7	32.6	17.1	20.7	18.1	15.3	31.5	28.8	21.4		7.3				14.7
Paragonite			$NaAl_2[(OH)_2AlSi_3O_{10}]$			4.6		5.1			10.4			8.9	9.9										
Margarite			$CaAl_2(Al_2Si_2)O_{10}(OH)_2$			3.0	1.4			10.8															
Biotite			$K(Mg,Fe^{2+})_3AlSi_3O_{10}(OH)_2$													1.9				7.0	2.7	5.7			
Clinochlore			$(Mg, Fe)_5Al(Si_3Al)O_{10}(OH)_8$	6.1	6.1	4.0	0.8	6.5	6.3	7.5	3.7	2.5	4.8	7.5	6.1	6.7	3.8	3.3	7.6	5.2	19.6	7.6	20.1	22.9	13.1
Kaolinite			$Al_2Si_2O_5(OH)_4$																						
Andalusite	Other Silicates		$Al_2(SiO_4)O$												1.1										
Analcime			$Na[AlSi_2O_6]\cdot H_2O$																						
Clinozoisite	Epidote Group		$Ca_2Al_3(SiO_4)_3(OH)$																			6.2	9.3	15.9	
Magnetite	Oxides		Fe_3O_4																	1.0	2.1	3.1	5.4	4.5	
Titanite			$CaTiSiO_5$												1.1	1.1					1.3		4.3	3.8	
Rutile			TiO_2			0.7	0.5	0.5							0.6										
Ilmenite			$FeTiO_3$																1.4	3.0	3.6	3.8			1.5
Brucite	Hydroxides		$Mg(OH)_2$										0.2												
Pyrite	Sulphides		FeS_2	0.8	1.3	4.5	4.2	2.7	2.6	3.1	1.2	4.1	3.6	1.6	1.2	1.7	3.9	1.3	6.8		3.5	2.2	2.3	3.9	16.4
Pyrrhotite			$Fe_{1-x}S$																	1.2		3.9			
Sphalerite			(Zn,Fe)S																			0.3			
TOTAL				100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Normalized wt. % crystalline material

TABLE 7-8:
MINERALOGY (RIETVELD-XRD) TESTING RESULTS OF MINE ROCK SAMPLES*

Mineral		Ideal Formula	Sample	ALT-09-01	ALT-09-08	L032066	L032097	L032129	L032181	L032184	ALT-09-11	L032070	L032072	L032222	L032007	L032005	ALT-09-20	L032130	L032036	L032031
			Borehole ID	NR0676	NR0670	NR10610	NR10480	NR10531	NR9527	NR9705	NR06101	NR10210	NR10608	NR09406	NR11659	NR11659	NR07190	NR10531	NR11749	NR11754
			From	201.8	222.8	78.0	62.0	100.0	211.0	55.1	260.0	119.0	95.0	316.0	218.0	200.0	293.0	127.2	37.5	320.6
			To	202.5	223.4	79.5	63.5	101.2	212.5	56.6	260.7	220.5	96.5	317.5	219.5	201.5	293.7	128.3	39.0	321.6
			Lithology	Intermediate Metavolcanics	Intermediate Metavolcanics	Clastic Metasediments	Clastic Metasediments	Clastic Metasediments	Clastic Metasediments	Clastic Metasediments	Clastic Metasediments	Clastic Metasediments/Pyritic Metasediments	Chemical Metasediments	Early Mafic-Ultramafic intrusions	Early Felsic to Intermediate Intrusives	Early Felsic to Intermediate Intrusives	Early Felsic to Intermediate Intrusives	Felsic to Intermediate Intrusives	Late Structural Zones	Diabase
			Waste Classification	Waste	Waste	Outside Pit	Waste	Outside Pit	Waste	Waste	Waste	Outside Pit	Waste	Waste	Outside Pit	Waste	Waste	Outside Pit	Ore	Outside Pit
			Lithology Code	3b	3b	5ce	5da	5ce	5dap	5dap	5dac	4cga	6	7a	8c	8c	8d	10b	11a	13
Calcite	Carbonates	$CaCO_3$		16.0	6.4	5.4	2.4	3.4	4.5	5.7	0.4	6.3	2.6	14.3	7.0	11.0	2.9	3.3	0.2	1.0
Dolomite		$CaMg(CO_3)_2$			6.8		0.4	14.2			0.6				0.4	1.9	1.1	5.6	12.6	
Dolomite-Ankerite		$Ca(Fe,Mg,Mn)(CO_3)_2$										10.9	3.5							
Siderite		$FeCO_3$						0.3										0.3		
Quartz		SiO_2		31.5	28.9	51.9	32.2	39.4	52.2	47.8	52.1	38.7	34.4	32.9	30.5	35.5	37.9	29.9	46.6	9.6
K-Feldspar	Feldspars	$KAlSi_3O_8$			1.8	2.2	1.1	1.1	1.5		0.7	1.8		2.1	1.3	2.0			1.5	
Plagioclase		$CaAl_2Si_2O_8$ - $NaAlSi_3O_8$		5.9	21.0		42.0	3.3		7.7	9.0		18.1	12.3	39.6	20.8	32.8	36.0		27.3
Enstatite (orthopyroxene)	Pyroxenes	$(Mg, Fe)_2Si_2O_6$				1.9														--
Augite		$Ca_{0.3}Mg_{0.7}Fe_{0.3}(SiO_3)_2$																		23.6
Actinolite	Amphibole	$Ca_2(Mg,Fe^{2+})_5Si_8O_{22}(OH)_2$											3.7	2.9						16.5
Muscovite	Phyllosilcates	$KAl_2(AlSi_3O_{10})(OH)_2$		11.3	15.8	17.3	12.0	26.0	23.8	30.1	28.3	18.5	7.8		14.5	8.7	12.3	21.9	33.1	
Paragonite		$NaAl_2[(OH)_2\|AlSi_3O_{10}]$				12.1		5.1				2.3								
Margarite		$CaAl_2(Al_2Si_2)O_{10}(OH)_2$							9.6											
Biotite		$K(Mg,Fe^{2+})_3AlSi_3O_{10}(OH)_2$			7.8								3.1				6.5			
Clinochlore		$(Mg, Fe)_5Al(Si_3Al)O_{10}(OH)_8$		19.0	5.5	6.9	6.6	4.3	6.5	6.5	4.3	18.1	17.2	34.9	6.5	19.5	5.0	2.3	4.8	11.1
Kaolinite		$Al_2Si_2O_5(OH)_4$																		2.1
Andalusite	Other Silicates	$Al_2(SiO_4)O$																		
Analcime		$Na[AlSi_2O_6]\cdot H_2O$									1.1									
Clinozoisite	Epidote Group	$Ca_2Al_3(SiO_4)_3(OH)$																		8.1
Magnetite	Oxides	Fe_3O_4		0.5						0.5			3.3							
Titanite		$CaTiSiO_5$																		
Rutile		TiO_2						0.7		0.7		0.8								
Ilmenite		$FeTiO_3$		3									3.7				0.5			
Brucite	Hydroxides	$Mg(OH)_2$																		
Pyrite	Sulphides	FeS_2		12.7	5.9	2.2	3.4	2.2	1.7	1.1	3.4	2.3	0.6	0.6	0.3	0.5	1.0	0.7	1.2	0.7
Pyrrhotite		$Fe_{(1-x)}S$											2.1							
Sphalerite		(Zn,Fe)S				0.1						0.4								
TOTAL				100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

*Normalized wt. % crystalline material

TABLE 7-9:
ABA RESULTS OF TARGETED STRATIGRAPHIC INTERVALS OF AGED AND FRESH CORE

HOLE-ID	Drilled Year	FROM	TO	Sample ID	Fizz Test	Paste pH	TIC	S(T)	$S(SO_4)$	$S(S^{-2})$ [Sobek]	$S(^{-2})$ Calc [S(T) - SO_4]	AP	Siderite NP	Carb NP	Siderite NPR	Carb NPR	NAG pH after reaction
		m	m				%					kg $CaCO_3$/t					
NR10555	2010	210.10	211.60	L032180	slight	9.44	0.45	1.61	<0.01	1.43	1.60	50.0	47.3	37.5	0.9	0.8	4.08
NR9527	1995	210.95	212.45	L032181	moderate	9.41	0.56	0.87	<0.01	0.70	0.86	26.9	69.3	46.7	2.6	1.7	5.95
NR10555	2010	60.00	61.50	L032182	slight	9.78	0.60	0.34	<0.01	0.28	0.33	10.3	57.5	50.0	5.6	4.8	6.11
NR9527	1995	60.04	61.54	L032183	slight	9.60	0.57	0.65	<0.01	0.59	0.64	20.0	55.2	47.5	2.8	2.4	6.00
NR11656	2011	54.20	55.20	L032185	slight	9.64	0.98	1.38	<0.01	1.22	1.37	42.8	81.1	81.7	1.9	1.9	6.71
NR9705	1997	55.10	56.60	L032184	slight	9.33	0.68	0.57	<0.01	0.46	0.56	17.5	63.6	56.7	3.6	3.2	5.99
NR11647	2011	78.00	79.00	L032189	None	8.97	0.25	2.25	<0.01	2.21	2.24	70.0	23.2	20.8	0.3	0.3	2.47
NR9717	1997	71.00	72.00	L032188	None	8.27	0.07	2.5	0.02	2.39	2.48	77.5	13.8	5.8	0.2	0.1	2.33

TABLE 7-10:
SUMMARY OF MINE ROCK HUMIDITY CELLS

	SAMPLE	Waste/ Ore Classification	LITHOLOGY	HOLE-ID	FROM	TO	Code	Paste pH	TIC	S_t	$S(SO_4)$	$S(S^{2-})$	NP	Carb NP	AP	NPR	Carb NPR	Carb NP Depletion*	S Depletion**
									%				kg $CaCO_3$/t					years	
HC-1	638478	Outside Pit	Felsic Metavolcanics	NR0512	68.8	69.3	4aa	6.3	<0.01	2.1	0.02	2.1	5.5	0.80	66	0.083	0.012	2.3	173
HC-2	RRR04250	Outside Pit	Felsic Metavolcanics	NR09333	420.5	422.0	4cf	8.3	0.11	3.5	0.02	3.4	26	9.2	108	0.24	0.086	13	206
HC-3	588142	Waste	Felsic Metavolcanics	NR08264	233.0	234.5	4cfb	9.1	0.73	1.9	0.02	1.8	65	61	58	1.1	1.1	281	579
HC-4	731259	Waste	Felsic Metavolcanics	NR08281	140.0	141.5	4b	9.1	0.44	0.83	0.02	0.81	54	37	25	2.1	1.5	87	175
HC-5	ALT-09-13	Waste	Mafic Metavolcanics	NR06131A	27.4	28.1	2	8.6	2.0	8.1	0.03	8.1	183	167	252	0.73	0.66	119	228
HC-6	ALT-09-01	Waste	Intermediate Volcanics	NR0676	201.8	202.5	6	8.3	1.8	6.1	0.04	6.0	188	148	188	1.0	0.79	132	230
HC-7	ALT-09-08	Waste	Intermediate Volcanics	NR0670	222.8	223.4	3b	9.3	1.4	3.0	0.02	3.0	177	117	93	1.9	1.3	228	377
HC-8	ALT-09-07	Outside Pit	Felsic Metavolcanics	NR06109	557.0	557.6	4b	9.3	0.03	1.8	0.01	1.8	13	2.5	55	0.23	0.045	6.1	183
HC-9	ALT-09-11	Waste	Clastic Metasediment	NR06101	260.0	260.7	5dac	9.1	0.07	1.8	0.01	1.8	24	5.8	57	0.42	0.10	27	538
HC-10	ALT-09-20	Waste	Early Felsic to Intermediate Intrusives	NR07190	293.0	293.7	8	9.7	0.31	0.47	0.01	0.47	45	26	15	3.1	1.8	102	192
HC-11	L032107	Waste	Felsic Metavolcanics	NR10588	368.5	370.0	4c	9.4	0.08	0.79	0.01	0.8	28	6.7	24	1.1	0.27	25	228
HC-12	L032174	Waste	Felsic Metavolcanics	NR09384	104.0	105.5	4cb	9.4	0.25	0.88	0.01	0.87	41	21	27	1.5	0.77	50	169
HC-13	L032154	Waste	Felsic Metavolcanics	NR10561	59.0	60.5	4cfa	8.9	0.12	0.57	0.01	0.56	29	10	18	1.6	0.57	37	143
HC-14	L032135	Outside Pit	Felsic Metavolcanics	NR10526	33.0	34.5	4ca	9.5	0.79	0.63	0.01	0.62	61	66	19	3.2	3.4	282	269
HC-15	L032201	Waste	Mafic Metavolcanics	NR10459	140.0	141.5	2b	9.3	0.72	2.0	0.01	2.0	114	60	61	1.9	0.98	134	285
HC-16	L032044	Waste	Mafic Metavolcanics	NR10607	149.0	150.5	2a	8.8	1.0	2.0	0.01	2.0	132	85	63	2.1	1.4	181	426
HC-17	L032104	Waste	Mafic Metavolcanics	NR10588	235.0	236.5	2a	8.8	0.51	2.6	0.01	2.6	102	43	80	1.3	0.53	74	335
HC-18	L032148	Waste	Mafic Metavolcanics	NR10459	125.1	126.5	2	9.2	1.3	1.2	0.01	1.2	160	106	38	4.3	2.8	243	310
HC-19	L032097	Waste	Clastic Metasediment	NR10480	62.0	63.5	5da	9.1	0.32	1.9	0.01	1.9	40	27	59	0.68	0.45	76	399
HC-20	L032066	Outside Pit	Clastic Metasediment	NR10610	78.0	79.5	5ce	8.8	0.72	1.2	0.01	1.2	67	60	36	1.9	1.7	145	291

* Non-acid depletion time calculated using steady molar Ca plus Mg release rate (most recent 20 weeks for non-acid cells and pre-acidic steady rate for acid cells).

** Non-acid depletion time calculated using steady sulphate release rates (most recent 20 weeks for non-acid cells and pre-acidic steady state rate for acid cells).

TABLE 7-11:
ABA RESULTS FOR MINE ROCK FIELD CELLS

Sample ID	Cell	Lithology	Borehole	Interval (m)		Fizz Test	Paste pH	TIC	S(T)	S(SO4)	S(S-2) Sobek	Insoluble S*	Calc. S(S-2)**	AP	Siderite NP	Carb NP	NPR	Carb NPR
				Top	Bottom			%						kg $CaCO_3$/t				
L032225	FC 1	4cfa	NR10-561	143	171	None	9.0	0.060	1.3	<0.01	1.1	0.21	1.3	41	15	5.0	0.44	0.15
L032226	FC 1		NR10-561	171	199	None	9.1	0.080	2.6	<0.01	2.6	0.02	2.6	83	17	6.7	0.21	0.08
L032227	FC 1		NR10-561	199	227	None	8.9	0.040	2.6	<0.01	2.4	0.22	2.6	81	17	3.3	0.23	0.05
FC 1 Average								0.060	2.2	<0.01	2.0	0.15	2.2	68	16	5.0	0.26	0.08
L032228	FC 2	4a	NR10-567	51	78	Slight	9.4	0.39	0.51	<0.01	0.55	<0.01	0.51	16	45	33	2.6	1.9
L032229	FC 2		NR10-567	78	107	Slight	9.4	0.96	0.53	<0.01	0.46	0.07	0.53	17	77	80	5.4	5.6
L032230	FC 2		NR10-567	107	132	Slight	9.6	0.59	0.46	<0.01	0.42	0.04	0.46	14	57	49	4.3	3.7
FC 2 Average								0.65	0.50	<0.01	0.48	0.055	0.50	16	60	54	4.0	3.6
L032231	FC 3	4c	NR10-544	185.3	209	Slight	9.2	0.15	2.5	<0.01	2.3	0.22	2.5	78	28	13	0.39	0.18
L032232	FC 3		NR10-544	209	232.5	Slight	9.0	0.19	2.1	<0.01	1.6	0.49	2.1	65	33	16	0.67	0.32
L032233	FC 3		NR10-544	232.5 276	243.2 288.5	Slight	9.2	0.11	1.3	<0.01	1.2	0.07	1.3	40	32	9.2	0.83	0.24
FC 3 Average								0.15	2.0	<0.01	1.7	0.26	2.0	61	31	13	0.83	0.24
L032234	FC 4	2a	NR10-560	172.5	199.5	Moderate	9.1	2.0	0.72	<0.01	0.44	0.28	0.72	23	208	168	15	12
L032235	FC 4		NR10-560	199.5	227	Moderate	9.3	2.1	0.35	<0.01	0.090	0.26	0.35	11	214	178	76	63
L032236	FC 4		NR10-560	227	252.5	Moderate	9.4	1.2	0.34	<0.01	0.090	0.25	0.34	11	134	99	48	35
FC 4 Average								1.8	0.47	<0.01	0.21	0.26	0.47	15	185	148	29	23
L032237	FC 5	3b	NR09-365	167	193	Slight	9.6	0.47	1.0	<0.01	0.97	0.06	1.0	32	53	39	1.8	1.3
L032238	FC 5		NR09-365	193	219	Slight	9.6	0.46	0.75	<0.01	0.70	0.05	0.75	23	53	38	2.4	1.8
L032239	FC 5		NR09-365	219	245.5	Slight	9.5	0.84	0.73	<0.01	0.61	0.12	0.73	23	76	70	4.0	3.7
FC 5 Average								0.59	0.84	<0.01	0.76	0.08	0.84	26	61	49	2.6	2.1
L032240	FC 7	5f	NR10-569	87	109.6	Moderate	8.7	1.2	4.4	0.0	4.4	<0.01	4.4	137	134	97	1.0	0.70
L032241	FC 7		NR10-546	186	203	Moderate	9.2	1.4	2.5	<0.01	2.2	0.29	2.5	79	162	120	2.3	1.7
L032242	FC 7		NR10-602	73.5	93.9	Moderate	9.0	1.6	6.4	<0.01	6.9	<0.01	6.4	199	168	135	0.78	0.62
L032243	FC 7		NR10-612	117.5	133.6	Slight	8.6	1.6	6.4	<0.01	5.8	0.62	6.4	201	89	136	0.49	0.75
FC 7 Average								1.5	4.9	<0.01	4.8	0.46	4.9	154	138	122	0.91	0.80
L032244	FC 6	5dac	NR10-463	108.5	147.9	None	8.7	0.06	2.8	<0.01	2.5	0.29	2.8	87	18	5.0	0.23	0.06
L032245	FC 6		NR10-468	74.2	108.5	None	8.8	0.07	2.5	<0.01	2.3	0.18	2.5	78	18	5.8	0.24	0.08
FC 6 Average								0.07	2.6	<0.01	2.4	0.24	2.6	82	18	5.4	0.23	0.07

Note:

* Insoluble sulphur = Total S - Sulphate S - Sulphide S
** Sulphide Calclulated = Total S - Sulphate S

Table 7-12: Elemental Distribution in Mine Rock Field Cells

Field Cell	Lithology	N	Number of Samples Encountered in Excess of 10 Times Continental Crustal Abundance					
			Ag	As	Bi	Cd	P	S
FC-1	4cfa	3	0	0	3	0	3	3
FC-2	4a	3	1	1	2	0	3	3
FC-3	4c	3	2	0	3	1	3	3
FC-4	2a	3	0	1	3	0	3	1
FC-5	3b	3	0	0	3	1	3	3
FC-6	5dac	2	0	0	2	0	2	2
FC-7	5f	4	2	1	4	1	4	1

TABLE 7-13:
TAILINGS ACID BASE ACCOUNTING RESULTS

Sample No.		ODM Zone Master Comp A	ODM Zone Master Comp B	ROM Sample A	ROM Sample B	Starter Pit Sample A	Starter Pit Sample B
Fizz Test		3	3	4	4	3	3
Paste pH		8.2	8.2	8.7	8.8	8.3	8.4
TIC	%	0.43	0.43	0.43	0.40	0.46	0.49
Carb-NP	kg $CaCO_3$/t	35.8	35.9	35.7	33.2	38.0	40.8
S(T)	%	2.29	2.24	2.24	2.19	2.15	2.1
S(SO_4)	%	0.68	0.78	0.54	0.24	0.35	0.4
Calculated S(S-2)*	%	1.61	1.46	1.69	1.95	1.8	1.71
AP	kg $CaCO_3$/t	50.3	45.6	52.8	60.9	56.3	53.4
NP**	kg $CaCO_3$/t	114	111	178	186	111	107.0
NP***	kg $CaCO_3$/t	41.2	41.5	46.4	45.3	44.2	44.0
NPR		0.82	0.91	0.88	0.74	0.79	0.82
Carb NPR		0.50	0.51	0.51	0.48	0.57	0.62
NAG pH		2.87	2.93	2.77	2.84	3.01	2.99

* Sulphide S = S(T) - S(SO4)
** Sobek NP with Siderite Correction
*** Modified Sobek NP

TABLE 7-14:
TAILINGS ELEMENTAL ANALYSIS RESULTS

Sample No.		ODM Zone Master Comp A	ODM Zone Master Comp B	ROM Sample A	ROM Sample B	Starter Pit Sample A	Starter Pit Sample B
Parameter	10x Crustal Abundance*						
Ag (ppm)	0.75	0.84	0.90	0.87	0.92	0.87	0.78
Al (%)	82.0	0.40	0.41	1.0	1.1	0.43	0.43
As (ppm)	18.0	63	67	58	56	85	93
B (ppm)	100	<1.0	<1.0	1.0	2.0	1.0	<1.0
Ba (ppm)	4250	12	12	29	34	10	9.2
Be (ppm)	30.0	0.06	0.06	0.09	0.10	0.06	<0.06
Bi (ppm)	0.085	0.82	0.88	1.9	1.8	0.85	0.90
Ca (%)	42.0	1.6	1.6	1.8	1.7	1.6	1.5
Cd (ppm)	1.5	4.4	4.8	2.8	2.6	5.5	5.7
Co (ppm)	250	8.9	9.0	13	13	11	10
Cr (ppm)	1020	110	120	83	96	80	63
Cu (ppm)	600	63	62	150	150	150	86
Fe (%)	56.0	2.2	2.3	3.3	3.3	2.6	2.6
Hg (ppm)	0.85	0.20	0.30	0.20	0.20	0.20	0.20
K (%)	20.0	0.07	0.07	0.16	0.19	0.07	0.07
Li (ppm)	200	6.0	7.0	16	18	7.0	7.0
Mg (%)	24.0	0.42	0.43	0.75	0.78	0.46	0.46
Mn (ppm)	9500	710	720	720	740	740	760
Mo (ppm)	12.0	1.6	1.6	1.9	1.9	3.4	2.4
Na (%)	24.0	0.01	0.01	0.03	0.04	0.01	0.01
Ni (ppm)	840	58	58	44	48	48	39
P (ppm)	10400	430	420	420	460	420	410
Pb (ppm)	140	110	120	49	50	130	130
Sb (ppm)	2.00	2.1	2.2	2.0	1.9	2.7	2.2
Se (ppm)	0.50	<0.7	<0.7	<0.7	<0.7	<0.7	<0.7
Si (ppm)	2815000	1200	1200	2100	2200	1100	1200
Sn (ppm)	24.0	0.70	1.1	1.1	4.5	<0.80	<0.80
Sr (ppm)	3700	25	25	35	36	21	21
Th (ppm)	12.0	1.5	1.5	1.5	1.6	1.4	1.3
Ti (%)	5.65	0.0034	0.0035	0.0090	0.0086	0.0038	0.0036
Tl (ppm)	8.60	0.05	0.05	0.08	0.09	0.05	0.05
U (ppm)	28.0	0.14	0.14	0.14	0.15	0.10	0.10
V (ppm)	1200	<1.0	<1.0	24	25	7.0	8.0
W (ppm)	12.5	0.43	0.52	0.79	0.81	0.48	0.38
Y (ppm)	330	1.4	1.5	2.3	2.3	1.6	1.5
Zn (ppm)	700	950	1000	590	570	1200	1200

* Price 1997

TABLE 7-15
TAILINGS SHAKE FLASK EXTRACTION RESULTS

Parameter	Sample No. PWQO	O. Reg 560/94	ODM Zone Master Comp A	ODM Zone Master Comp B	ROM Sample A	ROM Sample B	Starter Pit Sample A	Starter Pit Sample B
pH	6.5-8.5	6.0-9.5	7.3	7.3	7.7	7.7	8.2	8.5
Conductivity (uS/cm)	-	-	259	264	200	198	178	174
Total Acidity (to pH 8.3) (mg $CaCO_3$/L)	-	-	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0
Alkalinity (mg $CaCO_3$/L)	-	-	29	30	49	48	42	45
Chloride (mg/L)	-	-	1.0	1.0	1.2	1.2	1.8	1.8
Fluoride (mg/L)	-	-	0.08	0.08	0.09	0.09	0.09	0.09
Sulphate (mg/L)	-	-	78	78	33	32	25	21
Aluminum Al (mg/L)	0.015 -0.075*	-	0.12	0.12	0.17	0.16	0.076	0.079
Antimony Sb (mg/L)	0.02	-	0.0089	0.0092	0.014	0.014	0.02	0.02
Arsenic As (mg/L)	0.1	0.5	0.0020	0.0019	0.0014	0.0014	0.0040	0.0046
Barium Ba (mg/L)	-	-	0.0020	0.0017	0.0032	0.0027	0.0020	0.0021
Beryllium Be (mg/L)	0.011 -1.1**	-	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Bismuth Bi (mg/L)	-	-	<0.00001	<0.00001	<0.00001	<0.00001	0.00003	0.00002
Boron B (mg/L)	0.2	-	0.016	0.014	0.0098	0.0077	0.12	0.15
Cadmium Cd (mg/L)	2.00E-04	-	0.000008	0.000006	0.0000057	0.000011	<0.000003	0.000005
Calcium Ca (mg/L)	-	-	40	39	29	28	21	20
Chromium Cr (mg/L)	0.001	-	0.0007	<0.0005	<0.0005	0.0007	<0.0005	<0.0005
Cobalt Co (mg/L)	9.00E-04	-	0.00071	0.00067	0.00038	0.00038	0.00047	0.00049
Copper Cu (mg/L)	0.005	0.3	0.0007	0.0006	0.0006	0.0005	0.0006	<0.0005
Iron Fe (mg/L)	0.3	-	0.056	0.029	0.012	0.012	0.053	0.054
Lead Pb (mg/L)	0.005-0.025***	0.2	0.00019	0.00016	0.00023	0.00027	0.0019	0.0019
Lithium Li (mg/L)	-	-	0.003	0.003	0.005	0.005	0.003	0.003
Magnesium Mg (mg/L)	-	-	1.7	1.7	3.1	3.1	1.6	1.5
Manganese Mn (mg/L)	-	-	0.018	0.016	0.021	0.020	0.00091	0.00077
Mercury Hg (µg/L)	0.2	-	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001	<0.0001
Molybdenum Mo (mg/L)	0.04	-	0.0058	0.0054	0.0046	0.0043	0.0030	0.0030
Nickel Ni (mg/L)	0.025	0.5	0.0011	0.0006	0.0004	0.0002	0.0002	0.0002
Phosphorus P (mg/L)	0.01 - 0.02	-	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
Potassium K (mg/L)	-	-	5.2	5.1	5.5	5.3	4.3	4.0
Selenium Se (mg/L)	0.1	-	0.001	<0.001	0.001	<0.001	<0.001	<0.001
Silicon Si (mg/L)	-	-	1.5	1.5	1.7	1.6	2.3	3.0
Silver Ag (mg/L)	1.00E-04	-	<0.00001	<0.00001	0.00011	0.00012	0.00002	0.00009
Sodium Na (mg/L)	-	-	4.6	4.5	3.4	3.3	12	12
Strontium Sr (mg/L)	-	-	0.095	0.094	0.10	0.10	0.048	0.045
Thallium Tl (mg/L)	3.00E-04	-	0.00003	0.00002	<0.00002	<0.00002	<0.00002	<0.00002
Thorium Th (mg/L)	-	-	0.000004	<0.000004	0.000004	<0.000004	0.00001	0.000008
Tin Sn (mg/L)	-	-	0.00005	0.00006	<0.00001	<0.00001	0.00028	0.00011
Titanium Ti (mg/L)	-		0.0002	0.0002	0.0003	0.0002	0.0005	0.0005
Uranium U (mg/L)	0.005	-	0.00026	0.00023	0.00011	0.00012	0.00010	0.00012
Vanadium V (mg/L)	0.006	-	0.00009	0.0001	0.00008	0.00008	0.00021	0.00054
Tungsten W (mg/L)	0.03	-	0.00047	0.0003	0.0003	0.00035	0.00015	0.00020
Yttrium Y (mg/L)	-	-	0.000002	<0.000001	0.000057	0.000017	0.000005	0.000012
Zinc Zn (mg/L)	0.03	0.5	0.001	0.001	0.002	0.001	0.002	0.002

* Dependant on pH
** Dependant on Hardness
*** Dependant on Alkalinity

TABLE 7-16:
TAILINGS MINERALOGY (RIETVELD-XRD) TESTING RESULTS*

Mineral		Ideal Formula	Sample	ODM Zone Master Comp A	ODM Zone Master Comp B	ROM Sample A	ROM Sample B	Starter Pit Sample A	Starter Pit Sample B
Calcite	Carbonates	$CaCO_3$		2.4	1.9	1.43	1.38	2.0	2.1
Dolomite		$CaMg(CO_3)_2$		1.6	1.2	1.1	0.9	1.2	1.1
Ankerite		$CaFe(CO_3)_2$				1.4	1.3	0.9	1.4
Quartz		SiO_2		66.0	66.1	70.3	71.8	70.0	71.2
Albite	Feldspars	$NaAlSi_3O_8$		0.5	1.9	5.7	5.5		
Orthoclase		$KAlSi_3O_8$		1.1	1.2				
Muscovite	Phyllosilcates	$KAl_2(AlSi_3O_{10})(OH)_2$		25.0	24.7	15.6	15.6	21.8	20.7
Chlorite		$(Fe,(Mg,Mn)_5,Al)(Si_3Al)O_{10}(OH)_8$		2.2	2.0	3.4	2.4	3.0	2.5
Alunite	Sulphates	$(K,Na)Al_6(SO_4)_4(OH)_{12}$				0.4	0.1		
Pyrite	Sulphides	FeS_2		1.1	1.1	0.9	0.9	1.1	1.1
TOTAL				**100**	**100**	**100**	**100**	**100**	**100**

*Normalized wt. % crystalline material

TABLE 7-17:
SUMMARY OF TAILINGS HUMIDITY CELLS

	Paste pH	TIC	S_t	$S(S^{2-})$	AP	Modified NP	Carb NP	Modified NPR	Carb NPR	Carb NP Depletion (years)*	S Depletion (years)**
		%			kg $CaCO_3$/t						
ODM MC A	8.2	0.43	2.3	1.6	50	41	36	0.82	0.71	37	120
ODM MC B	8.2	0.43	2.2	1.5	46	42	36	0.91	0.79	43	120
ROM Sample A	8.7	0.43	2.2	1.7	53	46	36	0.87	0.67	33	87
ROM Sample B	8.8	0.40	2.2	2.0	61	45	33	0.74	0.54	14	53
Starter Pit Sample A	8.3	0.46	2.2	1.8	56	44	38	0.79	0.68	36	71
Starter Pit Sample B	8.4	0.49	2.1	1.7	53	44	41	0.83	0.77	32	65

* Non-acid depletion time calculated using steady molar Ca and Mg release rate (most recent 20 weeks).
** Non-acid depletion time calculated using steady sulphate release rates (most recent 20 weeks).

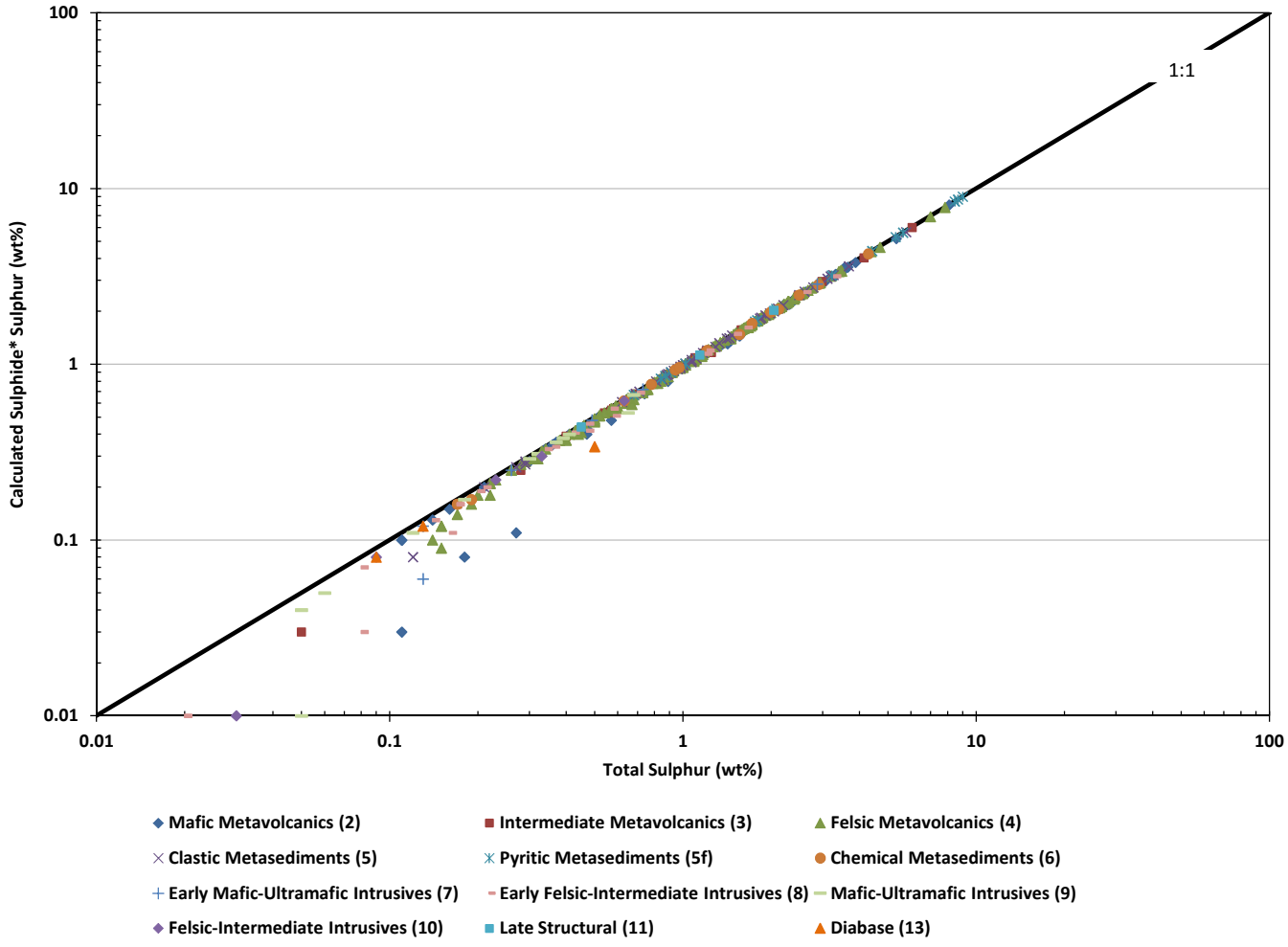
TABLE 7-18:
TAILINGS DECANT SOLUTION RESULTS

Sample No.				CND-1 Decant Solution	CND-2 Decant Solution
Parameter	Units	PWQO	O. Reg 560/94		
pH		6.5-8.5	6.0-9.0	7.9	7.7
Alkalinity	mg/L as CaCO3			65	82
Conductivity	µS/cm			4580	4470
Acidity	mg/L as CaCO3			2.0	2.0
EMF	mV			262	241
TDS	mg/L			4100	4160
F	mg/L			0.22	0.17
NH3+NH4	as N mg/L			2.0	4.4
Cl	mg/L			16	19
SO4	mg/L			2600	2700
NO2	as N mg/L			0.060	0.060
NO3	as N mg/L			<0.060	0.060
NO2+NO3	as N mg/L			0.060	0.060
Thiosalts	as S2O3 mg/L			10	10
Hg	mg/L	0.0002		0.00010	0.00010
Hardness	mg/L as CaCO3			749	1120
Ag	mg/L	0.0001		0.00012	0.00014
Al	mg/L	0.015-0.075*		0.16	0.080
As	mg/L	0.1	0.5	0.010	0.0047
Ba	mg/L			0.065	0.058
Be	mg/L	0.011-1.1**		0.000020	0.000020
B	mg/L	0.2		0.025	0.025
Bi	mg/L			0.000010	0.000010
Ca	mg/L			292	438
Cd	mg/L	0.0002		0.000019	0.00079
Co	mg/L	0.0009		0.020	0.015
Cr	mg/L	0.001		0.00080	0.00050
Cu	mg/L	0.005	0.3	0.16	0.19
Fe	mg/L	0.3		0.042	0.053
K	mg/L			36	41
Li	mg/L			0.0080	0.0080
Mg	mg/L			4.6	7.2
Mn	mg/L			0.045	0.44
Mo	mg/L	0.04		0.056	0.062
Na	mg/L			1060	868
Ni	mg/L	0.025	0.5	0.0038	0.0093
P	mg/L	0.01-0.02		0.017	0.013
Pb	mg/L		0.2	0.00034	0.0015
Sb	mg/L	0.02		0.077	0.15
Se	mg/L	0.1		0.012	0.012
Si	mg/L			2.2	3.4
Sn	mg/L			0.019	0.00022
Sr	mg/L			0.91	0.86
Th	mg/L			0.000029	0.0000040
Ti	mg/L			0.00050	0.00070
Tl	mg/L	0.0003		0.00020	0.00020
U	mg/L	0.005		0.0019	0.0030
V	mg/L	0.006		0.00059	0.00026
Zn	mg/L	0.03		0.0060	0.096
W	mg/L			0.0041	0.0012
Y	mg/L			0.000012	0.000057
Zr	mg/L	0.004		0.00013	0.000060

* Dependant on pH

** Dependant on Hardness

*** Dependant on Alkalinity



*Sulphide Sulphur as total sulphur less sulphate sulphur

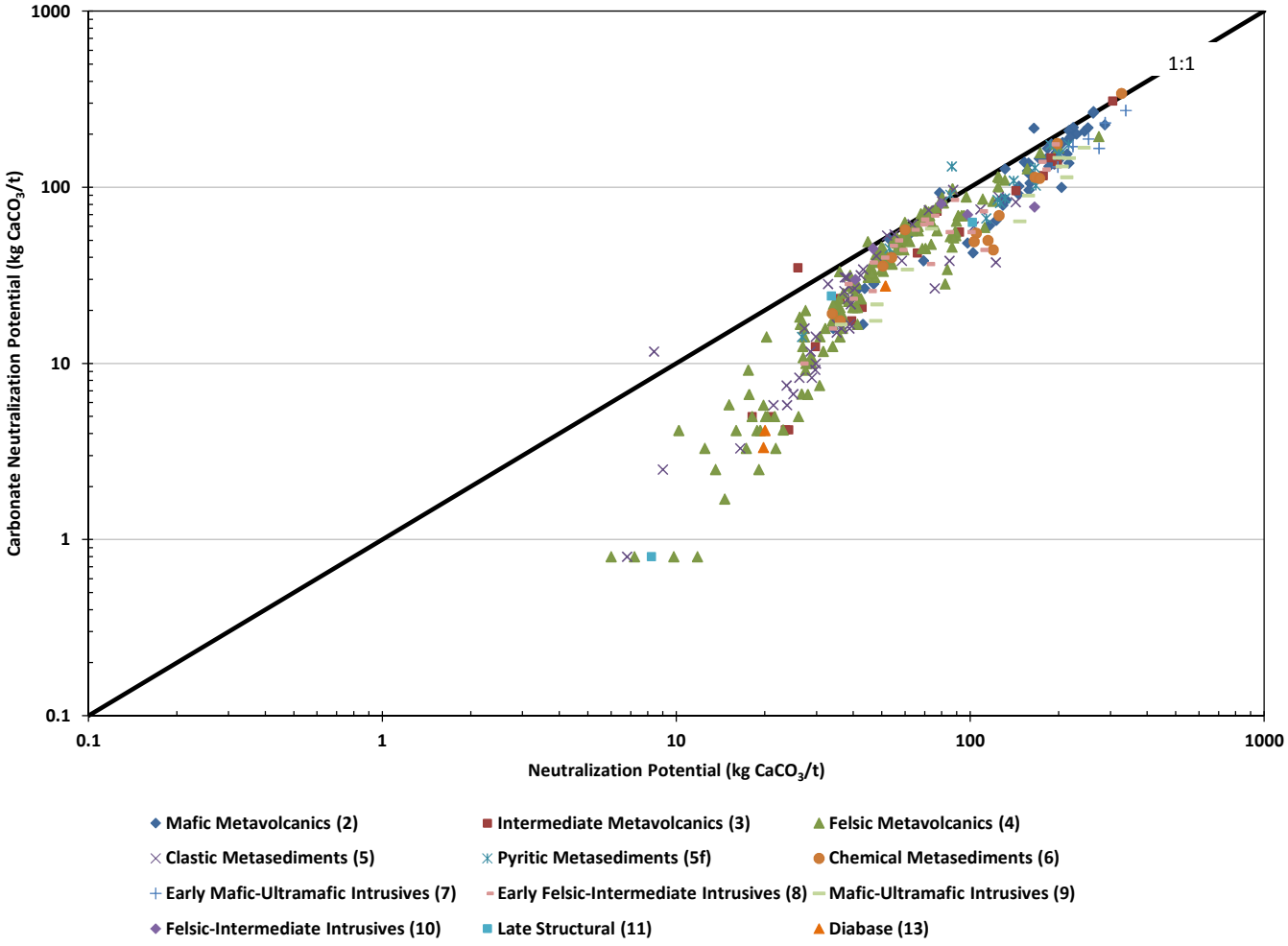
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Rainy River Gold Project

Scatterplot of Sulphide versus Total Sulphur for Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-1



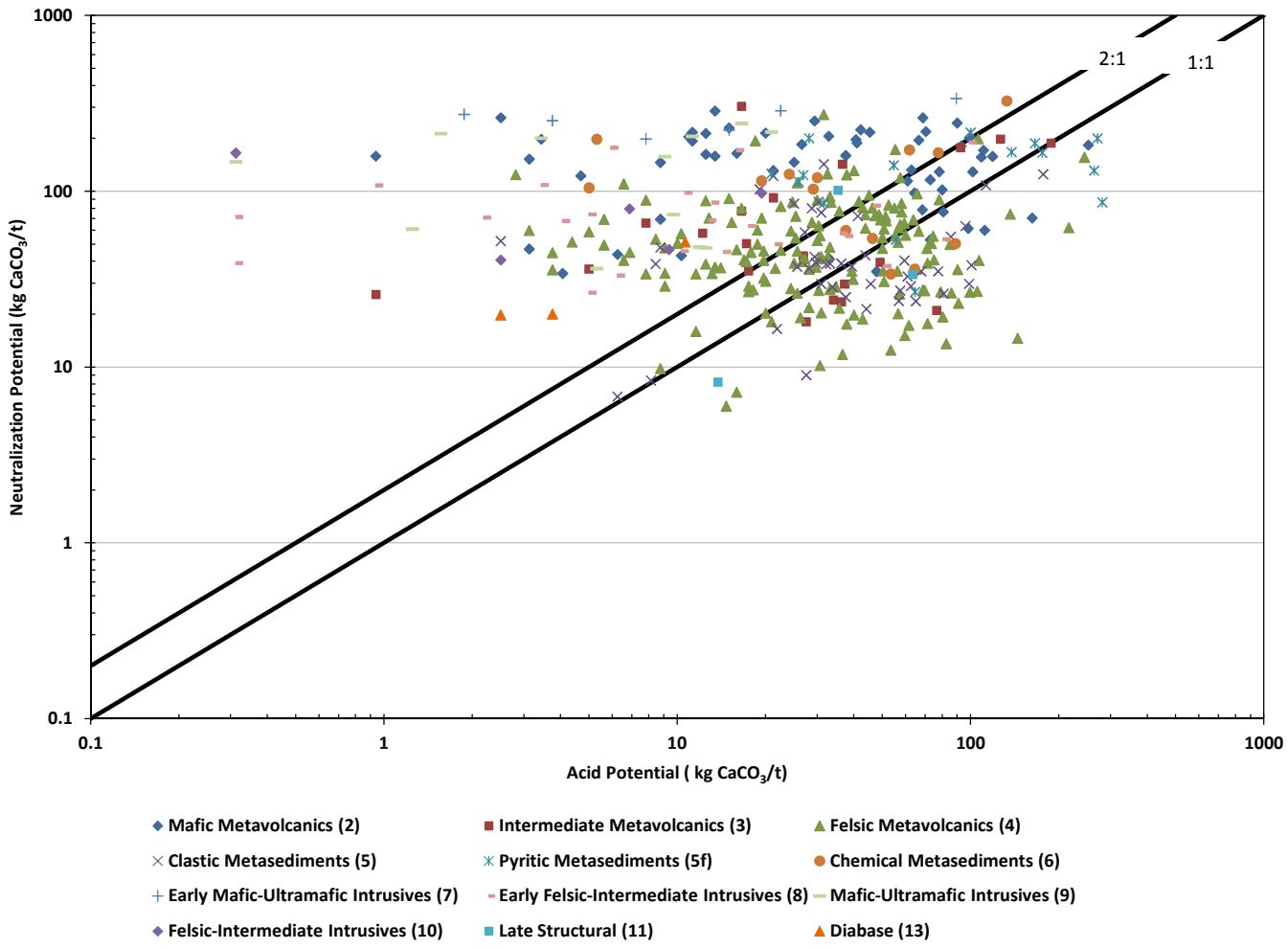
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Rainy River Gold Project

Scatterplot of Carbonate NP versus NP for Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-2



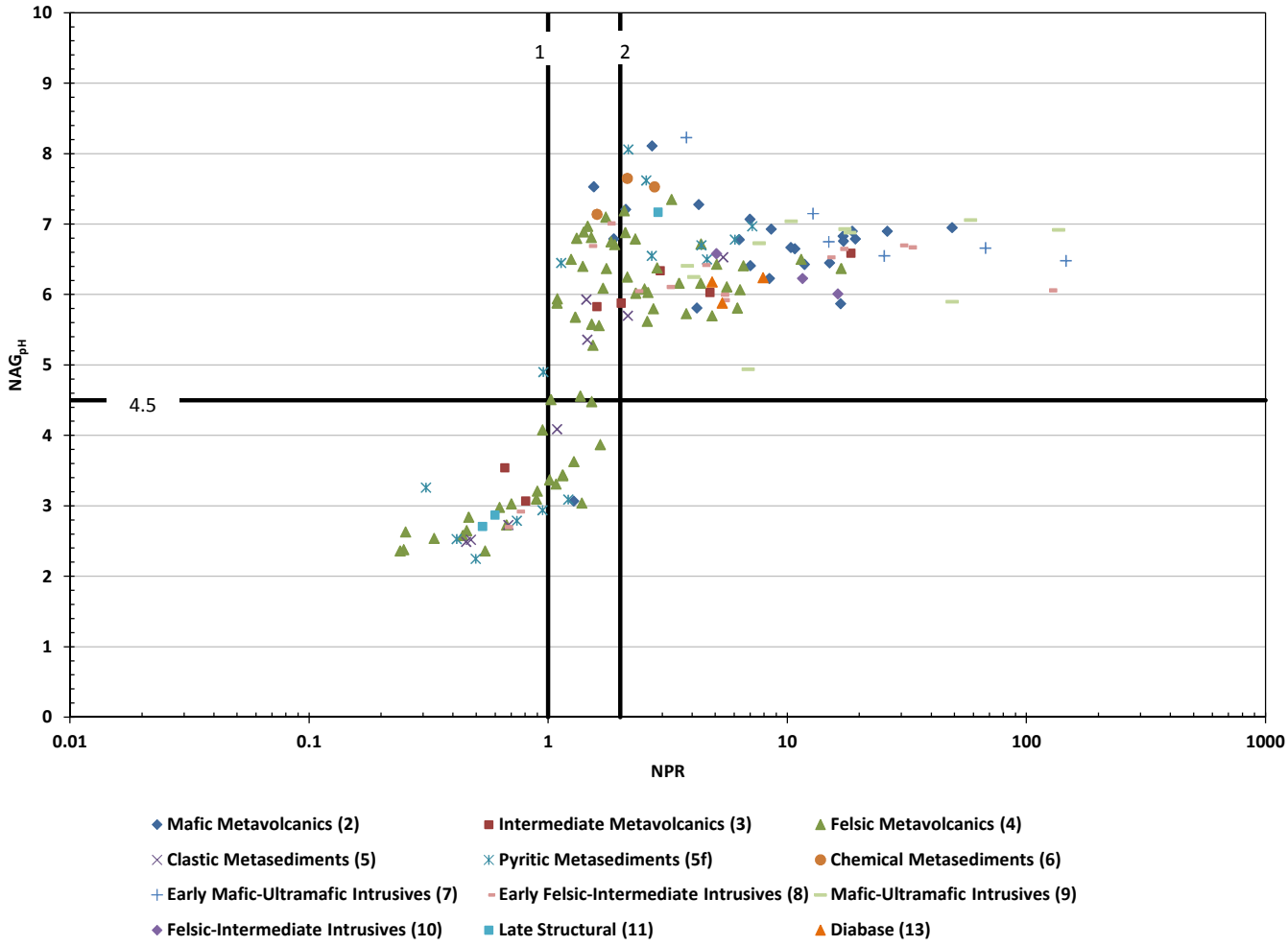
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Rainy River Gold Project

Scatterplot of NP versus AP for Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-3



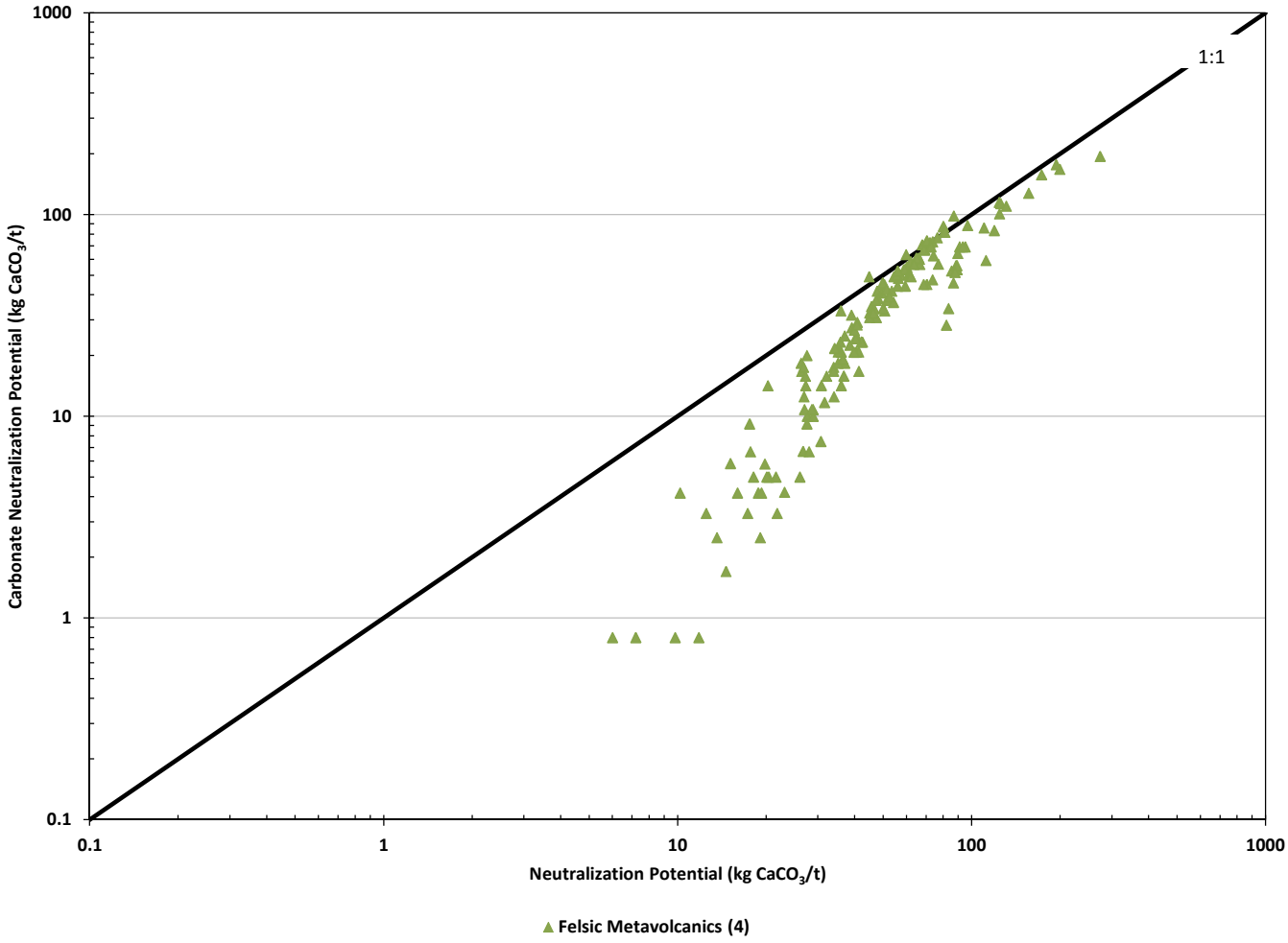
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Rainy River Gold Project

Scatterplot of NAG pH versus NPR for Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-4



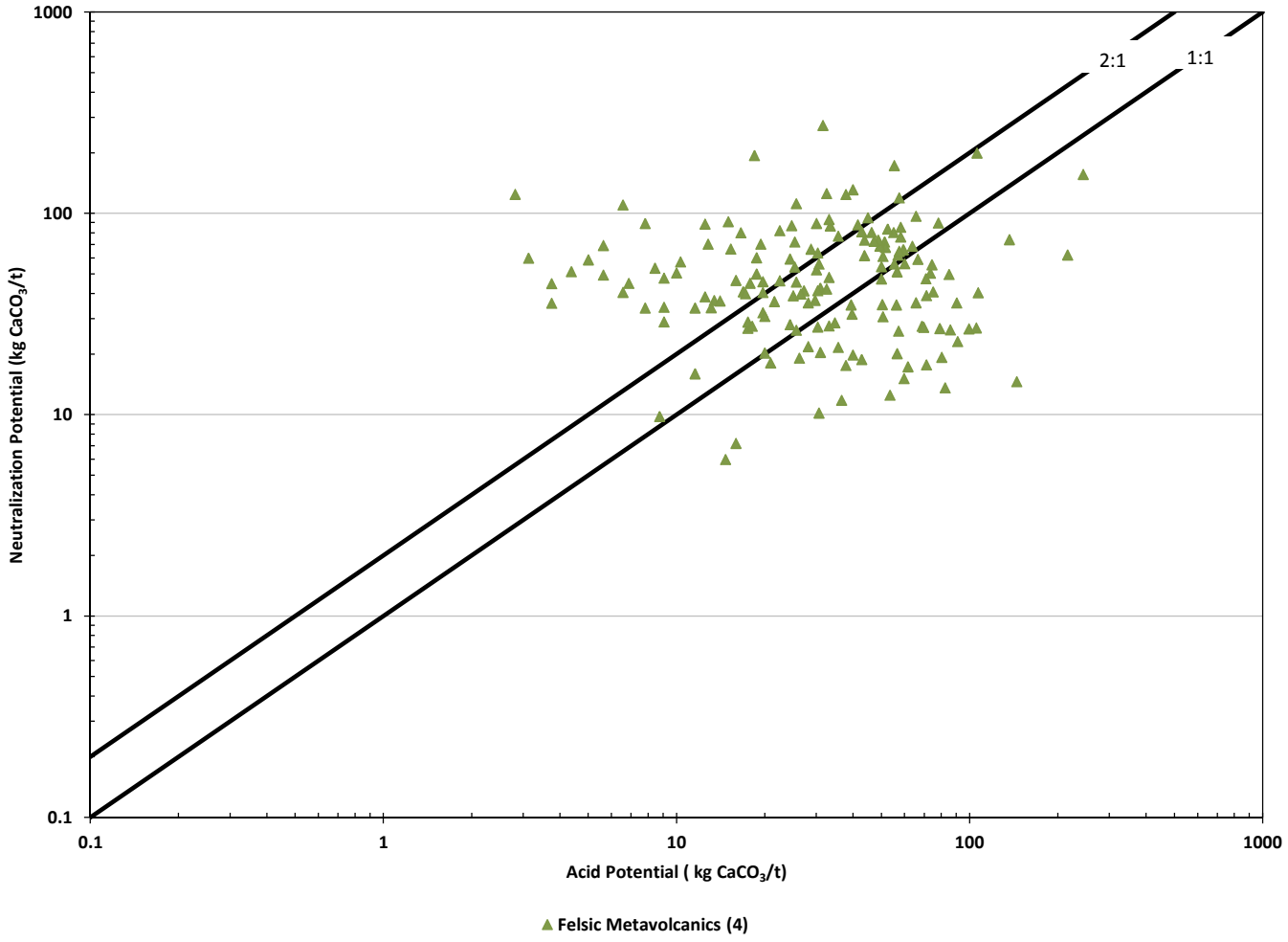
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Rainy River Gold Project

Scatterplot of Carbonate NP versus NP for Felsic Metavolcanic Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-5



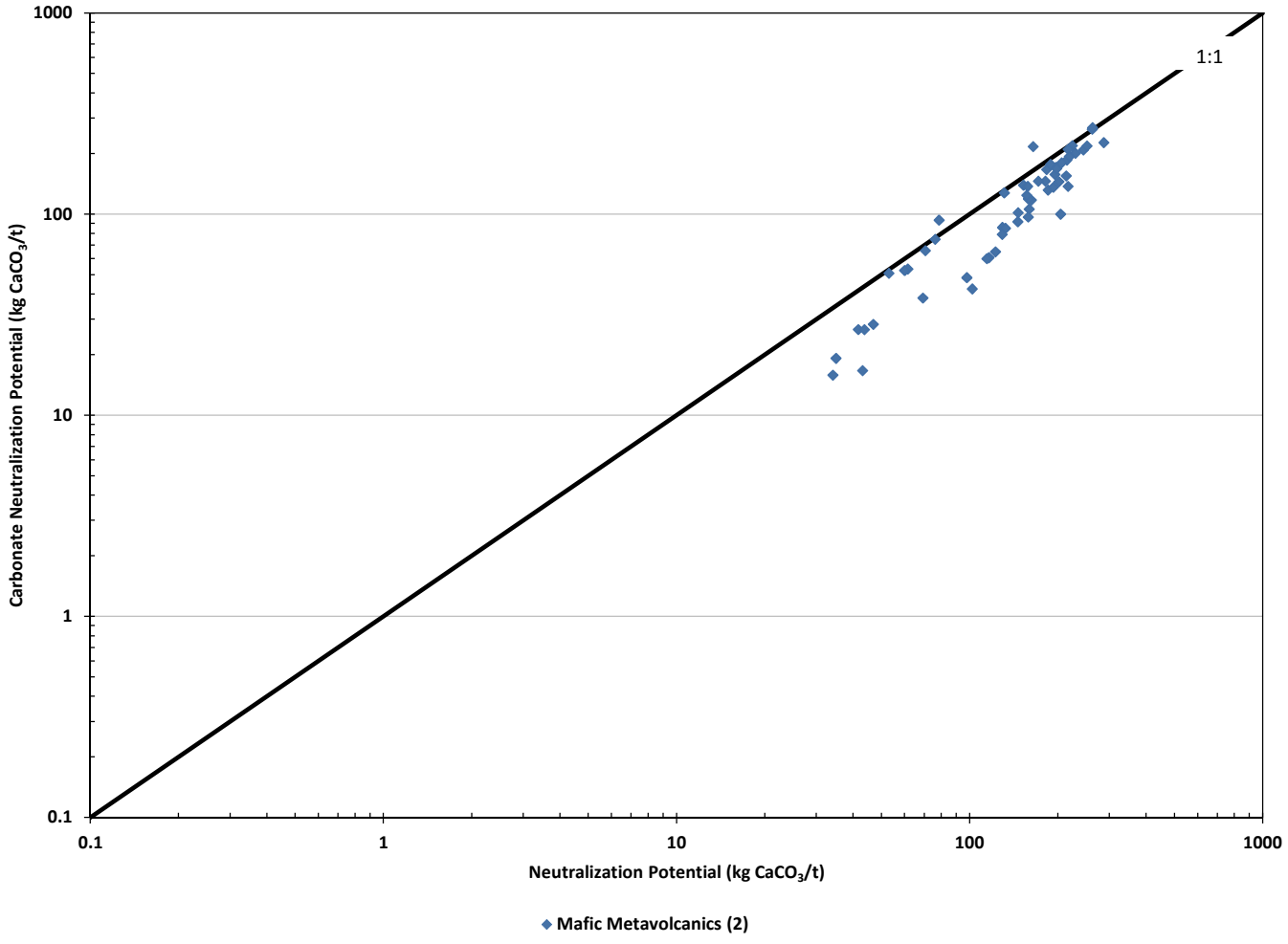
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Rainy River Gold Project

Scatterplot of NP versus AP for Felsic Metavolcanic Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-6



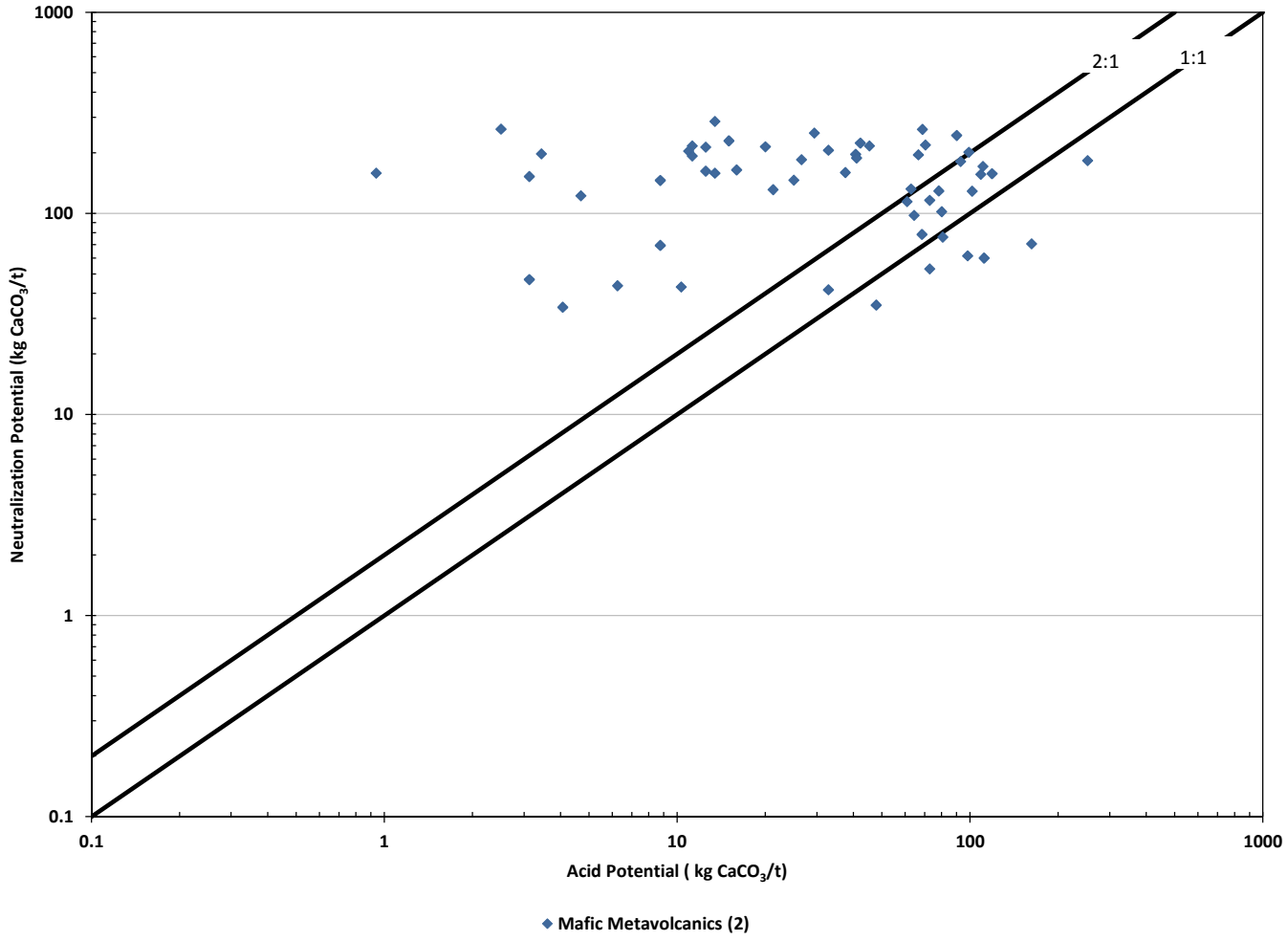
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Rainy River Gold Project

Scatterplot of Carbonate NP versus NP for Mafic Metavolcanic Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-7



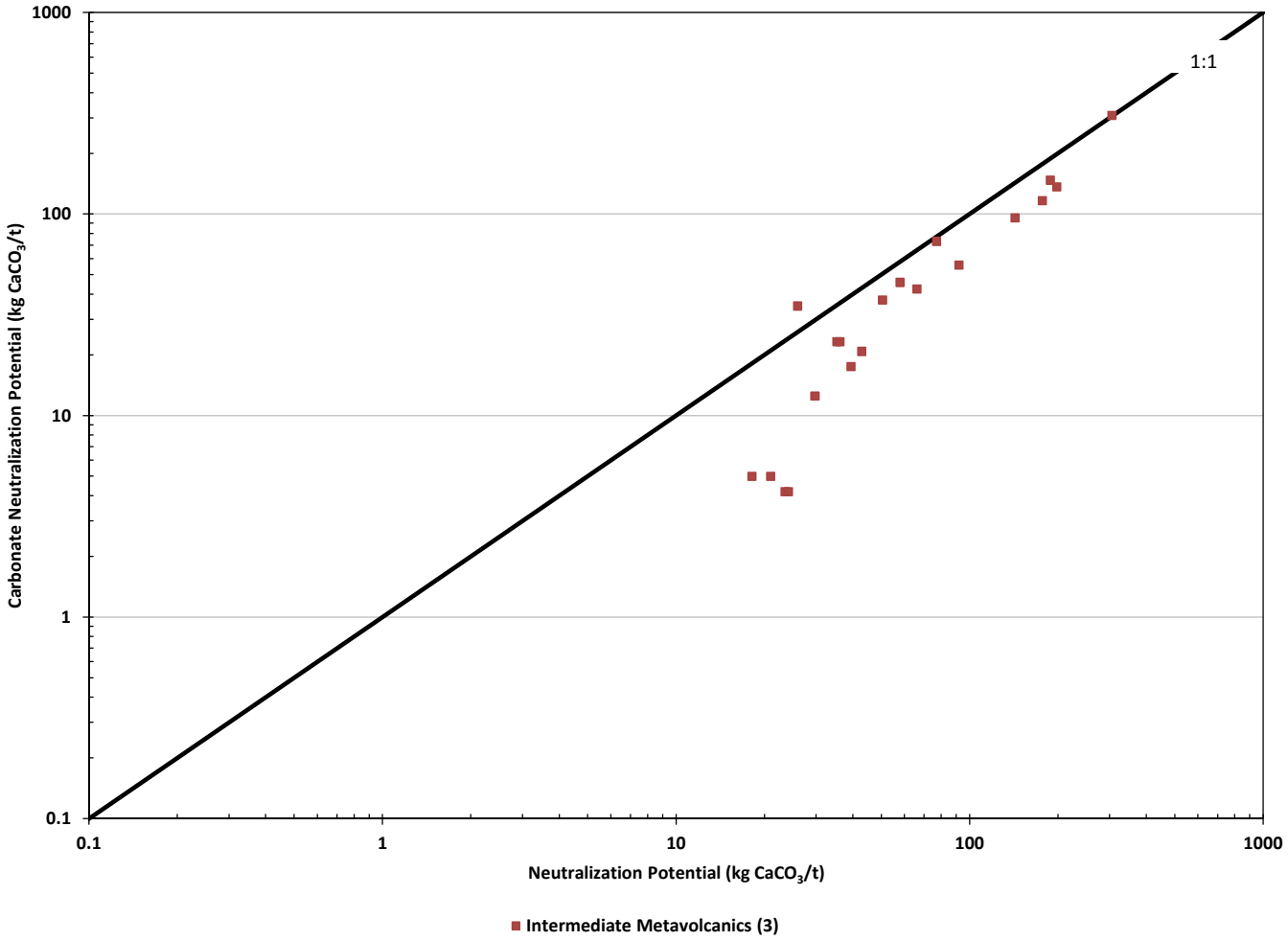
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Scatterplot of NP versus AP for Mafic Metavolcanic Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-8



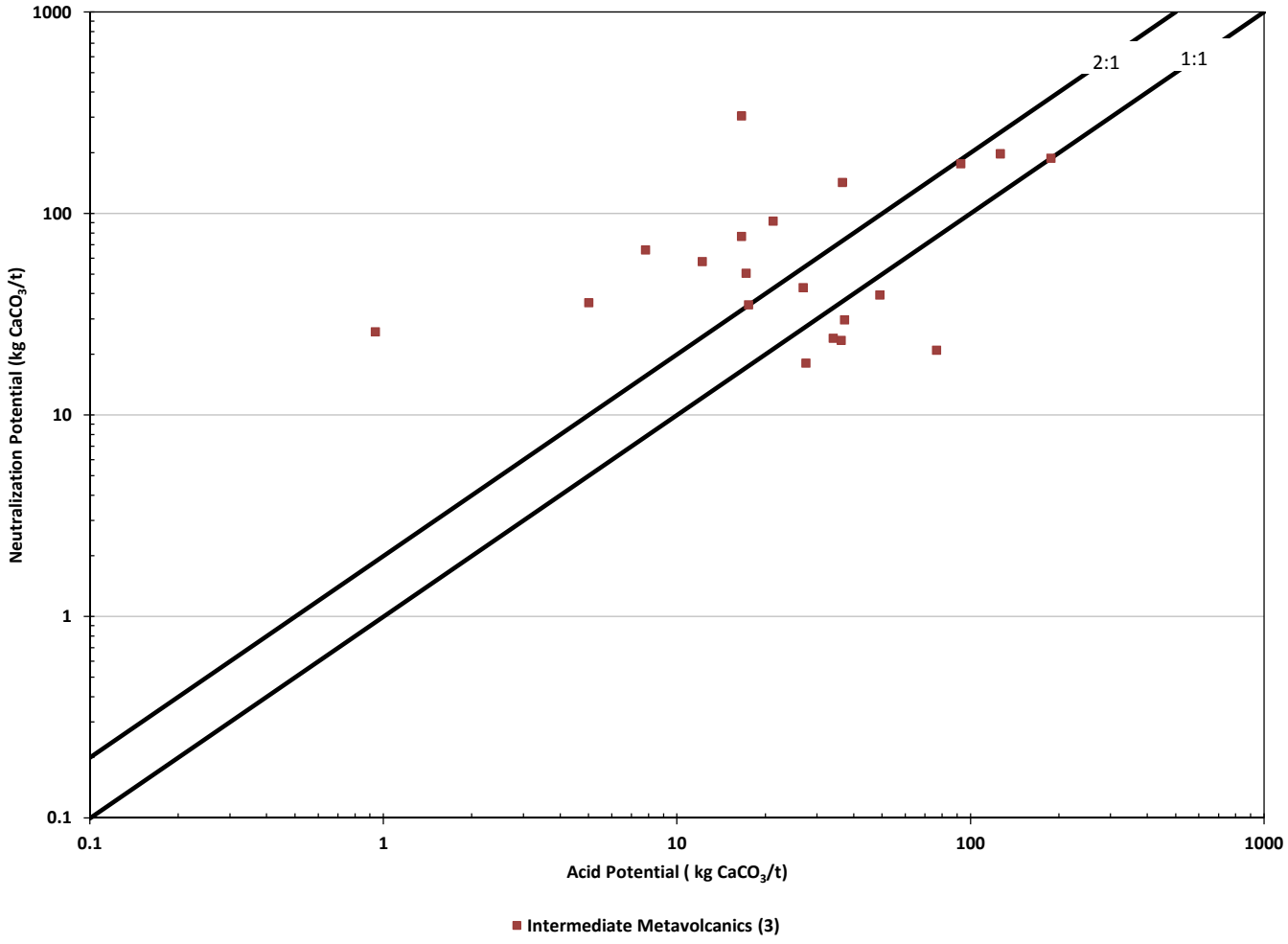
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Rainy River Gold Project

Scatterplot of Carbonate NP versus NP for Intermediate Metavolcanic Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-9



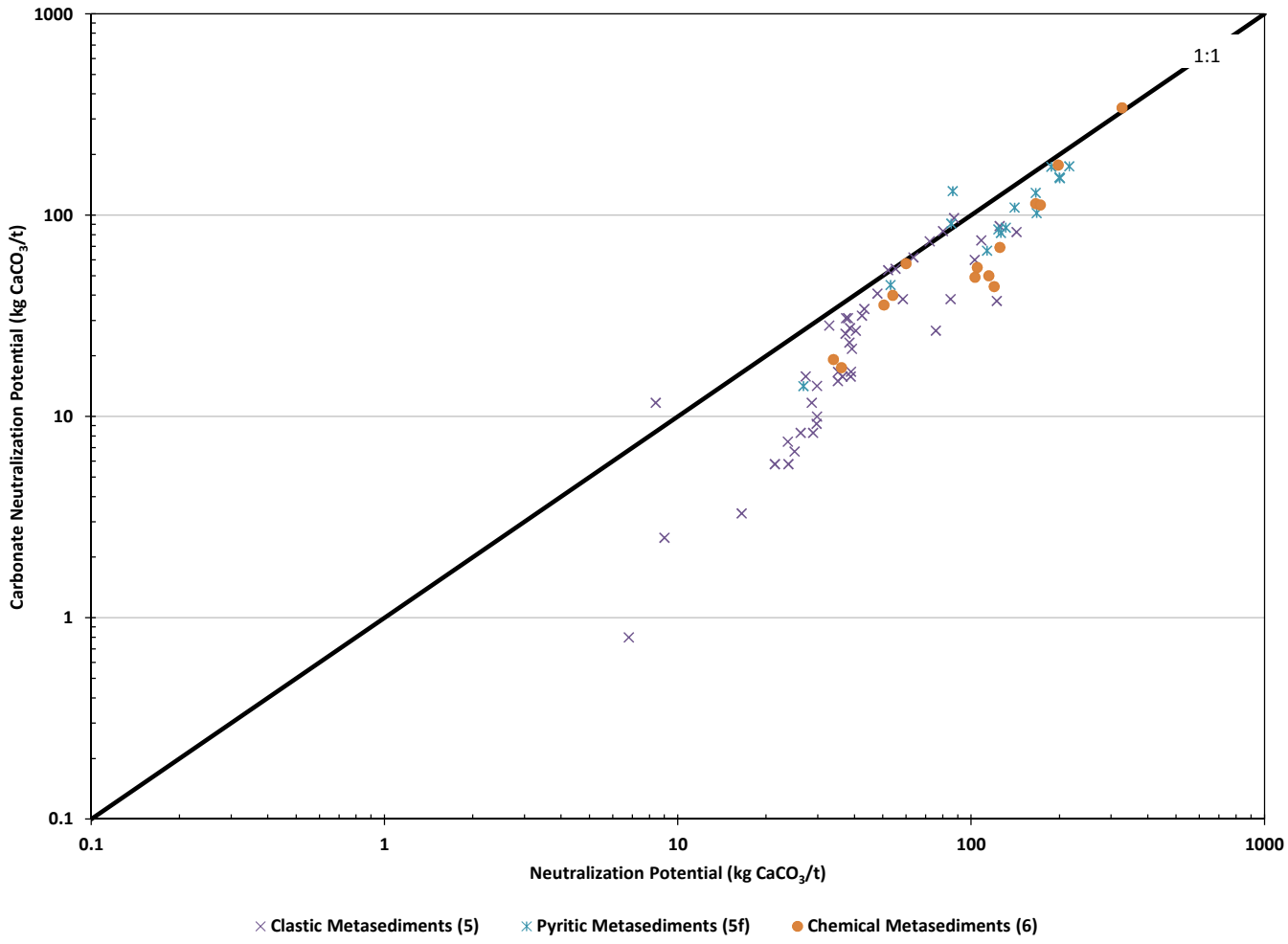
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Rainy River Gold Project

Scatterplot of NP versus AP for Intermediate Metavolcanic Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-10



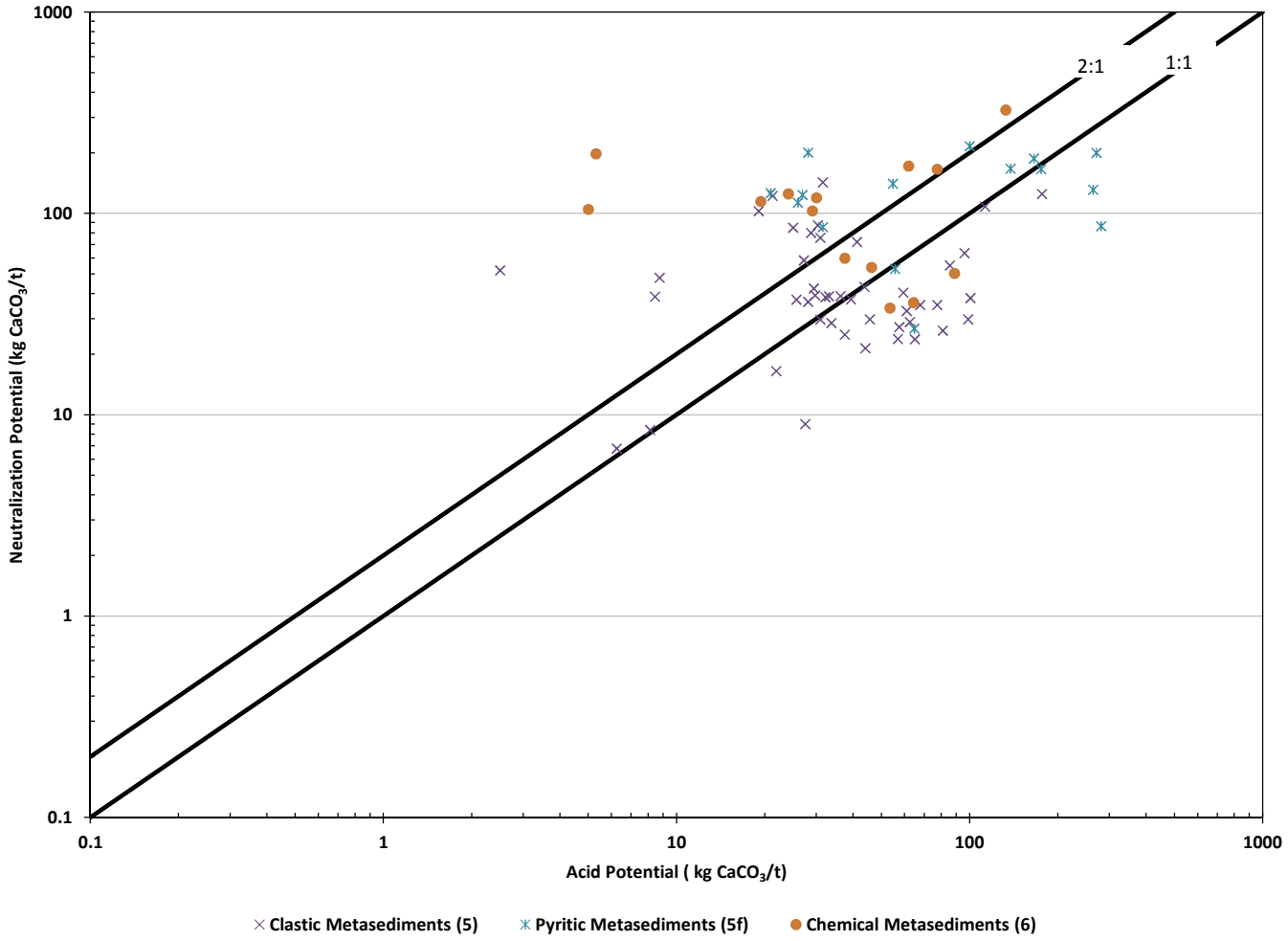
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Rainy River Gold Project

Scatterplot of Carbonate NP versus NP for Metasediment Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-11



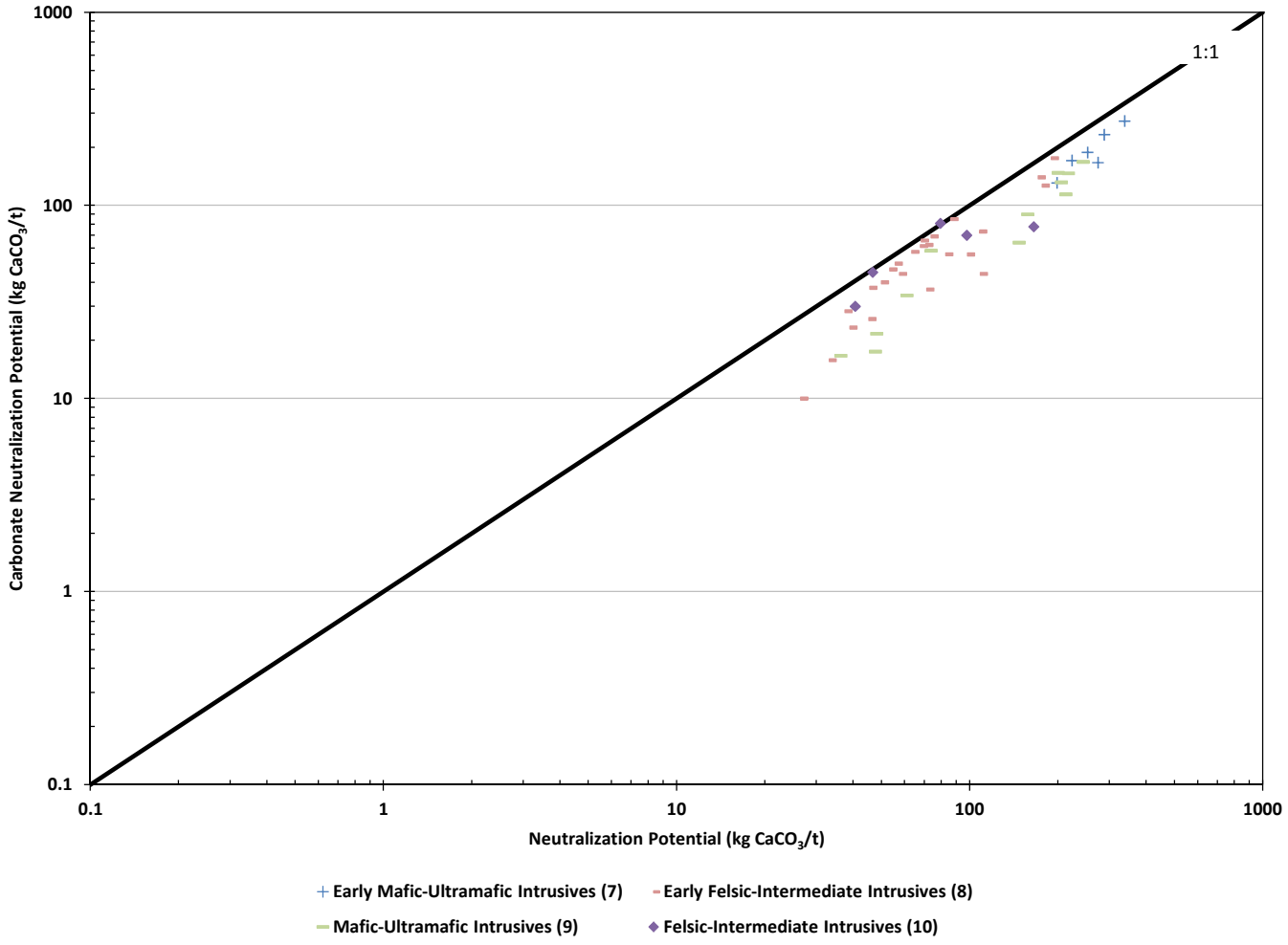
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Rainy River Gold Project

Scatterplot of NP versus AP for Metasediment Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-12



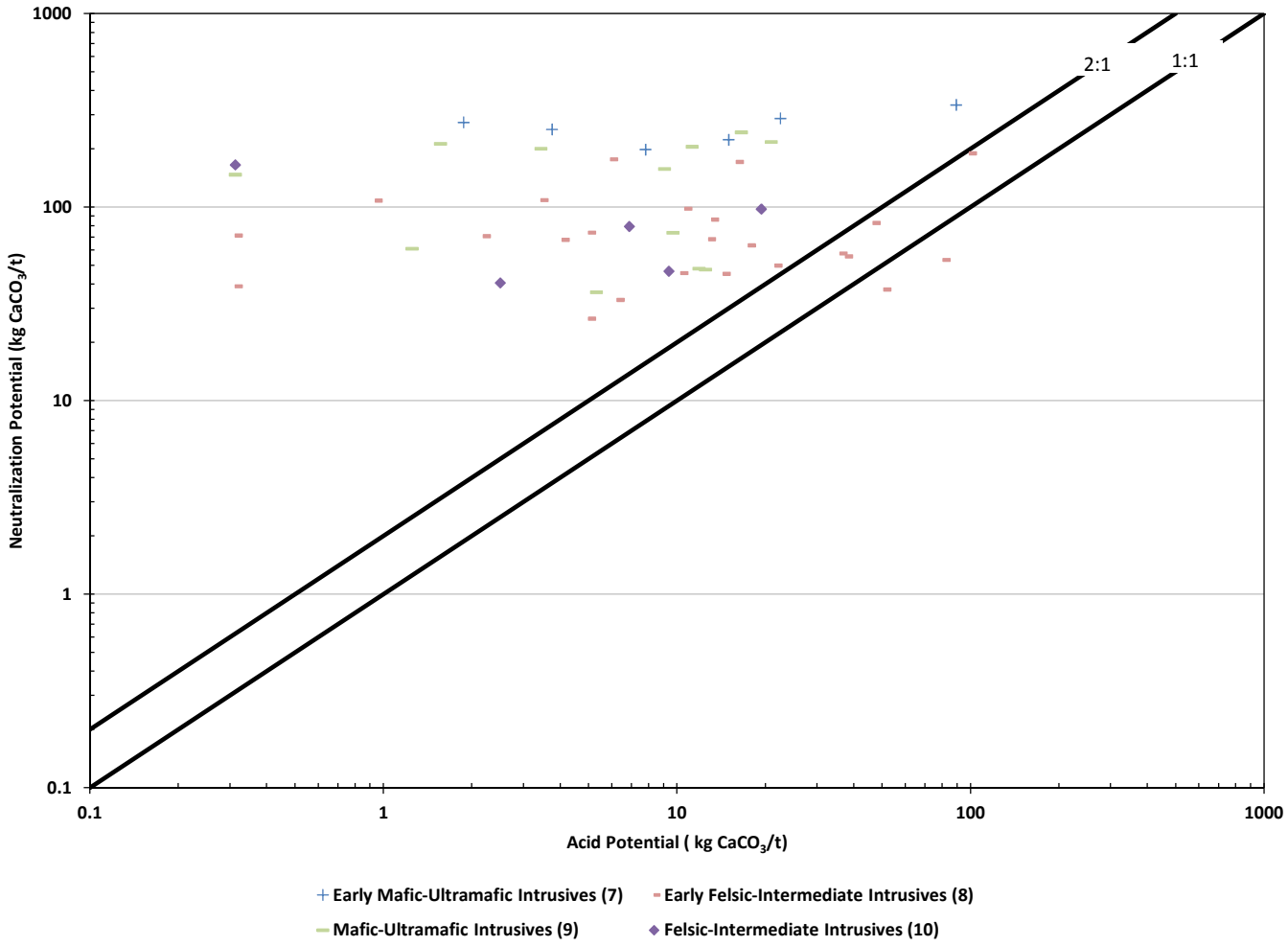
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Rainy River Gold Project

Scatterplot of Carbonate NP versus NP for Intrusive Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-13



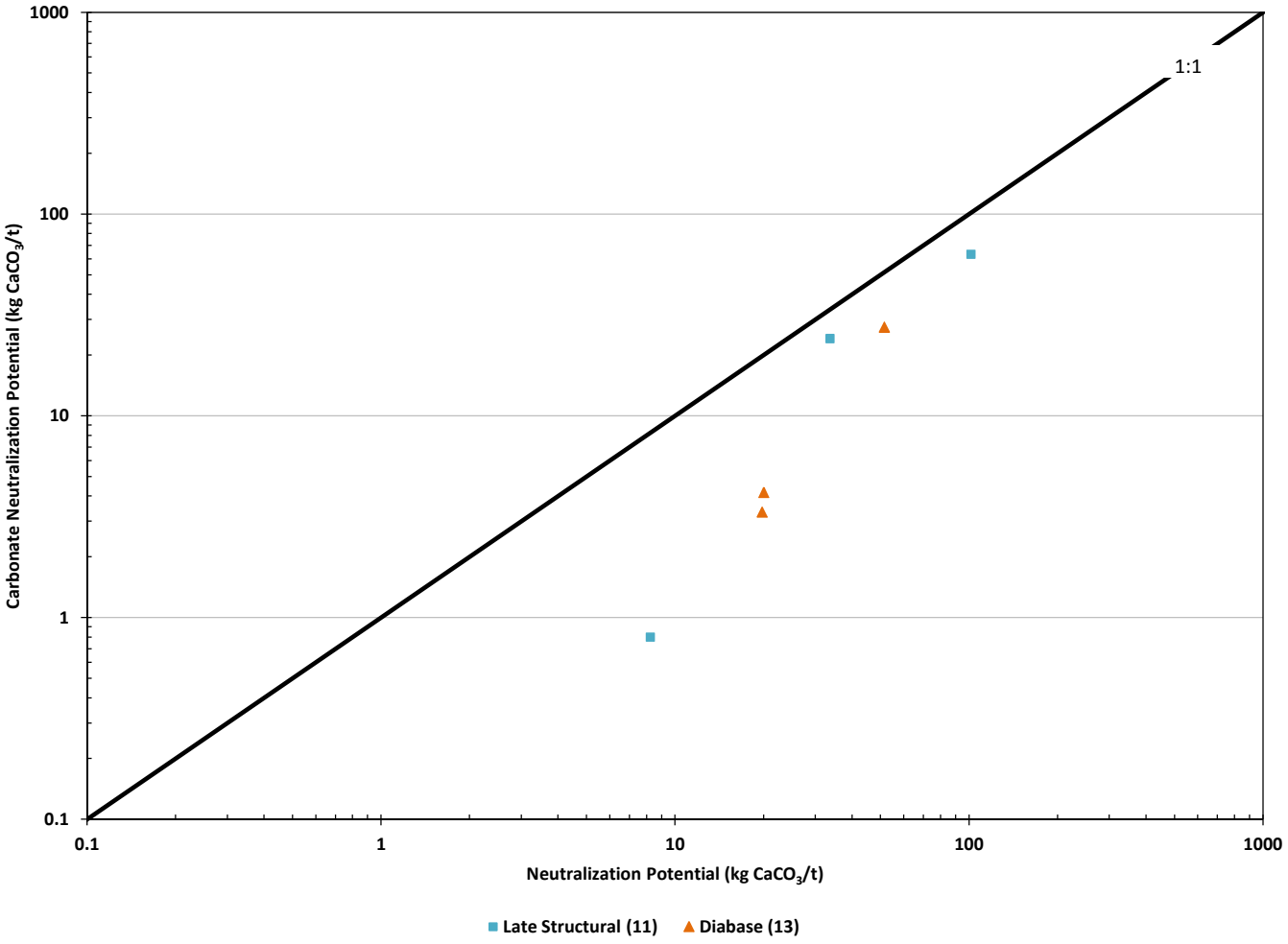
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Rainy River Gold Project

Scatterplot of NP versus AP for Intrusive Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-14



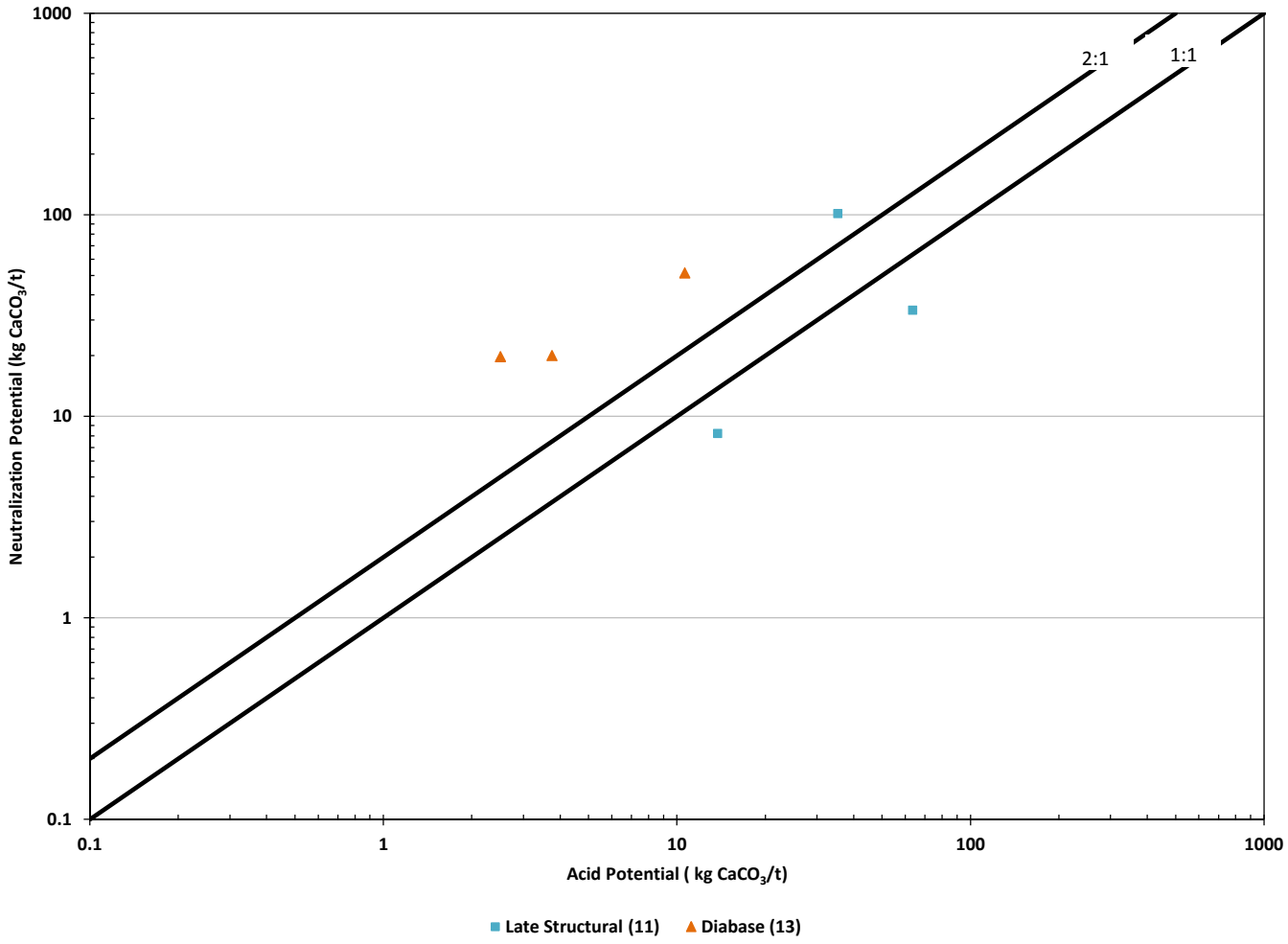
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Rainy River Gold Project

Scatterplot of Carbonate NP versus NP for Late Structural and Diabase Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-15



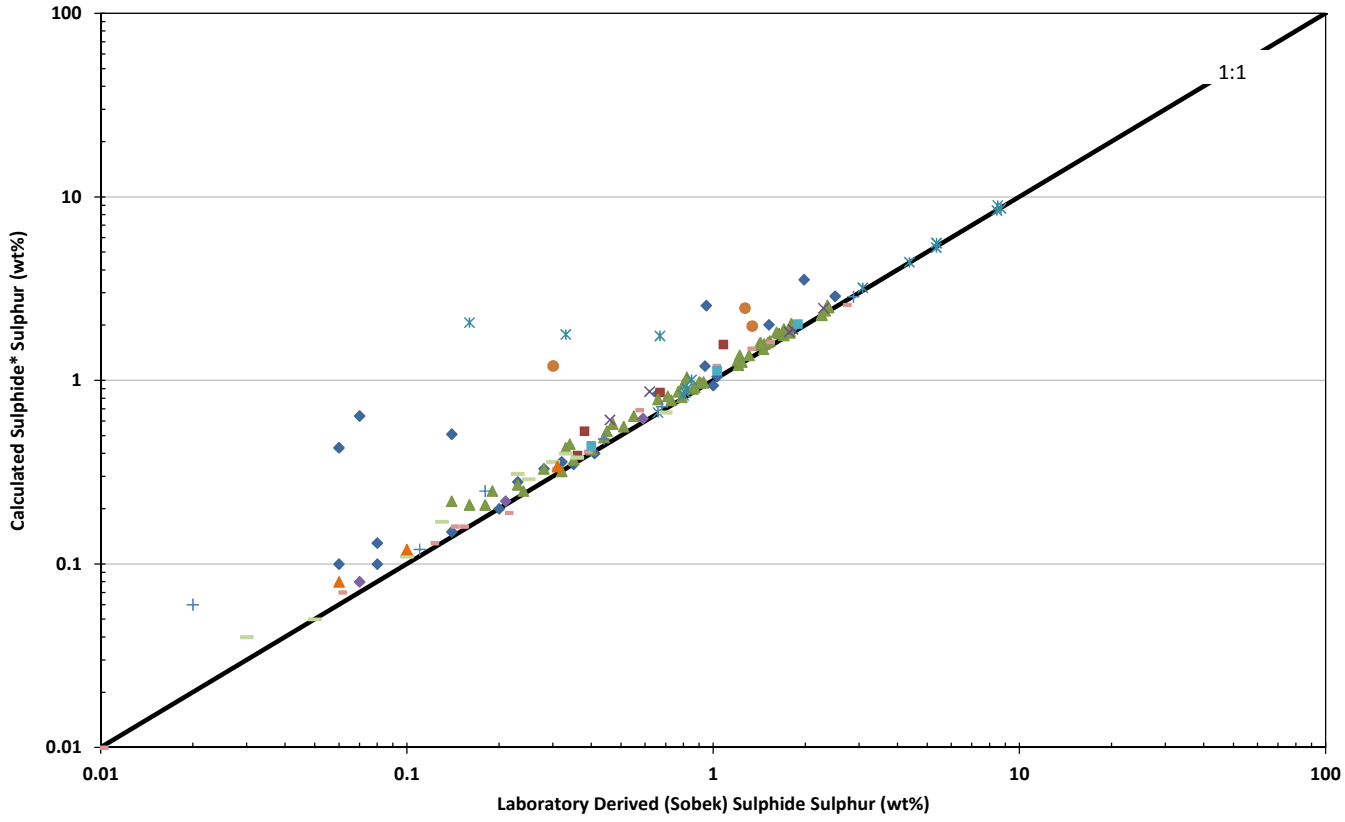
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Rainy River Gold Project

Scatterplot of NP versus AP for Late Structural and Diabase Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-16



◆ Mafic Metavolcanics (2) ■ Intermediate Metavolcanics (3) ▲ Felsic Metavolcanics (4)
× Clastic Metasediments (5) ✳ Pyritic Metasediments (5f) ● Chemical Metasediments (6)
+ Early Mafic-Ultramafic Intrusives (7) – Early Felsic-Intermediate Intrusives (8) – Mafic-Ultramafic Intrusives (9)
◆ Felsic-Intermediate Intrusives (10) ■ Late Structural (11) ▲ Diabase (13)

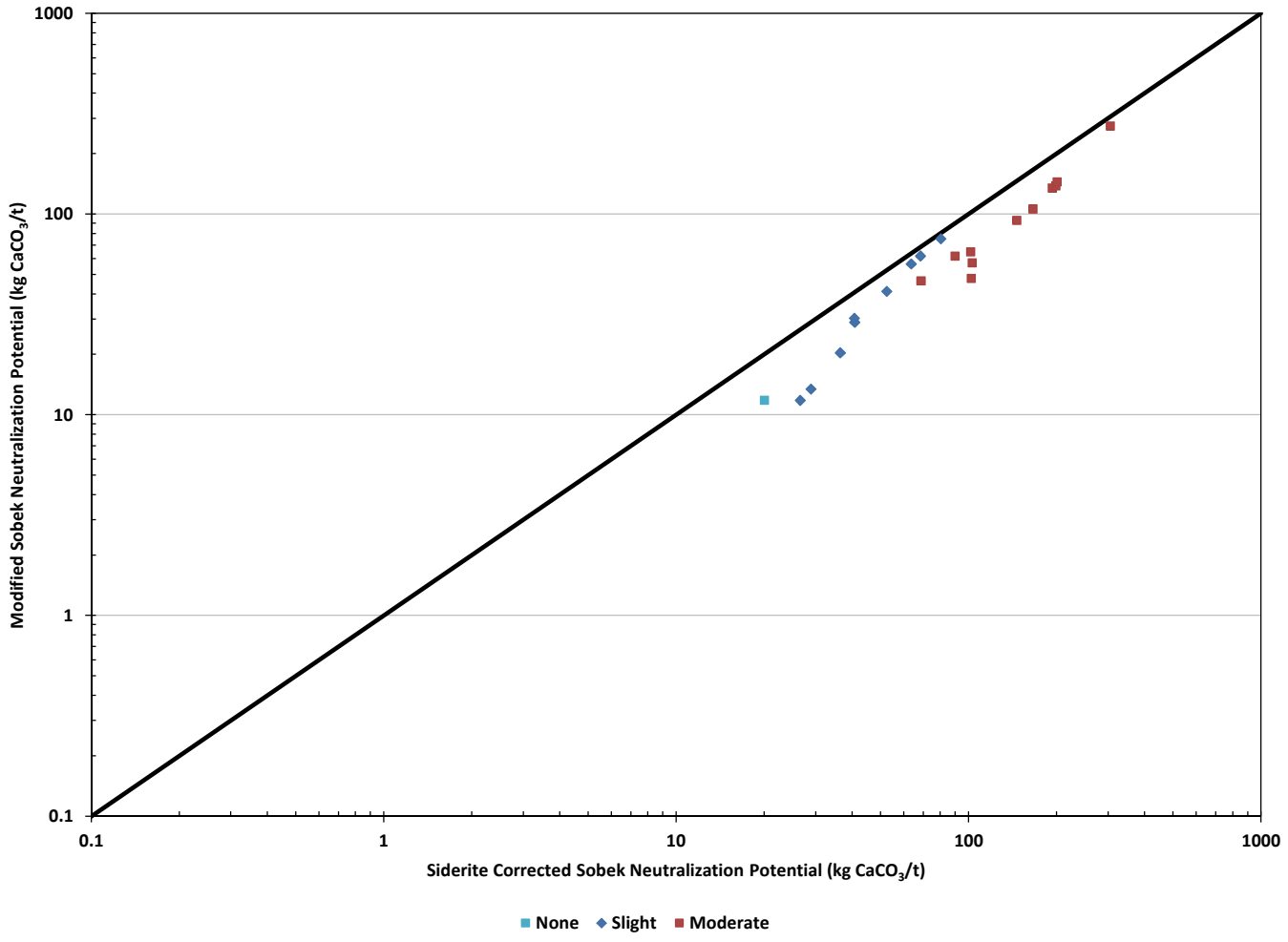
*Sulphide Sulphur as total sulphur less sulphate sulphur

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Rainy River Gold Project

Scatterplot of Calculated Sulphide versus Sobek Sulphide for Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-17



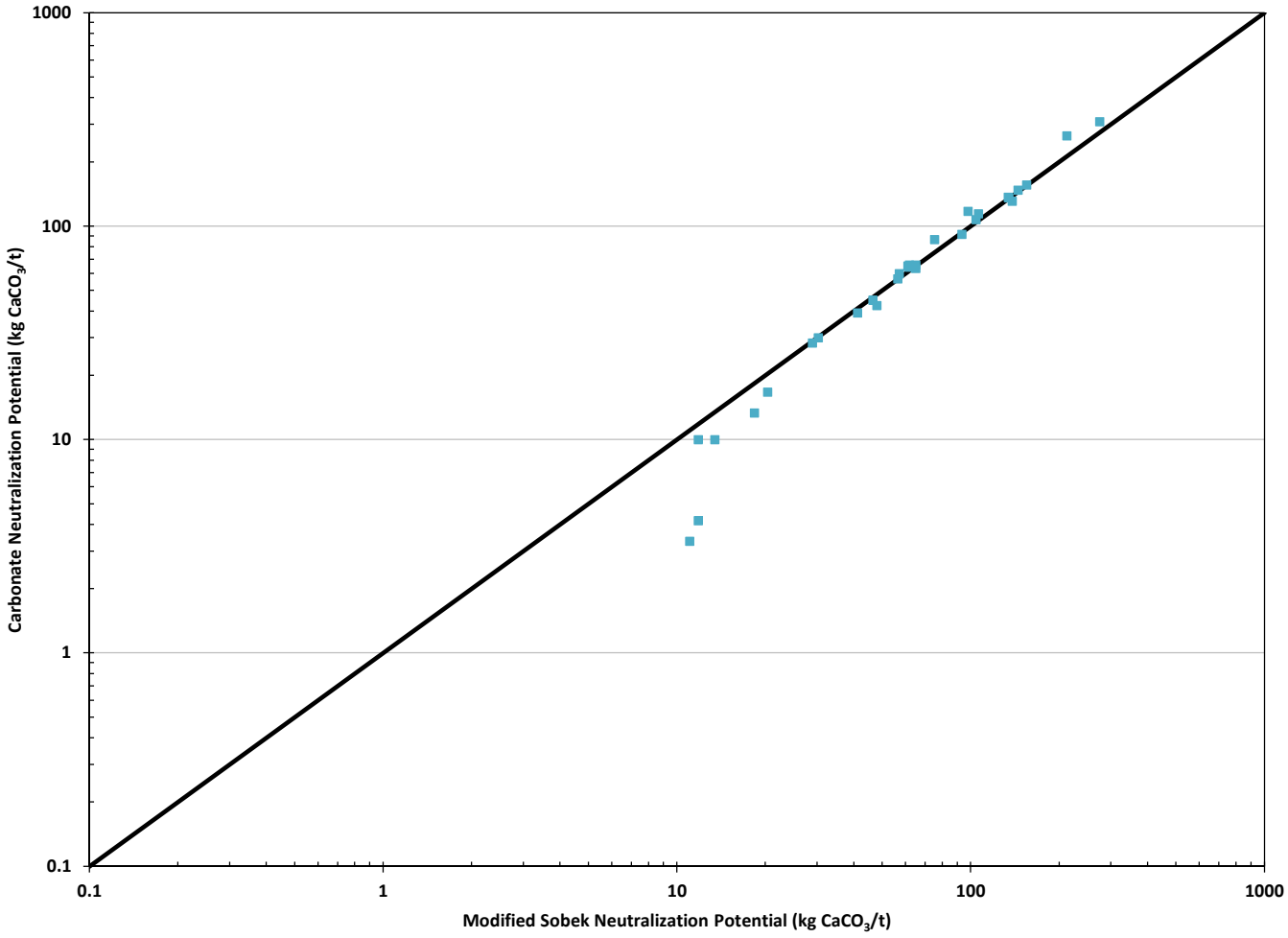
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Rainy River Gold Project

Scatterplot of Modified ABA NP versus NP (Siderite Corrected Sobek) for Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-18



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Rainy River Gold Project

Scatterplot of Carbonate NP versus Modified ABA NP for Mine Rock Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-19

Sample Photographs



<1 year old core (NR11647 at 78 to 79 m depth)

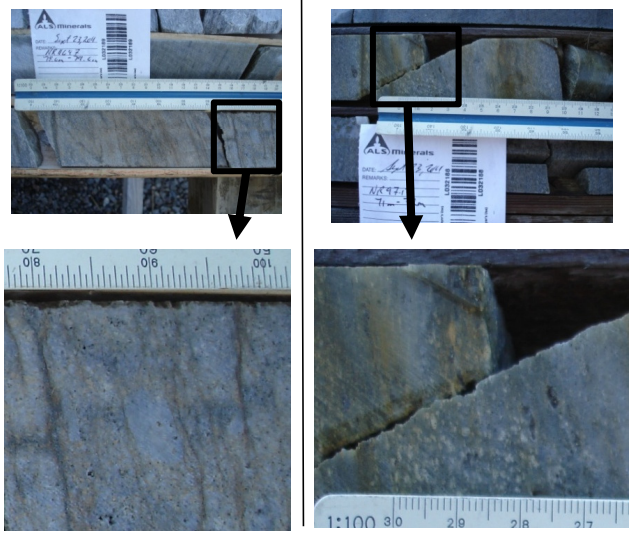


14 year old core (NR9717 at 71 to 72 m depth)

Detail Views

Fresh

Aged



Staining and pitting observed in both fresh and aged core

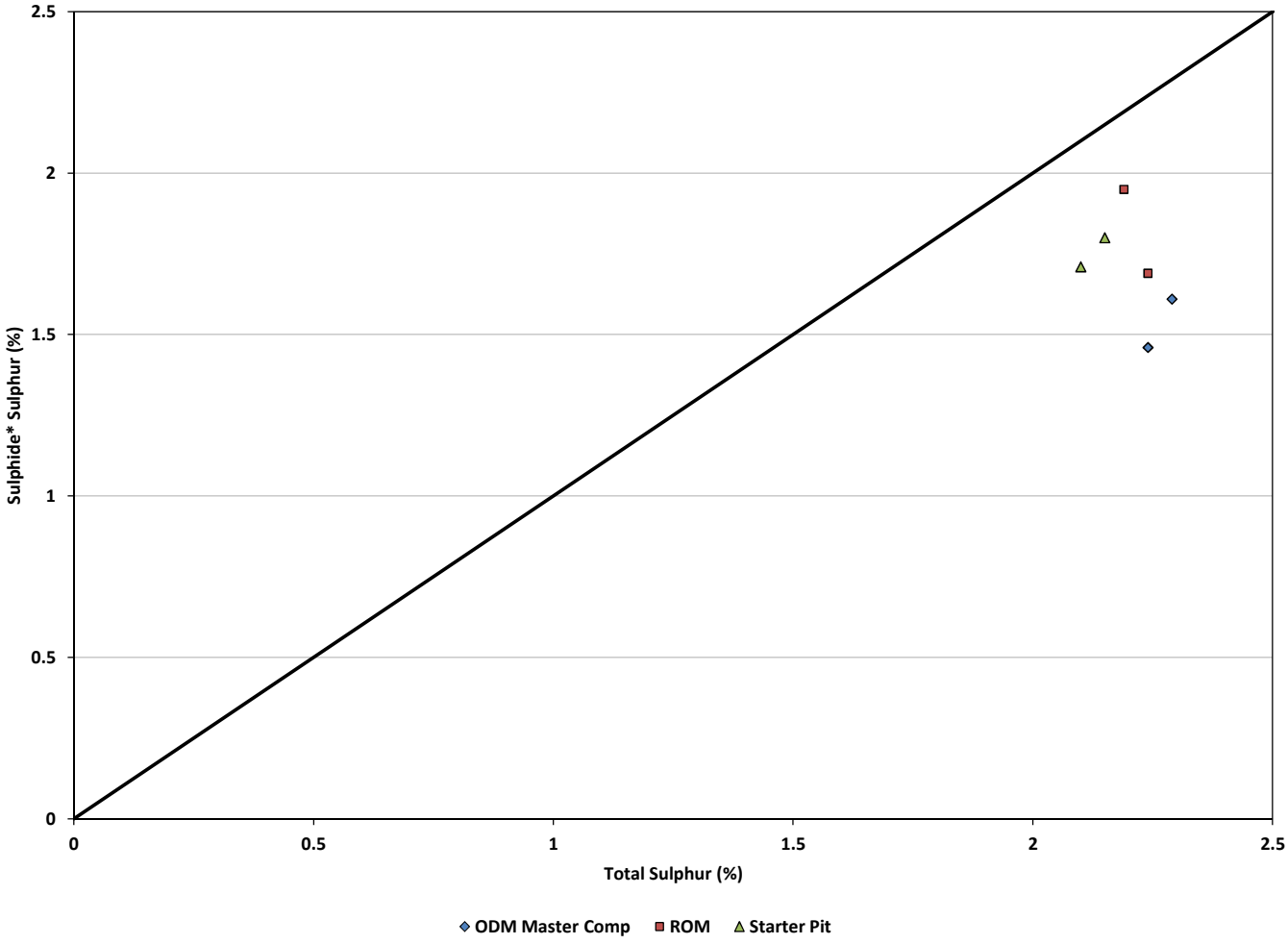
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Rainy River Gold Project

Selected Photographs of Fresh vs Aged Drill Core

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-20



*Sulphide Sulphur as total sulphur less sulphate sulphur

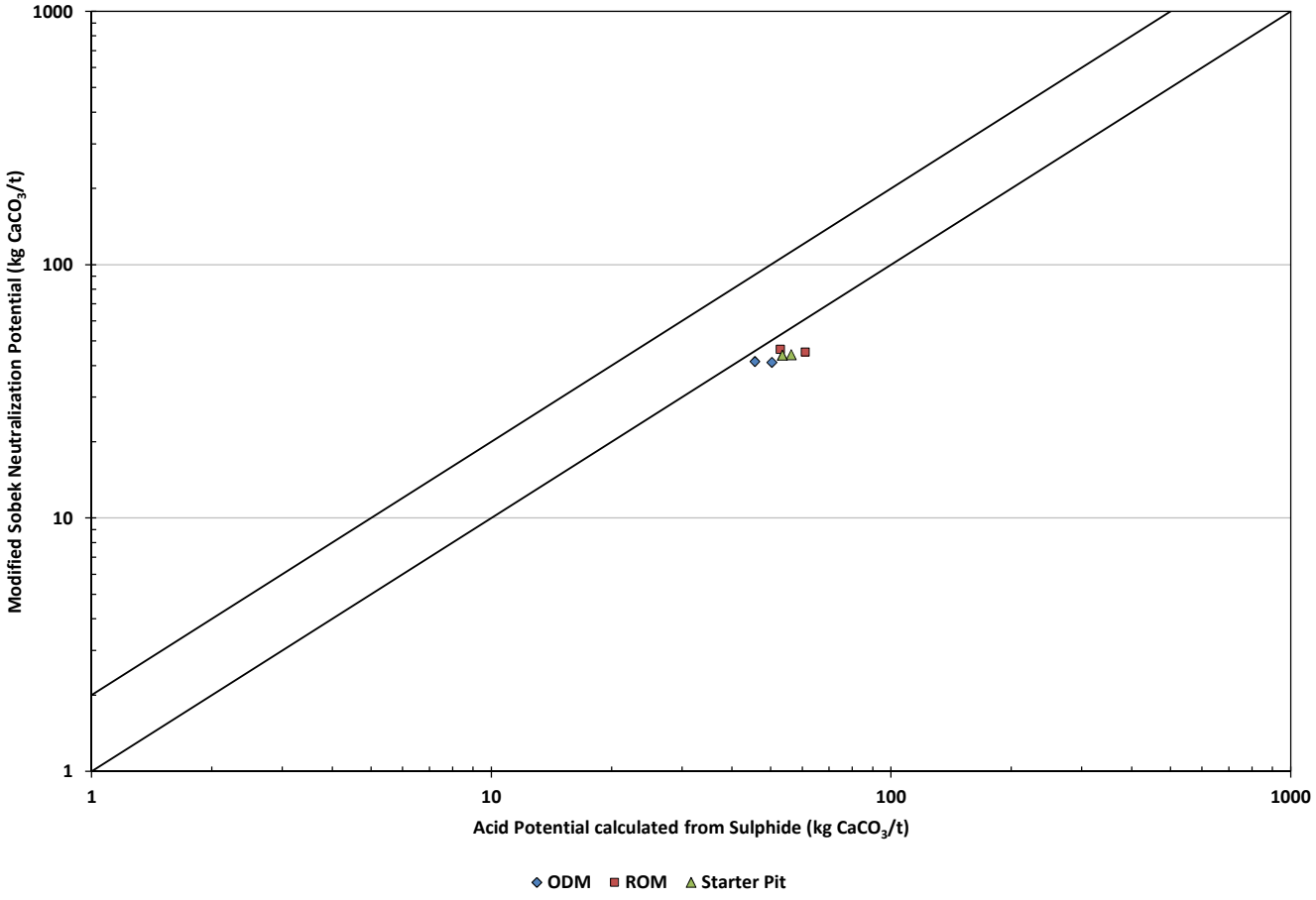
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Rainy River Gold Project

Scatterplot of Sulphide versus Total Sulphur for Tailings Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-21



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Rainy River Gold Project

Scatterplot of NP versus AP for Tailings Samples

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 7-22

8.0 DISCUSSION

8.1 PAG Distributions – ABA Data

Prior to the development of the mine block model, a preliminary evaluation of the distribution of PAG within the vicinity of the future pit was completed by spatially plotting NP, Carb NP, AP, NPR and Carbonate NPR distributions within the pit in both plan view and cross section (Figures 8-1 to 8-6). No discernible spatial variation in the sulphide (and thus AP) distribution was observed at the resolution plotted. Distributions of NP and Carb NP however, showed more elevated NP in the southwest area of the future pit development. The NPR and Carbonate NPR distributions follow the same pattern as the NP and Carb NP.

These patterns suggested that less PAG rock is likely to be present in the southwest region of the pit. Based on these findings a more detailed spatial evaluation of PAG has been completed using the block modelling approach described below.

8.2 ARD Block Model

8.2.1 Surrogate Development

The approach to block modelling previously described, utilizes the large exploration database to interpolate the potential PAG and NPAG mine rock volume distributions within the future open pit. The large exploration database provides near continuous sampling data over 1 to 2 m sample intervals from borehole spacings within the pit at generally between 10 to 30 m.

In order to utilize this large data set however, a relationship was required to estimate the NP and AP of rock samples on the basis of rock chemistry rather than traditional ABA data. This approach essentially produces surrogate relationships for NP and AP from the existing ICP exploration geochemistry data set. Three-dimensional modelling of the NP and AP within the pit based on the existing borehole sample data and analyses can then proceed; in this case supporting the development of a 5 x 5 x 5 m block model of NP and AP. When combined this data describes a three dimensional distribution of NPR on the basis of the 5 x 5 x 5 m blocks.

The following sections describe how the surrogate relationships for NP and AP were developed, and checked. Additional work is continuing with the block model in order to further develop this as a tool for planning and managing PAG mine rock at the site.

8.2.1.1 Acid Potential

The AP is determined by the following relation (MEND 2009):

$$AP\ (kg\ CaCO_3/t) = Sulphide\ Sulphur\ (wt\ \%) \times 31.25$$

AMEC has determined that the ICP sulphur analysis used for the exploration samples is a reasonable fit to sulphide sulphur and thus AP. Therefore the relation below can be used to determine surrogate AP from the exploration database using ICP sulphur (Figure 8-7). This relationship applies across all lithologies.

$$\text{Surrogate AP (kg } CaCO_3\text{/t)} = \text{ICP Sulphur (wt \%)} \times 31.25$$

8.2.1.2 Neutralization Potential

The relationship between NP and the exploration ICP data is less clear due to a more complex relationship between NP and mine rock mineralogy. Calcium carbonate (calcite) and calcium-magnesium carbonate (dolomite) have been confirmed to be the dominant neutralizing minerals in the RRGP waste rock and there is a good correlation between ICP Ca and ABA NP for all waste lithologies with the exception of diabase (Figure 8-8). Improvement in the correlation by incorporation of Mg to account for dolomite was attempted; however, the correlation using this approach was poor presumably since the ICP analysis extracts Mg from aluminosilicate minerals as well as the dolomite.

The following best-fit relation can be used as a predictor of NP from ICP Ca for all lithologies except diabase.

$$\text{Surrogate NP (kg } CaCO_3\text{/t)} = (37.14 \times \text{Calcium [\%]}) - 4.21$$

No specific correlation between NP and diabase was determined for the RRGP data and as expected diabase appears to be generally lacking in carbonate minerals. Based on the available ABA testing for diabase, this rock type exhibits a narrow range in NP. Further, diabase is expected to represent a small percentage of the total mine rock. Therefore, a conservative estimate of NP for diabase can be based on the minimum NP determined in the current ABA data set (approximately 20 kg $CaCO_3$/t).

8.2.1.3 Evaluation of Error and Implications of Surrogate Calculations

The excellent relationship between ICP S and ABA S indicates that the surrogate AP determined in this manner will result in little error in AP prediction on this basis.

Though the correlation between ICP Ca and ABA NP is very good, there is some scatter in the data that could result in incorrect coding of some waste rock samples as NPAG when ABA NP would determine a PAG condition (Figure 8-9). The alternate relationship is also possible (surrogate NP would determine a PAG condition when ABA NP would determine a NPAG condition).

The potential implications of such miscoding and options for managing this situation have been accounted for assuming rock with an NPR of less than 2 is PAG. In total some 5% of the ABA samples were miscoded by the surrogate NP relationship (Table 8-1). The most critical aspect of such miscoding is the situation where ABA determined PAG samples are calculated as NPAG by the surrogate relationship. As indicated in Table 8-1, only 3% of the ABA samples are miscoded in this manner.

The miscoding of NPAG and PAG was also inspected in terms of spatial and lithological variation within the pit; however, generally no specific trends were noted in these respects. It was noted that for many of the minor lithologies (which have more limited ABA data and represent relatively small rock quantities within the pit volume) the magnitude of the variance can be large. However, the variance increases with increasing NPR and among units that tend to have less PAG samples represented in the ABA data set. Therefore, the resulting errors do not lead to PAG and NPAG misclassifications for the ABA data set and are not considered material.

An option for minimizing the potential problem of mapping PAG as NPAG material on the basis of the surrogate relationship is to shift the best-fit line to a point where such miscoding no longer occurs in the ABA database. Adjustment of the trendline in such a manner results in the following more conservative surrogate relationship (Figure 8-8):

$$NP\ (kg\ CaCO_3/t) = (37.14 \times Calcium\ [\%]) - 19.0$$

By using this trend, a total of 8% of the ABA samples were misclassified, but none of these resulted in PAG rock being misclassified as NPAG rock (Figure 8-10). All misclassifications resulted in NPAG rock being classified as PAG rock. From a waste management perspective, this could result in some NPAG rock being placed in the PAG waste rock pile, but the likelihood of the opposite condition occurring is considered minor. Additional refinement and testing of the surrogate relationship are planned as part of further block model optimization work.

8.2.2 ARD Block Model Results

Results of the block model are presented in several plan views and sections cut through the proposed pit (Figures 8-11 through 8-17). Individual blocks are identified as PAG (NPR <1), uncertain (NPR between 1 and 2) and NPAG (NPR >2). Ore blocks on the basis of gold equivalent cut-off grade (with allowance for silver) are also identified.

These initial block model results are generally consistent with the low resolution spatial distribution indicated by plotting ABA data (Figures 8-4 through 8-6). NPAG materials predominate in the south and PAG materials predominate in the northern regions of the pit.

Materials quantities derived from the current mine plan and block model are provided in Table 8-2. The estimate indicates that approximately 41% of the waste material within the future pit will be PAG.

As the project moves forward additional block model runs are planned to optimize the management and handling of mine rock.

8.3 ARD Onset Times

8.3.1 Mine Rock

As is the case at all similar mining operations in Canada, a key factor in management of mine rock at the site will be the anticipated time to acid onset for PAG rock. For planning purposes average carbonate depletion rates for assumed PAG (NPR <1) and uncertain (NPR between 1 and 2) rock were applied to Carb NP values within the ABA data set and time to depletion was calculated. Figure 8-18 summarizes this data and indicates that less than 20% of the PAG and uncertain samples would be depleted of carbonate within 10 years at rates present in humidity cells.

Overall interpretation of the data available suggests a large portion of the PAG rock is likely to exhibit prolonged NP buffering. It is anticipated that without appropriate mitigation measures such as the planned encapsulation of PAG mine rock, hot spots could be sufficiently developed to have noticeable acid on-set after 5 years and more pronounced acid onset from unprotected PAG rock could be evident within 10 years post exposure.

8.3.2 Tailings

Three simulated tailings materials have undergone static ABA characterization and humidity cell testing is ongoing. Based on available data, all tailings are anticipated to be acid generating in the long term without implementation of suitable mitigation measures; however, based on humidity cell carbonate depletion times acid onset for exposed tailings is anticipated to be in the range of 30 or more years.

Table 8-1: Summary of Misclassified* Samples using Surrogate NP Relationship

Total Number of Samples	ABA NPAG coded as PAG	ABA PAG coded as NPAG	Total Misclassified Samples
380	7 (2%)	11 (3%)	18 (5%)

* Surrogate NP and AP were calculated for the ABA sample set using ICP Ca and S. Original ABA classification as PAG and NPAG (using ABA data) was compared to surrogate derived values and the number and type of misclassified samples were determined. Numbers in parentheses are % misclassified of total number of samples.

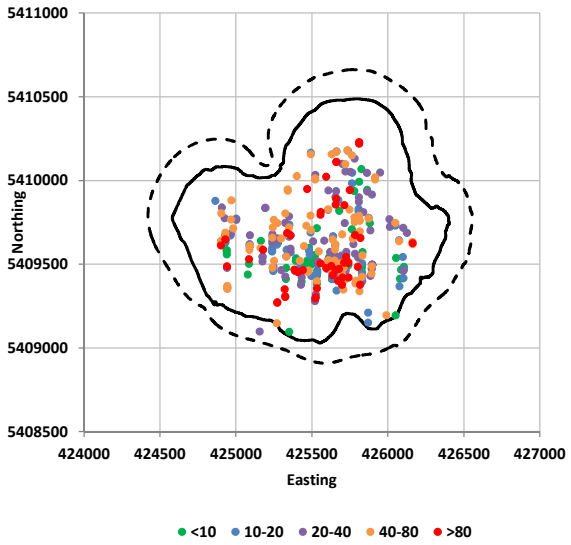
Table 8-2: Block Model Tonnages*

Ore	Overburden	Mine Rock	
		PAG	NPAG
113,243,145	80,034,000	145,124,962	205,499,982

* BBA 2013.

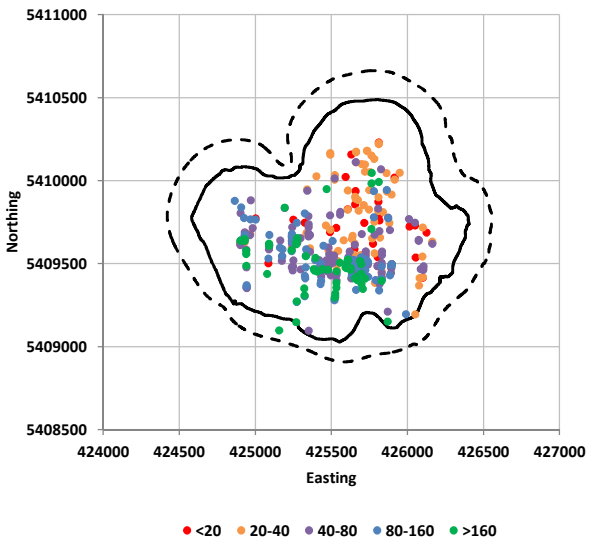
Acid Potential (AP)

(kg $CaCO_3$/t)



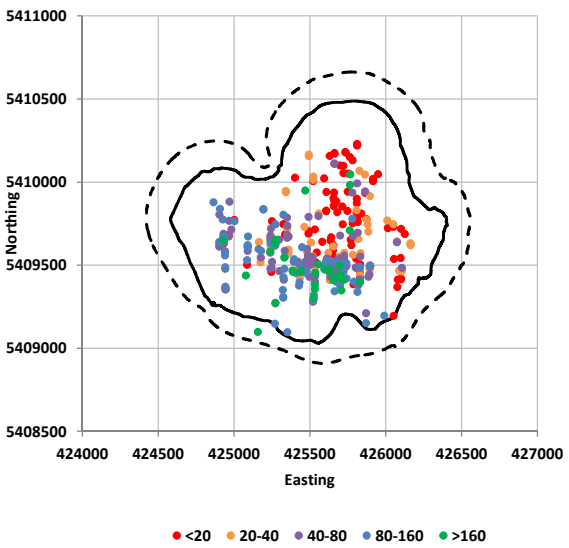
Neutralization Potential (NP)

(kg $CaCO_3$/t)



Carbonate Neutralization Potential

(kg $CaCO_3$/t)



Pit Limit

Pit Buffer Limit

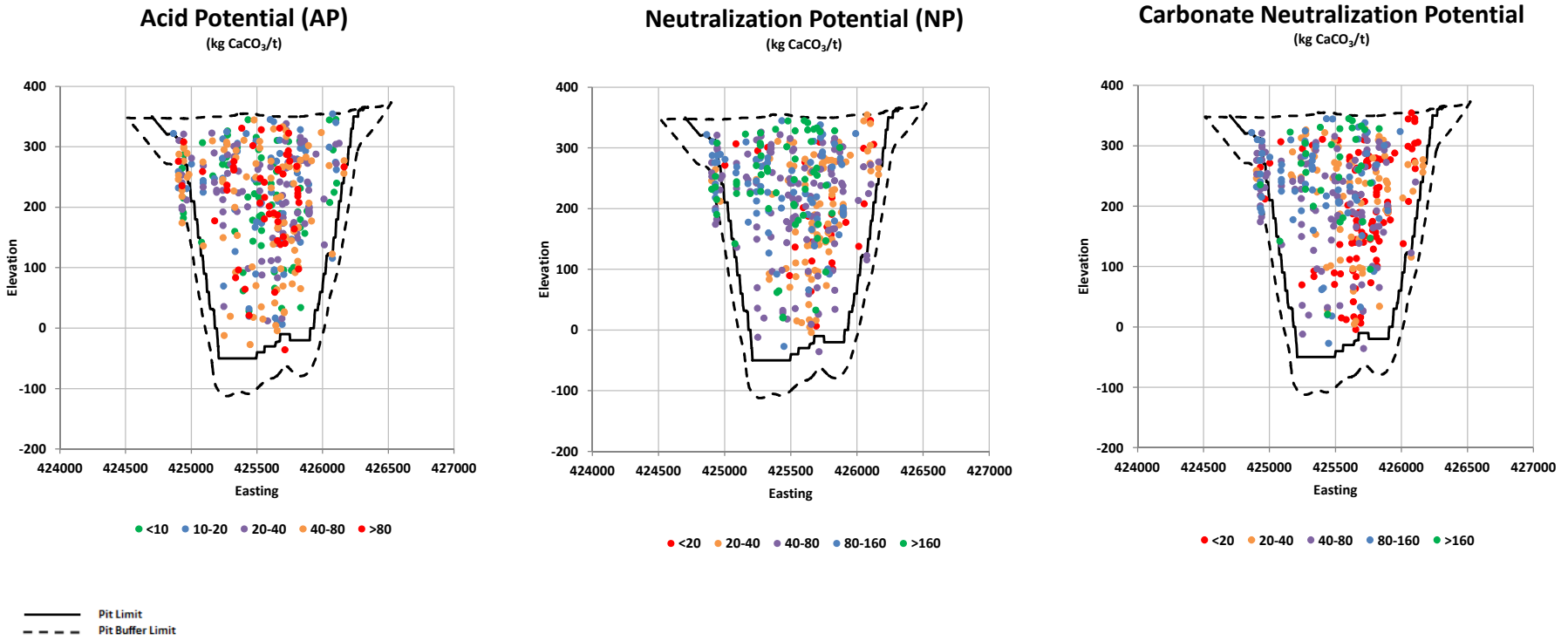
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Spatial Distribution of Mine Rock NP and AP (Plan View)

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-1



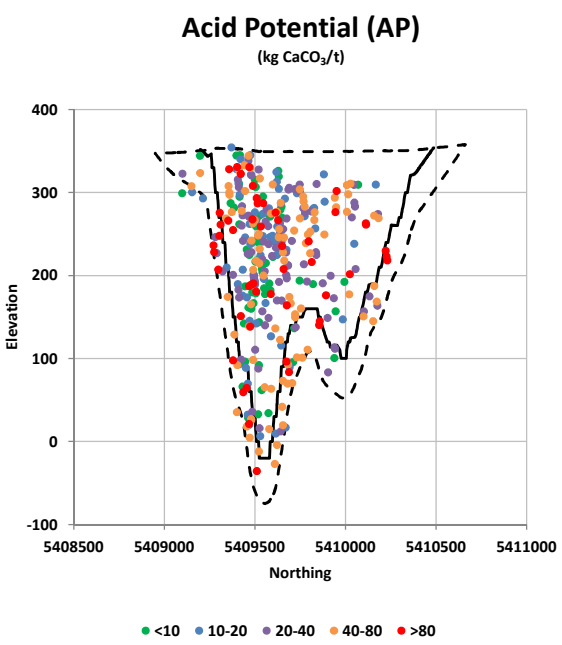
RAINYRIVER

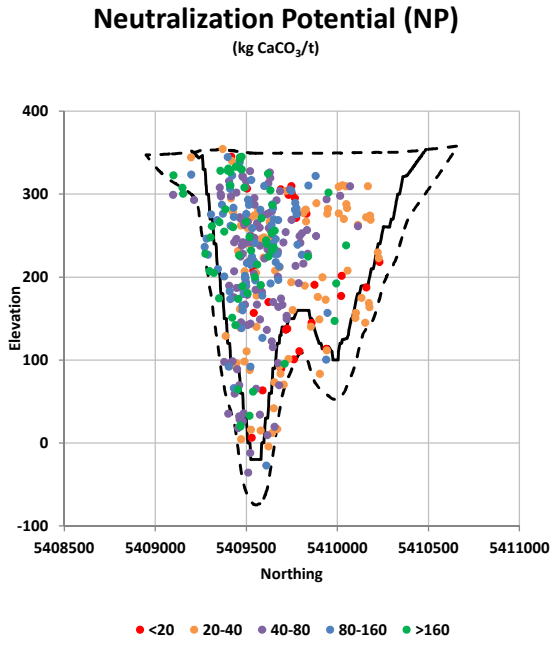
amec

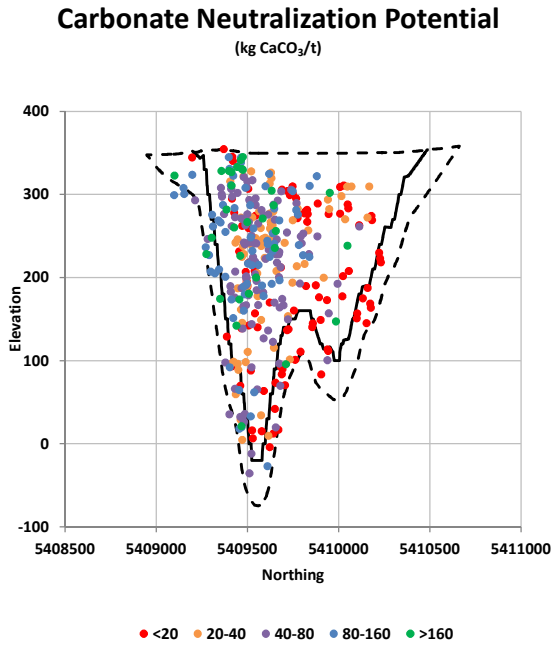
Rainy River Gold Project

Spatial Distribution of Mine Rock AP and NP in Cross Section (View North)

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-2







Pit Limit
Pit Buffer Limit

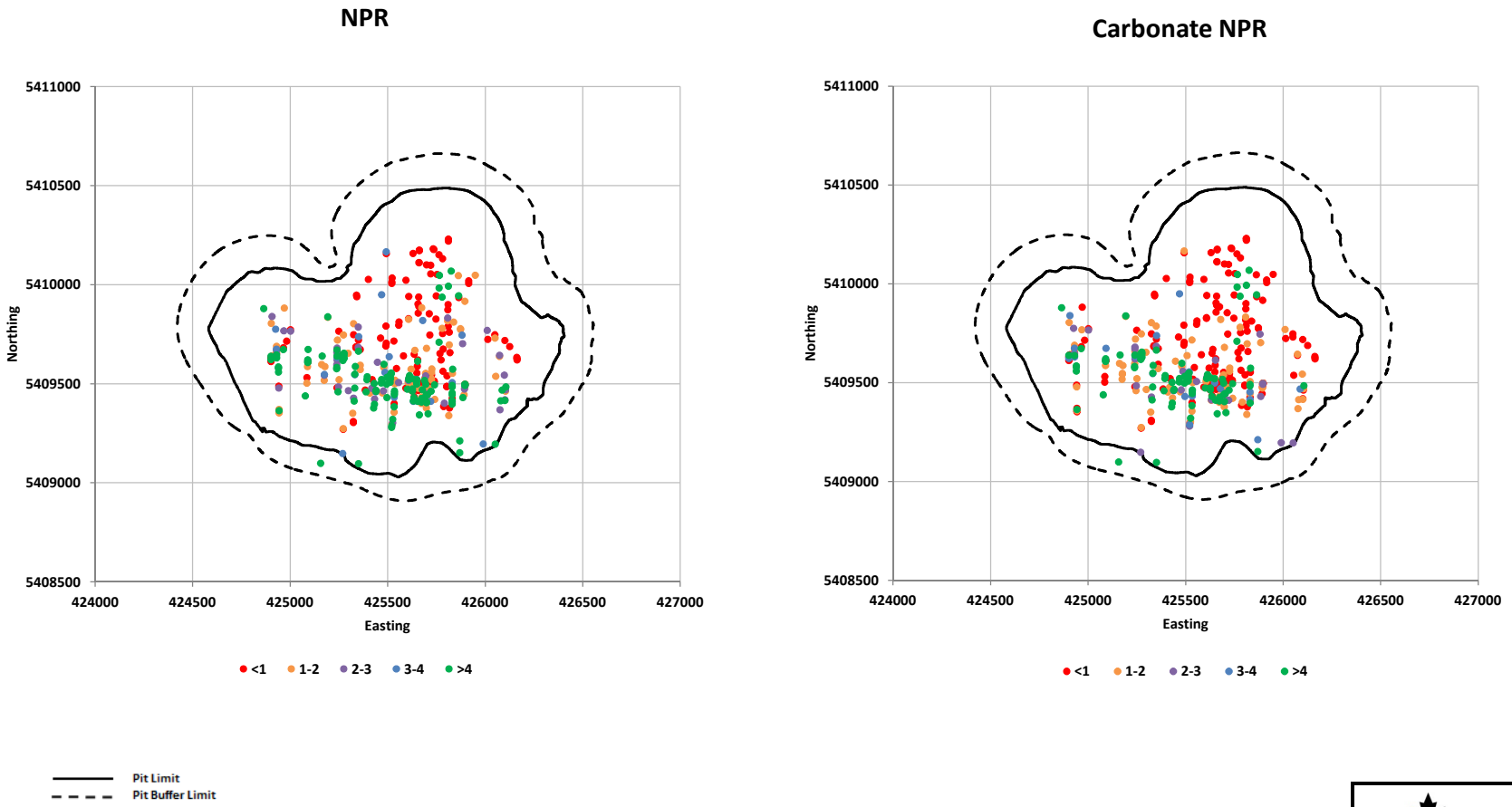
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Spatial Distribution of Mine Rock NP and AP in Cross Section (View West)

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-3

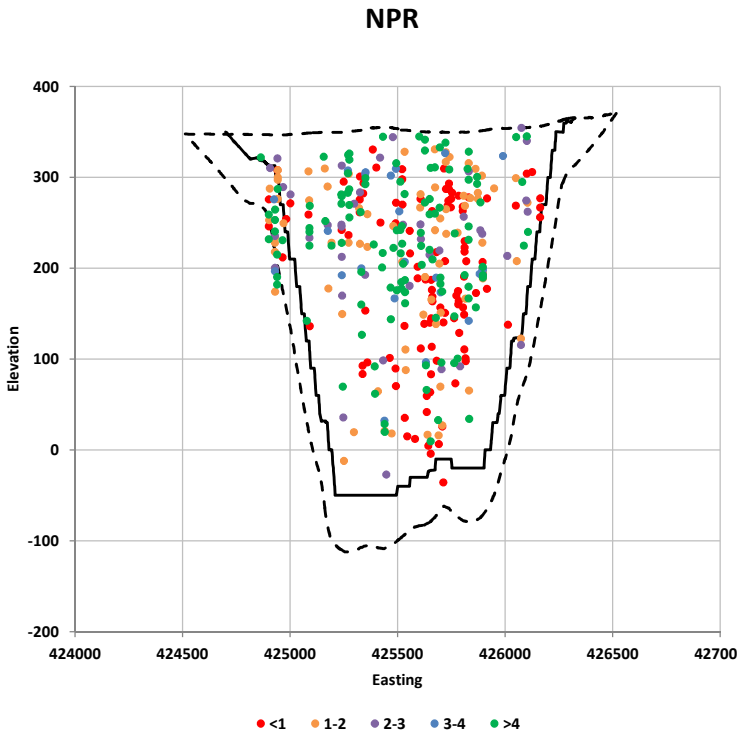


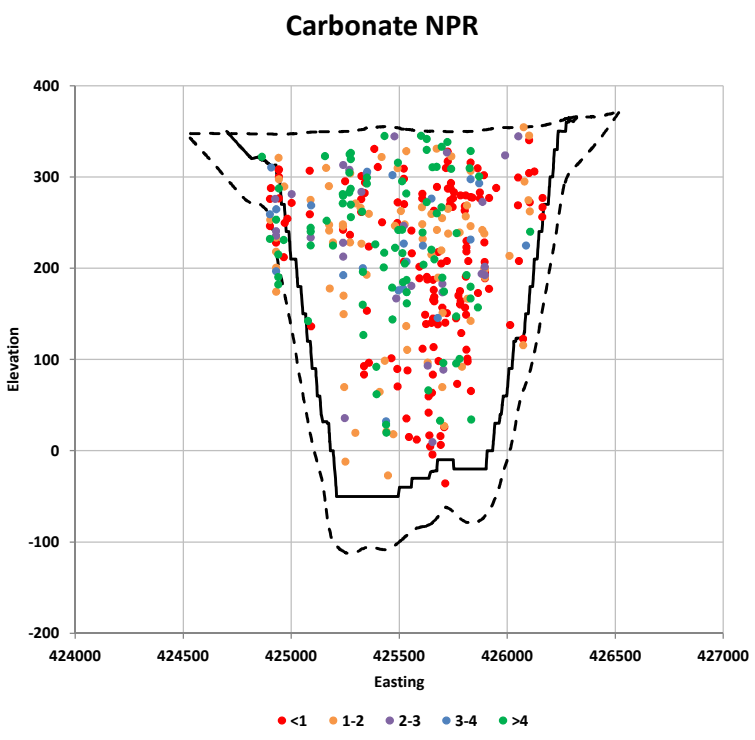
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Spatial Distribution of Mine Rock NPR (Plan View)

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-4





Pit Limit

Pit Buffer Limit

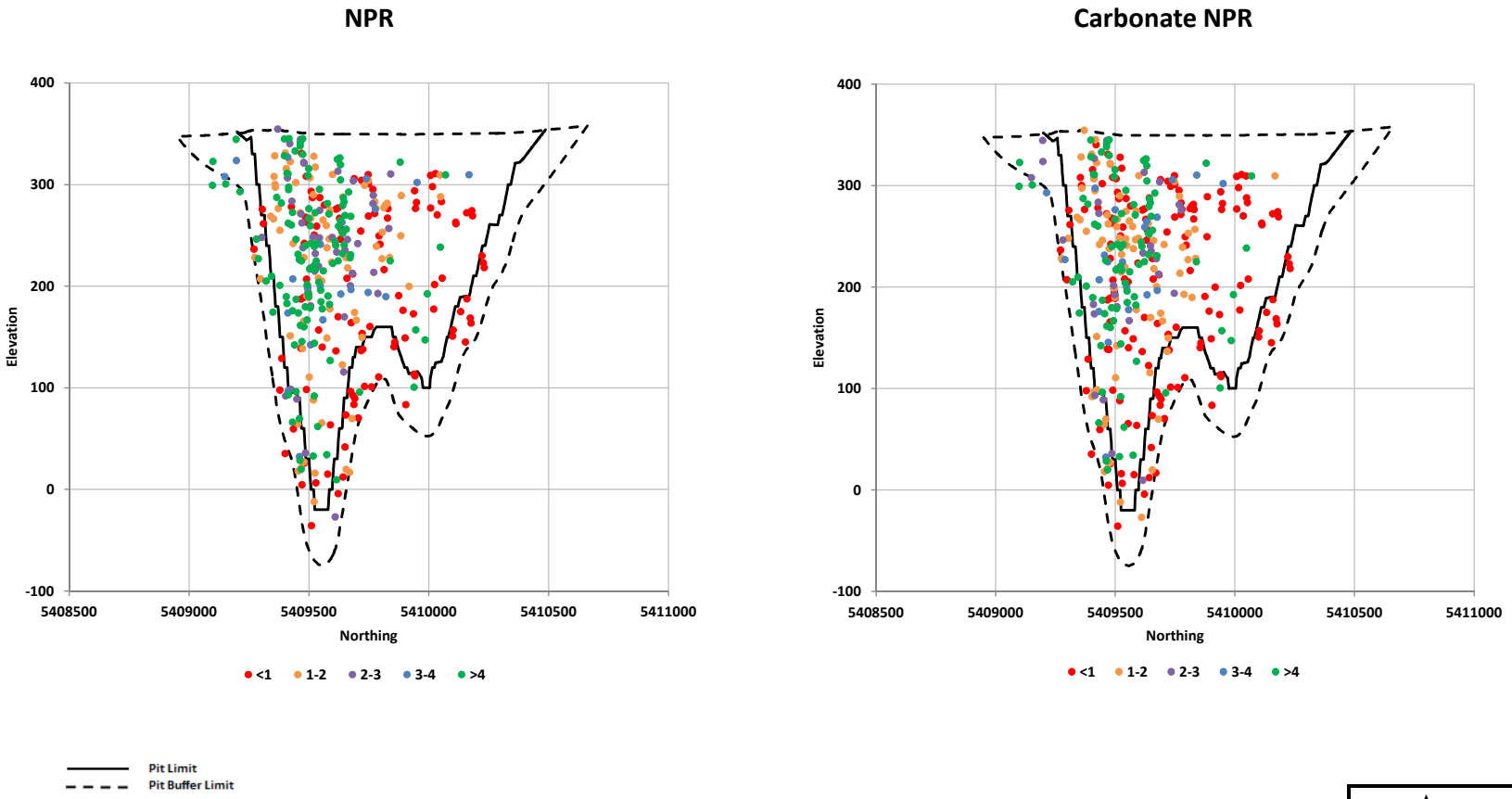
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Spatial Distribution of Mine Rock NPR in Cross Section (View North)

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-5



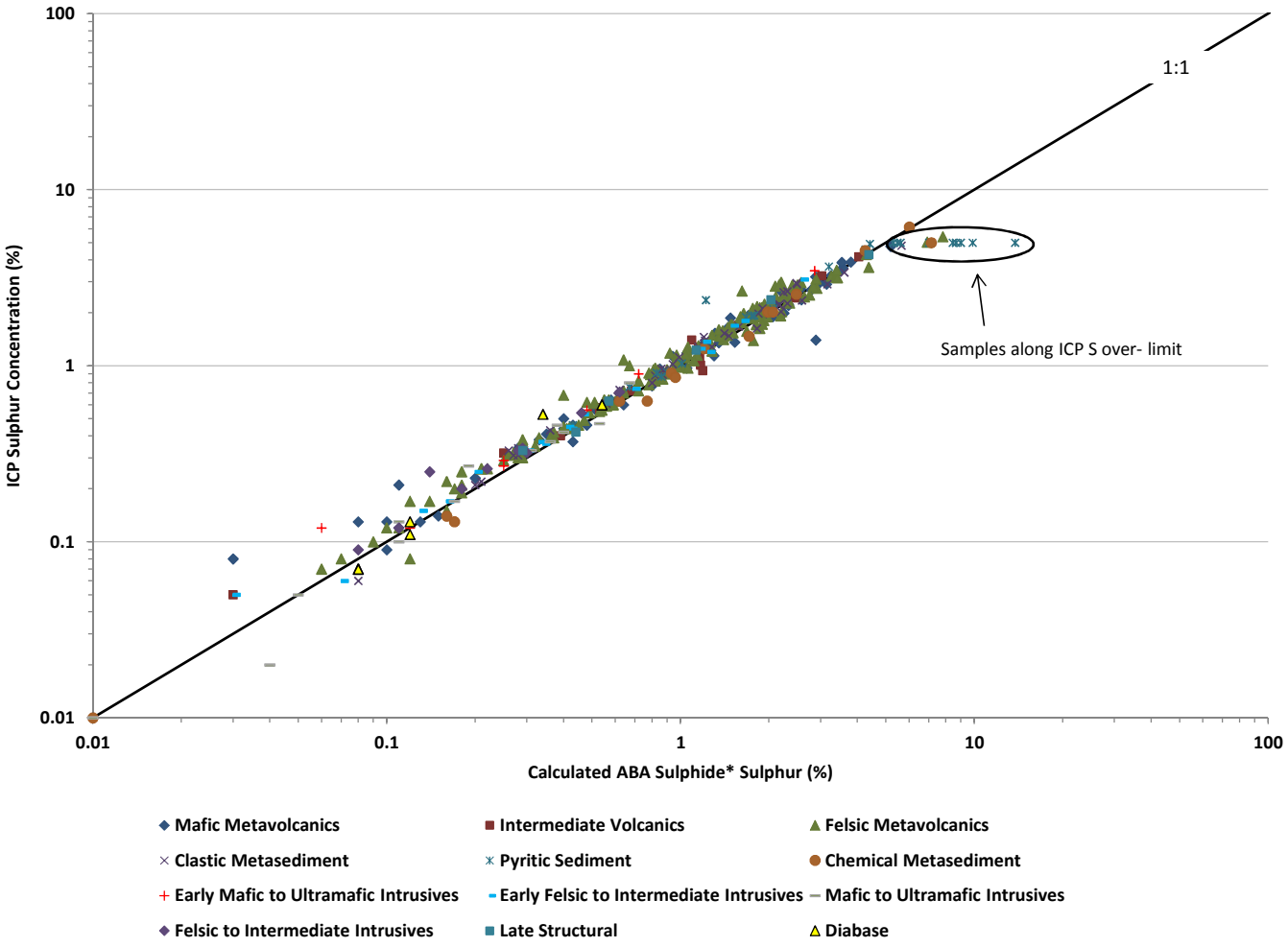
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Spatial Distribution of Mine Rock NPR in Cross Section (View West)

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-6



* Sulphide sulphur as total sulphur less sulphate sulphur

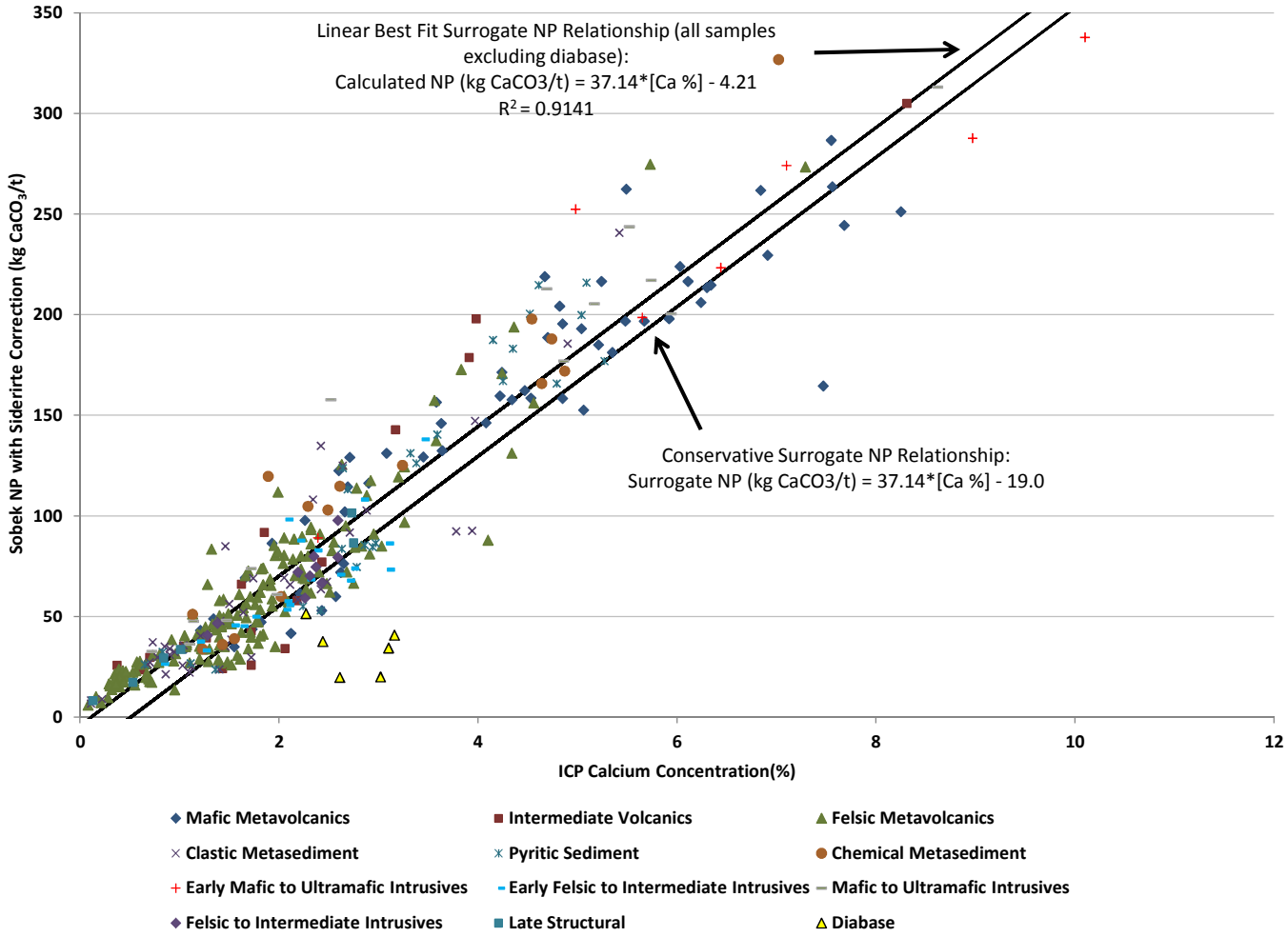
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Scatterplot of ICP Sulphur vs Calculated Sulphide Sulphur

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-7



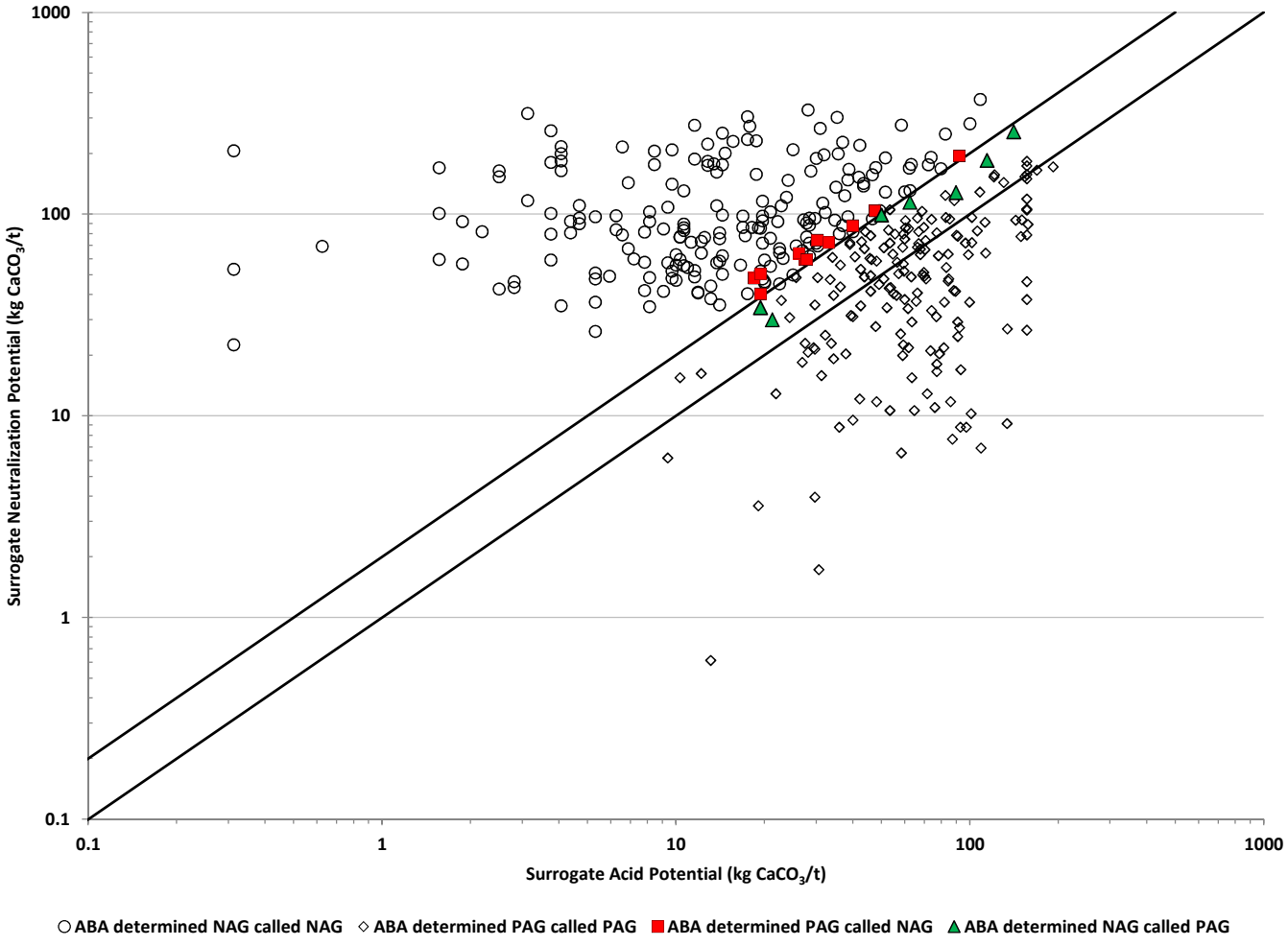
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Scatterplot of the Correlation between ICP Calcium and Sobek NP

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-8



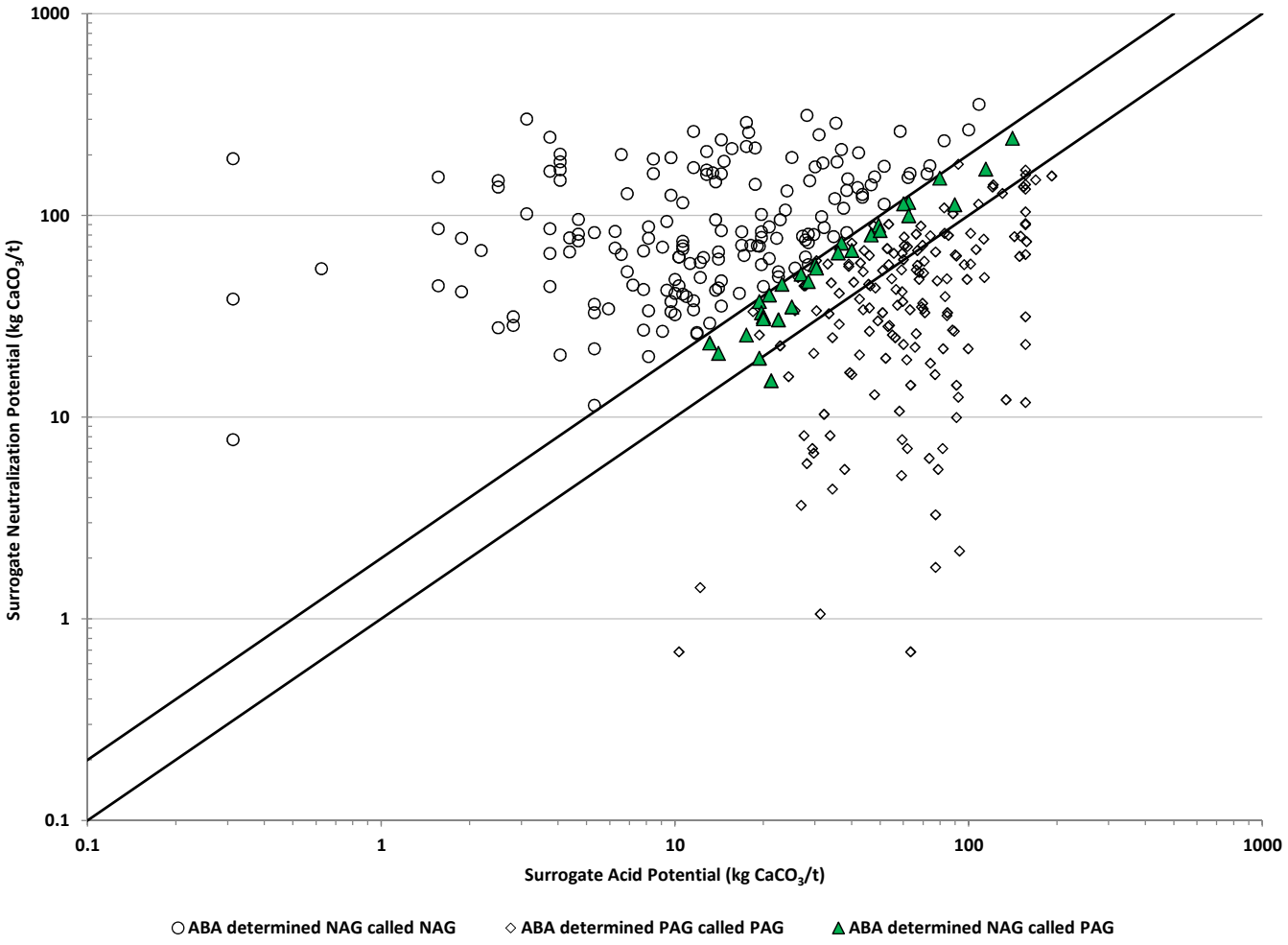
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Scatterplot of Surrogate NP versus Surrogate AP values demonstrating PAG and Non-PAG miscoding from ABA

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-9



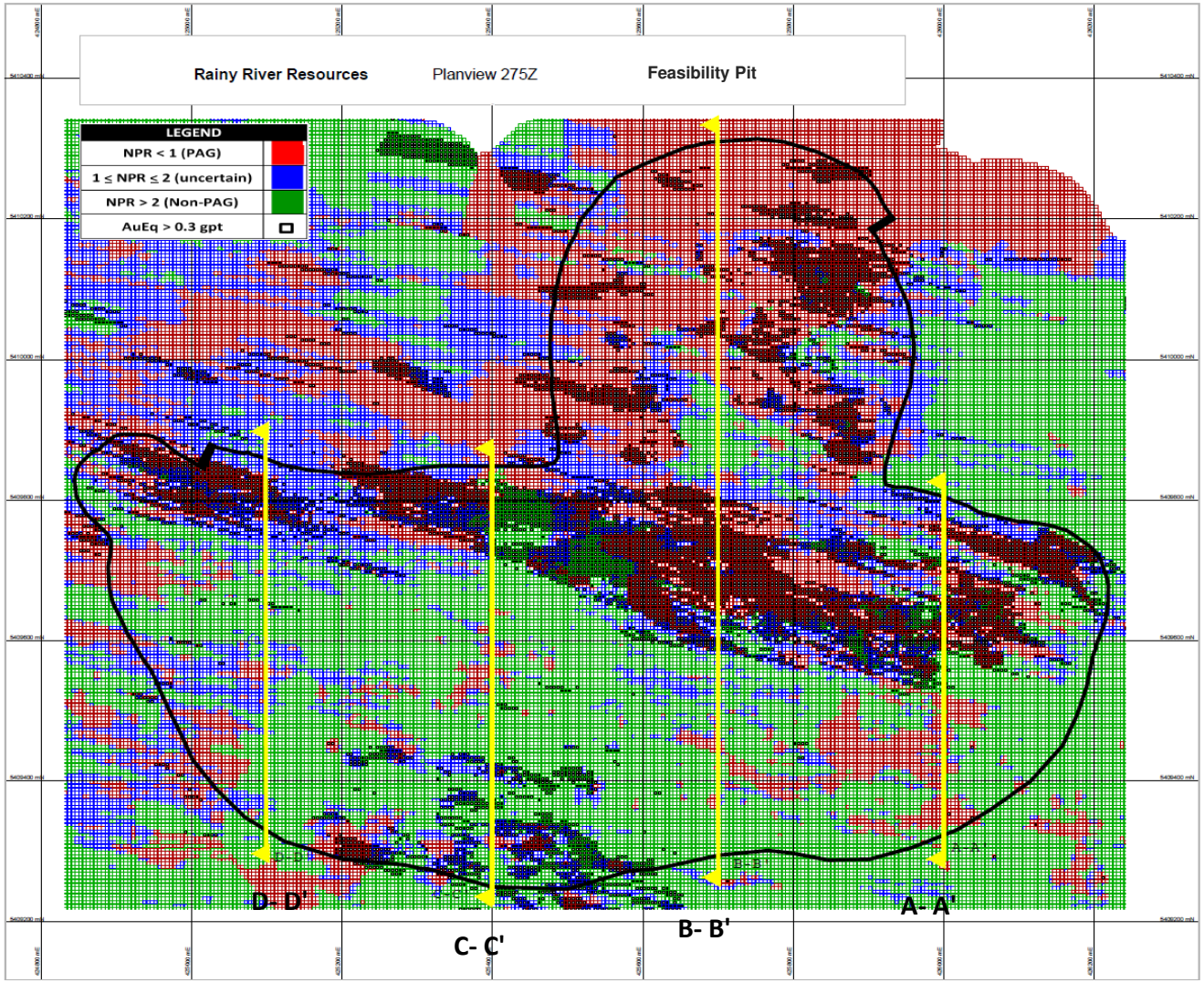
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Scatterplot of Surrogate NP vs. Surrogate AP values with Non-PAG miscoding values for conservative relationship

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-10



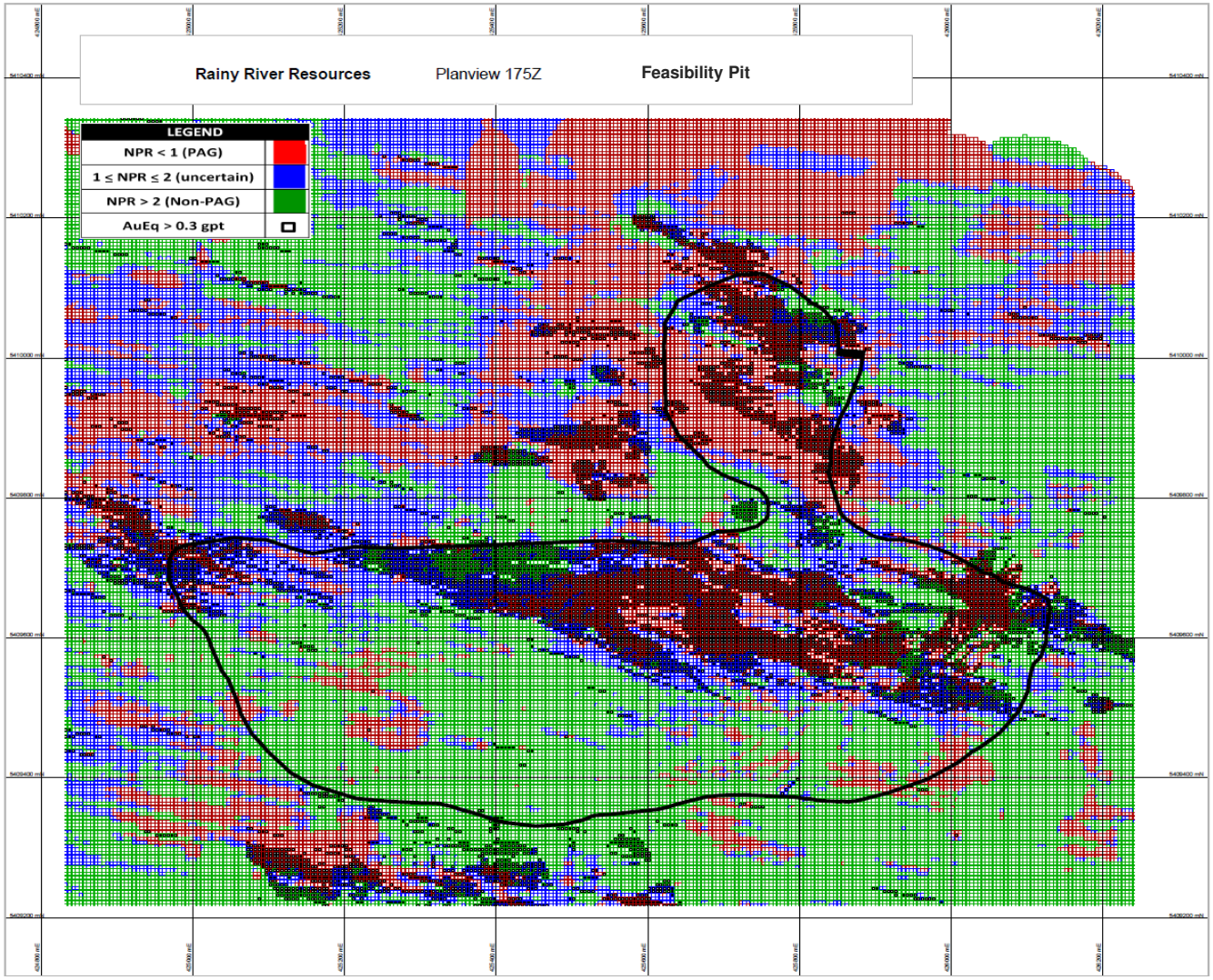
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Plan View of Block Model at Elevation 275m

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-11



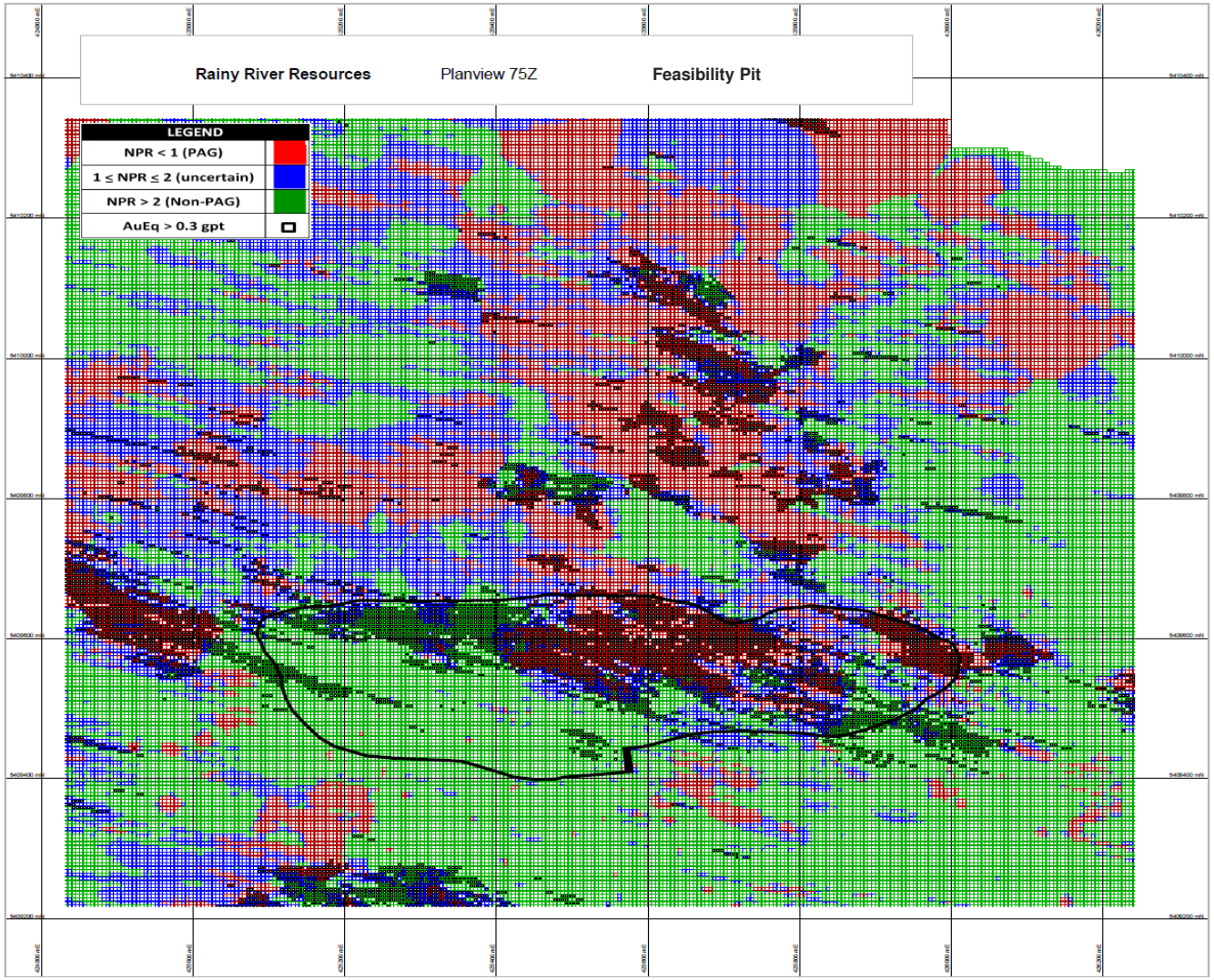
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Rainy River Gold Project

Plan View of Block Model at Elevation 175m

Drawn by: LC	Checked by:	Date: May 2013
Project: TC111504		FIGURE 8-12



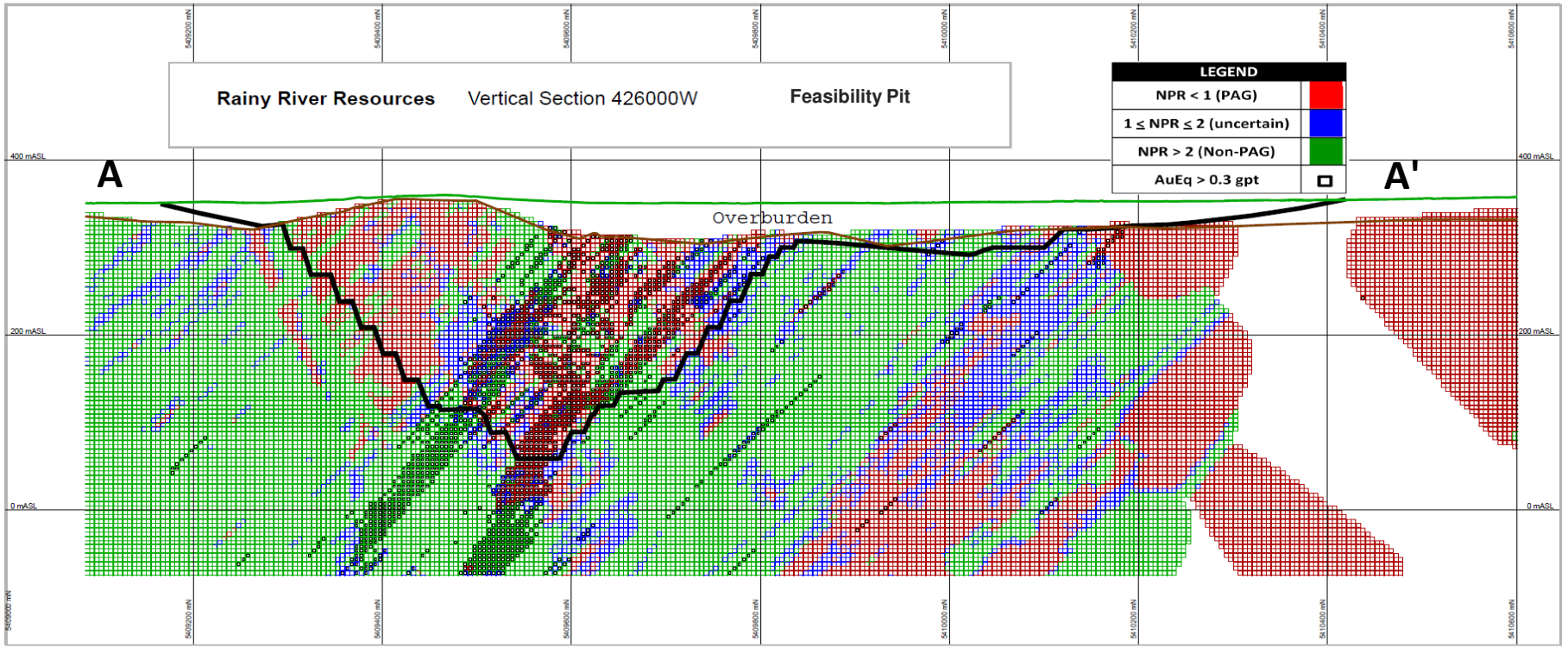
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Rainy River Gold Project

Plan View of Block Model at Elevation 75m

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-13



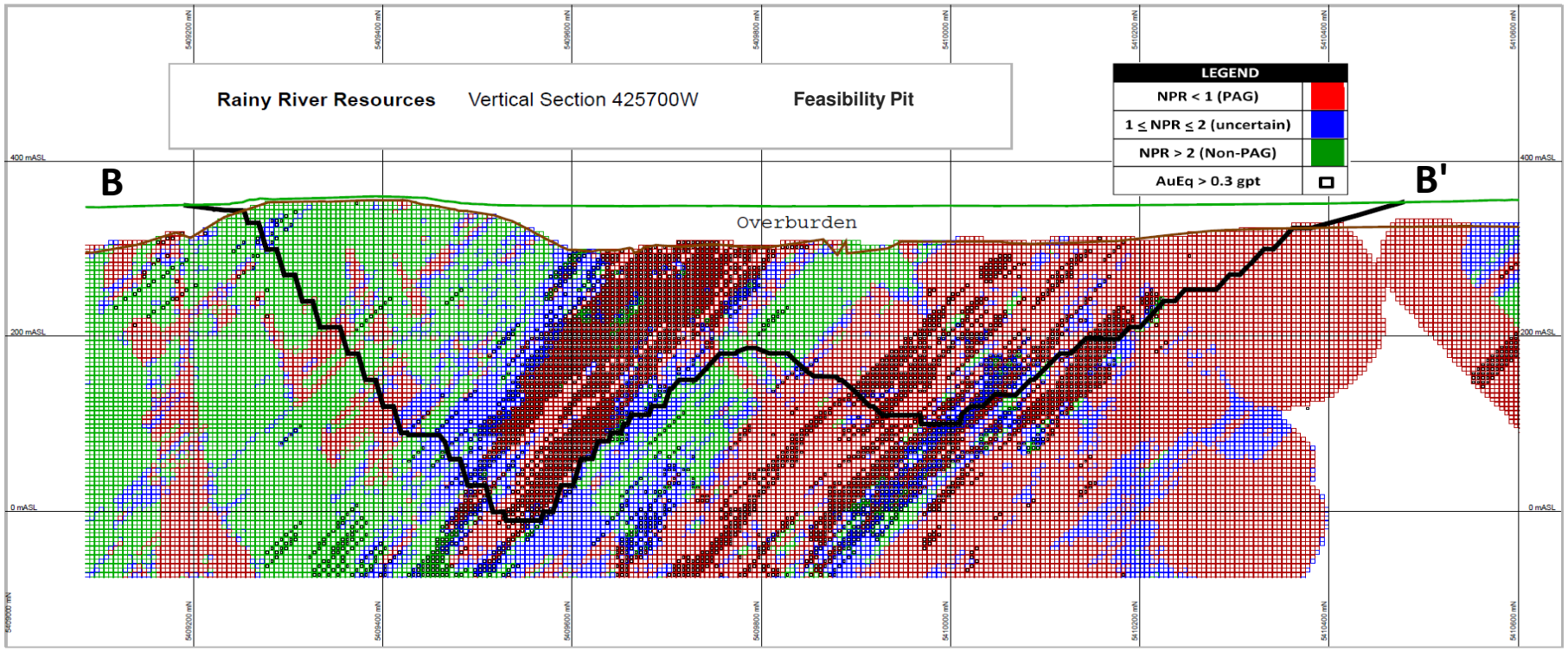
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Rainy River Gold Project

Block Model Cross Section A-A'

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-14



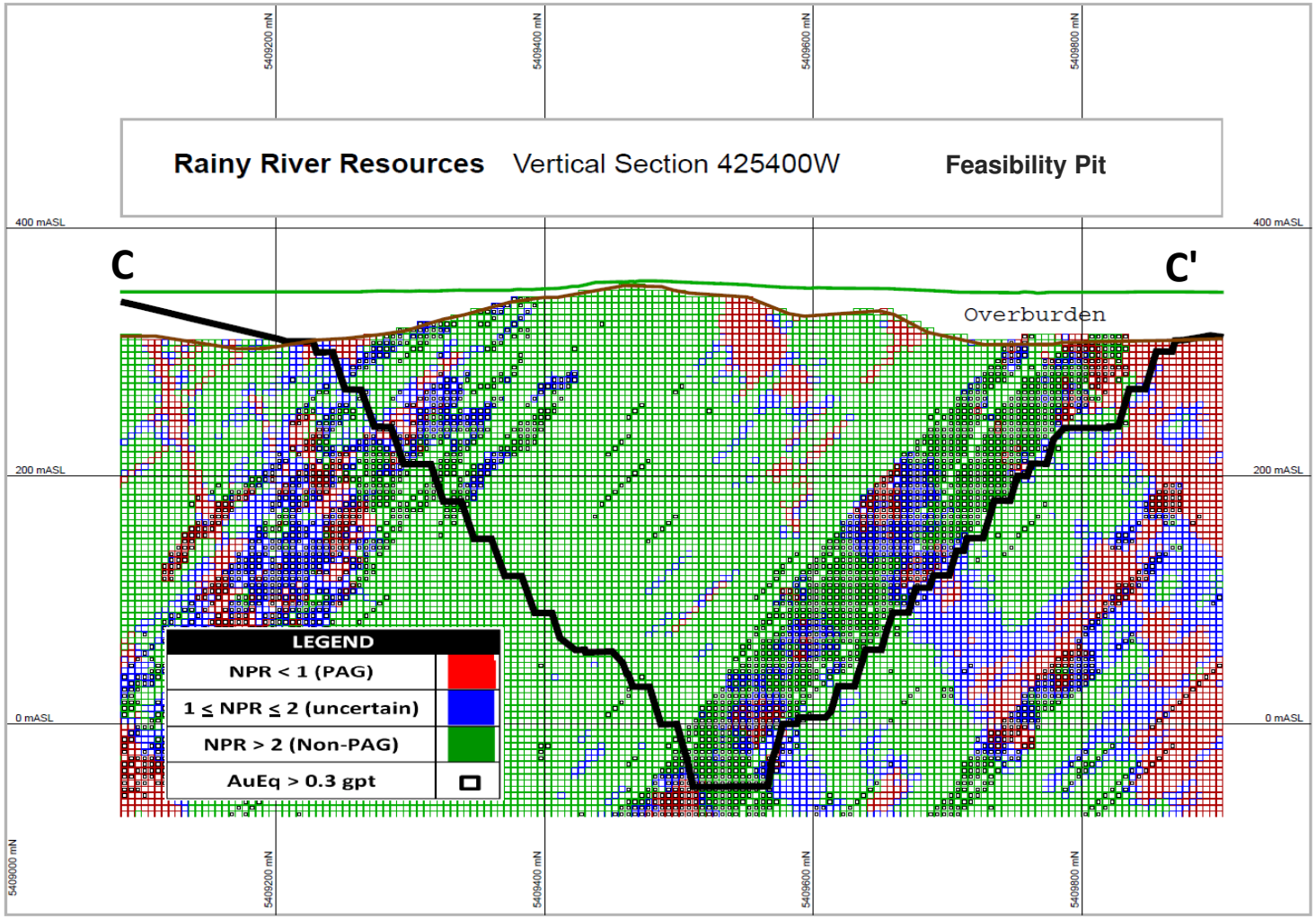
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Block Model Cross Section B-B'

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-15

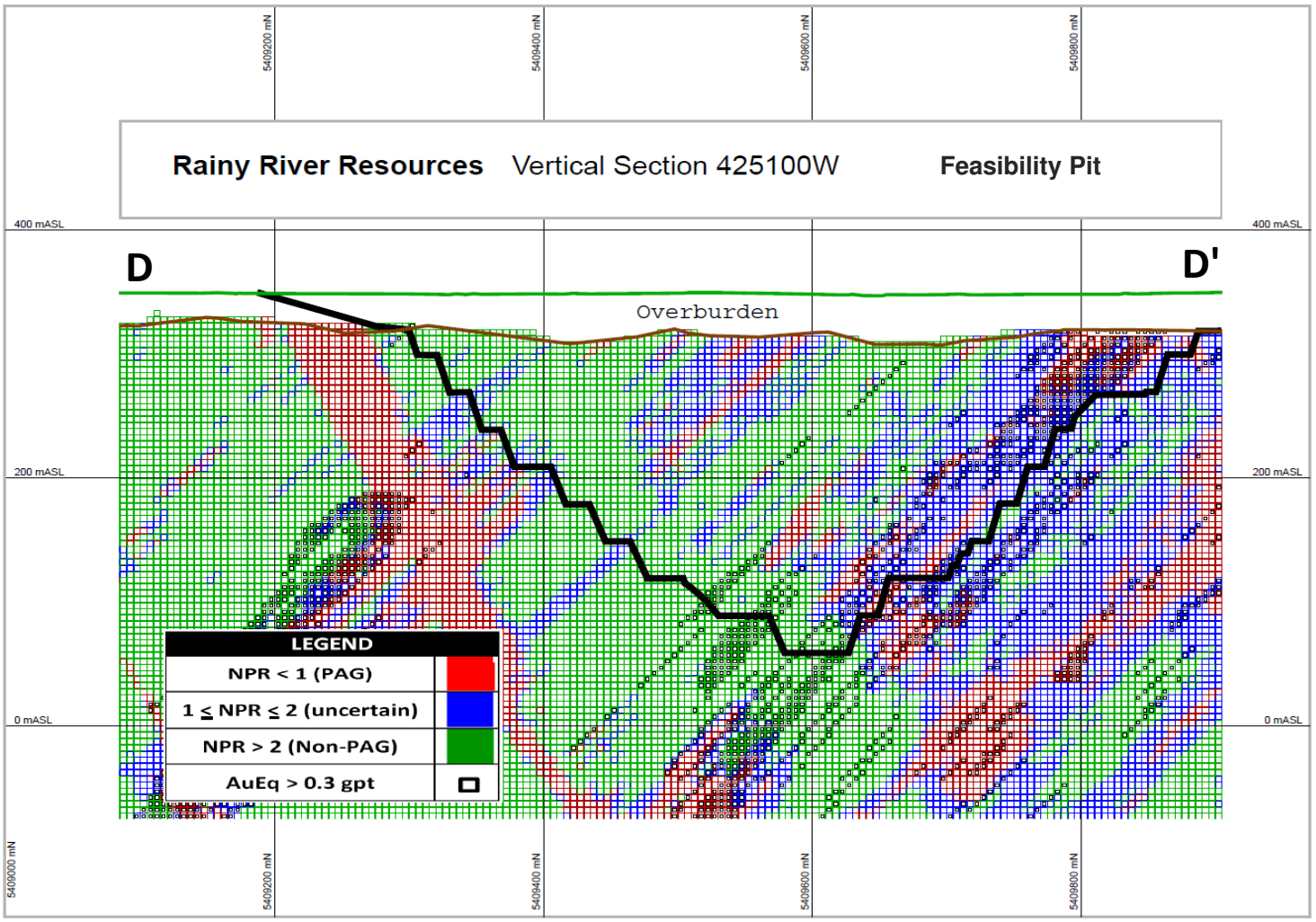


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Block Model Cross Section C-C'

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-16



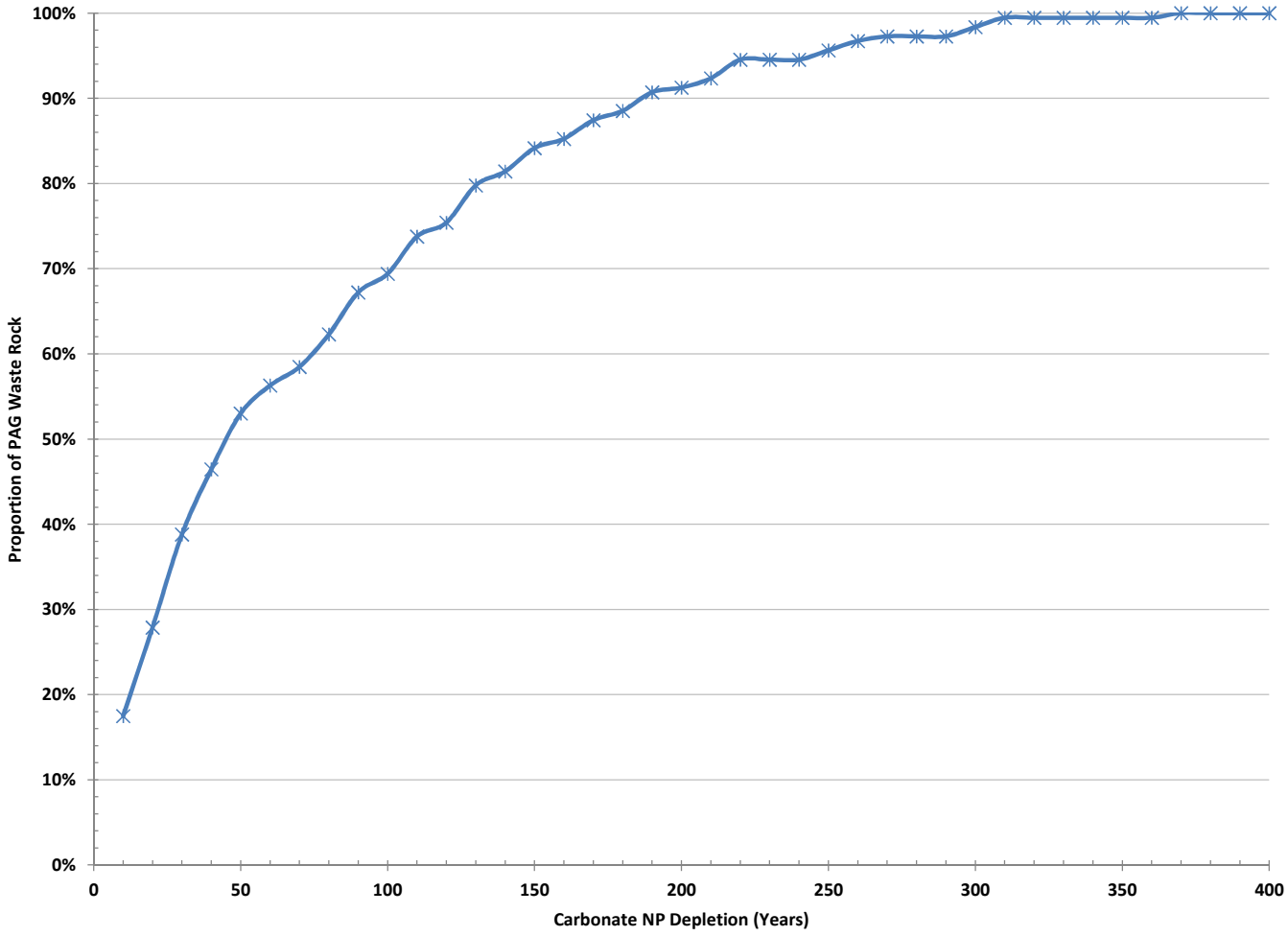
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Block Model Cross Section D-D'

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-17



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Proportions of PAG Rock by Carbonate Depletion Time

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE 8-18

9.0 SUMMARY OF FINDINGS

The following is a summary of the key findings of the ML/ARD characterization studies completed to date for the RRGP.

9.1 Mine Rock

9.1.1 Acid Generation and Neutralization Potential

- Based on drill core intersections, felsic metavolcanic rocks of various sub-lithologies make up approximately 65% of a preliminary inferred mine rock volume with mafic metavolcanic rocks and clastic metasediments constituting some 12% and 11%, respectively.

- Sulphur speciation results indicate sulphide is the primary form of sulphur in mine rock.

- The neutral to alkaline pH observed in almost all paste pH results and all SFE results indicates that no notable amounts of soluble acid-sulphate minerals are present in the mine rock.

- Sulphur in the form of sulphide is widely distributed at generally low levels among mine rock with median sulphide sulphur contents for major lithological units (felsic metavolcanics, mafic metavolcanics and metasediments) around 1%.

- Sulphide contents of these major non-ore, mine rock lithologies at the 90th percentile range from 2.4% to 3.4%.

- Pyrite is the most common sulphide observed with pyrrhotite a less common accessory that is seldom more abundant than pyrite. Rare sphalerite and chalcopyrite have also been identified.

- Neutralization potential in the mine rocks is primarily provided by carbonates which vary widely in abundance among the samples.

- Calcite ($CaCO_3$) appears to be the most common carbonate mineral, but dolomite ($Ca(Mg,Fe,Mn)(CO_3)_2$) is also abundant. Some of the dolomite is Fe-rich, but the amount of Fe substitution and the abundance of ankerite ($CaFe(CO_3)_2$) is undefined. There is evidence of minor amounts of siderite present in some samples.

- The testing results suggest that NP may be under represented in samples with NP less than 100 kg $CaCO_3$/t potentially due to the low response of dolomite to the fizz test.

- The observed abundance of calcite and dolomite suggest a relatively low importance of Fe carbonates in defining the NP of the mine rock; however, where such carbonates are locally abundant the available NP may be less than that suggested by the carbonate content.

- The siderite corrected NP determination is expected to account for Fe carbonates if present in the Sobek NP determination. However, on the whole the Sobek NP is generally higher than carbonate NP indicating the presence of possible non-carbonate NP minerals in the sample. The effective NP of non-carbonate minerals depends on the specific minerals and the reaction rates of these minerals in comparison to sulphide oxidation rates.

- A comparison of siderite corrected Sobek NP versus modified Sobek NP indicated that modified Sobek NP values were less than the Sobek NP method, but compared favourably to the Carb NP results. This suggests that the siderite corrected Sobek NP method may over represent the effective NP present in some samples.

- Assuming all rock with an NPR of <2 is PAG approximately 50% of the samples tested would be classified as PAG. Results of the ARD Block Model however, indicate that 41% of the waste rock is PAG and 59% is NPAG.

- Net Acid Generation (NAG) testing data is generally consistent with ABA data in terms of predicting the acid generating character of a given sample. Preliminary assessment of this data suggests that a site specific NPR of <1.7 for PAG mine rock may exist. This preliminary assessment will be validated by ongoing humidity cell testing.

- Estimated lag time to ARD for exposed mine rock is expected to be at least 5 years.

- Limited static testing data of the deeper Labradorean till material suggests some of this material may be PAG or of uncertain acid generating character due to its local derivation from mineralized bedrock.

9.1.2 Metals

- Screening based on 10 times average crustal abundance has identified, in addition to elevated S, the frequent presence of elevated Bi and Se in mine rock and less frequently Ag, As, Cd and Zn.

- Elevated concentrations of Zn (>1,000 mg/kg) and Cd (>10 mg/kg) were noted in a number of samples possibly due to the presence of sphalerite (Zn,Fe)S occurring sporadically throughout the mine rock.

- Based on short-term leach tests there is little evidence of metal leaching under neutral pH conditions. Aluminum was somewhat elevated in the short-term leach tests completed; however, the short-term leach results are not directly applicable to actual leaching conditions. Release of aluminum and other metals will be considered in more detail with the ongoing kinetic testing program.

- Mine rock humidity cell metal loading rates based on kinetic tests are generally low.

- Neutral leaching of elevated Zn and Cd have been identified for a single Zn and Cd enriched low NPR humidity cell (HC-2). Several additional recently initiated humidity cells containing elevated Zn and Cd are showing an order of magnitude or less Zn and Cd leaching rates.

- Two mine rock humidity cells have produced acidic drainage. The first such cell (HC-1) is an anomalous cell from already weathered and acidic rock from outside the pit. The second cell (HC-8) which produced acidic drainage after 80 days of operation is from low NPR low NP material that is expected to represent the extreme (and rare) end of the PAG rock spectrum.

9.2 Tailings

9.2.1 Acid Generation and Neutralization Potential

- Sulphur in the tailings materials tested is attributed to both sulphide and sulphate with median total sulphur concentration around 2% and sulphide content ranging from 1.5% to 1.9%.

- Based on limited data it is likely that the slightly elevated sulphate content of tailings (0.2 to 0.8%) in comparison to rock core samples is related to processing (gypsum precipitation during liming, cyanide destruction and pH control).

- Pyrite was the only sulphide identified in the tailings samples.

- Calcite appears to be the most common carbonate mineral; however, dolomite and ankerite (or Fe dolomite) are also present.

- The modified Sobek NP and the carbonate NP are comparable, with the modified Sobek NP having slightly higher values. This suggests that the primary contributor of NP is carbonate minerals.

- All tailings samples tested had NPR values less than 0.9 and are classified as PAG.

- Results of humidity cell testing suggest that the lag time to ARD in these materials is approximately 30 years.

9.2.2 Metals

- Screening based on 10 times average crustal abundance has identified the frequent presence of elevated Ag, As, Bi, Cd and Se in the tailings and also Sb and Zn in all tailings samples except the ROM samples.

- Based on short term leach tests there is little evidence of metal leaching under neutral pH conditions. Aluminum, silver and antimony were somewhat elevated in the short term leach tests completed; however short-term leach tests are not applicable to actual leaching conditions.

- Humidity cell testing suggests that metal leaching rates are generally low, with an increasing trend identified in the cells for Zn. Release of metals will continue to be monitored in ongoing kinetic testing.

10.0 CLOSING

This report has been prepared for the exclusive use of RRR for specific application to the RRGP by AMEC. The quality of information, conclusions and estimates contained herein are consistent with the level of effort involved in AMEC's services and based on: i) information available at the time of preparation, ii) data supplied by outside sources and iii) the assumptions, conditions and qualifications set forth in this document. This report is intended to be used by RRR only, and its nominated representatives, subject to the terms and conditions of its contract with AMEC. Any other use of, or reliance on, this report by any third party is at that party's sole risk. This report has been prepared in accordance with generally accepted industry-standard. No other warranty, expressed or implied, is made.

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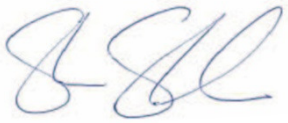
AMEC Environment & infrastructure
a Division of AMEC Americas Limited

Prepared by:



Stephen R. Walker, Ph.D.
Senior Hydrogeochemist

Reviewed by:



Steve Sibbick, MSc., P.Geo.
Principal Geochemist

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APPENDIX A

DATA SUMMARY OF STATIC TESTING

1	**Ultramafic Metavolcanic Rocks (Unsubdivided)**
1a	Massive lava flows
1b	Pillowed lava flows
1c	Polysutured lava flows
1d	Spinifex-textured lava flows
2	**Mafic Metavolcanic Rocks (Unsubdivided)**
2a	Massive lava flows (unsubdivided)
2aa	Fine-grained massive lava flows
2ab	Medium-grained massive lava flows
2ac	Variolitic lava flows
2ad	Amygdaloidal massive lava flows
2ae	Porphyritic massive lava flows
2b	Pillowed lava flows (unsubdivided)
2ba	Pillow breccia/hyaloclastite
2bb	Amygdaloidal pillowed lava flows
2c	Tuff (unsubdivided)
2ca	Crystal tuff
2cb	Lithic tuff
2cc	Vitric tuff
2cd	Lapilli tuff
2ce	Tuff breccia
3	**Intermediate Metavolcanic Rocks (Unsubdivided)**
3a	Massive lava flows (unsubdivided)
3aa	Amygdaloidal lava flows
3ab	Feldspar porphyritic lava flows
3b	Tuff (unsubdivided)
3ba	Crystal tuff
3bb	Lithic tuff
3bc	Vitric tuff
3bd	Lapilli tuff
3be	Tuff breccia
4	**Felsic Metavolcanic Rocks (Unsubdivided)**
4a	Massive lava flows (unsubdivided)
4aa	Quartz porphyritic, fractured to autobrecciated massive, locally amygdaloidal lava flows
4ab	Quartz-feldspar porphyritic massive lava flows
4ac	Feldspar porphyritic massive lava flows
4ad	Amygdaloidal massive lava flows
4b	Pyroclastic flows (unsubdivided)
4c	Tuff (unsubdivided)
4ca	Quartz crystal tuff
4cb	Quartz-feldspar crystal tuff
4cc	Feldspar crystal tuff
4cd	Lithic tuff
4ce	Vitric tuff
4cf	Monolithic fragmental units (unsubdivided)
4cfa	Monolithic lapilli-tuff
4cfb	Monolithic lapilli-tuff to tuff breccia
4cfc	Monolithic tuff-breccia or possibly breccia
4cg	Heterolithic fragmental units (unsubdivided)
4cga	Heterolithic lapilli-tuff
4cgb	Heterolithic felsic lapilli-tuff to tuff-breccia
4cgc	Heterolithic felsic tuff-breccia or possibly breccia
4d	Felsic rock of undeterminate genesis (volcanic or sedimentary)
5	**Clastic Metasedimentary Rocks (Unsubdivided)**
5a	Argillite (unsubdivided)

5b	Siltstone (unsubdivided)
5c	Sandstone (unsubdivided)
5ca	Wacke
5cb	Arkose/Arenite
5cc	Felsic volcanic, lithic sandstone
5cd	Felsic volcanic, sandstone to siltstone
5ce	Felsic volcanic, Pebbly Sandstone
5d	Conglomerate (unsubdivided)
5da	Polymictic, felsic volcanic conglomerate (unsudivided)
5daa	Boulder conglomerate
5daap	Possible boulder conglomerate
5dab	Cobble conglomerate
5dabp	Possible cobble conglomerate
5dac	Pebble conglomerate
5dacp	Possible pebble conglomerate
5dad	Cobble To boulder conglomerate
5dadp	Possible cobble to boulder conglomerate
5dae	Pebble To boulder conglomerate
5daep	Possible pebble to boulder conglomerate
5daf	Pebble To cobble conglomerate
5dafp	Possible pebble to cobble conglomerate
5db	Polymitic, felsic volcanic conglomerate and interbedded sandstone
5dbp	Possible polymitic, Felsic volcanic conglomerate and interbedded sandstone
5dc	Oligomictic, felsic volcanic conglomerate (unsudivided)
5dcp	Possible oligomictic, felsic volcanic conglomerate (unsudivided)
5dd	Polymictic, felsic to intermediate volcanic, pebble to boulder conglomerate
5ddp	Possible polymictic, felsic to intermediate volcanic, pebble to boulder conglomerate
5de	Polymictic, intermediate volcanic, pebble conglomerate
5dep	Possible, polymictic, intermediate volcanic, pebble conglomerate
5f	Siliceous sedimentary breccia
6	**Chemical Metasedimentary Rocks (Unsubdivided)**
6a	Graphitic sediments (unsubdivided)
6aa	Graphitic Argillite
6b	Chert (unsubdivided)
6c	Iron formation (unsubdivided)
6ca	Oxide facies iron formation
6cb	Carbonate facies iron formation
6cc	Silicate facies iron formation
6cd	Sulphide facies iron formation
6cd	Argillitic iron formation (unsubdivided)
6ce	Interbedded clastic iron formation (unsubdivided)
6d	Suphidic exhalative
7	**Early Mafic-Ultramafic intrusions (Unsubdivided)**
7a	Early Mafic intrusions (unsubdivided)
7aa	Diorite
7ab	Anorthosite
7ac	Gabbro (unsubdivided)
7acb	Clinopyroxene oikiocrystic gabbro
7ad	Norite
7ae	Granophyre
7b	Early Ultramafic intrusions (unsubdivided)

7ba	Hornblendite
7bb	Pyroxenite (unsubdivided)
7bc	Peridotite (unsubdivided)
7bd	Serpentinite
8	**Early Felsic to Intermediate Meta-Intrusions (Unsubdivided)**
8a	Granitc rocks
8b	Syenitic rocks
8c	Quartz porphyry
8d	Quartz-feldspar porphyry
8e	Quartz-feldspar porphyritic Georgeson Porphyry
8f	Feldspar porphyry
8g	Aphyric intrusions
8h	Pegmatite
9	**Late Mafic-Ultramafic intrusions (Unsubdivided)**
9a	Late Mafic intrusions (unsubdivided)
9aa	Diorite
9ab	Anorthosite
9ac	Gabbro (unsubdivided)
9aca	Leucogabbro
9acb	Melanogabbro
9ad	Norite
9ae	Granophyre
9b	Late Ultramafic intrusions (unsubdivided)
9ba	Hornblendite
9bb	Pyroxenite (unsubdivided)
9bba	Clinopyroxenite
9bbb	Orthopyroxenite
9bc	Peridotite (unsubdivided)
9bca	Wehrlite
9bcb	Websterite
9bcc	Dunite
9bcd	Lherzolite
9bce	Serpentinite
9c	Hybrid zone
9d	Massive magmatic sulphide
10	**Late Felsic To Intermediate intrusions (Unsubdivided)**
10a	Granitc rocks
10b	Syenitic rocks
10c	Quartz porphyry
10d	Quartz-feldspar porphyry
10e	Feldspar porphyry
10f	Pegmatite
10g	Aplite
11	**Late Structural Zones (Unsubdivided)**
11a	Shear zone (unsubdivided)
11b	Breccia zone (unsubdivided)
11ba	Tectonic breccia
11c	Fault zone (gouge, lost core)
11d	Vein (unsubdivided)
11da	Quartz vein
11db	Carbonate vein
11dc	Quartz-carbonate vein
12	**Lamprophyre (Unsubdivided)**
13	**Diabase (Unsubdivided)**
14	**Overburden (Unsubdivided)**

Table A-2: Mine Rock Acid Base Accounting Results

Consultant	HOLE-ID	FROM	TO	Easting	Northing	Elevation	Waste/Ore Classification	Rock Code	Lithology	Sample ID	Fizz Test	Paste pH	Sulphur (as S)				AP	Siderite Corrected NP	Modified Sobek NP	TIC	Carb NP	Siderite Corrected NPR	Modified Sobek NPR	Carb NPR
													S total (S_T)	Sulphate (S_{SO4})	Sulphide [Sobek]	Sulphide [S_T-S_{SO4}]								
		m	m			mASL							%	%	%	%	kg $CaCO_3$/t	kg $CaCO_3$/t	kg $CaCO_3$/t	%	kg $CaCO_3$/t			
AMEC	NR10459	96.50	98.00	424929.58	5409630.58	264.73	In-pit Mine Rock	2	Mafic Metavolcanic	L032146	Slight	9.64	0.14	<0.01	0.08	0.13	4.1	34.2	-	0.19	15.8	8.4	-	3.9
AMEC	NR10459	110.00	111.50	424929.26	5409637.89	253.39	In-pit Mine Rock	2	Mafic Metavolcanic	L032147	Moderate	9.00	0.86	<0.01	0.66	0.85	26.6	185	-	1.58	132	7.0	-	5.0
AMEC	NR10459	125.10	126.50	424929.03	5409646.06	240.75	In-pit Mine Rock	2	Mafic Metavolcanic	L032148	Moderate	9.16	1.21	0.01	0.94	1.20	37.5	160	-	1.27	106	4.3	-	2.8
AMEC	NR10459	131.00	132.50	424928.98	5409649.3	235.76	In-pit Mine Rock	2	Mafic Metavolcanic	L032149	Moderate	8.94	2.89	<0.01	2.50	2.88	90.0	244	-	2.50	208	2.7	-	2.3
KCB	NR0682	355.50	356.60	425471.64	5409454.38	18.24	In-pit Mine Rock	2	Mafic Metavolcanic	33969	Slight	8.90	2.21	0.02	-	2.19	68.4	78.6	-	1.12	93.3	1.1	-	1.4
KCB	NR0684	83.50	84.50	425812.47	5409339.82	268.93	In-pit Mine Rock	2	Mafic Metavolcanic	34069	Moderate	8.09	2.57	0.07	-	2.50	78.1	129	-	1.03	85.8	1.7	-	1.1
KCB	NR0684	258.50	260.00	425815.89	5409378.09	97.96	In-pit Mine Rock	2	Mafic Metavolcanic	34089	Slight	8.59	2.62	0.04	-	2.58	80.6	76.3	-	0.9	75.0	0.9	-	0.9
KCB	NR0689A	156.50	158.00	425427.24	5409377.98	201.03	In-pit Mine Rock	2	Mafic Metavolcanic	123521	Moderate	9.27	0.74	0.06	-	0.68	21.3	131.2	-	1.53	128	6.2	-	6.0
KCB	NR06103	88.60	89.55	425802.1	5409485.61	267.95	In-pit Mine Rock	2	Mafic Metavolcanic	142502	Slight	8.10	3.19	0.05	-	3.14	98.1	61.5	-	0.64	53.3	0.6	-	0.5
KCB	NR06103	93.40	95.05	425802.01	5409487.67	263.23	In-pit Mine Rock	2	Mafic Metavolcanic	142504	Slight	8.47	2.38	0.05	-	2.33	72.8	53.0	-	0.61	50.8	0.7	-	0.7
KCB	NR07148	11.00	12.50	425477.03	5409463.98	344.6	In-pit Mine Rock	2	Mafic Metavolcanic	243561	Moderate	8.48	2.23	0.1	-	2.13	66.6	196	-	1.89	158	2.9	-	2.4
KCB	NR06119	310.00	311.00	425408.04	5409453.46	64.7	In-pit Mine Rock	2	Mafic Metavolcanic	370771	Moderate	8.61	3.06	0.09	-	2.97	92.8	181	-	1.75	146	2.0	-	1.6
KCB	NR06122	195.50	197.00	425706.11	5409349.09	174.57	In-pit Mine Rock	2	Mafic Metavolcanic	370915	Moderate	8.54	1.45	0.1	-	1.35	42.2	224	-	2.63	219	5.3	-	5.2
KCB	NR0666	186.50	188.00	425655.56	5409466.69	187.47	In-pit Mine Rock	2	Mafic Metavolcanic	612377	Slight	7.92	3.65	0.08	-	3.57	112	60.0	-	0.63	52.5	0.5	-	0.5
KCB	NR0666	211.00	212.00	425656.51	5409477.27	165.68	In-pit Mine Rock	2	Mafic Metavolcanic	612385	Moderate	8.34	2.12	0.06	-	2.06	64.4	97.8	-	0.58	48.3	1.5	-	0.8
KCB	NR0624	25.00	26.50	425723.21	5409519.82	328.01	In-pit Mine Rock	2	Mafic Metavolcanic	752730	Slight	8.27	1.12	0.07	-	1.05	32.8	41.7	-	0.32	26.7	1.3	-	0.8
KCB	NR0624	37.50	39.00	425723.41	5409526.28	317.3	In-pit Mine Rock	2	Mafic Metavolcanic	752739	Moderate	8.29	2.41	0.08	-	2.33	72.8	116.3	-	0.73	60.8	1.6	-	0.8
KCB	NR0624	72.50	74.00	425724.06	5409544.44	287.4	In-pit Mine Rock	2	Mafic Metavolcanic	752766	Slight	7.78	5.34	0.15	-	5.19	162	70.6	-	0.79	65.8	0.4	-	0.4
KCB	NR0644	18.50	20.00	425626.14	5409463.41	341.79	In-pit Mine Rock	2	Mafic Metavolcanic	764208	Moderate	8.66	0.57	0.09	-	0.48	15.0	230	-	2.41	201	15.3	-	13.4
KCB	NR0644	34.50	35.90	425625.97	5409473.97	329.84	In-pit Mine Rock	2	Mafic Metavolcanic	764219	Moderate	8.40	1.36	0.06	-	1.30	40.6	197	-	2.05	171	4.8	-	4.2
KCB	NR08313	28.00	30.00	425269.33	5409617.94	324.95	In-pit Mine Rock	2	Mafic Metavolcanic	803501	Moderate	8.71	0.47	0.07	-	0.40	12.5	162	-	1.41	118	13.0	-	9.4
KCB	NR08313	78.50	80.00	425267.51	5409645.84	283.2	In-pit Mine Rock	2	Mafic Metavolcanic	803507	Moderate	8.99	0.11	0.08	-	0.03	0.9	159	-	1.43	119	169	-	127
KCB	NR0655	186.45	187.00	425679.6	5409505.9	217.89	In-pit Mine Rock	2	Mafic Metavolcanic	ALT-09-06	Slight	9.23	1.54	0.01	-	1.53	47.8	35.0	-	0.23	19.2	0.7	-	0.4
KCB	NR06131A	27.40	28.10	425383.72	5409468.54	330.9	In-pit Mine Rock	2	Mafic Metavolcanic	ALT-09-13	Moderate	8.57	8.09	0.03	-	8.06	252	183	-	2	167	0.7	-	0.7
KCB	NR07187	92.20	92.80	425320.05	5409351.76	266.4	In-pit Mine Rock	2	Mafic Metavolcanic	ALT-09-24	Moderate	8.94	3.2	0.03	-	3.17	99.1	202	-	1.74	145	2.0	-	1.5
KCB	NR08313	53.00	53.60	425268.4	5409631.38	304.73	In-pit Mine Rock	2	Mafic Metavolcanic	ALT-09-25	Moderate	8.80	0.47	0.04	-	0.43	13.4	287	-	2.72	227	21.3	-	16.9
AMEC	NR11644	122.00	123.50	425163.14	5409640.47	252.12	In-pit Mine Rock	2a	Mafic Metavolcanic	L032010	Slight	9.37	0.21	<0.01	0.20	0.20	6.3	43.7	-	0.32	26.7	7.0	-	4.3
AMEC	NR11639	125.00	126.50	425089.07	5409608.01	244.41	In-pit Mine Rock	2a	Mafic Metavolcanic	L032012	Moderate	9.22	0.37	<0.01	0.32	0.36	11.3	217	-	1.65	138	19.3	-	12.2
AMEC	NR11639	130.00	131.50	425089.13	5409610.85	240.3	In-pit Mine Rock	2a	Mafic Metavolcanic	L032013	Moderate	8.83	0.41	<0.01	0.41	0.40	12.5	213	-	1.86	155	17.1	-	12.4
AMEC	NR11730	49.20	51.00	425868.69	5409152.19	300.73	In-pit Mine Rock	2a	Mafic Metavolcanic	L032028	Moderate	8.47	0.36	<0.01	0.35	0.35	10.9	204	-	1.20	100	18.7	-	9.1
AMEC	NR11749	327.00	328.50	425244.57	5409460.03	69.89	In-pit Mine Rock	2a	Mafic Metavolcanic	L032038	Slight	9.10	0.34	<0.01	0.28	0.33	10.3	43.1	-	0.20	16.7	4.2	-	1.6
AMEC	NR10607	149.00	150.50	425647.85	5409523.16	215.02	In-pit Mine Rock	2a	Mafic Metavolcanic	L032044	Moderate	8.84	2.02	<0.01	1.52	2.01	62.8	132	-	1.02	85.0	2.1	-	1.4
AMEC	NR10588	29.00	31.40	425672.02	5409400.94	331.1	In-pit Mine Rock	2a	Mafic Metavolcanic	L032049	Moderate	8.84	3.55	<0.01	1.98	3.54	111	171	-	1.75	146	1.5	-	1.3
AMEC	NR10588	50.50	52.00	425672.25	5409408	311.27	In-pit Mine Rock	2a	Mafic Metavolcanic	L032050	Moderate	9.27	0.44	<0.01	0.06	0.43	13.4	158	-	1.16	96.7	11.8	-	7.2
AMEC	NR10588	104.60	106.10	425672.88	5409426.25	260.34	In-pit Mine Rock	2a	Mafic Metavolcanic	L032101	Moderate	9.28	0.65	0.01	0.07	0.64	20.0	215	-	2.23	186	10.7	-	9.3
AMEC	NR10588	235.00	236.50	425677.6	5409472.9	138.71	In-pit Mine Rock	2a	Mafic Metavolcanic	L032104	Moderate	8.80	2.57	<0.01	0.95	2.56	80.0	102	47.9	0.51	42.5	1.3	1.6	0.5
AMEC	NR10554	24.00	25.50	425274.78	5409628.24	326.46	In-pit Mine Rock	2a	Mafic Metavolcanic	L032159	Slight	9.12	0.11	<0.01	0.08	0.10	3.1	46.9	-	0.34	28.3	15.0	-	9.1
AMEC	NR10554	66.00	67.50	425274.31	5409642.94	287.13	In-pit Mine Rock	2a	Mafic Metavolcanic	L032161	Moderate	8.95	0.95	<0.01	1.00	0.94	29.4	251	-	2.62	218	8.6	-	7.4
AMEC	NR10554	79.50	91.00	425274.51	5409649.59	269.87	In-pit Mine Rock	2a	Mafic Metavolcanic	L032162	Moderate	9.42	0.16	<0.01	0.14	0.15	4.7	123	-	0.78	65.0	26.1	-	13.9
AMEC	NR10554	99.20	100.70	425274.87	5409654.93	256.18	In-pit Mine Rock	2a	Mafic Metavolcanic	L032163	Moderate	9.07	1.06	<0.01	1.03	1.05	32.8	206	-	2.16	180	6.3	-	5.5
AMEC	NR10457	132.50	134.00	424900.57	5409638.97	232.23	In-pit Mine Rock	2a	Mafic Metavolcanic	L032167	Moderate	9.14	0.37	<0.01	0.32	0.36	11.3	193	135	1.63	136	17.2	13.5	12.1
AMEC	Surface Channel Sample			425431	5409397	345	In-pit Mine Rock	2a	Mafic Metavolcanic	RRR253655	Moderate	8.40	0.11	<0.01	0.06	0.10	3.1	153	-	1.67	139	48.8	-	44.5
KCB	NR07205	200.00	201.50	425177.51	5409587.1	177.87	In-pit Mine Rock	2a	Mafic Metavolcanic	414533	Moderate	8.52	3.88	0.08	-	3.80	119	158	-	1.65	138	1.3	-	1.2
KCB	NR08244	33.50	35.00	425695.5	5409441.79	333.19	In-pit Mine Rock	2a	Mafic Metavolcanic	455611	Moderate	8.41	1.56	0.11	-	1.45	45.3	217	-	2.52	210	4.8	-	4.6
KCB	NR08244	120.50	122.00	425694.29	5409498.07	266.86	In-pit Mine Rock	2a	Mafic Metavolcanic	455635	Moderate	8.29	1.42	0.11	-	1.31	40.9	189	-	2.12	177	4.6	-	4.3
KCB	NR08262	170.00	171.40	425330.7	5409546.43	200.16	In-pit Mine Rock	2a	Mafic Metavolcanic	586509	Moderate	8.76	2.31	0.11	-	2.20	68.8	262	-	3.17	264	3.8	-	3.8
KCB	NR08264	80.00	81.50	425239.16	5409639.97	279.51	In-pit Mine Rock	2a	Mafic Metavolcanic	588036	Moderate	9.20	0.3	0.02	-	0.28	8.8	69.3	-	0.46	38.3	7.9	-	4.4
KCB	NR08263	90.50	92.00	425237.65	5409582.56	271.16	In-pit Mine Rock	2a	Mafic Metavolcanic	588359	Moderate	8.79	0.18	0.1	-	0.08	2.5	262	-	3.23	269	105	-	108
KCB	NR0666	51.50	53.00	425652.73	5409411.88	310.77	In-pit Mine Rock	2a	Mafic Metavolcanic	612352	Moderate	8.73	0.27	0.16	-	0.11	3.4	198	-	2.02	168	57.6	-	49.0
KCB	NR0638	17.00	18.50	425721.88	5409462.7	338.41	In-pit Mine Rock	2aa	Mafic Metavolcanic	758456	Moderate	8.37	0.89	0.09	-	0.80	25.0	146	-	1.22	102	5.9	-	4.1
KCB	NR07159	36.50	38.00	425740.48	5409421.39	322.69	In-pit Mine Rock	2ab	Mafic Metavolcanic	243856	Moderate	8.45	3.56	0.08	-	3.48	109	157	-	1.49	124	1.4	-	1.1
KCB	NR0677	203.30	204.80	425626.97	5409490.6	190.68	In-pit Mine Rock	2ad	Mafic Metavolcanic	33630	Moderate	8.15	3.32	0.07	-	3.25	102	129	-	0.95	79.2	1.3	-	0.8
AMEC	NR10459	140.00	141.50	424928.95	5409654.21	228.22	In-pit Mine Rock	2b	Mafic Metavolcanic	L032201	Moderate	9.31	1.96	<0.01	1.83	1.95	60.9	114	-	0.72	60.0	1.9	-	1.0
KCB	NR0662	32.30	33.50	425719.83	5409411.3	327	In-pit Mine Rock	2b	Mafic Metavolcanic	611194	Moderate	8.48	2.35	0.1	-	2.25	70.3	219	-	2.32	193	3.1	-	2.7
AMEC	NR10608	9.50	11.00	425600.02	5409473.39	345.28	In-pit Mine Rock	2c	Mafic Metavolcanic	L032071	Moderate	8.61	0.52	<0.01	0.14	0.51	15.9	165	-	2.60	217	10.3	-	13.6
AMEC	NR10471	67.50	69.00	424942.03	5409364.89	287.51	In-pit Mine Rock	2c	Mafic Metavolcanic	L032139	Moderate	9.27	0.29	<0.01	0.23	0.28	8.8	146	93.2	1.10	91.7	16.7	13.0	10.5
AMEC	NR09354	39.50	41.00	425829.68	5409404.69	315.88	In-pit Mine Rock	3	Intermediate Metavolcanic	L032216	Slight	8.91	0.87	<0.01	0.67	0.86	26.9	42.9	-	0.25	20.8	1.6	-	0.8
AMEC	NR09354	25.00	26.50	425829.79	5409397.55	328.5	In-pit Mine Rock	3	Intermediate Metavolcanic	L032217	Moderate	8.96	0.54	<0.01	0.38	0.53	16.6	305	275	3.71	309	18.4	23.2	18.7
KCB	NR0670	180.50	182.00	425698.29	5409405	189.79	In-pit Mine Rock	3a	Intermediate Metavolcanic	24510	Slight	8.92	0.56	0.03	-	0.53	16.6	77.1	-	0.88	73.3	4.7	-	4.4
KCB	NR0670	197.90	199.40	425698.81	5409411.77	173.77	In-pit Mine Rock	3a	Intermediate Metavolcanic	24514	Moderate	8.81	1.25	0.08	-	1.17	36.6	143	-	1.15	95.8	3.9	-	2.6
KCB	NR09340	218.00	219.50	425661.27	5410175.61	163.84	In-pit Mine Rock	3a	Intermediate Metavolcanic	201112	Slight	8.99	1.2	<0.01	-	1.19	37.2	29.7	-	0.15	12.5	0.8	-	0.3
KCB	NR08252	125.50	127.00	425479.11	5409583.58	246.71	In-pit Mine Rock	3a	Intermediate Metavolcanic	457203	Slight	8.98	0.58	0.02	-	0.56	17.5	35.3	-	0.28	23.3	2.0	-	1.3
KCB	NR08252	154.00	155.50	425479.98	5409598.7	222.56	In-pit Mine Rock	3a	Intermediate Metavolcanic	457222	Moderate	9.49	0.28	0.03	-	0.25	7.8	66.1	-	0.51	42.5	8.5	-	5.4
KCB	NR0644	111.50	113.00	425625.9	5409525.42	272.49	In-pit Mine Rock	3a	Intermediate Metavolcanic	764274	Slight	8.82	0.05	0.02	-	0.03	0.9	25.9	-	0.42	35.0	27.6	-	37.3
KCB	NR0670	188.20	188.95	425698.49	5409407.84	183.04	In-pit Mine Rock	3a	Intermediate Metavolcanic	ALT-09-10	Moderate	9.69	0.69	<0.01	-	0.68	21.3	91.9	-	0.67	55.8	4.3	-	2.6
KCB	NR09340	212.00	213.50	425661.15	5410172.31	168.85	In-pit Mine Rock	3a	Intermediate Metavolcanic	RRR05817	Slight	8.71	2.47	0.02	-	2.45	76.6	21.0	-	0.06	5.0	0.3	-	0.1
KCB	NR0670	110.00	111.30	425697.22	5409378.26	255.11	In-pit Mine Rock	3b	Intermediate Metavolcanic	24502	Moderate	8.19	4.14	0.1	-	4.04	126	198	-	1.64	137	1.6	-	1.1
KCB	NR0670	290.50	292.00	425703.18	5409448.81	89.02	In-pit Mine Rock	3b	Intermediate Metavolcanic	24531	Slight	9.03	0.57	0.02	-	0.55	17.2	50.5	-	0.45	37.5	2.9	-	2.2
KCB	NR06103	212.00	213.50	425803.48	5409540.04	157.03	In-pit Mine Rock	3b	Intermediate Metavolcanic	142547	None	8.96	0.9	0.02	-	0.88	27.5	18.1	-	0.06	5.0	0.7	-	0.2
KCB	NR08224	282.50	284.00	425607.26	5409941.5	111.88	In-pit Mine Rock	3b	Intermediate Metavolcanic	451081	Slight	8.94	1.18	0.02	-	1.16	36.3	23.5	-	0.05	4.2	0.6	-	0.1
KCB	NR0676	201.80	202.50	425592.58	5409478.13	189.13	In-pit Mine Rock	3b	Intermediate Metavolcanic	ALT-09-01	Moderate	8.29	6.05	0.04	-	6.01	188	188	-	1.77	148	1.0	-	0.8
KCB	NR0670	222.80	223.35	425699.82	5409421.36	151.33	In-pit Mine Rock	3b	Intermediate Metavolcanic	ALT-09-08	Moderate	9.27	2.98	0.02	-	2.96	92.5	177	-	1.4	117	1.9	-	1.3
KCB	NR0670	282.85	283.50	425702.76	5409445.48	96.36	In-pit Mine Rock	3b	Intermediate Metavolcanic	ALT-09-09	Slight	9.57	0.17	<0.01	-	0.16	5.0	36.1	-	0.28	23.3	7.2	-	4.7
AMEC	NR09354	83.00	84.50	425829.48	5409426.38	278.17	In-pit Mine Rock	3ba	Intermediate Metavolcanic	L032213	Slight	9.47	1.58	<0.01	1.08	1.57	49.1	39.4	-	0.21	17.5	0.8	-	0.4
AMEC	NR09354	60.50	62.00	425829.55	5409415.1	297.64	In-pit Mine Rock	3ba	Intermediate Metavolcanic	L032214	Slight	9.19	0.40	<0.01	0.36	0.39	12.2	57.9	-	0.55	45.8	4.7	-	3.8
KCB	NR0687	480.50	482.00	425579.95	5409641.6	12.31	In-pit Mine Rock	3be	Intermediate Metavolcanic	34795	Slight	8.54	1.1	<0.01	-	1.09	34.1	24.1	-	0.05	4.2	0.7	-	0.1
AMEC	NR11644	50.00	51.50	425160.48	5409597.76	310.01	In-pit Mine Rock	4a	Felsic Metavolcanic	L032009	Slight	9.55	1.77	<0.01	1.70	1.76	55.0	80.3	75.3	1.04	86.7	1.5	1.4	1.6
AMEC	NR11639	88.00	89.50	425088.22	5409587.14	274.95	In-pit Mine Rock	4a	Felsic Metavolcanic	L032011	Slight	9.48	1.65	<0.01	1.53	1.64	51.3	72.1	-	0.87	72.5	1.4	-	1.4
AMEC	NR11639	138.00	139.50	425089.18	5409615.4	233.72	In-pit Mine Rock	4a	Felsic Metavolcanic	L032014	Slight	9.60	0.93	<0.01	0.87	0.92	28.8	66.5	-	0.72	60.0	2.3	-	2.1
AMEC	NR11638	199.50	201.00	425629.35	5410158.38	187.71	In-pit Mine Rock	4a	Felsic Metavolcanic	L032017	None	9.20	1.38	<0.01	1.31	1.37	42.8	18.8	-	0.05	4.2	0.4	-	0.1
AMEC	NR11749	369.00	370.50	425246.63	5409484.71	35.97	In-pit Mine Rock	4a	Felsic Metavolcanic	L032039	Slight	9.13	0.82	<0.01	0.79	0.81	25.3	72.1	-	0.83	69.2	2.8	-	2.7
AMEC	NR10588	227.50	229.00	425677.13	5409470.11	145.65	In-pit Mine Rock	4a	Felsic Metavolcanic	L032103	Slight	9.63	0.33	<0.01	0.32	0.32	10.0	50.6	-	0.40	33.3	5.1	-	3.3
AMEC	NR10567	148.50	150.00	425429.73	5409502.06	217.07	In-pit Mine Rock	4a	Felsic Metavolcanic	L032109	Moderate	9.60	0.22	<0.01	0.16	0.21	6.6	110	-	1.03	85.8	16.8	-	13.1
AMEC	NR09385	168.50	169.90	426086.05	5409468.21	225.03	In-pit Mine Rock	4a	Felsic Metavolcanic	L032179	Slight	9.36	0.22	<0.01	0.18	0.21	6.6	40.5	-	0.30	25.0	6.2	-	3.8
AMEC	NR10555	60.00	61.50	425349.12	5409665	292.8	In-pit Mine Rock	4a	Felsic Metavolcanic	L032182	Slight	9.78	0.34	<0.01	0.28	0.33	10.3	57.5	-	0.60	50.0	5.6	-	4.8
KCB	NR0686	26.10	26.80	425531.85	5409356.56	328.43	In-pit Mine Rock	4a	Felsic Metavolcanic	123011	Moderate	8.43	3.48	0.09	-	3.39	106	200	-	2.01	168	1.9	-	1.6
KCB	NR09322	50.00	51.50	425491.57	5410166.84	309.76	In-pit Mine Rock	4a	Felsic Metavolcanic	201102	Slight	9.17	0.41	<0.01	-	0.40	12.5	38.5	-	0.27	22.5	3.1	-	1.8
KCB	NR09333	234.50	236.00	425808.62	5409900.49	149.17	In-pit Mine Rock	4a	Felsic Metavolcanic	201105	Slight	8.67	1.15	<0.01	-	1.14	35.6	21.6	-	0.06	5.0	0.6	-	0.1
KCB	NR09337	93.50	95.00	425491.9	5410157.25	272.35	In-pit Mine Rock	4a	Felsic Metavolcanic	201107	Slight	8.53	2.21	<0.01	-	2.20	68.8	27.5	-	0.24	20.0	0.4	-	0.3
KCB	NR09375	102.50	104.00	425084.99	5409531.45	259.25	In-pit Mine Rock	4a	Felsic Metavolcanic	201120	Moderate	8.05	7.83	0.02	-	7.81	244	156	-	1.53	128	0.6	-	0.5
KCB	NR0629	92.00	93.50	425000.7	5409773.39	271.72	In-pit Mine Rock	4a	Felsic Metavolcanic	750334	None	4.73	0.5	0.03	-	0.47	14.7	6.0	-	<0.01	<0.8	0.4	-	0.1
KCB	NR0686	224.00	225.50	425533.81	5409463.59	161.61	In-pit Mine Rock	4aa	Felsic Metavolcanic	123092	Slight	9.32	0.15	0.03	-	0.12	3.8	35.8	-	0.28	23.3	9.5	-	6.2
KCB	NR0686	287.00	288.50	425535.49	5409500.69	110.73	In-pit Mine Rock	4aa	Felsic Metavolcanic	123139	Slight	8.46	0.84	0.04	-	0.80	25.0	39.0	-	0.38	31.7	1.6	-	1.3
KCB	NR06128	40.00	41.50	425417.41	5409477.39	321.96	In-pit Mine Rock	4aa	Felsic Metavolcanic	132026	Moderate	9.20	0.6	0.03	-	0.57	17.8	45.0	-	0.39	32.5	2.5	-	1.8

Consultant	HOLE-ID	FROM	TO	Easting	Northing	Elevation	Waste/Ore Classification	Rock Code	Lithology	Sample ID	Fizz Test	Paste pH	Sulphur (as S)				AP	Siderite Corrected NP	Modified Sobek NP	TIC	Carb NP	Siderite Corrected NPR	Modified Sobek NPR	Carb NPR
													S total (S_T)	Sulphate (S_{SO4})	Sulphide [Sobek]	Sulphide [S_T-S_{SO4}]								
		m	m			mASL							%	%	%	%	kg $CaCO_3$/t	kg $CaCO_3$/t	kg $CaCO_3$/t	%	kg $CaCO_3$/t			
KCB	NR07152	92.00	93.50	425297.41	5409465.91	271.26	In-pit Mine Rock	4aa	Felsic Metavolcanic	243038	Moderate	9.40	0.82	0.04	-	0.78	24.4	59.4	-	0.53	44.2	2.4	-	1.8
KCB	NR07153	124.00	125.50	425238.9	5409480.02	242.28	In-pit Mine Rock	4aa	Felsic Metavolcanic	246978	Moderate	8.70	1.96	0.04	-	1.92	60.0	56.3	-	0.58	48.3	0.9	-	0.8
KCB	NR07174	222.00	223.00	425330.3	5409478.54	160.18	In-pit Mine Rock	4aa	Felsic Metavolcanic	338631	Moderate	9.44	0.15	0.06	-	0.09	2.8	124	-	1.21	101	44.2	-	35.8
KCB	NR08228	319.00	320.50	425654.87	5409903.44	83.53	In-pit Mine Rock	4aa	Felsic Metavolcanic	453154	Slight	8.76	0.92	0.02	-	0.90	28.1	21.8	-	0.04	3.3	0.8	-	0.1
KCB	NR0504	231.41	232.50	425780.32	5410132.01	175.1	In-pit Mine Rock	4aa	Felsic Metavolcanic	635659	Slight	8.76	1.09	0.03	-	1.06	33.1	27.6	-	0.12	10.0	0.8	-	0.3
KCB	NR0514	98.40	99.64	425735.54	5410178.48	274.41	In-pit Mine Rock	4aa	Felsic Metavolcanic	637507	Slight	8.65	1.02	0.03	-	0.99	30.9	20.4	-	0.06	5.0	0.7	-	0.2
KCB	NR0649	164.00	165.50	425513.74	5409526.27	216.64	In-pit Mine Rock	4aa	Felsic Metavolcanic	761134	Slight	9.12	0.2	0.02	-	0.18	5.6	49.4	-	0.49	40.8	8.8	-	7.3
KCB	NR0649	203.50	205.00	425516.64	5409549.6	184.91	In-pit Mine Rock	4aa	Felsic Metavolcanic	761166	Slight	8.95	0.31	0.02	-	0.29	9.1	47.7	-	0.5	41.7	5.3	-	4.6
KCB	NR0686	193.00	194.00	425533.22	5409445.69	187.22	In-pit Mine Rock	4ab	Felsic Metavolcanic	123069	Slight	9.62	0.17	0.03	-	0.14	4.4	51.4	-	0.45	37.5	11.7	-	8.6
KCB	NR06128	124.00	125.50	425419.6	5409521.45	250.5	In-pit Mine Rock	4ab	Felsic Metavolcanic	132043	Slight	8.37	2.39	0.04	-	2.35	73.4	50.5	-	0.54	45.0	0.7	-	0.6
KCB	NR07167	279.50	281.00	426072.85	5409644.33	115.76	In-pit Mine Rock	4ab	Felsic Metavolcanic	224459	Slight	9.06	0.68	0.05	-	0.63	19.7	45.8	-	0.38	31.7	2.3	-	1.6
KCB	NR07148	212.00	213.50	425485.02	5409557.67	167.04	In-pit Mine Rock	4ab	Felsic Metavolcanic	243630	Slight	9.19	0.64	0.04	-	0.60	18.8	60.2	-	0.66	55.0	3.2	-	2.9
KCB	NR06112	110.00	111.50	425358.53	5409572.13	259.77	In-pit Mine Rock	4ab	Felsic Metavolcanic	370007	Slight	8.63	0.86	0.04	-	0.82	25.6	45.6	-	0.42	35.0	1.8	-	1.4
KCB	NR06112	152.00	153.50	425358.47	5409593.77	223.78	In-pit Mine Rock	4ab	Felsic Metavolcanic	370017	Slight	8.60	0.98	0.03	-	0.95	29.7	37.0	-	0.3	25.0	1.2	-	0.8
KCB	NR06114	125.00	126.00	425892.88	5409473.93	238.09	In-pit Mine Rock	4ab	Felsic Metavolcanic	370213	Slight	8.92	0.64	0.04	-	0.60	18.8	50.0	-	0.41	34.2	2.7	-	1.8
KCB	NR0658	191.00	192.50	425466.52	5409504.49	178.85	In-pit Mine Rock	4ab	Felsic Metavolcanic	611444	Slight	9.58	0.22	0.04	-	0.18	5.6	69.3	-	0.8	66.7	12.3	-	11.9
KCB	NR0658	230.00	231.50	425467.87	5409521.97	144.02	In-pit Mine Rock	4ab	Felsic Metavolcanic	611473	Slight	9.54	0.19	0.03	-	0.16	5.0	58.8	-	0.64	53.3	11.8	-	10.7
AMEC	NR9527	60.04	61.54	425348.19	5409684.48	303.88	In-pit Mine Rock	4b	Felsic Metavolcanic	L032183	Slight	9.60	0.65	<0.01	0.59	0.64	20.0	55.2	-	0.57	47.5	2.8	-	2.4
KCB	NR0670	429.50	431.00	425711.78	5409509.88	-35.53	In-pit Mine Rock	4b	Felsic Metavolcanic	24631	Slight	8.63	2.75	0.03	-	2.72	85.0	49.8	-	0.55	45.8	0.6	-	0.5
KCB	NR09333	107.00	108.50	425806.74	5409832.43	256.96	In-pit Mine Rock	4b	Felsic Metavolcanic	201106	Slight	9.31	0.64	<0.01	-	0.63	19.7	40.5	-	0.25	20.8	2.1	-	1.1
KCB	NR09375	47.00	48.80	425084.64	5409503.34	306.91	In-pit Mine Rock	4b	Felsic Metavolcanic	201121	None	8.43	0.29	<0.01	-	0.28	8.8	9.8	-	0.01	0.8	1.1	-	0.1
KCB	NR07164	114.50	116.00	426161.49	5409633.39	256.29	In-pit Mine Rock	4b	Felsic Metavolcanic	223815	Slight	8.64	2.14	0.04	-	2.10	65.6	36.0	-	0.25	20.8	0.5	-	0.3
KCB	NR07185	191.00	192.50	425495.31	5409430.64	175.95	In-pit Mine Rock	4b	Felsic Metavolcanic	331741	Moderate	9.09	0.45	0.04	-	0.41	12.8	70.4	-	0.54	45.0	5.5	-	3.5
KCB	NR06114	135.60	137.00	425893.37	5409478.67	228.4	In-pit Mine Rock	4b	Felsic Metavolcanic	370221	Slight	8.65	1.02	0.03	-	0.99	30.9	42.5	-	0.28	23.3	1.4	-	0.8
KCB	NR08244	183.50	185.00	425693.73	5409539.84	219.71	In-pit Mine Rock	4b	Felsic Metavolcanic	455652	Moderate	8.39	1.11	0.04	-	1.07	33.4	86.7	-	0.55	45.8	2.6	-	1.4
KCB	NR08244	388.50	389.50	425698.15	5409679.24	69.9	In-pit Mine Rock	4b	Felsic Metavolcanic	455794	Moderate	8.45	1.46	0.06	-	1.40	43.8	73.6	-	0.57	47.5	1.7	-	1.1
KCB	NR08281	140.00	141.50	425883.55	5409702.98	242	In-pit Mine Rock	4b	Felsic Metavolcanic	731259	Moderate	9.12	0.83	0.02	-	0.81	25.3	54.2	-	0.44	36.7	2.1	-	1.4
KCB	NR0628	67.00	68.50	425512.06	5409543.62	295.43	In-pit Mine Rock	4b	Felsic Metavolcanic	749506	Slight	9.38	0.14	0.04	-	0.10	3.1	59.9	-	0.76	63.3	19.2	-	20.3
KCB	NR0631	87.00	88.40	424924.72	5409775.68	276.01	In-pit Mine Rock	4b	Felsic Metavolcanic	750541	Moderate	9.31	1.22	<0.01	-	1.21	37.8	124.1	-	1.38	115	3.3	-	3.0
KCB	NR0621	122.50	124.00	425495.01	5409532.44	241.97	In-pit Mine Rock	4b	Felsic Metavolcanic	751815	Slight	9.35	0.15	0.03	-	0.12	3.8	44.8	-	0.59	49.2	11.9	-	13.1
KCB	NR0634	153.50	155.00	425810.56	5410220.92	230	In-pit Mine Rock	4b	Felsic Metavolcanic	756526	Slight	7.96	2.94	0.03	-	2.91	90.9	23.1	-	0.05	4.2	0.3	-	0.0
KCB	NR0634	162.50	164.00	425810.4	5410226.67	223.08	In-pit Mine Rock	4b	Felsic Metavolcanic	756533	Slight	8.23	3.2	0.02	-	3.18	99.4	26.7	-	0.08	6.7	0.3	-	0.1
KCB	NR0634	168.50	170.00	425810.28	5410230.51	218.47	In-pit Mine Rock	4b	Felsic Metavolcanic	756537	None	6.84	4.7	0.07	-	4.63	145	14.6	-	0.02	1.7	0.1	-	0.0
KCB	NR07190	402.80	403.40	425641.99	5409470.57	4.8	In-pit Mine Rock	4b	Felsic Metavolcanic	ALT-09-18	Slight	9.25	2.29	<0.01	-	2.28	71.3	39.1	-	0.33	27.5	0.5	-	0.4
KCB	NR09331	186.50	188.00	425678.72	5409820.08	189.91	In-pit Mine Rock	4b	Felsic Metavolcanic	RRR01889	Slight	8.98	0.32	0.03	-	0.29	9.1	28.9	-	0.13	10.8	3.2	-	1.2
KCB	NR09333	80.00	81.50	425806.64	5409818.3	279.97	In-pit Mine Rock	4b	Felsic Metavolcanic	RRR04014	Slight	8.87	0.65	0.02	-	0.63	19.7	32.1	-	0.19	15.8	1.6	-	0.8
AMEC	NR11710	8.80	10.30	426050.48	5409195.66	344.63	In-pit Mine Rock	4c	Felsic Metavolcanic	L032022	Slight	8.91	0.26	<0.01	0.24	0.25	7.8	33.9	-	0.21	17.5	4.3	-	2.2
AMEC	NR11738	58.40	60.00	425868.88	5409211.94	293.16	In-pit Mine Rock	4c	Felsic Metavolcanic	L032024	Slight	8.80	0.50	<0.01	0.44	0.49	15.3	66.6	-	0.68	56.7	4.3	-	3.7
AMEC	NR10607	230.20	231.70	425648.81	5409554.84	140.26	In-pit Mine Rock	4c	Felsic Metavolcanic	L032045	Slight	9.18	0.98	<0.01	0.91	0.97	30.3	27.3	-	0.17	14.2	0.9	-	0.5
AMEC	NR10607	314.00	315.50	425650.7	5409588.85	63.7	In-pit Mine Rock	4c	Felsic Metavolcanic	L032046	None	9.10	1.92	<0.01	1.70	1.91	59.7	15.1	-	0.07	5.8	0.3	-	0.1
AMEC	NR11647	56.00	57.50	425324.02	5409747.83	301.09	In-pit Mine Rock	4c	Felsic Metavolcanic	L032052	None	9.07	1.22	<0.01	1.21	1.21	37.8	17.6	-	0.11	9.2	0.5	-	0.2
AMEC	NR10614	57.00	58.50	426049.2	5409731.17	299.46	In-pit Mine Rock	4c	Felsic Metavolcanic	L032062	None	7.70	0.38	<0.01	0.35	0.37	11.6	16.0	-	0.05	4.2	1.4	-	0.4
AMEC	NR10614	91.50	93.00	426048.74	5409747.6	269.13	In-pit Mine Rock	4c	Felsic Metavolcanic	L032063	Slight	8.41	2.28	<0.01	2.26	2.27	70.9	47.4	-	0.37	30.8	0.7	-	0.4
AMEC	NR10588	368.50	370.00	425689.78	5409524.44	16.19	In-pit Mine Rock	4c	Felsic Metavolcanic	L032107	Slight	9.36	0.79	<0.01	0.73	0.78	24.4	28.0	-	0.08	6.7	1.1	-	0.3
AMEC	NR09384	116.00	117.50	426103.64	5409469.89	262.37	In-pit Mine Rock	4c	Felsic Metavolcanic	L032175	Slight	9.48	0.44	<0.01	0.33	0.43	13.4	37.0	-	0.22	18.3	2.8	-	1.4
AMEC	NR09384	143.00	144.40	426105.21	5409485.03	240.13	In-pit Mine Rock	4c	Felsic Metavolcanic	L032176	Slight	9.79	0.28	<0.01	0.23	0.27	8.4	53.4	-	0.50	41.7	6.3	-	4.9
AMEC	NR09385	5.00	6.50	426075.02	5409369.34	354.67	In-pit Mine Rock	4c	Felsic Metavolcanic	L032177	Slight	9.51	0.46	<0.01	0.34	0.45	14.1	36.7	-	0.19	15.8	2.6	-	1.1
AMEC	NR11659	45.50	47.00	424940.52	5409484.6	313.06	In-pit Mine Rock	4c	Felsic Metavolcanic	L032002	Slight	8.79	0.98	<0.01	0.93	0.97	30.3	63.6	56.4	0.68	56.7	2.1	1.9	1.9
KCB	NR0670	359.00	360.50	425707.06	5409478.21	27.28	In-pit Mine Rock	4c	Felsic Metavolcanic	24581	Slight	8.39	1.7	0.05	-	1.65	51.6	67.9	-	0.85	70.8	1.3	-	1.4
KCB	NR0670	360.50	362.00	425707.16	5409478.88	25.94	In-pit Mine Rock	4c	Felsic Metavolcanic	24582	Moderate	8.91	1.8	0.03	-	1.77	55.3	56.0	-	0.53	44.2	1.0	-	0.8
KCB	NR09373	27.00	28.50	425155.52	5409099.04	322.92	In-pit Mine Rock	4c	Felsic Metavolcanic	201117	Moderate	8.45	1.02	<0.01	-	1.01	31.6	274	-	2.33	194	8.7	-	6.2
KCB	NR09445	65.00	66.50	424904.73	5409641.34	287.9	In-pit Mine Rock	4c	Felsic Metavolcanic	201142	Moderate	8.70	1.87	<0.01	-	1.86	58.1	85.4	-	0.63	52.5	1.5	-	0.9
KCB	NR08223	281.00	282.50	425658.03	5409938.12	113.71	In-pit Mine Rock	4c	Felsic Metavolcanic	450258	None	8.94	0.85	<0.01	-	0.84	26.3	19.1	-	0.03	2.5	0.7	-	0.1
KCB	NR08237	203.00	204.50	425863.69	5409935.15	172.98	In-pit Mine Rock	4c	Felsic Metavolcanic	450499	Slight	8.90	1.3	0.03	-	1.27	39.7	31.6	-	0.14	11.7	0.8	-	0.3
KCB	NR08227	45.00	46.00	425715.13	5409746.52	309.91	In-pit Mine Rock	4c	Felsic Metavolcanic	452002	None	8.25	1.18	0.01	-	1.17	36.6	11.8	-	<0.01	<0.8	0.3	-	0.0
KCB	NR08256	72.50	74.00	425914.79	5410006.93	277.08	In-pit Mine Rock	4c	Felsic Metavolcanic	585172	Slight	8.81	1.82	0.01	-	1.81	56.6	20.1	-	0.06	5.0	0.4	-	0.1
KCB	NR08262	254.00	255.50	425332.85	5409587.67	126.96	In-pit Mine Rock	4c	Felsic Metavolcanic	586517	Moderate	9.20	0.5	0.02	-	0.48	15.0	91.0	-	0.83	69.2	6.1	-	4.6
AMEC	NR10471	44.00	45.50	424942.4	5409353.57	308.1	In-pit Mine Rock	4ca	Felsic Metavolcanic	L032136	Slight	9.34	1.83	<0.01	1.78	1.82	56.9	62.0	-	0.70	58.3	1.1	-	1.0
AMEC	NR10471	53.00	54.30	424942.23	5409357.83	300.29	In-pit Mine Rock	4ca	Felsic Metavolcanic	L032137	Slight	9.44	1.61	<0.01	1.42	1.60	50.0	54.4	-	0.59	49.2	1.1	-	1.0
AMEC	NR10471	56.00	57.50	424942.17	5409359.32	297.57	In-pit Mine Rock	4ca	Felsic Metavolcanic	L032138	Slight	9.47	1.59	<0.01	1.47	1.58	49.4	68.8	-	0.80	66.7	1.4	-	1.4
AMEC	NR10471	80.00	81.50	424941.98	5409371.04	276.63	In-pit Mine Rock	4ca	Felsic Metavolcanic	L032140	Moderate	9.45	2.51	<0.01	2.38	2.50	78.1	89.7	61.8	0.77	64.2	1.1	0.8	0.8
AMEC	NR09420	56.00	57.00	426099.87	5409718.89	304.36	In-pit Mine Rock	4ca	Felsic Metavolcanic	L032186	None	8.17	0.65	<0.01	0.55	0.64	20.0	20.3	-	0.17	14.2	1.0	-	0.7
AMEC	NR09354	368.00	369.50	425832.2	5409573.76	34.35	In-pit Mine Rock	4ca	Felsic Metavolcanic	L032206	Slight	9.93	0.23	<0.01	0.14	0.22	6.9	45.0	-	0.37	30.8	6.5	-	4.5
KCB	NR08231	114.50	116.00	425490.16	5409791.63	249.64	In-pit Mine Rock	4ca	Felsic Metavolcanic	451833	Slight	8.68	2.17	0.04	-	2.13	66.6	59.2	-	0.64	53.3	0.9	-	0.8
KCB	NR08241	128.50	130.00	425778.3	5409780.58	239.33	In-pit Mine Rock	4ca	Felsic Metavolcanic	455047	Moderate	8.66	2.11	<0.01	-	2.10	65.6	96.9	-	1.06	88.3	1.5	-	1.3
KCB	NR08253	102.50	104.00	425506.8	5409637.22	262.85	In-pit Mine Rock	4ca	Felsic Metavolcanic	457004	Moderate	9.08	0.76	0.04	-	0.72	22.5	82.1	-	0.34	28.3	3.6	-	1.3
KCB	NR08256	173.00	174.50	425914.42	5410019.77	177.52	In-pit Mine Rock	4ca	Felsic Metavolcanic	585242	None	8.47	1.72	0.01	-	1.71	53.4	12.5	-	0.04	3.3	0.2	-	0.1
KCB	NR08264	119.00	120.50	425238.81	5409659.95	246.03	In-pit Mine Rock	4ca	Felsic Metavolcanic	588064	Moderate	9.24	1.46	0.02	-	1.44	45.0	95.1	-	0.83	69.2	2.1	-	1.5
KCB	NR08264	140.00	141.50	425239.1	5409670.91	228.12	In-pit Mine Rock	4ca	Felsic Metavolcanic	588078	Moderate	9.35	0.86	0.04	-	0.82	25.6	111.9	-	0.71	59.2	4.4	-	2.3
KCB	NR08264	158.00	159.50	425239.49	5409680.42	212.84	In-pit Mine Rock	4ca	Felsic Metavolcanic	588091	Moderate	9.43	1.09	0.03	-	1.06	33.1	93.3	-	0.83	69.2	2.8	-	2.1
KCB	NR08263	183.50	185.00	425240.03	5409632.11	192.51	In-pit Mine Rock	4ca	Felsic Metavolcanic	588424	Moderate	9.45	1.09	0.05	-	1.04	32.5	126	-	1.36	113	3.9	-	3.5
KCB	NR08263	210.50	212.00	425241.39	5409647.02	170.04	In-pit Mine Rock	4ca	Felsic Metavolcanic	588442	Moderate	9.41	1.17	0.03	-	1.14	35.6	77.1	-	0.68	56.7	2.2	-	1.6
KCB	NR09340	100.00	101.20	425659.78	5410111.63	263.15	In-pit Mine Rock	4ca	Felsic Metavolcanic	RRR05735	Slight	8.69	2.77	0.02	-	2.75	85.9	26.4	-	0.2	16.7	0.3	-	0.2
AMEC	NR09384	23.00	24.50	426100.14	5409419.46	340.42	In-pit Mine Rock	4cb	Felsic Metavolcanic	L032173	Slight	9.25	0.43	<0.01	0.40	0.42	13.1	34.0	-	0.15	12.5	2.6	-	1.0
AMEC	NR09384	104.00	105.50	426103.03	5409463.27	272.36	In-pit Mine Rock	4cb	Felsic Metavolcanic	L032174	Slight	9.40	0.88	<0.01	0.77	0.87	27.2	41.3	-	0.25	20.8	1.5	-	0.8
KCB	NR0686	168.50	170.00	425532.7	5409432.08	207.27	In-pit Mine Rock	4cb	Felsic Metavolcanic	123051	Slight	9.13	0.66	0.04	-	0.62	19.4	70.4	-	0.89	74.2	3.6	-	3.8
KCB	NR0686	209.00	210.50	425533.53	5409454.95	173.87	In-pit Mine Rock	4cb	Felsic Metavolcanic	123081	Moderate	8.86	0.67	0.08	-	0.59	18.4	194	-	2.12	177	10.5	-	9.6
KCB	NR07167	270.50	272.00	426072.54	5409638.69	122.77	In-pit Mine Rock	4cb	Felsic Metavolcanic	224453	Slight	8.97	1.67	0.05	-	1.62	50.6	61.2	-	0.61	50.8	1.2	-	1.0
KCB	NR07166	90.50	91.60	426097.43	5409544.02	274.72	In-pit Mine Rock	4cb	Felsic Metavolcanic	245302	Slight	8.94	0.4	0.03	-	0.37	11.6	33.9	-	0.2	16.7	2.9	-	1.4
KCB	NR07205	68.00	69.50	425173.5	5409517.78	290.11	In-pit Mine Rock	4cb	Felsic Metavolcanic	414505	Slight	9.07	1.09	0.03	-	1.06	33.1	48.1	-	0.46	38.3	1.5	-	1.2
KCB	NR07205	117.50	119.00	425174.54	5409543.28	247.7	In-pit Mine Rock	4cb	Felsic Metavolcanic	414524	Slight	9.32	0.56	0.02	-	0.54	16.9	40.8	-	0.35	29.2	2.4	-	1.7
KCB	NR07205	125.00	126.50	425174.75	5409547.2	241.31	In-pit Mine Rock	4cb	Felsic Metavolcanic	414529	Moderate	8.58	1	0.04	-	0.96	30.0	89.2	-	0.64	53.3	3.0	-	1.8
KCB	NR08255	243.50	245.00	425814.77	5409696.99	166.74	In-pit Mine Rock	4cb	Felsic Metavolcanic	459106	Slight	8.86	1.45	0.05	-	1.40	43.8	61.7	-	0.6	50.0	1.4	-	1.1
KCB	NR08264	41.00	42.50	425239.66	5409620.45	313.26	In-pit Mine Rock	4cb	Felsic Metavolcanic	588009	Slight	9.27	0.52	0.01	-	0.51	15.9	46.5	-	0.41	34.2	2.9	-	2.1
KCB	NR08263	78.50	80.00	425237.45	5409576.31	281.4	In-pit Mine Rock	4cb	Felsic Metavolcanic	588351	Moderate	9.40	0.44	0.04	-	0.40	12.5	88.5	-	0.67	55.8	7.1	-	4.5
AMEC	NR09419	33.00	34.50	424863.45	5409879.59	322.21	In-pit Mine Rock	4cc	Felsic Metavolcanic	L032221	Slight	9.84	0.54	<0.01	0.45	0.53	16.6	80.1	-	1.05	87.5	4.8	-	5.3
AMEC	NR11647	149.00	150.50	425323.92	5409804.06	227.08	In-pit Mine Rock	4cf	Felsic Metavolcanic	L032053	Slight	9.53	1.49	<0.01	1.46	1.48	46.3	80.5	-	0.98	81.7	1.7	-	1.8
AMEC	NR11632	77.00	78.50	425948.08	5410048.48	288.13	In-pit Mine Rock	4cf	Felsic Metavolcanic	L032058	Slight	9.03	0.91	<0.01	0.86	0.90	28.1	36.0	-	0.17	14.2	1.3	-	0.5
AMEC	NR11656	54.20	55.20	425272.22	5409747.01	304.17	In-pit Mine Rock	4cf	Felsic Metavolcanic	L032185	Slight	9.64	1.38	<0.01	1.22	1.37	42.8	81.1	-	0.98	81.7	1.9	-	1.9
AMEC	NR09406	282.70	283.90	425392.95	5409521.61	92.16	In-pit Mine Rock	4cf	Felsic Metavolcanic	L032223	Moderate	9.66	0.26	<0.01	0.19	0.25	7.8	89.1	-	0.67	55.8	11.4	-	7.1
KCB	NR0689A	268.50	270.00	425431.99	5409423.21	98.79	In-pit Mine Rock	4cf	Felsic Metavolcanic	123536	Slight	8.67	0.75	0.03	-	0.72	22.5	46.3	-	0.39	32.5	2.1	-	1.4
KCB	NR09340	102.00	103.00	425659.78	5410112.63	261.53	In-pit Mine Rock	4cf	Felsic Metavolcanic	201111	Slight	8.25	6.98	0.07	-	6.91	216	62.2	-	0.59	49.2	0.3	-	0.2
KCB	NR08224	77.00	78.50	425606.19	5409826.04	281.66	In-pit Mine Rock	4cf	Felsic Metavolcanic	451001	Slight	9.06	0.6	0.04	-	0.56	17.5	26.9	-	0.15	12.5	1.5	-	0.7
KCB	NR08232	105.50	107.00	424981.24	5409715.43	254.42	In-pit Mine Rock	4cf	Felsic Metavolcanic	451324	Slight	8.88	1.82	<0.01	-	1.81	56.6	51.3	-	0.51	42.5	0.9	-	0.8

Consultant	HOLE-ID	FROM	TO	Easting	Northing	Elevation	Waste/Ore Classification	Rock Code	Lithology	Sample ID	Fizz Test	Paste pH	Sulphur (as S)				AP	Siderite Corrected NP	Modified Sobek NP	TIC	Carb NP	Siderite Corrected NPR	Modified Sobek NPR	Carb NPR
													S total (S_T)	Sulphate (S_{SO4})	Sulphide [Sobek]	Sulphide [S_T-S_{SO4}]								
		m	m			mASL							%	%	%	%	kg $CaCO_3$/t	kg $CaCO_3$/t	kg $CaCO_3$/t	%	kg $CaCO_3$/t			
KCB	NR08255	186.50	188.00	425818.43	5409657.87	207.96	In-pit Mine Rock	4cf	Felsic Metavolcanic	459064	Slight	8.72	2.91	0.02	-	2.89	90.3	35.9	-	0.4	33.3	0.4	-	0.4
AMEC	NR11717	27.00	28.50	425989.02	5409196.77	323.83	In-pit Mine Rock	4cfa	Felsic Metavolcanic	L032023	Slight	8.69	1.29	<0.01	1.20	1.28	40.0	131	-	1.32	110	3.3	-	2.8
AMEC	NR11754	301.00	302.00	425809.6	5409790.26	110.83	In-pit Mine Rock	4cfa	Felsic Metavolcanic	L032030	None	8.60	2.29	<0.01	2.26	2.28	71.3	17.7	-	0.08	6.7	0.2	-	0.1
AMEC	NR11749	429.00	430.50	425249.57	5409520.84	-11.84	In-pit Mine Rock	4cfa	Felsic Metavolcanic	L032040	Slight	9.14	1.87	<0.01	1.78	1.86	58.1	76.4	-	0.92	76.7	1.3	-	1.3
AMEC	NR10607	389.00	390.50	425653.22	5409621.03	-4	In-pit Mine Rock	4cfa	Felsic Metavolcanic	L032048	Slight	9.17	1.81	<0.01	1.64	1.80	56.3	35.1	-	0.22	18.3	0.6	-	0.3
AMEC	NR10588	124.00	125.50	425673.22	5409432.91	242.13	In-pit Mine Rock	4cfa	Felsic Metavolcanic	L032102	Slight	9.38	0.97	<0.01	0.80	0.96	30.0	52.5	41.2	0.47	39.2	1.7	1.6	1.3
AMEC	NR10588	278.50	280.00	425680.92	5409489.03	98.44	In-pit Mine Rock	4cfa	Felsic Metavolcanic	L032105	Slight	9.08	1.62	<0.01	1.51	1.61	50.3	35.3	-	0.26	21.7	0.7	-	0.4
AMEC	NR10561	59.00	60.50	425673.41	5409884.35	289.21	In-pit Mine Rock	4cfa	Felsic Metavolcanic	L032154	Slight	8.93	0.57	<0.01	0.51	0.56	17.5	28.9	13.4	0.12	10.0	1.6	0.8	0.6
AMEC	NR10459	204.50	206.00	424929.39	5409689.68	174.35	In-pit Mine Rock	4cfa	Felsic Metavolcanic	L032205	Slight	9.63	1.57	<0.01	1.41	1.56	48.8	73.7	-	0.88	73.3	1.5	-	1.5
KCB	NR09333	185.00	186.50	425807.65	5409873.82	190.86	In-pit Mine Rock	4cfa	Felsic Metavolcanic	201104	Slight	8.62	0.68	<0.01	-	0.67	20.9	18.1	-	0.06	5.0	0.9	-	0.2
KCB	NR09375	249.50	251.00	425090.95	5409611.96	136.45	In-pit Mine Rock	4cfa	Felsic Metavolcanic	201122	Slight	8.66	2.39	<0.01	-	2.38	74.4	55.6	-	0.6	50.0	0.7	-	0.7
KCB	NR09412	71.50	73.00	424966.63	5409767.83	289.61	In-pit Mine Rock	4cfa	Felsic Metavolcanic	201135	Moderate	9.32	1.34	<0.01	-	1.33	41.6	87.8	-	0.62	51.7	2.1	-	1.2
KCB	NR09436	122.00	123.50	424969.06	5409882.65	249.75	In-pit Mine Rock	4cfa	Felsic Metavolcanic	201139	Slight	8.79	1.91	<0.01	-	1.90	59.4	66.0	-	0.73	60.8	1.1	-	1.0
KCB	NR09335	75.50	77.00	425872.48	5409774.44	283.17	In-pit Mine Rock	4cfa	Felsic Metavolcanic	RRR05411	Moderate	8.77	1.72	0.04	-	1.68	52.5	83.5	-	0.41	34.2	1.6	-	0.7
KCB	NR09335	83.00	84.50	425872.28	5409778.17	276.67	In-pit Mine Rock	4cfa	Felsic Metavolcanic	RRR05416	Slight	8.97	1	0.03	-	0.97	30.3	41.3	-	0.2	16.7	1.4	-	0.6
AMEC	NR10608	231.50	233.00	425619.17	5409574.27	149.12	In-pit Mine Rock	4cfb	Felsic Metavolcanic	L032077	Slight	8.92	1.05	<0.01	0.82	1.04	32.5	42.1	-	0.28	23.3	1.3	-	0.7
AMEC	NR10480	96.00	98.00	425521.74	5410034.49	270.29	In-pit Mine Rock	4cfb	Felsic Metavolcanic	L032098	Slight	9.27	1.27	<0.01	1.24	1.26	39.4	35.1	-	0.25	20.8	0.9	-	0.5
AMEC	NR10567	415.50	417.00	425446.77	5409609.08	-26.93	In-pit Mine Rock	4cfb	Felsic Metavolcanic	L032110	Moderate	9.39	1.85	<0.01	1.74	1.84	57.5	119	-	1.00	83.3	2.1	-	1.4
AMEC	NR10499	138.50	140.00	425192.15	5409836.13	228.34	In-pit Mine Rock	4cfb	Felsic Metavolcanic	L032111	Slight	9.40	0.99	<0.01	0.93	0.98	30.6	56.0	-	0.63	52.5	1.8	-	1.7
AMEC	NR10555	210.10	211.60	425348.97	5409720.99	153.57	In-pit Mine Rock	4cfb	Felsic Metavolcanic	L032180	Slight	9.44	1.61	<0.01	1.43	1.60	50.0	47.3	-	0.45	37.5	0.9	-	0.8
AMEC	NR10459	177.50	179.00	424929.19	5409674.76	196.86	In-pit Mine Rock	4cfb	Felsic Metavolcanic	L032204	Slight	9.84	0.80	<0.01	0.66	0.79	24.7	87.0	-	1.18	98.3	3.5	-	4.0
AMEC	NR09354	330.50	332.00	425831.13	5409553.03	65.58	In-pit Mine Rock	4cfb	Felsic Metavolcanic	L032207	Moderate	9.37	2.05	<0.01	1.80	2.04	63.8	68.7	46.5	0.54	45.0	1.1	0.8	0.7
AMEC	NR09391	56.00	57.50	426124.73	5409688.42	306.05	In-pit Mine Rock	4cfb	Felsic Metavolcanic	L032218	None	8.52	0.99	<0.01	0.90	0.98	30.6	10.2	-	0.05	4.2	0.3	-	0.1
AMEC	NR10466	149.00	150.50	424964.66	5409682.32	212.19	In-pit Mine Rock	4cfb	Felsic Metavolcanic	L032220	Slight	9.85	0.83	<0.01	0.71	0.82	25.6	26.3	-	0.22	18.3	1.0	-	0.7
KCB	NR0686	410.00	411.50	425544.04	5409577.65	15.21	In-pit Mine Rock	4cfb	Felsic Metavolcanic	123229	Slight	8.34	2.56	0.03	-	2.53	79.1	26.8	-	0.21	17.5	0.3	-	0.2
KCB	NR09324	95.00	96.50	425746.34	5409827.07	267.19	In-pit Mine Rock	4cfb	Felsic Metavolcanic	201103	Slight	8.67	1.63	<0.01	-	1.62	50.6	30.7	-	0.09	7.5	0.6	-	0.1
KCB	NR07152	406.50	408.00	425295.94	5409654.36	19.82	In-pit Mine Rock	4cfb	Felsic Metavolcanic	243171	Slight	8.95	1.52	<0.01	-	1.51	47.2	72.7	-	0.83	69.2	1.5	-	1.5
KCB	NR08227	245.50	247.00	425712.24	5409854.05	140.48	In-pit Mine Rock	4cfb	Felsic Metavolcanic	452142	Slight	7.50	3.4	0.03	-	3.37	105	27.0	-	0.13	10.8	0.3	-	0.1
KCB	NR08230	125.50	127.00	425555.6	5409796.06	241.41	In-pit Mine Rock	4cfb	Felsic Metavolcanic	454052	Moderate	8.12	4.38	<0.01	-	4.37	137	74.1	-	0.75	62.5	0.5	-	0.5
KCB	NR08230	155.50	157.00	425557.18	5409812.66	216.48	In-pit Mine Rock	4cfb	Felsic Metavolcanic	454072	Slight	8.31	3.46	0.04	-	3.42	107	40.4	-	0.29	24.2	0.4	-	0.2
KCB	NR08239	81.50	83.00	425837.43	5409811.74	277.47	In-pit Mine Rock	4cfb	Felsic Metavolcanic	454317	Slight	8.31	0.65	<0.01	-	0.64	20.0	30.8	-	0.17	14.2	1.5	-	0.7
KCB	NR08244	203.00	204.50	425693.64	5409552.89	205.22	In-pit Mine Rock	4cfb	Felsic Metavolcanic	455665	Slight	8.96	0.89	0.04	-	0.85	26.6	39.8	-	0.25	20.8	1.5	-	0.8
KCB	NR08252	316.00	317.50	425489.79	5409690.8	89.76	In-pit Mine Rock	4cfb	Felsic Metavolcanic	457337	None	9.14	0.52	<0.01	-	0.51	15.9	7.2	-	0.01	0.8	0.5	-	0.1
KCB	NR08255	335.00	336.50	425814.77	5409760.76	101.13	In-pit Mine Rock	4cfb	Felsic Metavolcanic	459173	None	8.37	1.99	0.02	-	1.97	61.6	17.3	-	0.04	3.3	0.3	-	0.1
KCB	NR08264	233.00	234.50	425241.64	5409721.08	149.86	In-pit Mine Rock	4cfb	Felsic Metavolcanic	588142	Slight	9.10	1.86	0.02	-	1.84	57.5	64.8	-	0.73	60.8	1.1	-	1.1
KCB	NR08263	117.50	119.00	425238.12	5409596.71	248.17	In-pit Mine Rock	4cfb	Felsic Metavolcanic	588377	Slight	9.32	0.58	0.03	-	0.55	17.2	39.9	-	0.32	26.7	2.3	-	1.6
KCB	NR08281	204.50	206.00	425880.4	5409745.95	194	In-pit Mine Rock	4cfb	Felsic Metavolcanic	731301	Slight	9.23	0.31	0.02	-	0.29	9.1	34.2	-	0.26	21.7	3.8	-	2.4
AMEC	NR10492	180.50	182.00	425592.62	5410023.25	201.82	In-pit Mine Rock	4cg	Felsic Metavolcanic	L032099	None	9.05	2.58	<0.01	2.36	2.57	80.3	19.3	-	0.05	4.2	0.2	-	0.1
KCB	NR08224	83.00	84.50	425606.08	5409829.12	276.51	In-pit Mine Rock	4cg	Felsic Metavolcanic	451006	Slight	8.94	1.3	0.02	-	1.28	40.0	19.8	-	0.07	5.8	0.5	-	0.1
KCB	NR08228	242.00	243.50	425655.41	5409857.15	145.05	In-pit Mine Rock	4cg	Felsic Metavolcanic	453046	None	8.51	2.67	0.03	-	2.64	82.5	13.6	-	0.03	2.5	0.2	-	0.0
AMEC	NR11687	71.00	72.50	425340.63	5409939.9	294.03	In-pit Mine Rock	4cgb	Felsic Metavolcanic	L032019	Slight	9.37	2.41	<0.01	2.32	2.40	75.0	40.8	28.9	0.34	28.3	0.5	0.4	0.4
AMEC	NR10608	363.50	365.00	425634.66	5409649.7	41.96	In-pit Mine Rock	4cgb	Felsic Metavolcanic	L032078	Slight	8.61	1.84	<0.01	1.61	1.83	57.2	26.0	-	0.06	5.0	0.5	-	0.1
AMEC	NR10608	395.30	396.80	425638.6	5409668.93	16.94	In-pit Mine Rock	4cgb	Felsic Metavolcanic	L032079	Slight	8.83	0.59	<0.01	0.47	0.58	18.1	27.5	-	0.11	9.2	1.5	-	0.5
KCB	NR0686	315.50	317.00	425537.09	5409517.98	88.14	In-pit Mine Rock	4cgb	Felsic Metavolcanic	123161	Slight	8.84	0.73	0.04	-	0.69	21.6	36.5	-	0.23	19.2	1.7	-	0.9
KCB	NR09360	42.50	44.00	425268.35	5409148.45	307.97	In-pit Mine Rock	4cgb	Felsic Metavolcanic	201115	Moderate	8.60	1.78	<0.01	-	1.77	55.3	173	-	1.89	158	3.1	-	2.8
KCB	NR08252	340.00	341.50	425491.64	5409705.05	70.53	In-pit Mine Rock	4cgb	Felsic Metavolcanic	457354	Slight	8.76	2.26	0.03	-	2.23	69.7	27.2	-	0.19	15.8	0.4	-	0.2
KCB	NR0501	86.84	87.80	425752.3	5410052.13	283.4	In-pit Mine Rock	4d	Felsic Metavolcanic	29589	Slight	8.10	1.16	0.05	-	1.11	34.7	28.6	-	0.13	10.8	0.8	-	0.3
AMEC	NR10480	48.50	50.00	425520.17	5410006.86	309.19	In-pit Mine Rock	5da	Clastic Metasediment	L032096	Slight	9.18	1.85	<0.01	1.77	1.84	57.5	27.3	-	0.19	15.8	0.5	-	0.3
AMEC	NR10480	62.00	63.50	425520.55	5410014.58	298.13	In-pit Mine Rock	5da	Clastic Metasediment	L032097	Slight	9.12	1.91	<0.01	1.82	1.90	59.4	40.4	-	0.32	26.7	0.7	-	0.4
KCB	NR08265	252.00	253.50	426012.32	5409724.28	137.97	In-pit Mine Rock	5da	Clastic Metasediment	587708	None	9.00	0.71	0.01	-	0.70	21.9	16.5	-	0.04	3.3	0.8	-	0.2
KCB	NR0514	105.00	106.50	425732.48	5410181.71	269.37	In-pit Mine Rock	5da	Clastic Metasediment	637513	Slight	8.35	1.44	0.03	-	1.41	44.1	21.4	-	0.07	5.8	0.5	-	0.1
KCB	NR0624	130.50	132.00	425725.31	5409574.91	238.06	In-pit Mine Rock	5da	Clastic Metasediment	752808	Slight	9.05	0.96	0.02	-	0.94	29.4	42.4	-	0.38	31.7	1.4	-	1.1
KCB	NR0505	89.50	91.00	425782.57	5409563.28	279.96	In-pit Mine Rock	5dab	Clastic Metasediment	635757	Slight	8.92	1.29	0.03	-	1.26	39.4	37.4	-	0.37	30.8	0.9	-	0.8
KCB	NR0647	245.20	246.50	425772.61	5409621.02	170.11	In-pit Mine Rock	5dab	Clastic Metasediment	764614	None	7.94	0.89	0.01	-	0.88	27.5	9.0	-	0.03	2.5	0.3	-	0.1
AMEC	NR11688	46.00	47.50	425400.07	5410027.21	311	In-pit Mine Rock	5dac	Clastic Metasediment	L032018	Slight	9.28	2.49	<0.01	2.29	2.48	77.5	35.1	-	0.20	16.7	0.5	-	0.2
KCB	NR06112	302.00	303.50	425358.66	5409673.21	96.55	In-pit Mine Rock	5dac	Clastic Metasediment	370079	Slight	8.67	3.11	0.04	-	3.07	95.9	63.5	-	0.74	61.7	0.7	-	0.6
KCB	NR08223	203.00	204.50	425658.41	5409891.66	176.34	In-pit Mine Rock	5dac	Clastic Metasediment	450221	Slight	8.82	2.6	<0.01	-	2.59	80.9	26.2	-	0.1	8.3	0.3	-	0.1
KCB	NR0504	52.50	53.25	425861.56	5410046.19	309.6	In-pit Mine Rock	5dac	Clastic Metasediment	635490	Slight	8.72	0.85	0.03	-	0.82	25.6	37.3	-	0.31	25.8	1.5	-	1.0
KCB	NR0504	271.50	273.00	425762.09	5410151.98	145.22	In-pit Mine Rock	5dac	Clastic Metasediment	635696	Slight	8.60	2.11	0.03	-	2.08	65.0	23.7	-	0.09	7.5	0.4	-	0.1
KCB	NR06101	260.00	260.65	425780.79	5409753.73	160.47	In-pit Mine Rock	5dac	Clastic Metasediment	ALT-09-11	Slight	9.10	1.83	<0.01	-	1.82	56.9	23.8	-	0.07	5.8	0.4	-	0.1
KCB	NR0681	168.00	168.60	426053.24	5409538.17	208.06	In-pit Mine Rock	5dac	Clastic Metasediment	ALT-09-12	None	9.00	0.21	<0.01	-	0.20	6.3	6.8	-	<0.01	<0.8	1.1	-	0.1
KCB	NR0657	373.35	374.00	425767.33	5409653.38	73.47	In-pit Mine Rock	5dac	Clastic Metasediment	ALT-09-15	Slight	9.42	1.47	<0.01	-	1.46	45.6	29.8	-	0.12	10.0	0.7	-	0.2
KCB	NR07157	167.00	167.50	425719.52	5410055.16	208.03	In-pit Mine Rock	5dac	Clastic Metasediment	ALT-09-27	Slight	9.40	1.21	<0.01	-	1.20	37.5	25.0	-	0.08	6.7	0.7	-	0.2
KCB	NR09342	170.00	171.50	425894.66	5409916.99	199.96	In-pit Mine Rock	5dac	Clastic Metasediment	RRR10076	Slight	8.66	0.98	0.03	-	0.95	29.7	39.2	-	0.26	21.7	1.3	-	0.7
KCB	NR0649	132.50	134.00	425511.97	5409508.07	242.29	In-pit Mine Rock	5dad	Clastic Metasediment	761112	Slight	9.53	0.29	0.01	-	0.28	8.8	47.9	-	0.49	40.8	5.5	-	4.7
KCB	NR0649	212.50	214.00	425517.4	5409555.06	177.8	In-pit Mine Rock	5dad	Clastic Metasediment	761172	Slight	9.14	0.29	0.02	-	0.27	8.4	38.6	-	0.33	27.5	4.6	-	3.3
KCB	NR06100	243.00	244.00	425783.46	5409675.44	164.24	In-pit Mine Rock	5daf	Clastic Metasediment	143258	Slight	8.60	2.78	0.04	-	2.74	85.6	55.2	-	0.65	54.2	0.6	-	0.6
KCB	NR07164	102.00	103.50	426162.09	5409626.95	266.98	In-pit Mine Rock	5daf	Clastic Metasediment	223806	Slight	8.56	3.26	0.04	-	3.22	101	38.0	-	0.37	30.8	0.4	-	0.3
KCB	NR07157	238.50	239.50	425719.49	5410098.64	151	In-pit Mine Rock	5daf	Clastic Metasediment	244421	Slight	8.49	2.04	0.04	-	2.00	62.5	28.9	-	0.1	8.3	0.5	-	0.1
KCB	NR0623	289.00	290.50	425531.26	5409716.35	136.76	In-pit Mine Rock	5daf	Clastic Metasediment	342304	None	7.72	0.27	<0.01	-	0.26	8.1	8.4	-	0.14	11.7	1.0	-	1.4
KCB	NR06114	169.40	170.50	425895.08	5409493.78	198.39	In-pit Mine Rock	5daf	Clastic Metasediment	370231	Moderate	8.80	0.81	<0.01	-	0.80	25.0	85.0	-	0.46	38.3	3.4	-	1.5
KCB	NR06114	173.00	174.00	425895.27	5409495.4	195.24	In-pit Mine Rock	5daf	Clastic Metasediment	370232	Slight	8.97	1.07	<0.01	-	1.06	33.1	38.8	-	0.19	15.8	1.2	-	0.5
KCB	NR06114	174.00	175.00	425895.33	5409495.86	194.35	In-pit Mine Rock	5daf	Clastic Metasediment	370233	Slight	8.88	1.17	<0.01	-	1.16	36.3	38.9	-	0.2	16.7	1.1	-	0.5
KCB	NR06114	175.00	176.00	425895.39	5409496.32	193.47	In-pit Mine Rock	5daf	Clastic Metasediment	370234	Moderate	8.74	1	<0.01	-	0.99	30.9	75.7	-	0.32	26.7	2.4	-	0.9
KCB	NR06114	176.00	177.00	425895.44	5409496.78	192.58	In-pit Mine Rock	5daf	Clastic Metasediment	370235	Moderate	8.75	1.02	<0.01	-	1.01	31.6	143	-	0.99	82.5	4.5	-	2.6
KCB	NR06114	177.00	178.00	425895.5	5409497.24	191.7	In-pit Mine Rock	5daf	Clastic Metasediment	370236	Slight	8.77	1.07	0.04	-	1.03	32.2	38.4	-	0.28	23.3	1.2	-	0.7
KCB	NR06114	178.00	179.00	425895.56	5409497.7	190.81	In-pit Mine Rock	5daf	Clastic Metasediment	370237	Slight	9.24	1	<0.01	-	0.99	30.9	29.7	-	0.11	9.2	1.0	-	0.3
KCB	NR06114	179.00	180.00	425895.61	5409498.17	189.92	In-pit Mine Rock	5daf	Clastic Metasediment	370238	Moderate	9.32	0.69	<0.01	-	0.68	21.3	122	-	0.45	37.5	5.8	-	1.8
KCB	NR06114	180.00	181.00	425895.67	5409498.63	189.04	In-pit Mine Rock	5daf	Clastic Metasediment	370239	Slight	9.28	0.91	<0.01	-	0.90	28.1	36.4	-	0.19	15.8	1.3	-	0.6
KCB	NR0660	279.50	281.00	425336.16	5409682.01	92.89	In-pit Mine Rock	5daf	Clastic Metasediment	611164	Slight	8.78	2.2	0.03	-	2.17	67.8	35.1	-	0.18	15.0	0.5	-	0.2
KCB	NR0660	290.00	291.50	425336.21	5409687.14	83.73	In-pit Mine Rock	5daf	Clastic Metasediment	611171	Slight	8.31	3.19	0.03	-	3.16	98.8	29.8	-	0.17	14.2	0.3	-	0.1
KCB	NR0509	121.00	122.50	424902.12	5409805.08	253.14	In-pit Mine Rock	5daf	Clastic Metasediment	636594	Slight	8.79	1.33	<0.01	-	1.32	41.3	72.2	-	0.89	74.2	1.8	-	1.8
KCB	NR0510	49.50	51.00	424906.01	5409840.02	310.54	In-pit Mine Rock	5daf	Clastic Metasediment	636653	Slight	8.83	0.98	<0.01	-	0.97	30.3	87.4	-	1.16	96.7	2.9	-	3.2
KCB	NR0629	80.00	81.50	425001.14	5409766.3	281.39	In-pit Mine Rock	5daf	Clastic Metasediment	750326	Slight	9.57	0.93	<0.01	-	0.92	28.8	80.1	-	1	83.3	2.8	-	2.9
KCB	NR0620	77.00	78.50	425738.27	5409508.61	293.47	In-pit Mine Rock	5daf	Clastic Metasediment	752238	Moderate	8.21	3.68	0.07	-	3.61	113	108	-	0.9	75.0	1.0	-	0.7
KCB	NR0620	85.50	86.50	425737.79	5409514.01	287.25	In-pit Mine Rock	5daf	Clastic Metasediment	752245	Moderate	8.16	5.77	0.12	-	5.65	177	125	-	1.06	88.3	0.7	-	0.5
KCB	NR08317	234.50	235.50	425698.27	5410100.97	156.96	In-pit Mine Rock	5daf	Clastic Metasediment	804881	Slight	8.89	1.11	0.03	-	1.08	33.8	28.6	-	0.14	11.7	0.8	-	0.3
KCB	NR07164	90.60	91.20	426162.62	5409620.91	277.16	In-pit Mine Rock	5daf	Clastic Metasediment	ALT-09-22	Slight	9.37	1.41	<0.01	-	1.40	43.8	43.2	-	0.41	34.2	1.0	-	0.8
AMEC	NR9527	210.95	212.45	425348.19	5409786.71	192.92	In-pit Mine Rock	5dap	Clastic Metasediment	L032181	Moderate	9.41	0.87	<0.01	0.70	0.86	26.9	69.3	-	0.56	46.7	2.6	-	1.7
AMEC	NR9705	55.10	56.60	425350.31	5409738.27	305.88	In-pit Mine Rock	5dap	Clastic Metasediment	L032184	Slight	9.33	0.57	<0.01	0.46	0.56	17.5	63.6	-	0.68	56.7	3.6	-	3.2
AMEC	NR9717	71.00	72.00	425248.48	5409765.76	295.44	In-pit Mine Rock	5dap	Clastic Metasediment	L032188	None	8.27	2.5	0.02	2.39	2.48	77.5	13.8	-	0.07	5.8	0.2	-	0.1
KCB	NR06116	333.00	334.50	425462.77	5409731.11	101.55	In-pit Mine Rock	5dep	Clastic Metasediment	130652	Slight	8.71	1.98	0.03	-	1.95	60.9	32.8	-	0.34	28.3	0.5	-	0.5
AMEC	NR11659	51.50	53.00	424940.41	5409488.26	308.24	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032003	Slight	8.49	5.63	0.02	5.36	5.61	175	166	-	1.55	129	0.9	-	0.7
AMEC	NR11649	96.00	97.50	425090.95	5409673.88	268.93	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032051	Moderate	9.30	0.68	<0.01	0.66	0.67	20.9	126	-	0.98	81.7	6.0	-	3.9

Consultant	HOLE-ID	FROM	TO	Easting	Northing	Elevation	Waste/Ore Classification	Rock Code	Lithology	Sample ID	Fizz Test	Paste pH	Sulphur (as S)				AP	Siderite Corrected NP	Modified Sobek NP	TIC	Carb NP	Siderite Corrected NPR	Modified Sobek NPR	Carb NPR
													S total (S_T)	Sulphate (S_{SO4})	Sulphide [Sobek]	Sulphide [S_T-S_{SO4}]								
		m	m			mASL							%	%	%	%	kg $CaCO_3$/t	kg $CaCO_3$/t	kg $CaCO_3$/t	%	kg $CaCO_3$/t			
AMEC	NR10612	119.00	120.50	425271.12	5409270.42	236.65	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032060	Slight	8.64	9.00	<0.01	8.50	8.99	281	86.5	-	1.58	132	0.3	-	0.5
AMEC	NR10612	128.00	129.50	425271.32	5409273.92	228.36	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032061	Slight	8.52	5.31	<0.01	5.35	5.30	166	188	-	2.09	174	1.1	-	1.1
AMEC	NR10602	76.50	78.00	425323.29	5409304.85	275.8	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032081	Moderate	8.67	8.45	<0.01	8.44	8.44	264	131	-	1.04	86.7	0.5	-	0.3
AMEC	NR10602	91.50	93.00	425323.02	5409309.9	261.68	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032082	Moderate	8.70	8.67	0.01	8.70	8.66	271	200	-	1.85	154	0.7	-	0.6
AMEC	NR10601	69.50	71.00	425324.1	5409428.11	283.75	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032083	Slight	9.50	1.02	<0.01	0.85	1.01	31.6	85.5	-	1.09	90.8	2.7	-	2.9
AMEC	NR10583	240.50	242.00	425785.9	5409385.86	129.06	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032084	Slight	8.93	2.08	<0.01	0.16	2.07	64.7	26.8	-	0.17	14.2	0.4	-	0.2
AMEC	NR10583	281.00	282.50	425789.65	5409402.15	92.18	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032085	Moderate	9.17	1.76	<0.01	0.67	1.75	54.7	140	-	1.31	109	2.6	-	2.0
AMEC	NR10568	109.50	111.00	425519.28	5409280.55	246.51	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032086	Moderate	9.24	0.84	<0.01	0.80	0.83	25.9	113	-	0.80	66.7	4.4	-	2.6
AMEC	NR10568	130.50	132.00	425520.13	5409288.64	227.14	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032087	Moderate	9.52	0.87	<0.01	0.81	0.86	26.9	124	-	1.02	85.0	4.6	-	3.2
AMEC	NR10568	152.20	153.40	425521.18	5409297.13	207.37	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032088	Moderate	8.86	4.42	<0.01	4.37	4.41	138	167	-	1.23	103	1.2	-	0.7
AMEC	NR10569	108.00	109.60	425524.39	5409303.13	248.17	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032091	Moderate	8.86	3.22	0.02	3.08	3.20	100	216	-	2.10	175	2.2	-	1.8
AMEC	NR10569	154.50	156.00	425524.81	5409320.67	205.16	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032092	Moderate	8.85	0.91	<0.01	0.82	0.90	28.1	200	-	1.83	153	7.1	-	5.4
AMEC	NR10569	342.00	343.50	425532.27	5409399.86	35.48	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	L032093	Slight	8.83	1.79	<0.01	0.33	1.78	55.6	53.1	-	0.54	45.0	1.0	-	0.8
AMEC	NR10607	83.00	84.50	425648.17	5409498.89	276.39	In-pit Mine Rock	5	Clastic Metasediment	L032041	Moderate	9.30	0.62	<0.01	0.46	0.61	19.1	103	57.2	0.72	60.0	5.4	4.0	3.1
AMEC	NR09433	155.00	156.15	426009.25	5409769.59	213.74	In-pit Mine Rock	5	Clastic Metasediment	L032187	Slight	9.50	0.88	<0.01	0.62	0.87	27.2	58.5	-	0.46	38.3	2.2	-	1.4
KCB	NR0620	56.50	58.00	425739.49	5409495.22	308.95	In-pit Mine Rock	5	Clastic Metasediment	752224	Slight	9.27	0.12	0.04	-	0.08	2.5	52.1	-	0.64	53.3	20.8	-	21.3
AMEC	NR10608	95.00	96.50	425603.92	5409507.26	266.98	In-pit Mine Rock	6	Chemical Metasediment	L032072	Slight	8.55	1.21	<0.01	0.30	1.20	37.5	60.0	-	0.69	57.5	1.6	-	1.5
AMEC	NR10608	116.00	117.50	425605.8	5409516.97	248.46	In-pit Mine Rock	6	Chemical Metasediment	L032073	Moderate	8.58	2.49	<0.01	1.27	2.48	77.5	166	106	1.37	114	2.1	2.7	1.5
AMEC	NR10608	134.50	136.00	425607.68	5409525.72	232.27	In-pit Mine Rock	6	Chemical Metasediment	L032080	Moderate	8.62	1.99	0.01	1.34	1.98	61.9	172	-	1.35	113	2.8	-	1.8
KCB	NR07190	336.50	338.00	425634.66	5409434.89	59.65	In-pit Mine Rock	6	Chemical Metasediment	335062	Slight	8.47	2.9	0.06	-	2.84	88.8	50.4	-	0.43	35.8	0.6	-	0.4
KCB	NR0675	233.30	233.90	425555.11	5409506.39	180.84	In-pit Mine Rock	6	Chemical Metasediment	ALT-09-02	Moderate	8.68	4.29	0.04	-	4.25	133	327	-	4.1	342	2.5	-	2.6
KCB	NR06129	84.80	85.50	425884.42	5409430.84	272.76	In-pit Mine Rock	6	Chemical Metasediment	ALT-09-14	Moderate	8.83	0.78	0.01	-	0.77	24.1	125	-	0.83	69.2	5.2	-	2.9
KCB	NR07190	329.00	329.70	425633.89	5409430.68	66.29	In-pit Mine Rock	6	Chemical Metasediment	ALT-09-19	Moderate	9.44	0.17	<0.01	-	0.16	5.0	105	-	0.66	55.0	21.0	-	11.0
KCB	NR07176	257.85	258.40	425623.13	5409466.17	138.98	In-pit Mine Rock	6	Chemical Metasediment	ALT-09-23	Slight	9.22	1.72	<0.01	-	1.71	53.4	33.9	-	0.23	19.2	0.6	-	0.4
KCB	NR06114	54.50	55.80	425891.1	5409444.83	302.1	In-pit Mine Rock	6cd	Chemical Metasediment	370211	Slight	8.20	1.56	0.08	-	1.48	46.3	54.0	-	0.48	40.0	1.2	-	0.9
KCB	NR06114	159.50	161.00	425894.56	5409489.37	207.01	In-pit Mine Rock	6cd	Chemical Metasediment	370224	Slight	8.14	2.12	0.06	-	2.06	64.4	36.1	-	0.21	17.5	0.6	-	0.3
KCB	NR06114	165.50	167.00	425894.88	5409492.09	201.68	In-pit Mine Rock	6cd	Chemical Metasediment	370228	Moderate	8.45	0.63	<0.01	-	0.62	19.4	115	-	0.6	50.0	5.9	-	2.6
KCB	NR06114	167.00	168.50	425894.96	5409492.77	200.34	In-pit Mine Rock	6cd	Chemical Metasediment	370229	Moderate	8.46	0.94	<0.01	-	0.93	29.1	103	-	0.59	49.2	3.5	-	1.7
KCB	NR06114	168.50	169.40	425895.02	5409493.32	199.28	In-pit Mine Rock	6cd	Chemical Metasediment	370230	Moderate	8.35	0.97	<0.01	-	0.96	30.0	120	-	0.53	44.2	4.0	-	1.5
KCB	NR0686	80.30	80.96	425531.86	5409384.38	281.94	In-pit Mine Rock	6cd	Chemical Metasediment	ALT-09-03	Moderate	9.05	0.19	0.02	-	0.17	5.3	198	-	2.13	178	37.3	-	33.4
AMEC	NR10486	233.90	234.90	425762.99	5409984.07	147.33	In-pit Mine Rock	7a	Early Mafic to Ultramafic Intrusive	L032095	Moderate	9.22	0.49	<0.01	0.44	0.48	15.0	223	-	2.05	171	14.9	-	11.4
AMEC	NR10469	55.90	57.00	425467.85	5409950.17	302.16	In-pit Mine Rock	7a	Early Mafic to Ultramafic Intrusive	L032169	Moderate	8.83	2.87	<0.01	2.87	2.86	89.4	338	-	3.28	273	3.8	-	3.1
AMEC	NR09357	330.25	331.75	425762.36	5409710.05	95.77	In-pit Mine Rock	7a	Early Mafic to Ultramafic Intrusive	L032170	Moderate	9.55	0.13	0.07	0.02	0.06	1.9	274	-	2.00	167	146	-	88.9
AMEC	NR09377	241.50	242.80	425076.82	5409439.05	142.33	In-pit Mine Rock	7a	Early Mafic to Ultramafic Intrusive	L032171	Moderate	9.38	0.13	<0.01	0.11	0.12	3.8	252	-	2.26	188	67.3	-	50.2
AMEC	NR09406	316.00	317.50	425394.3	5409536.13	62.06	In-pit Mine Rock	7a	Early Mafic to Ultramafic Intrusive	L032222	Moderate	9.00	0.26	<0.01	0.18	0.25	7.8	199	138	1.57	131	25.4	24.6	16.7
AMEC	NR09406	134.60	136.00	425388.33	5409459.4	226.36	In-pit Mine Rock	7a	Early Mafic to Ultramafic Intrusive	L032224	Moderate	8.96	0.73	<0.01	0.68	0.72	22.5	288	-	2.79	233	12.8	-	10.3
AMEC	NR10608	126.50	128.00	425606.84	5409521.92	239.26	In-pit Mine Rock	8	Early Felsic to Intermediate Intrusive	L032074	Slight	9.00	0.02	<0.01	0.01	0.01	0.3	39.1	-	0.28	23.3	125	-	74.7
KCB	NR0689A	357.50	359.00	425439.31	5409466.28	21.27	In-pit Mine Rock	8	Early Felsic to Intermediate Intrusive	123562	Moderate	8.08	3.27	0.1	-	3.17	99.1	190	-	2.11	176	1.9	-	1.8
KCB	NR0689A	359.00	360.50	425439.46	5409467.03	19.98	In-pit Mine Rock	8	Early Felsic to Intermediate Intrusive	123563	Moderate	8.87	0.58	0.07	-	0.51	15.9	171	-	1.68	140	10.8	-	8.8
KCB	NR07199	155.20	156.50	425661.41	5409343.37	209.93	In-pit Mine Rock	8	Early Felsic to Intermediate Intrusive	333472	Slight	9.22	0.47	0.05	-	0.42	13.1	86.4	-	1.02	85.0	6.6	-	6.5
KCB	NR07174	100.50	102.00	425327.28	5409412.94	262.08	In-pit Mine Rock	8	Early Felsic to Intermediate Intrusive	338622	Moderate	9.44	0.08	0.05	-	0.03	0.9	108	-	0.88	73.3	115	-	78.2
AMEC	NR11659	200.00	201.50	424938.82	5409578.74	190.51	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	L032005	Moderate	9.01	0.20	<0.01	0.21	0.19	5.9	177	-	1.52	127	29.8	-	21.3
AMEC	NR11659	210.50	212.00	424938.86	5409585.26	182.28	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	L032006	Slight	9.48	0.14	<0.01	0.12	0.13	4.1	67.9	-	0.74	61.7	16.7	-	15.2
AMEC	NR10607	101.00	102.50	425647.93	5409505.29	259.56	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	L032042	Slight	9.43	0.17	<0.01	0.15	0.16	5.0	26.5	11.8	0.12	10.0	5.3	2.5	2.0
AMEC	NR10607	143.10	144.60	425647.82	5409520.91	220.47	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	L032043	Slight	9.37	0.17	<0.01	0.14	0.16	5.0	74.0	-	0.83	69.2	14.8	-	13.8
AMEC	NR10608	167.00	168.50	425611.44	5409541.34	204.02	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	L032076	Slight	9.16	0.08	<0.01	0.06	0.07	2.2	70.9	-	0.75	62.5	32.4	-	28.6
AMEC	NR10459	133.50	135.00	424928.96	5409650.66	233.67	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	L032150	Slight	9.60	1.21	<0.01	1.00	1.20	37.5	55.8	-	0.60	50.0	1.5	-	1.3
AMEC	NR10457	81.50	83.00	424900.77	5409612.83	276.01	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	L032164	Slight	9.51	2.59	<0.01	2.67	2.58	80.6	53.4	-	0.56	46.7	0.7	-	0.6
AMEC	NR10457	101.00	102.50	424900.5	5409622.75	259.23	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	L032165	Slight	9.64	0.34	<0.01	0.30	0.33	10.3	45.7	-	0.45	37.5	4.4	-	3.6
AMEC	NR10457	116.00	117.50	424900.41	5409630.45	246.36	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	L032166	Slight	9.57	1.63	<0.01	1.50	1.62	50.6	37.6	-	0.34	28.3	0.7	-	0.6
AMEC	NR10459	152.00	153.50	424928.99	5409660.77	218.17	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	L032202	Moderate	9.70	1.50	<0.01	1.30	1.49	46.6	82.9	-	0.67	55.8	1.8	-	1.2
AMEC	NR10459	173.00	174.50	424929.16	5409672.29	200.62	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	L032203	Slight	9.74	0.70	<0.01	0.56	0.69	21.6	50.0	-	0.48	40.0	2.3	-	1.9
AMEC	NR10466	128.00	129.50	424964.02	5409673.11	231.06	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	L032219	Slight	9.84	0.42	<0.01	0.38	0.41	12.8	68.4	61.8	0.79	65.8	5.3	5.2	5.1
KCB	NR08262	174.50	176.00	425330.78	5409548.62	196.17	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	586512	Moderate	9.19	0.36	0.02	-	0.34	10.6	98.3	-	0.67	55.8	9.3	-	5.3
KCB	NR0624	98.50	100.00	425724.58	5409558.01	265.22	In-pit Mine Rock	8d	Early Felsic to Intermediate Intrusive	752785	Slight	8.43	1.19	0.04	-	1.15	35.9	57.7	-	0.53	44.2	1.6	-	1.2
KCB	NR0689A	345.00	345.60	425438.05	5409459.84	32.43	In-pit Mine Rock	8d	Early Felsic to Intermediate Intrusive	ALT-09-04	Slight	9.49	0.57	<0.01	-	0.56	17.5	63.5	-	0.69	57.5	3.6	-	3.3
KCB	NR07190	293.00	293.70	425630.63	5409411.69	96.7	In-pit Mine Rock	8d	Early Felsic to Intermediate Intrusive	ALT-09-20	Slight	9.72	0.47	<0.01	-	0.46	14.4	45.3	-	0.31	25.8	3.2	-	1.8
KCB	NR07190	297.00	297.60	425630.97	5409413.76	93.35	In-pit Mine Rock	8d	Early Felsic to Intermediate Intrusive	ALT-09-21	Slight	9.41	0.21	<0.01	-	0.20	6.3	33.2	-	0.19	15.8	5.3	-	2.5
KCB	NR08221	297.70	299.00	425778.28	5409937.66	100.72	In-pit Mine Rock	8f	Early Felsic to Intermediate Intrusive	450640	Moderate	8.95	0.16	0.05	-	0.11	3.4	109	-	0.53	44.2	31.7	-	12.9
KCB	NR0689A	349.30	349.90	425438.47	5409461.97	28.72	In-pit Mine Rock	8f	Early Felsic to Intermediate Intrusive	ALT-09-05	Moderate	9.41	0.02	<0.01	-	0.01	0.3	71.5	-	0.44	36.7	229	-	117.4
AMEC	NR11659	168.60	170.00	424938.95	5409559.29	215.23	In-pit Mine Rock	9a	Mafic to Ultramafic Intrusive	L032004	Moderate	8.67	0.12	<0.01	0.10	0.11	3.4	200	145	1.77	148	58.3	46.3	42.9
AMEC	NR11639	148.50	150.00	425089.2	5409621.39	225.09	In-pit Mine Rock	9a	Mafic to Ultramafic Intrusive	L032015	Moderate	8.76	0.37	<0.01	0.30	0.36	11.3	205	-	1.58	132	18.3	-	11.7
AMEC	NR10588	350.00	351.50	425687.76	5409516.98	33	In-pit Mine Rock	9a	Mafic to Ultramafic Intrusive	L032106	Moderate	9.24	0.06	<0.01	0.05	0.05	1.6	213	-	1.37	114	136	-	73.1
AMEC	NR10499	142.50	143.90	425192.18	5409838.3	225.04	In-pit Mine Rock	9a	Mafic to Ultramafic Intrusive	L032112	Moderate	8.97	0.68	<0.01	0.70	0.67	20.9	217	-	1.76	147	10.4	-	7.0
AMEC	NR10538	43.00	44.50	425824.72	5410069.25	309.68	In-pit Mine Rock	9a	Mafic to Ultramafic Intrusive	L032151	Slight	9.45	0.05	<0.01	0.03	0.04	1.3	61.1	-	0.41	34.2	48.8	-	27.3
KCB	NR08237	221.70	223.00	425862.98	5409944.81	157.1	In-pit Mine Rock	9a	Mafic to Ultramafic Intrusive	450812	Moderate	8.89	0.05	0.04	-	0.01	0.3	147	-	0.77	64.2	472	-	205
AMEC	NR09354	240.50	242.00	425829.63	5409506.17	142.39	In-pit Mine Rock	9ac	Mafic to Ultramafic Intrusive	L032208	Slight	9.49	0.41	<0.01	0.33	0.40	12.5	47.7	-	0.21	17.5	3.8	-	1.4
AMEC	NR09354	212.00	213.50	425829.37	5409491.66	166.92	In-pit Mine Rock	9ac	Mafic to Ultramafic Intrusive	L032209	Slight	9.52	0.32	<0.01	0.23	0.31	9.7	73.8	-	0.70	58.3	7.6	-	6.0
AMEC	NR09354	197.00	198.50	425829.29	5409484.05	179.84	In-pit Mine Rock	9ac	Mafic to Ultramafic Intrusive	L032210	Slight	9.65	0.30	<0.01	0.25	0.29	9.1	158	-	1.08	90.0	17.4	-	9.9
AMEC	NR09354	137.00	138.50	425829.39	5409453.71	231.6	In-pit Mine Rock	9ac	Mafic to Ultramafic Intrusive	L032211	Slight	9.47	0.18	<0.01	0.13	0.17	5.3	36.4	20.4	0.20	16.7	6.8	5.0	3.1
AMEC	NR09354	120.00	121.50	425829.44	5409445.11	246.26	In-pit Mine Rock	9ac	Mafic to Ultramafic Intrusive	L032212	Slight	9.48	0.39	<0.01	0.36	0.38	11.9	48.2	-	0.26	21.7	4.1	-	1.8
KCB	NR0515	110.64	111.65	425764.75	5410047.5	238.5	In-pit Mine Rock	9ac	Mafic to Ultramafic Intrusive	637704	Moderate	8.68	0.65	0.12	-	0.53	16.6	244	-	2.02	168	14.7	-	10.2
AMEC	NR10608	143.00	144.50	425608.61	5409529.78	224.86	In-pit Mine Rock	10	Felsic to Intermediate Intrusive	L032075	Moderate	9.08	0.63	<0.01	0.59	0.62	19.4	97.8	-	0.84	70.0	5.0	-	3.6
KCB	NR0621	41.60	42.10	425493.07	5409498.27	315.81	In-pit Mine Rock	10a	Felsic to Intermediate Intrusive	751753	Slight	8.81	0.33	0.03	-	0.30	9.4	46.7	-	0.54	45.0	5.0	-	4.8
AMEC	NR10610	51.00	52.50	425349.76	5409097.19	299.42	In-pit Mine Rock	10b	Felsic to Intermediate Intrusive	L032065	Slight	9.08	0.23	<0.01	0.21	0.22	6.9	79.5	-	0.97	80.8	11.6	-	11.8
AMEC	NR10554	31.30	32.60	425274.69	5409630.7	319.7	In-pit Mine Rock	10d	Felsic to Intermediate Intrusive	L032160	Slight	9.93	0.09	<0.01	0.07	0.08	2.5	40.7	30.3	0.36	30.0	16.3	13.8	12.0
KCB	NR07210	180.50	182.10	425810.55	5409993.1	192.62	In-pit Mine Rock	10d	Felsic to Intermediate Intrusive	418082	Moderate	8.98	0.03	0.02	-	0.01	0.3	165	-	0.93	77.5	529	-	248
AMEC	NR11687	85.00	86.50	425339.31	5409947.78	282.54	In-pit Mine Rock	11c	Late Structural Zones	L032020	Slight	9.51	2.04	<0.01	1.89	2.03	63.4	33.7	-	0.29	24.2	0.5	-	0.4
AMEC	NR10588	379.00	380.60	425690.98	5409528.71	6.62	In-pit Mine Rock	11c	Late Structural Zones	L032108	None	8.12	0.45	<0.01	0.40	0.44	13.8	8.2	-	<0.01	<0.8	0.6	-	0.1
AMEC	NR09354	50.00	51.50	425829.61	5409409.88	306.75	In-pit Mine Rock	11c	Late Structural Zones	L032215	Moderate	8.99	1.14	<0.01	1.03	1.13	35.3	101	64.9	0.76	63.3	2.9	2.0	1.8
KCB	NR08318	81.50	83.00	425748.18	5409943.73	276.65	In-pit Mine Rock	11c	Late Structural Zones	803009	Slight	8.20	4.4	0.03	-	4.37	137	29.4	-	0.14	11.7	0.2	-	0.1
AMEC	NR10607	374.10	375.00	425652.65	5409614.44	9.68	In-pit Mine Rock	13	Diabase	L032047	Slight	8.49	0.50	0.16	0.31	0.34	10.6	51.5	-	0.33	27.5	4.8	-	2.6
AMEC	NR09384	17.00	18.70	426100.04	5409416.32	345.41	In-pit Mine Rock	13	Diabase	L032172	None	8.99	0.09	<0.01	0.06	0.08	2.5	19.8	-	0.04	3.3	7.9	-	1.3
AMEC	NR09385	80.00	81.00	426078.77	5409414.39	295.15	In-pit Mine Rock	13	Diabase	L032178	None	9.10	0.13	<0.01	0.10	0.12	3.8	20.0	11.8	0.05	4.2	5.3	3.8	1.1
AMEC	NR11749	280.50	282.00	425242.85	5409433.47	108.02	Ore	2a	Mafic Metavolcanic	L032037	Moderate	8.55	1.49	<0.01	1.45	1.48	46.3	264	-	2.07	173	5.7	-	3.7
KCB	NR06119	84.25	84.95	425396.44	5409361.18	270.37	Ore	2	Mafic Metavolcanic	ALT-09-16	Moderate	9.11	0.16	0.02	-	0.14	4.4	197	-	1.35	113	45.1	-	25.7
KCB	NR07203	163.00	164.50	425422.31	5409331.89	196.4	Ore	2a	Mafic Metavolcanic	331994	Moderate	8.84	0.96	<0.01	-	0.95	29.7	248	-	2.31	193	8.4	-	6.5
KCB	NR07185	30.50	32.00	425495.3	5409364.21	321.99	Ore	2ab	Mafic Metavolcanic	331709	Moderate	8.23	3.64	0.09	-	3.55	111	193	-	2	167	1.7	-	1.5
AMEC	NR10486	113.10	114.50	425762.84	5409921.48	250.4	Ore	3b	Intermediate Metavolcanic	L032094	Slight	8.84	3.03	<0.01	2.91	3.02	94.4	34.2	-	0.15	12.5	0.4	-	0.1
KCB	NR08308	207.50	209.00	426166.33	5409618.01	176.73	Ore	3be	Intermediate Metavolcanic	801034	Slight	8.91	2.3	0.02	-	2.28	71.3	28.9	-	0.23	19.2	0.4	-	0.3
KCB	NR0670	381.50	383.00	425708.48	5409488.28	7.21	Ore	4b	Felsic Metavolcanic	24597	None	7.64	3.64	0.07	-	3.57	112	11.4	-	0.04	3.3	0.1	-	0.0
KCB	NR0670	446.45	447.30	425713.05	5409517.47	-50.26	Ore	4b	Felsic Metavolcanic	24644	Moderate	8.32	2.49	0.11	-	2.38	74.4	273	-	3.15	263	3.7	-	3.5
KCB	NR0685	369.50	371.00	425498.75	5409512.15	7.87	Ore	4b	Felsic Metavolcanic	34666	Slight	9.21	1.72	<0.01	-	1.71	53.4	38.1	-	0.29	24.2	0.7	-	0.5
KCB	NR0689A	400.50	402.00	425443.84	5409488.42	-15.3	Ore	4b	Felsic Metavolcanic	123572	Slight	8.42	1.86	0.04	-	1.82	56.9	36.1	-	0.31	25.8	0.6	-	0.5

Consultant	HOLE-ID	FROM	TO	Easting	Northing	Elevation	Waste/Ore Classification	Rock Code	Lithology	Sample ID	Fizz Test	Paste pH	Sulphur (as S)				AP	Siderite Corrected NP	Modified Sobek NP	TIC	Carb NP	Siderite Corrected NPR	Modified Sobek NPR	Carb NPR
													S total (S_T)	Sulphate (S_{SO4})	Sulphide [Sobek]	Sulphide [S_T-S_{SO4}]								
		m	m			mASL							%	%	%	%	kg $CaCO_3$/t	kg $CaCO_3$/t	kg $CaCO_3$/t	%	kg $CaCO_3$/t			
KCB	NR06107	231.50	233.00	425422.57	5409663.96	156.52	Ore	4b	Felsic Metavolcanic	130078	Moderate	8.95	2.16	<0.01	-	2.15	67.2	84.4	-	0.81	67.5	1.3	-	1.0
KCB	NR07194	161.50	162.40	425364.37	5409279.27	199.16	Ore	4b	Felsic Metavolcanic	414056	Slight	9.09	2.77	<0.01	-	2.76	86.3	90.1	-	1.48	123	1.0	-	1.4
KCB	NR08244	351.50	353.00	425696.15	5409653.77	96.32	Ore	4b	Felsic Metavolcanic	455768	Moderate	8.69	1.44	0.06	-	1.38	43.1	97.9	-	0.58	48.3	2.3	-	1.1
KCB	NR0624	132.80	134.00	425725.36	5409576.05	236.24	Ore	4b	Felsic Metavolcanic	752810	Slight	8.94	1.56	0.04	-	1.52	47.5	56.2	-	0.76	63.3	1.2	-	1.3
KCB	NR0624	134.00	135.50	425725.39	5409576.77	235.1	Ore	4b	Felsic Metavolcanic	752811	Slight	8.33	1.36	0.04	-	1.32	41.3	54.6	-	0.57	47.5	1.3	-	1.2
KCB	NR0624	158.00	159.00	425725.99	5409589.45	215.02	Ore	4b	Felsic Metavolcanic	752830	Slight	8.24	1.47	0.05	-	1.42	44.4	52.3	-	0.41	34.2	1.2	-	0.8
KCB	NR0624	194.00	195.00	425726.96	5409608.88	184.74	Ore	4b	Felsic Metavolcanic	752868	None	7.88	2.02	0.04	-	1.98	61.9	11.8	-	0.07	5.8	0.2	-	0.1
AMEC	NR11687	89.70	91.30	425338.89	5409950.47	278.64	Ore	4c	Felsic Metavolcanic	L032021	Slight	8.89	2.42	<0.01	2.32	2.41	75.3	43.4	-	0.39	32.5	0.6	-	0.4
AMEC	NR11647	78.00	79.00	425324.05	5409760.43	283.36	Ore	4c	Felsic Metavolcanic	L032189	None	8.97	2.25	<0.01	2.21	2.24	70.0	23.2	-	0.25	20.8	0.3	-	0.3
KCB	NR07166	260.00	261.50	426100.85	5409628.8	127.98	Ore	4c	Felsic Metavolcanic	245390	Moderate	9.19	1.64	0.05	-	1.59	49.7	98.3	-	0.45	37.5	2.0	-	0.8
KCB	NR08222	338.00	339.50	425726.45	5409960.54	59.92	Ore	4c	Felsic Metavolcanic	437377	None	8.72	0.87	0.02	-	0.85	26.6	15.5	-	0.06	5.0	0.6	-	0.2
KCB	NR08227	65.50	67.00	425714.44	5409757.1	292.08	Ore	4c	Felsic Metavolcanic	452016	None	8.57	1.32	<0.01	-	1.31	40.9	15.5	-	0.08	6.7	0.4	-	0.2
KCB	NR08227	77.50	79.00	425714.07	5409763.29	281.81	Ore	4c	Felsic Metavolcanic	452024	Slight	7.42	1.5	<0.01	-	1.49	46.6	20.8	-	0.08	6.7	0.4	-	0.1
KCB	NR08227	115.00	116.50	425713.22	5409782.97	249.9	Ore	4c	Felsic Metavolcanic	452050	Moderate	9.04	2.28	0.04	-	2.24	70.0	79.0	-	0.77	64.2	1.1	-	0.9
KCB	NR08265	88.50	90.00	426010.95	5409634.06	274.26	Ore	4c	Felsic Metavolcanic	587608	Slight	8.83	1.78	0.02	-	1.76	55.0	40.3	-	0.38	31.7	0.7	-	0.6
KCB	NR07152	354.00	355.50	425295.91	5409620.59	59.98	Ore	4cb	Felsic Metavolcanic	243135	Slight	8.90	2.35	0.04	-	2.31	72.2	74.1	-	0.89	74.2	1.0	-	1.0
KCB	NR06125	141.50	143.00	426114.74	5409665.5	238.71	Ore	4cf	Felsic Metavolcanic	129754	Slight	9.01	2.17	0.03	-	2.14	66.9	40.7	-	0.27	22.5	0.6	-	0.3
KCB	NR08255	135.50	137.00	425819.19	5409623.55	245.59	Ore	4cf	Felsic Metavolcanic	459029	Slight	9.14	1.01	0.03	-	0.98	30.6	55.1	-	0.62	51.7	1.8	-	1.7
AMEC	NR11754	51.00	52.00	425811.53	5409636.5	307.86	Ore	4cfa	Felsic Metavolcanic	L032029	None	8.63	1.63	<0.01	1.45	1.62	50.6	16.6	-	0.14	11.7	0.3	-	0.2
KCB	NR09414	56.00	57.50	425039.91	5409832.83	301.83	Ore	4cfa	Felsic Metavolcanic	201136	Slight	9.00	1.43	<0.01	-	1.42	44.4	46.2	-	0.44	36.7	1.0	-	0.8
KCB	NR09361	70.20	71.00	425809.61	5410116.79	287.63	Ore	4cfb	Felsic Metavolcanic	201116	None	8.68	1.46	<0.01	-	1.45	45.3	16.1	-	0.04	3.3	0.4	-	0.1
KCB	NR08223	194.00	195.30	425658.49	5409886.37	183.75	Ore	4cfb	Felsic Metavolcanic	450215	Slight	8.78	1.72	<0.01	-	1.71	53.4	31.4	-	0.16	13.3	0.6	-	0.2
KCB	NR08227	328.00	329.50	425711.01	5409901.46	73.03	Ore	4cfb	Felsic Metavolcanic	452177	Slight	8.47	2.35	0.04	-	2.31	72.2	29.2	-	0.09	7.5	0.4	-	0.1
KCB	NR08252	212.50	214.00	425482.33	5409630.6	173.61	Ore	4cfb	Felsic Metavolcanic	457266	Slight	8.68	1.96	0.03	-	1.93	60.3	45.1	-	0.39	32.5	0.7	-	0.5
KCB	NR08262	300.50	302.00	425334.1	5409611	86.75	Ore	4cfb	Felsic Metavolcanic	586554	Slight	8.87	2.49	0.02	-	2.47	77.2	77.6	-	0.89	74.2	1.0	-	1.0
KCB	NR08319	347.00	348.50	425702.32	5410067.84	85.39	Ore	4cfb	Felsic Metavolcanic	805693	Slight	8.08	5.98	0.05	-	5.93	185	36.6	-	0.17	14.2	0.2	-	0.1
KCB	NR09331	72.50	74.00	425682.36	5409758.83	285.94	Ore	4cfb	Felsic Metavolcanic	RRR01811	None	7.73	2.25	0.01	-	2.24	70.0	7.6	-	<0.01	<0.8	0.1	-	0.0
KCB	NR09331	75.50	77.00	425682.26	5409760.39	283.38	Ore	4cfb	Felsic Metavolcanic	RRR01813	None	7.68	3.29	<0.01	-	3.28	103	7.0	-	0.07	5.8	0.1	-	0.1
KCB	NR09331	99.50	101.00	425681.48	5409772.93	262.94	Ore	4cfb	Felsic Metavolcanic	RRR01830	Slight	8.86	1.92	0.03	-	1.89	59.1	41.4	-	0.43	35.8	0.7	-	0.6
KCB	NR08252	217.00	218.50	425482.6	5409633.15	169.91	Ore	4cfc	Felsic Metavolcanic	457269	Slight	8.33	4.82	0.02	-	4.80	150	21.8	-	0.1	8.3	0.1	-	0.1
KCB	NR08252	220.00	221.50	425482.78	5409634.86	167.45	Ore	4cfc	Felsic Metavolcanic	457271	Slight	8.41	3.93	0.02	-	3.91	122	25.5	-	0.09	7.5	0.2	-	0.1
KCB	NR08252	242.50	244.00	425484.3	5409647.82	149.13	Ore	4cfc	Felsic Metavolcanic	457287	Slight	8.10	5.69	0.02	-	5.67	177	20.6	-	0.1	8.3	0.1	-	0.0
KCB	NR08252	248.50	250.00	425484.72	5409651.3	144.25	Ore	4cfc	Felsic Metavolcanic	457291	Slight	8.37	3.12	0.02	-	3.10	96.9	25.4	-	0.12	10.0	0.3	-	0.1
KCB	NR08252	250.00	251.50	425484.83	5409652.17	143.04	Ore	4cfc	Felsic Metavolcanic	457292	Slight	8.63	2.27	0.04	-	2.23	69.7	60.3	-	0.67	55.8	0.9	-	0.8
KCB	NR0686	418.00	419.00	425544.63	5409582.67	9.34	Ore	4cg	Felsic Metavolcanic	123235	None	8.60	1.29	0.03	-	1.26	39.4	20.0	-	0.04	3.3	0.5	-	0.1
KCB	NR07157	103.40	104.50	425720.93	5410018.94	259.92	Ore	4cg	Felsic Metavolcanic	244337	Slight	8.40	2.23	0.02	-	2.21	69.1	22.4	-	0.2	16.7	0.3	-	0.2
KCB	NR07157	131.00	132.50	425720.31	5410034.84	237.13	Ore	4cg	Felsic Metavolcanic	244357	Slight	8.26	2.33	0.03	-	2.30	71.9	22.7	-	0.19	15.8	0.3	-	0.2
AMEC	NR11654	34.50	36.00	425103.52	5409819.66	314.24	Ore	4cga	Felsic Metavolcanic	L032001	Slight	8.87	1.94	<0.01	1.68	1.93	60.3	58.6	-	0.64	53.3	1.0	-	0.9
KCB	NR0686	340.90	342.50	425538.93	5409533.7	68.22	Ore	4cgb	Felsic Metavolcanic	123181	Slight	8.90	1.78	0.04	-	1.74	54.4	50.2	-	0.45	37.5	0.9	-	0.7
KCB	NR09331	335.00	336.50	425673.51	5409909.4	71.41	Ore	4cgb	Felsic Metavolcanic	RRR01966	None	8.36	4.31	0.02	-	4.29	134	16.6	-	0.08	6.7	0.1	-	0.0
KCB	NR09331	111.50	113.00	425681.1	5409779.26	252.75	Ore	5da	Clastic Metasediment	RRR01838	Slight	8.99	2.5	0.03	-	2.47	77.2	46.8	-	0.54	45.0	0.6	-	0.6
KCB	NR09341	162.00	163.00	425759.31	5410021.73	212.36	Ore	5dac	Clastic Metasediment	201113	None	7.22	4.45	0.02	-	4.43	138	18.5	-	0.01	0.8	0.1	-	0.0
KCB	NR06114	245.00	246.00	425900.05	5409529.82	132.2	Ore	5dad	Clastic Metasediment	370287	Slight	8.56	2.21	0.04	-	2.17	67.8	56.3	-	0.64	53.3	0.8	-	0.8
KCB	NR0514	167.00	168.41	425704.46	5410211.83	223.04	Ore	5dad	Clastic Metasediment	637573	Slight	8.64	0.65	0.03	-	0.62	19.4	24.9	-	0.17	14.2	1.3	-	0.7
KCB	NR0689A	414.00	415.50	425445.32	5409495.78	-26.51	Ore	5daf	Clastic Metasediment	123582	Slight	8.32	2.28	0.03	-	2.25	70.3	32.7	-	0.38	31.7	0.5	-	0.5
KCB	NR0689A	421.50	422.90	425446.14	5409499.93	-32.63	Ore	5daf	Clastic Metasediment	123587	Slight	8.53	1.47	0.02	-	1.45	45.3	32.8	-	0.34	28.3	0.7	-	0.6
KCB	NR0689A	462.00	463.50	425450.55	5409523.4	-65.39	Ore	5daf	Clastic Metasediment	123616	None	7.76	2.28	0.01	-	2.27	70.9	8.4	-	0.07	5.8	0.1	-	0.1
KCB	NR06126	99.50	101.00	426164.49	5409668.17	270.55	Ore	5daf	Clastic Metasediment	131243	Slight	8.69	2.56	0.05	-	2.51	78.4	48.8	-	0.35	29.2	0.6	-	0.4
KCB	NR06126	126.50	128.00	426164.6	5409683.94	248.63	Ore	5daf	Clastic Metasediment	131261	Slight	8.50	1.6	0.05	-	1.55	48.4	33.6	-	0.16	13.3	0.7	-	0.3
KCB	NR07173	439.00	440.00	425251.2	5409557.63	-5.82	Ore	5daf	Clastic Metasediment	330216	Slight	9.16	1.7	<0.01	-	1.69	52.8	63.2	-	0.7	58.3	1.2	-	1.1
KCB	NR06114	206.00	207.50	425897.31	5409510.95	165.92	Ore	5daf	Clastic Metasediment	370260	Slight	8.50	1.63	0.05	-	1.58	49.4	35.7	-	0.12	10.0	0.7	-	0.2
KCB	NR06114	249.50	251.00	425900.39	5409532.2	128.1	Ore	5daf	Clastic Metasediment	370291	Slight	8.82	1.3	0.02	-	1.28	40.0	32.4	-	0.47	39.2	0.8	-	1.0
KCB	NR06114	251.00	252.50	425900.5	5409532.95	126.81	Ore	5daf	Clastic Metasediment	370292	Slight	8.52	2.23	0.03	-	2.20	68.8	31.0	-	0.3	25.0	0.5	-	0.4
KCB	NR06114	265.00	266.00	425901.46	5409539.92	114.99	Ore	5daf	Clastic Metasediment	370305	Slight	8.75	2.35	0.04	-	2.31	72.2	65.9	-	0.74	61.7	0.9	-	0.9
KCB	NR0514	54.50	56.20	425755.72	5410158.31	307.46	Ore	5daf	Clastic Metasediment	638667	Slight	8.37	1.92	0.04	-	1.88	58.8	32.4	-	0.29	24.2	0.6	-	0.4
KCB	NR0631	142.50	143.50	424925.49	5409808.1	231.21	Ore	5daf	Clastic Metasediment	750579	Slight	9.05	2.25	<0.01	-	2.24	70.0	67.8	-	0.79	65.8	1.0	-	0.9
KCB	NR0635	78.00	79.50	425039.14	5409790.34	287.74	Ore	5daf	Clastic Metasediment	754751	Slight	9.21	1.62	<0.01	-	1.61	50.3	86.4	-	1.12	93.3	1.7	-	1.9
AMEC	NR10569	93.00	94.20	425524.44	5409297.57	262.32	Ore	5f	Clastic Metasediment/Pyritic Sediment	L032089	Slight	8.54	9.89	0.02	9.33	9.87	308	84.6	-	1.19	99.2	0.3	-	0.3
AMEC	NR10569	94.20	96.00	425524.44	5409298.12	260.92	Ore	5f	Clastic Metasediment/Pyritic Sediment	L032090	Slight	9.36	0.44	<0.01	0.43	0.43	13.4	74.7	-	0.93	77.5	5.6	-	5.8
AMEC	NR10529	177.50	179.00	425741.85	5410166.72	209.15	Ore	5f	Clastic Metasediment/Pyritic Sediment	L032133	Slight	8.10	13.80	0.03	13.20	13.77	430	32.4	-	0.16	13.3	0.1	-	0.0
AMEC	NR10552	261.50	263.00	425630.75	5409919.74	90.6	Ore	5f	Clastic Metasediment/Pyritic Sediment	L032158	None	8.46	5.48	<0.01	4.94	5.47	171	23.7	11.1	0.04	3.3	0.1	0.1	0.0
KCB	NR0686	86.00	87.00	425531.87	5409387.46	276.94	Ore	6cd	Chemical Metasediment	123019	Slight	8.57	4.03	0.08	-	3.95	123	87.7	-	1.47	123	0.7	-	1.0
KCB	NR0651	48.00	49.50	425533.23	5409444.14	317.64	Ore	6ce	Chemical Metasediment	757311	Slight	8.29	1.45	0.19	-	1.26	39.4	202	-	2.12	177	5.1	-	4.5
KCB	NR08315	250.50	252.00	425754.77	5410098.18	136.94	Ore	6	Chemical Metasediment	802817	Slight	6.62	13.7	0.05	-	13.65	427	29.2	-	0.04	3.3	0.1	-	0.0
KCB	NR07199	28.00	29.20	425657.63	5409299.61	329.35	Ore	8	Early Felsic to Intermediate Intrusive	333459	Slight	9.15	1.3	0.06	-	1.24	38.8	138	-	1.58	132	3.6	-	3.4
AMEC	NR11749	37.50	39.00	425248.36	5409306.27	314.89	Ore	11a	Late Structural Zones	L032036	Slight	9.20	0.58	<0.01	0.55	0.57	17.8	86.6	97.9	1.41	118	4.9	5.7	6.6
AMEC	NR11659	236.00	237.50	424939.32	5409601.22	162.4	Outside Pit	2	Mafic Metavolcanic	L032008	Moderate	8.69	<0.01	<0.01	<0.01	<0.01	0.3	197	134	1.64	137	630	447	437
KCB	NR0684	303.50	305.00	425817.62	5409388.53	54.22	Outside Pit	2	Mafic Metavolcanic	34113	Slight	8.27	2.82	0.03	-	2.79	87.2	47.2	-	0.42	35.0	0.5	-	0.4
KCB	NR08256	633.50	635.00	425913.02	5410138.34	-267.08	Outside Pit	2	Mafic Metavolcanic	585564	Slight	7.85	3.81	0.03	-	3.78	118	23.7	-	0.04	3.3	0.2	-	0.0
KCB	NR08315	477.00	478.50	425751.13	5410230.46	-46.85	Outside Pit	2	Mafic Metavolcanic	802975	Slight	8.27	6.11	0.07	-	6.04	189	45.9	-	0.38	31.7	0.2	-	0.2
KCB	NR08222	460.00	461.00	425736.11	5410030.01	-39.57	Outside Pit	6	Chemical Metasediment	437466	Slight	8.23	5.82	0.07	-	5.75	180	38.5	-	0.18	15.0	0.2	-	0.1
KCB	NR08221	458.50	459.50	425785.87	5410045.56	-17.97	Outside Pit	6	Chemical Metasediment	450754	Slight	8.02	10.3	0.06	-	10.24	320	38.6	-	0.27	22.5	0.1	-	0.1
KCB	NR08228	517.00	518.50	425658.22	5410028.07	-70.24	Outside Pit	6	Chemical Metasediment	453279	Moderate	8.28	7.61	0.08	-	7.53	235	171	-	1.29	108	0.7	-	0.5
KCB	NR08224	341.00	342.50	425609.23	5409976.94	65.38	Outside Pit	8	Early Felsic to Intermediate Intrusive	451109	Moderate	9.33	0.39	0.03	-	0.36	11.3	72.3	-	0.59	49.2	6.4	-	4.4
KCB	NR08262	531.50	533.00	425344.35	5409733.53	-108.75	Outside Pit	8	Early Felsic to Intermediate Intrusive	586714	Slight	8.40	2.45	0.03	-	2.42	75.6	43.5	-	0.32	26.7	0.6	-	0.4
KCB	NR09373	479.50	480.80	425171.16	5409323.19	-67.94	Outside Pit	2a	Mafic Metavolcanic	201119	Moderate	9.52	0.76	<0.01	-	0.75	23.4	94.4	-	0.71	59.2	4.0	-	2.5
KCB	NR09398	162.50	164.00	425734.14	5409197.31	198.19	Outside Pit	2a	Mafic Metavolcanic	201127	Slight	8.65	2.9	<0.01	-	2.89	90.3	86.4	-	1.36	113	1.0	-	1.3
KCB	NR09403	195.50	197.00	425761.55	5409196.45	164.47	Outside Pit	2a	Mafic Metavolcanic	201129	Moderate	8.89	0.25	<0.01	-	0.24	7.5	227	-	2.24	187	30.3	-	24.9
KCB	NR09407	87.50	89.00	425786.52	5409139.56	267.28	Outside Pit	2a	Mafic Metavolcanic	201133	Moderate	9.07	0.86	<0.01	-	0.85	26.6	124	-	0.72	60.0	4.6	-	2.3
KCB	NR08271	580.50	582.00	425266.46	5409326.8	-127.64	Outside Pit	2a	Mafic Metavolcanic	732293	Moderate	8.26	2.21	<0.01	-	2.20	68.8	93.2	-	0.39	32.5	1.4	-	0.5
KCB	NR09403	162.50	164.00	425759.17	5409185.04	195.34	Outside Pit	2ae	Mafic Metavolcanic	201128	Slight	8.44	2.23	<0.01	-	2.22	69.4	34.2	-	0.2	16.7	0.5	-	0.2
KCB	NR09407	191.00	192.50	425789.62	5409182.12	172.99	Outside Pit	2ba	Mafic Metavolcanic	201131	Moderate	8.44	4.21	0.02	-	4.19	131	192	-	1.39	116	1.5	-	0.9
KCB	NR07212	381.50	383.00	425752.57	5410109.24	28.82	Outside Pit	2c	Mafic Metavolcanic	418460	Slight	8.40	3.48	0.05	-	3.43	107	48.4	-	0.35	29.2	0.5	-	0.3
AMEC	NR10471	110.00	111.50	424942.32	5409386.19	250.75	Outside Pit	2ce	Mafic Metavolcanic	L032142	Slight	8.95	0.59	<0.01	0.53	0.58	18.1	48.9	-	0.35	29.2	2.7	-	1.6
AMEC	NR10471	134.00	135.50	424942.86	5409398.66	230.25	Outside Pit	2ce	Mafic Metavolcanic	L032143	Moderate	9.38	1.46	<0.01	1.44	1.45	45.3	137	104	1.29	108	3.0	2.3	2.4
AMEC	NR10471	164.00	165.50	424943.84	5409414.64	204.89	Outside Pit	2ce	Mafic Metavolcanic	L032145	Slight	9.78	1.71	<0.01	1.59	1.70	53.1	72.0	61.1	0.78	65.0	1.4	1.2	1.2
KCB	NR09338	188.00	189.50	425522.93	5410257.34	205.74	Outside Pit	3a	Intermediate Metavolcanic	201108	Slight	8.00	5.74	0.03	-	5.71	178	43.2	-	0.32	26.7	0.2	-	0.1
KCB	NR09338	176.00	177.50	425522.46	5410249.44	214.76	Outside Pit	3a	Intermediate Metavolcanic	201109	Slight	9.02	1.11	<0.01	-	1.10	34.4	46.3	-	0.39	32.5	1.3	-	0.9
KCB	NR08263	485.00	486.50	425263.31	5409808.48	-50.78	Outside Pit	3a	Intermediate Metavolcanic	588630	Slight	9.00	0.59	0.01	-	0.58	18.1	28.6	-	0.17	14.2	1.6	-	0.8
KCB	NR08263	515.00	516.50	425266.18	5409826.85	-74.33	Outside Pit	3a	Intermediate Metavolcanic	588650	Slight	8.71	1.27	0.02	-	1.25	39.1	31.5	-	0.22	18.3	0.8	-	0.5
KCB	NR08313	596.00	597.50	425267.99	5409956.69	-130.13	Outside Pit	3a	Intermediate Metavolcanic	803855	Slight	8.52	3.35	0.06	-	3.29	103	89.0	-	1.26	105	0.9	-	1.0
KCB	NR09342	503.00	504.50	425888.47	5410100.9	-77.28	Outside Pit	3a	Intermediate Metavolcanic	RRR10355	Slight	8.43	3.46	0.04	-	3.42	107	45.6	-	0.36	30.0	0.4	-	0.3
KCB	NR09322	296.80	297.90	425490.84	5410328.28	123.47	Outside Pit	3b	Intermediate Metavolcanic	201101	Moderate	7.82	11.3	0.05	-	11.25	352	88.3	-	0.49	40.8	0.3	-	0.1
KCB	NR08224	294.50	296.00	425607.6	5409948.7	102.29	Outside Pit	3b	Intermediate Metavolcanic	451089	Slight	9.14	1.16	<0.01	-	1.15	35.9	25.8	-	0.06	5.0	0.7	-	0.1

Consultant	HOLE-ID	FROM	TO	Easting	Northing	Elevation	Waste/Ore Classification	Rock Code	Lithology	Sample ID	Fizz Test	Paste pH	Sulphur (as S)				AP	Siderite Corrected NP	Modified Sobek NP	TIC	Carb NP	Siderite Corrected NPR	Modified Sobek NPR	Carb NPR
													S total (S_T)	Sulphate (S_{SO4})	Sulphide [Sobek]	Sulphide [S_T-S_{SO4}]								
		m	m			mASL							%	%	%	%	kg $CaCO_3$/t	kg $CaCO_3$/t	kg $CaCO_3$/t	%	kg $CaCO_3$/t			
KCB	NR08242	635.50	637.00	425915.09	5410084.75	-178.46	Outside Pit	3b	Intermediate Metavolcanic	454890	Slight	7.87	3.24	0.06	-	3.18	99.4	27.9	-	0.03	2.5	0.3	-	0.0
KCB	NR08265	540.00	541.50	426022.74	5409901.96	-88.3	Outside Pit	3b	Intermediate Metavolcanic	587856	Slight	8.26	5.12	0.03	-	5.09	159	22.7	-	0.08	6.7	0.1	-	0.0
KCB	NR08265	633.00	634.50	426030	5409962.04	-158.9	Outside Pit	3b	Intermediate Metavolcanic	587926	Slight	9.46	0.28	<0.01	-	0.27	8.4	28.1	-	0.11	9.2	3.3	-	1.1
KCB	NR08310	238.90	240.50	426002.22	5409942.46	150.66	Outside Pit	3b	Intermediate Metavolcanic	801337	Slight	8.99	0.21	<0.01	-	0.20	6.3	46.3	-	0.26	21.7	7.4	-	3.5
KCB	NR09386	368.00	369.50	425460.33	5409399.1	7.33	Outside Pit	3ba	Intermediate Metavolcanic	201126	Moderate	9.01	0.29	<0.01	-	0.28	8.8	179	-	1.51	126	20.4	-	14.4
KCB	NR08252	628.00	629.50	425519.6	5409888.31	-149.7	Outside Pit	3be	Intermediate Metavolcanic	457556	Slight	8.78	1.32	0.02	-	1.30	40.6	25.6	-	0.16	13.3	0.6	-	0.3
KCB	NR08252	632.50	634.00	425520.09	5409891.34	-153	Outside Pit	3be	Intermediate Metavolcanic	457559	Slight	8.97	0.99	0.02	-	0.97	30.3	29.6	-	0.17	14.2	1.0	-	0.5
AMEC	NR11658	113.00	114.50	424078.51	5410542.47	270.39	Outside Pit	4a	Felsic Metavolcanic	L032016	Slight	9.65	0.12	<0.01	0.10	0.11	3.4	59.2	-	0.59	49.2	17.2	-	14.3
KCB	NR0684	908.00	909.50	425861.6	5409597.25	-509.38	Outside Pit	4a	Felsic Metavolcanic	34370	Slight	8.60	1.83	0.02	-	1.81	56.6	30.2	-	0.12	10.0	0.5	-	0.2
KCB	NR0684	1008.50	1010.00	425871.96	5409647.73	-595.64	Outside Pit	4a	Felsic Metavolcanic	34439	Slight	8.92	0.45	0.01	-	0.44	13.8	29.0	-	0.1	8.3	2.1	-	0.6
KCB	NR08237	321.50	323.30	425859.59	5409998.14	72.53	Outside Pit	4a	Felsic Metavolcanic	450882	Slight	8.75	1.42	0.02	-	1.40	43.8	24.3	-	0.14	11.7	0.6	-	0.3
KCB	NR08242	547.30	548.50	425914.26	5410027.29	-111.38	Outside Pit	4a	Felsic Metavolcanic	454827	Slight	8.87	0.59	0.03	-	0.56	17.5	35.6	-	0.26	21.7	2.0	-	1.2
KCB	NR08242	629.50	631.00	425915.14	5410080.84	-173.92	Outside Pit	4a	Felsic Metavolcanic	454885	Slight	9.17	0.31	0.01	-	0.30	9.4	17.6	-	0.05	4.2	1.9	-	0.4
KCB	NR0684	966.50	968.00	425867.55	5409626.28	-559.81	Outside Pit	4aa	Felsic Metavolcanic	34411	None	8.30	1.05	0.01	-	1.04	32.5	11.7	-	0.02	1.7	0.4	-	0.1
KCB	NR08229	308.50	310.00	425605.52	5409899.65	92.04	Outside Pit	4aa	Felsic Metavolcanic	416957	Slight	8.57	3.28	0.02	-	3.26	102	23.9	-	0.05	4.2	0.2	-	0.0
KCB	NR08252	566.50	568.00	425512.91	5409847.45	-104.24	Outside Pit	4aa	Felsic Metavolcanic	457512	Slight	8.64	1.38	0.03	-	1.35	42.2	21.4	-	0.13	10.8	0.5	-	0.3
KCB	NR08252	583.00	584.50	425514.71	5409858.3	-116.53	Outside Pit	4aa	Felsic Metavolcanic	457524	Slight	8.76	1.33	0.03	-	1.30	40.6	31.3	-	0.19	15.8	0.8	-	0.4
KCB	NR08252	593.50	595.00	425515.85	5409865.26	-124.31	Outside Pit	4aa	Felsic Metavolcanic	457531	Slight	8.75	1.34	0.03	-	1.31	40.9	28.3	-	0.15	12.5	0.7	-	0.3
KCB	NR0512	68.80	69.30	424131.75	5410512.29	301.61	Outside Pit	4aa	Felsic Metavolcanic	638478	None	6.30	2.14	0.02	-	2.12	66.3	5.5	-	<0.01	<0.8	0.1	-	0.0
KCB	NR0512	114.20	115.35	424131.83	5410542.82	267.59	Outside Pit	4aa	Felsic Metavolcanic	638517	Slight	8.93	1.13	0.02	-	1.11	34.7	77.0	-	1.04	86.7	2.2	-	2.5
KCB	NR0684	788.00	789.00	425850.33	5409542.82	-402.78	Outside Pit	4ab	Felsic Metavolcanic	34318	Slight	8.97	1.25	0.03	-	1.22	38.1	40.9	-	0.3	25.0	1.1	-	0.7
KCB	NR0684	836.00	837.50	425854.69	5409563.88	-445.95	Outside Pit	4ab	Felsic Metavolcanic	34330	Slight	8.55	1.16	0.02	-	1.14	35.6	32.6	-	0.18	15.0	0.9	-	0.4
KCB	NR0670	479.00	480.50	425715.84	5409532.87	-79.17	Outside Pit	4b	Felsic Metavolcanic	24670	Slight	8.76	2.26	0.02	-	2.24	70.0	39.0	-	0.29	24.2	0.6	-	0.3
KCB	NR0670	501.50	503.00	425717.85	5409543.6	-98.84	Outside Pit	4b	Felsic Metavolcanic	24685	Slight	8.86	0.77	0.02	-	0.75	23.4	32.2	-	0.19	15.8	1.4	-	0.7
KCB	NR07153	580.00	581.50	425251.79	5409754.47	-120.53	Outside Pit	4b	Felsic Metavolcanic	244693	Slight	8.49	0.49	0.02	-	0.47	14.7	24.6	-	0.12	10.0	1.7	-	0.7
KCB	NR07167	347.00	348.50	426075.16	5409687.06	63.56	Outside Pit	4b	Felsic Metavolcanic	338506	Slight	8.85	0.13	0.02	-	0.11	3.4	25.8	-	0.13	10.8	7.5	-	3.1
KCB	NR07206	487.50	489.00	425300.27	5409467.77	-86.31	Outside Pit	4b	Felsic Metavolcanic	339618	Slight	8.83	0.96	<0.01	-	0.95	29.7	32.5	-	0.13	10.8	1.1	-	0.4
KCB	NR07218	357.50	359.00	425714.2	5410018.67	37.89	Outside Pit	4b	Felsic Metavolcanic	435951	None	8.51	2.44	0.03	-	2.41	75.3	14.5	-	0.03	2.5	0.2	-	0.0
KCB	NR08242	463.50	465.00	425912.24	5409973.54	-47.33	Outside Pit	4b	Felsic Metavolcanic	454797	Slight	9.07	0.59	0.02	-	0.57	17.8	25.4	-	0.07	5.8	1.4	-	0.3
KCB	NR08313	483.50	485.00	425266.34	5409885.36	-43.15	Outside Pit	4b	Felsic Metavolcanic	803776	Slight	9.37	0.49	0.03	-	0.46	14.4	46.3	-	0.41	34.2	3.2	-	2.4
KCB	NR06109	557.00	557.60	425407.01	5409852.5	-110.48	Outside Pit	4b	Felsic Metavolcanic	ALT-09-07	None	9.31	1.77	<0.01	-	1.76	55.0	12.8	-	0.03	2.5	0.2	-	0.0
KCB	NR06119	569.00	570.00	425434.1	5409582.42	-158.16	Outside Pit	4b	Felsic Metavolcanic	ALT-09-17	Moderate	9.39	2.1	<0.01	-	2.09	65.3	71.5	-	0.47	39.2	1.1	-	0.6
KCB	NR07148	565.10	565.70	425509.27	5409744.01	-131.29	Outside Pit	4b	Felsic Metavolcanic	ALT-09-26	Slight	9.42	2.48	<0.01	-	2.47	77.2	31.9	-	0.21	17.5	0.4	-	0.2
KCB	NR0659	329.27	329.85	425367.67	5409750.97	73.88	Outside Pit	4b	Felsic Metavolcanic	ALT-09-28	Moderate	9.53	1.21	<0.01	-	1.20	37.5	69.1	-	0.56	46.7	1.8	-	1.2
AMEC	NR11738	123.00	133.50	425869.12	5409239.75	229.97	Outside Pit	4c	Felsic Metavolcanic	L032027	Slight	9.05	0.56	<0.01	0.47	0.55	17.2	42.3	-	0.32	26.7	2.5	-	1.6
AMEC	NR11647	199.80	201.30	425324.09	5409835.01	186.8	Outside Pit	4c	Felsic Metavolcanic	L032054	Slight	9.36	2.42	<0.01	2.29	2.41	75.3	58.0	-	0.34	28.3	0.8	-	0.4
AMEC	NR11647	225.50	227.00	425323.99	5409850.77	166.5	Outside Pit	4c	Felsic Metavolcanic	L032055	Slight	9.38	2.23	<0.01	2.31	2.22	69.4	27.8	-	0.16	13.3	0.4	-	0.2
AMEC	NR10625	49.50	51.00	425113.36	5409023.2	301.96	Outside Pit	4c	Felsic Metavolcanic	L032057	Moderate	9.33	0.27	<0.01	0.29	0.26	8.1	275	-	2.97	248	33.8	-	30.5
AMEC	NR11635	42.00	43.50	424999.2	5409070.32	311.92	Outside Pit	4c	Felsic Metavolcanic	L032059	Slight	9.50	0.12	<0.01	0.12	0.11	3.4	85.0	-	1.24	103	24.7	-	30.1
KCB	NR09410	142.50	144.00	424692.06	5409938.31	236.05	Outside Pit	4c	Felsic Metavolcanic	201134	Slight	9.20	1.08	<0.01	-	1.07	33.4	179	-	2.18	182	5.3	-	5.4
KCB	NR09439	440.50	442.00	425136.82	5409357.66	-30.14	Outside Pit	4c	Felsic Metavolcanic	201140	Slight	9.13	2.57	<0.01	-	2.56	80.0	50.2	-	0.52	43.3	0.6	-	0.5
KCB	NR08224	434.00	435.50	425612.91	5410036.19	-6.16	Outside Pit	4c	Felsic Metavolcanic	451174	Slight	8.54	2.21	0.03	-	2.18	68.1	32.8	-	0.19	15.8	0.5	-	0.2
KCB	NR08242	218.50	220.00	425908.18	5409836.11	154.95	Outside Pit	4c	Felsic Metavolcanic	454692	Slight	8.77	2.19	0.03	-	2.16	67.5	28.0	-	0.08	6.7	0.4	-	0.1
KCB	NR08242	272.00	273.00	425909.69	5409863.27	109.17	Outside Pit	4c	Felsic Metavolcanic	454735	Slight	8.78	1.71	0.04	-	1.67	52.2	29.7	-	0.09	7.5	0.6	-	0.1
KCB	NR08242	356.00	357.30	425912.08	5409908.14	38.09	Outside Pit	4c	Felsic Metavolcanic	454765	None	8.92	0.61	0.03	-	0.58	18.1	16.8	-	0.05	4.2	0.9	-	0.2
KCB	NR08242	367.00	368.50	425912.2	5409914.67	29.12	Outside Pit	4c	Felsic Metavolcanic	454773	None	8.42	0.99	0.02	-	0.97	30.3	13.4	-	<0.01	0.4	0.4	-	0.0
KCB	NR08262	429.50	431.00	425339.47	5409678	-23.33	Outside Pit	4c	Felsic Metavolcanic	586642	Slight	8.67	2.63	0.02	-	2.61	81.6	35.0	-	0.25	20.8	0.4	-	0.3
KCB	NR08262	552.50	554.00	425345.43	5409745.11	-126.24	Outside Pit	4c	Felsic Metavolcanic	586728	None	8.18	1.39	0.01	-	1.38	43.1	10.6	-	0.01	0.8	0.2	-	0.0
KCB	NR08265	301.50	303.00	426013.41	5409753.24	97.85	Outside Pit	4c	Felsic Metavolcanic	587743	None	8.70	1.54	0.02	-	1.52	47.5	18.6	-	0.05	4.2	0.4	-	0.1
KCB	NR08281	324.50	326.00	425880.65	5409827.34	105.94	Outside Pit	4c	Felsic Metavolcanic	731368	None	8.63	3.71	0.01	-	3.70	116	14.6	-	0.05	4.2	0.1	-	0.0
KCB	NR08281	377.00	378.50	425882.09	5409863.5	67.91	Outside Pit	4c	Felsic Metavolcanic	731405	Slight	8.68	1.76	0.03	-	1.73	54.1	30.5	-	0.11	9.2	0.6	-	0.2
KCB	NR08281	396.50	398.00	425882.6	5409877.02	53.87	Outside Pit	4c	Felsic Metavolcanic	731414	Slight	8.67	1.09	0.02	-	1.07	33.4	30.1	-	0.14	11.7	0.9	-	0.3
KCB	NR09326	614.00	615.50	425638.77	5410162.46	-137.86	Outside Pit	4c	Felsic Metavolcanic	RRR01774	Slight	8.15	3.55	0.67	-	2.88	90.0	37.3	-	0.36	30.0	0.4	-	0.3
AMEC	NR10508	165.00	166.50	425124.35	5409139.63	193.49	Outside Pit	4ca	Felsic Metavolcanic	L032123	Slight	9.75	0.17	<0.01	0.15	0.16	5.0	82.8	-	1.24	103	16.6	-	20.7
AMEC	NR10471	168.50	170.00	424944.05	5409417.07	201.11	Outside Pit	4ca	Felsic Metavolcanic	L032134	Moderate	9.81	1.40	<0.01	1.33	1.39	43.4	118	-	0.97	80.8	2.7	-	1.9
AMEC	NR10526	33.00	34.50	425058.28	5409023.78	315.96	Outside Pit	4ca	Felsic Metavolcanic	L032135	Slight	9.48	0.63	<0.01	0.52	0.62	19.4	61.1	-	0.79	65.8	3.2	-	3.4
AMEC	NR10471	101.00	102.50	424942.16	5409381.59	258.48	Outside Pit	4ca	Felsic Metavolcanic	L032141	Slight	9.61	1.95	<0.01	1.74	1.94	60.6	65.5	-	0.77	64.2	1.1	-	1.1
AMEC	NR10582	545.00	546.50	425568.25	5409443.32	-54.02	Outside Pit	4ca	Felsic Metavolcanic	L032168	Slight	9.39	1.16	<0.01	0.93	1.15	35.9	47.3	-	0.39	32.5	1.3	-	0.9
KCB	NR09373	579.00	580.50	425180.73	5409386.48	-144.23	Outside Pit	4ca	Felsic Metavolcanic	201118	Slight	9.03	0.25	<0.01	-	0.24	7.5	43.8	-	0.47	39.2	5.8	-	5.2
KCB	NR09377	510.00	511.50	425084.31	5409597.23	-74.43	Outside Pit	4ca	Felsic Metavolcanic	201124	Slight	9.20	1.05	<0.01	-	1.04	32.5	70.1	-	0.83	69.2	2.2	-	2.1
KCB	NR09383	666.00	667.50	425410.76	5409498.56	-201.62	Outside Pit	4ca	Felsic Metavolcanic	201125	Slight	8.58	1.84	<0.01	-	1.83	57.2	29.9	-	0.16	13.3	0.5	-	0.2
KCB	NR09425	64.50	66.00	424494.71	5409808.88	298.33	Outside Pit	4ca	Felsic Metavolcanic	201137	None	8.10	1.72	<0.01	-	1.71	53.4	12.6	-	0.27	22.5	0.2	-	0.4
KCB	NR07211	393.50	395.00	425722.81	5410109.35	15.45	Outside Pit	4ca	Felsic Metavolcanic	435214	Moderate	7.98	11	0.09	-	10.91	341	98.9	-	0.65	54.2	0.3	-	0.2
KCB	NR08237	350.00	351.50	425858.57	5410013.61	48.79	Outside Pit	4ca	Felsic Metavolcanic	450903	Moderate	8.73	0.74	0.04	-	0.70	21.9	82.7	-	0.33	27.5	3.8	-	1.3
KCB	NR08237	407.00	408.50	425856.31	5410045.16	1.38	Outside Pit	4ca	Felsic Metavolcanic	450942	Moderate	8.62	1.05	0.03	-	1.02	31.9	56.0	-	0.31	25.8	1.8	-	0.8
KCB	NR08227	442.00	443.50	425706.07	5409970.37	-17.6	Outside Pit	4ca	Felsic Metavolcanic	452257	Slight	8.56	2.15	0.03	-	2.12	66.3	25.7	-	0.08	6.7	0.4	-	0.1
KCB	NR08235	143.50	144.50	424823.87	5409730.32	223.3	Outside Pit	4ca	Felsic Metavolcanic	452843	Moderate	8.75	1.9	<0.01	-	1.89	59.1	94.4	-	1.16	96.7	1.6	-	1.6
KCB	NR08236	151.00	152.00	424762.19	5409738.37	218.06	Outside Pit	4ca	Felsic Metavolcanic	453328	Slight	8.86	1.47	<0.01	-	1.46	45.6	72.4	-	0.9	75.0	1.6	-	1.6
KCB	NR08230	329.50	331.00	425567.39	5409913.67	75.19	Outside Pit	4ca	Felsic Metavolcanic	454191	None	8.15	2.17	0.03	-	2.14	66.9	15.5	-	0.01	0.8	0.2	-	0.0
KCB	NR08230	448.50	450.00	425576.04	5409986.34	-18.61	Outside Pit	4ca	Felsic Metavolcanic	454259	None	8.26	2.85	0.02	-	2.83	88.4	14.8	-	0.02	1.7	0.2	-	0.0
KCB	NR08230	484.00	485.50	425579.67	5410008.66	-45.97	Outside Pit	4ca	Felsic Metavolcanic	454285	Slight	8.82	1.77	0.03	-	1.74	54.4	38.7	-	0.26	21.7	0.7	-	0.4
KCB	NR08242	569.50	571.00	425914.82	5410041.8	-128.37	Outside Pit	4ca	Felsic Metavolcanic	454845	Slight	9.09	1.06	0.03	-	1.03	32.2	41.3	-	0.27	22.5	1.3	-	0.7
KCB	NR08252	658.00	659.50	425522.85	5409908.54	-171.62	Outside Pit	4ca	Felsic Metavolcanic	457577	None	8.53	2.76	0.01	-	2.75	85.9	9.9	-	0.04	3.3	0.1	-	0.0
KCB	NR08252	734.50	736.00	425531.33	5409960.38	-227.23	Outside Pit	4ca	Felsic Metavolcanic	457630	Slight	8.23	2.15	0.04	-	2.11	65.9	24.0	-	0.12	10.0	0.4	-	0.2
KCB	NR08256	305.00	306.50	425913.43	5410048.04	48.74	Outside Pit	4ca	Felsic Metavolcanic	585332	Slight	8.85	1.06	0.02	-	1.04	32.5	38.6	-	0.28	23.3	1.2	-	0.7
KCB	NR08265	340.50	342.00	426014.34	5409776.8	66.79	Outside Pit	4ca	Felsic Metavolcanic	587772	None	8.92	0.6	0.01	-	0.59	18.4	16.5	-	0.03	2.5	0.9	-	0.1
KCB	NR08271	615.00	616.50	425269.44	5409349.37	-153.55	Outside Pit	4ca	Felsic Metavolcanic	732317	Slight	8.85	0.79	<0.01	-	0.78	24.4	36.6	-	0.23	19.2	1.5	-	0.8
KCB	NR08310	194.00	195.50	426001.43	5409915.88	186.89	Outside Pit	4ca	Felsic Metavolcanic	801306	Slight	8.55	0.46	<0.01	-	0.45	14.1	37.9	-	0.21	17.5	2.7	-	1.2
KCB	NR09320	446.00	447.50	425783.03	5410160.02	-15.02	Outside Pit	4ca	Felsic Metavolcanic	RRR01265	None	7.13	8.38	0.03	-	8.35	261	6.1	-	0.04	3.3	0.0	-	0.0
KCB	NR09331	405.50	407.00	425672.66	5409953.72	16.6	Outside Pit	4ca	Felsic Metavolcanic	RRR03016	Slight	8.01	4.34	0.03	-	4.31	135	20.1	-	0.08	6.7	0.1	-	0.0
KCB	NR09336	630.50	632.00	425592.87	5410149.87	-142.37	Outside Pit	4ca	Felsic Metavolcanic	RRR06384	Slight	9.06	1.91	0.03	-	1.88	58.8	59.0	-	0.65	54.2	1.0	-	0.9
AMEC	NR10471	159.50	161.00	424943.64	5409412.22	208.67	Outside Pit	4cb	Felsic Metavolcanic	L032144	Slight	9.74	1.51	<0.01	1.43	1.50	46.9	91.0	-	1.18	98.3	1.9	-	2.1
KCB	NR06122	374.00	375.50	425729.72	5409429.18	16.97	Outside Pit	4cb	Felsic Metavolcanic	370954	Slight	8.62	1.82	0.02	-	1.80	56.3	36.0	-	0.34	28.3	0.6	-	0.5
KCB	NR08316	285.50	287.00	425690.55	5410172.88	104.01	Outside Pit	4cb	Felsic Metavolcanic	804567	Slight	8.92	2.39	0.03	-	2.36	73.8	37.9	-	0.36	30.0	0.5	-	0.4
KCB	NR08316	305.00	306.50	425690.64	5410184.12	88.07	Outside Pit	4cb	Felsic Metavolcanic	804580	Slight	8.67	3.22	0.03	-	3.19	99.7	28.3	-	0.14	11.7	0.3	-	0.1
KCB	NR08316	492.50	494.00	425696.71	5410301.24	-58.11	Outside Pit	4cb	Felsic Metavolcanic	804708	Slight	8.60	2.47	0.06	-	2.41	75.3	64.8	-	0.71	59.2	0.9	-	0.8
KCB	NR0684	570.00	571.50	425833.86	5409463.02	-201.03	Outside Pit	4cf	Felsic Metavolcanic	34267	None	8.10	0.28	<0.01	-	0.27	8.4	9.9	-	<0.01	<0.8	1.2	-	0.1
KCB	NR07153	488.50	490.00	425249.21	5409694.25	-51.69	Outside Pit	4cf	Felsic Metavolcanic	244631	Slight	9.16	0.51	0.01	-	0.50	15.6	14.3	-	0.03	2.5	0.9	-	0.2
KCB	NR07174	496.50	498.00	425343.43	5409639.33	-62.13	Outside Pit	4cf	Felsic Metavolcanic	338747	Slight	8.95	1.46	0.02	-	1.44	45.0	24.4	-	0.17	14.2	0.5	-	0.3
KCB	NR09333	420.50	422.00	425815.13	5410008.14	-2.32	Outside Pit	4cf	Felsic Metavolcanic	RRR04250	Slight	8.25	3.46	0.02	-	3.44	108	25.8	-	0.11	9.2	0.2	-	0.1
AMEC	NR11738	87.00	88.40	425868.91	5409222.95	266.87	Outside Pit	4cfa	Felsic Metavolcanic	L032025	Slight	8.82	1.06	<0.01	0.96	1.05	32.8	88.0	-	1.06	88.3	2.7	-	2.7
AMEC	NR11754	339.00	339.80	425810.19	5409814.68	81.85	Outside Pit	4cfa	Felsic Metavolcanic	L032032	Slight	8.74	0.55	<0.01	0.50	0.54	16.9	34.4	-	0.07	5.8	2.0	-	0.3
AMEC	NR11754	344.00	345.00	425810.29	5409817.97	77.95	Outside Pit	4cfa	Felsic Metavolcanic	L032033	Slight	8.69	1.37	<0.01	1.26	1.36	42.5	35.1	-	0.18	15.0	0.8	-	0.4
AMEC	NR10508	22.00	23.50	425122.92	5409088.89	327.14	Outside Pit	4cfa	Felsic Metavolcanic	L032113	Slight	9.44	0.37	<0.01	0.36	0.36	11.3	65.8	-	0.89	74.2	5.9	-	6.6

Consultant	HOLE-ID	FROM	TO	Easting	Northing	Elevation	Waste/Ore Classification	Rock Code	Lithology	Sample ID	Fizz Test	Paste pH	Sulphur (as S)				AP	Siderite Corrected NP	Modified Sobek NP	TIC	Carb NP	Siderite Corrected NPR	Modified Sobek NPR	Carb NPR
													S total (S_T)	Sulphate (S_{SO4})	Sulphide [Sobek]	Sulphide [S_T-S_{SO4}]								
		m	m			mASL							%	%	%	%	kg $CaCO_3$/t	kg $CaCO_3$/t	kg $CaCO_3$/t	%	kg $CaCO_3$/t			
AMEC	NR10508	39.00	40.50	425122.93	5409094.33	311.03	Outside Pit	4cfa	Felsic Metavolcanic	L032114	Slight	9.43	0.19	<0.01	0.17	0.18	5.6	49.5	-	0.57	47.5	8.8	-	8.4
AMEC	NR10508	54.00	55.30	425122.98	5409099.29	296.98	Outside Pit	4cfa	Felsic Metavolcanic	L032115	Slight	9.55	0.30	<0.01	0.28	0.29	9.1	85.0	-	1.69	141	9.4	-	15.5
AMEC	NR10508	69.00	70.50	425123.06	5409104.47	282.8	Outside Pit	4cfa	Felsic Metavolcanic	L032116	Slight	9.58	0.18	<0.01	0.17	0.17	5.3	84.4	-	1.44	120	15.9	-	22.6
AMEC	NR10531	165.00	166.30	425227.45	5409155.82	192.61	Outside Pit	4cfa	Felsic Metavolcanic	L032131	Slight	9.83	0.07	<0.01	0.08	0.06	1.9	86.1	-	1.34	112	45.9	-	59.6
KCB	NR08235	272.00	273.50	424826.16	5409799	114.43	Outside Pit	4cfa	Felsic Metavolcanic	452894	Slight	8.68	2.6	<0.01	-	2.59	80.9	76.0	-	0.87	72.5	0.9	-	0.9
KCB	NR09335	390.80	392.00	425871.58	5409942.13	16.48	Outside Pit	4cfa	Felsic Metavolcanic	RRR05608	Slight	9.10	0.53	0.02	-	0.51	15.9	29.2	-	0.16	13.3	1.8	-	0.8
KCB	NR09356	485.60	486.50	425682.67	5409870.37	7.66	Outside Pit	4cfb	Felsic Metavolcanic	201114	None	8.78	1.02	<0.01	-	1.01	31.6	20.8	-	0.03	2.5	0.7	-	0.1
KCB	NR09377	441.00	442.50	425080.78	5409554.73	-20.19	Outside Pit	4cfb	Felsic Metavolcanic	201123	Slight	8.23	2.66	0.02	-	2.64	82.5	36.4	-	0.28	23.3	0.4	-	0.3
KCB	NR09425	206.70	208.50	424512.93	5409906.07	194.03	Outside Pit	4cfb	Felsic Metavolcanic	201138	Moderate	9.25	1.31	<0.01	-	1.30	40.6	110	-	0.99	82.5	2.7	-	2.0
KCB	NR09377	441.00	442.50	425080.78	5409554.73	-20.19	Outside Pit	4cfb	Felsic Metavolcanic	201143	Slight	8.24	2.56	0.02	-	2.54	79.4	36.8	-	0.29	24.2	0.5	-	0.3
KCB	NR07200	732.00	733.50	425439.77	5409553.86	-297.49	Outside Pit	4cfb	Felsic Metavolcanic	337174	Slight	8.84	0.59	<0.01	-	0.58	18.1	26.2	-	0.08	6.7	1.4	-	0.4
KCB	NR07206	558.70	560.00	425308.52	5409504.57	-146.58	Outside Pit	4cfb	Felsic Metavolcanic	339671	Slight	9.50	2.38	<0.01	-	2.37	74.1	54.0	-	0.54	45.0	0.7	-	0.6
KCB	NR07206	660.00	661.80	425320.91	5409558.42	-231.78	Outside Pit	4cfb	Felsic Metavolcanic	339742	Moderate	9.32	2.1	<0.01	-	2.09	65.3	143	-	1.15	95.8	2.2	-	1.5
KCB	NR08237	327.50	329.00	425859.39	5410001.32	67.62	Outside Pit	4cfb	Felsic Metavolcanic	450886	Slight	9.18	0.7	0.03	-	0.67	20.9	38.5	-	0.28	23.3	1.8	-	1.1
KCB	NR08227	466.00	467.50	425704.64	5409985.39	-36.26	Outside Pit	4cfb	Felsic Metavolcanic	452274	Slight	8.61	1.81	0.02	-	1.79	55.9	23.3	-	0.07	5.8	0.4	-	0.1
KCB	NR08230	421.00	422.00	425573.56	5409969.01	2.91	Outside Pit	4cfb	Felsic Metavolcanic	454237	Slight	8.68	1.38	0.03	-	1.35	42.2	28.8	-	0.15	12.5	0.7	-	0.3
KCB	NR08230	457.00	458.50	425576.87	5409991.67	-25.18	Outside Pit	4cfb	Felsic Metavolcanic	454266	Slight	8.70	2.06	0.03	-	2.03	63.4	34.2	-	0.2	16.7	0.5	-	0.3
KCB	NR08242	362.50	364.00	425912.15	5409912	32.74	Outside Pit	4cfb	Felsic Metavolcanic	454770	None	8.50	1.08	0.03	-	1.05	32.8	14.0	-	0.03	2.5	0.4	-	0.1
KCB	NR08253	309.50	311.00	425514.64	5409753.03	91.54	Outside Pit	4cfb	Felsic Metavolcanic	457146	None	8.27	3.42	0.02	-	3.40	106	15.6	-	0.03	2.5	0.1	-	0.0
KCB	NR08252	472.00	473.50	425502.91	5409787	-32.3	Outside Pit	4cfb	Felsic Metavolcanic	457446	Slight	9.01	2.86	0.03	-	2.83	88.4	41.0	-	0.39	32.5	0.5	-	0.4
AMEC	NR10492	269.00	270.50	425595.24	5410078.2	132.5	Outside Pit	4cg	Felsic Metavolcanic	L032100	None	8.95	2.90	<0.01	2.77	2.89	90.3	15.8	-	0.04	3.3	0.2	-	0.0
KCB	NR0684	507.50	508.80	425829.38	5409443.88	-141.6	Outside Pit	4cg	Felsic Metavolcanic	34231	Slight	8.76	3	0.02	-	2.98	93.1	36.2	-	0.26	21.7	0.4	-	0.2
KCB	NR08224	383.00	384.50	425611.21	5410003.06	32.56	Outside Pit	4cg	Felsic Metavolcanic	451139	Slight	8.37	3.49	0.03	-	3.46	108	28.3	-	0.1	8.3	0.3	-	0.1
AMEC	NR10610	219.00	220.50	425349.26	5409155.9	142.04	Outside Pit	4cga	Felsic Metavolcanic	L032070	Moderate	8.88	1.20	<0.01	0.90	1.19	37.2	215	-	1.99	166	5.8	-	4.5
AMEC	NR10531	96.00	96.50	425225.66	5409131.27	257.49	Outside Pit	4cga	Felsic Metavolcanic	L032128	Slight	9.60	0.08	<0.01	0.06	0.07	2.2	171	-	1.86	155	78.1	-	70.9
KCB	NR0684	930.50	931.50	425863.83	5409608.1	-528.67	Outside Pit	4cga	Felsic Metavolcanic	34386	None	7.40	1.7	0.05	-	1.65	51.6	13.5	-	0.02	1.7	0.3	-	0.0
KCB	NR07187	814.00	815.00	425330.91	5409777.8	-312.94	Outside Pit	4cga	Felsic Metavolcanic	334857	None	8.08	4.06	0.02	-	4.04	126	13.9	-	0.19	15.8	0.1	-	0.1
AMEC	NR10531	44.50	46.00	425225.02	5409114.47	305.64	Outside Pit	4cgb	Felsic Metavolcanic	L032126	Moderate	9.38	1.36	<0.01	1.32	1.35	42.2	114	-	0.84	70.0	2.7	-	1.7
KCB	NR09439	610.00	611.50	425169.17	5409457.37	-163.31	Outside Pit	4cgb	Felsic Metavolcanic	201141	Slight	9.49	0.11	<0.01	-	0.10	3.1	31.7	-	0.17	14.2	10.1	-	4.5
KCB	NR08227	412.00	413.50	425707.71	5409951.83	5.92	Outside Pit	4cgb	Felsic Metavolcanic	452235	Slight	9.06	0.52	<0.01	-	0.51	15.9	25.2	-	0.13	10.8	1.6	-	0.7
KCB	NR08252	515.50	517.00	425507.48	5409814.63	-65.59	Outside Pit	4cgb	Felsic Metavolcanic	457476	Slight	8.90	1.99	0.02	-	1.97	61.6	24.3	-	0.14	11.7	0.4	-	0.2
KCB	NR08259	35.00	36.50	426277.93	5409144.47	325.92	Outside Pit	4cgb	Felsic Metavolcanic	587102	Slight	8.25	1.78	<0.01	-	1.77	55.3	27.3	-	0.07	5.8	0.5	-	0.1
KCB	NR08265	451.50	453.00	426018.14	5409845.57	-20.25	Outside Pit	4cgb	Felsic Metavolcanic	587793	Slight	8.78	0.71	0.02	-	0.69	21.6	21.5	-	0.05	4.2	1.0	-	0.2
KCB	NR08271	112.50	114.00	425239.76	5409050.04	248.09	Outside Pit	4cgb	Felsic Metavolcanic	732050	Moderate	8.60	2.17	<0.01	-	2.16	67.5	157	-	2	167	2.3	-	2.5
KCB	NR09323	464.00	465.50	425688.2	5410022.53	-47.49	Outside Pit	4cgb	Felsic Metavolcanic	RRR00963	Slight	8.08	5.39	0.04	-	5.35	167	37.6	-	0.36	30.0	0.2	-	0.2
KCB	NR09332	515.00	516.50	425745.05	5410029.22	-68.19	Outside Pit	4d	Felsic Metavolcanic	RRR05312	Slight	8.71	1.95	0.04	-	1.91	59.7	32.8	-	0.13	10.8	0.5	-	0.2
AMEC	NR10610	124.50	126.00	425349.58	5409122.13	230.28	Outside Pit	5b	Clastic Metasediment	L032068	Moderate	8.68	0.37	<0.01	0.36	0.36	11.3	186	155	1.87	156	16.5	13.8	13.9
AMEC	NR10508	114.00	115.50	425123.52	5409120.56	240.78	Outside Pit	5b	Clastic Metasediment	L032119	Moderate	9.69	0.29	<0.01	0.28	0.28	8.8	135	-	0.91	75.8	15.4	-	8.7
AMEC	NR11640	230.00	231.50	425374.78	5409857.44	169.6	Outside Pit	5ce	Clastic Metasediment	L032056	Slight	9.32	2.50	<0.01	2.49	2.49	77.8	34.0	-	0.24	20.0	0.4	-	0.3
AMEC	NR10610	78.00	79.50	425349.7	5409106.34	274.02	Outside Pit	5ce	Clastic Metasediment	L032066	Slight	8.77	1.16	<0.01	1.04	1.15	35.9	67.3	-	0.72	60.0	1.9	-	1.7
AMEC	NR10531	100.00	101.20	425225.76	5409132.76	253.41	Outside Pit	5ce	Clastic Metasediment	L032129	Slight	9.64	1.22	<0.01	1.13	1.21	37.8	92.6	-	1.94	162	2.4	-	4.3
KCB	NR07205	452.50	454.00	425190.63	5409730.61	-29.42	Outside Pit	5da	Clastic Metasediment	414678	Slight	8.92	2.14	0.02	-	2.12	66.3	21.3	-	0.14	11.7	0.3	-	0.2
KCB	NR08221	426.50	428.00	425783.99	5410023.85	5.11	Outside Pit	5da	Clastic Metasediment	450731	Slight	8.87	2.4	0.02	-	2.38	74.4	29.2	-	0.23	19.2	0.4	-	0.3
KCB	NR08265	597.00	598.50	426027.19	5409938.62	-131.71	Outside Pit	5da	Clastic Metasediment	587898	Slight	8.48	2.6	0.02	-	2.58	80.6	19.9	-	0.06	5.0	0.2	-	0.1
KCB	NR0512	130.00	131.50	424132.15	5410553.63	255.83	Outside Pit	5da	Clastic Metasediment	638531	Slight	9.35	1.1	0.03	-	1.07	33.4	84.5	-	1.46	122	2.5	-	3.6
AMEC	NR11754	353.00	354.00	425810.47	5409823.79	71.09	Outside Pit	5dac	Clastic Metasediment	L032034	Slight	8.58	2.25	<0.01	2.22	2.24	70.0	22.2	-	0.08	6.7	0.3	-	0.1
AMEC	NR10508	88.00	89.50	425123.21	5409111.16	265.02	Outside Pit	5dac	Clastic Metasediment	L032117	Slight	9.38	1.00	<0.01	0.96	0.99	30.9	92.4	-	2.03	169	3.0	-	5.5
AMEC	NR10508	105.00	106.50	425123.4	5409117.27	249.15	Outside Pit	5dac	Clastic Metasediment	L032118	Moderate	9.33	0.95	<0.01	0.92	0.94	29.4	241	213	3.18	265	8.2	7.4	9.0
AMEC	NR10508	135.00	136.50	425123.82	5409128.32	221.27	Outside Pit	5dac	Clastic Metasediment	L032121	Moderate	9.86	0.22	<0.01	0.08	0.21	6.6	147	-	1.74	145	22.4	-	22.1
AMEC	NR10508	152.00	153.50	425124.12	5409134.69	205.51	Outside Pit	5dac	Clastic Metasediment	L032122	Slight	9.30	2.32	<0.01	2.22	2.31	72.2	91.8	-	1.40	117	1.3	-	1.6
KCB	NR07152	579.00	580.50	425293.18	5409774.27	-104.13	Outside Pit	5dac	Clastic Metasediment	243545	Slight	8.49	2.03	0.02	-	2.01	62.8	20.5	-	0.11	9.2	0.3	-	0.1
KCB	NR08264	339.30	341.00	425245.92	5409780.76	61.89	Outside Pit	5dac	Clastic Metasediment	588216	Moderate	8.97	2.24	0.02	-	2.22	69.4	76.1	-	0.56	46.7	1.1	-	0.7
KCB	NR08263	389.00	390.50	425255.07	5409750.42	25.22	Outside Pit	5dac	Clastic Metasediment	588564	Slight	9.30	0.49	0.02	-	0.47	14.7	21.0	-	0.11	9.2	1.4	-	0.6
KCB	NR06106	444.50	446.00	425444.85	5409721.76	-19.85	Outside Pit	5daf	Clastic Metasediment	143928	Slight	8.21	2.86	0.03	-	2.83	88.4	18.7	-	0.16	13.3	0.2	-	0.2
KCB	NR07203	569.50	571.00	425434.08	5409525.09	-160.12	Outside Pit	5daf	Clastic Metasediment	337391	Slight	9.22	1.26	<0.01	-	1.25	39.1	26.5	-	0.09	7.5	0.7	-	0.2
KCB	NR07209	562.00	563.50	425227.67	5409496.07	-148.95	Outside Pit	5daf	Clastic Metasediment	415113	Slight	9.23	2.64	<0.01	-	2.63	82.2	82.5	-	0.96	80.0	1.0	-	1.0
KCB	NR08252	424.00	425.50	425498.47	5409756.68	4.64	Outside Pit	5daf	Clastic Metasediment	457413	Slight	8.82	2.04	0.03	-	2.01	62.8	25.7	-	0.09	7.5	0.4	-	0.1
KCB	NR08264	402.50	404.00	425248.51	5409817.32	10.53	Outside Pit	5daf	Clastic Metasediment	588259	Slight	9.28	0.45	0.02	-	0.43	13.4	24.6	-	0.14	11.7	1.8	-	0.9
KCB	NR08264	407.00	408.50	425248.75	5409819.94	6.88	Outside Pit	5daf	Clastic Metasediment	588262	Slight	9.02	0.53	0.02	-	0.51	15.9	32.9	-	0.35	29.2	2.1	-	1.8
KCB	NR07146	351.50	353.00	425417.87	5409842.74	65.34	Outside Pit	5dafp	Clastic Metasediment	223374	Slight	8.70	1.84	0.02	-	1.82	56.9	29.6	-	0.33	27.5	0.5	-	0.5
KCB	NR08262	482.00	483.50	425342.01	5409706.43	-67.39	Outside Pit	5dd	Clastic Metasediment	586678	Slight	8.63	1.86	0.02	-	1.84	57.5	20.6	-	0.27	22.5	0.4	-	0.4
AMEC	NR10613	192.25	193.75	425274.85	5409244.37	165.98	Outside Pit	5f	Clastic Metasediment/Pyritic Sediment	L032064	Slight	8.53	4.27	<0.01	3.76	4.26	133	83.7	-	1.08	90.0	0.6	-	0.7
AMEC	NR10546	187.50	189.00	425527.15	5409213.92	171.68	Outside Pit	5f	Clastic Metasediment/Pyritic Sediment	L032152	Moderate	8.38	1.98	0.76	1.21	1.22	38.1	177	-	1.50	125	4.6	-	3.3
AMEC	NR10546	208.50	210.00	425527.45	5409221.52	152.11	Outside Pit	5f	Clastic Metasediment/Pyritic Sediment	L032153	Moderate	8.69	7.03	0.01	6.59	7.02	219	183	-	1.81	151	0.8	-	0.7
AMEC	NR10562	263.00	264.00	425628.02	5409891.53	85.94	Outside Pit	5f	Clastic Metasediment/Pyritic Sediment	L032156	Slight	9.22	1.68	<0.01	1.55	1.67	52.2	26.2	-	0.11	9.2	0.5	-	0.2
AMEC	NR10562	282.50	284.00	425628.63	5409893.58	66.31	Outside Pit	5f	Clastic Metasediment/Pyritic Sediment	L032157	Slight	8.68	7.07	0.01	7.21	7.06	221	55.1	-	0.46	38.3	0.2	-	0.2
KCB	NR09342	420.50	422.00	425889.25	5410052.63	-10.38	Outside Pit	5f	Clastic Metasediment/Pyritic Sediment	RRR10249	Slight	8.02	6.43	0.05	-	6.38	199	39.4	-	0.28	23.3	0.2	-	0.1
AMEC	NR10610	106.50	108.00	425349.65	5409115.99	247.2	Outside Pit	6a	Chemical Metasediment	L032067	Slight	7.95	7.17	0.03	6.73	7.14	223	51.1	-	0.56	46.7	0.2	-	0.2
KCB	NR0684	999.50	1001.00	425871.04	5409643.09	-587.99	Outside Pit	6cd	Chemical Metasediment	34433	Slight	6.42	14.8	0.37	-	14.43	451	23.1	-	0.08	6.7	0.1	-	0.0
KCB	NR0640	120.50	122.00	425881.85	5411131.44	265.41	Outside Pit	6cd	Chemical Metasediment	758756	Moderate	8.12	3.81	0.07	-	3.74	117	145	-	1.02	85.0	1.2	-	0.7
KCB	NR09338	243.50	245.00	425526.23	5410293.89	164.11	Outside Pit	6d	Chemical Metasediment	201110	Slight	9.38	0.67	<0.01	-	0.66	20.6	49.5	-	0.48	40.0	2.4	-	1.9
AMEC	NR11659	218.00	219.50	424938.94	5409589.94	176.42	Outside Pit	8c	Early Felsic to Intermediate Intrusive	L032007	Slight	9.37	0.14	<0.01	0.11	0.13	4.1	73.3	-	0.77	64.2	18.1	-	15.8
KCB	NR09407	209.00	210.50	425790.59	5409189.62	156.66	Outside Pit	8c	Early Felsic to Intermediate Intrusive	201132	Moderate	9.06	2.05	<0.01	-	2.04	63.8	143	-	0.71	59.2	2.2	-	0.9
KCB	NR08242	448.50	449.50	425912.14	5409964.02	-35.41	Outside Pit	8c	Early Felsic to Intermediate Intrusive	454791	Slight	9.27	0.31	0.04	-	0.27	8.4	46.4	-	0.36	30.0	5.5	-	3.6
KCB	NR08242	501.50	503.00	425912.9	5409997.69	-76.65	Outside Pit	8c	Early Felsic to Intermediate Intrusive	454809	Slight	8.28	2.12	0.03	-	2.09	65.3	28.8	-	0.13	10.8	0.4	-	0.2
KCB	NR08221	473.00	474.50	425786.85	5410055.67	-28.66	Outside Pit	8d	Early Felsic to Intermediate Intrusive	450765	Slight	8.92	1.4	0.02	-	1.38	43.1	30.3	-	0.13	10.8	0.7	-	0.3
KCB	NR08265	588.00	589.50	426026.45	5409932.8	-124.88	Outside Pit	8d	Early Felsic to Intermediate Intrusive	587891	Slight	8.39	2.35	0.02	-	2.33	72.8	26.2	-	0.11	9.2	0.4	-	0.1
KCB	NR08265	621.00	622.50	426029.07	5409954.21	-149.86	Outside Pit	8d	Early Felsic to Intermediate Intrusive	587916	Slight	8.92	0.8	0.01	-	0.79	24.7	27.4	-	0.16	13.3	1.1	-	0.5
KCB	NR09403	92.00	93.50	425754.93	5409161.32	261.59	Outside Pit	8g	Early Felsic to Intermediate Intrusive	201130	Moderate	9.37	0.31	<0.01	-	0.30	9.4	87.8	-	0.63	52.5	9.4	-	5.6
AMEC	NR10531	39.00	40.40	425224.99	5409112.7	310.9	Outside Pit	9a	Mafic to Ultramafic Intrusive	L032125	Slight	8.94	0.02	<0.01	<0.01	0.01	0.3	32.7	-	0.10	8.3	105	-	26.7
AMEC	NR10531	205.00	206.50	425228.43	5409170.2	155.2	Outside Pit	9a	Mafic to Ultramafic Intrusive	L032132	Moderate	9.21	0.12	<0.01	0.09	0.11	3.4	313	-	2.93	244	91.1	-	71.0
AMEC	NR11738	111.40	112.90	425869.03	5409232.99	244.58	Outside Pit	10b	Felsic to Intermediate Intrusive	L032026	Slight	9.07	0.47	<0.01	0.43	0.46	14.4	66.7	-	0.72	60.0	4.6	-	4.2
AMEC	NR10508	120.10	121.50	425123.6	5409122.78	235.15	Outside Pit	10b	Felsic to Intermediate Intrusive	L032120	Slight	9.56	0.24	0.1	0.13	0.14	4.4	70.3	64.9	0.79	65.8	16.1	16.0	15.0
AMEC	NR10508	187.40	189.00	425124.73	5409148.32	172.79	Outside Pit	10b	Felsic to Intermediate Intrusive	L032124	Slight	9.74	0.19	<0.01	0.18	0.18	5.6	74.7	-	0.96	80.0	13.3	-	14.2
AMEC	NR10531	80.00	81.50	425225.36	5409126.05	272.08	Outside Pit	10b	Felsic to Intermediate Intrusive	L032127	Slight	9.77	0.30	0.01	0.28	0.29	9.1	80.0	-	1.12	93.3	8.8	-	10.3
AMEC	NR10531	127.20	128.30	425226.39	5409142.35	228.01	Outside Pit	10b	Felsic to Intermediate Intrusive	L032130	Slight	9.76	0.29	<0.01	0.27	0.28	8.8	72.1	-	0.91	75.8	8.2	-	8.7
KCB	NR0684	1023.00	1024.30	425873.29	5409655.22	-607.87	Outside Pit	10d	Felsic to Intermediate Intrusive	34450	Slight	8.39	1.01	0.02	-	0.99	30.9	21.7	-	0.08	6.7	0.7	-	0.2
KCB	NR08251	578.20	579.50	425692.39	5409861.56	-69.42	Outside Pit	10e	Felsic to Intermediate Intrusive	456806	Moderate	8.43	0.18	0.18	-	<0.01	0.3	151	-	1.07	89.2	482	-	285
AMEC	NR10610	205.50	207.00	425349.23	5409150.99	154.6	Outside Pit	11a	Late Structural Zones	L032069	Slight	8.86	2.12	<0.01	1.33	2.11	65.9	80.1	-	0.96	80.0	1.2	-	1.2
AMEC	NR11734	47.50	48.80	425874.5	5409025.3	303.07	Outside Pit	11c	Late Structural Zones	L032035	None	8.47	0.30	<0.01	0.27	0.29	9.1	17.3	-	0.06	5.0	1.9	-	0.6
AMEC	NR11754	320.60	321.60	425809.88	5409802.87	95.82	Outside Pit	13	Diabase	L032031	Slight	8.63	0.13	<0.01	0.09	0.12	3.8	40.8	18.3	0.16	13.3	10.9	6.5	3.6
AMEC	NR10561	297.50	299.50	425680.37	5409897.03	50.97	Outside Pit	13	Diabase	L032155	Slight	9.08	0.09	<0.01	0.07	0.08	2.5	37.6	-	0.13	10.8	15.0	-	4.3
KCB	NR08231	434.60	436.00	425496.56	5409988.82	-2.14	Outside Pit	13	Diabase	452360	None	8.79	0.12	0.04	-	0.08	2.5	19.2	-	0.03	2.5	7.7	-	1.0
KCB	NR08259	45.50	47.00	426277.34	5409149.65	316.81	Outside Pit	13	Diabase	587109	Slight	8.48	0.1	<0.01	-	0.09	2.8	35.8	-	0.05	4.2	12.7	-	1.5

Consultant	Sample ID	HOLE-ID	FROM	TO	Easting	Northing	Elevation	Ore/Waste Classification	Rock Code	Lithology	NAG pH after reaction	Vol. of 0.1 N NaOH		NAG (kg H_2SO_4/tonne)	
			m	m			mASL					to pH 4.5	to pH 7.0	to pH 4.5	to pH 7.0
AMEC	L032146	NR10459	96.50	98.00	424929.58	5409630.58	264.73	In-pit Mine Rock	2	Mafic Metavolcanic	6.23	-	1.45	-	2.84
AMEC	L032147	NR10459	110.00	111.50	424929.26	5409637.89	253.39	In-pit Mine Rock	2	Mafic Metavolcanic	7.07	-	-	-	-
AMEC	L032148	NR10459	125.10	126.50	424929.03	5409646.06	240.75	In-pit Mine Rock	2	Mafic Metavolcanic	7.28	-	-	-	-
AMEC	L032149	NR10459	131.00	132.50	424928.98	5409649.3	235.76	In-pit Mine Rock	2	Mafic Metavolcanic	8.11	-	-	-	-
KCB	33969	NR0682	355.50	356.60	425471.64	5409454.38	18.24	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	34069	NR0684	83.50	84.50	425812.47	5409339.82	268.93	In-pit Mine Rock	2	Mafic Metavolcanic	6.80	-	0.05	-	0.1
KCB	34089	NR0684	258.50	260.00	425815.89	5409378.09	97.96	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	123521	NR0689A	156.50	158.00	425427.24	5409377.98	201.03	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	142502	NR06103	88.60	89.55	425802.1	5409485.61	267.95	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	142504	NR06103	93.40	95.05	425802.01	5409487.67	263.23	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	243561	NR07148	11.00	12.50	425477.03	5409463.98	344.6	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	370771	NR06119	310.00	311.00	425408.04	5409453.46	64.7	In-pit Mine Rock	2	Mafic Metavolcanic	7.85	-	-	-	-
KCB	370915	NR06122	195.50	197.00	425706.11	5409349.09	174.57	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	612377	NR0666	186.50	188.00	425655.56	5409466.69	187.47	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	612385	NR0666	211.00	212.00	425656.51	5409477.27	165.68	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	752730	NR0624	25.00	26.50	425723.21	5409519.82	328.01	In-pit Mine Rock	2	Mafic Metavolcanic	6.45	-	0.10	-	0.2
KCB	752739	NR0624	37.50	39.00	425723.41	5409526.28	317.3	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	752766	NR0624	72.50	74.00	425724.06	5409544.44	287.4	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	764208	NR0644	18.50	20.00	425626.14	5409463.41	341.79	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	764219	NR0644	34.50	35.90	425625.97	5409473.97	329.84	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	803501	NR08313	28.00	30.00	425269.33	5409617.94	324.95	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	803507	NR08313	78.50	80.00	425267.51	5409645.84	283.2	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	ALT-09-06	NR0655	186.45	187.00	425679.6	5409505.9	217.89	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	ALT-09-13	NR06131A	27.40	28.10	425383.72	5409468.54	330.9	In-pit Mine Rock	2	Mafic Metavolcanic	**2.48**	**10.55**	**12.75**	**20.7**	**25.0**
KCB	ALT-09-24	NR07187	92.20	92.80	425320.05	5409351.76	266.4	In-pit Mine Rock	2	Mafic Metavolcanic					
KCB	ALT-09-25	NR08313	53.00	53.60	425268.4	5409631.38	304.73	In-pit Mine Rock	2	Mafic Metavolcanic					
AMEC	L032010	NR11644	122.00	123.50	425163.14	5409640.47	252.12	In-pit Mine Rock	2a	Mafic Metavolcanic	6.41	-	1.20	-	2.35
AMEC	L032012	NR11639	125.00	126.50	425089.07	5409608.01	244.41	In-pit Mine Rock	2a	Mafic Metavolcanic	6.79	-	0.20	-	0.39
AMEC	L032013	NR11639	130.00	131.50	425089.13	5409610.85	240.3	In-pit Mine Rock	2a	Mafic Metavolcanic	6.83	-	0.10	-	0.20
AMEC	L032028	NR11730	49.20	51.00	425868.69	5409152.19	300.73	In-pit Mine Rock	2a	Mafic Metavolcanic	6.90	-	0.15	-	0.29
AMEC	L032038	NR11749	327.00	328.50	425244.57	5409460.03	69.89	In-pit Mine Rock	2a	Mafic Metavolcanic	5.81	-	1.75	-	3.43
AMEC	L032044	NR10607	149.00	150.50	425647.85	5409523.16	215.02	In-pit Mine Rock	2a	Mafic Metavolcanic	7.21	-	-	-	-
AMEC	L032049	NR10588	29.00	31.40	425672.02	5409400.94	331.1	In-pit Mine Rock	2a	Mafic Metavolcanic	7.53	-	-	-	-
AMEC	L032050	NR10588	50.50	52.00	425672.25	5409408	311.27	In-pit Mine Rock	2a	Mafic Metavolcanic	6.43	-	0.70	-	1.37
AMEC	L032101	NR10588	104.60	106.10	425672.88	5409426.25	260.34	In-pit Mine Rock	2a	Mafic Metavolcanic	6.65	-	0.20	-	0.39
AMEC	L032104	NR10588	235.00	236.50	425677.6	5409472.9	138.71	In-pit Mine Rock	2a	Mafic Metavolcanic	3.07	3.45	7.45	6.76	14.60
AMEC	L032159	NR10554	24.00	25.50	425274.78	5409628.24	326.46	In-pit Mine Rock	2a	Mafic Metavolcanic	6.45	-	1.60	-	3.14
AMEC	L032161	NR10554	66.00	67.50	425274.31	5409642.94	287.13	In-pit Mine Rock	2a	Mafic Metavolcanic	6.93	-	0.05	-	0.10
AMEC	L032162	NR10554	79.50	91.00	425274.51	5409649.59	269.87	In-pit Mine Rock	2a	Mafic Metavolcanic	6.90	-	0.20	-	0.39
AMEC	L032163	NR10554	99.20	100.70	425274.87	5409654.93	256.18	In-pit Mine Rock	2a	Mafic Metavolcanic	6.78	-	0.10	-	0.20
AMEC	L032167	NR10457	132.50	134.00	424900.57	5409638.97	232.23	In-pit Mine Rock	2a	Mafic Metavolcanic	6.76	-	0.35	-	0.69
AMEC	RRR253655	Channel			425431	5409397	345	In-pit Mine Rock	2a	Mafic Metavolcanic	6.95	-	0.10	-	0.20
KCB	414533	NR07205	200.00	201.50	425177.51	5409587.1	177.87	In-pit Mine Rock	2a	Mafic Metavolcanic					
KCB	455611	NR08244	33.50	35.00	425695.5	5409441.79	333.19	In-pit Mine Rock	2a	Mafic Metavolcanic					
KCB	455635	NR08244	120.50	122.00	425694.29	5409498.07	266.86	In-pit Mine Rock	2a	Mafic Metavolcanic					
KCB	586509	NR08262	170.00	171.40	425330.7	5409546.43	200.16	In-pit Mine Rock	2a	Mafic Metavolcanic					
KCB	588036	NR08264	80.00	81.50	425239.16	5409639.97	279.51	In-pit Mine Rock	2a	Mafic Metavolcanic					
KCB	588359	NR08263	90.50	92.00	425237.65	5409582.56	271.16	In-pit Mine Rock	2a	Mafic Metavolcanic					
KCB	612352	NR0666	51.50	53.00	425652.73	5409411.88	310.77	In-pit Mine Rock	2a	Mafic Metavolcanic					
KCB	758456	NR0638	17.00	18.50	425721.88	5409462.7	338.41	In-pit Mine Rock	2aa	Mafic Metavolcanic					
KCB	243856	NR07159	36.50	38.00	425740.48	5409421.39	322.69	In-pit Mine Rock	2ab	Mafic Metavolcanic	6.72	-	0.05	-	0.1
KCB	33630	NR0677	203.30	204.80	425626.97	5409490.6	190.68	In-pit Mine Rock	2ad	Mafic Metavolcanic					
AMEC	L032201	NR10459	140.00	141.50	424928.95	5409654.21	228.22	In-pit Mine Rock	2b	Mafic Metavolcanic	6.79	-	0.20	-	0.39
KCB	611194	NR0662	32.30	33.50	425719.83	5409411.3	327	In-pit Mine Rock	2b	Mafic Metavolcanic					
AMEC	L032071	NR10608	9.50	11.00	425600.02	5409473.39	345.28	In-pit Mine Rock	2c	Mafic Metavolcanic	6.67	-	0.20	-	0.39
AMEC	L032139	NR10471	67.50	69.00	424942.03	5409364.89	287.51	In-pit Mine Rock	2c	Mafic Metavolcanic	5.87	-	2.35	-	4.61
AMEC	L032216	NR09354	39.50	41.00	425829.68	5409404.69	315.88	In-pit Mine Rock	3	Intermediate Metavolcanic	5.83	-	0.50	-	0.98
AMEC	L032217	NR09354	25.00	26.50	425829.79	5409397.55	328.5	In-pit Mine Rock	3	Intermediate Metavolcanic	6.59	-	0.25	-	0.49
KCB	24510	NR0670	180.50	182.00	425698.29	5409405	189.79	In-pit Mine Rock	3a	Intermediate Metavolcanic					
KCB	24514	NR0670	197.90	199.40	425698.81	5409411.77	173.77	In-pit Mine Rock	3a	Intermediate Metavolcanic					
KCB	201112	NR09340	218.00	219.50	425661.27	5410175.61	163.84	In-pit Mine Rock	3a	Intermediate Metavolcanic					
KCB	457203	NR08252	125.50	127.00	425479.11	5409583.58	246.71	In-pit Mine Rock	3a	Intermediate Metavolcanic	5.88	-	1.80	-	3.5
KCB	457222	NR08252	154.00	155.50	425479.98	5409598.7	222.56	In-pit Mine Rock	3a	Intermediate Metavolcanic					
KCB	764274	NR0644	111.50	113.00	425625.9	5409525.42	272.49	In-pit Mine Rock	3a	Intermediate Metavolcanic					
KCB	ALT-09-10	NR0670	188.20	188.95	425698.49	5409407.84	183.04	In-pit Mine Rock	3a	Intermediate Metavolcanic					
KCB	RRR05817	NR09340	212.00	213.50	425661.15	5410172.31	168.85	In-pit Mine Rock	3a	Intermediate Metavolcanic					
KCB	24502	NR0670	110.00	111.30	425697.22	5409378.26	255.11	In-pit Mine Rock	3b	Intermediate Metavolcanic	6.97	-	0.05	-	0.1
KCB	24531	NR0670	290.50	292.00	425703.18	5409448.81	89.02	In-pit Mine Rock	3b	Intermediate Metavolcanic	6.34	-	0.85	-	1.7
KCB	142547	NR06103	212.00	213.50	425803.48	5409540.04	157.03	In-pit Mine Rock	3b	Intermediate Metavolcanic	3.54	1.60	3.55	3.1	7.0
KCB	451081	NR08224	282.50	284.00	425607.26	5409941.5	111.88	In-pit Mine Rock	3b	Intermediate Metavolcanic					
KCB	ALT-09-01	NR0676	201.80	202.50	425592.58	5409478.13	189.13	In-pit Mine Rock	3b	Intermediate Metavolcanic	**3.91**	**0.10**	**0.85**	**0.2**	**1.7**
KCB	ALT-09-08	NR0670	222.80	223.35	425699.82	5409421.36	151.33	In-pit Mine Rock	3b	Intermediate Metavolcanic					
KCB	ALT-09-09	NR0670	282.85	283.50	425702.76	5409445.48	96.36	In-pit Mine Rock	3b	Intermediate Metavolcanic					
AMEC	L032213	NR09354	83.00	84.50	425829.48	5409426.38	278.17	In-pit Mine Rock	3ba	Intermediate Metavolcanic	3.07	2.40	5.60	4.70	10.98
AMEC	L032214	NR09354	60.50	62.00	425829.55	5409415.1	297.64	In-pit Mine Rock	3ba	Intermediate Metavolcanic	6.03	-	1.10	-	2.16
KCB	34795	NR0687	480.50	482.00	425579.95	5409641.6	12.31	In-pit Mine Rock	3be	Intermediate Metavolcanic					
AMEC	L032009	NR11644	50.00	51.50	425160.48	5409597.76	310.01	In-pit Mine Rock	4a	Felsic Metavolcanic	6.97	-	0.05	-	0.10
AMEC	L032011	NR11639	88.00	89.50	425088.22	5409587.14	274.95	In-pit Mine Rock	4a	Felsic Metavolcanic	6.89	-	0.05	-	0.10
AMEC	L032014	NR11639	138.00	139.50	425089.18	5409615.4	233.72	In-pit Mine Rock	4a	Felsic Metavolcanic	6.79	-	0.10	-	0.20
AMEC	L032017	NR11638	199.50	201.00	425629.35	5410158.38	187.71	In-pit Mine Rock	4a	Felsic Metavolcanic	2.58	11.20	13.85	21.95	27.15
AMEC	L032039	NR11749	369.00	370.50	425246.63	5409484.7	35.97	In-pit Mine Rock	4a	Felsic Metavolcanic	6.38	-	0.50	-	0.98
AMEC	L032103	NR10588	227.50	229.00	425677.13	5409470.11	145.65	In-pit Mine Rock	4a	Felsic Metavolcanic	6.43	-	1.10	-	2.16
AMEC	L032109	NR10567	148.50	150.00	425429.73	5409502.06	217.07	In-pit Mine Rock	4a	Felsic Metavolcanic	6.37	-	1.90	-	3.72
AMEC	L032179	NR09385	168.50	169.90	426086.05	5409468.21	225.03	In-pit Mine Rock	4a	Felsic Metavolcanic	5.81	-	3.30	-	6.47
AMEC	L032182	NR10555	60.00	61.50	425349.12	5409665	292.8	In-pit Mine Rock	4a	Felsic Metavolcanic	6.11	-	1.45	-	2.84
KCB	123011	NR0686	26.10	26.80	425531.85	5409356.56	328.43	In-pit Mine Rock	4a	Felsic Metavolcanic	7.43	-	-	-	-
KCB	201102	NR09322	50.00	51.50	425491.57	5410166.84	309.76	In-pit Mine Rock	4a	Felsic Metavolcanic					
KCB	201105	NR09333	234.50	236.00	425808.62	5409900.49	149.17	In-pit Mine Rock	4a	Felsic Metavolcanic					
KCB	201107	NR09337	93.50	95.00	425491.9	5410157.25	272.35	In-pit Mine Rock	4a	Felsic Metavolcanic					
KCB	201120	NR09375	102.50	104.00	425084.99	5409531.45	259.25	In-pit Mine Rock	4a	Felsic Metavolcanic					
KCB	750334	NR0629	92.00	93.50	425000.7	5409773.39	271.72	In-pit Mine Rock	4a	Felsic Metavolcanic					
KCB	123092	NR0686	224.00	225.50	425533.81	5409463.59	161.61	In-pit Mine Rock	4aa	Felsic Metavolcanic					
KCB	123139	NR0686	287.00	288.50	425535.49	5409500.69	110.73	In-pit Mine Rock	4aa	Felsic Metavolcanic					
KCB	132026	NR06128	40.00	41.50	425417.41	5409477.39	321.96	In-pit Mine Rock	4aa	Felsic Metavolcanic	6.08	#N/A	1.30	#N/A	2.5
KCB	243038	NR07152	92.00	93.50	425297.41	5409465.91	271.26	In-pit Mine Rock	4aa	Felsic Metavolcanic					
KCB	246978	NR07153	124.00	125.50	425238.9	5409480.02	242.28	In-pit Mine Rock	4aa	Felsic Metavolcanic					
KCB	338631	NR07174	222.00	223.00	425330.3	5409478.54	160.18	In-pit Mine Rock	4aa	Felsic Metavolcanic					
KCB	453154	NR08228	319.00	320.50	425654.87	5409903.44	83.53	In-pit Mine Rock	4aa	Felsic Metavolcanic					
KCB	635659	NR0504	231.41	232.50	425780.32	5410132.01	175.1	In-pit Mine Rock	4aa	Felsic Metavolcanic					
KCB	637507	NR0514	98.40	99.64	425735.54	5410178.48	274.41	In-pit Mine Rock	4aa	Felsic Metavolcanic					
KCB	761134	NR0649	164.00	165.50	425513.74	5409526.27	216.64	In-pit Mine Rock	4aa	Felsic Metavolcanic					
KCB	761166	NR0649	203.50	205.00	425516.64	5409549.6	184.91	In-pit Mine Rock	4aa	Felsic Metavolcanic					
KCB	123069	NR0686	193.00	194.00	425533.22	5409445.69	187.22	In-pit Mine Rock	4ab	Felsic Metavolcanic					
KCB	132043	NR06128	124.00	125.50	425419.6	5409521.45	250.5	In-pit Mine Rock	4ab	Felsic Metavolcanic					
KCB	224459	NR07167	279.50	281.00	426072.85	5409644.33	115.76	In-pit Mine Rock	4ab	Felsic Metavolcanic					
KCB	243630	NR07148	212.00	213.50	425485.02	5409557.67	167.04	In-pit Mine Rock	4ab	Felsic Metavolcanic					
KCB	370007	NR06112	110.00	111.50	425358.53	5409572.13	259.77	In-pit Mine Rock	4ab	Felsic Metavolcanic					
KCB	370017	NR06112	152.00	153.50	425358.47	5409593.77	223.78	In-pit Mine Rock	4ab	Felsic Metavolcanic	6.50	-	0.25	-	0.5
KCB	370213	NR06114	125.00	126.00	425892.88	5409473.93	238.09	In-pit Mine Rock	4ab	Felsic Metavolcanic					
KCB	611444	NR0658	191.00	192.50	425466.52	5409504.49	178.85	In-pit Mine Rock	4ab	Felsic Metavolcanic					
KCB	611473	NR0658	230.00	231.50	425467.87	5409521.97	144.02	In-pit Mine Rock	4ab	Felsic Metavolcanic					
AMEC	L032183	NR9527	60.04	61.54	425348.19	5409684.48	303.88	In-pit Mine Rock	4b	Felsic Metavolcanic	6.00	-	0.65	-	1.27
KCB	24631	NR0670	429.50	431.00	425711.78	5409509.88	-35.53	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	201106	NR09333	107.00	108.50	425806.74	5409832.43	256.96	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	201121	NR09375	47.00	48.80	425084.64	5409503.34	306.91	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	223815	NR07164	114.50	116.00	426161.49	5409633.39	256.29	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	331741	NR07185	191.00	192.50	425495.31	5409430.64	175.95	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	370221	NR06114	135.60	137.00	425893.37	5409478.67	228.4	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	455652	NR08244	183.50	185.00	425693.73	5409539.84	219.71	In-pit Mine Rock	4b	Felsic Metavolcanic					

Consultant	Sample ID	HOLE-ID	FROM	TO	Easting	Northing	Elevation	Ore/Waste Classification	Rock Code	Lithology	NAG pH after reaction	Vol. of 0.1 N NaOH		NAG (kg H_2SO_4/tonne)	
			m	m			mASL					to pH 4.5	to pH 7.0	to pH 4.5	to pH 7.0
KCB	455794	NR08244	388.50	389.50	425698.15	5409679.24	69.9	In-pit Mine Rock	4b	Felsic Metavolcanic	6.60	-	0.15	-	0.3
KCB	731259	NR08281	140.00	141.50	425883.55	5409702.98	242	In-pit Mine Rock	4b	Felsic Metavolcanic	6.25	-	0.40	-	0.8
KCB	749506	NR0628	67.00	68.50	425512.06	5409543.62	295.43	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	750541	NR0631	87.00	88.40	424924.72	5409775.68	276.01	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	751815	NR0621	122.50	124.00	425495.01	5409532.44	241.97	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	756526	NR0634	153.50	155.00	425810.56	5410220.92	230	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	756533	NR0634	162.50	164.00	425810.4	5410226.67	223.08	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	756537	NR0634	168.50	170.00	425810.28	5410230.51	218.47	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	ALT-09-18	NR07190	402.80	403.40	425641.99	5409470.57	4.8	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	RRR01889	NR09331	186.50	188.00	425678.72	5409820.08	189.91	In-pit Mine Rock	4b	Felsic Metavolcanic					
KCB	RRR04014	NR09333	80.00	81.50	425806.64	5409818.3	279.97	In-pit Mine Rock	4b	Felsic Metavolcanic	5.56	-	1.35	-	2.6
AMEC	L032022	NR11710	8.80	10.30	426050.48	5409195.66	344.63	In-pit Mine Rock	4c	Felsic Metavolcanic	6.16	-	2.15	-	4.21
AMEC	L032024	NR11738	58.40	60.00	425868.88	5409211.94	293.16	In-pit Mine Rock	4c	Felsic Metavolcanic	6.72	-	0.30	-	0.59
AMEC	L032045	NR10607	230.20	231.70	425648.81	5409554.84	140.26	In-pit Mine Rock	4c	Felsic Metavolcanic	3.21	2.40	4.20	4.70	8.23
AMEC	L032046	NR10607	314.00	315.50	425650.7	5409588.85	63.7	In-pit Mine Rock	4c	Felsic Metavolcanic	2.63	15.55	19.50	30.48	38.22
AMEC	L032052	NR11647	56.00	57.50	425324.02	5409747.83	301.09	In-pit Mine Rock	4c	Felsic Metavolcanic	2.84	7.10	9.35	13.92	18.33
AMEC	L032062	NR10614	57.00	58.50	426049.2	5409731.17	299.46	In-pit Mine Rock	4c	Felsic Metavolcanic	3.04	2.50	11.95	4.90	23.42
AMEC	L032063	NR10614	91.50	93.00	426048.74	5409747.6	269.13	In-pit Mine Rock	4c	Felsic Metavolcanic	2.73	7.65	12.40	14.99	24.30
AMEC	L032107	NR10588	368.50	370.00	425689.78	5409524.44	16.19	In-pit Mine Rock	4c	Felsic Metavolcanic	3.43	1.55	3.40	3.04	6.66
AMEC	L032175	NR09384	116.00	117.50	426103.64	5409469.89	262.37	In-pit Mine Rock	4c	Felsic Metavolcanic	5.80	-	1.10	-	2.16
AMEC	L032176	NR09384	143.00	144.40	426105.21	5409485.03	240.13	In-pit Mine Rock	4c	Felsic Metavolcanic	6.07	-	2.45	-	4.80
AMEC	L032177	NR09385	5.00	6.50	426075.02	5409369.34	354.67	In-pit Mine Rock	4c	Felsic Metavolcanic	6.03	-	0.95	-	1.86
KCB	24581	NR0670	359.00	360.50	425707.06	5409478.21	27.28	In-pit Mine Rock	4c	Felsic Metavolcanic					
KCB	24582	NR0670	360.50	362.00	425707.16	5409478.88	25.94	In-pit Mine Rock	4c	Felsic Metavolcanic					
KCB	201117	NR09373	27.00	28.50	425155.52	5409099.04	322.92	In-pit Mine Rock	4c	Felsic Metavolcanic					
KCB	201142	NR09445	65.00	66.50	424904.73	5409641.34	287.9	In-pit Mine Rock	4c	Felsic Metavolcanic					
KCB	450258	NR08223	281.00	282.50	425658.03	5409938.12	113.71	In-pit Mine Rock	4c	Felsic Metavolcanic					
KCB	450499	NR08237	203.00	204.50	425863.69	5409935.15	172.98	In-pit Mine Rock	4c	Felsic Metavolcanic					
KCB	452002	NR08227	45.00	46.00	425715.13	5409746.52	309.91	In-pit Mine Rock	4c	Felsic Metavolcanic					
KCB	585172	NR08256	72.50	74.00	425914.79	5410006.93	277.08	In-pit Mine Rock	4c	Felsic Metavolcanic					
KCB	586517	NR08262	254.00	255.50	425332.85	5409587.67	126.96	In-pit Mine Rock	4c	Felsic Metavolcanic					
AMEC	L032136	NR10471	44.00	45.50	424942.4	5409353.57	308.1	In-pit Mine Rock	4ca	Felsic Metavolcanic	5.94	-	0.40	-	0.78
AMEC	L032137	NR10471	53.00	54.30	424942.23	5409357.83	300.29	In-pit Mine Rock	4ca	Felsic Metavolcanic	5.88	-	0.45	-	0.88
AMEC	L032138	NR10471	56.00	57.50	424942.17	5409359.32	297.57	In-pit Mine Rock	4ca	Felsic Metavolcanic	6.40	-	0.10	-	0.20
AMEC	L032140	NR10471	80.00	81.50	424941.98	5409371.04	276.63	In-pit Mine Rock	4ca	Felsic Metavolcanic	3.44	1.10	2.95	2.16	5.78
AMEC	L032186	NR09420	56.00	57.00	426099.87	5409718.89	304.36	In-pit Mine Rock	4ca	Felsic Metavolcanic	3.37	1.30	2.80	2.55	5.49
AMEC	L032206	NR09354	368.00	369.50	425832.2	5409573.76	34.35	In-pit Mine Rock	4ca	Felsic Metavolcanic	6.41	-	1.10	-	2.16
KCB	451833	NR08231	114.50	116.00	425490.16	5409791.63	249.64	In-pit Mine Rock	4ca	Felsic Metavolcanic					
KCB	455047	NR08241	128.50	130.00	425778.3	5409780.58	239.33	In-pit Mine Rock	4ca	Felsic Metavolcanic					
KCB	457004	NR08253	102.50	104.00	425506.8	5409637.22	262.85	In-pit Mine Rock	4ca	Felsic Metavolcanic					
KCB	585242	NR08256	173.00	174.50	425914.42	5410019.77	177.52	In-pit Mine Rock	4ca	Felsic Metavolcanic					
KCB	588064	NR08264	119.00	120.50	425238.81	5409659.95	246.03	In-pit Mine Rock	4ca	Felsic Metavolcanic					
KCB	588078	NR08264	140.00	141.50	425239.1	5409670.91	228.12	In-pit Mine Rock	4ca	Felsic Metavolcanic					
KCB	588091	NR08264	158.00	159.50	425239.49	5409680.42	212.84	In-pit Mine Rock	4ca	Felsic Metavolcanic					
KCB	588424	NR08263	183.50	185.00	425240.03	5409632.11	192.51	In-pit Mine Rock	4ca	Felsic Metavolcanic					
KCB	588442	NR08263	210.50	212.00	425241.39	5409647.02	170.04	In-pit Mine Rock	4ca	Felsic Metavolcanic					
KCB	RRR05735	NR09340	100.00	101.20	425659.78	5410111.63	263.15	In-pit Mine Rock	4ca	Felsic Metavolcanic					
AMEC	L032173	NR09384	23.00	24.50	426100.14	5409419.46	340.42	In-pit Mine Rock	4cb	Felsic Metavolcanic	5.62	-	1.75	-	3.43
AMEC	L032174	NR09384	104.00	105.50	426103.03	5409463.27	272.36	In-pit Mine Rock	4cb	Felsic Metavolcanic	5.58	-	0.75	-	1.47
KCB	123051	NR0686	168.50	170.00	425532.7	5409432.08	207.27	In-pit Mine Rock	4cb	Felsic Metavolcanic					
KCB	123081	NR0686	209.00	210.50	425533.53	5409454.95	173.87	In-pit Mine Rock	4cb	Felsic Metavolcanic					
KCB	224453	NR07167	270.50	272.00	426072.54	5409638.69	122.77	In-pit Mine Rock	4cb	Felsic Metavolcanic					
KCB	245302	NR07166	90.50	91.60	426097.43	5409544.02	274.72	In-pit Mine Rock	4cb	Felsic Metavolcanic					
KCB	414505	NR07205	68.00	69.50	425173.5	5409517.78	290.11	In-pit Mine Rock	4cb	Felsic Metavolcanic	6.66	-	0.10	-	0.2
KCB	414524	NR07205	117.50	119.00	425174.54	5409543.28	247.7	In-pit Mine Rock	4cb	Felsic Metavolcanic					
KCB	414529	NR07205	125.00	126.50	425174.75	5409547.2	241.31	In-pit Mine Rock	4cb	Felsic Metavolcanic					
KCB	459106	NR08255	243.50	245.00	425814.77	5409696.99	166.74	In-pit Mine Rock	4cb	Felsic Metavolcanic					
KCB	588009	NR08264	41.00	42.50	425239.66	5409620.45	313.26	In-pit Mine Rock	4cb	Felsic Metavolcanic					
KCB	588351	NR08263	78.50	80.00	425237.45	5409576.31	281.4	In-pit Mine Rock	4cb	Felsic Metavolcanic					
AMEC	L032221	NR09419	33.00	34.50	424863.45	5409879.59	322.21	In-pit Mine Rock	4cc	Felsic Metavolcanic	5.70	-	1.05	-	2.06
AMEC	L032053	NR11647	149.00	150.50	425323.92	5409804.06	227.08	In-pit Mine Rock	4cf	Felsic Metavolcanic	7.10	-	-	-	-
AMEC	L032058	NR11632	77.00	78.50	425948.08	5410048.48	288.13	In-pit Mine Rock	4cf	Felsic Metavolcanic	3.63	1.10	2.65	2.16	5.19
AMEC	L032185	NR11656	54.20	55.20	425272.22	5409747.01	304.17	In-pit Mine Rock	4cf	Felsic Metavolcanic	6.71	-	0.10	-	0.20
AMEC	L032223	NR09406	282.70	283.90	425392.95	5409521.61	92.16	In-pit Mine Rock	4cf	Felsic Metavolcanic	6.50	-	0.60	-	1.18
KCB	123536	NR0689A	268.50	270.00	425431.99	5409423.21	98.79	In-pit Mine Rock	4cf	Felsic Metavolcanic					
KCB	201111	NR09340	102.00	103.00	425659.78	5410112.63	261.53	In-pit Mine Rock	4cf	Felsic Metavolcanic					
KCB	451001	NR08224	77.00	78.50	425606.19	5409826.04	281.66	In-pit Mine Rock	4cf	Felsic Metavolcanic	5.28	-	2.35	-	4.6
KCB	451324	NR08232	105.50	107.00	424981.24	5409715.43	254.42	In-pit Mine Rock	4cf	Felsic Metavolcanic					
KCB	459064	NR08255	186.50	188.00	425818.43	5409657.87	207.96	In-pit Mine Rock	4cf	Felsic Metavolcanic					
AMEC	L032023	NR11717	27.00	28.50	425989.02	5409196.77	323.83	In-pit Mine Rock	4cfa	Felsic Metavolcanic	7.35	-	-	-	-
AMEC	L032030	NR11754	301.00	302.00	425809.6	5409790.26	110.83	In-pit Mine Rock	4cfa	Felsic Metavolcanic	2.38	15.45	21.10	30.28	41.36
AMEC	L032040	NR11749	429.00	430.50	425249.57	5409520.8	-11.84	In-pit Mine Rock	4cfa	Felsic Metavolcanic	6.80	-	0.10	-	0.20
AMEC	L032048	NR10607	389.00	390.50	425653.22	5409621.03	-4	In-pit Mine Rock	4cfa	Felsic Metavolcanic	2.98	6.60	11.10	12.94	21.76
AMEC	L032102	NR10588	124.00	125.50	425673.22	5409432.91	242.13	In-pit Mine Rock	4cfa	Felsic Metavolcanic	6.37	-	0.30	-	0.59
AMEC	L032105	NR10588	278.50	280.00	425680.92	5409489.03	98.44	In-pit Mine Rock	4cfa	Felsic Metavolcanic	3.03	3.50	6.70	6.86	13.13
AMEC	L032154	NR10561	59.00	60.50	425673.41	5409884.35	289.21	In-pit Mine Rock	4cfa	Felsic Metavolcanic	3.87	0.70	4.05	1.37	7.94
AMEC	L032205	NR10459	204.50	206.00	424929.39	5409689.68	174.35	In-pit Mine Rock	4cfa	Felsic Metavolcanic	6.81	-	0.05	-	0.10
KCB	201104	NR09333	185.00	186.50	425807.65	5409873.82	190.86	In-pit Mine Rock	4cfa	Felsic Metavolcanic					
KCB	201122	NR09375	249.50	251.00	425090.95	5409611.96	136.45	In-pit Mine Rock	4cfa	Felsic Metavolcanic					
KCB	201135	NR09412	71.50	73.00	424966.63	5409767.83	289.61	In-pit Mine Rock	4cfa	Felsic Metavolcanic					
KCB	201139	NR09436	122.00	123.50	424969.06	5409882.65	249.75	In-pit Mine Rock	4cfa	Felsic Metavolcanic					
KCB	RRR05411	NR09335	75.50	77.00	425872.48	5409774.44	283.17	In-pit Mine Rock	4cfa	Felsic Metavolcanic	**3.18**	**1.05**	**1.95**	**2.1**	**3.8**
KCB	RRR05416	NR09335	83.00	84.50	425872.28	5409778.17	276.67	In-pit Mine Rock	4cfa	Felsic Metavolcanic	4.56	-	1.40	-	2.7
AMEC	L032077	NR10608	231.50	233.00	425619.17	5409574.27	149.12	In-pit Mine Rock	4cfb	Felsic Metavolcanic	5.68	-	0.80	-	1.57
AMEC	L032098	NR10480	96.00	98.00	425521.74	5410034.49	270.29	In-pit Mine Rock	4cfb	Felsic Metavolcanic	3.10	2.30	4.00	4.51	7.84
AMEC	L032110	NR10567	415.50	417.00	425446.77	5409609.08	-26.93	In-pit Mine Rock	4cfb	Felsic Metavolcanic	7.19	-	-	-	-
AMEC	L032111	NR10499	138.50	140.00	425192.15	5409836.13	228.34	In-pit Mine Rock	4cfb	Felsic Metavolcanic	6.75	-	0.05	-	0.10
AMEC	L032180	NR10555	210.10	211.60	425348.97	5409720.99	153.57	In-pit Mine Rock	4cfb	Felsic Metavolcanic	4.08	0.25	1.75	0.49	3.43
AMEC	L032204	NR10459	177.50	179.00	424929.19	5409674.76	196.86	In-pit Mine Rock	4cfb	Felsic Metavolcanic	6.16	-	0.45	-	0.88
AMEC	L032207	NR09354	330.50	332.00	425831.13	5409553.03	65.58	In-pit Mine Rock	4cfb	Felsic Metavolcanic	3.31	1.60	3.50	3.14	6.86
AMEC	L032218	NR09391	56.00	57.50	426124.73	5409688.42	306.05	In-pit Mine Rock	4cfb	Felsic Metavolcanic	2.54	7.55	9.60	14.80	18.82
AMEC	L032220	NR10466	149.00	150.50	424964.66	5409682.32	212.19	In-pit Mine Rock	4cfb	Felsic Metavolcanic	4.51	-	1.25	-	2.45
KCB	123229	NR0686	410.00	411.50	425544.04	5409577.65	15.21	In-pit Mine Rock	4cfb	Felsic Metavolcanic					
KCB	201103	NR09324	95.00	96.50	425746.34	5409827.07	267.19	In-pit Mine Rock	4cfb	Felsic Metavolcanic					
KCB	243171	NR07152	406.50	408.00	425295.94	5409654.36	19.82	In-pit Mine Rock	4cfb	Felsic Metavolcanic					
KCB	452142	NR08227	245.50	247.00	425712.24	5409854.05	140.48	In-pit Mine Rock	4cfb	Felsic Metavolcanic					
KCB	454052	NR08230	125.50	127.00	425555.6	5409796.06	241.41	In-pit Mine Rock	4cfb	Felsic Metavolcanic					
KCB	454072	NR08230	155.50	157.00	425557.18	5409812.66	216.48	In-pit Mine Rock	4cfb	Felsic Metavolcanic					
KCB	454317	NR08239	81.50	83.00	425837.43	5409811.74	277.47	In-pit Mine Rock	4cfb	Felsic Metavolcanic					
KCB	455665	NR08244	203.00	204.50	425693.64	5409552.89	205.22	In-pit Mine Rock	4cfb	Felsic Metavolcanic					
KCB	457337	NR08252	316.00	317.50	425489.79	5409690.8	89.76	In-pit Mine Rock	4cfb	Felsic Metavolcanic					
KCB	459173	NR08255	335.00	336.50	425814.77	5409760.76	101.13	In-pit Mine Rock	4cfb	Felsic Metavolcanic					
KCB	588142	NR08264	233.00	234.50	425241.64	5409721.08	149.86	In-pit Mine Rock	4cfb	Felsic Metavolcanic					
KCB	588377	NR08263	117.50	119.00	425238.12	5409596.71	248.17	In-pit Mine Rock	4cfb	Felsic Metavolcanic	6.02	-	1.15	-	2.3
KCB	731301	NR08281	204.50	206.00	425880.4	5409745.95	194	In-pit Mine Rock	4cfb	Felsic Metavolcanic	5.73	-	2.25	-	4.4
AMEC	L032099	NR10492	180.50	182.00	425592.62	5410023.25	201.82	In-pit Mine Rock	4cg	Felsic Metavolcanic	2.36	17.10	21.20	33.52	41.55
KCB	451006	NR08224	83.00	84.50	425606.08	5409829.12	276.51	In-pit Mine Rock	4cg	Felsic Metavolcanic					
KCB	453046	NR08228	242.00	243.50	425655.41	5409857.15	145.05	In-pit Mine Rock	4cg	Felsic Metavolcanic					
AMEC	L032019	NR11687	71.00	72.50	425340.63	5409939.9	294.03	In-pit Mine Rock	4cgb	Felsic Metavolcanic	2.36	13.20	16.85	25.87	33.03
AMEC	L032078	NR10608	363.50	365.00	425634.66	5409649.7	41.96	In-pit Mine Rock	4cgb	Felsic Metavolcanic	2.65	9.30	15.50	18.23	30.38
AMEC	L032079	NR10608	395.30	396.80	425638.6	5409668.93	16.94	In-pit Mine Rock	4cgb	Felsic Metavolcanic	4.48	0.10	3.15	0.20	6.17
KCB	123161	NR0686	315.50	317.00	425537.09	5409517.98	88.14	In-pit Mine Rock	4cgb	Felsic Metavolcanic	6.09	-	0.95	-	1.9
KCB	201115	NR09360	42.50	44.00	425268.35	5409148.45	307.97	In-pit Mine Rock	4cgb	Felsic Metavolcanic					
KCB	457354	NR08252	340.00	341.50	425491.64	5409705.05	70.53	In-pit Mine Rock	4cgb	Felsic Metavolcanic					
KCB	29589	NR0501	86.84	87.80	425752.3	5410052.13	283.4	In-pit Mine Rock	4d	Felsic Metavolcanic					
AMEC	L032002	NR11659	45.50	47.00	424940.52	5409484.6	313.06	In-pit Mine Rock	4c	Felsic Metavolcanic	6.88	-	0.05	-	0.10
AMEC	L032041	NR10607	83.00	84.50	425648.17	5409498.89	276.39	In-pit Mine Rock	5	Clasitc Metasediment	6.53	-	0.35	-	0.69
AMEC	L032187	NR09433	155.00	156.15	426009.25	5409769.59	213.74	In-pit Mine Rock	5	Clasitc Metasediment	5.70	-	0.95	-	1.86
KCB	752224	NR0620	56.50	58.00	425739.49	5409495.22	308.95	In-pit Mine Rock	5	Clasitc Metasediment					

Consultant	Sample ID	HOLE-ID	FROM	TO	Easting	Northing	Elevation	Ore/Waste Classification	Rock Code	Lithology	NAG pH after reaction	Vol. of 0.1 N NaOH		NAG (kg H_2SO_4/tonne)	
			m	m			mASL					to pH 4.5	to pH 7.0	to pH 4.5	to pH 7.0
AMEC	L032096	NR10480	48.50	50.00	425520.17	5410006.86	309.19	In-pit Mine Rock	5da	Clastic Metasediment	2.52	9.75	12.55	19.11	24.60
AMEC	L032097	NR10480	62.00	63.50	425520.55	5410014.58	298.13	In-pit Mine Rock	5da	Clastic Metasediment	2.73	8.50	10.65	16.66	20.87
KCB	587708	NR08265	252.00	253.50	426012.32	5409724.28	137.97	In-pit Mine Rock	5da	Clastic Metasediment					
KCB	637513	NR0514	105.00	106.50	425732.48	5410181.71	269.37	In-pit Mine Rock	5da	Clastic Metasediment					
KCB	752808	NR0624	130.50	132.00	425725.31	5409574.91	238.06	In-pit Mine Rock	5da	Clastic Metasediment	5.93	-	0.45	-	0.9
KCB	635757	NR0505	89.50	91.00	425782.57	5409563.28	279.96	In-pit Mine Rock	5dab	Clastic Metasediment					
KCB	764614	NR0647	245.20	246.50	425772.61	5409621.02	170.11	In-pit Mine Rock	5dab	Clastic Metasediment					
AMEC	L032018	NR11688	46.00	47.50	425400.07	5410027.21	311	In-pit Mine Rock	5dac	Clastic Metasediment	2.49	15.95	19.95	31.26	39.10
KCB	370079	NR06112	302.00	303.50	425358.66	5409673.21	96.55	In-pit Mine Rock	5dac	Clastic Metasediment					
KCB	450221	NR08223	203.00	204.50	425658.41	5409891.66	176.34	In-pit Mine Rock	5dac	Clastic Metasediment					
KCB	635490	NR0504	52.50	53.25	425861.56	5410046.19	309.6	In-pit Mine Rock	5dac	Clastic Metasediment	5.36	-	0.65	-	1.3
KCB	635696	NR0504	271.50	273.00	425762.09	5410151.98	145.22	In-pit Mine Rock	5dac	Clastic Metasediment					
KCB	ALT-09-11	NR06101	260.00	260.65	425780.79	5409753.73	160.47	In-pit Mine Rock	5dac	Clastic Metasediment	**2.60**	**9.25**	**13.25**	**18.1**	**26.0**
KCB	ALT-09-12	NR0681	168.00	168.60	426053.24	5409538.17	208.06	In-pit Mine Rock	5dac	Clastic Metasediment	4.09	0.50	11.05	1.0	21.7
KCB	ALT-09-15	NR0657	373.35	374.00	425767.33	5409653.38	73.47	In-pit Mine Rock	5dac	Clastic Metasediment					
KCB	ALT-09-27	NR07157	167.00	167.50	425719.52	5410055.16	208.03	In-pit Mine Rock	5dac	Clastic Metasediment					
KCB	RRR10076	NR09342	170.00	171.50	425894.66	5409916.99	199.96	In-pit Mine Rock	5dac	Clastic Metasediment					
KCB	761112	NR0649	132.50	134.00	425511.97	5409508.07	242.29	In-pit Mine Rock	5dad	Clastic Metasediment					
KCB	761172	NR0649	212.50	214.00	425517.4	5409555.06	177.8	In-pit Mine Rock	5dad	Clastic Metasediment					
KCB	143258	NR06100	243.00	244.00	425783.46	5409675.44	164.24	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	223806	NR07164	102.00	103.50	426162.09	5409626.95	266.98	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	244421	NR07157	238.50	239.50	425719.49	5410098.64	151	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	342304	NR0623	289.00	290.50	425531.26	5409716.35	136.76	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	370231	NR06114	169.40	170.50	425895.08	5409493.78	198.39	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	370232	NR06114	173.00	174.00	425895.27	5409495.4	195.24	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	370233	NR06114	174.00	175.00	425895.33	5409495.86	194.35	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	370234	NR06114	175.00	176.00	425895.39	5409496.32	193.47	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	370235	NR06114	176.00	177.00	425895.44	5409496.78	192.58	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	370236	NR06114	177.00	178.00	425895.5	5409497.24	191.7	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	370237	NR06114	178.00	179.00	425895.56	5409497.7	190.81	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	370238	NR06114	179.00	180.00	425895.61	5409498.17	189.92	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	370239	NR06114	180.00	181.00	425895.67	5409498.63	189.04	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	611164	NR0660	279.50	281.00	425336.16	5409682.01	92.89	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	611171	NR0660	290.00	291.50	425336.21	5409687.14	83.73	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	636594	NR0509	121.00	122.50	424902.12	5409805.08	253.14	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	636653	NR0510	49.50	51.00	424906.01	5409840.02	310.54	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	750326	NR0629	80.00	81.50	425001.14	5409766.3	281.39	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	752238	NR0620	77.00	78.50	425738.27	5409508.61	293.47	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	752245	NR0620	85.50	86.50	425737.79	5409514.01	287.25	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	804881	NR08317	234.50	235.50	425698.27	5410100.97	156.96	In-pit Mine Rock	5daf	Clastic Metasediment					
KCB	ALT-09-22	NR07164	90.60	91.20	426162.62	5409620.91	277.16	In-pit Mine Rock	5daf	Clastic Metasediment					
AMEC	L032181	NR9527	210.95	212.45	425348.19	5409786.71	192.92	In-pit Mine Rock	5dap	Clastic Metasediment	5.95	-	0.50	-	0.98
AMEC	L032184	NR9705	55.10	56.60	425350.31	5409738.27	305.88	In-pit Mine Rock	5dap	Clastic Metasediment	5.99	-	1.15	-	2.25
AMEC	L032188	NR9717	71.00	72.00	425248.48	5409765.76	295.44	In-pit Mine Rock	5dap	Clastic Metasediment	2.33	20.70	24.45	40.57	47.92
KCB	130652	NR06116	333.00	334.50	425462.77	5409731.11	101.55	In-pit Mine Rock	5dep	Clastic Metasediment					
AMEC	L032003	NR11659	51.50	53.00	424940.41	5409488.26	308.24	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	2.94	6.45	12.10	12.64	23.72
AMEC	L032051	NR11649	96.00	97.50	425090.95	5409673.88	268.93	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	6.78	-	0.10	-	0.20
AMEC	L032060	NR10612	119.00	120.50	425271.12	5409270.42	236.65	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	3.26	3.80	10.45	7.45	20.48
AMEC	L032061	NR10612	128.00	129.50	425271.32	5409273.92	228.36	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	6.45	-	0.40	-	0.78
AMEC	L032081	NR10602	76.50	78.00	425323.29	5409304.85	275.8	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	2.25	30.50	37.50	59.78	73.50
AMEC	L032082	NR10602	91.50	93.00	425323.02	5409309.9	261.68	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	2.79	13.20	19.55	25.87	38.32
AMEC	L032083	NR10601	69.50	71.00	425324.1	5409428.11	283.75	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	6.55	-	0.25	-	0.49
AMEC	L032084	NR10583	240.50	242.00	425785.9	5409385.86	129.06	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	2.53	11.80	16.05	23.13	31.46
AMEC	L032085	NR10583	281.00	282.50	425789.65	5409402.15	92.18	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	7.62	-	-	-	-
AMEC	L032086	NR10568	109.50	111.00	425519.28	5409280.55	246.51	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	6.70	-	0.15	-	0.29
AMEC	L032087	NR10568	130.50	132.00	425520.13	5409288.64	227.14	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	6.50	-	0.30	-	0.59
AMEC	L032088	NR10568	152.20	153.40	425521.18	5409297.13	207.37	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	3.09	4.80	9.35	9.41	18.33
AMEC	L032091	NR10569	108.00	109.60	425524.39	5409303.13	248.17	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	8.06	-	-	-	-
AMEC	L032092	NR10569	154.50	156.00	425524.81	5409320.67	205.16	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	6.97	-	0.05	-	0.10
AMEC	L032093	NR10569	342.00	343.50	425532.27	5409399.86	35.48	In-pit Mine Rock	5f	Clastic Metasediment/Pyritic Sediment	4.90	-	0.80	-	1.57
AMEC	L032072	NR10608	95.00	96.50	425603.92	5409507.26	266.98	In-pit Mine Rock	6	Chemical Metasediment	7.14	-	-	-	-
AMEC	L032073	NR10608	116.00	117.50	425605.8	5409516.97	248.46	In-pit Mine Rock	6	Chemical Metasediment	7.65	-	-	-	-
AMEC	L032080	NR10608	134.50	136.00	425607.68	5409525.72	232.27	In-pit Mine Rock	6	Chemical Metasediment	7.53	-	-	-	-
KCB	335062	NR07190	336.50	338.00	425634.66	5409434.89	59.65	In-pit Mine Rock	6	Chemical Metasediment					
KCB	ALT-09-02	NR0675	233.30	233.90	425555.11	5409506.39	180.84	In-pit Mine Rock	6	Chemical Metasediment	8.23	-	-	-	-
KCB	ALT-09-14	NR06129	84.80	85.50	425884.42	5409430.84	272.76	In-pit Mine Rock	6	Chemical Metasediment					
KCB	ALT-09-19	NR07190	329.00	329.70	425633.89	5409430.68	66.29	In-pit Mine Rock	6	Chemical Metasediment					
KCB	ALT-09-23	NR07176	257.85	258.40	425623.13	5409466.17	138.98	In-pit Mine Rock	6	Chemical Metasediment					
KCB	370211	NR06114	54.50	55.80	425891.1	5409444.83	302.1	In-pit Mine Rock	6cd	Chemical Metasediment	6.24	-	0.10	-	0.2
KCB	370224	NR06114	159.50	161.00	425894.56	5409489.37	207.01	In-pit Mine Rock	6cd	Chemical Metasediment					
KCB	370228	NR06114	165.50	167.00	425894.88	5409492.09	201.68	In-pit Mine Rock	6cd	Chemical Metasediment					
KCB	370229	NR06114	167.00	168.50	425894.96	5409492.77	200.34	In-pit Mine Rock	6cd	Chemical Metasediment					
KCB	370230	NR06114	168.50	169.40	425895.02	5409493.32	199.28	In-pit Mine Rock	6cd	Chemical Metasediment					
KCB	ALT-09-03	NR0686	80.30	80.96	425531.86	5409384.38	281.94	In-pit Mine Rock	6cd	Chemical Metasediment					
AMEC	L032095	NR10486	233.90	234.90	425762.99	5409984.07	147.33	In-pit Mine Rock	7a	Early Mafic to Ultramafic Intrusive	6.75	-	0.25	-	0.49
AMEC	L032169	NR10469	55.90	57.00	425467.85	5409950.17	302.16	In-pit Mine Rock	7a	Early Mafic to Ultramafic Intrusive	8.23	-	-	-	-
AMEC	L032170	NR09357	330.25	331.75	425762.36	5409710.05	95.77	In-pit Mine Rock	7a	Early Mafic to Ultramafic Intrusive	6.48	-	1.85	-	3.63
AMEC	L032171	NR09377	241.50	242.80	425076.82	5409439.05	142.33	In-pit Mine Rock	7a	Early Mafic to Ultramafic Intrusive	6.66	-	1.20	-	2.35
AMEC	L032222	NR09406	316.00	317.50	425394.3	5409536.13	62.06	In-pit Mine Rock	7a	Early Mafic to Ultramafic Intrusive	6.55	-	0.60	-	1.18
AMEC	L032224	NR09406	134.60	136.00	425388.33	5409459.4	226.36	In-pit Mine Rock	7a	Early Mafic to Ultramafic Intrusive	7.15	-	-	-	-
AMEC	L032074	NR10608	126.50	128.00	425606.84	5409521.92	239.26	In-pit Mine Rock	8	Early Felsic to Intermediate Intrusive	6.06	-	7.50	-	14.70
KCB	123562	NR0689A	357.50	359.00	425439.31	5409466.28	21.27	In-pit Mine Rock	8	Early Felsic to Intermediate Intrusive	7.67	-	-	-	-
KCB	123563	NR0689A	359.00	360.50	425439.46	5409467.03	19.98	In-pit Mine Rock	8	Early Felsic to Intermediate Intrusive					
KCB	333472	NR07199	155.20	156.50	425661.41	5409343.37	209.93	In-pit Mine Rock	8	Early Felsic to Intermediate Intrusive					
KCB	338622	NR07174	100.50	102.00	425327.28	5409412.94	262.08	In-pit Mine Rock	8	Early Felsic to Intermediate Intrusive					
AMEC	L032005	NR11659	200.00	201.50	424938.82	5409578.74	190.51	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	6.70	-	0.70	-	1.37
AMEC	L032006	NR11659	210.50	212.00	424938.86	5409585.26	182.28	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	6.65	-	1.05	-	2.06
AMEC	L032042	NR10607	101.00	102.50	425647.93	5409505.29	259.56	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	6.00	-	2.95	-	5.78
AMEC	L032043	NR10607	143.10	144.60	425647.82	5409520.91	220.47	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	6.53	-	1.40	-	2.74
AMEC	L032076	NR10608	167.00	168.50	425611.44	5409541.34	204.02	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	6.67	-	1.65	-	3.23
AMEC	L032150	NR10459	133.50	135.00	424928.96	5409650.66	233.67	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	6.69	-	0.25	-	0.49
AMEC	L032164	NR10457	81.50	83.00	424900.77	5409612.83	276.01	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	2.70	8.10	11.35	15.88	22.25
AMEC	L032165	NR10457	101.00	102.50	424900.5	5409622.75	259.23	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	6.42	-	1.15	-	2.25
AMEC	L032166	NR10457	116.00	117.50	424900.41	5409630.45	246.36	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	2.92	4.40	6.35	8.62	12.45
AMEC	L032202	NR10459	152.00	153.50	424928.99	5409660.77	218.17	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	7.01	-	-	-	-
AMEC	L032203	NR10459	173.00	174.50	424929.16	5409672.29	200.62	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	6.05	-	0.55	-	1.08
AMEC	L032219	NR10466	128.00	129.50	424964.02	5409673.11	231.06	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive	5.92	-	1.00	-	1.96
KCB	586512	NR08262	174.50	176.00	425330.78	5409548.62	196.17	In-pit Mine Rock	8c	Early Felsic to Intermediate Intrusive					
KCB	752785	NR0624	98.50	100.00	425724.58	5409558.01	265.22	In-pit Mine Rock	8d	Early Felsic to Intermediate Intrusive	6.44	-	0.10	-	0.2
KCB	ALT-09-04	NR0689A	345.00	345.60	425438.05	5409459.84	32.43	In-pit Mine Rock	8d	Early Felsic to Intermediate Intrusive					
KCB	ALT-09-20	NR07190	293.00	293.70	425630.63	5409411.69	96.7	In-pit Mine Rock	8d	Early Felsic to Intermediate Intrusive	6.11	-	0.95	-	1.9
KCB	ALT-09-21	NR07190	297.00	297.60	425630.97	5409413.76	93.35	In-pit Mine Rock	8d	Early Felsic to Intermediate Intrusive					
KCB	450640	NR08221	297.70	299.00	425778.28	5409937.66	100.72	In-pit Mine Rock	8f	Early Felsic to Intermediate Intrusive					
KCB	ALT-09-05	NR0689A	349.30	349.90	425438.47	5409461.97	28.72	In-pit Mine Rock	8f	Early Felsic to Intermediate Intrusive					
AMEC	L032004	NR11659	168.60	170.00	424938.95	5409559.29	215.23	In-pit Mine Rock	9a	Mafic to Ultramafic Intrusive	7.06	-	-	-	-
AMEC	L032015	NR11639	148.50	150.00	425089.2	5409621.39	225.09	In-pit Mine Rock	9a	Mafic to Ultramafic Intrusive	6.88	-	0.15	-	0.29
AMEC	L032106	NR10588	350.00	351.50	425687.76	5409516.98	33	In-pit Mine Rock	9a	Mafic to Ultramafic Intrusive	6.92	-	0.25	-	0.49
AMEC	L032112	NR10499	142.50	143.90	425192.18	5409838.3	225.04	In-pit Mine Rock	9a	Mafic to Ultramafic Intrusive	7.04	-	-	-	-
AMEC	L032151	NR10538	43.00	44.50	425824.72	5410069.25	309.68	In-pit Mine Rock	9a	Mafic to Ultramafic Intrusive	5.90	-	4.75	-	9.31
KCB	450812	NR08237	221.70	223.00	425862.98	5409944.81	157.1	In-pit Mine Rock	9a	Mafic to Ultramafic Intrusive					
AMEC	L032208	NR09354	240.50	242.00	425829.63	5409506.17	142.39	In-pit Mine Rock	9ac	Mafic to Ultramafic Intrusive	6.41	-	0.65	-	1.27
AMEC	L032209	NR09354	212.00	213.50	425829.37	5409491.66	166.92	In-pit Mine Rock	9ac	Mafic to Ultramafic Intrusive	6.73	-	0.25	-	0.49
AMEC	L032210	NR09354	197.00	198.50	425829.29	5409484.05	179.84	In-pit Mine Rock	9ac	Mafic to Ultramafic Intrusive	6.93	-	0.10	-	0.20
AMEC	L032211	NR09354	137.00	138.50	425829.39	5409453.71	231.6	In-pit Mine Rock	9ac	Mafic to Ultramafic Intrusive	4.94	-	5.40	-	10.58
AMEC	L032212	NR09354	120.00	121.50	425829.44	5409445.11	246.26	In-pit Mine Rock	9ac	Mafic to Ultramafic Intrusive	6.25	-	0.85	-	1.67
KCB	637704	NR0515	110.64	111.65	425764.75	5410047.5	238.5	In-pit Mine Rock	9ac	Mafic to Ultramafic Intrusive					
AMEC	L032075	NR10608	143.00	144.50	425608.61	5409529.78	224.86	In-pit Mine Rock	10	Felsic to Intermediate Intrusive	6.58	-	0.40	-	0.78
KCB	751753	NR0621	41.60	42.10	425493.07	5409498.27	315.81	In-pit Mine Rock	10a	Felsic to Intermediate Intrusive					
AMEC	L032065	NR10610	51.00	52.50	425349.76	5409097.19	299.42	In-pit Mine Rock	10b	Felsic to Intermediate Intrusive	6.23	-	1.95	-	3.82

Consultant	Sample ID	HOLE-ID	FROM	TO	Easting	Northing	Elevation	Ore/Waste Classification	Rock Code	Lithology	NAG pH after reaction	Vol. of 0.1 N NaOH		NAG (kg H_2SO_4/tonne)	
			m	m			mASL					to pH 4.5	to pH 7.0	to pH 4.5	to pH 7.0
AMEC	L032160	NR10554	31.30	32.60	425274.69	5409630.7	319.7	In-pit Mine Rock	10d	Felsic to Intermediate Intrusive	6.01	-	4.30	-	8.43
KCB	418082	NR07210	180.50	182.10	425810.55	5409993.1	192.62	In-pit Mine Rock	10d	Felsic to Intermediate Intrusive					
AMEC	L032020	NR11687	85.00	86.50	425339.31	5409947.78	282.54	In-pit Mine Rock	11c	Late Structural Zones	2.71	8.50	11.15	16.66	21.85
AMEC	L032108	NR10588	379.00	380.60	425690.98	5409528.71	6.62	In-pit Mine Rock	11c	Late Structural Zones	2.87	3.60	8.75	7.06	17.15
AMEC	L032215	NR09354	50.00	51.50	425829.61	5409409.88	306.75	In-pit Mine Rock	11c	Late Structural Zones	7.17	-	-	-	-
KCB	803009	NR08318	81.50	83.00	425748.18	5409943.73	276.65	In-pit Mine Rock	11c	Late Structural Zones					
AMEC	L032047	NR10607	374.10	375.00	425652.65	5409614.44	9.68	In-pit Mine Rock	13	Diabase	6.18	-	1.20	-	2.35
AMEC	L032172	NR09384	17.00	18.70	426100.04	5409416.32	345.41	In-pit Mine Rock	13	Diabase	6.24	-	1.30	-	2.55
AMEC	L032178	NR09385	80.00	81.00	426078.77	5409414.39	295.15	In-pit Mine Rock	13	Diabase	5.88	-	1.90		3.72
KCB	ALT-09-16	NR06119	84.25	84.95	425396.44	5409361.18	270.37	Ore	2	Mafic Metavolcanic					
AMEC	L032037	NR11749	280.50	282.00	425242.85	5409433.47	108.02	Ore	2a	Mafic Metavolcanic	7.82	-	-	-	-
KCB	331994	NR07203	163.00	164.50	425422.31	5409331.89	196.4	Ore	2a	Mafic Metavolcanic					
KCB	331709	NR07185	30.50	32.00	425495.3	5409364.21	321.99	Ore	2ab	Mafic Metavolcanic					
AMEC	L032094	NR10486	113.10	114.50	425762.84	5409921.48	250.4	Ore	3b	Intermediate Metavolcanic	2.44	17.80	24.35	34.89	47.73
KCB	801034	NR08308	207.50	209.00	426166.33	5409618.01	176.73	Ore	3be	Intermediate Metavolcanic					
KCB	24597	NR0670	381.50	383.00	425708.48	5409488.28	7.21	Ore	4b	Felsic Metavolcanic					
KCB	24644	NR0670	446.45	447.30	425713.05	5409517.47	-50.26	Ore	4b	Felsic Metavolcanic					
KCB	34666	NR0685	369.50	371.00	425498.75	5409512.15	7.87	Ore	4b	Felsic Metavolcanic					
KCB	123572	NR0689A	400.50	402.00	425443.84	5409488.42	-15.3	Ore	4b	Felsic Metavolcanic					
KCB	130078	NR06107	231.50	233.00	425422.57	5409663.96	156.52	Ore	4b	Felsic Metavolcanic					
KCB	414056	NR07194	161.50	162.40	425364.37	5409279.27	199.16	Ore	4b	Felsic Metavolcanic					
KCB	455768	NR08244	351.50	353.00	425696.15	5409653.77	96.32	Ore	4b	Felsic Metavolcanic	6.35	-	0.10	-	0.2
KCB	752810	NR0624	132.80	134.00	425725.36	5409576.05	236.24	Ore	4b	Felsic Metavolcanic					
KCB	752811	NR0624	134.00	135.50	425725.39	5409576.77	235.1	Ore	4b	Felsic Metavolcanic					
KCB	752830	NR0624	158.00	159.00	425725.99	5409589.45	215.02	Ore	4b	Felsic Metavolcanic					
KCB	752868	NR0624	194.00	195.00	425726.96	5409608.88	184.74	Ore	4b	Felsic Metavolcanic					
AMEC	L032021	NR11687	89.70	91.30	425338.89	5409950.47	278.64	Ore	4c	Felsic Metavolcanic	2.58	10.20	13.30	19.99	26.07
AMEC	L032189	NR11647	78.00	79.00	425324.05	5409760.43	283.36	Ore	4c	Felsic Metavolcanic	2.47	14.50	17.80	28.42	34.89
KCB	245390	NR07166	260.00	261.50	426100.85	5409628.8	127.98	Ore	4c	Felsic Metavolcanic	5.50	-	0.15	-	0.3
KCB	437377	NR08222	338.00	339.50	425726.45	5409960.54	59.92	Ore	4c	Felsic Metavolcanic					
KCB	452016	NR08227	65.50	67.00	425714.44	5409757.1	292.08	Ore	4c	Felsic Metavolcanic					
KCB	452024	NR08227	77.50	79.00	425714.07	5409763.29	281.81	Ore	4c	Felsic Metavolcanic					
KCB	452050	NR08227	115.00	116.50	425713.22	5409782.97	249.9	Ore	4c	Felsic Metavolcanic					
KCB	587608	NR08265	88.50	90.00	426010.95	5409634.06	274.26	Ore	4c	Felsic Metavolcanic					
KCB	243135	NR07152	354.00	355.50	425295.91	5409620.59	59.98	Ore	4cb	Felsic Metavolcanic					
KCB	129754	NR06125	141.50	143.00	426114.74	5409665.5	238.71	Ore	4cf	Felsic Metavolcanic					
KCB	459029	NR08255	135.50	137.00	425819.19	5409623.55	245.59	Ore	4cf	Felsic Metavolcanic	6.37	-	0.10	-	0.2
AMEC	L032029	NR11754	51.00	52.00	425811.53	5409636.5	307.86	Ore	4cfa	Felsic Metavolcanic	2.70	9.70	12.75	19.01	24.99
KCB	201136	NR09414	56.00	57.50	425039.91	5409832.83	301.83	Ore	4cfa	Felsic Metavolcanic					
KCB	201116	NR09361	70.20	71.00	425809.61	5410116.79	287.63	Ore	4cfb	Felsic Metavolcanic					
KCB	450215	NR08223	194.00	195.30	425658.49	5409886.37	183.75	Ore	4cfb	Felsic Metavolcanic					
KCB	452177	NR08227	328.00	329.50	425711.01	5409901.46	73.03	Ore	4cfb	Felsic Metavolcanic					
KCB	457266	NR08252	212.50	214.00	425482.33	5409630.6	173.61	Ore	4cfb	Felsic Metavolcanic					
KCB	586554	NR08262	300.50	302.00	425334.1	5409611	86.75	Ore	4cfb	Felsic Metavolcanic					
KCB	805693	NR08319	347.00	348.50	425702.32	5410067.84	85.39	Ore	4cfb	Felsic Metavolcanic					
KCB	RRR01811	NR09331	72.50	74.00	425682.36	5409758.83	285.94	Ore	4cfb	Felsic Metavolcanic	**2.45**	**19.35**	**22.50**	**37.9**	**44.1**
KCB	RRR01813	NR09331	75.50	77.00	425682.26	5409760.39	283.38	Ore	4cfb	Felsic Metavolcanic					
KCB	RRR01830	NR09331	99.50	101.00	425681.48	5409772.93	262.94	Ore	4cfb	Felsic Metavolcanic					
KCB	457269	NR08252	217.00	218.50	425482.6	5409633.15	169.91	Ore	4cfc	Felsic Metavolcanic					
KCB	457271	NR08252	220.00	221.50	425482.78	5409634.86	167.45	Ore	4cfc	Felsic Metavolcanic					
KCB	457287	NR08252	242.50	244.00	425484.3	5409647.82	149.13	Ore	4cfc	Felsic Metavolcanic					
KCB	457291	NR08252	248.50	250.00	425484.72	5409651.3	144.25	Ore	4cfc	Felsic Metavolcanic					
KCB	457292	NR08252	250.00	251.50	425484.83	5409652.17	143.04	Ore	4cfc	Felsic Metavolcanic					
KCB	123235	NR0686	418.00	419.00	425544.63	5409582.67	9.34	Ore	4cg	Felsic Metavolcanic					
KCB	244337	NR07157	103.40	104.50	425720.93	5410018.94	259.92	Ore	4cg	Felsic Metavolcanic	**2.49**	**14.95**	**17.9**	**29.3**	**35.1**
KCB	244357	NR07157	131.00	132.50	425720.31	5410034.84	237.13	Ore	4cg	Felsic Metavolcanic					
AMEC	L032001	NR11654	34.50	36.00	425103.52	5409819.66	314.24	Ore	4cga	Felsic Metavolcanic	6.27	-	0.35	-	0.69
KCB	123181	NR0686	340.90	342.50	425538.93	5409533.7	68.22	Ore	4cgb	Felsic Metavolcanic					
KCB	RRR01966	NR09331	335.00	336.50	425673.51	5409909.4	71.41	Ore	4cgb	Felsic Metavolcanic					
KCB	RRR01838	NR09331	111.50	113.00	425681.1	5409779.26	252.75	Ore	5da	Clastic Metasediment					
KCB	201113	NR09341	162.00	163.00	425759.31	5410021.73	212.36	Ore	5dac	Clastic Metasediment					
KCB	370287	NR06114	245.00	246.00	425900.05	5409529.82	132.2	Ore	5dad	Clastic Metasediment					
KCB	637573	NR0514	167.00	168.41	425704.46	5410211.83	223.04	Ore	5dad	Clastic Metasediment	5.49	-	1.15	-	2.3
KCB	123582	NR0689A	414.00	415.50	425445.32	5409495.78	-26.51	Ore	5daf	Clastic Metasediment					
KCB	123587	NR0689A	421.50	422.90	425446.14	5409499.93	-32.63	Ore	5daf	Clastic Metasediment					
KCB	123616	NR0689A	462.00	463.50	425450.55	5409523.4	-65.39	Ore	5daf	Clastic Metasediment					
KCB	131243	NR06126	99.50	101.00	426164.49	5409668.17	270.55	Ore	5daf	Clastic Metasediment					
KCB	131261	NR06126	126.50	128.00	426164.6	5409683.94	248.63	Ore	5daf	Clastic Metasediment					
KCB	330216	NR07173	439.00	440.00	425251.2	5409557.63	-5.82	Ore	5daf	Clastic Metasediment					
KCB	370260	NR06114	206.00	207.50	425897.31	5409510.95	165.92	Ore	5daf	Clastic Metasediment					
KCB	370291	NR06114	249.50	251.00	425900.39	5409532.2	128.1	Ore	5daf	Clastic Metasediment					
KCB	370292	NR06114	251.00	252.50	425900.5	5409532.95	126.81	Ore	5daf	Clastic Metasediment					
KCB	370305	NR06114	265.00	266.00	425901.46	5409539.92	114.99	Ore	5daf	Clastic Metasediment					
KCB	638667	NR0514	54.50	56.20	425755.72	5410158.31	307.46	Ore	5daf	Clastic Metasediment					
KCB	750579	NR0631	142.50	143.50	424925.49	5409808.1	231.21	Ore	5daf	Clastic Metasediment					
KCB	754751	NR0635	78.00	79.50	425039.14	5409790.34	287.74	Ore	5daf	Clastic Metasediment					
AMEC	L032089	NR10569	93.00	94.20	425524.44	5409297.57	262.32	Ore	5f	Clastic Metasediment/Pyritic Sediment	2.67	16.20	28.25	31.75	55.37
AMEC	L032090	NR10569	94.20	96.00	425524.44	5409298.12	260.92	Ore	5f	Clastic Metasediment/Pyritic Sediment	5.97	-	1.90	-	3.72
AMEC	L032133	NR10529	177.50	179.00	425741.85	5410166.72	209.15	Ore	5f	Clastic Metasediment/Pyritic Sediment	1.82	12.00	15.70	117.60	153.86
AMEC	L032158	NR10552	261.50	263.00	425630.75	5409919.74	90.6	Ore	5f	Clastic Metasediment/Pyritic Sediment	2.15	32.80	41.85	64.29	82.03
KCB	802817	NR08315	250.50	252.00	425754.77	5410098.18	136.94	Ore	6	Chemical Metasediment					
KCB	123019	NR0686	86.00	87.00	425531.87	5409387.46	276.94	Ore	6cd	Chemical Metasediment	5.92	-	0.10	-	0.2
KCB	757311	NR0651	48.00	49.50	425533.23	5409444.14	317.64	Ore	6ce	Chemical Metasediment					
KCB	333459	NR07199	28.00	29.20	425657.63	5409299.61	329.35	Ore	8	Early Felsic to Intermediate Intrusive					
AMEC	L032036	NR11749	37.50	39.00	425248.36	5409306.27	314.89	Ore	11a	Late Structural Zones	5.49	-	0.85	-	1.67
AMEC	L032008	NR11659	236.00	237.50	424939.32	5409601.22	162.4	Outside Pit	2	Mafic Metavolcanic	6.97	-	0.05	-	0.10
KCB	34113	NR0684	303.50	305.00	425817.62	5409388.53	54.22	Outside Pit	2	Mafic Metavolcanic					
KCB	585564	NR08256	633.50	635.00	425913.02	5410138.34	-267.08	Outside Pit	2	Mafic Metavolcanic					
KCB	802975	NR08315	477.00	478.50	425751.13	5410230.46	-46.85	Outside Pit	2	Mafic Metavolcanic					
KCB	201119	NR09373	479.50	480.80	425171.16	5409323.19	-67.94	Outside Pit	2a	Mafic Metavolcanic					
KCB	201127	NR09398	162.50	164.00	425734.14	5409197.31	198.19	Outside Pit	2a	Mafic Metavolcanic					
KCB	201129	NR09403	195.50	197.00	425761.55	5409196.45	164.47	Outside Pit	2a	Mafic Metavolcanic					
KCB	201133	NR09407	87.50	89.00	425786.52	5409139.56	267.28	Outside Pit	2a	Mafic Metavolcanic					
KCB	732293	NR08271	580.50	582.00	425266.46	5409326.8	-127.64	Outside Pit	2a	Mafic Metavolcanic					
KCB	201128	NR09403	162.50	164.00	425759.17	5409185.04	195.34	Outside Pit	2ae	Mafic Metavolcanic					
KCB	201131	NR09407	191.00	192.50	425789.62	5409182.12	172.99	Outside Pit	2ba	Mafic Metavolcanic					
KCB	418460	NR07212	381.50	383.00	425752.57	5410109.24	28.82	Outside Pit	2c	Mafic Metavolcanic					
AMEC	L032142	NR10471	110.00	111.50	424942.32	5409386.19	250.75	Outside Pit	2ce	Mafic Metavolcanic	6.34	-	0.50	-	0.98
AMEC	L032143	NR10471	134.00	135.50	424942.86	5409398.66	230.25	Outside Pit	2ce	Mafic Metavolcanic	7.30	-	-	-	-
AMEC	L032145	NR10471	164.00	165.50	424943.84	5409414.64	204.89	Outside Pit	2ce	Mafic Metavolcanic	7.21	-	-	-	-
KCB	201108	NR09338	188.00	189.50	425522.93	5410257.34	205.74	Outside Pit	3a	Intermediate Metavolcanic					
KCB	201109	NR09338	176.00	177.50	425522.46	5410249.44	214.76	Outside Pit	3a	Intermediate Metavolcanic					
KCB	588630	NR08263	485.00	486.50	425263.31	5409808.48	-50.78	Outside Pit	3a	Intermediate Metavolcanic	5.67	-	1.10	-	2.2
KCB	588650	NR08263	515.00	516.50	425266.18	5409826.85	-74.33	Outside Pit	3a	Intermediate Metavolcanic					
KCB	803855	NR08313	596.00	597.50	425267.99	5409956.69	-130.13	Outside Pit	3a	Intermediate Metavolcanic					
KCB	RRR10355	NR09342	503.00	504.50	425888.47	5410100.9	-77.28	Outside Pit	3a	Intermediate Metavolcanic					
KCB	201101	NR09322	296.80	297.90	425490.84	5410328.28	123.47	Outside Pit	3b	Intermediate Metavolcanic					
KCB	451089	NR08224	294.50	296.00	425607.6	5409948.7	102.29	Outside Pit	3b	Intermediate Metavolcanic					
KCB	454890	NR08242	635.50	637.00	425915.09	5410084.75	-178.46	Outside Pit	3b	Intermediate Metavolcanic					
KCB	587856	NR08265	540.00	541.50	426022.74	5409901.96	-88.3	Outside Pit	3b	Intermediate Metavolcanic					
KCB	587926	NR08265	633.00	634.50	426030	5409962.04	-158.9	Outside Pit	3b	Intermediate Metavolcanic					
KCB	801337	NR08310	238.90	240.50	426002.22	5409942.46	150.66	Outside Pit	3b	Intermediate Metavolcanic					
KCB	201126	NR09386	368.00	369.50	425460.33	5409399.1	7.33	Outside Pit	3ba	Intermediate Metavolcanic					
KCB	457556	NR08252	628.00	629.50	425519.6	5409888.31	-149.7	Outside Pit	3be	Intermediate Metavolcanic					
KCB	457559	NR08252	632.50	634.00	425520.09	5409891.34	-153	Outside Pit	3be	Intermediate Metavolcanic					
AMEC	L032016	NR11658	113.00	114.50	424078.51	5410542.47	270.39	Outside Pit	4a	Felsic Metavolcanic	6.43	-	3.80	-	7.45
KCB	34370	NR0684	908.00	909.50	425861.6	5409597.25	-509.38	Outside Pit	4a	Felsic Metavolcanic					
KCB	34439	NR0684	1008.50	1010.00	425871.96	5409647.73	-595.64	Outside Pit	4a	Felsic Metavolcanic					
KCB	450882	NR08237	321.50	323.30	425859.59	5409998.14	72.53	Outside Pit	4a	Felsic Metavolcanic					

Consultant	Sample ID	HOLE-ID	FROM	TO	Easting	Northing	Elevation	Ore/Waste Classification	Rock Code	Lithology	NAG pH after reaction	Vol. of 0.1 N NaOH		NAG (kg H_2SO_4/tonne)	
			m	m			mASL					to pH 4.5	to pH 7.0	to pH 4.5	to pH 7.0
KCB	454827	NR08242	547.30	548.50	425914.26	5410027.29	-111.38	Outside Pit	4a	Felsic Metavolcanic					
KCB	454885	NR08242	629.50	631.00	425915.14	5410080.84	-173.92	Outside Pit	4a	Felsic Metavolcanic					
KCB	34411	NR0684	966.50	968.00	425867.55	5409626.28	-559.81	Outside Pit	4aa	Felsic Metavolcanic					
KCB	416957	NR08229	308.50	310.00	425605.52	5409899.65	92.04	Outside Pit	4aa	Felsic Metavolcanic					
KCB	457512	NR08252	566.50	568.00	425512.91	5409847.45	-104.24	Outside Pit	4aa	Felsic Metavolcanic					
KCB	457524	NR08252	583.00	584.50	425514.71	5409858.3	-116.53	Outside Pit	4aa	Felsic Metavolcanic					
KCB	457531	NR08252	593.50	595.00	425515.85	5409865.26	-124.31	Outside Pit	4aa	Felsic Metavolcanic					
KCB	638478	NR0512	68.80	69.30	424131.75	5410512.29	301.61	Outside Pit	4aa	Felsic Metavolcanic	2.40	16.00	18.25	31.4	35.8
KCB	638517	NR0512	114.20	115.35	424131.83	5410542.82	267.59	Outside Pit	4aa	Felsic Metavolcanic					
KCB	34318	NR0684	788.00	789.00	425850.33	5409542.82	-402.78	Outside Pit	4ab	Felsic Metavolcanic					
KCB	34330	NR0684	836.00	837.50	425854.69	5409563.88	-445.95	Outside Pit	4ab	Felsic Metavolcanic					
KCB	24670	NR0670	479.00	480.50	425715.84	5409532.87	-79.17	Outside Pit	4b	Felsic Metavolcanic					
KCB	24685	NR0670	501.50	503.00	425717.85	5409543.6	-98.84	Outside Pit	4b	Felsic Metavolcanic	5.41	-	1.25	-	2.5
KCB	244693	NR07153	580.00	581.50	425251.79	5409754.47	-120.53	Outside Pit	4b	Felsic Metavolcanic					
KCB	338506	NR07167	347.00	348.50	426075.16	5409687.06	63.56	Outside Pit	4b	Felsic Metavolcanic					
KCB	339618	NR07206	487.50	489.00	425300.27	5409467.77	-86.31	Outside Pit	4b	Felsic Metavolcanic					
KCB	435951	NR07218	357.50	359.00	425714.2	5410018.67	37.89	Outside Pit	4b	Felsic Metavolcanic					
KCB	454797	NR08242	463.50	465.00	425912.24	5409973.54	-47.33	Outside Pit	4b	Felsic Metavolcanic					
KCB	803776	NR08313	483.50	485.00	425266.34	5409885.36	-43.15	Outside Pit	4b	Felsic Metavolcanic	**5.77**	-	**1.55**	-	**3.0**
KCB	ALT-09-07	NR06109	557.00	557.60	425407.01	5409852.5	-110.48	Outside Pit	4b	Felsic Metavolcanic	2.46	13.65	16.35	26.8	32.0
KCB	ALT-09-17	NR06119	569.00	570.00	425434.1	5409582.42	-158.16	Outside Pit	4b	Felsic Metavolcanic					
KCB	ALT-09-26	NR07148	565.10	565.70	425509.27	5409744.01	-131.29	Outside Pit	4b	Felsic Metavolcanic					
KCB	ALT-09-28	NR0659	329.27	329.85	425367.67	5409750.97	73.88	Outside Pit	4b	Felsic Metavolcanic					
AMEC	L032027	NR11738	123.00	133.50	425869.12	5409239.75	229.97	Outside Pit	4c	Felsic Metavolcanic	5.85	-	1.35	-	2.65
AMEC	L032054	NR11647	199.80	201.30	425324.09	5409835.01	186.8	Outside Pit	4c	Felsic Metavolcanic	2.72	11.55	14.95	22.64	29.30
AMEC	L032055	NR11647	225.50	227.00	425323.99	5409850.77	166.5	Outside Pit	4c	Felsic Metavolcanic	2.39	15.55	19.25	30.48	37.73
AMEC	L032057	NR10625	49.50	51.00	425113.36	5409023.2	301.96	Outside Pit	4c	Felsic Metavolcanic	6.25	-	1.50	-	2.94
AMEC	L032059	NR11635	42.00	43.50	424999.2	5409070.32	311.92	Outside Pit	4c	Felsic Metavolcanic	5.80	-	7.50	-	14.70
KCB	201134	NR09410	142.50	144.00	424692.06	5409938.31	236.05	Outside Pit	4c	Felsic Metavolcanic					
KCB	201140	NR09439	440.50	442.00	425136.82	5409357.66	-30.14	Outside Pit	4c	Felsic Metavolcanic					
KCB	451174	NR08224	434.00	435.50	425612.91	5410036.19	-6.16	Outside Pit	4c	Felsic Metavolcanic					
KCB	454692	NR08242	218.50	220.00	425908.18	5409836.11	154.95	Outside Pit	4c	Felsic Metavolcanic					
KCB	454735	NR08242	272.00	273.00	425909.69	5409863.27	109.17	Outside Pit	4c	Felsic Metavolcanic					
KCB	454765	NR08242	356.00	357.30	425912.08	5409908.14	38.09	Outside Pit	4c	Felsic Metavolcanic					
KCB	454773	NR08242	367.00	368.50	425912.2	5409914.67	29.12	Outside Pit	4c	Felsic Metavolcanic					
KCB	586642	NR08262	429.50	431.00	425339.47	5409678	-23.33	Outside Pit	4c	Felsic Metavolcanic					
KCB	586728	NR08262	552.50	554.00	425345.43	5409745.11	-126.24	Outside Pit	4c	Felsic Metavolcanic					
KCB	587743	NR08265	301.50	303.00	426013.41	5409753.24	97.85	Outside Pit	4c	Felsic Metavolcanic					
KCB	731368	NR08281	324.50	326.00	425880.65	5409827.34	105.94	Outside Pit	4c	Felsic Metavolcanic					
KCB	731405	NR08281	377.00	378.50	425882.09	5409863.5	67.91	Outside Pit	4c	Felsic Metavolcanic					
KCB	731414	NR08281	396.50	398.00	425882.6	5409877.02	53.87	Outside Pit	4c	Felsic Metavolcanic					
KCB	RRR01774	NR09326	614.00	615.50	425638.77	5410162.46	-137.86	Outside Pit	4c	Felsic Metavolcanic					
AMEC	L032123	NR10508	165.00	166.50	425124.35	5409139.63	193.49	Outside Pit	4ca	Felsic Metavolcanic	5.69	-	5.30	-	10.39
AMEC	L032134	NR10471	168.50	170.00	424944.05	5409417.07	201.11	Outside Pit	4ca	Felsic Metavolcanic	6.85	-	0.10	-	0.20
AMEC	L032135	NR10526	33.00	34.50	425058.28	5409023.78	315.96	Outside Pit	4ca	Felsic Metavolcanic	5.27	-	1.00	-	1.96
AMEC	L032141	NR10471	101.00	102.50	424942.16	5409381.59	258.48	Outside Pit	4ca	Felsic Metavolcanic	6.62	-	0.25	-	0.49
AMEC	L032168	NR10582	545.00	546.50	425568.25	5409443.32	-54.02	Outside Pit	4ca	Felsic Metavolcanic	6.46	-	0.25	-	0.49
KCB	201118	NR09373	579.00	580.50	425180.73	5409386.48	-144.23	Outside Pit	4ca	Felsic Metavolcanic					
KCB	201124	NR09377	510.00	511.50	425084.31	5409597.23	-74.43	Outside Pit	4ca	Felsic Metavolcanic					
KCB	201125	NR09383	666.00	667.50	425410.76	5409498.56	-201.62	Outside Pit	4ca	Felsic Metavolcanic					
KCB	201137	NR09425	63.00	64.50	424494.71	5409808.88	298.33	Outside Pit	4ca	Felsic Metavolcanic					
KCB	435214	NR07211	393.50	395.00	425722.81	5410109.35	15.45	Outside Pit	4ca	Felsic Metavolcanic					
KCB	450903	NR08237	350.00	351.50	425858.57	5410013.61	48.79	Outside Pit	4ca	Felsic Metavolcanic					
KCB	450942	NR08237	407.00	408.50	425856.31	5410045.16	1.38	Outside Pit	4ca	Felsic Metavolcanic	6.21	-	0.15	-	0.3
KCB	452257	NR08227	442.00	443.50	425706.07	5409970.37	-17.6	Outside Pit	4ca	Felsic Metavolcanic					
KCB	452843	NR08235	143.50	144.50	424823.87	5409730.32	223.3	Outside Pit	4ca	Felsic Metavolcanic					
KCB	453328	NR08236	151.00	152.00	424762.19	5409738.37	218.06	Outside Pit	4ca	Felsic Metavolcanic					
KCB	454191	NR08230	329.50	331.00	425567.39	5409913.67	75.19	Outside Pit	4ca	Felsic Metavolcanic					
KCB	454259	NR08230	448.50	450.00	425576.04	5409986.34	-18.61	Outside Pit	4ca	Felsic Metavolcanic					
KCB	454285	NR08230	484.00	485.50	425579.67	5410008.66	-45.97	Outside Pit	4ca	Felsic Metavolcanic					
KCB	454845	NR08242	569.50	571.00	425914.82	5410041.8	-128.37	Outside Pit	4ca	Felsic Metavolcanic					
KCB	457577	NR08252	658.00	659.50	425522.85	5409908.54	-171.62	Outside Pit	4ca	Felsic Metavolcanic					
KCB	457630	NR08252	734.50	736.00	425531.33	5409960.38	-227.23	Outside Pit	4ca	Felsic Metavolcanic					
KCB	585332	NR08256	305.00	306.50	425913.43	5410048.04	48.74	Outside Pit	4ca	Felsic Metavolcanic					
KCB	587772	NR08265	340.50	342.00	426014.34	5409776.8	66.79	Outside Pit	4ca	Felsic Metavolcanic					
KCB	732317	NR08271	615.00	616.50	425269.44	5409349.37	-153.55	Outside Pit	4ca	Felsic Metavolcanic					
KCB	801306	NR08310	194.00	195.50	426001.43	5409915.88	186.89	Outside Pit	4ca	Felsic Metavolcanic					
KCB	RRR01265	NR09320	446.00	447.50	425783.03	5410160.02	-15.02	Outside Pit	4ca	Felsic Metavolcanic					
KCB	RRR03016	NR09331	405.50	407.00	425672.66	5409953.72	16.6	Outside Pit	4ca	Felsic Metavolcanic					
KCB	RRR06384	NR09336	630.50	632.00	425592.87	5410149.87	-142.37	Outside Pit	4ca	Felsic Metavolcanic					
AMEC	L032144	NR10471	159.50	161.00	424943.64	5409412.22	208.67	Outside Pit	4cb	Felsic Metavolcanic	6.91	-	0.05	-	0.10
KCB	370954	NR06122	374.00	375.50	425729.72	5409429.18	16.97	Outside Pit	4cb	Felsic Metavolcanic					
KCB	804567	NR08316	285.50	287.00	425690.55	5410172.88	104.01	Outside Pit	4cb	Felsic Metavolcanic					
KCB	804580	NR08316	305.00	306.50	425690.64	5410184.12	88.07	Outside Pit	4cb	Felsic Metavolcanic					
KCB	804708	NR08316	492.50	494.00	425696.71	5410301.24	-58.11	Outside Pit	4cb	Felsic Metavolcanic					
KCB	34267	NR0684	570.00	571.50	425833.86	5409463.02	-201.03	Outside Pit	4cf	Felsic Metavolcanic					
KCB	244631	NR07153	488.50	490.00	425249.21	5409694.25	-51.69	Outside Pit	4cf	Felsic Metavolcanic					
KCB	338747	NR07174	496.50	498.00	425343.43	5409639.33	-62.13	Outside Pit	4cf	Felsic Metavolcanic					
KCB	RRR04250	NR09333	420.50	422.00	425815.13	5410008.14	-2.32	Outside Pit	4cf	Felsic Metavolcanic	**2.32**	**20.65**	**25.6**	**40.5**	**50.2**
AMEC	L032025	NR11738	87.00	88.40	425868.91	5409222.95	266.87	Outside Pit	4cfa	Felsic Metavolcanic	7.05	-	-	-	-
AMEC	L032032	NR11754	339.00	339.80	425810.19	5409814.68	81.85	Outside Pit	4cfa	Felsic Metavolcanic	4.59	-	1.45	-	2.84
AMEC	L032033	NR11754	344.00	345.00	425810.29	5409817.97	77.95	Outside Pit	4cfa	Felsic Metavolcanic	3.04	4.40	6.35	8.62	12.45
AMEC	L032113	NR10508	22.00	23.50	425122.92	5409088.89	327.14	Outside Pit	4cfa	Felsic Metavolcanic	5.14	-	2.25	-	4.41
AMEC	L032114	NR10508	39.00	40.50	425122.93	5409094.33	311.03	Outside Pit	4cfa	Felsic Metavolcanic	5.87	-	4.15	-	8.13
AMEC	L032115	NR10508	54.00	55.30	425122.98	5409099.29	296.98	Outside Pit	4cfa	Felsic Metavolcanic	5.67	-	1.70	-	3.33
AMEC	L032116	NR10508	69.00	70.50	425123.06	5409104.47	282.8	Outside Pit	4cfa	Felsic Metavolcanic	5.82	-	2.70	-	5.29
AMEC	L032131	NR10531	165.00	166.30	425227.45	5409155.82	192.61	Outside Pit	4cfa	Felsic Metavolcanic	4.95	-	8.45	-	16.56
KCB	452894	NR08235	272.00	273.50	424826.16	5409799	114.43	Outside Pit	4cfa	Felsic Metavolcanic					
KCB	RRR05608	NR09335	390.80	392.00	425871.58	5409942.13	16.48	Outside Pit	4cfa	Felsic Metavolcanic	5.22	-	2.85	-	5.6
KCB	201114	NR09356	485.60	486.50	425682.67	5409870.37	7.66	Outside Pit	4cfb	Felsic Metavolcanic					
KCB	201123	NR09377	441.00	442.50	425080.78	5409554.73	-20.19	Outside Pit	4cfb	Felsic Metavolcanic					
KCB	201138	NR09425	206.70	208.50	424512.93	5409906.07	194.03	Outside Pit	4cfb	Felsic Metavolcanic					
KCB	201143	NR09377	441.00	442.50	425080.78	5409554.73	-20.19	Outside Pit	4cfb	Felsic Metavolcanic					
KCB	337174	NR07200	732.00	733.50	425439.77	5409553.86	-297.49	Outside Pit	4cfb	Felsic Metavolcanic					
KCB	339671	NR07206	558.70	560.00	425308.52	5409504.57	-146.58	Outside Pit	4cfb	Felsic Metavolcanic					
KCB	339742	NR07206	660.00	661.80	425320.91	5409558.42	-231.78	Outside Pit	4cfb	Felsic Metavolcanic					
KCB	450886	NR08237	327.50	329.00	425859.39	5410001.32	67.62	Outside Pit	4cfb	Felsic Metavolcanic					
KCB	452274	NR08227	466.00	467.50	425704.64	5409985.39	-36.26	Outside Pit	4cfb	Felsic Metavolcanic					
KCB	454237	NR08230	421.00	422.00	425573.56	5409969.01	2.91	Outside Pit	4cfb	Felsic Metavolcanic					
KCB	454266	NR08230	457.00	458.50	425576.87	5409991.67	-25.18	Outside Pit	4cfb	Felsic Metavolcanic	**2.45**	**8.20**	**10.65**	**16.1**	**20.9**
KCB	454770	NR08242	362.50	364.00	425912.15	5409912	32.74	Outside Pit	4cfb	Felsic Metavolcanic					
KCB	457146	NR08253	309.50	311.00	425514.64	5409753.03	91.54	Outside Pit	4cfb	Felsic Metavolcanic					
KCB	457446	NR08252	472.00	473.50	425502.91	5409787	-32.3	Outside Pit	4cfb	Felsic Metavolcanic					
AMEC	L032100	NR10492	269.00	270.50	425595.24	5410078.2	132.5	Outside Pit	4cg	Felsic Metavolcanic	2.26	22.60	26.50	44.30	51.94
KCB	34231	NR0684	507.50	508.80	425829.38	5409443.88	-141.6	Outside Pit	4cg	Felsic Metavolcanic					
KCB	451139	NR08224	383.00	384.50	425611.21	5410003.06	32.56	Outside Pit	4cg	Felsic Metavolcanic					
AMEC	L032070	NR10610	219.00	220.50	425349.26	5409155.9	142.04	Outside Pit	4cga	Felsic Metavolcanic	6.96	-	0.10	-	0.20
AMEC	L032128	NR10531	96.00	96.50	425225.66	5409131.27	257.49	Outside Pit	4cga	Felsic Metavolcanic	6.21	-	3.20	-	6.27
KCB	34386	NR0684	930.50	931.50	425863.83	5409608.1	-528.67	Outside Pit	4cga	Felsic Metavolcanic					
KCB	334857	NR07187	814.00	815.00	425330.91	5409777.8	-312.94	Outside Pit	4cga	Felsic Metavolcanic					
AMEC	L032126	NR10531	44.50	46.00	425225.02	5409114.47	305.64	Outside Pit	4cgb	Felsic Metavolcanic	7.10	-	-	-	-
KCB	201141	NR09439	610.00	611.50	425169.17	5409457.37	-163.31	Outside Pit	4cgb	Felsic Metavolcanic					
KCB	452235	NR08227	412.00	413.50	425707.71	5409951.83	5.92	Outside Pit	4cgb	Felsic Metavolcanic					
KCB	457476	NR08252	515.50	517.00	425507.48	5409814.63	-65.59	Outside Pit	4cgb	Felsic Metavolcanic					
KCB	587102	NR08259	35.00	36.50	426277.93	5409144.47	325.92	Outside Pit	4cgb	Felsic Metavolcanic					
KCB	587793	NR08265	451.50	453.00	426018.14	5409845.57	-20.25	Outside Pit	4cgb	Felsic Metavolcanic					
KCB	732050	NR08271	112.50	114.00	425239.76	5409050.04	248.09	Outside Pit	4cgb	Felsic Metavolcanic					
KCB	RRR00963	NR09323	464.00	465.50	425688.2	5410022.53	-47.49	Outside Pit	4cgb	Felsic Metavolcanic					
KCB	RRR05312	NR09332	515.00	516.50	425745.05	5410029.22	-68.19	Outside Pit	4d	Felsic Metavolcanic					

Consultant	Sample ID	HOLE-ID	FROM	TO	Easting	Northing	Elevation	Ore/Waste Classification	Rock Code	Lithology	NAG pH after reaction	Vol. of 0.1 N NaOH		NAG (kg H_2SO_4/tonne)	
			m	m			mASL					to pH 4.5	to pH 7.0	to pH 4.5	to pH 7.0
AMEC	L032068	NR10610	124.50	126.00	425349.58	5409122.13	230.28	Outside Pit	5b	Clastic Metasediment	6.31	-	1.00	-	1.96
AMEC	L032119	NR10508	114.00	115.50	425123.52	5409120.56	240.78	Outside Pit	5b	Clastic Metasediment	6.12	-	2.65	-	5.19
AMEC	L032056	NR11640	230.00	231.50	425374.78	5409857.44	169.6	Outside Pit	5ce	Clastic Metasediment	2.46	12.75	17.10	24.99	33.52
AMEC	L032066	NR10610	78.00	79.50	425349.7	5409106.34	274.02	Outside Pit	5ce	Clastic Metasediment	7.13	-	-	-	-
AMEC	L032129	NR10531	100.00	101.20	425225.76	5409132.76	253.41	Outside Pit	5ce	Clastic Metasediment	7.01	-	-	-	-
KCB	414678	NR07205	452.50	454.00	425190.63	5409730.61	-29.42	Outside Pit	5da	Clastic Metasediment					
KCB	450731	NR08221	426.50	428.00	425783.99	5410023.85	5.11	Outside Pit	5da	Clastic Metasediment					
KCB	587898	NR08265	597.00	598.50	426027.19	5409938.62	-131.71	Outside Pit	5da	Clastic Metasediment					
KCB	638531	NR0512	130.00	131.50	424132.15	5410553.63	255.83	Outside Pit	5da	Clastic Metasediment					
AMEC	L032034	NR11754	353.00	354.00	425810.47	5409823.79	71.09	Outside Pit	5dac	Clastic Metasediment	2.30	16.30	21.40	31.95	41.94
AMEC	L032117	NR10508	88.00	89.50	425123.21	5409111.16	265.02	Outside Pit	5dac	Clastic Metasediment	6.80	-	0.10	-	0.20
AMEC	L032118	NR10508	105.00	106.50	425123.4	5409117.27	249.15	Outside Pit	5dac	Clastic Metasediment	7.31	-	-	-	-
AMEC	L032121	NR10508	135.00	136.50	425123.82	5409128.32	221.27	Outside Pit	5dac	Clastic Metasediment	6.08	-	2.60	-	5.10
AMEC	L032122	NR10508	152.00	153.50	425124.12	5409134.69	205.51	Outside Pit	5dac	Clastic Metasediment	7.21	-	-	-	-
KCB	243545	NR07152	579.00	580.50	425293.18	5409774.27	-104.13	Outside Pit	5dac	Clastic Metasediment					
KCB	588216	NR08264	339.30	341.00	425245.92	5409780.76	61.89	Outside Pit	5dac	Clastic Metasediment					
KCB	588564	NR08263	389.00	390.50	425255.07	5409750.42	25.22	Outside Pit	5dac	Clastic Metasediment	5.06	-	1.85	-	3.6
KCB	143928	NR06106	444.50	446.00	425444.85	5409721.76	-19.85	Outside Pit	5daf	Clastic Metasediment					
KCB	337391	NR07203	569.50	571.00	425434.08	5409525.09	-160.12	Outside Pit	5daf	Clastic Metasediment					
KCB	415113	NR07209	562.00	563.50	425227.67	5409496.07	-148.95	Outside Pit	5daf	Clastic Metasediment					
KCB	457413	NR08252	424.00	425.50	425498.47	5409756.68	4.64	Outside Pit	5daf	Clastic Metasediment					
KCB	588259	NR08264	402.50	404.00	425248.51	5409817.32	10.53	Outside Pit	5daf	Clastic Metasediment					
KCB	588262	NR08264	407.00	408.50	425248.75	5409819.94	6.88	Outside Pit	5daf	Clastic Metasediment	5.73	-	2.10	-	4.1
KCB	223374	NR07146	351.50	353.00	425417.87	5409842.74	65.34	Outside Pit	5dafp	Clastic Metasediment					
KCB	586678	NR08262	482.00	483.50	425342.01	5409706.43	-67.39	Outside Pit	5dd	Clastic Metasediment					
AMEC	L032064	NR10613	192.25	193.75	425274.85	5409244.37	165.98	Outside Pit	5f	Clastic Metasediment/Pyritic Sediment	3.30	2.55	6.30	5.00	12.35
AMEC	L032152	NR10546	187.50	189.00	425527.15	5409213.92	171.68	Outside Pit	5f	Clastic Metasediment/Pyritic Sediment	7.37	-	-	-	-
AMEC	L032153	NR10546	208.50	210.00	425527.45	5409221.52	152.11	Outside Pit	5f	Clastic Metasediment/Pyritic Sediment	2.38	10.70	16.90	20.97	33.12
AMEC	L032156	NR10562	263.00	264.00	425628.02	5409891.53	85.94	Outside Pit	5f	Clastic Metasediment/Pyritic Sediment	2.55	10.45	14.60	20.48	28.62
AMEC	L032157	NR10562	282.50	284.00	425628.63	5409893.58	66.31	Outside Pit	5f	Clastic Metasediment/Pyritic Sediment	2.10	33.85	46.10	66.35	90.36
KCB	RRR10249	NR09342	420.50	422.00	425889.25	5410052.63	-10.38	Outside Pit	5f	Clastic Metasediment/Pyritic Sediment					
KCB	437466	NR08222	460.00	461.00	425736.11	5410030.01	-39.57	Outside Pit	6	Chemical Metasediment					
KCB	450754	NR08221	458.50	459.50	425785.87	5410045.56	-17.97	Outside Pit	6	Chemical Metasediment					
KCB	453279	NR08228	517.00	518.50	425658.22	5410028.07	-70.24	Outside Pit	6	Chemical Metasediment					
AMEC	L032067	NR10610	106.50	108.00	425349.65	5409115.99	247.2	Outside Pit	6a	Chemical Metasediment	2.15	36.75	49.50	72.03	97.02
KCB	34433	NR0684	999.50	1001.00	425871.04	5409643.09	-587.99	Outside Pit	6cd	Chemical Metasediment					
KCB	758756	NR0640	120.50	122.00	425881.85	5411131.44	265.41	Outside Pit	6cd	Chemical Metasediment	**3.70**	**0.45**	**1.30**	**0.9**	**2.5**
KCB	201110	NR09338	243.50	245.00	425526.23	5410293.89	164.11	Outside Pit	6d	Chemical Metasediment					
KCB	451109	NR08224	341.00	342.50	425609.23	5409976.94	65.38	Outside Pit	8	Early Felsic to Intermediate Intrusive					
KCB	586714	NR08262	531.50	533.00	425344.35	5409733.53	-108.75	Outside Pit	8	Early Felsic to Intermediate Intrusive					
AMEC	L032007	NR11659	218.00	219.50	424938.94	5409589.94	176.42	Outside Pit	8c	Early Felsic to Intermediate Intrusive	6.68	-	1.00	-	1.96
KCB	201132	NR09407	209.00	210.50	425790.59	5409189.62	156.66	Outside Pit	8c	Early Felsic to Intermediate Intrusive					
KCB	454791	NR08242	448.50	449.50	425912.14	5409964.02	-35.41	Outside Pit	8c	Early Felsic to Intermediate Intrusive					
KCB	454809	NR08242	501.50	503.00	425912.9	5409997.69	-76.65	Outside Pit	8c	Early Felsic to Intermediate Intrusive					
KCB	450765	NR08221	473.00	474.50	425786.85	5410055.67	-28.66	Outside Pit	8d	Early Felsic to Intermediate Intrusive					
KCB	587891	NR08265	588.00	589.50	426026.45	5409932.8	-124.88	Outside Pit	8d	Early Felsic to Intermediate Intrusive					
KCB	587916	NR08265	621.00	622.50	426029.07	5409954.21	-149.86	Outside Pit	8d	Early Felsic to Intermediate Intrusive					
KCB	201130	NR09403	92.00	93.50	425754.93	5409161.32	261.59	Outside Pit	8g	Early Felsic to Intermediate Intrusive					
AMEC	L032125	NR10531	39.00	40.40	425224.99	5409112.7	310.9	Outside Pit	9a	Mafic to Ultramafic Intrusive	6.73	-	0.50	-	0.98
AMEC	L032132	NR10531	205.00	206.50	425228.43	5409170.2	155.2	Outside Pit	9a	Mafic to Ultramafic Intrusive	6.68	-	0.65	-	1.27
AMEC	L032026	NR11738	111.40	112.90	425869.03	5409232.99	244.58	Outside Pit	10b	Felsic to Intermediate Intrusive	6.42	-	0.60	-	1.18
AMEC	L032120	NR10508	120.10	121.50	425123.6	5409122.78	235.15	Outside Pit	10b	Felsic to Intermediate Intrusive	6.42	-	2.20	-	4.31
AMEC	L032124	NR10508	187.40	189.00	425124.73	5409148.32	172.79	Outside Pit	10b	Felsic to Intermediate Intrusive	6.34	-	2.35	-	4.61
AMEC	L032127	NR10531	80.00	81.50	425225.36	5409126.05	272.08	Outside Pit	10b	Felsic to Intermediate Intrusive	5.95	-	1.85	-	3.63
AMEC	L032130	NR10531	127.20	128.30	425226.39	5409142.35	228.01	Outside Pit	10b	Felsic to Intermediate Intrusive	6.01	-	1.85	-	3.63
KCB	34450	NR0684	1023.00	1024.30	425873.29	5409655.22	-607.87	Outside Pit	10d	Felsic to Intermediate Intrusive					
KCB	456806	NR08251	578.20	579.50	425692.39	5409861.56	-69.42	Outside Pit	10e	Felsic to Intermediate Intrusive					
AMEC	L032069	NR10610	205.50	207.00	425349.23	5409150.99	154.6	Outside Pit	11a	Late Structural Zones	6.63	-	0.15	-	0.29
AMEC	L032035	NR11734	47.50	48.80	425874.5	5409025.3	303.07	Outside Pit	11c	Late Structural Zones	4.47	0.05	2.85	0.10	5.59
AMEC	L032031	NR11754	320.60	321.60	425809.88	5409802.87	95.82	Outside Pit	13	Diabase	6.43	-	1.00	-	1.96
AMEC	L032155	NR10561	297.50	299.50	425680.37	5409897.03	50.97	Outside Pit	13	Diabase	6.50	-	0.95	-	1.86
KCB	452360	NR08231	434.60	436.00	425496.56	5409988.82	-2.14	Outside Pit	13	Diabase					
KCB	587109	NR08259	45.50	47.00	426277.34	5409149.65	316.81	Outside Pit	13	Diabase					

Notes:
Bold NAG test values indicate that sequential NAG was completed. The lowest pH recorded in sequential NAG is reported.

Table A-4: Mine Rock Elemental Analysis Results

Consultant	Sample ID	HOLE-ID	Ore/Waste Classification	Rock Code	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Tb	Te	Th	Tl	Tl	U	V	W	Y	Yb	Zn	Zr
					ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm		%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	Average Crustal Abundance*				**0.075**	**8.23**	**1.8**	**10**	**425**	**3**	**0.0085**	**4.15**	**0.15**	**66.5**	**25**	**102**	-	**60**	**5.63**	**19**	**1.5**	**3**	**0.085**	**0.25**	**2.085**	**39**	**20**	-	**2.33**	**950**	**1.2**	**2.355**	**20**	**84**	**1050**	**14**	**90**	**0.7**	**0.035**	**0.2**	**22**	**0.05**	**2.3**	**370**	**2**	-	-	**12**	**0.565**	**0.85**	**2.7**	**120**	**1.25**	**33**	**3.2**	**70**	**165**
	10x Average Crustal Abundance				**0.75**	**82.3**	**18**	**100**	**4250**	**30**	**0.085**	**41.5**	**1.5**	**665**	**250**	**1020**	-	**600**	**56.3**	**190**	**15**	**30**	**0.85**	**2.5**	**20.85**	**390**	**200**	-	**23.3**	**9500**	**12**	**23.55**	**200**	**840**	**10500**	**140**	**900**	**7**	**0.35**	**2**	**220**	**0.5**	**23**	**3700**	**20**	-	-	**12**	**5.65**	**8.5**	**27**	**1200**	**12.5**	**330**	**32**	**700**	**1650**
AMEC	L032146	NR10459	In-pit Mine Rock	2	0.2	1.85	7	30	7	<0.1	<0.02	1.06	0.01	0.9	26.2	362	0.35	229	2.79	3.8	<0.1	0.25	0.01	<0.02	0.01	0.5	25	0.04	2.01	391	0.67	0.03	0.12	101	220	0.4	0.4	-	0.13	0.66	2.6	<1	<0.3	26.8	<0.05	0.05	<0.05	<0.1	0.15	<0.02	<0.05	47	0.2	1.99	0.3	30	2.6
AMEC	L032147	NR10459	In-pit Mine Rock	2	0.42	2.9	10	30	18	<0.1	0.04	5.21	0.04	2.59	50.5	393	0.35	448	4.37	5.6	0.1	0.07	0.03	<0.02	0.01	1.5	39	0.06	3.25	1060	1.34	0.02	0.09	124	240	0.9	0.7	-	0.96	0.39	3.2	<1	<0.3	48.4	<0.05	0.05	0.18	<0.1	0.11	<0.02	0.09	64	0.1	2.21	0.4	52	4.7
AMEC	L032148	NR10459	In-pit Mine Rock	2	0.44	2.66	6	30	10	0.1	0.16	4.22	0.04	5.41	36.8	136	0.49	190	7.16	9.5	0.3	0.17	0.02	0.03	0.01	2.3	39	0.15	2.86	808	2.77	0.02	0.18	53.3	480	0.5	0.5	-	1.34	0.27	10.1	<1	0.5	56.3	<0.05	0.21	0.35	0.2	0.19	<0.02	0.1	184	0.1	8.07	0.9	56	6.9
AMEC	L032149	NR10459	In-pit Mine Rock	2	0.41	2.6	6	30	19	0.1	0.18	7.68	0.06	8.6	49.2	124	0.4	400	8.13	9.4	0.2	0.1	0.02	0.04	0.03	3.8	47	0.16	2.8	974	5.99	0.02	0.1	51.1	430	1.2	0.9	-	3.2	0.07	12.3	1	<0.3	221	<0.05	0.24	0.31	0.3	0.04	<0.02	0.1	155	0.1	7.93	0.9	55	6.1
KCB	33969	NR0682	In-pit Mine Rock	2	0.5	1.54	16.4	-	19	<1	0.3	2.14	0.1	15	26.9	31	3.2	62.9	8.85	14	0.1	0.1	0.006	0.06	0.1	6	52.6	-	1.23	1224	0.5	0.04	<0.1	2.4	1190	4.4	4.9	<5	1.92	0.4	10.6	<0.5	0.4	37	<0.1	-	0.2	0.6	0.072	0.1	0.1	51	2.8	14.5	-	102	4.5
KCB	34069	NR0684	In-pit Mine Rock	2	0.4	3.35	19.2	-	78	<1	0.3	3.45	0.2	13	45.2	80	9.4	119.1	7.76	11	<0.1	0.05	0.04	0.39	5	50	-	1.07	767	8.2	0.13	0.2	70.9	490	0.8	3.1	<5	2.64	0.9	11.9	<0.5	0.3	71	<0.1	-	0.3	0.5	0.091	0.3	0.1	184	0.1	9.9	-	125	1.2
KCB	34089	NR0684	In-pit Mine Rock	2	0.7	3.08	12.2	-	153	<1	0.2	2.65	0.4	9	36.4	84	13.2	74.5	8.27	11	0.2	<0.1	0.05	0.01	0.71	4	74.9	-	1.44	1263	1	0.09	0.3	49.1	570	5.8	27.4	<5	2.37	0.2	7.1	<0.5	0.3	67	<0.1	-	0.5	0.4	0.168	0.3	<0.1	195	0.4	6.5	-	242	0.8
KCB	123521	NR0683A	In-pit Mine Rock	2	0.5	0.63	26.6	-	43	<1	0.2	3.08	0.1	43	6.8	41	1.3	25.3	2.1	2	<0.1	0.2	0.05	0.02	0.14	23	16.3	-	1.03	1261	1.9	0.03	<0.1	9.4	360	0.4	3.7	<5	0.73	0.4	0.7	<0.5	<0.1	36	<0.1	-	0.4	1.5	<0.005	<0.1	1.1	2	0.1	2.8	-	44	7.1
KCB	142502	NR06103	In-pit Mine Rock	2	1.5	2.48	32.1	-	67	<1	0.3	2.21	0.5	13	45.8	72	5.3	93.7	8.33	10	0.1	0.1	0.1	0.02	0.27	5	59.6	-	1	882	1.7	0.08	0.2	52.5	600	8.8	12	5	2.91	0.4	8	<0.5	0.2	51	<0.1	-	1	0.6	0.106	0.1	0.1	149	1.1	10.4	-	338	1.8
KCB	142504	NR06103	In-pit Mine Rock	2	1.1	2.98	19.5	-	70	<1	0.2	2.43	0.6	10	40.3	72	7.1	84.8	9.21	11	0.1	<0.1	0.1	0.02	0.33	4	60.5	-	0.99	1048	1.2	0.13	0.2	55.6	650	29.6	15.9	6	2.23	0.7	9.9	<0.5	0.3	89	<0.1	-	0.5	0.4	0.114	0.2	<0.1	188	0.8	8.9	-	288	0.9
KCB	243561	NR07148	In-pit Mine Rock	2	1	2.73	33.5	-	50	<1	0.1	4.85	1.2	8	29.2	76	3.6	53.5	6.55	9	0.1	<0.1	0.05	0.02	0.14	3	53.4	-	1.21	1053	0.7	0.05	0.2	54.9	370	1.9	6.5	<5	2.31	0.2	4.4	<0.5	0.1	64	<0.1	-	1.2	0.4	0.069	0.1	<0.1	128	<0.1	6.1	-	282	1
KCB	370771	NR06119	In-pit Mine Rock	2	2.3	2.93	21.8	-	2	<1	0.7	5.35	15.3	2	48.3	448	0.5	231.7	6.66	8	0.1	<0.1	0.8	0.18	0.01	1	70.2	-	2.98	1103	4.1	0.02	0.2	155.2	150	0.3	0.4	<5	2.95	0.1	5	<0.5	0.1	33	<0.1	-	2.3	0.1	0.073	<0.1	0.1	93	0.7	2.2	-	3103	1.5
KCB	370915	NR06122	In-pit Mine Rock	2	0.5	3.12	14.9	-	100	<1	0.3	6.03	0.4	10	42.1	72	8.8	83.8	7.48	12	0.2	0.1	0.5	0.03	0.56	5	67.9	-	2.4	1792	0.7	0.16	0.2	50.9	650	2.3	19.8	<5	1.35	0.3	12.9	<0.5	0.5	102	<0.1	-	0.2	0.4	0.119	0.3	0.1	176	13	7.9	-	226	2.1
KCB	612377	NR0666	In-pit Mine Rock	2	1.1	3.72	22.9	-	163	<1	0.3	2.57	0.6	16	36.8	75	12.2	87.2	8.55	14	0.2	0.1	0.05	0.04	0.67	7	68.2	-	1.01	1276	1.9	0.23	0.2	41.1	620	8.5	26.1	6	3.6	0.3	9.9	<0.5	0.4	111	<0.1	-	1.2	0.8	0.111	0.3	0.1	219	0.4	7.8	-	257	3.6
KCB	612385	NR0666	In-pit Mine Rock	2	1.5	2.54	14.5	-	103	<1	0.2	2.26	0.1	14	31.3	70	10.2	63.5	7.33	10	0.2	0.1	0.1	0.02	0.38	6	54.8	-	1	1059	0.9	0.09	0.2	50.3	610	4.6	16.1	<5	1.9	0.1	7.9	<0.5	0.2	61	<0.1	-	1.4	0.5	0.103	0.2	0.1	202	1.4	8.2	-	169	1.5
KCB	752730	NR0624	In-pit Mine Rock	2	0.7	3.83	5.3	-	121	<1	0.2	2.12	0.4	9	47	80	9.2	94.2	6.83	12	0.1	<0.1	0.05	0.01	0.55	4	69.8	-	0.99	796	0.8	0.18	0.2	63.4	660	6	23.6	<5	0.97	0.2	6.6	<0.5	0.2	102	<0.1	-	0.4	0.4	0.117	0.3	0.1	197	0.2	10.5	-	289	1
KCB	752739	NR0624	In-pit Mine Rock	2	0.8	3.03	12.7	-	102	<1	0.1	2.9	1	10	37	70	10.7	106.8	8.39	13	0.2	<0.1	0.1	0.03	0.61	4	52.1	-	0.86	1459	1.6	0.21	0.2	50.4	770	6.5	28.6	7	2.2	0.4	10.3	<0.5	0.4	99	<0.1	-	0.5	0.5	0.113	0.4	<0.1	232	0.3	9.5	-	288	1.5
KCB	752766	NR0624	In-pit Mine Rock	2	1.1	2.91	30.8	-	82	<1	0.5	2.2	0.5	21	43.9	69	5.6	94.2	10	13	0.3	0.1	0.05	0.02	0.23	9	53.8	-	1.18	1264	1.1	0.07	0.3	51.8	550	7.7	9.8	<5	4.77	0.4	10	1.3	0.3	66	<0.1	-	0.7	0.9	0.069	0.1	0.1	226	0.2	10.9	-	271	2.7
KCB	764208	NR0644	In-pit Mine Rock	2	0.4	3.17	110.5	-	78	<1	<0.1	6.91	0.2	12	39.7	67	5.7	117.3	6.87	11	0.2	<0.1	0.05	0.02	0.38	5	115	-	0.92	1302	0.5	0.07	0.2	52.6	480	5.3	16.6	<5	0.46	0.5	11.8	<0.5	0.3	77	<0.1	-	0.1	0.5	0.08	0.2	0.1	158	0.1	13.2	-	140	1
KCB	764219	NR0644	In-pit Mine Rock	2	0.8	2.59	9	-	59	<1	0.1	5.48	1.3	12	54.4	64	7.4	134.2	7.09	10	0.4	0.1	0.2	0.05	0.42	5	61.8	-	1.07	1631	2.8	0.07	0.2	45.7	450	3.6	21.8	<5	1.14	0.6	11.2	<0.5	0.3	77	<0.1	-	0.3	0.5	0.092	0.3	0.2	154	5	12.2	-	340	2.1
KCB	803501	NR08313	In-pit Mine Rock	2	0.7	2.28	53	-	2	<1	0.2	4.47	<0.1	1	35.9	326	0.5	677.6	3.57	5	0.1	<0.1	0.05	0.03	0.01	<1	44.7	-	1.99	886	0.6	0.03	0.2	151.1	150	1.6	0.2	<5	0.44	0.4	3.9	<0.5	0.1	47	<0.1	-	0.6	0.1	0.073	<0.1	<0.1	50	0.1	2.9	-	55	1
KCB	803507	NR08313	In-pit Mine Rock	2	0.1	1.84	5.4	-	6	<1	0.1	4.53	<0.1	1	23.3	295	0.4	26.9	3.06	4	0.1	<0.1	0.05	0.02	0.01	<1	33.6	-	1.48	799	0.7	0.03	0.2	88.5	120	1.2	0.2	<5	0.08	0.7	4.9	<0.5	0.1	70	<0.1	-	0.1	<0.1	0.094	<0.1	<0.1	46	0.2	3	-	40	0.7
KCB	ALT-09-06	NR0655	In-pit Mine Rock	2	0.6	1.95	3	-	79	<1	0.3	1.55	0.3	12	34.9	90	6.5	163	7.66	9	0.2	<0.1	0.438	0.03	0.28	5	45.3	-	0.97	1020	0.8	0.11	0.2	52.6	710	3	10.9	<5	1.36	0.2	9.1	<0.5	0.3	29	<0.1	-	0.6	0.4	0.164	0.2	0.1	224	12.7	8.6	-	245	1.1
KCB	ALT-09-13	NR06131A	In-pit Mine Rock	2	5.5	2.25	48.7	-	31	<1	1	4.31	0.3	11	59.7	66	1.5	937.9	10	10	0.2	0.1	0.118	0.37	0.15	5	48.8	-	1.54	1660	0.9	0.1	0.2	63	460	3.3	8.5	<5	7.82	0.3	6.8	1.2	0.2	66	<0.1	-	10.6	0.4	0.082	0.1	0.1	115	0.3	9.1	-	162	4
KCB	ALT-09-24	NR07187	In-pit Mine Rock	2	0.8	2.54	9.1	-	27	<1	0.1	4.73	0.1	26	34	201	1.4	137.5	6.91	10	0.1	0.1	0.054	0.03	0.03	11	63.8	-	2.64	1094	0.4	0.01	0.1	81	550	3.8	1.2	<5	3.22	0.1	10.1	<0.5	<0.1	79	<0.1	-	1.3	1.4	0.027	<0.1	0.2	272	0.2	5	-	79	5.9
KCB	ALT-09-25	NR08313	In-pit Mine Rock	2	0.2	3.86	5.5	-	3	<1	1	7.55	<0.1	3	28.8	450	0.3	17	5.59	8	0.2	<0.1	0.017	0.09	0.01	1	80.9	-	3.25	1361	2.3	0.01	0.1	128.4	140	3.2	0.4	6	0.37	0.1	16	<0.5	0.2	165	<0.1	-	0.7	0.1	0.083	<0.1	<0.1	128	0.2	5	-	67	0.6
KCB	L032010	NR11644	In-pit Mine Rock	2a	0.06	2.15	5	40	<5.	0.2	0.06	1.73	0.02	3.51	33	131	0.29	26.7	7.11	7.4	0.2	0.13	<0.01	<0.02	<0.01	1.6	37	0.12	2.16	576	3.12	0.05	0.32	43.9	540	0.4	0.3	-	0.23	0.42	6.8	<1	0.4	43.9	<0.05	0.15	0.16	0.2	0.23	<0.02	<0.05	177	0.2	6.26	0.8	36	5.9
KCB	L032012	NR11639	In-pit Mine Rock	2a	0.28	4.06	8	40	<5.	0.1	0.03	6.11	0.04	1.24	50.2	531	0.3	258	5.42	8	0.1	<0.05	<0.01	<0.02	<0.01	0.6	85	0.08	4.57	1270	12.9	0.03	0.09	165	240	0.7	<0.2	-	0.41	0.28	8.2	<1	0.6	63.1	<0.05	0.07	0.18	<0.1	0.16	<0.02	<0.05	100	<0.1	3.08	0.5	55	4
KCB	L032013	NR11639	In-pit Mine Rock	2a	0.24	4.95	12	40	<5.	0.1	0.05	6.3	0.05	3.5	58.3	649	0.39	164	7.2	10.7	0.3	<0.05	0.03	<0.02	0.01	1.6	116	0.09	5.22	1480	1.27	0.01	0.08	204	250	0.9	0.5	-	0.5	0.14	15.7	<1	0.6	73.8	<0.05	0.11	0.17	0.2	0.11	<0.02	<0.05	177	<0.1	3.76	0.5	74	4.7
KCB	L032028	NR11730	In-pit Mine Rock	2a	0.46	3.98	16	50	22	0.8	0.09	4.82	0.27	82.9	42	520	2.22	38	6.01	14.1	0.3	0.45	0.04	0.03	0.08	37.3	173	0.07	4.34	978	0.72	0.03	0.44	175	1990	2.9	2.8	-	0.41	0.81	12.7	<1	0.7	49.8	<0.05	0.51	0.09	3.6	0.25	0.04	0.62	130	0.8	9.14	0.6	123	17.8
KCB	L032038	NR11749	In-pit Mine Rock	2a	0.2	2.55	8	40	60	<0.1	0.17	1.21	0.02	117	42.7	414	3.97	89.5	3.89	5.2	<0.1	<0.05	0.03	<0.02	0.34	0.6	59	0.04	2.85	569	0.61	0.05	0.09	135	240	1.4	14	-	0.38	0.66	4	<1	<0.3	21.4	<0.05	0.06	0.3	<0.1	0.16	0.14	<0.05	64	0.2	2.44	0.3	54	2.6
KCB	L032044	NR10607	In-pit Mine Rock	2a	1	4.26	20	30	24	0.2	0.22	3.64	0.27	13.5	14.4	95	3.74	156	8.69	15.8	0.2	0.07	0.03	0.05	0.12	5.5	91	0.14	1.86	1860	0.49	0.19	0.18	62.2	780	5.5	5.4	-	2	0.53	14.1	<1	<0.3	127	<0.05	0.5	0.95	0.5	0.13	0.3	<0.05	238	1.3	12.9	1.4	282	6.5
KCB	L032049	NR10588	In-pit Mine Rock	2a	0.69	2.66	56	30	21	0.2	0.07	4.24	0.22	8.9	54.1	78	4.61	137	9.02	8.5	0.1	0.09	0.02	0.03	0.27	3.6	46	0.11	1.69	1710	0.5	0.13	0.22	73.7	480	4.6	12.4	-	3.86	0.8	10	<1	<0.3	43.7	<0.05	0.34	0.2	0.4	0.09	0.31	<0.05	129	0.6	9.28	0.8	132	6.4
KCB	L032050	NR10588	In-pit Mine Rock	2a	0.17	2.95	8	40	78	0.1	0.05	4.85	0.11	11.5	37.7	112	8.33	97.7	5.5	9.5	0.2	0.05	0.01	0.03	0.47	4.6	70	0.14	1.04	833	0.42	0.17	0.27	59.8	560	4.5	19.4	-	0.46	0.41	11.2	<1	<0.3	41.4	<0.05	0.43	0.06	0.5	0.18	0.21	0.05	152	1.3	10.5	0.9	95	3.5
KCB	L032101	NR10588	In-pit Mine Rock	2a	0.45	3.53	20	30	98	0.2	0.06	6.34	0.32	13.8	33.6	82	7.35	93.4	7.15	9.9	0.2	0.08	0.03	0.04	0.75	5.3	59	0.14	1.27	2430	0.44	0.24	0.23	45.2	640	3.2	26.8	-	0.6	0.51	9.9	<1	0.4	122	<0.05	0.5	0.08	0.5	0.15	0.29	0.06	117	0.6	11.8	0.9	150	4.2
KCB	L032104	NR10588	In-pit Mine Rock	2a	1.77	3.13	5	40	135	0.1	0.18	2.66	0.59	12.9	45.7	98	7.66	157	9.29	9.8	0.3	0.06	0.03	0.32	0.07	0.52	5.1	86	0.12	1.08	1370	0.59	0.17	0.22	74.8	780	4.2	16.3	-	2.73	0.23	6.8	<1	<0.3	72.3	<0.05	0.46	1.36	0.5	0.19	0.22	0.05	258	0.5	8.92	0.8	1390	5.3
KCB	L032159	NR10554	In-pit Mine Rock	2a	0.16	2.63	6	40	<5.	<0.1	0.05	1.36	0.02	1.36	32.7	346	0.36	60.4	3.65	5.2	<0.1	<0.05	<0.01	<0.02	<0.01	0.7	67	0.04	2.87	806	0.25	0.03	0.09	108	220	0.8	0.3	-	0.09	0.54	2.7	<1	<0.3	13.2	<0.05	0.16	<0.1	0.1	0.02	<0.02	<0.05	68	0.1	2.13	0.3	57	2.2
KCB	L032161	NR10554	In-pit Mine Rock	2a	0.45	4.03	13	30	16	0.1	0.52	8.25	0.08	1.41	55.8	512	0.28	20.8	6.87	8.3	0.3	<0.05	0.05	0.03	<0.01	0.7	104	0.09	4.18	1540	0.63	0.01	0.08	160	180	0.8	<0.2	-	1.13	0.23	8.1	<1	<0.3	57.1	<0.05	0.06	1.17	0.1	0.07	<0.02	<0.05	133	0.4	2.45	0.5	68	4.1
KCB	L032162	NR10554	In-pit Mine Rock	2a	0.22	2.49	7	30	<5.	<0.1	0.06	2.6	0.02	1.1	35.5	376	0.61	61.7	3.93	5.5	0.1	<0.05	<0.01	<0.02	<0.01	0.5	67	0.05	2.82	661	1.61	0.03	0.08	116	190	0.4	0.4	-	0.14	0.46	3	<1	<0.3	23.1	<0.05	0.06	0.2	<0.1	0.08	<0.02	<0.05	59	0.3	4.7	0.2	1	
KCB	L032163	NR10554	In-pit Mine Rock	2a	0.35	3.7	7	30	<5.	0.1	0.36	6.24	0.06	6.92	47.8	188	0.45	102	8.78	13.4	0.3	<0.05	0.06	0.12	<0.01	2.9	132	0.14	2.71	1080	2.25	0.02	0.07	63.7	420	1.3	0.3	-	1.18	0.06	27.9	<1	<0.3	141	<0.05	0.26	0.81	0.3	0.01	<0.02	<0.05	251	0.1	7.1	0.8	64	5.9
KCB	L032167	NR10457	In-pit Mine Rock	2a	0.28	4.36	9	40	9	0.2	0.08	5.04	0.06	2.94	46.6	460	0.69	189	7.11	10.4	0.3	<0.05	0.04	0.03	0.03	1.3	88	0.09	4.58	1160	0.92	0.02	0.08	142	300	1.2	1.2	-	0.41	0.22	14.7	<1	<0.3	76.1	<0.05	0.09	0.15	0.2	0.11	<0.02	<0.05	171	<0.1	3.69	0.5	73	4.6
AMEC	RRR253655	Channel	In-pit Mine Rock	2a	0.91	4.1	5	20	8	<0.1	0.03	5.06	0.09	6.36	46.5	12	0.45	233	10.1	16.3	0.3	<0.05	0.05	<0.06	0.02	2.6	82	0.19	2.81	1410	0.15	0.02	0.07	51.5	440	2.4	0.7	-	0.13	0.8	27	<1	1	35.4	<0.05	0.32	0.11	0.3	0.08	<0.02	<0.05	668	1.9	8.37	1.2	120	5.3
KCB	414533	NR07205	In-pit Mine Rock	2a	1.9	2.89	19.8	-	10	<1	5	4.34	0.1	12	33	131	0.6	258.3	8.92	13	0.2	0.1	0.1	0.14	0.03	5	93.7	-	2.38	941	3.5	0.02	0.1	53.5	410	2.6	1.1	<5	3.88	<0.1	14.8	<0.5	0.1	90	<0.1	-	6.7	0.4	0.016	<0.1	0.1	155	1.6	8.1	-	82	2.3
KCB	455611	NR08244	In-pit Mine Rock	2a	0.6	3.28	30.1	-	45	<1	0.1	5.24	0.3	9	34.7	62	6.1	88.2	7.09	10	0.1	<0.1	0.1	0.03	0.33	4	47.1	-	1.61	2105	1.1	0.14	0.2	48	460	7.5	17.4	<5	1.65	0.4	9.5	<0.5	0.3	67	<0.1	-	0.3	0.4	0.085	0.2	<0.1	160	1.4	8.9	-	158	0.7
KCB	455635	NR08244	In-pit Mine Rock	2a	0.4	2.33	8.4	-	18	<1	0.2	4.7	0.2	11	29.7	48	2	84.9	6.58	7	0.1	<0.1	0.05	0.03	0.09	4	43	-	1.35	1648	0.7	0.03	0.1	39.2	550	3.3	4.5	<5	1.53	0.4	6.9	<0.5	0.1	78	<0.1	-	0.5	0.4	0.04	<0.1	0.1	80	0.5	9	-	169	0.8
KCB	586509	NR08262	In-pit Mine Rock	2a	1.8	1.38	32	-	18	<1	1.6	6.84	0.1	11	59.4	216	0.7	132.9	5.14	5	0.1	0.1	0.05	0.09	0.05	6	50	-	1.98	1201	3.7	0.01	0.1	92	160	6.6	1.7	<5	2.64	0.1	5.2	<0.5	0.2	174	<0.1	-	5.6	0.2	0.01	<0.1	0.3	35	0.1	6.8	-	65	5
KCB	588036	NR08264	In-pit Mine Rock	2a	0.4	0.17	30.7	-	2	<1	0.2	1.66	<0.1	1	33.9	276	0.4	194.5	2.71	4	0.1	<0.1	0.05	0.01	0.01	1	40.5	-	1.86	471	1	0.03	0.1	122.3	190	1.4	0.2	<5	0.3	0.5	2.5	<0.5	0.1	25	<0.1	-	0.5	0.1	0.051	<0.1	<0.1	34	0.1	1.3	-	41	0.4
KCB	588359	NR08263	In-pit Mine Rock	2a	0.2	2.81	9.8	-	4	<1	0.6	5.49	0.1	4	34.2	405	0.6	53.9

Table A-4: Mine Rock Elemental Analysis Results (continued)

Consultant	Sample ID	HOLE-ID	Ore/Waste Classification	Rock Code	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Tb	Te	Th	Tl	Tl	U	V	W	Y	Yb	Zn	Zr
					ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	Average Crustal Abundance*				0.075	8.23	1.8	10	425	3	0.0085	4.15	0.15	66.5	25	102	-	60	5.63	19	1.5	3	0.085	0.25	2.085	39	20	-	2.33	950	1.2	2.355	20	84	1050	14	90	0.7	0.035	0.2	22	0.05	2.3	370	2	-	-	1.2	0.565	0.85	2.7	120	1.25	33	3.2	70	165
	10x Average Crustal Abundance				0.75	82.3	18	100	4250	30	0.085	41.5	1.5	665	250	1020	-	600	56.3	190	15	30	0.85	2.5	20.85	390	200	-	23.3	9500	12	23.55	200	840	10500	140	900	7	0.35	2	220	0.5	23	3700	20	-	-	12	5.65	8.5	27	1200	12.5	330	32	700	1650
AMEC	L032022	NR11710	In-pit Mine Rock	4c	0.14	1.44	19	40	27	0.2	0.09	1.23	0.06	22.2	5.1	62	1.17	30.4	0.71	3.5	<0.1	0.23	<0.01	<0.02	0.16	11.8	23	0.01	0.64	349	0.54	0.13	<0.05	5.6	480	10.4	4	-	0.29	0.36	1.8	<1	<0.3	84.4	<0.05	0.09	<0.05	1.3	<0.01	0.04	0.11	6	<0.01	1.44	<0.1	40	9.6
AMEC	L032024	NR11738	In-pit Mine Rock	4c	0.28	2.06	18	40	29	0.2	0.08	2.75	0.12	32	12.9	63	1.53	116	2.46	5.3	<0.1	0.37	0.02	<0.02	0.14	15.7	60	0.04	1.25	675	0.47	0.04	<0.05	37.6	570	1.1	3.4	-	0.54	0.47	2	<1	<0.3	36.6	<0.05	0.18	0.06	1.7	<0.01	0.04	0.3	15	0.3	3.35	0.3	107	14.9
AMEC	L032045	NR10607	In-pit Mine Rock	4c	0.15	1.54	19	30	19	0.2	0.02	0.79	0.14	26.9	7.2	61	1.58	16.1	1.64	4.4	<0.1	0.52	0.02	<0.02	0.12	14.8	29	0.02	0.69	452	0.23	0.06	<0.05	7.6	440	19.4	4.1	-	1.03	0.51	1	<1	<0.3	25	<0.05	0.14	<0.05	2.2	<0.01	0.06	0.36	6	<0.1	2.3	0.2	90	15.2
AMEC	L032046	NR10607	In-pit Mine Rock	4c	0.47	1	57	40	20	0.2	<0.02	1.2	0.39	25.4	6.6	43	1.9	15.3	1.81	2.5	<0.1	0.73	0.03	<0.02	0.16	14	16	0.02	0.53	482	0.37	0.07	0.08	7.3	400	35.9	5	-	1.76	0.51	0.5	<1	<0.3	30.8	<0.05	0.13	0.05	2.3	0.01	0.07	0.45	3	0.3	2.25	0.2	129	27
AMEC	L032052	NR11647	In-pit Mine Rock	4c	0.25	1.1	95	30	30	0.2	0.03	0.44	0.09	23.1	7.8	65	1.04	21.3	1.79	3.1	<0.1	0.24	<0.01	<0.02	0.13	12.4	37	0.01	0.91	207	0.52	0.04	<0.05	9.4	350	11.6	3.3	-	1.35	0.24	0.6	<1	<0.3	19.8	<0.05	0.11	<0.05	1.3	<0.01	0.04	0.2	4	<0.1	1.39	0.1	61	5.2
AMEC	L032062	NR10614	In-pit Mine Rock	4c	0.14	1.8	15	40	54	0.4	0.04	0.55	0.11	26.1	7.4	44	3.82	9.9	1.94	5.2	<0.1	0.43	<0.01	<0.02	0.33	13.7	29	0.02	0.73	856	0.36	0.1	0.14	7.2	420	13.4	17.2	-	0.39	0.47	1.2	<1	<0.3	40.3	<0.05	0.11	<0.05	1.8	0.05	0.37	0.29	13	<0.1	1.69	0.1	75	11.3
AMEC	L032063	NR10614	In-pit Mine Rock	4c	2.34	1.8	62	40	27	0.4	0.04	1.79	0.43	34.2	10.8	58	3.61	13.9	2.31	4.8	<0.1	0.65	0.03	<0.02	0.34	17	34	0.03	1.17	1370	0.44	0.14	0.07	18.1	490	41.7	15.2	-	2.5	1.07	1.2	<1	<0.3	30.2	<0.05	0.15	0.22	1.9	0.03	0.4	0.36	9	<0.1	2.17	0.2	119	25.6
AMEC	L032107	NR10588	In-pit Mine Rock	4c	0.12	2.34	9	40	30	0.2	0.16	0.94	0.07	52.9	8.5	45	2.69	20.6	2.26	5.9	0.1	0.38	0.03	<0.02	0.11	25.6	40	0.04	1.02	674	0.35	0.08	<0.05	10.6	560	4	3.5	2.3	0.78	0.06	1.3	<1	<0.3	44.4	<0.05	0.26	<0.05	3.4	<0.01	<0.05	0.51	12	2.5	4.04	0.3	123	14.3
AMEC	L032175	NR09384	In-pit Mine Rock	4c	0.3	1.52	9	30	28	0.1	0.1	1.07	0.48	38.2	10.1	51	1.97	15.7	2.5	5.6	<0.1	0.43	0.01	0.05	0.15	19.3	36	0.03	0.82	877	0.35	0.08	0.12	9.2	520	17.4	5.4	-	0.45	0.18	1.5	<1	<0.3	44.3	<0.05	0.21	<0.05	2.2	0.05	0.07	0.46	20	1.1	3.7	0.2	187	16.2
AMEC	L032176	NR09384	In-pit Mine Rock	4c	0.28	1.07	11	30	29	<0.1	0.06	1.81	0.4	25	7.1	55	1.22	10.3	1.82	4.3	<0.1	0.35	0.03	<0.02	0.13	13	43	0.03	0.84	460	0.55	0.03	0.05	11.4	390	2.8	3.9	-	0.32	0.26	1.1	<1	<0.3	25.2	<0.05	0.13	0.08	1.4	0.03	0.05	0.21	12	<0.1	2.38	0.2	154	11.2
AMEC	L032177	NR09385	In-pit Mine Rock	4c	0.15	2.7	8	30	41	0.2	0.05	1.79	0.14	27.2	8.1	56	3.76	21.6	1.87	7.2	<0.1	0.41	<0.01	<0.02	0.22	13.9	24	0.03	0.82	391	0.44	0.23	0.1	11.5	440	9.5	9.3	-	0.46	0.3	1.6	<1	<0.3	114	<0.05	0.18	<0.05	1.5	0.04	0.13	0.27	18	0.1	3.46	0.2	81	12.5
KCB	24581	NR0670	In-pit Mine Rock	4c	1.8	0.36	20.7	-	34	<1	0.1	1.72	2.6	31	7	34	0.9	32.9	1.56	1	<0.1	0.4	0.2	0.02	0.16	15	5.8	-	0.49	1343	0.6	0.01	0.2	7.2	360	474.8	5.1	<5	1.57	1.8	0.5	1.6	<0.1	41	<0.1	-	0.2	2.1	<0.005	0.1	0.3	2	<0.1	2.4	-	689	16.5
KCB	24582	NR0670	In-pit Mine Rock	4c	1.3	0.39	23.8	-	35	<1	0.4	1.51	1.2	30	6.6	42	1	81.6	1.61	1	<0.1	0.5	0.1	0.01	0.16	16	5.4	-	0.28	884	0.4	0.01	0.1	7.1	380	96.6	5	<5	1.83	1.2	0.4	<0.5	0.1	30	<0.1	-	0.2	2.4	<0.005	0.1	0.4	2	0.1	2.2	-	397	17.8
KCB	201117	NR09373	In-pit Mine Rock	4c	1	4.54	18.4	-	4	<1	1	7.29	0.1	8	50.4	504	1.7	287.6	7.09	11	0.2	<0.1	0.023	0.09	0.02	4	148.3	-	4.04	1815	1.3	0.01	0.2	167.2	220	6.7	0.8	<5	0.99	0.1	14.8	<0.5	0.1	129	<0.1	-	1	0.3	0.05	<0.1	<0.1	137	0.2	5.3	-	135	1
KCB	201142	NR09445	In-pit Mine Rock	4c	0.1	0.68	<0.5	-	37	<1	0.2	1.95	<0.1	49	8.7	28	0.5	71.7	1.91	2	<0.1	0.2	0.017	<0.01	0.09	23	20.9	-	0.52	111	14.3	0.04	<0.1	11.2	560	2	2.3	8	1.63	0.1	0.4	<0.5	0.1	50	<0.1	-	0.2	2.2	<0.005	<0.1	0.4	4	<0.1	2.6	-	12	6.3
KCB	450258	NR08223	In-pit Mine Rock	4c	0.3	1.75	4.7	-	23	<1	0.7	0.69	1.5	29	8.7	52	1.4	24.5	1.95	7	<0.1	0.3	0.007	0.06	0.09	14	17.5	-	1.15	642	0.3	0.11	<0.1	9	370	3	3.8	<5	0.95	<0.1	1.4	<0.5	0.1	65	<0.1	-	0.4	1.9	0.03	<0.1	0.3	19	0.2	3.6	-	538	9.7
KCB	450499	NR08237	In-pit Mine Rock	4c	0.4	1.63	5.3	-	33	<1	1.7	0.96	0.1	41	8	63	3.2	8.1	2.32	6	<0.1	0.5	0.05	0.03	0.11	21	32.7	-	0.81	481	0.5	0.13	0.2	7.8	520	2.5	5.3	<5	1.26	0.2	1.4	<0.5	0.2	50	<0.1	-	0.2	2.5	0.026	0.1	0.3	14	0.2	2.2	-	52	18
KCB	452002	NR08227	In-pit Mine Rock	4c	0.6	1.43	34.3	-	18	<1	0.3	0.11	5.4	21	8.3	35	0.8	49.7	2.54	4	<0.1	0.2	0.1	0.24	0.13	10	35.2	-	1.25	586	0.4	0.01	<0.1	10.9	380	5	4.5	<5	1.18	0.5	0.5	<0.5	<0.1	6	<0.1	-	<0.1	1.2	<0.005	0.1	0.1	6	0.1	0.8	-	1369	5.4
KCB	585172	NR08256	In-pit Mine Rock	4c	0.6	1	15.4	-	25	<1	3.9	0.4	0.3	22	8.3	40	1.2	46	2.41	3	<0.1	0.2	0.05	0.02	0.12	12	29.1	-	0.57	374	0.6	0.04	<0.1	9.9	380	7.8	3.8	<5	1.71	0.4	0.6	<0.5	0.1	16	<0.1	-	0.3	1.1	0.008	<0.1	0.1	4	<0.1	1.2	-	107	7
KCB	585517	NR08262	In-pit Mine Rock	4c	0.3	0.88	13.4	-	21	<1	<0.1	2.41	0.2	23	7.1	37	0.9	18	1.28	2	<0.1	0.1	0.05	0.01	0.09	12	27.1	-	0.76	470	0.4	0.03	0.1	8.1	340	6.1	2.7	<5	0.62	0.4	0.8	<0.5	0.1	39	<0.1	-	<0.1	1.2	<0.005	<0.1	0.2	3	0.1	1.8	-	91	4.3
AMEC	L032136	NR10471	In-pit Mine Rock	4ca	0.09	0.52	1	30	29	<0.1	0.08	1.81	0.04	22.3	9.1	58	0.56	41.7	2.36	1.7	<0.1	0.16	0.02	<0.02	0.08	10.6	18	0.03	0.68	230	0.55	0.04	<0.05	19.5	430	0.6	1.7	-	2.17	<0.05	0.7	<1	<0.3	41.2	<0.05	0.12	0.42	1.1	<0.01	<0.02	0.21	5	<0.1	2.22	0.2	44	4.8
AMEC	L032137	NR10471	In-pit Mine Rock	4ca	0.27	0.61	1	30	33	<0.1	0.09	1.64	0.04	24.1	7.7	68	0.56	369	2.03	2	<0.1	0.2	0.02	<0.02	0.09	11.5	21	0.03	0.59	272	6.98	0.05	<0.05	13.1	440	1	1.8	-	1.9	0.11	0.6	<1	<0.3	42.6	<0.05	0.12	0.35	1.5	<0.01	<0.02	0.25	4	<0.1	2.41	0.2	31	6.2
AMEC	L032138	NR10471	In-pit Mine Rock	4ca	0.04	0.59	<1	30	36	<0.1	0.06	2.26	0.02	26.3	7.4	66	0.61	10.4	1.91	1.9	<0.1	0.19	<0.01	<0.02	0.08	13	19	0.03	0.57	322	0.48	0.05	<0.05	12	430	1.2	1.8	-	1.78	<0.05	0.6	<1	<0.3	52.3	<0.05	0.14	0.33	1.5	<0.01	<0.02	0.23	3	<0.1	2.41	0.2	26	6.3
AMEC	L032140	NR10471	In-pit Mine Rock	4ca	0.15	0.76	4	30	31	<0.1	0.27	2.23	0.08	25.3	11.2	61	0.62	38.5	2.76	2.3	<0.1	0.21	0.02	<0.02	0.08	12.6	27	0.03	0.73	398	1.04	0.05	<0.05	14.1	450	0.6	1.6	-	2.88	0.32	0.9	<1	<0.3	56.7	<0.05	0.17	0.67	1.6	<0.01	<0.02	0.27	6	<0.1	3.02	0.3	43	6.8
AMEC	L032186	NR09420	In-pit Mine Rock	4ca	1.36	1.16	40	30	16	0.3	0.53	0.46	0.52	30.5	6.8	43	1.93	19.6	2.01	3.8	<0.1	0.31	0.01	<0.02	0.18	16.6	19	0.02	0.82	1200	0.45	0.01	<0.05	6.4	660	109	9.9	-	0.7	0.84	1	<1	<0.5	8.6	<0.05	0.13	0.05	2	0.01	0.31	0.33	9	<0.1	1.73	0.1	159	7.4
AMEC	L032206	NR09354	In-pit Mine Rock	4ca	0.26	0.94	4	30	33	<0.1	0.06	1.42	0.06	27.4	7.5	62	2.59	41	1.78	4.2	<0.1	0.37	<0.01	<0.02	0.14	14.7	33	0.02	0.58	253	0.5	0.04	0.11	7.7	430	2.8	5.5	-	0.26	0.12	1.3	<1	<0.3	26.3	<0.05	0.15	<0.05	2	0.04	0.1	0.3	19	0.1	2.25	0.2	62	14.7
KCB	451833	NR08231	In-pit Mine Rock	4ca	2.7	0.52	30	-	22	<1	0.1	1.75	4.4	26	7.5	33	0.8	32.5	1.87	2	<0.1	0.2	0.2	0.01	0.1	13	14.1	-	0.49	884	0.4	0.02	0.1	7.9	340	554.9	3.5	<5	2.06	1.5	0.6	<0.5	0.1	19	<0.1	-	1.2	1.6	<0.005	<0.1	0.2	3	<0.1	1.7	-	1066	7.3
KCB	459047	NR08241	In-pit Mine Rock	4ca	1.3	0.49	36.6	-	26	<1	0.1	3.26	0.6	29	8.4	27	0.9	14.7	2.03	3	<0.1	0.3	0.06	0.01	0.13	15	8.3	-	0.28	1249	0.1	0.02	<0.1	11.2	420	9	4.3	<5	2.83	0.8	0.7	<0.5	0.1	55	<0.1	-	0.1	1.3	<0.005	0.1	0.2	4	0.1	2.7	-	132	9.5
KCB	457004	NR08253	In-pit Mine Rock	4ca	0.8	2.16	38.5	-	25	<1	0.1	1.99	0.8	23	7.9	45	3.2	17.4	1.62	5	<0.1	0.2	0.2	0.05	0.02	12	11	28.7	-	0.89	682	0.4	0.11	0.1	8.8	330	40.9	3.5	<5	0.82	0.4	0.7	<0.5	0.1	57	<0.1	-	<0.1	1.4	0.016	0.1	0.2	4	0.1	2.1	-	183	8.1
KCB	585242	NR08256	In-pit Mine Rock	4ca	0.2	1.21	2.6	-	13	<1	1.2	0.38	0.1	28	8.3	43	0.9	27.8	2.32	4	<0.1	0.3	0.05	0.01	0.05	14	26.9	-	0.55	189	0.8	0.04	<0.1	7.1	420	1.4	1.5	<5	1.66	0.1	1	<0.5	0.1	28	<0.1	-	0.2	1.7	<0.005	<0.1	0.3	6	0.1	1.8	-	30	7.1
KCB	588064	NR08264	In-pit Mine Rock	4ca	1.9	0.78	24.7	-	15	<1	0.8	2.67	0.1	24	9.2	41	1.2	28.2	1.87	3	<0.1	0.1	0.05	0.01	0.06	12	32	-	0.57	482	0.3	0.04	<0.1	11.1	380	4.7	2	<5	1.49	0.3	0.8	<0.5	0.1	43	<0.1	-	0.8	1.7	<0.005	<0.1	0.3	5	<0.1	3.8	-	28	3.4
KCB	588078	NR08264	In-pit Mine Rock	4ca	0.9	0.7	20.1	-	21	<1	0.4	1.99	0.1	22	7.7	39	0.8	28.2	1.31	2	<0.1	0.1	0.05	0.01	0.09	11	21.2	-	0.49	379	0.7	0.04	0.1	8.9	340	11.7	2.7	<5	0.97	0.4	0.6	<0.5	0.1	37	<0.1	-	0.1	1.4	<0.005	<0.1	0.2	4	<0.1	1.6	-	48	5.3
KCB	588091	NR08264	In-pit Mine Rock	4ca	0.4	0.62	33.1	-	27	<1	0.1	2.32	0.6	17	8.9	52	1.8	31.5	1.63	2	<0.1	0.2	0.05	0.02	0.09	9	22.5	-	0.74	447	0.5	0.04	<0.1	9.8	320	15.2	3	<5	1.28	0.2	0.7	<0.5	0.1	56	<0.1	-	<0.1	1.4	<0.005	<0.1	0.2	4	<0.1	2.1	-	227	6.5
KCB	588424	NR08263	In-pit Mine Rock	4ca	2.2	0.46	41.2	-	19	<1	<0.1	2.63	0.1	34	7.9	31	1	7.8	1.76	2	<0.1	0.2	0.05	0.01	0.11	18	13.5	-	0.99	1133	0.3	0.03	0.1	10.8	420	7.1	3.5	<5	1.11	0.8	0.9	<0.5	0.1	29	<0.1	-	<0.1	2.5	<0.005	0.1	0.2	2	<0.1	2.3	-	44	7.1
KCB	588442	NR08263	In-pit Mine Rock	4ca	0.4	0.56	21.2	-	28	<1	0.3	1.89	0.1	25	7.2	47	0.9	13.2	1.51	2	<0.1	0.2	0.05	<0.01	0.1	13	22.2	-	0.63	328	0.5	0.03	0.1	9	380	10.9	2.8	<5	1.18	0.4	0.7	<0.5	0.1	45	<0.1	-	<0.1	1.5	<0.005	<0.1	0.2	<2	<0.1	2.4	-	23	9
KCB	RR05735	NR09340	In-pit Mine Rock	4ca	0.8	0.61	4.2	-	32	<1	4.5	0.66	<0.1	26	3	41	0.9	189.8	2.42	2	<0.1	0.3	0.05	0.02	0.12	8	14.4	-	0.41	160	0.9	0.02	<0.1	11.2	420	9	4.3	<5	2.52	0.1	0.5	<0.5	0.1	49	0.1	-	0.9	1.7	<0.005	<0.1	0.1	2	0.2	2.3	-	43	11.5
AMEC	L032173	NR09384	In-pit Mine Rock	4cb	0.04	1.95	3	40	31	0.4	0.06	1.69	0.02	20.9	8.8	57	2.48	10.5	1.86	7.6	<0.1	0.34	<0.01	<0.02	0.2	10.2	20	0.03	0.91	362	0.3	0.03	0.15	13.7	370	2	5.9	-	0.45	0.13	2.3	<1	<0.3	13.2	<0.05	0.13	<0.05	1.5	0.06	0.06	0.27	21	0.9	2.6	0.2	18	11.1
AMEC	L032174	NR09384	In-pit Mine Rock	4cb	0.19	2.08	7	40	38	0.2	0.09	1.84	0.16	48.9	12.5	48	2.89	12.7	2.5	6.5	<0.1	0.44	0.02	<0.02	0.23	24.5	57	0.04	0.99	581	0.64	0.11	0.19	13.8	530	8.6	7.8	-	0.84	0.27	1.9	<1	<0.3	63.8	<0.05	0.26	<0.05	3.3	0.09	0.1	0.51	26	0.3	4.4	0.3	88	13.7
KCB	123051	NR0686	In-pit Mine Rock	4cb	0.5	0.59	7.8	-	31	<1	0.2	2.16	0.2	23	8.5	44	1.1	33	1.89	2	<0.1	0.3	0.05	0.01	0.14	12	17.8	-	0.51	432	0.3	0.03	0.1	10.3	350	1.2	4.2	<5	0.67	0.5	0.7	<0.5	0.1	40	<0.1	-	0.4	1.3	<0.005	<0.1	0.4	2	<0.1	3	-	77	8.3
KCB	123081	NR0686	In-pit Mine Rock	4cb	0.3	1.21	4.1	-	37	<1	0.1	4.36	0.1	45	18.5	48	1.4	24.7	2.83	3	<0.1	0.3	0.1	0.01	0.11	21	36.9	-	1.56	777	0.3	0.04	0.1	14.8	610	<0.1	3.5	<5	0.6	0.1	2.8	<0.5	0.1	92	<0.1	-	<0.1	2	0.006	<0.1	0.3	12	0.1	4.9	-	75	14.5
KCB	224453	NR07167	In-pit Mine Rock	4cb	6	1.38	81.8	-	25	<1	<0.1	2.15	1.4	30	8	32	3.4	17.9	1.94	4	<0.1	0.4	0.1	0.01	0.25	14	23.5	-	1.02	2105	0.3	0.08	0.1	9.9	410	121.1	13.9	<5	1.52	1.1	0.8	<0.5	0.1	32	0.6	-	0.1	1.6	0.014	0.1	0.3	8	<0.1	2.8	-	352	17
KCB	245302	NR07166	In-pit Mine Rock	4cb	0.5	1.44	4.6	-	33	<1	1.3	0.2	26	8	59	2	25.7	1.68	5	0.1	0.3	0.05	0.01	0.14	13	38.5	-	0.66	427	0.4	0.07	0.1	9.2	350	5	5.6	<5	0.42	0.4	1.3	<0.5	0.1	35	<0.1	-	0.1	1.4	0.04	0.1	0.2	12	0.1	2.4	-	148	10.8
KCB	414505	NR07205	In-pit Mine Rock	4cb	0.2	0.76	1	-	19	<1	0.2	1.42	<0.1	32	5.7	67	0.8	65.5	1.43	3	<0.1	0.2	0.05	0.02	0.07	15	29.1	-	0.68	279	2.8	0.04	<0.1	8.5	970	<0.1	1.6	<5	0.97	<0.1	0.8	<0.5	0.1	26	<0.1	-	0.2	1.4	<0.005	<0.1	0.3	6	0.1	2.8	-	22	5.6
KCB	414524	NR07205	In-pit Mine Rock	4cb	0.2	0.75	<0.5	-	32	<1	0.1	1.2	<0.1	29	7.4	72	1.7	76.6	1.75	4	<0.1	0.3	0.05	0.01	0.1	14	24.5	-	0.56	204	7.5	0.04	<0.1	9.2	370	<0.1	3.2	<5	0.56	<0.1	1	<0.5	0.1	21	<0.1	-	0.1	1.4	0.008	<0.1	0.4	13	0.1	2.6	-	19	7.4
KCB	414529	NR07205	In-pit Mine Rock	4cb	0.2	0.87	4.1	-	24	<1	0.4	2.05	<0.1	26	8.6	69	1	66.9	1.93	4	<0.1	0.2	0.05	0.02	0.08	13	24.9	-	0.68	308	3.1	0.04	<0.1	9.7	360	2.5	5	<5	0.91	<0.1	1.1	<0.5	0.1	32	<0.1	-	0.3	1.3	0.007	<0.1	0.4	13	0.1	2.8	-	22	7.4
KCB	459106	NR08255	In-pit Mine Rock	4cb	0.5	1.15	20.4	-	26	<1	0.3	2.32	0.3	25	8.1	34	2.3	12.1	1.72	3	<0.1	0.3	0.05	0.01	0.14	12	27.7	-	0.66	1199	0.3	0.06	0.1	8.9	410	17.3	7.3	<5	1.41	0.2	0.6	<0.5	0.1	38	<0.1	-	0.1	1.5	0.025	0.1	0.2	5	0.1	2.3	-	126	8.8
KCB	588009	NR08264	In-pit Mine Rock	4cb	0.3	0.78	2.3	-	22	<1	0.3	1.52	<0.1	29	6.1	52	1.7	76.7	1.6	3	<0.1	0.2	0.05	0.02	0.12	14	21	-	0.58	310	0.5	0.03	0.1	9.2	450	1.7	4	<5	0.62	0.1	0.7	<0.5	0.1	17	<0.1	-	0.4	1.5	0.042	0.1	0.3	10	0.1	2.4	-	21	5.3
KCB	588351	NR08263	In-pit Mine Rock	4cb	0.1	0.85	1.5	-	11	<1	0.

Consultant	Sample ID	HOLE-ID	Ore/Waste Classification	Rock Code	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Tb	Te	Th	Tl	Tl	U	V	W	Y	Yb	Zn	Zr
					ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	Average Crustal Abundance*				0.075	8.23	1.8	10	425	3	0.0085	4.15	0.15	66.5	25	102	-	60	5.63	19	1.5	3	0.085	0.25	2.085	39	20	-	2.33	950	1.2	2.355	20	84	1050	140	90	0.7	0.035	0.2	22	0.05	2.3	370	2	-	-	1.2	0.565	0.85	2.7	120	1.25	33	3.2	70	165
	10x Average Crustal Abundance				0.75	82.3	18	100	4250	30	0.085	41.5	1.5	665	250	1020	-	600	56.3	190	15	30	0.85	2.5	20.85	390	200	-	23.3	9500	12	23.55	200	840	10500	140	900	7	0.35	2	220	0.5	23	3700	20	-	-	12	5.65	8.5	27	1200	12.5	330	32	700	1650
KCB	342304	NR0623	In-pit Mine Rock	5daf	0.3	0.82	2.6	-	17	<1	0.1	0.11	<0.1	13	6.3	91	0.9	15.7	0.96	3	<0.1	0.2	0.05	<0.01	0.09	7	18.9	-	0.42	124	1.6	0.02	<0.1	9.4	410	1.7	2.5	<5	0.33	<0.1	0.9	<0.5	0.1	8	<0.1	-	0.1	0.9	<0.005	<0.1	0.3	5	0.2	1.3	-	34	17
KCB	370231	NR06114	In-pit Mine Rock	5daf	0.4	1.17	17.4	-	18	<1	0.2	1.46	0.1	19	10.9	31	1.3	14.2	2.15	4	<0.1	0.2	<0.005	0.01	0.03	9	59.1	-	0.94	493	0.9	0.03	<0.1	21.2	450	21.4	5.2	<5	0.8	0.5	1.8	<0.5	0.1	14	<0.1	-	0.2	1.4	0.037	0.1	0.2	10	0.9	0.4	4	61	5.9
KCB	370232	NR06114	In-pit Mine Rock	5daf	1.5	1.16	29.7	-	21	<1	0.5	1.01	2.6	28	5.7	14	3.4	51.6	1.37	4	<0.1	0.2	0.138	0.03	0.15	14	41.5	-	0.88	566	0.4	0.06	<0.1	5.2	360	138	5.7	<5	1.1	0.6	0.7	<0.5	0.1	22	<0.1	-	0.2	2.1	0.032	0.1	0.2	9	0.2	1.3	-	706	8.1
KCB	370233	NR06114	In-pit Mine Rock	5daf	0.6	1.13	31.9	-	18	<1	0.2	0.94	1.6	26	6.2	34	3.6	21.9	1.54	4	<0.1	0.2	0.067	0.04	0.15	13	44.3	-	0.94	474	0.7	0.06	<0.1	6.1	340	41.8	6	<5	1.25	0.5	0.6	<0.5	0.1	21	<0.1	-	<0.1	2	0.034	0.1	0.2	8	0.2	1.4	-	429	8.1
KCB	370234	NR06114	In-pit Mine Rock	5daf	0.6	1.17	21.7	-	20	<1	0.2	1.17	1.2	24	5.6	18	2.3	53.7	1.45	4	<0.1	0.2	0.065	0.03	0.15	13	56	-	1.22	715	0.4	0.03	<0.1	5.4	320	46.8	5.3	<5	1.02	0.4	0.7	<0.5	0.1	17	<0.1	-	<0.1	1.8	0.034	0.1	0.2	10	0.2	1.2	-	321	7.4
KCB	370235	NR06114	In-pit Mine Rock	5daf	2.9	1.4	17.9	-	18	<1	0.2	2.94	4.5	18	5.5	19	2.4	62.1	1.46	5	<0.1	0.2	0.333	0.03	0.14	9	78.3	-	1.68	1249	0.4	0.02	<0.1	5.4	310	390.5	4.9	<5	1.02	0.8	1	<0.5	0.1	24	0.1	-	0.1	1.6	0.046	0.1	0.2	12	0.3	1.5	-	953	9.4
KCB	370236	NR06114	In-pit Mine Rock	5daf	0.5	1.56	22.7	-	28	<1	0.1	1.56	0.7	31	6.6	45	3.1	21	1.62	5	<0.1	0.4	0.1	0.02	0.19	15	40.3	-	1.1	716	0.4	0.06	0.1	8	420	56.7	7.1	<5	1.04	0.5	1.2	<0.5	0.1	26	<0.1	-	<0.1	2.2	0.031	0.1	0.3	11	0.5	2.2	-	246	14.1
KCB	370237	NR06114	In-pit Mine Rock	5daf	0.5	1.38	16.3	-	28	<1	0.2	0.87	0.5	32	8	30	3	26	1.6	4	<0.1	0.3	0.042	0.01	0.15	16	27.1	-	0.64	417	0.3	0.08	<0.1	8.8	430	49	5.6	<5	1.02	0.5	0.9	<0.5	0.1	38	<0.1	-	<0.1	2.6	0.028	0.1	0.3	11	2.7	2.4	-	248	11
KCB	370238	NR06114	In-pit Mine Rock	5daf	0.3	1.49	10.3	-	30	<1	0.2	1.74	0.4	36	8.8	28	2.7	21.3	1.73	4	<0.1	0.3	0.02	0.01	0.13	18	30.7	-	0.78	747	0.3	0.06	<0.1	8.4	420	44.4	5	<5	0.73	0.3	1	<0.5	0.1	39	<0.1	-	<0.1	2.8	0.027	0.1	0.4	13	3.7	2.9	-	180	9.7
KCB	370239	NR06114	In-pit Mine Rock	5daf	0.4	1.92	10.7	-	32	<1	0.2	1.4	0.5	40	8.4	48	4.1	23.1	1.74	5	<0.1	0.3	0.055	0.02	0.13	20	36.9	-	0.84	595	0.3	0.1	<0.1	8.7	59	58.7	5	<5	0.94	0.3	1.1	<0.5	0.1	53	<0.1	-	<0.1	3.1	0.022	0.1	0.4	15	1.6	3.4	-	224	11.6
KCB	611164	NR0660	In-pit Mine Rock	5daf	0.7	2.05	14.5	-	24	<1	0.4	1.46	0.2	44	9.8	55	4.2	16.3	2.11	5	<0.1	0.3	0.05	0.01	0.11	22	24.5	-	0.7	523	0.6	0.1	<0.1	8.5	570	27.3	3.2	<5	2.21	0.4	1	<0.5	0.1	61	<0.1	-	0.1	3.3	<0.005	<0.1	0.4	2	0.3	2.8	-	67	12.8
KCB	611171	NR0660	In-pit Mine Rock	5daf	2.3	0.96	4.7	-	22	<1	3.3	0.78	0.1	25	13.1	43	1.4	67.9	3.03	4	0.1	0.3	0.05	0.04	0.07	13	32.1	-	0.84	357	0.9	0.05	0.1	11.8	820	4.3	2.3	<5	2.91	0.5	1.3	<0.5	0.1	24	<0.1	-	3	3	<0.005	<0.1	0.3	8	0.1	3.2	-	102	12.1
KCB	636594	NR0509	In-pit Mine Rock	5daf	1.9	0.74	23	-	16	<1	0.2	1.34	0.1	10	7.1	34	0.4	13.9	1.56	2	<0.1	0.2	0.134	<0.01	0.06	5	21.6	-	1.01	383	0.5	0.02	<0.1	9.8	380	6.9	1.6	<5	1.27	0.6	0.6	<0.5	0.1	41	<0.1	-	2	0.8	<0.005	<0.1	0.1	4	0.1	1.1	-	58	5.6
KCB	636653	NR0510	In-pit Mine Rock	5daf	0.2	0.59	18.1	-	16	<1	<0.1	1.74	0.1	10	7.4	17	0.4	12.1	1.63	2	<0.1	0.1	0.022	<0.01	0.07	5	17.2	-	1.13	640	0.3	0.02	<0.1	9.6	360	6	2.3	<5	0.99	0.9	0.7	<0.5	0.1	31	<0.1	-	<0.1	1.2	<0.005	<0.1	0.1	2	0.1	1.2	-	45	4.1
KCB	750326	NR0629	In-pit Mine Rock	5daf	0.8	0.5	34.6	-	19	<1	0.3	1.84	0.1	13	6.9	48	0.6	25.8	1.33	1	<0.1	0.1	0.026	0.01	0.09	6	17	-	0.85	1006	0.5	0.03	<0.1	7.1	310	15.3	2.8	<5	0.97	1.1	0.6	<0.5	<0.1	70	<0.1	-	<0.1	0.9	<0.005	<0.1	0.1	2	0.1	1.7	-	59	4.3
KCB	752238	NR0620	In-pit Mine Rock	5daf	1.4	2.66	36.8	-	28	<1	0.2	2.34	0.7	15	38.3	58	3.1	90.6	8.06	10	0.2	0.1	0.1	0.03	0.11	6	61	-	0.89	1019	0.7	0.04	0.2	6.8	670	10.5	5.8	<5	3.39	1	6.5	<0.5	0.1	46	<0.1	-	1.1	0.5	0.073	0.1	0.4	16	0.2	11.2	-	305	2.6
KCB	752245	NR0620	In-pit Mine Rock	5daf	1.3	3.1	59.4	-	80	<1	0.2	2.64	0.5	34	30.2	55	6.8	117.6	10	11	0.2	0.1	0.05	0.02	0.43	6	39	-	0.85	1488	1.1	0.11	0.3	35.1	510	19.9	18.3	6	4.81	0.3	6.5	<0.5	0.3	75	<0.1	-	0.8	0.7	0.122	0.2	0.1	157	0.3	10.8	-	247	3.3
KCB	804881	NR08317	In-pit Mine Rock	5daf	1.1	2.4	13.7	-	30	<1	1.4	1.52	0.1	27	13.1	52	1.7	292.3	1.67	6	<0.1	0.5	0.05	0.03	0.14	13	26.5	-	0.91	186	18.3	0.15	0.1	9.8	380	1.6	5.1	15	1.06	1.1	1	<0.5	0.2	120	<0.1	-	0.2	1.4	<0.005	0.1	0.3	8	<0.1	2.7	-	53	19.9
KCB	ALT-09-22	NR07164	In-pit Mine Rock	5daf	1	0.66	40.6	-	20	<1	0.2	1.67	0.1	27	7.9	46	0.7	20.2	1.36	2	<0.1	0.4	0.016	0.01	0.16	13	8.1	-	0.2	637	0.3	0.07	0.1	10.4	480	13.4	5.2	<5	1.61	0.5	0.7	<0.5	<0.1	41	<0.1	-	0.1	1.5	0.011	0.1	0.2	<2	0.1	1.7	-	36	9.9
AMEC	U032181	NR9527	In-pit Mine Rock	5dap	0.23	1.23	23	30	20	0.2	0.04	2.05	0.35	27.9	7.5	28	0.53	2.2	1.55	3	<0.1	0.16	<0.02	0.08	15.1	23	0.02	0.78	723	0.6	0.03	<0.05	7.8	440	30.8	2.1	-	0.96	0.16	0.6	<1	<0.03	26.5	<0.05	0.1	<0.05	1.3	<0.01	<0.03	0.03	0.3	4	<0.1	1.23	0.1	109	4.3
AMEC	U032184	NR9705	In-pit Mine Rock	5dap	0.24	0.99	11	30	21	<0.1	0.03	2.42	0.25	22.6	6.6	49	1.23	21.3	1.41	2.6	<0.1	0.1	0.05	0.01	<0.02	0.1	11.4	44	0.02	0.74	447	0.4	0.03	<0.05	8	370	10.6	2.6	-	0.61	0.21	0.6	<1	<0.3	43.9	<0.05	0.09	<0.05	1.3	<0.01	0.03	0.13	3	<0.1	1.53	0.1	91	4.4
AMEC	U032188	NR9717	In-pit Mine Rock	5dap	1.56	0.96	45	30	24	0.1	0.8	0.32	0.35	18.1	6.8	53	0.59	20.6	2.5	2.4	<0.1	0.1	0.32	0.06	0.02	0.11	9.2	27	0.01	0.67	107	0.55	0.05	0.11	10.6	550	26.7	3.1	-	2.79	0.81	0.7	<1	<0.3	26.4	<0.05	0.08	0.51	1.4	<0.01	0.15	0.3	5	<0.1	1.23	<0.1	129	6.4
KCB	130652	NR0616	In-pit Mine Rock	5dep	0.4	1.16	8.7	28	<1	0.4	1	0.1	39	8.3	38	1.3	17.9	1.91	3	<0.1	0.4	0.05	0.01	0.12	18	22.1	-	0.61	513	0.4	0.08	<0.1	9.3	400	7.2	3.8	<5	1.63	0.1	1	<0.5	0.1	38	<0.1	-	0.3	2.2	<0.005	<0.1	0.3	5	<0.1	3.4	-	76	14.9
AMEC	U032003	NR1659	In-pit Mine Rock	5f	0.63	2.76	3	30	11	0.1	0.96	4.79	0.04	14.5	16.6	90	0.69	225	9.53	9.3	0.1	0.32	0.08	0.13	0.08	6	94	0.18	2.2	1350	46.2	0.03	0.15	62.9	770	1.2	2.4	-	>5	0.07	10	1	<0.3	70.6	<0.05	0.09	2.14	0.4	<0.01	0.02	0.29	113	<0.1	10.6	1.2	91	15
AMEC	U032051	NR11649	In-pit Mine Rock	5f	0.15	2.45	5	30	21	0.1	0.1	3.38	0.09	13.1	37	124	0.72	114	5.23	8.8	<0.1	0.21	0.01	<0.02	0.09	6.8	82	0.12	1.92	582	5.68	0.03	<0.05	35.8	470	0.7	2.5	-	0.76	0.07	9.8	<1	<0.3	46.2	<0.05	0.26	0.11	0.6	<0.01	0.02	0.11	102	<0.1	6.68	0.7	54	9.1
AMEC	U032060	NR10612	In-pit Mine Rock	5f	1.82	2.92	45	20	11	0.1	0.28	2.97	34.6	4.4	49.5	76	0.69	515	11.5	10.3	0.1	0.16	1.82	1.19	0.07	1.9	75	0.07	2.7	2860	1.07	0.02	0.09	43.3	740	1.9	1.7	-	>5	0.22	12.5	3	<0.3	22.5	<0.05	0.14	1.92	0.3	<0.01	0.02	<0.05	108	<0.1	4.14	0.5	5630	9.1
AMEC	U032061	NR10612	In-pit Mine Rock	5f	0.86	1.69	16	30	19	0.1	0.39	4.15	0.29	5.84	38	81	0.89	65.7	7.39	4.4	<0.1	0.13	0.03	0.04	0.1	2.6	48	0.06	2.55	1780	0.5	0.04	<0.05	83.1	390	2	2.6	-	0.42	5.6	<1	<0.3	38	<0.05	0.1	1.12	0.3	<0.01	0.03	<0.05	38	<0.1	2.67	0.4	214	7.6
AMEC	U032081	NR10602	In-pit Mine Rock	5f	0.44	3.31	15	40	13	0.1	0.64	3.32	1.45	17.4	33.1	64	0.91	140	10.5	8.9	0.2	0.11	0.06	0.1	0.15	7.3	81	0.14	2.58	2660	0.87	0.03	<0.05	45.6	790	2.9	1.3	-	>5	0.2	9.7	<1	<0.3	37.2	<0.05	0.13	0.47	0.2	0.02	1	<0.01	<0.02	0.12	90	<0.1	11.6	1	559	10.9
AMEC	U032082	NR10602	In-pit Mine Rock	5f	0.43	2.06	15	30	6	<0.1	0.93	5.04	0.6	9.62	37.8	70	0.67	136	9.63	5.4	0.1	<0.05	0.05	0.11	0.05	3.8	56	0.09	2.15	2760	0.67	0.04	<0.05	51.3	760	2.9	1	-	>5	0.24	7.7	<1	<0.3	51.2	<0.05	0.2	1.13	0.3	<0.01	<0.02	<0.05	63	<0.1	4.34	0.6	280	7.1
AMEC	U032083	NR10601	In-pit Mine Rock	5f	0.19	1.09	7	30	26	0.1	0.55	2.86	0.16	32.4	8	42	0.88	27.7	2.22	2.9	<0.1	0.23	<0.01	0.03	0.09	15.7	27	0.03	1.09	945	0.48	0.04	<0.05	9.6	480	2.6	2	-	1.03	0.17	0.9	<1	<0.3	32.6	<0.05	0.49	0.58	0.7	0.18	0.32	0.1	186	0.4	9.67	0.7	204	7.1
AMEC	U032084	NR10583	In-pit Mine Rock	5f	0.99	2.64	5	40	165	<0.1	0.23	1.11	0.12	16.9	32.8	111	12.6	200	8.02	9.3	0.2	0.05	0.01	0.03	0.82	6.7	81	0.1	0.94	593	0.62	0.11	0.16	58	800	2.3	27.8	-	2.1	0.2	12	<1	0.5	37.8	<0.05	0.49	0.58	0.7	0.18	0.32	0.1	186	0.4	9.67	0.7	204	7.1
AMEC	U032085	NR10583	In-pit Mine Rock	5f	0.46	2.46	4	40	99	0.1	0.04	3.59	0.12	23.5	20.2	66	8.16	85.9	8.38	9.5	0.2	0.21	0.01	0.05	0.49	10.2	65	0.11	1.59	1540	0.64	0.09	0.12	27.3	770	4.1	15.3	-	1.92	0.43	15.2	2	0.8	86.3	<0.05	0.44	0.22	1.1	0.12	0.21	0.16	193	0.1	9.39	0.8	246	12.6
AMEC	U032086	NR10568	In-pit Mine Rock	5f	0.26	1.24	7	30	48	<0.1	0.04	2.69	0.06	33.8	8.9	53	1.56	41.8	1.9	3.3	<0.1	0.42	<0.01	<0.02	0.14	17	38	0.04	1.04	627	0.44	0.04	<0.05	16.4	460	3.8	3.3	-	0.91	0.52	1.1	<1	0.7	40.4	<0.05	0.18	0.24	1.8	<0.01	<0.03	0.32	9	<0.1	2.8	0.2	44	18.2
AMEC	U032087	NR10568	In-pit Mine Rock	5f	0.1	1.11	3	40	226	0.1	0.06	2.64	0.05	73.3	13.4	56	7.36	32.4	2.76	4.8	0.1	0.66	<0.01	<0.02	0.58	36.1	58	0.06	1.26	640	0.72	0.05	<0.05	17.4	720	4.5	20.4	-	0.87	0.25	3.3	<1	<0.3	55.4	<0.05	0.28	0.19	4.9	0.07	0.27	0.62	39	<0.1	4.6	0.4	83	29
AMEC	U032088	NR10568	In-pit Mine Rock	5f	0.19	4.05	9	30	102	0.2	0.19	4.25	0.1	6.84	45	117	12	25.1	6.59	8.4	0.1	<0.05	0.01	<0.02	0.55	3	67	0.1	2.56	1650	0.22	0.05	<0.05	70.3	550	6.1	20.1	-	4.92	0.44	5.6	<1	<0.3	91.4	<0.05	0.28	0.59	0.2	0.08	0.35	0.07	111	0.4	7.45	0.6	166	6.8
AMEC	U032091	NR10569	In-pit Mine Rock	5f	0.73	2.57	9	40	28	0.1	0.19	5.09	0.16	23.5	35.4	154	1.21	175	8.06	7.4	0.1	0.1	0.05	<0.02	0.06	10.4	106	0.11	3.35	1740	0.52	0.02	<0.05	79.4	850	5.4	1.8	-	3.66	0.16	7.2	<1	<0.3	143	<0.05	0.02	1.35	0.4	0.02	0.1	<0.01	0.02	0.15	268	<0.1	6.58	0.7	154	10.4
AMEC	U032092	NR10569	In-pit Mine Rock	5f	0.26	5.36	11	40	44	0.2	0.04	4.52	0.2	36	52.8	139	6.27	57.7	8.13	12.2	0.2	<0.05	0.02	0.03	0.2	3	153	0.11	5.11	1420	0.27	0.07	<0.05	184	430	3.2	6.8	-	0.92	0.28	12.2	<1	<0.3	222	<0.05	0.28	0.23	0.3	0.06	0.1	0.07	153	0.4	8.47	0.7	259	6.5
AMEC	U032093	NR10569	In-pit Mine Rock	5f	0.61	2.68	5	40	50	0.1	0.8	2.42	0.15	13.9	41.5	84	6.8	237	8.59	8.5	0.3	<0.05	0.02	0.03	0.16	5.4	56	0.14	1.22	1020	0.64	0.09	0.08	69.3	760	2.1	8.1	-	1.93	0.21	11.5	<1	<0.3	35.5	<0.05	0.47	1.25	0.5	0.12	0.16	0.07	192	0.5	10.6	0.9	220	5.8
AMEC	U032072	NR10608	In-pit Mine Rock	6	0.47	3.5	5	30	41	0.2	0.17	2.02	0.47	9.79	48.4	84	9.79	104	9.3	14.6	0.2	<0.05	0.09	0.07	0.2	4.1	73	0.1	1.89	1560	0.46	0.09	0.19	61.3	710	3.1	11.2	-	1.25	0.64	20.3	<1	<0.3	48.2	<0.05	0.4	0.28	0.4	0.15	0.21	0.05	247	15.1	9.5	0.8	308	6.8
AMEC	U032073	NR10608	In-pit Mine Rock	6	2.57	3.85	26	30	120	0.2	0.21	4.64	2.09	10	40.6	95	11.9	96.3	8.65	12.8	0.2	0.05	0.07	0.06	0.62	4.2	79	0.13	1.67	1880	0.69	0.32	0.29	48.3	840	6.5	22	-	3.25	0.68	14.4	<1	0.4	91.9	<0.05	0.37	2.16	0.4	0.17	0.28	0.06	213	1.5	9.62	0.9	334	5.8
AMEC	U032080	NR10608	In-pit Mine Rock	6	0.76	4.52	10	30	53	0.2	0.06	4.87	0.23	10.5	42	87	7.23	99.2	9.71	13.1	0.3	0.08	0.01	0.04	0.24	4.4	81	0.17	1.7	2120	0.67	0.31	0.21	56	820	12.5	12.5	-	2.02	0.75	19.4	2	0.5	191	<0.05	0.47	0.74	0.4	0.15	0.26	0.08	282	0.2	13.5	1.2	212	6.3
KCB	335062	NR07190	In-pit Mine Rock	6	2.6	3.14	9.1	-	167	<1	0.3	1.88	33.6	13	53.6	80	9.2	211.6	9.31	12	0.2	<0.1	2.3	0.25	6	5	68.1	-	0.98	1150	0.6	0.11	0.3	69.5	540	2.5	26.3	<5	3.07	0.2	6.4	<0.5	0.3	89	<0.1	-	2	0.5	0.142	0.3	0.1	257	0.2	8.4	6519	1
KCB	ALT-09-02	NR0675	In-pit Mine Rock	6	1.9	1.5	21.9	-	62	<1	0.3	7.02	0.4	7	28.4	46	6.6	84.7	7.51	7	<0.1	0.1	0.138	0.05	0.19	3	75.7	-	2.42	1832	2.8	0.08	0.2	38.7	420	4.2	7	25	4.51	0.3	10	0.6	0.3	117	<0.1	-	2.2	0.2	0.075	0.1	0.1	133	2.6	7	-	148	2
KCB	ALT-09-14	NR06129	In-pit Mine Rock	6	0.4	2.39	2.6	-	18	<1	0.1	3.24	0.2	14	26.7	77	1.1	113.7	6.08	8	0.2	<0.1	0.056	0.03	0.1	6	36.1	-	1.09	1299	0.4	0.08	0.2	29.1	600	3.5	3.8	<5	0.63	0.2	7.9	<0.5	0.3	60	<0.1	-	0.1	0.5	0.14	0.1	0.1	144	1.4	11.2	-	141	1
KCB	ALT-09-19	NR07190	In-pit Mine Rock	6	0.2	1.36	1.6	-	130	<1	<0.1	2.29	<0.1	54	10	46	4.8	6.8	2.02	3	<0.1	<0.1	0.06	<0.005	0.01	23	96.3	-	1.11	561	0.2	0.03	0.1	17.8	630	1.9	15.3	-	0.14	0.1	2	<0.5	0.1	79	<0.1	-	<0.1	2.5	0.096	0.2	0.4	30	0.3	3.6	-	74	21.9
KCB	ALT-09-23	NR07176	In-pit Mine Rock	6	0.6	2.17	8.2	-	67	<1	1	1.23	0.7	13	47.9	68	6.7	93.3	7.91	8	0.1	<0.1	0.088	0.02	0.27	5	54.3	-	1.02	710	0.7	0.07	0.2	72.2	710	4.2	12.9	<5	1.47	0.2	5.5	<0.5	0.2	31	<0.1	-	1.1	0.5	0.116	0.2	0.1	180	0.5	7.4	-	447	0.8
KCB	370211	NR06114	In-pit Mine Rock	6cd	1	2.71	6.2	-	57	<1	0.8	2.77	0.3	12	29.4	83	3.2	64.4	7.29	10	0.2	0.1	0.1	0.03	0.28	5	49	-	1.09	1418	6.8	0.13	0.3	41.6	660	3.9	11.1	10	1.23	0.2	8.2	<0.5	0.3	83	<0.1	-	0.7	0.6	0.174	0.2	0.1	166	2.3	10.4	-	308	1.7
KCB	370224

Consultant	Sample ID	HOLE-ID	Ore/Waste Classification	Rock Code	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Tb	Te	Th	Tl	Tl	U	V	W	Y	Yb	Zn	Zr
					ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	Average Crustal Abundance*				0.075	8.23	1.8	10	425	3	0.0085	4.15	0.15	66.5	25	102	-	60	5.63	19	1.5	3	0.085	0.25	2.085	39	20	-	2.33	950	1.2	2.355	20	84	1050	14	90	0.7	0.035	0.2	22	0.05	2.3	370	2	-	-	1.2	0.565	0.85	2.7	120	1.25	33	3.2	70	165
	10x Average Crustal Abundance				0.75	82.3	18	100	4250	30	0.085	41.5	1.5	665	250	1020	-	600	56.3	190	15	30	0.85	2.5	20.85	390	200	-	23.3	9500	12	23.55	200	840	10500	140	900	7	0.35	2	220	0.5	23	3700	20	-	-	12	5.65	8.5	27	1200	12.5	330	32	700	1650
KCB	587608	NR08265	Ore	4c	0.6	0.32	26.9	-	36	<1	<0.1	1.29	0.8	30	9.3	37	0.7	10.9	1.7	1	<0.1	0.2	0.05	0.02	0.19	16	5.2	-	0.12	507	0.3	0.01	0.1	11.2	400	6	6.9	<5	1.78	0.1	0.5	<0.5	0.1	49	<0.1	-	<0.1	1.5	0.01	0.1	0.1	3	0.2	1.7	-	195	7.9
KCB	243135	NR07152	Ore	4cb	1.6	0.43	17.1	-	19	<1	0.4	1.98	1.4	10	7.8	33	0.6	69.1	2.01	1	<0.1	0.2	0.1	0.03	0.12	5	6.6	-	0.68	1410	0.5	0.02	0.1	10.8	370	16.3	4.6	<5	2.08	0.9	0.6	<0.5	<0.1	18	<0.1	-	0.7	0.8	<0.005	0.1	0.1	<2	<0.1	1.2	-	292	7.7
KCB	129754	NR06125	Ore	4cf	8.6	1.56	49.6	-	20	<1	0.2	1.28	10.4	35	10.5	62	3	110	2.48	5	<0.1	0.5	0.3	0.08	0.42	16	27.8	-	1.67	932	1.3	0.03	0.1	21	550	1206.1	23.4	<5	1.98	4.3	1.5	<0.5	0.1	13	<0.1	-	0.1	1.9	0.047	0.5	0.3	15	0.1	2.9	-	2078	17.9
KCB	459029	NR08255	Ore	4cf	0.2	0.69	21.9	-	25	<1	0.1	1.63	0.1	38	10.1	31	0.6	14.3	1.77	2	0.1	0.2	0.05	0.01	0.14	18	10.7	-	0.61	886	0.9	0.01	<0.1	10.5	530	11.1	3.9	<5	1.12	0.4	0.6	<0.5	<0.1	15	<0.1	-	<0.1	2	<0.005	0.1	0.2	4	0.2	2.2	-	76	7.8
AMEC	L032029	NR11754	Ore	4cfa	1.08	0.51	55	40	50	<0.1	0.48	0.29	4.89	18.3	6.3	51	0.73	146	1.89	1.5	<0.1	0.3	0.07	0.03	0.27	10.1	5	<0.01	0.27	904	0.18	0.01	<0.05	7.7	420	90.6	7.4	-	1.87	1.05	0.5	<1	<0.3	23.9	<0.05	0.09	<0.05	1.5	<0.01	0.11	0.19	2	<0.1	1.17	<0.1	1530	9
KCB	201136	NR09414	Ore	4cfa	3.2	0.96	21.9	-	14	<1	<0.1	0.83	0.2	7	6.5	20	0.8	15.9	1.35	2	<0.1	0.1	0.134	<0.01	0.08	3	29.5	-	1.28	669	0.3	0.02	<0.1	7.8	330	19.5	2.7	<5	1.3	2.8	0.4	<0.5	<0.1	25	<0.1	-	1.4	0.5	<0.005	<0.1	0.1	2	0.2	0.9	-	113	3.8
KCB	201116	NR09361	Ore	4cfb	0.4	2.05	5	-	23	<1	2.6	0.28	<0.1	32	12.7	25	0.8	43.3	4.77	6	0.1	0.2	0.004	0.03	0.13	15	38.8	-	1.28	358	1.1	0.02	0.1	15.7	610	2.1	4.1	<5	1.19	0.4	1.5	<0.5	<0.1	17	<0.1	-	0.7	1.5	0.007	<0.1	0.2	3	0.1	3	-	48	7.1
KCB	450215	NR08223	Ore	4cfb	0.6	1.46	7.5	-	22	<1	2.8	0.8	0.1	21	7.4	47	1.5	68.8	2.67	5	<0.1	0.3	<0.005	0.02	0.08	11	20.3	-	0.69	362	0.3	0.09	<0.1	9.8	340	6.5	2.9	<5	1.86	0.3	0.9	<0.5	<0.1	65	<0.1	-	0.1	1.6	0.006	<0.1	0.2	10	0.1	2.2	-	58	7
KCB	452177	NR08227	Ore	4cfb	0.4	2.35	20.5	-	35	<1	2.4	1.39	0.1	26	8.2	54	1.5	8.9	3.07	6	<0.1	0.3	0.05	0.01	0.16	13	20.9	-	0.96	386	0.2	0.18	0.1	9.2	430	3.5	6.9	<5	2.3	0.1	0.9	<0.5	0.1	100	<0.1	-	0.4	1.7	0.01	0.1	0.2	7	0.3	2.5	-	91	11.8
KCB	457266	NR08252	Ore	4cfb	2.3	1.25	70.2	-	18	<1	0.5	1.42	6.8	32	10.5	40	1.8	135.2	2.31	4	0.1	0.3	0.2	0.06	0.11	15	27.9	-	0.71	721	0.4	0.03	<0.1	11.7	480	50	4.3	<5	1.69	0.5	0.9	<0.5	0.1	23	<0.1	-	0.1	1.6	<0.005	0.1	0.2	8	0.8	1.8	-	1580	11
KCB	586554	NR08262	Ore	4cfb	1.2	0.56	21.7	-	20	<1	0.2	1.84	3.9	13	8.6	33	0.6	10.9	2.3	2	<0.1	0.2	0.2	0.01	0.12	6	11	-	1.01	1688	0.5	0.02	0.1	10.5	410	125.1	4.1	<5	2.36	0.5	0.5	<0.5	0.1	31	<0.1	-	0.8	1	<0.005	0.1	0.1	2	0.1	1.2	-	867	6.5
KCB	805693	NR08319	Ore	4cfb	2.3	3.32	57.3	-	30	<1	6.9	1.25	0.2	15	28	71	4.4	507	7.73	11	0.1	0.2	0.05	0.19	0.13	7	35	-	1.58	376	0.9	0.13	0.2	37.6	550	4.5	8.4	<5	5.88	0.2	6	1.3	0.2	98	<0.1	-	2.5	0.9	0.046	0.1	0.1	101	<0.1	6.4	-	97	8.3
KCB	NRR01811	NR09331	Ore	4cfb	0.7	0.69	52.7	-	20	<1	0.4	0.11	4.9	26	7.2	30	0.6	59.3	2.1	2	<0.1	0.2	0.1	0.05	0.14	12	17.2	-	0.45	223	0.6	0.02	<0.1	9.2	340	33.4	4.5	<5	2.21	1.6	0.4	<0.5	0.1	10	<0.1	-	<0.1	1.4	<0.005	0.1	0.2	3	0.3	1	-	1182	6.2
KCB	RRR01813	NR09331	Ore	4cfb	0.9	0.55	141.9	-	22	<1	1	0.09	21.5	21	7.7	23	0.5	93	2.45	1	<0.1	0.2	0.6	0.34	0.13	10	12.3	-	0.24	137	0.4	0.01	<0.1	9	270	47.4	4.3	<5	3.15	2.1	0.4	<0.5	<0.1	8	<0.1	1.2	<0.005	0.1	0.1	3	0.1	0.7	-	4994	5.8
KCB	RRR01830	NR09331	Ore	4cfb	7.2	0.87	46.6	-	23	<1	0.3	1.28	6.5	22	7.1	30	1.1	64.4	1.67	2	<0.1	0.4	0.3	0.26	0.14	11	15.1	-	0.5	665	0.4	0.04	<0.1	10.1	340	119.6	4.2	<5	1.92	1.7	0.8	<0.5	<0.1	17	<0.1	-	4.8	1.2	<0.005	0.1	0.2	4	0.2	1.5	-	1400	14.2
KCB	457269	NR08252	Ore	4cfc	4.7	1.43	138.9	-	19	<1	3.4	0.33	1.6	16	12.4	31	1.1	140.3	4.83	4	0.1	0.3	0.1	0.21	0.11	8	27.4	-	0.98	592	1	0.01	0.1	12.9	310	68.5	4.8	<5	4.77	0.7	0.6	<0.5	0.1	9	<0.1	-	0.4	1	<0.005	0.1	0.1	6	<0.1	1.4	-	364	9.8
KCB	457271	NR08252	Ore	4cfc	4.7	1.56	68.2	-	17	<1	2.3	0.33	0.2	13	10	33	0.7	23.2	4.69	5	0.1	0.2	0.1	0.06	0.1	7	32.7	-	1.21	775	1	0.01	0.1	12.8	300	34.1	3.9	<5	3.69	0.3	0.7	<0.5	<0.1	8	<0.1	-	0.3	0.9	<0.005	0.1	0.1	8	0.5	1.4	-	145	5.4
KCB	457287	NR08252	Ore	4cfc	6.3	0.79	73.4	-	20	<1	1.8	0.32	0.8	25	8	39	0.7	246.3	5.5	3	0.1	0.2	0.1	0.2	0.11	12	14.4	-	0.63	482	0.9	0.01	0.1	9.4	310	107.5	5	<5	5.76	0.5	0.4	<0.5	0.1	7	<0.1	-	0.1	1.1	<0.005	0.1	0.1	4	<0.1	1.4	-	221	7
KCB	457291	NR08252	Ore	4cfc	1.9	1.12	63.2	-	22	<1	0.8	0.42	29.2	23	8.4	44	1.2	129.9	3.83	4	0.1	0.1	0.7	1.35	0.12	12	19.8	-	0.85	670	0.6	0.01	0.1	10.7	410	49.3	5.3	<5	3.04	0.5	0.7	<0.5	0.1	8	<0.1	-	0.1	1.2	0.006	0.1	0.1	6	<0.1	1.5	-	6102	4.8
KCB	457292	NR08252	Ore	4cfc	1.5	0.85	46.3	-	21	<1	0.6	1.59	9.7	24	7.2	46	0.8	120	3	3	<0.1	0.2	0.47	0.12	12	15.1	-	0.9	1387	0.5	0.03	0.1	9.7	380	33.8	4.9	<5	1.8	0.3	0.7	<0.5	0.1	20	<0.1	-	<0.1	1.2	<0.005	0.1	0.1	4	<0.1	1.8	-	2137	5.9
KCB	123235	NR0686	Ore	4cg	0.7	1.94	21.1	-	20	<1	0.6	0.64	10.2	21	7.7	41	1.5	56.9	2.57	4	<0.1	0.1	0.4	0.37	0.13	10	25.9	-	1.05	628	0.6	0.03	<0.1	9.2	440	8.8	4.3	<5	1.22	0.3	0.6	<0.5	<0.1	33	<0.1	-	<0.1	1.4	<0.005	0.1	0.2	6	0.1	2.1	-	2307	5.6
KCB	244337	NR07157	Ore	4cg	2.6	1.64	7.5	-	32	<1	2	0.53	6.1	27	9.1	49	1.5	132.2	2.75	5	<0.1	0.5	0.1	0.61	0.13	12	35.2	-	1.22	595	0.5	0.06	0.1	13.8	430	2.4	4.8	<5	2.03	0.1	1.1	<0.5	0.1	35	<0.1	-	2.3	1.7	0.025	<0.1	0.3	11	0.1	3.4	-	1705	19.2
KCB	244357	NR07157	Ore	4cg	3.5	2.17	20.4	-	25	<1	2.2	0.46	5.4	25	11.9	50	1.2	56.3	3.91	6	0.1	0.3	0.1	0.31	0.11	12	42.4	-	1.61	974	0.6	0.04	0.1	9.6	370	6.6	3.6	<5	2.29	0.1	1	<0.5	0.1	19	<0.1	-	3.5	1.9	0.013	<0.1	0.4	10	0.2	3.9	-	1512	9
AMEC	L032001	NR11654	Ore	4cga	2.31	0.9	8	40	21	0.1	0.04	1.44	0.05	16.3	8.5	50	0.43	7.73	1.89	2.3	<0.1	0.24	0.08	<0.02	0.1	8.4	23	<0.01	1	666	0.34	0.04	0.19	11	440	8.9	3	-	2.24	0.26	0.6	<1	0.9	29.6	0.08	0.09	1.81	0.8	<0.01	0.04	0.09	3	0.1	1.18	-	38	5.8
KCB	123181	NR0686	Ore	4cgb	0.9	1.1	38.4	-	26	<1	0.2	1.61	5.5	29	12.2	159	2.1	52.6	2.48	3	<0.1	0.5	0.3	0.34	0.16	15	24.7	-	1.15	694	1.6	0.01	0.1	38.5	450	42.3	5.8	<5	1.64	0.4	2.1	<0.5	0.1	45	<0.1	-	0.1	2.3	0.038	0.1	0.4	12	0.2	2.4	-	1458	19.3
KCB	RRR01966	NR09331	Ore	4cgb	3.6	1.78	45.5	-	27	<1	3.8	0.36	84.2	25	10	32	1.9	602.1	4.46	5	0.1	0.5	1.6	0.14	0.2	11	29.4	-	1.29	594	0.6	0.04	0.1	10.9	390	6.3	6.2	<5	4.28	0.3	1.7	1	0.1	9	<0.1	-	0.8	1.7	0.018	0.1	0.3	16	0.2	3.1	-	>10000	16.8
KCB	RRR01838	NR09331	Ore	5da	6.6	0.53	34.9	-	23	<1	0.4	1.37	3.4	25	7.8	30	0.7	41.2	2.27	1	<0.1	0.3	0.4	0.05	0.14	12	11.6	-	0.44	1200	0.8	0.02	0.1	11.7	380	148.1	4.9	<5	2.54	0.8	0.6	<0.5	0.1	17	<0.1	-	4.2	1.1	<0.005	0.1	0.1	3	0.1	1.4	-	783	11.9
KCB	201113	NR09341	Ore	5dsa	54.4	3.27	95.8	-	16	<1	29.3	0.24	8.3	39	16.2	28	0.8	1000	6.76	9	0.1	0.4	0.805	11.32	0.09	58	96.5	-	3.32	745	2.5	0.02	0.1	17.4	540	24.7	3.2	<5	3.63	1.2	1.7	2.5	0.5	15	<0.1	-	2.5	2.2	0.01	0.1	0.4	25	0.2	1.9	-	1554	16.8
KCB	370287	NR06114	Ore	5dad	2.4	0.3	40	-	30	<1	0.1	1.5	6.9	15	5.7	42	0.5	220.8	1.96	1	<0.1	0.3	0.3	0.01	0.17	8	3.5	-	0.38	994	1.2	0.01	0.1	6.7	330	1202	5.1	<5	2.23	3.7	0.3	<0.5	<0.1	25	<0.1	-	<0.1	1	<0.005	0.1	0.2	<2.	0.1	1.9	-	1852	11.1
KCB	637573	NR0514	Ore	5dad	0.3	1.55	6.5	-	38	<1	0.4	1.12	0.2	31	10.2	55	2	13.8	1.83	5	0.1	0.3	0.05	0.01	0.15	15	44	-	0.86	534	1.2	0.07	0.1	10	430	4.1	6.6	<5	0.73	0.1	1	<0.5	0.1	36	<0.1	-	0.1	1.7	0.034	0.1	0.3	12	0.1	3.4	-	75	8.9
KCB	123582	NR0689A	Ore	5daf	1.4	0.6	53.6	-	20	<1	0.2	0.95	4.6	24	6.3	53	1.4	125.2	2.46	2	<0.1	0.4	0.2	0.44	0.12	12	9.9	-	0.4	599	0.5	0.02	0.1	7.9	320	46.2	4.1	<5	1.94	0.4	0.5	<0.5	0.1	16	<0.1	-	<0.1	1.9	<0.005	0.1	0.3	<2.	<0.1	1.8	-	1297	16.5
KCB	123587	NR0689A	Ore	5daf	2.5	1.51	27.3	-	15	<1	0.9	0.76	20.1	28	8.3	39	1.1	198.2	2.52	5	<0.1	0.4	0.8	0.81	0.15	15	29	-	1.28	730	0.4	0.03	0.2	8.3	420	17.6	4.3	<5	1.57	0.5	0.9	<0.5	0.1	12	0.1	-	0.1	2.3	<0.005	0.1	0.2	6	0.5	1.9	-	5008	17.7
KCB	123616	NR0689A	Ore	5daf	4.1	0.52	87.4	-	18	<1	4.3	0.1	0.2	27	7.1	32	0.8	13	2.32	2	<0.1	0.3	0.05	0.02	0.15	13	6.9	-	0.23	124	0.3	0.01	<0.1	8	320	17.9	5.6	<5	1.86	1.2	0.5	<0.5	0.1	8	<0.1	-	1.7	1.4	<0.005	0.1	0.2	2	<0.1	2.9	-	63	12.1
KCB	131243	NR06126	Ore	5daf	2	2.52	75.4	-	30	<1	0.8	2.19	0.1	30	13.2	77	5.5	18.2	3.12	7	<0.1	0.3	0.05	0.01	0.61	14	30.4	-	1.58	1167	1.2	0.17	0.1	26.2	420	26.4	33.9	<5	2.45	0.3	2.4	<0.5	0.1	57	<0.1	-	0.1	1.6	0.053	0.7	0.3	28	0.2	2.6	-	133	11
KCB	131261	NR06126	Ore	5daf	5.5	2.02	57.8	-	21	<1	<0.1	1.42	0.1	36	10.2	70	3.4	18.4	2.1	5	<0.1	0.6	0.05	<0.01	0.55	17	20.9	-	1.26	694	0.4	0.09	<0.1	20.6	440	20.7	29.5	<5	1.56	0.4	1.5	<0.5	0.1	29	<0.1	2	0.036	0.7	0.3	13	<0.1	2.9	-	74	21.2
KCB	330216	NR07173	Ore	5daf	0.6	0.47	27.2	-	16	<1	0.2	0.64	1.3	12	9	56	0.9	20.6	1.95	1	<0.1	0.1	0.084	0.01	0.09	6	3.8	-	0.57	886	0.6	0.02	<0.1	17.4	440	40.2	4.9	<5	1.73	0.2	0.7	<0.5	<0.1	21	<0.1	-	<0.1	1.2	<0.005	<0.1	0.1	4	<0.1	2	-	305	6.4
KCB	370260	NR06114	Ore	5daf	0.4	1.95	13.9	-	46	<1	0.3	1.04	1.8	31	24.9	166	6.7	23.5	2.67	5	<0.1	0.3	0.1	0.01	0.3	15	75.6	-	1.72	717	0.4	0.08	0.1	56.1	500	10	14.4	<5	1.67	0.3	1.9	<0.5	0.1	64	<0.1	-	0.1	2.5	0.09	0.2	0.4	27	0.4	2.3	-	462	10
KCB	370291	NR06114	Ore	5daf	1	0.3	19.5	-	38	<1	0.1	0.95	1.3	25	9	39	0.4	16.8	1.22	1	<0.1	0.3	0.1	0.02	0.17	12	2.7	-	0.11	623	0.5	0.01	<0.1	11	340	258.5	5.2	<5	1.28	1.4	0.4	<0.5	<0.1	36	<0.1	-	<0.1	1.4	<0.005	0.1	0.2	2	<0.1	1.5	-	340	13.8
KCB	370292	NR06114	Ore	5daf	1.7	0.19	72.7	-	32	<1	0.2	0.9	4	22	9	36	0.4	43.4	1.89	1	<0.1	0.3	0.2	0.02	0.14	11	1.2	-	0.04	501	0.4	0.01	0.2	11.4	330	408.7	4.5	<5	2.03	1.7	0.3	<0.5	0.3	34	<0.1	-	0.1	1.4	<0.005	0.1	0.2	<2.	0.3	1.3	-	1038	11
KCB	370305	NR06114	Ore	5daf	2.3	0.29	67.5	-	16	<1	0.2	2.11	1	15	6.8	38	0.5	14.6	2.02	1	<0.1	0.2	0.2	0.01	0.14	8	3.8	-	0.23	1041	0.4	0.01	0.1	10.5	410	222.6	4.3	<5	2.26	4.4	0.3	<0.5	<0.1	25	<0.1	-	<0.1	1.1	<0.005	0.1	0.1	<2.	2.9	2.1	-	341	10.3
KCB	638667	NR0514	Ore	5daf	0.5	1.79	3.5	-	22	<1	5	0.85	0.1	24	9.6	41	1	191.9	2.94	5	0.1	0.2	0.05	0.05	0.1	12	33.9	-	1.33	381	1.9	0.07	0.1	8.7	360	1.3	3.2	<5	2	0.1	1.3	<0.5	0.1	38	<0.1	-	0.2	1.3	<0.005	<0.1	0.2	13	<0.1	1.3	-	47	8.7
KCB	750579	NR0631	Ore	5daf	2.4	0.46	16.4	-	20	<1	2.5	1.29	0.4	10	8.2	15	0.5	48.7	1.91	1	<0.1	0.1	0.168	0.01	0.11	5	9.2	-	0.77	961	3.3	0.02	<0.1	8.2	370	73	3.9	<5	1.85	2.9	0.5	2.1	<0.1	31	<0.1	-	0.9	0.9	<0.005	<0.1	0.1	3	0.2	1.1	-	104	4.2
KCB	754751	NR0635	Ore	5daf	1.7	0.38	43.8	-	20	<1	0.3	1.78	0.2	9	3.3	38	0.5	48.5	1.73	1	<0.1	0.3	0.1	0.02	0.05	0.01	0.09	4	10.6	-	0.96	495	2	0.03	<0.1	10.1	420	16.3	2.9	<5	1.67	1.9	0.8	<0.5	<0.1	70	<0.1	-	0.3	0.6	<0.005	<0.1	0.1	3	0.1	1.6	-	75	6.1
AMEC	L032089	NR10569	Ore	5f	4.02	2.32	124	40	43	0.2	1	2.94	38.7	6.73	29	45	5.46	437	10.7	6.9	0.2	<0.05	15.7	1.75	0.3	2.5	36	0.14	1.81	1610	0.82	0.1	0.17	2.6	1070	14.1	10.5	-	>5	2.03	7.7	2	0.3	70.1	<0.05	0.3	3.07	0.3	0.09	0.15	0.06	80	9.6	9.1	1	8000	9.6
AMEC	NR10569	Ore	5f	0.13	2.08	6	30	57	0.3	0.04	2.78	0.12	17	9.9	47	8.69	16	2.09	4.6	<0.1	0.3	0.53	0.06	<0.02	0.35	18.3	32	0.04	1.21	702	0.52	0.2	<0.05	19.8	590	5	15.9	-	0.46	0.51	1.4	<1	<0.3	95.2	<0.05	0.21	0.12	1.9	0.04	0.23	0.34	14	<0.1	3.79	0.2	75	22.6
AMEC	L032133	NR10529	Ore	5f	4.21	2.32	56	30	26	0.1	9.33	0.83	0.61	9.33	40.2	62	2.14	253	13.2	6.7	0.1	0.11	0.02	0.08	0.12	3.9	41	0.08	1.75	620	1.39	0.06	0.11	52.3	680	3.4	4.5	-	>5	0.15	3.6	5	<0.3	26.7	<0.05	0.25	12.2	0.6	0.05	0.07	0.05	88	<0.1	6.54	0.6	295	9.1
AMEC	L032158	NR10552	Ore	5f	1.79	3.1	31	40	34	0.3	3.03	1.36	0.33	7.61	41.8	84	2.8	157	7.42	11.4	0.2	0.07	0.01	0.1	0.14	3.1	47	0.11	2.1	1060	0.59	0.15	0.17	59.8	810	7.1	4.7	-	>5	0.18	13.9	<1	0.3	54.7	<0.05	0.32	2.33	0.4	0.23	0.05	<0.05	197	0.9	9.54	0.9	287	5.8
KCB	802817	NR08315	Ore	6	2.6	2.71	125.2	-	19	<1	8.1	0.32	0.4	9	38.4	71	1.3	150.2	15.41	12	0.3	0.1	0.01	0.09	0.06	4	53	-	2.17	968	0.5	0.02	0.1	47.1	570	10.7	2.3	<5	1.0	0.3	8.1	3.7	0.1	21	<0.1	-	4.3	0.4	0.062	<0.1	<0.1	146	0.1	7	-	311	17
KCB	123019	NR0686	Ore	6cd	2.4	4.06	95.7	-	125	<1	0.4	3.49	0.3	9	39.3	96	10.7	78.3	8.67	13	0.2	<0.1	0.1	0.04	0.98	4	60.9	-	1.92	2112	0.5	0.13	0.3	41.2	1250	34.9	3.62	0.9	11.7	<0.5	0.4	65	<0.1	-	2	0.4	0.138	0.4	<0.1	177	1.7	6.2	-	227	1.4

Consultant	Sample ID	HOLE-ID	Ore/Waste Classification	Rock Code	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Tb	Te	Th	Tl	Tl	U	V	W	Y	Yb	Zn	Zr
					ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
	Average Crustal Abundance*				0.075	8.23	1.8	10	425	3	0.0085	4.15	0.15	66.5	25	102	-	60	5.63	19	1.5	3	0.085	0.25	2.085	39	20	-	2.33	950	1.2	2.355	20	84	1050	14	90	0.7	0.035	0.2	22	0.05	2.3	370	2	-	-	12	0.565	0.85	2.7	120	1.25	33	3.2	70	165
	10x Average Crustal Abundance				0.75	82.3	18	100	4250	30	0.085	41.5	1.5	665	250	1020	-	600	56.3	190	15	30	0.85	2.5	20.85	390	200	-	23.3	9500	12	23.55	200	840	10500	140	900	7	0.35	2	220	0.5	23	3700	20	-	-	12	5.65	8.5	27	1200	12.5	330	32	700	1650
AMEC	LG32135	NR10526	Outside Pit	4ca	0.1	1.18	8	30	20	<0.1	0.04	1.6	0.13	30.1	7.5	44	0.47	9	2.27	3	<0.1	0.17	0.07	<0.02	0.09	14.4	15	0.02	0.87	679	0.34	0.03	<0.05	9.2	440	1	1.9	-	0.67	0.87	0.6	<1	<0.3	35.7	<0.05	0.14	<0.05	1.5	<0.01	0.02	0.16	5	<0.1	1.36	<0.1	97	5.7
AMEC	LG32141	NR10471	Outside Pit	4ca	0.2	0.56	3	40	33	0.1	0.46	1.92	0.08	26	9.3	39	0.65	58.8	2.15	1.6	<0.1	0.26	0.03	<0.02	0.11	13.6	15	0.02	0.69	567	1.33	0.04	0.15	9.6	390	0.9	2.3	-	2.17	0.22	0.6	<1	<0.3	36.8	<0.05	0.12	0.49	1.6	<0.01	0.02	0.14	2	<0.1	1.97	0.1	50	8.4
AMEC	LG32168	NR10582	Outside Pit	4ca	0.34	1.33	25	30	18	0.2	0.02	1.77	0.14	25.9	6.4	44	1.24	18.1	1.53	3.2	<0.1	0.62	0.02	<0.02	0.16	14.2	23	0.02	0.73	770	0.21	0.03	<0.05	7.2	600	39.5	5.2	-	1.3	0.61	0.6	<1	<0.3	50.3	<0.05	0.14	0.06	2.4	<0.01	0.07	0.41	4	<0.1	2.43	0.2	69	23.2
KCB	201118	NR09373	Outside Pit	4ca	0.1	1.86	7.6	-	21	<1	0.1	1.21	0.2	49	8.5	22	0.4	4	2.59	5	0.1	0.2	0.031	0.01	0.07	23	38.3	-	1.02	593	0.4	0.03	<0.1	9.3	600	1.9	1.5	<5	0.3	0.6	1.4	<0.5	0.1	58	<0.1	-	<0.1	2.4	<0.005	<0.1	0.2	16	0.2	1.5	-	79	8.1
KCB	201124	NR09377	Outside Pit	4ca	1.3	0.92	13.8	-	32	<1	0.3	2.26	1.5	18	8.4	30	0.8	26.2	2.02	3	<0.1	0.2	0.07	0.02	0.16	9	20.8	-	1.15	1899	0.9	0.03	<0.1	9.2	500	30.6	4.5	<5	1.12	0.1	0.8	<0.5	0.1	29	<0.1	-	0.6	2	<0.005	0.1	0.3	5	0.1	1.8	-	401	7.5
KCB	201125	NR09383	Outside Pit	4ca	1.3	1.22	24.8	-	33	<1	2.3	0.94	1.5	29	7.6	26	0.9	136	3.21	4	<0.1	0.4	0.02	0.04	0.24	14	34.3	-	0.58	486	0.4	0.09	0.2	7.6	410	14.9	4.3	<5	1.64	0.3	0.8	<0.5	<0.1	77	<0.1	-	0.2	1.8	<0.005	<0.1	0.2	5	0.1	3.1	-	356	9.8
KCB	201137	NR09425	Outside Pit	4ca	0.5	0.25	2.9	-	20	<1	0.4	0.12	0.1	16	32.7	25	0.5	301.6	2.34	1	<0.1	0.1	0.025	0.01	0.1	7	1.8	-	0.06	976	2.3	0.03	<0.1	14.3	380	2.4	2.6	<5	1.42	0.6	0.3	<0.5	0.1	16	<0.1	-	0.5	1.5	<0.005	<0.1	0.2	<2	0.1	1.7	-	46	3
KCB	435214	NR07211	Outside Pit	4ca	1.6	1.39	36.4	-	19	<1	4.9	1.93	0.1	17	43.6	90	1.2	122.3	9.38	7	0.2	0.2	0.05	0.02	0.06	8	50	-	1.41	627	3.1	0.03	0.2	76.4	760	3.2	2.9	<5	10	1.7	5.3	4.8	0.1	24	<0.1	-	1.6	0.8	0.006	0.1	0.1	68	<0.1	9.7	-	115	8
KCB	450903	NR08237	Outside Pit	4ca	0.3	1.96	5.7	-	59	<1	0.4	2.04	<0.1	29	9.1	92	5.6	17.7	1.96	7	<0.1	0.4	0.05	0.01	0.29	14	35.1	-	0.76	480	0.5	0.22	0.2	12.4	420	1	14	<5	0.75	0.1	2	<0.5	0.2	138	<0.1	-	0.1	1.6	0.045	0.2	0.3	20	0.3	3.1	-	53	12.5
KCB	450942	NR08237	Outside Pit	4ca	0.5	0.96	6.6	-	32	<1	0.2	1.41	1.5	30	9.4	68	1.9	45.6	1.88	4	<0.1	0.4	0.05	0.01	0.16	14	26.3	-	0.54	582	0.4	0.03	0.2	11.4	420	24.9	6	<5	1.01	<0.1	1.1	<0.5	0.1	16	<0.1	-	0.4	1.7	0.043	0.1	0.3	10	0.2	2.6	-	418	16.3
KCB	452257	NR08227	Outside Pit	4ca	0.3	1.4	5.3	-	32	<1	2.1	0.61	<0.1	26	9.4	54	1	13.3	2.43	4	<0.1	0.3	0.1	0.01	0.1	13	27.5	-	1.11	255	0.5	0.09	<0.1	11.5	450	<0.1	2.8	<5	1.99	0.1	1	<0.5	0.1	35	<0.1	-	0.8	1.5	<0.005	<0.1	0.2	7	1.6	2.8	-	49	11.7
KCB	452843	NR08235	Outside Pit	4ca	1.2	0.23	1.2	-	18	<1	0.4	2.32	<0.1	16	13.3	36	0.7	188.7	2.05	1	<0.1	0.1	0.006	<0.01	0.1	7	<0.1	-	0.64	283	4	0.04	<0.1	15.7	390	1.9	2.9	<5	2.14	0.1	0.9	<0.5	<0.1	48	<0.1	-	0.3	1.4	<0.005	<0.1	0.1	6	0.1	3.7	-	16	5.9
KCB	453328	NR08236	Outside Pit	4ca	0.3	0.31	1.3	-	26	<1	0.3	1.71	<0.1	22	12.2	52	0.5	127.5	2.05	1	<0.1	0.2	0.014	<0.01	0.08	11	3.3	-	0.65	198	0.9	0.06	<0.1	16.1	520	1.7	2.3	<5	2.53	0.1	1.5	<0.5	0.1	48	<0.1	-	0.2	1.2	<0.005	<0.1	0.2	7	0.1	2.6	-	15	7.4
KCB	454191	NR08230	Outside Pit	4ca	0.4	1.52	6.2	-	25	<1	6.2	0.5	<0.1	31	8.7	40	1.4	20.7	2.51	4	<0.1	0.2	0.05	0.02	0.08	14	32.4	-	0.94	263	0.4	0.11	0.1	7.3	490	2.1	2.3	<5	2.11	0.1	0.6	<0.5	0.1	54	<0.1	-	1.1	1.7	<0.005	<0.1	0.2	7	0.2	2	-	52	7
KCB	454259	NR08230	Outside Pit	4ca	2.5	1.23	13.3	-	32	<1	8	0.2	0.1	27	8.9	32	0.8	1996.1	3.25	4	<0.1	0.3	0.05	0.29	0.12	12	34.9	-	1.15	243	0.6	0.02	<0.1	10.2	420	2.6	3.8	<5	2.68	1.1	0.6	<0.5	0.2	9	<0.1	-	1.8	1.7	<0.005	<0.1	0.3	7	0.1	3.1	-	60	11.6
KCB	454285	NR08230	Outside Pit	4ca	0.7	1.22	10.8	-	40	<1	2.4	1.26	0.1	32	8.5	37	2.1	57.4	1.91	3	<0.1	0.3	0.05	0.04	0.16	16	24.6	-	0.69	582	0.3	0.09	<0.1	10.3	440	2.7	7.8	<5	1.55	0.5	0.7	<0.5	0.1	32	<0.1	-	0.9	1.6	0.01	0.1	0.3	7	0.1	3.6	-	54	10.9
KCB	454845	NR08242	Outside Pit	4ca	0.3	1.03	0.9	-	138	<1	0.6	1.03	<0.1	47	8.2	62	4.8	9.6	2.1	5	<0.1	0.3	0.05	0.03	0.55	22	28.5	-	0.81	405	0.3	0.04	0.1	11.7	590	1.2	22.1	<5	1.14	0.1	1.4	<0.5	0.2	15	<0.1	-	0.2	2.5	0.071	0.3	0.4	21	0.2	3	-	72	9.4
KCB	457577	NR08252	Outside Pit	4ca	0.3	0.35	1.9	-	37	<1	1.4	0.24	0.4	16	6.4	32	0.9	10.3	2.49	1	<0.1	0.4	0.05	0.02	0.15	8	3.7	-	0.12	94	0.4	0.02	0.1	5.6	350	2	4.1	<5	2.59	0.1	0.4	<0.5	0.1	7	<0.1	-	0.2	1.5	<0.005	<0.1	0.2	<2	0.3	1.9	-	90	15.4
KCB	457630	NR08252	Outside Pit	4ca	0.1	0.68	<0.5	-	31	<1	0.8	0.91	0.1	25	10.1	48	1	33.8	2	2	0.1	0.2	0.05	<0.01	0.14	13	6.6	-	0.26	134	3.6	0.03	0.1	6.7	380	6.7	4.5	<5	2.01	0.1	0.6	0.5	0.1	13	<0.1	-	0.1	1.6	0.011	<0.1	0.2	2	0.5	1.7	-	41	7.8
KCB	585332	NR08256	Outside Pit	4ca	0.5	0.81	9.5	-	25	<1	0.1	1.06	0.2	27	7.8	61	1.8	18.1	1.79	3	<0.1	0.3	0.05	0.01	0.12	13	34.1	-	0.61	400	0.3	0.03	<0.1	10	460	2.9	4.6	<5	1.23	0.1	1	<0.5	0.1	13	<0.1	-	0.5	1.5	0.009	0.1	0.2	10	<0.1	2.7	-	81	10.2
KCB	587772	NR08265	Outside Pit	4ca	0.2	1.73	15.3	-	24	<1	0.2	0.78	0.1	25	9	48	3.1	8.9	1.58	4	0.1	0.2	0.05	<0.01	0.17	12	28.8	-	0.84	389	0.2	0.07	0.1	11.6	410	13.4	7.1	<5	0.66	0.2	0.9	<0.5	0.1	42	<0.1	-	0.1	2.6	0.025	0.1	0.3	9	0.1	2.6	-	98	5.5
KCB	732317	NR08271	Outside Pit	4ca	0.5	1.14	8.5	-	28	<1	0.3	0.98	0.1	31	9.9	72	3	47.9	2.35	6	<0.1	0.2	0.014	0.01	0.14	15	52.5	-	0.78	321	0.5	0.05	<0.1	13	440	5.5	5.5	<5	1.31	0.2	1.8	<0.5	0.1	19	<0.1	-	0.4	2.1	0.05	0.1	0.4	15	0.3	3.5	-	62	6.8
KCB	801306	NR08310	Outside Pit	4ca	0.2	1.58	12	-	25	<1	0.1	1	0.4	35	9.4	55	1.4	16.3	2.05	5	<0.1	0.4	0.009	0.01	0.16	17	44.9	-	1.14	448	0.3	0.04	<0.1	9.3	460	10.8	5.5	<5	0.79	0.2	1.6	<0.5	0.1	20	<0.1	-	<0.1	2.1	0.033	<0.1	0.4	10	0.3	3.1	-	192	11.8
KCB	RRR01265	NR09332	Outside Pit	4ca	1.4	0.27	9.3	-	32	<1	4	0.11	0.4	10	19.4	46	0.8	6.66	2.4	1	0.1	0.5	0.05	0.02	0.13	5	4.7	-	0.1	53	1.7	0.01	0.1	22.6	290	1.6	3.5	<5	0.18	0.4	0.5	1.4	0.1	4	<0.1	-	2.6	1.3	<0.005	0.1	0.2	<2	0.2	2.1	-	87	17.9
KCB	RRR03016	NR09331	Outside Pit	4ca	3.8	1.06	12.3	-	39	<1	17.6	0.62	0.8	14	7.2	44	1.1	7069.2	4.19	2	<0.1	0.2	0.05	0.37	0.14	7	8.6	-	0.38	118	0.5	0.07	0.1	4.7	240	3.7	4.9	<5	4.07	0.2	0.5	2	0.2	56	<0.1	-	2.9	1.1	<0.005	0.1	0.2	2	0.7	1.6	-	95	7.7
KCB	RRR06384	NR09336	Outside Pit	4ca	0.2	0.3	0.6	-	42	<1	0.7	1.56	0.5	23	6.1	41	0.6	4.2	1.53	1	<0.1	0.3	0.05	0.02	0.14	11	6.2	-	0.32	272	0.3	0.03	<0.1	5.8	340	2.8	4.2	<5	1.76	0.2	0.5	<0.5	0.1	27	<0.1	-	0.2	1.4	<0.005	<0.1	0.2	2	0.1	2.1	-	110	11.1
AMEC	LG32144	NR10471	Outside Pit	4cb	0.1	0.77	3	30	25	0.1	0.19	2.95	0.03	21.6	9.5	50	0.79	10.5	1.82	2.2	<0.1	0.27	0.02	<0.02	0.08	10.2	21	0.03	1.03	539	1.78	0.05	0.07	11.7	590	0.9	2.2	-	1.71	0.09	0.8	1	<0.3	52.5	<0.05	0.13	0.34	1.4	<0.01	0.02	0.19	4	<0.1	2.68	0.2	22	8.9
KCB	370954	NR06122	Outside Pit	4cb	3.5	0.59	81.1	-	17	<1	<0.1	1.13	1.7	24	5.9	43	1.4	63.2	1.65	2	<0.1	0.4	0.2	0.03	0.12	12	13.2	-	0.39	464	0.4	0.02	<0.1	6.6	330	169.3	3.6	<5	1.5	2.9	0.5	<0.5	<0.1	18	<0.1	-	0.2	1.8	<0.005	<0.1	0.3	2	0.2	1.8	-	466	16.8
KCB	804567	NR08316	Outside Pit	4cb	0.5	0.46	1.4	-	33	<1	1.3	1.22	0.3	16	7.1	29	0.9	8	2.06	1	<0.1	0.5	0.05	0.02	0.14	8	9.3	-	0.25	302	0.3	0.02	0.1	6.7	340	6	4	<5	1.98	0.8	0.5	<0.5	0.1	17	<0.1	-	0.3	1.5	<0.005	0.1	0.3	2	<0.1	2	-	66	19.1
KCB	804580	NR08316	Outside Pit	4cb	0.7	1.76	3.4	-	34	<1	1.9	1.17	0.1	48	11.4	40	1.1	7.3	3.13	4	0.1	0.5	0.05	0.01	0.13	24	15.8	-	0.55	375	0.5	0.15	0.1	14.6	570	5.6	4.5	<5	3.05	0.2	1.1	<0.5	0.1	114	<0.1	-	1.1	2.7	<0.005	<0.1	0.4	7	<0.1	3.5	-	62	21
KCB	804708	NR08316	Outside Pit	4cb	0.2	0.34	<0.5	-	34	<1	0.5	1.79	<0.1	20	8.1	41	0.6	8.2	2.06	1	<0.1	0.4	0.05	<0.01	0.13	10	10.6	-	0.42	206	0.8	0.03	0.1	8.8	360	1.6	5.1	<5	1.93	0.1	0.6	<0.5	0.1	139	<0.1	-	0.1	1.2	<0.005	0.1	0.2	3	<0.1	3.3	-	15	15.3
KCB	34267	NR0684	Outside Pit	4cf	0.1	1.12	2.4	-	13	<1	0.1	0.21	<0.1	22	10.5	102	0.8	9	1.09	4	0.1	0.1	0.2	<0.01	0.02	11	18.9	-	0.49	82	2.1	0.04	<0.1	14.1	430	1.8	0.7	<5	0.3	0.2	1	<0.5	0.1	33	<0.1	-	<0.1	1.4	<0.005	<0.1	0.2	8	7.7	1.3	-	32	6
KCB	244631	NR07153	Outside Pit	4cf	0.2	0.96	1.8	-	25	<1	0.3	0.24	<0.1	35	7	56	0.8	20.3	1.62	4	<0.1	0.3	0.05	<0.01	0.08	17	32.1	-	0.55	283	1.3	0.05	<0.1	6.7	490	<0.1	2.3	<5	0.57	<0.1	0.9	<0.5	0.1	17	<0.1	-	0.1	2.3	<0.005	<0.1	0.4	5	<0.1	2.4	-	48	11
KCB	338747	NR07174	Outside Pit	4cf	0.7	0.84	4.8	-	26	<1	0.7	0.66	0.1	34	7.2	55	1	13.3	1.65	3	<0.1	0.2	0.05	<0.01	0.1	16	21.1	-	0.77	422	1.5	0.04	<0.1	8.4	420	6	3.2	<5	1.51	<0.1	0.7	<0.5	0.1	27	<0.1	-	0.8	2	<0.005	<0.1	0.3	3	<0.1	2.6	-	100	7.2
KCB	RRR04250	NR09333	Outside Pit	4cf	2.2	1.41	52.8	-	39	<1	3.2	0.55	3.5	16	54.2	52	3.1	212.6	4.24	6	0.1	0.2	0.1	<0.01	0.27	22	<0.02	0.08	10.2	21	0.03	1.03	539	1.78	0.05	0.07	11.7	590	0.9	2.2	-	1.71	0.09	0.8	1	<0.3	52.5	<0.05	0.13	0.34	1.4	<0.01	0.02	0.19	4	<0.1	2.68	0.2	22	8.9
AMEC	LG32025	NR11738	Outside Pit	4cfa	0.24	3.1	19	40	137	0.3	0.18	4.1	0.11	38.9	11.3	47	4.36	14.1	3.13	7.5	<0.1	0.3	0.6	<0.01	<0.02	0.23	18.5	28	0.05	1.64	1270	0.77	0.08	0.05	17.2	650	6.9	8.1	-	1.23	1.01	2.6	<1	<0.3	84.4	<0.05	0.23	0.05	2.8	0.03	0.17	0.44	23	1.6	4.52	0.3	74	29.1
AMEC	LG32032	NR11754	Outside Pit	4cfa	0.2	0.5	5.4	7	40	29	0.1	1.02	1.1	<5	6.81	20.6	86	2.23	107	2.4	9	<0.1	0.18	<0.01	<0.02	0.12	3.3	18	0.04	1.29	242	0.52	0.59	0.14	38.3	280	1.5	3.7	-	0.6	0.18	3.9	1	<0.3	57.5	<0.05	0.11	0.07	0.15	0.09	0.09	95	0.2	3.22	0.3	7.7
AMEC	LG32033	NR11754	Outside Pit	4cfa	0.17	2.15	8	40	33	0.3	2.18	1.45	<0.01	23.7	10.4	52	2.18	40.2	2.58	6	<0.1	0.43	<0.01	0.03	0.16	12.4	36	0.03	1.12	506	1.39	0.06	0.16	7.9	460	2.2	5.1	-	1.47	0.12	1.6	<1	<0.3	40	<0.05	0.15	0.25	1.7	0.05	0.06	0.3	12	0.4	2.63	0.2	27	16.5
AMEC	LG32113	NR10508	Outside Pit	4cfa	0.04	1.39	3	40	23	0.2	0.08	1.84	0.07	39.6	6.2	32	0.48	6.4	2.4	3.5	<0.1	0.26	0.03	<0.02	0.09	19.1	24	0.01	1.01	475	0.42	0.03	<0.05	7.7	540	0.4	1.8	-	0.39	0.27	0.8	<1	<0.3	50.8	<0.05	0.13	<0.05	2.6	<0.01	0.02	0.23	6	<0.1	1.38	0.1	59	10.1
AMEC	LG32114	NR10508	Outside Pit	4cfa	0.2	1.36	2	40	26	0.2	0.05	1.44	0.04	37.5	4.8	34	0.57	2.1	1.78	3.5	<0.1	0.32	0.02	<0.02	0.1	17.6	22	0.02	0.64	347	0.45	0.04	<0.05	8.1	530	0.5	2.1	-	0.19	0.67	0.7	<1	<0.3	65.3	<0.05	0.17	<0.05	1.8	<0.01	0.02	0.28	6	<0.1	1.77	0.1	31	12.4
AMEC	LG32115	NR10508	Outside Pit	4cfa	0.03	1.83	3	30	28	0.1	0.04	1.03	0.03	40.1	5.6	26	0.55	3.1	2.36	2.9	<0.1	0.31	0.02	<0.02	0.11	19.5	21	0.02	1.42	1030	0.54	0.04	<0.05	7.2	520	1.2	2.2	-	0.3	1.81	0.7	<1	<0.3	81.4	<0.05	0.15	0.07	2.7	<0.01	0.03	0.27	4	<0.1	1.83	0.1	81	11
AMEC	LG32116	NR10508	Outside Pit	4cfa	<0.01	1.38	9	40	27	0.2	0.03	2.76	0.06	51.3	5.8	19	0.42	1.8	2.75	3.6	<0.1	0.31	0.03	<0.02	0.1	23.6	22	0.02	1.33	612	0.44	0.03	<0.05	9.9	700	0.5	2	-	0.2	2.65	0.8	<1	<0.3	60.8	<0.05	0.17	<0.05	3.2	<0.01	0.03	0.28	7	0.2	2.07	0.1	43	13
AMEC	LG32131	NR10531	Outside Pit	4cfa	0.02	0.88	8	30	19	<0.1	<0.02	2.32	0.04	23.3	4.8	31	0.75	2.7	1.59	2.3	<0.1	0.17	<0.01	<0.02	0.09	11.3	20	0.01	1.2	477	0.29	0.04	<0.05	9.4	370	<0.2	1.3	-	0.07	0.48	0.6	<1	<0.3	34.8	<0.05	0.1	<0.05	1.3	<0.01	<0.02	0.14	3	<0.1	1.24	<0.1	51	6.9
KCB	452894	NR08235	Outside Pit	4cfa	4.1	0.63	74.6	-	51	<1	2	1.76	3.2	21	9.8	29	1.8	202.5	2.53	2	<0.1	0.2	0.441	0.03	0.13	10	10.6	-	0.88	1143	8.3	0.03	<0.1	14.5	430	92.6	4.7	<5	3.5	13.2	0.9	1.1	0.1	31	<0.1	-	1.2	1.1	<0.005	0.1	0.1	8	0.1	1.8	-	771	7.5
KCB	RRR05608	NR09335	Outside Pit	4cfa	0.1	1.2	1.4	-	23	<1	0.4	0.77	0.1	23	8.6	80	1.6	4.7	1.25	4	<0.1	0.2	0.06	<0.01	0.09	10	42.5	-	0.92	164	0.7	0.07	<0.1	13.2	390	1.8	2.8	<5	0.62	0.1	1.1	<0.5	0.1	26	<0.1	-	0.1	1.9	<0.005	<0.1	0.4	8	0.2	2.7	-	50	8.8
KCB	201114	NR09356	Outside Pit	4cfb	0.3	1.66	1.8	-	52	<1	1.2	0.24	<0.1	11	7.3	30	3.2	22.4	2.57	5	<0.1	0.2	0.006	0.02	0.4	5	39.6	-	1.24	219	0.5	0.03	<0.1	7.5	360	1	13.8	<5	0.94	<0.1	1.3	<0.5	0.1	12	<0.1	-	<0.1	1.3	0.011	0.1	0.2	15	0.2	2.1	-	30	8
KCB	201123	NR09377	Outside Pit	4cfb	1.2	0.91	4.9	-	16	<1	3	0.97	0.3	19	2.7	19	0.6	202	3.18	3	<0.1	0.2	0.015	0.05	0.1	8	38.7	-	0.8	342	0.3	0.02	<0.1	7.1	380	1.5	3.5	<5	2.13	0.1	0.5	<0.5	0.1	16	<0.1	-	0.5	1.6	<0.005	<0.1	0.2	5	0.1	1.9	-	111	7.5
KCB	201138	NR09425	Outside Pit	4cfb	2.1	0.81	73.6	-	25	<1	0.5	2.32	26	16	9.9	27	0.6	131	1.95	2	<0.1	0.1	2.502	0.1	0.09	8	40.3	-	0.75	645	1.3	0.04	<0.1	11	360	8.8	2.7	<5	1.43	0.7	0.7	<0.5	0.1	49	<0.1	-	0.2	0.9	<0.005	<0.1	0.1	3

Table A-4: Mine Rock Elemental Analysis Results (continued)

Consultant	Sample ID	HOLE-ID	Ore/Waste Classification	Rock Code	Ag	Al	As	B	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe	Ga	Ge	Hf	Hg	In	K	La	Li	Lu	Mg	Mn	Mo	Na	Nb	Ni	P	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Tb	Te	Th	Tl	Tl	U	V	W	Y	Yb	Zn	Zr
					ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	%	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppb	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Average Crustal Abundance*					**0.075**	**8.23**	**1.8**	**10**	**425**	**3**	**0.0085**	**4.15**	**0.15**	**66.5**	**25**	**102**	-	**60**	**5.63**	**19**	**1.5**	**3**	**0.085**	**0.25**	**2.085**	**39**	**20**	-	**2.33**	**950**	**1.2**	**2.355**	**20**	**84**	**1050**	**14**	**90**	**0.7**	**0.035**	**0.2**	**22**	**0.05**	**2.3**	**370**	**2**	-	-	**1.2**	**0.565**	**0.85**	**2.7**	**120**	**1.25**	**33**	**3.2**	**70**	**165**
10x Average Crustal Abundance					**0.75**	**82.3**	**18**	**100**	**4250**	**30**	**0.085**	**41.5**	**1.5**	**665**	**250**	**1020**	-	**600**	**56.3**	**190**	**15**	**30**	**0.85**	**2.5**	**20.85**	**390**	**200**	-	**23.3**	**9500**	**12**	**23.55**	**200**	**840**	**10500**	**140**	**900**	**7**	**0.35**	**2**	**220**	**0.5**	**23**	**3700**	**20**	-	-	**12**	**5.65**	**8.5**	**27**	**1200**	**12.5**	**330**	**32**	**700**	**1650**
KCB	34450	NR0684	Outside Pit	10d	0.3	1.27	1.4	-	75	<1	8.3	0.77	<0.1	21	8	57	2.9	44	1.84	5	<0.1	0.4	0.05	<0.01	0.19	10	13.5	-	0.59	146	0.2	0.06	0.2	10.7	380	1.9	6.1	<5	1.09	<0.1	1.8	<0.5	0.2	14	<0.1	-	2.1	2	0.062	0.1	0.3	17	0.2	2.6	-	23	12.9
KCB	456806	NR08251	Outside Pit	10e	0.2	1.83	1.3	-	566	<1	0.2	3.3	0.1	149	17.7	99	13.7	23.3	3.13	7	0.2	0.6	0.05	0.01	0.76	77	29.7	-	1.65	697	0.1	0.03	0.1	38.6	1680	4.9	32.2	<5	0.17	<0.1	7.7	<0.5	0.2	387	<0.1	-	<0.1	10	0.104	0.2	1.6	69	<0.1	9.3	-	59	27.2
AMEC	L032069	NR10610	Outside Pit	11a	0.58	1.87	19	30	24	0.1	0.09	2.29	16.7	29	15.4	33	1.14	85.7	4.11	5	<0.1	0.3	0.9	0.21	0.12	14.2	41	0.03	1.85	1280	0.89	0.02	<0.05	22.3	520	1.9	2.9	-	2.47	2.13	1.8	<1	<0.3	26.4	<0.05	0.17	0.52	1.5	<0.01	0.04	0.15	11	<0.1	2.78	0.2	4630	14.6
AMEC	L032035	NR11734	Outside Pit	11c	0.47	2.16	15	40	24	0.2	0.04	0.53	0.08	16.2	14.4	64	0.93	27.3	3.11	5.6	<0.1	0.14	0.01	<0.02	0.18	7.6	45	0.03	1.49	707	0.66	0.02	0.09	27	510	6.3	4.9	-	0.33	0.87	2.6	<1	<0.3	14.3	<0.05	0.2	<0.05	1.1	0.04	0.09	0.21	34	0.9	3.64	0.3	78	6
AMEC	L032031	NR11754	Outside Pit	13	0.19	5.47	4	40	7	<0.1	0.06	3.16	0.17	3.18	28.4	113	1.09	113	3.77	8.2	<0.1	0.13	<0.01	<0.02	0.03	1.4	25	0.06	1.9	700	0.24	0.49	0.14	48.3	230	2.2	0.6	-	0.13	0.18	4.9	<1	<0.3	54.4	<0.05	0.13	<0.05	0.1	0.22	0.03	<0.05	121	0.1	4.24	0.4	81	6.2
AMEC	L032155	NR10561	Outside Pit	13	0.09	4.4	2	40	5	<0.1	0.04	2.44	0.06	2.51	23.4	101	0.93	117	3.84	7	0.1	0.15	<0.01	<0.02	0.01	1.1	19	0.05	1.82	534	0.23	0.35	0.11	45	200	1.1	0.4	-	0.07	<0.05	3.5	<1	<0.3	41.5	<0.05	0.11	<0.05	0.1	0.19	0.03	<0.05	113	<0.1	3.77	0.3	56	5.8
KCB	452360	NR08231	Outside Pit	13	0.2	4.23	<0.5	-	9	<1	<0.1	2.38	0.1	3	20.4	68	1.1	115.8	3.26	8	0.1	0.1	0.05	0.01	0.02	1	10.4	-	1.09	324	0.2	0.4	0.1	34.2	210	0.9	0.8	<5	0.11	<0.1	2.9	<0.5	0.2	46	<0.1	-	<0.1	0.2	0.171	<0.1	<0.1	117	<0.1	3.8	-	53	3.6
KCB	587109	NR08259	Outside Pit	13	0.2	5.07	<0.5	-	10	<1	<0.1	3.12	<0.1	3	19.2	56	1.2	93.5	3.09	8	<0.1	0.1	0.012	<0.01	0.03	1	9.6	-	1.15	259	0.3	0.49	<0.1	32.9	150	2.2	1.1	<5	0.12	<0.1	2.5	<0.5	0.1	56	<0.1	-	<0.1	0.1	0.167	<0.1	<0.1	108	0.1	3.2	-	36	2.5

* Price 1997

Table A-5: Shake Flask Extraction Results

Sample ID	Analyte:	Consultant	Waste Classification	Rock Code	pH	Redox	Conductivity	Acidity (to pH 4.5)	Total Acidity (to pH 8.3)	Alkalinity	Chloride	Fluoride	Sulphate	Major Anions	Major Cations	Difference	Balance (%)	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd
	Unit:					mV	umhos/cm	mg $CaCO_3$/L	mg $CaCO_3$/L	mg $CaCO_3$/L	mg/L	mg/L	mg/L	meq/L	meq/L	meq/L	%	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
O. Reg 560/94					**6.0-9.5**	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.5**	-	-	-	-	-
PWQO					**6.5-8.5**	-	-	-	-	-	-	-	-	-	-	-	-	-	**0.015-0.075***	**0.02**	**0.1**	-	**0.011-1.1****	-	**0.2**	**0.0002**
612385		KCB	In-pit Mine Rock	2	7.76	341	350	#N/A	5.37	64.7	4.50	0.07	104	3.59	3.72	-0.14	-1.9%	162	0.04	0.0015	0.0004	0.0158	<0.00001	<0.000005	<0.05	<0.000005
752739		KCB	In-pit Mine Rock	2	7.63	326	429	#N/A	5.33	49.7	3.60	0.11	156	4.35	4.46	-0.11	-1.3%	200	0.07	0.0007	0.0003	0.0104	<0.00001	<0.000005	<0.05	0.000041
803501		KCB	In-pit Mine Rock	2	7.90	291	128	#N/A	3.99	73.0	2.90	0.02	3.00	1.60	1.39	0.21	7.1%	61.9	0.04	0.0050	0.1440	0.0034	<0.00001	<0.000005	<0.05	<0.000005
455611		KCB	In-pit Mine Rock	2a	8.01	218	452	#N/A	5.23	65.4	4.60	0.05	180	5.19	4.51	0.68	7.0%	200	0.10	0.0022	0.0006	0.0042	<0.00001	<0.000005	<0.05	0.000011
L032049		AMEC	In-pit Mine Rock	2a	7.78	324	108	#N/A	5.43	55.0	0.300	<0.06	7.00	1.26	1.18	0.08	0.03	51.4	0.15	0.0048	0.0005	0.0009	<0.00002	<0.00001	0.014	0.000003
L032101		AMEC	In-pit Mine Rock	2a	7.94	289	63.8	#N/A	2.48	38.5	0.200	<0.06	2.00	0.81	0.71	0.10	0.07	27.2	0.32	0.0017	0.0008	0.0023	<0.00002	<0.00001	0.004	0.000003
L032104		AMEC	In-pit Mine Rock	2a	7.87	297	65.3	#N/A	2.68	31.8	0.300	<0.06	3.00	0.71	0.69	0.02	0.01	23.9	0.30	0.0005	0.0004	0.0038	<0.00002	<0.00001	0.006	0.000003
L032162		AMEC	In-pit Mine Rock	2a	7.95	286	72.8	#N/A	2.39	44.3	0.400	<0.06	2.00	0.94	0.84	0.10	0.06	26.4	0.15	0.0014	0.0009	0.0025	<0.00002	<0.00001	0.016	0.000003
243856		KCB	In-pit Mine Rock	2ab	7.85	188	216	#N/A	4.55	73.3	1.60	0.05	50.0	2.55	2.34	0.22	4.4%	97.5	0.09	0.0059	0.0022	0.0042	<0.00001	<0.000005	<0.05	<0.000005
L032216		AMEC	In-pit Mine Rock	3	7.54	352	78.0	#N/A	3.34	41.1	0.800	<0.06	2.00	0.89	0.78	0.10	0.06	33.1	0.22	0.0006	0.0013	0.0033	<0.00002	<0.00001	0.010	0.000003
24510		KCB	In-pit Mine Rock	3a	8.11	230	170	#N/A	2.29	77.2	1.30	0.12	18.0	1.96	1.77	0.18	4.9%	58.5	0.08	0.0026	0.0031	0.0053	0.00002	<0.000005	<0.05	<0.000005
24531		KCB	In-pit Mine Rock	3b	8.19	232	176	#N/A	2.13	66.8	3.20	0.17	26.0	1.97	1.72	0.24	6.6%	54.2	0.05	0.0231	0.1680	0.0027	<0.00001	<0.000005	<0.05	<0.000005
451081		KCB	In-pit Mine Rock	3b	8.04	292	144	#N/A	2.82	59.4	1.20	0.08	22.0	1.68	1.52	0.16	4.9%	57	0.10	0.0008	0.0009	0.0021	<0.00001	0.000006	<0.05	0.00003
L032214		AMEC	In-pit Mine Rock	3ba	7.89	259	81.6	#N/A	2.80	48.2	0.500	<0.06	2.00	1.02	0.92	0.10	0.05	37.6	0.15	0.0005	0.0122	0.0029	<0.00002	<0.00001	0.015	0.000006
123011		KCB	In-pit Mine Rock	4a	8.13	249	282	#N/A	2.50	74.7	1.70	0.08	79.0	3.19	3.09	0.10	1.5%	135	0.06	0.0033	0.0012	0.0124	<0.00001	<0.000005	<0.05	<0.000005
L032109		AMEC	In-pit Mine Rock	4a	7.89	293	52.0	#N/A	2.3	32.1	0.200	<0.06	2.00	0.65	0.59	0.06	0.05	21.9	0.30	0.0013	0.0011	0.0007	<0.00002	<0.00001	0.007	0.000003
L032182		AMEC	In-pit Mine Rock	4a	7.94	321	68.9	#N/A	3.55	42.7	0.400	<0.06	2.00	0.91	0.75	0.15	0.09	28.3	0.25	0.0027	0.0036	0.0011	<0.00002	<0.00001	0.016	0.000006
132026		KCB	In-pit Mine Rock	4aa	8.20	254	116	#N/A	2.10	64.2	0.90	0.05	5.00	1.41	1.25	0.16	6.1%	52.1	0.11	0.0010	0.0017	0.0021	<0.00001	<0.000005	<0.05	<0.000005
338631		KCB	In-pit Mine Rock	4aa	7.92	225	111	#N/A	3.68	67.9	1.10	0.03	1.00	1.41	1.30	0.12	4.3%	52.7	0.12	0.0009	0.0051	0.0022	<0.00001	<0.000005	<0.05	0.000017
453154		KCB	In-pit Mine Rock	4aa	8.07	294	127	#N/A	2.17	49.1	3.30	0.07	14.0	1.37	1.35	0.02	0.7%	42.5	0.10	0.0006	0.0010	0.0015	<0.00001	0.000012	<0.05	<0.000005
132043		KCB	In-pit Mine Rock	4ab	8.03	266	232	#N/A	2.64	50.6	0.70	0.06	82.0	2.74	2.39	0.35	6.7%	107	0.09	0.0018	0.0010	0.0029	<0.00001	<0.000005	<0.05	0.000028
243630		KCB	In-pit Mine Rock	4ab	7.81	157	124	#N/A	4.03	69.8	2.10	0.05	4.00	1.54	1.40	0.14	4.6%	57.4	0.08	0.0044	0.0072	0.0010	<0.00001	<0.000005	<0.05	<0.000005
24631		KCB	In-pit Mine Rock	4b	8.03	247	241	#N/A	2.82	55.0	4.30	0.12	67.0	2.62	2.36	0.25	5.1%	86.4	0.03	0.0046	0.0018	0.0022	<0.00001	0.000005	<0.05	0.000026
731259		KCB	In-pit Mine Rock	4b	7.68	322	130	#N/A	5.10	70.6	1.50	0.06	6.00	1.58	1.46	0.12	4.0%	53.8	0.08	0.0022	0.0012	0.0016	<0.00001	<0.000005	<0.05	<0.000005
L032183		AMEC	In-pit Mine Rock	4b	7.89	324	88.5	#N/A	4.01	47.2	0.400	0.07	4.00	1.04	0.95	0.09	0.05	39.9	0.24	0.0020	0.0030	0.0014	<0.00002	<0.00001	0.008	0.000003
RRR01889		KCB	In-pit Mine Rock	4b	7.92	262	118	#N/A	4.18	71.5	2.00	0.05	1.00	1.51	1.36	0.15	5.1%	52.7	0.16	0.0020	0.0007	0.0011	<0.00001	<0.000005	<0.05	<0.000005
RRR04014		KCB	In-pit Mine Rock	4b	7.94	295	128	#N/A	4.37	76.5	1.30	0.06	5.00	1.67	1.45	0.22	6.9%	46	0.08	0.0020	0.0057	0.0014	<0.00001	<0.000005	0.059	0.000005
450499		KCB	In-pit Mine Rock	4c	8.05	296	129	#N/A	2.73	64.7	1.40	0.07	11.0	1.56	1.43	0.13	4.4%	56.8	0.07	0.0035	0.0013	0.0017	<0.00001	0.000028	<0.05	0.000006
585172		KCB	In-pit Mine Rock	4c	7.87	289	122	#N/A	3.45	58.5	1.50	0.06	13.0	1.48	1.29	0.19	6.9%	51.9	0.08	0.0033	0.0014	0.0024	<0.00001	0.00007	<0.05	0.000011
L032175		AMEC	In-pit Mine Rock	4c	7.91	296	77.4	#N/A	2.82	45.7	0.600	<0.06	2.00	0.97	0.89	0.09	0.05	36.0	0.21	0.0021	0.0020	0.0010	<0.00002	<0.00001	0.007	0.000004
457004		KCB	In-pit Mine Rock	4ca	8.15	216	125	#N/A	3.46	69.8	1.60	0.03	5.00	1.54	1.33	0.21	7.4%	42.7	0.10	0.0025	0.0052	0.0009	<0.00001	<0.000005	<0.05	0.000008
L032136		AMEC	In-pit Mine Rock	4ca	7.83	288	99.0	#N/A	3.12	46.6	0.400	<0.06	8.00	1.11	1.09	0.02	0.01	46.2	0.11	0.0009	0.0025	0.0025	<0.00002	<0.00001	0.011	0.000014
L032206		AMEC	In-pit Mine Rock	4ca	7.95	308	79.5	#N/A	3.52	46.0	1.30	<0.06	3.00	1.02	0.87	0.15	0.08	32.0	0.24	0.0021	0.0015	0.0015	<0.00002	<0.00001	0.008	0.000003
RRR05735		KCB	In-pit Mine Rock	4ca	7.87	299	140	#N/A	4.00	64.9	3.70	0.06	11.0	1.63	1.50	0.13	4.1%	57.6	0.09	0.0007	0.0012	0.0018	<0.00001	0.000112	<0.05	0.000007
L032185		AMEC	In-pit Mine Rock	4cf	7.90	322	88.8	#N/A	3.90	43.0	2.10	<0.06	4.00	1.00	0.93	0.07	0.04	36.6	0.16	0.0018	0.0043	0.0014	<0.00002	<0.00001	0.012	0.000004
L032023		AMEC	In-pit Mine Rock	4cfa	7.75	292	92.4	#N/A	5.16	49.9	0.700	0.06	4.00	1.10	1.02	0.08	0.04	43.6	0.13	0.0077	0.0058	0.0014	<0.00002	<0.00001	0.014	0.000003
L032102		AMEC	In-pit Mine Rock	4cfa	7.93	292	65.1	#N/A	2.43	36.1	0.300	<0.06	2.00	0.73	0.71	0.02	0.01	21.5	0.31	0.0037	0.0024	0.0008	<0.00002	<0.00001	0.010	0.000003
L032154		AMEC	In-pit Mine Rock	4cfa	7.86	283	87.2	#N/A	3.26	49.2	0.800	<0.06	2.00	1.05	1.01	0.04	0.02	37.2	0.22	0.0018	0.0026	0.0007	<0.00002	<0.00001	0.021	0.000006
588142		KCB	In-pit Mine Rock	4cfb	7.80	343	125	#N/A	4.08	61.0	2.00	0.03	10.0	1.48	1.41	0.08	2.6%	55.8	0.06	0.0013	0.0031	0.0041	<0.00001	0.00002	<0.05	0.000009
L032180		AMEC	In-pit Mine Rock	4cfb	7.78	334	87.0	#N/A	3.90	46.2	1.00	<0.06	3.00	1.02	0.94	0.08	0.04	35.5	0.22	0.0022	0.0188	0.0010	<0.00002	<0.00001	0.028	0.000038
L032207		AMEC	In-pit Mine Rock	4cfb	7.86	313	87.4	#N/A	3.86	40.5	0.900	<0.06	6.00	0.96	0.91	0.05	0.02	35.0	0.21	0.0078	0.0016	0.0017	<0.00002	<0.00001	0.009	0.000017
L032218		AMEC	In-pit Mine Rock	4cfb	7.43	340	62.2	#N/A	3.46	12.2	0.200	<0.06	13.0	0.52	0.58	-0.06	-0.06	23.5	0.15	0.0016	0.0012	0.0023	<0.00002	<0.00001	0.013	0.000061
453046		KCB	In-pit Mine Rock	4cg	7.81	302	189	#N/A	2.84	35.1	2.40	0.12	70.0	2.23	1.91	0.32	7.6%	80.1	0.06	0.0026	0.0002	0.0034	<0.00001	0.000058	<0.05	0.000011
123161		KCB	In-pit Mine Rock	4cgb	8.17	251	221	#N/A	2.39	73.4	3.90	0.12	42.0	2.45	2.32	0.13	2.7%	79.6	0.10	0.0027	0.0019	0.0028	<0.00001	<0.000005	<0.05	0.000036
L032019		AMEC	In-pit Mine Rock	4cgb	7.82	301	92.2	#N/A	4.38	45.8	0.400	0.06	9.00	1.11	0.97	0.14	0.07	40.4	0.17	0.0016	0.0046	0.0014	<0.00002	<0.00001	0.007	0.000013
L032018		AMEC	In-pit Mine Rock	5dac	7.78	296	75.1	#N/A	4.34	42.4	0.200	<0.06	5.00	0.96	0.80	0.15	0.09	34.7	0.19	0.0018	0.0050	0.0027	<0.00002	0.00002	0.006	0.00017
RRR10076		KCB	In-pit Mine Rock	5dac	7.85	302	187	#N/A	4.45	68.5	2.30	0.08	32.0	2.10	1.97	0.13	3.2%	78.6	0.11	0.0030	0.0024	0.0022	<0.00001	<0.000005	<0.05	0.00002
761172		KCB	In-pit Mine Rock	5dad	7.95	284	161	#N/A	4.24	79.5	2.00	0.12	14.0	1.94	1.72	0.21	5.8%	61.7	0.06	0.0027	0.0083	0.0029	<0.00001	<0.000005	<0.05	0.000005
223806		KCB	In-pit Mine Rock	5daf	8.03	271	199	#N/A	2.58	47.9	1.30	0.05	56.0	2.16	1.95	0.21	5.0%	81.4	0.06	0.0050	0.0030	0.0011	<0.00001	<0.000005	<0.05	0.000011
L032181		AMEC	In-pit Mine Rock	5dap	7.92	325	85.8	#N/A	3.65	41.6	0.700	0.06	5.00	0.96	0.90	0.06	0.03	34.8	0.31	0.0015	0.0135	0.0012	<0.00002	0.00001	0.030	0.000019
L032184		AMEC	In-pit Mine Rock	5dap	7.92	323	96.6	#N/A	3.80	48.5	1.50	0.25	4.00	1.11	1.00	0.11	0.05	40.4	0.17	0.0016	0.0091	0.0022	<0.00002	<0.00001	0.010	0.000011
L032188		AMEC	In-pit Mine Rock	5dap	7.65	328	178	#N/A	4.41	33.0	0.800	<0.06	54.0	1.81	1.61	0.20	0.06	70.2	0.06	0.0019	0.0020	0.0022	<0.00002	0.00003	0.006	0.00023
L032051		AMEC	In-pit Mine Rock	5f	7.89	315	74.8	#N/A	4.55	45.5	0.800	<0.06	2.00	0.97	0.86	0.12	0.06	35.6	0.20	0.0002	0.0016	0.0027	<0.00002	<0.00001	0.007	0.000003
L032082		AMEC	In-pit Mine Rock	5f	7.82	304	150	#N/A	3.12	44.7	0.600	0.06	28.0	1.50	1.50	0.00	0.00	65.9	0.18	0.0031	0.0014	0.0008	<0.00002	<0.00001	0.011	0.000004
L032091		AMEC	In-pit Mine Rock	5f	7.89	292	114	#N/A	2.93	43.3	0.500	0.08	16.0	1.22	1.16	0.05	0.02	51.3	0.16	0.0013	0.0065	0.0026	<0.00002	<0.00001	0.008	0.000003
335062		KCB	In-pit Mine Rock	6	7.71	231	314	#N/A	4.61	59.0	7.00	0.11	108	3.63	3.46	0.17	2.4%	149	0.06	0.0006	0.0001	0.0146	<0.00001	<0.000005	<0.05	0.00022
L032072		AMEC	In-pit Mine Rock	6	7.88	301	64.9	#N/A	2.60	35.5	0.300	0.09	2.00	0.76	0.71	0.05	0.04	27.5	0.32	0.0033	0.0004	0.0009	<0.00002	<0.00001	0.006	0.000003
L032073		AMEC	In-pit Mine Rock	6	7.82	308	130	#N/A	3.00	41.1	0.700	0.08	24.0	1.35	1.28	0.06	0.02	52.8	0.21	0.0054	0.0005	0.0047	<0.00002	<0.00001	0.006	0.000003
L032169		AMEC	In-pit Mine Rock	7a	7.86	294	78.5	#N/A	2.38	39.0	1.00	<0.06	4.00	0.89	0.91	-0.02	-0.01	42.7	0.11	0.0027	0.0171	0.0023	<0.00002	<0.00001	0.007	0.000003
L032222		AMEC	In-pit Mine Rock	7a	7.80	336	80.5	#N/A	3.03	46.9	1.00	0.06	2.00	0.97	0.88	0.08	0.04	37.4	0.13	0.0036	0.0005	0.0012	<0.00002	<0.00001	0.014	0.000003
L032224		AMEC	In-pit Mine Rock	7a	7.88	334	104	#N/A	3.23	47.2	4.10	0.07	2.00	1.10	1.08	0.02	0.01	39.7	0.11	0.0008	0.0028	0.0204	<0.00002	<0.00001	0.014	0.000003
123563		KCB	In-pit Mine Rock	8	8.28	245	182	#N/A	1.93	101	1.50	0.11	12.0	2.31	2.11	0.19	4.4%	91.9	0.17	0.0009	0.0004	0.0043	<0.00001	<0.000005	0.07	<0.000005
333472		KCB	In-pit Mine Rock	8	7.94	200	126	#N/A	3.74	72.9	1.30	0.03	4.00	1.58	1.42	0.16	5.4%	58.6	0.11	0.0028	0.0011	0.0015	<0.00001	<0.000005	<0.05	<0.000005
L032005		AMEC	In-pit Mine Rock	8c	7.83	285	85.0	#N/A	4.33	51.6	1.30	0.06	5.00	1.17	0.92	0.26	0.12	39.5	0.16	0.0003	0.0009	0.0041	<0.00002	<0.00001	0.008	0.000003
L032042		AMEC	In-pit Mine Rock	8c	7.82	315	68.2	#N/A	4.17	42.2	0.600	0.07	2.00	0.91	0.78	0.13	0.08	26.8	0.24	0.0024	0.0036	0.0015	<0.00002	<0.00001	0.017	0.000003
L032043		AMEC	In-pit Mine Rock	8c	7.84	317	71.4	#N/A	4.62	44.7	0.500	<0.06	2.00	0.95	0.80	0.15	0.09	31.0	0.28	0.0002	0.0021	0.0033	<0.00002	<0.00001	0.007	0.000003
L032164		AMEC	In-pit Mine Rock	8c	7.9	293	95.8	#N/A	2.75	44.6	1.50	<0.06	6.00	1.06	1.06	0.00	0.00	34.1	0.21	0.0015	0.0065	0.0038	<0.00002	<0.00001	0.017	0.000006
L032202		AMEC	In-pit Mine Rock	8c	7.96	309	82.7	#N/A	3.52	42.9	0.900	0.06	4.00	0.97	0.89	0.08	0.04	30.7	0.25	0.0007	0.0033	0.0146	<0.00002	<0.00001	0.006	0.000006
450812		KCB	In-pit Mine Rock	9a	8.15	290	152	#N/A	2.38	77.0	2.70	0.12	8.00	1.78	1.72	0.07	1.9%	62.5	0.06	0.0007	0.0009	0.15	<0.00001	<0.000005	<0.05	<0.000005
L032208		AMEC	In-pit Mine Rock	9ac	8.01	305	80.1	#N/A	3.24	48.9	0.300	<0.06	3.00	1.05	0.90	0.15	0.08	18.6	0.11	0.0008	0.0004	0.0048	<0.00002	<0.00001	0.014	0.000003
L032210		AMEC	In-pit Mine Rock	9ac	7.91	237	79.4	#N/A	2.57	45.4	0.400	<0.06	2.00	0.92	0.88	0.04	0.02	20.9	0.03	0.0025	0.0037	0.0273	<0.00002	<0.00001	0.008	0.000003
L032211		AMEC	In-pit Mine Rock	9ac	7.96	246	76.5	#N/A	2.76	45.3	1.10	<0.06	2.00	0.98	0.87	0.11	0.06	28.5	0.21	0.0004	0.0097	0.0032	<0.00002	0.00004	0.013	0.000003
L032020		AMEC	In-pit Mine Rock	11c	7.66	281	81.3	#N/A	5.68	44.6	0.600	0.08	3.00	0.98	0.90	0.08	0.04	32.1	0.22	0.0041	0.0400	0.0009	<0.00002	0.00005	0.012	0.000003
L032215		AMEC	In-pit Mine Rock	11c	7.91	261	83.0	#N/A	2.88	44.2	0.700	<0.06	4.00	0.99	0.94	0.05	0.02	40.1	0.14	0.0003	0.0041	0.0018	<0.00002	<0.00001	0.011	0.000006
Blank		AMEC			7.07	333	0.500	#N/A	2.64	2.01	0.200	<0.06	2.00	#N/A	#N/A	#N/A	#N/A	<0.05	0.002	0.0002	0.0003	<0.00002	<0.00001	0.001	0.000003
Blank		KCB			7.24	295	<1.00	#N/A	1.79	2.33	<0.500	<0.01	<1.00	#N/A	#N/A	#N/A	#N/A	<0.50	0.0013	<0.00002	<0.00	0.00003	<0.00001	<0.000005	<0.05	<0.000005
752868		KCB	Ore	4b	7.53	321	528	#N/A	5.68	46.8	9.90	0.17	204	5.46	5.44	0.03	0.3%	213	0.007	0.0020	0.0004	0.0167	<0.00001	<0.000005	<0.05	0.0103
587608		KCB	Ore	4c	7.87	289	141	#N/A	3.34	63.9	1.90	0.05	16.0	1.66	1.47	0.20	6.3%	59.4	0.044	0.0013	0.0073	0.0033	<0.00001	<0.000005	<0.05	0.00001
L032189		AMEC	Ore	4c	7.75	314	79.5	#N/A	3.83	28.8	1.60	<0.06	11.0	0.85	0.79	0.06	0.04	31.9	0.07	0.0015	0.0005	0.0011	<0.00002	0.00001	0.006	0.000035
243135		KCB	Ore	4cb	8.11	266	144	#N/A	2.22	58.3	2.00	0.05	19.0	1.62	1.50	0.12	3.8%	62.1	0.070	0.0019	0.0042	0.0013	<0.00001	<0.000005	<0.05	0.000009
129754		KCB	Ore	4cf	8.16	252	139	#N/A	2.20	65.0	2.10	0.05	12.0	1.61	1.50	0.11	3.5%	62.6	0.055	0.0083	0.0020	0.0014	<0.00001	<0.000005	<0.05	0.000048
459029		KCB	Ore	4cf	7.88	284	125	#N/A	3.44	68.8	1.50	0.05	5.00	1.52	1.40	0.12	4.2%	58.2	0.060	0.0050	0.0035	0.0017	<0.00001	<0.000005	<0.05	<0.000005
452177		KCB	Ore	4cfb	8.00	296	170	#N/A	2.59	52.6	2.50	0.08	42.0	2.00	1.79	0.21	5.5%	70.5	0.068	0.0011	0.0007	0.0019	<0.00001	0.000023	<0.05	<0.000005
RRR01830		KCB	Ore	4cfb	7.94	294	132	#N/A	4.06	72.7	1.90	0.05	6.00	1.63	1.45	0.18	5.8%	59	0.053	0.0077	0.0018	0.0010	<0.00001	0.000007	<0.05	0.000011
457292		KCB	Ore	4cfc	8.00	230	117	#N/A	4.12	59.8	1.80	0.04	11.0	1.48	1.22	0.26	9.6%	47.8	0.090	0.0036	0.0008	0.0013	<0.00001	<0.000005	<0.05	0.000043
131243		KCB	Ore	5daf	8.06	263	263	#N/A	2.77	60.1	1.40	0.06	82.0	2.95	2.78	0.17	2.9%	121	0.086	0.0015	0.0037	0.0014	<0.00001	<0.000005	<0.05	0.000025
370305		KCB	Ore	5daf	7.77	245	209	#N/A	4.29	60.3	2.90	0.06	50.0	2.33	2.16	0.17	3.8%	84.1	0.049	0.0243	0.0025	0.0022	<0.00001	<0.000005	<0.05	0.000132
L032089		AMEC	Ore	5f	7.81	303	152	#N/A	3.33	47.3	0.400	<0.06	28.0	1.54	1.47	0.07	0.02	67.9	0.08	0.0040	0.0005	0.0014	<0.00002	<0.00001	0.009	0.000020
123019		KCB	Ore	6cd	8.14	254	328	#N/A	2.66	76.7	2.90	0.09	99.0	3.68	3.48	0.19	2.7%	141	0.086	0.0070	0.0012	0.0076	<0.00001	<0.000005	<0.05	0.00001
L032036		AMEC	Ore	11a	7.68	317	69.8	#N/A	4.72	42.4	0.300	<0.06	2.00	0.90	0.78	0.12	0.07	32.0	0.10	0.0007	0.0050	0.0013	<0.00002	<0.00001	0.006	0.000006

Sample ID	Analyte:	Consultant	Waste Classification	Rock Code	pH	Redox	Conductivity	Acidity (to pH 4.5)	Total Acidity (to pH 8.3)	Alkalinity	Chloride	Fluoride	Sulphate	Major Anions	Major Cations	Difference	Balance (%)	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd
	Unit:					mV	umhos/cm	mg $CaCO_3$/L	mg $CaCO_3$/L	mg $CaCO_3$/L	mg/L	mg/L	mg/L	meq/L	meq/L	meq/L	%	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
O. Reg 560/94					6.0-9.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-	-	-	-	-
PWQO					6.5-8.5	-	-	-	-	-	-	-	-	-	-	-	-	-	0.015-0.075*	0.02	0.1	-	0.011-1.1**	-	0.2	0.0002
34113		KCB	Outside Pit	2	8.07	250	270	#N/A	2.88	70.4	4.50	0.21	67.0	2.93	2.83	0.10	1.7%	114	0.076	0.0023	0.00057	0.0053	<0.00001	<0.000005	<0.05	0.000007
L032145		AMEC	Outside Pit	2ce	8.84	250	158	#N/A	#N/A	80.3	0.800	0.06	6.00	1.76	1.77	-0.01	0.00	3.86	0.56	0.0003	0.0022	0.0022	<0.00002	<0.00001	0.012	0.000003
454890		KCB	Outside Pit	3b	7.75	207	514	#N/A	5.73	37.4	9.70	0.13	240	6.02	5.26	0.76	6.8%	242	0.041	0.0008	0.00012	0.0109	<0.00001	<0.000005	<0.05	0.000011
587856		KCB	Outside Pit	3b	7.13	373	449	#N/A	4.67	17.3	2.10	0.13	186	4.28	4.59	-0.31	-3.5%	212	0.042	0.0005	0.00037	0.0063	<0.00001	<0.000005	<0.05	0.000035
457559		KCB	Outside Pit	3be	7.88	266	129	#N/A	3.43	63.9	1.90	0.05	12.0	1.58	1.40	0.18	6.0%	59.7	0.069	0.0011	0.00068	0.0023	<0.00001	0.000028	<0.05	0.000027
457531		KCB	Outside Pit	4aa	7.94	234	135	#N/A	3.17	64.0	2.30	0.04	16.0	1.68	1.44	0.23	7.5%	60.5	0.068	0.0020	0.00054	0.0022	<0.00001	0.000027	<0.05	0.000015
638478		KCB	Outside Pit	4aa	5.17	379	280	#N/A	12.5	0.950	1.10	0.21	108	2.30	2.30	0.00	0.1%	65.1	0.994	0.0008	0.00211	0.10	0.00019	<0.000005	<0.05	0.000381
24685		KCB	Outside Pit	4b	8.15	239	145	#N/A	2.35	61.3	3.80	0.08	18.0	1.71	1.52	0.19	6.0%	51	0.058	0.0018	0.00085	0.0015	<0.00001	<0.000005	<0.05	0.000005
435951		KCB	Outside Pit	4b	7.80	258	229	#N/A	4.40	61.8	3.40	0.08	59.0	2.56	2.37	0.19	3.9%	92.1	0.038	0.0006	0.00042	0.003	<0.00001	0.000011	<0.05	0.00001
L032168		AMEC	Outside Pit	4ca	7.87	293	85.4	#N/A	2.62	47.9	1.40	<0.06	2.00	1.04	0.96	0.08	0.04	38.1	0.15	0.0067	0.0019	0.0005	<0.00002	<0.00001	0.017	0.000003
804567		KCB	Outside Pit	4cb	7.89	294	148	#N/A	4.07	66.3	3.60	0.07	13.0	1.70	1.55	0.15	4.7%	57.1	0.084	0.0036	0.00115	0.0018	<0.00001	0.000019	<0.05	0.000006
804708		KCB	Outside Pit	4cb	7.71	308	453	#N/A	5.32	54.1	5.60	0.09	175	4.89	6.79	-1.90	-16.3%	302	0.046	0.0015	0.00146	0.0194	<0.00001	0.000009	<0.05	0.00001
RRR04250		KCB	Outside Pit	4cf	7.76	305	172	#N/A	4.49	53.5	3.70	0.06	38.0	1.97	1.75	0.22	5.8%	71.8	0.063	0.0059	0.00091	0.0025	<0.00001	0.00001	<0.05	0.000019
L032032		AMEC	Outside Pit	4cfa	7.81	308	52.9	#N/A	4.05	33.1	0.400	<0.06	2.00	0.71	0.60	0.11	0.09	20.9	0.24	0.0003	0.0008	0.0060	<0.00002	<0.00001	0.015	0.000003
L032115		AMEC	Outside Pit	4cfa	7.61	307	73.1	#N/A	3.26	30.3	0.500	<0.06	2.00	0.66	0.76	-0.10	-0.07	29.5	0.26	0.0068	0.0013	0.0032	<0.00002	<0.00001	0.010	0.000003
L032131		AMEC	Outside Pit	4cfa	7.84	277	73.1	#N/A	2.93	45.7	0.400	<0.06	2.00	0.97	0.85	0.12	0.07	33.1	0.20	0.0042	0.0042	0.0009	<0.00002	<0.00001	0.016	0.000003
451139		KCB	Outside Pit	4cga	8.01	298	193	#N/A	2.91	66.6	2.70	0.11	38.0	2.20	2.01	0.19	4.5%	81.8	0.051	0.0023	0.00082	0.0022	<0.00001	0.00027	<0.05	0.000009
L032070		AMEC	Outside Pit	4cga	7.98	301	81.0	#N/A	2.40	42.4	0.600	0.08	4.00	0.95	0.89	0.07	0.04	27.8	0.31	0.0177	0.0015	0.0005	<0.00002	<0.00001	0.011	0.000003
L032128		AMEC	Outside Pit	4cga	7.87	225	91.8	#N/A	3.00	53.2	0.400	0.14	2.00	1.12	1.05	0.08	0.03	35.7	0.20	0.0004	0.0007	0.0076	<0.00002	<0.00001	0.016	0.0044
457476		KCB	Outside Pit	4cgb	7.94	238	132	#N/A	4.20	51.9	1.60	0.03	27.0	1.65	1.35	0.29	9.8%	59.1	0.075	0.0018	0.00069	0.0012	<0.00001	0.000055	<0.05	0.000044
L032068		AMEC	Outside Pit	5b	7.95	311	67.6	#N/A	2.64	36.6	0.400	0.10	2.00	0.79	0.71	0.08	0.05	25.5	0.26	0.0051	0.0823	0.0018	<0.00002	<0.00001	0.014	0.000003
L032056		AMEC	Outside Pit	5ce	7.75	322	82.4	#N/A	4.60	42.7	0.600	<0.06	5.00	0.97	0.91	0.06	0.03	37.0	0.14	0.0033	0.0719	0.0011	<0.00002	<0.00001	0.007	0.000025
L032066		AMEC	Outside Pit	5ce	7.86	317	83.5	#N/A	4.06	45.7	1.00	<0.06	3.00	1.00	0.92	0.08	0.04	36.1	0.25	0.0024	0.0098	0.0016	<0.00002	<0.00001	0.015	0.000003
L032129		AMEC	Outside Pit	5ce	7.86	247	86.0	#N/A	3.09	51.7	0.200	<0.06	2.00	1.08	1.00	0.08	0.04	41.5	0.18	0.0022	0.0096	0.0026	<0.00002	<0.00001	0.019	0.000010
414678		KCB	Outside Pit	5da	7.85	247	175	#N/A	4.16	67.2	2.10	0.08	29.0	2.01	1.85	0.16	4.1%	70.5	0.069	0.0012	0.00077	0.0019	<0.00001	0.000023	<0.05	0.000008
L032118		AMEC	Outside Pit	5dac	7.92	298	79.0	#N/A	2.55	43.6	0.300	<0.06	3.00	0.94	0.89	0.05	0.03	38.9	0.33	0.0071	0.0016	0.0009	<0.00002	<0.00001	0.008	0.000003
L032122		AMEC	Outside Pit	5dac	7.83	305	108	#N/A	2.92	41.3	0.500	<0.06	14.0	1.13	1.09	0.04	0.02	46.0	0.17	0.0063	0.0040	0.0012	<0.00002	<0.00001	0.011	0.000003
437466		KCB	Outside Pit	6	7.42	332	553	#N/A	4.31	43.0	6.30	0.05	264	6.54	6.12	0.42	3.3%	280	0.044	0.0013	0.00019	0.0102	<0.00001	0.00002	<0.05	0.000056
450754		KCB	Outside Pit	6	7.70	310	645	#N/A	4.71	40.6	6.10	0.04	300	7.23	7.51	-0.28	-1.9%	370	0.015	0.0010	0.00006	0.0043	<0.00001	<0.000005	<0.05	0.00002
L032067		AMEC	Outside Pit	6a	7.52	334	194	#N/A	3.97	31.8	0.300	0.09	54.0	1.77	1.89	-0.12	-0.03	88.3	0.02	0.0026	0.0005	0.0030	<0.00002	<0.00001	0.012	0.000011
758756		KCB	Outside Pit	6cd	7.69	311	647	#N/A	6.03	52.1	12.0	0.11	288	7.38	7.36	0.02	0.1%	339	0.056	0.0005	0.00011	0.0182	<0.00001	<0.000005	<0.05	0.00001
586714		KCB	Outside Pit	8	7.76	300	240	#N/A	4.15	61.3	3.10	0.08	67.0	2.71	2.56	0.15	2.9%	116	0.058	0.0005	0.00037	0.0105	<0.00001	0.000008	<0.05	0.000006
454791		KCB	Outside Pit	8c	8.08	291	117	#N/A	2.43	69.5	1.60	0.06	3.00	1.50	1.32	0.18	6.5%	52.8	0.085	0.0018	0.00155	0.0023	<0.00001	<0.000005	<0.05	<0.000005
454809		KCB	Outside Pit	8c	7.79	187	244	#N/A	5.35	49.2	5.10	0.06	82.0	2.84	2.44	0.39	7.5%	107	0.075	0.0004	0.00075	0.0022	<0.00001	<0.000005	<0.05	0.000018
L032007		AMEC	Outside Pit	8c	7.95	287	79.5	#N/A	3.37	46.9	0.800	0.09	4.00	1.04	0.85	0.19	0.10	23.5	0.27	0.0003	0.0011	0.0141	<0.00002	<0.00001	0.008	0.000008
L032026		AMEC	Outside Pit	10b	7.83	295	72.7	#N/A	4.79	40.8	0.400	<0.06	3.00	0.89	0.82	0.07	0.04	31.0	0.23	0.0007	0.0015	0.0132	<0.00002	<0.00001	0.007	0.000006
L032130		AMEC	Outside Pit	10b	7.85	266	72.3	#N/A	2.94	42.0	0.300	<0.06	2.00	0.89	0.82	0.07	0.04	34.5	0.15	0.0030	0.2160	0.0053	<0.00002	<0.00001	0.007	0.000003
34450		KCB	Outside Pit	10d	8.11	254	303	#N/A	2.51	71.5	26.0	0.11	41.0	3.02	3.04	-0.03	-0.4%	89.9	0.034	0.0003	0.00037	0.0183	<0.00001	0.000062	<0.05	0.000007
L032069		AMEC	Outside Pit	11a	7.87	308	71.0	#N/A	2.62	33.1	0.900	0.08	4.00	0.77	0.75	0.02	0.02	27.4	0.26	0.0115	0.0013	0.0009	<0.00002	<0.00001	0.012	0.000003
452360		KCB	Outside Pit	13	8.15	286	104	#N/A	2.11	64.9	1.50	0.04	1.00	1.36	1.20	0.16	6.1%	43.4	0.075	0.0004	0.00032	0.0011	<0.00001	<0.000005	<0.05	<0.000005
L032031		AMEC	Outside Pit	13	7.83	303	69.7	#N/A	4.43	45.2	0.700	<0.06	2.00	0.92	0.78	0.14	0.08	30.9	0.19	0.0006	0.0007	0.0040	<0.00002	<0.00001	0.018	0.000003

O. Reg 560/94 = Metal Mining Sector of the Environmental Protection
PWQO = Provincial Water Quality Objectives
* Dependant on pH
**Dependant on Hardness
***Dependant on Alkalinity

Sample ID	Analyte:	Consultant	Waste Classification	Rock Code	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	Unit:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
O. Reg 560/94					-	-	-	0.3	-	0.2	-	-	-		-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-
PWQO					-	0.001	0.0009	0.005	0.3	0.005-0.025***	-	-	-	0.2	0.04	0.025	0.01-0.02	-	0.1	-	0.0001	-	-	-	0.0003	-	-	0.005	0.006	0.03	0.004
612385		KCB	In-pit Mine Rock	2	57.7	<0.0001	0.000045	0.00068	0.001	0.000014	0.029	4.27	0.0894	0.02	0.00011	0.0003	0.004	9.63	0.00032	1.02	0.000006	5.57	0.127	44.0	0.000012	0.00006	<0.0005	0.000019	0.0002	0.0004	<0.0001
752739		KCB	In-pit Mine Rock	2	72.3	<0.0001	0.000101	0.00089	0.004	0.000015	0.021	4.77	0.195	0.01	0.00056	0.00018	0.004	10.5	0.0004	0.937	0.000015	4.09	0.107	62.0	0.000005	0.00003	<0.0005	0.000023	0.0002	0.001	<0.0001
803501		KCB	In-pit Mine Rock	2	20.8	<0.0001	0.000019	0.0011	0.003	0.000033	0.0049	2.41	0.0208	<0.01	0.00006	0.0115	0.01	0.46	0.00033	1.20	0.000006	3.28	0.0611	<3.00	0.000003	0.00003	<0.0005	<0.000002	0.0008	0.0013	<0.0001
455611		KCB	In-pit Mine Rock	2a	62.8	<0.0001	0.000109	0.0021	0.003	0.000045	0.017	10.5	0.0851	<0.01	0.00036	0.00025	0.003	11.5	0.00101	0.999	0.000007	5.05	0.0757	59.0	0.000006	0.00002	<0.0005	0.000015	<0.0002	0.001	<0.0001
L032049		AMEC	In-pit Mine Rock	2a	16.7	<0.0005	0.000083	0.00090	<0.003	0.00010	0.0040	2.35	0.0657	<0.01	0.0001	0.0003	0.011	2.84	0.00028	0.700	0.000010	1.22	0.0262	11.0	0.000020	0.000010	<0.0001	0.000001	0.000015	<0.001	<0.00001
L032101		AMEC	In-pit Mine Rock	2a	8.92	<0.0005	0.000035	0.00070	<0.003	0.00023	0.0060	1.20	0.0185	0.01	0.00013	0.0002	0.012	3.07	0.00013	0.520	0.000010	1.08	0.0227	0.710	0.000020	0.000010	<0.0001	0.000002	0.00039	<0.001	<0.00001
L032104		AMEC	In-pit Mine Rock	2a	8.96	<0.0005	0.000045	0.00070	<0.003	0.00050	0.0070	0.376	0.0157	0.01	0.00008	0.0003	<0.009	2.61	0.00004	0.550	0.000010	2.45	0.0437	7.08	0.000020	0.000010	0.0002	<0.000001	0.00083	0.001	<0.00001
L032162		AMEC	In-pit Mine Rock	2a	8.75	<0.0005	0.000023	0.00070	<0.003	0.000020	0.0010	1.11	0.00330	0.01	0.0003	<0.0001	<0.009	0.51	0.00004	1.35	0.000010	6.38	0.0422	0.600	0.000020	0.000010	<0.0001	<0.000001	0.00155	<0.001	<0.00001
243856		KCB	In-pit Mine Rock	2ab	34.6	<0.0001	0.000007	0.0020	0.004	0.000036	0.0063	2.70	0.0387	<0.01	0.00025	0.0004	0.005	7.98	0.00016	0.821	<0.0000005	4.23	0.0891	18.0	0.000004	0.0001	<0.0005	0.000026	0.0004	0.0003	<0.0001
L032216		AMEC	In-pit Mine Rock	3	11.2	0.0007	0.000054	0.0006	0.047	0.00040	0.0030	1.24	0.00350	0.01	0.00189	0.0003	0.014	1.94	0.00004	1.04	0.000010	1.00	0.0834	1.51	0.000020	0.000090	0.0025	0.000005	0.00189	0.002	0.00009
24510		KCB	In-pit Mine Rock	3a	18.1	<0.0001	0.000018	0.00075	0.001	0.000008	0.016	3.26	0.0261	<0.01	0.00035	0.00027	0.006	10.0	<0.00004	1.45	<0.0000005	7.96	0.0926	7.00	0.000014	0.00011	<0.0005	0.000058	0.0007	0.001	<0.0001
24531		KCB	In-pit Mine Rock	3b	18.6	<0.0001	0.000025	0.0019	0.002	0.000027	0.019	1.87	0.0120	0.02	0.00084	0.00495	0.004	11.8	0.00008	1.73	<0.0000005	7.84	0.0805	9.00	0.000011	0.0001	<0.0005	0.000016	0.0009	0.0006	<0.0001
451081		KCB	In-pit Mine Rock	3b	20.0	<0.0001	0.000011	0.0017	0.005	0.000049	0.0046	1.70	0.0681	<0.01	0.00024	0.00019	0.004	5.59	0.00008	1.24	<0.0000005	5.33	0.0592	8.00	0.000006	0.00002	<0.0005	0.000028	0.0003	0.001	<0.0001
L032214		AMEC	In-pit Mine Rock	3ba	13.1	0.0007	0.000070	0.0013	<0.003	0.00010	0.0040	1.18	0.00830	0.01	0.00038	0.0002	<0.009	2.95	0.00016	1.10	0.000010	1.53	0.0797	0.900	0.000020	0.000070	<0.0001	0.000011	0.00033	0.002	0.00001
123011		KCB	In-pit Mine Rock	4a	42.4	<0.0001	0.000019	0.00022	<0.001	0.000012	0.0078	7.18	0.0463	<0.01	0.0006	0.00017	0.004	6.52	0.0001	1.06	0.000006	5.02	0.238	29.0	0.000006	<0.00001	<0.0005	0.000049	0.0006	0.0003	<0.0001
L032109		AMEC	In-pit Mine Rock	4a	7.69	<0.0005	0.000042	0.00070	<0.003	0.000020	0.0020	0.659	0.0212	<0.01	0.0002	0.0002	<0.009	1.35	0.00004	0.970	0.000010	1.82	0.0323	0.530	0.000020	0.000010	<0.0001	0.000018	0.00026	<0.001	0.00001
L032182		AMEC	In-pit Mine Rock	4a	10.2	0.0008	0.000056	0.0019	0.003	0.000015	0.0040	0.652	0.0122	0.01	0.00046	<0.0001	<0.009	1.63	0.00012	1.27	0.000010	2.66	0.0399	0.640	0.000020	0.000080	0.0003	0.000059	0.00037	0.001	0.00002
132026		KCB	In-pit Mine Rock	4aa	17.2	<0.0001	0.000008	0.0024	0.003	0.0011	0.0039	2.21	0.0400	<0.01	0.00041	0.00018	0.008	3.37	<0.00004	1.09	<0.0000005	2.60	0.0903	<3.00	0.000008	0.00011	<0.0005	0.000078	0.0003	0.0005	<0.0001
338631		KCB	In-pit Mine Rock	4aa	19.2	<0.0001	0.000015	0.00078	0.001	0.000021	0.0043	1.13	0.0764	<0.01	0.00115	0.00019	0.005	1.55	<0.00004	0.872	<0.0000005	4.40	0.0689	<3.00	0.000002	0.0001	<0.0005	0.000079	<0.0002	0.0003	<0.0001
453154		KCB	In-pit Mine Rock	4aa	14.0	<0.0001	0.000016	0.0013	0.002	0.000015	0.0036	1.82	0.00704	<0.01	0.00053	0.00015	0.007	2.56	0.00005	1.33	<0.0000005	9.75	0.0678	7.00	0.000003	0.00002	<0.0005	0.000005	0.0003	0.0005	<0.0001
132043		KCB	In-pit Mine Rock	4ab	37.1	<0.0001	0.000059	0.0048	0.006	0.000041	0.0057	3.52	0.132	<0.01	0.0002	0.00027	0.008	2.91	0.00018	1.29	0.000005	3.70	0.0998	27.0	0.000005	0.00012	<0.0005	0.000523	<0.0002	0.002	<0.0001
243630		KCB	In-pit Mine Rock	4ab	21.9	<0.0001	0.000021	0.00081	0.001	0.000042	0.0072	0.640	0.0702	<0.01	0.00031	0.00064	0.005	1.85	0.00005	0.967	<0.0000005	4.83	0.0781	<3.00	0.000003	0.0001	<0.0005	0.000065	<0.0002	0.0002	<0.0001
24631		KCB	In-pit Mine Rock	4b	31.1	<0.0001	0.000032	0.0011	0.002	0.000026	0.0074	2.13	0.163	<0.01	0.00031	0.00024	0.007	18.0	0.0002	1.45	0.000006	3.88	0.0565	25.0	0.00002	0.00011	<0.0005	0.000043	<0.0002	0.02	<0.0001
731259		KCB	In-pit Mine Rock	4b	20.0	<0.0001	0.000025	0.0021	0.001	0.000020	0.0069	0.970	0.0669	<0.01	0.00047	0.00026	0.005	6.00	<0.00004	1.16	<0.0000005	5.25	0.0850	<3.00	0.000008	0.00003	<0.0005	0.000046	<0.0002	0.0005	<0.0001
L032183		AMEC	In-pit Mine Rock	4b	14.5	0.0009	0.00057	0.0079	0.008	0.00018	0.0050	0.872	0.0288	0.01	0.0005	0.0001	<0.009	1.99	0.00004	1.12	0.000010	1.72	0.0389	1.96	0.000020	0.000240	0.0004	0.000244	0.0004	0.003	0.0001
RRR01889		KCB	In-pit Mine Rock	4b	20.3	<0.0001	0.000006	0.0011	0.002	0.000023	0.0039	0.470	0.00929	<0.01	0.00011	0.00016	0.005	2.59	<0.00004	1.08	<0.0000005	5.21	0.0864	<3.00	0.000004	<0.00001	<0.0005	0.000007	0.0002	0.0003	<0.0001
RRR04014		KCB	In-pit Mine Rock	4b	14.6	<0.0001	<0.000005	0.0011	0.004	0.000052	0.0038	2.28	0.0286	<0.01	0.00112	0.00026	0.004	4.18	0.00008	1.65	<0.0000005	9.88	0.176	<3.00	0.000009	<0.00001	<0.0005	0.000006	0.0006	0.0004	<0.0001
450499		KCB	In-pit Mine Rock	4c	21.2	<0.0001	0.000061	0.00090	0.003	0.00005	0.0055	0.960	0.0290	<0.01	0.0004	0.00025	0.008	3.54	0.00009	1.44	0.000055	4.64	0.0804	5.00	0.000005	0.00002	<0.0005	0.000011	0.0003	0.001	<0.0001
585172		KCB	In-pit Mine Rock	4c	19.5	<0.0001	0.000011	0.0016	0.002	0.000089	0.0059	0.800	0.0297	0.03	0.00043	0.00027	0.005	3.65	0.00036	1.33	<0.0000005	3.70	0.0970	4.00	0.000006	0.00002	<0.0005	0.000008	<0.0002	0.0008	<0.0001
L032175		AMEC	In-pit Mine Rock	4c	13.8	<0.0005	0.000036	0.0017	<0.003	0.00033	0.0030	0.400	0.00900	0.01	0.00016	<0.0001	<0.009	2.16	0.00004	1.04	0.000020	1.89	0.0427	1.05	0.000020	0.000010	0.0002	0.000021	0.00052	0.002	0.00002
457004		KCB	In-pit Mine Rock	4ca	15.0	<0.0001	0.000009	0.00032	0.002	0.000182	0.0070	1.27	0.0266	<0.01	0.00023	0.00015	0.011	2.45	<0.00004	1.33	<0.0000005	9.29	0.0965	<3.00	0.000005	<0.00001	<0.0005	0.000011	<0.0002	0.0004	<0.0001
L032136		AMEC	In-pit Mine Rock	4ca	13.7	<0.0005	0.000096	0.0015	<0.003	0.000020	0.0020	2.91	0.0262	0.01	0.00061	0.0003	<0.009	2.13	0.00023	0.920	0.000030	2.12	0.128	4.13	0.000020	0.000010	0.0002	0.000179	0.00029	0.001	0.00016
L032206		AMEC	In-pit Mine Rock	4ca	12.2	0.0017	0.000078	0.0012	<0.003	0.00021	0.0050	0.392	0.00820	0.01	0.00043	0.0001	<0.009	2.20	0.00004	1.37	0.000010	3.23	0.0406	0.910	0.000020	0.000090	0.0002	0.00003	0.00063	0.002	0.00005
RRR05735		KCB	In-pit Mine Rock	4ca	21.9	<0.0001	<0.000005	0.0023	0.003	0.000053	0.0025	0.690	0.0430	<0.01	0.00166	0.00032	0.004	8.12	0.00066	1.15	<0.0000005	3.26	0.114	6.00	0.000009	0.000010	<0.0005	0.000041	0.0002	0.003	<0.0001
L032185		AMEC	In-pit Mine Rock	4cf	12.1	0.0019	0.000060	0.0018	<0.003	0.00011	0.0020	1.56	0.0273	0.02	0.00155	0.0011	<0.009	2.89	0.00004	1.17	0.000010	2.27	0.0446	2.26	0.000020	0.000060	<0.0001	0.000008	0.00012	0.002	<0.0001
L032023		AMEC	In-pit Mine Rock	4cfa	15.0	<0.0005	0.000106	0.0010	<0.003	0.0047	0.0030	1.47	0.0439	0.01	0.0027	0.0006	<0.009	3.91	0.00004	1.30	0.000010	0.720	0.0300	2.87	0.000020	0.000010	<0.0001	0.000003	0.00046	<0.001	0.00004
L032102		AMEC	In-pit Mine Rock	4cfa	7.71	<0.0005	0.000033	0.00080	0.012	0.000040	0.0050	0.546	0.0114	0.01	0.00037	0.0003	0.014	3.44	0.00004	1.13	0.000010	3.58	0.0282	1.31	0.000020	0.000270	0.0001	0.000016	0.00045	0.002	<0.00001
L032154		AMEC	In-pit Mine Rock	4cfa	13.8	<0.0005	0.000076	0.0018	<0.003	0.00043	0.0020	0.663	0.00820	0.01	0.00051	0.0002	<0.009	2.13	0.00004	1.18	0.000010	4.14	0.117	1.21	0.000020	0.000010	0.0002	0.000038	0.00047	<0.001	0.00006
588142		KCB	In-pit Mine Rock	4cfb	19.3	<0.0001	0.000018	0.00052	0.002	0.00015	0.0030	1.83	0.166	0.01	0.00041	0.0001	0.005	3.87	0.00013	0.828	<0.0000005	4.29	0.102	4.00	0.000011	0.00003	<0.0005	0.000022	<0.0002	0.0006	<0.0001
L032180		AMEC	In-pit Mine Rock	4cfb	12.5	<0.0005	0.00018	0.039	<0.003	0.00070	0.0030	1.01	0.149	0.01	0.00042	<0.0001	<0.009	3.17	0.00008	1.26	0.000010	2.58	0.0550	1.85	0.000020	0.000110	0.0001	0.000007	0.0003	0.007	0.00003
L032207		AMEC	In-pit Mine Rock	4cfb	13.1	0.0006	0.000093	0.0017	0.006	0.00017	0.0030	0.554	0.0773	0.01	0.00025	0.0003	<0.009	3.46	0.00019	0.920	0.000010	2.23	0.0495	5.35	0.000020	0.000120	0.0003	0.000085	0.00018	0.003	0.00005
L032218		AMEC	In-pit Mine Rock	4cfb	6.74	0.0013	0.00089	0.0025	0.014	0.0019	0.002	1.62	0.166	0.01	0.00082	0.0012	0.028	2.58	0.00032	1.18	0.000020	0.520	0.0170	5.54	0.000020	0.000150	0.0015	0.00002	0.00008	0.014	0.00152
453046		KCB	In-pit Mine Rock	4cg	29.4	<0.0001	0.000027	0.0022	0.002	0.000010	0.0039	1.60	0.0344	0.01	0.0004	0.00025	0.004	3.86	0.00074	1.05	0.000035	4.93	0.0966	23.0	0.000007	0.00001	<0.0005	0.000023	<0.0002	0.0003	<0.0001
123161		KCB	In-pit Mine Rock	4cgb	27.7	<0.0001	0.000031	0.0036	0.007	0.00024	0.0035	2.53	0.0450	0.01	0.00032	0.00025	0.005	7.96	0.00013	2.00	0.000059	12.2	0.0882	18.0	0.000008	0.00001	<0.0005	0.00011	0.0006	0.008	<0.0001
L032019		AMEC	In-pit Mine Rock	4cgb	13.7	<0.0005	0.00022	0.00090	<0.003	0.00255	0.0040	1.51	0.0580	0.01	0.00326	0.0004	<0.009	2.24	0.00058	1.25	0.000020	1.96	0.0331	9.88	0.000020	0.000020	0.0002	0.000011	0.00027	0.001	0.00002
L032018		AMEC	In-pit Mine Rock	5dac	12.5	<0.0005	0.00016	0.031	<0.003	0.00764	0.0020	0.837	0.0510	0.01	0.00068	0.0003	0.017	1.39	0.00013	0.820	0.000070	1.14	0.0346	2.22	0.000030	0.000050	0.0002	0.000027	0.00036	0.016	0.00001
RRR10076		KCB	In-pit Mine Rock	5dac	28.6	<0.0001	0.000017	0.00094	0.003	0.000067	0.0084	1.75	0.0453	<0.01	0.0006	0.0002	0.007	5.01	0.00013	1.56	<0.0000005	5.89	0.156	13.0	0.000011	0.000010	<0.0005	0.000074	0.0003	0.0006	<0.0001
761172		KCB	In-pit Mine Rock	5dad	22.3	<0.0001	0.000012	0.00081	0.002	0.000026	0.016	1.44	0.0266	<0.01	0.00071	0.00048	0.005	5.49	0.00019	1.86	<0.0000005	8.09	0.0915	5.00	0.000006	0.00002	<0.0005	0.000063	0.0005	0.0003	<0.0001
223806		KCB	In-pit Mine Rock	5daf	31.0	<0.0001	0.000042	0.0023	0.002	0.000067	0.0033	0.960	0.199	0.01	0.00022	0.00032	0.005	6.93	<0.00004	1.00	<0.0000005	3.32	0.0719	20.0	0.00002	0.00012	<0.0005	0.00005	0.0003	0.001	<0.0001
L032181		AMEC	In-pit Mine Rock	5dap	12.4	0.0009	0.00021	0.0052	0.004	0.00070	0.0020	0.963	0.0324	0.01	0.00086	0.0013	<0.009	3.32	0.00028	1.33	0.000010	1.71	0.0558	2.59	0.000020	0.000120	0.0003	0.000092	0.00044	0.002	0.00041
L032184		AMEC	In-pit Mine Rock	5dap	12.8	0.0008	0.000073	0.0022	<0.003	0.00013	0.0040	2.06	0.0168	0.01	0.00426	0.0004	<0.009	3.07	0.00008	1.28	0.000010	2.04	0.0401	2.06	0.000020	0.000070	0.0001	0.000032	0.00022	0.004	0.00012
L032188		AMEC	In-pit Mine Rock	5dap	19.9	0.0007	0.0014	0.011	0.02	0.00140	0.0040	4.97	0.398	0.02	0.00201	0.0022	<0.009	3.51	0.00045	0.910	0.000050	2.12	0.0561	18.5	0.000020	0.000130	0.0003	0.000092	<0.00003	0.015	0.00051
L032051		AMEC	In-pit Mine Rock	5f	11.6	<0.0005	0.000040	0.00060	<0.003	0.00008	0.0020	1.61	0.00700	<0.01	0.00056	0.0002	0.011	2.00	0.00024	0.920	0.000010	1.61	0.0872	1.12	0.000020	0.000010	<0.0001	<0.000001	0.0006	0.002	<0.00001
L032082		AMEC	In-pit Mine Rock	5f	21.7	<0.0005	0.000079	0.0013	<0.003	0.00024	0.0040	2.86	0.0646	0.01	0.00023	0.0003	0.012	1.51	0.00011	0.560	0.000080	2.68	0.0858	27.8	0.000020	0.000010	0.0001	<0.000001	0.00012	<0.001	<0.00001
L032091		AMEC	In-pit Mine Rock	5f	15.6	<0.0005	0.000067	0.00080	<0.003	0.00051	0.0040	3.00	0.0214	0.01	0.00016	0.0003	0.015	1.58	0.00018	0.620	0.000010	1.69	0.175	19.4	0.000020	0.000010	0.001	0.000003	0.00049	0.002	<0.00001
335062		KCB	In-pit Mine Rock	6	53.7	<0.0001	0.000167	0.0012	0.003	0.00097	0.034	3.60	0.231	<0.01	0.00015	0.00039	0.008	10.4	0.00022	0.917	0.000012	4.71	0.127	44.0	0.000005	0.00012	<0.0005	0.000009	0.0002	0.01	<0.0001
L032072		AMEC	In-pit Mine Rock	6	9.37	0.0012	0.000024	0.00070	<0.003	0.00018	0.0020	1.01	0.0136	0.01	0.0001	0.0002	0.017	1.66	0.00011	0.670	0.000010	1.81	0.0311	1.61	0.000020	0.000010	<0.0001	<0.000001	0.00071	0.002	<0.00001
L032073		AMEC	In-pit Mine Rock	6	17.3	<0.0005	0.000056	0.00070	<0.003	0.000050	0.011	2.34	0.0383	0.01	0.00016	0.0003	0.015	4.42	0.00004	0.640	0.000010	1.99	0.0667	19.6	0.000020	0.000010	0.0003	0.000004	0.00029	0.001	<0.00001
L032169		AMEC	In-pit Mine Rock	7a	15.2	<0.0005	0.000025	<0.0005	<0.003	0.000020	0.0010	1.16	0.0154	0.01	0.0011	0.0003	0.014	0.37	0.00039	0.660	0.000010	0.620	0.0484	2.31	0.000020	0.000010	<0.0001	<0.000001	0.00136	<0.001	<0.00001
L032222		AMEC	In-pit Mine Rock	7a	12.9	0.0009	0.000030	<0.0005	<0.003	0.00013	0.00200	1.25	0.00390	0.02	0.00013	0.0004	0.013	0.36	0.00048	0.940	0.000010	2.45	0.0903	0.710	0.000020	0.000030	0.0001	<0.000001	0.00034	0.001	0.00002
L032224		AMEC	In-pit Mine Rock	7a	12.7	0.0011	0.000036	0.00060	<0.003	0.00029	0.0080	1.94	0.00800	0.01	0.00172	0.0004	<0.009	8.15	0.00004	1.02	0.000010	1.36	0.159	1.81	0.000020	0.000040	0.0001	0.000029	0.00362	<0.001	0.00002
123563		KCB	In-pit Mine Rock	8	27.2	<0.0001	0.000012	0.00068	0.002	0.000036	0.011	5.80	0.0205	<0.01	0.00012	0.00018	0.004	2.48	0.00024	1.21	<0.0000005	4.93	0.202	5.00	0.000005	0.00007	<0.0005	0.000047	0.0002	0.0001	<0.0001
333472		KCB	In-pit Mine Rock	8	21.0	0.0001	0.000017	0.0018	0.005	0.000049	0.0056	1.49	0.0598	<0.01	0.00012	0.00028	0.004	3.76	<0.00004	0.849	<0.0000005	3.13	0.0457	<3.00	0.000008	0.00016	<0.0005	0.000016	0.0002	0.0007	<0.0001
L032005		AMEC	In-pit Mine Rock	8c	14.1	<0.0005	0.000055	<0.0005	<0.003	0.00095	0.0010	1.06	0.0112	0.01	0.00026	0.0005	<0.009	1.01	0.00004	0.870	0.000010	1.78	0.109	0.550	0.000020	0.000010	<0.0001	0.000005	0.00024	0.002	<0.00001
L032042		AMEC	In-pit Mine Rock	8c	9.89	<0.0005	0.000033	0.0011	<0.003	0.00057	0.0050	0.503	0.00700	<0.01	0.00031	0.0002	0.019	2.60	0.00005	1.45	0.000010	3.26	0.0251	0.550	0.000020	0.000010	0.0001	0.000007	0.00052	0.002	<0.00001
L032043		AMEC	In-pit Mine Rock	8c	11.3	<0.0005	0.000040	0.00070	<0.003	0.00022	0.0050	0.702	0.0117	<0.01	0.00016	0.0002	0.017	1.79	0.00004	1.06	0.000010	2.23	0.102	0.650	0.000020	0.000010	<0.0001	0.000008	0.00044	<0.001	<0.00001
L032164		AMEC	In-pit Mine Rock	8c	11.2	<0.0005	0.000052	0.0017	<0.003	0.000090	0.0040	1.51	0.00930	0.02	0.00321	<0.0001	<0.009	2.45	0.00004	1.19	0.000030	6.51	0.138	3.75	0.000020	0.000010	0.0002	0.00002	0.00063	<0.001	0.00002
L032202		AMEC	In-pit Mine Rock	8c	10.9	0.001	0.000082	0.0015	0.004	0.000060	0.0020	0.842	0.00860	0.01	0.00122	<0.0001	<0.009	1.69	0.00004	0.960	0.000010	4.57	0.107	2.32	0.000020	0.000110	0.0002	0.000058	0.00047	0.003	0.00007
450812		KCB	In-pit Mine Rock	9a	22.0	<0.0001	0.000107	0.00097	0.003	0.00002	0.0056	1.85	0.0122	0.01	0.00034	0.00031	0.007	4.07	<0.00004	0.976	0.000009	8.33	0.348	5.00	0.000008	0.00002	<0.0005	0.000025	0.0008	0.001	<0.0001
L032208		AMEC	In-pit Mine Rock	9ac	6.07	0.0009	0.000034	0.0011	0.011	0.00018	0.0020	0.838	0.00260	0.01	0.00027	0.0006	<0.009	1.28	0.00017	1.41	0.000010	10.9	0.0707	1.03	0.000020	0.000070	0.0004	0.000001	0.00229	0.001	<0.00001
L032210		AMEC	In-pit Mine Rock	9ac	6.06	0.0012	0.000054	0.0074	0.006	0.000070	0.0030	1.40	0.00400	<0.01	0.0001	0.0017	<0.009	6.06	0.00045	1.91	0.000010	6.87	0.0758	0.940	0.000020	0.000050	0.0001	0.000004	0.00273	0.001	<0.00001
L032211		AMEC	In-pit Mine Rock	9ac	10.0	0.0009	0.000069	0.0016	0.006	0.000050	0.0020	0.849	0.00200	<0.01	0.00024	0.0004	0.015	1.40	0.00023	1.35	0.000010	5.46	0.0399	0.740	0.000020	0.000070	0.0002	0.000001	0.0015	0.002	0.00002
L032020		AMEC	In-pit Mine Rock	11c	11.1	<0.0005	0.00013	0.0011	<0.003	0.00035	0.0030	1.07	0.0417	0.01	0.00039	0.0005	0.019	2.38	0.00078	1.23	0.000010	3.87	0.0441	2.50	0.000020	0.000010	0.0002	0.000003	0.00044	0.002	0.00002
L032215		AMEC	In-pit Mine Rock	11c	12.6	0.0006	0.000096	0.0015	0.004	0.00018	0.0030	2.08	0.00750	0.01	0.00035	0.0003	<0.009	3.03	0.00004	1.13	0.000010	1.02	0.0614	1.97	0.000020	0.000080	0.0002	0.000025	0.00103	0.002	0.00005
Blank		AMEC			<0.02	0.0008	0.000003

Sample ID	Analyte:	Consultant	Waste Classification	Rock Code	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	Unit:				mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L
O. Reg 560/94					-	-	-	0.3	-	0.2	-	-	-		-	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-	0.5	-
PWQO					-	0.001	0.0009	0.005	0.3	0.005-0.025***	-	-	-	0.2	0.04	0.025	0.01-0.02	-	0.1	-	0.0001	-	-	-	0.0003	-	-	0.005	0.006	0.03	0.004
34113		KCB	Outside Pit	2	41.0	<0.0001	0.000024	0.00083	0.002	0.000022	0.031	2.86	0.0585	<0.01	0.0005	0.0003	0.005	10.3	0.00015	1.38	0.000023	6.57	0.0926	28.0	0.0000070	<0.00001	<0.0005	0.000014	0.0006	0.0004	<0.0001
L032145		AMEC	Outside Pit	2ce	1.28	<0.0005	0.000025	0.0031	0.014	0.000100	<0.001	0.160	0.00110	0.01	0.00047	<0.0001	<0.009	1.38	0.00141	1.76	0.000020	36.5	0.0196	3.89	0.000020	0.000050	0.0006	0.000007	0.00395	0.001	0.00016
454890		KCB	Outside Pit	3b	86.3	<0.0001	0.000105	0.0013	0.002	0.000021	0.0123	6.47	0.0369	<0.01	0.00096	0.00065	0.004	2.9	0.00091	1.06	0.000025	7.78	0.277	78.0	0.000041	<0.00001	<0.0005	0.000009	<0.0002	0.0007	<0.0001
587856		KCB	Outside Pit	3b	81.2	<0.0001	0.00010	0.00091	0.002	0.000011	0.0037	2.26	0.0886	0.02	0.00014	0.00027	<0.00	5.23	0.00018	1.32	<0.000005	5.05	0.154	72.0	0.000017	0.00003	<0.0005	0.000032	<0.0002	0.004	<0.0001
457559		KCB	Outside Pit	3be	22.4	<0.0001	0.000006	0.00026	0.002	0.000042	0.0046	0.890	0.0896	<0.01	0.00005	0.00019	0.005	4.19	0.00006	1.04	<0.000005	2.38	0.0413	5.00	0.0000060	0.00001	<0.0005	0.000009	<0.0002	0.001	<0.0001
457531		KCB	Outside Pit	4aa	23.4	<0.0001	0.00001	0.00083	0.003	0.000038	0.0019	0.540	0.0311	<0.01	0.00011	0.00017	0.004	3.12	0.00033	1.01	<0.000005	3.52	0.0523	6.00	0.0000070	0.00002	<0.0005	0.000014	<0.0002	0.0005	<0.0001
638478		KCB	Outside Pit	4aa	13.8	0.0003	0.019	0.20	0.22	0.00038	0.024	7.41	0.379	<0.01	<0.00005	0.0127	0.005	19.3	0.00163	0.987	0.000019	8.25	0.191	37.0	0.000137	0.00005	<0.0005	0.00163	<0.0002	0.08	<0.0001
24685		KCB	Outside Pit	4b	19.2	<0.0001	0.000018	0.0014	0.002	0.000060	0.012	0.730	0.0528	<0.01	0.00027	0.00017	0.005	3.41	0.00042	1.98	<0.000005	9.43	0.0810	6.00	0.0000060	0.00011	<0.0005	0.00003	0.0004	0.0005	<0.0001
435951		KCB	Outside Pit	4b	31.7	0.0001	0.000021	0.0021	0.003	0.000029	0.0032	3.14	0.0331	<0.01	0.00029	0.0002	0.005	7.44	0.00043	1.35	<0.000005	7.80	0.0792	21.0	0.0000070	0.00013	<0.0005	0.000011	<0.0002	0.0004	<0.0001
L032168		AMEC	Outside Pit	4ca	14.7	<0.0005	0.000040	0.0012	<0.003	0.000760	0.0020	0.364	0.0578	0.02	0.00019	0.0003	0.01	3.16	0.00017	1.36	0.000030	2.02	0.0444	1.31	0.000020	0.000010	0.0002	0.000001	0.00033	0.002	0.00002
804567		KCB	Outside Pit	4cb	21.0	<0.0001	<0.000005	0.00095	0.002	0.00054	0.0050	1.15	0.0689	<0.01	0.00015	0.00012	0.002	7.56	0.00007	1.25	<0.000005	4.82	0.0756	6.00	0.000015	0.00002	<0.0005	0.000006	<0.0002	0.0003	<0.0001
804708		KCB	Outside Pit	4cb	115	<0.0001	0.000008	0.00059	0.002	0.000040	0.011	3.84	0.0414	<0.01	0.00025	0.0004	0.002	9.76	0.00014	1.53	0.000011	7.86	6.19	63.0	0.0000090	0.00002	<0.0005	0.000066	<0.0002	0.0004	<0.0001
RRR04250		KCB	Outside Pit	4cf	26.2	<0.0001	0.000047	0.00038	0.003	0.000021	0.0080	1.56	0.0541	<0.01	0.0001	0.00045	0.003	5.85	0.00062	1.22	0.000012	3.78	0.0621	15.0	0.000011	0.00005	<0.0005	0.000008	0.0004	0.001	<0.0001
L032032		AMEC	Outside Pit	4cfa	7.77	<0.0005	0.000032	0.00060	<0.003	0.00023	<0.001	0.369	0.00220	0.01	0.00016	0.0002	0.013	0.78	0.00004	1.05	0.000010	3.02	0.0437	0.84	0.000020	0.000010	<0.0001	0.000001	0.00113	0.001	<0.00001
L032115		AMEC	Outside Pit	4cfa	7.94	<0.0005	0.000059	0.0010	<0.003	0.000020	0.0030	2.34	0.0274	<0.01	0.00244	0.0003	0.019	3.22	0.00007	0.830	0.000010	1.20	0.125	1.08	0.000020	0.000010	<0.0001	0.000037	0.00025	0.001	0.00002
L032131		AMEC	Outside Pit	4cfa	9.32	<0.0005	0.000036	0.00070	<0.003	0.000040	0.0030	2.38	0.0237	0.01	0.00023	0.0003	<0.009	2.70	0.00004	0.930	0.000030	1.98	0.0583	0.440	0.000020	0.000010	<0.0001	0.000011	0.00023	0.002	<0.00001
451139		KCB	Outside Pit	4cga	29.4	<0.0001	0.000023	0.0014	0.003	0.000023	0.0035	2.03	0.0138	<0.01	0.00308	0.00026	0.004	8.3	0.00089	1.18	0.000012	3.80	0.0988	15.0	0.000014	0.00003	<0.0005	0.000018	<0.0002	0.002	<0.0001
L032070		AMEC	Outside Pit	4cga	7.96	<0.0005	0.000028	<0.0005	<0.003	0.000020	0.0020	1.93	0.0133	0.01	0.00034	0.0003	0.015	1.88	0.00005	0.820	0.000010	5.59	0.0353	2.09	0.000020	0.000010	<0.0001	<0.000001	0.00046	<0.001	<0.00001
L032128		AMEC	Outside Pit	4cga	9.11	<0.0005	0.00025	0.0012	<0.003	0.011	0.0020	3.14	0.00900	0.01	0.00022	0.001	0.012	3.14	0.00007	1.08	0.000010	5.05	0.360	0.790	0.000020	0.000010	<0.0001	0.000102	0.00073	0.031	0.00003
457476		KCB	Outside Pit	4cgb	22.0	<0.0001	0.000011	0.00026	0.001	0.000053	0.0032	1.00	0.139	<0.01	<0.00005	0.00018	0.004	2.27	0.00012	0.897	0.000012	2.29	0.0543	8.00	0.0000050	<0.00001	<0.0005	0.000019	<0.0002	0.0003	<0.0001
L032068		AMEC	Outside Pit	5b	7.78	0.0007	0.000062	<0.0005	<0.003	0.00060	0.0020	1.48	0.00850	0.01	0.00045	0.0006	<0.009	2.36	0.00004	0.860	0.000010	2.48	0.0985	0.870	0.000020	0.000050	0.0003	0.000005	0.001	0.001	0.00005
L032056		AMEC	Outside Pit	5ce	13.4	<0.0005	0.00016	0.0010	<0.003	0.00088	0.0050	0.870	0.157	<0.01	0.00015	0.0002	0.012	1.97	0.00029	1.02	0.000010	2.22	0.0335	3.48	0.000020	0.000010	0.0001	<0.000001	0.00027	0.003	<0.00001
L032066		AMEC	Outside Pit	5ce	12.0	<0.0005	0.000078	0.00070	<0.003	0.00028	0.0020	1.51	0.0103	<0.01	0.00038	0.0003	0.016	2.09	0.00090	1.01	0.000010	2.60	0.0954	2.07	0.000020	0.000010	<0.0001	0.000004	0.00068	0.003	<0.00001
L032129		AMEC	Outside Pit	5ce	12.2	<0.0005	0.00047	0.00090	<0.003	0.000020	0.0020	2.68	0.0319	0.01	0.00129	0.0016	<0.009	2.06	0.00004	0.75	0.000050	1.95	0.306	1.06	0.000020	0.000010	<0.0001	0.000022	0.00029	0.002	<0.00001
414678		KCB	Outside Pit	5da	26.3	<0.0001	0.000034	0.0017	0.004	0.000049	0.0051	1.17	0.0671	0.01	0.00114	0.00024	0.01	1.43	0.00021	1.55	<0.000005	9.32	0.0889	12.0	0.0000020	0.0002	<0.0005	0.000037	0.0003	0.0006	<0.0001
L032118		AMEC	Outside Pit	5dac	10.4	<0.0005	0.000052	0.00080	<0.003	0.00014	0.0020	3.11	0.0128	<0.01	0.00132	0.0004	<0.009	1.72	0.00004	0.630	0.000010	0.750	0.0707	1.54	0.000020	0.000010	<0.0001	0.000003	0.00023	0.001	<0.00001
L032122		AMEC	Outside Pit	5dac	14.2	<0.0005	0.000080	0.0015	<0.003	0.000020	0.0030	2.53	0.0253	<0.01	0.00156	0.001	<0.009	2.88	0.00047	0.670	0.000010	1.66	0.118	18.5	0.000020	0.000010	0.0002	0.000015	0.0001	0.001	0.00002
437466		KCB	Outside Pit	6	104	<0.0001	0.000089	0.0017	0.004	0.000035	0.0133	5.06	0.0907	0.01	0.00037	0.00056	0.004	7.82	0.00143	0.826	0.000018	7.22	0.145	94.0	0.000018	0.00001	<0.0005	0.000027	0.0005	0.002	<0.0001
450754		KCB	Outside Pit	6	139	<0.0001	0.00038	0.0016	0.003	0.000012	0.0041	5.25	0.488	0.03	<0.00005	0.00185	0.003	0.97	0.00104	0.893	0.000027	2.18	0.151	120	0.0000090	0.00001	<0.0005	0.000008	<0.0002	0.001	<0.0001
L032067		AMEC	Outside Pit	6a	23.9	<0.0005	0.0081	0.0026	<0.003	0.00094	0.0010	6.96	0.407	<0.01	0.00019	0.019	0.01	2.00	0.00242	0.460	0.000010	1.14	0.111	22.6	0.000030	0.000010	0.0001	0.000008	0.00009	0.002	0.00002
758756		KCB	Outside Pit	6cd	125	<0.0001	0.00005	0.00080	0.003	0.000010	0.0085	6.50	0.0912	0.03	0.00013	0.00026	0.003	13.7	0.00127	0.830	0.000033	5.43	0.130	118	0.000019	0.00002	<0.0005	0.000021	<0.0002	0.0008	<0.0001
586714		KCB	Outside Pit	8	43.7	<0.0001	0.000011	0.00055	0.004	0.00011	0.0069	1.75	0.0505	0.03	0.0001	0.00041	0.004	1.89	0.00044	1.06	<0.000005	4.14	0.111	25.0	0.0000030	0.00002	<0.0005	0.000063	<0.0002	0.002	<0.0001
454791		KCB	Outside Pit	8c	19.8	<0.0001	0.000027	0.0014	0.003	0.000143	0.0077	0.800	0.0309	<0.01	0.00011	0.0002	0.007	2.77	<0.00004	1.38	0.000006	4.40	0.0629	<3.00	0.0000060	0.00004	<0.0005	0.000019	0.0002	0.0003	<0.0001
454809		KCB	Outside Pit	8c	40.1	<0.0001	0.000018	0.00035	0.003	0.000051	0.0068	1.59	0.0215	<0.01	0.00018	0.00011	0.003	2.22	0.00039	1.16	<0.000005	5.75	0.154	27.0	0.0000040	<0.00001	<0.0005	0.000026	<0.0002	0.0004	<0.0001
L032007		AMEC	Outside Pit	8c	8.19	<0.0005	0.000074	0.0011	<0.003	0.0033	0.0020	0.754	0.00380	0.01	0.00074	0.0003	<0.009	1.37	0.00017	1.15	0.000010	7.22	0.128	0.830	0.000020	0.000070	0.0002	0.000022	0.00088	0.001	0.00005
L032026		AMEC	Outside Pit	10b	11.6	<0.0005	0.000040	0.00050	<0.003	0.00010	0.0010	0.494	0.0433	0.01	0.00075	0.0002	<0.009	2.08	0.00004	1.05	0.000010	2.29	0.819	1.87	0.000020	0.000010	<0.0001	0.000114	0.00033	0.002	<0.00001
L032130		AMEC	Outside Pit	10b	11.2	<0.0005	0.000049	0.00070	<0.003	0.000020	0.0010	1.57	0.0400	0.01	0.00098	0.0028	0.01	2.02	0.00007	0.870	0.000020	1.34	0.175	0.660	0.000020	0.000010	0.0001	0.000446	0.00037	<0.001	0.00007
34450		KCB	Outside Pit	10d	33.4	<0.0001	0.000025	0.00063	0.004	0.000057	0.0056	1.59	0.00510	0.02	0.00043	0.00031	0.009	11.6	0.00057	2.53	0.000027	21.8	0.217	17.0	0.000016	0.00001	<0.0005	0.000017	0.0005	0.0006	<0.0001
L032069		AMEC	Outside Pit	11a	8.94	<0.0005	0.000038	0.00060	<0.003	0.000020	0.0020	1.24	0.0180	0.01	0.00068	0.0003	0.018	2.87	0.00004	0.910	0.000010	2.18	0.0465	2.90	0.000020	0.000010	0.0001	0.000001	0.00027	0.001	0.00005
452360		KCB	Outside Pit	13	13.6	<0.0001	0.000017	0.00068	0.005	0.000023	0.0017	2.27	0.00413	<0.01	0.00017	0.00018	0.006	0.66	0.00012	1.84	0.000013	7.39	0.0571	<3.00	0.0000030	0.00002	<0.0005	0.000004	0.0024	0.0004	<0.0001
L032031		AMEC	Outside Pit	13	10.3	<0.0005	0.000052	0.00090	<0.003	0.0051	0.0020	1.22	0.00300	0.01	0.00031	0.0002	0.01	0.41	0.00006	1.69	0.000010	2.94	0.0412	0.770	0.000020	0.000010	0.0001	<0.000001	0.00197	0.002	<0.00001

O. Reg 560/94 = Metal Mining Sector of the Environmental Protection
PWQO = Provincial Water Quality Objectives
* Dependant on pH
**Dependant on Hardness
***Dependant on Alkalinity

Table A-6: Tailings Net Acid Generation Results

Parameter	Final pH	Vol NaOH to pH 4.5	Vol NaOH to pH 7.0	NAG (pH 4.5)	NAG (pH 7.0)
Unit	units	mL	mL	kg H_2SO_4/tonne	kg H_2SO_4/tonne
ODM Zone Master Comp A	2.9	3.8	4.7	13	16
ODM Zone Master Comp B	2.9	3.6	4.4	12	14
ROM Sample A	2.8	3.6	5.3	11	17
ROM Sample B	2.8	3.2	5.4	10	17
Starter Pit Sample A	3.0	2.8	4.7	8.8	17
Starter Pit Sample B	3.0	2.7	4.4	8.7	17

RAINYRIVER

Table A-7: Tailings Sequential Net Acid Generation Results

amec

Sample	Description	Final pH	Vol NaOH to pH 4.5	Vol NaOH to pH 7.0	NAG (pH 4.5)	NAG (pH 7.0)
			mL	mL	kg H_2SO_4/tonne	kg H_2SO_4/tonne
ODM Zone Master Comp A	Stage 1	2.9	2.4	3.1	8.0	10
ODM Zone Master Comp A	Stage 2	4.3	0.050	0.16	0.20	0.50
ODM Zone Master Comp A	Stage 3	5.3	0.0	0.16	0.0	0.50
ODM Zone Master Comp A	Total NAG	---	2.5	3.4	8.2	11
ODM Zone Master Comp B	Stage 1	2.9	2.3	2.8	7.3	9.1
ODM Zone Master Comp B	Stage 2	4.3	0.040	0.16	0.10	0.50
ODM Zone Master Comp B	Stage 3	5.2	0.0	0.28	0.0	0.90
ODM Zone Master Comp B	Total NAG	---	2.3	3.3	7.4	11
ROM Sample A	Stage 1	2.8	3.0	4.2	9.9	14
ROM Sample A	Stage 2	3.9	0.16	0.37	0.50	1.2
ROM Sample A	Stage 3	4.8	0.0	0.19	0.0	0.60
ROM Sample A	Total NAG	---	3.2	4.7	10	16
ROM Sample B	Stage 1	2.9	2.8	4.0	9.1	13
ROM Sample B	Stage 2	4.0	0.13	0.27	0.40	0.90
ROM Sample B	Stage 3	4.9	0.0	0.19	0.0	0.60
ROM Sample B	Total NAG	---	2.9	4.5	9.5	15
Starter Pit Sample A	Stage 1	2.8	3.2	3.8	10	12
Starter Pit Sample A	Stage 2	3.5	0.48	0.68	1.6	2.2
Starter Pit Sample A	Stage 3	4.6	0.0	0.20	0.0	0.60
Starter Pit Sample A	Total NAG	---	3.6	4.7	12	15
Starter Pit Sample B	Stage 1	2.7	3.7	4.5	12	14
Starter Pit Sample B	Stage 2	3.7	0.27	0.47	0.90	1.5
Starter Pit Sample B	Stage 3	4.7	0.0	0.21	0.0	0.70
Starter Pit Sample B	Total NAG	---	4.0	5.1	13	16

APPENDIX B

DATA SUMMARY OF KINETIC TESTING

HUMIDITY CELLS

HC 1
Sample = 638478

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	1	500	385	7.04	1.10	4.02	12.71	0.010	0.00169	0.00393	0.0033	0.000008	0.0000039	0.0081	0.000011	2.44	0.00019	0.00009	0.0058	0.0039
09-Feb-10	2	500	480	6.74	1.25	2.22	14.40	0.007	0.00254	0.00322	0.0032	0.000010	0.0000048	0.0144	0.000007	2.81	0.00024	0.00003	0.0023	0.0048
16-Feb-10	3	500	440	6.63	1.36	1.40	9.68	0.010	0.00172	0.00167	0.0027	0.000009	0.0000044	0.0110	0.000005	1.79	0.00022	0.00002	0.0017	0.0044
23-Feb-10	4	500	450	6.82	1.09	1.14	7.20	0.003	0.00135	0.00108	0.0022	0.000009	0.0000045	0.0077	0.000004	1.60	0.00023	0.00005	0.0010	0.0045
02-Mar-10	5	500	445	6.39	0.94	0.67	6.68	0.002	0.00085	0.00058	0.0027	0.000009	0.0000045	0.0053	0.000004	1.30	0.00022	0.00004	0.0008	0.0045
09-Mar-10	6	500	460	6.26	1.07	0.67	5.06	0.002	0.00083	0.00041	0.0022	0.000009	0.0000046	0.0055	0.000002	1.19	0.00023	0.00004	0.0016	0.0046
16-Mar-10	7	500	450	6.45	1.17	0.79	4.50	0.002	0.00059	0.00032	0.0020	0.000009	0.0000045	0.0081	0.000004	1.32	0.00023	0.00005	0.0008	0.0090
23-Mar-10	8	500	465	6.32	1.31	0.71	4.65	0.001	0.00051	0.00028	0.0025	0.000009	0.0000047	0.0042	0.000011	1.37	0.00028	0.00007	0.0010	0.0047
30-Mar-10	9	500	460	6.19	1.54	0.40	6.90	0.002	0.00046	0.00014	0.0028	0.000009	0.0000046	0.0041	0.000011	1.48	0.00032	0.00012	0.0021	0.0046
06-Apr-10	10	500	435	6.22	1.41	0.49	6.96	0.006	0.00030	0.00013	0.0035	0.000009	0.0000044	0.0022	0.000013	1.74	0.00035	0.00017	0.0021	0.0044
13-Apr-10	11	500	470	6.25	1.67	0.78	7.05	0.006	0.00042	0.00014	0.0042	0.000009	0.0000047	0.0042	0.000049	1.57	0.00024	0.00029	0.0027	0.0047
20-Apr-10	12	500	450	6.16	1.80	0.60	9.00	0.007	0.00027	0.00018	0.0057	0.000009	0.0000045	0.0036	0.000035	1.74	0.00032	0.00044	0.0041	0.0045
27-Apr-10	13	500	455	6.1	1.33	0.67	8.19	0.009	0.00009	0.00009	0.0070	0.000009	0.0000046	0.0027	0.000035	1.76	0.00023	0.00060	0.0072	0.0046
04-May-10	14	500	445	5.87	1.62	0.49	9.35	0.015	0.00018	0.00009	0.0103	0.000013	0.0000045	0.0036	0.000061	1.95	0.00022	0.00103	0.0083	0.0089
11-May-10	15	500	445	5.97	1.32	0.56	8.01	0.020	0.00013	0.00013	0.0089	0.000013	0.0000045	0.0027	0.000072	2.05	0.00031	0.00133	0.0132	0.0089
18-May-10	16	500	430	5.82	1.66	0.54	7.74	0.035	0.00013	0.00009	0.0087	0.000017	0.0000043	0.0033	0.000090	2.31	0.00022	0.00190	0.0215	0.0224
25-May-10	17	500	465	6.13	2.24	1.02	5.12	0.048	0.00009	0.00009	0.0084	0.000028	0.0000047	0.0027	0.000110	1.71	0.00023	0.00248	0.0296	0.0256
01-Jun-10	18	500	420	5.63	1.96	0.34	7.98	0.085	0.00008	0.00008	0.0080	0.000034	0.0000042	0.0025	0.000121	2.18	0.00025	0.00324	0.0419	0.0407
08-Jun-10	19	500	415	5.55	1.96	0.41	4.98	0.098	0.00008	0.00012	0.0076	0.000042	0.0000042	0.0024	0.000128	1.88	0.00046	0.00388	0.0589	0.0523
15-Jun-10	20	500	445	5.62	2.67	0.45	4.01	0.128	0.00009	0.00009	0.0094	0.000058	0.0000045	0.0026	0.000142	1.38	0.00022	0.00446	0.1099	0.0725
22-Jun-10	21	500	435	5.63	2.77	0.51														
29-Jun-10	22	500	450	5.33	3.24	0.19	4.05	0.311	0.00009	0.00014	0.0063	0.000104	0.0000045	0.0021	0.000164	1.04	0.00032	0.00572	0.2696	0.0581
06-Jul-10	23	500	460	4.99	4.91	0.05														
13-Jul-10	24	500	445	4.68	5.95	0.04	6.23	0.521	0.00009	0.00036	0.0063	0.000182	0.0000045	0.0015	0.000169	0.74	0.00022	0.00547	0.5607	0.0245
20-Jul-10	25	500	450	4.51	11.42	0.05														
27-Jul-10	26	500	455	4.36	13.65	#N/A	11.83	1.260	0.00009	0.00255	0.0054	0.000241	0.0000046	0.0015	0.000147	0.83	0.00032	0.00537	0.9464	0.0537
03-Aug-10	27	500	470	4.64	15.26	0.05	11.28	1.654	0.00009	0.00024	0.0042	0.000226	0.0000047	0.0053	0.000133	0.64	0.00042	0.00517	1.0105	0.0456
10-Aug-10	28	500	450	4.63	17.70	0.05	15.75	1.913	0.00009	0.00095	0.0039	0.000248	0.0000045	0.0063	0.000126	0.66	0.00050	0.00545	1.3905	0.0608
17-Aug-10	29	500	455	4.51	20.62	0.05	16.38	2.598	0.00009	0.00023	0.0042	0.000278	0.0000046	0.0014	0.000123	0.60	0.00064	0.00582	1.2285	0.0792
24-Aug-10	30	500	430	4.41	20.80	#N/A	14.19	2.150	0.00009	0.00026	0.0040	0.000245	0.0000043	0.0011	0.000102	0.71	0.00082	0.00516	1.0836	0.1023
31-Aug-10	31	500	465	4.42	23.66	#N/A	24.18	2.483	0.00009	0.00033	0.0039	0.000260	0.0000047	0.0010	0.000127	0.76	0.00116	0.00791	1.1858	0.2325
07-Sep-10	32	500	435	4.2	21.88	#N/A	21.75	2.327	0.00009	0.00783	0.0034	0.000222	0.0000305	0.0009	0.000057	0.57	0.00439	0.00666	1.0440	0.1857
14-Sep-10	33	500	420	3.99	23.15	#N/A	21.84	2.818	0.00013	0.00025	0.0093	0.000223	0.0000042	0.0021	0.000089	0.60	0.00223	0.00571	0.9744	0.2692
21-Sep-10	34	500	450	4.02	25.02	#N/A	24.75	2.565	0.00027	0.00032	0.0066	0.000221	0.0000315	0.0013	0.000144	0.58	0.00293	0.00639	0.9405	0.3506
28-Sep-10	35	500	480	3.79	32.14	#N/A	31.68	3.547	0.00010	0.00134	0.0051	0.000307	0.0000048	0.0018	0.000445	0.75	0.00557	0.01008	1.2960	0.7680
05-Oct-10	36	500	460	3.67	28.91	#N/A	34.04	2.898	0.00023	0.00014	0.0047	0.000225	0.0000046	0.0018	0.000146	0.76	0.00557	0.00741	0.9108	0.7130
12-Oct-10	37	500	435	3.76	26.03	#N/A	29.15	2.619	0.00009	0.00022	0.0036	0.000196	0.0000044	0.0014	0.000147	1.98	0.00648	0.00735	0.9135	0.8613
19-Oct-10	38	500	445	3.77	24.71	#N/A	30.26	2.425	0.00009	0.00009	0.0035	0.000187	0.0000045	0.0012	0.000130	0.67	0.00659	0.00703	0.8500	0.8945
26-Oct-10	39	500	450	3.67	24.81	#N/A	28.80	2.475	0.00009	0.00018	0.0029	0.000167	0.0000045	0.0018	0.000296	0.53	0.00675	0.00734	0.8190	0.9315
02-Nov-10	40	500	450	4.01	23.19	#N/A	27.00	2.313	0.00009	0.00027	0.0040	0.000131	0.0000045	0.0014	0.000131	0.51	0.00603	0.00603	0.6975	0.8145
09-Nov-10	41	500	495	3.55	35.77	#N/A	24.75	2.901	0.00010	0.00025	0.0028	0.000178	0.0000050	0.0015	0.000162	0.79	0.01005	0.00916	1.0940	2.1681
16-Nov-10	42	500	460	3.88	22.85	#N/A	24.84	1.849	0.00106	0.00028	0.0033	0.000110	0.0000046	0.0010	0.000104	0.66	0.00598	0.00649	0.7130	1.0074
23-Nov-10	43	500	450	3.53	23.03	#N/A	24.30	2.106	0.00009	0.00018	0.0040	0.000131	0.0000045	0.0012	0.000125	0.59	0.00698	0.00657	0.8055	1.2195
30-Nov-10	44	500	425	3.63	20.64	#N/A	19.55	1.602	0.00009	0.00013	0.0032	0.000089	0.0000043	0.0008	0.000089	0.74	0.00519	0.00591	0.6673	0.9733
07-Dec-10	45	500	430	3.65	19.59	#N/A	19.35	1.363	0.00009	0.00009	0.0030	0.000077	0.0000043	0.0021	0.000061	0.86	0.00447	0.00581	0.6020	1.0750
14-Dec-10	46	500	455	3.76	19.00	#N/A	20.93	1.320	0.00009	0.00014	0.0026	0.000050	0.0000046	0.0010	0.000068	0.76	0.00419	0.00560	0.6006	1.0056
21-Dec-10	47	500	450	3.55	23.05	#N/A	27.00	1.476	0.00009	0.00018	0.0032	0.000095	0.0000045	0.0016	0.000153	1.28	0.00513	0.00689	0.6795	1.2105
28-Dec-10	48	500	450	3.55	20.56	#N/A	23.40	1.346	0.00203	0.00050	0.0025	0.000077	0.0000045	0.0014	0.000058	0.51	0.00464	0.00639	0.6300	1.0440
04-Jan-11	49	500	475	3.55	25.44	#N/A	26.13	1.311	0.00010	0.00014	0.0033	0.000081	0.0000048	0.0008	0.000067	0.48	0.00494	0.00703	0.7458	1.2303
11-Jan-11	50	500	455	3.69	20.19	#N/A	22.30	1.047	0.00228	0.00055	0.0030	0.000055	0.0000046	0.0015	0.000031	0.46	0.00359	0.00596	0.5733	1.1603
18-Jan-11	51	500	425	3.75	15.33	#N/A	16.15	0.684	0.00009	0.00013	0.0037	0.000043	0.0000043	0.0011	0.000343	0.70	0.00251	0.00455	0.4293	0.9563
25-Jan-11	52	500	445	3.65	20.81	#N/A	23.14	0.948	0.00009	0.00009	0.0028	0.000062	0.0000045	0.0016	0.000055	0.53	0.00338	0.00605	0.5296	1.1793
01-Feb-11	53	500	445	3.85	13.58	#N/A	15.13	0.694	0.00009	0.00009	0.0022	0.000040	0.0000045	0.0012	0.000045	0.45	0.00209	0.00472	0.4201	0.9790
08-Feb-11	54	500	440	3.88	13.05	#N/A	18.04	0.722	0.00057	0.00026	0.0023	0.000040	0.0000044	0.0010	0.000037	0.45	0.00216	0.00434	0.3881	0.9900
15-Feb-11	55	500	455	3.75	15.63	#N/A	15.93	0.801	0.00009	0.00009	0.0022	0.000046	0.0000046	0.0009	0.000067	0.51	0.00218	0.00478	0.4241	0.9555
22-Feb-11	56	500	435	3.81	11.85	#N/A	16.53	0.613	0.00013	0.00009	0.0023	0.000030	0.0000044	0.0011	0.000028	0.50	0.00209	0.00395	0.3611	0.8178
01-Mar-11	57	500	435	3.9	11.46	#N/A	17.84	0.552	0.01422	0.00148	0.0019	0.000030	0.0000044	0.0014	0.000250	0.47	0.00174	0.00387	0.3410	0.7482
08-Mar-11	58	500	435	3.86	12.16	#N/A	16.97	0.570	0.00013	0.00013	0.0021	0.000026	0.0000044	0.0010	0.000350	0.53	0.00174	0.00398	0.3345	0.7700
15-Mar-11	59	500	455	3.66	17.49	#N/A	20.02	0.892	0.00009	0.00009	0.0029	0.000041	0.0000046	0.0012	0.000041	0.38	0.00268	0.00551	0.5278	1.2194
22-Mar-11	60	500	440	3.83	13.96	#N/A	16.28	0.678	0.00009	0.00009	0.0024	0.000031	0.0000044	0.0008	0.000032	0.40	0.00207	0.00444	0.3621	0.8756
29-Mar-11	61	500	445	3.82	14.39	#N/A	14.24	0.645	0.00009	0.00009	0.0022	0.000031	0.0000045	0.0010	0.002777	0.47	0.00205	0.00472	0.4250	1.0013
05-Apr-11	62	500	455	3.69	15.73	#N/A	20.02	0.796	0.00009	0.00009	0.0026	0.000036	0.0000046	0.0013	0.000040	0.35	0.00250	0.00628	0.4914	1.1967
12-Apr-11	63	500	460	3.62	13.92	#N/A	16.56	0.690	0.00009	0.00014	0.0021	0.000023	0.0000046	0.0009	0.000057	0.48	0.00193	0.00488	0.4094	1.0074
19-Apr-11	64	500	465	3.66	17.80	#N/A	20.00	0.860	0.00009	0.00009	0.0035	0.000042	0.0000047	0.0008	0.000087	0.38	0.00246	0.00623	0.5255	1.2137
26-Apr-11	65	500	440	3.58	18.46	#N/A	20.24	0.889	0.00009	0.00053	0.0040	0.000026	0.0000044	0.0007	0.000035	0.45	0.00246	0.00638	0.5104	1.2804
03-May-11	66	500	440	3.56	18.89	#N/A	18.04	0.792	0.00009	0.00009	0.0078	0.000031	0.0000044	0.0014	0.000029	0.34	0.00207	0.00532	0.4400	0.9768
10-May-11	67	500	435	3.6	18.04	#N/A	18.27	0.639	0.00009	0.00009	0.0047	0.000030	0.0000044	0.0017	0.000040	0.47	0.00178	0.00510	0.3837	0.8483
17-May-11	68	500	430	3.51			21.07	0.813	0.00009	0.00009	0.0033	0.000034	0.0000043	0.0006	0.000043	0.49	0.00185	0.00525	0.4300	0.8686
24-May-11	69	500	490	3.3	42.90	#N/A	39.69	1.828	0.00010	0.00010	0.0021	0.000064	0.0000049	0.0015	0.000075	0.63	0.00559	0.01161	0.9604	4.1454
31-May-11	70	500	450	3.44	27.53	#N/A	25.20	0.806	0.00009	0.00009	0.0024	0.000041	0.0000090	0.0005	0.000054	0.41	0.00288	0.00747	0.5895	1.4625
07-Jun-11	71	500	440	3.61	17.59	#N/A	18.04	0.590	0.00009	0.00009	0.0028	0.000031	0.0000044	0.0009	0.000043	0.36	0.00176	0.00510	0.4220	0.9900
14-Jun-11	72	500	440	3.56	16.65	#N/A	14.52	0.541	0.00009	0.00009	0.0020	0.000026	0.0000044	0.0013	0.000036	0.37	0.00167	0.00463	0.3978	0.9152
21-Jun-11	73	500	445	3.57	17.81	#N/A	20.92	0.654	0.00009	0.00009	0.0016	0.000022	0.0000045	0.0008	0.000485	0.25	0.00191	0.00516	0.4325	1.0903
28-Jun-11	74	500	440	3.42	22.81	#N/A	24.20	0.827	0.00009	0.00035	0.0049	0.000035	0.0000044	0.0010	0.000034	0.33	0.00246	0.00669	0.9284	1.4212
05-Jul-11	75	500	450	3.43	22.95	#N/A	24.30	0.846	0.00009	0.00009	0.0036	0.000027	0.0000045	0.0014	0.000035	0.30	0.00275	0.00684	0.5130	1.4580

Cell Terminated

HC 1
Sample = 638478

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	0.00002	0.0015	0.72	0.009	0.0039	0.002938	0.0006	0.0039	4.24	0.00023	0.23	0.000004	2.49	0.017	4.20	0.00008	0.00008	0.00004	0.000022	0.00006	0.0015	0.000150
09-Feb-10	0.00001	0.0010	0.82	0.010	0.0048	0.004944	0.0001	0.0048	3.69	0.00030	0.42	0.000005	1.63	0.018	4.69	0.00010	0.00000	0.00005	0.000014	0.00005	0.0005	0.000053
16-Feb-10	0.00004	0.0004	0.50	0.007	0.0044	0.002728	0.0002	0.0044	2.02	0.00022	0.44	0.000004	0.92	0.011	3.08	0.00009	0.00004	0.00013	0.000017	0.00008	0.0009	0.000026
23-Feb-10	0.00001	0.0005	0.47	0.009	0.0045	0.001409	0.0001	0.0045	1.60	0.00011	0.44	0.000005	0.49	0.011	2.42	0.00009	0.00003	0.00005	0.000005	0.00005	0.0005	0.000014
02-Mar-10	0.00002	0.0004	0.37	0.007	0.0045	0.000699	0.0001	0.0045	1.05	0.00008	0.31	0.000004	0.28	0.008	2.18	0.00009	0.00007	0.00009	0.000004	0.00004	0.0004	0.000009
09-Mar-10	0.00004	0.0005	0.37	0.010	0.0046	0.000377	0.0002	0.0046	0.89	0.00006	0.42	0.000005	0.18	0.008	1.81	0.00009	0.00017	0.00005	0.000026	0.00003	0.0009	0.000009
16-Mar-10	0.00001	0.0005	0.44	0.014	0.0045	0.000711	0.0001	0.0045	0.79	0.00006	0.38	0.000005	0.23	0.009	2.05	0.00009	0.00002	0.00005	0.000049	0.00002	0.0005	0.000005
23-Mar-10	0.00020	0.0009	0.44	0.020	0.0047	0.000205	0.0001	0.0047	0.73	0.00006	0.47	0.000005	0.12	0.011	2.04	0.00009	0.00004	0.00005	0.000008	0.00001	0.0014	0.000005
30-Mar-10	0.00022	0.0005	0.45	0.025	0.0046	0.000074	0.0002	0.0046	0.64	0.00006	0.44	0.000005	0.12	0.012	2.01	0.00009	0.00005	0.00005	0.000004	0.00001	0.0014	0.000005
06-Apr-10	0.00020	0.0004	0.52	0.032	0.0044	0.000057	0.0002	0.0044	0.67	0.00006	0.39	0.000004	0.10	0.014	2.51	0.00009	0.00005	0.00013	0.000014	0.00001	0.0013	0.000009
13-Apr-10	0.00003	0.0009	0.54	0.041	0.0047	0.000089	0.0003	0.0047	0.70	0.00008	0.67	0.000005	0.11	0.015	2.31	0.00009	0.00014	0.00009	0.000015	0.00001	0.0024	0.000009
20-Apr-10	0.00003	0.0005	0.53	0.045	0.0045	0.000005	0.0005	0.0045	0.61	0.00014	0.46	0.000005	0.08	0.018	2.54	0.00009	0.00007	0.00005	0.000086	0.00001	0.0041	0.000009
27-Apr-10	0.00035	0.0005	0.54	0.052	0.0046	0.000086	0.0005	0.0046	0.59	0.00013	0.46	0.000005	0.10	0.020	2.41	0.00009	0.00004	0.00005	0.000045	0.00001	0.0050	0.000005
04-May-10	0.00005	0.0004	0.63	0.065	0.0045	0.000027	0.0008	0.0045	0.80	0.00014	0.56	0.000004	0.08	0.025	2.78	0.00009	0.00010	0.00004	0.000048	0.00001	0.0080	0.000004
11-May-10	0.00008	0.0004	0.63	0.074	0.0045	0.000013	0.0012	0.0089	0.67	0.00014	0.49	0.000022	0.06	0.027	2.99	0.00009	0.00019	0.00004	0.000066	0.00002	0.0116	0.000009
18-May-10	0.00009	0.0009	0.68	0.081	0.0043	0.000004	0.0015	0.0039	0.67	0.00013	0.35	0.000004	0.08	0.030	3.11	0.00009	0.00009	0.00004	0.000141	0.00001	0.0168	0.000004
25-May-10	0.00073	0.0009	0.56	0.073	0.0047	0.000121	0.0018	0.0042	0.52	0.00018	0.42	0.000005	0.07	0.023	2.71	0.00009	0.00010	0.00005	0.000134	0.00001	0.0251	0.000005
01-Jun-10	0.00010	0.0008	0.64	0.089	0.0042	0.000349	0.0023	0.0038	0.56	0.00024	0.24	0.000008	0.08	0.029	3.30	0.00008	0.00006	0.00004	0.000196	0.00001	0.0386	0.000004
08-Jun-10	0.00010	0.0008	0.59	0.081	0.0042	0.000170	0.0026	0.0050	0.51	0.00019	0.22	0.000004	0.06	0.024	3.05	0.00008	0.00011	0.00004	0.000222	0.00001	0.0535	0.000004
15-Jun-10	0.00070	0.0009	0.49	0.072	0.0045	0.000036	0.0029	1.0814	1.62	0.00014	0.30	0.000076	0.49	0.018	2.46	0.00009	0.00001	0.00004	0.000275	0.00001	0.0645	0.000004
22-Jun-10																						
29-Jun-10	0.00017	0.0009	0.43	0.065	0.0045	0.000045	0.0037	0.0041	0.37	0.00016	0.27	0.000005	0.07	0.013	2.33	0.00009	0.00013	0.00009	0.000585	0.00001	0.0945	0.000009
06-Jul-10																						
13-Jul-10	0.00013	0.0013	0.35	0.054	0.0045	0.000147	0.0040	0.0196	0.35	0.00018	0.32	0.000018	0.05	0.008	3.57	0.00009	0.00006	0.00004	0.000552	0.00001	0.0948	0.000004
20-Jul-10																						
27-Jul-10	0.00050	0.0018	0.35	0.051	0.0046	0.000200	0.0044	0.0182	0.38	0.00002	0.34	0.000009	0.06	0.009	5.19	0.00009	0.00052	0.00005	0.001269	0.00001	0.0760	0.000009
03-Aug-10	0.00054	0.0019	0.30	0.051	0.0047	0.000122	0.0044	0.0249	0.32	0.00019	0.44	0.000005	0.07	0.007	5.12	0.00009	0.00011	0.00005	0.001382	0.00001	0.0653	0.000005
10-Aug-10	0.00082	0.0018	0.29	0.048	0.0045	0.000068	0.0048	0.0149	0.37	0.00265	0.30	0.000009	0.14	0.007	5.90	0.00009	0.00004	0.00005	0.001233	0.00001	0.0644	0.000014
17-Aug-10	0.00072	0.0027	0.29	0.044	0.0046	0.000055	0.0055	0.0164	0.35	0.00002	0.30	0.000023	0.06	0.005	8.96	0.00009	0.00005	0.00009	0.001451	0.00001	0.0605	0.000009
24-Aug-10	0.00058	0.0026	0.27	0.040	0.0043	0.000009	0.0051	0.0129	0.34	0.00009	0.28	0.000013	0.04	0.005	7.14	0.00009	0.00002	0.00009	0.001135	0.00001	0.0473	0.000013
31-Aug-10	0.00066	0.0023	0.47	0.145	0.0093	0.000005	0.0082	0.0042	0.30	0.00017	0.39	0.000009	0.07	0.005	8.56	0.00009	0.00000	0.00005	0.001288	0.00001	0.0553	0.000005
07-Sep-10	0.00236	0.0026	0.29	0.026	0.0044	0.003049	0.0083	0.0157	0.31	0.00034	0.27	0.000057	0.20	0.003	7.05	0.00009	0.01118	0.00048	0.000961	0.00315	0.0409	0.000148
14-Sep-10	0.00089	0.0029	0.30	0.037	0.0042	0.000017	0.0052	0.0176	0.29	0.00029	0.21	0.000013	0.07	0.005	7.73	0.00008	0.00007	0.00004	0.000869	0.00001	0.0357	0.000042
21-Sep-10	0.00077	0.0023	0.36	0.041	0.0045	0.000081	0.0059	0.0270	0.27	0.00049	0.42	0.000027	2.01	0.004	11.48	0.00009	0.00012	0.00005	0.000829	0.00001	0.0410	0.000023
28-Sep-10	0.00180	0.0034	0.48	0.060	0.0048	0.000562	0.0187	0.0144	0.31	0.00216	1.16	0.000014	0.08	0.006	12.43	0.00010	0.00012	0.00010	0.001858	0.00044	0.0893	0.000019
05-Oct-10	0.00347	0.0028	0.43	0.048	0.0092	0.002778	0.0060	0.0120	0.25	0.00002	0.59	0.000014	0.07	0.005	10.72	0.00009	0.00029	0.00014	0.000994	0.00001	0.0396	0.000014
12-Oct-10	0.00067	0.0030	0.60	0.046	0.0044	0.013181	0.0060	0.0135	0.25	0.00095	0.33	0.000004	6.39	0.008	19.05	0.00009	0.00033	0.00004	0.000518	0.00001	0.0326	0.000004
19-Oct-10	0.00313	0.0036	0.43	0.038	0.0045	0.000111	0.0056	0.0120	0.16	0.00021	0.28	0.000009	0.06	0.003	9.08	0.00009	0.00002	0.00004	0.000476	0.00001	0.0329	0.000009
26-Oct-10	0.02678	0.0032	0.42	0.033	0.0045	0.000059	0.0062	0.0212	0.11	0.00041	0.32	0.000005	0.14	0.003	8.60	0.00009	0.00004	0.00005	0.000779	0.00001	0.0513	0.000005
02-Nov-10	0.00062	0.0027	0.40	0.028	0.0045	0.003110	0.0047	0.0158	0.10	0.00062	0.32	0.000009	0.07	0.003	7.43	0.00009	0.00005	0.00027	0.000406	0.00001	0.0342	0.000005
09-Nov-10	0.00110	0.0040	0.66	0.045	0.0050	0.008564	0.0069	0.0361	0.15	0.00002	1.02	0.000015	0.14	0.005	12.33	0.00010	0.00008	0.00015	0.002034	0.00001	0.0366	0.000005
16-Nov-10	0.00074	0.0028	0.42	0.026	0.0046	0.001325	0.0043	0.0161	0.09	0.00002	0.40	0.000018	0.06	0.003	7.96	0.00009	0.00022	0.00005	0.000351	0.00001	0.0253	0.000005
23-Nov-10	0.00057	0.0032	0.42	0.026	0.0045	0.002187	0.0047	0.0117	0.07	0.00035	0.33	0.000018	0.05	0.003	8.06	0.00009	0.00007	0.00005	0.000339	0.00001	0.0275	0.000009
30-Nov-10	0.00295	0.0021	0.40	0.020	0.0043	0.002355	0.0042	0.0038	0.07	0.00043	0.23	0.000021	0.06	0.003	7.40	0.00009	0.00015	0.00004	0.000247	0.00001	0.0302	0.000009
07-Dec-10	0.00135	0.0022	0.45	0.021	0.0043	0.000043	0.0040	0.0163	0.06	0.00006	0.23	0.000022	0.04	0.003	6.88	0.00009	0.00007	0.00004	0.000178	0.00001	0.0215	0.000004
14-Dec-10	0.00028	0.0023	0.42	0.018	0.0046	0.004163	0.0038	0.0041	0.06	0.00028	0.19	0.000018	0.05	0.003	6.42	0.00009	0.00013	0.00005	0.000214	0.00001	0.0191	0.000005
21-Dec-10	0.01220	0.0027	0.79	0.058	0.0045	0.000005	0.0020	0.0045	0.06	0.00021	0.31	0.000023	0.07	0.005	9.41	0.00009	0.00008	0.00005	0.000248	0.00001	0.0306	0.000005
28-Dec-10	0.00121	0.0023	0.42	0.018	0.0045	0.001062	0.0043	0.0329	0.04	0.00002	0.27	0.000023	0.08	0.002	8.15	0.00009	0.00044	0.00005	0.000216	0.00001	0.0194	0.000005
04-Jan-11	0.02123	0.0024	0.46	0.019	0.0048	0.000005	0.0041	0.0166	0.04	0.00038	0.28	0.000024	0.05	0.002	8.36	0.00010	0.00002	0.00005	0.000168	0.00001	0.0219	0.000005
11-Jan-11	0.02289	0.0018	0.37	0.016	0.0046	0.000487	0.0038	0.0082	0.04	0.00024	0.24	0.000027	0.05	0.002	7.69	0.00009	0.00091	0.00005	0.000323	0.00001	0.0177	0.000005
18-Jan-11	0.00087	0.0017	0.31	0.012	0.0043	0.000230	0.0027	0.0153	0.04	0.00017	0.17	0.000021	0.05	0.002	5.95	0.00009	0.00010	0.00004	0.000111	0.00002	0.0625	0.000004
25-Jan-11	0.00024	0.0022	0.36	0.014	0.0045	0.000160	0.0039	0.0169	0.03	0.00009	0.22	0.000022	0.04	0.002	6.63	0.00009	0.00012	0.00004	0.005785	0.00001	0.0174	0.000004
01-Feb-11	0.00028	0.0013	0.31	0.012	0.0045	0.000013	0.0029	0.0236	0.03	0.00009	0.18	0.000027	0.04	0.002	8.86	0.00009	0.00014	0.00004	0.000081	0.00001	0.0125	0.000004
08-Feb-11	0.00017	0.0013	0.29	0.011	0.0044	0.000524	0.0027	0.0123	0.03	0.00006	0.17	0.000018	0.03	0.002	5.50	0.00009	0.00024	0.00004	0.000065	0.00001	0.0119	0.000004
15-Feb-11	0.00055	0.0018	0.30	0.011	0.0046	0.000041	0.0032	0.0118	0.03	0.00008	0.19	0.000018	0.05	0.002	5.73	0.00009	0.00007	0.00005	0.000142	0.00001	0.0146	0.000005
22-Feb-11	0.00087	0.0013	0.26	0.009	0.0044	0.000570	0.0024	0.0200	0.02	0.00012	0.14	0.000022	0.06	0.002	6.66	0.00009	0.00011	0.00004	0.000170	0.00001	0.0113	0.000004
01-Mar-11	0.05829	0.0017	0.28	0.009	0.0044	0.000196	0.0024	0.0226	0.03	0.00002	0.14	0.000022	0.07	0.002	5.39	0.00009	0.00012	0.00004	0.000056	0.00001	0.0161	0.000004
08-Mar-11	0.00091	0.0013	0.26	0.009	0.0044	0.000261	0.0025	0.0087	0.02	0.00002	0.13	0.000017	0.07	0.002	5.35	0.00009	0.00011	0.00004	0.000088	0.00001	0.0187	0.000004
15-Mar-11	0.00099	0.0018	0.34	0.012	0.0046	0.000055	0.0035	0.0237	0.02	0.00013	0.21	0.000023	0.05	0.002	6.42	0.00001	0.00026	0.00005	0.000161	0.00001	0.0155	0.000005
22-Mar-11	0.00027	0.0013	0.26	0.009	0.0044	0.000352	0.0026	0.0040	0.02	0.00015	0.15	0.000018	0.02	0.001	5.46	0.00009	0.00011	0.00004	0.000062	0.00001	0.0110	0.000004
29-Mar-11	0.02470	0.0013	0.32	0.010	0.0045	0.000004	0.0030	0.0249	0.02	0.00003	0.16	0.000018	0.04	0.001	6.85	0.00009	0.00010	0.00004	0.000068	0.00001	0.3097	0.000004
05-Apr-11	0.00049	0.0018	0.34	0.012	0.0046	0.004368	0.0036	0.0091	0.02	0.00011	0.21	0.000023	0.04	0.001	7.14	0.00009	0.00006	0.00005	0.000083	0.00001	0.0137	0.000005
12-Apr-11	0.01776	0.0014	0.32	0.012	0.0046	0.000018	0.0028	0.0055	0.03	0.00002	0.16	0.000023	0.04	0.003	6.07	0.00009	0.00003	0.00005	0.000048	0.00001	0.0147	0.000005
19-Apr-11	0.00383	0.0019	0.34	0.011	0.0047	0.000205	0.0037	0.0126	0.02	0.00026	0.21	0.000023	0.04	0.001	7.53	0.00009	0.00007	0.00005	0.001339	0.00001	0.0312	0.000005
26-Apr-11	0.00029	0.0018	0.33	0.011	0.2244	0.000110	0.0036	0.0246	0.03	0.00008	0.18	0.000022	0.04	0.002	7.35	0.00009	0.00004	0.00004	0.000066	0.00001	0.0110	0.000004
03-May-11	0.00022	0.0013	0.28	0.009	0.0044	0.000053	0.0032	0.0066	0.02	0.00003	0.16	0.000013	0.04	0.001	6.51	0.00009	0.00000	0.00013	0.000043	0.00001	0.0106	0.000018
10-May-11	0.00023	0.0013	0.31	0.009	0.0044	0.000074	0.0028	0.0039	0.03	0.00003	0.14	0.000017	0.03	0.003	6.13	0.00009	0.00004	0.00026	0.000055	0.00001	0.0135	0.000004
17-May-11	0.00017	0.0017	0.30	0.009	0.0043	0.000017	0.0032	0.0194	0.02	0.00002	0.15	0.000022	0.03	0.001	6.58	0.00009	0.00002	0.00004	0.000049	0.00001	0.0138	0.000004
24-May-11	0.00053	0.0029	0.67	0.023	0.0049	0.000010	0.0067	0.0191	0.03	0.00012	1.03	0.000044	0.05	0.003	15.14	0.00010	0.00012	0.00005	0.000113	0.00001	0.0245	0.000005
31-May-11	0.00157	0.0018	0.32	0.011	0.0045	0.000014	0.0044	0.0099	0.02	0.00009	0.19	0.000032	0.03	0.001	7.25	0.00009	0.00007	0.00005	0.000064	0.00001	0.0162	0.000009
07-Jun-11	0.00015	0.0013	0.27	0.011	0.0044	0.000004	0.0029	0.0040	0.02	0.00007	0.19	0.000013	0.05	0.002	6.64	0.00001	0.00006	0.00018	0.000036	0.00001	0.0128	0.000004
14-Jun-11	0.00052	0.0013	0.25	0.009	0.0044	0.000436	0.0028	0.0040	0.02	0.00002	0.17	0.000018	0.04	0.001	5.94	0.00001	0.00011	0.00004	0.000068	0.00001	0.0119	0.000004
21-Jun-11	0.00041	0.0013	0.27	0.008	0.0045	0.000004	0.0029	0.0058	0.01	0.00010	0.18	0.000018	0.04	0.001	6.32	0.00002	0.00004	0.00004	0.000039	0.00001	0.0632	0.000004
28-Jun-11	0.00030	0.0018	0.33	0.011	0.0088	0.000004	0.0046	0.0040	0.02	0.00009	0.18	0.000018	0.04	0.001	7.79	0.00003	0.00003	0.00004	0.000050	0.00001	0.0128	0.000004
05-Jul-11	0.00064	0.0014	0.33	0.011	0.0045	0.000009	0.0039	0.0041	0.02	0.00009	0.28	0.000014	0.08	0.001	8.15	0.00001	0.00007	0.00018	0.000044	0.00001	0.0135	0.000005

Cell Terminated

Table B-2: Mine Rock Humidity Cell 2 Loading Results

HC 2
Sample = RRR04250

Date	Cycle	Volume mL Input	Output	pH	Acidity (pH 8.3) mgCaCO3/kg/wk	Alkalinity mgCaCO3/kg/wk	Sulphate mg/kg/wk	Al mg/kg/wk	Sb mg/kg/wk	As mg/kg/wk	Ba mg/kg/wk	Be mg/kg/wk	Bi mg/kg/wk	B mg/kg/wk	Cd mg/kg/wk	Ca mg/kg/wk	Cr mg/kg/wk	Co mg/kg/wk	Cu mg/kg/wk	Fe mg/kg/wk
02-Feb-10	1	500	385	7.30	0.90	6.38	63.91	0.019	0.0005	0.00023	0.0026	0.000008	0.0000039	0.0042	0.000013	18.90	0.00019	0.001236	0.00100	0.0039
09-Feb-10	2	500	500	7.40	1.10	8.90	54.50	0.043	0.0043	0.00040	0.0021	0.000010	0.0000050	0.0080	0.000029	19.35	0.00025	0.000092	0.00025	0.0050
16-Feb-10	3	500	460	7.27	1.15	7.60	50.60	0.048	0.0026	0.00032	0.0016	0.000009	0.0000046	0.0064	0.000026	14.58	0.00023	0.000047	0.00032	0.0046
23-Feb-10	4	500	445	7.44	0.92	7.40	37.38	0.047	0.0019	0.00027	0.0019	0.000009	0.0000045	0.0049	0.000028	13.84	0.00022	0.000062	0.00022	0.0045
02-Mar-10	5	500	455	7.40	0.78	5.79	31.40	0.047	0.0013	0.00018	0.0012	0.000009	0.0000046	0.0036	0.000028	10.42	0.00023	0.000046	0.00027	0.0046
09-Mar-10	6	500	460	7.30	0.94	6.48	29.90	0.039	0.0014	0.00023	0.0009	0.000009	0.0000046	0.0041	0.000054	11.55	0.00023	0.000071	0.00097	0.0046
16-Mar-10	7	500	460	7.21	1.03	6.21	25.76	0.051	0.0013	0.00023	0.0007	0.000009	0.0000046	0.0069	0.000043	11.59	0.00023	0.000031	0.00023	0.0046
23-Mar-10	8	500	475	7.24	1.43	6.38	28.50	0.044	0.0011	0.00019	0.0007	0.000010	0.0000048	0.0033	0.000050	10.74	0.00029	0.000025	0.00024	0.0048
30-Mar-10	9	500	460	7.31	1.06	5.73	30.82	0.036	0.0012	0.00014	0.0016	0.000009	0.0000046	0.0032	0.000063	10.90	0.00037	0.000044	0.00028	0.0046
06-Apr-10	10	500	430	7.28	1.00	6.09	30.53	0.041	0.0010	0.00026	0.0007	0.000009	0.0000043	0.0017	0.000065	11.65	0.00030	0.000032	0.00043	0.0043
13-Apr-10	11	500	460	7.18	1.27	6.40	19.78	0.046	0.0010	0.00018	0.0008	0.000009	0.0000046	0.0028	0.000058	8.79	0.00028	0.000031	0.00032	0.0046
20-Apr-10	12	500	440	7.31	1.32	5.98	20.68	0.061	0.0011	0.00022	0.0008	0.000009	0.0000044	0.0026	0.000052	9.37	0.00022	0.000022	0.00026	0.0044
27-Apr-10	13	500	455	7.39	0.98	6.42	19.11	0.049	0.0007	0.00014	0.0006	0.000009	0.0000046	0.0018	0.000053	8.74	0.00032	0.000025	0.00082	0.0046
04-May-10	14	500	455	7.27	1.13	6.29	17.29	0.043	0.0008	0.00023	0.0006	0.000009	0.0000046	0.0023	0.000066	6.96	0.00027	0.000023	0.00023	0.0046
11-May-10	15	500	455	7.22	1.10	5.62	17.29	0.050	0.0009	0.00014	0.0007	0.000009	0.0000046	0.0023	0.000071	8.96	0.00027	0.000024	0.00041	0.0046
18-May-10	16	500	430	7.22	1.16	5.61	17.20	0.047	0.0007	0.00039	0.0006	0.000009	0.0000043	0.0022	0.000059	9.03	0.00026	0.000077	0.00039	0.0013
25-May-10	17	500	465	7.11	1.74	6.20	11.63	0.044	0.0008	0.00014	0.0010	0.000009	0.0000047	0.0021	0.000074	8.14	0.00023	0.000055	0.00079	0.0023
01-Jun-10	18	500	435	7.23	1.18	5.34	14.79	0.051	0.0006	0.00009	0.0005	0.000009	0.0000044	0.0019	0.000061	8.18	0.00026	0.000065	0.00104	0.0017
08-Jun-10	19	500	425	7.09	1.27	5.26	12.33	0.036	0.0006	0.00009	0.0007	0.000009	0.0000043	0.0019	0.000052	7.91	0.00034	0.000044	0.00034	0.0009
15-Jun-10	20	500	435	7.22	1.39	5.46	10.01	0.041	0.0006	0.00013	0.0006	0.000009	0.0000044	0.0017	0.000063	7.09	0.00022	0.000061	0.00035	0.0035
22-Jun-10	21	500	435	7.30	1.12	5.04														
29-Jun-10	22	500	430	7.07	1.20	4.52	9.03	0.034	0.0005	0.00009	0.0006	0.000009	0.0000043	0.0015	0.000070	6.49	0.00047	0.000055	0.00189	0.0060
06-Jul-10	23	500	465	7.00	1.29	4.90														
13-Jul-10	24	500	455	7.01	1.40	4.61	7.74	0.042	0.0006	0.00018	0.0008	0.000009	0.0000046	0.0016	0.000083	6.14	0.00027	0.000083	0.00555	0.0018
20-Jul-10	25	500	450	7.01	1.97	4.62														
27-Jul-10	26	500	450	6.90	1.83	4.46	13.05	0.037	0.0005	0.00122	0.0005	0.000009	0.0000045	0.0016	0.000075	7.25	0.00023	0.000055	0.00518	0.0041
03-Aug-10	27	500	475	7.05	1.90	4.23	11.40	0.034	0.0005	0.00019	0.0012	0.000010	0.0000048	0.0041	0.000086	6.89	0.00024	0.000098	0.00052	0.0010
10-Aug-10	28	500	450	7.11	2.20	4.37	13.50	0.023	0.0003	0.00009	0.0006	0.000009	0.0000045	0.0063	0.000086	7.25	0.00027	0.000028	0.00023	0.0009
17-Aug-10	29	500	450	6.97	1.84	4.37	11.70	0.024	0.0005	0.00014	0.0007	0.000009	0.0000045	0.0015	0.000083	6.57	0.00023	0.000036	0.00041	0.0009
24-Aug-10	30	500	475	6.95	1.72	5.41	12.35	0.045	0.0006	0.00010	0.0005	0.000010	0.0000048	0.0016	0.000086	7.79	0.00024	0.000037	0.00337	0.0010
31-Aug-10	31	500	460	7.22	2.76	5.64	16.10	0.033	0.0009	0.00037	0.0005	0.000009	0.0000046	0.0014	0.000104	6.72	0.00023	0.000111	0.00041	0.0023
07-Sep-10	32	500	435	6.89	2.01	4.25	15.23	0.028	0.0004	0.00009	0.0005	0.000009	0.0000044	0.0102	0.000098	6.44	0.00035	0.000028	0.00039	0.0044
14-Sep-10	33	500	430	6.73	1.76	3.86	10.75	0.025	0.0004	0.00219	0.0005	0.000009	0.0000043	0.0014	0.000085	6.11	0.00022	0.000054	0.00052	0.0030
21-Sep-10	34	500	475	6.83	1.84	4.76	15.68	0.044	0.0007	0.00010	0.0005	0.000010	0.0000285	0.0017	0.000111	7.51	0.00024	0.000068	0.00561	0.0033
28-Sep-10	35	500	490	6.77	1.79	4.85	21.56	0.026	0.0008	0.00049	0.0007	0.000010	0.0000049	0.0022	0.000232	10.29	0.00025	0.000083	0.00044	0.0010
05-Oct-10	36	500	445	6.75	1.88	4.12	16.91	0.044	0.0007	0.00009	0.0006	0.000009	0.0000045	0.0018	0.000120	7.21	0.00022	0.000103	0.00547	0.0009
12-Oct-10	37	500	440	6.74	1.71	3.45	13.20	0.023	0.0051	0.00062	0.0005	0.000009	0.0000044	0.0016	0.000135	6.86	0.00022	0.000172	0.00233	0.0057
19-Oct-10	38	500	445	6.74	1.85	3.67	13.80	0.020	0.0004	0.00009	0.0005	0.000009	0.0000045	0.0015	0.000110	6.10	0.00022	0.000036	0.00031	0.0013
26-Oct-10	39	500	445	6.69	1.62	3.16	12.91	0.020	0.0068	0.00013	0.0004	0.000009	0.0000045	0.0017	0.000096	5.65	0.00031	0.000055	0.00089	0.0009
02-Nov-10	40	500	455	6.97	1.44	4.11	12.29	0.027	0.0003	0.00009	0.0011	0.000009	0.0000046	0.0026	0.000101	6.69	0.00023	0.000029	0.00046	0.0036
09-Nov-10	41	500	495	6.78	2.35	4.43	20.79	0.023	0.0029	0.00025	0.0007	0.000010	0.0000050	0.0018	0.000247	10.10	0.00025	0.000117	0.00050	0.0010
16-Nov-10	42	500	445	7.06	1.75	3.85	11.57	0.017	0.0004	0.00009	0.0005	0.000009	0.0000045	0.0128	0.000129	6.36	0.00022	0.000037	0.00022	0.0009
23-Nov-10	43	500	445	6.73	1.58	3.79	9.35	0.021	0.0004	0.00013	0.0017	0.000009	0.0000045	0.0013	0.000113	5.52	0.00027	0.000047	0.00049	0.0018
30-Nov-10	44	500	440	6.80	1.99	4.14	7.92	0.020	0.0004	0.00009	0.0014	0.000009	0.0000044	0.0020	0.000107	5.72	0.00031	0.000041	0.00040	0.0022
07-Dec-10	45	500	440	6.71	1.77	3.61	10.12	0.025	0.0004	0.00009	0.0004	0.000009	0.0000044	0.0017	0.000108	6.95	0.00022	0.000040	0.00088	0.0040
14-Dec-10	46	500	435	6.91	2.18	4.14	11.75	0.022	0.0004	0.00009	0.0004	0.000009	0.0000044	0.0030	0.000090	5.79	0.00026	0.000038	0.00039	0.0044
21-Dec-10	47	500	455	6.88	2.58	4.30	14.11	0.020	0.0005	0.00032	0.0005	0.000009	0.0000046	0.0014	0.000110	7.42	0.00023	0.000664	0.00077	0.0064
28-Dec-10	48	500	455	7.04	2.48	4.59	11.38	0.025	0.0005	0.00014	0.0026	0.000009	0.0000046	0.0026	0.000093	6.14	0.00041	0.000097	0.00050	0.0009
04-Jan-11	49	500	455	6.95	2.64	3.98	9.56	0.019	0.0003	0.00023	0.0005	0.000009	0.0000046	0.0010	0.000116	5.10	0.00023	0.000053	0.00055	0.0009
11-Jan-11	50	500	455	6.75	1.83	3.16	10.47	0.015	0.0005	0.00009	0.0003	0.000009	0.0000046	0.0028	0.000130	5.37	0.00023	0.000042	0.00032	0.0027
18-Jan-11	51	500	430	6.68	1.56	2.98	12.04	0.018	0.0004	0.00009	0.0005	0.000009	0.0000043	0.0009	0.000096	6.45	0.00022	0.000033	0.00026	0.0060
25-Jan-11	52	500	465	6.73	1.91	3.30	10.70	0.019	0.0003	0.00014	0.0005	0.000014	0.0000047	0.0013	0.000106	5.53	0.00023	0.000034	0.00047	0.0112
01-Feb-11	53	500	435	6.66	1.66	3.42	8.27	0.011	0.0003	0.00017	0.0004	0.000009	0.0000044	0.0010	0.000144	5.70	0.00022	0.000053	0.00057	0.0009
08-Feb-11	54	500	430	6.76	1.41	3.11	13.33	0.017	0.0003	0.00009	0.0004	0.000009	0.0000043	0.0008	0.000117	6.67	0.00022	0.000031	0.00022	0.0026
15-Feb-11	55	500	445	6.74	1.43	3.03	5.79	0.015	0.0003	0.00009	0.0004	0.000009	0.0000045	0.0019	0.000101	4.81	0.00022	0.000055	0.00022	0.0009
22-Feb-11	56	500	430	6.81	1.60	3.55	10.32	0.018	0.0008	0.00013	0.0003	0.000009	0.0000043	0.0015	0.000083	4.60	0.00026	0.000040	0.00039	0.0013
01-Mar-11	57	500	425	6.71	1.36	2.98	10.63	0.018	0.0003	0.00013	0.0003	0.000009	0.0000043	0.0014	0.000103	4.29	0.00021	0.000033	0.00043	0.0009
08-Mar-11	58	500	445	6.70	1.60	3.30	10.24	0.015	0.0004	0.00009	0.0014	0.000009	0.0000045	0.0011	0.000136	4.45	0.00022	0.000061	0.00040	0.0013
15-Mar-11	59	500	470	6.72	1.89	3.29	9.40	0.018	0.0003	0.00009	0.0003	0.000009	0.0000047	0.0012	0.000107	4.75	0.00024	0.000057	0.00056	0.0033
22-Mar-11	60	500	440	6.83	1.84	3.76	8.80	0.017	0.0004	0.00009	0.0008	0.000009	0.0000044	0.0009	0.000127	5.10	0.00022	0.000075	0.00040	0.0022
29-Mar-11	61	500	445	7.14	2.06	4.02	8.01	0.019	0.0003	0.00009	0.0003	0.000009	0.0000045	0.0008	0.000113	5.12	0.00022	0.000042	0.00022	0.0009
05-Apr-11	62	500	460	6.81	1.88	4.23	9.20	0.017	0.0003	0.00009	0.0005	0.000009	0.0000046	0.0013	0.000170	5.34	0.00023	0.000152	0.00032	0.0009
12-Apr-11	63	500	450	6.78	1.56	3.58	9.45	0.018	0.0003	0.00009	0.0004	0.000009	0.0000045	0.0009	0.000093	5.31	0.00023	0.000028	0.00023	0.0090
19-Apr-11	64	500	460	7.10	2.69	4.72	8.74	0.020	0.0003	0.00009	0.0004	0.000009	0.0000046	0.0011	0.000128	5.84	0.00023	0.000053	0.00023	0.0018
26-Apr-11	65	500	450	6.92	1.61	4.50	10.35	0.039	0.0005	0.00009	0.0005	0.000009	0.0000045	0.0008	0.000113	6.30	0.00023	0.000040	0.00023	0.0009
03-May-11	66	500	440	6.88	2.08	3.99	10.12	0.026	0.0003	0.00009	0.0009	0.000009	0.0000044	0.0015	0.000108	6.38	0.00022	0.000065	0.00273	0.0026
10-May-11	67	500	430	6.93	1.66	3.76	11.18	0.021	0.0002	0.00022	0.0003	0.000009	0.0000043	0.0016	0.000128	5.55	0.00022	0.000049	0.00069	0.0133
17-May-11	68	500	435	6.92	1.68	4.06	13.92	0.021	0.0003	0.00009	0.0005	0.000009	0.0000044	0.0008	0.000116	6.87	0.00022	0.000044	0.00022	0.0009
24-May-11	69	500	495	6.49	2.88	4.77	19.31	0.018	0.0004	0.00010	0.0007	0.000010	0.0000050	0.0035	0.000279	10.49	0.00025	0.000117	0.00025	0.0040
31-May-11	70	500	450	6.49	2.44	2.95	11.25	0.010	0.0004	0.00009	0.0003	0.000009	0.0000045	0.0007	0.000112	5.27	0.00023	0.000123	0.00513	0.0032
07-Jun-11	71	500	440	6.83	1.30	3.15	11.00	0.018	0.0003	0.00009	0.0005	0.000009	0.0000044	0.0010	0.000103	6.07	0.00022	0.000051	0.00106	0.0057
14-Jun-11	72	500	435	6.79	1.56	2.60	6.96	0.013	0.0002	0.00009	0.0006	0.000009	0.0000044	0.0011	0.000106	4.48	0.00022	0.000035	0.00022	0.0044
21-Jun-11	73	500	450	6.88	1.39	2.63	9.00	0.014	0.0002	0.00009	0.0003	0.000009	0.0000045	0.0008	0.000117	4.20	0.00023	0.000040	0.00023	0.0023
28-Jun-11	74	500	445	6.93	1.76	3.59	8.46	0.019	0.0002	0.00036	0.0006	0.000009	0.0000045	0.0012	0.000148	4.98	0.00022	0.000043	0.00031	0.0053

HC 2
Sample = RRR04250

Date	Cycle	Volume mL Input	Output	pH	Acidity (pH 8.3) mgCaCO3/kg/wk	Alkalinity mgCaCO3/kg/wk	Sulphate mg/kg/wk	Al mg/kg/wk	Sb mg/kg/wk	As mg/kg/wk	Ba mg/kg/wk	Be mg/kg/wk	Bi mg/kg/wk	B mg/kg/wk	Cd mg/kg/wk	Ca mg/kg/wk	Cr mg/kg/wk	Co mg/kg/wk	Cu mg/kg/wk	Fe mg/kg/wk
05-Jul-11	75	500	455	6.88	1.93	4.19	10.47	0.027	0.0004	0.00009	0.0005	0.000009	0.0000046	0.0021	0.000402	5.73	0.00032	0.000058	0.00055	0.0050
12-Jul-11	76	500	445	7.12	1.82	3.92	8.90	0.018	0.0003	0.00009	0.0003	0.000009	0.0000045	0.0009	0.000121	5.56	0.00022	0.000040	0.00022	0.0009
19-Jul-11	77	500	445	7.27	1.91	3.88	8.90	0.017	0.0003	0.00058	0.0005	0.000009	0.0000045	0.0014	0.000197	4.94	0.00111	0.000071	0.00160	0.0009
26-Jul-11	78	500	455	7.45	2.37	4.61	9.56	0.015	0.0001	0.00050	0.0003	0.000009	0.0000046	0.0044	0.000143	5.10	0.00023	0.000060	0.00091	0.0177
02-Aug-11	79	500	465	7.35	1.96	4.16	11.16	0.015	0.0111	0.00140	0.0005	0.000009	0.0000047	0.0010	0.000138	5.21	0.00023	0.000048	0.00023	0.0009
09-Aug-11	80	500	445	7.19	1.48	3.79	8.01	0.018	0.0003	0.00022	0.0004	0.000009	0.0000045	0.0008	0.000150	4.72	0.00045	0.000144	0.00022	0.0040
16-Aug-11	81	500	455	7.35	2.76	4.59	10.47	0.023	0.0003	0.00009	0.0003	0.000009	0.0000046	0.0010	0.000141	5.01	0.00036	0.000160	0.00241	0.0009
23-Aug-11	82	500	460	6.99	2.49	6.61	9.66	0.022	0.0004	0.00097	0.0007	0.000009	0.0000736	0.0015	0.000148	5.93	0.00032	0.000167	0.00023	0.0028
30-Aug-11	83	500	445	7.27	2.01	4.40	12.02	0.022	0.0003	0.00009	0.0004	0.000009	0.0000045	0.0010	0.005162	5.70	0.00027	0.000054	0.00031	0.0036
06-Sep-11	84	500	450	7.30	1.93	4.03	10.80	0.018	0.0003	0.00009	0.0004	0.000009	0.0000045	0.0017	0.000124	5.58	0.00027	0.000042	0.00027	0.0009
13-Sep-11	85	500	445	7.28	1.63	3.78	16.91	0.018	0.0004	0.00009	0.0008	0.000009	0.0000045	0.0011	0.000169	6.94	0.00089	0.000050	0.00022	0.0009
20-Sep-11	86	500	445	7.48	2.08	4.45	13.35	0.017	0.0003	0.00027	0.0004	0.000009	0.0000490	0.0010	0.000162	6.14	0.00049	0.000058	0.00080	0.0045
27-Sep-11	87	500	450	7.24	2.38	4.30	10.35	0.014	0.0072	0.00126	0.0006	0.000009	0.0000045	0.0013	0.000136	5.58	0.00027	0.000040	0.00023	0.0036
04-Oct-11	88	500	450	7.62	1.97	4.82	10.35	0.013	0.0013	0.00036	0.0005	0.000009	0.0000045	0.0012	0.000128	4.47	0.00023	0.000049	0.00036	0.0009
11-Oct-11	89	500	460	7.34	2.67	4.14	10.58	0.013	0.0002	0.00009	0.0005	0.000009	0.0000046	0.0013	0.000150	5.15	0.00023	0.000046	0.00032	0.0009
18-Oct-11	90	500	440	7.36	1.99	3.89	10.12	0.016	0.0004	0.00048	0.0004	0.000009	0.0006072	0.0012	0.000440	4.75	0.00026	0.000091	0.00202	0.0009
25-Oct-11	91	500	455	7.15	1.56	3.64	10.92	0.014	0.0002	0.00009	0.0003	0.000009	0.0000046	0.0012	0.000169	5.55	0.00032	0.000056	0.00027	0.0023
01-Nov-11	92	500	470	7.47	2.24	4.49	12.22	0.015	0.0003	0.00423	0.0005	0.000009	0.0000047	0.0010	0.000163	5.50	0.00028	0.000056	0.00024	0.0014
08-Nov-11	93	500	420	7.17	2.09	3.36	8.40	0.013	0.0002	0.00021	0.0003	0.000008	0.0000042	0.0005	0.000160	4.58	0.00021	0.000059	0.00076	0.0013
15-Nov-11	94	500	440	7.37	2.16	3.56	9.24	0.018	0.0001	0.00018	0.0003	0.000009	0.0000308	0.0012	0.000148	4.33	0.00022	0.000050	0.00035	0.0013
22-Nov-11	95	500	450	7.01	2.25	4.19	9.45	0.021	0.0002	0.00018	0.0003	0.000009	0.0000045	0.0005	0.000313	4.73	0.00023	0.000047	0.00068	0.0014
29-Nov-11	96	500	445	7.63	2.51	4.77	9.35	0.024	0.0003	0.00009	0.0004	0.000009	0.0000045	0.0011	0.000206	5.16	0.00022	0.000057	0.00027	0.0013
06-Dec-11	97	500	445	7.17	2.22	3.70	9.35	0.019	0.0002	0.00009	0.0004	0.000009	0.0000045	0.0004	0.000264	5.12	0.00022	0.000064	0.00040	0.0013
13-Dec-11	98	500	455	7.30	2.13	4.34	9.56	0.014	0.0002	0.00009	0.0007	0.000009	0.0000046	0.0007	0.000153	5.69	0.00046	0.000050	0.00046	0.0014
20-Dec-11	99	500	445	7.21	2.09	4.51	11.13	0.023	0.0003	0.00009	0.0003	0.000009	0.0000045	0.0006	0.000156	5.61	0.00022	0.000047	0.00027	0.0013
27-Dec-11	100	500	455	7.71	2.52	5.75	9.56	0.024	0.0003	0.00064	0.0005	0.000009	0.0000046	0.0010	0.000143	6.01	0.00023	0.000052	0.00023	0.0014
03-Jan-12	101	500	445	7.18	2.43	4.73	12.02	0.031	0.0002	0.00009	0.0004	0.000009	0.0000045	0.0010	0.000139	5.61	0.00022	0.000051	0.00036	0.0013
10-Jan-12	102	500	445	7.47	1.72	5.21	9.35	0.031	0.0004	0.00018	0.0018	0.000009	0.0000045	0.0008	0.000135	5.25	0.00022	0.000050	0.00027	0.0013
17-Jan-12	103	500	460	7.09	2.06	4.48	9.20	0.021	0.0003	0.00009	0.0004	0.000009	0.0000046	0.0012	0.000190	5.52	0.00023	0.000065	0.00032	0.0014
24-Jan-12	104	500	480	7.28	2.36	4.62	11.52	0.023	0.0003	0.00014	0.0003	0.000010	0.0000048	0.0009	0.000142	5.66	0.00024	0.000052	0.00034	0.0029
31-Jan-12	105	500	460	6.98	1.45	3.72	6.44	0.018	0.0003	0.00120	0.0006	0.000009	0.0000046	0.0028	0.000205	4.19	0.00023	0.000052	0.00028	0.0014
07-Feb-12	106	500	495	7.20	2.37	5.93	14.85	0.016	0.0002	0.00020	0.0005	0.000010	0.0000050	0.0008	0.000273	6.83	0.00025	0.000100	0.00035	0.0015
14-Feb-12	107	500	440	7.51	2.26	4.22	10.12	0.010	0.0001	0.00018	0.0004	0.000009	0.0000044	0.0010	0.000187	4.44	0.00022	0.000047	0.00026	0.0013
21-Feb-12	108	500	445	7.13	1.38	3.28	8.46	0.012	0.0002	0.00018	0.0005	0.000009	0.0000045	0.0033	0.000143	4.45	0.00022	0.000045	0.00076	0.0013
28-Feb-12	109	500	440	7.12	2.18	3.13	7.04	0.015	0.0002	0.00009	0.0007	0.000009	0.0000044	0.0007	0.000188	4.25	0.00022	0.000048	0.00040	0.0013
06-Mar-12	110	500	455	7.07	1.44	3.99	10.01	0.022	0.0002	0.00009	0.0004	0.000009	0.0000046	0.0010	0.000175	5.05	0.00023	0.000053	0.00046	0.0014
13-Mar-12	111	500	440	6.99	2.06	3.46	9.68	0.015	0.0002	0.00062	0.0009	0.000009	0.0000044	0.0015	0.000151	4.58	0.00022	0.000078	0.00057	0.0013
20-Mar-12	112	500	450	7.07	2.33	3.33	8.55	0.008	0.0003	0.00090	0.0003	0.000009	0.0000045	0.0008	0.000166	4.34	0.00023	0.000058	0.00036	0.0032
27-Mar-12	113	500	460	6.74	1.98	2.85	11.04	0.022	0.0002	0.00115	0.0004	0.000009	0.0000046	0.0008	0.000146	5.24	0.00023	0.000045	0.00037	0.0014
03-Apr-12	114	500	450	6.81	1.98	3.45	10.35	0.024	0.0002	0.00009	0.0003	0.000009	0.0000045	0.0006	0.000141	4.86	0.00023	0.000045	0.00036	0.0014
10-Apr-12	115	500	445	7.05	1.42	3.22	11.13	0.016	0.0002	0.00009	0.0003	0.000009	0.0000045	0.0008	0.000142	5.07	0.00022	0.000055	0.00040	0.0013
17-Apr-12	116	500	455	7.04	1.79	3.00	10.92	0.021	0.0002	0.00009	0.0003	0.000009	0.0000046	0.0009	0.000164	4.60	0.00023	0.000055	0.00023	0.0014
24-Apr-12	117	500	435	6.69	1.47	2.83	9.57	0.019	0.0002	0.00009	0.0004	0.000009	0.0000044	0.0005	0.000158	4.70	0.00022	0.000052	0.00044	0.0013
01-May-12	118	500	450	7.12	2.39	3.58	10.35	0.019	0.0003	0.00009	0.0003	0.000009	0.0000045	0.0012	0.000145	4.68	0.00023	0.000045	0.00032	0.0014
08-May-12	119	500	455	6.92	1.78	3.33	8.65	0.013	0.0002	0.00018	0.0004	0.000009	0.0000046	0.0015	0.000153	4.91	0.00023	0.000051	0.00068	0.0014
15-May-12	120	500	445	6.74	1.41	2.55	7.57	0.018	0.0002	0.00009	0.0003	0.000009	0.0000045	0.0013	0.000105	4.29	0.00022	0.000233	0.00089	0.0013
22-May-12	121	500	445	6.66	1.89	2.49	10.68	0.027	0.0001	0.00013	0.0004	0.000009	0.0000045	0.0008	0.000134	5.70	0.00022	0.000048	0.00089	0.0013
29-May-12	122	500	445	6.62	1.76	2.76	8.90	0.022	0.0002	0.00045	0.0003	0.000009	0.0000045	0.0010	0.000132	4.94	0.00022	0.000051	0.00027	0.0031
05-Jun-12	123	500	445	6.95	1.83	2.87	8.46	0.021	0.0001	0.00009	0.0006	0.000009	0.0000045	0.0013	0.000214	4.63	0.00022	0.000056	0.00076	0.0013
12-Jun-12	124	500	450	7.06	1.68	2.93	9.45	0.022	0.0002	0.00009	0.0003	0.000009	0.0000045	0.0017	0.000136	4.95	0.00023	0.000045	0.00027	0.0014
19-Jun-12	125	500	450	6.65	1.23	2.39	12.15	0.021	0.0002	0.00009	0.0005	0.000009	0.0000045	0.0011	0.000140	6.71	0.00023	0.000062	0.00023	0.0014
26-Jun-12	126	500	450	7.09	1.51	3.21	11.25	0.025	0.0002	0.00009	0.0004	0.000009	0.0000045	0.0015	0.000139	5.45	0.00023	0.000027	0.00054	0.0014
03-Jul-12	127	500	440	7.32	2.80	3.81	7.48	0.017	0.0002	0.00009	0.0003	0.000009	0.0000044	0.0008	0.000165	4.44	0.00022	0.000056	0.00044	0.0013
10-Jul-12	128	500	440	6.94	1.69	2.71	10.12	0.019	0.0002	0.00031	0.0004	0.000009	0.0000044	0.0010	0.000160	5.41	0.00022	0.000060	0.00057	0.0013
17-Jul-12	129	500	440	6.74	1.14	2.38	7.92	0.021	0.0002	0.00009	0.0003	0.000009	0.0000044	0.0010	0.000131	4.40	0.00022	0.000050	0.00022	0.0013
24-Jul-12	130	500	440	6.80	0.95	2.23	7.04	0.018	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0007	0.000146	4.58	0.00022	0.000048	0.00031	0.0013
31-Jul-12	131	500	450	7.04	0.97	2.39	7.65	0.021	0.0004	0.00104	0.0008	0.000009	0.0000045	0.0015	0.000144	4.28	0.00023	0.000081	0.00027	0.0014
07-Aug-12	132	500	440	7.09	1.14	2.35	10.56	0.028	0.0001	0.00026	0.0006	0.000009	0.0000044	0.0013	0.000141	5.24	0.00022	0.000238	0.00044	0.0013
14-Aug-12	133	500	435	6.70	1.12	2.12	8.70	0.018	0.0002	0.00009	0.0003	0.000009	0.0000044	0.0010	0.000147	4.29	0.00022	0.000056	0.00061	0.0013
21-Aug-12	134	500	450	6.84	1.49	2.50	9.45	0.019	0.0005	0.00014	0.0003	0.000009	0.0000045	0.0018	0.000182	4.50	0.00023	0.000067	0.00032	0.0014
28-Aug-12	135	500	450	6.71	2.42	2.46	8.55	0.027	0.0006	0.00621	0.0004	0.000009	0.0000045	0.0009	0.000179	4.30	0.00023	0.000071	0.00036	0.0032
04-Sep-12	136	500	460	6.91	1.74	2.75	7.36	0.032	0.0002	0.00009	0.0004	0.000009	0.0000046	0.0011	0.000155	4.26	0.00023	0.000106	0.00032	0.0014
11-Sep-12	137	500	460	6.65	1.38	2.28	7.82	0.012	0.0002	0.00009	0.0005	0.000009	0.0000046	0.0009	0.000144	4.14	0.00023	0.000055	0.00037	0.0014
18-Sep-12	138	500	490	7.01	1.28	4.13	14.21	0.022	0.0002	0.00010	0.0007	0.000010	0.0000049	0.0012	0.000254	6.96	0.00025	0.000084	0.00078	0.0015
25-Sep-12	139	500	435	6.80	1.09	2.78	12.18	0.015	0.0002	0.00009	0.0003	0.000009	0.0000044	0.0007	0.000187	5.57	0.00022	0.000048	0.00022	0.0013
02-Oct-12	140	500	450	6.87	1.56	2.84	13.05	0.010	0.0002	0.00036	0.0004	0.000009	0.0000045	0.0015	0.000161	5.72	0.00023	0.000102	0.00063	0.0014
09-Oct-12	141	500	445	6.61	2.12	2.28	10.68	0.016	0.0001	0.00009	0.0003	0.000009	0.0000045	0.0014	0.000159	4.72	0.00022	0.000130	0.00076	0.0013
16-Oct-12	142	500	415	7.09	2.00	2.62	7.47	0.011	0.0001	0.00008	0.0002	0.000008	0.0000042	0.0010	0.000143	3.59	0.00021	0.000049	0.00050	0.0012
23-Oct-12	143	500	455	6.83	1.67	2.51	8.19	0.020	0.0001	0.00009	0.0003	0.000009	0.0000046	0.0007	0.000172	4.02	0.00023	0.000105	0.00059	0.0014
30-Oct-12	144	500	445	6.81	1.83	2.43	6.68	0.013	0.0001	0.00013	0.0010	0.000009	0.0000045	0.0018	0.001193	3.84	0.00022	0.000083	0.00067	0.0013
06-Nov-12	145	500	440	6.55	1.66	1.96	5.72	0.009	0.0002	0.00013	0.0004	0.000009	0.0000044	0.0009	0.000156	3.89	0.00022	0.000069	0.00035	0.0013
13-Nov-12	146	500	435	6.90	2.67	2.63	7.40	0.009	0.0001	0.00013	0.0003	0.000009	0.0000044	0.0009	0.000163	3.94	0.00022	0.000100	0.00030	0.0013
20-Nov-12	147	500	495	7.31	2.97	5.63	11.88	0.016	0.0002	0.00010	0.0009	0.000010	0.0000050	0.0014	0.000306	7.52	0.00025	0.000123	0.00035	0.0124
27-Nov-12	148	500	510	7.35	2.43	6.26	14.28	0.013	0.0003	0.00015	0.0005	0.000010	0.0000051	0.0012	0.000314	8.72	0.00026	0.000162	0.00036	0.0015
04-Dec-12	149	500	435	7.23	0.84	2.35	6.09	0.020	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0003	0.000140	3.90	0.00026	0.000055	0.00078	0.0013
11-Dec-12	150	500	480	7.26	1.07	3.51	9.12	0.017	0.0003	0.00010	0.0004	0.000010	0.0000144	0.0017	0.000174	5.66	0.00024	0.000073	0.00038	0.0014
18-Dec-12	151	500	475	7.10	1.22	3.21	11.88	0.016	0.0002	0.00010	0.0004	0.000010	0.0000048	0.0005	0.000197	6.08	0.00024	0.000103	0.00062	0.0014
25-Dec-12	152	500	435	7.10	1.49	2.51	8.70	0.015	0.0002	0.00013	0.0003	0.000009	0.0000044	0.0007	0.000151	4.48	0.00022	0.000070	0.00030	0.0013
01-Jan-13	153	500	480	7.14	1.33	3.18	12.48	0.011	0.0002	0.00010	0.0004	0.000010	0.0000048	0.0008	0.000216	5.33	0.00024	0.000081	0.00024	0.0014
08-Jan-13	154	500	440	7.25	1.45	3.16	8.80	0.018	0.0002	0.00044	0.0020	0.000009	0.0000044	0.0007	0.000140	4.71	0.00022	0.000073	0.00022	0.0013
15-Jan-13	155	500	460																	
22-Jan-13	156	500	470	7.21	1.88	3.38	11.75													
29-Jan-13	157	500	445																	
05-Feb-13	158	500	465	7.13	1.53	2.87	10.23													
12-Feb-13	159	500	455																	

HC 2
Sample = RRR04250

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	0.000019	0.0042	1.49	0.018	0.0039	0.00009	0.00046	0.0039	4.70	0.00067	0.30	0.000004	4.20	0.065	20.41	0.00008	0.00018	0.00004	0.000007	0.00018	0.0008	0.000004
09-Feb-10	0.000010	0.0060	2.05	0.032	0.0050	0.00018	0.00020	0.0050	5.40	0.00095	0.46	0.000005	4.46	0.066	21.90	0.00010	0.00001	0.00005	0.000020	0.00027	0.0010	0.000005
16-Feb-10	0.000009	0.0046	1.48	0.024	0.0046	0.00010	0.00046	0.0046	3.30	0.00063	0.40	0.000005	2.53	0.045	14.95	0.00009	0.00003	0.00009	0.000014	0.00027	0.0009	0.000005
23-Feb-10	0.000009	0.0045	1.21	0.024	0.0045	0.00007	0.00013	0.0045	2.60	0.00043	0.37	0.000004	1.58	0.039	12.37	0.00009	0.00001	0.00004	0.000019	0.00027	0.0013	0.000004
02-Mar-10	0.000023	0.0036	0.78	0.020	0.0046	0.00005	0.00014	0.0046	1.71	0.00023	0.29	0.000005	0.89	0.028	10.33	0.00009	0.00006	0.00018	0.000013	0.00025	0.0014	0.000009
09-Mar-10	0.000087	0.0037	0.72	0.031	0.0046	0.00004	0.00028	0.0046	1.58	0.00021	0.37	0.000005	0.61	0.027	9.89	0.00009	0.00019	0.00005	0.000032	0.00024	0.0023	0.000170
16-Mar-10	0.000009	0.0032	0.65	0.028	0.0046	0.00023	0.00023	0.0046	1.41	0.00018	0.37	0.000005	0.52	0.024	9.66	0.00009	0.00000	0.00005	0.000060	0.00028	0.0014	0.000005
23-Mar-10	0.000010	0.0033	0.53	0.029	0.0048	0.00010	0.00005	0.0048	1.17	0.00013	0.40	0.000005	0.37	0.022	8.60	0.00010	0.00003	0.00005	0.000008	0.00028	0.0014	0.000005
30-Mar-10	0.000184	0.0028	0.49	0.032	0.0046	0.00004	0.00018	0.0046	1.11	0.00014	0.37	0.000005	0.36	0.022	8.28	0.00009	0.00013	0.00009	0.000006	0.00026	0.0023	0.000005
06-Apr-10	0.000172	0.0030	0.43	0.027	0.0043	0.00005	0.00004	0.0043	1.10	0.00012	0.39	0.000004	0.34	0.021	9.42	0.00009	0.00005	0.00004	0.000048	0.00029	0.0022	0.000004
13-Apr-10	0.000028	0.0018	0.29	0.026	0.0046	0.00006	0.00005	0.0046	0.75	0.00011	0.38	0.000005	0.25	0.015	6.21	0.00009	0.00014	0.00009	0.000021	0.00027	0.0018	0.000005
20-Apr-10	0.000013	0.0018	0.29	0.020	0.0044	0.00003	0.00018	0.0044	0.86	0.00013	0.42	0.000004	0.23	0.016	7.22	0.00009	0.00008	0.00009	0.000040	0.00039	0.0018	0.000009
27-Apr-10	0.000014	0.0014	0.25	0.022	0.0046	0.00006	0.00005	0.0046	0.70	0.00010	0.37	0.000005	0.21	0.014	6.14	0.00009	0.00010	0.00005	0.000011	0.00030	0.0018	0.000005
04-May-10	0.000009	0.0014	0.19	0.021	0.0046	0.00005	0.00005	0.0046	0.65	0.00007	0.38	0.000005	0.15	0.011	4.87	0.00009	0.00008	0.00005	0.000006	0.00028	0.0023	0.000005
11-May-10	0.000592	0.0014	0.23	0.023	0.0046	0.00005	0.00009	0.0091	0.71	0.00008	0.44	0.000027	0.18	0.014	6.60	0.00009	0.00010	0.00005	0.000012	0.00037	0.0018	0.000005
18-May-10	0.000009	0.0013	0.22	0.020	0.0043	0.00025	0.00009	0.0039	0.65	0.00008	0.38	0.000004	0.18	0.014	6.54	0.00009	0.00008	0.00017	0.000014	0.00032	0.0017	0.000004
25-May-10	0.000414	0.0019	0.20	0.023	0.0186	0.00009	0.00005	0.0042	0.57	0.00026	0.37	0.000005	0.18	0.012	6.14	0.00009	0.00011	0.00023	0.000009	0.00032	0.0033	0.000005
01-Jun-10	0.000987	0.0013	0.17	0.020	0.0087	0.00015	0.00004	0.0039	0.51	0.00006	0.33	0.000004	0.15	0.013	6.09	0.00009	0.00008	0.00013	0.000016	0.00029	0.0017	0.000004
08-Jun-10	0.000009	0.0013	0.15	0.017	0.0043	0.00009	0.00004	0.0094	0.48	0.00003	0.31	0.000004	0.14	0.011	5.74	0.00009	0.00009	0.00009	0.000004	0.00027	0.0017	0.000004
15-Jun-10	0.000044	0.0013	0.14	0.019	0.0044	0.00008	0.00009	0.0104	0.43	0.00009	0.31	0.000026	0.14	0.010	4.92	0.00009	0.00035	0.00013	0.000008	0.00030	0.0026	0.000004
22-Jun-10																						
29-Jun-10	0.000034	0.0009	0.13	0.019	0.0043	0.00009	0.00004	0.0039	0.41	0.00003	0.28	0.000004	0.13	0.009	4.47	0.00009	0.00088	0.00009	0.000008	0.00022	0.0034	0.000004
06-Jul-10																						
13-Jul-10	0.000027	0.0009	0.13	0.023	0.0046	0.00017	0.00018	0.0041	0.38	0.00002	0.29	0.000009	0.12	0.009	5.32	0.00009	0.00025	0.00009	0.000119	0.00022	0.0041	0.000009
20-Jul-10																						
27-Jul-10	0.000014	0.0009	0.12	0.021	0.0045	0.00009	0.00005	0.0059	0.39	0.00007	0.33	0.000005	0.13	0.009	4.86	0.00009	0.00016	0.00014	0.000020	0.00023	0.0032	0.000005
03-Aug-10	0.000052	0.0010	0.12	0.025	0.0048	0.00010	0.00014	0.0043	0.34	0.00002	0.29	0.000005	0.11	0.009	4.67	0.00010	0.00008	0.00005	0.000011	0.00018	0.0033	0.000005
10-Aug-10	0.000009	0.0009	0.11	0.022	0.0045	0.00008	0.00009	0.0041	0.35	0.00003	0.28	0.000005	0.12	0.009	4.86	0.00009	0.00003	0.00005	0.000006	0.00020	0.0036	0.000005
17-Aug-10	0.000027	0.0009	0.10	0.017	0.0045	0.00008	0.00009	0.0041	0.34	0.00006	0.29	0.000009	0.10	0.008	6.17	0.00009	0.00007	0.00009	0.000024	0.00022	0.0032	0.000005
24-Aug-10	0.000038	0.0010	0.11	0.020	0.0048	0.00005	0.00005	0.0043	0.37	0.00007	0.36	0.000014	0.12	0.009	5.46	0.00010	0.00009	0.00014	0.000010	0.00026	0.0038	0.000005
31-Aug-10	0.000023	0.0009	0.11	0.018	0.0046	0.00020	0.00005	0.0041	0.35	0.00006	0.36	0.000005	0.10	0.008	4.97	0.00009	0.00001	0.00009	0.000006	0.00026	0.0051	0.000005
07-Sep-10	0.000013	0.0009	0.09	0.010	0.0044	0.00005	0.00026	0.0039	0.30	0.00002	0.31	0.000004	0.10	0.006	4.65	0.00009	0.00010	0.00009	0.000008	0.00025	0.0039	0.000004
14-Sep-10	0.000009	0.0009	0.09	0.020	0.0043	0.00206	0.00013	0.0039	0.29	0.00008	0.29	0.000009	0.10	0.007	4.11	0.00009	0.00005	0.00022	0.000008	0.00021	0.0034	0.000009
21-Sep-10	0.000029	0.0010	0.11	0.024	0.0048	0.00005	0.00024	0.0048	0.37	0.00064	0.37	0.000014	0.23	0.009	6.03	0.00010	0.00007	0.00010	0.000009	0.00020	0.0043	0.000005
28-Sep-10	0.000088	0.0015	0.15	0.047	0.0049	0.00026	0.00029	0.0044	0.41	0.00002	0.49	0.000005	0.14	0.013	8.09	0.00010	0.00017	0.00005	0.000015	0.00023	0.0103	0.000005
05-Oct-10	0.000071	0.0004	0.10	0.025	0.0045	0.00117	0.00004	0.0067	0.31	0.00002	0.35	0.000004	0.11	0.009	5.43	0.00009	0.00016	0.00009	0.000024	0.00017	0.0053	0.000004
12-Oct-10	0.000176	0.0009	0.10	0.021	0.0044	0.00087	0.00031	0.0040	0.28	0.00007	0.29	0.000004	0.24	0.008	5.85	0.00009	0.00034	0.00013	0.000010	0.00018	0.0057	0.000004
19-Oct-10	0.000045	0.0009	0.08	0.020	0.0045	0.00008	0.00009	0.0040	0.27	0.00002	0.25	0.000004	0.09	0.007	4.22	0.00009	0.00003	0.00004	0.000026	0.00016	0.0067	0.000004
26-Oct-10	0.000125	0.0004	0.08	0.019	0.0045	0.00081	0.00027	0.0040	0.24	0.00221	0.23	0.000004	0.12	0.007	4.54	0.00009	0.00008	0.00009	0.000006	0.00014	0.0058	0.000004
02-Nov-10	0.000241	0.0009	0.09	0.022	0.0046	0.00032	0.00032	0.0041	0.28	0.00005	0.30	0.000005	0.12	0.008	4.52	0.00009	0.00021	0.00018	0.000004	0.00009	0.0077	0.000009
09-Nov-10	0.000262	0.0010	0.15	0.052	0.0050	0.00055	0.00040	0.0045	0.38	0.00003	0.44	0.000005	0.16	0.012	6.88	0.00010	0.00025	0.00010	0.000046	0.00018	0.0144	0.000005
16-Nov-10	0.000303	0.0009	0.08	0.024	0.0045	0.00012	0.00018	0.0040	0.25	0.00002	0.27	0.000004	0.09	0.007	4.29	0.00009	0.00028	0.00004	0.000010	0.00012	0.0071	0.000004
23-Nov-10	0.000031	0.0009	0.07	0.021	0.0045	0.00788	0.00004	0.0040	0.24	0.00005	0.25	0.000004	0.07	0.006	3.46	0.00009	0.00008	0.00009	0.000213	0.00013	0.0062	0.000004
30-Nov-10	0.000062	0.0009	0.08	0.019	0.0044	0.00006	0.00035	0.0040	0.23	0.00016	0.26	0.000004	0.10	0.006	3.79	0.00009	0.00007	0.00013	0.000660	0.00015	0.0070	0.000004
07-Dec-10	0.000664	0.0009	0.08	0.021	0.0044	0.00032	0.00018	0.0040	0.24	0.00002	0.27	0.000004	0.08	0.007	3.81	0.00009	0.00039	0.00013	0.000068	0.00013	0.0066	0.000004
14-Dec-10	0.000022	0.0004	0.07	0.017	0.0044	0.00026	0.00017	0.0039	0.24	0.00021	0.25	0.000004	0.10	0.006	3.51	0.00009	0.00028	0.00009	0.000043	0.00015	0.0039	0.000004
21-Dec-10	0.000455	0.0009	0.10	0.022	0.0046	0.00010	0.00077	0.0041	0.27	0.00002	0.30	0.000005	0.11	0.008	4.73	0.00009	0.00013	0.00009	0.000012	0.00014	0.0068	0.000005
28-Dec-10	0.000628	0.0005	0.08	0.020	0.0046	0.00017	0.00018	0.0196	0.27	0.00021	0.33	0.000005	0.12	0.007	4.41	0.00009	0.00014	0.00009	0.000013	0.00017	0.0050	0.000005
04-Jan-11	0.000678	0.0005	0.07	0.022	0.0046	0.00020	0.00055	0.0173	0.21	0.00002	0.23	0.000005	0.09	0.005	3.35	0.00009	0.00004	0.00027	0.000013	0.00011	0.0082	0.000005
11-Jan-11	0.000014	0.0005	0.08	0.023	0.0046	0.00006	0.00014	0.0041	0.21	0.00002	0.22	0.000005	0.09	0.006	3.65	0.00009	0.00010	0.00014	0.000003	0.00010	0.0082	0.000005
18-Jan-11	0.000017	0.0004	0.07	0.018	0.0043	0.00003	0.00004	0.0039	0.24	0.00002	0.26	0.000004	0.08	0.007	4.60	0.00009	0.00012	0.00009	0.000002	0.00010	0.0065	0.000004
25-Jan-11	0.000242	0.0005	0.07	0.020	0.0047	0.00006	0.00005	0.0042	0.20	0.00002	0.22	0.000005	0.08	0.006	3.74	0.00009	0.00010	0.00005	0.000013	0.00013	0.0084	0.000005
01-Feb-11	0.000009	0.0004	0.07	0.025	0.0044	0.00003	0.00026	0.0252	0.21	0.00002	0.23	0.000004	0.08	0.006	5.44	0.00009	0.00004	0.00009	0.000041	0.00009	0.0091	0.000004
08-Feb-11	0.000009	0.0004	0.07	0.018	0.0043	0.00017	0.00004	0.0082	0.21	0.00002	0.26	0.000004	0.08	0.007	4.39	0.00009	0.00013	0.00004	0.000005	0.00010	0.0073	0.000004
15-Feb-11	0.000013	0.0004	0.06	0.017	0.0045	0.00021	0.00027	0.0178	0.19	0.00002	0.23	0.000004	0.07	0.005	2.95	0.00009	0.00002	0.00004	0.000002	0.00006	0.0058	0.000004
22-Feb-11	0.000499	0.0004	0.05	0.015	0.0043	0.00075	0.00013	0.0112	0.19	0.00002	0.22	0.000009	0.08	0.005	3.24	0.00009	0.00022	0.00013	0.000018	0.00009	0.0052	0.000073
01-Mar-11	0.000493	0.0004	0.06	0.016	0.0043	0.00011	0.00017	0.0132	0.16	0.00002	0.21	0.000004	0.08	0.004	2.77	0.00009	0.00008	0.00013	0.000004	0.00009	0.0115	0.000004
08-Mar-11	0.000463	0.0004	0.06	0.019	0.0045	0.00028	0.00009	0.0071	0.18	0.00002	0.22	0.000004	0.08	0.005	2.91	0.00009	0.00009	0.00009	0.000006	0.00007	0.0089	0.000004
15-Mar-11	0.000465	0.0005	0.07	0.020	0.0047	0.00006	0.00028	0.0042	0.20	0.00002	0.24	0.000005	0.08	0.005	2.86	0.00001	0.00020	0.00009	0.000006	0.00008	0.0071	0.000005
22-Mar-11	0.000013	0.0004	0.07	0.019	0.0044	0.00005	0.00018	0.0040	0.20	0.00008	0.24	0.000004	0.07	0.005	3.37	0.00009	0.00013	0.00009	0.000002	0.00008	0.0070	0.000004
29-Mar-11	0.000018	0.0004	0.06	0.019	0.0045	0.00005	0.00018	0.0040	0.19	0.00002	0.24	0.000004	0.08	0.005	3.45	0.00009	0.00005	0.00009	0.000005	0.00008	0.0053	0.000004
05-Apr-11	0.000350	0.0005	0.07	0.023	0.0046	0.00011	0.00023	0.0225	0.22	0.00007	0.26	0.000005	0.08	0.005	3.55	0.00009	0.00007	0.00009	0.000002	0.00007	0.0078	0.000005
12-Apr-11	0.000009	0.0005	0.07	0.023	0.0045	0.00031	0.00005	0.0041	0.21	0.00002	0.23	0.000005	0.08	0.006	3.69	0.00009	0.00007	0.00009	0.000006	0.00009	0.0050	0.000005
19-Apr-11	0.000046	0.0005	0.07	0.023	0.0046	0.00259	0.00014	0.0083	0.21	0.00018	0.26	0.000005	0.09	0.006	3.87	0.00009	0.00005	0.00014	0.000007	0.00012	0.0133	0.000005
26-Apr-11	0.000009	0.0005	0.07	0.023	0.0045	0.00005	0.00036	0.0041	0.23	0.00002	0.28	0.000005	0.09	0.006	4.13	0.00009	0.00000	0.00086	0.000006	0.00010	0.0054	0.000018
03-May-11	0.000018	0.0004	0.07	0.020	0.0044	0.00007	0.00018	0.0079	0.22	0.00002	0.26	0.000004	0.07	0.007	4.35	0.00009	0.00000	0.00009	0.000002	0.00007	0.0053	0.000004
10-May-11	0.000013	0.0004	0.06	0.018	0.0043	0.00006	0.00030	0.0039	0.20	0.00004	0.23	0.000004	0.07	0.006	3.85	0.00009	0.00003	0.00017	0.000002	0.00003	0.0082	0.000004
17-May-11	0.000009	0.0004	0.06	0.020	0.0044	0.00008	0.00004	0.0161	0.22	0.00005	0.27	0.000022	0.07	0.007	4.87	0.00009	0.00003	0.00004	0.000007	0.00008	0.0061	0.000004
24-May-11	0.000015	0.0010	0.12	0.055	0.0050	0.00006	0.00005	0.0045	0.33	0.00002	0.79	0.000005	0.10	0.011	7.47	0.00010	0.00242	0.00030	0.000007	0.00012	0.0134	0.000005
31-May-11	0.000041	0.0005	0.05	0.018	0.0045	0.00005	0.00009	0.0041	0.19	0.00002	0.23	0.000005	0.07	0.005	3.51	0.00009	0.00005	0.00005	0.000002	0.00005	0.0059	0.000014
07-Jun-11	0.000035	0.0004	0.06	0.020	0.0044	0.00004	0.00018	0.0114	0.20	0.00005	0.27	0.000004	0.11	0.007	4.35	0.00001	0.00007	0.00013	0.000000	0.00006	0.0057	0.000004
14-Jun-11	0.000035	0.0004	0.05	0.017	0.0044	0.00019	0.00026	0.0039	0.16	0.00002	0.23	0.000004	0.08	0.004	3.08	0.00001	0.00013	0.00004	0.000003	0.00007	0.0061	0.000004
21-Jun-11	0.000072	0.0005	0.05	0.018	0.0045	0.00004	0.00005	0.0045	0.16	0.00002	0.20	0.000005	0.07	0.004	2.78	0.00001	0.00013	0.00009	0.000002	0.00006	0.0090	0.000005
28-Jun-11	0.000285	0.0004	0.06	0.022	0.0089	0.00072	0.00013	0.0040	0.19	0.00006	0.24	0.000004	0.08	0.005	3.16	0.00001	0.00001	0.00004	0.000011	0.00007	0.0120	0.000004

HC 2
Sample = RRR04250

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	0.000127	0.0005	0.08	0.022	0.0046	0.00020	0.00018	0.0068	0.21	0.00002	0.31	0.000005	0.11	0.005	3.80	0.00001	0.00010	0.00018	0.000004	0.00009	0.0068	0.000005
12-Jul-11	0.000009	0.0004	0.07	0.023	0.0045	0.00246	0.00013	0.0040	0.21	0.00002	0.28	0.000004	0.08	0.005	3.59	0.00001	0.00004	0.00004	0.000062	0.00007	0.0076	0.000004
19-Jul-11	0.000182	0.0009	0.11	0.022	0.0045	0.00029	0.00031	0.0040	0.18	0.00057	0.23	0.000004	0.09	0.005	3.32	0.00001	0.00108	0.00013	0.000043	0.00188	0.0151	0.000022
26-Jul-11	0.000009	0.0005	0.08	0.040	0.0046	0.00015	0.00023	0.0132	0.18	0.00007	0.23	0.000005	0.11	0.006	3.26	0.00001	0.00002	0.00018	0.000005	0.00005	0.0096	0.000005
02-Aug-11	0.000028	0.0005	0.07	0.024	0.0047	0.00057	0.00009	0.0042	0.18	0.00008	0.25	0.000005	0.11	0.005	3.43	0.00001	0.00004	0.00005	0.000009	0.00007	0.0070	0.000005
09-Aug-11	0.000263	0.0004	0.06	0.019	0.0045	0.00011	0.00018	0.0040	0.16	0.00002	0.21	0.000004	0.08	0.004	3.29	0.00001	0.00000	0.00004	0.000009	0.00007	0.0102	0.000004
16-Aug-11	0.000041	0.0005	0.07	0.023	0.0046	0.00004	0.00041	0.0041	0.18	0.00005	0.24	0.000005	0.07	0.005	3.55	0.00001	0.00005	0.00005	0.000007	0.00003	0.0096	0.000005
23-Aug-11	0.000037	0.0005	0.08	0.027	0.0046	0.00131	0.00046	0.0041	0.21	0.00002	0.29	0.000005	0.08	0.005	3.99	0.00001	0.00006	0.00005	0.000004	0.00008	0.0092	0.000005
30-Aug-11	0.008811	0.0004	0.07	0.023	0.0134	0.00008	0.00027	0.0040	0.20	0.00017	0.25	0.000009	0.08	0.005	3.91	0.00001	0.00010	0.00004	0.000004	0.00006	0.8055	0.000004
06-Sep-11	0.000108	0.0005	0.07	0.020	0.0090	0.00027	0.00014	0.0041	0.19	0.00002	0.28	0.000005	0.07	0.005	3.86	0.00001	0.00002	0.00009	0.000002	0.00008	0.0180	0.000005
13-Sep-11	0.000779	0.0004	0.07	0.022	0.0045	0.00040	0.00004	0.0040	0.20	0.00002	0.24	0.000004	0.08	0.007	5.12	0.00001	0.00007	0.00009	0.000008	0.00005	0.0151	0.000004
20-Sep-11	0.000031	0.0004	0.07	0.025	0.0045	0.00051	0.00027	0.0040	0.19	0.00002	0.26	0.000004	0.07	0.005	4.67	0.00001	0.00014	0.00009	0.000030	0.00007	0.0102	0.000004
27-Sep-11	0.000041	0.0005	0.06	0.022	0.0045	0.00047	0.00005	0.0041	0.19	0.00002	0.21	0.000005	0.07	0.005	4.09	0.00001	0.00006	0.00005	0.000014	0.00005	0.0113	0.000005
04-Oct-11	0.000045	0.0005	0.05	0.019	0.0045	0.00029	0.00005	0.0041	0.16	0.00002	0.19	0.000005	0.06	0.004	3.20	0.00001	0.00004	0.00005	0.000039	0.00005	0.0086	0.000005
11-Oct-11	0.000069	0.0005	0.06	0.024	0.0046	0.00012	0.00018	0.0041	0.15	0.00002	0.25	0.000005	0.06	0.004	3.59	0.00001	0.00001	0.00005	0.000000	0.00005	0.0110	0.000005
18-Oct-11	0.000304	0.0004	0.06	0.021	0.0044	0.00052	0.00022	0.0040	0.16	0.00002	0.18	0.000004	0.06	0.004	3.42	0.00004	0.00004	0.00004	0.000011	0.00004	0.0224	0.000004
25-Oct-11	0.000014	0.0005	0.07	0.028	0.0046	0.00005	0.00005	0.0041	0.20	0.00002	0.27	0.000005	0.07	0.005	3.91	0.00001	0.00005	0.00014	0.000004	0.00005	0.0105	0.000005
01-Nov-11	0.000009	0.0005	0.07	0.026	0.0047	0.00015	0.00014	0.0042	0.18	0.00015	0.23	0.000005	0.07	0.005	3.67	0.00001	0.00005	0.00009	0.000002	0.00005	0.0103	0.000005
08-Nov-11	0.000050	0.0004	0.05	0.021	0.0042	0.00003	0.00004	0.0038	0.16	0.00002	0.24	0.000004	0.06	0.004	3.12	0.00001	0.00002	0.00008	0.000002	0.00008	0.0130	0.000004
15-Nov-11	0.000009	0.0004	0.05	0.021	0.0044	0.00101	0.00022	0.0040	0.15	0.00018	0.15	0.000004	0.05	0.004	2.86	0.00001	0.00001	0.00009	0.000005	0.00009	0.0114	0.000004
22-Nov-11	0.000711	0.0005	0.06	0.023	0.0045	0.00003	0.00018	0.0041	0.15	0.00023	0.21	0.000005	0.02	0.005	3.02	0.00001	0.00002	0.00018	0.000003	0.00010	0.0135	0.000005
29-Nov-11	0.000027	0.0004	0.06	0.024	0.0045	0.00024	0.00027	0.0080	0.18	0.00002	0.24	0.000004	0.06	0.005	3.43	0.00001	0.00001	0.00013	0.000004	0.00014	0.0120	0.000004
06-Dec-11	0.000196	0.0004	0.06	0.025	0.0045	0.00004	0.00009	0.0040	0.18	0.00005	0.40	0.000022	0.04	0.004	3.32	0.00001	0.00000	0.00013	0.000001	0.00011	0.0365	0.000004
13-Dec-11	0.000050	0.0005	0.06	0.027	0.0046	0.00013	0.00023	0.0046	0.18	0.00009	0.21	0.000005	0.08	0.005	3.69	0.00001	0.00005	0.00005	0.000047	0.00004	0.0096	0.000005
20-Dec-11	0.000102	0.0004	0.06	0.025	0.0045	0.00004	0.00018	0.0040	0.18	0.00017	0.25	0.000004	0.05	0.005	3.92	0.00001	0.00000	0.00004	0.000001	0.00010	0.0134	0.000004
27-Dec-11	0.000009	0.0005	0.06	0.026	0.0046	0.00058	0.00027	0.0041	0.18	0.00010	0.23	0.000005	0.06	0.005	4.16	0.00001	0.00000	0.00014	0.000020	0.00014	0.0096	0.000005
03-Jan-12	0.000009	0.0004	0.05	0.023	0.0045	0.00008	0.00031	0.0040	0.17	0.00002	0.21	0.000004	0.04	0.005	3.88	0.00001	0.00001	0.00009	0.000023	0.00020	0.0089	0.000004
10-Jan-12	0.000013	0.0004	0.05	0.024	0.0045	0.00012	0.00009	0.0040	0.16	0.00002	0.22	0.000004	0.06	0.005	3.38	0.00001	0.00008	0.00013	0.000004	0.00022	0.0093	0.000004
17-Jan-12	0.000014	0.0005	0.06	0.027	0.0230	0.00023	0.00115	0.0041	0.16	0.00002	0.20	0.000005	0.04	0.004	3.54	0.00001	0.00002	0.00009	0.000003	0.00025	0.0138	0.000005
24-Jan-12	0.000010	0.0005	0.06	0.025	0.0048	0.00007	0.00014	0.0043	0.18	0.00010	0.21	0.000005	0.05	0.005	3.79	0.00001	0.00001	0.00010	0.000002	0.00015	0.0091	0.000005
31-Jan-12	0.000069	0.0005	0.05	0.023	0.0046	0.00048	0.00009	0.0041	0.14	0.00002	0.16	0.000005	0.06	0.003	2.66	0.00001	0.00001	0.00009	0.000018	0.00021	0.0225	0.000005
07-Feb-12	0.000010	0.0005	0.07	0.048	0.0050	0.00007	0.00030	0.0045	0.19	0.00007	0.26	0.000005	0.05	0.005	4.29	0.00001	0.00000	0.00005	0.000009	0.00013	0.0198	0.000005
14-Feb-12	0.000018	0.0004	0.05	0.023	0.0044	0.00005	0.00013	0.0040	0.13	0.00004	0.16	0.000004	0.05	0.004	2.82	0.00001	0.00000	0.00009	0.000003	0.00004	0.0180	0.000004
21-Feb-12	0.000009	0.0004	0.05	0.023	0.0045	0.00007	0.00018	0.0040	0.15	0.00006	0.18	0.000004	0.06	0.004	2.93	0.00001	0.00001	0.00004	0.000005	0.00008	0.0107	0.000004
28-Feb-12	0.000348	0.0004	0.05	0.022	0.0044	0.00010	0.00004	0.0040	0.14	0.00002	0.18	0.000004	0.05	0.003	2.66	0.00001	0.00003	0.00009	0.000001	0.00015	0.0158	0.000004
06-Mar-12	0.000096	0.0005	0.06	0.025	0.0046	0.00007	0.00041	0.0041	0.17	0.00002	0.21	0.000005	0.06	0.004	3.53	0.00001	0.00139	0.00027	0.000005	0.00016	0.0159	0.000005
13-Mar-12	0.000035	0.0004	0.05	0.022	0.0044	0.00238	0.00018	0.0044	0.15	0.00002	0.19	0.000004	0.06	0.004	3.00	0.00001	0.00013	0.00004	0.000004	0.00004	0.0101	0.000004
20-Mar-12	0.000009	0.0005	0.05	0.024	0.0045	0.00014	0.00005	0.0041	0.15	0.00007	0.18	0.000005	0.05	0.004	2.84	0.00001	0.00007	0.00005	0.000011	0.00003	0.0144	0.000005
27-Mar-12	0.000014	0.0005	0.06	0.026	0.0046	0.00004	0.00009	0.0041	0.14	0.00002	0.18	0.000005	0.06	0.004	3.63	0.00001	0.00001	0.00014	0.000003	0.00015	0.0101	0.000005
03-Apr-12	0.000009	0.0005	0.05	0.025	0.0045	0.00003	0.00009	0.0041	0.16	0.00002	0.18	0.000005	0.05	0.004	3.35	0.00001	0.00000	0.00005	0.000000	0.00009	0.0104	0.000005
10-Apr-12	0.000013	0.0004	0.05	0.026	0.0089	0.00006	0.00013	0.0040	0.16	0.00002	0.20	0.000004	0.05	0.004	3.45	0.00001	0.00001	0.00004	0.000004	0.00012	0.0093	0.000004
17-Apr-12	0.000009	0.0005	0.05	0.024	0.0046	0.00005	0.00009	0.0041	0.13	0.00004	0.18	0.000005	0.04	0.004	3.07	0.00001	0.00001	0.00009	0.000002	0.00014	0.0141	0.000005
24-Apr-12	0.000291	0.0004	0.05	0.022	0.0087	0.00088	0.00013	0.0039	0.15	0.00002	0.19	0.000004	0.04	0.004	3.43	0.00001	0.00003	0.00004	0.000007	0.00012	0.0157	0.000004
01-May-12	0.000041	0.0005	0.06	0.024	0.0180	0.00029	0.00009	0.0041	0.16	0.00002	0.18	0.000005	0.05	0.004	3.18	0.00001	0.00001	0.00009	0.000072	0.00016	0.0117	0.000005
08-May-12	0.000014	0.0005	0.06	0.024	0.0046	0.00005	0.00009	0.0041	0.17	0.00003	0.19	0.000005	0.07	0.004	3.39	0.00001	0.00007	0.00005	0.000005	0.00009	0.0123	0.000005
15-May-12	0.000013	0.0004	0.05	0.021	0.0045	0.00022	0.00018	0.0040	0.15	0.00006	0.17	0.000004	0.05	0.003	2.87	0.00001	0.00000	0.00004	0.000007	0.00013	0.0085	0.000004
22-May-12	0.000013	0.0004	0.05	0.021	0.0045	0.00006	0.00018	0.0040	0.15	0.00002	0.16	0.000004	0.06	0.005	4.28	0.00001	0.00003	0.00009	0.000035	0.00017	0.0111	0.000004
29-May-12	0.000009	0.0004	0.05	0.024	0.0045	0.00020	0.00004	0.0040	0.14	0.00004	0.24	0.000004	0.04	0.004	3.44	0.00001	0.00016	0.00004	0.000004	0.00015	0.0102	0.000004
05-Jun-12	0.000009	0.0004	0.06	0.024	0.0045	0.00010	0.00004	0.0040	0.15	0.00003	0.20	0.000004	0.06	0.004	3.35	0.00001	0.00000	0.00018	0.000001	0.00019	0.0134	0.000004
12-Jun-12	0.000009	0.0005	0.05	0.022	0.0045	0.00005	0.00005	0.0041	0.15	0.00002	0.19	0.000005	0.05	0.004	3.31	0.00001	0.00005	0.00009	0.000002	0.00013	0.0117	0.000005
19-Jun-12	0.000009	0.0005	0.05	0.023	0.0045	0.00005	0.00014	0.0041	0.14	0.00005	0.16	0.000005	0.05	0.005	4.95	0.00001	0.00002	0.00009	0.000002	0.00017	0.0122	0.000005
26-Jun-12	0.000018	0.0005	0.06	0.023	0.0045	0.00006	0.00018	0.0041	0.15	0.00002	0.18	0.000005	0.06	0.004	3.95	0.00001	0.00005	0.00005	0.000008	0.00015	0.0122	0.000005
03-Jul-12	0.000040	0.0004	0.05	0.024	0.0044	0.00001	0.00004	0.0040	0.13	0.00003	0.17	0.000004	0.04	0.004	3.21	0.00001	0.00028	0.00013	0.000009	0.00011	0.0150	0.000004
10-Jul-12	0.000013	0.0004	0.06	0.023	0.0044	0.00010	0.00009	0.0040	0.14	0.00005	0.17	0.000004	0.05	0.004	3.96	0.00001	0.00004	0.00004	0.000007	0.00013	0.0114	0.000004
17-Jul-12	0.000009	0.0004	0.05	0.022	0.0044	0.00001	0.00009	0.0040	0.14	0.00005	0.15	0.000031	0.04	0.004	3.19	0.00001	0.00000	0.00009	0.000000	0.00012	0.0084	0.000004
24-Jul-12	0.000009	0.0004	0.05	0.022	0.0088	0.00005	0.00004	0.0040	0.13	0.00022	0.21	0.000004	0.04	0.003	3.45	0.00001	0.00002	0.00009	0.000000	0.00012	0.0123	0.000004
31-Jul-12	0.000009	0.0005	0.05	0.022	0.0045	0.00011	0.00014	0.0041	0.13	0.00002	0.17	0.000005	0.05	0.003	3.00	0.00001	0.00027	0.00005	0.000005	0.00017	0.0108	0.000005
07-Aug-12	0.000031	0.0004	0.06	0.020	0.0044	0.00012	0.00026	0.0040	0.13	0.00005	0.18	0.000004	0.05	0.004	3.93	0.00001	0.00010	0.00004	0.000004	0.00016	0.0097	0.000022
14-Aug-12	0.000009	0.0004	0.05	0.022	0.0044	0.00003	0.00009	0.0039	0.12	0.00006	0.15	0.000004	0.04	0.003	3.15	0.00001	0.00011	0.00009	0.000001	0.00013	0.0117	0.000004
21-Aug-12	0.000009	0.0005	0.07	0.023	0.0045	0.00014	0.00014	0.0041	0.12	0.00002	0.52	0.000005	0.05	0.003	3.40	0.00001	0.00013	0.00014	0.000005	0.00013	0.0144	0.000005
28-Aug-12	0.000009	0.0005	0.06	0.025	0.0045	0.00013	0.00014	0.0041	0.13	0.00002	0.16	0.000005	0.04	0.003	3.00	0.00001	0.00009	0.00023	0.000005	0.00029	0.0149	0.000005
04-Sep-12	0.000009	0.0005	0.06	0.022	0.0092	0.00021	0.00014	0.0041	0.12	0.00002	0.16	0.000005	0.05	0.003	2.97	0.00001	0.00015	0.00005	0.000005	0.00015	0.0129	0.000005
11-Sep-12	0.000009	0.0005	0.06	0.021	0.0092	0.00012	0.00005	0.0046	0.13	0.00002	0.16	0.000005	0.05	0.004	3.22	0.00001	0.00007	0.00014	0.000003	0.00011	0.0110	0.000005
18-Sep-12	0.000652	0.0005	0.08	0.042	0.0049	0.00004	0.00005	0.0044	0.17	0.00005	0.27	0.000005	0.05	0.005	5.05	0.00001	0.00023	0.00005	0.000006	0.00016	0.0157	0.000005
25-Sep-12	0.000096	0.0004	0.04	0.020	0.0044	0.00004	0.00013	0.0039	0.11	0.00005	0.15	0.000030	0.04	0.005	4.25	0.00001	0.00003	0.00004	0.000007	0.00008	0.0144	0.000004
02-Oct-12	0.000122	0.0005	0.05	0.022	0.0045	0.00021	0.00032	0.0041	0.12	0.00002	0.30	0.000005	0.04	0.005	4.35	0.00001	0.00028	0.00005	0.000011	0.00008	0.0117	0.000005
09-Oct-12	0.000009	0.0004	0.04	0.023	0.0045	0.00002	0.00134	0.0071	0.12	0.00002	0.14	0.000004	0.04	0.004	3.49	0.00001	0.00006	0.00018	0.000008	0.00013	0.0138	0.000004
16-Oct-12	0.000012	0.0004	0.04	0.019	0.0042	0.00004	0.00008	0.0037	0.11	0.00002	0.19	0.000004	0.04	0.003	2.67	0.00001	0.00006	0.00004	0.000001	0.00006	0.0125	0.000004
23-Oct-12	0.000073	0.0005	0.05	0.022	0.0046	0.00282	0.00073	0.0041	0.12	0.00003	0.14	0.000005	0.05	0.003	2.86	0.00001	0.00006	0.00009	0.000002	0.00010	0.0173	0.000005
30-Oct-12	0.000009	0.0004	0.06	0.023	0.0045	0.00005	0.00013	0.0040	0.12	0.00006	0.32	0.000004	0.05	0.003	2.82	0.00001	0.00003	0.00004	0.000008	0.00010	0.0138	0.000004
06-Nov-12	0.000009	0.0004	0.05	0.022	0.0044	0.00012	0.00013	0.0040	0.12	0.00002	0.14	0.000004	0.04	0.003	2.57	0.00001	0.00012	0.00004	0.000005	0.00006	0.0114	0.000004
13-Nov-12	0.000009	0.0004	0.05	0.023	0.0044	0.00005	0.00004	0.0039	0.12	0.00002	0.15	0.000004	0.03	0.003	2.89	0.00001	0.00001	0.00004	0.000007	0.00007	0.0139	0.000004
20-Nov-12	0.000050	0.0005	0.08	0.053	0.0050	0.00005	0.00035	0.0045	0.18	0.00004	0.25	0.000005	0.06	0.006	5.20	0.00001	0.00007	0.00005	0.000003	0.00008	0.0223	0.000005
27-Nov-12	0.000010	0.0005	0.08	0.057	0.0051	0.00010	0.00020	0.0046	0.20	0.00004	0.38	0.000005	0.06	0.007	5.97	0.00001	0.00023	0.00005	0.000002	0.00002	0.0199	0.000005
04-Dec-12	0.000209	0.0004	0.03	0.020	0.0044	0.00005	0.00004	0.0039	0.11	0.00002	0.16	0.000004	0.04	0.003	2.73	0.00001	0.00009	0.00009	0.000002	0.00007	0.0096	0.000004
11-Dec-12	0.000010	0.0005	0.05	0.026	0.0048	0.00037	0.00005	0.0043	0.16	0.00003	0.24	0.000005	0.04	0.004	3.56	0.00001	0.00009	0.00005	0.000006	0.00024	0.0106	0.000005
18-Dec-12	0.000010	0.0005	0.04	0.027	0.0048	0.00005	0.00029	0.0043	0.13	0.00002	0.16	0.000005	0.04	0.005	4.51	0.00001	0.00025	0.00010	0.000064	0.00012	0.0124	0.000005
25-Dec-12	0.000009	0.0004	0.04	0.019	0.0044	0.00030	0.00009	0.0039	0.11	0.00003	0.10	0.000004	0.03	0.004	3.25	0.00001	0.00007	0.00004	0.000002	0.00010	0.0126	0.000004
01-Jan-13	0.000010	0.0005	0.05	0.028	0.0048	0.00070	0.00010	0.0043	0.12	0.00014	0.17	0.000005	0.04	0.005	3.89	0.00001	0.00007	0.00005	0.000003	0.00008	0.0178	0.000005
08-Jan-13	0.000009	0.0004	0.04	0.019	0.0044	0.00045	0.00004	0.0040	0.14	0.00005	0.24	0.000004	0.04	0.004	3.08	0.00001	0.00011	0.00004	0.000001	0.00009	0.0088	0.000145
15-Jan-13																						
22-Jan-13																						
29-Jan-13																						
05-Feb-13																						
12-Feb-13																						

Table B-3: Mine Rock Humidity Cell 3 Loading Results

HC 3
Sample = 588142

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	1	500	420	7.61	0.74	9.07	16.38	0.036	0.0005	0.00176	0.0010	0.000008	0.0000042	0.0118	0.000001	3.43	0.00021	0.000042	0.00076	0.0042
09-Feb-10	2	500	475	7.55	0.87	10.27	11.40	0.051	0.0010	0.00204	0.0010	0.000010	0.0000048	0.0195	0.000001	3.83	0.00024	0.000016	0.00029	0.0048
16-Feb-10	3	500	460	7.44	1.06	9.77	7.36	0.065	0.0007	0.00138	0.0010	0.000009	0.0000046	0.0166	0.000001	3.33	0.00046	0.000005	0.00028	0.0046
23-Feb-10	4	500	510	7.69	0.85	8.59	2.55	0.093	0.0004	0.00087	0.0007	0.000010	0.0000051	0.0077	0.000002	2.64	0.00026	0.000008	0.00026	0.0051
02-Mar-10	5	500	435	7.63	0.61	6.75	3.48	0.061	0.0005	0.00078	0.0008	0.000009	0.0000044	0.0074	0.000013	2.32	0.00022	0.000007	0.00030	0.0044
09-Mar-10	6	500	455	7.40	0.87	5.88	2.73	0.042	0.0004	0.00059	0.0008	0.000009	0.0000046	0.0077	0.000001	2.54	0.00023	0.000006	0.00050	0.0046
16-Mar-10	7	500	465	7.30	0.92	6.29	1.86	0.047	0.0003	0.00056	0.0007	0.000009	0.0000047	0.0098	0.000001	2.73	0.00023	0.000004	0.00023	0.0047
23-Mar-10	8	500	430	7.30	1.24	5.02	3.01	0.041	0.0003	0.00043	0.0006	0.000009	0.0000043	0.0055	0.000001	2.31	0.00022	0.000005	0.00022	0.0043
30-Mar-10	9	500	485	7.43	1.00	5.91	2.91	0.041	0.0004	0.00044	0.0006	0.000010	0.0000049	0.0078	0.000001	2.76	0.00029	0.000004	0.00029	0.0049
06-Apr-10	10	500	435	7.46	0.86	6.38	3.92	0.049	0.0004	0.00048	0.0006	0.000009	0.0000044	0.0044	0.000001	2.57	0.00026	0.000004	0.00030	0.0044
13-Apr-10	11	500	435	7.25	1.20	5.25	2.18	0.041	0.0003	0.00030	0.0006	0.000009	0.0000044	0.0044	0.000007	2.10	0.00030	0.000006	0.00022	0.0044
20-Apr-10	12	500	470	7.46	1.23	5.97	4.23	0.048	0.0003	0.00052	0.0007	0.000009	0.0000047	0.0052	0.000001	2.51	0.00038	0.000005	0.00028	0.0047
27-Apr-10	13	500	455	7.41	0.88	5.03	3.64	0.040	0.0001	0.00032	0.0008	0.000009	0.0000046	0.0032	0.000001	2.33	0.00027	0.000007	0.00118	0.0046
04-May-10	14	500	445	7.27	1.06	4.85	2.67	0.035	0.0002	0.00031	0.0006	0.000009	0.0000045	0.0040	0.000001	2.38	0.00027	0.000003	0.00022	0.0045
11-May-10	15	500	460	7.23	1.00	5.03	2.76	0.039	0.0003	0.00041	0.0006	0.000009	0.0000046	0.0041	0.000001	2.36	0.00032	0.000004	0.00023	0.0046
18-May-10	16	500	460	7.29	1.07	5.09	1.84	0.039	0.0003	0.00046	0.0005	0.000009	0.0000046	0.0043	0.000001	2.20	0.00028	0.000026	0.00023	0.0009
25-May-10	17	500	460	7.21	1.58	5.20	1.38	0.036	0.0002	0.00028	0.0007	0.000009	0.0000046	0.0033	0.000001	1.93	0.00023	0.000007	0.00032	0.0009
01-Jun-10	18	500	445	7.30	1.05	4.97	1.34	0.046	0.0003	0.00036	0.0004	0.000009	0.0000045	0.0036	0.000001	2.06	0.00031	0.000021	0.00040	0.0018
08-Jun-10	19	500	445	7.21	1.13	5.18	0.89	0.032	0.0003	0.00036	0.0004	0.000009	0.0000045	0.0037	0.000001	2.10	0.00027	0.000010	0.00031	0.0009
15-Jun-10	20	500	450	7.36	1.22	5.44	0.90	0.038	0.0003	0.00036	0.0005	0.000009	0.0000045	0.0035	0.000001	2.05	0.00023	0.000010	0.00032	0.0009
22-Jun-10	21	500	445	7.46	0.83	5.01														
29-Jun-10	22	500	440	7.21	0.95	4.73	1.76	0.032	0.0002	0.00070	0.0004	0.000009	0.0000044	0.0029	0.000001	1.72	0.00053	0.000014	0.00075	0.0123
06-Jul-10	23	500	460	7.09	1.09	4.55														
13-Jul-10	24	500	450	7.15	1.18	4.85	0.90	0.031	0.0002	0.00059	0.0004	0.000009	0.0000045	0.0025	0.000001	1.73	0.00027	0.000021	0.00113	0.0018
20-Jul-10	25	500	445	7.41	1.61	6.13														
27-Jul-10	26	500	455	7.10	1.33	5.23	2.73	0.036	0.0002	0.00086	0.0004	0.000009	0.0000046	0.0026	0.000001	2.18	0.00023	0.000016	0.00264	0.0014
03-Aug-10	27	500	450	7.33	1.44	4.55	1.80	0.034	0.0001	0.00027	0.0006	0.000009	0.0000045	0.0037	0.000001	2.00	0.00027	0.000033	0.00041	0.0009
10-Aug-10	28	500	465	7.55	1.77	4.82	1.86	0.026	0.0001	0.00037	0.0004	0.000009	0.0000047	0.0046	0.000001	1.92	0.00037	0.000004	0.00023	0.0028
17-Aug-10	29	500	435	7.42	1.24	4.91	0.87	0.031	0.0003	0.00035	0.0003	0.000009	0.0000044	0.0024	0.000001	1.87	0.00022	0.000001	0.00022	0.0009
24-Aug-10	30	500	465	7.29	1.32	6.15	0.93	0.045	0.0003	0.00037	0.0004	0.000009	0.0000047	0.0026	0.000001	2.34	0.00023	0.000002	0.00028	0.0009
31-Aug-10	31	500	455	7.70	2.17	6.43	2.73	0.035	0.0004	0.00036	0.0004	0.000009	0.0000046	0.0025	0.000001	2.33	0.00023	0.000016	0.00023	0.0009
07-Sep-10	32	500	435	7.05	1.43	4.90	1.74	0.028	0.0001	0.00030	0.0003	0.000009	0.0000044	0.0046	0.000001	1.85	0.00030	0.000003	0.00030	0.0022
14-Sep-10	33	500	445	6.99	1.38	4.59	1.34	0.025	0.0002	0.00067	0.0003	0.000009	0.0000045	0.0021	0.000001	1.86	0.00022	0.000008	0.00049	0.0013
21-Sep-10	34	500	455	7.11	1.22	4.92	1.82	0.027	0.0002	0.00046	0.0003	0.000009	0.0000228	0.0024	0.000001	1.98	0.00023	0.000008	0.00132	0.0009
28-Sep-10	35	500	485	7.13	1.31	5.92	4.85	0.024	0.0002	0.00039	0.0004	0.000010	0.0000049	0.0035	0.000001	2.61	0.00024	0.000011	0.00024	0.0010
05-Oct-10	36	500	450	7.12	1.32	5.49	3.15	0.035	0.0003	0.00041	0.0004	0.000009	0.0000045	0.0028	0.000001	2.32	0.00023	0.000030	0.00212	0.0009
12-Oct-10	37	500	450	7.09	1.27	4.75	2.25	0.027	0.0023	0.00045	0.0003	0.000009	0.0000045	0.0023	0.000009	2.02	0.00023	0.000043	0.00126	0.0009
19-Oct-10	38	500	455	7.08	1.49	5.28	2.28	0.027	0.0002	0.00027	0.0036	0.000009	0.0000046	0.0023	0.000003	1.95	0.00023	0.000001	0.00023	0.0009
26-Oct-10	39	500	450	7.08	1.13	4.63	1.80	0.024	0.0026	0.00027	0.0003	0.000009	0.0000045	0.0024	0.000001	1.68	0.00036	0.000007	0.00054	0.0009
02-Nov-10	40	500	460	7.25	1.16	5.09	2.30	0.030	0.0001	0.00032	0.0004	0.000009	0.0000046	0.0029	0.000001	1.91	0.00023	0.000001	0.00023	0.0014
09-Nov-10	41	500	495	7.29	1.45	6.36	1.49	0.022	0.0011	0.00040	0.0004	0.000010	0.0000050	0.0028	0.000005	2.93	0.00025	0.000019	0.00045	0.0030
16-Nov-10	42	500	450	7.46	1.35	5.19	0.90	0.022	0.0001	0.00027	0.0003	0.000009	0.0000045	0.0055	0.000001	1.91	0.00027	0.000005	0.00077	0.0009
23-Nov-10	43	500	440	7.08	1.17	5.62	1.76	0.026	0.0002	0.00040	0.0003	0.000009	0.0000044	0.0023	0.000001	2.02	0.00031	0.000012	0.00031	0.0009
30-Nov-10	44	500	455	7.20	1.59	6.07	0.91	0.030	0.0002	0.00032	0.0038	0.000009	0.0000046	0.0021	0.000001	2.08	0.00027	0.000001	0.00023	0.0009
07-Dec-10	45	500	445	7.06	1.44	5.17	0.89	0.061	0.0002	0.00027	0.0004	0.000009	0.0000045	0.0023	0.000004	2.20	0.00045	0.000007	0.00062	0.0009
14-Dec-10	46	500	455	7.28	1.75	5.76	1.82	0.027	0.0002	0.00023	0.0004	0.000009	0.0000046	0.0032	0.000001	1.92	0.00036	0.000001	0.00114	0.0009
21-Dec-10	47	500	470	7.35	2.18	5.97	0.94	0.025	0.0003	0.00042	0.0003	0.000009	0.0000047	0.0017	0.000001	2.59	0.00024	0.000030	0.00033	0.0009
28-Dec-10	48	500	460	7.38	2.12	4.42	0.92	0.028	0.0004	0.00032	0.0009	0.000009	0.0000046	0.0030	0.000001	2.05	0.00046	0.000022	0.00101	0.0009
04-Jan-11	49	500	460	7.32	2.14	5.27	1.38	0.026	0.0001	0.00041	0.0004	0.000009	0.0000046	0.0015	0.000027	1.88	0.00023	0.000030	0.00037	0.0018
11-Jan-11	50	500	430	7.09	1.31	4.33	1.72	0.017	0.0002	0.00022	0.0004	0.000009	0.0000043	0.0029	0.000001	1.81	0.00022	0.000008	0.00022	0.0009
18-Jan-11	51	500	455	7.10	1.37	4.77	1.82	0.022	0.0002	0.00027	0.0003	0.000009	0.0000046	0.0015	0.000001	2.04	0.00023	0.000004	0.00023	0.0018
25-Jan-11	52	500	465	7.17	1.51	4.92	1.86	0.024	0.0001	0.00028	0.0003	0.000009	0.0000047	0.0017	0.000001	2.01	0.00023	0.000005	0.00023	0.0033
01-Feb-11	53	500	495	7.03	1.52	5.56	0.99	0.019	0.0001	0.00030	0.0003	0.000010	0.0000050	0.0018	0.000001	2.50	0.00025	0.000006	0.00025	0.0010
08-Feb-11	54	500	460	7.15	1.20	4.63	2.30	0.022	0.0001	0.00028	0.0002	0.000009	0.0000046	0.0013	0.000001	1.96	0.00023	0.000003	0.00023	0.0014
15-Feb-11	55	500	450	7.10	1.26	4.41	1.80	0.020	0.0001	0.00023	0.0002	0.000009	0.0000045	0.0021	0.000001	1.69	0.00023	0.000009	0.00023	0.0009
22-Feb-11	56	500	445	7.17	1.35	4.53	3.12	0.019	0.0003	0.00031	0.0002	0.000009	0.0000045	0.0019	0.000002	1.69	0.00022	0.000009	0.00022	0.0009
01-Mar-11	57	500	450	6.96	1.05	4.06	3.15	0.018	0.0002	0.00027	0.0002	0.000009	0.0000045	0.0014	0.000087	1.61	0.00023	0.000005	0.00027	0.0009
08-Mar-11	58	500	465	7.03	1.46	4.46	2.79	0.019	0.0003	0.00023	0.0011	0.000009	0.0000047	0.0015	0.000001	1.61	0.00023	0.000010	0.00033	0.0009
15-Mar-11	59	500	445	7.10	1.45	4.17	1.78	0.022	0.0001	0.00018	0.0003	0.000009	0.0000045	0.0015	0.000003	1.73	0.00022	0.000027	0.00036	0.0027
22-Mar-11	60	500	455	7.24	1.47	4.66	2.73	0.017	0.0001	0.00018	0.0005	0.000009	0.0000046	0.0012	0.000001	1.64	0.00023	0.000035	0.00023	0.0009
29-Mar-11	61	500	460	7.31	1.60	5.10	1.84	0.018	0.0001	0.00018	0.0002	0.000009	0.0000046	0.0012	0.000005	1.86	0.00023	0.000010	0.00023	0.0009
05-Apr-11	62	500	460	7.21	1.52	4.97	2.30	0.017	0.0001	0.00014	0.0002	0.000009	0.0000046	0.0014	0.000006	1.74	0.00023	0.000017	0.00023	0.0009
12-Apr-11	63	500	450	7.21	1.30	4.33	1.80	0.017	0.0001	0.00023	0.0002	0.000009	0.0000045	0.0012	0.000001	1.60	0.00023	0.000006	0.00023	0.0023
19-Apr-11	64	500	455	7.38	2.12	5.58	2.28	0.020	0.0001	0.00009	0.0002	0.000009	0.0000046	0.0013	0.000116	1.78	0.00023	0.000009	0.00023	0.0009
26-Apr-11	65	500	450	7.29	1.31	4.37	1.80	0.019	0.0001	0.00027	0.0002	0.000009	0.0000045	0.0012	0.000001	1.79	0.00023	0.000001	0.00023	0.0009
03-May-11	66	500	445	7.46	1.37	4.39	1.78	0.018	0.0001	0.00013	0.0003	0.000009	0.0000045	0.0018	0.000001	1.59	0.00022	0.000015	0.00058	0.0013
10-May-11	67	500	455	7.33	1.37	4.32	1.82	0.026	0.0001	0.00009	0.0002	0.000009	0.0000046	0.0015	0.000004	1.59	0.00023	0.000034	0.00032	0.0009
17-May-11	68	500	450	7.44	1.25	4.42	1.80	0.020	0.0001	0.00023	0.0002	0.000009	0.0000045	0.0010	0.000001	1.54	0.00023	0.000005	0.00023	0.0009
24-May-11	69	500	515	7.57	2.00	4.66	2.06	0.016	0.0001	0.00021	0.0003	0.000010	0.0000052	0.0035	0.000002	2.13	0.00026	0.000010	0.00026	0.0010
31-May-11	70	500	455	7.43	1.69	4.67	1.82	0.008	0.0001	0.00023	0.0003	0.000009	0.0000046	0.0013	0.000001	1.51	0.00023	0.000027	0.00146	0.0009
07-Jun-11	71	500	450	7.30	1.04	4.46	1.35	0.021	0.0001	0.00027	0.0003	0.000009	0.0000045	0.0016	0.000001	1.63	0.00023	0.000017	0.00041	0.0014
14-Jun-11	72	500	445	7.54	1.18	4.03	1.78	0.019	0.0001	0.00027	0.0003	0.000009	0.0000045	0.0016	0.000004	1.52	0.00022	0.000004	0.00022	0.0022
21-Jun-11	73	500	450	7.30	1.08	4.18	1.35	0.017	0.0001	0.00018	0.0002	0.000009	0.0000045	0.0010	0.000001	1.65	0.00023	0.000005	0.00023	0.0009
28-Jun-11	74	500	450	7.28	1.35	4.58	1.80	0.018	0.0001	0.00018	0.0002	0.000009	0.0000045	0.0016	0.000001	1.72	0.00023	0.000007	0.00023	0.0009

HC 3
Sample = 588142

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	75	500	455	7.31	1.52	4.52	1.37	0.018	0.0001	0.00027	0.0002	0.000009	0.0000046	0.0022	0.000123	1.79	0.00023	0.000016	0.00023	0.0009
12-Jul-11	76	500	450	7.13	1.74	4.03	1.35	0.017	0.0001	0.00018	0.0002	0.000009	0.0000045	0.0011	0.000004	1.92	0.00023	0.000009	0.00023	0.0009
19-Jul-11	77	500	465	7.45	1.73	4.30	0.93	0.015	0.0001	0.00014	0.0003	0.000009	0.0000186	0.0019	0.000007	1.75	0.00023	0.000214	0.00274	0.0009
26-Jul-11	78	500	455	7.68	2.09	4.68	0.91	0.018	0.0002	0.00246	0.0002	0.000009	0.0000046	0.0014	0.000001	1.63	0.00023	0.000006	0.00023	0.0191
02-Aug-11	79	500	455	7.71	1.48	4.05	0.91	0.018	0.0001	0.00041	0.0003	0.000009	0.0000046	0.0013	0.000001	1.76	0.00041	0.000006	0.00023	0.0009
09-Aug-11	80	500	450	7.45	1.26	4.48	0.90	0.016	0.0001	0.00117	0.0002	0.000009	0.0000045	0.0012	0.000001	1.49	0.00036	0.000033	0.00023	0.0014
16-Aug-11	81	500	460	7.67	2.21	5.39	0.92	0.017	0.0001	0.00023	0.0002	0.000009	0.0000046	0.0012	0.000001	1.84	0.00028	0.000009	0.00023	0.0009
23-Aug-11	82	500	455	7.52	1.91	4.83	0.91	0.018	0.0001	0.00018	0.0002	0.000009	0.0000046	0.0014	0.000001	1.87	0.00023	0.000006	0.00023	0.0018
30-Aug-11	83	500	455	7.55	1.80	4.55	1.82	0.014	0.0001	0.00027	0.0007	0.000009	0.0000046	0.0014	0.000008	1.77	0.00046	0.000005	0.00023	0.0014
06-Sep-11	84	500	455	7.68	1.63	4.13	0.91	0.014	0.0001	0.00023	0.0004	0.000009	0.0000046	0.0011	0.000002	1.53	0.00023	0.000006	0.00023	0.0009
13-Sep-11	85	500	455	7.65	1.30	4.22	0.91	0.014	0.0001	0.00032	0.0005	0.000009	0.0000046	0.0016	0.000003	1.53	0.00073	0.000007	0.00023	0.0009
20-Sep-11	86	500	450	7.4	1.83	4.30	0.90	0.013	0.0001	0.00023	0.0003	0.000009	0.0000045	0.0013	0.000007	1.57	0.00059	0.000009	0.00023	0.0036
27-Sep-11	87	500	455	7.45	2.17	4.54	1.82	0.014	0.0002	0.00223	0.0002	0.000009	0.0000046	0.0005	0.000003	1.50	0.00027	0.000016	0.00023	0.0018
04-Oct-11	88	500	460	7.49	1.83	4.41	1.38	0.015	0.0002	0.00023	0.0004	0.000009	0.0000046	0.0016	0.000002	1.50	0.00028	0.000006	0.00041	0.0009
11-Oct-11	89	500	450	7.67	2.08	4.30	1.80	0.014	0.0012	0.00036	0.0003	0.000009	0.0000045	0.0015	0.000001	1.54	0.00027	0.000007	0.00023	0.0009
18-Oct-11	90	500	450	7.34	1.77	4.20	1.35	0.015	0.0002	0.00032	0.0003	0.000009	0.0000045	0.0014	0.000001	1.57	0.00027	0.000003	0.00023	0.0009
25-Oct-11	91	500	455	7.19	1.16	3.59	1.37	0.013	0.0001	0.00018	0.0002	0.000009	0.0000046	0.0013	0.000003	1.69	0.00036	0.000005	0.00023	0.0023
01-Nov-11	92	500	460	7.36	1.98	4.28	1.84	0.016	0.0001	0.00124	0.0002	0.000009	0.0000046	0.0011	0.000001	1.62	0.00028	0.000007	0.00023	0.0023
08-Nov-11	93	500	450	7.48	2.00	4.15	0.90	0.013	0.0001	0.00023	0.0002	0.000009	0.0000045	0.0009	0.000006	1.63	0.00023	0.000007	0.00032	0.0059
15-Nov-11	94	500	455	7.27	2.19	4.02	1.37	0.014	0.0001	0.00023	0.0001	0.000009	0.0000046	0.0010	0.000001	1.46	0.00023	0.000005	0.00023	0.0014
22-Nov-11	95	500	450	7.51	2.12	4.50	0.90	0.023	0.0001	0.00059	0.0002	0.000009	0.0000045	0.0024	0.000008	1.46	0.00023	0.000014	0.00023	0.0014
29-Nov-11	96	500	455	7.55	2.35	4.76	1.37	0.023	0.0001	0.00032	0.0002	0.000009	0.0000046	0.0013	0.000012	1.52	0.00023	0.000007	0.00023	0.0014
06-Dec-11	97	500	450	7.35	1.97	3.86	1.80	0.014	0.0001	0.00014	0.0013	0.000009	0.0000045	0.0027	0.000004	1.41	0.00023	0.000005	0.00023	0.0014
13-Dec-11	98	500	450	7.22	1.92	4.00	0.90	0.011	0.0001	0.00018	0.0003	0.000009	0.0000045	0.0008	0.000004	1.48	0.00041	0.000004	0.00023	0.0014
20-Dec-11	99	500	450	7.52	1.80	4.05	0.90	0.017	0.0001	0.00014	0.0002	0.000009	0.0000045	0.0009	0.000001	1.35	0.00023	0.000004	0.00036	0.0014
27-Dec-11	100	500	455	7.82	2.01	4.87	1.37	0.030	0.0001	0.00018	0.0002	0.000009	0.0000046	0.0010	0.000001	1.42	0.00023	0.000003	0.00023	0.0014
03-Jan-12	101	500	450	7.46	2.11	5.14	1.35	0.030	0.0001	0.00126	0.0003	0.000009	0.0000045	0.0010	0.000001	1.43	0.00023	0.000009	0.00023	0.0014
10-Jan-12	102	500	450	7.29	1.54	4.58	1.35	0.029	0.0001	0.00018	0.0007	0.000009	0.0000045	0.0009	0.000007	1.35	0.00023	0.000004	0.00023	0.0014
17-Jan-12	103	500	455	7.31	1.87	4.72	1.37	0.019	0.0001	0.00014	0.0002	0.000009	0.0000046	0.0021	0.000003	1.74	0.00023	0.000006	0.00023	0.0014
24-Jan-12	104	500	485	7.29	2.27	5.58	1.46	0.025	0.0001	0.00019	0.0002	0.000010	0.0000049	0.0010	0.000001	1.62	0.00024	0.000008	0.00024	0.0029
31-Jan-12	105	500	450	7.07	1.32	4.88	0.90	0.022	0.0001	0.00036	0.0002	0.000009	0.0000045	0.0015	0.000001	1.42	0.00023	0.000005	0.00054	0.0014
07-Feb-12	106	500	495	7.50	2.37	5.86	1.98	0.017	0.0001	0.00020	0.0002	0.000010	0.0000050	0.0010	0.000010	2.23	0.00025	0.000007	0.00059	0.0015
14-Feb-12	107	500	450	7.48	2.06	5.13	2.25	0.014	0.0001	0.00018	0.0002	0.000009	0.0000045	0.0010	0.000061	2.03	0.00023	0.000014	0.00059	0.0018
21-Feb-12	108	500	455	7.11	1.30	4.05	1.82	0.015	0.0001	0.00014	0.0004	0.000009	0.0000046	0.0030	0.000005	1.45	0.00023	0.000002	0.00027	0.0014
28-Feb-12	109	500	445	7.08	2.04	5.16	1.34	0.024	0.0001	0.00013	0.0003	0.000009	0.0000045	0.0008	0.000011	1.70	0.00022	0.000004	0.00036	0.0018
06-Mar-12	110	500	460	7.2	1.34	4.20	0.92	0.028	0.0001	0.00014	0.0002	0.000009	0.0000046	0.0010	0.000011	1.62	0.00023	0.000009	0.00037	0.0014
13-Mar-12	111	500	445	7.17	1.94	4.35	0.89	0.016	0.0001	0.00045	0.0006	0.000009	0.0000045	0.0014	0.000001	1.49	0.00022	0.000022	0.00022	0.0013
20-Mar-12	112	500	460	7.19	2.19	3.86	1.38	0.012	0.0001	0.00041	0.0002	0.000009	0.0000046	0.0009	0.000001	1.47	0.00023	0.000003	0.00023	0.0014
27-Mar-12	113	500	455	7.02	1.63	3.64	1.37	0.028	0.0001	0.00109	0.0002	0.000009	0.0000046	0.0008	0.000003	1.59	0.00023	0.000001	0.00023	0.0036
03-Apr-12	114	500	455	6.97	1.96	3.61	1.37	0.026	0.0001	0.00014	0.0002	0.000009	0.0000046	0.0007	0.000025	1.47	0.00023	0.000012	0.00041	0.0014
10-Apr-12	115	500	455	7.06	1.09	3.57	1.82	0.018	0.0001	0.00014	0.0002	0.000009	0.0000046	0.0010	0.000001	1.57	0.00023	0.000006	0.00023	0.0014
17-Apr-12	116	500	460	7.13	1.75	3.68	2.30	0.019	0.0001	0.00009	0.0003	0.000009	0.0000046	0.0011	0.000001	1.59	0.00023	0.000002	0.00051	0.0014
24-Apr-12	117	500	465	7.12	1.30	3.99	0.93	0.022	0.0001	0.00042	0.0002	0.000009	0.0000047	0.0008	0.000001	1.54	0.00023	0.000007	0.00079	0.0019
01-May-12	118	500	450	7.45	2.05	4.42	1.80	0.019	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0008	0.000001	1.54	0.00023	0.000003	0.00023	0.0014
08-May-12	119	500	450	7.15	1.40	3.85	0.90	0.015	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0014	0.000001	1.43	0.00023	0.000004	0.00023	0.0014
15-May-12	120	500	460	7.2	1.25	3.80	1.38	0.021	0.0001	0.00009	0.0002	0.000009	0.0000046	0.0012	0.000001	1.45	0.00023	0.000040	0.00037	0.0014
22-May-12	121	500	455	7.13	1.69	3.69	1.37	0.029	0.0001	0.00014	0.0001	0.000009	0.0000046	0.0008	0.000001	1.38	0.00023	0.000008	0.00027	0.0014
29-May-12	122	500	450	7.03	1.29	3.35	0.90	0.021	0.0001	0.00023	0.0001	0.000009	0.0000045	0.0010	0.000001	1.40	0.00023	0.000007	0.00023	0.0014
05-Jun-12	123	500	455	7.05	1.58	3.78	0.91	0.023	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0013	0.000001	1.47	0.00023	0.000010	0.00036	0.0014
12-Jun-12	124	500	450	7.21	1.41	3.84	1.35	0.024	0.0001	0.00027	0.0001	0.000009	0.0000045	0.0014	0.000001	1.53	0.00023	0.000001	0.00023	0.0014
19-Jun-12	125	500	470	7.13	1.18	3.62	0.94	0.023	0.0001	0.00014	0.0001	0.000009	0.0000047	0.0012	0.000001	1.50	0.00024	0.000007	0.00024	0.0014
26-Jun-12	126	500	455	7.16	1.30	3.74	1.82	0.027	0.0001	0.00009	0.0002	0.000009	0.0000046	0.0016	0.000001	1.52	0.00023	0.000001	0.00036	0.0014
03-Jul-12	127	500	455	7.44	2.61	4.51	1.37	0.017	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0011	0.000001	1.59	0.00023	0.000002	0.00023	0.0014
10-Jul-12	128	500	450	7.04	1.24	3.41	2.25	0.020	0.0001	0.00036	0.0002	0.000009	0.0000045	0.0009	0.000001	1.60	0.00023	0.000001	0.00063	0.0014
17-Jul-12	129	500	450	7.21	0.94	3.52	1.35	0.023	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0011	0.000001	1.47	0.00023	0.000008	0.00023	0.0014
24-Jul-12	130	500	455	7.01	1.09	3.21	0.91	0.020	0.0001	0.00009	0.0002	0.000009	0.0000046	0.0008	0.000001	1.44	0.00023	0.000003	0.00023	0.0014
31-Jul-12	131	500	455	7.19	0.85	3.03	1.82	0.022	0.0001	0.00036	0.0002	0.000009	0.0000046	0.0012	0.000001	1.36	0.00023	0.000008	0.00023	0.0014
07-Aug-12	132	500	465	7.32	0.93	3.85	1.40	0.033	0.0003	0.00042	0.0002	0.000009	0.0000047	0.0011	0.000001	1.49	0.00079	0.000067	0.00033	0.4650
14-Aug-12	133	500	445	7.03	0.76	3.13	0.89	0.023	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0010	0.000002	1.34	0.00022	0.000001	0.00076	0.0013
21-Aug-12	134	500	465	6.97	1.38	3.19	1.86	0.022	0.0002	0.00028	0.0001	0.000009	0.0000047	0.0014	0.000001	1.40	0.00023	0.000003	0.00140	0.0014
28-Aug-12	135	500	460	7.21	1.98	3.56	2.30	0.025	0.0001	0.00133	0.0002	0.000009	0.0000046	0.0011	0.000018	1.35	0.00023	0.000043	0.00170	0.0014
04-Sep-12	136	500	480	6.96	1.69	3.53	2.40	0.032	0.0001	0.00010	0.0002	0.000010	0.0000048	0.0012	0.000003	1.65	0.00024	0.000024	0.00038	0.0014
11-Sep-12	137	500	465	7.06	1.25	3.05	2.79	0.015	0.0001	0.00009	0.0002	0.000009	0.0000047	0.0010	0.000002	1.40	0.00023	0.000007	0.00023	0.0014
18-Sep-12	138	500	510	7.07	1.15	4.31	2.55	0.018	0.0001	0.00020	0.0002	0.000010	0.0000051	0.0014	0.000002	2.06	0.00026	0.000001	0.00026	0.0015
25-Sep-12	139	500	440	7.00	1.01	2.99	2.20	0.015	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0008	0.000011	1.40	0.00022	0.000001	0.00022	0.0013
02-Oct-12	140	500	460	7.03	1.12	3.36	2.30	0.014	0.0001	0.00014	0.0001	0.000009	0.0000046	0.0014	0.000001	1.52	0.00023	0.000024	0.00028	0.0014
09-Oct-12	141	500	460	7.16	1.86	3.29	1.84	0.017	0.0001	0.00023	0.0002	0.000009	0.0000046	0.0012	0.000001	1.40	0.00023	0.000284	0.00175	0.0014
16-Oct-12	142	500	455	7.53	2.00	3.76	2.28	0.017	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0011	0.000001	1.42	0.00023	0.000002	0.00036	0.0014
23-Oct-12	143	500	465	6.9	1.43	3.22	1.86	0.021	0.0001	0.00009	0.0001	0.000009	0.0000047	0.0006	0.000022	1.27	0.00023	0.000025	0.00028	0.0014
30-Oct-12	144	500	455	6.94	1.33	3.39	2.28	0.016	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0016	0.000746	1.48	0.00023	0.000003	0.00046	0.0014
06-Nov-12	145	500	450	6.96	1.67	3.16	0.90	0.010	0.0001	0.00014	0.0004	0.000009	0.0000045	0.0011	0.000003	1.42	0.00023	0.000011	0.00023	0.0014
13-Nov-12	146	500	450	7.41	2.47	3.63	1.35	0.009	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0011	0.000005	1.32	0.00023	0.000029	0.00023	0.0014
20-Nov-12	147	500	500	7.41	2.60	4.53	1.50	0.011	0.0001	0.00010	0.0002	0.000010	0.0000050	0.0012	0.000002	1.75	0.00025	0.000172	0.00060	0.0045
27-Nov-12	148	500	510	7.37	1.96	4.40	2.55	0.010	0.0001	0.00020	0.0001	0.000010	0.0000051	0.0011	0.000002	1.87	0.00026	0.000052	0.00026	0.0015
04-Dec-12	149	500	470	7.32	0.83	2.66	1.88	0.011	0.0001	0.00009	0.0001	0.000009	0.0000047	0.0004	0.000005	1.22	0.00024	0.000014	0.00024	0.0014
11-Dec-12	150	500	470	7.33	1.00	3.25	1.88	0.019	0.0001	0.00009	0.0001	0.000009	0.0000188	0.0012	0.000001	1.45	0.00024	0.000014	0.00047	0.0014
18-Dec-12	151	500	460	7.33	0.95	3.38	1.38	0.013	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0004	0.000001	1.21	0.00023	0.000010	0.00023	0.0014
25-Dec-12	152	500	450	7.27	1.30	3.11	0.90	0.014	0.0001	0.00014	0.0001	0.000009	0.0000045	0.0005	0.000002	1.26	0.00023	0.000004	0.00023	0.0014
01-Jan-13	153	500	460	7.42	1.18	3.39	1.38	0.010	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0005	0.000001	1.19	0.00023	0.000006	0.00023	0.0014
08-Jan-13	154	500	440	7.50	1.12	3.51	0.88	0.015	0.0001	0.00018	0.0009	0.000009	0.0000044	0.0006	0.000001	1.10	0.00022	0.000023	0.00022	0.0013
15-Jan-13	155	500	455																	
22-Jan-13	156	500	455	7.44	1.58	3.09	1.82													
29-Jan-13	157	500	460																	
05-Feb-13	158	500	460	7.40	1.20	3.09	2.30													
12-Feb-13	159	500	455																	

HC 3
Sample = 588142

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	0.000038	0.0017	0.57	0.011	0.0042	0.00039	0.00021	0.0042	3.26	0.00014	0.28	0.000004	5.21	0.029	4.79	0.00008	0.00011	0.00004	0.000005	0.00010	0.0004	0.000008
09-Feb-10	0.000024	0.0014	0.70	0.017	0.0048	0.00055	0.00005	0.0048	2.67	0.00014	0.30	0.000005	3.52	0.035	4.15	0.00010	0.00000	0.00005	0.000030	0.00007	0.0005	0.000005
16-Feb-10	0.000037	0.0009	0.56	0.017	0.0046	0.00028	0.00023	0.0046	1.73	0.00010	0.31	0.000005	1.56	0.028	2.60	0.00009	0.00003	0.00005	0.000019	0.00007	0.0005	0.000009
23-Feb-10	0.000046	0.0010	0.37	0.012	0.0051	0.00007	0.00005	0.0051	0.91	0.00008	0.29	0.000005	0.36	0.019	0.85	0.00010	0.00003	0.00005	0.000013	0.00009	0.0005	0.000015
02-Mar-10	0.000044	0.0004	0.39	0.010	0.0044	0.00007	0.00004	0.0044	0.79	0.00005	0.20	0.000004	0.32	0.020	1.24	0.00009	0.00006	0.00004	0.000030	0.00007	0.0004	0.000017
09-Mar-10	0.000059	0.0005	0.35	0.019	0.0046	0.00007	0.00023	0.0046	0.54	0.00004	0.20	0.000005	0.20	0.020	1.31	0.00009	0.00014	0.00005	0.000019	0.00005	0.0005	0.000018
16-Mar-10	0.000037	0.0005	0.41	0.020	0.0047	0.00013	0.00005	0.0047	0.55	0.00003	0.22	0.000005	0.19	0.019	1.37	0.00009	0.00000	0.00005	0.000026	0.00006	0.0005	0.000005
23-Mar-10	0.000043	0.0009	0.31	0.015	0.0043	0.00006	0.00004	0.0043	0.39	0.00002	0.19	0.000004	0.11	0.017	1.15	0.00009	0.00003	0.00004	0.000016	0.00004	0.0004	0.000026
30-Mar-10	0.000053	0.0005	0.37	0.022	0.0049	0.00009	0.00010	0.0049	0.43	0.00002	0.23	0.000005	0.13	0.018	1.21	0.00010	0.00004	0.00005	0.000018	0.00005	0.0005	0.000039
06-Apr-10	0.000204	0.0004	0.37	0.017	0.0044	0.00006	0.00004	0.0044	0.42	0.00002	0.23	0.000004	0.11	0.018	1.14	0.00009	0.00004	0.00004	0.000026	0.00006	0.0004	0.000004
13-Apr-10	0.000035	0.0004	0.26	0.017	0.0044	0.00004	0.00004	0.0044	0.26	0.00003	0.16	0.000004	0.08	0.014	0.80	0.00009	0.00007	0.00004	0.000016	0.00003	0.0004	0.000004
20-Apr-10	0.000207	0.0005	0.30	0.020	0.0047	0.00003	0.00009	0.0047	0.29	0.00002	0.18	0.000005	0.08	0.016	1.10	0.00009	0.00008	0.00005	0.000058	0.00004	0.0005	0.000014
27-Apr-10	0.000068	0.0005	0.26	0.018	0.0046	0.00005	0.00005	0.0046	0.24	0.00039	0.16	0.000005	0.09	0.014	1.07	0.00009	0.00008	0.00005	0.000024	0.00005	0.0005	0.000027
04-May-10	0.000619	0.0004	0.28	0.018	0.0045	0.00006	0.00004	0.0045	0.21	0.00003	0.16	0.000004	0.07	0.015	0.99	0.00009	0.00010	0.00004	0.000019	0.00004	0.0004	0.000009
11-May-10	0.000032	0.0005	0.28	0.018	0.0046	0.00004	0.00005	0.0138	0.24	0.00003	0.19	0.000009	0.04	0.014	1.07	0.00009	0.00016	0.00005	0.000017	0.00007	0.0005	0.000005
18-May-10	0.000023	0.0005	0.27	0.015	0.0046	0.00024	0.00005	0.0041	0.23	0.00006	0.18	0.000005	0.07	0.013	0.69	0.00009	0.00006	0.00005	0.000021	0.00004	0.0005	0.000009
25-May-10	0.000524	0.0005	0.19	0.016	0.0092	0.00006	0.00005	0.0041	0.16	0.00002	0.14	0.000005	0.05	0.010	0.81	0.00009	0.00008	0.00005	0.000015	0.00005	0.0009	0.000051
01-Jun-10	0.000049	0.0004	0.23	0.016	0.0134	0.00008	0.00004	0.0040	0.18	0.00005	0.15	0.000004	0.06	0.011	0.78	0.00009	0.00008	0.00004	0.000020	0.00005	0.0004	0.000004
08-Jun-10	0.000392	0.0004	0.23	0.016	0.0045	0.00005	0.00004	0.0040	0.18	0.00002	0.15	0.000004	0.05	0.011	0.76	0.00009	0.00006	0.00004	0.000015	0.00004	0.0009	0.000004
15-Jun-10	0.000045	0.0005	0.23	0.016	0.0045	0.00007	0.00005	0.0050	0.17	0.00002	0.15	0.000014	0.06	0.011	0.70	0.00009	0.00014	0.00005	0.000020	0.00005	0.0005	0.000014
22-Jun-10																						
29-Jun-10	0.000053	0.0004	0.19	0.015	0.0044	0.00006	0.00004	0.0040	0.15	0.00002	0.14	0.000004	0.06	0.007	0.57	0.00009	0.00055	0.00004	0.000013	0.00003	0.0009	0.000009
06-Jul-10																						
13-Jul-10	0.000036	0.0005	0.20	0.016	0.0045	0.00010	0.00009	0.0153	0.14	0.00002	0.14	0.000005	0.04	0.010	0.72	0.00009	0.00014	0.00005	0.000051	0.00005	0.0005	0.000059
20-Jul-10																						
27-Jul-10	0.000027	0.0005	0.21	0.016	0.0046	0.00004	0.00005	0.0041	0.14	0.00002	0.15	0.000005	0.05	0.010	0.64	0.00009	0.00040	0.00005	0.000020	0.00005	0.0005	0.000014
03-Aug-10	0.000036	0.0005	0.18	0.015	0.0045	0.00006	0.00009	0.0041	0.11	0.00002	0.13	0.000005	0.03	0.009	0.72	0.00009	0.00007	0.00005	0.000017	0.00003	0.0005	0.000005
10-Aug-10	0.000023	0.0005	0.17	0.017	0.0047	0.00005	0.00009	0.0042	0.11	0.00004	0.13	0.000005	0.04	0.008	0.54	0.00009	0.00002	0.00005	0.000011	0.00005	0.0005	0.000005
17-Aug-10	0.000026	0.0004	0.16	0.014	0.0044	0.00006	0.00004	0.0039	0.11	0.00002	0.13	0.000004	0.03	0.008	0.72	0.00009	0.00005	0.00004	0.000018	0.00005	0.0004	0.000009
24-Aug-10	0.000051	0.0005	0.19	0.017	0.0047	0.00002	0.00009	0.0042	0.12	0.00003	0.17	0.000005	0.04	0.009	0.69	0.00009	0.00019	0.00005	0.000014	0.00005	0.0005	0.000019
31-Aug-10	0.000046	0.0005	0.19	0.010	0.0091	0.00005	0.00005	0.0041	0.12	0.00002	0.16	0.000005	0.02	0.008	0.85	0.00009	0.00001	0.00005	0.000014	0.00007	0.0005	0.000009
07-Sep-10	0.000344	0.0004	0.14	0.006	0.0044	0.00002	0.00009	0.0044	0.09	0.00002	0.13	0.000004	0.03	0.005	0.49	0.00009	0.00004	0.00004	0.000011	0.00007	0.0004	0.000013
14-Sep-10	0.000022	0.0004	0.16	0.018	0.0045	0.00080	0.00009	0.0053	0.10	0.00002	0.13	0.000004	0.04	0.007	0.50	0.00009	0.00006	0.00004	0.000013	0.00005	0.0004	0.000013
21-Sep-10	0.000018	0.0005	0.16	0.017	0.0046	0.00000	0.00009	0.0041	0.10	0.00040	0.12	0.000005	0.06	0.008	0.81	0.00009	0.00007	0.00005	0.000011	0.00002	0.0005	0.000005
28-Sep-10	0.000024	0.0005	0.20	0.020	0.0049	0.00016	0.00010	0.0044	0.10	0.00002	0.19	0.000005	0.04	0.011	1.04	0.00010	0.00016	0.00005	0.000030	0.00004	0.0010	0.000005
05-Oct-10	0.000063	0.0005	0.17	0.018	0.0090	0.00067	0.00005	0.0063	0.10	0.00002	0.15	0.000005	0.04	0.009	0.82	0.00009	0.00030	0.00005	0.000025	0.00003	0.0009	0.000009
12-Oct-10	0.000041	0.0005	0.15	0.017	0.0045	0.00027	0.00014	0.0041	0.09	0.00002	0.13	0.000005	0.05	0.007	1.02	0.00009	0.00017	0.00009	0.000009	0.00004	0.0005	0.000014
19-Oct-10	0.000046	0.0005	0.15	0.016	0.0046	0.00003	0.00005	0.0050	0.08	0.00002	0.12	0.000005	0.03	0.008	0.55	0.00009	0.00002	0.00005	0.000019	0.00005	0.0005	0.000014
26-Oct-10	0.000144	0.0005	0.13	0.014	0.0045	0.00019	0.00014	0.0099	0.07	0.00148	0.10	0.000005	0.05	0.006	0.64	0.00009	0.00003	0.00005	0.000017	0.00005	0.0009	0.000005
02-Nov-10	0.000193	0.0005	0.15	0.014	0.0046	0.00005	0.00028	0.0078	0.08	0.00002	0.12	0.000005	0.05	0.007	0.61	0.00009	0.00002	0.00005	0.000014	0.00001	0.0005	0.000014
09-Nov-10	0.000203	0.0005	0.21	0.023	0.0050	0.00017	0.00015	0.0109	0.09	0.00002	0.18	0.000005	0.05	0.011	1.05	0.00010	0.00012	0.00005	0.000045	0.00004	0.0010	0.000005
16-Nov-10	0.000347	0.0005	0.14	0.016	0.0090	0.00007	0.00014	0.0041	0.07	0.00002	0.11	0.000005	0.03	0.007	0.63	0.00009	0.00012	0.00005	0.000024	0.00002	0.0014	0.000005
23-Nov-10	0.000128	0.0004	0.14	0.016	0.0044	0.00153	0.00004	0.0040	0.07	0.00002	0.12	0.000004	0.02	0.007	0.35	0.00009	0.00006	0.00004	0.000052	0.00004	0.0018	0.000013
30-Nov-10	0.000036	0.0005	0.17	0.017	0.0046	0.00027	0.00014	0.0041	0.09	0.00002	0.15	0.000005	0.04	0.007	0.51	0.00009	0.00105	0.00005	0.000115	0.00005	0.0009	0.000014
07-Dec-10	0.001268	0.0004	0.16	0.017	0.0045	0.00022	0.00009	0.0093	0.07	0.00002	0.12	0.000004	0.03	0.006	0.41	0.00009	0.00029	0.00004	0.000048	0.00003	0.0009	0.000013
14-Dec-10	0.000046	0.0005	0.14	0.015	0.0046	0.00018	0.00014	0.0041	0.07	0.00002	0.10	0.000005	0.04	0.006	0.43	0.00009	0.00039	0.00005	0.000069	0.00005	0.0005	0.000005
21-Dec-10	0.000150	0.0005	0.26	0.069	0.0047	0.00002	0.00024	0.0259	0.06	0.00002	0.12	0.000005	0.04	0.006	0.79	0.00009	0.00007	0.00005	0.000021	0.00003	0.0047	0.000005
28-Dec-10	0.000869	0.0005	0.15	0.014	0.0046	0.00010	0.00009	0.0115	0.07	0.00002	0.14	0.000005	0.04	0.006	0.61	0.00009	0.00015	0.00005	0.000012	0.00004	0.0014	0.000014
04-Jan-11	0.000304	0.0005	0.14	0.014	0.0046	0.00013	0.00060	0.0046	0.05	0.00002	0.10	0.000005	0.03	0.005	0.56	0.00009	0.00004	0.00028	0.000030	0.00005	0.0023	0.000009
11-Jan-11	0.000047	0.0004	0.13	0.016	0.0043	0.00003	0.00009	0.0039	0.05	0.00002	0.08	0.000004	0.03	0.005	0.47	0.00009	0.00006	0.00004	0.000021	0.00003	0.0004	0.000009
18-Jan-11	0.000018	0.0005	0.15	0.016	0.0046	0.00003	0.00005	0.0150	0.06	0.00005	0.11	0.000005	0.03	0.006	0.52	0.00009	0.00007	0.00005	0.000011	0.00003	0.0005	0.000023
25-Jan-11	0.000033	0.0005	0.14	0.015	0.0047	0.00001	0.00042	0.0042	0.05	0.00007	0.11	0.000005	0.03	0.006	0.57	0.00009	0.00010	0.00005	0.000011	0.00004	0.0009	0.000014
01-Feb-11	0.000030	0.0005	0.18	0.022	0.0050	0.00003	0.00010	0.0356	0.08	0.00002	0.13	0.000005	0.03	0.007	0.96	0.00010	0.00019	0.00005	0.000015	0.00003	0.0005	0.000015
08-Feb-11	0.000014	0.0005	0.14	0.015	0.0184	0.00006	0.00005	0.0055	0.05	0.00002	0.12	0.000005	0.02	0.005	0.46	0.00009	0.00017	0.00005	0.000012	0.00002	0.0005	0.000005
15-Feb-11	0.000077	0.0005	0.12	0.014	0.0045	0.00012	0.00009	0.0135	0.05	0.00002	0.09	0.000005	0.01	0.005	0.34	0.00009	0.00001	0.00005	0.000008	0.00001	0.0005	0.000005
22-Feb-11	0.000022	0.0004	0.11	0.012	0.0045	0.00012	0.00009	0.0040	0.05	0.00002	0.09	0.000013	0.02	0.004	0.48	0.00009	0.00004	0.00004	0.000006	0.00002	0.0004	0.000027
01-Mar-11	0.000545	0.0005	0.11	0.013	0.0045	0.00003	0.00009	0.0140	0.04	0.00002	0.09	0.000005	0.03	0.004	0.36	0.00009	0.00008	0.00005	0.000008	0.00003	0.0063	0.000005
08-Mar-11	0.000470	0.0005	0.11	0.013	0.0047	0.00009	0.00009	0.0042	0.04	0.00002	0.07	0.000005	0.02	0.004	0.33	0.00009	0.00013	0.00005	0.000010	0.00002	0.0014	0.000019
15-Mar-11	0.000343	0.0004	0.11	0.013	0.0045	0.00002	0.00027	0.0049	0.04	0.00005	0.09	0.000004	0.03	0.004	0.45	0.00001	0.00018	0.00004	0.000011	0.00002	0.0031	0.000018
22-Mar-11	0.000018	0.0005	0.11	0.013	0.0046	0.00001	0.00014	0.0055	0.04	0.00002	0.08	0.000005	0.00	0.004	0.35	0.00009	0.00011	0.00005	0.000008	0.00001	0.0005	0.000009
29-Mar-11	0.000018	0.0005	0.12	0.014	0.0046	0.00002	0.00009	0.0041	0.04	0.00002	0.09	0.000005	0.03	0.004	0.44	0.00009	0.00004	0.00005	0.000010	0.00002	0.0005	0.000009
05-Apr-11	0.000032	0.0005	0.11	0.014	0.0046	0.00004	0.00009	0.0092	0.04	0.00002	0.09	0.000005	0.02	0.004	0.52	0.00009	0.00015	0.00005	0.000008	0.00001	0.0005	0.000014
12-Apr-11	0.000032	0.0005	0.12	0.016	0.0045	0.00013	0.00005	0.0045	0.04	0.00002	0.08	0.000005	0.02	0.004	0.41	0.00009	0.00008	0.00005	0.000023	0.00002	0.0005	0.000014
19-Apr-11	0.000296	0.0005	0.12	0.014	0.0046	0.00062	0.00009	0.0041	0.04	0.00020	0.09	0.000005	0.02	0.004	0.57	0.00009	0.00003	0.00005	0.000010	0.00005	0.0100	0.000018
26-Apr-11	0.000009	0.0005	0.12	0.012	0.0045	0.00002	0.00014	0.0041	0.04	0.00002	0.08	0.000005	0.02	0.004	0.55	0.00009	0.00002	0.00005	0.000007	0.00001	0.0005	0.000009
03-May-11	0.000018	0.0004	0.11	0.012	0.0178	0.00004	0.00009	0.0040	0.04	0.00002	0.07	0.000004	0.02	0.004	0.43	0.00009	0.00001	0.00004	0.000007	0.00001	0.0004	0.000004
10-May-11	0.000032	0.0005	0.11	0.012	0.0046	0.00004	0.00041	0.0041	0.04	0.00004	0.07	0.000005	0.02	0.004	0.44	0.00009	0.00005	0.00023	0.000000	0.00007	0.0018	0.000005
17-May-11	0.000023	0.0005	0.10	0.012	0.0045	0.00002	0.00005	0.0135	0.03	0.00002	0.08	0.000005	0.01	0.003	0.33	0.00009	0.00001	0.00005	0.000008	0.00001	0.0009	0.000005
24-May-11	0.000015	0.0005	0.12	0.017	0.0052	0.00001	0.00010	0.0082	0.04	0.00002	0.38	0.000005	0.02	0.005	0.75	0.00010	0.00076	0.00005	0.000013	0.00002	0.0005	0.000005
31-May-11	0.000023	0.0005	0.09	0.011	0.0046	0.00002	0.00005	0.0041	0.03	0.00010	0.08	0.000005	0.01	0.004	0.38	0.00009	0.00005	0.00005	0.000008	0.00001	0.0018	0.000005
07-Jun-11	0.000032	0.0005	0.11	0.011	0.0045	0.00001	0.00005	0.0081	0.03	0.00002	0.10	0.000005	0.05	0.003	0.41	0.00001	0.00008	0.00005	0.000005	0.00001	0.0005	0.000009
14-Jun-11	0.000022	0.0004	0.10	0.011	0.0045	0.00008	0.00009	0.0040	0.03	0.00002	0.10	0.000004	0.03	0.003	0.38	0.00001	0.00009	0.00004	0.000008	0.00002	0.0004	0.000009
21-Jun-11	0.000090	0.0005	0.11	0.012	0.0045	0.00000	0.00005	0.0041	0.03	0.00002	0.08	0.000005	0.02	0.003	0.49	0.00001	0.00005	0.00005	0.000007	0.00001	0.0014	0.000005
28-Jun-11	0.000054	0.0005	0.11	0.013	0.0090	0.00038	0.00009	0.0041	0.04	0.00002	0.08	0.000005	0.02	0.004	0.45	0.00001	0.00001	0.00009	0.000013	0.00001	0.0009	0.000005

HC 3
Sample = 588142

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	0.000068	0.0005	0.12	0.011	0.0046	0.00007	0.00009	0.0041	0.03	0.00002	0.09	0.000005	0.04	0.004	0.56	0.00001	0.00005	0.00005	0.000007	0.00002	0.0018	0.000023
12-Jul-11	0.000383	0.0005	0.13	0.013	0.0045	0.00063	0.00005	0.0041	0.04	0.00003	0.09	0.000005	0.08	0.004	0.54	0.00001	0.00004	0.00005	0.000017	0.00001	0.0036	0.000005
19-Jul-11	0.000098	0.0005	0.12	0.012	0.0047	0.00004	0.00028	0.0042	0.03	0.00035	0.07	0.000005	0.04	0.004	0.48	0.00001	0.00009	0.00005	0.000009	0.00003	0.0014	0.000005
26-Jul-11	0.000018	0.0005	0.12	0.029	0.0046	0.00073	0.00014	0.0041	0.03	0.00002	0.06	0.000005	0.02	0.004	0.47	0.00001	0.00000	0.00014	0.000007	0.00011	0.0005	0.000005
02-Aug-11	0.000041	0.0005	0.12	0.012	0.0046	0.00013	0.00005	0.0041	0.03	0.00002	0.08	0.000005	0.01	0.003	0.58	0.00001	0.00003	0.00005	0.000010	0.00002	0.0009	0.000009
09-Aug-11	0.000027	0.0005	0.10	0.010	0.0090	0.00156	0.00005	0.0041	0.03	0.00002	0.07	0.000005	0.02	0.003	0.44	0.00001	0.00001	0.00005	0.000022	0.00004	0.0009	0.000014
16-Aug-11	0.000018	0.0005	0.12	0.011	0.0046	0.00008	0.00005	0.0041	0.03	0.00002	0.08	0.000005	0.02	0.004	0.60	0.00001	0.00004	0.00005	0.000008	0.00001	0.0005	0.000005
23-Aug-11	0.000036	0.0005	0.12	0.012	0.0091	0.00004	0.00005	0.0041	0.03	0.00002	0.08	0.000005	0.01	0.004	0.59	0.00001	0.00005	0.00005	0.000010	0.00001	0.0018	0.000005
30-Aug-11	0.000027	0.0005	0.12	0.011	0.0046	0.00002	0.00009	0.0041	0.03	0.00007	0.08	0.000005	0.02	0.003	0.54	0.00001	0.00004	0.00005	0.000007	0.00001	0.0014	0.000005
06-Sep-11	0.000109	0.0005	0.10	0.009	0.0046	0.00076	0.00005	0.0041	0.03	0.00025	0.10	0.000005	0.02	0.003	0.45	0.00001	0.00000	0.00005	0.000018	0.00003	0.0018	0.000005
13-Sep-11	0.000105	0.0005	0.11	0.011	0.0046	0.00113	0.00005	0.0041	0.03	0.00002	0.07	0.000005	0.01	0.003	0.43	0.00001	0.00025	0.00005	0.000019	0.00001	0.0027	0.000005
20-Sep-11	0.000252	0.0005	0.11	0.012	0.0045	0.00027	0.00009	0.0041	0.03	0.00005	0.07	0.000005	0.01	0.003	0.45	0.00001	0.00020	0.00005	0.000010	0.00001	0.0014	0.000023
27-Sep-11	0.000018	0.0005	0.11	0.010	0.0046	0.00014	0.00009	0.0041	0.03	0.00002	0.05	0.000005	0.02	0.003	0.40	0.00001	0.00005	0.00005	0.000021	0.00003	0.0009	0.000005
04-Oct-11	0.000028	0.0005	0.11	0.010	0.0046	0.00003	0.00005	0.0041	0.03	0.00002	0.07	0.000005	0.02	0.003	0.40	0.00001	0.00004	0.00005	0.000010	0.00001	0.0009	0.000009
11-Oct-11	0.000068	0.0005	0.10	0.010	0.0045	0.00009	0.00005	0.0041	0.02	0.00002	0.09	0.000005	0.01	0.002	0.55	0.00001	0.00005	0.00005	0.000000	0.00001	0.0009	0.000005
18-Oct-11	0.000027	0.0005	0.11	0.010	0.0045	0.00008	0.00009	0.0041	0.03	0.00002	0.09	0.000005	0.01	0.004	0.45	0.00001	0.00003	0.00005	0.000006	0.00001	0.0005	0.000005
25-Oct-11	0.000046	0.0005	0.12	0.012	0.0046	0.00001	0.00005	0.0041	0.03	0.00002	0.10	0.000005	0.02	0.003	0.53	0.00001	0.00005	0.00005	0.000007	0.00001	0.0009	0.000009
01-Nov-11	0.000028	0.0005	0.12	0.011	0.0046	0.00004	0.00009	0.0041	0.02	0.00002	0.06	0.000005	0.02	0.003	0.49	0.00001	0.00003	0.00005	0.000007	0.00001	0.0014	0.000014
08-Nov-11	0.000050	0.0005	0.13	0.012	0.0045	0.00001	0.00005	0.0045	0.03	0.00006	0.07	0.000005	0.02	0.003	0.45	0.00001	0.00002	0.00005	0.000008	0.00006	0.0014	0.000005
15-Nov-11	0.000027	0.0005	0.11	0.011	0.0046	0.00005	0.00005	0.0041	0.03	0.00002	0.03	0.000005	0.01	0.002	0.37	0.00001	0.00000	0.00005	0.000008	0.00006	0.0005	0.000005
22-Nov-11	0.000050	0.0005	0.11	0.010	0.0045	0.00000	0.00009	0.0041	0.00	0.00008	0.06	0.000005	0.00	0.002	0.27	0.00001	0.00004	0.00005	0.000009	0.00005	0.0018	0.000005
29-Nov-11	0.000032	0.0005	0.12	0.011	0.0046	0.00015	0.00014	0.0046	0.02	0.00003	0.10	0.000005	0.01	0.003	0.33	0.00001	0.00003	0.00005	0.000008	0.00008	0.0009	0.000009
06-Dec-11	0.000009	0.0005	0.11	0.011	0.0045	0.00002	0.00005	0.0041	0.02	0.00004	0.10	0.000023	0.00	0.002	0.30	0.00001	0.00016	0.00005	0.000006	0.00008	0.0009	0.000005
13-Dec-11	0.000059	0.0005	0.12	0.010	0.0045	0.00004	0.00009	0.0041	0.02	0.00020	0.05	0.000005	0.03	0.003	0.32	0.00001	0.00004	0.00005	0.000019	0.00001	0.0027	0.000014
20-Dec-11	0.000032	0.0005	0.10	0.009	0.0045	0.00001	0.00005	0.0041	0.02	0.00004	0.06	0.000005	0.02	0.002	0.37	0.00001	0.00001	0.00005	0.000007	0.00006	0.0005	0.000005
27-Dec-11	0.000032	0.0005	0.11	0.009	0.0046	0.00013	0.00009	0.0041	0.02	0.00002	0.05	0.000005	0.02	0.002	0.39	0.00001	0.00000	0.00009	0.000011	0.00014	0.0005	0.000018
03-Jan-12	0.000014	0.0005	0.11	0.009	0.0045	0.00004	0.00009	0.0041	0.02	0.00002	0.05	0.000005	0.01	0.002	0.34	0.00001	0.00002	0.00005	0.000015	0.00016	0.0009	0.000005
10-Jan-12	0.000018	0.0005	0.11	0.009	0.0045	0.00004	0.00005	0.0041	0.02	0.00002	0.06	0.000005	0.03	0.002	0.32	0.00001	0.00002	0.00014	0.000008	0.00018	0.0009	0.000009
17-Jan-12	0.000032	0.0005	0.13	0.011	0.0046	0.00005	0.00077	0.0041	0.02	0.00002	0.06	0.000005	0.01	0.002	0.39	0.00001	0.00001	0.00009	0.000008	0.00010	0.0023	0.000014
24-Jan-12	0.000010	0.0005	0.13	0.009	0.0049	0.00002	0.00010	0.0044	0.03	0.00004	0.06	0.000005	0.02	0.003	0.38	0.00001	0.00001	0.00044	0.000008	0.00025	0.0005	0.000005
31-Jan-12	0.000023	0.0005	0.11	0.009	0.0045	0.00010	0.00005	0.0041	0.02	0.00002	0.05	0.000005	0.03	0.002	0.29	0.00001	0.00001	0.00005	0.000010	0.00014	0.0014	0.000005
07-Feb-12	0.000020	0.0005	0.16	0.016	0.0050	0.00001	0.00010	0.0045	0.03	0.00004	0.07	0.000005	0.01	0.003	0.68	0.00001	0.00000	0.00005	0.000018	0.00009	0.0010	0.000005
14-Feb-12	0.000027	0.0005	0.13	0.009	0.0045	0.00001	0.00009	0.0041	0.03	0.00002	0.07	0.000005	0.02	0.003	0.63	0.00001	0.00000	0.00005	0.000050	0.00001	0.0005	0.000005
21-Feb-12	0.000018	0.0005	0.11	0.008	0.0046	0.00004	0.00009	0.0041	0.02	0.00002	0.07	0.000005	0.02	0.002	0.29	0.00001	0.00000	0.00005	0.000008	0.00006	0.0009	0.000005
28-Feb-12	0.000085	0.0004	0.13	0.010	0.0045	0.00001	0.00004	0.0040	0.02	0.00004	0.07	0.000004	0.03	0.003	0.29	0.00001	0.00003	0.00009	0.000007	0.00009	0.0022	0.000013
06-Mar-12	0.000055	0.0005	0.13	0.008	0.0046	0.00002	0.00009	0.0041	0.02	0.00002	0.08	0.000005	0.03	0.002	0.41	0.00001	0.00063	0.00005	0.000010	0.00009	0.0023	0.000009
13-Mar-12	0.000018	0.0004	0.12	0.008	0.0045	0.00081	0.00009	0.0040	0.02	0.00002	0.06	0.000004	0.02	0.002	0.30	0.00001	0.00012	0.00004	0.000010	0.00002	0.0009	0.000013
20-Mar-12	0.000018	0.0005	0.12	0.010	0.0046	0.00005	0.00005	0.0041	0.02	0.00004	0.05	0.000005	0.02	0.002	0.37	0.00001	0.00006	0.00005	0.000009	0.00001	0.0005	0.000032
27-Mar-12	0.000023	0.0005	0.13	0.008	0.0046	0.00001	0.00009	0.0041	0.02	0.00002	0.05	0.000005	0.02	0.002	0.43	0.00001	0.00003	0.00014	0.000010	0.00015	0.0005	0.000009
03-Apr-12	0.000032	0.0005	0.12	0.008	0.0046	0.00001	0.00009	0.0041	0.02	0.00002	0.04	0.000005	0.03	0.002	0.45	0.00001	0.00001	0.00005	0.000017	0.00008	0.0014	0.000009
10-Apr-12	0.000018	0.0005	0.13	0.008	0.0228	0.00001	0.00005	0.0041	0.02	0.00002	0.05	0.000005	0.02	0.002	0.48	0.00001	0.00001	0.00005	0.000008	0.00009	0.0009	0.000005
17-Apr-12	0.000023	0.0005	0.13	0.008	0.0184	0.00002	0.00005	0.0041	0.02	0.00002	0.06	0.000005	0.00	0.002	0.49	0.00001	0.00017	0.00005	0.000009	0.00008	0.0009	0.000005
24-Apr-12	0.000112	0.0005	0.13	0.008	0.0140	0.00055	0.00009	0.0042	0.02	0.00002	0.06	0.000005	0.02	0.002	0.40	0.00001	0.00006	0.00005	0.000010	0.00010	0.0019	0.000005
01-May-12	0.000014	0.0005	0.12	0.009	0.0090	0.00009	0.00014	0.0041	0.02	0.00002	0.05	0.000005	0.01	0.002	0.43	0.00001	0.00001	0.00005	0.000041	0.00010	0.0005	0.000005
08-May-12	0.000023	0.0005	0.12	0.008	0.0045	0.00001	0.00005	0.0041	0.02	0.00002	0.05	0.000005	0.02	0.002	0.37	0.00001	0.00007	0.00005	0.000017	0.00006	0.0014	0.000005
15-May-12	0.000028	0.0005	0.12	0.007	0.0046	0.00005	0.00005	0.0041	0.02	0.00002	0.05	0.000005	0.02	0.002	0.35	0.00001	0.00001	0.00005	0.000009	0.00009	0.0041	0.000005
22-May-12	0.000009	0.0005	0.11	0.007	0.0046	0.00002	0.00005	0.0041	0.02	0.00002	0.05	0.000005	0.03	0.002	0.35	0.00001	0.00000	0.00005	0.000018	0.00012	0.0005	0.000005
29-May-12	0.000009	0.0005	0.12	0.007	0.0045	0.00005	0.00005	0.0041	0.02	0.00003	0.08	0.000005	0.01	0.002	0.36	0.00001	0.00009	0.00005	0.000007	0.00014	0.0027	0.000009
05-Jun-12	0.000009	0.0005	0.12	0.008	0.0091	0.00006	0.00005	0.0041	0.02	0.00002	0.07	0.000005	0.02	0.002	0.40	0.00001	0.00000	0.00005	0.000006	0.00010	0.0005	0.000005
12-Jun-12	0.000009	0.0005	0.13	0.008	0.0045	0.00002	0.00005	0.0041	0.02	0.00002	0.05	0.000005	0.01	0.002	0.37	0.00001	0.00004	0.00005	0.000007	0.00010	0.0009	0.000005
19-Jun-12	0.000009	0.0005	0.13	0.008	0.0047	0.00002	0.00005	0.0042	0.02	0.00014	0.05	0.000005	0.01	0.002	0.43	0.00001	0.00002	0.00005	0.000008	0.00011	0.0005	0.000005
26-Jun-12	0.000023	0.0005	0.15	0.007	0.0046	0.00003	0.00005	0.0041	0.04	0.00002	0.22	0.000005	0.15	0.003	0.52	0.00001	0.00003	0.00009	0.000009	0.00014	0.0009	0.000005
03-Jul-12	0.000027	0.0005	0.13	0.009	0.0046	0.00000	0.00005	0.0041	0.02	0.00002	0.06	0.000005	0.01	0.002	0.54	0.00001	0.00008	0.00005	0.000010	0.00010	0.0014	0.000005
10-Jul-12	0.000014	0.0005	0.14	0.008	0.0045	0.00004	0.00005	0.0041	0.02	0.00004	0.05	0.000005	0.02	0.002	0.55	0.00001	0.00008	0.00005	0.000009	0.00011	0.0009	0.000005
17-Jul-12	0.000009	0.0005	0.13	0.007	0.0045	0.00000	0.00009	0.0041	0.02	0.00005	0.05	0.000018	0.03	0.002	0.47	0.00001	0.00001	0.00005	0.000006	0.00014	0.0009	0.000005
24-Jul-12	0.000009	0.0005	0.17	0.008	0.0137	0.00004	0.00005	0.0041	0.07	0.00016	0.08	0.000005	0.21	0.002	0.46	0.00001	0.00002	0.00005	0.000005	0.00011	0.0009	0.000005
31-Jul-12	0.000014	0.0005	0.13	0.007	0.0046	0.00004	0.00005	0.0041	0.02	0.00002	0.06	0.000005	0.01	0.002	0.43	0.00001	0.00010	0.00005	0.000007	0.00013	0.0005	0.000005
07-Aug-12	0.000019	0.0005	0.14	0.010	0.0047	0.00006	0.00023	0.0042	0.02	0.00005	0.09	0.000005	0.02	0.002	0.46	0.00001	0.00007	0.00005	0.000008	0.00013	0.0009	0.000005
14-Aug-12	0.000053	0.0004	0.13	0.006	0.0045	0.00001	0.00009	0.0040	0.01	0.00004	0.04	0.000004	0.02	0.002	0.48	0.00001	0.00015	0.00004	0.000006	0.00013	0.0013	0.000004
21-Aug-12	0.000051	0.0005	0.14	0.007	0.0186	0.00005	0.00005	0.0042	0.01	0.00002	0.24	0.000005	0.01	0.002	0.59	0.00001	0.00011	0.00009	0.000006	0.00011	0.0019	0.000005
28-Aug-12	0.000120	0.0005	0.12	0.009	0.0046	0.00023	0.00028	0.0041	0.02	0.00002	0.05	0.000005	0.01	0.002	0.44	0.00001	0.00087	0.00005	0.000013	0.00017	0.0032	0.000009
04-Sep-12	0.000014	0.0005	0.14	0.008	0.0336	0.00005	0.00005	0.0043	0.02	0.00002	0.04	0.000005	0.01	0.002	0.62	0.00001	0.00009	0.00005	0.000007	0.00016	0.0010	0.000005
11-Sep-12	0.000014	0.0005	0.13	0.006	0.0047	0.00001	0.00005	0.0042	0.02	0.00002	0.06	0.000005	0.02	0.002	0.60	0.00001	0.00005	0.00005	0.000011	0.00005	0.0005	0.000009
18-Sep-12	0.000087	0.0005	0.19	0.011	0.0102	0.00001	0.00005	0.0046	0.02	0.00003	0.08	0.000005	0.02	0.003	0.89	0.00001	0.00013	0.00005	0.000013	0.00011	0.0031	0.000005
25-Sep-12	0.000031	0.0004	0.12	0.006	0.0044	0.00003	0.00004	0.0040	0.01	0.00002	0.04	0.000013	0.01	0.002	0.58	0.00001	0.00003	0.00004	0.000017	0.00007	0.0035	0.000004
02-Oct-12	0.000032	0.0005	0.13	0.008	0.0046	0.00007	0.00009	0.0041	0.02	0.00002	0.13	0.000005	0.02	0.002	0.63	0.00001	0.00029	0.00005	0.000010	0.00007	0.0005	0.000005
09-Oct-12	0.000014	0.0005	0.13	0.008	0.0046	0.00012	0.00442	0.0041	0.02	0.00002	0.04	0.000005	0.01	0.002	0.56	0.00001	0.00007	0.00032	0.000012	0.00017	0.0005	0.000005
16-Oct-12	0.000014	0.0005	0.13	0.007	0.0046	0.00001	0.00009	0.0041	0.02	0.00002	0.07	0.000005	0.02	0.002	0.56	0.00001	0.00013	0.00005	0.000008	0.00008	0.0005	0.000005
23-Oct-12	0.000042	0.0005	0.12	0.007	0.0047	0.00008	0.00023	0.0042	0.01	0.00002	0.04	0.000005	0.01	0.002	0.40	0.00001	0.00003	0.00005	0.000010	0.00007	0.0023	0.000005
30-Oct-12	0.000009	0.0005	0.23	0.009	0.0046	0.00003	0.00005	0.0041	0.02	0.00002	0.06	0.000005	0.05	0.002	0.76	0.00001	0.00003	0.00005	0.000010	0.00008	0.0014	0.000005
06-Nov-12	0.000009	0.0005	0.14	0.007	0.0045	0.00003	0.00009	0.0041	0.02	0.00002	0.05	0.000005	0.01	0.002	0.46	0.00001	0.00004	0.00005	0.000008	0.00005	0.0005	0.000005
13-Nov-12	0.000018	0.0005	0.14	0.007	0.0045	0.00002	0.00005	0.0041	0.01	0.00002	0.05	0.000005	0.01	0.002	0.44	0.00001	0.00000	0.00005	0.000008	0.00006	0.0018	0.000005
20-Nov-12	0.000010	0.0005	0.16	0.010	0.0050	0.00001	0.00015	0.0045	0.01	0.00002	0.07	0.000005	0.02	0.002	0.66	0.00001	0.00007	0.00005	0.000011	0.00006	0.0005	0.000005
27-Nov-12	0.000010	0.0005	0.16	0.010	0.0051	0.00002	0.00010	0.0046	0.01	0.00004	0.09	0.000005	0.02	0.002	0.79	0.00001	0.00009	0.00005	0.000009	0.00002	0.0005	0.000005
04-Dec-12	0.000014	0.0005	0.12	0.005	0.0047	0.00001	0.00005	0.0042	0.01	0.00002	0.04	0.000005	0.00	0.001	0.51	0.00001	0.00004	0.00005	0.000010	0.00006	0.0009	0.000009
11-Dec-12	0.000009	0.0005	0.13	0.004	0.0047	0.00009	0.00005	0.0042	0.01	0.00002	0.05	0.000005	0.01	0.001	0.50	0.00001	0.00019	0.00009	0.000009	0.00020	0.0009	0.000005
18-Dec-12	0.000018	0.0005	0.12	0.004	0.0046	0.00002	0.00005	0.0041	0.01	0.00002	0.03	0.000005	0.01	0.002	0.44	0.00001	0.00004	0.00005	0.000014	0.00006	0.0005	0.000005
25-Dec-12	0.000014	0.0005	0.14	0.004	0.0045	0.00008	0.00005	0.0059	0.01	0.00002	0.03	0.000005	0.01	0.002	0.45	0.00001	0.00007	0.00005	0.000007	0.00003	0.0005	0.000009
01-Jan-13	0.000009	0.0005	0.13	0.005	0.0046	0.00021	0.00005	0.0041	0.01	0.00008	0.03	0.000005	0.01	0.001	0.40	0.00001	0.00006	0.00005	0.000006	0.00006	0.0005	0.000005
08-Jan-13	0.000009	0.0004	0.12	0.003	0.0044	0.00016	0.00004	0.0040	0.02	0.00003	0.06	0.000004	0.01	0.001	0.35	0.00001	0.00008	0.00004	0.000007	0.00009	0.0004	0.000004
15-Jan-13																						
22-Jan-13																						
29-Jan-13																						
05-Feb-13																						
12-Feb-13																						

HC 4
Sample = 731259

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	1	500	385	7.99	0.40	11.23	10.78	0.063	0.0005	0.00042	0.0004	0.000008	0.0000039	0.0073	0.000001	2.50	0.00019	0.000027	0.00054	0.0039
09-Feb-10	2	500	490	7.85	0.68	14.01	10.29	0.081	0.0031	0.00088	0.0004	0.000010	0.0000049	0.0132	0.000001	3.66	0.00025	0.000009	0.00039	0.0049
16-Feb-10	3	500	440	7.59	0.98	12.02	8.36	0.071	0.0020	0.00066	0.0004	0.000009	0.0000044	0.0106	0.000001	3.34	0.00031	0.000001	0.00048	0.0044
23-Feb-10	4	500	430	7.83	0.66	11.03	6.45	0.087	0.0014	0.00052	0.0003	0.000009	0.0000043	0.0077	0.000001	3.41	0.00022	0.000011	0.00022	0.0043
02-Mar-10	5	500	440	7.77	0.51	9.15	5.72	0.076	0.0011	0.00040	0.0009	0.000009	0.0000044	0.0057	0.000001	2.83	0.00022	0.000010	0.00022	0.0044
09-Mar-10	6	500	445	7.73	0.67	9.60	3.56	0.075	0.0010	0.00031	0.0003	0.000009	0.0000045	0.0053	0.000001	2.90	0.00022	0.000001	0.00022	0.0045
16-Mar-10	7	500	435	7.59	0.81	9.00	3.48	0.092	0.0010	0.00052	0.0002	0.000009	0.0000044	0.0061	0.000001	3.44	0.00022	0.000002	0.00022	0.0044
23-Mar-10	8	500	430	7.58	0.98	8.82	5.59	0.079	0.0009	0.00034	0.0003	0.000009	0.0000043	0.0044	0.000001	3.37	0.00026	0.000004	0.00022	0.0043
30-Mar-10	9	500	485	7.66	0.76	8.43	3.88	0.065	0.0009	0.00029	0.0003	0.000010	0.0000049	0.0049	0.000001	3.86	0.00039	0.000002	0.00034	0.0049
06-Apr-10	10	500	435	7.62	0.77	9.23	6.53	0.070	0.0007	0.00057	0.0002	0.000009	0.0000044	0.0030	0.000001	3.78	0.00026	0.000003	0.00026	0.0044
13-Apr-10	11	500	450	7.47	1.12	9.36	3.60	0.078	0.0007	0.00023	0.0003	0.000009	0.0000045	0.0032	0.000001	3.17	0.00027	0.000004	0.00027	0.0045
20-Apr-10	12	500	435	7.69	0.97	9.45	4.79	0.089	0.0006	0.00044	0.0003	0.000009	0.0000044	0.0030	0.000001	3.51	0.00026	0.000003	0.00022	0.0044
27-Apr-10	13	500	440	7.67	1.01	7.99	3.52	0.083	0.0004	0.00026	0.0004	0.000009	0.0000044	0.0022	0.000001	3.30	0.00031	0.000030	0.00185	0.0044
04-May-10	14	500	435	7.56	0.86	7.68	4.79	0.064	0.0005	0.00022	0.0003	0.000009	0.0000044	0.0026	0.000002	3.74	0.00039	0.000002	0.00030	0.0044
11-May-10	15	500	450	7.43	0.94	7.65	3.15	0.058	0.0005	0.00036	0.0003	0.000009	0.0000045	0.0027	0.000001	3.96	0.00032	0.000001	0.00027	0.0045
18-May-10	16	500	415	7.50	0.87	7.16	3.74	0.060	0.0005	0.00029	0.0003	0.000008	0.0000042	0.0030	0.000001	3.61	0.00021	0.000022	0.00046	0.0141
25-May-10	17	500	455	7.52	1.40	9.75	2.28	0.093	0.0005	0.00027	0.0003	0.000009	0.0000046	0.0027	0.000001	3.30	0.00023	0.000006	0.00027	0.0014
01-Jun-10	18	500	420	7.55	0.89	8.69	3.36	0.087	0.0005	0.00025	0.0002	0.000008	0.0000042	0.0026	0.000001	3.25	0.00025	0.000014	0.00046	0.0017
08-Jun-10	19	500	410	7.48	0.96	8.45	1.23	0.068	0.0004	0.00021	0.0002	0.000008	0.0000041	0.0025	0.000001	3.00	0.00049	0.000003	0.00029	0.0041
15-Jun-10	20	500	440	7.63	0.96	9.39	1.76	0.083	0.0004	0.00026	0.0002	0.000009	0.0000044	0.0023	0.000003	3.01	0.00022	0.000005	0.00026	0.0022
22-Jun-10	21	500	435	7.75	0.67	8.74														
29-Jun-10	22	500	440	7.53	0.79	7.64	1.76	0.081	0.0003	0.00053	0.0002	0.000009	0.0000044	0.0020	0.000001	2.85	0.00053	0.000007	0.00044	0.0044
06-Jul-10	23	500	475	7.51	0.99	8.50														
13-Jul-10	24	500	450	7.35	1.12	7.64	0.90	0.049	0.0004	0.00027	0.0002	0.000009	0.0000045	0.0020	0.000001	2.79	0.00027	0.000011	0.00068	0.0023
20-Jul-10	25	500	440	7.47	1.63	7.47														
27-Jul-10	26	500	450	7.37	1.21	7.92	2.70	0.074	0.0003	0.00050	0.0003	0.000009	0.0000045	0.0019	0.000001	3.57	0.00023	0.000010	0.00135	0.0027
03-Aug-10	27	500	475	7.50	1.36	7.48	1.43	0.060	0.0003	0.00010	0.0002	0.000010	0.0000048	0.0029	0.000001	3.37	0.00024	0.000019	0.00171	0.0014
10-Aug-10	28	500	440	7.57	1.50	7.24	4.84	0.047	0.0001	0.00018	0.0002	0.000009	0.0000044	0.0033	0.000002	3.44	0.00031	0.000004	0.00022	0.0009
17-Aug-10	29	500	440	7.55	1.23	7.12	0.88	0.065	0.0003	0.00013	0.0003	0.000009	0.0000044	0.0018	0.000068	3.15	0.00022	0.000201	0.00255	0.0018
24-Aug-10	30	500	430	7.38	1.41	7.22	1.72	0.055	0.0003	0.00039	0.0002	0.000009	0.0000043	0.0018	0.000003	3.31	0.00026	0.000003	0.00026	0.0022
31-Aug-10	31	500	455	7.76	1.87	10.75	2.73	0.071	0.0005	0.00036	0.0001	0.000009	0.0000046	0.0019	0.000001	3.36	0.00023	0.000010	0.00032	0.0009
07-Sep-10	32	500	430	7.20	1.37	7.49	2.58	0.049	0.0002	0.00022	0.0002	0.000009	0.0000043	0.0034	0.000005	3.09	0.00030	0.000004	0.00039	0.0026
14-Sep-10	33	500	430	7.18	1.18	6.82	2.15	0.044	0.0009	0.00026	0.0002	0.000009	0.0000043	0.0014	0.000001	2.89	0.00022	0.000005	0.00030	0.0026
21-Sep-10	34	500	460	7.37	1.07	7.67	2.76	0.049	0.0003	0.00009	0.0002	0.000009	0.0000230	0.0019	0.000001	3.12	0.00023	0.000007	0.00069	0.0014
28-Sep-10	35	500	490	7.34	1.09	8.39	3.92	0.043	0.0004	0.00034	0.0002	0.000010	0.0000049	0.0026	0.000006	3.47	0.00025	0.000043	0.00025	0.0010
05-Oct-10	36	500	460	7.33	1.16	7.57	5.06	0.052	0.0004	0.00028	0.0003	0.000009	0.0000046	0.0021	0.000001	3.61	0.00023	0.000023	0.00106	0.0009
12-Oct-10	37	500	430	7.26	1.12	6.62	4.30	0.046	0.0013	0.00030	0.0002	0.000009	0.0000043	0.0018	0.000003	3.43	0.00022	0.000021	0.00142	0.0009
19-Oct-10	38	500	435	7.25	1.31	6.83	3.48	0.041	0.0003	0.00009	0.0001	0.000009	0.0000044	0.0015	0.000004	2.74	0.00022	0.000002	0.00022	0.0009
26-Oct-10	39	500	445	7.25	1.09	6.58	3.56	0.037	0.0018	0.00013	0.0002	0.000009	0.0000045	0.0017	0.000003	2.58	0.00027	0.000004	0.00036	0.0009
02-Nov-10	40	500	450	7.41	0.99	6.68	3.15	0.045	0.0002	0.00018	0.0002	0.000009	0.0000045	0.0027	0.000001	2.89	0.00023	0.000001	0.00036	0.0027
09-Nov-10	41	500	500	7.45	1.28	8.79	2.50	0.036	0.0009	0.00015	0.0002	0.000010	0.0000050	0.0023	0.000003	4.05	0.00025	0.000013	0.00025	0.0020
16-Nov-10	42	500	450	7.57	1.24	7.28	2.70	0.041	0.0002	0.00009	0.0002	0.000009	0.0000045	0.0037	0.000003	3.38	0.00027	0.000007	0.00023	0.0009
23-Nov-10	43	500	440	7.19	1.14	7.29	2.64	0.039	0.0003	0.00022	0.0002	0.000009	0.0000044	0.0015	0.000003	2.95	0.00035	0.000015	0.00026	0.0009
30-Nov-10	44	500	435	7.31	1.30	7.51	1.31	0.048	0.0002	0.00009	0.0002	0.000009	0.0000044	0.0014	0.000001	2.94	0.00026	0.000003	0.00026	0.0013
07-Dec-10	45	500	425	7.26	1.30	7.66	1.70	0.055	0.0003	0.00017	0.0001	0.000009	0.0000043	0.0017	0.000001	3.91	0.00026	0.000005	0.00047	0.0009
14-Dec-10	46	500	415	7.33	1.58	7.10	2.91	0.044	0.0002	0.00012	0.0002	0.000008	0.0000042	0.0021	0.000002	2.75	0.00029	0.000004	0.00087	0.0008
21-Dec-10	47	500	465	7.39	2.08	8.58	1.86	0.054	0.0003	0.00028	0.0003	0.000009	0.0000047	0.0015	0.000001	3.85	0.00023	0.000012	0.00037	0.0009
28-Dec-10	48	500	450	7.36	2.53	7.20	1.80	0.047	0.0003	0.00018	0.0003	0.000009	0.0000045	0.0026	0.000004	3.20	0.00171	0.000010	0.00045	0.0014
04-Jan-11	49	500	460	7.41	2.09	8.30	2.30	0.052	0.0002	0.00032	0.0003	0.000009	0.0000046	0.0012	0.000006	3.07	0.00023	0.000028	0.00028	0.0014
11-Jan-11	50	500	450	7.27	1.26	6.84	2.25	0.040	0.0002	0.00018	0.0001	0.000009	0.0000045	0.0025	0.000003	2.89	0.00023	0.000006	0.00023	0.0014
18-Jan-11	51	500	430	7.27	1.26	6.27	2.58	0.042	0.0002	0.00017	0.0002	0.000009	0.0000043	0.0010	0.000001	3.16	0.00022	0.000003	0.00022	0.0030
25-Jan-11	52	500	440	7.29	1.37	6.96	2.64	0.036	0.0002	0.00018	0.0002	0.000009	0.0000044	0.0015	0.000004	2.90	0.00022	0.000086	0.00022	0.0013
01-Feb-11	53	500	425	7.16	1.24	6.07	1.70	0.028	0.0002	0.00013	0.0002	0.000009	0.0000043	0.0015	0.000002	2.56	0.00021	0.000008	0.00021	0.0009
08-Feb-11	54	500	435	7.29	1.14	5.87	3.48	0.037	0.0002	0.00017	0.0001	0.000009	0.0000044	0.0011	0.000003	2.73	0.00022	0.000005	0.00022	0.0030
15-Feb-11	55	500	440	7.26	1.16	5.73	2.20	0.035	0.0001	0.00018	0.0001	0.000009	0.0000044	0.0016	0.000001	2.57	0.00022	0.000011	0.00022	0.0013
22-Feb-11	56	500	430	7.29	1.23	6.20	3.87	0.030	0.0003	0.00022	0.0001	0.000009	0.0000043	0.0015	0.000003	2.59	0.00022	0.000006	0.00022	0.0009
01-Mar-11	57	500	430	7.15	0.97	5.32	4.30	0.029	0.0002	0.00013	0.0001	0.000009	0.0000043	0.0011	0.000002	2.55	0.00022	0.000006	0.00034	0.0009
08-Mar-11	58	500	430	7.15	1.27	5.57	3.87	0.030	0.0003	0.00009	0.0001	0.000009	0.0000043	0.0012	0.000004	2.58	0.00022	0.000010	0.00030	0.0009
15-Mar-11	59	500	450	7.25	1.30	6.87	3.60	0.035	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0014	0.000003	2.79	0.00023	0.000020	0.00032	0.0018
22-Mar-11	60	500	435	7.31	1.42	6.56	2.61	0.036	0.0002	0.00009	0.0005	0.000009	0.0000044	0.0010	0.000004	2.70	0.00022	0.000023	0.00035	0.0013
29-Mar-11	61	500	435	7.63	1.44	6.66	1.74	0.033	0.0002	0.00009	0.0001	0.000009	0.0000044	0.0010	0.000001	2.57	0.00022	0.000007	0.00022	0.0009
05-Apr-11	62	500	465	7.34	1.49	7.39	3.26	0.037	0.0001	0.00014	0.0001	0.000009	0.0000047	0.0013	0.000004	2.92	0.00023	0.000009	0.00023	0.0009
12-Apr-11	63	500	440	7.31	1.15	6.08	2.64	0.035	0.0001	0.00013	0.0001	0.000009	0.0000044	0.0008	0.000002	2.77	0.00022	0.000003	0.00022	0.0040
19-Apr-11	64	500	460	7.65	2.31	9.79	2.30	0.040	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0011	0.000005	2.91	0.00023	0.000012	0.00023	0.0009
26-Apr-11	65	500	440	7.53	1.15	9.20	2.20	0.056	0.0002	0.00018	0.0002	0.000009	0.0000044	0.0010	0.000001	3.13	0.00022	0.000001	0.00022	0.0013
03-May-11	66	500	440	7.46	1.36	6.93	2.64	0.046	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0015	0.000002	2.83	0.00022	0.000008	0.00031	0.0022
10-May-11	67	500	425	7.53	1.18	7.06	2.55	0.048	0.0001	0.00013	0.0001	0.000009	0.0000043	0.0017	0.000009	2.75	0.00021	0.000014	0.00064	0.0009
17-May-11	68	500	445	7.59	1.11	7.23	1.78	0.046	0.0001	0.00018	0.0001	0.000009	0.0000045	0.0009	0.000001	2.80	0.00022	0.000006	0.00022	0.0009
24-May-11	69	500	495	7.54	1.91	7.14	2.48	0.036	0.0001	0.00010	0.0001	0.000010	0.0000050	0.0034	0.000002	3.46	0.00025	0.000014	0.00025	0.0010
31-May-11	70	500	465	7.45	1.70	6.95	3.26	0.027	0.0002	0.00014	0.0001	0.000009	0.0000093	0.0009	0.000003	3.22	0.00023	0.000024	0.00047	0.0009
07-Jun-11	71	500	425	7.51	1.37	5.82	1.70	0.032	0.0001	0.00009	0.0002	0.000009	0.0000043	0.0010	0.000002	2.51	0.00034	0.000010	0.00021	0.0017
14-Jun-11	72	500	435	7.65	0.94	6.42	2.18	0.041	0.0001	0.00017	0.0001	0.000009	0.0000044	0.0010	0.000001	2.55	0.00022	0.000007	0.00022	0.0026
21-Jun-11	73	500	445	7.60	0.87	6.98	1.78	0.038	0.0001	0.00018	0.0001	0.000009	0.0000045	0.0008	0.000001	2.69	0.00022	0.000008	0.00022	0.0009
28-Jun-11	74	500	450	7.56	1.29	9.38	2.70	0.047	0.0001	0.00014	0.0001	0.000009	0.0000045	0.0014	0.000003	3.15	0.00023	0.000009	0.00023	0.0023

HC 4
Sample = 731259

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	75	500	450	7.47	1.45	7.18	1.80	0.058	0.0001	0.00014	0.0001	0.000009	0.0000045	0.0020	0.000063	2.97	0.00023	0.000018	0.00027	0.0014
12-Jul-11	76	500	440	7.23	1.51	5.94	2.20	0.041	0.0001	0.00018	0.0001	0.000009	0.0000044	0.0010	0.000001	3.15	0.00022	0.000007	0.00022	0.0009
19-Jul-11	77	500	445	7.46	1.65	5.60	1.34	0.033	0.0001	0.00009	0.0055	0.000009	0.0000045	0.0016	0.000003	2.64	0.00022	0.000039	0.00080	0.0009
26-Jul-11	78	500	440	7.62	1.96	6.21	0.88	0.035	0.0002	0.00075	0.0001	0.000009	0.0000044	0.0011	0.000001	2.38	0.00022	0.000009	0.00022	0.0167
02-Aug-11	79	500	470	7.60	1.81	6.61	0.94	0.034	0.0001	0.00019	0.0001	0.000009	0.0000047	0.0013	0.000002	3.05	0.00024	0.000006	0.00024	0.0038
09-Aug-11	80	500	440	7.53	1.32	5.60	1.76	0.032	0.0001	0.00040	0.0001	0.000009	0.0000044	0.0010	0.000003	2.87	0.00026	0.000015	0.00022	0.0026
16-Aug-11	81	500	450	7.61	2.34	9.31	1.80	0.051	0.0001	0.00014	0.0001	0.000009	0.0000045	0.0011	0.000001	2.79	0.00027	0.000009	0.00041	0.0014
23-Aug-11	82	500	465	7.55	1.91	7.36	1.86	0.046	0.0002	0.00014	0.0001	0.000009	0.0000047	0.0013	0.000002	3.49	0.00023	0.000006	0.00023	0.0028
30-Aug-11	83	500	440	7.55	1.82	6.87	2.64	0.043	0.0001	0.00013	0.0002	0.000009	0.0000044	0.0011	0.000008	3.08	0.00026	0.000007	0.00022	0.0018
06-Sep-11	84	500	440	7.64	1.65	6.53	2.20	0.033	0.0001	0.00013	0.0002	0.000009	0.0000044	0.0010	0.000001	2.87	0.00026	0.000005	0.00022	0.0009
13-Sep-11	85	500	445	7.61	1.31	6.20	1.78	0.035	0.0001	0.00013	0.0002	0.000009	0.0000045	0.0012	0.000008	2.61	0.00080	0.000007	0.00022	0.0009
20-Sep-11	86	500	455	7.45	1.68	6.62	1.82	0.034	0.0001	0.00023	0.0003	0.000009	0.0000046	0.0012	0.000004	2.81	0.00082	0.000008	0.00023	0.0055
27-Sep-11	87	500	450	7.40	2.29	6.48	2.25	0.034	0.0001	0.00054	0.0003	0.000009	0.0000045	0.0001	0.000001	2.71	0.00027	0.000006	0.00023	0.0027
04-Oct-11	88	500	450	7.50	1.62	7.49	2.25	0.048	0.0002	0.00018	0.0002	0.000009	0.0000045	0.0015	0.000001	3.03	0.00023	0.000007	0.00023	0.0014
11-Oct-11	89	500	445	7.62	2.10	6.78	1.78	0.039	0.0009	0.00018	0.0004	0.000009	0.0000045	0.0015	0.000011	2.97	0.00027	0.000006	0.00071	0.0018
18-Oct-11	90	500	445	7.43	1.70	6.27	1.78	0.041	0.0002	0.00022	0.0003	0.000009	0.0000045	0.0013	0.000001	2.85	0.00031	0.000004	0.00022	0.0009
25-Oct-11	91	500	455	7.38	1.38	6.47	1.82	0.042	0.0001	0.00018	0.0001	0.000009	0.0000046	0.0013	0.000003	3.04	0.00023	0.000006	0.00023	0.0014
01-Nov-11	92	500	460	7.48	1.83	6.27	2.30	0.037	0.0002	0.00078	0.0002	0.000009	0.0000046	0.0011	0.000001	2.79	0.00041	0.000009	0.00023	0.0028
08-Nov-11	93	500	450	7.43	1.93	6.21	1.80	0.033	0.0002	0.00014	0.0002	0.000009	0.0000045	0.0007	0.000009	2.96	0.00023	0.000005	0.00023	0.0014
15-Nov-11	94	500	445	7.22	1.98	5.50	1.78	0.031	0.0001	0.00013	0.0001	0.000009	0.0000045	0.0009	0.000001	2.79	0.00022	0.000007	0.00022	0.0013
22-Nov-11	95	500	450	7.46	2.28	6.45	2.25	0.039	0.0002	0.00045	0.0001	0.000009	0.0000045	0.0013	0.000007	3.03	0.00023	0.000012	0.00027	0.0077
29-Nov-11	96	500	445	7.51	2.23	6.38	1.34	0.044	0.0001	0.00013	0.0001	0.000009	0.0000045	0.0011	0.000007	2.80	0.00022	0.000008	0.00022	0.0013
06-Dec-11	97	500	445	7.35	2.09	5.87	1.78	0.032	0.0001	0.00022	0.0004	0.000009	0.0000045	0.0012	0.000006	2.73	0.00022	0.000004	0.00022	0.0013
13-Dec-11	98	500	440	7.31	1.65	6.11	1.32	0.024	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0007	0.000001	2.65	0.00040	0.000005	0.00048	0.0013
20-Dec-11	99	500	435	7.49	1.76	6.21	1.31	0.036	0.0001	0.00039	0.0001	0.000009	0.0000044	0.0007	0.000001	2.62	0.00022	0.000007	0.00022	0.0013
27-Dec-11	100	500	455	7.67	1.94	7.42	1.37	0.033	0.0001	0.00018	0.0020	0.000009	0.0000046	0.0011	0.000003	2.75	0.00023	0.000005	0.00059	0.0036
03-Jan-12	101	500	450	7.41	1.95	6.95	1.80	0.042	0.0001	0.00036	0.0002	0.000009	0.0000045	0.0009	0.000001	2.52	0.00023	0.000007	0.00023	0.0014
10-Jan-12	102	500	435	7.37	1.37	6.04	1.31	0.041	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0007	0.000004	2.40	0.00022	0.000004	0.00022	0.0013
17-Jan-12	103	500	470	7.37	1.94	9.56	2.35	0.038	0.0001	0.00014	0.0001	0.000009	0.0000047	0.0016	0.000003	3.41	0.00024	0.000006	0.00024	0.0014
24-Jan-12	104	500	470	7.53	2.27	7.88	2.35	0.043	0.0001	0.00014	0.0001	0.000009	0.0000047	0.0008	0.000002	2.98	0.00024	0.000007	0.00024	0.0014
31-Jan-12	105	500	450	7.21	1.71	7.07	1.35	0.036	0.0001	0.00050	0.0001	0.000009	0.0000045	0.0012	0.000001	2.62	0.00023	0.000006	0.00050	0.0014
07-Feb-12	106	500	490	7.21	2.20	9.95	3.43	0.033	0.0001	0.00020	0.0002	0.000010	0.0000049	0.0010	0.000012	3.80	0.00025	0.000021	0.00078	0.0015
14-Feb-12	107	500	435	7.34	2.11	6.23	3.05	0.023	0.0001	0.00017	0.0001	0.000009	0.0000044	0.0007	0.000003	2.77	0.00022	0.000008	0.00052	0.0013
21-Feb-12	108	500	440	7.28	1.17	5.93	2.64	0.024	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0025	0.000010	2.58	0.00022	0.000004	0.00026	0.0013
28-Feb-12	109	500	435	7.29	1.87	6.05	1.74	0.029	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0007	0.000003	2.54	0.00022	0.000003	0.00035	0.0013
06-Mar-12	110	500	455	7.32	1.39	5.75	1.82	0.035	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0008	0.000002	2.59	0.00023	0.000005	0.00023	0.0014
13-Mar-12	111	500	440	7.19	1.95	5.66	1.76	0.022	0.0001	0.00031	0.0003	0.000009	0.0000044	0.0011	0.000002	2.53	0.00022	0.000011	0.00022	0.0013
20-Mar-12	112	500	455	7.25	2.11	5.60	1.82	0.022	0.0001	0.00027	0.0006	0.000009	0.0000046	0.0008	0.000144	2.50	0.00023	0.000009	0.00273	0.0014
27-Mar-12	113	500	460	7.17	1.73	5.98	2.30	0.040	0.0001	0.00018	0.0001	0.000009	0.0000046	0.0008	0.000003	2.79	0.00023	0.000001	0.00023	0.0064
03-Apr-12	114	500	460	7.13	1.78	6.21	1.84	0.045	0.0001	0.00014	0.0001	0.000009	0.0000046	0.0007	0.000001	2.94	0.00023	0.000005	0.00023	0.0014
10-Apr-12	115	500	455	7.24	1.12	5.70	1.82	0.035	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0008	0.000001	2.65	0.00023	0.000005	0.00023	0.0014
17-Apr-12	116	500	450	7.25	1.61	5.55	1.80	0.040	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0008	0.000001	2.61	0.00023	0.000002	0.00023	0.0027
24-Apr-12	117	500	445	7.36	1.22	5.36	2.67	0.038	0.0001	0.00031	0.0002	0.000009	0.0000045	0.0007	0.000001	2.79	0.00022	0.000006	0.00027	0.0013
01-May-12	118	500	435	7.46	1.87	6.24	2.18	0.038	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0011	0.000001	2.71	0.00022	0.000003	0.00022	0.0013
08-May-12	119	500	445	7.37	1.34	5.83	1.34	0.032	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0012	0.000001	2.82	0.00022	0.000004	0.00071	0.0013
15-May-12	120	500	435	7.43	1.09	5.23	1.74	0.031	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0009	0.000001	2.52	0.00022	0.000009	0.00022	0.0013
22-May-12	121	500	435	7.22	1.54	5.16	1.74	0.039	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0007	0.000001	2.40	0.00022	0.000004	0.00022	0.0126
29-May-12	122	500	445	7.22	1.50	5.54	1.34	0.037	0.0001	0.00013	0.0000	0.000009	0.0000045	0.0009	0.000001	2.65	0.00022	0.000005	0.00049	0.0027
05-Jun-12	123	500	435	7.20	1.48	5.40	0.87	0.034	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0011	0.000021	2.66	0.00022	0.000015	0.00122	0.0026
12-Jun-12	124	500	455	7.36	1.38	5.94	2.28	0.040	0.0001	0.00018	0.0001	0.000009	0.0000046	0.0013	0.000001	2.78	0.00023	0.000001	0.00023	0.0014
19-Jun-12	125	500	435	7.28	1.04	5.43	1.31	0.034	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0009	0.000001	2.58	0.00022	0.000004	0.00022	0.0013
26-Jun-12	126	500	440	7.39	1.19	5.72	2.20	0.044	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0014	0.000001	2.62	0.00022	0.000001	0.00026	0.0013
03-Jul-12	127	500	440	7.40	2.72	6.53	1.76	0.037	0.0001	0.00009	0.0000	0.000009	0.0000044	0.0007	0.000002	2.74	0.00022	0.000001	0.00022	0.0013
10-Jul-12	128	500	430	7.26	1.38	5.68	2.58	0.042	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0009	0.000001	2.77	0.00022	0.000001	0.00022	0.0013
17-Jul-12	129	500	440	7.41	0.86	5.58	2.20	0.042	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0008	0.000001	2.53	0.00022	0.000007	0.00022	0.0013
24-Jul-12	130	500	440	7.18	1.17	5.40	2.64	0.038	0.0001	0.00018	0.0001	0.000009	0.0000044	0.0006	0.000001	2.68	0.00022	0.000005	0.00022	0.0013
31-Jul-12	131	500	450	7.42	0.86	6.07	1.80	0.051	0.0001	0.00023	0.0001	0.000009	0.0000045	0.0010	0.000001	2.86	0.00023	0.000002	0.00032	0.0014
07-Aug-12	132	500	445	7.52	0.84	5.48	2.23	0.051	0.0003	0.00018	0.0001	0.000009	0.0000045	0.0009	0.000001	2.76	0.00022	0.000008	0.00022	0.0013
14-Aug-12	133	500	435	7.27	1.00	5.09	1.31	0.035	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0009	0.000001	2.46	0.00022	0.000001	0.00065	0.0013
21-Aug-12	134	500	435	7.20	1.10	5.01	2.61	0.039	0.0003	0.00030	0.0001	0.000009	0.0000044	0.0010	0.000001	2.46	0.00022	0.000004	0.00022	0.0013
28-Aug-12	135	500	445	7.22	1.91	5.37	2.67	0.043	0.0001	0.00027	0.0001	0.000009	0.0000045	0.0010	0.000051	2.35	0.00022	0.000023	0.00040	0.0022
04-Sep-12	136	500	450	7.16	1.80	5.76	2.70	0.056	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0011	0.000001	2.70	0.00023	0.000005	0.00023	0.0014
11-Sep-12	137	500	450	7.30	1.08	5.58	2.70	0.035	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0008	0.000005	2.46	0.00023	0.000008	0.00032	0.0090
18-Sep-12	138	500	505	7.29	1.08	7.13	4.55	0.036	0.0002	0.00020	0.0001	0.000010	0.0000051	0.0014	0.000002	4.31	0.00025	0.000006	0.00025	0.0015
25-Sep-12	139	500	460	7.24	1.20	5.43	3.22	0.030	0.0001	0.00014	0.0001	0.000009	0.0000046	0.0010	0.000001	2.82	0.00023	0.000002	0.00023	0.0014
02-Oct-12	140	500	440	7.22	1.37	5.46	2.64	0.024	0.0001	0.00009	0.0001	0.000009	0.0000088	0.0012	0.000001	2.64	0.00022	0.000022	0.00022	0.0013
09-Oct-12	141	500	455	7.29	2.14	5.63	2.73	0.033	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0011	0.000001	2.56	0.00023	0.000065	0.00055	0.0014
16-Oct-12	142	500	430	7.50	1.90	5.74	2.58	0.031	0.0001	0.00009	0.0000	0.000009	0.0000043	0.0011	0.000001	2.39	0.00022	0.000001	0.00022	0.0013
23-Oct-12	143	500	440	7.12	1.76	6.09	3.08	0.038	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0005	0.000004	2.67	0.00022	0.000078	0.00044	0.0013
30-Oct-12	144	500	440	7.14	1.66	5.85	2.64	0.040	0.0001	0.00013	0.0001	0.000009	0.0000044	0.0014	0.000568	2.94	0.00022	0.000002	0.00031	0.0013
06-Nov-12	145	500	440	7.26	1.59	5.55	1.32	0.025	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0012	0.000003	2.82	0.00022	0.000006	0.00040	0.0013
13-Nov-12	146	500	440	7.40	2.38	6.32	2.20	0.028	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0010	0.000002	2.88	0.00022	0.000021	0.00022	0.0013
20-Nov-12	147	500	490	7.65	2.87	7.26	2.94	0.031	0.0001	0.00010	0.0001	0.000010	0.0000049	0.0018	0.000006	3.85	0.00025	0.000046	0.00029	0.0029
27-Nov-12	148	500	500	7.35	2.22	8.28	6.00	0.024	0.0002	0.00015	0.0002	0.000010	0.0000050	0.0018	0.000004	5.35	0.00025	0.000031	0.00025	0.0015
04-Dec-12	149	500	460	7.60	0.88	6.82	3.68	0.040	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0007	0.000005	3.53	0.00023	0.000010	0.00023	0.0014
11-Dec-12	150	500	465	7.50	0.97	7.17	3.72	0.033	0.0001	0.00009	0.0001	0.000009	0.0000047	0.0013	0.000013	3.71	0.00023	0.000019	0.00070	0.0014
18-Dec-12	151	500	485	7.41	1.13	6.76	3.40	0.035	0.0001	0.00010	0.0002	0.000010	0.0000049	0.0008	0.000003	3.50	0.00024	0.000008	0.00024	0.0015
25-Dec-12	152	500	450	7.35	1.22	5.01	1.35	0.030	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0007	0.000001	2.58	0.00023	0.000006	0.00023	0.0014
01-Jan-13	153	500	450	7.46	1.13	5.95	1.80	0.027	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0006	0.000002	2.39	0.00023	0.000005	0.00023	0.0014
08-Jan-13	154	500	445	7.54	1.28	6.17	1.78	0.035	0.0001	0.00013	0.0004	0.000009	0.0000045	0.0007	0.000004	2.65	0.00022	0.000028	0.00022	0.0013
15-Jan-13	155	500	450																	
22-Jan-13	156	500	455	7.49	1.62	6.23	3.19													
29-Jan-13	157	500	460																	
05-Feb-13	158	500	490	7.44	1.44	5.51														
12-Feb-13	159	500	480																	

HC 4
Sample = 731259

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	0.000015	0.0023	0.21	0.003	0.0039	0.00047	0.00019	0.0039	2.96	0.00003	0.41	0.000004	4.66	0.017	3.68	0.00008	0.00009	0.00008	0.000011	0.00020	0.0004	0.000004
09-Feb-10	0.000015	0.0029	0.34	0.007	0.0049	0.00073	0.00005	0.0049	3.49	0.00002	0.51	0.000005	4.79	0.026	4.10	0.00010	0.00000	0.00005	0.000077	0.00020	0.0005	0.000005
16-Feb-10	0.000035	0.0022	0.29	0.009	0.0044	0.00047	0.00018	0.0044	2.24	0.00002	0.44	0.000004	3.06	0.021	3.01	0.00009	0.00003	0.00009	0.000088	0.00017	0.0004	0.000009
23-Feb-10	0.000077	0.0022	0.31	0.008	0.0043	0.00025	0.00009	0.0043	2.05	0.00003	0.43	0.000004	2.30	0.022	2.48	0.00009	0.00003	0.00013	0.000077	0.00018	0.0004	0.000009
02-Mar-10	0.000018	0.0013	0.25	0.007	0.0044	0.00015	0.00004	0.0044	1.48	0.00005	0.32	0.000004	1.53	0.018	2.16	0.00009	0.00005	0.00035	0.000062	0.00018	0.0004	0.000013
09-Mar-10	0.000040	0.0013	0.25	0.008	0.0045	0.00008	0.00009	0.0045	1.28	0.00002	0.33	0.000004	0.84	0.016	1.50	0.00009	0.00012	0.00004	0.000057	0.00014	0.0004	0.000036
16-Mar-10	0.000013	0.0013	0.30	0.008	0.0044	0.00010	0.00004	0.0044	1.36	0.00002	0.35	0.000004	0.86	0.018	1.79	0.00009	0.00000	0.00004	0.000110	0.00016	0.0004	0.000004
23-Mar-10	0.000017	0.0017	0.29	0.009	0.0043	0.00007	0.00004	0.0043	1.20	0.00002	0.38	0.000004	0.57	0.018	1.74	0.00009	0.00006	0.00009	0.000071	0.00014	0.0004	0.000013
30-Mar-10	0.000034	0.0015	0.31	0.015	0.0049	0.00005	0.00010	0.0049	1.12	0.00002	0.33	0.000005	0.53	0.019	1.79	0.00010	0.00005	0.00010	0.000083	0.00014	0.0005	0.000005
06-Apr-10	0.000013	0.0013	0.32	0.011	0.0044	0.00006	0.00004	0.0044	1.17	0.00002	0.33	0.000004	0.61	0.021	2.15	0.00009	0.00006	0.00004	0.000129	0.00013	0.0004	0.000004
13-Apr-10	0.000018	0.0014	0.22	0.011	0.0045	0.00004	0.00005	0.0045	0.83	0.00002	0.31	0.000005	0.36	0.014	1.04	0.00009	0.00012	0.00009	0.000073	0.00012	0.0005	0.000005
20-Apr-10	0.000039	0.0009	0.24	0.010	0.0044	0.00003	0.00004	0.0044	0.90	0.00002	0.34	0.000004	0.30	0.017	1.63	0.00009	0.00004	0.00004	0.000095	0.00015	0.0004	0.000009
27-Apr-10	0.000048	0.0009	0.21	0.011	0.0044	0.00004	0.00004	0.0044	0.73	0.00016	0.30	0.000004	0.27	0.014	1.28	0.00009	0.00007	0.00018	0.000083	0.00011	0.0004	0.000013
04-May-10	0.000626	0.0009	0.24	0.015	0.0044	0.00005	0.00004	0.0044	0.71	0.00002	0.27	0.000004	0.30	0.016	1.41	0.00009	0.00010	0.00004	0.000092	0.00011	0.0004	0.000004
11-May-10	0.000612	0.0009	0.26	0.017	0.0045	0.00004	0.00005	0.0090	0.81	0.00002	0.32	0.000023	0.26	0.018	1.84	0.00009	0.00012	0.00005	0.000104	0.00014	0.0005	0.000005
18-May-10	0.000012	0.0012	0.31	0.049	0.0042	0.00015	0.00004	0.0037	0.90	0.00002	0.30	0.000004	0.33	0.020	1.88	0.00008	0.00006	0.00004	0.000084	0.00012	0.0004	0.000004
25-May-10	0.000032	0.0009	0.21	0.010	0.0046	0.00005	0.00005	0.0041	0.65	0.00005	0.31	0.000005	0.22	0.013	1.27	0.00009	0.00010	0.00009	0.000087	0.00015	0.0023	0.000005
01-Jun-10	0.000109	0.0008	0.25	0.011	0.0042	0.00007	0.00004	0.0038	0.75	0.00002	0.30	0.000004	0.24	0.014	1.38	0.00008	0.00005	0.00008	0.000081	0.00015	0.0004	0.000004
08-Jun-10	0.000016	0.0008	0.20	0.011	0.0041	0.00005	0.00004	0.0078	0.63	0.00002	0.27	0.000004	0.19	0.011	0.98	0.00008	0.00009	0.00004	0.000062	0.00012	0.0004	0.000004
15-Jun-10	0.000035	0.0009	0.18	0.011	0.0044	0.00009	0.00004	0.0040	0.53	0.00002	0.29	0.000018	0.17	0.011	0.82	0.00009	0.00015	0.00013	0.000066	0.00016	0.0004	0.000009
22-Jun-10																						
29-Jun-10	0.000040	0.0004	0.17	0.011	0.0044	0.00007	0.00004	0.0040	0.50	0.00002	0.26	0.000004	0.15	0.008	0.85	0.00009	0.00024	0.00009	0.000070	0.00011	0.0004	0.000009
06-Jul-10																						
13-Jul-10	0.000041	0.0005	0.19	0.016	0.0045	0.00012	0.00009	0.0108	0.48	0.00002	0.25	0.000005	0.14	0.011	1.12	0.00009	0.00057	0.00018	0.000096	0.00012	0.0005	0.000018
20-Jul-10																						
27-Jul-10	0.000027	0.0005	0.19	0.014	0.0045	0.00005	0.00005	0.0095	0.44	0.00003	0.29	0.000005	0.13	0.012	1.08	0.00009	0.00006	0.00014	0.000071	0.00013	0.0005	0.000005
03-Aug-10	0.000019	0.0005	0.17	0.015	0.0048	0.00014	0.00005	0.0043	0.38	0.00002	0.23	0.000005	0.10	0.010	1.01	0.00010	0.00006	0.00005	0.000094	0.00008	0.0005	0.000005
10-Aug-10	0.000018	0.0004	0.17	0.015	0.0044	0.00006	0.00009	0.0040	0.42	0.00002	0.24	0.000004	0.11	0.011	1.25	0.00009	0.00001	0.00009	0.000065	0.00011	0.0004	0.000004
17-Aug-10	0.001808	0.0004	0.16	0.015	0.0044	0.00013	0.00009	0.0053	0.41	0.00002	0.26	0.000004	0.11	0.010	1.22	0.00009	0.00002	0.00004	0.000259	0.00011	0.0053	0.000009
24-Aug-10	0.000030	0.0004	0.17	0.015	0.0043	0.00003	0.00009	0.0039	0.39	0.00002	0.25	0.000034	0.11	0.010	1.25	0.00009	0.00008	0.00013	0.000062	0.00011	0.0004	0.000009
31-Aug-10	0.000055	0.0005	0.17	0.004	0.0046	0.00004	0.00005	0.0041	0.37	0.00002	0.30	0.000005	0.10	0.010	1.03	0.00009	0.00001	0.00005	0.000083	0.00013	0.0005	0.000005
07-Sep-10	0.000344	0.0004	0.15	0.005	0.0043	0.00002	0.00009	0.0039	0.37	0.00002	0.25	0.000004	0.09	0.008	1.08	0.00009	0.00003	0.00017	0.000063	0.00015	0.0009	0.000009
14-Sep-10	0.000030	0.0004	0.15	0.016	0.0043	0.00040	0.00009	0.0039	0.35	0.00002	0.23	0.000004	0.10	0.009	0.94	0.00009	0.00008	0.00017	0.000060	0.00009	0.0004	0.000009
21-Sep-10	0.000009	0.0005	0.16	0.016	0.0046	0.00002	0.00009	0.0055	0.37	0.00034	0.25	0.000009	0.11	0.009	1.11	0.00009	0.00011	0.00005	0.000063	0.00008	0.0005	0.000009
28-Sep-10	0.000054	0.0005	0.16	0.016	0.0049	0.00015	0.00034	0.0044	0.33	0.00002	0.29	0.000005	0.10	0.011	1.31	0.00010	0.00011	0.00005	0.000123	0.00009	0.0010	0.000005
05-Oct-10	0.000051	0.0005	0.17	0.015	0.0046	0.00047	0.00005	0.0041	0.37	0.00002	0.28	0.000005	0.10	0.011	1.60	0.00009	0.00045	0.00009	0.000085	0.00009	0.0005	0.000014
12-Oct-10	0.000030	0.0004	0.17	0.014	0.0043	0.00017	0.00013	0.0039	0.35	0.00002	0.25	0.000004	0.11	0.011	1.58	0.00009	0.00024	0.00013	0.000046	0.00011	0.0004	0.000004
19-Oct-10	0.000030	0.0004	0.13	0.013	0.0044	0.00006	0.00004	0.0039	0.31	0.00002	0.21	0.000004	0.08	0.008	0.91	0.00009	0.00003	0.00004	0.000048	0.00010	0.0017	0.000004
26-Oct-10	0.000045	0.0004	0.12	0.013	0.0045	0.00016	0.00013	0.0040	0.27	0.00123	0.19	0.000004	0.09	0.007	1.02	0.00009	0.00006	0.00004	0.000050	0.00010	0.0009	0.000004
02-Nov-10	0.000162	0.0005	0.14	0.013	0.0045	0.00008	0.00018	0.0117	0.30	0.00002	0.23	0.000005	0.10	0.008	1.04	0.00009	0.00002	0.00009	0.000048	0.00002	0.0005	0.000009
09-Nov-10	0.000220	0.0005	0.19	0.020	0.0050	0.00016	0.00010	0.0180	0.33	0.00002	0.29	0.000005	0.11	0.012	1.38	0.00010	0.00032	0.00010	0.000151	0.00008	0.0010	0.000005
16-Nov-10	0.000239	0.0005	0.15	0.016	0.0045	0.00012	0.00009	0.0158	0.30	0.00002	0.24	0.000005	0.09	0.010	1.34	0.00009	0.00008	0.00009	0.000071	0.00007	0.0014	0.000005
23-Nov-10	0.000031	0.0004	0.13	0.014	0.0044	0.00116	0.00004	0.0040	0.26	0.00002	0.21	0.000004	0.07	0.008	0.90	0.00009	0.00011	0.00013	0.000088	0.00008	0.0009	0.000013
30-Nov-10	0.000026	0.0004	0.14	0.015	0.0044	0.00026	0.00017	0.0039	0.27	0.00002	0.23	0.000004	0.08	0.008	0.98	0.00009	0.00069	0.00013	0.000099	0.00009	0.0017	0.000009
07-Dec-10	0.000905	0.0004	0.17	0.015	0.0043	0.00025	0.00009	0.0072	0.30	0.00002	0.26	0.000004	0.09	0.009	1.09	0.00009	0.00017	0.00009	0.000071	0.00010	0.0009	0.000013
14-Dec-10	0.000066	0.0004	0.12	0.013	0.0042	0.00020	0.00017	0.0037	0.26	0.00010	0.20	0.000004	0.08	0.007	0.74	0.00008	0.00027	0.00008	0.000073	0.00009	0.0004	0.000004
21-Dec-10	0.000051	0.0005	0.20	0.051	0.0047	0.00007	0.00009	0.0042	0.28	0.00002	0.31	0.000005	0.08	0.008	1.13	0.00009	0.00008	0.00009	0.000066	0.00008	0.0009	0.000005
28-Dec-10	0.000729	0.0005	0.13	0.015	0.0045	0.00014	0.00005	0.0041	0.30	0.00002	0.26	0.000005	0.09	0.008	1.12	0.00009	0.00013	0.00009	0.000046	0.00008	0.0014	0.000009
04-Jan-11	0.000290	0.0005	0.12	0.013	0.0046	0.00013	0.00051	0.0055	0.22	0.00002	0.22	0.000005	0.07	0.007	0.82	0.00009	0.00003	0.00037	0.000053	0.00008	0.0005	0.000009
11-Jan-11	0.000018	0.0005	0.11	0.015	0.0045	0.00008	0.00009	0.0041	0.20	0.00002	0.18	0.000005	0.06	0.007	0.79	0.00009	0.00007	0.00009	0.000041	0.00006	0.0009	0.000009
18-Jan-11	0.000026	0.0004	0.13	0.015	0.0043	0.00006	0.00004	0.0039	0.26	0.00003	0.24	0.000004	0.07	0.008	0.95	0.00009	0.00012	0.00009	0.000035	0.00007	0.0004	0.000013
25-Jan-11	0.000075	0.0004	0.12	0.015	0.0044	0.00007	0.00022	0.0079	0.25	0.00003	0.20	0.000004	0.07	0.007	0.85	0.00009	0.00009	0.00009	0.000073	0.00008	0.0013	0.000004
01-Feb-11	0.000017	0.0004	0.11	0.013	0.0043	0.00007	0.00009	0.0174	0.21	0.00002	0.17	0.000004	0.06	0.006	1.30	0.00009	0.00025	0.00009	0.000037	0.00006	0.0009	0.000009
08-Feb-11	0.000017	0.0004	0.11	0.014	0.0044	0.00008	0.00004	0.0039	0.20	0.00002	0.22	0.000004	0.06	0.007	0.74	0.00009	0.00020	0.00013	0.000031	0.00007	0.0009	0.000004
15-Feb-11	0.000013	0.0004	0.10	0.013	0.0044	0.00011	0.00013	0.0048	0.20	0.00005	0.22	0.000004	0.05	0.006	0.64	0.00009	0.00000	0.00004	0.000012	0.00004	0.0004	0.000009
22-Feb-11	0.000009	0.0004	0.09	0.012	0.0043	0.00008	0.00004	0.0069	0.19	0.00002	0.19	0.000009	0.06	0.006	0.71	0.00009	0.00000	0.00009	0.000016	0.00005	0.0004	0.000004
01-Mar-11	0.000658	0.0004	0.11	0.011	0.0043	0.00006	0.00009	0.0215	0.19	0.00002	0.19	0.000004	0.07	0.006	0.81	0.00009	0.00009	0.00013	0.000026	0.00006	0.0030	0.000009
08-Mar-11	0.000366	0.0004	0.10	0.012	0.0043	0.00010	0.00004	0.0138	0.19	0.00014	0.17	0.000004	0.06	0.006	0.82	0.00009	0.00011	0.00009	0.000027	0.00005	0.0004	0.000009
15-Mar-11	0.000414	0.0005	0.09	0.015	0.0045	0.00006	0.00018	0.0171	0.17	0.00002	0.20	0.000005	0.07	0.006	0.70	0.00001	0.00021	0.00014	0.000030	0.00006	0.0009	0.000023
22-Mar-11	0.000022	0.0004	0.09	0.014	0.0044	0.00005	0.00009	0.0039	0.18	0.00007	0.20	0.000004	0.05	0.006	0.75	0.00009	0.00016	0.00004	0.000026	0.00007	0.0004	0.000004
29-Mar-11	0.000022	0.0004	0.09	0.012	0.0044	0.00004	0.00009	0.0170	0.18	0.00002	0.18	0.000004	0.06	0.006	0.75	0.00009	0.00004	0.00009	0.000026	0.00006	0.0004	0.000017
05-Apr-11	0.000070	0.0005	0.10	0.015	0.0047	0.00007	0.00009	0.0042	0.19	0.00002	0.22	0.000005	0.06	0.006	0.76	0.00009	0.00005	0.00005	0.000027	0.00005	0.0009	0.000005
12-Apr-11	0.000013	0.0004	0.11	0.016	0.0044	0.00014	0.00004	0.0040	0.19	0.00002	0.19	0.000004	0.06	0.008	0.87	0.00009	0.00009	0.00009	0.000029	0.00007	0.0004	0.000004
19-Apr-11	0.000906	0.0005	0.09	0.015	0.0046	0.00035	0.00009	0.0101	0.17	0.00023	0.21	0.000005	0.06	0.006	0.72	0.00009	0.00003	0.00009	0.000028	0.00007	0.0028	0.000005
26-Apr-11	0.000018	0.0004	0.09	0.014	0.0044	0.00004	0.00022	0.0106	0.18	0.00002	0.21	0.000004	0.06	0.006	0.77	0.00009	0.00002	0.00009	0.000033	0.00007	0.0009	0.000004
03-May-11	0.000018	0.0004	0.09	0.012	0.0044	0.00006	0.00009	0.0048	0.18	0.00007	0.19	0.000004	0.06	0.006	0.82	0.00009	0.00000	0.00004	0.000022	0.00005	0.0004	0.000004
10-May-11	0.000021	0.0004	0.09	0.011	0.0043	0.00006	0.00017	0.0038	0.17	0.00002	0.18	0.000004	0.06	0.006	0.78	0.00009	0.00006	0.00013	0.000024	0.00004	0.0013	0.000009
17-May-11	0.000009	0.0004	0.08	0.013	0.0045	0.00005	0.00004	0.0053	0.16	0.00003	0.19	0.000013	0.05	0.006	0.66	0.00009	0.00000	0.00004	0.000026	0.00005	0.0004	0.000004
24-May-11	0.000114	0.0005	0.10	0.018	0.0050	0.00004	0.00005	0.0045	0.17	0.00005	0.50	0.000005	0.05	0.007	1.04	0.00010	0.00029	0.00005	0.000052	0.00005	0.0010	0.000005
31-May-11	0.000023	0.0005	0.09	0.015	0.0047	0.00006	0.00005	0.0186	0.18	0.00002	0.22	0.000005	0.06	0.007	1.02	0.00009	0.00009	0.00005	0.000027	0.00003	0.0009	0.000009
07-Jun-11	0.000026	0.0004	0.07	0.010	0.0043	0.00003	0.00009	0.0068	0.14	0.00002	0.19	0.000004	0.09	0.005	0.77	0.00001	0.00007	0.00004	0.000014	0.00003	0.0013	0.000004
14-Jun-11	0.000026	0.0004	0.07	0.010	0.0044	0.00009	0.00017	0.0039	0.14	0.00002	0.20	0.000004	0.07	0.005	0.65	0.00001	0.00011	0.00004	0.000017	0.00006	0.0004	0.000004
21-Jun-11	0.000107	0.0004	0.08	0.012	0.0045	0.00003	0.00004	0.0067	0.14	0.00002	0.17	0.000004	0.05	0.005	0.64	0.00001	0.00005	0.00009	0.000019	0.00004	0.0013	0.000004
28-Jun-11	0.000027	0.0005	0.09	0.016	0.0090	0.00027	0.00009	0.0041	0.16	0.00002	0.19	0.000005	0.06	0.006	0.75	0.00001	0.00004	0.00005	0.000023	0.00005	0.0009	0.000005

HC 4
Sample = 731259

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	0.000054	0.0005	0.08	0.010	0.0045	0.00008	0.00009	0.0041	0.15	0.00002	0.23	0.000005	0.07	0.006	0.78	0.00001	0.00024	0.00009	0.000021	0.00006	0.0014	0.000005
12-Jul-11	0.000062	0.0004	0.09	0.013	0.0044	0.00033	0.00004	0.0040	0.17	0.00002	0.22	0.000004	0.06	0.006	0.85	0.00001	0.00005	0.00004	0.000022	0.00004	0.0018	0.000004
19-Jul-11	0.000022	0.0004	0.08	0.011	0.0045	0.00005	0.00018	0.0040	0.14	0.00002	0.17	0.000004	0.07	0.005	0.73	0.00001	0.00008	0.00004	0.000021	0.00006	0.0013	0.000004
26-Jul-11	0.000013	0.0004	0.08	0.027	0.0044	0.00044	0.00013	0.0062	0.12	0.00002	0.14	0.000004	0.04	0.005	0.57	0.00001	0.00000	0.00013	0.000017	0.00005	0.0004	0.000004
02-Aug-11	0.000024	0.0005	0.09	0.013	0.0047	0.00008	0.00005	0.0042	0.16	0.00002	0.21	0.000005	0.05	0.006	0.88	0.00001	0.00002	0.00005	0.000024	0.00005	0.0019	0.000005
09-Aug-11	0.000040	0.0004	0.08	0.012	0.0044	0.00058	0.00004	0.0040	0.14	0.00006	0.19	0.000004	0.06	0.006	0.93	0.00001	0.00000	0.00004	0.000023	0.00005	0.0013	0.000004
16-Aug-11	0.000018	0.0005	0.07	0.009	0.0045	0.00008	0.00005	0.0041	0.13	0.00002	0.18	0.000005	0.05	0.005	0.72	0.00001	0.00005	0.00005	0.000021	0.00004	0.0009	0.000005
23-Aug-11	0.000037	0.0005	0.09	0.013	0.0047	0.00006	0.00005	0.0042	0.15	0.00002	0.22	0.000005	0.06	0.007	1.03	0.00001	0.00004	0.00005	0.000028	0.00005	0.0009	0.000005
30-Aug-11	0.000026	0.0004	0.09	0.009	0.0044	0.00004	0.00013	0.0040	0.15	0.00002	0.19	0.000004	0.06	0.006	0.99	0.00001	0.00004	0.00004	0.000023	0.00005	0.0009	0.000004
06-Sep-11	0.000070	0.0004	0.08	0.009	0.0044	0.00034	0.00004	0.0040	0.13	0.00009	0.18	0.000004	0.05	0.005	0.92	0.00001	0.00000	0.00004	0.000024	0.00006	0.0035	0.000004
13-Sep-11	0.000102	0.0004	0.07	0.010	0.0045	0.00035	0.00004	0.0040	0.13	0.00002	0.16	0.000004	0.05	0.005	0.78	0.00001	0.00009	0.00004	0.000020	0.00003	0.0022	0.000004
20-Sep-11	0.000073	0.0005	0.08	0.015	0.0046	0.00014	0.00009	0.0041	0.13	0.00002	0.18	0.000005	0.05	0.005	0.88	0.00001	0.00025	0.00005	0.000018	0.00017	0.0023	0.000005
27-Sep-11	0.000009	0.0005	0.07	0.010	0.0045	0.00005	0.00005	0.0041	0.14	0.00006	0.16	0.000005	0.05	0.005	0.85	0.00001	0.00000	0.00005	0.000009	0.00005	0.0005	0.000009
04-Oct-11	0.000045	0.0005	0.08	0.010	0.0045	0.00005	0.00005	0.0041	0.14	0.00002	0.20	0.000005	0.05	0.005	0.83	0.00001	0.00004	0.00009	0.000021	0.00004	0.0009	0.000009
11-Oct-11	0.000053	0.0004	0.07	0.010	0.0045	0.00007	0.00009	0.0040	0.11	0.00007	0.19	0.000009	0.04	0.005	0.81	0.00001	0.00005	0.00004	0.000012	0.00004	0.0009	0.000031
18-Oct-11	0.000040	0.0004	0.07	0.011	0.0045	0.00010	0.00009	0.0040	0.13	0.00002	0.16	0.000004	0.05	0.005	0.84	0.00001	0.00002	0.00004	0.000014	0.00004	0.0022	0.000004
25-Oct-11	0.000027	0.0005	0.08	0.010	0.0046	0.00004	0.00005	0.0041	0.14	0.00002	0.22	0.000005	0.05	0.006	0.81	0.00001	0.00004	0.00005	0.000022	0.00004	0.0009	0.000009
01-Nov-11	0.000064	0.0005	0.07	0.010	0.0046	0.00005	0.00009	0.0041	0.12	0.00002	0.17	0.000005	0.05	0.005	0.77	0.00001	0.00004	0.00009	0.000019	0.00004	0.0009	0.000009
08-Nov-11	0.000063	0.0005	0.08	0.011	0.0045	0.00003	0.00005	0.0041	0.12	0.00007	0.17	0.000005	0.06	0.005	0.94	0.00001	0.00001	0.00009	0.000018	0.00008	0.0018	0.000023
15-Nov-11	0.000018	0.0004	0.07	0.011	0.0045	0.00004	0.00013	0.0040	0.11	0.00002	0.12	0.000004	0.04	0.005	0.88	0.00001	0.00000	0.00004	0.000017	0.00008	0.0004	0.000009
22-Nov-11	0.000014	0.0005	0.08	0.010	0.0045	0.00001	0.00014	0.0041	0.11	0.00018	0.18	0.000005	0.01	0.006	0.97	0.00001	0.00003	0.00009	0.000020	0.00010	0.0014	0.000005
29-Nov-11	0.000018	0.0004	0.07	0.011	0.0045	0.00014	0.00013	0.0071	0.11	0.00002	0.20	0.000004	0.05	0.005	0.70	0.00001	0.00003	0.00013	0.000016	0.00013	0.0004	0.000004
06-Dec-11	0.000009	0.0004	0.06	0.012	0.0045	0.00004	0.00004	0.0040	0.11	0.00002	0.19	0.000022	0.02	0.005	0.69	0.00001	0.00005	0.00009	0.000016	0.00012	0.0009	0.000004
13-Dec-11	0.000075	0.0004	0.07	0.011	0.0044	0.00005	0.00013	0.0079	0.11	0.00016	0.15	0.000004	0.06	0.005	0.73	0.00001	0.00004	0.00004	0.000022	0.00003	0.0013	0.000004
20-Dec-11	0.000022	0.0004	0.07	0.008	0.0044	0.00002	0.00009	0.0039	0.11	0.00007	0.16	0.000004	0.04	0.004	0.73	0.00001	0.00000	0.00004	0.000016	0.00006	0.0013	0.000004
27-Dec-11	0.000232	0.0005	0.07	0.010	0.0046	0.00008	0.00014	0.0155	0.47	0.00002	0.15	0.000114	0.07	0.005	0.73	0.00001	0.00000	0.00009	0.000024	0.00005	0.0014	0.000005
03-Jan-12	0.000009	0.0005	0.06	0.008	0.0045	0.00004	0.00023	0.0041	0.11	0.00002	0.15	0.000005	0.05	0.004	0.70	0.00001	0.00001	0.00081	0.000019	0.00051	0.0005	0.000005
10-Jan-12	0.000030	0.0004	0.06	0.008	0.0044	0.00003	0.00009	0.0039	0.10	0.00002	0.13	0.000004	0.05	0.004	0.63	0.00001	0.00002	0.00013	0.000014	0.00020	0.0009	0.000004
17-Jan-12	0.000014	0.0005	0.08	0.015	0.0047	0.00004	0.00042	0.0042	0.13	0.00002	0.18	0.000005	0.04	0.005	0.85	0.00001	0.00001	0.00009	0.000023	0.00014	0.0014	0.000005
24-Jan-12	0.000009	0.0005	0.07	0.010	0.0047	0.00002	0.00014	0.0042	0.12	0.00005	0.16	0.000005	0.05	0.005	0.74	0.00001	0.00001	0.00005	0.000017	0.00013	0.0009	0.000009
31-Jan-12	0.000014	0.0005	0.06	0.010	0.0045	0.00006	0.00005	0.0041	0.10	0.00002	0.14	0.000005	0.05	0.004	0.66	0.00001	0.00001	0.00014	0.000016	0.00018	0.0009	0.000005
07-Feb-12	0.000025	0.0005	0.09	0.020	0.0049	0.00004	0.00034	0.0044	0.13	0.00002	0.19	0.000005	0.06	0.007	1.16	0.00001	0.00000	0.00010	0.000050	0.00015	0.0010	0.000005
14-Feb-12	0.000017	0.0004	0.06	0.009	0.0044	0.00001	0.00009	0.0039	0.09	0.00002	0.13	0.000004	0.05	0.005	0.90	0.00001	0.00000	0.00004	0.000030	0.00003	0.0004	0.000004
21-Feb-12	0.000009	0.0004	0.06	0.010	0.0044	0.00002	0.00013	0.0040	0.10	0.00002	0.14	0.000004	0.05	0.004	0.72	0.00001	0.00000	0.00004	0.000014	0.00008	0.0009	0.000004
28-Feb-12	0.000022	0.0004	0.06	0.011	0.0044	0.00002	0.00009	0.0039	0.10	0.00002	0.14	0.000004	0.05	0.004	0.61	0.00001	0.00003	0.00013	0.000014	0.00012	0.0009	0.000004
06-Mar-12	0.000009	0.0005	0.06	0.008	0.0046	0.00003	0.00009	0.0041	0.10	0.00002	0.15	0.000005	0.05	0.004	0.71	0.00001	0.00027	0.00005	0.000021	0.00010	0.0009	0.000005
13-Mar-12	0.000018	0.0004	0.06	0.009	0.0044	0.00044	0.00009	0.0040	0.09	0.00002	0.14	0.000004	0.05	0.004	0.69	0.00001	0.00011	0.00004	0.000015	0.00003	0.0004	0.000009
20-Mar-12	0.000396	0.0005	0.06	0.010	0.0046	0.00003	0.00005	0.0319	0.44	0.00005	0.13	0.000309	0.09	0.004	0.63	0.00001	0.00000	0.00005	0.000015	0.00001	0.0100	0.000005
27-Mar-12	0.000018	0.0005	0.06	0.009	0.0046	0.00001	0.00009	0.0041	0.09	0.00002	0.14	0.000005	0.06	0.004	0.71	0.00001	0.00002	0.00009	0.000021	0.00019	0.0009	0.000005
03-Apr-12	0.000018	0.0005	0.09	0.009	0.0046	0.00001	0.00014	0.0041	0.11	0.00002	0.15	0.000005	0.06	0.005	0.81	0.00001	0.00001	0.00005	0.000018	0.00012	0.0018	0.000005
10-Apr-12	0.000014	0.0005	0.06	0.010	0.0182	0.00002	0.00005	0.0041	0.09	0.00020	0.14	0.000005	0.05	0.004	0.71	0.00001	0.00001	0.00009	0.000015	0.00014	0.0014	0.000005
17-Apr-12	0.000009	0.0005	0.05	0.009	0.0135	0.00003	0.00009	0.0041	0.09	0.00002	0.13	0.000005	0.03	0.004	0.68	0.00001	0.00001	0.00009	0.000014	0.00014	0.0009	0.000005
24-Apr-12	0.000022	0.0004	0.06	0.010	0.0089	0.00036	0.00009	0.0040	0.11	0.00002	0.14	0.000004	0.05	0.005	0.94	0.00001	0.00004	0.00004	0.000020	0.00012	0.0009	0.000004
01-May-12	0.000026	0.0004	0.05	0.009	0.0261	0.00003	0.00004	0.0039	0.09	0.00002	0.13	0.000004	0.04	0.004	0.66	0.00001	0.00001	0.00017	0.000020	0.00016	0.0009	0.000004
08-May-12	0.000018	0.0004	0.07	0.008	0.0045	0.00002	0.00009	0.0040	0.12	0.00002	0.14	0.000004	0.05	0.004	0.81	0.00001	0.00016	0.00004	0.000022	0.00010	0.0009	0.000004
15-May-12	0.000013	0.0004	0.05	0.008	0.0044	0.00002	0.00004	0.0039	0.09	0.00002	0.13	0.000004	0.05	0.004	0.76	0.00001	0.00000	0.00004	0.000018	0.00009	0.0009	0.000004
22-May-12	0.000009	0.0004	0.05	0.008	0.0044	0.00006	0.00017	0.0039	0.09	0.00002	0.13	0.000004	0.04	0.004	0.70	0.00001	0.00001	0.00009	0.000019	0.00017	0.0026	0.000004
29-May-12	0.000009	0.0004	0.06	0.010	0.0045	0.00002	0.00004	0.0040	0.10	0.00002	0.16	0.000004	0.04	0.004	0.73	0.00001	0.00009	0.00004	0.000014	0.00012	0.0009	0.000004
05-Jun-12	0.000009	0.0004	0.06	0.008	0.0087	0.00007	0.00004	0.0039	0.11	0.00002	0.15	0.000004	0.07	0.004	0.82	0.00001	0.00003	0.00009	0.000019	0.00011	0.0009	0.000004
12-Jun-12	0.000009	0.0005	0.06	0.010	0.0046	0.00002	0.00005	0.0041	0.11	0.00002	0.16	0.000005	0.05	0.004	0.75	0.00001	0.00004	0.00009	0.000014	0.00014	0.0005	0.000005
19-Jun-12	0.000009	0.0004	0.05	0.008	0.0044	0.00002	0.00004	0.0039	0.10	0.00010	0.15	0.000004	0.04	0.004	0.77	0.00001	0.00003	0.00004	0.000015	0.00013	0.0009	0.000004
26-Jun-12	0.000009	0.0004	0.07	0.007	0.0044	0.00004	0.00009	0.0040	0.12	0.00002	0.25	0.000004	0.14	0.004	0.73	0.00001	0.00007	0.00009	0.000015	0.00019	0.0009	0.000004
03-Jul-12	0.000009	0.0004	0.06	0.007	0.0044	0.00042	0.00004	0.0040	0.10	0.00002	0.16	0.000004	0.05	0.004	0.79	0.00001	0.00004	0.00004	0.000015	0.00014	0.0004	0.000004
10-Jul-12	0.000009	0.0004	0.06	0.007	0.0086	0.00003	0.00004	0.0039	0.11	0.00002	0.16	0.000004	0.05	0.004	0.78	0.00001	0.00004	0.00013	0.000015	0.00014	0.0004	0.000004
17-Jul-12	0.000009	0.0004	0.05	0.005	0.0044	0.00000	0.00004	0.0040	0.10	0.00005	0.15	0.000018	0.04	0.004	0.66	0.00001	0.00001	0.00004	0.000015	0.00014	0.0004	0.000004
24-Jul-12	0.000009	0.0004	0.07	0.008	0.0088	0.00004	0.00004	0.0040	0.13	0.00012	0.17	0.000004	0.14	0.004	0.75	0.00001	0.00003	0.00009	0.000012	0.00015	0.0013	0.000004
31-Jul-12	0.000023	0.0005	0.05	0.007	0.0045	0.00003	0.00005	0.0041	0.11	0.00002	0.18	0.000005	0.05	0.004	0.72	0.00001	0.00011	0.00009	0.000016	0.00020	0.0018	0.000005
07-Aug-12	0.000009	0.0004	0.05	0.005	0.0045	0.00004	0.00004	0.0040	0.11	0.00002	0.18	0.000004	0.05	0.004	0.89	0.00001	0.00011	0.00009	0.000017	0.00017	0.0009	0.000004
14-Aug-12	0.000009	0.0004	0.05	0.005	0.0044	0.00000	0.00004	0.0039	0.10	0.00002	0.15	0.000004	0.07	0.004	0.83	0.00001	0.00006	0.00004	0.000016	0.00013	0.0009	0.000004
21-Aug-12	0.000017	0.0004	0.05	0.006	0.0044	0.00003	0.00009	0.0039	0.09	0.00002	0.24	0.000004	0.04	0.004	0.81	0.00001	0.00008	0.00009	0.000014	0.00013	0.0004	0.000004
28-Aug-12	0.000027	0.0004	0.05	0.007	0.0089	0.00006	0.00022	0.0040	0.08	0.00002	0.13	0.000004	0.05	0.004	0.66	0.00001	0.00036	0.00004	0.000015	0.00015	0.0053	0.000004
04-Sep-12	0.000009	0.0005	0.05	0.007	0.0180	0.00002	0.00005	0.0041	0.09	0.00002	0.15	0.000005	0.05	0.004	0.73	0.00001	0.00004	0.00009	0.000018	0.00018	0.0005	0.000005
11-Sep-12	0.000027	0.0005	0.05	0.006	0.0045	0.00002	0.00005	0.0041	0.09	0.00002	0.16	0.000005	0.05	0.004	0.68	0.00001	0.00009	0.00009	0.000016	0.00008	0.0014	0.000005
18-Sep-12	0.000045	0.0005	0.08	0.016	0.0051	0.00001	0.00005	0.0045	0.12	0.00002	0.22	0.000005	0.06	0.007	1.78	0.00001	0.00006	0.00005	0.000046	0.00010	0.0020	0.000005
25-Sep-12	0.000009	0.0005	0.05	0.007	0.0092	0.00002	0.00005	0.0041	0.09	0.00002	0.14	0.000023	0.04	0.005	1.06	0.00001	0.00006	0.00005	0.000026	0.00009	0.0005	0.000005
02-Oct-12	0.000009	0.0004	0.05	0.007	0.0044	0.00003	0.00018	0.0040	0.09	0.00002	0.20	0.000004	0.04	0.004	0.94	0.00001	0.00004	0.00004	0.000018	0.00008	0.0004	0.000004
09-Oct-12	0.000009	0.0005	0.05	0.007	0.0046	0.00004	0.00109	0.0041	0.09	0.00002	0.14	0.000005	0.04	0.004	0.76	0.00001	0.00010	0.00005	0.000022	0.00011	0.0005	0.000005
16-Oct-12	0.000009	0.0004	0.05	0.006	0.0043	0.00001	0.00004	0.0039	0.08	0.00002	0.15	0.000004	0.05	0.004	0.69	0.00001	0.00004	0.00004	0.000018	0.00009	0.0004	0.000004
23-Oct-12	0.000018	0.0004	0.05	0.006	0.0044	0.00010	0.00101	0.0040	0.10	0.00002	0.14	0.000009	0.04	0.004	0.79	0.00001	0.00002	0.00009	0.000022	0.00011	0.0009	0.000004
30-Oct-12	0.000009	0.0004	0.08	0.008	0.0044	0.00004	0.00009	0.0040	0.10	0.00002	0.16	0.000004	0.06	0.005	1.08	0.00001	0.00001	0.00004	0.000022	0.00012	0.0013	0.000004
06-Nov-12	0.000022	0.0004	0.05	0.007	0.0044	0.00004	0.00009	0.0040	0.08	0.00002	0.13	0.000004	0.04	0.004	0.86	0.00001	0.00013	0.00004	0.000018	0.00007	0.0004	0.000004
13-Nov-12	0.000009	0.0004	0.06	0.007	0.0044	0.00001	0.00004	0.0040	0.09	0.00002	0.16	0.000004	0.04	0.004	0.88	0.00001	0.00000	0.00004	0.000019	0.00008	0.0004	0.000004
20-Nov-12	0.000015	0.0005	0.07	0.011	0.0049	0.00001	0.00010	0.0044	0.10	0.00002	0.19	0.000005	0.05	0.006	1.28	0.00001	0.00006	0.00005	0.000044	0.00009	0.0015	0.000005
27-Nov-12	0.000010	0.0005	0.10	0.021	0.0050	0.00005	0.00010	0.0045	0.13	0.00002	0.29	0.000005	0.06	0.009	2.45	0.00001	0.00012	0.00005	0.000054	0.00002	0.0010	0.000005
04-Dec-12	0.000009	0.0005	0.06	0.009	0.0046	0.00001	0.00005	0.0041	0.10	0.00004	0.17	0.000005	0.04	0.006	1.25	0.00001	0.00004	0.00009	0.000032	0.00010	0.0005	0.000005
11-Dec-12	0.000009	0.0005	0.06	0.010	0.0047	0.00004	0.00005	0.0042	0.11	0.00002	0.18	0.000005	0.05	0.005	1.22	0.00001	0.00003	0.00005	0.000028	0.00010	0.0009	0.000005
18-Dec-12	0.000010	0.0005	0.06	0.013	0.0049	0.00002	0.00005	0.0044	0.09	0.00004	0.15	0.000005	0.04	0.005	1.31	0.00001	0.00006	0.00010	0.000032	0.00010	0.0005	0.000005
25-Dec-12	0.000009	0.0005	0.05	0.009	0.0045	0.00004	0.00005	0.0041	0.07	0.00002	0.09	0.000005	0.04	0.004	0.92	0.00001	0.00004	0.00005	0.000018	0.00004	0.0005	0.000005
01-Jan-13	0.000009	0.0005	0.04	0.009	0.0045	0.00010	0.00005	0.0041	0.07	0.00005	0.11	0.000005	0.04	0.004	0.72	0.00001	0.00006	0.00005	0.000017	0.00007	0.0005	0.000005
08-Jan-13	0.000013	0.0004	0.04	0.008	0.0045	0.00009	0.00004	0.0040	0.08	0.00002	0.15	0.000004	0.04	0.004	0.73	0.00001	0.00011	0.00009	0.000018	0.00011	0.0009	0.000004
15-Jan-13																						
22-Jan-13																						
29-Jan-13																						
05-Feb-13																						
12-Feb-13																						

HC 5
Sample = Alt 09 13

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	1	500	395	7.59	0.94	12.38	68.34	0.056	0.0019	0.00028	0.0030	0.000008	0.0000040	0.0115	0.000001	19.99	0.00020	0.000052	0.00130	0.0040
09-Feb-10	2	500	465	7.54	1.12	12.76	54.87	0.071	0.0017	0.00028	0.0022	0.000009	0.0000047	0.0181	0.000001	17.02	0.00023	0.000027	0.00051	0.0047
16-Feb-10	3	500	450	7.55	1.14	13.21	64.80	0.066	0.0012	0.00027	0.0020	0.000009	0.0000045	0.0162	0.000001	17.73	0.00023	0.000024	0.00054	0.0045
23-Feb-10	4	500	450	7.63	1.01	11.79	66.15	0.051	0.0007	0.00023	0.0018	0.000009	0.0000045	0.0117	0.000001	20.61	0.00023	0.000036	0.00036	0.0045
02-Mar-10	5	500	435	7.57	0.73	8.83	66.99	0.040	0.0005	0.00017	0.0016	0.000009	0.0000044	0.0070	0.000001	16.18	0.00022	0.000023	0.00035	0.0044
09-Mar-10	6	500	460	7.53	0.89	10.87	48.30	0.049	0.0005	0.00018	0.0012	0.000009	0.0000046	0.0087	0.000001	16.19	0.00023	0.000023	0.00041	0.0046
16-Mar-10	7	500	435	7.44	1.00	9.55	41.33	0.055	0.0003	0.00013	0.0009	0.000009	0.0000044	0.0078	0.000001	14.53	0.00022	0.000017	0.00026	0.0044
23-Mar-10	8	500	445	7.49	1.26	10.65	49.84	0.052	0.0004	0.00013	0.0009	0.000009	0.0000045	0.0064	0.000001	13.31	0.00022	0.000013	0.00031	0.0045
30-Mar-10	9	500	455	7.59	0.86	9.67	43.23	0.042	0.0004	0.00009	0.0010	0.000009	0.0000046	0.0059	0.000001	12.65	0.00032	0.000015	0.00036	0.0046
06-Apr-10	10	500	435	7.52	0.90	10.15	41.76	0.045	0.0003	0.00009	0.0007	0.000009	0.0000044	0.0035	0.000001	11.88	0.00030	0.000011	0.00044	0.0044
13-Apr-10	11	500	460	7.35	1.42	10.35	36.80	0.047	0.0003	0.00009	0.0007	0.000009	0.0000046	0.0051	0.000001	10.21	0.00023	0.000009	0.00037	0.0046
20-Apr-10	12	500	440	7.57	1.14	10.78	36.08	0.051	0.0003	0.00018	0.0008	0.000009	0.0000044	0.0048	0.000004	12.10	0.00031	0.000012	0.00044	0.0044
27-Apr-10	13	500	445	7.58	1.26	10.38	32.04	0.048	0.0002	0.00009	0.0006	0.000009	0.0000045	0.0036	0.000001	9.97	0.00027	0.000010	0.00045	0.0045
04-May-10	14	500	435	7.52	1.03	10.29	30.02	0.046	0.0003	0.00009	0.0007	0.000009	0.0000044	0.0039	0.000001	10.70	0.00030	0.000010	0.00039	0.0044
11-May-10	15	500	440	7.43	1.08	10.08	36.08	0.041	0.0003	0.00013	0.0007	0.000009	0.0000044	0.0040	0.000001	10.96	0.00031	0.000007	0.00044	0.0044
18-May-10	16	500	425	7.47	1.12	9.70	28.90	0.046	0.0003	0.00021	0.0006	0.000009	0.0000043	0.0037	0.000002	10.97	0.00021	0.000029	0.00068	0.0009
25-May-10	17	500	450	7.32	1.74	10.61	21.15	0.037	0.0002	0.00009	0.0007	0.000009	0.0000045	0.0036	0.000003	9.90	0.00023	0.000015	0.00068	0.0009
01-Jun-10	18	500	425	7.50	0.99	9.58	18.70	0.039	0.0002	0.00017	0.0005	0.000009	0.0000043	0.0030	0.000001	9.27	0.00034	0.000064	0.00081	0.0017
08-Jun-10	19	500	420	7.39	1.21	9.52	21.42	0.039	0.0002	0.00008	0.0005	0.000008	0.0000042	0.0034	0.000001	10.08	0.00034	0.000007	0.00071	0.0008
15-Jun-10	20	500	435	7.46	1.16	9.45	21.32	0.037	0.0002	0.00009	0.0007	0.000009	0.0000044	0.0028	0.000001	9.48	0.00022	0.000013	0.00052	0.0009
22-Jun-10	21	500	435	7.61	0.82	10.16														
29-Jun-10	22	500	450	7.32	0.98	8.32	19.35	0.031	0.0001	0.00009	0.0005	0.000009	0.0000045	0.0027	0.000002	8.33	0.00032	0.000012	0.00068	0.0009
06-Jul-10	23	500	470	7.50	1.02	9.99														
13-Jul-10	24	500	460	7.29	1.20	8.30	18.40	0.027	0.0002	0.00014	0.0006	0.000009	0.0000046	0.0027	0.000001	7.96	0.00023	0.000016	0.00064	0.0014
20-Jul-10	25	500	450	7.32	1.98	9.02														
27-Jul-10	26	500	455	7.23	1.39	9.85	24.12	0.028	0.0001	0.00023	0.0006	0.000009	0.0000046	0.0023	0.000001	9.42	0.00027	0.000013	0.00109	0.0009
03-Aug-10	27	500	465	7.44	1.50	9.90	21.86	0.027	0.0001	0.00009	0.0006	0.000009	0.0000047	0.0033	0.000001	9.30	0.00023	0.000020	0.00144	0.0023
10-Aug-10	28	500	460	7.46	2.03	10.30	26.68	0.025	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0037	0.000005	9.66	0.00028	0.000011	0.00046	0.0009
17-Aug-10	29	500	440	7.47	1.52	9.76	24.20	0.030	0.0002	0.00009	0.0004	0.000009	0.0000044	0.0025	0.000001	8.67	0.00022	0.000002	0.00062	0.0009
24-Aug-10	30	500	425	7.33	1.28	10.20	20.40	0.027	0.0002	0.00013	0.0004	0.000009	0.0000043	0.0023	0.000002	9.27	0.00021	0.000010	0.00064	0.0009
31-Aug-10	31	500	455	7.67	2.39	12.06	24.12	0.026	0.0003	0.00009	0.0004	0.000009	0.0000046	0.0024	0.000001	7.87	0.00023	0.000012	0.00046	0.0009
07-Sep-10	32	500	440	7.19	1.58	9.11	25.08	0.025	0.0001	0.00013	0.0004	0.000009	0.0000044	0.0033	0.000006	7.96	0.00035	0.000014	0.00062	0.0009
14-Sep-10	33	500	430	7.12	1.36	7.77	24.94	0.018	0.0012	0.00017	0.0004	0.000009	0.0000043	0.0021	0.000003	7.78	0.00022	0.000015	0.00069	0.0017
21-Sep-10	34	500	435	7.32	1.17	9.14	20.88	0.021	0.0001	0.00017	0.0004	0.000009	0.0000174	0.0026	0.000001	7.96	0.00022	0.000015	0.00061	0.0009
28-Sep-10	35	500	495	7.35	1.20	11.65	31.19	0.028	0.0001	0.00010	0.0006	0.000010	0.0000050	0.0034	0.000001	11.14	0.00025	0.000028	0.00059	0.0010
05-Oct-10	36	500	470	7.25	1.35	9.63	31.49	0.026	0.0002	0.00009	0.0008	0.000009	0.0000047	0.0027	0.000002	10.11	0.00024	0.000055	0.00085	0.0009
12-Oct-10	37	500	430	7.21	1.24	7.57	23.22	0.026	0.0008	0.00013	0.0004	0.000009	0.0000043	0.0022	0.000003	9.20	0.00022	0.000034	0.00103	0.0009
19-Oct-10	38	500	435	7.23	1.43	9.33	23.06	0.022	0.0001	0.00009	0.0020	0.000009	0.0000044	0.0020	0.000002	8.09	0.00022	0.000017	0.00052	0.0009
26-Oct-10	39	500	445	7.19	1.18	7.65	20.47	0.019	0.0010	0.00009	0.0004	0.000009	0.0000045	0.0020	0.000001	7.21	0.00031	0.000027	0.00085	0.0009
02-Nov-10	40	500	455	7.36	1.04	9.43	19.11	0.020	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0030	0.000001	8.19	0.00023	0.000013	0.00041	0.0014
09-Nov-10	41	500	495	7.45	1.49	12.94	31.68	0.021	0.0004	0.00030	0.0006	0.000010	0.0000050	0.0026	0.000001	11.29	0.00030	0.000035	0.00099	0.0010
16-Nov-10	42	500	450	7.52	1.38	9.94	51.30	0.019	0.0001	0.00009	0.0005	0.000009	0.0000045	0.0036	0.000002	9.00	0.00027	0.000018	0.00041	0.0009
23-Nov-10	43	500	450	7.18	1.37	9.93	21.60	0.021	0.0001	0.00009	0.0007	0.000009	0.0000045	0.0018	0.000003	8.15	0.00032	0.000036	0.00054	0.0009
30-Nov-10	44	500	435	7.29	1.59	11.50	18.71	0.025	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0017	0.000001	8.13	0.00030	0.000030	0.00052	0.0009
07-Dec-10	45	500	435	7.28	1.50	10.82	20.88	0.032	0.0001	0.00009	0.0013	0.000009	0.0000044	0.0020	0.000002	9.87	0.00035	0.000027	0.00104	0.0009
14-Dec-10	46	500	445	7.28	2.04	10.55	21.81	0.026	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0024	0.000003	8.05	0.00022	0.000030	0.00058	0.0009
21-Dec-10	47	500	470	7.35	2.60	11.80	22.09	0.024	0.0002	0.00009	0.0005	0.000009	0.0000047	0.0018	0.000001	9.12	0.00024	0.000018	0.00094	0.0009
28-Dec-10	48	500	465	7.43	2.68	10.53	24.18	0.022	0.0002	0.00009	0.0005	0.000009	0.0000047	0.0027	0.000002	8.56	0.00042	0.000017	0.00056	0.0009
04-Jan-11	49	500	460	7.31	2.19	10.29	23.92	0.018	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0014	0.000008	7.82	0.00023	0.000015	0.00046	0.0009
11-Jan-11	50	500	455	7.20	1.32	9.72	22.75	0.016	0.0001	0.00009	0.0003	0.000009	0.0000046	0.0026	0.000002	8.10	0.00023	0.000015	0.00036	0.0009
18-Jan-11	51	500	435	7.21	1.39	8.83	21.75	0.019	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0014	0.000001	8.35	0.00022	0.000013	0.00035	0.0013
25-Jan-11	52	500	465	7.20	1.69	10.01	24.18	0.018	0.0001	0.00009	0.0004	0.000009	0.0000047	0.0018	0.000001	7.49	0.00023	0.000047	0.00042	0.0033
01-Feb-11	53	500	435	7.22	1.33	9.40	21.32	0.014	0.0001	0.00013	0.0004	0.000009	0.0000044	0.0014	0.000004	6.48	0.00022	0.000017	0.00035	0.0009
08-Feb-11	54	500	425	7.34	1.25	9.52	21.68	0.021	0.0001	0.00009	0.0003	0.000009	0.0000043	0.0012	0.000003	8.42	0.00021	0.000013	0.00034	0.0017
15-Feb-11	55	500	445	7.29	1.31	9.55	17.80	0.019	0.0001	0.00009	0.0003	0.000009	0.0000045	0.0020	0.000003	7.52	0.00022	0.000029	0.00076	0.0009
22-Feb-11	56	500	435	7.32	1.37	9.24	23.49	0.017	0.0002	0.00009	0.0003	0.000009	0.0000044	0.0019	0.000003	7.79	0.00026	0.000017	0.00057	0.0009
01-Mar-11	57	500	435	7.21	1.30	7.83	21.75	0.017	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0012	0.000004	7.31	0.00022	0.000013	0.00065	0.0009
08-Mar-11	58	500	440	7.18	1.35	7.97	22.88	0.014	0.0002	0.00009	0.0003	0.000009	0.0000044	0.0014	0.000006	7.04	0.00022	0.000029	0.00053	0.0009
15-Mar-11	59	500	445	7.27	1.40	9.62	19.14	0.016	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0015	0.000003	7.79	0.00036	0.000028	0.00067	0.0009
22-Mar-11	60	500	435	7.27	1.52	8.81	17.84	0.014	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0011	0.000003	7.22	0.00022	0.000019	0.00048	0.0022
29-Mar-11	61	500	440	7.58	1.60	9.71	18.92	0.013	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0012	0.000001	8.18	0.00022	0.000019	0.00040	0.0009
05-Apr-11	62	500	455	7.29	1.83	11.06	22.30	0.015	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0016	0.000003	9.51	0.00023	0.000025	0.00055	0.0009
12-Apr-11	63	500	445	7.30	1.29	8.96	20.47	0.015	0.0001	0.00009	0.0003	0.000009	0.0000045	0.0010	0.000001	7.74	0.00022	0.000015	0.00214	0.0022
19-Apr-11	64	500	450	7.49	2.59	11.56	21.15	0.014	0.0001	0.00009	0.0003	0.000009	0.0000045	0.0013	0.000005	8.19	0.00023	0.000036	0.00036	0.0014
26-Apr-11	65	500	435	7.42	1.33	10.07	19.14	0.016	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0013	0.000001	8.27	0.00022	0.000027	0.00030	0.0009
03-May-11	66	500	435	7.41	1.61	9.89	20.88	0.017	0.0001	0.00009	0.0018	0.000009	0.0000044	0.0018	0.000003	7.96	0.00022	0.000021	0.00044	0.0009
10-May-11	67	500	430	7.44	1.38	10.02	20.21	0.017	0.0001	0.00009	0.0003	0.000009	0.0000043	0.0018	0.000005	7.27	0.00022	0.000032	0.00047	0.0009
17-May-11	68	500	440	7.68	1.20	10.05	18.48	0.016	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0010	0.000002	7.17	0.00022	0.000022	0.00031	0.0009
24-May-11	69	500	500	7.49	2.24	11.48	29.00	0.016	0.0001	0.00010	0.0005	0.000010	0.0000050	0.0034	0.000003	11.30	0.00025	0.000044	0.00055	0.0010
31-May-11	70	500	455	7.43	2.10	10.06	22.30	0.007	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0014	0.000002	8.55	0.00023	0.000054	0.00055	0.0009
07-Jun-11	71	500	440	7.58	1.61	9.44	17.60	0.016	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0015	0.000005	8.18	0.00022	0.000027	0.00062	0.0009
14-Jun-11	72	500	430	7.54	1.09	8.89	21.50	0.014	0.0001	0.00013	0.0004	0.000009	0.0000043	0.0013	0.000004	7.65	0.00022	0.000023	0.00034	0.0026
21-Jun-11	73	500	455	7.57	1.05	10.49	27.76	0.014	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0013	0.000004	9.37	0.00023	0.000028	0.00036	0.0009
28-Jun-11	74	500	440	7.53	1.47	10.68	22.44	0.018	0.0001	0.00022	0.0004	0.000009	0.0000044	0.0016	0.000006	8.84	0.00022	0.000020	0.00040	0.0013

HC 5
Sample = Alt 09 13

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	75	500	460	7.39	1.80	10.81	24.38	0.017	0.0001	0.00014	0.0004	0.000009	0.0000046	0.0023	0.000045	9.66	0.00023	0.000029	0.00046	0.0009
12-Jul-11	76	500	445	7.26	1.86	9.26	25.81	0.015	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0012	0.000001	10.86	0.00022	0.000019	0.00031	0.0009
19-Jul-11	77	500	440	7.37	2.18	8.90	22.88	0.013	0.0001	0.00009	0.0006	0.000009	0.0000044	0.0018	0.000002	9.28	0.00022	0.000029	0.00031	0.0009
26-Jul-11	78	500	455	7.53	2.41	10.46	26.39	0.015	0.0001	0.00041	0.0004	0.000009	0.0000046	0.0015	0.000001	8.60	0.00023	0.000036	0.00041	0.0150
02-Aug-11	79	500	475	7.52	2.28	10.48	28.03	0.013	0.0001	0.00010	0.0004	0.000010	0.0000048	0.0015	0.000003	10.59	0.00024	0.000024	0.00038	0.0029
09-Aug-11	80	500	440	7.43	1.75	9.00	21.12	0.013	0.0001	0.00013	0.0004	0.000009	0.0000044	0.0011	0.000004	7.92	0.00035	0.000030	0.00031	0.0009
16-Aug-11	81	500	460	7.48	2.92	10.98	24.84	0.014	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0015	0.000002	8.28	0.00028	0.000026	0.00064	0.0009
23-Aug-11	82	500	460	7.41	2.10	10.44	25.76	0.019	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0016	0.000003	10.30	0.00023	0.000020	0.00041	0.0018
30-Aug-11	83	500	450	7.41	2.41	9.96	22.95	0.016	0.0001	0.00009	0.0005	0.000009	0.0000045	0.0014	0.000012	10.08	0.00032	0.000023	0.00045	0.0018
06-Sep-11	84	500	430	7.51	2.02	9.18	25.80	0.012	0.0001	0.00009	0.0004	0.000009	0.0000043	0.0012	0.000004	8.47	0.00022	0.000017	0.00039	0.0009
13-Sep-11	85	500	460	7.48	1.83	9.76	28.06	0.013	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0017	0.000008	9.20	0.00046	0.000025	0.00041	0.0009
20-Sep-11	86	500	445	7.41	2.03	9.63	23.59	0.011	0.0001	0.00013	0.0008	0.000009	0.0000045	0.0014	0.000007	8.59	0.00156	0.000027	0.00102	0.0036
27-Sep-11	87	500	455	7.36	2.55	9.26	25.03	0.013	0.0001	0.00014	0.0007	0.000009	0.0000046	0.0003	0.000005	8.92	0.00046	0.000019	0.00036	0.0018
04-Oct-11	88	500	465	7.45	2.24	9.45	23.25	0.013	0.0021	0.00098	0.0004	0.000009	0.0000047	0.0018	0.000001	8.32	0.00028	0.000021	0.00037	0.0009
11-Oct-11	89	500	465	7.50	2.78	10.44	26.97	0.017	0.0007	0.00009	0.0005	0.000009	0.0000047	0.0017	0.000003	9.53	0.00033	0.000019	0.00056	0.0009
18-Oct-11	90	500	455	7.36	1.98	9.10	27.76	0.013	0.0001	0.00014	0.0005	0.000009	0.0000046	0.0016	0.000001	9.19	0.00027	0.000020	0.00059	0.0014
25-Oct-11	91	500	455	7.34	1.47	9.32	24.57	0.014	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0015	0.000022	8.83	0.00023	0.000021	0.00046	0.0014
01-Nov-11	92	500	475	7.37	2.15	9.69	24.70	0.012	0.0001	0.00033	0.0005	0.000010	0.0000048	0.0014	0.000007	8.65	0.00029	0.000019	0.00043	0.0014
08-Nov-11	93	500	435	7.39	2.25	9.32	21.32	0.013	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0010	0.000005	8.83	0.00022	0.000024	0.00039	0.0013
15-Nov-11	94	500	445	7.28	2.27	7.75	23.14	0.015	0.0001	0.00009	0.0003	0.000009	0.0000045	0.0012	0.000003	8.10	0.00022	0.000026	0.00053	0.0013
22-Nov-11	95	500	445	7.39	2.45	9.83	22.25	0.018	0.0001	0.00027	0.0006	0.000009	0.0000045	0.0012	0.000007	8.86	0.00022	0.000021	0.00049	0.0013
29-Nov-11	96	500	445	7.48	2.47	9.98	20.47	0.019	0.0001	0.00013	0.0003	0.000009	0.0000045	0.0014	0.000004	8.32	0.00022	0.000024	0.00045	0.0013
06-Dec-11	97	500	445	7.30	2.22	9.24	21.81	0.015	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0011	0.000004	8.99	0.00022	0.000018	0.00040	0.0013
13-Dec-11	98	500	445	7.25	2.05	9.30	21.81	0.010	0.0001	0.00009	0.0005	0.000009	0.0000045	0.0011	0.000005	8.59	0.00040	0.000020	0.00058	0.0013
20-Dec-11	99	500	435	7.44	2.11	8.83	20.45	0.013	0.0001	0.00013	0.0003	0.000009	0.0000044	0.0010	0.000001	7.70	0.00022	0.000020	0.00048	0.0013
27-Dec-11	100	500	460	7.67	2.56	12.14	23.92	0.026	0.0001	0.00023	0.0003	0.000009	0.0000046	0.0012	0.000005	8.83	0.00023	0.000021	0.00037	0.0014
03-Jan-12	101	500	445	7.34	1.98	10.43	22.70	0.026	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0012	0.000004	7.79	0.00022	0.000024	0.00071	0.0013
10-Jan-12	102	500	445	7.31	1.73	10.04	19.58	0.026	0.0001	0.00009	0.0008	0.000009	0.0000045	0.0012	0.000008	7.70	0.00022	0.000014	0.00049	0.0013
17-Jan-12	103	500	465	7.31	2.06	11.28	23.72	0.016	0.0001	0.00009	0.0003	0.000009	0.0000047	0.0019	0.000006	9.30	0.00023	0.000020	0.00084	0.0014
24-Jan-12	104	500	480	7.42	2.51	10.91	21.60	0.019	0.0001	0.00010	0.0003	0.000010	0.0000048	0.0011	0.000003	8.16	0.00024	0.000023	0.00038	0.0014
31-Jan-12	105	500	455	7.19	1.67	10.07	21.84	0.019	0.0001	0.00014	0.0004	0.000009	0.0000046	0.0014	0.000001	8.24	0.00027	0.000019	0.00046	0.0014
07-Feb-12	106	500	485	7.40	2.41	13.85	29.10	0.016	0.0001	0.00010	0.0005	0.000010	0.0000049	0.0010	0.000011	10.91	0.00024	0.000032	0.00087	0.0015
14-Feb-12	107	500	435	7.36	2.38	8.80	23.49	0.008	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0008	0.000006	8.09	0.00022	0.000017	0.00039	0.0013
21-Feb-12	108	500	445	7.24	1.43	7.77	20.47	0.013	0.0001	0.00009	0.0003	0.000009	0.0000045	0.0028	0.000003	8.10	0.00022	0.000019	0.00058	0.0013
28-Feb-12	109	500	440	7.25	2.07	7.87	20.68	0.014	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0011	0.000006	8.18	0.00022	0.000015	0.00088	0.0013
06-Mar-12	110	500	460	7.29	1.75	9.53	23.46	0.018	0.0001	0.00009	0.0009	0.000009	0.0000046	0.0010	0.000005	8.65	0.00023	0.000014	0.00041	0.0028
13-Mar-12	111	500	435	7.17	2.17	7.19	21.75	0.009	0.0001	0.00017	0.0005	0.000009	0.0000044	0.0011	0.000004	7.79	0.00022	0.000016	0.00048	0.0017
20-Mar-12	112	500	465	7.23	2.25	9.60	23.72	0.015	0.0001	0.00014	0.0003	0.000009	0.0000047	0.0012	0.000006	8.65	0.00023	0.000021	0.00065	0.0014
27-Mar-12	113	500	445	7.23	1.91	10.43	23.14	0.024	0.0001	0.00013	0.0003	0.000009	0.0000045	0.0010	0.000010	9.35	0.00022	0.000024	0.00111	0.0013
03-Apr-12	114	500	460	7.18	1.97	10.44	23.46	0.025	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0010	0.000001	8.74	0.00023	0.000009	0.00064	0.0014
10-Apr-12	115	500	460	7.33	1.56	10.95	24.84	0.017	0.0001	0.00009	0.0006	0.000009	0.0000046	0.0012	0.000001	9.20	0.00023	0.000015	0.00046	0.0014
17-Apr-12	116	500	465	7.22	1.84	10.15	25.58	0.017	0.0001	0.00009	0.0003	0.000009	0.0000047	0.0012	0.000001	9.11	0.00023	0.000012	0.00042	0.0014
24-Apr-12	117	500	450	7.39	1.48	9.73	23.40	0.023	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0012	0.000001	8.64	0.00023	0.000018	0.00054	0.0018
01-May-12	118	500	440	7.37	2.33	9.33	22.44	0.021	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0017	0.000001	8.32	0.00022	0.000012	0.00044	0.0013
08-May-12	119	500	450	7.37	1.49	9.93	22.05	0.014	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0017	0.000001	8.82	0.00023	0.000014	0.00063	0.0014
15-May-12	120	500	450	7.43	1.37	8.06	18.90	0.017	0.0001	0.00009	0.0003	0.000009	0.0000045	0.0013	0.000001	8.60	0.00023	0.000013	0.00063	0.0014
22-May-12	121	500	455	7.21	1.70	8.04	21.39	0.028	0.0001	0.00009	0.0003	0.000009	0.0000046	0.0010	0.000001	8.65	0.00023	0.000012	0.00027	0.0014
29-May-12	122	500	490	7.27	1.89	11.95	28.42	0.017	0.0001	0.00010	0.0004	0.000010	0.0000049	0.0018	0.000001	12.35	0.00025	0.000025	0.00054	0.0015
05-Jun-12	123	500	450	7.17	2.03	9.14	23.85	0.020	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0017	0.000001	9.68	0.00023	0.000018	0.00059	0.0014
12-Jun-12	124	500	450	7.31	1.60	9.60	23.40	0.020	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0018	0.000001	9.81	0.00023	0.000010	0.00050	0.0014
19-Jun-12	125	500	455	7.29	1.49	7.88	25.03	0.021	0.0001	0.00009	0.0003	0.000009	0.0000046	0.0016	0.000001	9.78	0.00023	0.000016	0.00077	0.0014
26-Jun-12	126	500	445	7.35	1.59	7.70	25.81	0.028	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0016	0.000001	9.43	0.00022	0.000001	0.00071	0.0013
03-Jul-12	127	500	445	7.27	3.35	9.83	25.37	0.017	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0013	0.000005	9.92	0.00022	0.000013	0.00053	0.0013
10-Jul-12	128	500	435	7.33	1.54	8.77	21.75	0.020	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0013	0.000002	8.66	0.00022	0.000008	0.00052	0.0013
17-Jul-12	129	500	440	7.38	1.08	8.92	22.44	0.022	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0014	0.000001	8.84	0.00022	0.000019	0.00035	0.0013
24-Jul-12	130	500	460	7.18	1.40	8.02	26.22	0.023	0.0001	0.00018	0.0003	0.000009	0.0000046	0.0014	0.000002	10.21	0.00023	0.000016	0.00051	0.0014
31-Jul-12	131	500	445	7.36	1.11	7.27	21.81	0.023	0.0001	0.00013	0.0003	0.000009	0.0000045	0.0015	0.000002	8.86	0.00022	0.000009	0.00036	0.0013
07-Aug-12	132	500	445	7.43	1.10	7.47	23.14	0.030	0.0002	0.00053	0.0005	0.000009	0.0000045	0.0012	0.000004	9.03	0.00022	0.000015	0.00045	0.0013
14-Aug-12	133	500	445	7.23	1.24	6.87	23.59	0.021	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0014	0.000003	8.23	0.00022	0.000005	0.00085	0.0013
21-Aug-12	134	500	450	7.17	1.40	6.35	24.75	0.024	0.0002	0.00009	0.0003	0.000009	0.0000045	0.0016	0.000004	8.87	0.00023	0.000018	0.00045	0.0014
28-Aug-12	135	500	455	7.25	2.23	9.19	22.75	0.023	0.0001	0.00014	0.0003	0.000009	0.0000046	0.0018	0.000002	8.33	0.00023	0.000013	0.00064	0.0014
04-Sep-12	136	500	460	7.09	2.21	7.27	23.00	0.030	0.0001	0.00009	0.0003	0.000009	0.0000046	0.0016	0.000002	8.92	0.00023	0.000012	0.00046	0.0014
11-Sep-12	137	500	450	7.21	1.50	6.50	18.90	0.012	0.0001	0.00009	0.0005	0.000009	0.0000045	0.0014	0.000008	7.47	0.00023	0.000015	0.00059	0.0036
18-Sep-12	138	500	485	7.29	1.26	10.01	29.10	0.017	0.0001	0.00015	0.0004	0.000010	0.0000049	0.0019	0.000037	10.48	0.00024	0.000015	0.00039	0.0015
25-Sep-12	139	500	450	7.19	1.40	6.84	21.60	0.015	0.0001	0.00009	0.0003	0.000009	0.0000045	0.0014	0.000008	7.79	0.00023	0.000011	0.00050	0.0014
02-Oct-12	140	500	440	7.17	1.65	7.12	20.68	0.012	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0017	0.000002	7.79	0.00022	0.000028	0.00075	0.0013
09-Oct-12	141	500	445	7.22	2.37	7.15	20.92	0.015	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0015	0.000003	7.34	0.00022	0.000020	0.00053	0.0013
16-Oct-12	142	500	435	7.37	2.22	7.44	20.88	0.014	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0015	0.000004	7.31	0.00022	0.000010	0.00048	0.0026
23-Oct-12	143	500	440	7.16	1.87	7.09	19.36	0.023	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0009	0.000012	7.00	0.00022	0.000052	0.00066	0.0013
30-Oct-12	144	500	440	7.08	1.82	6.78	20.24	0.020	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0018	0.000471	7.70	0.00022	0.000009	0.00057	0.0018
06-Nov-12	145	500	440	7.18	1.85	6.79	16.72	0.009	0.0001	0.00022	0.0005	0.000009	0.0000044	0.0016	0.000014	7.88	0.00022	0.000023	0.00057	0.0013
13-Nov-12	146	500	440	7.29	2.60	7.59	18.04	0.008	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0014	0.000011	7.52	0.00022	0.000026	0.00040	0.0013
20-Nov-12	147	500	495	7.64	3.49	11.35	21.29	0.013	0.0001	0.00010	0.0006	0.000010	0.0000050	0.0016	0.000002	9.50	0.00025	0.000077	0.00069	0.0015
27-Nov-12	148	500	505	7.37	2.51	11.70	24.24	0.010	0.0001	0.00010	0.0005	0.000010	0.0000051	0.0017	0.000007	10.25	0.00025	0.000027	0.00051	0.0015
04-Dec-12	149	500	465	7.54	0.84	10.04	21.86	0.013	0.0001	0.00009	0.0003	0.000009	0.0000047	0.0008	0.000004	8.04	0.00023	0.000028	0.00074	0.0014
11-Dec-12	150	500	450	7.47	1.09	9.96	18.45	0.013	0.0001	0.00009	0.0003	0.000009	0.0000045	0.0013	0.000005	7.74	0.00023	0.000028	0.00059	0.0018
18-Dec-12	151	500	495	7.46	1.12	11.57	22.28	0.012	0.0001	0.00010	0.0005	0.000010	0.0000050	0.0009	0.000005	9.45	0.00025	0.000021	0.00050	0.0015
25-Dec-12	152	500	450	7.37	1.58	7.98	16.20	0.013	0.0001	0.00009	0.0003	0.000009	0.0000045	0.0008	0.000054	7.16	0.00023	0.000018	0.00032	0.0014
01-Jan-13	153	500	460	7.42	1.25	9.26	19.78	0.011	0.0001	0.00009	0.0003	0.000009	0.0000046	0.0007	0.000006	7.22	0.00023	0.000016	0.00023	0.0014
08-Jan-13	154	500	450	7.50	1.49	9.50	16.65	0.015	0.0001	0.00009	0.0006	0.000009	0.0000045	0.0009	0.000003	7.29	0.00023	0.000036	0.00041	0.0014
15-Jan-13	155	500	455																	
22-Jan-13	156	500	455	7.35	2.07	9.12	19.11													
29-Jan-13	157	500	455																	
05-Feb-13	158	500	450	7.42	1.57	7.39	21.15													
12-Feb-13	159	500	450																	

HC 5
Sample = Alt 09 13

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	0.000016	0.0032	3.73	0.021	0.0040	0.00028	0.00079	0.0040	4.82	0.00040	0.23	0.000012	4.98	0.107	28.99	0.00008	0.00019	0.00004	0.000017	0.00011	0.0004	0.000004
09-Feb-10	0.000009	0.0033	6.23	0.030	0.0093	0.00036	0.00023	0.0047	3.95	0.00153	0.27	0.000274	4.79	0.102	34.08	0.00009	0.00000	0.00005	0.000031	0.00017	0.0005	0.000005
16-Feb-10	0.000009	0.0032	5.63	0.036	0.0045	0.00027	0.00054	0.0045	2.81	0.00137	0.29	0.000410	2.75	0.090	31.68	0.00009	0.00003	0.00005	0.000036	0.00016	0.0005	0.000005
23-Feb-10	0.000009	0.0032	5.99	0.044	0.0045	0.00017	0.00023	0.0045	2.17	0.00112	0.24	0.000005	1.69	0.093	23.40	0.00009	0.00003	0.00005	0.000038	0.00013	0.0005	0.000005
02-Mar-10	0.000022	0.0022	4.61	0.031	0.0044	0.00014	0.00017	0.0044	1.44	0.00074	0.17	0.000004	0.95	0.066	20.97	0.00009	0.00006	0.00004	0.000018	0.00010	0.0004	0.000065
09-Mar-10	0.000014	0.0018	4.56	0.037	0.0046	0.00015	0.00023	0.0046	1.33	0.00051	0.23	0.000005	0.67	0.060	17.99	0.00009	0.00014	0.00005	0.000021	0.00012	0.0005	0.000005
16-Mar-10	0.000009	0.0017	4.28	0.034	0.0044	0.00016	0.00030	0.0044	1.15	0.00041	0.24	0.000004	0.58	0.049	15.96	0.00009	0.00000	0.00004	0.000017	0.00012	0.0004	0.000004
23-Mar-10	0.000209	0.0022	3.86	0.031	0.0045	0.00013	0.00009	0.0045	0.96	0.00032	0.22	0.000004	0.39	0.043	14.06	0.00009	0.00002	0.00004	0.000013	0.00011	0.0004	0.000004
30-Mar-10	0.000009	0.0014	3.72	0.033	0.0046	0.00014	0.00023	0.0046	0.87	0.00027	0.20	0.000005	0.38	0.041	12.42	0.00009	0.00001	0.00005	0.000010	0.00010	0.0005	0.000073
06-Apr-10	0.000152	0.0017	3.22	0.029	0.0044	0.00013	0.00004	0.0044	0.75	0.00022	0.20	0.000004	0.33	0.036	12.27	0.00009	0.00004	0.00004	0.000011	0.00009	0.0004	0.000004
13-Apr-10	0.000170	0.0014	2.81	0.030	0.0046	0.00012	0.00005	0.0046	0.65	0.00020	0.20	0.000005	0.30	0.030	9.61	0.00009	0.00012	0.00005	0.000014	0.00008	0.0005	0.000005
20-Apr-10	0.000136	0.0013	3.07	0.027	0.0044	0.00011	0.00009	0.0044	0.71	0.00022	0.18	0.000004	0.26	0.035	12.14	0.00009	0.00007	0.00004	0.000017	0.00012	0.0004	0.000004
27-Apr-10	0.000360	0.0013	2.79	0.025	0.0045	0.00010	0.00009	0.0045	0.58	0.00022	0.18	0.000004	0.24	0.027	9.30	0.00009	0.00010	0.00004	0.000008	0.00009	0.0004	0.000004
04-May-10	0.000009	0.0009	2.97	0.030	0.0044	0.00013	0.00004	0.0044	0.56	0.00021	0.19	0.000004	0.24	0.028	8.96	0.00009	0.00013	0.00004	0.000008	0.00009	0.0004	0.000004
11-May-10	0.000810	0.0013	2.95	0.029	0.0044	0.00012	0.00009	0.0044	0.62	0.00019	0.21	0.000018	0.20	0.029	10.56	0.00009	0.00018	0.00004	0.000011	0.00010	0.0004	0.000004
18-May-10	0.000009	0.0013	2.92	0.023	0.0043	0.00023	0.00009	0.0038	0.60	0.00021	0.21	0.000004	0.22	0.027	10.41	0.00009	0.00005	0.00013	0.000007	0.00009	0.0004	0.000004
25-May-10	0.000504	0.0014	2.45	0.025	0.0045	0.00012	0.00005	0.0041	0.48	0.00016	0.18	0.000005	0.18	0.024	9.72	0.00009	0.00009	0.00009	0.000009	0.00009	0.0009	0.000005
01-Jun-10	0.000106	0.0013	2.46	0.022	0.0043	0.00014	0.00004	0.0038	0.45	0.00019	0.17	0.000004	0.18	0.022	9.01	0.00009	0.00017	0.00004	0.000006	0.00009	0.0004	0.000004
08-Jun-10	0.000512	0.0013	2.52	0.024	0.0042	0.00012	0.00004	0.0105	0.49	0.00018	0.18	0.000004	0.17	0.023	9.74	0.00008	0.00008	0.00004	0.000000	0.00008	0.0004	0.000004
15-Jun-10	0.000013	0.0009	2.25	0.026	0.0044	0.00013	0.00009	0.0039	0.41	0.00018	0.16	0.000013	0.16	0.021	8.70	0.00009	0.00013	0.00004	0.000005	0.00007	0.0004	0.000004
22-Jun-10																						
29-Jun-10	0.000032	0.0009	2.21	0.025	0.0045	0.00012	0.00005	0.0086	0.37	0.00023	0.14	0.000005	0.15	0.014	7.70	0.00009	0.00059	0.00005	0.000003	0.00004	0.0009	0.000005
06-Jul-10																						
13-Jul-10	0.000009	0.0009	2.43	0.028	0.0046	0.00017	0.00018	0.0051	0.37	0.00018	0.14	0.000005	0.14	0.019	9.20	0.00009	0.00019	0.00009	0.000008	0.00006	0.0005	0.000009
20-Jul-10																						
27-Jul-10	0.000009	0.0009	2.43	0.027	0.0046	0.00009	0.00005	0.0041	0.36	0.00016	0.14	0.000005	0.13	0.018	8.37	0.00009	0.00007	0.00005	0.000004	0.00004	0.0005	0.000005
03-Aug-10	0.000023	0.0009	2.66	0.031	0.0047	0.00013	0.00014	0.0056	0.35	0.00004	0.14	0.000005	0.13	0.018	8.51	0.00009	0.00006	0.00005	0.000002	0.00003	0.0005	0.000005
10-Aug-10	0.000009	0.0009	2.49	0.030	0.0092	0.00012	0.00014	0.0041	0.35	0.00014	0.14	0.000005	0.12	0.018	8.56	0.00009	0.00001	0.00005	0.000002	0.00005	0.0005	0.000005
17-Aug-10	0.000013	0.0009	2.32	0.024	0.0044	0.00014	0.00009	0.0040	0.34	0.00014	0.14	0.000004	0.10	0.016	10.96	0.00009	0.00006	0.00009	0.000004	0.00005	0.0004	0.000004
24-Aug-10	0.000013	0.0009	2.40	0.027	0.0043	0.00011	0.00009	0.0038	0.33	0.00007	0.15	0.000004	0.11	0.016	8.67	0.00009	0.00004	0.00013	0.000002	0.00005	0.0004	0.000004
31-Aug-10	0.000009	0.0009	2.08	0.019	0.0046	0.00010	0.00005	0.0041	0.30	0.00005	0.14	0.000005	0.10	0.014	7.64	0.00009	0.00000	0.00005	0.000001	0.00005	0.0005	0.000005
07-Sep-10	0.000057	0.0009	2.05	0.015	0.0044	0.00010	0.00009	0.0040	0.30	0.00002	0.14	0.000004	0.09	0.012	7.66	0.00009	0.00003	0.00004	0.000002	0.00007	0.0057	0.000004
14-Sep-10	0.000009	0.0009	1.99	0.026	0.0043	0.00051	0.00013	0.0090	0.29	0.00012	0.13	0.000004	0.10	0.014	7.27	0.00009	0.00010	0.00004	0.000003	0.00004	0.0004	0.000004
21-Sep-10	0.000009	0.0009	1.97	0.026	0.0044	0.00009	0.00035	0.0039	0.31	0.00061	0.13	0.000009	0.09	0.014	7.53	0.00009	0.00003	0.00004	0.000001	0.00003	0.0004	0.000004
28-Sep-10	0.000020	0.0015	2.96	0.036	0.0050	0.00024	0.00020	0.0045	0.39	0.00006	0.19	0.000005	0.13	0.021	11.24	0.00010	0.00017	0.00005	0.000007	0.00005	0.0010	0.000005
05-Oct-10	0.000024	0.0009	2.32	0.028	0.0047	0.00039	0.00005	0.0094	0.34	0.00002	0.15	0.000005	0.11	0.018	9.96	0.00009	0.00021	0.00005	0.000005	0.00002	0.0005	0.000005
12-Oct-10	0.000013	0.0009	2.33	0.026	0.0043	0.00021	0.00030	0.0039	0.30	0.00004	0.13	0.000004	0.11	0.016	8.34	0.00009	0.00012	0.00004	0.000000	0.00004	0.0004	0.000004
19-Oct-10	0.000017	0.0009	2.00	0.025	0.0044	0.00012	0.00009	0.0039	0.28	0.00006	0.12	0.000004	0.08	0.013	7.31	0.00009	0.00001	0.00004	0.000004	0.00004	0.0009	0.000004
26-Oct-10	0.000067	0.0009	1.91	0.022	0.0045	0.00015	0.00036	0.0040	0.25	0.00113	0.10	0.000004	0.08	0.012	7.57	0.00009	0.00001	0.00004	0.000001	0.00004	0.0013	0.000004
02-Nov-10	0.000109	0.0009	2.06	0.023	0.0046	0.00013	0.00032	0.0214	0.27	0.00013	0.12	0.000005	0.10	0.013	7.37	0.00009	0.00002	0.00018	0.000003	0.00001	0.0005	0.000005
09-Nov-10	0.000262	0.0010	3.04	0.041	0.0050	0.00021	0.00015	0.0069	0.37	0.00002	0.17	0.000005	0.12	0.019	9.65	0.00010	0.00010	0.00005	0.007821	0.00004	0.0005	0.000005
16-Nov-10	0.000158	0.0009	2.23	0.028	0.0045	0.00016	0.00023	0.0041	0.28	0.00002	0.13	0.000005	0.09	0.014	8.06	0.00009	0.00009	0.00005	0.000004	0.00002	0.0005	0.000005
23-Nov-10	0.000009	0.0009	2.10	0.026	0.0045	0.00049	0.00005	0.0041	0.26	0.00005	0.12	0.000005	0.07	0.013	7.11	0.00009	0.00005	0.00005	0.000018	0.00003	0.0009	0.000005
30-Nov-10	0.000017	0.0009	2.07	0.025	0.0044	0.00028	0.00039	0.0039	0.27	0.00007	0.13	0.000004	0.08	0.012	7.05	0.00009	0.00044	0.00004	0.000031	0.00004	0.0009	0.000004
07-Dec-10	0.002310	0.0009	2.35	0.028	0.0044	0.00025	0.00026	0.0087	0.28	0.00005	0.13	0.000004	0.07	0.012	6.96	0.00009	0.00014	0.00009	0.000014	0.00003	0.0013	0.000004
14-Dec-10	0.000062	0.0009	2.11	0.022	0.0045	0.00023	0.00022	0.0040	0.29	0.00009	0.12	0.000004	0.08	0.011	6.41	0.00009	0.00014	0.00004	0.000008	0.00005	0.0004	0.000004
21-Dec-10	0.000019	0.0009	2.34	0.069	0.0047	0.00011	0.00019	0.0127	0.27	0.00003	0.18	0.000005	0.08	0.011	8.18	0.00009	0.00010	0.00005	0.000005	0.00003	0.0005	0.000005
28-Dec-10	0.000428	0.0009	2.24	0.025	0.0047	0.00017	0.00009	0.0107	0.31	0.00002	0.14	0.000005	0.08	0.013	8.42	0.00009	0.00008	0.00005	0.000004	0.00003	0.0009	0.000005
04-Jan-11	0.000529	0.0005	1.99	0.024	0.0046	0.00013	0.00018	0.0041	0.25	0.00002	0.12	0.000005	0.06	0.010	6.67	0.00009	0.00005	0.00005	0.000006	0.00002	0.0009	0.000005
11-Jan-11	0.000009	0.0005	2.12	0.029	0.0046	0.00014	0.00014	0.0041	0.25	0.00009	0.11	0.000005	0.06	0.011	7.33	0.00009	0.00018	0.00014	0.000001	0.00003	0.0005	0.000005
18-Jan-11	0.000013	0.0009	2.07	0.023	0.0044	0.00012	0.00004	0.0083	0.28	0.00007	0.12	0.000004	0.07	0.011	7.44	0.00009	0.00010	0.00004	0.000003	0.00003	0.0009	0.000004
25-Jan-11	0.000009	0.0005	1.80	0.022	0.0047	0.00011	0.00023	0.0042	0.26	0.00004	0.11	0.000005	0.06	0.010	6.32	0.00009	0.00013	0.00005	0.000014	0.00003	0.0005	0.000023
01-Feb-11	0.000013	0.0009	1.51	0.021	0.0044	0.00011	0.00022	0.0157	0.20	0.00002	0.08	0.000004	0.05	0.009	8.31	0.00009	0.00021	0.00004	0.000015	0.00003	0.0013	0.000004
08-Feb-11	0.000009	0.0009	1.99	0.023	0.0043	0.00014	0.00004	0.0038	0.25	0.00005	0.13	0.000004	0.05	0.010	6.80	0.00009	0.00025	0.00009	0.000001	0.00002	0.0004	0.000004
15-Feb-11	0.000685	0.0009	1.84	0.023	0.0045	0.00022	0.00036	0.0129	0.24	0.00011	0.12	0.000004	0.06	0.009	6.27	0.00009	0.00012	0.00004	0.000009	0.00001	0.0009	0.000004
22-Feb-11	0.000322	0.0009	1.87	0.022	0.0044	0.00016	0.00004	0.0039	0.24	0.00004	0.11	0.000009	0.06	0.009	6.48	0.00009	0.00009	0.00004	0.000009	0.00002	0.0009	0.000004
01-Mar-11	0.000570	0.0004	1.77	0.021	0.0044	0.00010	0.00017	0.0039	0.20	0.00005	0.10	0.000004	0.06	0.009	6.13	0.00009	0.00009	0.00004	0.000000	0.00003	0.0039	0.000004
08-Mar-11	0.000409	0.0004	1.77	0.022	0.0044	0.00015	0.00004	0.0040	0.20	0.00002	0.07	0.000004	0.05	0.008	5.90	0.00009	0.00011	0.00004	0.000003	0.00001	0.0022	0.000004
15-Mar-11	0.000765	0.0004	1.92	0.024	0.0045	0.00011	0.00027	0.0053	0.22	0.00002	0.10	0.000004	0.06	0.010	6.14	0.00001	0.00023	0.00004	0.000003	0.00002	0.0040	0.000004
22-Mar-11	0.000009	0.0004	1.69	0.022	0.0044	0.00009	0.00004	0.0039	0.21	0.00011	0.10	0.000004	0.03	0.009	6.18	0.00009	0.00013	0.00004	0.000000	0.00002	0.0004	0.000004
29-Mar-11	0.000009	0.0004	1.98	0.023	0.0044	0.00010	0.00022	0.0185	0.23	0.00005	0.11	0.000004	0.06	0.010	7.48	0.00009	0.00004	0.00004	0.000001	0.00002	0.0004	0.000004
05-Apr-11	0.000009	0.0005	2.27	0.029	0.0046	0.00011	0.00023	0.0218	0.26	0.00002	0.12	0.000005	0.06	0.012	8.42	0.00009	0.00005	0.00005	0.000002	0.00002	0.0005	0.000005
12-Apr-11	0.000009	0.0004	2.00	0.027	0.0089	0.00017	0.00004	0.0089	0.23	0.00002	0.10	0.000004	0.05	0.010	6.94	0.00009	0.00014	0.00004	0.000003	0.00002	0.0013	0.000004
19-Apr-11	0.000036	0.0005	2.00	0.025	0.0045	0.00035	0.00014	0.0162	0.22	0.00027	0.10	0.000005	0.05	0.010	7.20	0.00009	0.00005	0.00005	0.000003	0.00005	0.0018	0.000005
26-Apr-11	0.000009	0.0004	1.89	0.023	0.0044	0.00010	0.00052	0.0218	0.22	0.00002	0.09	0.000004	0.05	0.010	7.13	0.00009	0.00000	0.00004	0.000000	0.00002	0.0004	0.000004
03-May-11	0.000009	0.0004	1.88	0.023	0.0044	0.00012	0.00017	0.0113	0.23	0.00035	0.10	0.000004	0.05	0.009	6.96	0.00009	0.00000	0.00013	0.000000	0.00001	0.0009	0.000004
10-May-11	0.000009	0.0004	1.76	0.021	0.0086	0.00011	0.00043	0.0039	0.21	0.00005	0.09	0.000004	0.05	0.008	6.41	0.00009	0.00003	0.00030	0.000000	0.00001	0.0009	0.000004
17-May-11	0.000009	0.0004	1.68	0.020	0.0044	0.00011	0.00009	0.0150	0.21	0.00018	0.08	0.000013	0.04	0.008	6.38	0.00009	0.00001	0.00004	0.000005	0.00001	0.0009	0.000004
24-May-11	0.000015	0.0010	2.84	0.039	0.0050	0.00010	0.00005	0.0045	0.30	0.00002	0.37	0.000005	0.08	0.014	10.25	0.00010	0.00012	0.00005	0.000003	0.00002	0.0005	0.000005
31-May-11	0.000014	0.0005	1.74	0.023	0.0046	0.00012	0.00005	0.0050	0.23	0.00014	0.11	0.000005	0.05	0.009	7.19	0.00009	0.00007	0.00005	0.000000	0.00001	0.0009	0.000005
07-Jun-11	0.000018	0.0004	1.83	0.023	0.0044	0.00010	0.00026	0.0255	0.23	0.00005	0.11	0.000004	0.07	0.009	7.39	0.00001	0.00007	0.00022	0.000000	0.00001	0.0009	0.000004
14-Jun-11	0.000017	0.0004	1.68	0.022	0.0043	0.00014	0.00034	0.0039	0.19	0.00002	0.11	0.000004	0.07	0.008	6.75	0.00001	0.00012	0.00004	0.000002	0.00002	0.0009	0.000004
21-Jun-11	0.000023	0.0005	2.26	0.031	0.0046	0.00010	0.00005	0.0050	0.23	0.00020	0.11	0.000005	0.05	0.010	8.14	0.00001	0.00007	0.00005	0.000002	0.00002	0.0005	0.000005
28-Jun-11	0.000009	0.0009	1.99	0.025	0.0044	0.00025	0.00022	0.0040	0.23	0.00024	0.11	0.000004	0.05	0.009	7.48	0.00001	0.00003	0.00004	0.000003	0.00002	0.0009	0.000004

HC 5
Sample = Alt 09 13

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	0.000023	0.0005	2.30	0.026	0.0046	0.00014	0.00028	0.0092	0.25	0.00007	0.12	0.000005	0.07	0.010	8.42	0.00001	0.00006	0.00014	0.000001	0.00002	0.0009	0.000005
12-Jul-11	0.000013	0.0004	2.41	0.028	0.0223	0.00030	0.00018	0.0040	0.26	0.00010	0.13	0.000004	0.05	0.011	9.43	0.00001	0.00004	0.00004	0.000003	0.00001	0.0009	0.000018
19-Jul-11	0.000022	0.0004	2.11	0.024	0.0044	0.00012	0.00035	0.0040	0.23	0.00015	0.11	0.000004	0.06	0.010	8.18	0.00001	0.00009	0.00004	0.000001	0.00003	0.0004	0.000004
26-Jul-11	0.000009	0.0005	2.08	0.042	0.0046	0.00039	0.00046	0.0055	0.22	0.00003	0.10	0.000005	0.04	0.010	7.23	0.00001	0.00000	0.00041	0.000002	0.00001	0.0005	0.000005
02-Aug-11	0.000010	0.0005	2.57	0.029	0.0048	0.00014	0.00005	0.0043	0.28	0.00009	0.13	0.000005	0.05	0.011	9.36	0.00001	0.00002	0.00005	0.000001	0.00002	0.0005	0.000005
09-Aug-11	0.000009	0.0004	1.70	0.021	0.0044	0.00042	0.00004	0.0040	0.19	0.00009	0.09	0.000004	0.04	0.008	7.00	0.00001	0.00000	0.00004	0.000007	0.00002	0.0013	0.000004
16-Aug-11	0.000069	0.0005	1.96	0.022	0.0046	0.00015	0.00005	0.0041	0.21	0.00017	0.10	0.000005	0.04	0.009	7.77	0.00001	0.00005	0.00005	0.000001	0.00001	0.0009	0.000005
23-Aug-11	0.000014	0.0009	2.40	0.026	0.0092	0.00014	0.00005	0.0041	0.29	0.00006	0.12	0.000005	0.06	0.010	9.98	0.00001	0.00004	0.00005	0.000002	0.00001	0.0018	0.000005
30-Aug-11	0.000023	0.0009	2.29	0.025	0.0045	0.00013	0.00032	0.0041	0.25	0.00004	0.11	0.000005	0.05	0.010	9.14	0.00001	0.00005	0.00005	0.000003	0.00001	0.0014	0.000005
06-Sep-11	0.000133	0.0004	1.86	0.021	0.0043	0.00023	0.00004	0.0039	0.20	0.00015	0.08	0.000004	0.04	0.008	7.83	0.00001	0.00000	0.00004	0.000003	0.00003	0.0026	0.000004
13-Sep-11	0.000110	0.0005	2.37	0.026	0.0046	0.00027	0.00005	0.0041	0.22	0.00007	0.09	0.000005	0.04	0.009	8.88	0.00001	0.00005	0.00005	0.000005	0.00001	0.0023	0.000005
20-Sep-11	0.000027	0.0004	1.91	0.027	0.0045	0.00018	0.00004	0.0040	0.21	0.00013	0.10	0.000004	0.10	0.008	8.41	0.00001	0.00020	0.00004	0.000001	0.00008	0.0022	0.000004
27-Sep-11	0.000014	0.0005	2.12	0.025	0.0046	0.00015	0.00023	0.0041	0.23	0.00013	0.07	0.000005	0.04	0.009	8.65	0.00001	0.00006	0.00005	0.000009	0.00002	0.0009	0.000005
04-Oct-11	0.000065	0.0005	1.90	0.023	0.0047	0.00018	0.00005	0.0042	0.21	0.00002	0.09	0.000005	0.04	0.008	7.63	0.00001	0.00005	0.00005	0.000003	0.00001	0.0014	0.000005
11-Oct-11	0.000037	0.0005	2.25	0.027	0.0047	0.00013	0.00028	0.0042	0.18	0.00003	0.12	0.000005	0.04	0.008	8.79	0.00001	0.00002	0.00005	0.000000	0.00001	0.0005	0.000005
18-Oct-11	0.000023	0.0005	2.09	0.025	0.0046	0.00016	0.00014	0.0041	0.21	0.00003	0.08	0.000005	0.04	0.009	8.83	0.00001	0.00001	0.00005	0.000000	0.00001	0.0014	0.000005
25-Oct-11	0.000027	0.0005	2.05	0.026	0.0046	0.00012	0.00009	0.0041	0.20	0.00003	0.12	0.000005	0.05	0.008	7.96	0.00001	0.00004	0.00005	0.000005	0.00001	0.0023	0.000005
01-Nov-11	0.000010	0.0005	1.97	0.026	0.0048	0.00012	0.00024	0.0043	0.20	0.00005	0.10	0.000005	0.04	0.008	7.46	0.00001	0.00003	0.00005	0.000000	0.00001	0.0014	0.000005
08-Nov-11	0.000009	0.0004	1.98	0.025	0.0044	0.00011	0.00004	0.0039	0.20	0.00003	0.10	0.000004	0.04	0.008	7.79	0.00001	0.00001	0.00004	0.000001	0.00007	0.0004	0.000004
15-Nov-11	0.000009	0.0004	1.82	0.022	0.0045	0.00011	0.00040	0.0040	0.18	0.00002	0.06	0.000004	0.04	0.007	6.85	0.00001	0.00002	0.00004	0.000001	0.00008	0.0009	0.000004
22-Nov-11	0.000018	0.0004	1.97	0.026	0.0089	0.00008	0.00027	0.0040	0.17	0.00004	0.09	0.000004	0.00	0.008	7.39	0.00001	0.00002	0.00004	0.000004	0.00007	0.0009	0.000004
29-Nov-11	0.000009	0.0004	1.79	0.025	0.0045	0.00018	0.00040	0.0045	0.20	0.00008	0.12	0.000004	0.03	0.007	6.81	0.00001	0.00001	0.00004	0.000002	0.00008	0.0004	0.000004
06-Dec-11	0.000009	0.0004	1.92	0.028	0.0045	0.00010	0.00004	0.0040	0.20	0.00007	0.13	0.000022	0.02	0.008	7.48	0.00001	0.00001	0.00004	0.000001	0.00008	0.0004	0.000004
13-Dec-11	0.000058	0.0004	1.84	0.025	0.0401	0.00012	0.00031	0.0080	0.18	0.00016	0.09	0.000004	0.05	0.008	7.03	0.00001	0.00006	0.00004	0.000003	0.00001	0.0018	0.000004
20-Dec-11	0.000013	0.0004	1.74	0.022	0.0044	0.00010	0.00030	0.0039	0.18	0.00018	0.10	0.000004	0.03	0.007	6.66	0.00001	0.00000	0.00004	0.000001	0.00003	0.0004	0.000004
27-Dec-11	0.000009	0.0005	1.96	0.024	0.0046	0.00013	0.00041	0.0041	0.19	0.00006	0.09	0.000005	0.04	0.008	7.59	0.00001	0.00000	0.00014	0.000003	0.00012	0.0009	0.000005
03-Jan-12	0.000009	0.0004	1.63	0.021	0.0045	0.00010	0.00040	0.0040	0.18	0.00002	0.08	0.000004	0.04	0.007	6.50	0.00001	0.00000	0.00009	0.000004	0.00016	0.0009	0.000004
10-Jan-12	0.000013	0.0004	1.57	0.023	0.0045	0.00009	0.00009	0.0040	0.17	0.00004	0.08	0.000004	0.05	0.007	6.19	0.00001	0.00003	0.00013	0.000002	0.00021	0.0013	0.000004
17-Jan-12	0.000023	0.0005	1.93	0.029	0.0047	0.00011	0.00028	0.0042	0.19	0.00007	0.09	0.000005	0.03	0.008	7.25	0.00001	0.00009	0.00005	0.000003	0.00010	0.0019	0.000005
24-Jan-12	0.000010	0.0005	1.72	0.025	0.0048	0.00009	0.00019	0.0043	0.18	0.00009	0.09	0.000005	0.04	0.007	6.58	0.00001	0.00000	0.00005	0.000000	0.00011	0.0010	0.000005
31-Jan-12	0.000009	0.0005	1.69	0.025	0.0046	0.00012	0.00005	0.0041	0.17	0.00005	0.08	0.000005	0.07	0.007	6.69	0.00001	0.00000	0.00005	0.000046	0.00017	0.0009	0.000005
07-Feb-12	0.000019	0.0005	2.29	0.040	0.0049	0.00008	0.00049	0.0044	0.22	0.00011	0.12	0.000015	0.06	0.010	8.83	0.00001	0.00000	0.00005	0.000008	0.00011	0.0010	0.000005
14-Feb-12	0.000009	0.0004	1.49	0.024	0.0044	0.00007	0.00026	0.0039	0.15	0.00006	0.08	0.000004	0.04	0.007	6.39	0.00001	0.00000	0.00004	0.000010	0.00001	0.0004	0.000004
21-Feb-12	0.000009	0.0004	1.64	0.025	0.0045	0.00007	0.00027	0.0040	0.16	0.00003	0.09	0.000004	0.05	0.007	6.72	0.00001	0.00000	0.00009	0.000002	0.00009	0.0009	0.000004
28-Feb-12	0.000009	0.0004	1.76	0.026	0.0044	0.00009	0.00013	0.0040	0.18	0.00007	0.09	0.000004	0.04	0.008	6.60	0.00001	0.00002	0.00004	0.000000	0.00009	0.0009	0.000004
06-Mar-12	0.000009	0.0005	1.88	0.027	0.0046	0.00025	0.00018	0.0041	0.18	0.00005	0.10	0.000005	0.03	0.008	7.68	0.00001	0.00011	0.00005	0.000016	0.00010	0.0009	0.000009
13-Mar-12	0.000009	0.0004	1.54	0.023	0.0044	0.00032	0.00013	0.0044	0.16	0.00002	0.08	0.000004	0.05	0.007	6.39	0.00001	0.00013	0.00004	0.000001	0.00001	0.0009	0.000004
20-Mar-12	0.000009	0.0005	1.95	0.028	0.0047	0.00011	0.00009	0.0042	0.19	0.00011	0.09	0.000009	0.04	0.007	7.30	0.00001	0.00000	0.00005	0.000002	0.00010	0.0005	0.000005
27-Mar-12	0.000022	0.0004	1.90	0.027	0.0045	0.00009	0.00013	0.0040	0.18	0.00003	0.10	0.000009	0.05	0.007	7.74	0.00001	0.00000	0.00009	0.000008	0.00010	0.0040	0.000004
03-Apr-12	0.000009	0.0005	1.92	0.027	0.0046	0.00008	0.00097	0.0041	0.20	0.00006	0.09	0.000005	0.05	0.007	7.27	0.00001	0.00000	0.00018	0.000001	0.00010	0.0009	0.000005
10-Apr-12	0.000009	0.0005	2.01	0.030	0.0414	0.00011	0.00009	0.0041	0.21	0.00019	0.10	0.000018	0.05	0.008	7.82	0.00001	0.00001	0.00005	0.000003	0.00011	0.0014	0.000005
17-Apr-12	0.000009	0.0005	1.96	0.029	0.0140	0.00010	0.00019	0.0042	0.19	0.00007	0.10	0.000019	0.03	0.008	7.67	0.00001	0.00001	0.00005	0.000003	0.00009	0.0005	0.000005
24-Apr-12	0.000009	0.0005	1.77	0.027	0.0135	0.00034	0.00018	0.0041	0.19	0.00008	0.09	0.000009	0.04	0.007	7.16	0.00001	0.00002	0.00005	0.000016	0.00010	0.0009	0.000005
01-May-12	0.000009	0.0004	1.69	0.029	0.0132	0.00009	0.00022	0.0040	0.17	0.00007	0.08	0.000013	0.03	0.007	6.86	0.00001	0.00002	0.00004	0.000007	0.00010	0.0004	0.000004
08-May-12	0.000009	0.0005	1.95	0.032	0.0045	0.00008	0.00014	0.0041	0.21	0.00003	0.09	0.000027	0.04	0.007	7.65	0.00001	0.00010	0.00005	0.000003	0.00007	0.0014	0.000005
15-May-12	0.000009	0.0005	1.76	0.029	0.0045	0.00008	0.00014	0.0041	0.19	0.00003	0.09	0.000027	0.04	0.007	7.16	0.00001	0.00000	0.00005	0.000005	0.00008	0.0009	0.000005
22-May-12	0.000023	0.0005	1.81	0.030	0.0091	0.00009	0.00018	0.0041	0.18	0.00004	0.09	0.000032	0.04	0.007	7.55	0.00001	0.00001	0.00005	0.000004	0.00015	0.0009	0.000005
29-May-12	0.000010	0.0005	2.65	0.055	0.0098	0.00008	0.00015	0.0044	0.24	0.00008	0.15	0.000127	0.03	0.011	10.98	0.00001	0.00005	0.00005	0.000002	0.00009	0.0010	0.000005
05-Jun-12	0.000009	0.0005	1.84	0.034	0.0045	0.00011	0.00005	0.0041	0.18	0.00005	0.10	0.000054	0.05	0.008	8.69	0.00001	0.00001	0.00009	0.000000	0.00013	0.0009	0.000005
12-Jun-12	0.000009	0.0005	1.81	0.033	0.0045	0.00009	0.00009	0.0041	0.19	0.00008	0.10	0.000041	0.03	0.008	8.01	0.00001	0.00006	0.00005	0.000001	0.00016	0.0009	0.000005
19-Jun-12	0.000009	0.0005	1.93	0.033	0.0046	0.00009	0.00005	0.0041	0.19	0.00016	0.10	0.000046	0.04	0.008	8.42	0.00001	0.00007	0.00005	0.000001	0.00011	0.0009	0.000005
26-Jun-12	0.000013	0.0004	1.91	0.030	0.0089	0.00010	0.00022	0.0040	0.21	0.00008	0.17	0.000036	0.11	0.008	8.19	0.00001	0.00004	0.00004	0.000005	0.00015	0.0013	0.000004
03-Jul-12	0.000009	0.0004	2.06	0.037	0.0089	0.00035	0.00004	0.0040	0.20	0.00006	0.10	0.000076	0.04	0.009	8.94	0.00001	0.00008	0.00013	0.000003	0.00010	0.0013	0.000004
10-Jul-12	0.000009	0.0004	1.66	0.030	0.0087	0.00008	0.00013	0.0039	0.16	0.00008	0.08	0.000035	0.04	0.007	7.09	0.00001	0.00004	0.00004	0.000001	0.00009	0.0004	0.000004
17-Jul-12	0.000009	0.0004	1.88	0.031	0.0044	0.00007	0.00013	0.0040	0.18	0.00029	0.08	0.000070	0.04	0.008	7.88	0.00001	0.00000	0.00013	0.000000	0.00011	0.0004	0.000004
24-Jul-12	0.000009	0.0005	2.25	0.037	0.0092	0.00010	0.00005	0.0041	0.21	0.00034	0.11	0.000097	0.08	0.009	9.48	0.00001	0.00000	0.00005	0.000000	0.00011	0.0005	0.000005
31-Jul-12	0.000009	0.0004	1.78	0.030	0.0089	0.00008	0.00004	0.0040	0.17	0.00004	0.09	0.000058	0.04	0.007	7.39	0.00001	0.00004	0.00004	0.000001	0.00014	0.0009	0.000004
07-Aug-12	0.000009	0.0004	1.84	0.030	0.0045	0.00009	0.00009	0.0040	0.18	0.00006	0.09	0.000071	0.04	0.008	8.19	0.00001	0.00004	0.00004	0.000003	0.00015	0.0009	0.000004
14-Aug-12	0.000009	0.0004	1.87	0.031	0.0089	0.00008	0.00013	0.0040	0.17	0.00008	0.08	0.000102	0.04	0.007	7.74	0.00001	0.00007	0.00004	0.000001	0.00015	0.0013	0.000004
21-Aug-12	0.000009	0.0005	1.99	0.034	0.0090	0.00009	0.00014	0.0041	0.16	0.00005	0.15	0.000162	0.04	0.007	8.42	0.00001	0.00009	0.00005	0.000001	0.00012	0.0005	0.000005
28-Aug-12	0.000014	0.0005	1.69	0.038	0.0137	0.00014	0.00018	0.0041	0.15	0.00015	0.09	0.000082	0.04	0.007	7.23	0.00001	0.00021	0.00005	0.000003	0.00015	0.0014	0.000005
04-Sep-12	0.000009	0.0005	1.89	0.031	0.0138	0.00007	0.00009	0.0041	0.16	0.00006	0.08	0.000069	0.03	0.007	7.91	0.00001	0.00002	0.00005	0.000000	0.00013	0.0005	0.000005
11-Sep-12	0.000009	0.0005	1.63	0.025	0.0180	0.00007	0.00005	0.0041	0.15	0.00003	0.09	0.000059	0.04	0.006	7.11	0.00001	0.00006	0.00005	0.000000	0.00008	0.0014	0.000005
18-Sep-12	0.000019	0.0005	2.28	0.043	0.0194	0.00005	0.00005	0.0044	0.18	0.00008	0.12	0.000102	0.04	0.009	9.55	0.00001	0.00008	0.00005	0.000012	0.00011	0.0010	0.000005
25-Sep-12	0.000059	0.0005	1.53	0.026	0.0045	0.00007	0.00014	0.0041	0.15	0.00005	0.08	0.000036	0.03	0.006	6.89	0.00001	0.00004	0.00005	0.000004	0.00007	0.0014	0.000005
02-Oct-12	0.000013	0.0004	1.58	0.026	0.0044	0.00008	0.00004	0.0040	0.16	0.00003	0.11	0.000022	0.03	0.006	7.04	0.00001	0.00007	0.00004	0.000002	0.00010	0.0004	0.000004
09-Oct-12	0.000009	0.0004	1.50	0.027	0.0045	0.00007	0.00031	0.0040	0.15	0.00005	0.08	0.000031	0.03	0.006	6.41	0.00001	0.00004	0.00004	0.000003	0.00007	0.0004	0.000004
16-Oct-12	0.000009	0.0004	1.53	0.024	0.0044	0.00007	0.00013	0.0039	0.14	0.00002	0.09	0.000035	0.03	0.006	6.61	0.00001	0.00010	0.00004	0.000001	0.00007	0.0009	0.000004
23-Oct-12	0.000031	0.0004	1.34	0.023	0.0044	0.00012	0.00053	0.0040	0.12	0.00004	0.07	0.000018	0.03	0.006	5.81	0.00001	0.00002	0.00009	0.000005	0.00009	0.0013	0.000004
30-Oct-12	0.000009	0.0004	1.63	0.028	0.0044	0.00009	0.00013	0.0040	0.15	0.00004	0.09	0.000013	0.04	0.006	7.04	0.00001	0.00006	0.00004	0.000006	0.00008	0.0009	0.000004
06-Nov-12	0.000009	0.0004	1.57	0.026	0.0044	0.00007	0.00013	0.0040	0.14	0.00004	0.07	0.000044	0.03	0.006	6.38	0.00001	0.00007	0.00004	0.000001	0.00006	0.0004	0.000004
13-Nov-12	0.000013	0.0004	1.59	0.027	0.0088	0.00006	0.00004	0.0040	0.14	0.00004	0.08	0.000035	0.03	0.006	6.64	0.00001	0.00001	0.00004	0.000001	0.00006	0.0009	0.000004
20-Nov-12	0.000010	0.0005	2.13	0.042	0.0050	0.00005	0.00144	0.0045	0.16	0.00006	0.11	0.000030	0.04	0.008	7.92	0.00001	0.00008	0.00005	0.000005	0.00008	0.0005	0.000005
27-Nov-12	0.000010	0.0005	2.12	0.042	0.0051	0.00007	0.00015	0.0045	0.19	0.00006	0.13	0.000051	0.04	0.009	8.43	0.00001	0.00007	0.00010	0.000016	0.00002	0.0005	0.000005
04-Dec-12	0.000009	0.0005	1.69	0.023	0.0047	0.00007	0.00005	0.0042	0.17	0.00005	0.09	0.000047	0.03	0.007	6.84	0.00001	0.00007	0.00005	0.000005	0.00007	0.0009	0.000005
11-Dec-12	0.000009	0.0005	1.27	0.021	0.0045	0.00010	0.00005	0.0041	0.16	0.00005	0.07	0.000036	0.03	0.006	5.49	0.00001	0.00006	0.00005	0.000002	0.00007	0.0005	0.000005
18-Dec-12	0.000010	0.0005	1.94	0.036	0.0050	0.00007	0.00010	0.0045	0.19	0.00006	0.09	0.000084	0.04	0.008	7.87	0.00001	0.00006	0.00005	0.000005	0.00007	0.0005	0.000005
25-Dec-12	0.000009	0.0005	1.45	0.022	0.0045	0.00009	0.00009	0.0050	0.14	0.00003	0.06	0.000041	0.03	0.006	5.63	0.00001	0.00005	0.00005	0.000000	0.00001	0.0014	0.000005
01-Jan-13	0.000009	0.0005	1.48	0.022	0.0046	0.00013	0.00009	0.0060	0.15	0.00010	0.08	0.000060	0.04	0.006	5.98	0.00001	0.00005	0.00005	0.000000	0.00006	0.0005	0.000069
08-Jan-13	0.000009	0.0005	1.30	0.019	0.0045	0.00012	0.00005	0.0041	0.15	0.00004	0.09	0.000041	0.03	0.005	5.36	0.00001	0.00005	0.00005	0.000001	0.00008	0.0005	0.000005
15-Jan-13																						
22-Jan-13																						
29-Jan-13																						
05-Feb-13																						
12-Feb-13																						

HC 6
Sample = Alt 09 01

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	1	500	391	7.55	0.86	10.68	38.71	0.052	0.0013	0.00023	0.0022	0.000008	0.0000039	0.0031	0.000001	15.60	0.00020	0.000025	0.00098	0.0039
09-Feb-10	2	500	460	7.55	1.05	11.50	57.50	0.062	0.0043	0.00028	0.0022	0.000009	0.0000046	0.0046	0.000001	21.48	0.00023	0.000026	0.00023	0.0046
16-Feb-10	3	500	410	7.48	0.98	9.48	50.02	0.056	0.0027	0.00016	0.0017	0.000008	0.0000041	0.0037	0.000001	16.97	0.00021	0.000016	0.00025	0.0041
23-Feb-10	4	500	455	7.61	0.92	10.92	42.32	0.046	0.0016	0.00009	0.0013	0.000009	0.0000046	0.0032	0.000001	17.97	0.00023	0.000020	0.00023	0.0046
02-Mar-10	5	500	450	7.60	0.68	7.99	37.80	0.054	0.0011	0.00009	0.0013	0.000009	0.0000045	0.0018	0.000001	13.10	0.00023	0.000016	0.00023	0.0045
09-Mar-10	6	500	425	7.52	0.82	8.60	29.33	0.039	0.0009	0.00013	0.0008	0.000009	0.0000043	0.0017	0.000001	12.11	0.00021	0.000011	0.00021	0.0043
16-Mar-10	7	500	455	7.44	0.96	7.98	30.94	0.058	0.0010	0.00009	0.0007	0.000009	0.0000046	0.0027	0.000001	13.65	0.00023	0.000013	0.00023	0.0046
23-Mar-10	8	500	460	7.45	1.30	9.46	34.04	0.044	0.0008	0.00009	0.0007	0.000009	0.0000046	0.0016	0.000001	13.20	0.00023	0.000008	0.00023	0.0046
30-Mar-10	9	500	445	7.55	0.78	7.53	28.48	0.033	0.0008	0.00009	0.0007	0.000009	0.0000045	0.0018	0.000001	12.15	0.00027	0.000008	0.00040	0.0045
06-Apr-10	10	500	455	7.52	0.95	9.11	25.03	0.041	0.0008	0.00009	0.0006	0.000014	0.0000046	0.0009	0.000009	12.24	0.00023	0.000020	0.00073	0.0046
13-Apr-10	11	500	470	7.40	1.31	8.46	25.38	0.050	0.0009	0.00009	0.0005	0.000009	0.0000047	0.0014	0.000001	11.52	0.00024	0.000005	0.00024	0.0047
20-Apr-10	12	500	450	7.62	1.13	9.91	23.85	0.055	0.0009	0.00009	0.0006	0.000009	0.0000045	0.0014	0.000002	11.43	0.00027	0.000007	0.00027	0.0045
27-Apr-10	13	500	465	7.59	1.20	9.34	25.11	0.041	0.0007	0.00009	0.0005	0.000009	0.0000047	0.0009	0.000001	11.58	0.00028	0.000006	0.00033	0.0047
04-May-10	14	500	445	7.48	1.04	8.05	27.15	0.037	0.0007	0.00009	0.0006	0.000009	0.0000045	0.0013	0.000002	12.50	0.00022	0.000007	0.00022	0.0045
11-May-10	15	500	440	7.41	0.92	7.81	22.00	0.033	0.0007	0.00018	0.0005	0.000009	0.0000044	0.0009	0.000005	11.22	0.00035	0.000008	0.00026	0.0044
18-May-10	16	500	435	7.44	1.06	7.48	21.75	0.035	0.0006	0.00009	0.0005	0.000009	0.0000044	0.0012	0.000002	11.53	0.00022	0.000027	0.00030	0.0009
25-May-10	17	500	450	7.35	1.78	9.06	15.30	0.032	0.0006	0.00009	0.0006	0.000009	0.0000045	0.0010	0.000003	10.22	0.00023	0.000011	0.00041	0.0009
01-Jun-10	18	500	455	7.48	0.99	8.07	21.39	0.037	0.0006	0.00014	0.0004	0.000009	0.0000046	0.0011	0.000001	11.56	0.00032	0.000012	0.00046	0.0009
08-Jun-10	19	500	500	7.39	1.49	9.23	25.50	0.037	0.0008	0.00010	0.0006	0.000010	0.0000050	0.0016	0.000002	17.10	0.00025	0.000008	0.00025	0.0010
15-Jun-10	20	500	445	7.51	1.07	7.75	16.47	0.035	0.0005	0.00009	0.0005	0.000009	0.0000045	0.0009	0.000004	10.99	0.00022	0.000009	0.00022	0.0009
22-Jun-10	21	500	440	7.68	0.85	9.64														
29-Jun-10	22	500	435	7.36	0.86	6.93	13.49	0.031	0.0003	0.00009	0.0004	0.000009	0.0000044	0.0010	0.000001	8.79	0.00044	0.000009	0.00030	0.0009
06-Jul-10	23	500	460	7.55	0.91	9.33														
13-Jul-10	24	500	450	7.30	1.15	7.12	12.60	0.026	0.0005	0.00009	0.0004	0.000009	0.0000045	0.0012	0.000002	8.87	0.00023	0.000014	0.00041	0.0009
20-Jul-10	25	500	465	7.44	1.90	9.62														
27-Jul-10	26	500	465	7.28	1.49	8.40	23.25	0.035	0.0004	0.00009	0.0004	0.000009	0.0000047	0.0013	0.000001	12.28	0.00023	0.000007	0.00056	0.0009
03-Aug-10	27	500	470	7.50	1.41	9.45	23.03	0.030	0.0004	0.00009	0.0008	0.000009	0.0000047	0.0015	0.000003	12.69	0.00024	0.000019	0.00071	0.0009
10-Aug-10	28	500	435	7.58	1.78	8.75	29.15	0.025	0.0002	0.00009	0.0007	0.000009	0.0000044	0.0022	0.000002	12.48	0.00026	0.000010	0.00030	0.0009
17-Aug-10	29	500	435	7.54	1.32	8.76	20.88	0.032	0.0004	0.00009	0.0003	0.000009	0.0000044	0.0013	0.000003	10.01	0.00022	0.000001	0.00030	0.0009
24-Aug-10	30	500	440	7.44	1.28	9.28	16.72	0.030	0.0004	0.00009	0.0004	0.000009	0.0000044	0.0012	0.000003	10.34	0.00022	0.000007	0.00026	0.0009
31-Aug-10	31	500	435	7.72	2.18	10.35	22.62	0.027	0.0005	0.00009	0.0003	0.000009	0.0000044	0.0009	0.000001	9.96	0.00022	0.000010	0.00044	0.0009
07-Sep-10	32	500	420	7.23	1.48	7.32	20.58	0.024	0.0003	0.00008	0.0003	0.000008	0.0000042	0.0019	0.000003	9.32	0.00034	0.000011	0.00059	0.0008
14-Sep-10	33	500	415	7.17	1.26	6.83	20.34	0.019	0.0006	0.00008	0.0003	0.000008	0.0000042	0.0007	0.000001	8.84	0.00021	0.000010	0.00066	0.0008
21-Sep-10	34	500	425	7.37	1.09	7.59	16.58	0.028	0.0003	0.00009	0.0003	0.000009	0.0000170	0.0009	0.000001	9.44	0.00021	0.000011	0.00055	0.0009
28-Sep-10	35	500	410	7.47	0.84	9.37	19.27	0.046	0.0005	0.00008	0.0003	0.000008	0.0000041	0.0009	0.000005	8.94	0.00021	0.000016	0.00049	0.0008
05-Oct-10	36	500	405	7.42	1.08	9.43	19.85	0.036	0.0005	0.00008	0.0005	0.000008	0.0000041	0.0011	0.000001	9.96	0.00020	0.000049	0.00049	0.0008
12-Oct-10	37	500	420	7.34	1.13	8.76	21.00	0.029	0.0009	0.00013	0.0004	0.000008	0.0000042	0.0011	0.000003	11.76	0.00021	0.000038	0.00092	0.0008
19-Oct-10	38	500	425	7.36	1.20	9.55	19.13	0.034	0.0004	0.00009	0.0005	0.000009	0.0000043	0.0009	0.000001	10.20	0.00021	0.000017	0.00038	0.0009
26-Oct-10	39	500	425	7.29	1.13	7.51	16.15	0.027	0.0010	0.00009	0.0003	0.000009	0.0000043	0.0009	0.000001	8.29	0.00034	0.000028	0.00060	0.0009
02-Nov-10	40	500	430	7.49	0.86	9.59	15.91	0.030	0.0003	0.00009	0.0003	0.000009	0.0000043	0.0018	0.000001	9.33	0.00022	0.000013	0.00030	0.0013
09-Nov-10	41	500	415	7.51	1.07	9.06	18.26	0.028	0.0005	0.00008	0.0003	0.000008	0.0000042	0.0005	0.000001	9.92	0.00021	0.000023	0.00025	0.0008
16-Nov-10	42	500	420	7.67	1.17	9.11	15.12	0.026	0.0003	0.00008	0.0003	0.000008	0.0000042	0.0021	0.000003	8.69	0.00021	0.000013	0.00021	0.0008
23-Nov-10	43	500	415	7.30	1.17	9.45	13.28	0.037	0.0004	0.00008	0.0003	0.000008	0.0000042	0.0007	0.000003	8.09	0.00033	0.000031	0.00033	0.0008
30-Nov-10	44	500	440	7.41	1.31	10.74	11.88	0.037	0.0003	0.00009	0.0012	0.000009	0.0000044	0.0008	0.000001	8.36	0.00026	0.000026	0.00022	0.0009
07-Dec-10	45	500	430	7.35	1.40	10.01	14.19	0.035	0.0003	0.00009	0.0003	0.000009	0.0000043	0.0010	0.000001	11.18	0.00030	0.000015	0.00043	0.0009
14-Dec-10	46	500	420	7.40	1.71	9.21	14.70	0.033	0.0004	0.00008	0.0003	0.000008	0.0000042	0.0012	0.000003	7.94	0.00021	0.000026	0.00029	0.0008
21-Dec-10	47	500	425	7.47	2.09	9.61	16.15	0.030	0.0003	0.00009	0.0003	0.000009	0.0000043	0.0006	0.000002	8.67	0.00021	0.000016	0.00038	0.0009
28-Dec-10	48	500	450	7.50	2.39	9.49	17.10	0.030	0.0004	0.00009	0.0003	0.000009	0.0000045	0.0017	0.000005	8.73	0.00045	0.000013	0.00041	0.0009
04-Jan-11	49	500	425	7.42	1.98	8.97	13.18	0.026	0.0003	0.00009	0.0002	0.000009	0.0000043	0.0006	0.000009	7.52	0.00026	0.000009	0.00030	0.0009
11-Jan-11	50	500	405	7.36	1.06	8.74	11.75	0.025	0.0003	0.00008	0.0002	0.000008	0.0000041	0.0015	0.000003	7.37	0.00020	0.000010	0.00020	0.0016
18-Jan-11	51	500	435	7.34	1.31	9.34	12.62	0.026	0.0003	0.00009	0.0002	0.000009	0.0000044	0.0009	0.000003	8.53	0.00022	0.000008	0.00022	0.0009
25-Jan-11	52	500	415	7.29	1.34	7.34	17.85	0.022	0.0002	0.00008	0.0003	0.000008	0.0000042	0.0009	0.000004	8.72	0.00021	0.000021	0.00025	0.0008
01-Feb-11	53	500	425	7.32	1.13	7.65	17.00	0.019	0.0003	0.00009	0.0002	0.000009	0.0000043	0.0007	0.000005	7.86	0.00021	0.000013	0.00034	0.0009
08-Feb-11	54	500	435	7.36	1.07	6.84	16.53	0.023	0.0003	0.00009	0.0002	0.000009	0.0000044	0.0006	0.000006	8.92	0.00022	0.000011	0.00022	0.0026
15-Feb-11	55	500	420	7.31	1.18	7.19	14.70	0.025	0.0003	0.00008	0.0002	0.000008	0.0000042	0.0014	0.000005	8.78	0.00021	0.000027	0.00042	0.0008
22-Feb-11	56	500	425	7.37	1.28	6.99	15.73	0.020	0.0004	0.00009	0.0002	0.000009	0.0000043	0.0013	0.000004	7.95	0.00021	0.000013	0.00030	0.0009
01-Mar-11	57	500	460	7.28	1.29	7.82	17.48	0.021	0.0002	0.00009	0.0002	0.000009	0.0000046	0.0010	0.000021	8.56	0.00023	0.000012	0.00037	0.0009
08-Mar-11	58	500	425	7.27	1.28	7.34	15.30	0.020	0.0003	0.00009	0.0004	0.000009	0.0000043	0.0009	0.000026	8.20	0.00021	0.000030	0.00034	0.0009
15-Mar-11	59	500	420	7.32	1.24	8.43	12.60	0.019	0.0002	0.00017	0.0003	0.000008	0.0000042	0.0009	0.000011	7.77	0.00021	0.000024	0.00046	0.0013
22-Mar-11	60	500	415	7.34	1.39	7.36	14.11	0.017	0.0002	0.00008	0.0002	0.000008	0.0000042	0.0007	0.000005	8.01	0.00025	0.000018	0.00029	0.0008
29-Mar-11	61	500	485	7.71	1.67	11.30	17.46	0.018	0.0003	0.00010	0.0003	0.000010	0.0000049	0.0012	0.000004	11.01	0.00024	0.000021	0.00024	0.0010
05-Apr-11	62	500	435	7.43	1.57	9.72	16.10	0.021	0.0003	0.00009	0.0002	0.000009	0.0000044	0.0008	0.000003	9.35	0.00022	0.000021	0.00026	0.0009
12-Apr-11	63	500	460	7.42	1.27	11.27	22.08	0.024	0.0004	0.00014	0.0003	0.000009	0.0000046	0.0010	0.000009	12.70	0.00023	0.000020	0.00023	0.0023
19-Apr-11	64	500	490	7.67	2.74	13.11	16.17	0.026	0.0003	0.00010	0.0003	0.000010	0.0000049	0.0011	0.000006	10.29	0.00025	0.000041	0.00025	0.0010
26-Apr-11	65	500	440	7.49	1.12	9.81	11.88	0.023	0.0003	0.00009	0.0003	0.000009	0.0000044	0.0008	0.000001	8.14	0.00022	0.000020	0.00022	0.0009
03-May-11	66	500	460	7.57	1.63	9.34	14.72	0.027	0.0003	0.00009	0.0003	0.000009	0.0000046	0.0013	0.000001	8.79	0.00023	0.000018	0.00023	0.0009
10-May-11	67	500	450	7.51	1.45	9.70	15.30	0.025	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0014	0.000003	7.70	0.00023	0.000032	0.00023	0.0009
17-May-11	68	500	460	7.80	1.24	9.70	14.26	0.023	0.0003	0.00009	0.0003	0.000009	0.0000046	0.0007	0.000002	8.23	0.00023	0.000022	0.00023	0.0009
24-May-11	69	500	520	7.67	2.03	8.16	16.12	0.028	0.0001	0.00010	0.0003	0.000010	0.0000052	0.0029	0.000003	9.78	0.00026	0.000028	0.00026	0.0010
31-May-11	70	500	475	7.59	1.88	8.21	14.73	0.010	0.0003	0.00010	0.0004	0.000010	0.0000048	0.0005	0.000005	8.65	0.00024	0.000050	0.00029	0.0010
07-Jun-11	71	500	455	7.72	1.52	7.54	11.83	0.023	0.0003	0.00009	0.0003	0.000009	0.0000046	0.0010	0.000005	8.33	0.00023	0.000022	0.00041	0.0009
14-Jun-11	72	500	455	7.68	1.02	7.32	14.56	0.021	0.0002	0.00009	0.0003	0.000009	0.0000046	0.0010	0.000006	8.19	0.00023	0.000021	0.00023	0.0023
21-Jun-11	73	500	460	7.62	0.93	9.81	17.94	0.020	0.0002	0.00009	0.0002	0.000009	0.0000046	0.0007	0.000005	9.34	0.00023	0.000027	0.00023	0.0009
28-Jun-11	74	500	465	7.60	1.38	10.33	17.21	0.027	0.0002	0.00009	0.0002	0.000009	0.0000047	0.0011	0.000003	9.30	0.00023	0.000017	0.00023	0.0009

HC 6
Sample = Alt 09 01

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	75	500	495	7.49	1.80	12.08	25.25	0.028	0.0003	0.00010	0.0003	0.000010	0.0000050	0.0021	0.000035	13.27	0.00025	0.000033	0.00035	0.0010
12-Jul-11	76	500	460	7.34	1.76	9.84	18.40	0.026	0.0003	0.00009	0.0002	0.000009	0.0000046	0.0007	0.000003	11.36	0.00023	0.000016	0.00023	0.0009
19-Jul-11	77	500	470	7.53	2.02	9.77	16.92	0.023	0.0003	0.00009	0.0002	0.000009	0.0000047	0.0013	0.000003	9.73	0.00024	0.000022	0.00024	0.0009
26-Jul-11	78	500	455	7.73	2.17	10.01	15.93	0.024	0.0003	0.00032	0.0002	0.000009	0.0000046	0.0009	0.000002	8.60	0.00023	0.000032	0.00027	0.0127
02-Aug-11	79	500	465	7.72	2.11	9.95	17.67	0.027	0.0002	0.00009	0.0002	0.000009	0.0000047	0.0007	0.000003	10.23	0.00033	0.000018	0.00023	0.0019
09-Aug-11	80	500	465	7.57	1.54	9.87	17.67	0.027	0.0002	0.00009	0.0002	0.000009	0.0000047	0.0008	0.000007	9.44	0.00028	0.000027	0.00023	0.0019
16-Aug-11	81	500	470	7.71	2.47	11.04	18.33	0.027	0.0003	0.00009	0.0002	0.000009	0.0000047	0.0008	0.000001	9.64	0.00038	0.000018	0.00024	0.0024
23-Aug-11	82	500	465	7.61	2.09	9.85	14.88	0.028	0.0003	0.00009	0.0002	0.000009	0.0000047	0.0009	0.000003	8.88	0.00023	0.000014	0.00023	0.0019
30-Aug-11	83	500	465	7.62	2.14	9.88	19.53	0.026	0.0003	0.00009	0.0003	0.000009	0.0000047	0.0011	0.000008	10.18	0.00033	0.000018	0.00023	0.0014
06-Sep-11	84	500	465	7.71	2.23	9.49	17.21	0.021	0.0003	0.00009	0.0003	0.000009	0.0000047	0.0010	0.000007	8.42	0.00023	0.000012	0.00023	0.0009
13-Sep-11	85	500	465	7.63	1.68	9.39	20.00	0.022	0.0003	0.00009	0.0003	0.000009	0.0000047	0.0012	0.000006	9.25	0.00056	0.000019	0.00023	0.0009
20-Sep-11	86	500	470	7.51	1.99	9.42	17.39	0.020	0.0003	0.00009	0.0003	0.000009	0.0000047	0.0009	0.000008	8.79	0.00066	0.000020	0.00024	0.0075
27-Sep-11	87	500	465	7.55	2.64	8.20	16.28	0.020	0.0002	0.00009	0.0002	0.000009	0.0000047	0.0001	0.000007	8.37	0.00033	0.000013	0.00023	0.0009
04-Oct-11	88	500	505	7.58	2.27	11.11	23.23	0.023	0.0017	0.00066	0.0004	0.000010	0.0000051	0.0016	0.000005	10.61	0.00030	0.000020	0.00025	0.0010
11-Oct-11	89	500	445	7.68	2.38	9.51	16.91	0.021	0.0007	0.00009	0.0003	0.000009	0.0000045	0.0009	0.000007	8.32	0.00022	0.000012	0.00022	0.0009
18-Oct-11	90	500	450	7.49	1.89	7.88	17.55	0.023	0.0003	0.00014	0.0004	0.000009	0.0000045	0.0010	0.000005	9.00	0.00032	0.000014	0.00023	0.0009
25-Oct-11	91	500	430	7.40	1.38	7.54	15.05	0.019	0.0002	0.00009	0.0002	0.000009	0.0000043	0.0008	0.000007	8.17	0.00022	0.000014	0.00022	0.0013
01-Nov-11	92	500	435	7.49	1.88	7.55	19.58	0.019	0.0002	0.00009	0.0002	0.000009	0.0000044	0.0006	0.000004	9.05	0.00022	0.000014	0.00022	0.0022
08-Nov-11	93	500	445	7.47	2.20	7.36	19.58	0.019	0.0002	0.00009	0.0002	0.000009	0.0000045	0.0004	0.000005	10.72	0.00022	0.000022	0.00022	0.0013
15-Nov-11	94	500	450	7.39	2.21	7.52	18.90	0.021	0.0002	0.00009	0.0004	0.000009	0.0000045	0.0007	0.000008	9.23	0.00023	0.000023	0.00023	0.0014
22-Nov-11	95	500	445	7.54	2.19	9.83	15.13	0.027	0.0002	0.00018	0.0002	0.000009	0.0000045	0.0007	0.000005	9.17	0.00022	0.000015	0.00022	0.0013
29-Nov-11	96	500	435	7.62	2.24	9.62	13.49	0.033	0.0002	0.00009	0.0002	0.000009	0.0000044	0.0007	0.000007	8.13	0.00022	0.000020	0.00044	0.0013
06-Dec-11	97	500	450	7.43	2.37	7.73	14.40	0.021	0.0002	0.00009	0.0002	0.000009	0.0000045	0.0003	0.000010	9.54	0.00023	0.000012	0.00023	0.0014
13-Dec-11	98	500	445	7.40	1.88	9.45	12.91	0.018	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0004	0.000004	8.54	0.00040	0.000012	0.00031	0.0013
20-Dec-11	99	500	450	7.61	1.99	7.99	13.95	0.023	0.0002	0.00023	0.0003	0.000009	0.0000045	0.0005	0.000009	7.97	0.00023	0.000015	0.00023	0.0014
27-Dec-11	100	500	445	7.61	2.09	9.82	12.46	0.030	0.0002	0.00009	0.0002	0.000009	0.0000045	0.0005	0.000004	7.74	0.00022	0.000014	0.00022	0.0013
03-Jan-12	101	500	440	7.47	2.09	9.46	14.52	0.030	0.0002	0.00009	0.0003	0.000009	0.0000044	0.0007	0.000018	7.74	0.00022	0.000032	0.00026	0.0013
10-Jan-12	102	500	440	7.45	1.58	9.19	10.56	0.035	0.0002	0.00009	0.0003	0.000009	0.0000044	0.0005	0.000004	7.04	0.00022	0.000009	0.00022	0.0013
17-Jan-12	103	500	450	7.40	1.93	9.72	12.60	0.021	0.0002	0.00009	0.0002	0.000009	0.0000045	0.0011	0.000009	7.97	0.00023	0.000012	0.00023	0.0014
24-Jan-12	104	500	475	7.52	2.46	10.26	14.25	0.027	0.0002	0.00010	0.0002	0.000010	0.0000048	0.0006	0.000005	7.98	0.00024	0.000015	0.00024	0.0014
31-Jan-12	105	500	450	7.31	1.69	9.68	14.40	0.024	0.0002	0.00036	0.0002	0.000009	0.0000045	0.0009	0.000005	8.33	0.00023	0.000014	0.00023	0.0014
07-Feb-12	106	500	485	7.48	2.12	11.87	24.74	0.021	0.0001	0.00010	0.0003	0.000010	0.0000049	0.0008	0.000007	11.98	0.00024	0.000026	0.00039	0.0015
14-Feb-12	107	500	440	7.51	2.18	8.88	18.04	0.014	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0005	0.000007	8.45	0.00022	0.000011	0.00026	0.0013
21-Feb-12	108	500	460	7.33	1.35	7.07	21.62	0.018	0.0002	0.00009	0.0004	0.000009	0.0000046	0.0021	0.000010	10.76	0.00023	0.000011	0.00032	0.0014
28-Feb-12	109	500	405	7.38	1.94	7.00	15.80	0.020	0.0002	0.00008	0.0002	0.000008	0.0000041	0.0005	0.000005	8.95	0.00020	0.000011	0.00020	0.0012
06-Mar-12	110	500	440	7.54	1.28	10.32	14.52	0.024	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0005	0.000004	7.96	0.00022	0.000008	0.00022	0.0013
13-Mar-12	111	500	435	7.26	2.04	6.65	12.18	0.017	0.0002	0.00100	#N/A	0.000009	0.0000044	0.0006	0.000021	7.44	0.00022	0.000012	0.00248	#N/A
20-Mar-12	112	500	470	7.33	2.15	7.64	15.04	0.020	0.0001	0.00009	0.0002	0.000009	0.0000047	0.0006	0.000025	8.27	0.00024	0.000008	0.00071	0.0014
27-Mar-12	113	500	455	7.22	1.85	6.99	16.38	0.026	0.0001	0.00023	0.0002	0.000009	0.0000046	0.0006	0.000007	8.60	0.00023	0.000019	0.00027	0.0014
03-Apr-12	114	500	455	7.17	1.92	6.91	15.93	0.026	0.0001	0.00009	0.0002	0.000009	0.0000046	0.0005	0.000001	8.05	0.00023	0.000004	0.00027	0.0014
10-Apr-12	115	500	455	7.28	1.35	6.97	16.38	0.019	0.0002	0.00009	0.0002	0.000009	0.0000046	0.0007	0.000008	7.83	0.00023	0.000011	0.00027	0.0014
17-Apr-12	116	500	450	7.21	1.75	6.63	16.65	0.022	0.0002	0.00009	0.0001	0.000009	0.0000045	0.0009	0.000001	7.97	0.00023	0.000007	0.00023	0.0014
24-Apr-12	117	500	435	7.35	1.35	6.31	15.23	0.025	0.0002	0.00009	0.0002	0.000009	0.0000044	0.0006	0.000001	7.79	0.00022	0.000010	0.00022	0.0013
01-May-12	118	500	435	7.53	2.18	6.99	15.23	0.025	0.0002	0.00009	0.0001	0.000009	0.0000044	0.0013	0.000001	8.00	0.00022	0.000007	0.00022	0.0013
08-May-12	119	500	435	7.36	1.47	6.70	13.49	0.016	0.0002	0.00009	0.0002	0.000009	0.0000044	0.0010	0.000001	7.87	0.00022	0.000007	0.00131	0.0013
15-May-12	120	500	425	7.44	1.32	5.96	14.03	0.019	0.0001	0.00009	0.0004	0.000009	0.0000043	0.0007	0.000006	8.37	0.00021	0.000008	0.00034	0.0013
22-May-12	121	500	440	7.25	1.58	5.90	19.36	0.026	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0006	0.000001	9.15	0.00022	0.000007	0.00022	0.0013
29-May-12	122	500	435	7.23	1.68	5.96	14.79	0.020	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0007	0.000001	9.40	0.00022	0.000011	0.00022	0.0013
05-Jun-12	123	500	440	7.22	1.83	6.38	14.08	0.022	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0011	0.000001	8.62	0.00022	0.000011	0.00026	0.0013
12-Jun-12	124	500	440	7.30	1.51	5.89	14.96	0.020	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0009	0.000001	8.45	0.00022	0.000004	0.00022	0.0013
19-Jun-12	125	500	450	7.24	1.35	5.70	17.55	0.036	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0029	0.000001	9.95	0.00023	0.000010	0.00023	0.0014
26-Jun-12	126	500	445	7.40	1.39	6.70	16.91	0.032	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0013	0.000001	9.39	0.00022	0.000001	0.00058	0.0013
03-Jul-12	127	500	450	7.43	3.15	7.72	17.10	0.021	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0007	0.000008	9.41	0.00023	0.000006	0.00023	0.0014
10-Jul-12	128	500	430	7.32	1.40	6.55	16.77	0.022	0.0002	0.00009	0.0002	0.000009	0.0000043	0.0007	0.000003	9.07	0.00022	0.000005	0.00022	0.0013
17-Jul-12	129	500	445	7.39	1.01	6.33	14.24	0.023	0.0002	0.00009	0.0002	0.000009	0.0000045	0.0009	0.000002	8.23	0.00022	0.000016	0.00022	0.0013
24-Jul-12	130	500	440	7.14	1.23	6.12	15.40	0.021	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0005	0.000006	8.67	0.00022	0.000006	0.00022	0.0013
31-Jul-12	131	500	440	7.38	0.94	5.44	13.20	0.023	0.0002	0.00009	0.0001	0.000009	0.0000044	0.0007	0.000007	7.92	0.00022	0.000004	0.00022	0.0013
07-Aug-12	132	500	435	7.48	0.93	6.09	14.36	0.034	0.0003	0.00009	0.0002	0.000009	0.0000044	0.0008	0.000002	8.18	0.00022	0.000003	0.00039	0.0013
14-Aug-12	133	500	430	7.23	0.98	5.40	13.76	0.022	0.0001	0.00009	0.0002	0.000009	0.0000043	0.0007	0.000004	7.53	0.00022	0.000003	0.00026	0.0013
21-Aug-12	134	500	450	7.18	1.35	5.54	12.60	0.026	0.0003	0.00009	0.0001	0.000009	0.0000045	0.0009	0.000006	7.79	0.00023	0.000010	0.00023	0.0014
28-Aug-12	135	500	450	7.33	2.17	5.86	12.60	0.031	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0008	0.000003	7.07	0.00023	0.000006	0.00032	0.0014
04-Sep-12	136	500	445	7.15	1.98	6.12	12.02	0.029	0.0002	0.00009	0.0002	0.000009	0.0000045	0.0008	0.000009	8.14	0.00022	0.000006	0.00022	0.0013
11-Sep-12	137	500	460	7.22	1.39	5.68	11.96	0.016	0.0001	0.00009	0.0002	0.000009	0.0000046	0.0007	0.000009	6.99	0.00023	0.000009	0.00028	0.0032
18-Sep-12	138	500	435	7.28	1.04	5.99	14.36	0.023	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0006	0.000007	7.53	0.00022	0.000003	0.00022	0.0013
25-Sep-12	139	500	450	7.23	1.26	6.03	13.50	0.019	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0007	0.000004	7.16	0.00023	0.000006	0.00023	0.0014
02-Oct-12	140	500	450	7.13	1.15	5.95	14.40	0.014	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0011	0.000004	7.97	0.00023	0.000025	0.00036	0.0014
09-Oct-12	141	500	460	7.24	2.33	6.00	16.56	0.018	0.0001	0.00009	0.0002	0.000009	0.0000046	0.0009	0.000004	7.45	0.00023	0.000006	0.00041	0.0014
16-Oct-12	142	500	430	7.57	2.29	6.27	16.34	0.013	0.0001	0.00009	0.0003	0.000009	0.0000043	0.0008	0.000013	7.96	0.00022	0.000004	0.00030	0.0013
23-Oct-12	143	500	450	7.11	1.84	5.90	16.65	0.028	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0005	0.000004	7.65	0.00023	0.000036	0.00036	0.0018
30-Oct-12	144	500	440	7.11	1.68	6.17	17.16	0.017	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0012	0.000537	8.45	0.00022	0.000007	0.00040	0.0013
06-Nov-12	145	500	445	7.26	1.74	6.31	14.69	0.012	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0011	0.000007	9.03	0.00022	0.000013	0.00022	0.0013
13-Nov-12	146	500	440	7.44	2.57	6.54	15.40	0.012	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0008	0.000006	9.55	0.00022	0.000018	0.00022	0.0013
20-Nov-12	147	500	480	7.53	3.32	7.96	14.88	0.015	0.0001	0.00010	0.0004	0.000010	0.0000048	0.0014	0.000009	8.98	0.00024	0.000007	0.00024	0.0014
27-Nov-12	148	500	500	7.41	2.27	8.13	20.00	0.014	0.0002	0.00010	0.0004	0.000010	0.0000050	0.0014	0.000009	11.65	0.00025	0.000022	0.00025	0.0015
04-Dec-12	149	500	475	7.43	0.96	7.52	17.10	0.012	0.0001	0.00010	0.0002	0.000010	0.0000048	0.0007	0.000005	8.93	0.00024	0.000017	0.00024	0.0014
11-Dec-12	150	500	495	7.46	1.15	8.42	20.79	0.015	0.0002	0.00010	0.0003	0.000010	0.0000050	0.0013	0.000011	10.79	0.00025	0.000027	0.00025	0.0015
18-Dec-12	151	500	495	7.47	1.13	7.76	19.31	0.017	0.0002	0.00010	0.0003	0.000010	0.0000050	0.0009	0.000008	10.00	0.00025	0.000015	0.00025	0.0015
25-Dec-12	152	500	435	7.35	1.33	5.33	10.88	0.015	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0008	0.000005	6.61	0.00022	0.000007	0.00022	0.0013
01-Jan-13	153	500	475	7.51	1.33	6.64	14.73	0.014	0.0002	0.00010	0.0002	0.000010	0.0000048	0.0010	0.000006	7.27	0.00024	0.000011	0.00024	0.0014
08-Jan-13	154	500	455	7.56	1.46	6.43	11.83	0.017	0.0002	0.00009	0.0012	0.000009	0.0000046	0.0007	0.000006	7.37	0.00023	0.000031	0.00023	0.0014
15-Jan-13	155	500	460																	
22-Jan-13	156	500	450	7.40	1.78	5.90	11.25													
29-Jan-13	157	500	455																	
05-Feb-13	158	500	470	7.48	1.49	6.01	14.57													
12-Feb-13	159	500	465																	

HC 6
Sample = Alt 09 01

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	0.000012	0.0031	1.26	0.003	0.0039	0.00025	0.00043	0.0039	2.13	0.00032	0.20	0.000004	3.06	0.056	16.30	0.00008	0.00011	0.00004	0.000004	0.00018	0.0004	0.000004
09-Feb-10	0.000009	0.0032	2.64	0.007	0.0046	0.00023	0.00014	0.0046	2.05	0.00046	0.23	0.000005	3.37	0.073	21.48	0.00009	0.00000	0.00005	0.000024	0.00022	0.0005	0.000005
16-Feb-10	0.000008	0.0029	2.61	0.005	0.0041	0.00019	0.00045	0.0041	1.46	0.00049	0.20	0.000004	2.04	0.049	17.18	0.00008	0.00001	0.00004	0.000008	0.00022	0.0004	0.000004
23-Feb-10	0.000009	0.0032	1.59	0.007	0.0046	0.00010	0.00014	0.0046	0.82	0.00025	0.20	0.000005	0.80	0.046	14.56	0.00009	0.00002	0.00005	0.000010	0.00020	0.0005	0.000005
02-Mar-10	0.000027	0.0018	1.11	0.003	0.0045	0.00008	0.00014	0.0045	0.51	0.00019	0.15	0.000005	0.45	0.030	11.70	0.00009	0.00009	0.00005	0.000008	0.00024	0.0005	0.000005
09-Mar-10	0.000009	0.0017	1.01	0.004	0.0043	0.00007	0.00013	0.0043	0.43	0.00018	0.14	0.000004	0.32	0.025	9.69	0.00009	0.00012	0.00004	0.000013	0.00017	0.0004	0.000004
16-Mar-10	0.000046	0.0018	0.98	0.003	0.0046	0.00009	0.00027	0.0046	0.40	0.00017	0.17	0.000005	0.30	0.025	10.69	0.00009	0.00001	0.00005	0.000007	0.00025	0.0009	0.000005
23-Mar-10	0.000202	0.0018	0.84	0.004	0.0046	0.00007	0.00018	0.0046	0.34	0.00016	0.17	0.000005	0.23	0.024	10.17	0.00009	0.00002	0.00005	0.000006	0.00022	0.0005	0.000005
30-Mar-10	0.000129	0.0013	0.79	0.004	0.0045	0.00006	0.00018	0.0045	0.30	0.00014	0.14	0.000004	0.22	0.021	8.68	0.00009	0.00008	0.00004	0.000011	0.00018	0.0004	0.000004
06-Apr-10	0.000164	0.0014	0.66	0.005	0.0046	0.00006	0.00005	0.0046	0.26	0.00011	0.16	0.000036	0.18	0.019	8.96	0.00009	0.00005	0.00005	0.000009	0.00020	0.0005	0.000009
13-Apr-10	0.000009	0.0014	0.63	0.004	0.0047	0.00006	0.00005	0.0047	0.24	0.00016	0.16	0.000005	0.17	0.017	7.90	0.00009	0.00006	0.00005	0.000010	0.00023	0.0005	0.000005
20-Apr-10	0.000126	0.0014	0.59	0.004	0.0045	0.00005	0.00009	0.0045	0.24	0.00012	0.14	0.000005	0.15	0.017	8.15	0.00009	0.00007	0.00005	0.000009	0.00026	0.0005	0.000005
27-Apr-10	0.000507	0.0014	0.56	0.004	0.0047	0.00004	0.00009	0.0047	0.21	0.00016	0.15	0.000005	0.14	0.017	7.86	0.00009	0.00010	0.00005	0.000003	0.00021	0.0005	0.000005
04-May-10	0.000636	0.0013	0.57	0.005	0.0045	0.00006	0.00004	0.0045	0.20	0.00015	0.14	0.000004	0.13	0.017	7.74	0.00009	0.00009	0.00004	0.000004	0.00019	0.0004	0.000004
11-May-10	0.000783	0.0013	0.49	0.005	0.0044	0.00007	0.00009	0.0088	0.19	0.00012	0.15	0.000009	0.10	0.015	7.83	0.00009	0.00013	0.00004	0.000009	0.00018	0.0004	0.000004
18-May-10	0.000078	0.0013	0.49	0.004	0.0044	0.00015	0.00004	0.0039	0.18	0.00011	0.14	0.000004	0.11	0.014	7.87	0.00009	0.00006	0.00009	0.000003	0.00019	0.0004	0.000004
25-May-10	0.000405	0.0014	0.43	0.005	0.0045	0.00007	0.00005	0.0041	0.15	0.00010	0.12	0.000005	0.10	0.012	7.47	0.00009	0.00008	0.00005	0.000004	0.00019	0.0009	0.000005
01-Jun-10	0.000014	0.0009	0.44	0.005	0.0182	0.00007	0.00005	0.0041	0.15	0.00010	0.14	0.000005	0.10	0.014	8.19	0.00009	0.00009	0.00005	0.000004	0.00019	0.0005	0.000005
08-Jun-10	0.000010	0.0015	0.68	0.008	0.0050	0.00010	0.00005	0.0045	0.21	0.00010	0.20	0.000005	0.12	0.020	12.90	0.00010	0.00007	0.00005	0.000003	0.00020	0.0005	0.000005
15-Jun-10	0.000022	0.0009	0.37	0.006	0.0045	0.00009	0.00009	0.0040	0.13	0.00007	0.12	0.000004	0.09	0.013	7.57	0.00009	0.00011	0.00004	0.000003	0.00016	0.0004	0.000004
22-Jun-10																						
29-Jun-10	0.000044	0.0009	0.33	0.004	0.0044	0.00008	0.00004	0.0039	0.12	0.00007	0.10	0.000004	0.08	0.009	5.74	0.00009	0.00064	0.00009	0.000002	0.00012	0.0004	0.000013
06-Jul-10																						
13-Jul-10	0.000014	0.0009	0.33	0.005	0.0045	0.00010	0.00009	0.0131	0.12	0.00005	0.11	0.000005	0.08	0.010	7.38	0.00009	0.00018	0.00005	0.000014	0.00014	0.0005	0.000005
20-Jul-10																						
27-Jul-10	0.000009	0.0009	0.34	0.004	0.0047	0.00003	0.00005	0.0056	0.12	0.00002	0.13	0.000005	0.08	0.013	8.09	0.00009	0.00006	0.00005	0.000001	0.00017	0.0005	0.000005
03-Aug-10	0.000009	0.0009	0.31	0.005	0.0047	0.00006	0.00014	0.0085	0.11	0.00002	0.12	0.000005	0.07	0.014	8.32	0.00009	0.00006	0.00005	0.000002	0.00014	0.0005	0.000005
10-Aug-10	0.000009	0.0009	0.32	0.005	0.0044	0.00006	0.00017	0.0039	0.12	0.00008	0.10	0.000004	0.07	0.013	8.31	0.00009	0.00003	0.00004	0.000001	0.00014	0.0004	0.000004
17-Aug-10	0.000009	0.0009	0.26	0.002	0.0044	0.00007	0.00009	0.0039	0.11	0.00010	0.12	0.000004	0.06	0.009	9.00	0.00009	0.00006	0.00009	0.000003	0.00015	0.0004	0.000004
24-Aug-10	0.000018	0.0009	0.23	0.005	0.0044	0.00003	0.00009	0.0040	0.09	0.00002	0.12	0.000004	0.06	0.009	6.82	0.00009	0.00006	0.00009	0.000002	0.00015	0.0004	0.000004
31-Aug-10	0.000022	0.0009	0.25	0.000	0.0044	0.00002	0.00004	0.0039	0.10	0.00004	0.11	0.000004	0.05	0.008	7.00	0.00009	0.00002	0.00004	0.000001	0.00015	0.0004	0.000004
07-Sep-10	0.000239	0.0008	0.26	0.000	0.0042	0.00004	0.00008	0.0038	0.11	0.00002	0.10	0.000004	0.05	0.006	6.59	0.00008	0.00002	0.00004	0.000001	0.00016	0.0004	0.000004
14-Sep-10	0.000008	0.0008	0.24	0.006	0.0042	0.00022	0.00008	0.0037	0.10	0.00008	0.10	0.000004	0.06	0.008	5.98	0.00008	0.00007	0.00004	0.000001	0.00010	0.0004	0.000004
21-Sep-10	0.000009	0.0009	0.24	0.004	0.0043	0.00001	0.00026	0.0038	0.11	0.00034	0.11	0.000004	0.06	0.008	6.55	0.00009	0.00008	0.00004	0.000000	0.00012	0.0004	0.000004
28-Sep-10	0.000037	0.0012	0.25	0.003	0.0082	0.00012	0.00008	0.0037	0.14	0.00002	0.17	0.000004	0.06	0.008	6.15	0.00008	0.00014	0.00004	0.000002	0.00017	0.0004	0.000004
05-Oct-10	0.000020	0.0008	0.22	0.004	0.0041	0.00021	0.00004	0.0036	0.15	0.00002	0.15	0.000004	0.06	0.008	6.97	0.00008	0.00016	0.00004	0.000001	0.00015	0.0004	0.000004
12-Oct-10	0.000084	0.0008	0.22	0.005	0.0126	0.00011	0.00038	0.0038	0.13	0.00002	0.13	0.000004	0.07	0.010	7.64	0.00008	0.00019	0.00004	0.000000	0.00015	0.0004	0.000004
19-Oct-10	0.000009	0.0009	0.20	0.004	0.0043	0.00003	0.00004	0.0038	0.13	0.00004	0.11	0.000004	0.05	0.008	6.63	0.00009	0.00003	0.00004	0.000003	0.00016	0.0009	0.000004
26-Oct-10	0.000200	0.0009	0.19	0.003	0.0043	0.00005	0.00038	0.0098	0.11	0.00103	0.09	0.000004	0.05	0.007	6.04	0.00009	0.00001	0.00004	0.000003	0.00014	0.0021	0.000004
02-Nov-10	0.000116	0.0013	0.23	0.004	0.0043	0.00004	0.00034	0.0039	0.13	0.00010	0.13	0.000004	0.07	0.008	5.98	0.00009	0.00001	0.00013	0.000003	0.00004	0.0004	0.000009
09-Nov-10	0.000129	0.0008	0.19	0.004	0.0042	0.00007	0.00012	0.0066	0.13	0.00002	0.11	0.000004	0.06	0.008	6.10	0.00008	0.00036	0.00004	0.000066	0.00012	0.0004	0.000004
16-Nov-10	0.000185	0.0008	0.18	0.004	0.0042	0.00006	0.00017	0.0038	0.11	0.00002	0.11	0.000004	0.04	0.007	5.42	0.00008	0.00012	0.00004	0.000009	0.00011	0.0004	0.000004
23-Nov-10	0.000091	0.0008	0.16	0.003	0.0042	0.00026	0.00004	0.0037	0.11	0.00005	0.12	0.000004	0.03	0.006	4.65	0.00008	0.00006	0.00004	0.000005	0.00015	0.0008	0.000004
30-Nov-10	0.000009	0.0009	0.16	0.004	0.0044	0.00014	0.00026	0.0040	0.10	0.00009	0.12	0.000004	0.05	0.006	4.84	0.00009	0.00034	0.00004	0.000021	0.00016	0.0009	0.000004
07-Dec-10	0.000714	0.0009	0.18	0.004	0.0043	0.00012	0.00026	0.0039	0.10	0.00002	0.12	0.000004	0.04	0.007	5.55	0.00009	0.00012	0.00004	0.000009	0.00015	0.0013	0.000004
14-Dec-10	0.000025	0.0008	0.17	0.003	0.0168	0.00010	0.00017	0.0038	0.11	0.00011	0.11	0.000004	0.05	0.006	4.45	0.00008	0.00011	0.00004	0.000005	0.00014	0.0004	0.000004
21-Dec-10	0.000043	0.0009	0.15	0.000	0.0043	0.00000	0.00030	0.0038	0.10	0.00002	0.11	0.000004	0.04	0.006	4.97	0.00009	0.00009	0.00004	0.000003	0.00013	0.0004	0.000004
28-Dec-10	0.000725	0.0009	0.17	0.003	0.0045	0.00006	0.00005	0.0077	0.11	0.00009	0.14	0.000005	0.05	0.007	5.99	0.00009	0.00008	0.00005	0.000012	0.00012	0.0014	0.000005
04-Jan-11	0.000221	0.0009	0.15	0.003	0.0043	0.00003	0.00013	0.0038	0.09	0.00002	0.10	0.000004	0.04	0.005	4.29	0.00009	0.00003	0.00004	0.000009	0.00012	0.0009	0.000004
11-Jan-11	0.000008	0.0008	0.14	0.004	0.0041	0.00004	0.00012	0.0036	0.08	0.00004	0.09	0.000004	0.04	0.005	4.33	0.00008	0.00018	0.00008	0.000001	0.00011	0.0004	0.000008
18-Jan-11	0.000009	0.0004	0.11	0.004	0.0044	0.00001	0.00004	0.0104	0.08	0.00002	0.12	0.000004	0.03	0.006	4.79	0.00009	0.00014	0.00004	0.000000	0.00012	0.0004	0.000004
25-Jan-11	0.000062	0.0008	0.14	0.003	0.0042	0.00004	0.00021	0.0125	0.09	0.00002	0.11	0.000004	0.04	0.006	5.35	0.00008	0.00012	0.00004	0.000015	0.00010	0.0004	0.000004
01-Feb-11	0.000013	0.0009	0.14	0.003	0.0043	0.00003	0.00021	0.0153	0.08	0.00006	0.08	0.000004	0.03	0.005	7.27	0.00009	0.00020	0.00004	0.000003	0.00010	0.0009	0.000004
08-Feb-11	0.000013	0.0009	0.16	0.004	0.0044	0.00003	0.00004	0.0039	0.09	0.00002	0.10	0.000004	0.03	0.006	5.52	0.00009	0.00027	0.00004	0.000000	0.00010	0.0009	0.000004
15-Feb-11	0.000475	0.0004	0.11	0.004	0.0042	0.00008	0.00042	0.0038	0.07	0.00007	0.11	0.000004	0.03	0.006	5.46	0.00008	0.00011	0.00013	0.000005	0.00006	0.0004	0.000013
22-Feb-11	0.000421	0.0004	0.11	0.003	0.0043	0.00004	0.00004	0.0102	0.07	0.00003	0.09	0.000004	0.03	0.005	4.68	0.00009	0.00009	0.00004	0.000003	0.00009	0.0009	0.000004
01-Mar-11	0.000681	0.0005	0.12	0.004	0.0046	0.00002	0.00023	0.0248	0.06	0.00004	0.10	0.000005	0.05	0.006	5.06	0.00009	0.00011	0.00005	0.000000	0.00011	0.0018	0.000005
08-Mar-11	0.000684	0.0004	0.12	0.004	0.0043	0.00005	0.00004	0.0123	0.06	0.00002	0.08	0.000004	0.03	0.005	4.80	0.00009	0.00009	0.00004	0.000001	0.00007	0.0009	0.000004
15-Mar-11	0.000399	0.0004	0.11	0.004	0.0042	0.00003	0.00025	0.0038	0.06	0.00002	0.09	0.000004	0.04	0.005	4.24	0.00001	0.00010	0.00004	0.000002	0.00009	0.0013	0.000004
22-Mar-11	0.000012	0.0004	0.12	0.004	0.0042	0.00002	0.00004	0.0037	0.06	0.00010	0.09	0.000004	0.02	0.005	4.94	0.00008	0.00015	0.00004	0.000000	0.00007	0.0004	0.000004
29-Mar-11	0.000010	0.0005	0.17	0.005	0.0049	0.00001	0.00024	0.0058	0.08	0.00004	0.14	0.000005	0.04	0.008	7.08	0.00010	0.00004	0.00005	0.000001	0.00009	0.0005	0.000005
05-Apr-11	0.000039	0.0004	0.12	0.004	0.0044	0.00003	0.00022	0.0052	0.07	0.00003	0.10	0.000004	0.03	0.006	5.79	0.00009	0.00003	0.00004	0.000000	0.00009	0.0004	0.000004
12-Apr-11	0.000014	0.0009	0.20	0.009	0.0046	0.00011	0.00009	0.0041	0.10	0.00006	0.14	0.000005	0.05	0.010	8.56	0.00009	0.00017	0.00005	0.000004	0.00010	0.0005	0.000005
19-Apr-11	0.000020	0.0010	0.15	0.005	0.0049	0.00020	0.00015	0.0064	0.08	0.00024	0.13	0.000005	0.04	0.007	6.13	0.00010	0.00002	0.00005	0.000005	0.00014	0.0020	0.000005
26-Apr-11	0.000009	0.0004	0.11	0.004	0.0044	0.00002	0.00048	0.0123	0.07	0.00008	0.08	0.000004	0.04	0.005	4.84	0.00009	0.00001	0.00004	0.000000	0.00009	0.0004	0.000004
03-May-11	0.000009	0.0005	0.12	0.004	0.0046	0.00004	0.00018	0.0156	0.07	0.00036	0.10	0.000005	0.03	0.006	5.38	0.00009	0.00000	0.00009	0.000000	0.00009	0.0009	0.000005
10-May-11	0.000032	0.0005	0.11	0.004	0.0045	0.00003	0.00045	0.0041	0.06	0.00002	0.08	0.000005	0.03	0.005	4.59	0.00009	0.00005	0.00023	0.000000	0.00007	0.0018	0.000005
17-May-11	0.000009	0.0005	0.11	0.004	0.0046	0.00003	0.00005	0.0143	0.06	0.00008	0.08	0.000009	0.04	0.005	5.01	0.00009	0.00001	0.00005	0.000001	0.00008	0.0005	0.000005
24-May-11	0.000010	0.0005	0.13	0.004	0.0052	0.00003	0.00005	0.0125	0.08	0.00011	0.31	0.000005	0.04	0.006	6.08	0.00010	0.00008	0.00005	0.000003	0.00011	0.0010	0.000005
31-May-11	0.000010	0.0005	0.11	0.004	0.0048	0.00004	0.00005	0.0062	0.06	0.00037	0.10	0.000005	0.03	0.006	5.13	0.00010	0.00008	0.00005	0.000000	0.00008	0.0010	0.000005
07-Jun-11	0.000023	0.0005	0.12	0.004	0.0046	0.00003	0.00027	0.0041	0.06	0.00007	0.11	0.000005	0.07	0.005	5.23	0.00001	0.00006	0.00018	0.000000	0.00008	0.0018	0.000009
14-Jun-11	0.000018	0.0005	0.10	0.005	0.0046	0.00007	0.00036	0.0041	0.06	0.00002	0.11	0.000005	0.07	0.005	5.01	0.00001	0.00014	0.00005	0.000001	0.00009	0.0018	0.000005
21-Jun-11	0.000032	0.0005	0.12	0.004	0.0046	0.00003	0.00005	0.0060	0.06	0.00009	0.10	0.000005	0.04	0.006	5.52	0.00001	0.00004	0.00005	0.000000	0.00008	0.0037	0.000005
28-Jun-11	0.000009	0.0009	0.13	0.005	0.0047	0.00018	0.00019	0.0042	0.07	0.00007	0.09	0.000005	0.03	0.006	5.49	0.00001	0.00002	0.00005	0.000003	0.00009	0.0005	0.000005

HC 6
Sample = Alt 09 01

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	0.000015	0.0010	0.18	0.006	0.0050	0.00007	0.00035	0.0059	0.08	0.00003	0.16	0.000005	0.06	0.009	8.46	0.00001	0.00006	0.00015	0.000000	0.00010	0.0010	0.000005
12-Jul-11	0.000009	0.0009	0.14	0.005	0.0046	0.00022	0.00018	0.0041	0.08	0.00002	0.12	0.000005	0.03	0.007	6.72	0.00001	0.00008	0.00005	0.000004	0.00009	0.0009	0.000005
19-Jul-11	0.000009	0.0005	0.13	0.005	0.0047	0.00005	0.00038	0.0042	0.07	0.00020	0.12	0.000005	0.05	0.006	5.78	0.00001	0.00008	0.00005	0.000000	0.00010	0.0005	0.000005
26-Jul-11	0.000014	0.0009	0.12	0.022	0.0046	0.00026	0.00046	0.0041	0.06	0.00005	0.08	0.000005	0.02	0.006	4.78	0.00001	0.00000	0.00041	0.000000	0.00007	0.0018	0.000005
02-Aug-11	0.000009	0.0009	0.13	0.004	0.0047	0.00007	0.00005	0.0042	0.07	0.00002	0.11	0.000005	0.03	0.006	6.00	0.00001	0.00002	0.00005	0.000001	0.00012	0.0009	0.000005
09-Aug-11	0.000019	0.0009	0.12	0.004	0.0047	0.00028	0.00005	0.0042	0.06	0.00002	0.10	0.000005	0.03	0.006	5.81	0.00001	0.00000	0.00005	0.000005	0.00010	0.0009	0.000005
16-Aug-11	0.000009	0.0009	0.12	0.004	0.0047	0.00007	0.00005	0.0042	0.07	0.00009	0.11	0.000005	0.03	0.006	5.97	0.00001	0.00006	0.00005	0.000001	0.00009	0.0009	0.000005
23-Aug-11	0.004645	0.0009	0.11	0.004	0.0093	0.00005	0.00005	0.0042	0.06	0.00002	0.10	0.000005	0.02	0.006	5.21	0.00001	0.00003	0.00005	0.000001	0.00010	0.0005	0.000005
30-Aug-11	0.000023	0.0009	0.12	0.005	0.0047	0.00005	0.00033	0.0084	0.07	0.00007	0.12	0.000005	0.04	0.006	7.02	0.00001	0.00004	0.00005	0.000001	0.00009	0.0023	0.000005
06-Sep-11	0.000112	0.0005	0.09	0.004	0.0047	0.00011	0.00005	0.0042	0.05	0.00007	0.07	0.000005	0.02	0.005	5.30	0.00001	0.00000	0.00005	0.000004	0.00010	0.0033	0.000028
13-Sep-11	0.000107	0.0009	0.11	0.004	0.0047	0.00009	0.00005	0.0042	0.06	0.00002	0.09	0.000005	0.03	0.006	5.91	0.00001	0.00005	0.00005	0.000000	0.00006	0.0009	0.000005
20-Sep-11	0.000024	0.0005	0.11	0.006	0.0047	0.00009	0.00005	0.0042	0.06	0.00010	0.09	0.000005	0.03	0.005	5.83	0.00001	0.00017	0.00005	0.000001	0.00008	0.0019	0.000005
27-Sep-11	0.000014	0.0005	0.10	0.005	0.0047	0.00005	0.00005	0.0042	0.06	0.00007	0.07	0.000005	0.03	0.005	5.39	0.00001	0.00005	0.00005	0.000005	0.00008	0.0019	0.000005
04-Oct-11	0.000051	0.0010	0.12	0.006	0.0051	0.00008	0.00005	0.0045	0.06	0.00004	0.12	0.000005	0.04	0.006	6.87	0.00001	0.00005	0.00005	0.000005	0.00009	0.0015	0.000005
11-Oct-11	0.000027	0.0004	0.08	0.004	0.0045	0.00006	0.00022	0.0040	0.05	0.00002	0.09	0.000004	0.02	0.005	5.16	0.00001	0.00001	0.00004	0.000000	0.00006	0.0004	0.000009
18-Oct-11	0.000018	0.0005	0.09	0.004	0.0045	0.00009	0.00014	0.0041	0.05	0.00002	0.07	0.000005	0.02	0.005	5.81	0.00001	0.00003	0.00005	0.000000	0.00007	0.0018	0.000005
25-Oct-11	0.000017	0.0004	0.08	0.004	0.0043	0.00003	0.00004	0.0039	0.05	0.00002	0.09	0.000004	0.03	0.005	4.90	0.00001	0.00003	0.00004	0.000000	0.00006	0.0013	0.000004
01-Nov-11	0.000009	0.0004	0.09	0.004	0.0044	0.00004	0.00022	0.0039	0.05	0.00015	0.08	0.000004	0.03	0.005	5.57	0.00001	0.00003	0.00004	0.000000	0.00005	0.0004	0.000004
08-Nov-11	0.000009	0.0004	0.10	0.005	0.0045	0.00002	0.00009	0.0040	0.05	0.00004	0.08	0.000004	0.03	0.006	7.08	0.00001	0.00003	0.00004	0.000000	0.00010	0.0009	0.000004
15-Nov-11	0.000009	0.0005	0.09	0.005	0.0045	0.00003	0.00072	0.0041	0.05	0.00008	0.05	0.000005	0.03	0.005	5.81	0.00001	0.00002	0.00005	0.000002	0.00012	0.0009	0.000005
22-Nov-11	0.000009	0.0004	0.10	0.005	0.0045	0.00001	0.00027	0.0040	0.03	0.00008	0.08	0.000004	0.00	0.005	5.30	0.00001	0.00000	0.00004	0.000001	0.00015	0.0004	0.000004
29-Nov-11	0.000009	0.0004	0.07	0.004	0.0044	0.00010	0.00039	0.0061	0.04	0.00002	0.10	0.000004	0.02	0.005	4.52	0.00001	0.00003	0.00009	0.000001	0.00019	0.0009	0.000004
06-Dec-11	0.000009	0.0005	0.09	0.005	0.0045	0.00003	0.00005	0.0041	0.05	0.00011	0.10	0.000009	0.00	0.005	5.58	0.00001	0.00000	0.00005	0.000001	0.00009	0.0009	0.000005
13-Dec-11	0.000062	0.0004	0.08	0.004	0.0045	0.00003	0.00027	0.0093	0.04	0.00013	0.08	0.000004	0.04	0.005	4.54	0.00001	0.00003	0.00004	0.000003	0.00006	0.0009	0.000004
20-Dec-11	0.000009	0.0005	0.08	0.004	0.0045	0.00002	0.00032	0.0041	0.04	0.00021	0.08	0.000005	0.03	0.004	4.73	0.00001	0.00001	0.00005	0.000000	0.00012	0.0018	0.000005
27-Dec-11	0.000009	0.0004	0.08	0.004	0.0045	0.00005	0.00031	0.0053	0.04	0.00009	0.07	0.000004	0.02	0.004	4.54	0.00001	0.00000	0.00013	0.000002	0.00016	0.0004	0.000004
03-Jan-12	0.000537	0.0004	0.07	0.004	0.0044	0.00003	0.00040	0.0040	0.04	0.00002	0.07	0.000004	0.02	0.004	4.49	0.00001	0.00001	0.00009	0.000001	0.00023	0.0013	0.000004
10-Jan-12	0.000009	0.0004	0.07	0.003	0.0044	0.00002	0.00013	0.0040	0.04	0.00006	0.07	0.000004	0.03	0.004	3.89	0.00001	0.00002	0.00009	0.000001	0.00025	0.0009	0.000004
17-Jan-12	0.000009	0.0005	0.08	0.005	0.0360	0.00003	0.00018	0.0041	0.04	0.00008	0.06	0.000005	0.02	0.004	4.28	0.00001	0.00001	0.00005	0.000001	0.00015	0.0014	0.000005
24-Jan-12	0.000010	0.0005	0.08	0.004	0.0048	0.00003	0.00019	0.0043	0.04	0.00011	0.07	0.000005	0.02	0.004	4.37	0.00001	0.00001	0.00005	0.000000	0.00016	0.0010	0.000005
31-Jan-12	0.000009	0.0005	0.07	0.004	0.0045	0.00005	0.00005	0.0041	0.04	0.00004	0.07	0.000005	0.05	0.005	4.77	0.00001	0.00000	0.00009	0.000032	0.00021	0.0009	0.000005
07-Feb-12	0.000010	0.0005	0.11	0.007	0.0049	0.00002	0.00049	0.0044	0.05	0.00012	0.10	0.000005	0.04	0.007	7.32	0.00001	0.00000	0.00010	0.000003	0.00017	0.0010	0.000005
14-Feb-12	0.000053	0.0004	0.06	0.003	0.0044	0.00002	0.00022	0.0040	0.03	0.00010	0.06	0.000004	0.03	0.005	4.88	0.00001	0.00000	0.00004	0.000005	0.00006	0.0004	0.000004
21-Feb-12	0.000009	0.0005	0.08	0.004	0.0046	0.00002	0.00023	0.0041	0.05	0.00002	0.07	0.000005	0.03	0.006	7.13	0.00001	0.00000	0.00005	0.000000	0.00009	0.0009	0.000005
28-Feb-12	0.000008	0.0004	0.06	0.004	0.0041	0.00001	0.00004	0.0036	0.03	0.00005	0.06	0.000004	0.03	0.006	5.31	0.00001	0.00002	0.00004	0.000000	0.00012	0.0008	0.000004
06-Mar-12	0.000009	0.0004	0.07	0.003	0.0044	0.00002	0.00018	0.0040	0.04	0.00010	0.07	0.000004	0.03	0.005	4.97	0.00001	0.00006	0.00004	0.000004	0.00013	0.0013	0.000004
13-Mar-12	0.000474	0.0004	0.07	0.003	0.0044	0.00005	0.00013	#N/A	#N/A	0.00007	0.07	0.000339	#N/A	0.004	4.27	0.00010	0.00002	0.00004	0.000006	0.00004	0.0017	0.000004
20-Mar-12	0.000047	0.0005	0.08	0.004	0.0047	0.00003	0.00005	0.0146	0.13	0.00008	0.07	0.000254	0.03	0.005	4.63	0.00001	0.00000	0.00005	0.000001	0.00008	0.0014	0.000005
27-Mar-12	0.000014	0.0005	0.08	0.004	0.0046	0.00002	0.00018	0.0041	0.03	0.00002	0.07	0.000005	0.03	0.005	5.41	0.00001	0.00001	0.00032	0.000002	0.00024	0.0009	0.000005
03-Apr-12	0.000009	0.0005	0.08	0.004	0.0046	0.00001	0.00018	0.0041	0.04	0.00008	0.06	0.000005	0.04	0.005	4.96	0.00001	0.00000	0.00036	0.000000	0.00017	0.0009	0.000005
10-Apr-12	0.000059	0.0005	0.08	0.004	0.0182	0.00003	0.00009	0.0041	0.04	0.00004	0.06	0.000005	0.03	0.005	4.78	0.00001	0.00002	0.00005	0.000001	0.00013	0.0009	0.000005
17-Apr-12	0.000009	0.0005	0.07	0.003	0.0135	0.00003	0.00014	0.0041	0.03	0.00006	0.07	0.000005	0.01	0.004	4.82	0.00001	0.00001	0.00005	0.000000	0.00015	0.0005	0.000005
24-Apr-12	0.000009	0.0004	0.06	0.003	0.0131	0.00018	0.00017	0.0039	0.04	0.00008	0.06	0.000004	0.03	0.004	4.83	0.00001	0.00000	0.00004	0.000001	0.00011	0.0009	0.000004
01-May-12	0.000017	0.0004	0.07	0.004	0.0087	0.00002	0.00017	0.0039	0.03	0.00006	0.06	0.000004	0.02	0.004	4.87	0.00001	0.00000	0.00009	0.000003	0.00016	0.0004	0.000004
08-May-12	0.000035	0.0004	0.06	0.004	0.0044	0.00001	0.00009	0.0039	0.04	0.00007	0.06	0.000004	0.02	0.004	4.79	0.00001	0.00014	0.00004	0.000008	0.00010	0.0009	0.000004
15-May-12	0.000017	0.0004	0.07	0.003	0.0043	0.00002	0.00009	0.0038	0.03	0.00003	0.06	0.000004	0.03	0.005	5.36	0.00001	0.00000	0.00009	0.000001	0.00023	0.0017	0.000004
22-May-12	0.000009	0.0004	0.07	0.003	0.0088	0.00002	0.00013	0.0040	0.04	0.00004	0.06	0.000004	0.03	0.005	6.20	0.00001	0.00000	0.00004	0.000001	0.00015	0.0009	0.000004
29-May-12	0.000009	0.0004	0.08	0.004	0.0044	0.00001	0.00004	0.0039	0.03	0.00005	0.08	0.000004	0.01	0.005	6.13	0.00001	0.00008	0.00004	0.000001	0.00011	0.0009	0.000004
05-Jun-12	0.000009	0.0004	0.07	0.003	0.0044	0.00005	0.00004	0.0040	0.03	0.00004	0.07	0.000004	0.03	0.005	5.85	0.00001	0.00000	0.00004	0.000000	0.00014	0.0009	0.000004
12-Jun-12	0.000009	0.0004	0.07	0.004	0.0044	0.00002	0.00009	0.0040	0.04	0.00006	0.07	0.000004	0.02	0.005	5.24	0.00001	0.00004	0.00004	0.000000	0.00013	0.0009	0.000004
19-Jun-12	0.000009	0.0005	0.07	0.003	0.0045	0.00002	0.00005	0.0041	0.04	0.00010	0.07	0.000005	0.02	0.006	6.44	0.00001	0.00006	0.00005	0.000001	0.00015	0.0009	0.000005
26-Jun-12	0.000036	0.0004	0.09	0.003	0.0045	0.00003	0.00022	0.0040	0.04	0.00007	0.13	0.000004	0.08	0.006	5.96	0.00001	0.00020	0.00004	0.000001	0.00018	0.0022	0.000004
03-Jul-12	0.000009	0.0005	0.08	0.004	0.0045	0.00021	0.00005	0.0041	0.04	0.00004	0.07	0.000005	0.02	0.005	6.21	0.00001	0.00008	0.00009	0.000001	0.00014	0.0014	0.000005
10-Jul-12	0.000009	0.0004	0.09	0.004	0.0043	0.00003	0.00013	0.0039	0.04	0.00008	0.08	0.000004	0.03	0.005	5.68	0.00001	0.00006	0.00004	0.000000	0.00014	0.0009	0.000004
17-Jul-12	0.000009	0.0004	0.08	0.003	0.0045	0.00000	0.00009	0.0040	0.04	0.00010	0.07	0.000013	0.02	0.005	5.34	0.00001	0.00000	0.00009	0.000000	0.00014	0.0004	0.000004
24-Jul-12	0.000009	0.0004	0.08	0.003	0.0088	0.00003	0.00004	0.0040	0.04	0.00016	0.08	0.000004	0.04	0.005	5.72	0.00001	0.00001	0.00004	0.000000	0.00013	0.0026	0.000004
31-Jul-12	0.000009	0.0004	0.07	0.003	0.0044	0.00002	0.00004	0.0040	0.03	0.00006	0.07	0.000004	0.02	0.004	4.88	0.00001	0.00002	0.00004	0.000003	0.00017	0.0009	0.000004
07-Aug-12	0.000009	0.0004	0.07	0.003	0.0044	0.00003	0.00004	0.0039	0.03	0.00003	0.07	0.000004	0.03	0.005	5.44	0.00001	0.00009	0.00004	0.000001	0.00018	0.0009	0.000004
14-Aug-12	0.000009	0.0004	0.08	0.003	0.0043	0.00001	0.00009	0.0039	0.03	0.00012	0.05	0.000004	0.03	0.004	5.07	0.00001	0.00002	0.00004	0.000001	0.00015	0.0013	0.000004
21-Aug-12	0.000009	0.0005	0.08	0.004	0.0045	0.00004	0.00014	0.0041	0.03	0.00006	0.10	0.000005	0.02	0.004	5.22	0.00001	0.00010	0.00005	0.000001	0.00014	0.0018	0.000005
28-Aug-12	0.000009	0.0005	0.06	0.003	0.0045	0.00005	0.00014	0.0041	0.03	0.00006	0.05	0.000005	0.02	0.004	4.55	0.00001	0.00017	0.00009	0.000001	0.00018	0.0009	0.000005
04-Sep-12	0.000013	0.0004	0.08	0.003	0.0045	0.00002	0.00009	0.0040	0.03	0.00008	0.06	0.000004	0.02	0.005	5.21	0.00001	0.00004	0.00004	0.000009	0.00016	0.0009	0.000009
11-Sep-12	0.000009	0.0005	0.07	0.003	0.0046	0.00002	0.00005	0.0041	0.03	0.00004	0.06	0.000005	0.03	0.004	4.69	0.00001	0.00006	0.00005	0.000000	0.00010	0.0009	0.000009
18-Sep-12	0.000009	0.0004	0.06	0.003	0.0131	0.00001	0.00004	0.0039	0.03	0.00006	0.07	0.000004	0.02	0.004	4.87	0.00001	0.00007	0.00004	0.000001	0.00013	0.0009	0.000004
25-Sep-12	0.000009	0.0005	0.06	0.003	0.0045	0.00003	0.00014	0.0041	0.03	0.00007	0.05	0.000014	0.02	0.004	4.55	0.00001	0.00009	0.00005	0.000002	0.00009	0.0009	0.000005
02-Oct-12	0.000009	0.0005	0.06	0.003	0.0045	0.00003	0.00005	0.0041	0.03	0.00003	0.08	0.000005	0.02	0.005	5.45	0.00001	0.00005	0.00005	0.000000	0.00008	0.0005	0.000005
09-Oct-12	0.000009	0.0005	0.07	0.003	0.0046	0.00002	0.00023	0.0046	0.03	0.00007	0.06	0.000005	0.02	0.004	4.88	0.00001	0.00005	0.00005	0.000001	0.00010	0.0009	0.000005
16-Oct-12	0.000009	0.0004	0.07	0.003	0.0043	0.00002	0.00013	0.0039	0.03	0.00004	0.06	0.000004	0.02	0.004	5.46	0.00001	0.00004	0.00004	0.000000	0.00008	0.0013	0.000004
23-Oct-12	0.000009	0.0005	0.06	0.003	0.0045	0.00007	0.00041	0.0041	0.03	0.00004	0.06	0.000005	0.02	0.004	4.95	0.00001	0.00009	0.00009	0.000008	0.00014	0.0009	0.000005
30-Oct-12	0.000009	0.0004	0.07	0.003	0.0044	0.00003	0.00013	0.0040	0.03	0.00004	0.07	0.000004	0.02	0.005	5.68	0.00001	0.00004	0.00004	0.000005	0.00012	0.0013	0.000004
06-Nov-12	0.000009	0.0004	0.07	0.003	0.0045	0.00002	0.00009	0.0040	0.03	0.00004	0.06	0.000004	0.02	0.005	5.52	0.00001	0.00004	0.00004	0.000001	0.00007	0.0004	0.000004
13-Nov-12	0.000009	0.0004	0.07	0.004	0.0044	0.00002	0.00004	0.0040	0.03	0.00004	0.07	0.000004	0.02	0.005	6.34	0.00001	0.00001	0.00004	0.000001	0.00009	0.0009	0.000004
20-Nov-12	0.000024	0.0005	0.08	0.003	0.0048	0.00002	0.00024	0.0043	0.03	0.00007	0.09	0.000005	0.02	0.006	5.47	0.00001	0.00003	0.00005	0.000000	0.00008	0.0014	0.000005
27-Nov-12	0.000010	0.0005	0.10	0.004	0.0050	0.00002	0.00010	0.0045	0.03	0.00009	0.12	0.000005	0.03	0.007	7.45	0.00001	0.00004	0.00005	0.000001	0.00002	0.0010	0.000005
04-Dec-12	0.000010	0.0005	0.08	0.004	0.0048	0.00002	0.00005	0.0043	0.03	0.00002	0.07	0.000005	0.01	0.005	5.99	0.00001	0.00013	0.00005	0.000001	0.00009	0.0010	0.000005
11-Dec-12	0.000010	0.0005	0.08	0.004	0.0050	0.00004	0.00005	0.0045	0.04	0.00007	0.08	0.000005	0.02	0.006	6.53	0.00001	0.00006	0.00005	0.000002	0.00011	0.0010	0.000005
18-Dec-12	0.000010	0.0005	0.09	0.004	0.0050	0.00003	0.00005	0.0045	0.04	0.00002	0.07	0.000005	0.02	0.006	6.68	0.00001	0.00004	0.00005	0.000003	0.00010	0.0005	0.000005
25-Dec-12	0.000009	0.0004	0.04	0.002	0.0044	0.00004	0.00004	0.0039	0.02	0.00006	0.04	0.000004	0.01	0.004	4.16	0.00001	0.00008	0.00004	0.000000	0.00005	0.0004	0.000004
01-Jan-13	0.000010	0.0005	0.06	0.003	0.0190	0.00007	0.00010	0.0052	0.03	0.00010	0.06	0.000005	0.03	0.004	4.56	0.00001	0.00005	0.00005	0.000000	0.00010	0.0005	0.000005
08-Jan-13	0.000009	0.0005	0.06	0.002	0.0046	0.00007	0.00005	0.0046	0.03	0.00005	0.06	0.000005	0.02	0.004	4.14	0.00001	0.00015	0.00005	0.000002	0.00012	0.0009	0.000005
15-Jan-13																						
22-Jan-13																						
29-Jan-13																						
05-Feb-13																						
12-Feb-13																						

HC 7
Sample = Alt 09 08

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	1	500	410	7.78	0.68	12.00	20.91	0.069	0.0013	0.00135	0.0018	0.000008	0.0000041	0.0037	0.000001	5.04	0.00021	0.000023	0.00082	0.0041
09-Feb-10	2	500	450	7.69	0.79	11.62	24.30	0.086	0.0018	0.00117	0.0019	0.000009	0.0000045	0.0063	0.000001	6.30	0.00023	0.000012	0.00023	0.0045
16-Feb-10	3	500	420	7.66	0.90	11.36	29.82	0.085	0.0017	0.00105	0.0021	0.000008	0.0000042	0.0063	0.000001	6.55	0.00021	0.000004	0.00021	0.0042
23-Feb-10	4	500	440	7.74	0.77	10.73	20.24	0.084	0.0009	0.00062	0.0012	0.000009	0.0000044	0.0044	0.000001	6.42	0.00022	0.000011	0.00022	0.0044
02-Mar-10	5	500	425	7.69	0.55	8.85	16.58	0.068	0.0006	0.00043	0.0010	0.000009	0.0000043	0.0030	0.000003	5.40	0.00021	0.000008	0.00026	0.0043
09-Mar-10	6	500	440	7.62	0.76	9.42	14.08	0.066	0.0006	0.00044	0.0011	0.000009	0.0000044	0.0026	0.000001	5.76	0.00022	0.000005	0.00026	0.0044
16-Mar-10	7	500	445	7.56	0.85	9.61	11.57	0.085	0.0005	0.00040	0.0009	0.000009	0.0000045	0.0031	0.000001	5.38	0.00022	0.000004	0.00022	0.0045
23-Mar-10	8	500	450	7.57	1.12	9.55	13.50	0.070	0.0005	0.00036	0.0008	0.000009	0.0000045	0.0023	0.000001	5.00	0.00027	0.000004	0.00023	0.0045
30-Mar-10	9	500	445	7.67	0.69	9.03	11.57	0.064	0.0005	0.00027	0.0007	0.000009	0.0000045	0.0022	0.000001	5.03	0.00022	0.000004	0.00022	0.0045
06-Apr-10	10	500	450	7.60	0.81	9.36	11.25	0.073	0.0004	0.00041	0.0008	0.000009	0.0000045	0.0009	0.000002	5.18	0.00023	0.000011	0.00099	0.0045
13-Apr-10	11	500	445	7.46	1.17	9.25	10.24	0.073	0.0004	0.00027	0.0007	0.000009	0.0000045	0.0018	0.000001	4.63	0.00027	0.000003	0.00022	0.0045
20-Apr-10	12	500	455	7.62	1.12	9.41	12.74	0.068	0.0004	0.00036	0.0008	0.000009	0.0000046	0.0018	0.000001	4.82	0.00032	0.000003	0.00023	0.0046
27-Apr-10	13	500	445	7.63	1.22	7.91	8.90	0.056	0.0003	0.00027	0.0006	0.000009	0.0000045	0.0013	0.000001	3.97	0.00036	0.000010	0.00040	0.0045
04-May-10	14	500	450	7.53	0.91	8.17	9.90	0.061	0.0003	0.00027	0.0007	0.000009	0.0000045	0.0014	0.000001	4.39	0.00023	0.000002	0.00023	0.0045
11-May-10	15	500	455	7.42	0.91	7.54	6.83	0.060	0.0003	0.00055	0.0007	0.000009	0.0000046	0.0014	0.000003	4.30	0.00023	0.000007	0.00023	0.0046
18-May-10	16	500	435	7.47	1.02	7.68	8.27	0.061	0.0003	0.00057	0.0007	0.000009	0.0000044	0.0014	0.000001	4.52	0.00022	0.000025	0.00035	0.0009
25-May-10	17	500	405	7.42	1.36	8.28	6.48	0.068	0.0002	0.00024	0.0008	0.000008	0.0000041	0.0012	0.000001	3.92	0.00020	0.000007	0.00041	0.0008
01-Jun-10	18	500	430	7.51	0.87	7.18	6.88	0.071	0.0002	0.00026	0.0006	0.000009	0.0000043	0.0012	0.000001	4.06	0.00026	0.000006	0.00043	0.0009
08-Jun-10	19	500	480	7.45	1.25	9.79	6.72	0.050	0.0003	0.00024	0.0007	0.000010	0.0000048	0.0021	0.000001	5.57	0.00024	0.000001	0.00024	0.0010
15-Jun-10	20	500	440	7.54	0.92	7.37	5.72	0.062	0.0003	0.00022	0.0007	0.000009	0.0000044	0.0014	0.000001	4.58	0.00022	0.000006	0.00022	0.0009
22-Jun-10	21	500	430	7.69	0.79	7.39														
29-Jun-10	22	500	440	7.43	0.82	6.79	4.40	0.056	0.0001	0.00031	0.0006	0.000009	0.0000044	0.0013	0.000001	3.72	0.00048	0.000003	0.00022	0.0018
06-Jul-10	23	500	460	7.46	0.90	8.28														
13-Jul-10	24	500	450	7.31	1.22	6.36	3.15	0.046	0.0002	0.00023	0.0006	0.000009	0.0000045	0.0015	0.000001	3.28	0.00032	0.000009	0.00041	0.0027
20-Jul-10	25	500	450	7.48	1.56	7.83														
27-Jul-10	26	500	445	7.29	1.34	7.11	6.23	0.041	0.0001	0.00018	0.0006	0.000009	0.0000045	0.0012	0.000001	4.07	0.00022	0.000003	0.00031	0.0013
03-Aug-10	27	500	445	7.51	1.23	6.68	5.79	0.047	0.0001	0.00013	0.0005	0.000009	0.0000045	0.0012	0.000001	3.51	0.00022	0.000006	0.00031	0.0013
10-Aug-10	28	500	445	7.67	1.56	6.94	5.34	0.044	0.0001	0.00018	0.0006	0.000009	0.0000045	0.0022	0.000001	3.82	0.00036	0.000003	0.00022	0.0009
17-Aug-10	29	500	440	7.64	1.14	7.11	3.96	0.055	0.0002	0.00018	0.0005	0.000009	0.0000044	0.0015	0.000001	3.74	0.00022	0.000001	0.00022	0.0009
24-Aug-10	30	500	425	7.45	1.21	6.86	5.10	0.042	0.0002	0.00026	0.0005	0.000009	0.0000043	0.0013	0.000001	3.71	0.00021	0.000003	0.00034	0.0009
31-Aug-10	31	500	415	7.85	1.66	7.42	6.64	0.047	0.0002	0.00066	0.0006	0.000008	0.0000042	0.0010	0.000001	3.20	0.00025	0.000025	0.00021	0.0046
07-Sep-10	32	500	435	7.20	1.36	6.52	6.09	0.042	0.0001	0.00017	0.0005	0.000009	0.0000044	0.0020	0.000001	3.22	0.00035	0.000004	0.00035	0.0026
14-Sep-10	33	500	435	7.19	1.14	6.30	5.66	0.037	0.0003	0.00013	0.0004	0.000009	0.0000044	0.0011	0.000001	3.23	0.00022	0.000004	0.00048	0.0017
21-Sep-10	34	500	435	7.37	1.00	6.90	5.66	0.047	0.0001	0.00030	0.0005	0.000009	0.0000174	0.0013	0.000001	3.43	0.00022	0.000001	0.00022	0.0009
28-Sep-10	35	500	415	7.39	0.85	6.91	8.72	0.051	0.0002	0.00021	0.0005	0.000008	0.0000042	0.0012	0.000001	3.23	0.00021	0.000007	0.00033	0.0008
05-Oct-10	36	500	420	7.38	1.00	6.83	5.88	0.047	0.0002	0.00025	0.0006	0.000008	0.0000042	0.0013	0.000001	3.33	0.00021	0.000018	0.00038	0.0008
12-Oct-10	37	500	430	7.30	1.09	6.39	6.02	0.043	0.0005	0.00022	0.0005	0.000009	0.0000043	0.0012	0.000001	3.55	0.00022	0.000012	0.00077	0.0009
19-Oct-10	38	500	425	7.29	1.04	6.53	6.80	0.038	0.0001	0.00009	0.0005	0.000009	0.0000043	0.0011	0.000001	3.38	0.00021	0.000004	0.00021	0.0009
26-Oct-10	39	500	440	7.26	1.08	6.17	5.72	0.037	0.0007	0.00013	0.0004	0.000009	0.0000044	0.0012	0.000001	3.14	0.00031	0.000004	0.00044	0.0009
02-Nov-10	40	500	435	7.44	0.82	6.53	5.66	0.043	0.0001	0.00013	0.0005	0.000009	0.0000044	0.0019	0.000001	3.51	0.00022	0.000009	0.00030	0.0013
09-Nov-10	41	500	430	7.51	1.05	6.73	6.88	0.040	0.0003	0.00026	0.0005	0.000009	0.0000043	0.0008	0.000001	3.73	0.00022	0.000010	0.00022	0.0009
16-Nov-10	42	500	420	7.67	1.14	6.57	5.04	0.037	0.0001	0.00008	0.0005	0.000008	0.0000042	0.0020	0.000001	3.20	0.00025	0.000006	0.00021	0.0008
23-Nov-10	43	500	500	7.24	1.23	10.30	6.00	0.041	0.0002	0.00025	0.0007	0.000010	0.0000050	0.0025	0.000002	4.63	0.00025	0.000019	0.00030	0.0010
30-Nov-10	44	500	455	7.32	1.31	7.69	4.10	0.043	0.0001	0.00009	0.0008	0.000009	0.0000046	0.0013	0.000001	3.99	0.00023	0.000008	0.00023	0.0009
07-Dec-10	45	500	420	7.36	1.16	9.08	3.78	0.060	0.0001	0.00013	0.0006	0.000008	0.0000042	0.0013	0.000001	5.12	0.00029	0.000007	0.00042	0.0017
14-Dec-10	46	500	435	7.39	1.45	7.16	4.79	0.053	0.0001	0.00013	0.0005	0.000009	0.0000044	0.0016	0.000001	3.27	0.00022	0.000006	0.00035	0.0009
21-Dec-10	47	500	435	7.45	1.99	7.54	4.35	0.048	0.0001	0.00017	0.0005	0.000009	0.0000044	0.0010	0.000001	3.48	0.00022	0.000008	0.00035	0.0009
28-Dec-10	48	500	440	7.56	2.24	7.39	5.28	0.044	0.0002	0.00013	0.0005	0.000009	0.0000044	0.0019	0.000001	3.27	0.00026	0.000003	0.00026	0.0013
04-Jan-11	49	500	430	7.42	1.85	7.19	4.30	0.040	0.0001	0.00013	0.0004	0.000009	0.0000043	0.0007	0.000003	2.92	0.00026	0.000003	0.00034	0.0009
11-Jan-11	50	500	430	7.28	1.21	6.02	4.73	0.034	0.0001	0.00009	0.0004	0.000009	0.0000043	0.0017	0.000001	3.00	0.00022	0.000004	0.00022	0.0013
18-Jan-11	51	500	430	7.24	1.16	6.24	4.73	0.037	0.0001	0.00009	0.0005	0.000009	0.0000043	0.0009	0.000001	3.21	0.00022	0.000021	0.00022	0.0022
25-Jan-11	52	500	435	7.31	1.34	6.20	5.22	0.037	0.0001	0.00013	0.0005	0.000009	0.0000044	0.0010	0.000001	2.80	0.00022	0.000006	0.00022	0.0009
01-Feb-11	53	500	440	7.25	1.17	6.37	3.52	0.031	0.0001	0.00013	0.0006	0.000009	0.0000044	0.0009	0.000014	2.89	0.00022	0.000007	0.00022	0.0009
08-Feb-11	54	500	425	7.35	0.99	5.90	4.68	0.038	0.0002	0.00013	0.0006	0.000009	0.0000043	0.0009	0.000009	3.20	0.00021	0.000010	0.00021	0.0009
15-Feb-11	55	500	445	7.33	1.15	6.00	2.23	0.037	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0016	0.000001	2.95	0.00027	0.000009	0.00022	0.0009
22-Feb-11	56	500	440	7.35	1.24	6.38	6.16	0.033	0.0001	0.00013	0.0004	0.000009	0.0000044	0.0013	0.000003	3.04	0.00022	0.000006	0.00022	0.0009
01-Mar-11	57	500	430	7.24	1.15	6.23	6.02	0.034	0.0001	0.00013	0.0004	0.000009	0.0000043	0.0008	0.000001	2.98	0.00022	0.000005	0.00039	0.0009
08-Mar-11	58	500	435	7.25	1.24	6.32	5.22	0.033	0.0001	0.00013	0.0004	0.000009	0.0000044	0.0010	0.000006	3.06	0.00022	0.000013	0.00030	0.0009
15-Mar-11	59	500	455	7.30	1.29	6.74	5.01	0.032	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0010	0.000001	3.25	0.00023	0.000016	0.00041	0.0009
22-Mar-11	60	500	415	7.39	1.21	6.31	4.57	0.031	0.0001	0.00008	0.0004	0.000008	0.0000042	0.0007	0.000001	2.86	0.00025	0.000007	0.00033	0.0017
29-Mar-11	61	500	505	7.77	1.56	11.08	5.56	0.028	0.0001	0.00010	0.0006	0.000010	0.0000051	0.0016	0.000002	4.91	0.00025	0.000009	0.00025	0.0010
05-Apr-11	62	500	435	7.41	1.44	6.98	5.22	0.030	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0009	0.000001	3.38	0.00022	0.000008	0.00022	0.0017
12-Apr-11	63	500	450	7.44	1.07	7.45	4.50	0.034	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0009	0.000001	3.36	0.00023	0.000005	0.00023	0.0032
19-Apr-11	64	500	440	7.81	2.06	11.66	5.72	0.068	0.0001	0.00009	0.0005	0.000009	0.0000044	0.0008	0.000001	4.16	0.00022	0.000016	0.00022	0.0009
26-Apr-11	65	500	430	7.58	0.97	9.37	4.30	0.052	0.0001	0.00009	0.0004	0.000009	0.0000043	0.0006	0.000001	3.49	0.00022	0.000003	0.00022	0.0009
03-May-11	66	500	425	7.60	1.29	7.51	4.25	0.048	0.0001	0.00009	0.0004	0.000009	0.0000043	0.0012	0.000001	3.29	0.00021	0.000007	0.00021	0.0013
10-May-11	67	500	430	7.57	1.14	7.06	4.30	0.043	0.0001	0.00009	0.0004	0.000009	0.0000043	0.0014	0.000002	3.09	0.00022	0.000013	0.00026	0.0009
17-May-11	68	500	440	#N/A	#N/A	#N/A	4.40	0.048	0.0001	0.00013	0.0004	0.000009	0.0000044	0.0007	0.000001	3.01	0.00022	0.000008	0.00022	0.0009
24-May-11	69	500	500	7.62	1.55	7.44	4.50	0.045	0.0001	0.00010	0.0004	0.000010	0.0000050	0.0025	0.000002	3.60	0.00025	0.000011	0.00025	0.0010
31-May-11	70	500	465	7.60	1.71	7.37	4.19	0.028	0.0001	0.00009	0.0004	0.000009	0.0000047	0.0013	0.000001	3.32	0.00023	0.000019	0.00023	0.0009
07-Jun-11	71	500	445	7.76	1.36	7.04	4.01	0.041	0.0001	0.00013	0.0005	0.000009	0.0000045	0.0010	0.000001	3.45	0.00022	0.000010	0.00022	0.0009
14-Jun-11	72	500	455	7.70	1.03	7.17	3.19	0.037	0.0001	0.00014	0.0005	0.000009	0.0000046	0.0015	0.000001	3.24	0.00023	0.000007	0.00023	0.0014
21-Jun-11	73	500	435	7.57	0.92	6.38	6.53	0.032	0.0001	0.00009	0.0005	0.000009	0.0000044	0.0005	0.000001	3.43	0.00022	0.000010	0.00022	0.0009
28-Jun-11	74	500	445	7.61	1.09	7.04	4.90	0.038	0.0001	0.00009	0.0005	0.000009	0.0000045	0.0011	0.000001	3.39	0.00022	0.000008	0.00022	0.0009

HC 7
Sample = Alt 09 08

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	75	500	505	7.49	1.77	10.83	7.58	0.042	0.0001	0.00020	0.0007	0.000010	0.0000051	0.0026	0.000024	5.20	0.00025	0.000022	0.00025	0.0010
12-Jul-11	76	500	460	7.32	1.62	7.06	4.14	0.039	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0011	0.000001	4.31	0.00023	0.000007	0.00023	0.0009
19-Jul-11	77	500	455	7.52	1.78	6.74	5.46	0.034	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0015	0.000001	3.92	0.00023	0.000009	0.00023	0.0014
26-Jul-11	78	500	445	7.75	1.89	7.51	4.90	0.036	0.0001	0.00027	0.0004	0.000009	0.0000045	0.0010	0.000001	3.20	0.00022	0.000013	0.00022	0.0160
02-Aug-11	79	500	465	7.72	1.97	7.04	5.58	0.028	0.0001	0.00014	0.0005	0.000009	0.0000047	0.0012	0.000001	4.09	0.00028	0.000006	0.00023	0.0019
09-Aug-11	80	500	455	7.57	1.42	6.87	4.55	0.032	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0008	0.000001	3.28	0.00036	0.000011	0.00023	0.0018
16-Aug-11	81	500	450	7.68	2.16	7.45	5.85	0.034	0.0001	0.00009	0.0005	0.000009	0.0000045	0.0009	0.000001	3.24	0.00027	0.000007	0.00023	0.0009
23-Aug-11	82	500	450	7.54	1.92	6.68	4.95	0.037	0.0001	0.00014	0.0005	0.000009	0.0000045	0.0010	0.000001	3.67	0.00032	0.000006	0.00023	0.0023
30-Aug-11	83	500	440	7.67	1.66	6.71	6.16	0.035	0.0001	0.00013	0.0004	0.000009	0.0000044	0.0010	0.000003	3.58	0.00026	0.000007	0.00022	0.0040
06-Sep-11	84	500	450	7.72	1.75	6.51	4.95	0.029	0.0001	0.00009	0.0005	0.000009	0.0000045	0.0011	0.000020	3.40	0.00023	0.000008	0.00023	0.0009
13-Sep-11	85	500	460	7.66	1.55	6.24	6.90	0.031	0.0001	0.00009	0.0006	0.000009	0.0000046	0.0014	0.000002	3.72	0.00046	0.000009	0.00023	0.0009
20-Sep-11	86	500	475	7.48	1.85	6.66	6.18	0.030	0.0001	0.00019	0.0006	0.000010	0.0000048	0.0012	0.000001	3.93	0.00062	0.000009	0.00071	0.0038
27-Sep-11	87	500	470	7.52	2.41	7.15	5.64	0.033	0.0001	0.00009	0.0005	0.000009	0.0000047	0.0001	0.000006	3.46	0.00033	0.000006	0.00024	0.0038
04-Oct-11	88	500	510	7.49	2.16	7.39	9.69	0.024	0.0009	0.00051	0.0007	0.000010	0.0000051	0.0018	0.000002	4.74	0.00026	0.000010	0.00026	0.0010
11-Oct-11	89	500	485	7.66	2.67	7.71	8.73	0.029	0.0005	0.00015	0.0007	0.000010	0.0000049	0.0016	0.000001	4.53	0.00034	0.000007	0.00024	0.0010
18-Oct-11	90	500	465	7.53	1.63	7.28	5.58	0.033	0.0002	0.00009	0.0005	0.000009	0.0000047	0.0012	0.000001	3.75	0.00028	0.000005	0.00023	0.0009
25-Oct-11	91	500	460	7.36	1.47	6.01	5.52	0.027	0.0001	0.00014	0.0005	0.000009	0.0000046	0.0011	0.000002	3.73	0.00028	0.000011	0.00023	0.0014
01-Nov-11	92	500	475	7.45	1.91	7.14	9.03	0.029	0.0001	0.00019	0.0006	0.000010	0.0000048	0.0009	0.000001	5.08	0.00024	0.000008	0.00024	0.0014
08-Nov-11	93	500	485	7.51	2.09	7.50	6.79	0.033	0.0001	0.00019	0.0009	0.000010	0.0000049	0.0008	0.000005	4.79	0.00024	0.000010	0.00024	0.0015
15-Nov-11	94	500	465	7.4	1.99	6.61	7.44	0.031	0.0001	0.00009	0.0005	0.000009	0.0000047	0.0009	0.000001	4.00	0.00023	0.000010	0.00023	0.0014
22-Nov-11	95	500	470	7.54	2.12	7.84	4.70	0.038	0.0001	0.00024	0.0005	0.000009	0.0000047	0.0008	0.000001	3.97	0.00024	0.000006	0.00028	0.0014
29-Nov-11	96	500	470	7.61	2.36	7.96	7.05	0.037	0.0001	0.00024	0.0006	0.000009	0.0000047	0.0011	0.000001	4.46	0.00024	0.000010	0.00024	0.0014
06-Dec-11	97	500	465	7.46	2.27	7.09	6.05	0.026	0.0001	0.00009	0.0007	0.000009	0.0000047	0.0007	0.000003	4.70	0.00023	0.000007	0.00023	0.0014
13-Dec-11	98	500	490	7.34	2.02	7.73	7.84	0.022	0.0001	0.00010	0.0008	0.000010	0.0000049	0.0008	0.000001	5.59	0.00039	0.000010	0.00025	0.0015
20-Dec-11	99	500	475	7.60	2.11	7.82	6.65	0.032	0.0001	0.00014	0.0006	0.000010	0.0000048	0.0008	0.000015	4.58	0.00024	0.000010	0.00024	0.0014
27-Dec-11	100	500	480	7.75	2.25	8.66	6.72	0.040	0.0001	0.00019	0.0006	0.000010	0.0000048	0.0009	0.000001	4.45	0.00024	0.000007	0.00024	0.0014
03-Jan-12	101	500	490	7.45	2.07	8.34	7.84	0.044	0.0001	0.00010	0.0006	0.000010	0.0000049	0.0010	0.000001	4.43	0.00025	0.000011	0.00034	0.0015
10-Jan-12	102	500	470	7.51	1.66	8.14	5.17	0.041	0.0001	0.00009	0.0006	0.000009	0.0000047	0.0008	0.000002	4.03	0.00024	0.000006	0.00024	0.0014
17-Jan-12	103	500	480	7.21	2.00	8.22	7.20	0.029	0.0001	0.00029	0.0009	0.000010	0.0000048	0.0013	0.000001	4.80	0.00024	0.000009	0.00024	0.0014
24-Jan-12	104	500	510	7.52	2.48	10.57	9.18	0.033	0.0001	0.00010	0.0006	0.000010	0.0000051	0.0008	0.000002	4.77	0.00026	0.000009	0.00031	0.0015
31-Jan-12	105	500	460	7.26	1.62	7.50	6.44	0.031	0.0001	0.00014	0.0006	0.000009	0.0000046	0.0010	0.000026	4.07	0.00023	0.000009	0.00028	0.0014
07-Feb-12	106	500	505	7.49	2.00	8.83	10.10	0.025	0.0001	0.00010	0.0008	0.000010	0.0000051	0.0008	0.000002	5.10	0.00025	0.000011	0.00045	0.0015
14-Feb-12	107	500	470	7.53	2.15	7.31	7.52	0.024	0.0001	0.00009	0.0005	0.000009	0.0000047	0.0006	0.000013	3.95	0.00024	0.000006	0.00024	0.0014
21-Feb-12	108	500	480	7.32	1.24	6.44	5.76	0.024	0.0001	0.00010	0.0006	0.000010	0.0000048	0.0021	0.000010	3.99	0.00024	0.000004	0.00034	0.0014
28-Feb-12	109	500	470	7.38	2.33	6.90	6.11	0.028	0.0001	0.00009	0.0006	0.000009	0.0000047	0.0007	0.000001	4.10	0.00024	0.000004	0.00024	0.0014
06-Mar-12	110	500	465	7.21	1.57	6.65	7.44	0.036	0.0001	0.00009	0.0005	0.000009	0.0000047	0.0008	0.000011	3.86	0.00023	0.000006	0.00037	0.0014
13-Mar-12	111	500	465	7.28	2.07	6.35	6.51	0.024	0.0001	0.00037	0.0006	0.000009	0.0000047	0.0008	0.000011	4.09	0.00023	0.000003	0.00065	0.0037
20-Mar-12	112	500	490	7.31	2.33	6.85	8.33	0.017	0.0001	0.00010	0.0007	0.000010	0.0000049	0.0009	0.000002	4.51	0.00025	0.000005	0.00025	0.0015
27-Mar-12	113	500	475	7.2	1.91	6.39	7.13	0.034	0.0001	0.00043	0.0006	0.000010	0.0000048	0.0007	0.000003	4.35	0.00057	0.000002	0.00024	0.0124
03-Apr-12	114	500	455	7.09	1.88	5.38	6.83	0.034	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0006	0.000001	3.49	0.00023	0.000001	0.00023	0.0014
10-Apr-12	115	500	485	7.23	1.46	5.81	7.28	0.032	0.0001	0.00010	0.0006	0.000010	0.0000049	0.0008	0.000001	3.87	0.00024	0.000007	0.00024	0.0015
17-Apr-12	116	500	465	7.25	1.74	5.71	7.44	0.029	0.0001	0.00009	0.0005	0.000009	0.0000047	0.0008	0.000001	3.83	0.00023	0.000003	0.00023	0.0014
24-Apr-12	117	500	460	7.31	1.44	5.90	6.90	0.039	0.0001	0.00078	0.0008	0.000009	0.0000046	0.0008	0.000001	3.68	0.00023	0.000006	0.00060	0.0014
01-May-12	118	500	470	7.48	2.32	6.27	7.99	0.033	0.0001	0.00009	0.0005	0.000009	0.0000047	0.0015	0.000001	4.12	0.00024	0.000005	0.00024	0.0014
08-May-12	119	500	455	7.29	1.53	6.15	4.55	0.026	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0012	0.000001	3.68	0.00023	0.000004	0.00032	0.0014
15-May-12	120	500	440	7.4	1.28	5.73	4.40	0.031	0.0001	0.00009	0.0005	0.000009	0.0000044	0.0008	0.000001	3.41	0.00022	0.000004	0.00022	0.0013
22-May-12	121	500	465	7.26	1.56	5.77	5.12	0.040	0.0001	0.00009	0.0005	0.000009	0.0000047	0.0007	0.000001	3.64	0.00023	0.000003	0.00042	0.0014
29-May-12	122	500	455	7.22	1.50	5.35	4.55	0.032	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0010	0.000001	3.49	0.00023	0.000005	0.00023	0.0014
05-Jun-12	123	500	455	7.19	1.82	5.71	3.64	0.033	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0012	0.000001	3.48	0.00023	0.000009	0.00064	0.0032
12-Jun-12	124	500	450	7.35	1.49	5.56	4.95	0.038	0.0001	0.00009	0.0005	0.000009	0.0000045	0.0013	0.000001	3.58	0.00023	0.000001	0.00023	0.0014
19-Jun-12	125	500	460	7.27	1.21	5.54	4.14	0.035	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0010	0.000001	3.51	0.00023	0.000005	0.00023	0.0018
26-Jun-12	126	500	460	7.34	1.27	6.01	5.98	0.041	0.0001	0.00009	0.0006	0.000009	0.0000046	0.0016	0.000001	3.68	0.00023	0.000001	0.00593	0.0014
03-Jul-12	127	500	455	7.45	2.83	6.97	5.46	0.032	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0008	0.000001	3.66	0.00023	0.000003	0.00023	0.0014
10-Jul-12	128	500	440	7.22	1.41	5.30	5.72	0.032	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0008	0.000001	3.37	0.00022	0.000001	0.00026	0.0013
17-Jul-12	129	500	455	7.27	1.01	5.37	5.46	0.033	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0009	0.000001	3.40	0.00023	0.000017	0.00023	0.0014
24-Jul-12	130	500	455	7.14	1.38	5.47	5.01	0.033	0.0001	0.00023	0.0004	0.000009	0.0000046	0.0006	0.000001	3.54	0.00023	0.000014	0.00082	0.0014
31-Jul-12	131	500	445	7.33	0.90	5.01	4.90	0.032	0.0001	0.00013	0.0004	0.000009	0.0000045	0.0007	0.000001	3.24	0.00022	0.000002	0.00022	0.0013
07-Aug-12	132	500	445	7.45	0.95	5.40	4.45	0.045	0.0001	0.00013	0.0005	0.000009	0.0000045	0.0008	0.000002	3.28	0.00022	0.000003	0.00022	0.0013
14-Aug-12	133	500	435	7.2	1.08	4.92	4.79	0.031	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0007	0.000001	2.92	0.00022	0.000001	0.00183	0.0013
21-Aug-12	134	500	450	7.1	1.24	5.09	4.50	0.036	0.0002	0.00009	0.0004	0.000009	0.0000045	0.0010	0.000001	3.06	0.00023	0.000005	0.00023	0.0014
28-Aug-12	135	500	465	7.28	2.14	5.53	4.65	0.032	0.0001	0.00009	0.0004	0.000009	0.0000047	0.0009	0.000001	3.20	0.00023	0.000004	0.00023	0.0014
04-Sep-12	136	500	460	7.17	2.03	5.68	4.60	0.044	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0009	0.000001	3.34	0.00023	0.000002	0.00023	0.0014
11-Sep-12	137	500	455	7.22	1.22	5.31	4.55	0.024	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0008	0.000003	2.78	0.00023	0.000007	0.00027	0.0014
18-Sep-12	138	500	440	7.24	1.07	5.30	5.28	0.035	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0007	0.000001	3.06	0.00022	0.000001	0.00022	0.0013
25-Sep-12	139	500	445	7.18	1.25	5.38	5.79	0.025	0.0001	0.00009	0.0005	0.000009	0.0000045	0.0008	0.000008	2.86	0.00022	0.000059	0.00022	0.0013
02-Oct-12	140	500	451	7.15	1.47	5.38	4.06	0.021	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0012	0.000001	2.91	0.00023	0.000021	0.00036	0.0014
09-Oct-12	141	500	455	7.12	2.05	5.92	5.01	0.046	0.0001	0.00009	0.0005	0.000009	0.0000046	0.0010	0.000001	3.04	0.00023	0.000002	0.00027	0.0014
16-Oct-12	142	500	440	7.33	2.22	6.45	4.84	0.028	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0010	0.000001	3.07	0.00022	0.000001	0.00022	0.0013
23-Oct-12	143	500	450	7.16	1.65	5.76	4.95	0.034	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0005	0.000001	2.85	0.00023	0.000030	0.00027	0.0014
30-Oct-12	144	500	450	7.15	1.75	6.37	4.95	0.035	0.0001	0.00009	0.0006	0.000009	0.0000045	0.0012	0.000495	3.25	0.00023	0.000001	0.00041	0.0014
06-Nov-12	145	500	475	7.26	1.64	5.85	2.85	0.021	0.0001	0.00014	0.0005	0.000010	0.0000048	0.0012	0.000009	3.24	0.00024	0.000035	0.00062	0.0014
13-Nov-12	146	500	440	7.46	2.47	5.71	3.96	0.020	0.0001	0.00009	0.0004	0.000009	0.0000044	0.0008	0.000004	3.01	0.00022	0.000015	0.00022	0.0013
20-Nov-12	147	500	490	7.51	2.94	8.28	4.41	0.023	0.0001	0.00010	0.0006	0.000010	0.0000049	0.0012	0.000001	3.58	0.00025	0.000019	0.00025	0.0015
27-Nov-12	148	500	500	7.39	2.24	7.87	5.50	0.018	0.0001	0.00010	0.0006	0.000010	0.0000050	0.0012	0.000003	4.17	0.00025	0.000001	0.00025	0.0015
04-Dec-12	149	500	435	7.50	0.82	4.79	4.35	0.023	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0003	0.000002	2.50	0.00022	0.000007	0.00022	0.0013
11-Dec-12	150	500	470	7.47	0.92	5.99	4.70	0.022	0.0001	0.00009	0.0004	0.000009	0.0000047	0.0009	0.000001	2.86	0.00024	0.000019	0.00042	0.0014
18-Dec-12	151	500	480	7.44	1.08	6.52	4.32	0.020	0.0001	0.00010	0.0005	0.000010	0.0000048	0.0006	0.000001	3.15	0.00024	0.000009	0.00029	0.0014
25-Dec-12	152	500	465	7.36	1.34	5.55	4.19	0.021	0.0001	0.00009	0.0004	0.000009	0.0000047	0.0006	0.000001	3.03	0.00023	0.000007	0.00023	0.0014
01-Jan-13	153	500	470	7.47	1.29	5.44	4.70	0.020	0.0001	0.00009	0.0004	0.000009	0.0000047	0.0006	0.000002	2.59	0.00024	0.000009	0.00024	0.0014
08-Jan-13	154	500	465	7.54	1.40	5.75	4.19	0.025	0.0001	0.00009	0.0009	0.000009	0.0000047	0.0007	0.000001	3.21	0.00023	0.000033	0.00028	0.0014
15-Jan-13	155	500	450																	
22-Jan-13	156	500	470	7.42	1.69	5.96	4.23													
29-Jan-13	157	500	455																	
05-Feb-13	158	500	460	7.42	1.41	5.36	5.52													
12-Feb-13	159	500	455																	

HC 7
Sample = Alt 09 08

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	0.000008	0.0041	1.07	0.008	0.0041	0.00015	0.00025	0.0041	4.55	0.00002	0.41	0.000004	3.06	0.031	7.83	0.00008	0.00009	0.00008	0.000007	0.00037	0.0004	0.000004
09-Feb-10	0.000009	0.0045	2.26	0.017	0.0045	0.00026	0.00009	0.0045	5.04	0.00018	0.33	0.000005	3.29	0.042	9.45	0.00009	0.00000	0.00005	0.000032	0.00041	0.0005	0.000005
16-Feb-10	0.000008	0.0055	3.13	0.015	0.0042	0.00032	0.00017	0.0042	4.79	0.00003	0.36	0.000004	2.66	0.040	10.75	0.00008	0.00001	0.00004	0.000066	0.00043	0.0004	0.000004
23-Feb-10	0.000009	0.0040	1.96	0.016	0.0044	0.00012	0.00004	0.0044	2.68	0.00002	0.30	0.000004	0.98	0.034	6.51	0.00009	0.00002	0.00004	0.000044	0.00036	0.0004	0.000004
02-Mar-10	0.000030	0.0026	1.59	0.013	0.0043	0.00009	0.00004	0.0043	1.90	0.00002	0.24	0.000004	0.63	0.027	6.08	0.00009	0.00006	0.00004	0.000040	0.00030	0.0004	0.000004
09-Mar-10	0.000031	0.0026	1.60	0.019	0.0044	0.00009	0.00004	0.0044	1.77	0.00002	0.26	0.000004	0.46	0.026	5.50	0.00009	0.00017	0.00009	0.000047	0.00030	0.0004	0.000009
16-Mar-10	0.000009	0.0022	1.42	0.017	0.0045	0.00008	0.00009	0.0045	1.41	0.00002	0.28	0.000004	0.36	0.021	4.54	0.00009	0.00000	0.00004	0.000036	0.00033	0.0004	0.000004
23-Mar-10	0.000158	0.0023	1.28	0.018	0.0045	0.00008	0.00009	0.0045	1.16	0.00002	0.27	0.000005	0.30	0.020	4.20	0.00009	0.00002	0.00005	0.000034	0.00030	0.0005	0.000005
30-Mar-10	0.000009	0.0018	1.33	0.020	0.0045	0.00008	0.00009	0.0045	1.13	0.00002	0.25	0.000004	0.30	0.019	4.00	0.00009	0.00003	0.00009	0.000031	0.00028	0.0004	0.000004
06-Apr-10	0.000009	0.0018	1.19	0.023	0.0045	0.00009	0.00005	0.0045	0.99	0.00002	0.25	0.000009	0.28	0.018	4.12	0.00009	0.00004	0.00005	0.000065	0.00029	0.0005	0.000005
13-Apr-10	0.000249	0.0018	1.04	0.022	0.0045	0.00008	0.00004	0.0045	0.85	0.00002	0.24	0.000004	0.25	0.016	3.29	0.00009	0.00008	0.00004	0.000039	0.00026	0.0004	0.000004
20-Apr-10	0.000014	0.0014	1.13	0.022	0.0046	0.00008	0.00005	0.0046	0.93	0.00002	0.23	0.000005	0.22	0.017	3.84	0.00009	0.00006	0.00005	0.000046	0.00031	0.0005	0.000005
27-Apr-10	0.000458	0.0013	0.95	0.019	0.0045	0.00008	0.00018	0.0045	0.73	0.00002	0.20	0.000004	0.19	0.013	2.88	0.00009	0.00009	0.00004	0.000043	0.00024	0.0004	0.000004
04-May-10	0.000009	0.0009	1.03	0.023	0.0045	0.00011	0.00005	0.0045	0.72	0.00002	0.22	0.000005	0.19	0.014	2.71	0.00009	0.00007	0.00005	0.000033	0.00027	0.0005	0.000005
11-May-10	0.000018	0.0009	0.98	0.022	0.0046	0.00012	0.00005	0.0137	0.75	0.00002	0.25	0.000014	0.16	0.013	3.01	0.00009	0.00010	0.00005	0.000035	0.00031	0.0005	0.000005
18-May-10	0.000065	0.0009	1.00	0.018	0.0044	0.00026	0.00004	0.0039	0.73	0.00002	0.24	0.000004	0.17	0.014	3.20	0.00009	0.00007	0.00004	0.000032	0.00030	0.0004	0.000004
25-May-10	0.000360	0.0012	0.80	0.016	0.0041	0.00010	0.00004	0.0036	0.60	0.00002	0.20	0.000004	0.15	0.012	2.93	0.00008	0.00022	0.00004	0.000025	0.00029	0.0008	0.000004
01-Jun-10	0.000619	0.0009	0.82	0.017	0.0086	0.00009	0.00004	0.0039	0.58	0.00002	0.21	0.000004	0.13	0.012	2.84	0.00009	0.00006	0.00004	0.000025	0.00028	0.0004	0.000004
08-Jun-10	0.000010	0.0010	1.03	0.025	0.0048	0.00012	0.00005	0.0086	0.62	0.00002	0.27	0.000005	0.16	0.017	3.88	0.00010	0.00007	0.00005	0.000075	0.00026	0.0005	0.000005
15-Jun-10	0.000018	0.0009	0.82	0.018	0.0044	0.00015	0.00004	0.0040	0.51	0.00002	0.21	0.000026	0.13	0.013	3.28	0.00009	0.00013	0.00004	0.000037	0.00029	0.0004	0.000004
22-Jun-10																						
29-Jun-10	0.000013	0.0004	0.75	0.019	0.0044	0.00016	0.00004	0.0040	0.48	0.00002	0.18	0.000004	0.11	0.010	2.48	0.00009	0.00015	0.00004	0.000031	0.00022	0.0004	0.000004
06-Jul-10																						
13-Jul-10	0.000050	0.0005	0.72	0.020	0.0045	0.00018	0.00009	0.0059	0.43	0.00002	0.19	0.000005	0.12	0.010	2.58	0.00009	0.00117	0.00009	0.000039	0.00023	0.0005	0.000009
20-Jul-10																						
27-Jul-10	0.000018	0.0004	0.72	0.021	0.0045	0.00011	0.00102	0.0040	0.42	0.00002	0.18	0.000004	0.11	0.011	2.48	0.00009	0.00014	0.00004	0.000027	0.00021	0.0009	0.000004
03-Aug-10	0.000018	0.0004	0.68	0.018	0.0045	0.00015	0.00009	0.0040	0.37	0.00002	0.16	0.000004	0.09	0.009	2.16	0.00009	0.00005	0.00004	0.000027	0.00019	0.0004	0.000004
10-Aug-10	0.000009	0.0004	0.72	0.019	0.0045	0.00013	0.00009	0.0040	0.41	0.00002	0.19	0.000004	0.11	0.010	2.32	0.00009	0.00002	0.00004	0.000024	0.00023	0.0004	0.000004
17-Aug-10	0.000009	0.0004	0.64	0.016	0.0044	0.00014	0.00004	0.0040	0.39	0.00002	0.20	0.000004	0.08	0.009	3.09	0.00009	0.00006	0.00004	0.000028	0.00025	0.0004	0.000004
24-Aug-10	0.000013	0.0004	0.65	0.020	0.0043	0.00010	0.00004	0.0038	0.35	0.00002	0.18	0.000004	0.09	0.009	2.34	0.00009	0.00009	0.00004	0.000024	0.00020	0.0004	0.000004
31-Aug-10	0.000017	0.0004	0.64	0.007	0.0042	0.00011	0.00033	0.0037	0.33	0.00002	0.21	0.000004	0.11	0.007	2.17	0.00008	0.00001	0.00012	0.000022	0.00023	0.0004	0.000008
07-Sep-10	0.000022	0.0004	0.59	0.006	0.0044	0.00010	0.00009	0.0039	0.33	0.00002	0.18	0.000004	0.08	0.006	2.04	0.00009	0.00002	0.00004	0.000022	0.00024	0.0009	0.000004
14-Sep-10	0.000009	0.0004	0.65	0.018	0.0044	0.00026	0.00004	0.0039	0.34	0.00002	0.17	0.000004	0.10	0.008	2.04	0.00009	0.00006	0.00004	0.000020	0.00017	0.0004	0.000004
21-Sep-10	0.000009	0.0004	0.66	0.016	0.0044	0.00010	0.00030	0.0074	0.38	0.00013	0.19	0.000004	0.08	0.008	2.23	0.00009	0.00004	0.00004	0.000019	0.00020	0.0004	0.000004
28-Sep-10	0.000033	0.0008	0.61	0.012	0.0042	0.00016	0.00004	0.0037	0.41	0.00002	0.20	0.000004	0.10	0.008	2.10	0.00008	0.00017	0.00004	0.000018	0.00021	0.0004	0.000004
05-Oct-10	0.000021	0.0004	0.59	0.015	0.0042	0.00020	0.00004	0.0109	0.41	0.00002	0.19	0.000004	0.09	0.008	2.12	0.00008	0.00030	0.00004	0.000022	0.00020	0.0004	0.000004
12-Oct-10	0.000009	0.0004	0.66	0.016	0.0043	0.00012	0.00013	0.0039	0.38	0.00002	0.18	0.000004	0.09	0.009	2.24	0.00009	0.00018	0.00004	0.000014	0.00020	0.0004	0.000004
19-Oct-10	0.000051	0.0004	0.64	0.016	0.0043	0.00004	0.00004	0.0038	0.36	0.00002	0.16	0.000004	0.08	0.008	2.18	0.00009	0.00002	0.00004	0.000023	0.00017	0.0017	0.000004
26-Oct-10	0.000079	0.0004	0.59	0.015	0.0044	0.00006	0.00018	0.0040	0.32	0.00060	0.14	0.000004	0.08	0.007	2.29	0.00009	0.00001	0.00004	0.000022	0.00018	0.0009	0.000004
02-Nov-10	0.000226	0.0009	0.58	0.015	0.0044	0.00005	0.00039	0.0039	0.34	0.00002	0.17	0.000004	0.10	0.008	2.25	0.00009	0.00003	0.00004	0.000020	0.00010	0.0017	0.000004
09-Nov-10	0.000181	0.0004	0.68	0.016	0.0043	0.00009	0.00009	0.0073	0.38	0.00002	0.17	0.000004	0.09	0.009	2.27	0.00009	0.00012	0.00013	0.002344	0.00017	0.0017	0.000004
16-Nov-10	0.000210	0.0004	0.61	0.016	0.0042	0.00007	0.00008	0.0042	0.32	0.00002	0.15	0.000004	0.08	0.007	1.99	0.00008	0.00011	0.00004	0.000021	0.00015	0.0004	0.000004
23-Nov-10	0.000010	0.0005	0.57	0.024	0.0050	0.00011	0.00005	0.0045	0.34	0.00002	0.23	0.000005	0.06	0.011	2.17	0.00010	0.00002	0.00005	0.000041	0.00018	0.0010	0.000005
30-Nov-10	0.000009	0.0005	0.64	0.020	0.0046	0.00014	0.00023	0.0041	0.34	0.00002	0.19	0.000005	0.08	0.009	2.44	0.00009	0.00012	0.00005	0.000038	0.00017	0.0014	0.000005
07-Dec-10	0.000638	0.0004	0.65	0.022	0.0042	0.00011	0.00013	0.0063	0.36	0.00002	0.22	0.000004	0.08	0.009	2.20	0.00008	0.00009	0.00004	0.000031	0.00021	0.0013	0.000004
14-Dec-10	0.000035	0.0004	0.57	0.014	0.0044	0.00011	0.00013	0.0039	0.33	0.00003	0.17	0.000004	0.08	0.007	1.75	0.00009	0.00013	0.00004	0.000023	0.00022	0.0004	0.000004
21-Dec-10	0.000013	0.0004	0.54	0.011	0.0044	0.00000	0.00013	0.0039	0.32	0.00002	0.18	0.000004	0.08	0.007	1.72	0.00009	0.00007	0.00004	0.000020	0.00018	0.0004	0.000004
28-Dec-10	0.000361	0.0004	0.61	0.015	0.0044	0.00005	0.00004	0.0176	0.35	0.00002	0.19	0.000004	0.09	0.007	2.13	0.00009	0.00009	0.00004	0.000018	0.00018	0.0009	0.000004
04-Jan-11	0.000254	0.0004	0.56	0.014	0.0043	0.00003	0.00009	0.0039	0.30	0.00002	0.16	0.000004	0.07	0.006	1.60	0.00009	0.00003	0.00004	0.000019	0.00016	0.0009	0.000004
11-Jan-11	0.000009	0.0004	0.57	0.017	0.0043	0.00004	0.00004	0.0039	0.28	0.00002	0.14	0.000004	0.07	0.006	1.69	0.00009	0.00009	0.00004	0.000014	0.00012	0.0004	0.000004
18-Jan-11	0.000009	0.0004	0.56	0.016	0.0043	0.00002	0.00004	0.0039	0.33	0.00002	0.17	0.000004	0.07	0.007	1.89	0.00009	0.00010	0.00004	0.000015	0.00015	0.0004	0.000004
25-Jan-11	0.000013	0.0004	0.50	0.014	0.0044	0.00003	0.00009	0.0048	0.29	0.00005	0.14	0.000004	0.06	0.006	1.55	0.00009	0.00014	0.00013	0.000018	0.00014	0.0013	0.000004
01-Feb-11	0.000334	0.0004	0.50	0.016	0.0044	0.00002	0.00013	0.0255	0.27	0.00002	0.14	0.000004	0.06	0.006	2.32	0.00009	0.00017	0.00009	0.000027	0.00011	0.0013	0.000004
08-Feb-11	0.000009	0.0004	0.53	0.016	0.0043	0.00005	0.00004	0.0038	0.27	0.00002	0.17	0.000004	0.06	0.007	1.68	0.00009	0.00025	0.00004	0.000023	0.00014	0.0004	0.000009
15-Feb-11	0.000409	0.0004	0.51	0.015	0.0045	0.00008	0.00013	0.0187	0.27	0.00002	0.16	0.000004	0.05	0.006	1.55	0.00009	0.00012	0.00004	0.000017	0.00011	0.0009	0.000004
22-Feb-11	0.000013	0.0004	0.52	0.013	0.0044	0.00003	0.00004	0.0040	0.28	0.00002	0.16	0.000004	0.06	0.006	1.55	0.00009	0.00000	0.00004	0.000015	0.00012	0.0004	0.000004
01-Mar-11	0.000692	0.0004	0.45	0.014	0.0043	0.00002	0.00009	0.0224	0.22	0.00002	0.13	0.000004	0.06	0.006	1.48	0.00009	0.00008	0.00004	0.000012	0.00013	0.0004	0.000004
08-Mar-11	0.000396	0.0004	0.48	0.017	0.0044	0.00005	0.00004	0.0122	0.25	0.00005	0.13	0.000004	0.06	0.006	1.61	0.00009	0.00010	0.00004	0.000015	0.00011	0.0004	0.000004
15-Mar-11	0.000437	0.0005	0.46	0.018	0.0046	0.00003	0.00018	0.0046	0.26	0.00005	0.15	0.000005	0.06	0.007	1.52	0.00001	0.00009	0.00005	0.000017	0.00012	0.0005	0.000005
22-Mar-11	0.000017	0.0004	0.50	0.016	0.0042	0.00001	0.00004	0.0037	0.24	0.00002	0.15	0.000004	0.05	0.006	1.57	0.00008	0.00019	0.00004	0.000013	0.00010	0.0004	0.000004
29-Mar-11	0.000010	0.0005	0.65	0.027	0.0051	0.00001	0.00015	0.0086	0.32	0.00002	0.25	0.000005	0.08	0.010	2.64	0.00010	0.00006	0.00005	0.000037	0.00012	0.0005	0.000005
05-Apr-11	0.000035	0.0004	0.51	0.017	0.0044	0.00004	0.00009	0.0117	0.27	0.00002	0.16	0.000004	0.06	0.007	1.94	0.00009	0.00007	0.00004	0.000016	0.00011	0.0004	0.000004
12-Apr-11	0.000009	0.0005	0.46	0.022	0.0045	0.00006	0.00005	0.0054	0.25	0.00002	0.16	0.000005	0.06	0.007	1.66	0.00009	0.00005	0.00005	0.000016	0.00012	0.0005	0.000005
19-Apr-11	0.000264	0.0004	0.59	0.019	0.0044	0.00013	0.00013	0.0150	0.33	0.00017	0.21	0.000004	0.07	0.008	2.03	0.00009	0.00004	0.00013	0.000021	0.00019	0.0009	0.000004
26-Apr-11	0.000009	0.0004	0.52	0.017	0.0043	0.00002	0.00022	0.0056	0.30	0.00002	0.19	0.000004	0.06	0.007	1.71	0.00009	0.00000	0.00004	0.000017	0.00015	0.0004	0.000004
03-May-11	0.000013	0.0004	0.45	0.016	0.0043	0.00003	0.00009	0.0085	0.29	0.00002	0.17	0.000004	0.06	0.006	1.61	0.00009	0.00002	0.00004	0.000012	0.00012	0.0013	0.000004
10-May-11	0.000009	0.0004	0.44	0.015	0.0043	0.00002	0.00017	0.0039	0.29	0.00002	0.16	0.000004	0.06	0.006	1.57	0.00009	0.00005	0.00009	0.000012	0.00010	0.0013	0.000004
17-May-11	0.000009	0.0004	0.40	0.013	0.0044	0.00001	0.00004	0.0084	0.26	0.00002	0.15	0.000013	0.06	0.006	1.46	0.00009	0.00002	0.00004	0.000014	0.00012	0.0004	0.000004
24-May-11	0.000015	0.0005	0.44	0.017	0.0050	0.00001	0.00005	0.0100	0.29	0.00002	0.30	0.000005	0.06	0.007	1.71	0.00010	0.00007	0.00005	0.000013	0.00015	0.0010	0.000005
31-May-11	0.000009	0.0005	0.41	0.017	0.0047	0.00001	0.00005	0.0042	0.26	0.00002	0.19	0.000005	0.06	0.007	1.60	0.00009	0.00007	0.00005	0.000017	0.00010	0.0005	0.000005
07-Jun-11	0.000013	0.0004	0.49	0.015	0.0045	0.00000	0.00009	0.0040	0.28	0.00002	0.18	0.000004	0.08	0.006	1.89	0.00001	0.00009	0.00004	0.000009	0.00011	0.0009	0.000004
14-Jun-11	0.000014	0.0005	0.38	0.016	0.0046	0.00002	0.00018	0.0041	0.23	0.00002	0.20	0.000005	0.07	0.006	1.55	0.00001	0.00010	0.00005	0.000015	0.00012	0.0005	0.000005
21-Jun-11	0.000013	0.0004	0.47	0.017	0.0044	0.00000	0.00004	0.0039	0.24	0.00002	0.13	0.000004	0.05	0.006	1.97	0.00001	0.00010	0.00004	0.000013	0.00009	0.0004	0.000004
28-Jun-11	0.000009	0.0004	0.47	0.016	0.0045	0.00011	0.00009	0.0040	0.26	0.00002	0.16	0.000004	0.05	0.006	1.77	0.00001	0.00004	0.00009	0.000016	0.00011	0.0004	0.000004

HC 7
Sample = Alt 09 08

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	0.000010	0.0005	0.72	0.026	0.0051	0.00004	0.00015	0.0045	0.32	0.00002	0.27	0.000005	0.11	0.010	3.05	0.00001	0.00006	0.00005	0.000038	0.00014	0.0035	0.000005
12-Jul-11	0.000009	0.0005	0.52	0.023	0.0368	0.00011	0.00005	0.0041	0.27	0.00007	0.22	0.000005	0.06	0.008	2.02	0.00001	0.00004	0.00005	0.000020	0.00011	0.0005	0.000005
19-Jul-11	0.000009	0.0005	0.49	0.019	0.0046	0.00001	0.00018	0.0041	0.24	0.00007	0.18	0.000005	0.07	0.007	2.02	0.00001	0.00006	0.00005	0.000017	0.00011	0.0005	0.000005
26-Jul-11	0.000009	0.0004	0.41	0.033	0.0045	0.00017	0.00018	0.0058	0.21	0.00002	0.15	0.000004	0.04	0.007	1.58	0.00001	0.00000	0.00018	0.000015	0.00010	0.0009	0.000004
02-Aug-11	0.000009	0.0005	0.55	0.019	0.0047	0.00002	0.00005	0.0042	0.27	0.00002	0.20	0.000005	0.05	0.008	2.30	0.00001	0.00001	0.00005	0.000021	0.00010	0.0005	0.000005
09-Aug-11	0.000009	0.0005	0.42	0.016	0.0046	0.00019	0.00005	0.0041	0.20	0.00002	0.15	0.000005	0.05	0.006	1.79	0.00001	0.00000	0.00005	0.000018	0.00010	0.0009	0.000005
16-Aug-11	0.000018	0.0005	0.40	0.013	0.0045	0.00004	0.00005	0.0041	0.21	0.00002	0.14	0.000005	0.05	0.006	1.91	0.00001	0.00005	0.00005	0.000015	0.00009	0.0009	0.000005
23-Aug-11	0.000054	0.0005	0.50	0.017	0.0045	0.00003	0.00005	0.0041	0.24	0.00002	0.17	0.000005	0.05	0.007	2.03	0.00001	0.00004	0.00005	0.000017	0.00010	0.0009	0.000005
30-Aug-11	0.000013	0.0004	0.47	0.013	0.0088	0.00002	0.00013	0.0040	0.23	0.00006	0.16	0.000004	0.06	0.007	2.09	0.00001	0.00011	0.00009	0.000013	0.00010	0.0013	0.000004
06-Sep-11	0.000023	0.0005	0.45	0.014	0.0045	0.00011	0.00005	0.0041	0.22	0.00002	0.14	0.000005	0.05	0.006	1.93	0.00001	0.00000	0.00005	0.000032	0.00011	0.0014	0.000005
13-Sep-11	0.000120	0.0005	0.52	0.017	0.0046	0.00006	0.00005	0.0041	0.22	0.00002	0.16	0.000005	0.05	0.007	2.23	0.00001	0.00005	0.00005	0.000018	0.00009	0.0009	0.000005
20-Sep-11	0.000019	0.0005	0.55	0.021	0.0048	0.00005	0.00014	0.0043	0.23	0.00002	0.18	0.000005	0.05	0.007	2.55	0.00001	0.00021	0.00005	0.000020	0.00009	0.0014	0.000005
27-Sep-11	0.000014	0.0005	0.45	0.015	0.0047	0.00004	0.00005	0.0042	0.23	0.00002	0.15	0.000005	0.05	0.006	1.98	0.00001	0.00006	0.00005	0.000023	0.00010	0.0019	0.000005
04-Oct-11	0.000051	0.0005	0.67	0.024	0.0051	0.00006	0.00005	0.0046	0.28	0.00002	0.19	0.000005	0.07	0.009	3.29	0.00001	0.00005	0.00005	0.000045	0.00008	0.0010	0.000015
11-Oct-11	0.000029	0.0005	0.53	0.019	0.0049	0.00002	0.00015	0.0044	0.23	0.00002	0.20	0.000005	0.05	0.008	2.76	0.00001	0.00001	0.00005	0.000013	0.00009	0.0005	0.000034
18-Oct-11	0.000033	0.0005	0.45	0.016	0.0047	0.00006	0.00009	0.0042	0.22	0.00002	0.16	0.000005	0.05	0.007	2.17	0.00001	0.00002	0.00005	0.000018	0.00009	0.0009	0.000005
25-Oct-11	0.000014	0.0005	0.46	0.018	0.0046	0.00002	0.00005	0.0041	0.21	0.00002	0.17	0.000005	0.05	0.007	2.10	0.00001	0.00004	0.00005	0.000019	0.00008	0.0009	0.000005
01-Nov-11	0.000010	0.0005	0.48	0.019	0.0048	0.00002	0.00010	0.0043	0.23	0.00002	0.19	0.000005	0.04	0.009	3.10	0.00001	0.00003	0.00005	0.000023	0.00009	0.0005	0.000005
08-Nov-11	0.000010	0.0005	0.54	0.021	0.0049	0.00001	0.00005	0.0049	0.25	0.00002	0.21	0.000005	0.05	0.009	2.74	0.00001	0.00002	0.00005	0.000028	0.00015	0.0015	0.000005
15-Nov-11	0.000009	0.0005	0.49	0.017	0.0047	0.00001	0.00019	0.0042	0.21	0.00002	0.13	0.000005	0.05	0.007	2.33	0.00001	0.00000	0.00005	0.000023	0.00016	0.0005	0.000005
22-Nov-11	0.000014	0.0005	0.48	0.022	0.0047	0.00000	0.00019	0.0042	0.21	0.00002	0.19	0.000005	0.00	0.007	1.96	0.00001	0.00001	0.00005	0.000023	0.00015	0.0005	0.000005
29-Nov-11	0.000009	0.0005	0.56	0.025	0.0047	0.00008	0.00024	0.0061	0.24	0.00002	0.21	0.000005	0.04	0.008	2.53	0.00001	0.00002	0.00005	0.000024	0.00016	0.0005	0.000005
06-Dec-11	0.000009	0.0005	0.59	0.028	0.0047	0.00001	0.00005	0.0047	0.24	0.00002	0.21	0.000019	0.02	0.008	2.65	0.00001	0.00000	0.00005	0.000026	0.00013	0.0009	0.000005
13-Dec-11	0.000049	0.0005	0.68	0.029	0.0049	0.00003	0.00020	0.0074	0.26	0.00002	0.21	0.000005	0.08	0.010	3.32	0.00001	0.00003	0.00005	0.000033	0.00007	0.0010	0.000005
20-Dec-11	0.000038	0.0005	0.52	0.022	0.0048	0.00001	0.00014	0.0048	0.22	0.00014	0.22	0.000005	0.05	0.008	2.68	0.00001	0.00000	0.00005	0.000025	0.00016	0.0024	0.000005
27-Dec-11	0.000010	0.0005	0.53	0.020	0.0048	0.00004	0.00019	0.0043	0.22	0.00004	0.19	0.000005	0.05	0.008	2.72	0.00001	0.00000	0.00019	0.000026	0.00019	0.0005	0.000005
03-Jan-12	0.000010	0.0005	0.53	0.019	0.0049	0.00003	0.00025	0.0044	0.23	0.00002	0.19	0.000005	0.04	0.008	2.61	0.00001	0.00001	0.00015	0.000026	0.00024	0.0005	0.000005
10-Jan-12	0.000009	0.0005	0.47	0.019	0.0047	0.00002	0.00005	0.0042	0.20	0.00002	0.17	0.000005	0.05	0.007	2.18	0.00001	0.00002	0.00009	0.000024	0.00025	0.0009	0.000005
17-Jan-12	0.000010	0.0005	0.56	0.026	0.0048	0.00004	0.00010	0.0043	0.23	0.00002	0.18	0.000005	0.04	0.008	2.72	0.00001	0.00001	0.00005	0.000027	0.00017	0.0010	0.000005
24-Jan-12	0.000010	0.0005	0.56	0.024	0.0051	0.00003	0.00010	0.0046	0.24	0.00003	0.19	0.000005	0.05	0.008	2.71	0.00001	0.00002	0.00005	0.000027	0.00016	0.0005	0.000005
31-Jan-12	0.000023	0.0005	0.46	0.019	0.0046	0.00005	0.00005	0.0041	0.20	0.00002	0.16	0.000005	0.06	0.007	2.29	0.00001	0.00000	0.00005	0.000058	0.00023	0.0060	0.000005
07-Feb-12	0.000010	0.0005	0.63	0.029	0.0051	0.00004	0.00025	0.0045	0.25	0.00003	0.19	0.000005	0.07	0.009	3.00	0.00001	0.00001	0.00005	0.000035	0.00017	0.0010	0.000005
14-Feb-12	0.000009	0.0005	0.46	0.017	0.0047	0.00003	0.00014	0.0042	0.19	0.00002	0.15	0.000005	0.05	0.007	2.17	0.00001	0.00000	0.00005	0.000027	0.00008	0.0014	0.000005
21-Feb-12	0.000010	0.0005	0.47	0.022	0.0048	0.00002	0.00019	0.0043	0.20	0.00002	0.15	0.000005	0.06	0.007	2.17	0.00001	0.00000	0.00005	0.000020	0.00009	0.0005	0.000005
28-Feb-12	0.000009	0.0005	0.48	0.022	0.0047	0.00003	0.00014	0.0042	0.20	0.00002	0.16	0.000005	0.05	0.007	2.23	0.00001	0.00002	0.00009	0.000018	0.00015	0.0005	0.000005
06-Mar-12	0.000009	0.0005	0.48	0.018	0.0047	0.00004	0.00014	0.0042	0.20	0.00002	0.16	0.000005	0.05	0.007	2.46	0.00001	0.00003	0.00009	0.000022	0.00019	0.0028	0.000005
13-Mar-12	0.000153	0.0005	0.50	0.019	0.0047	0.00006	0.00009	0.0172	0.35	0.00002	0.17	0.000121	0.07	0.007	2.33	0.00002	0.00003	0.00005	0.000024	0.00006	0.0014	0.000005
20-Mar-12	0.000010	0.0005	0.58	0.026	0.0049	0.00006	0.00005	0.0044	0.23	0.00006	0.17	0.000005	0.05	0.008	2.61	0.00001	0.00007	0.00005	0.000023	0.00005	0.0005	0.000005
27-Mar-12	0.000014	0.0005	0.53	0.022	0.0048	0.00008	0.00019	0.0043	0.20	0.00002	0.16	0.000005	0.08	0.007	2.48	0.00001	0.00001	0.00005	0.000028	0.00016	0.0014	0.000005
03-Apr-12	0.000009	0.0005	0.44	0.014	0.0046	0.00003	0.00009	0.0041	0.19	0.00002	0.12	0.000005	0.05	0.006	2.11	0.00001	0.00000	0.00005	0.000016	0.00010	0.0009	0.000005
10-Apr-12	0.000010	0.0005	0.49	0.019	0.0194	0.00005	0.00005	0.0044	0.20	0.00004	0.16	0.000005	0.05	0.007	2.33	0.00001	0.00002	0.00005	0.000020	0.00017	0.0010	0.000005
17-Apr-12	0.000009	0.0005	0.47	0.018	0.0186	0.00005	0.00009	0.0042	0.19	0.00002	0.14	0.000005	0.03	0.006	2.26	0.00001	0.00000	0.00005	0.000019	0.00012	0.0005	0.000005
24-Apr-12	0.000009	0.0005	0.43	0.017	0.0138	0.00025	0.00018	0.0041	0.19	0.00002	0.14	0.000005	0.05	0.006	2.16	0.00001	0.00000	0.00005	0.000064	0.00018	0.0009	0.000005
01-May-12	0.000038	0.0005	0.51	0.021	0.0141	0.00004	0.00009	0.0042	0.20	0.00002	0.15	0.000005	0.04	0.007	2.48	0.00001	0.00004	0.00005	0.000019	0.00015	0.0009	0.000005
08-May-12	0.000018	0.0005	0.44	0.018	0.0046	0.00003	0.00009	0.0041	0.21	0.00002	0.14	0.000005	0.04	0.006	2.07	0.00001	0.00020	0.00009	0.000024	0.00015	0.0009	0.000005
15-May-12	0.000018	0.0004	0.42	0.014	0.0044	0.00003	0.00009	0.0040	0.19	0.00002	0.13	0.000004	0.04	0.006	1.92	0.00001	0.00000	0.00004	0.000017	0.00014	0.0013	0.000004
22-May-12	0.000019	0.0005	0.47	0.016	0.0093	0.00004	0.00009	0.0042	0.20	0.00002	0.15	0.000005	0.05	0.006	2.18	0.00001	0.00001	0.00009	0.000017	0.00020	0.0009	0.000005
29-May-12	0.000009	0.0005	0.45	0.016	0.0046	0.00003	0.00005	0.0041	0.19	0.00002	0.14	0.000005	0.03	0.006	1.97	0.00001	0.00005	0.00005	0.000015	0.00015	0.0005	0.000005
05-Jun-12	0.000018	0.0005	0.45	0.016	0.0046	0.00006	0.00005	0.0041	0.18	0.00002	0.15	0.000005	0.05	0.006	2.05	0.00001	0.00000	0.00009	0.000011	0.00015	0.0014	0.000005
12-Jun-12	0.000009	0.0005	0.50	0.014	0.0045	0.00004	0.00005	0.0041	0.20	0.00003	0.15	0.000005	0.04	0.006	2.07	0.00001	0.00003	0.00009	0.000014	0.00017	0.0005	0.000005
19-Jun-12	0.000009	0.0005	0.46	0.014	0.0046	0.00006	0.00005	0.0041	0.19	0.00002	0.14	0.000005	0.04	0.006	2.00	0.00001	0.00021	0.00005	0.000015	0.00017	0.0009	0.000005
26-Jun-12	0.000087	0.0005	0.50	0.015	0.0046	0.00005	0.00009	0.0041	0.20	0.00002	0.20	0.000005	0.09	0.006	2.21	0.00001	0.00062	0.00005	0.000015	0.00021	0.0028	0.000005
03-Jul-12	0.000009	0.0005	0.51	0.016	0.0046	0.00018	0.00005	0.0041	0.20	0.00002	0.15	0.000005	0.04	0.006	2.27	0.00001	0.00005	0.00005	0.000014	0.00015	0.0009	0.000005
10-Jul-12	0.000009	0.0004	0.49	0.014	0.0088	0.00004	0.00009	0.0040	0.17	0.00003	0.12	0.000004	0.04	0.006	2.05	0.00001	0.00005	0.00004	0.000010	0.00017	0.0004	0.000004
17-Jul-12	0.000009	0.0005	0.51	0.012	0.0046	0.00002	0.00005	0.0041	0.19	0.00002	0.14	0.000014	0.04	0.006	2.14	0.00001	0.00000	0.00005	0.000012	0.00015	0.0005	0.000009
24-Jul-12	0.000009	0.0005	0.53	0.014	0.0091	0.00006	0.00005	0.0041	0.20	0.00010	0.14	0.000005	0.05	0.006	2.21	0.00001	0.00000	0.00005	0.000012	0.00015	0.0005	0.000005
31-Jul-12	0.000009	0.0004	0.49	0.011	0.0045	0.00003	0.00004	0.0040	0.18	0.00002	0.12	0.000004	0.04	0.005	1.85	0.00001	0.00000	0.00004	0.000009	0.00017	0.0004	0.000004
07-Aug-12	0.000018	0.0004	0.53	0.009	0.0045	0.00004	0.00004	0.0040	0.19	0.00002	0.13	0.000004	0.05	0.005	2.12	0.00001	0.00010	0.00004	0.000011	0.00025	0.0018	0.000004
14-Aug-12	0.000013	0.0004	0.47	0.009	0.0044	0.00003	0.00004	0.0039	0.17	0.00002	0.12	0.000004	0.04	0.005	1.90	0.00001	0.00026	0.00004	0.000009	0.00016	0.0017	0.000004
21-Aug-12	0.000009	0.0005	0.49	0.013	0.0045	0.00005	0.00009	0.0041	0.15	0.00002	0.14	0.000005	0.04	0.005	2.01	0.00001	0.00011	0.00005	0.000010	0.00014	0.0005	0.000005
28-Aug-12	0.000009	0.0005	0.49	0.016	0.0140	0.00006	0.00005	0.0042	0.16	0.00002	0.13	0.000005	0.04	0.005	1.99	0.00001	0.00008	0.00005	0.000011	0.00013	0.0009	0.000005
04-Sep-12	0.000009	0.0005	0.58	0.015	0.0046	0.00004	0.00005	0.0041	0.19	0.00002	0.12	0.000005	0.04	0.005	2.01	0.00001	0.00003	0.00005	0.000011	0.00017	0.0005	0.000005
11-Sep-12	0.000027	0.0005	0.53	0.012	0.0091	0.00003	0.00005	0.0041	0.18	0.00002	0.11	0.000005	0.05	0.005	1.86	0.00001	0.00005	0.00005	0.000010	0.00012	0.0009	0.000005
18-Sep-12	0.000009	0.0004	0.47	0.012	0.0044	0.00002	0.00004	0.0040	0.16	0.00002	0.12	0.000004	0.04	0.005	1.85	0.00001	0.00005	0.00004	0.000011	0.00015	0.0009	0.000004
25-Sep-12	0.000027	0.0004	0.51	0.012	0.0045	0.00005	0.00027	0.0040	0.17	0.00002	0.11	0.000018	0.04	0.005	1.86	0.00001	0.00003	0.00018	0.000024	0.00016	0.0013	0.000004
02-Oct-12	0.000009	0.0005	0.55	0.012	0.0045	0.00004	0.00005	0.0050	0.19	0.00002	0.13	0.000005	0.04	0.005	1.85	0.00001	0.00002	0.00005	0.000009	0.00009	0.0005	0.000005
09-Oct-12	0.000009	0.0005	0.49	0.014	0.0046	0.00003	0.00018	0.0050	0.18	0.00002	0.12	0.000005	0.04	0.005	1.78	0.00001	0.00005	0.00005	0.000014	0.00011	0.0005	0.000005
16-Oct-12	0.000009	0.0004	0.49	0.013	0.0044	0.00003	0.00009	0.0040	0.17	0.00002	0.11	0.000004	0.04	0.005	1.83	0.00001	0.00009	0.00004	0.000011	0.00012	0.0004	0.000004
23-Oct-12	0.000009	0.0005	0.45	0.012	0.0045	0.00007	0.00032	0.0050	0.15	0.00002	0.10	0.000005	0.04	0.004	1.65	0.00001	0.00002	0.00005	0.000010	0.00011	0.0005	0.000005
30-Oct-12	0.000009	0.0005	0.50	0.016	0.0045	0.00004	0.00018	0.0041	0.17	0.00002	0.13	0.000005	0.04	0.005	1.85	0.00001	0.00003	0.00018	0.000014	0.00020	0.0009	0.000005
06-Nov-12	0.000010	0.0005	0.54	0.016	0.0048	0.00007	0.00038	0.0043	0.17	0.00002	0.11	0.000005	0.04	0.005	1.79	0.00001	0.00009	0.00005	0.000010	0.00009	0.0005	0.000005
13-Nov-12	0.000009	0.0004	0.51	0.014	0.0044	0.00003	0.00004	0.0040	0.17	0.00002	0.11	0.000004	0.03	0.005	1.82	0.00001	0.00000	0.00004	0.000008	0.00011	0.0013	0.000004
20-Nov-12	0.000010	0.0005	0.54	0.017	0.0049	0.00003	0.00005	0.0044	0.16	0.00002	0.13	0.000010	0.04	0.006	1.88	0.00001	0.00007	0.00005	0.000015	0.00011	0.0005	0.000005
27-Nov-12	0.000010	0.0005	0.66	0.025	0.0050	0.00004	0.00005	0.0045	0.20	0.00002	0.16	0.000005	0.05	0.007	2.29	0.00001	0.00005	0.00005	0.000016	0.00002	0.0005	0.000005
04-Dec-12	0.000009	0.0004	0.52	0.008	0.0131	0.00004	0.00004	0.0039	0.15	0.00009	0.07	0.000004	0.03	0.004	1.64	0.00001	0.00003	0.00004	0.000012	0.00009	0.0009	0.000004
11-Dec-12	0.000014	0.0005	0.45	0.010	0.0047	0.00003	0.00005	0.0042	0.18	0.00002	0.09	0.000005	0.03	0.004	1.39	0.00001	0.00012	0.00005	0.000013	0.00011	0.0005	0.000005
18-Dec-12	0.000010	0.0005	0.51	0.013	0.0048	0.00004	0.00005	0.0043	0.17	0.00008	0.10	0.000005	0.03	0.005	1.83	0.00001	0.00013	0.00005	0.000016	0.00011	0.0005	0.000005
25-Dec-12	0.000009	0.0005	0.62	0.012	0.0047	0.00005	0.00005	0.0107	0.17	0.00002	0.08	0.000005	0.03	0.005	1.88	0.00001	0.00004	0.00005	0.000012	0.00004	0.0005	0.000005
01-Jan-13	0.000009	0.0005	0.48	0.010	0.0047	0.00008	0.00009	0.0042	0.17	0.00002	0.08	0.000005	0.04	0.004	1.61	0.00001	0.00004	0.00005	0.000013	0.00009	0.0005	0.000005
08-Jan-13	0.000009	0.0005	0.51	0.009	0.0047	0.00007	0.00005	0.0042	0.20	0.00002	0.11	0.000005	0.04	0.005	1.81	0.00001	0.00010	0.00009	0.000017	0.00017	0.0005	0.000005
15-Jan-13																						
22-Jan-13																						
29-Jan-13																						
05-Feb-13																						
12-Feb-13																						

HC 8
Sample = Alt 09 07

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	1	500	415	7.41	0.91	9.49	23.66	0.044	0.0006	0.00129	0.0011	0.000008	0.0000042	0.0050	0.000014	7.72	0.00021	0.000506	0.00162	0.0042
09-Feb-10	2	500	445	7.33	0.95	5.99	23.59	0.057	0.0009	0.00098	0.0008	0.000009	0.0000045	0.0098	0.000007	8.19	0.00022	0.000046	0.00040	0.0045
16-Feb-10	3	500	415	7.38	1.00	6.23	18.26	0.066	0.0007	0.00104	0.0007	0.000008	0.0000042	0.0075	0.000002	6.47	0.00021	0.000018	0.00033	0.0042
23-Feb-10	4	500	455	7.44	0.95	5.44	13.20	0.060	0.0006	0.00059	0.0005	0.000009	0.0000046	0.0064	0.000001	5.87	0.00023	0.000017	0.00023	0.0046
02-Mar-10	5	500	445	7.35	0.69	4.39	10.24	0.049	0.0004	0.00053	0.0004	0.000009	0.0000045	0.0036	0.000001	4.54	0.00022	0.000013	0.00022	0.0045
09-Mar-10	6	500	435	7.3	0.87	4.12	7.83	0.045	0.0003	0.00044	0.0004	0.000009	0.0000044	0.0030	0.000001	4.52	0.00022	0.000007	0.00035	0.0044
16-Mar-10	7	500	435	7.26	0.92	4.20	6.09	0.061	0.0003	0.00044	0.0003	0.000009	0.0000044	0.0035	0.000001	4.13	0.00022	0.000007	0.00022	0.0044
23-Mar-10	8	500	455	7.25	1.36	4.19	9.56	0.044	0.0004	0.00046	0.0003	0.000009	0.0000046	0.0028	0.000001	4.31	0.00023	0.000007	0.00027	0.0046
30-Mar-10	9	500	440	7.25	0.99	3.56	11.44	0.036	0.0004	0.00035	0.0004	0.000009	0.0000044	0.0022	0.000001	4.58	0.00026	0.000008	0.00026	0.0044
06-Apr-10	10	500	460	7.22	1.04	3.93	8.28	0.043	0.0003	0.00046	0.0003	0.000009	0.0000046	0.0009	0.000001	4.60	0.00028	0.000007	0.00041	0.0046
13-Apr-10	11	500	460	7.13	1.33	4.14	10.58	0.040	0.0004	0.00037	0.0004	0.000009	0.0000046	0.0023	0.000001	4.59	0.00023	0.000005	0.00023	0.0046
20-Apr-10	12	500	445	7.34	1.21	3.86	8.90	0.043	0.0003	0.00045	0.0003	0.000009	0.0000045	0.0018	0.000001	4.24	0.00031	0.000005	0.00031	0.0045
27-Apr-10	13	500	455	7.32	1.28	3.76	8.65	0.033	0.0002	0.00036	0.0003	0.000009	0.0000046	0.0014	0.000001	3.94	0.00027	0.000006	0.00036	0.0046
04-May-10	14	500	430	7.16	1.00	3.68	8.17	0.034	0.0002	0.00034	0.0003	0.000009	0.0000043	0.0013	0.000001	3.82	0.00026	0.000004	0.00026	0.0043
11-May-10	15	500	445	7.04	0.89	3.23	6.23	0.035	0.0002	0.00053	0.0003	0.000009	0.0000045	0.0013	0.000002	3.83	0.00027	0.000004	0.00022	0.0045
18-May-10	16	500	420	7.14	1.05	3.25	7.98	0.041	0.0002	0.00046	0.0003	0.000008	0.0000042	0.0014	0.000001	4.15	0.00034	0.000065	0.00046	0.0008
25-May-10	17	500	430	7.10	1.67	3.64	4.30	0.040	0.0002	0.00039	0.0004	0.000009	0.0000043	0.0012	0.000001	3.88	0.00022	0.000009	0.00052	0.0009
01-Jun-10	18	500	425	7.14	1.02	3.36	5.95	0.033	0.0001	0.00038	0.0003	0.000009	0.0000043	0.0012	0.000001	3.66	0.00030	0.000011	0.00064	0.0009
08-Jun-10	19	500	490	7.08	1.30	4.42	7.84	0.027	0.0003	0.00034	0.0003	0.000010	0.0000049	0.0024	0.000001	5.59	0.00025	0.000004	0.00025	0.0010
15-Jun-10	20	500	445	7.23	1.25	3.20	6.68	0.034	0.0002	0.00031	0.0003	0.000009	0.0000045	0.0015	0.000001	4.10	0.00022	0.000008	0.00031	0.0009
22-Jun-10	21	500	430	7.25	1.00	2.79														
29-Jun-10	22	500	440	7.11	0.96	2.57	3.52	0.025	0.0001	0.00022	0.0002	0.000009	0.0000044	0.0011	0.000005	3.09	0.00035	0.000004	0.00031	0.0009
06-Jul-10	23	500	450	6.99	1.14	2.76														
13-Jul-10	24	500	455	6.98	1.21	2.69	3.64	0.023	0.0002	0.00036	0.0002	0.000009	0.0000046	0.0013	0.000001	3.03	0.00027	0.000009	0.00055	0.0009
20-Jul-10	25	500	450	7.22	1.68	3.16														
27-Jul-10	26	500	500	6.92	1.62	3.77	8.00	0.016	0.0002	0.00025	0.0003	0.000010	0.0000050	0.0019	0.000002	4.92	0.00025	0.000004	0.00040	0.0010
03-Aug-10	27	500	455	7.20	1.32	2.62	4.10	0.019	0.0002	0.00018	0.0002	0.000009	0.0000046	0.0020	0.000002	3.14	0.00023	0.000006	0.00041	0.0009
10-Aug-10	28	500	455	7.41	1.59	2.78	5.01	0.019	0.0001	0.00059	0.0002	0.000009	0.0000046	0.0021	0.000001	3.08	0.00023	0.000005	0.00032	0.0009
17-Aug-10	29	500	450	7.35	1.31	2.96	4.05	0.026	0.0002	0.00027	0.0002	0.000009	0.0000045	0.0014	0.000001	3.25	0.00023	0.000001	0.00023	0.0009
24-Aug-10	30	500	445	7.10	1.29	2.52	4.01	0.019	0.0001	0.00040	0.0002	0.000009	0.0000045	0.0014	0.000001	2.99	0.00022	0.000004	0.00022	0.0009
31-Aug-10	31	500	470	7.41	2.04	3.40	6.11	0.017	0.0002	0.00019	0.0002	0.000009	0.0000047	0.0012	0.000001	2.99	0.00024	0.000006	0.00028	0.0009
07-Sep-10	32	500	435	6.77	1.43	2.19	6.09	0.019	0.0001	0.00022	0.0002	0.000009	0.0000044	0.0017	0.000001	2.56	0.00030	0.000005	0.00048	0.0013
14-Sep-10	33	500	435	6.73	1.34	2.17	5.22	0.015	0.0003	0.00022	0.0001	0.000009	0.0000044	0.0010	0.000001	2.54	0.00022	0.000007	0.00039	0.0009
21-Sep-10	34	500	435	6.90	1.16	2.24	5.22	0.020	0.0002	0.00670	0.0005	0.000009	0.0000174	0.0039	0.000003	2.56	0.00022	0.000028	0.00048	0.0009
28-Sep-10	35	500	415	6.87	0.93	2.02	7.06	0.019	0.0001	0.00025	0.0002	0.000008	0.0000042	0.0010	0.000001	2.65	0.00021	0.000008	0.00025	0.0008
05-Oct-10	36	500	425	6.88	1.25	2.19	5.95	0.016	0.0002	0.00047	0.0003	0.000009	0.0000043	0.0013	0.000001	2.84	0.00021	0.000019	0.00021	0.0009
12-Oct-10	37	500	445	6.78	1.20	1.95	6.23	0.015	0.0004	0.00031	0.0002	0.000009	0.0000045	0.0017	0.000001	3.07	0.00022	0.000016	0.00312	0.0009
19-Oct-10	38	500	455	6.80	1.42	2.21	5.92	0.013	0.0001	0.00014	0.0014	0.000009	0.0000046	0.0014	0.000001	2.85	0.00023	0.000007	0.00023	0.0009
26-Oct-10	39	500	450	6.77	1.18	1.84	4.95	0.014	0.0005	0.00018	0.0002	0.000009	0.0000045	0.0013	0.000001	2.52	0.00036	0.000007	0.00027	0.0009
02-Nov-10	40	500	460	6.92	0.90	1.96	5.52	0.016	0.0001	0.00018	0.0003	0.000009	0.0000046	0.0020	0.000001	2.96	0.00023	0.000006	0.00023	0.0009
09-Nov-10	41	500	435	6.95	1.27	1.87	5.22	0.011	0.0002	0.00022	0.0002	0.000009	0.0000044	0.0007	0.000001	3.09	0.00026	0.000016	0.00026	0.0009
16-Nov-10	42	500	415	7.29	1.28	1.73	4.57	0.008	0.0001	0.00012	0.0002	0.000008	0.0000042	0.0020	0.000002	2.61	0.00025	0.000012	0.00037	0.0008
23-Nov-10	43	500	430	6.71	0.95	1.79	4.30	0.008	0.0001	0.00017	0.0002	0.000009	0.0000043	0.0012	0.000001	2.33	0.00026	0.000018	0.00030	0.0009
30-Nov-10	44	500	455	6.91	1.45	2.38	2.28	0.011	0.0001	0.00009	0.0002	0.000009	0.0000046	0.0012	0.000001	2.63	0.00023	0.000009	0.00027	0.0009
07-Dec-10	45	500	430	6.82	1.29	1.75	2.58	0.010	0.0001	0.00009	0.0003	0.000009	0.0000043	0.0011	0.000001	3.04	0.00030	0.000014	0.00056	0.0009
14-Dec-10	46	500	465	7.04	1.80	2.08	5.58	0.010	0.0001	0.00019	0.0002	0.000009	0.0000047	0.0016	0.000001	2.96	0.00033	0.000011	0.00033	0.0009
21-Dec-10	47	500	450	7.18	2.06	2.14	4.95	0.009	0.0001	0.00018	0.0002	0.000009	0.0000045	0.0011	0.000003	2.88	0.00027	0.000013	0.00095	0.0009
28-Dec-10	48	500	455	7.34	2.16	2.36	5.01	0.012	0.0001	0.00014	0.0002	0.000009	0.0000046	0.0018	0.000001	2.83	0.00041	0.000010	0.00036	0.0009
04-Jan-11	49	500	440	7.21	1.89	2.13	4.40	0.009	0.0001	0.00013	0.0002	0.000009	0.0000044	0.0008	0.000002	2.31	0.00022	0.000009	0.00031	0.0009
11-Jan-11	50	500	425	6.81	1.21	1.55	4.68	0.008	0.0001	0.00009	0.0002	0.000009	0.0000043	0.0016	0.000001	2.58	0.00021	0.000013	0.00021	0.0017
18-Jan-11	51	500	430	6.68	1.24	1.41	4.73	0.008	0.0001	0.00013	0.0002	0.000009	0.0000043	0.0009	0.000001	2.49	0.00022	0.000013	0.00022	0.0009
25-Jan-11	52	500	430	6.80	1.47	1.49	5.59	0.007	0.0001	0.00013	0.0002	0.000009	0.0000043	0.0012	0.000001	2.39	0.00022	0.000015	0.00022	0.0009
01-Feb-11	53	500	435	6.67	1.29	1.46	3.92	0.004	0.0001	0.00013	0.0004	0.000009	0.0000044	0.0009	0.000003	2.32	0.00022	0.000018	0.00039	0.0009
08-Feb-11	54	500	430	6.72	1.05	1.22	5.59	0.006	0.0001	0.00013	0.0001	0.000009	0.0000043	0.0007	0.000002	2.41	0.00022	0.000015	0.00022	0.0009
15-Feb-11	55	500	460	6.71	1.32	1.24	1.84	0.005	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0015	0.000001	2.37	0.00023	0.000018	0.00023	0.0009
22-Feb-11	56	500	430	6.87	1.32	1.45	6.88	0.005	0.0001	0.00013	0.0002	0.000009	0.0000043	0.0013	0.000003	2.52	0.00022	0.000020	0.00026	0.0009
01-Mar-11	57	500	445	6.59	1.02	1.21	7.57	0.007	0.0001	0.00013	0.0001	0.000009	0.0000045	0.0010	0.000001	2.59	0.00022	0.000016	0.00027	0.0009
08-Mar-11	58	500	455	6.68	1.38	1.62	5.92	0.005	0.0001	0.00009	0.0004	0.000009	0.0000046	0.0011	0.000003	3.39	0.00023	0.000024	0.00055	0.0014
15-Mar-11	59	500	455	6.84	1.40	1.48	5.01	0.005	0.0001	0.00014	0.0002	0.000009	0.0000046	0.0011	0.000011	3.56	0.00023	0.000026	0.00050	0.0009
22-Mar-11	60	500	475	6.94	1.52	1.56	7.13	0.005	0.0001	0.00010	0.0004	0.000010	0.0000048	0.0010	0.000003	3.71	0.00024	0.000023	0.00057	0.0010
29-Mar-11	61	500	510	7.21	1.86	2.91	10.71	0.007	0.0001	0.00015	0.0003	0.000010	0.0000051	0.0015	0.000003	6.17	0.00026	0.000024	0.00031	0.0010
05-Apr-11	62	500	470	7.03	1.65	2.15	7.05	0.005	0.0001	0.00009	0.0002	0.000009	0.0000047	0.0011	0.000002	3.80	0.00024	0.000020	0.00028	0.0009
12-Apr-11	63	500	460	6.89	1.14	1.63	6.90	0.005	0.0001	0.00018	0.0002	0.000009	0.0000046	0.0008	0.000002	3.28	0.00023	0.000020	0.00023	0.0028
19-Apr-11	64	500	460	7.21	2.15	2.23	7.36	0.005	0.0001	0.00009	0.0002	0.000009	0.0000046	0.0009	0.000028	3.17	0.00023	0.000028	0.00023	0.0009
26-Apr-11	65	500	435	6.94	1.17	1.25	5.66	0.004	0.0001	0.00017	0.0002	0.000009	0.0000044	0.0008	0.000001	2.91	0.00022	0.000019	0.00022	0.0009
03-May-11	66	500	445	7.20	1.53	1.44	5.79	0.004	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0015	0.000003	2.79	0.00022	0.000027	0.00036	0.0009
10-May-11	67	500	440	6.97	1.43	1.07	5.28	0.003	0.0001	0.00013	0.0002	0.000009	0.0000044	0.0014	0.000002	2.53	0.00022	0.000039	0.00031	0.0009
17-May-11	68	500	440	6.46	1.59	0.70	6.16	0.003	0.0001	0.00013	0.0002	0.000009	0.0000044	0.0009	0.000007	2.47	0.00022	0.000041	0.00022	0.0009
24-May-11	69	500	480	7.12	2.02	1.17	4.80	0.003	0.0001	0.00010	0.0002	0.000010	0.0000048	0.0022	0.000006	2.45	0.00024	0.000038	0.00029	0.0010
31-May-11	70	500	450	7.20	1.98	1.35	6.30	0.002	0.0001	0.00009	0.0003	0.000009	0.0000045	0.0009	0.000009	2.78	0.00023	0.000083	0.00023	0.0009
07-Jun-11	71	500	445	7.3	1.60	1.02	5.34	0.002	0.0001	0.00009	0.0004	0.000009	0.0000045	0.0012	0.000011	3.11	0.00022	0.000080	0.00085	0.0009
14-Jun-11	72	500	435	6.93	1.27	0.64	6.09	0.002	0.0001	0.00013	0.0003	0.000009	0.0000044	0.0010	0.000009	2.87	0.00022	0.000083	0.00070	0.0022
21-Jun-11	73	500	435	6.61	1.14	0.83	7.83	0.002	0.0001	0.00009	0.0003	0.000009	0.0000044	0.0007	0.000010	2.86	0.00022	0.000094	0.00026	0.0009
28-Jun-11	74	500	445	6.68	1.50	0.94	8.01	0.002	0.0001	0.00022	0.0004	0.000009	0.0000045	0.0015	0.000013	3.33	0.00022	0.000117	0.00027	0.0009

HC 8
Sample = Alt 09 07

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	75	500	495	6.73	2.10	1.13	14.85	0.003	0.0001	0.00010	0.0007	0.000010	0.0000050	0.0029	0.000040	5.20	0.00025	0.000142	0.00069	0.0010
12-Jul-11	76	500	445	6.29	1.76	0.76	8.90	0.002	0.0001	0.00013	0.0005	0.000009	0.0000045	0.0011	0.000014	3.81	0.00022	0.000144	0.00040	0.0009
19-Jul-11	77	500	450	6.87	1.98	0.92	8.10	0.004	0.0001	0.00009	0.0005	0.000009	0.0000045	0.0014	0.000016	3.19	0.00023	0.000167	0.00059	0.0009
26-Jul-11	78	500	430	7.11	2.18	0.84	7.74	0.007	0.0001	0.00022	0.0006	0.000009	0.0000043	0.0010	0.000018	2.58	0.00022	0.000234	0.00082	0.0146
02-Aug-11	79	500	455	6.32	2.17	0.81	8.19	0.006	0.0001	0.00009	0.0007	0.000009	0.0000046	0.0012	0.000021	3.29	0.00032	0.000257	0.00055	0.0009
09-Aug-11	80	500	450	6.62	1.89	0.97	17.55	0.015	0.0001	0.00009	0.0010	0.000009	0.0000045	0.0011	0.000032	6.62	0.00027	0.000328	0.00099	0.0027
16-Aug-11	81	500	435	7.04	2.64	1.34	15.23	0.026	0.0001	0.00013	0.0010	0.000009	0.0000044	0.0011	0.000023	5.22	0.00035	0.000361	0.00300	0.0022
23-Aug-11	82	500	445	6.65	2.34	0.96	12.91	0.029	0.0001	0.00009	0.0015	0.000009	0.0000045	0.0013	0.000030	4.98	0.00040	0.000492	0.00156	0.0045
30-Aug-11	83	500	430	6.56	2.18	0.83	13.76	0.047	0.0001	0.00009	0.0018	0.000009	0.0000043	0.0014	0.000049	4.10	0.00026	0.000600	0.00228	0.0056
06-Sep-11	84	500	435	6.18	2.34	0.75	10.44	0.074	0.0001	0.00009	0.0023	0.000009	0.0000044	0.0012	0.000114	3.15	0.00030	0.000718	0.00305	0.0061
13-Sep-11	85	500	445	5.87	2.41	0.40	12.91	0.116	0.0001	0.00009	0.0030	0.000013	0.0000089	0.0016	0.000065	3.31	0.00076	0.000983	0.00312	0.0071
20-Sep-11	86	500	455	5.51	2.67	0.31	12.74	0.139	0.0001	0.00014	0.0034	0.000009	0.0000046	0.0014	0.000061	3.13	0.00100	0.001078	0.00259	0.0155
27-Sep-11	87	500	445	5.46	3.24	0.33	12.02	0.179	0.0001	0.00009	0.0038	0.000018	0.0000045	0.0004	0.000070	2.95	0.00076	0.001264	0.00383	0.0138
04-Oct-11	88	500	520	5.93	2.84	0.66	10.92	0.093	0.0006	0.00026	0.0039	0.000010	0.0000052	0.0031	0.000056	2.94	0.00042	0.000926	0.00369	0.0042
11-Oct-11	89	500	445	5.68	3.57	0.50	10.68	0.176	0.0004	0.00009	0.0040	0.000018	0.0000045	0.0015	0.000067	2.68	0.00031	0.001228	0.00454	0.0085
18-Oct-11	90	500	440	5.04	4.07	0.14	12.32	0.348	0.0002	0.00009	0.0050	0.000013	0.0000044	0.0015	0.000084	2.84	0.00026	0.002020	0.00810	0.0114
25-Oct-11	91	500	435	4.99	4.08	0.04	10.88	0.398	0.0001	0.00009	0.0043	0.000022	0.0000044	0.0012	0.000079	2.67	0.00022	0.002336	0.00596	0.0144
01-Nov-11	92	500	440	4.92	5.03	0.07	13.64	0.484	0.0001	0.00013	0.0049	0.000022	0.0000044	0.0011	0.000083	2.68	0.00057	0.002948	0.00625	0.0176
08-Nov-11	93	500	440	4.94	5.41	0.12	12.32	0.502	0.0001	0.00009	0.0039	0.000022	0.0000044	0.0008	0.000075	2.73	0.00022	0.003458	0.00854	0.0136
15-Nov-11	94	500	440	4.86	5.54	0.04	12.76	0.524	0.0001	0.00009	0.0037	0.000026	0.0000044	0.0010	0.000078	2.39	0.00022	0.003652	0.00880	0.0114
22-Nov-11	95	500	445	4.87	6.30	0.04	11.57	0.681	0.0001	0.00018	0.0038	0.000027	0.0000045	0.0009	0.000107	2.51	0.00022	0.004321	0.01210	0.0147
29-Nov-11	96	500	440	4.86	7.48	0.04	13.64	0.678	0.0001	0.00009	0.0039	0.000026	0.0000044	0.0011	0.000081	2.31	0.00022	0.004884	0.01250	0.0128
06-Dec-11	97	500	435	4.8	6.10	0.04	10.44	0.622	0.0001	0.00009	0.0034	0.000026	0.0000044	0.0008	0.000087	2.17	0.00022	0.004481	0.01288	0.0135
13-Dec-11	98	500	440	4.95	5.99	0.11	11.88	0.607	0.0001	0.00009	0.0035	0.000031	0.0000044	0.0008	0.000081	2.20	0.00048	0.004752	0.01650	0.0145
20-Dec-11	99	500	435	4.80	6.75	0.04	12.62	0.705	0.0001	0.00026	0.0037	0.000017	0.0000044	0.0008	0.000103	2.11	0.00022	0.005177	0.01805	0.0135
27-Dec-11	100	500	440	4.75	7.30	0.04	12.76	0.766	0.0001	0.00035	0.0036	0.000022	0.0000044	0.0011	0.000115	2.20	0.00022	0.005940	0.02059	0.0150
03-Jan-12	101	500	440	4.64	7.66	0.04	14.52	0.744	0.0001	0.00035	0.0036	0.000026	0.0000044	0.0013	0.000095	2.35	0.00022	0.006204	0.02433	0.0150
10-Jan-12	102	500	445	4.66	6.55	0.04	11.13	0.748	0.0001	0.00009	0.0035	0.000027	0.0000045	0.0010	0.000146	2.18	0.00022	0.006230	0.02603	0.0142
17-Jan-12	103	500	440	4.55	6.82	0.04	13.20	0.871	0.0001	0.00009	0.0030	0.000031	0.0000044	0.0015	0.000092	2.36	0.00022	0.006204	0.02495	0.0158
24-Jan-12	104	500	475	4.57	7.75	0.05	16.63	0.907	0.0001	0.00010	0.0031	0.000033	0.0000048	0.0010	0.000092	2.19	0.00024	0.006650	0.03092	0.0185
31-Jan-12	105	500	440	4.45	7.26	#N/A	13.64	0.744	0.0001	0.00013	0.0031	0.000031	0.0000044	0.0011	0.000175	1.85	0.00022	0.005764	0.03287	0.0163
07-Feb-12	106	500	490	4.37	11.57	#N/A	27.44	1.436	0.0001	0.00010	0.0054	0.000044	0.0000049	0.0016	0.000158	4.28	0.00025	0.010584	0.04949	0.0240
14-Feb-12	107	500	435	4.51	8.43	0.04	14.36	0.870	0.0001	0.00013	0.0030	0.000026	0.0000044	0.0007	0.000169	2.38	0.00022	0.005525	0.03558	0.0152
21-Feb-12	108	500	435	4.54	8.28	0.04	14.79	1.040	0.0001	0.00009	0.0027	0.000026	0.0000044	0.0018	0.000143	2.25	0.00022	0.005177	0.03832	0.0161
28-Feb-12	109	500	435	4.42	9.49	#N/A	15.66	1.383	0.0001	0.00009	0.0029	0.000035	0.0000044	0.0010	0.000087	2.35	0.00022	0.006003	0.04072	0.0235
06-Mar-12	110	500	440	4.45	11.47	#N/A	17.16	2.152	0.0001	0.00009	0.0026	0.000040	0.0000044	0.0008	0.000112	2.15	0.00022	0.006116	0.05368	0.0211
13-Mar-12	111	500	435	4.33	11.96	#N/A	16.97	1.392	0.0001	0.00009	0.0029	0.000039	0.0000044	0.0009	0.000088	2.27	0.00022	0.005916	0.05220	0.0204
20-Mar-12	112	500	465	4.3	16.04	#N/A	22.32	1.837	0.0001	0.00042	0.0031	0.000056	0.0000047	0.0012	0.000129	2.75	0.00023	0.008603	0.06975	0.0307
27-Mar-12	113	500	450	4.33	14.27	#N/A	21.15	1.908	0.0001	0.00036	0.0030	0.000041	0.0000045	0.0011	0.000104	2.93	0.00023	0.006570	0.05760	0.0257
03-Apr-12	114	500	450	4.22	13.49	#N/A	20.25	1.454	0.0001	0.00009	0.0028	0.000036	0.0000045	0.0009	0.000130	2.63	0.00023	0.006435	0.05580	0.0261
10-Apr-12	115	500	450	4.23	14.25	#N/A	22.05	1.787	0.0001	0.00009	0.0030	0.000050	0.0000045	0.0013	0.000131	2.57	0.00023	0.006615	0.05625	0.0347
17-Apr-12	116	500	445	4.25	14.07	#N/A	21.81	1.865	0.0001	0.00009	0.0025	0.000045	0.0000045	0.0009	0.000082	2.46	0.00022	0.006453	0.04984	0.0307
24-Apr-12	117	500	435	4.25	12.38	#N/A	19.58	1.466	0.0001	0.00009	0.0025	0.000035	0.0000044	0.0008	0.000062	2.30	0.00022	0.005655	0.04481	0.0305
01-May-12	118	500	430	4.26	16.18	#N/A	24.94	1.625	0.0001	0.00009	0.0019	0.000043	0.0000043	0.0007	0.000074	2.13	0.00022	0.006708	0.04988	0.0357
08-May-12	119	500	430	4.2	14.20	#N/A	18.06	1.441	0.0001	0.00009	0.0021	0.000039	0.0000043	0.0012	0.000074	2.06	0.00022	0.005848	0.04601	0.0404
15-May-12	120	500	425	4.13	14.08	#N/A	19.98	1.679	0.0001	0.00009	0.0021	0.000043	0.0000043	0.0009	0.000089	2.16	0.00021	0.005908	0.04718	0.0400
22-May-12	121	500	515	4.15	17.75	#N/A	28.33	2.101	0.0001	0.00010	0.0025	0.000052	0.0000052	0.0010	0.000077	5.30	0.00046	0.006901	0.04753	0.0427
29-May-12	122	500	440	4.1	14.52	#N/A	19.80	1.672	0.0001	0.00009	0.0016	0.000040	0.0000044	0.0011	0.000062	2.09	0.00022	0.005412	0.03472	0.0361
05-Jun-12	123	500	425	4.47	11.29	#N/A	16.58	1.645	0.0001	0.00009	0.0020	0.000038	0.0000043	0.0013	0.000094	2.16	0.00021	0.004973	0.04101	0.0391
12-Jun-12	124	500	435	4.06	17.13	#N/A	22.19	2.014	0.0001	0.00009	0.0023	0.000044	0.0000044	0.0012	0.000076	2.87	0.00039	0.006525	0.03867	0.0622
19-Jun-12	125	500	430	3.98	22.80	#N/A	25.37	2.632	0.0001	0.00013	0.0020	0.000060	0.0000043	0.0010	0.000103	2.41	0.00060	0.008643	0.04945	0.0710
26-Jun-12	126	500	435	4.04	19.79	#N/A	26.97	2.262	0.0001	0.00009	0.0021	0.000052	0.0000044	0.0014	0.000090	2.91	0.00052	0.006970	0.04224	0.0600
03-Jul-12	127	500	430	4.14	19.29	#N/A	24.08	2.111	0.0001	0.00009	0.0018	0.000043	0.0000043	0.0007	0.000092	3.26	0.00043	0.006235	0.03216	0.0529
10-Jul-12	128	500	430	3.97	20.82	#N/A	33.54	2.494	0.0001	0.00030	0.0022	0.000043	0.0000043	0.0011	0.000097	5.46	0.00052	0.006966	0.03797	0.0598
17-Jul-12	129	500	500	4.12	12.06	#N/A	34.50	1.430	0.0001	0.00010	0.0025	0.000025	0.0000050	0.0016	0.000071	9.15	0.00030	0.004450	0.02115	0.0325
24-Jul-12	130	500	445	4.04	16.89	#N/A	29.82	1.718	0.0001	0.00036	0.0022	0.000040	0.0000045	0.0010	0.000083	5.30	0.00058	0.006052	0.02852	0.0454
31-Jul-12	131	500	440	4.05	11.94	#N/A	19.36	1.184	0.0001	0.00009	0.0016	0.000022	0.0000044	0.0008	0.000060	3.50	0.00026	0.003859	0.01813	0.0361
07-Aug-12	132	500	440	4.08	13.64	#N/A	21.56	1.219	0.0001	0.00044	0.0021	0.000026	0.0000044	0.0011	0.000073	3.85	0.00026	0.004114	0.02156	0.0343
14-Aug-12	133	500	440	3.94	21.39	#N/A	54.56	2.737	0.0001	0.00018	0.0023	0.000048	0.0000044	0.0010	0.000122	11.35	0.00075	0.007700	0.03428	0.0713
21-Aug-12	134	500	445	4.07	14.48	#N/A	24.48	1.620	0.0001	0.00076	0.0017	0.000031	0.0000045	0.0011	0.000067	5.65	0.00031	0.004410	0.01825	0.0347
28-Aug-12	135	500	440	4.14	11.47	#N/A	14.08	0.942	0.0001	0.00009	0.0019	0.000013	0.0000044	0.0048	0.000133	3.40	0.00048	0.002710	0.01443	0.0387
04-Sep-12	136	500	435	4.04	15.28	#N/A	21.75	1.840	0.0001	0.00026	0.0016	0.000030	0.0000044	0.0010	0.000069	3.40	0.00030	0.004481	0.01844	0.0378
11-Sep-12	137	500	455	4.04	16.01	#N/A	22.75	2.120	0.0001	0.00009	0.0016	0.000032	0.0000046	0.0009	0.000105	3.13	0.00050	0.005506	0.02948	0.0491
18-Sep-12	138	500	440	4.1	12.36	#N/A	22.44	1.549	0.0001	0.00022	0.0018	0.000026	0.0000044	0.0011	0.000061	3.41	0.00035	0.003674	0.01404	0.0352
25-Sep-12	139	500	440	4.11	10.91	#N/A	22.00	1.175	0.0001	0.00048	0.0015	0.000022	0.0000044	0.0011	0.000072	4.25	0.00026	0.003648	0.02072	0.0260
02-Oct-12	140	500	440	4.23	7.87	#N/A	14.96	0.647	0.0001	0.00018	0.0014	0.000009	0.0000044	0.0013	0.000040	3.43	0.00022	0.002235	0.01030	0.0136
09-Oct-12	141	500	440	4.13	12.21	#N/A	25.08	1.276	0.0001	0.00018	0.0016	0.000022	0.0000044	0.0011	0.000061	5.10	0.00022	0.003234	0.01316	0.0194
16-Oct-12	142	500	425	4.15	8.28	#N/A	20.83	0.939	0.0001	0.00009	0.0014	0.000013	0.0000043	0.0011	0.000039	4.97	0.00021	0.002482	0.00978	0.0145
23-Oct-12	143	500	435	4.17	8.66	#N/A	18.71	0.944	0.0001	0.00009	0.0013	0.000009	0.0000044	0.0006	0.000046	3.71	0.00022	0.002427	0.01166	0.0126
30-Oct-12	144	500	435	4.05	12.32	#N/A	22.62	1.444	0.0001	0.00009	0.0016	0.000026	0.0000044	0.0014	0.000513	4.19	0.00022	0.003863	0.01588	0.0209
06-Nov-12	145	500	440	4.25	7.04	#N/A	11.44	0.708	0.0001	0.00009	0.0016	0.000013	0.0000044	0.0013	0.000038	2.97	0.00022	0.002244	0.01003	0.0088
13-Nov-12	146	500	435	4.33	8.37	#N/A	9.57	0.587	0.0001	0.00009	0.0018	0.000009	0.0000044	0.0011	0.000030	1.98	0.00022	0.002153	0.00787	0.0091
20-Nov-12	147	500	505	4.41	11.43	#N/A	14.65	1.081	0.0001	0.00015	0.0031	0.000020	0.0000051	0.0023	0.000056	2.45	0.00035	0.003530	0.01278	0.0146
27-Nov-12	148	500	490	4.28	11.77	#N/A	26.95	1.201	0.0001	0.00015	0.0026	0.000015	0.0000049	0.0018	0.000062	5.39	0.00025	0.003974	0.01357	0.0294
04-Dec-12	149	500	440	4.22	8.99	#N/A	17.16	1.096	0.0001	0.00009	0.0014	0.000018	0.0000044	0.0008	0.000095	2.69	0.00022	0.002680	0.01800	0.0299
11-Dec-12	150	500	450	4.30	7.83	#N/A	11.25	0.824	0.0001	0.00009	0.0014	0.000014	0.0000045	0.0013	0.000061	1.71	0.00023	0.002642	0.01341	0.0234
18-Dec-12	151	500	455	4.24	7.76	#N/A	10.92	0.846	0.0001	0.00009	0.0014	0.000014	0.0000046	0.0008	0.000050	1.42	0.00023	0.002384	0.00819	0.0241
25-Dec-12	152	500	450	4.21	9.86	#N/A	13.05	1.080	0.0001	0.00009	0.0013	0.000014	0.0000045	0.0008	0.000047	1.46	0.00023	0.003168	0.01017	0.0396
01-Jan-13	153	500	470	4.15	10.20	#N/A	13.63	1.048	0.0001	0.00009	0.0014	0.000014	0.0000047	0.0009	0.000062	1.45	0.00024	0.003050	0.01029	0.0343
08-Jan-13	154	500	455	4.13	10.77	#N/A	14.11	0.987	0.0001	0.00009	0.0023	0.000014	0.0000046	0.0009	0.000138	1.56	0.00023	0.002998	0.00996	0.0396
15-Jan-13	155	500	465	4.09	8.18	#N/A	13.49	0.949	0.0001	0.00009	0.0014	0.000009	0.0000047	0.0007	0.000045	1.32	0.00023	0.002781	0.00888	0.0270
22-Jan-13	156	500	460	3.94	14.98	#N/A	20.24	1.693	0.0001	0.00018	0.0017	0.000018	0.0000046	0.0010	0.000071	1.78	0.00032	0.004223	0.01348	0.0938
29-Jan-13	157	500	495	3.82	19.33	#N/A	33.17	2.792	0.0001	0.00010	0.0029	0.000025	0.0000050	0.0013	0.000080	4.74	0.00050	0.006237	0.02124	0.2970
05-Feb-13	158	500	455	3.97	15.40	#N/A	21.39													
12-Feb-13	159	500	460	3.88	20.47	#N/A	24.84													

HC 8
Sample = Alt 09 07

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	0.000071	0.0042	0.98	0.010	0.0042	0.00126	0.00025	0.0042	3.43	0.00020	0.49	0.000004	4.77	0.032	9.75	0.00008	0.00008	0.00004	0.000012	0.00010	0.0004	0.000017
09-Feb-10	0.000098	0.0031	1.04	0.010	0.0045	0.00162	0.00009	0.0045	2.63	0.00018	0.40	0.000004	3.53	0.034	8.81	0.00009	0.00000	0.00004	0.000037	0.00009	0.0004	0.000013
16-Feb-10	0.000066	0.0021	0.71	0.005	0.0125	0.00108	0.00021	0.0042	1.75	0.00016	0.41	0.000004	1.74	0.024	6.35	0.00008	0.00001	0.00004	0.000056	0.00012	0.0004	0.000017
23-Feb-10	0.000027	0.0018	0.51	0.006	0.0046	0.00046	0.00005	0.0046	1.04	0.00006	0.38	0.000005	0.73	0.019	4.60	0.00009	0.00001	0.00005	0.000033	0.00010	0.0005	0.000005
02-Mar-10	0.000022	0.0009	0.36	0.005	0.0045	0.00032	0.00004	0.0045	0.71	0.00004	0.28	0.000004	0.48	0.014	3.90	0.00009	0.00004	0.00004	0.000030	0.00009	0.0004	0.000004
09-Mar-10	0.000048	0.0009	0.31	0.005	0.0044	0.00024	0.00004	0.0044	0.62	0.00004	0.29	0.000004	0.35	0.013	3.53	0.00009	0.00018	0.00004	0.000023	0.00009	0.0004	0.000009
16-Mar-10	0.000052	0.0009	0.28	0.004	0.0044	0.00022	0.00009	0.0044	0.53	0.00002	0.31	0.000004	0.29	0.011	3.10	0.00009	0.00003	0.00004	0.000023	0.00009	0.0004	0.000004
23-Mar-10	0.000214	0.0009	0.26	0.005	0.0046	0.00020	0.00009	0.0046	0.47	0.00002	0.30	0.000005	0.24	0.011	3.13	0.00009	0.00001	0.00005	0.000032	0.00008	0.0005	0.000005
30-Mar-10	0.000013	0.0004	0.25	0.005	0.0044	0.00019	0.00009	0.0044	0.46	0.00003	0.26	0.000004	0.22	0.011	3.27	0.00009	0.00001	0.00004	0.000032	0.00008	0.0004	0.000004
06-Apr-10	0.000147	0.0005	0.20	0.006	0.0046	0.00016	0.00005	0.0046	0.36	0.00002	0.32	0.000005	0.18	0.011	3.43	0.00009	0.00003	0.00005	0.000038	0.00009	0.0005	0.000005
13-Apr-10	0.000028	0.0009	0.21	0.006	0.0046	0.00019	0.00005	0.0046	0.36	0.00005	0.30	0.000005	0.20	0.010	3.20	0.00009	0.00010	0.00005	0.000041	0.00008	0.0005	0.000005
20-Apr-10	0.000027	0.0004	0.17	0.005	0.0045	0.00016	0.00004	0.0045	0.34	0.00002	0.25	0.000004	0.15	0.009	3.13	0.00009	0.00007	0.00004	0.000033	0.00010	0.0004	0.000004
27-Apr-10	0.000359	0.0005	0.16	0.005	0.0046	0.00018	0.00005	0.0046	0.30	0.00005	0.26	0.000005	0.17	0.008	2.72	0.00009	0.00005	0.00005	0.000032	0.00008	0.0005	0.000009
04-May-10	0.000499	0.0004	0.14	0.005	0.0043	0.00016	0.00004	0.0043	0.26	0.00003	0.25	0.000004	0.17	0.008	2.32	0.00009	0.00006	0.00004	0.000027	0.00009	0.0004	0.000004
11-May-10	0.000565	0.0004	0.14	0.004	0.0045	0.00016	0.00004	0.0089	0.27	0.00002	0.29	0.000009	0.12	0.008	2.64	0.00009	0.00010	0.00004	0.000030	0.00012	0.0004	0.000004
18-May-10	0.000021	0.0004	0.13	0.005	0.0042	0.00020	0.00004	0.0038	0.25	0.00004	0.28	0.000004	0.11	0.008	2.68	0.00008	0.00012	0.00004	0.000021	0.00011	0.0004	0.000004
25-May-10	0.000581	0.0004	0.12	0.005	0.0043	0.00012	0.00004	0.0039	0.22	0.00002	0.25	0.000004	0.11	0.007	2.79	0.00009	0.00010	0.00004	0.000021	0.00010	0.0009	0.000004
01-Jun-10	0.000544	0.0004	0.12	0.005	0.0043	0.00009	0.00004	0.0038	0.20	0.00005	0.23	0.000004	0.10	0.007	2.53	0.00009	0.00008	0.00004	0.000018	0.00009	0.0004	0.000004
08-Jun-10	0.000686	0.0005	0.16	0.007	0.0049	0.00014	0.00005	0.0078	0.22	0.00002	0.36	0.000005	0.11	0.010	4.01	0.00010	0.00006	0.00005	0.000061	0.00009	0.0005	0.000005
15-Jun-10	0.000018	0.0004	0.11	0.005	0.0045	0.00013	0.00004	0.0040	0.16	0.00002	0.24	0.000009	0.10	0.007	2.88	0.00009	0.00014	0.00004	0.000026	0.00010	0.0004	0.000004
22-Jun-10																						
29-Jun-10	0.000013	0.0004	0.09	0.004	0.0044	0.00013	0.00004	0.0040	0.15	0.00002	0.22	0.000004	0.09	0.005	2.13	0.00009	0.00018	0.00004	0.000021	0.00006	0.0004	0.000004
06-Jul-10																						
13-Jul-10	0.000009	0.0005	0.09	0.005	0.0046	0.00013	0.00009	0.0068	0.15	0.00002	0.24	0.000005	0.09	0.006	2.48	0.00009	0.00020	0.00005	0.000031	0.00008	0.0005	0.000018
20-Jul-10																						
27-Jul-10	0.000010	0.0005	0.12	0.006	0.0050	0.00005	0.00005	0.0045	0.15	0.00002	0.35	0.000005	0.11	0.008	3.23	0.00010	0.00012	0.00005	0.000049	0.00009	0.0005	0.000005
03-Aug-10	0.000014	0.0005	0.07	0.004	0.0046	0.00007	0.00009	0.0091	0.12	0.00002	0.20	0.000005	0.07	0.005	2.06	0.00009	0.00006	0.00005	0.000027	0.00006	0.0005	0.000005
10-Aug-10	0.000009	0.0005	0.06	0.003	0.0046	0.00005	0.00009	0.0041	0.11	0.00005	0.23	0.000005	0.06	0.005	1.92	0.00009	0.00000	0.00005	0.000018	0.00008	0.0005	0.000005
17-Aug-10	0.000014	0.0005	0.07	0.000	0.0045	0.00006	0.00005	0.0041	0.12	0.00002	0.26	0.000005	0.07	0.005	2.90	0.00009	0.00005	0.00005	0.000023	0.00009	0.0005	0.000005
24-Aug-10	0.000022	0.0004	0.06	0.003	0.0045	0.00003	0.00009	0.0040	0.10	0.00002	0.23	0.000004	0.07	0.004	2.03	0.00009	0.00003	0.00004	0.000018	0.00008	0.0013	0.000004
31-Aug-10	0.000014	0.0005	0.06	0.000	0.0047	0.00002	0.00005	0.0042	0.10	0.00004	0.24	0.000005	0.06	0.004	2.14	0.00009	0.00000	0.00005	0.000020	0.00008	0.0005	0.000005
07-Sep-10	0.000318	0.0004	0.05	0.000	0.0044	0.00002	0.00004	0.0039	0.09	0.00002	0.21	0.000004	0.06	0.002	1.78	0.00009	0.00002	0.00004	0.000014	0.00010	0.0004	0.000004
14-Sep-10	0.000013	0.0004	0.06	0.005	0.0044	0.00015	0.00009	0.0039	0.09	0.00002	0.21	0.000004	0.07	0.004	1.74	0.00009	0.00023	0.00004	0.000014	0.00006	0.0004	0.000004
21-Sep-10	0.000009	0.0004	0.06	0.004	0.0044	0.00667	0.00030	0.0044	0.11	0.00031	0.22	0.000013	0.07	0.004	1.84	0.00009	0.00006	0.00004	0.053070	0.00009	0.0004	0.000004
28-Sep-10	0.000033	0.0004	0.06	0.004	0.0042	0.00007	0.00004	0.0037	0.10	0.00002	0.21	0.000004	0.07	0.004	2.00	0.00008	0.00015	0.00004	0.000012	0.00007	0.0004	0.000004
05-Oct-10	0.000021	0.0004	0.07	0.005	0.0043	0.00013	0.00004	0.0038	0.11	0.00002	0.23	0.000004	0.08	0.004	2.13	0.00009	0.00030	0.00004	0.000009	0.00007	0.0004	0.000004
12-Oct-10	0.000076	0.0004	0.07	0.005	0.0045	0.00009	0.00018	0.0040	0.09	0.00002	0.25	0.000004	0.08	0.005	2.13	0.00009	0.00031	0.00004	0.000007	0.00007	0.0013	0.000004
19-Oct-10	0.000014	0.0005	0.06	0.005	0.0046	0.00002	0.00005	0.0041	0.08	0.00002	0.23	0.000005	0.06	0.004	2.00	0.00009	0.00002	0.00005	0.000012	0.00006	0.0009	0.000005
26-Oct-10	0.000050	0.0005	0.06	0.005	0.0045	0.00003	0.00018	0.0041	0.08	0.00068	0.18	0.000005	0.07	0.004	2.01	0.00009	0.00000	0.00005	0.000010	0.00007	0.0014	0.000005
02-Nov-10	0.000198	0.0005	0.06	0.005	0.0046	0.00001	0.00028	0.0041	0.08	0.00002	0.25	0.000005	0.08	0.004	2.11	0.00009	0.00002	0.00005	0.000011	0.00001	0.0005	0.000005
09-Nov-10	0.000274	0.0004	0.07	0.006	0.0044	0.00005	0.00013	0.0191	0.09	0.00002	0.21	0.000004	0.09	0.005	2.15	0.00009	0.00011	0.00004	0.000961	0.00006	0.0004	0.000004
16-Nov-10	0.000394	0.0004	0.06	0.006	0.0042	0.00004	0.00008	0.0037	0.08	0.00002	0.18	0.000004	0.06	0.004	1.90	0.00008	0.00007	0.00004	0.000011	0.00004	0.0012	0.000004
23-Nov-10	0.000030	0.0004	0.05	0.006	0.0043	0.00007	0.00004	0.0039	0.07	0.00010	0.20	0.000004	0.05	0.003	1.49	0.00009	0.00008	0.00004	0.000011	0.00006	0.0009	0.000004
30-Nov-10	0.000014	0.0005	0.07	0.006	0.0046	0.00010	0.00018	0.0041	0.07	0.00002	0.22	0.000005	0.07	0.004	1.85	0.00009	0.00009	0.00005	0.000020	0.00007	0.0009	0.000009
07-Dec-10	0.000688	0.0004	0.07	0.006	0.0043	0.00008	0.00009	0.0069	0.07	0.00002	0.20	0.000004	0.06	0.004	1.80	0.00009	0.00011	0.00004	0.000015	0.00006	0.0013	0.000004
14-Dec-10	0.000414	0.0005	0.07	0.006	0.0047	0.00010	0.00019	0.0042	0.07	0.00004	0.22	0.000005	0.07	0.004	1.96	0.00009	0.00011	0.00005	0.000018	0.00007	0.0014	0.000005
21-Dec-10	0.000212	0.0005	0.06	0.001	0.0045	0.00000	0.00009	0.0081	0.07	0.00002	0.22	0.000005	0.06	0.004	1.95	0.00009	0.00007	0.00005	0.000013	0.00005	0.0009	0.000005
28-Dec-10	0.001074	0.0005	0.07	0.006	0.0046	0.00002	0.00005	0.0109	0.07	0.00002	0.22	0.000005	0.07	0.004	2.29	0.00009	0.00006	0.00005	0.000009	0.00006	0.0009	0.000005
04-Jan-11	0.000409	0.0004	0.06	0.005	0.0044	0.00001	0.00009	0.0114	0.06	0.00002	0.20	0.000004	0.07	0.003	1.68	0.00009	0.00002	0.00004	0.000009	0.00005	0.0009	0.000004
11-Jan-11	0.000009	0.0004	0.06	0.007	0.0043	0.00002	0.00009	0.0038	0.07	0.00002	0.18	0.000004	0.06	0.004	1.88	0.00009	0.00012	0.00004	0.000008	0.00005	0.0004	0.000004
18-Jan-11	0.000017	0.0004	0.06	0.008	0.0043	0.00000	0.00004	0.0129	0.07	0.00002	0.21	0.000004	0.06	0.004	1.87	0.00009	0.00009	0.00004	0.000007	0.00004	0.0004	0.000009
25-Jan-11	0.000017	0.0004	0.06	0.006	0.0043	0.00001	0.00013	0.0039	0.06	0.00002	0.20	0.000004	0.07	0.003	1.74	0.00009	0.00014	0.00004	0.000009	0.00005	0.0004	0.000004
01-Feb-11	0.000009	0.0004	0.06	0.008	0.0044	0.00001	0.00013	0.0231	0.06	0.00002	0.18	0.000004	0.06	0.003	2.34	0.00009	0.00001	0.00004	0.000005	0.00004	0.0004	0.000004
08-Feb-11	0.000009	0.0004	0.07	0.008	0.0043	0.00000	0.00004	0.0039	0.06	0.00002	0.21	0.000004	0.05	0.003	1.78	0.00009	0.00019	0.00004	0.000006	0.00003	0.0004	0.000004
15-Feb-11	0.000635	0.0005	0.06	0.008	0.0046	0.00006	0.00009	0.0124	0.06	0.00002	0.22	0.000005	0.05	0.003	1.75	0.00009	0.00011	0.00005	0.000007	0.00001	0.0005	0.000005
22-Feb-11	0.000009	0.0004	0.06	0.008	0.0043	0.00001	0.00004	0.0039	0.06	0.00002	0.22	0.000004	0.06	0.004	1.80	0.00009	0.00000	0.00004	0.000005	0.00003	0.0004	0.000004
01-Mar-11	0.000503	0.0004	0.07	0.009	0.0045	0.00001	0.00009	0.0040	0.05	0.00002	0.22	0.000004	0.06	0.004	1.95	0.00009	0.00008	0.00004	0.000006	0.00004	0.0004	0.000004
08-Mar-11	0.000382	0.0005	0.08	0.011	0.0046	0.00003	0.00005	0.0059	0.06	0.00002	0.24	0.000005	0.06	0.005	2.52	0.00009	0.00010	0.00005	0.000008	0.00004	0.0009	0.000005
15-Mar-11	0.000359	0.0005	0.09	0.011	0.0046	0.00002	0.00018	0.0109	0.06	0.00002	0.26	0.000005	0.07	0.005	2.54	0.00001	0.00010	0.00005	0.000009	0.00004	0.0023	0.000005
22-Mar-11	0.000024	0.0005	0.08	0.012	0.0048	0.00000	0.00005	0.0043	0.05	0.00002	0.29	0.000005	0.05	0.005	2.85	0.00010	0.00012	0.00005	0.000007	0.00004	0.0005	0.000005
29-Mar-11	0.000010	0.0005	0.14	0.017	0.0051	0.00001	0.00015	0.0128	0.08	0.00002	0.42	0.000005	0.08	0.008	4.82	0.00010	0.00006	0.00005	0.000017	0.00005	0.0005	0.000005
05-Apr-11	0.000009	0.0005	0.08	0.011	0.0047	0.00002	0.00014	0.0042	0.06	0.00002	0.31	0.000005	0.06	0.005	2.95	0.00009	0.00005	0.00005	0.000009	0.00004	0.0005	0.000005
12-Apr-11	0.000014	0.0005	0.09	0.014	0.0046	0.00005	0.00005	0.0041	0.06	0.00009	0.29	0.000005	0.06	0.005	2.62	0.00009	0.00003	0.00005	0.000007	0.00005	0.0005	0.000005
19-Apr-11	0.000405	0.0005	0.08	0.012	0.0046	0.00010	0.00009	0.0175	0.06	0.00019	0.30	0.000005	0.06	0.005	2.47	0.00009	0.00004	0.00005	0.000007	0.00006	0.0037	0.000005
26-Apr-11	0.000009	0.0004	0.08	0.012	0.0044	0.00000	0.00022	0.0091	0.06	0.00002	0.24	0.000004	0.06	0.004	2.31	0.00009	0.00000	0.00004	0.000004	0.00003	0.0004	0.000004
03-May-11	0.000018	0.0004	0.08	0.014	0.0045	0.00001	0.00009	0.0040	0.06	0.00015	0.28	0.000004	0.06	0.004	2.26	0.00009	0.00000	0.00004	0.000004	0.00002	0.0004	0.000004
10-May-11	0.000022	0.0004	0.08	0.015	0.0044	0.00000	0.00018	0.0040	0.06	0.00002	0.22	0.000004	0.06	0.004	2.16	0.00009	0.00005	0.00009	0.000005	0.00001	0.0009	0.000004
17-May-11	0.000018	0.0004	0.08	0.016	0.0044	0.00001	0.00009	0.0150	0.06	0.00002	0.23	0.000009	0.07	0.004	2.07	0.00009	0.00006	0.00004	0.000007	0.00002	0.0018	0.000004
24-May-11	0.000019	0.0005	0.09	0.017	0.0048	0.00000	0.00005	0.0043	0.06	0.00002	0.35	0.000005	0.06	0.004	2.01	0.00010	0.00006	0.00005	0.000006	0.00002	0.0010	0.000005
31-May-11	0.000018	0.0005	0.11	0.029	0.0045	0.00001	0.00005	0.0041	0.07	0.00008	0.35	0.000005	0.07	0.005	2.36	0.00009	0.00006	0.00005	0.000005	0.00001	0.0009	0.000005
07-Jun-11	0.000036	0.0004	0.15	0.033	0.0045	0.00000	0.00018	0.0071	0.08	0.00004	0.35	0.000004	0.10	0.005	2.83	0.00001	0.00008	0.00009	0.000003	0.00001	0.0013	0.000004
14-Jun-11	0.000039	0.0004	0.14	0.034	0.0044	0.00002	0.00026	0.0039	0.07	0.00009	0.34	0.000004	0.10	0.005	2.56	0.00001	0.00007	0.00004	0.000008	0.00001	0.0013	0.000004
21-Jun-11	0.000057	0.0004	0.16	0.037	0.0044	0.00000	0.00009	0.0052	0.08	0.00002	0.30	0.000004	0.08	0.006	2.55	0.00001	0.00005	0.00004	0.000010	0.00001	0.0017	0.000004
28-Jun-11	0.000053	0.0004	0.18	0.050	0.0045	0.00007	0.00022	0.0040	0.08	0.00002	0.40	0.000004	0.08	0.007	2.94	0.00001	0.00001	0.00004	0.000012	0.00001	0.0013	0.000004

HC 8
Sample = Alt 09 07

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	0.000050	0.0005	0.29	0.080	0.0050	0.00002	0.00035	0.0045	0.09	0.00009	0.77	0.000005	0.13	0.010	4.65	0.00001	0.00005	0.00010	0.000011	0.00001	0.0035	0.000005
12-Jul-11	0.000076	0.0004	0.21	0.059	0.0045	0.00009	0.00022	0.0040	0.09	0.00003	0.48	0.000004	0.09	0.008	3.37	0.00001	0.00004	0.00004	0.000014	0.00001	0.0009	0.000004
19-Jul-11	0.000410	0.0005	0.21	0.050	0.0045	0.00000	0.00032	0.0063	0.09	0.00012	0.37	0.000005	0.11	0.007	2.97	0.00001	0.00006	0.00005	0.000017	0.00001	0.0014	0.000023
26-Jul-11	0.000155	0.0004	0.18	0.065	0.0043	0.00017	0.00039	0.0060	0.08	0.00002	0.32	0.000004	0.07	0.007	2.33	0.00001	0.00000	0.00017	0.000023	0.00001	0.0013	0.000004
02-Aug-11	0.000127	0.0005	0.26	0.069	0.0046	0.00001	0.00027	0.0041	0.11	0.00004	0.50	0.000005	0.10	0.008	3.12	0.00001	0.00001	0.00005	0.000025	0.00001	0.0014	0.000005
09-Aug-11	0.000248	0.0005	0.29	0.078	0.0045	0.00007	0.00036	0.0041	0.11	0.00002	0.50	0.000005	0.11	0.014	6.12	0.00001	0.00000	0.00005	0.000040	0.00001	0.0018	0.000005
16-Aug-11	0.002327	0.0004	0.25	0.070	0.0044	0.00002	0.00039	0.0039	0.11	0.00002	0.39	0.000004	0.11	0.012	5.00	0.00001	0.00003	0.00004	0.000044	0.00001	0.0017	0.000004
23-Aug-11	0.000294	0.0004	0.32	0.097	0.0045	0.00002	0.00053	0.0040	0.13	0.00002	0.51	0.000004	0.12	0.013	4.76	0.00001	0.00005	0.00004	0.000063	0.00001	0.0031	0.000004
30-Aug-11	0.003956	0.0004	0.33	0.106	0.0043	0.00001	0.00077	0.0039	0.13	0.00002	0.42	0.000004	0.13	0.013	4.09	0.00001	0.00005	0.00009	0.000080	0.00001	0.0043	0.000004
06-Sep-11	0.000857	0.0004	0.37	0.113	0.0044	0.00027	0.00087	0.0039	0.13	0.00002	0.42	0.000004	0.13	0.012	3.59	0.00001	0.00002	0.00004	0.000104	0.00001	0.0100	0.000004
13-Sep-11	0.002203	0.0004	0.42	0.128	0.0045	0.00002	0.00085	0.0040	0.15	0.00012	0.54	0.000004	0.15	0.013	3.91	0.00001	0.00009	0.00009	0.000124	0.00001	0.0053	0.000018
20-Sep-11	0.001483	0.0005	0.42	0.125	0.0046	0.00004	0.00100	0.0041	0.15	0.00002	0.49	0.000005	0.15	0.013	4.15	0.00001	0.00018	0.00005	0.000131	0.00001	0.0050	0.000009
27-Sep-11	0.001593	0.0009	0.41	0.118	0.0045	0.00002	0.00142	0.0040	0.16	0.00002	0.49	0.000004	0.16	0.013	3.93	0.00001	0.00007	0.00004	0.000154	0.00001	0.0062	0.000009
04-Oct-11	0.001420	0.0010	0.30	0.099	0.0052	0.00003	0.00104	0.0047	0.12	0.00002	0.69	0.000005	0.11	0.010	3.37	0.00001	0.00010	0.00010	0.000094	0.00002	0.0042	0.000005
11-Oct-11	0.001807	0.0009	0.29	0.087	0.0045	0.00001	0.00129	0.0040	0.12	0.00002	0.50	0.000004	0.11	0.010	3.24	0.00001	0.00003	0.00004	0.000133	0.00001	0.0058	0.000004
18-Oct-11	0.002222	0.0009	0.34	0.097	0.0044	0.00004	0.00185	0.0040	0.14	0.00004	0.53	0.000004	0.14	0.011	3.96	0.00001	0.00002	0.00004	0.000192	0.00001	0.0088	0.000004
25-Oct-11	0.002419	0.0009	0.34	0.090	0.0044	0.00000	0.00178	0.0039	0.14	0.00003	0.46	0.000004	0.15	0.010	3.75	0.00001	0.00004	0.00004	0.000227	0.00001	0.0083	0.000004
01-Nov-11	0.002970	0.0013	0.37	0.092	0.0044	0.00002	0.00207	0.0040	0.15	0.00007	0.53	0.000004	0.15	0.010	3.92	0.00001	0.00006	0.00009	0.000267	0.00001	0.0101	0.000009
08-Nov-11	0.001940	0.0013	0.39	0.088	0.0044	0.00000	0.00207	0.0040	0.16	0.00004	0.48	0.000004	0.18	0.009	4.23	0.00001	0.00001	0.00009	0.000248	0.00004	0.0106	0.000004
15-Nov-11	0.001690	0.0013	0.32	0.073	0.0044	0.00000	0.00202	0.0040	0.14	0.00011	0.41	0.000004	0.16	0.007	3.74	0.00001	0.00002	0.00018	0.000261	0.00009	0.0123	0.000004
22-Nov-11	0.009657	0.0013	0.38	0.082	0.0045	0.00000	0.00236	0.0040	0.14	0.00014	0.57	0.000004	0.14	0.008	4.16	0.00001	0.00000	0.00009	0.000291	0.00004	0.0182	0.000004
29-Nov-11	0.001280	0.0018	0.35	0.077	0.0044	0.00006	0.00246	0.0040	0.15	0.00010	0.54	0.000004	0.17	0.007	4.06	0.00001	0.00004	0.00022	0.000257	0.00012	0.0158	0.000004
06-Dec-11	0.002319	0.0013	0.31	0.075	0.0044	0.00000	0.00196	0.0039	0.13	0.00007	0.47	0.000030	0.15	0.006	3.86	0.00001	0.00000	0.00009	0.000272	0.00007	0.0161	0.000004
13-Dec-11	0.001030	0.0013	0.32	0.090	0.0044	0.00001	0.00220	0.0053	0.14	0.00014	0.57	0.000004	0.18	0.007	3.87	0.00001	0.00005	0.00004	0.000267	0.00001	0.0172	0.000044
20-Dec-11	0.004067	0.0017	0.31	0.092	0.0044	0.00000	0.00252	0.0039	0.13	0.00033	0.52	0.000004	0.15	0.006	3.93	0.00001	0.00000	0.00009	0.000264	0.00005	0.0226	0.000004
27-Dec-11	0.001201	0.0018	0.34	0.108	0.0044	0.00002	0.00290	0.0040	0.13	0.00002	0.57	0.000004	0.17	0.006	4.19	0.00001	0.00000	0.00018	0.000297	0.00009	0.0220	0.000004
03-Jan-12	0.001003	0.0018	0.35	0.122	0.0044	0.00000	0.00308	0.0040	0.13	0.00004	0.57	0.000004	0.17	0.007	4.44	0.00001	0.00001	0.00013	0.000294	0.00015	0.0216	0.000004
10-Jan-12	0.000979	0.0018	0.32	0.117	0.0045	0.00000	0.00307	0.0040	0.12	0.00007	0.58	0.000004	0.17	0.006	4.17	0.00001	0.00000	0.00009	0.000284	0.00016	0.0254	0.000004
17-Jan-12	0.001052	0.0018	0.29	0.108	0.0044	0.00000	0.00299	0.0040	0.12	0.00007	0.56	0.000004	0.16	0.006	4.30	0.00001	0.00001	0.00013	0.000330	0.00010	0.0220	0.000004
24-Jan-12	0.000955	0.0019	0.31	0.118	0.0048	0.00000	0.00314	0.0043	0.13	0.00010	0.57	0.000005	0.19	0.007	4.60	0.00001	0.00002	0.00010	0.000358	0.00011	0.0242	0.000005
31-Jan-12	0.003617	0.0018	0.26	0.096	0.0044	0.00002	0.00260	0.0040	0.11	0.00005	0.47	0.000004	0.18	0.006	4.02	0.00001	0.00004	0.00009	0.000366	0.00015	0.0374	0.000004
07-Feb-12	0.001205	0.0025	0.47	0.180	0.0049	0.00000	0.00515	0.0044	0.16	0.00014	1.64	0.000005	0.27	0.012	7.60	0.00001	0.00000	0.00025	0.000591	0.00010	0.0372	0.000005
14-Feb-12	0.001248	0.0017	0.25	0.084	0.0044	0.00000	0.00261	0.0039	0.10	0.00007	0.47	0.000004	0.18	0.007	4.39	0.00001	0.00000	0.00004	0.000375	0.00001	0.0331	0.000004
21-Feb-12	0.000744	0.0017	0.24	0.086	0.0044	0.00000	0.00244	0.0039	0.10	0.00009	0.50	0.000004	0.20	0.007	4.61	0.00001	0.00000	0.00004	0.000367	0.00004	0.0196	0.000004
28-Feb-12	0.000753	0.0017	0.25	0.093	0.0044	0.00001	0.00283	0.0039	0.11	0.00006	0.52	0.000004	0.19	0.007	4.87	0.00001	0.00001	0.00013	0.000385	0.00012	0.0213	0.000004
06-Mar-12	0.002270	0.0018	0.25	0.084	0.0044	0.00000	0.00312	0.0040	0.11	0.00004	0.61	0.000004	0.22	0.007	5.46	0.00001	0.00000	0.00013	0.000475	0.00010	0.0238	0.000004
13-Mar-12	0.000679	0.0017	0.24	0.082	0.0044	0.00003	0.00274	0.0039	0.10	0.00008	0.56	0.000004	0.22	0.007	5.09	0.00001	0.00013	0.00004	0.000455	0.00001	0.0191	0.000004
20-Mar-12	0.000749	0.0023	0.32	0.111	0.0047	0.00002	0.00400	0.0042	0.12	0.00009	1.05	0.000005	0.28	0.009	6.98	0.00001	0.00007	0.00005	0.000577	0.00001	0.0279	0.000005
27-Mar-12	0.001904	0.0018	0.26	0.093	0.0045	0.00000	0.00320	0.0041	0.09	0.00006	0.94	0.000005	0.25	0.009	6.57	0.00001	0.00000	0.00009	0.000594	0.00009	0.0216	0.000005
03-Apr-12	0.001283	0.0018	0.24	0.082	0.0045	0.00000	0.00302	0.0041	0.10	0.00004	0.91	0.000005	0.25	0.008	6.44	0.00001	0.00000	0.00005	0.000482	0.00005	0.0230	0.000005
10-Apr-12	0.000711	0.0018	0.25	0.086	0.0135	0.00000	0.00315	0.0041	0.09	0.00011	1.00	0.000005	0.28	0.009	6.57	0.00001	0.00002	0.00009	0.000486	0.00010	0.0189	0.000005
17-Apr-12	0.000663	0.0018	0.24	0.082	0.0045	0.00000	0.00307	0.0040	0.09	0.00008	0.68	0.000004	0.24	0.008	6.45	0.00001	0.00000	0.00004	0.000512	0.00007	0.0160	0.000004
24-Apr-12	0.000592	0.0017	0.21	0.073	0.0044	0.00025	0.00261	0.0039	0.09	0.00007	0.45	0.000004	0.23	0.008	5.74	0.00001	0.00000	0.00017	0.000526	0.00014	0.0144	0.000004
01-May-12	0.000830	0.0017	0.25	0.089	0.0043	0.00000	0.00310	0.0039	0.09	0.00010	0.55	0.000004	0.27	0.008	6.67	0.00001	0.00001	0.00009	0.000598	0.00009	0.0159	0.000004
08-May-12	0.002984	0.0017	0.22	0.077	0.0043	0.00000	0.00280	0.0039	0.09	0.00003	0.49	0.000004	0.26	0.008	6.19	0.00001	0.00009	0.00004	0.000568	0.00006	0.0168	0.000004
15-May-12	0.003778	0.0017	0.22	0.079	0.0043	0.00000	0.00285	0.0038	0.09	0.00007	0.48	0.000004	0.27	0.009	6.12	0.00001	0.00000	0.00004	0.000578	0.00007	0.0187	0.000004
22-May-12	0.000912	0.0021	0.26	0.090	0.0052	0.00001	0.00330	0.0046	0.10	0.00013	0.53	0.000005	0.30	0.018	9.84	0.00001	0.00002	0.00005	0.000623	0.00015	0.0144	0.000005
29-May-12	0.000484	0.0013	0.20	0.069	0.0044	0.00000	0.00246	0.0040	0.08	0.00012	0.62	0.000004	0.24	0.009	6.12	0.00001	0.00005	0.00004	0.000510	0.00009	0.0110	0.000004
05-Jun-12	0.000850	0.0013	0.20	0.067	0.0043	0.00003	0.00225	0.0038	0.08	0.00007	0.47	0.000004	0.26	0.010	6.29	0.00001	0.00000	0.00009	0.000536	0.00010	0.0106	0.000004
12-Jun-12	0.000548	0.0017	0.24	0.083	0.0044	0.00000	0.00313	0.0039	0.10	0.00014	0.81	0.000004	0.32	0.012	7.70	0.00001	0.00013	0.00004	0.000566	0.00008	0.0126	0.000004
19-Jun-12	0.000787	0.0022	0.32	0.108	0.0043	0.00000	0.00409	0.0039	0.12	0.00008	0.58	0.000004	0.38	0.011	9.07	0.00001	0.00007	0.00004	0.000856	0.00011	0.0159	0.000004
26-Jun-12	0.000605	0.0017	0.26	0.084	0.0044	0.00000	0.00339	0.0039	0.10	0.00017	0.67	0.000004	0.38	0.013	8.31	0.00001	0.00003	0.00009	0.000731	0.00013	0.0135	0.000004
03-Jul-12	0.000507	0.0013	0.24	0.080	0.0043	0.00012	0.00301	0.0039	0.08	0.00007	0.48	0.000004	0.33	0.015	8.39	0.00001	0.00009	0.00013	0.000645	0.00009	0.0112	0.000004
10-Jul-12	0.001367	0.0017	0.30	0.095	0.0043	0.00001	0.00348	0.0039	0.11	0.00012	0.44	0.000004	0.43	0.021	10.79	0.00001	0.00005	0.00004	0.000692	0.00005	0.0120	0.000004
17-Jul-12	0.000625	0.0010	0.17	0.057	0.0050	0.00001	0.00220	0.0045	0.07	0.00013	0.52	0.000010	0.26	0.032	12.00	0.00001	0.00001	0.00020	0.000494	0.00013	0.0075	0.000005
24-Jul-12	0.000619	0.0013	0.23	0.075	0.0045	0.00000	0.00289	0.0040	0.08	0.00028	0.67	0.000004	0.37	0.021	10.15	0.00001	0.00001	0.00004	0.000587	0.00005	0.0093	0.000004
31-Jul-12	0.000361	0.0009	0.15	0.051	0.0044	0.00000	0.00180	0.0040	0.06	0.00006	0.59	0.000004	0.27	0.015	6.69	0.00001	0.00002	0.00004	0.000458	0.00009	0.0062	0.000004
07-Aug-12	0.001822	0.0009	0.17	0.056	0.0044	0.00000	0.00211	0.0040	0.06	0.00008	0.46	0.000004	0.29	0.017	7.22	0.00001	0.00004	0.00009	0.000510	0.00018	0.0106	0.000004
14-Aug-12	0.003186	0.0018	0.32	0.099	0.0044	0.00000	0.00378	0.0040	0.09	0.00024	0.55	0.000004	0.49	0.045	17.47	0.00001	0.00006	0.00009	0.000867	0.00009	0.0119	0.000004
21-Aug-12	0.000449	0.0009	0.17	0.055	0.0045	0.00012	0.00223	0.0040	0.05	0.00009	0.50	0.000004	0.28	0.023	8.99	0.00001	0.00032	0.00009	0.000516	0.00012	0.0076	0.000004
28-Aug-12	0.000409	0.0004	0.09	0.034	0.0044	0.00119	0.00167	0.0040	0.04	0.00002	0.54	0.000004	0.19	0.015	5.46	0.00001	0.00037	0.00009	0.000446	0.00017	0.0106	0.000004
04-Sep-12	0.000331	0.0009	0.16	0.053	0.0261	0.00018	0.00370	0.0039	0.05	0.00010	0.45	0.000004	0.30	0.016	6.96	0.00001	0.00015	0.00004	0.000566	0.00013	0.0074	0.000004
11-Sep-12	0.001269	0.0009	0.20	0.063	0.0046	0.00000	0.00241	0.0041	0.06	0.00005	0.57	0.000005	0.35	0.015	8.24	0.00001	0.00008	0.00005	0.000751	0.00005	0.0082	0.000005
18-Sep-12	0.000308	0.0009	0.16	0.048	0.0044	0.00000	0.00172	0.0040	0.06	0.00007	0.37	0.000004	0.30	0.016	6.95	0.00001	0.00005	0.00004	0.000510	0.00011	0.0092	0.000004
25-Sep-12	0.000625	0.0009	0.16	0.046	0.0044	0.00000	0.00264	0.0040	0.05	0.00007	0.45	0.000004	0.25	0.017	7.08	0.00001	0.00008	0.00004	0.000453	0.00007	0.0070	0.000004
02-Oct-12	0.000352	0.0004	0.09	0.030	0.0044	0.00011	0.00110	0.0040	0.04	0.00002	0.45	0.000004	0.18	0.014	5.19	0.00001	0.00018	0.00004	0.000297	0.00004	0.0040	0.000004
09-Oct-12	0.000466	0.0009	0.14	0.044	0.0044	0.00000	0.00172	0.0040	0.05	0.00009	0.49	0.000004	0.27	0.022	7.61	0.00001	0.00006	0.00004	0.000444	0.00005	0.0053	0.000004
16-Oct-12	0.000225	0.0004	0.10	0.031	0.0043	0.00000	0.00123	0.0038	0.04	0.00004	0.30	0.000004	0.21	0.019	6.67	0.00001	0.00004	0.00004	0.000315	0.00006	0.0038	0.000004
23-Oct-12	0.003115	0.0004	0.10	0.033	0.0044	0.00003	0.00135	0.0039	0.04	0.00011	0.33	0.000004	0.20	0.016	5.57	0.00001	0.00001	0.00004	0.000307	0.00004	0.0057	0.000004
30-Oct-12	0.000779	0.0009	0.18	0.051	0.0044	0.00001	0.00196	0.0039	0.05	0.00010	0.32	0.000004	0.32	0.021	7.48	0.00001	0.00002	0.00004	0.000452	0.00007	0.0057	0.000004
06-Nov-12	0.000436	0.0004	0.09	0.030	0.0044	0.00000	0.00110	0.0040	0.03	0.00007	0.35	0.000004	0.19	0.014	4.24	0.00001	0.00002	0.00004	0.000269	0.00004	0.0040	0.000004
13-Nov-12	0.000570	0.0004	0.07	0.027	0.0044	0.00000	0.00096	0.0039	0.03	0.00007	0.31	0.000004	0.18	0.011	3.76	0.00001	0.00000	0.00004	0.000243	0.00004	0.0035	0.000004
20-Nov-12	0.000328	0.0005	0.12	0.045	0.0051	0.00001	0.00182	0.0045	0.04	0.00008	1.48	0.000025	0.29	0.013	5.05	0.00001	0.00017	0.00010	0.000346	0.00007	0.0091	0.000005
27-Nov-12	0.000495	0.0005	0.11	0.046	0.0049	0.00007	0.00181	0.0044	0.04	0.00012	1.72	0.000005	0.27	0.022	7.89	0.00001	0.00012	0.00005	0.000430	0.00001	0.0074	0.000005
04-Dec-12	0.000418	0.0004	0.08	0.033	0.0044	0.00000	0.00128	0.0040	0.04	0.00002	0.29	0.000004	0.23	0.013	5.63	0.00001	0.00007	0.00004	0.000381	0.00004	0.0062	0.000004
11-Dec-12	0.000203	0.0005	0.06	0.027	0.0045	0.00000	0.00108	0.0041	0.03	0.00009	0.63	0.000005	0.18	0.008	3.66	0.00001	0.00003	0.00005	0.000306	0.00006	0.0054	0.000005
18-Dec-12	0.000150	0.0005	0.06	0.028	0.0046	0.00001	0.00105	0.0041	0.03	0.00002	0.56	0.000014	0.20	0.008	3.77	0.00001	0.00005	0.00005	0.000288	0.00005	0.0041	0.000005
25-Dec-12	0.000153	0.0005	0.08	0.033	0.0045	0.00002	0.00144	0.0041	0.03	0.00008	0.54	0.000005	0.22	0.009	4.32	0.00001	0.00006	0.00005	0.000341	0.00001	0.0041	0.000005
01-Jan-13	0.000273	0.0005	0.07	0.033	0.0047	0.00003	0.00136	0.0042	0.03	0.00009	0.73	0.000005	0.27	0.008	4.15	0.00001	0.00006	0.00005	0.000386	0.00006	0.0061	0.000005
08-Jan-13	0.000287	0.0005	0.07	0.030	0.0046	0.00003	0.00127	0.0041	0.04	0.00008	0.70	0.000005	0.23	0.008	4.11	0.00001	0.00006	0.00005	0.000360	0.00009	0.0055	0.000005
15-Jan-13	0.000237	0.0005	0.07	0.030	0.0047	0.00001	0.00130	0.0042	0.03	0.00007	0.55	0.000009	0.20	0.008	4.18	0.00001	0.00007	0.00009	0.000353	0.00009	0.0037	0.000005
22-Jan-13	0.000281	0.0005	0.10	0.043	0.0046	0.00000	0.00189	0.0041	0.04	0.00007	0.84	0.000014	0.26	0.010	6.07	0.00001	0.00005	0.00028	0.000511	0.00006	0.0055	0.000005
29-Jan-13	0.000525	0.0005	0.17	0.069	0.0050	0.00000	0.00272	0.0045	0.06	0.00013	2.53	0.000020	0.56	0.026	11.98	0.00001	0.00017	0.00005	0.000703	0.00005	0.0079	0.000005
05-Feb-13																						
12-Feb-13																						

HC 9
Sample = Alt 09 11

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	1	500	375	7.76	0.55	9.78	8.25	0.081	0.0007	0.00075	0.0004	0.000008	0.0000075	0.0023	0.000007	2.87	0.00019	0.000050	0.00101	0.0038
09-Feb-10	2	500	460	7.93	0.56	13.84	11.50	0.099	0.0018	0.00064	0.0003	0.000009	0.0000092	0.0046	0.000018	4.69	0.00023	0.000046	0.00055	0.0046
16-Feb-10	3	500	415	7.49	0.88	9.13	13.70	0.086	0.0014	0.00054	0.0004	0.000008	0.0000083	0.0037	0.000015	4.86	0.00021	0.000031	0.00042	0.0042
23-Feb-10	4	500	460	7.6	0.82	7.77	11.04	0.082	0.0010	0.00037	0.0003	0.000009	0.0000046	0.0032	0.000004	4.88	0.00023	0.000017	0.00028	0.0046
02-Mar-10	5	500	450	7.59	0.61	6.79	8.55	0.081	0.0008	0.00032	0.0003	0.000009	0.0000045	0.0023	0.000002	4.29	0.00023	0.000011	0.00027	0.0045
09-Mar-10	6	500	440	7.48	0.85	6.56	8.80	0.066	0.0006	0.00026	0.0003	0.000009	0.0000044	0.0018	0.000001	4.58	0.00022	0.000007	0.00026	0.0044
16-Mar-10	7	500	455	7.40	0.97	7.04	6.37	0.077	0.0007	0.00082	0.0002	0.000009	0.0000046	0.0027	0.000001	5.01	0.00023	0.000007	0.00023	0.0046
23-Mar-10	8	500	450	7.37	1.19	6.21	8.55	0.058	0.0005	0.00023	0.0003	0.000009	0.0000045	0.0018	0.000001	4.27	0.00023	0.000004	0.00023	0.0045
30-Mar-10	9	500	450	7.43	0.86	5.17	7.65	0.051	0.0005	0.00014	0.0003	0.000009	0.0000045	0.0014	0.000001	3.67	0.00023	0.000003	0.00027	0.0045
06-Apr-10	10	500	470	7.34	1.01	5.89	6.58	0.052	0.0004	0.00019	0.0002	0.000009	0.0000047	0.0009	0.000002	4.18	0.00028	0.000004	0.00024	0.0047
13-Apr-10	11	500	465	7.23	1.29	5.84	6.51	0.055	0.0005	0.00019	0.0002	0.000009	0.0000047	0.0014	0.000001	3.69	0.00023	0.000004	0.00023	0.0047
20-Apr-10	12	500	450	7.43	1.12	5.82	4.95	0.054	0.0004	0.00023	0.0003	0.000009	0.0000090	0.0014	0.000001	3.58	0.00027	0.000004	0.00027	0.0045
27-Apr-10	13	500	460	7.61	1.04	6.94	6.90	0.082	0.0003	0.00028	0.0003	0.000009	0.0000046	0.0009	0.000001	3.87	0.00023	0.000003	0.00028	0.0046
04-May-10	14	500	445	7.41	0.93	6.29	5.34	0.062	0.0004	0.00018	0.0002	0.000009	0.0000045	0.0013	0.000001	3.92	0.00022	0.000002	0.00022	0.0045
11-May-10	15	500	455	7.27	0.93	5.78	3.64	0.058	0.0004	0.00027	0.0002	0.000009	0.0000046	0.0014	0.000001	3.56	0.00036	0.000001	0.00023	0.0046
18-May-10	16	500	435	7.36	1.01	5.52	4.35	0.070	0.0003	0.00022	0.0002	0.000009	0.0000044	0.0011	0.000001	3.54	0.00030	0.000044	0.00418	0.0009
25-May-10	17	500	435	7.30	1.41	6.40	3.48	0.081	0.0003	0.00070	0.0002	0.000009	0.0000087	0.0011	0.000001	3.47	0.00022	0.000007	0.00026	0.0017
01-Jun-10	18	500	435	7.34	0.90	5.31	3.05	0.060	0.0002	0.00083	0.0002	0.000009	0.0000044	0.0010	0.000001	3.19	0.00022	0.000005	0.00022	0.0013
08-Jun-10	19	500	495	7.26	1.28	7.00	2.97	0.040	0.0004	0.00020	0.0002	0.000010	0.0000050	0.0017	0.000001	3.99	0.00025	0.000002	0.00025	0.0010
15-Jun-10	20	500	440	7.39	1.13	5.39	2.20	0.060	0.0003	0.00018	0.0003	0.000009	0.0000044	0.0011	0.000001	3.12	0.00022	0.000004	0.00026	0.0009
22-Jun-10	21	500	430	7.56	0.78	5.18														
29-Jun-10	22	500	470	7.20	0.98	4.86	1.88	0.051	0.0001	0.00028	0.0002	0.000009	0.0000047	0.0014	0.000001	2.74	0.00042	0.000003	0.00038	0.0009
06-Jul-10	23	500	455	7.16	1.04	4.40														
13-Jul-10	24	500	445	7.15	1.06	4.82	1.78	0.033	0.0002	0.00022	0.0001	0.000009	0.0000045	0.0015	0.000002	2.45	0.00031	0.000008	0.00058	0.0009
20-Jul-10	25	500	450	7.32	1.52	5.26														
27-Jul-10	26	500	440	7.10	1.32	4.18	5.28	0.033	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0013	0.000003	2.78	0.00026	0.000002	0.00022	0.0009
03-Aug-10	27	500	455	7.31	1.26	4.06	2.73	0.030	0.0002	0.00014	0.0002	0.000009	0.0000046	0.0022	0.000003	2.47	0.00023	0.000005	0.00027	0.0009
10-Aug-10	28	500	465	7.52	1.59	4.78	4.65	0.032	0.0001	0.00042	0.0001	0.000009	0.0000047	0.0024	0.000003	2.77	0.00023	0.000004	0.00037	0.0009
17-Aug-10	29	500	460	7.43	1.24	4.51	0.92	0.048	0.0002	0.00014	0.0002	0.000009	0.0000046	0.0015	0.000002	2.68	0.00023	0.000001	0.00023	0.0009
24-Aug-10	30	500	425	7.26	1.19	4.03	1.28	0.038	0.0001	0.00013	0.0002	0.000009	0.0000043	0.0009	0.000003	2.47	0.00021	0.000002	0.00038	0.0017
31-Aug-10	31	500	435	7.69	1.75	5.05	3.48	0.032	0.0002	0.00009	0.0001	0.000009	0.0000044	0.0011	0.000001	2.35	0.00022	0.000003	0.00035	0.0009
07-Sep-10	32	500	420	7.06	1.36	4.37	3.36	0.047	0.0001	0.00013	0.0001	0.000008	0.0000042	0.0018	0.000003	2.39	0.00029	0.000003	0.00038	0.0013
14-Sep-10	33	500	475	6.97	1.32	4.38	3.33	0.028	0.0003	0.00010	0.0001	0.000010	0.0000048	0.0013	0.000001	2.69	0.00024	0.000004	0.00043	0.0019
21-Sep-10	34	500	420	7.16	1.04	4.03	3.36	0.165	0.0002	0.00214	0.0002	0.000017	0.0000042	0.0013	0.000034	2.33	0.00055	0.000072	0.03524	0.0008
28-Sep-10	35	500	415	7.26	0.88	5.00	3.74	0.060	0.0001	0.00021	0.0002	0.000008	0.0000042	0.0013	0.000004	2.82	0.00021	0.000006	0.00033	0.0008
05-Oct-10	36	500	425	7.19	1.08	4.53	4.25	0.048	0.0002	0.00017	0.0003	0.000009	0.0000043	0.0014	0.000001	2.49	0.00021	0.000013	0.00043	0.0009
12-Oct-10	37	500	425	7.10	1.02	3.70	2.98	0.038	0.0003	0.00038	0.0002	0.000009	0.0000043	0.0012	0.000001	2.31	0.00021	0.000010	0.00060	0.0009
19-Oct-10	38	500	435	7.05	1.13	4.18	3.48	0.032	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0014	0.000002	2.18	0.00022	0.000001	0.00026	0.0009
26-Oct-10	39	500	440	7.03	1.14	3.57	3.08	0.031	0.0004	0.00009	0.0001	0.000009	0.0000044	0.0011	0.000001	2.00	0.00026	0.000001	0.00044	0.0009
02-Nov-10	40	500	445	7.27	0.84	4.10	3.12	0.043	0.0001	0.00013	0.0003	0.000009	0.0000045	0.0019	0.000001	2.39	0.00022	0.000001	0.00040	0.0013
09-Nov-10	41	500	420	7.35	1.16	4.36	2.10	0.043	0.0002	0.00008	0.0001	0.000008	0.0000042	0.0008	0.000003	2.24	0.00021	0.000007	0.00025	0.0017
16-Nov-10	42	500	415	7.50	0.99	4.59	1.66	0.036	0.0001	0.00008	0.0002	0.000008	0.0000042	0.0027	0.000004	2.17	0.00025	0.000005	0.00021	0.0008
23-Nov-10	43	500	420	7.05	0.95	4.55	1.68	0.038	0.0001	0.00013	0.0002	0.000008	0.0000042	0.0012	0.000005	1.97	0.00025	0.000010	0.00029	0.0017
30-Nov-10	44	500	480	7.13	1.41	5.50	0.96	0.028	0.0001	0.00010	0.0003	0.000010	0.0000048	0.0013	0.000004	2.43	0.00034	0.000010	0.00029	0.0010
07-Dec-10	45	500	410	7.20	1.14	6.20	1.23	0.041	0.0002	0.00016	0.0001	0.000008	0.0000041	0.0009	0.000001	3.28	0.00029	0.000005	0.00041	0.0008
14-Dec-10	46	500	435	7.27	1.41	4.78	2.18	0.043	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0014	0.000003	2.21	0.00026	0.000001	0.00048	0.0009
21-Dec-10	47	500	410	7.28	1.65	4.12	2.46	0.037	0.0001	0.00008	0.0002	0.000008	0.0000041	0.0007	0.000022	2.02	0.00021	0.000007	0.00033	0.0008
28-Dec-10	48	500	420	7.47	1.73	4.45	2.52	0.039	0.0001	0.00008	0.0002	0.000008	0.0000042	0.0017	0.000003	2.20	0.00025	0.000002	0.00025	0.0008
04-Jan-11	49	500	480	7.23	2.17	5.08	2.40	0.023	0.0001	0.00010	0.0001	0.000010	0.0000048	0.0011	0.000005	2.33	0.00024	0.000006	0.00024	0.0010
11-Jan-11	50	500	430	7.07	1.10	3.56	2.15	0.029	0.0001	0.00009	0.0002	0.000009	0.0000043	0.0018	0.000004	2.15	0.00022	0.000005	0.00022	0.0026
18-Jan-11	51	500	420	7.03	1.05	3.26	2.94	0.030	0.0001	0.00008	0.0002	0.000008	0.0000042	0.0009	0.000002	2.26	0.00021	0.000011	0.00021	0.0025
25-Jan-11	52	500	430	7.13	1.34	3.71	2.15	0.031	0.0001	0.00013	0.0002	0.000009	0.0000043	0.0010	0.000001	1.78	0.00022	0.000003	0.00022	0.0013
01-Feb-11	53	500	425	7.00	1.13	3.79	0.85	0.021	0.0062	0.00009	0.0002	0.000009	0.0000043	0.0011	0.000033	1.68	0.00021	0.000006	0.00021	0.0009
08-Feb-11	54	500	435	7.11	0.97	3.35	3.92	0.028	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0008	0.000005	1.81	0.00022	0.000003	0.00022	0.0013
15-Feb-11	55	500	430	7.09	1.11	3.36	0.86	0.026	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0012	0.000008	1.81	0.00022	0.000011	0.00026	0.0009
22-Feb-11	56	500	430	7.16	1.20	3.65	3.87	0.028	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0014	0.000004	1.81	0.00022	0.000005	0.00026	0.0009
01-Mar-11	57	500	415	6.99	1.05	2.88	4.15	0.028	0.0001	0.00008	0.0001	0.000008	0.0000042	0.0010	0.000007	1.60	0.00021	0.000004	0.00025	0.0008
08-Mar-11	58	500	425	7.00	1.17	3.17	3.83	0.023	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0008	0.000005	1.68	0.00021	0.000007	0.00030	0.0009
15-Mar-11	59	500	445	7.15	1.21	3.52	3.12	0.027	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0009	0.000004	1.79	0.00022	0.000009	0.00045	0.0018
22-Mar-11	60	500	445	7.23	1.19	3.60	2.67	0.029	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0008	0.000005	1.77	0.00022	0.000004	0.00036	0.0009
29-Mar-11	61	500	500	7.41	1.55	5.19	2.50	0.016	0.0001	0.00010	0.0001	0.000010	0.0000050	0.0010	0.000002	2.66	0.00025	0.000008	0.00025	0.0010
05-Apr-11	62	500	430	7.24	1.27	3.56	3.01	0.020	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0008	0.000003	1.79	0.00022	0.000009	0.00022	0.0017
12-Apr-11	63	500	425	7.17	1.00	2.99	2.98	0.023	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0008	0.000002	1.69	0.00021	0.000005	0.00021	0.0030
19-Apr-11	64	500	440	7.51	1.82	6.69	3.08	0.069	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0007	0.000001	2.63	0.00022	0.000009	0.00022	0.0009
26-Apr-11	65	500	420	7.36	0.94	4.40	2.10	0.050	0.0001	0.00008	0.0002	0.000008	0.0000042	0.0008	0.000003	2.11	0.00021	0.000001	0.00021	0.0017
03-May-11	66	500	435	7.41	1.34	4.14	2.18	0.040	0.0002	0.00009	0.0002	0.000009	0.0000044	0.0012	0.000009	1.81	0.00022	0.000011	0.00030	0.0022
10-May-11	67	500	420	7.33	1.14	3.80	2.10	0.041	0.0001	0.00008	0.0001	0.000008	0.0000042	0.0013	0.000001	1.71	0.00021	0.000009	0.00021	0.0008
17-May-11	68	500	420	7.57	1.17	4.05	2.10	0.030	0.0001	0.00008	0.0001	0.000008	0.0000042	0.0008	0.000003	1.73	0.00021	0.000006	0.00021	0.0008
24-May-11	69	500	520	7.39	1.69	4.07	2.60	0.039	0.0001	0.00010	0.0001	0.000010	0.0000052	0.0026	0.000002	1.94	0.00026	0.000007	0.00026	0.0010
31-May-11	70	500	440	7.44	1.64	3.61	1.76	0.019	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0009	0.000004	1.52	0.00022	0.000010	0.00026	0.0009
07-Jun-11	71	500	430	7.59	1.19	3.46	1.72	0.029	0.0001	0.00013	0.0001	0.000009	0.0000043	0.0009	0.000005	1.67	0.00022	0.000007	0.00034	0.0017
14-Jun-11	72	500	420	7.49	0.99	2.86	2.10	0.023	0.0001	0.00008	0.0002	0.000008	0.0000042	0.0007	0.000004	1.45	0.00021	0.000014	0.00021	0.0025
21-Jun-11	73	500	430	7.33	0.82	3.40	1.72	0.030	0.0001	0.00009	0.0002	0.000009	0.0000043	0.0005	0.000005	1.77	0.00022	0.000006	0.00022	0.0009
28-Jun-11	74	500	430	7.45	0.99	4.45	2.58	0.040	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0011	0.000004	1.90	0.00022	0.000006	0.00022	0.0026

HC 9
Sample = Alt 09 11

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	75	500	485	7.41	1.51	5.67	2.91	0.050	0.0001	0.00010	0.0002	0.000010	0.0000049	0.0022	0.000016	2.70	0.00024	0.000020	0.00024	0.0015
12-Jul-11	76	500	445	7.07	1.57	3.51	2.23	0.032	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0010	0.000003	2.36	0.00022	0.000007	0.00022	0.0009
19-Jul-11	77	500	435	7.39	1.60	3.45	1.74	0.032	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0012	0.000003	1.99	0.00022	0.000006	0.00030	0.0017
26-Jul-11	78	500	430	7.61	1.77	3.78	0.86	0.030	0.0001	0.00022	0.0001	0.000009	0.0000043	0.0008	0.000001	1.50	0.00022	0.000009	0.00022	0.0146
02-Aug-11	79	500	445	7.68	1.77	3.95	0.89	0.033	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0008	0.000004	1.75	0.00022	0.000003	0.00022	0.0022
09-Aug-11	80	500	430	7.51	1.18	3.56	1.29	0.030	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0008	0.000006	1.82	0.00034	0.000008	0.00022	0.0030
16-Aug-11	81	500	435	7.66	2.21	4.58	0.87	0.030	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0008	0.000002	1.69	0.00030	0.000007	0.00022	0.0009
23-Aug-11	82	500	440	7.5	1.79	4.22	1.76	0.037	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0010	0.000007	1.67	0.00026	0.000007	0.00022	0.0022
30-Aug-11	83	500	425	7.52	1.62	3.61	2.13	0.032	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0008	0.000010	1.70	0.00047	0.000010	0.00026	0.0051
06-Sep-11	84	500	430	7.56	1.58	3.20	1.72	0.026	0.0001	0.00009	0.0002	0.000009	0.0000043	0.0007	0.000006	1.59	0.00022	0.000008	0.00022	0.0009
13-Sep-11	85	500	435	7.55	1.49	3.58	1.74	0.026	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0009	0.000007	1.67	0.00052	0.000013	0.00022	0.0009
20-Sep-11	86	500	440	7.29	1.71	3.07	1.76	0.023	0.0001	0.00018	0.0002	0.000009	0.0000044	0.0010	0.000007	1.59	0.00035	0.000011	0.00031	0.0053
27-Sep-11	87	500	435	7.41	2.14	3.61	2.18	0.025	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0001	0.000005	1.53	0.00030	0.000012	0.00022	0.0013
04-Oct-11	88	500	485	7.44	1.84	5.15	2.43	0.031	0.0005	0.00029	0.0003	0.000010	0.0000049	0.0014	0.000005	2.38	0.00034	0.000010	0.00024	0.0010
11-Oct-11	89	500	445	7.58	2.15	4.06	2.23	0.037	0.0003	0.00009	0.0001	0.000009	0.0000045	0.0013	0.000003	1.85	0.00031	0.000004	0.00022	0.0013
18-Oct-11	90	500	450	7.21	1.89	3.15	2.25	0.038	0.0002	0.00009	0.0003	0.000009	0.0000045	0.0011	0.000004	1.74	0.00027	0.000009	0.00041	0.0009
25-Oct-11	91	500	430	7.09	1.26	2.93	1.72	0.028	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0010	0.000007	1.72	0.00022	0.000015	0.00022	0.0013
01-Nov-11	92	500	465	7.18	1.89	3.16	2.33	0.028	0.0001	0.00014	0.0001	0.000009	0.0000047	0.0009	0.000005	1.79	0.00023	0.000020	0.00023	0.0019
08-Nov-11	93	500	450	7.29	2.03	3.12	2.25	0.026	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0008	0.000009	1.77	0.00023	0.000005	0.00027	0.0014
15-Nov-11	94	500	440	7.06	2.16	2.97	1.32	0.036	0.0001	0.00013	0.0001	0.000009	0.0000044	0.0008	0.000003	1.48	0.00022	0.000006	0.00031	0.0031
22-Nov-11	95	500	440	7.32	2.31	3.31	0.88	0.032	0.0001	0.00013	0.0001	0.000009	0.0000044	0.0005	0.000010	1.57	0.00022	0.000005	0.00031	0.0013
29-Nov-11	96	500	445	7.56	2.15	3.64	1.78	0.034	0.0001	0.00013	0.0001	0.000009	0.0000045	0.0008	0.000006	1.58	0.00022	0.000031	0.00022	0.0013
06-Dec-11	97	500	445	7.11	2.09	2.97	1.34	0.027	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0006	0.000008	1.81	0.00022	0.000035	0.00022	0.0027
13-Dec-11	98	500	440	7.40	1.47	6.41	1.32	0.022	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0007	0.000005	1.63	0.00035	0.000004	0.00035	0.0013
20-Dec-11	99	500	435	7.25	1.76	2.73	1.31	0.029	0.0001	0.00030	0.0001	0.000009	0.0000044	0.0005	0.000009	1.41	0.00022	0.000005	0.00022	0.0013
27-Dec-11	100	500	445	7.58	2.01	3.17	0.89	0.032	0.0001	0.00009	0.0003	0.000009	0.0000045	0.0008	0.000004	1.44	0.00022	0.000003	0.00031	0.0013
03-Jan-12	101	500	450	7.27	2.03	3.52	2.25	0.040	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0010	0.000009	1.52	0.00023	0.000018	0.00023	0.0014
10-Jan-12	102	500	450	7.04	1.88	3.02	1.80	0.041	0.0001	0.00009	0.0003	0.000009	0.0000045	0.0007	0.000005	1.47	0.00023	0.000018	0.00027	0.0014
17-Jan-12	103	500	435	7.14	2.00	3.39	1.31	0.026	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0010	0.000006	1.55	0.00022	0.000036	0.00026	0.0013
24-Jan-12	104	500	475	7.3	2.30	3.65	2.38	0.033	0.0001	0.00010	0.0001	0.000010	0.0000048	0.0007	0.000004	1.60	0.00024	0.000030	0.00029	0.0024
31-Jan-12	105	500	430	6.94	1.72	3.34	1.29	0.033	0.0001	0.00026	0.0001	0.000009	0.0000043	0.0008	0.000005	1.47	0.00022	0.000032	0.00060	0.0013
07-Feb-12	106	500	485	7.34	2.13	4.75	2.91	0.028	0.0001	0.00010	0.0001	0.000010	0.0000049	0.0008	0.000004	2.19	0.00024	0.000063	0.00044	0.0015
14-Feb-12	107	500	435	7.22	2.24	2.60	2.18	0.019	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0004	0.000003	1.48	0.00022	0.000003	0.00035	0.0013
21-Feb-12	108	500	455	6.79	1.55	2.84	2.73	0.025	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0016	0.000005	1.66	0.00023	0.000027	0.00041	0.0014
28-Feb-12	109	500	420	7.07	2.07	2.60	1.68	0.036	0.0001	0.00008	0.0002	0.000008	0.0000042	0.0005	0.000004	1.41	0.00021	0.000034	0.00046	0.0013
06-Mar-12	110	500	440	7.19	1.24	2.91	2.20	0.021	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0007	0.000011	1.45	0.00022	0.000007	0.00031	0.0035
13-Mar-12	111	500	445	6.96	2.08	2.89	2.23	0.023	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0008	0.000006	1.47	0.00022	0.000019	0.00053	0.0013
20-Mar-12	112	500	460	6.97	2.43	2.80	1.84	0.015	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0006	0.000005	1.59	0.00023	0.000006	0.00032	0.0014
27-Mar-12	113	500	430	6.8	1.74	2.21	2.15	0.033	0.0001	0.00026	0.0001	0.000009	0.0000043	0.0006	0.000006	1.36	0.00022	0.000012	0.00034	0.0013
03-Apr-12	114	500	460	6.79	2.02	3.00	2.30	0.042	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0007	0.000001	1.74	0.00023	0.000037	0.00064	0.0014
10-Apr-12	115	500	440	6.88	1.38	2.56	1.76	0.040	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0009	0.000001	1.53	0.00022	0.000043	0.00053	0.0013
17-Apr-12	116	500	440	6.87	1.92	2.40	1.76	0.044	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0007	0.000001	1.37	0.00022	0.000040	0.00048	0.0013
24-Apr-12	117	500	440	6.87	1.53	3.12	2.20	0.046	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0007	0.000001	1.56	0.00022	0.000047	0.00066	0.0013
01-May-12	118	500	425	7.17	2.22	2.90	1.70	0.039	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0006	0.000001	1.39	0.00021	0.000040	0.00043	0.0013
08-May-12	119	500	440	6.86	1.74	2.62	1.76	0.033	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0011	0.000001	1.44	0.00022	0.000059	0.00066	0.0013
15-May-12	120	500	405	6.94	1.48	2.22	1.62	0.047	0.0001	0.00008	0.0001	0.000008	0.0000041	0.0008	0.000001	1.32	0.00020	0.000032	0.00049	0.0016
22-May-12	121	500	440	6.86	1.55	2.21	1.76	0.055	0.0001	0.00009	0.0002	0.000009	0.0000044	0.0006	0.000001	1.33	0.00022	0.000041	0.00053	0.0013
29-May-12	122	500	435	6.84	1.83	2.64	1.31	0.055	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0007	0.000001	1.53	0.00022	0.000033	0.00039	0.0044
05-Jun-12	123	500	425	6.89	2.00	2.64	1.28	0.041	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0011	0.000001	1.56	0.00021	0.000017	0.00043	0.0021
12-Jun-12	124	500	455	6.96	1.84	3.08	2.28	0.053	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0010	0.000001	1.77	0.00023	0.000035	0.00032	0.0014
19-Jun-12	125	500	440	6.81	1.32	2.39	1.32	0.033	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0009	0.000001	1.52	0.00022	0.000018	0.00035	0.1038
26-Jun-12	126	500	440	6.92	1.42	2.80	2.20	0.060	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0008	0.000001	1.50	0.00022	0.000036	0.00062	0.0013
03-Jul-12	127	500	445	7.24	2.94	3.48	1.78	0.035	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0007	0.000004	1.56	0.00022	0.000005	0.00031	0.0018
10-Jul-12	128	500	420	6.85	1.73	2.47	2.52	0.050	0.0001	0.00008	0.0001	0.000008	0.0000042	0.0004	0.000003	1.41	0.00021	0.000041	0.00059	0.0013
17-Jul-12	129	500	440	6.93	1.08	2.57	2.20	0.040	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0009	0.000002	1.45	0.00022	0.000026	0.00022	0.0013
24-Jul-12	130	500	450	6.79	1.37	2.39	1.80	0.037	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0006	0.000002	1.52	0.00023	0.000010	0.00023	0.0014
31-Jul-12	131	500	445	6.86	0.96	2.27	1.78	0.048	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0006	0.000004	1.35	0.00022	0.000017	0.00022	0.0013
07-Aug-12	132	500	450	7.07	1.05	2.43	2.25	0.054	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0010	0.000002	1.54	0.00023	0.000038	0.00032	0.0014
14-Aug-12	133	500	440	6.83	1.38	2.20	2.20	0.053	0.0001	0.00009	0.0001	0.000009	0.0000044	0.0006	0.000004	1.54	0.00022	0.000058	0.00048	0.0013
21-Aug-12	134	500	450	6.79	1.40	2.10	2.25	0.032	0.0001	0.00009	0.0000	0.000009	0.0000045	0.0008	0.000004	1.31	0.00023	0.000003	0.00023	0.0014
28-Aug-12	135	500	455	7.03	2.19	2.49	2.73	0.024	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0008	0.000003	1.45	0.00023	0.000001	0.00023	0.0027
04-Sep-12	136	500	455	6.78	2.29	2.53	2.28	0.039	0.0001	0.00009	0.0000	0.000009	0.0000046	0.0008	0.000001	1.70	0.00023	0.000004	0.00023	0.0014
11-Sep-12	137	500	460	6.83	1.36	2.71	2.76	0.023	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0007	0.000003	1.38	0.00023	0.000007	0.00037	0.0014
18-Sep-12	138	500	455	6.8	1.11	2.44	2.28	0.047	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0006	0.000002	1.42	0.00023	0.000001	0.00023	0.0014
25-Sep-12	139	500	450	6.80	1.40	2.34	2.70	0.027	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0007	0.000003	1.28	0.00023	0.000008	0.00023	0.0014
02-Oct-12	140	500	460	6.87	1.54	2.76	1.84	0.020	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0011	0.000002	1.65	0.00023	0.000026	0.00028	0.0014
09-Oct-12	141	500	475	6.93	2.35	2.78	1.90	0.030	0.0001	0.00010	0.0001	0.000010	0.0000048	0.0010	0.000002	1.57	0.00024	0.000015	0.00033	0.0014
16-Oct-12	142	500	465	7.41	2.35	2.83	3.26	0.025	0.0001	0.00009	0.0001	0.000009	0.0000047	0.0010	0.000004	1.77	0.00023	0.000005	0.00023	0.0014
23-Oct-12	143	500	485	6.73	2.08	2.59	4.85	0.037	0.0001	0.00010	0.0001	0.000010	0.0000049	0.0006	0.000012	2.27	0.00024	0.000032	0.00039	0.0015
30-Oct-12	144	500	445	6.74	1.86	2.31	3.56	0.023	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0011	0.000748	1.88	0.00022	0.000004	0.00045	0.0022
06-Nov-12	145	500	450	6.94	1.67	2.22	1.35	0.019	0.0001	0.00009	0.0001	0.000009	0.0000045	0.0011	0.000006	1.69	0.00023	0.000016	0.00027	0.0014
13-Nov-12	146	500	455	7.26	2.40	2.78	1.82	0.015	0.0001	0.00009	0.0001	0.000009	0.0000046	0.0009	0.000014	1.38	0.00023	0.000013	0.00023	0.0014
20-Nov-12	147	500	505	7.58	3.29	4.13	2.02	0.022	0.0001	0.00010	0.0001	0.000010	0.0000051	0.0012	0.000006	2.27	0.00025	0.000037	0.00035	0.0015
27-Nov-12	148	500	490	7.16	2.30	4.24	3.43	0.022	0.0001	0.00010	0.0001	0.000010	0.0000049	0.0010	0.000006	2.17	0.00025	0.000002	0.00025	0.0015
04-Dec-12	149	500	430	6.96	1.00	1.78	2.15	0.027	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0003	0.000005	1.19	0.00022	0.000047	0.00060	0.0013
11-Dec-12	150	500	480	7.11	1.18	3.68	1.44	0.027	0.0001	0.00010	0.0001	0.000010	0.0000048	0.0009	0.000006	1.65	0.00024	0.000034	0.00024	0.0019
18-Dec-12	151	500	485	6.98	1.29	2.95	0.97	0.020	0.0001	0.00010	0.0001	0.000010	0.0000049	0.0005	0.000006	1.59	0.00024	0.000009	0.00024	0.0015
25-Dec-12	152	500	460	6.96	1.51	2.53	0.92	0.025	0.0001	0.00009	0.0000	0.000009	0.0000046	0.0004	0.000004	1.43	0.00023	0.000018	0.00023	0.0014
01-Jan-13	153	500	430	7.07	1.30	2.23	1.72	0.029	0.0001	0.00009	0.0001	0.000009	0.0000043	0.0003	0.000003	1.23	0.00022	0.000022	0.00022	0.0013
08-Jan-13	154	500	450	7.23	1.34	2.56	0.90	0.028	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0005	0.000005	1.10	0.00023	0.000037	0.00023	0.0014
15-Jan-13	155	500	460																	
22-Jan-13	156	500	470	7.42	1.71	3.06	2.35													
29-Jan-13	157	500	455																	
05-Feb-13	158	500	455	7.02	1.60	2.42	2.73													
12-Feb-13	159	500	460																	

HC 9
Sample = Alt 09 11

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	0.002044	0.0008	0.10	0.001	0.0038	0.00024	0.00083	0.0038	2.49	0.00006	0.67	0.000004	3.83	0.011	2.99	0.00008	0.00009	0.00015	0.000004	0.00021	0.0011	0.000041
09-Feb-10	0.002585	0.0009	0.17	0.003	0.0046	0.00038	0.00087	0.0046	2.00	0.00012	0.53	0.000014	3.64	0.018	4.27	0.00009	0.00000	0.00005	0.000042	0.00018	0.0009	0.000014
16-Feb-10	0.001129	0.0008	0.18	0.003	0.0042	0.00032	0.00075	0.0042	1.58	0.00011	0.49	0.000008	3.05	0.019	4.77	0.00008	0.00003	0.00004	0.000055	0.00019	0.0008	0.000012
23-Feb-10	0.000322	0.0009	0.17	0.004	0.0046	0.00016	0.00023	0.0046	1.11	0.00006	0.46	0.000005	1.77	0.017	3.57	0.00009	0.00002	0.00005	0.000065	0.00014	0.0005	0.000009
02-Mar-10	0.000171	0.0005	0.14	0.003	0.0045	0.00012	0.00014	0.0045	0.89	0.00005	0.39	0.000009	1.35	0.014	3.45	0.00009	0.00007	0.00009	0.000051	0.00014	0.0005	0.000009
09-Mar-10	0.000132	0.0004	0.15	0.004	0.0044	0.00011	0.00009	0.0044	0.76	0.00003	0.39	0.000004	0.97	0.015	3.19	0.00009	0.00019	0.00009	0.000061	0.00012	0.0004	0.000009
16-Mar-10	0.000068	0.0009	0.16	0.004	0.0046	0.00011	0.00014	0.0046	0.73	0.00015	0.46	0.000005	0.99	0.015	3.25	0.00009	0.00001	0.00005	0.000065	0.00014	0.0005	0.000005
23-Mar-10	0.000216	0.0009	0.13	0.004	0.0045	0.00010	0.00009	0.0045	0.56	0.00003	0.40	0.000005	0.66	0.013	2.70	0.00009	0.00002	0.00009	0.000061	0.00012	0.0005	0.000014
30-Mar-10	0.000059	0.0005	0.11	0.004	0.0045	0.00010	0.00009	0.0045	0.45	0.00003	0.32	0.000005	0.54	0.011	2.26	0.00009	0.00011	0.00005	0.000043	0.00012	0.0005	0.000005
06-Apr-10	0.000193	0.0005	0.12	0.005	0.0047	0.00010	0.00005	0.0047	0.43	0.00002	0.39	0.000005	0.59	0.013	2.58	0.00009	0.00003	0.00009	0.000052	0.00011	0.0005	0.000009
13-Apr-10	0.000042	0.0005	0.10	0.005	0.0047	0.00010	0.00005	0.0047	0.36	0.00004	0.35	0.000005	0.48	0.011	2.08	0.00009	0.00004	0.00005	0.000049	0.00011	0.0005	0.000005
20-Apr-10	0.000149	0.0005	0.10	0.005	0.0045	0.00010	0.00005	0.0045	0.37	0.00002	0.33	0.000005	0.40	0.010	2.11	0.00009	0.00008	0.00005	0.000051	0.00013	0.0005	0.000014
27-Apr-10	0.000497	0.0005	0.10	0.004	0.0046	0.00011	0.00005	0.0046	0.36	0.00008	0.40	0.000005	0.40	0.010	1.91	0.00009	0.00008	0.00005	0.000044	0.00015	0.0005	0.000005
04-May-10	0.000579	0.0004	0.10	0.004	0.0045	0.00013	0.00004	0.0045	0.34	0.00004	0.38	0.000004	0.39	0.011	1.73	0.00009	0.00008	0.00004	0.000046	0.00015	0.0004	0.000004
11-May-10	0.000055	0.0005	0.09	0.004	0.0046	0.00012	0.00005	0.0091	0.31	0.00002	0.42	0.000018	0.34	0.010	1.78	0.00009	0.00018	0.00005	0.000042	0.00017	0.0005	0.000009
18-May-10	0.000048	0.0004	0.08	0.003	0.0044	0.00016	0.00009	0.0039	0.27	0.00002	0.38	0.000004	0.30	0.009	1.55	0.00009	0.00017	0.00004	0.000035	0.00014	0.0004	0.000004
25-May-10	0.000091	0.0004	0.08	0.003	0.0044	0.00010	0.00004	0.0039	0.25	0.00002	0.37	0.000004	0.30	0.009	1.71	0.00009	0.00010	0.00013	0.000041	0.00017	0.0009	0.000013
01-Jun-10	0.000444	0.0004	0.07	0.004	0.0044	0.00008	0.00004	0.0039	0.21	0.00003	0.33	0.000004	0.25	0.008	1.55	0.00009	0.00008	0.00009	0.000036	0.00015	0.0004	0.000004
08-Jun-10	0.000673	0.0005	0.09	0.006	0.0050	0.00010	0.00005	0.0050	0.23	0.00002	0.43	0.000005	0.29	0.010	1.92	0.00010	0.00009	0.00005	0.000082	0.00013	0.0005	0.000005
15-Jun-10	0.000048	0.0004	0.07	0.004	0.0044	0.00011	0.00004	0.0040	0.19	0.00002	0.32	0.000018	0.25	0.008	1.57	0.00009	0.00037	0.00009	0.000038	0.00015	0.0004	0.000009
22-Jun-10																						
29-Jun-10	0.000052	0.0005	0.06	0.004	0.0047	0.00009	0.00005	0.0042	0.17	0.00002	0.31	0.000005	0.21	0.007	1.24	0.00009	0.00073	0.00005	0.000034	0.00011	0.0005	0.000009
06-Jul-10																						
13-Jul-10	0.000036	0.0004	0.06	0.004	0.0045	0.00011	0.00009	0.0058	0.16	0.00002	0.31	0.000004	0.20	0.007	1.39	0.00009	0.00019	0.00004	0.000040	0.00013	0.0004	0.000027
20-Jul-10																						
27-Jul-10	0.000026	0.0004	0.06	0.004	0.0044	0.00002	0.00004	0.0040	0.14	0.00002	0.28	0.000004	0.18	0.007	1.37	0.00009	0.00006	0.00004	0.000024	0.00011	0.0004	0.000004
03-Aug-10	0.000023	0.0005	0.05	0.003	0.0046	0.00005	0.00005	0.0041	0.13	0.00002	0.26	0.000005	0.16	0.006	1.13	0.00009	0.00006	0.00005	0.000029	0.00010	0.0005	0.000005
10-Aug-10	0.000028	0.0005	0.05	0.004	0.0047	0.00004	0.00009	0.0042	0.14	0.00002	0.30	0.000005	0.16	0.007	1.20	0.00009	0.00000	0.00005	0.000022	0.00013	0.0009	0.000005
17-Aug-10	0.000055	0.0005	0.05	0.001	0.0046	0.00005	0.00005	0.0041	0.14	0.00002	0.30	0.000009	0.17	0.006	1.79	0.00009	0.00005	0.00014	0.000024	0.00012	0.0005	0.000005
24-Aug-10	0.000055	0.0004	0.04	0.004	0.0043	0.00003	0.00009	0.0038	0.12	0.00002	0.25	0.000009	0.15	0.006	1.22	0.00009	0.00004	0.00013	0.000018	0.00011	0.0009	0.000009
31-Aug-10	0.000030	0.0004	0.04	0.000	0.0044	0.00002	0.00004	0.0039	0.12	0.00002	0.26	0.000004	0.14	0.005	1.17	0.00009	0.00001	0.00004	0.000019	0.00011	0.0004	0.000004
07-Sep-10	0.000231	0.0004	0.03	0.000	0.0042	0.00002	0.00004	0.0055	0.12	0.00003	0.28	0.000004	0.14	0.004	1.06	0.00008	0.00001	0.00008	0.000018	0.00014	0.0008	0.000013
14-Sep-10	0.000480	0.0005	0.05	0.006	0.0190	0.00014	0.00005	0.0043	0.11	0.00002	0.30	0.000005	0.16	0.006	1.24	0.00010	0.00006	0.00005	0.000027	0.00009	0.0005	0.000010
21-Sep-10	0.000046	0.0008	0.04	0.003	0.0042	0.00002	0.00176	0.0038	0.12	0.00002	0.29	0.000004	0.13	0.006	1.13	0.00008	0.00004	0.00004	0.000073	0.00012	0.0076	0.000008
28-Sep-10	0.000071	0.0004	0.05	0.002	0.0042	0.00007	0.00004	0.0037	0.14	0.00002	0.33	0.000004	0.17	0.007	1.41	0.00008	0.00015	0.00004	0.000017	0.00013	0.0008	0.000021
05-Oct-10	0.000055	0.0004	0.04	0.003	0.0085	0.00012	0.00004	0.0051	0.14	0.00002	0.31	0.000004	0.17	0.006	1.22	0.00009	0.00028	0.00009	0.000013	0.00011	0.0009	0.000021
12-Oct-10	0.000034	0.0004	0.04	0.003	0.0043	0.00006	0.00013	0.0038	0.11	0.00002	0.26	0.000004	0.15	0.006	1.08	0.00009	0.00018	0.00009	0.003583	0.00010	0.0004	0.000004
19-Oct-10	0.000035	0.0004	0.03	0.004	0.0044	0.00002	0.00004	0.0039	0.10	0.00002	0.26	0.000004	0.13	0.005	0.91	0.00009	0.00000	0.00004	0.000013	0.00010	0.0013	0.000004
26-Oct-10	0.000079	0.0004	0.04	0.003	0.0044	0.00004	0.00013	0.0040	0.10	0.00057	0.20	0.000004	0.13	0.004	1.08	0.00009	0.00000	0.00009	0.000011	0.00009	0.0013	0.000004
02-Nov-10	0.000120	0.0004	0.04	0.003	0.0045	0.00003	0.00022	0.0040	0.12	0.00002	0.25	0.000004	0.18	0.006	1.21	0.00009	0.00003	0.00009	0.000012	0.00003	0.0022	0.000009
09-Nov-10	0.000244	0.0004	0.04	0.002	0.0042	0.00005	0.00004	0.0080	0.11	0.00002	0.24	0.000004	0.16	0.005	0.91	0.00008	0.00010	0.00004	0.000030	0.00009	0.0008	0.000004
16-Nov-10	0.000108	0.0004	0.04	0.003	0.0042	0.00004	0.00008	0.0037	0.11	0.00002	0.26	0.000004	0.13	0.005	0.82	0.00008	0.00010	0.00008	0.000013	0.00008	0.0021	0.000025
23-Nov-10	0.000038	0.0004	0.03	0.003	0.0042	0.00008	0.00004	0.0038	0.09	0.00003	0.24	0.000004	0.12	0.004	0.58	0.00008	0.00006	0.00013	0.000012	0.00009	0.0017	0.000008
30-Nov-10	0.000048	0.0005	0.04	0.004	0.0048	0.00012	0.00014	0.0043	0.10	0.00002	0.31	0.000005	0.15	0.005	0.93	0.00010	0.00011	0.00010	0.000028	0.00010	0.0019	0.000005
07-Dec-10	0.000492	0.0004	0.05	0.004	0.0041	0.00007	0.00008	0.0057	0.11	0.00002	0.38	0.000004	0.17	0.006	1.02	0.00008	0.00007	0.00008	0.000026	0.00012	0.0008	0.000016
14-Dec-10	0.000052	0.0004	0.03	0.003	0.0044	0.00008	0.00013	0.0039	0.09	0.00002	0.23	0.000004	0.14	0.005	0.77	0.00009	0.00016	0.00009	0.000019	0.00010	0.0009	0.000030
21-Dec-10	0.000144	0.0004	0.03	0.000	0.0246	0.00000	0.00008	0.0037	0.08	0.00002	0.23	0.000004	0.12	0.004	0.76	0.00008	0.00006	0.00008	0.000014	0.00007	0.0049	0.000008
28-Dec-10	0.000580	0.0004	0.03	0.002	0.0042	0.00002	0.00004	0.0097	0.09	0.00003	0.25	0.000004	0.13	0.005	1.08	0.00008	0.00005	0.00008	0.000015	0.00009	0.0013	0.000004
04-Jan-11	0.000278	0.0005	0.04	0.004	0.0048	0.00001	0.00005	0.0101	0.08	0.00002	0.27	0.000005	0.13	0.005	0.92	0.00010	0.00005	0.00005	0.000021	0.00007	0.0014	0.000005
11-Jan-11	0.000056	0.0004	0.03	0.004	0.0043	0.00003	0.00004	0.0039	0.08	0.00002	0.22	0.000004	0.12	0.005	0.95	0.00009	0.00016	0.00013	0.000012	0.00006	0.0013	0.000013
18-Jan-11	0.000046	0.0004	0.04	0.003	0.0042	0.00001	0.00004	0.0067	0.10	0.00003	0.26	0.000004	0.14	0.005	1.00	0.00008	0.00018	0.00004	0.000011	0.00008	0.0013	0.000013
25-Jan-11	0.000039	0.0004	0.03	0.002	0.0043	0.00001	0.00009	0.0086	0.08	0.00002	0.20	0.000004	0.13	0.004	0.70	0.00009	0.00013	0.00009	0.000010	0.00008	0.0004	0.000009
01-Feb-11	0.000179	0.0004	0.03	0.002	0.0043	0.00418	0.00009	0.0259	0.07	0.00004	0.18	0.000060	0.11	0.004	0.92	0.00009	0.00199	0.00523	0.000016	0.00006	0.0009	0.018445
08-Feb-11	0.000030	0.0004	0.03	0.003	0.0044	0.00001	0.00004	0.0039	0.07	0.00002	0.23	0.000004	0.11	0.004	0.69	0.00009	0.00022	0.00004	0.000010	0.00007	0.0013	0.000009
15-Feb-11	0.000116	0.0004	0.03	0.003	0.0043	0.00004	0.00013	0.0155	0.08	0.00002	0.23	0.000004	0.11	0.004	0.73	0.00009	0.00002	0.00004	0.000009	0.00004	0.0004	0.000013
22-Feb-11	0.000632	0.0004	0.02	0.002	0.0043	0.00002	0.00004	0.0151	0.08	0.00002	0.22	0.000009	0.12	0.004	0.70	0.00009	0.00009	0.00009	0.000012	0.00006	0.0017	0.000009
01-Mar-11	0.000481	0.0004	0.02	0.002	0.0042	0.00001	0.00008	0.0104	0.06	0.00002	0.20	0.000004	0.10	0.003	0.66	0.00008	0.00007	0.00008	0.000007	0.00006	0.0012	0.000004
08-Mar-11	0.000519	0.0004	0.03	0.003	0.0043	0.00003	0.00004	0.0115	0.07	0.00002	0.17	0.000004	0.11	0.004	0.66	0.00009	0.00009	0.00009	0.000008	0.00005	0.0009	0.000017
15-Mar-11	0.000481	0.0004	0.03	0.003	0.0134	0.00002	0.00013	0.0053	0.07	0.00002	0.22	0.000004	0.12	0.004	0.63	0.00001	0.00009	0.00009	0.000009	0.00006	0.0013	0.000009
22-Mar-11	0.000045	0.0004	0.02	0.003	0.0045	0.00000	0.00004	0.0040	0.04	0.00002	0.23	0.000004	0.12	0.004	0.67	0.00009	0.00010	0.00009	0.000008	0.00006	0.0009	0.000004
29-Mar-11	0.000015	0.0005	0.04	0.005	0.0050	0.00001	0.00010	0.0140	0.08	0.00002	0.32	0.000005	0.14	0.005	1.08	0.00010	0.00004	0.00005	0.000024	0.00005	0.0005	0.000005
05-Apr-11	0.000026	0.0004	0.02	0.003	0.0043	0.00002	0.00009	0.0120	0.07	0.00002	0.21	0.000004	0.10	0.004	0.81	0.00009	0.00006	0.00013	0.000010	0.00005	0.0013	0.000004
12-Apr-11	0.000021	0.0004	0.03	0.005	0.0043	0.00004	0.00004	0.0085	0.06	0.00002	0.20	0.000004	0.10	0.004	0.75	0.00009	0.00006	0.00004	0.000008	0.00005	0.0009	0.000004
19-Apr-11	0.000040	0.0004	0.04	0.003	0.0044	0.00009	0.00009	0.0040	0.09	0.00016	0.32	0.000004	0.15	0.005	0.93	0.00009	0.00001	0.00013	0.000011	0.00011	0.0013	0.000009
26-Apr-11	0.000076	0.0004	0.03	0.003	0.0042	0.00001	0.00017	0.0038	0.08	0.00002	0.26	0.000004	0.16	0.004	0.82	0.00008	0.00003	0.00017	0.000005	0.00007	0.0021	0.000017
03-May-11	0.000057	0.0004	0.03	0.003	0.0044	0.00009	0.00004	0.0039	0.08	0.00003	0.24	0.000009	0.12	0.004	0.66	0.00009	0.00003	0.00013	0.000010	0.00006	0.0013	0.000030
10-May-11	0.000055	0.0004	0.03	0.003	0.0042	0.00002	0.00013	0.0063	0.07	0.00002	0.21	0.000004	0.12	0.003	0.71	0.00008	0.00006	0.00013	0.000006	0.00004	0.0008	0.000013
17-May-11	0.000034	0.0004	0.03	0.003	0.0042	0.00002	0.00004	0.0084	0.07	0.00002	0.22	0.000017	0.13	0.003	0.64	0.00008	0.00002	0.00008	0.000007	0.00005	0.0013	0.000008
24-May-11	0.000031	0.0005	0.03	0.002	0.0052	0.00001	0.00005	0.0047	0.09	0.00002	0.35	0.000005	0.15	0.004	0.74	0.00010	0.00007	0.00005	0.000006	0.00006	0.0010	0.000005
31-May-11	0.000026	0.0004	0.02	0.002	0.0044	0.00002	0.00004	0.0185	0.06	0.00002	0.23	0.000004	0.11	0.003	0.54	0.00009	0.00007	0.00004	0.000004	0.00004	0.0009	0.000004
07-Jun-11	0.000047	0.0004	0.02	0.003	0.0043	0.00000	0.00004	0.0039	0.06	0.00002	0.24	0.000004	0.14	0.003	0.71	0.00001	0.00006	0.00009	0.000002	0.00004	0.0013	0.000004
14-Jun-11	0.000038	0.0004	0.02	0.003	0.0042	0.00002	0.00008	0.0038	0.06	0.00003	0.21	0.000004	0.12	0.003	0.63	0.00001	0.00010	0.00004	0.000005	0.00005	0.0008	0.000004
21-Jun-11	0.000056	0.0004	0.02	0.002	0.0043	0.00000	0.00004	0.0039	0.06	0.00002	0.22	0.000004	0.12	0.003	0.72	0.00001	0.00012	0.00013	0.000006	0.00005	0.0034	0.000009
28-Jun-11	0.000039	0.0004	0.02	0.003	0.0043	0.00007	0.00009	0.0039	0.07	0.00004	0.24	0.000004	0.12	0.003	0.67	0.00001	0.00002	0.00004	0.000007	0.00006	0.0013	0.000004

HC 9
Sample = Alt 09 11

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	0.000034	0.0005	0.03	0.004	0.0049	0.00003	0.00010	0.0044	0.08	0.00002	0.39	0.000005	0.16	0.005	0.95	0.00001	0.00005	0.00005	0.000014	0.00006	0.0024	0.000005
12-Jul-11	0.000040	0.0004	0.03	0.004	0.0045	0.00008	0.00004	0.0040	0.08	0.00002	0.31	0.000004	0.13	0.004	0.97	0.00001	0.00005	0.00009	0.000010	0.00005	0.0013	0.000004
19-Jul-11	0.000039	0.0004	0.02	0.003	0.0044	0.00001	0.00013	0.0096	0.07	0.00002	0.25	0.000004	0.13	0.004	0.81	0.00001	0.00006	0.00009	0.000007	0.00006	0.0009	0.000017
26-Jul-11	0.000039	0.0004	0.03	0.019	0.0043	0.00015	0.00013	0.0077	0.06	0.00002	0.20	0.000004	0.09	0.004	0.53	0.00001	0.00000	0.00017	0.000005	0.00003	0.0009	0.000004
02-Aug-11	0.000062	0.0004	0.02	0.003	0.0045	0.00002	0.00004	0.0040	0.07	0.00002	0.25	0.000004	0.12	0.003	0.70	0.00001	0.00003	0.00009	0.000008	0.00004	0.0018	0.000009
09-Aug-11	0.000065	0.0004	0.02	0.003	0.0043	0.00006	0.00004	0.0039	0.06	0.00002	0.25	0.000004	0.13	0.003	0.78	0.00001	0.00000	0.00009	0.000009	0.00005	0.0026	0.000009
16-Aug-11	0.000052	0.0004	0.02	0.003	0.0087	0.00003	0.00004	0.0039	0.06	0.00002	0.23	0.000004	0.13	0.003	0.71	0.00001	0.00006	0.00004	0.000006	0.00004	0.0013	0.000004
23-Aug-11	0.000048	0.0004	0.02	0.003	0.0044	0.00003	0.00004	0.0040	0.06	0.00002	0.23	0.000004	0.12	0.003	0.65	0.00001	0.00004	0.00004	0.000008	0.00006	0.0018	0.000004
30-Aug-11	0.000085	0.0004	0.02	0.003	0.0085	0.00002	0.00009	0.0038	0.06	0.00002	0.21	0.000004	0.12	0.003	0.71	0.00001	0.00006	0.00004	0.000007	0.00003	0.0026	0.000004
06-Sep-11	0.000125	0.0004	0.02	0.003	0.0043	0.00004	0.00004	0.0039	0.06	0.00002	0.18	0.000004	0.11	0.003	0.74	0.00001	0.00000	0.00009	0.000007	0.00005	0.0013	0.000013
13-Sep-11	0.000152	0.0004	0.02	0.002	0.0044	0.00003	0.00004	0.0039	0.06	0.00002	0.22	0.000004	0.12	0.003	0.72	0.00001	0.00005	0.00004	0.000007	0.00003	0.0017	0.000009
20-Sep-11	0.000062	0.0004	0.02	0.003	0.0044	0.00004	0.00009	0.0040	0.06	0.00007	0.21	0.000004	0.11	0.003	0.76	0.00001	0.00016	0.00004	0.000007	0.00009	0.0018	0.000013
27-Sep-11	0.000039	0.0004	0.02	0.002	0.0044	0.00002	0.00004	0.0039	0.06	0.00002	0.17	0.000004	0.11	0.003	0.65	0.00001	0.00005	0.00004	0.000009	0.00004	0.0017	0.000004
04-Oct-11	0.000068	0.0005	0.02	0.005	0.0049	0.00005	0.00005	0.0044	0.07	0.00002	0.32	0.000005	0.15	0.004	0.97	0.00001	0.00009	0.00010	0.000021	0.00005	0.0024	0.000005
11-Oct-11	0.000067	0.0004	0.02	0.003	0.0045	0.00002	0.00009	0.0040	0.05	0.00002	0.24	0.000004	0.11	0.003	0.74	0.00001	0.00000	0.00004	0.000000	0.00004	0.0009	0.000004
18-Oct-11	0.000086	0.0005	0.02	0.003	0.0045	0.00005	0.00005	0.0041	0.06	0.00002	0.22	0.000005	0.11	0.003	0.74	0.00001	0.00002	0.00009	0.000006	0.00004	0.0014	0.000014
25-Oct-11	0.000043	0.0004	0.02	0.003	0.0043	0.00002	0.00004	0.0039	0.06	0.00002	0.22	0.000004	0.11	0.003	0.69	0.00001	0.00003	0.00004	0.000007	0.00003	0.0013	0.000004
01-Nov-11	0.000042	0.0005	0.02	0.003	0.0047	0.00002	0.00005	0.0042	0.06	0.00009	0.22	0.000005	0.11	0.003	0.75	0.00001	0.00003	0.00009	0.000009	0.00003	0.0014	0.000005
08-Nov-11	0.000108	0.0005	0.02	0.003	0.0045	0.00001	0.00005	0.0045	0.06	0.00002	0.22	0.000005	0.14	0.003	0.76	0.00001	0.00001	0.00009	0.000007	0.00008	0.0023	0.000005
15-Nov-11	0.000048	0.0004	0.02	0.003	0.0044	0.00002	0.00013	0.0040	0.05	0.00002	0.16	0.000004	0.11	0.002	0.54	0.00001	0.00082	0.00013	0.000007	0.00009	0.0022	0.000004
22-Nov-11	0.000110	0.0004	0.02	0.003	0.0044	0.00000	0.00009	0.0040	0.03	0.00002	0.21	0.000004	0.07	0.003	0.53	0.00001	0.00000	0.00009	0.000007	0.00007	0.0018	0.000004
29-Nov-11	0.000031	0.0004	0.02	0.004	0.0045	0.00006	0.00013	0.0040	0.05	0.00002	0.22	0.000004	0.10	0.003	0.61	0.00001	0.00003	0.00009	0.000009	0.00012	0.0013	0.000004
06-Dec-11	0.000018	0.0004	0.02	0.003	0.0045	0.00001	0.00004	0.0040	0.05	0.00002	0.21	0.000027	0.10	0.003	0.67	0.00001	0.00000	0.00004	0.000008	0.00009	0.0013	0.000004
13-Dec-11	0.000066	0.0004	0.02	0.003	0.0044	0.00003	0.00009	0.0062	0.05	0.00013	0.20	0.000004	0.13	0.003	0.63	0.00001	0.00004	0.00009	0.000006	0.00001	0.0018	0.000004
20-Dec-11	0.000022	0.0004	0.01	0.003	0.0044	0.00001	0.00004	0.0039	0.05	0.00025	0.18	0.000004	0.10	0.002	0.57	0.00001	0.00000	0.00004	0.000004	0.00007	0.0017	0.000004
27-Dec-11	0.000111	0.0004	0.02	0.003	0.0045	0.00003	0.00009	0.0040	0.08	0.00004	0.17	0.000045	0.12	0.002	0.59	0.00001	0.00000	0.00009	0.000007	0.00012	0.0009	0.000004
03-Jan-12	0.000131	0.0005	0.02	0.003	0.0135	0.00001	0.00014	0.0041	0.05	0.00002	0.20	0.000005	0.12	0.003	0.62	0.00001	0.00004	0.00009	0.000006	0.00017	0.0014	0.000005
10-Jan-12	0.000045	0.0005	0.02	0.003	0.0045	0.00001	0.00005	0.0041	0.05	0.00002	0.19	0.000005	0.12	0.002	0.60	0.00001	0.00003	0.00018	0.000011	0.00019	0.0014	0.000005
17-Jan-12	0.000026	0.0004	0.02	0.003	0.0044	0.00002	0.00009	0.0039	0.04	0.00002	0.19	0.000004	0.11	0.003	0.59	0.00001	0.00004	0.00013	0.000009	0.00013	0.0009	0.000004
24-Jan-12	0.000019	0.0005	0.02	0.003	0.0048	0.00001	0.00010	0.0043	0.05	0.00002	0.20	0.000005	0.12	0.003	0.60	0.00001	0.00000	0.00005	0.000008	0.00012	0.0010	0.000005
31-Jan-12	0.000043	0.0004	0.01	0.003	0.0043	0.00003	0.00004	0.0039	0.05	0.00002	0.19	0.000004	0.12	0.002	0.53	0.00001	0.00001	0.00009	0.000025	0.00017	0.0013	0.000004
07-Feb-12	0.000019	0.0005	0.02	0.005	0.0049	0.00001	0.00010	0.0044	0.05	0.00003	0.26	0.000005	0.12	0.003	0.80	0.00001	0.00000	0.00010	0.000019	0.00009	0.0010	0.000010
14-Feb-12	0.000013	0.0004	0.01	0.003	0.0044	0.00001	0.00009	0.0039	0.04	0.00002	0.17	0.000004	0.11	0.002	0.65	0.00001	0.00000	0.00004	0.000007	0.00003	0.0004	0.000004
21-Feb-12	0.000023	0.0005	0.02	0.003	0.0046	0.00000	0.00009	0.0041	0.05	0.00002	0.19	0.000005	0.13	0.003	0.68	0.00001	0.00000	0.00009	0.000008	0.00009	0.0009	0.000005
28-Feb-12	0.000029	0.0004	0.01	0.003	0.0042	0.00000	0.00004	0.0038	0.04	0.00002	0.18	0.000008	0.11	0.002	0.50	0.00001	0.00001	0.00008	0.000006	0.00011	0.0013	0.000008
06-Mar-12	0.000022	0.0004	0.01	0.003	0.0044	0.00003	0.00009	0.0040	0.04	0.00002	0.20	0.000004	0.11	0.002	0.61	0.00001	0.00001	0.00009	0.000009	0.00011	0.0018	0.000004
13-Mar-12	0.000045	0.0004	0.01	0.003	0.0045	0.00003	0.00004	0.0040	0.04	0.00002	0.20	0.000004	0.12	0.002	0.57	0.00001	0.00012	0.00004	0.000007	0.00002	0.0013	0.000009
20-Mar-12	0.000014	0.0005	0.02	0.003	0.0046	0.00002	0.00005	0.0041	0.05	0.00004	0.19	0.000005	0.12	0.003	0.64	0.00001	0.00004	0.00005	0.000008	0.00001	0.0005	0.000005
27-Mar-12	0.000030	0.0004	0.01	0.003	0.0043	0.00001	0.00009	0.0039	0.04	0.00002	0.17	0.000004	0.10	0.002	0.53	0.00001	0.00000	0.00030	0.000009	0.00021	0.0009	0.000004
03-Apr-12	0.000046	0.0005	0.02	0.003	0.0046	0.00000	0.00009	0.0041	0.05	0.00002	0.22	0.000005	0.14	0.003	0.73	0.00001	0.00000	0.00005	0.000010	0.00012	0.0028	0.000005
10-Apr-12	0.000031	0.0004	0.01	0.003	0.0220	0.00001	0.00004	0.0040	0.04	0.00002	0.21	0.000004	0.12	0.002	0.62	0.00001	0.00001	0.00009	0.000009	0.00012	0.0013	0.000004
17-Apr-12	0.000040	0.0004	0.01	0.003	0.0220	0.00002	0.00004	0.0040	0.04	0.00002	0.18	0.000004	0.09	0.002	0.56	0.00001	0.00000	0.00013	0.000009	0.00011	0.0013	0.000004
24-Apr-12	0.000026	0.0004	0.01	0.003	0.0132	0.00013	0.00009	0.0040	0.05	0.00002	0.21	0.000004	0.13	0.002	0.66	0.00001	0.00000	0.00009	0.000010	0.00015	0.0013	0.000004
01-May-12	0.000030	0.0004	0.01	0.003	0.0128	0.00001	0.00004	0.0038	0.04	0.00002	0.18	0.000004	0.11	0.002	0.56	0.00001	0.00002	0.00009	0.000014	0.00012	0.0009	0.000004
08-May-12	0.000048	0.0004	0.01	0.003	0.0044	0.00001	0.00009	0.0040	0.05	0.00002	0.18	0.000004	0.13	0.002	0.60	0.00001	0.00007	0.00004	0.000011	0.00011	0.0013	0.000004
15-May-12	0.000065	0.0004	0.01	0.002	0.0041	0.00001	0.00012	0.0036	0.04	0.00002	0.18	0.000004	0.12	0.002	0.54	0.00001	0.00000	0.00012	0.000009	0.00013	0.0024	0.000020
22-May-12	0.000022	0.0004	0.01	0.002	0.0088	0.00002	0.00018	0.0040	0.04	0.00002	0.18	0.000004	0.13	0.002	0.60	0.00001	0.00001	0.00009	0.000011	0.00018	0.0018	0.000009
29-May-12	0.000091	0.0004	0.01	0.003	0.0044	0.00001	0.00004	0.0039	0.05	0.00002	0.21	0.000004	0.13	0.002	0.61	0.00001	0.00010	0.00026	0.000009	0.00019	0.0013	0.000004
05-Jun-12	0.000051	0.0004	0.01	0.003	0.0085	0.00005	0.00004	0.0038	0.05	0.00002	0.19	0.000004	0.13	0.002	0.68	0.00001	0.00001	0.00021	0.000007	0.00018	0.0017	0.000004
12-Jun-12	0.000023	0.0005	0.01	0.003	0.0046	0.00002	0.00005	0.0041	0.05	0.00007	0.25	0.000005	0.15	0.003	0.71	0.00001	0.00001	0.00005	0.000012	0.00009	0.0014	0.000005
19-Jun-12	0.000048	0.0004	0.01	0.003	0.0044	0.00005	0.00009	0.0040	0.05	0.00003	0.22	0.000004	0.12	0.002	0.66	0.00001	0.00026	0.00009	0.000004	0.00012	0.0026	0.000009
26-Jun-12	0.000040	0.0004	0.02	0.003	0.0044	0.00002	0.00009	0.0040	0.05	0.00002	0.26	0.000004	0.16	0.002	0.65	0.00001	0.00001	0.00013	0.000012	0.00018	0.0013	0.000004
03-Jul-12	0.000031	0.0004	0.01	0.003	0.0045	0.00011	0.00004	0.0040	0.05	0.00002	0.23	0.000004	0.13	0.002	0.68	0.00001	0.00008	0.00009	0.000008	0.00010	0.0013	0.000004
10-Jul-12	0.000038	0.0004	0.01	0.003	0.0084	0.00003	0.00004	0.0038	0.05	0.00002	0.20	0.000004	0.13	0.002	0.61	0.00001	0.00017	0.00017	0.000012	0.00015	0.0017	0.000004
17-Jul-12	0.000018	0.0004	0.01	0.003	0.0044	0.00000	0.00004	0.0040	0.04	0.00003	0.21	0.000009	0.13	0.002	0.59	0.00001	0.00000	0.00004	0.000007	0.00017	0.0013	0.000004
24-Jul-12	0.000009	0.0005	0.01	0.003	0.0045	0.00001	0.00005	0.0041	0.05	0.00010	0.22	0.000005	0.14	0.002	0.68	0.00001	0.00002	0.00005	0.000005	0.00014	0.0009	0.000005
31-Jul-12	0.000013	0.0004	0.01	0.003	0.0045	0.00001	0.00004	0.0040	0.04	0.00002	0.21	0.000004	0.11	0.002	0.55	0.00001	0.00002	0.00009	0.000008	0.00016	0.0013	0.000004
07-Aug-12	0.000036	0.0005	0.01	0.003	0.0045	0.00001	0.00005	0.0041	0.05	0.00004	0.23	0.000005	0.12	0.002	0.71	0.00001	0.00005	0.00009	0.000011	0.00015	0.0014	0.000153
14-Aug-12	0.000031	0.0004	0.01	0.003	0.0044	0.00001	0.00009	0.0040	0.04	0.00002	0.20	0.000004	0.13	0.002	0.81	0.00001	0.00005	0.00009	0.000012	0.00014	0.0013	0.000004
21-Aug-12	0.000009	0.0005	0.01	0.003	0.0045	0.00002	0.00005	0.0041	0.03	0.00002	0.20	0.000005	0.09	0.002	0.64	0.00001	0.00005	0.00005	0.000004	0.00012	0.0009	0.000005
28-Aug-12	0.000009	0.0005	0.01	0.003	0.0046	0.00003	0.00005	0.0041	0.04	0.00002	0.18	0.000005	0.10	0.002	0.67	0.00001	0.00007	0.00005	0.000005	0.00014	0.0009	0.000005
04-Sep-12	0.000009	0.0005	0.01	0.003	0.0273	0.00001	0.00005	0.0041	0.05	0.00002	0.21	0.000005	0.14	0.002	0.77	0.00001	0.00000	0.00005	0.000004	0.00009	0.0005	0.000005
11-Sep-12	0.000018	0.0005	0.01	0.003	0.0046	0.00001	0.00005	0.0041	0.04	0.00002	0.19	0.000005	0.13	0.002	0.65	0.00001	0.00004	0.00005	0.000006	0.00008	0.0009	0.000005
18-Sep-12	0.000027	0.0005	0.01	0.003	0.0137	0.00000	0.00005	0.0041	0.04	0.00002	0.21	0.000005	0.13	0.002	0.66	0.00001	0.00005	0.00009	0.000005	0.00015	0.0014	0.000005
25-Sep-12	0.000014	0.0005	0.01	0.002	0.0045	0.00002	0.00005	0.0041	0.03	0.00003	0.19	0.000018	0.09	0.002	0.58	0.00001	0.00005	0.00005	0.000009	0.00008	0.0009	0.000005
02-Oct-12	0.000009	0.0005	0.01	0.003	0.0046	0.00001	0.00005	0.0041	0.04	0.00002	0.23	0.000009	0.11	0.002	0.86	0.00001	0.00001	0.00005	0.000007	0.00009	0.0005	0.000005
09-Oct-12	0.000010	0.0005	0.01	0.003	0.0048	0.00001	0.00014	0.0043	0.04	0.00002	0.19	0.000005	0.10	0.002	0.83	0.00001	0.00005	0.00005	0.000013	0.00010	0.0010	0.000005
16-Oct-12	0.000009	0.0005	0.01	0.003	0.0047	0.00001	0.00005	0.0042	0.04	0.00002	0.22	0.000005	0.11	0.003	0.97	0.00001	0.00002	0.00005	0.000011	0.00008	0.0009	0.000009
23-Oct-12	0.000044	0.0005	0.01	0.004	0.0049	0.00004	0.00019	0.0044	0.04	0.00002	0.23	0.000005	0.13	0.003	1.34	0.00001	0.00002	0.00005	0.000015	0.00012	0.0010	0.000005
30-Oct-12	0.000013	0.0004	0.01	0.003	0.0045	0.00003	0.00004	0.0040	0.04	0.00002	0.19	0.000004	0.10	0.003	1.14	0.00001	0.00008	0.00004	0.000013	0.00008	0.0018	0.000004
06-Nov-12	0.000014	0.0005	0.01	0.003	0.0045	0.00004	0.00014	0.0041	0.04	0.00002	0.18	0.000005	0.13	0.002	0.86	0.00001	0.00007	0.00009	0.000009	0.00009	0.0009	0.000005
13-Nov-12	0.000059	0.0005	0.01	0.003	0.0046	0.00001	0.00005	0.0041	0.03	0.00002	0.21	0.000014	0.10	0.002	0.60	0.00001	0.00001	0.00005	0.000007	0.00006	0.0014	0.000005
20-Nov-12	0.000010	0.0005	0.01	0.005	0.0051	0.00002	0.00020	0.0045	0.04	0.00003	0.29	0.000015	0.15	0.003	1.00	0.00001	0.00003	0.00005	0.000013	0.00007	0.0015	0.000005
27-Nov-12	0.000010	0.0005	0.01	0.005	0.0049	0.00002	0.00005	0.0044	0.04	0.00002	0.27	0.000005	0.14	0.003	0.97	0.00001	0.00004	0.00005	0.000016	0.00001	0.0005	0.000005
04-Dec-12	0.000030	0.0004	0.01	0.002	0.0043	0.00001	0.00004	0.0047	0.03	0.00002	0.15	0.000004	0.09	0.002	0.60	0.00001	0.00005	0.00004	0.000012	0.00007	0.0013	0.000004
11-Dec-12	0.000014	0.0005	0.01	0.003	0.0048	0.00002	0.00005	0.0043	0.04	0.00002	0.21	0.000005	0.12	0.002	0.60	0.00001	0.00004	0.00005	0.000013	0.00008	0.0010	0.000005
18-Dec-12	0.000010	0.0005	0.01	0.004	0.0049	0.00002	0.00005	0.0044	0.03	0.00002	0.19	0.000010	0.12	0.002	0.67	0.00001	0.00004	0.00005	0.000012	0.00007	0.0010	0.000005
25-Dec-12	0.000009	0.0005	0.01	0.003	0.0046	0.00003	0.00005	0.0106	0.03	0.00002	0.15	0.000005	0.10	0.002	0.63	0.00001	0.00004	0.00005	0.000009	0.00001	0.0009	0.000005
01-Jan-13	0.000017	0.0004	0.01	0.002	0.0043	0.00004	0.00004	0.0056	0.03	0.00002	0.17	0.000009	0.12	0.002	0.59	0.00001	0.00007	0.00004	0.000009	0.00006	0.0009	0.000004
08-Jan-13	0.000009	0.0005	0.01	0.002	0.0045	0.00003	0.00005	0.0045	0.03	0.00002	0.16	0.000005	0.09	0.001	0.42	0.00001	0.00005	0.00005	0.000009	0.00009	0.0005	0.000005
15-Jan-13																						
22-Jan-13																						
29-Jan-13																						
05-Feb-13																						
12-Feb-13																						

HC 10
Sample = Alt 09 20

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	1	500	410	8.26	0.13	13.65	3.69	0.089	0.0011	0.00148	0.0009	0.000008	0.0000041	0.0057	0.000001	1.98	0.00021	0.000035	0.00062	0.0041
09-Feb-10	2	500	450	7.65	0.74	9.99	6.75	0.095	0.0022	0.00207	0.0009	0.000009	0.0000045	0.0099	0.000001	2.59	0.00023	0.000022	0.00032	0.0045
16-Feb-10	3	500	410	7.67	0.73	11.79	3.69	0.091	0.0017	0.00193	0.0008	0.000008	0.0000123	0.0078	0.000020	2.31	0.00021	0.000028	0.00029	0.0041
23-Feb-10	4	500	430	7.84	0.58	11.53	3.44	0.081	0.0011	0.00129	0.0007	0.000009	0.0000043	0.0056	0.000001	2.50	0.00022	0.000009	0.00022	0.0043
02-Mar-10	5	500	455	7.84	0.46	10.26	2.28	0.089	0.0008	0.00123	0.0008	0.000009	0.0000046	0.0046	0.000001	2.47	0.00023	0.000009	0.00023	0.0046
09-Mar-10	6	500	420	7.68	0.63	9.43	2.10	0.076	0.0006	0.00097	0.0007	0.000008	0.0000042	0.0034	0.000001	2.51	0.00021	0.000005	0.00021	0.0042
16-Mar-10	7	500	445	7.56	0.86	9.63	3.56	0.085	0.0007	0.00093	0.0008	0.000009	0.0000045	0.0036	0.000001	3.24	0.00022	0.000006	0.00022	0.0045
23-Mar-10	8	500	460	7.58	0.95	9.55	4.14	0.078	0.0006	0.00087	0.0009	0.000009	0.0000046	0.0031	0.000013	3.24	0.00023	0.000005	0.00023	0.0046
30-Mar-10	9	500	435	7.71	0.62	7.43	3.92	0.070	0.0005	0.00083	0.0007	0.000009	0.0000044	0.0022	0.000001	2.95	0.00026	0.000005	0.00044	0.0044
06-Apr-10	10	500	455	7.63	0.84	10.00	2.73	0.076	0.0004	0.00105	0.0009	0.000009	0.0000046	0.0009	0.000001	3.35	0.00023	0.000004	0.00023	0.0046
13-Apr-10	11	500	445	7.49	1.07	9.79	2.67	0.088	0.0005	0.00085	0.0008	0.000009	0.0000045	0.0022	0.000001	3.13	0.00022	0.000003	0.00022	0.0045
20-Apr-10	12	500	440	7.73	0.88	9.68	3.52	0.096	0.0004	0.00092	0.0009	0.000009	0.0000044	0.0022	0.000001	3.26	0.00026	0.000003	0.00035	0.0044
27-Apr-10	13	500	440	7.68	1.02	9.26	1.32	0.076	0.0003	0.00079	0.0007	0.000009	0.0000044	0.0013	0.000001	2.80	0.00022	0.000003	0.00022	0.0044
04-May-10	14	500	450	7.57	0.83	9.09	2.25	0.067	0.0004	0.00077	0.0008	0.000009	0.0000045	0.0023	0.000001	3.18	0.00023	0.000003	0.00041	0.0045
11-May-10	15	500	440	7.45	0.88	7.63	1.76	0.073	0.0004	0.00084	0.0008	0.000009	0.0000044	0.0018	0.000001	3.15	0.00026	0.000001	0.00031	0.0044
18-May-10	16	500	415	7.52	0.89	7.09	0.83	0.084	0.0002	0.00095	0.0007	0.000008	0.0000042	0.0016	0.000003	2.73	0.00033	0.000056	0.00037	0.0017
25-May-10	17	500	425	7.45	1.13	8.77	2.13	0.092	0.0003	0.00085	0.0007	0.000009	0.0000043	0.0013	0.000001	2.55	0.00030	0.000006	0.00034	0.0013
01-Jun-10	18	500	425	7.56	0.79	7.36	0.85	0.081	0.0002	0.00106	0.0006	0.000009	0.0000043	0.0015	0.000001	2.56	0.00030	0.000006	0.00026	0.0021
08-Jun-10	19	500	500	7.49	1.13	11.09	0.50	0.065	0.0006	0.00080	0.0008	0.000010	0.0000050	0.0030	0.000002	3.63	0.00025	0.000001	0.00030	0.0010
15-Jun-10	20	500	460	7.64	1.01	8.33	0.46	0.077	0.0003	0.00074	0.0010	0.000009	0.0000046	0.0019	0.000001	2.91	0.00023	0.000005	0.00028	0.0009
22-Jun-10	21	500	435	7.70	0.77	8.77														
29-Jun-10	22	500	450	7.44	0.87	7.34	0.90	0.071	0.0002	0.00077	0.0007	0.000009	0.0000045	0.0016	0.000001	2.24	0.00041	0.000002	0.00023	0.0009
06-Jul-10	23	500	470	7.49	0.84	8.52														
13-Jul-10	24	500	455	7.42	0.98	7.48	0.91	0.055	0.0003	0.00068	0.0007	0.000009	0.0000046	0.0018	0.000001	2.04	0.00023	0.000006	0.00059	0.0009
20-Jul-10	25	500	450	7.51	1.46	7.41														
27-Jul-10	26	500	440	7.31	1.29	6.70	2.20	0.051	0.0001	0.00053	0.0007	0.000009	0.0000044	0.0015	0.000001	2.29	0.00022	0.000001	0.00022	0.0018
03-Aug-10	27	500	455	7.51	1.17	6.40	1.37	0.055	0.0002	0.00046	0.0006	0.000009	0.0000046	0.0023	0.000001	2.20	0.00023	0.000001	0.00023	0.0009
10-Aug-10	28	500	445	7.64	1.38	7.24	2.23	0.053	0.0001	0.00067	0.0006	0.000009	0.0000045	0.0022	0.000001	2.28	0.00027	0.000003	0.00022	0.0009
17-Aug-10	29	500	445	7.65	1.11	6.97	0.89	0.069	0.0002	0.00058	0.0006	0.000009	0.0000045	0.0014	0.000001	2.12	0.00022	0.000001	0.00022	0.0009
24-Aug-10	30	500	440	7.40	1.07	6.41	0.88	0.058	0.0001	0.00079	0.0007	0.000009	0.0000044	0.0013	0.000001	2.03	0.00022	0.000002	0.00022	0.0018
31-Aug-10	31	500	450	7.68	1.71	7.65	0.90	0.055	0.0002	0.00059	0.0006	0.000009	0.0000045	0.0012	0.000001	1.98	0.00023	0.000003	0.00027	0.0009
07-Sep-10	32	500	455	7.22	1.41	7.31	1.82	0.055	0.0001	0.00059	0.0006	0.000009	0.0000046	0.0022	0.000001	2.14	0.00027	0.000003	0.00046	0.0009
14-Sep-10	33	500	465	7.23	1.15	6.93	0.93	0.053	0.0003	0.00051	0.0006	0.000009	0.0000047	0.0013	0.000001	2.24	0.00023	0.000005	0.00042	0.0033
21-Sep-10	34	500	460	7.39	1.07	7.51	1.38	0.063	0.0001	0.00032	0.0007	0.000009	0.0000184	0.0016	0.000001	2.31	0.00023	0.000001	0.00032	0.0009
28-Sep-10	35	500	460	7.43	0.85	8.03	0.92	0.069	0.0002	0.00064	0.0007	0.000009	0.0000046	0.0017	0.000001	2.58	0.00023	0.000005	0.00023	0.0179
05-Oct-10	36	500	450	7.42	1.08	7.62	1.80	0.061	0.0002	0.00063	0.0008	0.000009	0.0000045	0.0018	0.000001	2.31	0.00023	0.000012	0.00027	0.0009
12-Oct-10	37	500	445	7.38	0.96	6.84	1.78	0.059	0.0003	0.00058	0.0007	0.000009	0.0000045	0.0015	0.000003	2.21	0.00022	0.000010	0.00089	0.0009
19-Oct-10	38	500	455	7.34	1.11	7.10	2.28	0.055	0.0001	0.00041	0.0009	0.000009	0.0000046	0.0015	0.000001	2.16	0.00023	0.000001	0.00023	0.0009
26-Oct-10	39	500	485	7.34	1.15	7.96	1.46	0.048	0.0004	0.00044	0.0007	0.000010	0.0000049	0.0017	0.000001	2.25	0.00029	0.000001	0.00049	0.0010
02-Nov-10	40	500	490	7.52	0.87	7.18	1.47	0.067	0.0001	0.00044	0.0008	0.000010	0.0000049	0.0019	0.000001	2.06	0.00025	0.000001	0.00039	0.0015
09-Nov-10	41	500	425	7.56	1.04	6.63	0.85	0.060	0.0002	0.00034	0.0008	0.000009	0.0000043	0.0009	0.000001	2.04	0.00030	0.000007	0.00038	0.0026
16-Nov-10	42	500	450	7.70	0.97	7.46	0.90	0.049	0.0001	0.00032	0.0008	0.000009	0.0000045	0.0021	0.000002	2.11	0.00027	0.000005	0.00023	0.0009
23-Nov-10	43	500	420	7.27	0.95	6.71	0.84	0.053	0.0002	0.00042	0.0007	0.000008	0.0000042	0.0009	0.000001	1.86	0.00034	0.000009	0.00034	0.0008
30-Nov-10	44	500	440	7.34	1.24	7.68	0.88	0.048	0.0001	0.00031	0.0008	0.000009	0.0000044	0.0011	0.000001	2.13	0.00026	0.000001	0.00026	0.0009
07-Dec-10	45	500	445	7.43	1.08	10.48	0.89	0.065	0.0002	0.00058	0.0010	0.000009	0.0000045	0.0011	0.000001	3.64	0.00031	0.000005	0.00036	0.0009
14-Dec-10	46	500	460	7.37	1.62	7.48	0.92	0.056	0.0001	0.00037	0.0007	0.000009	0.0000046	0.0015	0.000001	2.19	0.00028	0.000001	0.00055	0.0009
21-Dec-10	47	500	465	7.41	1.77	7.72	0.93	0.053	0.0001	0.00037	0.0008	0.000009	0.0000047	0.0009	0.000001	2.38	0.00023	0.000006	0.00037	0.0009
28-Dec-10	48	500	470	7.43	2.01	7.61	1.41	0.052	0.0001	0.00038	0.0007	0.000009	0.0000047	0.0019	0.000001	2.14	0.00033	0.000001	0.00038	0.0009
04-Jan-11	49	500	485	7.38	1.93	7.84	0.97	0.045	0.0001	0.00034	0.0008	0.000010	0.0000049	0.0010	0.000001	2.29	0.00024	0.000003	0.00029	0.0010
11-Jan-11	50	500	440	7.27	1.08	5.79	1.32	0.040	0.0001	0.00026	0.0007	0.000009	0.0000044	0.0015	0.000001	2.06	0.00022	0.000004	0.00022	0.0018
18-Jan-11	51	500	470	7.27	1.17	6.44	1.88	0.046	0.0001	0.00038	0.0008	0.000009	0.0000047	0.0012	0.000001	2.40	0.00024	0.000002	0.00024	0.0014
25-Jan-11	52	500	470	7.27	1.30	6.71	0.94	0.042	0.0003	0.00080	0.0009	0.000009	0.0000047	0.0011	0.000001	1.99	0.00024	0.000005	0.00024	0.0009
01-Feb-11	53	500	455	7.24	1.14	6.36	0.91	0.033	0.0001	0.00032	0.0008	0.000009	0.0000046	0.0009	0.000001	2.05	0.00023	0.000005	0.00023	0.0009
08-Feb-11	54	500	480	7.33	0.94	6.24	3.36	0.044	0.0001	0.00034	0.0009	0.000010	0.0000048	0.0008	0.000001	3.94	0.00024	0.000007	0.00024	0.0125
15-Feb-11	55	500	455	7.28	1.12	5.88	0.91	0.038	0.0001	0.00027	0.0007	0.000009	0.0000046	0.0014	0.000001	2.00	0.00023	0.000006	0.00023	0.0009
22-Feb-11	56	500	455	7.34	1.16	5.83	3.19	0.033	0.0001	0.00032	0.0006	0.000009	0.0000046	0.0014	0.000001	1.94	0.00023	0.000005	0.00023	0.0009
01-Mar-11	57	500	455	7.21	1.17	5.70	3.64	0.034	0.0001	0.00032	0.0007	0.000009	0.0000046	0.0009	0.000001	2.03	0.00023	0.000004	0.00036	0.0009
08-Mar-11	58	500	465	7.24	1.13	5.77	3.26	0.034	0.0002	0.00033	0.0006	0.000009	0.0000047	0.0009	0.000001	1.98	0.00023	0.000008	0.00056	0.0009
15-Mar-11	59	500	455	7.30	1.24	5.94	3.19	0.034	0.0001	0.00023	0.0007	0.000009	0.0000046	0.0010	0.000001	2.01	0.00023	0.000009	0.00036	0.0009
22-Mar-11	60	500	465	7.39	1.24	6.19	2.33	0.038	0.0001	0.00028	0.0007	0.000009	0.0000047	0.0008	0.000001	1.90	0.00023	0.000003	0.00028	0.0009
29-Mar-11	61	500	505	7.71	1.53	8.00	2.02	0.027	0.0001	0.00025	0.0008	0.000010	0.0000051	0.0012	0.000002	2.59	0.00025	0.000010	0.00025	0.0010
05-Apr-11	62	500	460	7.37	1.33	6.92	1.84	0.037	0.0001	0.00028	0.0007	0.000009	0.0000046	0.0009	0.000001	2.03	0.00023	0.000006	0.00023	0.0009
12-Apr-11	63	500	475	7.34	1.14	6.03	2.38	0.039	0.0001	0.00033	0.0006	0.000010	0.0000048	0.0006	0.000001	2.06	0.00024	0.000002	0.00024	0.0024
19-Apr-11	64	500	465	7.72	1.95	8.10	1.86	0.046	0.0001	0.00033	0.0007	0.000009	0.0000047	0.0007	0.000001	2.12	0.00023	0.000010	0.00023	0.0009
26-Apr-11	65	500	425	7.55	0.94	7.04	1.70	0.060	0.0001	0.00034	0.0008	0.000009	0.0000043	0.0006	0.000001	2.33	0.00021	0.000001	0.00021	0.0009
03-May-11	66	500	445	7.53	1.25	6.59	1.78	0.049	0.0002	0.00018	0.0008	0.000009	0.0000045	0.0013	0.000006	2.00	0.00022	0.000012	0.00027	0.0018
10-May-11	67	500	450	7.54	1.06	6.94	1.35	0.044	0.0001	0.00041	0.0008	0.000009	0.0000045	0.0008	0.000003	2.07	0.00023	0.000013	0.00023	0.0009
17-May-11	68	500	460	7.69	1.26	7.18	1.38	0.051	0.0001	0.00032	0.0009	0.000009	0.0000046	0.0008	0.000001	2.09	0.00023	0.000010	0.00023	0.0009
24-May-11	69	500	520	7.60	1.51	6.30	1.56	0.056	0.0001	0.00031	0.0008	0.000010	0.0000052	0.0024	0.000002	2.21	0.00026	0.000009	0.00026	0.0010
31-May-11	70	500	480	7.54	1.57	7.30	1.44	0.033	0.0001	0.00034	0.0008	0.000010	0.0000048	0.0006	0.000001	2.08	0.00024	0.000013	0.00024	0.0010
07-Jun-11	71	500	445	7.89	0.97	6.80	1.34	0.049	0.0001	0.00027	0.0007	0.000009	0.0000045	0.0009	0.000002	1.95	0.00022	0.000004	0.00022	0.0009
14-Jun-11	72	500	455	7.68	0.88	6.33	1.37	0.024	0.0001	0.00009	0.0002	0.000009	0.0000046	0.0008	0.000004	1.57	0.00023	0.000015	0.00023	0.0027
21-Jun-11	73	500	455	7.57	0.82	6.04	0.91	0.041	0.0001	0.00027	0.0007	0.000009	0.0000046	0.0005	0.000001	1.84	0.00023	0.000005	0.00023	0.0009
28-Jun-11	74	500	460	7.57	0.93	6.32	1.84	0.043	0.0001	0.00023	0.0007	0.000009	0.0000046	0.0010	0.000001	2.01	0.00023	0.000006	0.00023	0.0009

HC 10
Sample = Alt 09 20

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	75	500	495	7.43	1.52	7.18	0.99	0.042	0.0001	0.00035	0.0009	0.000010	0.0000050	0.0019	0.000013	2.44	0.00025	0.000020	0.00025	0.0010
12-Jul-11	76	500	455	7.22	1.56	5.36	1.37	0.043	0.0001	0.00027	0.0007	0.000009	0.0000046	0.0007	0.000001	2.18	0.00023	0.000005	0.00023	0.0009
19-Jul-11	77	500	480	7.46	1.78	5.78	0.96	0.038	0.0001	0.00019	0.0007	0.000010	0.0000048	0.0012	0.000001	2.15	0.00024	0.000005	0.00024	0.0010
26-Jul-11	78	500	450	7.67	1.89	5.89	0.90	0.039	0.0001	0.00041	0.0007	0.000009	0.0000045	0.0007	0.000001	1.67	0.00023	0.000008	0.00023	0.0207
02-Aug-11	79	500	470	7.61	1.80	5.41	0.94	0.030	0.0001	0.00024	0.0007	0.000009	0.0000047	0.0010	0.000001	2.08	0.00024	0.000001	0.00024	0.0014
09-Aug-11	80	500	475	7.52	1.33	6.07	0.48	0.042	0.0001	0.00024	0.0008	0.000010	0.0000048	0.0010	0.000001	1.88	0.00029	0.000006	0.00024	0.0014
16-Aug-11	81	500	465	7.63	2.13	6.90	0.93	0.045	0.0001	0.00028	0.0007	0.000009	0.0000047	0.0008	0.000001	2.00	0.00023	0.000004	0.00023	0.0009
23-Aug-11	82	500	465	7.57	1.87	6.27	0.93	0.046	0.0001	0.00033	0.0008	0.000009	0.0000047	0.0010	0.000001	1.95	0.00037	0.000005	0.00023	0.0019
30-Aug-11	83	500	465	7.56	1.60	6.05	1.40	0.045	0.0001	0.00028	0.0007	0.000009	0.0000047	0.0010	0.000001	2.08	0.00033	0.000005	0.00023	0.0023
06-Sep-11	84	500	455	7.62	1.46	5.68	0.91	0.034	0.0001	0.00027	0.0007	0.000009	0.0000046	0.0008	0.000003	1.75	0.00023	0.000005	0.00023	0.0009
13-Sep-11	85	500	450	7.56	1.30	5.48	1.35	0.038	0.0001	0.00023	0.0008	0.000009	0.0000045	0.0011	0.000003	1.89	0.00077	0.000005	0.00023	0.0009
20-Sep-11	86	500	465	7.43	1.68	5.51	1.40	0.036	0.0001	0.00033	0.0008	0.000009	0.0000047	0.0009	0.000001	1.80	0.00070	0.000007	0.00023	0.0037
27-Sep-11	87	500	460	7.38	2.21	5.50	1.38	0.038	0.0001	0.00018	0.0007	0.000009	0.0000046	0.0001	0.000002	1.88	0.00032	0.000005	0.00023	0.0014
04-Oct-11	88	500	510	7.46	1.84	7.28	1.53	0.031	0.0003	0.00036	0.0009	0.000010	0.0000051	0.0017	0.000002	2.36	0.00026	0.000007	0.00026	0.0010
11-Oct-11	89	500	445	7.57	1.94	5.33	1.34	0.036	0.0003	0.00022	0.0006	0.000009	0.0000045	0.0010	0.000001	1.68	0.00027	0.000004	0.00022	0.0089
18-Oct-11	90	500	445	7.36	1.65	5.08	1.34	0.043	0.0002	0.00022	0.0007	0.000009	0.0000045	0.0011	0.000001	1.78	0.00031	0.000004	0.00027	0.0009
25-Oct-11	91	500	450	7.30	1.27	4.81	1.35	0.037	0.0001	0.00023	0.0007	0.000009	0.0000045	0.0009	0.000004	1.81	0.00027	0.000006	0.00023	0.0014
01-Nov-11	92	500	470	7.35	1.86	5.26	1.41	0.039	0.0001	0.00038	0.0007	0.000009	0.0000047	0.0008	0.000001	1.83	0.00024	0.000008	0.00024	0.0014
08-Nov-11	93	500	440	7.44	1.84	5.18	0.88	0.036	0.0001	0.00018	0.0006	0.000009	0.0000044	0.0006	0.000001	1.87	0.00022	0.000004	0.00022	0.0013
15-Nov-11	94	500	445	7.26	2.06	4.60	0.89	0.035	0.0001	0.00018	0.0005	0.000009	0.0000045	0.0007	0.000001	1.71	0.00022	0.000005	0.00022	0.0013
22-Nov-11	95	500	440	7.42	1.99	5.40	0.88	0.044	0.0001	0.00031	0.0006	0.000009	0.0000044	0.0006	0.000001	1.90	0.00022	0.000004	0.00026	0.0013
29-Nov-11	96	500	445	7.36	2.22	5.14	1.34	0.043	0.0001	0.00018	0.0007	0.000009	0.0000045	0.0008	0.000002	1.96	0.00022	0.000011	0.00022	0.0013
06-Dec-11	97	500	435	7.34	1.89	4.94	0.87	0.037	0.0001	0.00009	0.0008	0.000009	0.0000044	0.0004	0.000002	1.87	0.00022	0.000010	0.00022	0.0013
13-Dec-11	98	500	445	7.36	1.65	6.17	0.89	0.029	0.0001	0.00018	0.0007	0.000009	0.0000045	0.0005	0.000001	1.95	0.00036	0.000003	0.00022	0.0013
20-Dec-11	99	500	440	7.48	1.69	5.07	0.88	0.036	0.0001	0.00022	0.0007	0.000009	0.0000044	0.0006	0.000001	1.73	0.00022	0.000004	0.00022	0.0013
27-Dec-11	100	500	435	7.59	1.84	5.48	0.87	0.043	0.0001	0.00017	0.0006	0.000009	0.0000044	0.0007	0.000001	1.80	0.00022	0.000002	0.00022	0.0013
03-Jan-12	101	500	440	7.32	1.76	5.56	1.32	0.046	0.0001	0.00018	0.0006	0.000009	0.0000044	0.0007	0.000001	1.70	0.00022	0.000010	0.00026	0.0013
10-Jan-12	102	500	445	7.3	1.60	5.47	1.34	0.048	0.0001	0.00018	0.0006	0.000009	0.0000045	0.0007	0.000003	1.78	0.00049	0.000006	0.00031	0.0013
17-Jan-12	103	500	440	7.25	1.85	5.78	0.88	0.037	0.0001	0.00018	0.0007	0.000009	0.0000044	0.0009	0.000001	1.88	0.00022	0.000007	0.00026	0.0013
24-Jan-12	104	500	470	7.43	1.91	6.08	1.88	0.041	0.0001	0.00019	0.0006	0.000009	0.0000047	0.0006	0.000001	1.88	0.00024	0.000007	0.00024	0.0014
31-Jan-12	105	500	445	7.15	1.70	6.04	0.89	0.040	0.0001	0.00022	0.0008	0.000009	0.0000045	0.0009	0.000001	1.94	0.00022	0.000010	0.00031	0.0013
07-Feb-12	106	500	495	7.4	1.91	10.04	1.98	0.033	0.0001	0.00020	0.0010	0.000010	0.0000050	0.0008	0.000001	2.69	0.00025	0.000010	0.00025	0.0015
14-Feb-12	107	500	430	7.28	2.07	4.89	1.72	0.031	0.0001	0.00017	0.0006	0.000009	0.0000043	0.0003	0.000001	1.69	0.00022	0.000002	0.00022	0.0013
21-Feb-12	108	500	445	7.12	1.21	4.69	2.23	0.032	0.0001	0.00022	0.0007	0.000009	0.0000045	0.0014	0.000001	1.78	0.00022	0.000004	0.00022	0.0013
28-Feb-12	109	500	435	7.24	1.99	5.00	1.31	0.035	0.0001	0.00022	0.0007	0.000009	0.0000044	0.0005	0.000001	1.84	0.00022	0.000014	0.00048	0.0013
06-Mar-12	110	500	430	7.17	1.39	4.67	1.72	0.031	0.0001	0.00009	0.0006	0.000009	0.0000043	0.0005	0.000001	1.73	0.00022	0.000005	0.00022	0.0013
13-Mar-12	111	500	435	7.18	1.96	5.07	1.31	0.037	0.0001	0.00017	0.0009	0.000009	0.0000044	0.0006	0.000001	1.84	0.00022	0.000012	0.00022	0.0013
20-Mar-12	112	500	460	7.16	2.26	5.16	1.38	0.025	0.0001	0.00023	0.0007	0.000009	0.0000046	0.0006	0.000003	2.04	0.00023	0.000003	0.00023	0.0014
27-Mar-12	113	500	455	7.08	1.72	5.59	1.82	0.046	0.0001	0.00018	0.0007	0.000009	0.0000046	0.0007	0.000002	2.28	0.00023	0.000001	0.00023	0.0014
03-Apr-12	114	500	455	7.09	1.84	5.38	1.37	0.042	0.0001	0.00018	0.0007	0.000009	0.0000046	0.0006	0.000001	2.04	0.00023	0.000004	0.00073	0.0014
10-Apr-12	115	500	450	7.19	1.30	5.16	1.35	0.046	0.0001	0.00018	0.0007	0.000009	0.0000045	0.0008	0.000001	2.04	0.00023	0.000016	0.00027	0.0014
17-Apr-12	116	500	450	7.17	1.64	4.72	1.35	0.044	0.0001	0.00018	0.0006	0.000009	0.0000045	0.0007	0.000001	1.89	0.00023	0.000014	0.00023	0.0014
24-Apr-12	117	500	430	7.23	1.34	4.98	1.29	0.050	0.0001	0.00043	0.0008	0.000009	0.0000043	0.0005	0.000001	1.95	0.00022	0.000010	0.00030	0.0017
01-May-12	118	500	425	7.37	1.97	5.61	1.70	0.041	0.0001	0.00017	0.0006	0.000009	0.0000043	0.0004	0.000001	1.94	0.00021	0.000011	0.00021	0.0013
08-May-12	119	500	435	7.25	1.47	5.26	1.74	0.040	0.0001	0.00013	0.0007	0.000009	0.0000044	0.0013	0.000001	1.96	0.00022	0.000011	0.00035	0.0013
15-May-12	120	500	425	7.26	1.41	4.90	1.28	0.045	0.0001	0.00009	0.0007	0.000009	0.0000043	0.0007	0.000001	1.85	0.00021	0.000003	0.00034	0.0013
22-May-12	121	500	435	7.19	1.61	4.86	1.31	0.060	0.0001	0.00013	0.0006	0.000009	0.0000044	0.0005	0.000001	1.75	0.00022	0.000019	0.00022	0.0013
29-May-12	122	500	435	7.25	1.47	6.09	1.31	0.065	0.0001	0.00013	0.0007	0.000009	0.0000044	0.0007	0.000001	2.28	0.00022	0.000017	0.00039	0.0022
05-Jun-12	123	500	430	7.19	1.75	5.31	0.86	0.055	0.0001	0.00017	0.0007	0.000009	0.0000043	0.0012	0.000001	1.98	0.00022	0.000014	0.00034	0.0013
12-Jun-12	124	500	425	7.47	1.39	10.03	1.70	0.078	0.0001	0.00026	0.0012	0.000009	0.0000043	0.0010	0.000001	3.30	0.00021	0.000002	0.00021	0.0013
19-Jun-12	125	500	440	7.2	1.20	5.32	0.88	0.051	0.0001	0.00013	0.0007	0.000009	0.0000044	0.0011	0.000001	1.87	0.00022	0.000015	0.00022	0.0013
26-Jun-12	126	500	430	7.28	1.30	5.48	1.29	0.066	0.0001	0.00013	0.0008	0.000009	0.0000043	0.0012	0.000001	2.02	0.00022	0.000001	0.00065	0.0013
03-Jul-12	127	500	425	7.38	2.58	5.92	2.13	0.051	0.0001	0.00017	0.0007	0.000009	0.0000043	0.0006	0.000001	1.83	0.00021	0.000002	0.00026	0.0013
10-Jul-12	128	500	420	7.19	1.52	4.89	2.52	0.052	0.0001	0.00021	0.0007	0.000008	0.0000042	0.0007	0.000001	1.78	0.00021	0.000003	0.00034	0.0013
17-Jul-12	129	500	430	7.32	0.86	5.50	1.72	0.052	0.0001	0.00013	0.0007	0.000009	0.0000043	0.0009	0.000001	1.98	0.00022	0.000016	0.00022	0.0013
24-Jul-12	130	500	430	7.14	1.20	4.70	1.72	0.048	0.0001	0.00026	0.0007	0.000009	0.0000043	0.0004	0.000001	1.81	0.00022	0.000011	0.00022	0.0013
31-Jul-12	131	500	445	7.23	0.96	4.79	1.34	0.049	0.0001	0.00009	0.0007	0.000009	0.0000045	0.0005	0.000001	1.87	0.00022	0.000001	0.00022	0.0013
07-Aug-12	132	500	435	7.43	0.96	5.15	1.74	0.063	0.0001	0.00022	0.0007	0.000009	0.0000044	0.0006	0.000001	1.83	0.00022	0.000014	0.00026	0.0013
14-Aug-12	133	500	425	7.15	1.22	4.74	0.85	0.051	0.0001	0.00013	0.0005	0.000009	0.0000043	0.0006	0.000001	1.64	0.00021	0.000022	0.00026	0.0013
21-Aug-12	134	500	445	7.14	1.45	5.05	1.34	0.052	0.0001	0.00018	0.0007	0.000009	0.0000045	0.0010	0.000001	1.81	0.00022	0.000004	0.00022	0.0013
28-Aug-12	135	500	450	7.22	1.87	5.17	2.25	0.046	0.0001	0.00014	0.0007	0.000009	0.0000045	0.0010	0.000001	1.78	0.00023	0.000001	0.00023	0.0014
04-Sep-12	136	500	450	7.08	2.05	5.01	1.80	0.062	0.0001	0.00018	0.0007	0.000009	0.0000045	0.0006	0.000001	1.88	0.00023	0.000004	0.00027	0.0014
11-Sep-12	137	500	445	7.22	1.20	5.00	2.23	0.039	0.0001	0.00013	0.0006	0.000009	0.0000045	0.0007	0.000001	1.72	0.00022	0.000006	0.00031	0.0013
18-Sep-12	138	500	435	7.24	1.07	5.29	1.74	0.065	0.0001	0.00022	0.0009	0.000009	0.0000044	0.0007	0.000107	1.76	0.00022	0.000013	0.00113	0.0013
25-Sep-12	139	500	420	7.18	1.13	5.08	2.10	0.041	0.0001	0.00008	0.0006	0.000008	0.0000042	0.0005	0.000001	1.65	0.00021	0.000001	0.00021	0.0017
02-Oct-12	140	500	445	7.2	1.26	5.12	1.78	0.038	0.0001	0.00013	0.0006	0.000009	0.0000045	0.0009	0.000001	1.70	0.00022	0.000022	0.00022	0.0013
09-Oct-12	141	500	440	7.22	2.05	6.24	1.32	0.051	0.0001	0.00013	0.0008	0.000009	0.0000044	0.0007	0.000001	2.01	0.00022	0.000002	0.00031	0.0013
16-Oct-12	142	500	420	7.39	2.07	5.36	1.68	0.055	0.0001	0.00013	0.0006	0.000008	0.0000042	0.0006	0.000001	1.74	0.00021	0.000001	0.00021	0.0013
23-Oct-12	143	500	435	7.19	1.71	5.49	1.74	0.052	0.0001	0.00009	0.0006	0.000009	0.0000044	0.0002	0.000001	1.76	0.00022	0.000022	0.00026	0.0013
30-Oct-12	144	500	445	7.15	1.68	5.70	1.78	0.049	0.0001	0.00009	0.0007	0.000009	0.0000045	0.0008	0.000187	1.90	0.00022	0.000001	0.00022	0.0049
06-Nov-12	145	500	440	7.27	1.62	5.65	0.88	0.038	0.0001	0.00018	0.0007	0.000009	0.0000044	0.0008	0.000001	1.97	0.00022	0.000015	0.00026	0.0013
13-Nov-12	146	500	430	7.37	2.03	5.44	1.29	0.036	0.0001	0.00013	0.0007	0.000009	0.0000043	0.0007	0.000002	1.79	0.00022	0.000009	0.00022	0.0013
20-Nov-12	147	500	495	7.35	3.01	7.32	0.99	0.033	0.0001	0.00010	0.0010	0.000010	0.0000050	0.0010	0.000001	2.48	0.00025	0.000028	0.00030	0.0015
27-Nov-12	148	500	500	7.34	2.24	7.90	2.50	0.030	0.0001	0.00020	0.0009	0.000010	0.0000050	0.0008	0.000002	2.60	0.00025	0.000011	0.00025	0.0015
04-Dec-12	149	500	455	7.36	0.86	4.86	1.82	0.035	0.0001	0.00009	0.0006	0.000009	0.0000046	0.0003	0.000002	1.64	0.00023	0.000019	0.00032	0.0014
11-Dec-12	150	500	480	7.42	0.97	6.15	1.44	0.033	0.0001	0.00014	0.0007	0.000010	0.0000048	0.0008	0.000003	2.04	0.00024	0.000021	0.00024	0.0014
18-Dec-12	151	500	490	7.37	1.07	7.13	0.98	0.032	0.0001	0.00010	0.0009	0.000010	0.0000049	0.0005	0.000002	2.34	0.00025	0.000001	0.00025	0.0015
25-Dec-12	152	500	465	7.28	1.31	5.12	0.93	0.033	0.0001	0.00014	0.0006	0.000009	0.0000047	0.0004	0.000001	1.80	0.00023	0.000006	0.00023	0.0014
01-Jan-13	153	500	430	7.39	1.11	5.31	0.86	0.037	0.0001	0.00013	0.0006	0.000009	0.0000043	0.0004	0.000001	1.56	0.00022	0.000009	0.00022	0.0013
08-Jan-13	154	500	445	7.40	1.08	5.30	0.89	0.037	0.0001	0.00013	0.0009	0.000009	0.0000045	0.0005	0.000001	1.47	0.00022	0.000032	0.00022	0.0013
15-Jan-13	155	500	460																	
22-Jan-13	156	500	460	7.34	1.67	5.36	1.38													
29-Jan-13	157	500	455																	
05-Feb-13	158	500	455	7.36	1.40	5.08	2.28													
12-Feb-13	159	500	460																	

HC 10
Sample = Alt 09 20

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
02-Feb-10	0.000021	0.0041	0.20	0.002	0.0041	0.00030	0.00053	0.0041	3.42	0.00004	0.74	0.000004	4.14	0.012	1.96	0.00008	0.00007	0.00029	0.000003	0.00059	0.0004	0.000004
09-Feb-10	0.000018	0.0059	0.29	0.005	0.0045	0.00037	0.00059	0.0045	3.48	0.00009	0.48	0.000005	3.76	0.015	2.43	0.00009	0.00000	0.00014	0.000018	0.00057	0.0005	0.000005
16-Feb-10	0.000037	0.0053	0.27	0.005	0.0041	0.00034	0.00045	0.0041	2.79	0.00007	0.46	0.000021	2.29	0.013	1.81	0.00008	0.00012	0.00025	0.000048	0.00059	0.0004	0.000049
23-Feb-10	0.000013	0.0043	0.27	0.006	0.0043	0.00013	0.00017	0.0043	1.88	0.00002	0.38	0.000004	1.25	0.013	1.13	0.00009	0.00002	0.00013	0.000025	0.00046	0.0004	0.000004
02-Mar-10	0.000018	0.0036	0.26	0.005	0.0046	0.00009	0.00014	0.0046	1.63	0.00002	0.35	0.000005	0.90	0.012	1.07	0.00009	0.00006	0.00014	0.000028	0.00046	0.0005	0.000005
09-Mar-10	0.000029	0.0034	0.24	0.007	0.0042	0.00006	0.00008	0.0042	1.40	0.00002	0.33	0.000004	0.58	0.011	0.90	0.00008	0.00010	0.00021	0.000032	0.00038	0.0004	0.000004
16-Mar-10	0.000027	0.0027	0.30	0.009	0.0045	0.00009	0.00009	0.0045	1.31	0.00002	0.36	0.000004	0.58	0.013	1.21	0.00009	0.00001	0.00018	0.000045	0.00034	0.0004	0.000004
23-Mar-10	0.000179	0.0032	0.31	0.007	0.0046	0.00012	0.00009	0.0046	1.21	0.00002	0.35	0.000005	0.46	0.014	1.44	0.00009	0.00006	0.00014	0.000046	0.00031	0.0018	0.000005
30-Mar-10	0.000448	0.0026	0.26	0.008	0.0044	0.00010	0.00009	0.0044	1.05	0.00002	0.30	0.000004	0.38	0.012	1.24	0.00009	0.00001	0.00013	0.000032	0.00030	0.0004	0.000004
06-Apr-10	0.000014	0.0023	0.23	0.011	0.0046	0.00006	0.00005	0.0046	1.00	0.00002	0.35	0.000005	0.34	0.013	1.02	0.00009	0.00004	0.00014	0.000051	0.00031	0.0005	0.000005
13-Apr-10	0.000022	0.0027	0.22	0.008	0.0045	0.00006	0.00004	0.0045	0.89	0.00002	0.32	0.000004	0.32	0.012	0.91	0.00009	0.00012	0.00013	0.000052	0.00028	0.0004	0.000004
20-Apr-10	0.000132	0.0022	0.22	0.007	0.0044	0.00005	0.00004	0.0044	0.94	0.00002	0.33	0.000004	0.26	0.012	1.21	0.00009	0.00007	0.00013	0.000048	0.00033	0.0004	0.000004
27-Apr-10	0.000031	0.0018	0.20	0.008	0.0044	0.00004	0.00004	0.0044	0.81	0.00002	0.28	0.000004	0.25	0.010	0.88	0.00009	0.00004	0.00013	0.000050	0.00025	0.0004	0.000004
04-May-10	0.000419	0.0018	0.20	0.009	0.0045	0.00005	0.00005	0.0045	0.77	0.00002	0.30	0.000005	0.26	0.012	0.86	0.00009	0.00006	0.00009	0.000053	0.00026	0.0005	0.000005
11-May-10	0.000827	0.0018	0.18	0.010	0.0044	0.00005	0.00004	0.0088	0.75	0.00002	0.33	0.000013	0.19	0.011	0.95	0.00009	0.00013	0.00009	0.000042	0.00029	0.0004	0.000004
18-May-10	0.000116	0.0017	0.16	0.008	0.0042	0.00024	0.00004	0.0037	0.73	0.00002	0.30	0.000004	0.19	0.009	0.59	0.00008	0.00011	0.00008	0.000040	0.00029	0.0004	0.000008
25-May-10	0.000574	0.0013	0.13	0.010	0.0043	0.00004	0.00004	0.0038	0.64	0.00002	0.26	0.000004	0.17	0.008	0.55	0.00009	0.00012	0.00009	0.000043	0.00029	0.0009	0.000004
01-Jun-10	0.000455	0.0013	0.12	0.009	0.0043	0.00003	0.00004	0.0038	0.60	0.00002	0.26	0.000004	0.15	0.008	0.47	0.00009	0.00009	0.00013	0.000026	0.00027	0.0004	0.000004
08-Jun-10	0.000420	0.0015	0.18	0.010	0.0050	0.00006	0.00005	0.0110	0.75	0.00002	0.39	0.000005	0.20	0.012	0.71	0.00010	0.00008	0.00005	0.000085	0.00028	0.0005	0.000005
15-Jun-10	0.000028	0.0014	0.13	0.009	0.0046	0.00007	0.00005	0.0060	0.58	0.00002	0.29	0.000009	0.16	0.009	0.67	0.00009	0.00018	0.00005	0.000046	0.00027	0.0005	0.000009
22-Jun-10																						
29-Jun-10	0.000027	0.0014	0.11	0.009	0.0045	0.00005	0.00005	0.0041	0.51	0.00002	0.24	0.000005	0.13	0.005	0.44	0.00009	0.00027	0.00005	0.000032	0.00021	0.0005	0.000005
06-Jul-10																						
13-Jul-10	0.000023	0.0009	0.11	0.009	0.0046	0.00007	0.00009	0.0041	0.49	0.00002	0.26	0.000005	0.13	0.007	0.38	0.00009	0.00050	0.00005	0.000041	0.00024	0.0005	0.000005
20-Jul-10																						
27-Jul-10	0.000009	0.0009	0.10	0.008	0.0044	0.00000	0.00004	0.0040	0.45	0.00036	0.25	0.000004	0.13	0.007	0.39	0.00009	0.00004	0.00004	0.000026	0.00021	0.0004	0.000004
03-Aug-10	0.000009	0.0009	0.09	0.008	0.0046	0.00004	0.00005	0.0059	0.44	0.00002	0.23	0.000005	0.10	0.006	0.32	0.00009	0.00005	0.00005	0.000031	0.00020	0.0005	0.000005
10-Aug-10	0.000013	0.0009	0.09	0.008	0.0045	0.00002	0.00004	0.0053	0.45	0.00003	0.27	0.000004	0.11	0.006	0.29	0.00009	0.00027	0.00004	0.000023	0.00024	0.0004	0.000004
17-Aug-10	0.000018	0.0009	0.08	0.004	0.0045	0.00003	0.00004	0.0040	0.44	0.00002	0.26	0.000004	0.11	0.006	0.44	0.00009	0.00005	0.00009	0.000027	0.00026	0.0004	0.000004
24-Aug-10	0.000022	0.0009	0.08	0.007	0.0044	0.00001	0.00009	0.0040	0.42	0.00002	0.23	0.000004	0.10	0.005	0.34	0.00009	0.00017	0.00013	0.000023	0.00023	0.0004	0.000004
31-Aug-10	0.000027	0.0009	0.07	0.000	0.0045	0.00000	0.00005	0.0041	0.40	0.00002	0.23	0.000005	0.09	0.005	0.30	0.00009	0.00001	0.00005	0.000023	0.00026	0.0005	0.000005
07-Sep-10	0.000027	0.0009	0.07	0.000	0.0046	0.00000	0.00005	0.0059	0.42	0.00002	0.26	0.000005	0.08	0.004	0.21	0.00009	0.00001	0.00005	0.000022	0.00025	0.0009	0.000005
14-Sep-10	0.000023	0.0005	0.08	0.010	0.0047	0.00010	0.00005	0.0042	0.42	0.00002	0.26	0.000005	0.09	0.006	0.28	0.00009	0.00008	0.00009	0.000023	0.00022	0.0005	0.000009
21-Sep-10	0.000009	0.0005	0.07	0.009	0.0046	0.00004	0.00009	0.0041	0.47	0.00029	0.29	0.000005	0.09	0.006	0.26	0.00009	0.00010	0.00005	0.000129	0.00023	0.0005	0.000005
28-Sep-10	0.000028	0.0009	0.08	0.009	0.0046	0.00006	0.00005	0.0055	0.55	0.00002	0.35	0.000005	0.11	0.007	0.33	0.00009	0.00014	0.00005	0.000023	0.00026	0.0005	0.000110
05-Oct-10	0.000018	0.0009	0.08	0.009	0.0045	0.00009	0.00005	0.0072	0.51	0.00002	0.30	0.000005	0.10	0.006	0.32	0.00009	0.00018	0.00009	0.000020	0.00025	0.0005	0.000005
12-Oct-10	0.000441	0.0009	0.08	0.009	0.0045	0.00007	0.00013	0.0040	0.45	0.00002	0.27	0.000004	0.12	0.006	0.32	0.00009	0.00019	0.00004	0.000072	0.00024	0.0009	0.000004
19-Oct-10	0.000009	0.0009	0.07	0.008	0.0046	0.00000	0.00005	0.0041	0.45	0.00002	0.26	0.000005	0.09	0.006	0.25	0.00009	0.00000	0.00005	0.000017	0.00023	0.0009	0.000009
26-Oct-10	0.000078	0.0005	0.07	0.009	0.0049	0.00000	0.00015	0.0044	0.42	0.00044	0.24	0.000005	0.09	0.006	0.31	0.00010	0.00000	0.00005	0.000023	0.00020	0.0010	0.000005
02-Nov-10	0.000093	0.0010	0.07	0.007	0.0049	0.00001	0.00025	0.0123	0.44	0.00002	0.25	0.000005	0.12	0.005	0.34	0.00010	0.00032	0.00005	0.000018	0.00016	0.0015	0.000005
09-Nov-10	0.000327	0.0009	0.07	0.008	0.0043	0.00003	0.00009	0.0119	0.41	0.00002	0.23	0.000004	0.12	0.005	0.28	0.00009	0.00041	0.00017	0.000017	0.00021	0.0047	0.000004
16-Nov-10	0.000288	0.0009	0.07	0.008	0.0090	0.00002	0.00009	0.0099	0.41	0.00002	0.24	0.000005	0.07	0.005	0.24	0.00009	0.00008	0.00005	0.000019	0.00020	0.0009	0.000023
23-Nov-10	0.000013	0.0008	0.05	0.008	0.0042	0.00006	0.00004	0.0038	0.37	0.00002	0.20	0.000004	0.07	0.005	0.10	0.00008	0.00009	0.00008	0.000018	0.00021	0.0008	0.000004
30-Nov-10	0.000040	0.0004	0.07	0.009	0.0044	0.00007	0.00013	0.0040	0.38	0.00002	0.22	0.000004	0.08	0.005	0.29	0.00009	0.00004	0.00004	0.000025	0.00018	0.0013	0.000004
07-Dec-10	0.000850	0.0009	0.10	0.011	0.0045	0.00006	0.00009	0.0040	0.51	0.00002	0.36	0.000004	0.10	0.008	0.33	0.00009	0.00008	0.00004	0.000033	0.00025	0.0009	0.000004
14-Dec-10	0.000028	0.0005	0.06	0.008	0.0046	0.00005	0.00014	0.0041	0.38	0.00006	0.22	0.000005	0.08	0.006	0.25	0.00009	0.00012	0.00005	0.000022	0.00022	0.0005	0.000005
21-Dec-10	0.000014	0.0005	0.06	0.003	0.0047	0.00000	0.00009	0.0042	0.39	0.00002	0.25	0.000005	0.07	0.005	0.26	0.00009	0.00008	0.00009	0.000022	0.00020	0.0005	0.000005
28-Dec-10	0.000644	0.0005	0.06	0.007	0.0047	0.00000	0.00005	0.0061	0.38	0.00002	0.25	0.000005	0.08	0.005	0.32	0.00009	0.00010	0.00005	0.000017	0.00020	0.0009	0.000005
04-Jan-11	0.000563	0.0005	0.06	0.009	0.0049	0.00000	0.00005	0.0058	0.40	0.00002	0.25	0.000005	0.07	0.005	0.29	0.00010	0.00004	0.00005	0.000021	0.00018	0.0010	0.000005
11-Jan-11	0.000013	0.0004	0.06	0.009	0.0044	0.00006	0.00004	0.0040	0.36	0.00002	0.18	0.000004	0.07	0.005	0.31	0.00009	0.00013	0.00004	0.000355	0.00015	0.0004	0.000009
18-Jan-11	0.000009	0.0005	0.07	0.010	0.0047	0.00000	0.00005	0.0132	0.43	0.00002	0.29	0.000005	0.08	0.006	0.30	0.00009	0.00006	0.00005	0.000019	0.00020	0.0005	0.000005
25-Jan-11	0.000019	0.0005	0.06	0.007	0.0047	0.00000	0.00009	0.0061	0.37	0.00002	0.21	0.000005	0.08	0.005	0.24	0.00009	0.00013	0.00005	0.000018	0.00018	0.0005	0.000005
01-Feb-11	0.000014	0.0005	0.06	0.008	0.0046	0.00006	0.00009	0.0187	0.34	0.00002	0.20	0.000005	0.06	0.005	0.41	0.00009	0.00028	0.00009	0.000018	0.00015	0.0005	0.000400
08-Feb-11	0.000024	0.0005	0.09	0.009	0.0048	0.00033	0.00005	0.0043	0.37	0.00002	0.26	0.000005	0.10	0.007	0.39	0.00010	0.00024	0.00005	0.000030	0.00017	0.0005	0.000005
15-Feb-11	0.000469	0.0005	0.06	0.008	0.0046	0.00004	0.00009	0.0114	0.35	0.00006	0.24	0.000005	0.05	0.005	0.27	0.00009	0.00010	0.00005	0.000017	0.00013	0.0009	0.000005
22-Feb-11	0.000009	0.0005	0.05	0.007	0.0046	0.00000	0.00005	0.0041	0.34	0.00003	0.21	0.000005	0.06	0.005	0.24	0.00009	0.00000	0.00005	0.000008	0.00014	0.0005	0.000005
01-Mar-11	0.000601	0.0005	0.05	0.008	0.0046	0.00000	0.00009	0.0191	0.30	0.00002	0.21	0.000005	0.07	0.005	0.28	0.00009	0.00021	0.00005	0.000015	0.00015	0.0032	0.000005
08-Mar-11	0.000484	0.0005	0.05	0.008	0.0047	0.00003	0.00005	0.0042	0.32	0.00002	0.19	0.000005	0.07	0.005	0.28	0.00009	0.00012	0.00005	0.000018	0.00013	0.0009	0.000005
15-Mar-11	0.000696	0.0005	0.05	0.008	0.0046	0.00001	0.00014	0.0041	0.33	0.00002	0.22	0.000005	0.07	0.005	0.28	0.00001	0.00009	0.00005	0.000017	0.00015	0.0023	0.000005
22-Mar-11	0.000009	0.0005	0.05	0.007	0.0047	0.00000	0.00005	0.0042	0.32	0.00002	0.22	0.000005	0.04	0.005	0.24	0.00009	0.00008	0.00005	0.000013	0.00016	0.0005	0.000005
29-Mar-11	0.000015	0.0005	0.07	0.008	0.0051	0.00001	0.00010	0.0152	0.37	0.00002	0.28	0.000005	0.07	0.007	0.32	0.00010	0.00005	0.00005	0.000030	0.00014	0.0005	0.000005
05-Apr-11	0.000028	0.0005	0.05	0.008	0.0046	0.00001	0.00009	0.0074	0.32	0.00002	0.23	0.000005	0.06	0.005	0.28	0.00009	0.00003	0.00005	0.000017	0.00017	0.0005	0.000005
12-Apr-11	0.000010	0.0005	0.06	0.010	0.0048	0.00004	0.00005	0.0095	0.34	0.00002	0.23	0.000005	0.06	0.006	0.29	0.00010	0.00003	0.00005	0.000019	0.00017	0.0005	0.000005
19-Apr-11	0.000023	0.0005	0.05	0.007	0.0047	0.00007	0.00005	0.0102	0.34	0.00014	0.23	0.000005	0.10	0.005	0.30	0.00009	0.00003	0.00005	0.000017	0.00021	0.0019	0.000005
26-Apr-11	0.000017	0.0004	0.05	0.007	0.0043	0.00001	0.00017	0.0038	0.35	0.00002	0.21	0.000004	0.07	0.005	0.32	0.00009	0.00002	0.00009	0.000017	0.00018	0.0009	0.000004
03-May-11	0.000022	0.0004	0.04	0.007	0.0045	0.00004	0.00009	0.0080	0.32	0.00008	0.21	0.000004	0.05	0.005	0.26	0.00009	0.00004	0.00004	0.000022	0.00016	0.0009	0.000004
10-May-11	0.000018	0.0005	0.05	0.008	0.0045	0.00024	0.00005	0.0041	0.33	0.00002	0.21	0.000014	0.05	0.005	0.27	0.00009	0.00008	0.00005	0.000014	0.00009	0.0005	0.000005
17-May-11	0.000262	0.0005	0.04	0.010	0.0046	0.00001	0.00005	0.0041	0.34	0.00002	0.21	0.000009	0.05	0.005	0.25	0.00009	0.00003	0.00005	0.000016	0.00016	0.0009	0.000005
24-May-11	0.000010	0.0005	0.05	0.007	0.0052	0.00001	0.00005	0.0052	0.41	0.00002	0.34	0.000005	0.07	0.005	0.32	0.00010	0.00004	0.00005	0.000017	0.00020	0.0005	0.000005
31-May-11	0.000010	0.0005	0.05	0.007	0.0048	0.00001	0.00005	0.0043	0.35	0.00002	0.28	0.000005	0.06	0.005	0.25	0.00010	0.00005	0.00005	0.000020	0.00019	0.0005	0.000005
07-Jun-11	0.000018	0.0004	0.04	0.007	0.0045	0.00000	0.00004	0.0058	0.33	0.00002	0.24	0.000004	0.08	0.004	0.26	0.00001	0.00006	0.00004	0.000009	0.00016	0.0009	0.000004
14-Jun-11	0.000041	0.0005	0.02	0.003	0.0046	0.00002	0.00009	0.0041	0.06	0.00003	0.23	0.000005	0.13	0.003	0.68	0.00001	0.00010	0.00005	0.000006	0.00005	0.0009	0.000005
21-Jun-11	0.000032	0.0005	0.04	0.006	0.0046	0.00000	0.00005	0.0055	0.29	0.00002	0.20	0.000005	0.06	0.004	0.26	0.00001	0.00005	0.00005	0.000014	0.00015	0.0018	0.000005
28-Jun-11	0.000009	0.0005	0.04	0.008	0.0046	0.00006	0.00005	0.0041	0.33	0.00002	0.22	0.000005	0.06	0.005	0.26	0.00001	0.00000	0.00005	0.000016	0.00014	0.0005	0.000009

HC 10
Sample = Alt 09 20

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
05-Jul-11	0.000010	0.0005	0.06	0.008	0.0050	0.00002	0.00010	0.0045	0.37	0.00002	0.30	0.000005	0.09	0.006	0.33	0.00001	0.00005	0.00005	0.000020	0.00015	0.0025	0.000005
12-Jul-11	0.000009	0.0005	0.04	0.008	0.0046	0.00006	0.00005	0.0041	0.33	0.00002	0.25	0.000005	0.05	0.005	0.29	0.00001	0.00005	0.00005	0.000016	0.00015	0.0005	0.000005
19-Jul-11	0.000010	0.0005	0.05	0.008	0.0048	0.00001	0.00010	0.0086	0.33	0.00014	0.23	0.000005	0.07	0.005	0.32	0.00001	0.00007	0.00005	0.000016	0.00015	0.0005	0.000005
26-Jul-11	0.000009	0.0005	0.05	0.026	0.0045	0.00014	0.00014	0.0203	0.26	0.00002	0.17	0.000005	0.04	0.005	0.24	0.00001	0.00000	0.00009	0.000013	0.00014	0.0005	0.000005
02-Aug-11	0.000014	0.0005	0.04	0.007	0.0047	0.00002	0.00005	0.0042	0.33	0.00002	0.24	0.000005	0.05	0.005	0.30	0.00001	0.00003	0.00005	0.000017	0.00014	0.0014	0.000005
09-Aug-11	0.000014	0.0005	0.04	0.007	0.0048	0.00006	0.00005	0.0043	0.29	0.00002	0.22	0.000005	0.05	0.004	0.28	0.00001	0.00000	0.00005	0.000016	0.00016	0.0010	0.000005
16-Aug-11	0.000023	0.0005	0.04	0.007	0.0047	0.00003	0.00005	0.0042	0.31	0.00006	0.24	0.000005	0.06	0.005	0.30	0.00001	0.00004	0.00005	0.000013	0.00015	0.0005	0.000005
23-Aug-11	0.000019	0.0005	0.04	0.007	0.0047	0.00002	0.00005	0.0042	0.30	0.00002	0.23	0.000005	0.06	0.005	0.28	0.00001	0.00003	0.00005	0.000017	0.00015	0.0005	0.000005
30-Aug-11	0.000023	0.0005	0.04	0.007	0.0047	0.00002	0.00009	0.0042	0.31	0.00004	0.22	0.000005	0.06	0.005	0.33	0.00001	0.00004	0.00005	0.000015	0.00016	0.0009	0.000005
06-Sep-11	0.000059	0.0005	0.04	0.006	0.0228	0.00002	0.00005	0.0041	0.28	0.00002	0.17	0.000005	0.05	0.004	0.31	0.00001	0.00000	0.00005	0.000014	0.00015	0.0014	0.000005
13-Sep-11	0.000108	0.0005	0.04	0.006	0.0045	0.00005	0.00005	0.0041	0.29	0.00002	0.21	0.000005	0.05	0.005	0.34	0.00001	0.00005	0.00005	0.000015	0.00014	0.0014	0.000005
20-Sep-11	0.000023	0.0005	0.04	0.007	0.0047	0.00004	0.00009	0.0042	0.26	0.00002	0.20	0.000005	0.07	0.004	0.30	0.00001	0.00014	0.00005	0.000015	0.00015	0.0014	0.000005
27-Sep-11	0.000018	0.0005	0.04	0.006	0.0046	0.00002	0.00005	0.0041	0.30	0.00003	0.19	0.000005	0.05	0.004	0.37	0.00001	0.00005	0.00005	0.000017	0.00014	0.0009	0.000005
04-Oct-11	0.000036	0.0005	0.05	0.008	0.0051	0.00004	0.00005	0.0046	0.35	0.00002	0.26	0.000005	0.06	0.006	0.35	0.00001	0.00004	0.00005	0.000024	0.00013	0.0010	0.000005
11-Oct-11	0.000040	0.0004	0.03	0.005	0.0045	0.00001	0.00004	0.0040	0.27	0.00002	0.19	0.000004	0.04	0.004	0.33	0.00001	0.00001	0.00004	0.000000	0.00012	0.0004	0.000004
18-Oct-11	0.000040	0.0004	0.04	0.006	0.0045	0.00004	0.00009	0.0040	0.28	0.00002	0.18	0.000004	0.05	0.004	0.32	0.00001	0.00002	0.00004	0.000010	0.00013	0.0004	0.000004
25-Oct-11	0.000018	0.0005	0.03	0.006	0.0045	0.00002	0.00005	0.0041	0.27	0.00002	0.19	0.000005	0.05	0.004	0.29	0.00001	0.00004	0.00005	0.000014	0.00013	0.0009	0.000005
01-Nov-11	0.000014	0.0005	0.04	0.006	0.0047	0.00002	0.00005	0.0042	0.28	0.00002	0.19	0.000005	0.04	0.004	0.32	0.00001	0.00004	0.00005	0.000012	0.00014	0.0009	0.000005
08-Nov-11	0.000009	0.0004	0.04	0.006	0.0044	0.00001	0.00004	0.0040	0.29	0.00006	0.17	0.000004	0.05	0.004	0.38	0.00001	0.00003	0.00009	0.000012	0.00016	0.0018	0.000004
15-Nov-11	0.000009	0.0004	0.04	0.006	0.0045	0.00001	0.00009	0.0040	0.27	0.00004	0.13	0.000004	0.05	0.004	0.34	0.00001	0.00001	0.00009	0.000012	0.00016	0.0009	0.000004
22-Nov-11	0.000018	0.0004	0.04	0.007	0.0044	0.00000	0.00009	0.0040	0.28	0.00002	0.18	0.000004	0.01	0.004	0.30	0.00001	0.00000	0.00009	0.000015	0.00016	0.0004	0.000004
29-Nov-11	0.000009	0.0004	0.04	0.008	0.0045	0.00006	0.00009	0.0045	0.30	0.00002	0.20	0.000004	0.04	0.005	0.35	0.00001	0.00003	0.00004	0.000012	0.00020	0.0004	0.000004
06-Dec-11	0.000009	0.0004	0.04	0.007	0.0044	0.00002	0.00004	0.0078	0.27	0.00002	0.17	0.000030	0.03	0.004	0.32	0.00001	0.00000	0.00022	0.000011	0.00022	0.0009	0.000004
13-Dec-11	0.000076	0.0004	0.05	0.007	0.0045	0.00002	0.00009	0.0049	0.29	0.00010	0.16	0.000004	0.06	0.004	0.38	0.00001	0.00004	0.00004	0.000012	0.00009	0.0009	0.000004
20-Dec-11	0.000009	0.0004	0.04	0.006	0.0044	0.00001	0.00004	0.0040	0.26	0.00007	0.16	0.000004	0.04	0.004	0.38	0.00001	0.00000	0.00004	0.000012	0.00016	0.0004	0.000004
27-Dec-11	0.000009	0.0004	0.04	0.006	0.0044	0.00003	0.00013	0.0039	0.27	0.00002	0.16	0.000004	0.05	0.004	0.41	0.00001	0.00001	0.00004	0.000012	0.00018	0.0004	0.000004
03-Jan-12	0.000009	0.0004	0.04	0.005	0.0044	0.00002	0.00013	0.0040	0.27	0.00002	0.16	0.000004	0.04	0.004	0.37	0.00001	0.00001	0.00004	0.000011	0.00025	0.0009	0.000004
10-Jan-12	0.000018	0.0004	0.04	0.006	0.0045	0.00002	0.00004	0.0040	0.27	0.00002	0.16	0.000004	0.08	0.004	0.34	0.00001	0.00003	0.00009	0.000012	0.00027	0.0018	0.000004
17-Jan-12	0.000009	0.0004	0.04	0.007	0.0044	0.00002	0.00009	0.0040	0.28	0.00002	0.16	0.000004	0.04	0.004	0.35	0.00001	0.00001	0.00009	0.000013	0.00020	0.0004	0.000004
24-Jan-12	0.000009	0.0005	0.04	0.007	0.0047	0.00002	0.00009	0.0042	0.30	0.00002	0.15	0.000005	0.05	0.004	0.38	0.00001	0.00003	0.00005	0.000012	0.00022	0.0005	0.000005
31-Jan-12	0.000018	0.0004	0.04	0.007	0.0045	0.00003	0.00004	0.0040	0.29	0.00002	0.16	0.000004	0.06	0.004	0.36	0.00001	0.00003	0.00009	0.000024	0.00025	0.0009	0.000004
07-Feb-12	0.000010	0.0005	0.05	0.009	0.0050	0.00002	0.00010	0.0045	0.32	0.00004	0.24	0.000005	0.05	0.006	0.38	0.00001	0.00000	0.00005	0.000020	0.00019	0.0005	0.000005
14-Feb-12	0.000009	0.0004	0.03	0.005	0.0043	0.00002	0.00009	0.0039	0.23	0.00002	0.14	0.000004	0.05	0.004	0.32	0.00001	0.00000	0.00004	0.000011	0.00011	0.0004	0.000004
21-Feb-12	0.000009	0.0004	0.03	0.006	0.0045	0.00001	0.00009	0.0040	0.26	0.00002	0.15	0.000004	0.05	0.004	0.36	0.00001	0.00000	0.00004	0.000012	0.00013	0.0004	0.000004
28-Feb-12	0.000009	0.0004	0.04	0.007	0.0044	0.00003	0.00004	0.0039	0.27	0.00004	0.15	0.000004	0.05	0.004	0.33	0.00001	0.00001	0.00004	0.000010	0.00016	0.0009	0.000004
06-Mar-12	0.000009	0.0004	0.03	0.005	0.0043	0.00002	0.00009	0.0039	0.27	0.00002	0.15	0.000004	0.06	0.004	0.39	0.00001	0.00000	0.00004	0.000012	0.00018	0.0013	0.000004
13-Mar-12	0.000017	0.0004	0.04	0.005	0.0044	0.00004	0.00009	0.0039	0.27	0.00002	0.16	0.000004	0.05	0.004	0.37	0.00001	0.00013	0.00004	0.000011	0.00010	0.0004	0.000013
20-Mar-12	0.000009	0.0005	0.04	0.008	0.0046	0.00003	0.00005	0.0041	0.29	0.00003	0.16	0.000005	0.05	0.005	0.38	0.00001	0.00006	0.00005	0.000012	0.00008	0.0005	0.000005
27-Mar-12	0.000009	0.0005	0.04	0.007	0.0046	0.00003	0.00009	0.0041	0.27	0.00002	0.18	0.000005	0.05	0.005	0.43	0.00001	0.00000	0.00009	0.000017	0.00022	0.0005	0.000005
03-Apr-12	0.000023	0.0005	0.03	0.007	0.0046	0.00002	0.00005	0.0041	0.28	0.00002	0.15	0.000005	0.05	0.004	0.38	0.00001	0.00000	0.00005	0.000013	0.00018	0.0009	0.000005
10-Apr-12	0.000018	0.0005	0.04	0.007	0.0225	0.00003	0.00005	0.0041	0.28	0.00002	0.16	0.000005	0.05	0.004	0.41	0.00001	0.00001	0.00005	0.000013	0.00019	0.0005	0.000005
17-Apr-12	0.000009	0.0005	0.03	0.006	0.0045	0.00003	0.00005	0.0041	0.26	0.00002	0.15	0.000005	0.03	0.004	0.41	0.00001	0.00000	0.00009	0.000013	0.00019	0.0005	0.000009
24-Apr-12	0.000009	0.0004	0.03	0.006	0.0086	0.00011	0.00030	0.0039	0.28	0.00002	0.17	0.000004	0.05	0.004	0.42	0.00001	0.00000	0.00004	0.000050	0.00018	0.0004	0.000004
01-May-12	0.000021	0.0004	0.03	0.007	0.0085	0.00002	0.00004	0.0038	0.27	0.00005	0.16	0.000004	0.04	0.004	0.36	0.00001	0.00001	0.00009	0.000012	0.00021	0.0004	0.000004
08-May-12	0.000026	0.0004	0.03	0.007	0.0044	0.00002	0.00009	0.0039	0.29	0.00002	0.17	0.000004	0.05	0.004	0.34	0.00001	0.00021	0.00004	0.000014	0.00018	0.0004	0.000004
15-May-12	0.000009	0.0004	0.03	0.006	0.0043	0.00001	0.00013	0.0038	0.28	0.00002	0.16	0.000004	0.05	0.004	0.31	0.00001	0.00000	0.00004	0.000013	0.00018	0.0009	0.000004
22-May-12	0.000009	0.0004	0.03	0.005	0.0087	0.00003	0.00009	0.0039	0.27	0.00002	0.17	0.000004	0.05	0.004	0.32	0.00001	0.00000	0.00009	0.000013	0.00027	0.0004	0.000004
29-May-12	0.000009	0.0004	0.03	0.007	0.0044	0.00002	0.00009	0.0039	0.29	0.00002	0.19	0.000004	0.05	0.004	0.31	0.00001	0.00010	0.00026	0.000013	0.00029	0.0004	0.000004
05-Jun-12	0.000009	0.0004	0.03	0.007	0.0086	0.00005	0.00004	0.0039	0.27	0.00002	0.17	0.000004	0.06	0.004	0.31	0.00001	0.00001	0.00009	0.000009	0.00022	0.0004	0.000004
12-Jun-12	0.000009	0.0004	0.04	0.011	0.0085	0.00003	0.00004	0.0038	0.42	0.00007	0.32	0.000004	0.06	0.006	0.35	0.00001	0.00000	0.00004	0.000017	0.00025	0.0009	0.000004
19-Jun-12	0.000009	0.0004	0.03	0.007	0.0044	0.00001	0.00004	0.0040	0.30	0.00004	0.18	0.000004	0.04	0.004	0.25	0.00001	0.00000	0.00004	0.000008	0.00023	0.0004	0.000004
26-Jun-12	0.000013	0.0004	0.03	0.007	0.0043	0.00003	0.00004	0.0039	0.31	0.00002	0.22	0.000004	0.06	0.004	0.30	0.00001	0.00006	0.00009	0.000012	0.00026	0.0009	0.000004
03-Jul-12	0.000009	0.0004	0.03	0.007	0.0043	0.00015	0.00004	0.0038	0.28	0.00002	0.17	0.000004	0.04	0.004	0.27	0.00001	0.00006	0.00004	0.000015	0.00022	0.0009	0.000004
10-Jul-12	0.000013	0.0004	0.03	0.006	0.0084	0.00002	0.00004	0.0038	0.28	0.00002	0.16	0.000004	0.05	0.004	0.26	0.00001	0.00017	0.00004	0.000010	0.00022	0.0013	0.000004
17-Jul-12	0.000009	0.0004	0.03	0.006	0.0043	0.00000	0.00004	0.0039	0.30	0.00002	0.18	0.000004	0.04	0.004	0.28	0.00001	0.00000	0.00004	0.000010	0.00022	0.0004	0.000004
24-Jul-12	0.000009	0.0004	0.03	0.007	0.0086	0.00002	0.00004	0.0039	0.28	0.00006	0.16	0.000004	0.05	0.004	0.27	0.00001	0.00002	0.00004	0.000009	0.00025	0.0004	0.000004
31-Jul-12	0.000009	0.0004	0.03	0.006	0.0045	0.00001	0.00004	0.0040	0.28	0.00002	0.17	0.000004	0.04	0.004	0.26	0.00001	0.00001	0.00004	0.000011	0.00025	0.0009	0.000004
07-Aug-12	0.000017	0.0004	0.03	0.005	0.0044	0.00001	0.00004	0.0039	0.28	0.00002	0.20	0.000004	0.05	0.004	0.30	0.00001	0.00004	0.00004	0.000011	0.00027	0.0009	0.000013
14-Aug-12	0.000009	0.0004	0.03	0.005	0.0043	0.00001	0.00004	0.0038	0.27	0.00002	0.16	0.000004	0.05	0.003	0.28	0.00001	0.00003	0.00004	0.000010	0.00017	0.0009	0.000004
21-Aug-12	0.000009	0.0004	0.03	0.007	0.0045	0.00002	0.00004	0.0040	0.25	0.00002	0.18	0.000004	0.04	0.004	0.34	0.00001	0.00005	0.00004	0.000010	0.00021	0.0004	0.000004
28-Aug-12	0.000009	0.0005	0.03	0.007	0.0045	0.00003	0.00005	0.0041	0.26	0.00002	0.17	0.000005	0.04	0.004	0.25	0.00001	0.00014	0.00014	0.000009	0.00023	0.0005	0.000005
04-Sep-12	0.000009	0.0005	0.03	0.006	0.0225	0.00001	0.00005	0.0041	0.26	0.00002	0.17	0.000005	0.05	0.004	0.27	0.00001	0.00003	0.00005	0.000016	0.00032	0.0005	0.000005
11-Sep-12	0.000009	0.0004	0.03	0.006	0.0089	0.00001	0.00004	0.0040	0.26	0.00002	0.16	0.000004	0.05	0.004	0.26	0.00001	0.00007	0.00004	0.000010	0.00019	0.0004	0.000004
18-Sep-12	0.000065	0.0004	0.03	0.006	0.0131	0.00002	0.00004	0.0039	0.26	0.00002	0.18	0.000009	0.04	0.004	0.25	0.00001	0.00013	0.00013	0.000017	0.00024	0.0096	0.000004
25-Sep-12	0.000017	0.0004	0.03	0.006	0.0084	0.00001	0.00004	0.0038	0.26	0.00003	0.16	0.000013	0.04	0.003	0.23	0.00001	0.00007	0.00004	0.000014	0.00016	0.0004	0.000004
02-Oct-12	0.000009	0.0004	0.03	0.006	0.0045	0.00001	0.00004	0.0040	0.26	0.00002	0.18	0.000004	0.04	0.003	0.25	0.00001	0.00004	0.00004	0.000010	0.00018	0.0004	0.000004
09-Oct-12	0.000009	0.0004	0.03	0.008	0.0044	0.00002	0.00013	0.0040	0.28	0.00002	0.17	0.000004	0.04	0.004	0.25	0.00001	0.00005	0.00004	0.000012	0.00018	0.0004	0.000004
16-Oct-12	0.000008	0.0004	0.03	0.006	0.0042	0.00001	0.00004	0.0038	0.26	0.00002	0.17	0.000004	0.04	0.003	0.24	0.00001	0.00003	0.00004	0.000010	0.00017	0.0008	0.000004
23-Oct-12	0.000009	0.0004	0.03	0.006	0.0044	0.00004	0.00017	0.0039	0.25	0.00002	0.15	0.000004	0.04	0.003	0.23	0.00001	0.00001	0.00004	0.000011	0.00020	0.0004	0.000004
30-Oct-12	0.000009	0.0004	0.03	0.007	0.0045	0.00003	0.00004	0.0040	0.28	0.00002	0.17	0.000022	0.04	0.004	0.26	0.00001	0.00020	0.00004	0.000012	0.00017	0.0004	0.000004
06-Nov-12	0.000009	0.0004	0.03	0.007	0.0044	0.00003	0.00009	0.0040	0.25	0.00002	0.17	0.000004	0.04	0.004	0.24	0.00001	0.00007	0.00004	0.000011	0.00016	0.0004	0.000004
13-Nov-12	0.000009	0.0004	0.03	0.007	0.0086	0.00001	0.00004	0.0039	0.26	0.00002	0.15	0.000004	0.03	0.003	0.25	0.00001	0.00001	0.00004	0.000010	0.00016	0.0004	0.000004
20-Nov-12	0.000010	0.0005	0.04	0.010	0.0050	0.00001	0.00005	0.0045	0.27	0.00002	0.22	0.000005	0.05	0.005	0.26	0.00001	0.00007	0.00005	0.000015	0.00017	0.0035	0.000005
27-Nov-12	0.000010	0.0005	0.04	0.011	0.0050	0.00002	0.00010	0.0045	0.28	0.00002	0.24	0.000005	0.05	0.005	0.31	0.00001	0.00006	0.00005	0.000023	0.00003	0.0005	0.000005
04-Dec-12	0.000009	0.0005	0.03	0.006	0.0046	0.00001	0.00005	0.0041	0.24	0.00002	0.13	0.000005	0.03	0.003	0.20	0.00001	0.00004	0.00005	0.000013	0.00014	0.0005	0.000005
11-Dec-12	0.000010	0.0005	0.03	0.006	0.0240	0.00002	0.00005	0.0043	0.29	0.00002	0.17	0.000005	0.04	0.004	0.25	0.00001	0.00003	0.00005	0.000014	0.00018	0.0005	0.000005
18-Dec-12	0.000010	0.0005	0.03	0.009	0.0049	0.00002	0.00005	0.0044	0.27	0.00002	0.20	0.000005	0.04	0.005	0.31	0.00001	0.00005	0.00005	0.000020	0.00017	0.0005	0.000005
25-Dec-12	0.000009	0.0005	0.03	0.006	0.0047	0.00002	0.00005	0.0042	0.24	0.00002	0.12	0.000005	0.03	0.004	0.26	0.00001	0.00003	0.00005	0.000012	0.00010	0.0005	0.000005
01-Jan-13	0.000009	0.0004	0.02	0.005	0.0043	0.00005	0.00004	0.0047	0.25	0.00002	0.15	0.000004	0.05	0.003	0.19	0.00001	0.00004	0.00004	0.000011	0.00015	0.0004	0.000004
08-Jan-13	0.000009	0.0004	0.02	0.004	0.0045	0.00002	0.00004	0.0089	0.26	0.00002	0.13	0.000004	0.04	0.003	0.16	0.00001	0.00005	0.00004	0.000012	0.00019	0.0004	0.000004
15-Jan-13																						
22-Jan-13																						
29-Jan-13																						
05-Feb-13																						
12-Feb-13																						

HC 11
Sample = L032107

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	1	500	450	7.84	1.82	14.31	6.30	0.103	0.0014	0.00302	0.0004	0.000009	0.0000045	0.0153	0.000001	2.01	0.00023	0.000013	0.00045	0.0014
08-May-12	2	500	430	7.88	0.80	9.95	4.73	0.099	0.0020	0.00482	0.0003	0.000009	0.0000043	0.0139	0.000001	1.44	0.00022	0.000012	0.00065	0.0017
15-May-12	3	500	415	7.90	0.73	9.65	2.91	0.157	0.0017	0.00502	0.0005	0.000008	0.0000042	0.0149	0.000001	1.36	0.00021	0.000008	0.00025	0.0029
22-May-12	4	500	470	7.62	1.33	10.09	3.29	0.117	0.0020	0.00418	0.0004	0.000009	0.0000047	0.0131	0.000001	1.50	0.00024	0.000012	0.00047	0.0014
29-May-12	5	500	435	7.54	1.35	8.99	1.74	0.113	0.0013	0.00318	0.0003	0.000009	0.0000044	0.0106	0.000001	1.71	0.00022	0.000010	0.00022	0.0013
05-Jun-12	6	500	455	7.52	1.53	9.39	1.82	0.092	0.0015	0.00268	0.0005	0.000009	0.0000046	0.0107	0.000023	1.77	0.00023	0.000010	0.00023	0.0018
12-Jun-12	7	500	440	7.62	1.21	7.31	1.76	0.098	0.0011	0.00242	0.0003	0.000009	0.0000044	0.0077	0.000001	1.64	0.00022	0.000001	0.00022	0.0013
19-Jun-12	8	500	460	7.40	1.08	7.34	0.92	0.069	0.0012	0.00271	0.0003	0.000009	0.0000046	0.0076	0.000001	1.77	0.00023	0.000018	0.00023	0.0018
26-Jun-12	9	500	455	7.50	1.13	6.67	2.28	0.098	0.0011	0.00259	0.0004	0.000009	0.0000046	0.0074	0.000001	1.77	0.00023	0.000001	0.00023	0.0023
03-Jul-12	10	500	465	7.54	2.70	7.57	2.33	0.072	0.0010	0.00237	0.0003	0.000009	0.0000047	0.0056	0.000001	1.95	0.00023	0.000004	0.00023	0.0014
10-Jul-12	11	500	470	7.35	1.49	6.72	2.35	0.083	0.0010	0.00226	0.0003	0.000009	0.0000047	0.0061	0.000001	1.99	0.00024	0.000005	0.00024	0.0014
17-Jul-12	12	500	460	7.45	0.94	5.91	1.84	0.075	0.0009	0.00225	0.0003	0.000009	0.0000046	0.0056	0.000001	1.85	0.00023	0.000014	0.00023	0.0014
24-Jul-12	13	500	470	7.28	1.21	6.19	2.35	0.070	0.0008	0.00207	0.0003	0.000009	0.0000047	0.0045	0.000001	2.14	0.00024	0.000005	0.00024	0.0014
31-Jul-12	14	500	465	7.40	0.90	5.92	1.86	0.066	0.0009	0.00214	0.0003	0.000009	0.0000047	0.0049	0.000001	1.90	0.00023	0.000008	0.00023	0.0014
07-Aug-12	15	500	475	7.56	0.95	6.27	1.90	0.079	0.0010	0.00233	0.0003	0.000010	0.0000048	0.0057	0.000001	2.00	0.00024	0.000009	0.00029	0.0014
14-Aug-12	16	500	475	7.29	1.14	5.81	1.43	0.070	0.0008	0.00214	0.0003	0.000010	0.0000048	0.0046	0.000001	1.97	0.00024	0.000017	0.00029	0.0014
21-Aug-12	17	500	485	7.23	1.47	6.11	1.94	0.071	0.0009	0.00189	0.0003	0.000010	0.0000049	0.0048	0.000001	2.18	0.00024	0.000007	0.00024	0.0015
28-Aug-12	18	500	475	7.34	2.07	6.57	2.38	0.066	0.0006	0.00152	0.0003	0.000010	0.0000048	0.0038	0.000001	2.14	0.00024	0.000003	0.00043	0.0014
04-Sep-12	19	500	500	7.21	2.11	5.44	2.00	0.051	0.0006	0.00115	0.0003	0.000010	0.0000050	0.0037	0.000002	2.03	0.00025	0.000008	0.00025	0.0015
11-Sep-12	20	500	490	7.26	1.38	5.67	1.96	0.041	0.0007	0.00167	0.0003	0.000010	0.0000049	0.0040	0.000001	2.22	0.00025	0.000009	0.00025	0.0015
18-Sep-12	21	500	485	7.23																
25-Sep-12	22	500	470	7.23	1.22	5.50	2.35	0.038	0.0006	0.00141	0.0003	0.000009	0.0000047	0.0032	0.000001	2.04	0.00024	0.000003	0.00024	0.0014
02-Oct-12	23	500	485	7.15	1.60	5.35	1.94	0.028	0.0005	0.00126	0.0003	0.000010	0.0000049	0.0034	0.000001	2.04	0.00024	0.000029	0.00024	0.0015
09-Oct-12	24	500	480	7.19	2.15	4.93	1.44	0.033	0.0004	0.00120	0.0003	0.000010	0.0000048	0.0026	0.000001	1.90	0.00024	0.000001	0.00024	0.0014
16-Oct-12	25	500	500	7.51	2.48	6.02	2.50	0.033	0.0004	0.00125	0.0003	0.000010	0.0000050	0.0031	0.000002	2.08	0.00025	0.000003	0.00025	0.0015
23-Oct-12	26	500	475	7.10	2.01	5.14	2.38	0.046	0.0004	0.00124	0.0002	0.000010	0.0000048	0.0020	0.000001	1.88	0.00024	0.000028	0.00029	0.0014
30-Oct-12	27	500	490	7.14	1.95	6.27	2.45	0.038	0.0004	0.00123	0.0003	0.000010	0.0000049	0.0030	0.000204	2.34	0.00025	0.000001	0.00025	0.0044
06-Nov-12	28	500	470	7.28	1.80	5.11	0.94	0.032	0.0004	0.00122	0.0002	0.000009	0.0000047	0.0025	0.000001	2.10	0.00024	0.000015	0.00024	0.0014
13-Nov-12	29	500	470	7.26	1.96	5.15	1.88	0.026	0.0003	0.00118	0.0002	0.000009	0.0000047	0.0022	0.000001	1.82	0.00024	0.000016	0.00024	0.0014
20-Nov-12	30	500	495	7.68	2.81	6.46	1.49	0.035	0.0004	0.00134	0.0003	0.000010	0.0000050	0.0028	0.000004	2.22	0.00025	0.000055	0.00035	0.0015
27-Nov-12	31	500	495	7.34	2.07	6.10	2.48	0.033	0.0004	0.00119	0.0003	0.000010	0.0000050	0.0023	0.000001	2.27	0.00025	0.000001	0.00025	0.0015
04-Dec-12	32	500	455	7.37	0.89	3.65	1.82	0.040	0.0003	0.00109	0.0002	0.000009	0.0000046	0.0013	0.000002	1.47	0.00023	0.000008	0.00023	0.0332
11-Dec-12	33	500	480	7.47	1.02	5.24	1.92	0.042	0.0004	0.00125	0.0002	0.000010	0.0000048	0.0021	0.000003	1.86	0.00024	0.000023	0.00024	0.0014
18-Dec-12	34	500	455	7.42	1.05	4.48	0.91	0.046	0.0003	0.00118	0.0002	0.000009	0.0000046	0.0014	0.000001	1.67	0.00023	0.000004	0.00023	0.0014
25-Dec-12	35	500	450	7.38	1.22	4.21	0.90	0.039	0.0003	0.00117	0.0002	0.000009	0.0000045	0.0016	0.000001	1.50	0.00023	0.000005	0.00027	0.0014
01-Jan-13	36	500	440	#N/A	#N/A	#N/A	0.88	0.039	0.0003	0.00114	0.0002	0.000009	0.0000044	0.0015	0.000001	1.33	0.00022	0.000006	0.00022	0.0013
08-Jan-13	37	500	445	7.49	1.23	4.49	0.89	0.040	0.0004	0.00107	0.0002	0.000009	0.0000089	0.0016	0.000001	1.48	0.00022	0.000028	0.00022	0.0013
15-Jan-13	38	500	455	7.12	1.18	4.40	1.37	0.041	0.0004	0.00109	0.0002	0.000009	0.0000046	0.0015	0.000001	1.43	0.00023	0.000017	0.00027	0.0041
22-Jan-13	39	500	460	7.11	1.65	3.92	1.84	0.028	0.0003	0.00074	0.0002	0.000009	0.0000046	0.0017	0.000001	1.29	0.00023	0.000011	0.00023	0.0014
29-Jan-13	40	500	450	7.30	1.22	3.55	1.80	0.038	0.0002	0.00095	0.0004	0.000009	0.0000045	0.0013	0.000001	1.53	0.00023	0.000018	0.00032	0.0171
05-Feb-13	41	500	460	7.38	1.45	4.08	2.30													
12-Feb-13	42	500	455	7.33	2.09	4.12	2.28													

HC 11
Sample = L032107

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	0.000018	0.0009	0.11	0.002	0.0360	0.00033	0.00027	0.0050	0.85	0.00002	0.54	0.000005	6.48	0.014	2.23	0.00001	0.00006	0.00014	0.000004	0.00044	0.0005	0.000005
08-May-12	0.000017	0.0004	0.08	0.004	0.0043	0.00030	0.00022	0.0039	0.38	0.00002	0.31	0.000004	4.34	0.010	1.57	0.00001	0.00028	0.00009	0.000015	0.00028	0.0004	0.000004
15-May-12	0.000021	0.0004	0.07	0.003	0.0042	0.00015	0.00008	0.0037	0.33	0.00002	0.43	0.000004	3.88	0.010	1.32	0.00001	0.00009	0.00021	0.000012	0.00038	0.0004	0.000025
22-May-12	0.000019	0.0005	0.08	0.004	0.0141	0.00010	0.00009	0.0042	0.28	0.00006	0.35	0.000005	3.23	0.011	1.13	0.00001	0.00012	0.00009	0.000031	0.00032	0.0009	0.000009
29-May-12	0.000009	0.0004	0.10	0.005	0.0044	0.00005	0.00004	0.0039	0.27	0.00002	0.34	0.000004	2.26	0.012	0.91	0.00001	0.00014	0.00004	0.000029	0.00032	0.0009	0.000004
05-Jun-12	0.000428	0.0005	0.11	0.006	0.0046	0.00005	0.00005	0.0041	0.24	0.00002	0.35	0.000005	2.08	0.013	0.83	0.00001	0.00012	0.00005	0.000049	0.00028	0.0018	0.000005
12-Jun-12	0.000009	0.0004	0.09	0.005	0.0044	0.00004	0.00004	0.0040	0.19	0.00002	0.29	0.000004	1.54	0.011	0.62	0.00001	0.00008	0.00004	0.000029	0.00031	0.0004	0.000004
19-Jun-12	0.000009	0.0005	0.11	0.006	0.0046	0.00003	0.00005	0.0041	0.20	0.00002	0.30	0.000005	1.32	0.012	0.58	0.00001	0.00006	0.00005	0.000044	0.00028	0.0005	0.000005
26-Jun-12	0.000023	0.0005	0.11	0.007	0.0046	0.00003	0.00009	0.0041	0.20	0.00002	0.38	0.000005	1.20	0.012	0.61	0.00001	0.00005	0.00018	0.000049	0.00037	0.0009	0.000018
03-Jul-12	0.000009	0.0005	0.12	0.008	0.0047	0.00008	0.00005	0.0042	0.18	0.00002	0.32	0.000005	0.97	0.013	0.58	0.00001	0.00018	0.00005	0.000050	0.00026	0.0009	0.000005
10-Jul-12	0.000009	0.0005	0.12	0.006	0.0094	0.00002	0.00005	0.0042	0.18	0.00003	0.33	0.000005	0.91	0.014	0.59	0.00001	0.00008	0.00019	0.000056	0.00044	0.0005	0.000005
17-Jul-12	0.000009	0.0005	0.12	0.006	0.0092	0.00000	0.00005	0.0041	0.17	0.00002	0.31	0.000005	0.77	0.013	0.61	0.00001	0.00003	0.00005	0.000054	0.00033	0.0005	0.000005
24-Jul-12	0.000009	0.0005	0.12	0.007	0.0047	0.00002	0.00005	0.0042	0.17	0.00008	0.33	0.000005	0.70	0.014	0.60	0.00001	0.00003	0.00005	0.000047	0.00030	0.0005	0.000085
31-Jul-12	0.000009	0.0005	0.12	0.006	0.0047	0.00001	0.00005	0.0042	0.15	0.00002	0.31	0.000005	0.64	0.013	0.54	0.00001	0.00005	0.00005	0.000055	0.00036	0.0009	0.000005
07-Aug-12	0.000019	0.0005	0.13	0.006	0.0048	0.00002	0.00005	0.0043	0.15	0.00002	0.35	0.000005	0.63	0.014	0.68	0.00001	0.00009	0.00005	0.000062	0.00039	0.0024	0.000005
14-Aug-12	0.000010	0.0005	0.13	0.005	0.0048	0.00002	0.00010	0.0043	0.16	0.00002	0.34	0.000005	0.56	0.014	0.70	0.00001	0.00008	0.00005	0.000066	0.00035	0.0005	0.000005
21-Aug-12	0.000010	0.0005	0.13	0.007	0.0049	0.00003	0.00010	0.0044	0.13	0.00002	0.33	0.000005	0.47	0.014	0.72	0.00001	0.00015	0.00010	0.000062	0.00036	0.0010	0.000005
28-Aug-12	0.000019	0.0005	0.12	0.007	0.0048	0.00004	0.00005	0.0043	0.12	0.00002	0.29	0.000005	0.41	0.013	0.58	0.00001	0.00023	0.00010	0.000058	0.00029	0.0010	0.000005
04-Sep-12	0.000010	0.0005	0.11	0.008	0.0050	0.00001	0.00005	0.0045	0.11	0.00002	0.24	0.000005	0.35	0.012	0.58	0.00001	0.00003	0.00005	0.000061	0.00026	0.0010	0.000005
11-Sep-12	0.000034	0.0005	0.14	0.006	0.0147	0.00002	0.00005	0.0044	0.13	0.00002	0.31	0.000005	0.42	0.015	0.82	0.00001	0.00009	0.00005	0.000084	0.00024	0.0005	0.000005
18-Sep-12																						
25-Sep-12	0.000009	0.0005	0.13	0.006	0.0047	0.00002	0.00005	0.0042	0.11	0.00002	0.31	0.000024	0.33	0.014	0.72	0.00001	0.00005	0.00005	0.000071	0.00020	0.0005	0.000005
02-Oct-12	0.000010	0.0005	0.13	0.006	0.0049	0.00002	0.00005	0.0044	0.11	0.00002	0.27	0.000005	0.29	0.013	0.74	0.00001	0.00002	0.00005	0.000066	0.00021	0.0005	0.000005
09-Oct-12	0.000010	0.0005	0.12	0.006	0.0048	0.00002	0.00010	0.0043	0.10	0.00002	0.24	0.000005	0.27	0.012	0.64	0.00001	0.00006	0.00005	0.000068	0.00019	0.0005	0.000005
16-Oct-12	0.000010	0.0005	0.12	0.006	0.0050	0.00002	0.00005	0.0045	0.10	0.00002	0.25	0.000005	0.28	0.013	0.67	0.00001	0.00004	0.00005	0.000061	0.00018	0.0010	0.000005
23-Oct-12	0.000010	0.0005	0.11	0.006	0.0048	0.00004	0.00029	0.0043	0.09	0.00002	0.23	0.000005	0.24	0.012	0.57	0.00001	0.00003	0.00005	0.000055	0.00019	0.0005	0.000005
30-Oct-12	0.000010	0.0005	0.13	0.007	0.0049	0.00003	0.00005	0.0044	0.10	0.00002	0.30	0.000025	0.27	0.015	0.68	0.00001	0.00019	0.00005	0.000053	0.00019	0.0005	0.000005
06-Nov-12	0.000009	0.0005	0.12	0.007	0.0047	0.00003	0.00005	0.0042	0.09	0.00002	0.24	0.000005	0.26	0.013	0.65	0.00001	0.00005	0.00005	0.000048	0.00014	0.0005	0.000005
13-Nov-12	0.000009	0.0005	0.11	0.006	0.0094	0.00001	0.00005	0.0042	0.08	0.00002	0.22	0.000014	0.21	0.011	0.59	0.00001	0.00001	0.00005	0.000037	0.00015	0.0005	0.000005
20-Nov-12	0.000010	0.0005	0.11	0.008	0.0050	0.00006	0.00010	0.0045	0.09	0.00002	0.27	0.000005	0.23	0.013	0.54	0.00001	0.00006	0.00005	0.000053	0.00022	0.0010	0.000005
27-Nov-12	0.000010	0.0005	0.11	0.007	0.0050	0.00001	0.00005	0.0045	0.08	0.00002	0.26	0.000005	0.21	0.013	0.62	0.00001	0.00006	0.00005	0.000041	0.00003	0.0005	0.000005
04-Dec-12	0.000014	0.0005	0.09	0.006	0.0046	0.00001	0.00005	0.0041	0.07	0.00002	0.19	0.000005	0.18	0.009	0.49	0.00001	0.00004	0.00005	0.000028	0.00015	0.0005	0.000005
11-Dec-12	0.000010	0.0005	0.10	0.005	0.0048	0.00002	0.00005	0.0043	0.09	0.00002	0.22	0.000005	0.20	0.010	0.44	0.00001	0.00007	0.00005	0.000030	0.00019	0.0005	0.000005
18-Dec-12	0.000014	0.0005	0.10	0.004	0.0046	0.00002	0.00005	0.0041	0.08	0.00002	0.19	0.000009	0.20	0.010	0.52	0.00001	0.00005	0.00005	0.000022	0.00018	0.0005	0.000005
25-Dec-12	0.000009	0.0005	0.10	0.004	0.0045	0.00002	0.00005	0.0068	0.07	0.00002	0.16	0.000005	0.16	0.010	0.42	0.00001	0.00005	0.00005	0.000018	0.00011	0.0005	0.000005
01-Jan-13	0.000009	0.0004	0.09	0.004	0.0044	0.00003	0.00004	0.0053	0.08	0.00002	0.18	0.000004	0.21	0.008	0.36	0.00001	0.00005	0.00004	0.000018	0.00017	0.0004	0.000004
08-Jan-13	0.000009	0.0004	0.08	0.004	0.0045	0.00002	0.00004	0.0040	0.09	0.00002	0.20	0.000022	0.16	0.008	0.34	0.00001	0.00003	0.00009	0.000017	0.00020	0.0004	0.000004
15-Jan-13	0.000009	0.0005	0.08	0.005	0.0046	0.00002	0.00009	0.0041	0.07	0.00002	0.16	0.000005	0.15	0.008	0.34	0.00001	0.00006	0.00005	0.000025	0.00020	0.0005	0.000005
22-Jan-13	0.000009	0.0005	0.08	0.003	0.0046	0.00001	0.00005	0.0041	0.07	0.00002	0.15	0.000009	0.11	0.008	0.38	0.00001	0.00005	0.00005	0.000014	0.00012	0.0005	0.000005
29-Jan-13	0.000014	0.0005	0.09	0.004	0.0045	0.00001	0.00009	0.0054	0.08	0.00002	0.18	0.000005	0.19	0.009	0.49	0.00001	0.00005	0.00009	0.000018	0.00019	0.0005	0.000005
05-Feb-13																						
12-Feb-13																						

HC 12
Sample = L032174

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	1	500	425	7.63	2.04	11.88	9.78	0.046	0.0015	0.00064	0.0007	0.000009	0.0000043	0.0100	0.000001	4.59	0.00021	0.000020	0.00077	0.0013
08-May-12	2	500	455	7.71	1.06	10.64	7.28	0.059	0.0046	0.00073	0.0005	0.000009	0.0000046	0.0166	0.000001	3.99	0.00023	0.000015	0.00041	0.0027
15-May-12	3	500	430	7.73	0.99	9.08	4.73	0.101	0.0028	0.00086	0.0004	0.000009	0.0000043	0.0108	0.000001	3.61	0.00022	0.000006	0.00022	0.0013
22-May-12	4	500	505	7.55	1.75	12.19	4.04	0.081	0.0035	0.00116	0.0005	0.000010	0.0000051	0.0116	0.000002	4.24	0.00025	0.000010	0.00025	0.0015
29-May-12	5	500	490	7.42	1.76	11.82	2.45	0.082	0.0034	0.00113	0.0004	0.000010	0.0000049	0.0104	0.000001	4.42	0.00025	0.000014	0.00025	0.0015
05-Jun-12	6	500	495	7.46	1.78	13.17	1.98	0.076	0.0029	0.00109	0.0005	0.000010	0.0000050	0.0081	0.000001	4.59	0.00025	0.000015	0.00025	0.0015
12-Jun-12	7	500	510	7.57	1.51	12.67	3.57	0.080	0.0023	0.00117	0.0004	0.000010	0.0000051	0.0061	0.000002	4.44	0.00026	0.000005	0.00026	0.0015
19-Jun-12	8	500	490	7.46	1.35	11.02	1.47	0.068	0.0018	0.00118	0.0004	0.000010	0.0000049	0.0046	0.000001	3.90	0.00025	0.000022	0.00029	0.0015
26-Jun-12	9	500	500	7.58	1.37	11.55	2.00	0.083	0.0019	0.00135	0.0004	0.000010	0.0000050	0.0050	0.000002	4.16	0.00025	0.000001	0.00025	0.0015
03-Jul-12	10	500	490	7.51	3.07	12.69	2.94	0.072	0.0018	0.00201	0.0004	0.000010	0.0000049	0.0039	0.000002	4.00	0.00025	0.000008	0.00025	0.0015
10-Jul-12	11	500	505	7.45	1.66	10.95	3.54	0.082	0.0018	0.00121	0.0004	0.000010	0.0000051	0.0043	0.000002	3.93	0.00025	0.000006	0.00025	0.0015
17-Jul-12	12	500	500	7.55	1.07	10.81	3.00	0.083	0.0018	0.00140	0.0004	0.000010	0.0000050	0.0039	0.000002	3.84	0.00025	0.000023	0.00025	0.0015
24-Jul-12	13	500	500	7.37	1.30	10.16	3.00	0.079	0.0014	0.00135	0.0003	0.000010	0.0000050	0.0031	0.000002	3.88	0.00025	0.000006	0.00025	0.0015
31-Jul-12	14	500	490	7.51	0.99	8.45	2.45	0.083	0.0014	0.00142	0.0003	0.000010	0.0000049	0.0031	0.000001	3.57	0.00025	0.000004	0.00025	0.0015
07-Aug-12	15	500	505	7.63	1.07	10.41	3.03	0.100	0.0017	0.00182	0.0004	0.000010	0.0000051	0.0036	0.000002	3.89	0.00025	0.000013	0.00035	0.0045
14-Aug-12	16	500	500	7.41	1.38	8.65	2.00	0.089	0.0013	0.00140	0.0004	0.000010	0.0000050	0.0030	0.000002	3.89	0.00025	0.000015	0.00125	0.0015
21-Aug-12	17	500	500	7.33	1.65	8.09	3.00	0.088	0.0015	0.00120	0.0004	0.000010	0.0000050	0.0032	0.000002	3.99	0.00025	0.000011	0.00025	0.0040
28-Aug-12	18	500	495	7.42	2.25	10.62	3.47	0.085	0.0012	0.00109	0.0004	0.000010	0.0000099	0.0026	0.000001	3.81	0.00025	0.000013	0.00084	0.0015
04-Sep-12	19	500	500	7.16	2.11	7.28	3.00	0.070	0.0010	0.00090	0.0004	0.000010	0.0000050	0.0023	0.000002	3.55	0.00025	0.000010	0.00025	0.0015
11-Sep-12	20	500	480	7.41	1.23	7.25	3.36	0.074	0.0008	0.00110	0.0004	0.000010	0.0000048	0.0020	0.000001	3.30	0.00024	0.000011	0.00038	0.0014
18-Sep-12	21	500	470	7.35																
25-Sep-12	22	500	485	7.43	1.16	8.39	3.40	0.071	0.0008	0.00116	0.0004	0.000010	0.0000049	0.0022	0.000001	3.39	0.00024	0.000008	0.00024	0.0015
02-Oct-12	23	500	480	7.27	1.45	6.69	1.92	0.053	0.0007	0.00086	0.0003	0.000010	0.0000048	0.0021	0.000001	3.07	0.00024	0.000030	0.00024	0.0014
09-Oct-12	24	500	475	7.27	2.19	6.69	2.38	0.065	0.0006	0.00090	0.0004	0.000010	0.0000048	0.0017	0.000001	3.19	0.00024	0.000005	0.00024	0.0014
16-Oct-12	25	500	480	7.55	2.30	6.70	3.36	0.068	0.0005	0.00082	0.0003	0.000010	0.0000048	0.0017	0.000001	3.00	0.00024	0.000005	0.00024	0.0014
23-Oct-12	26	500	480	7.18	1.94	6.90	3.36	0.076	0.0005	0.00082	0.0003	0.000010	0.0000048	0.0012	0.000001	3.05	0.00024	0.000023	0.00024	0.0019
30-Oct-12	27	500	475	7.31	1.85	8.00	3.33	0.071	0.0006	0.00095	0.0004	0.000010	0.0000048	0.0018	0.000189	3.41	0.00024	0.000001	0.00024	0.0014
06-Nov-12	28	500	470	7.43	1.60	6.90	1.41	0.064	0.0005	0.00094	0.0003	0.000009	0.0000047	0.0017	0.000001	3.13	0.00024	0.000016	0.00024	0.0014
13-Nov-12	29	500	465	7.53	2.04	6.52	1.86	0.052	0.0005	0.00079	0.0003	0.000009	0.0000047	0.0016	0.000001	2.73	0.00023	0.000016	0.00023	0.0014
20-Nov-12	30	500	500	7.71	2.76	8.16	3.00	0.058	0.0006	0.00095	0.0004	0.000010	0.0000050	0.0020	0.000002	3.19	0.00025	0.000058	0.00035	0.0015
27-Nov-12	31	500	500	7.42	2.28	8.07	2.50	0.062	0.0006	0.00085	0.0003	0.000010	0.0000050	0.0019	0.000002	3.66	0.00025	0.000006	0.00025	0.0015
04-Dec-12	32	500	450	7.56	0.78	5.99	2.25	0.061	0.0005	0.00104	0.0002	0.000009	0.0000045	0.0010	0.000001	2.62	0.00023	0.000023	0.00045	0.0014
11-Dec-12	33	500	510	7.58	1.05	7.95	2.55	0.061	0.0009	0.00087	0.0003	0.000010	0.0000051	0.0020	0.000003	3.18	0.00026	0.000023	0.00026	0.0015
18-Dec-12	34	500	495	7.51	1.09	7.56	1.49	0.061	0.0007	0.00074	0.0003	0.000010	0.0000050	0.0013	0.000001	3.18	0.00025	0.000006	0.00025	0.0015
25-Dec-12	35	500	485	7.46	1.21	6.85	0.97	0.059	0.0005	0.00082	0.0003	0.000010	0.0000049	0.0012	0.000001	2.71	0.00024	0.000010	0.00024	0.0015
01-Jan-13	36	500	500	7.43	1.25	7.64	1.50	0.057	0.0006	0.00070	0.0003	0.000010	0.0000050	0.0012	0.000002	2.66	0.00025	0.000012	0.00025	0.0015
08-Jan-13	37	500	495	7.61	1.31	7.94	0.99	0.057	0.0007	0.00064	0.0004	0.000010	0.0000050	0.0014	0.000002	2.89	0.00025	0.000033	0.00025	0.0015
15-Jan-13	38	500	515	7.54	1.28	8.20	2.06	0.055	0.0007	0.00062	0.0003	0.000010	0.0000052	0.0012	0.000002	3.05	0.00026	0.000013	0.00031	0.3332
22-Jan-13	39	500	510	7.36	1.73	7.73	2.55	0.049	0.0006	0.00061	0.0004	0.000010	0.0000051	0.0016	0.000005	3.15	0.00026	0.000010	0.00026	0.0015
29-Jan-13	40	500	490	7.50	1.24	6.43	2.94	0.048	0.0004	0.00064	0.0004	0.000010	0.0000049	0.0011	0.000001	2.89	0.00025	0.000007	0.00025	0.0093
05-Feb-13	41	500	490	7.46	1.44	6.49	3.92													
12-Feb-13	42	500	500	7.42	2.05	6.68	3.50													

HC 12
Sample = L032174

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	0.000021	0.0034	0.31	0.001	0.0043	0.00037	0.00013	0.0038	2.62	0.00002	0.49	0.000004	3.14	0.027	3.42	0.00001	0.00012	0.00009	0.000007	0.00028	0.0009	0.000004
08-May-12	0.000014	0.0032	0.33	0.003	0.0046	0.00040	0.00018	0.0041	1.67	0.00002	0.39	0.000005	2.20	0.023	2.75	0.00001	0.00023	0.00005	0.000043	0.00025	0.0005	0.000005
15-May-12	0.000009	0.0026	0.26	0.002	0.0043	0.00024	0.00013	0.0039	1.17	0.00002	0.44	0.000004	1.24	0.020	1.95	0.00001	0.00008	0.00009	0.000025	0.00033	0.0004	0.000004
22-May-12	0.000010	0.0025	0.30	0.003	0.0051	0.00020	0.00010	0.0045	0.96	0.00002	0.44	0.000005	0.87	0.022	1.68	0.00001	0.00012	0.00010	0.000087	0.00034	0.0005	0.000010
29-May-12	0.000010	0.0025	0.27	0.003	0.0049	0.00013	0.00005	0.0044	0.85	0.00003	0.49	0.000005	0.63	0.021	1.48	0.00001	0.00011	0.00010	0.000130	0.00038	0.0005	0.000005
05-Jun-12	0.000109	0.0020	0.25	0.003	0.0050	0.00054	0.00005	0.0045	0.71	0.00002	0.47	0.000005	0.49	0.021	1.30	0.00001	0.00004	0.00005	0.000160	0.00033	0.0030	0.000005
12-Jun-12	0.000026	0.0015	0.21	0.003	0.0051	0.00007	0.00010	0.0046	0.60	0.00005	0.47	0.000005	0.38	0.018	1.02	0.00001	0.00018	0.00020	0.000152	0.00044	0.0015	0.000005
19-Jun-12	0.000020	0.0010	0.17	0.003	0.0049	0.00005	0.00010	0.0044	0.48	0.00003	0.41	0.000005	0.28	0.016	0.89	0.00001	0.00011	0.00005	0.000173	0.00038	0.0010	0.000005
26-Jun-12	0.000010	0.0010	0.17	0.003	0.0050	0.00006	0.00010	0.0045	0.51	0.00002	0.49	0.000005	0.29	0.016	0.95	0.00001	0.00002	0.00010	0.000217	0.00042	0.0010	0.000005
03-Jul-12	0.000015	0.0010	0.15	0.003	0.0049	0.00013	0.00005	0.0044	0.45	0.00002	0.43	0.000005	0.25	0.015	0.87	0.00001	0.00008	0.00005	0.000297	0.00036	0.0010	0.000005
10-Jul-12	0.000010	0.0010	0.14	0.003	0.0051	0.00004	0.00005	0.0045	0.45	0.00002	0.45	0.000005	0.25	0.015	0.90	0.00001	0.00006	0.00010	0.000212	0.00042	0.0005	0.000005
17-Jul-12	0.000010	0.0010	0.13	0.002	0.0050	0.00003	0.00005	0.0045	0.43	0.00002	0.45	0.000005	0.22	0.014	0.97	0.00001	0.00002	0.00005	0.000237	0.00045	0.0010	0.000005
24-Jul-12	0.000010	0.0005	0.13	0.003	0.0050	0.00004	0.00005	0.0045	0.40	0.00008	0.44	0.000005	0.21	0.014	1.00	0.00001	0.00005	0.00005	0.000193	0.00040	0.0015	0.000020
31-Jul-12	0.000010	0.0010	0.11	0.002	0.0049	0.00003	0.00005	0.0044	0.36	0.00002	0.41	0.000005	0.19	0.013	0.85	0.00001	0.00002	0.00005	0.000178	0.00048	0.0010	0.000005
07-Aug-12	0.000020	0.0010	0.12	0.003	0.0051	0.00007	0.00005	0.0045	0.43	0.00002	0.51	0.000005	0.20	0.014	1.16	0.00001	0.00012	0.00010	0.000197	0.00054	0.0015	0.000005
14-Aug-12	0.000010	0.0010	0.11	0.003	0.0050	0.00006	0.00005	0.0045	0.41	0.00002	0.45	0.000005	0.17	0.014	1.15	0.00001	0.00018	0.00010	0.000178	0.00042	0.0015	0.000005
21-Aug-12	0.000010	0.0010	0.11	0.003	0.0050	0.00008	0.00010	0.0045	0.36	0.00002	0.43	0.000005	0.16	0.013	1.27	0.00001	0.00008	0.00010	0.000182	0.00035	0.0005	0.000005
28-Aug-12	0.000025	0.0010	0.10	0.003	0.0050	0.00009	0.00005	0.0045	0.35	0.00002	0.38	0.000005	0.14	0.013	1.07	0.00001	0.00017	0.00010	0.000170	0.00038	0.0015	0.000005
04-Sep-12	0.000010	0.0005	0.09	0.003	0.0050	0.00007	0.00005	0.0045	0.31	0.00002	0.30	0.000005	0.13	0.011	1.05	0.00001	0.00005	0.00005	0.000146	0.00030	0.0005	0.000005
11-Sep-12	0.000024	0.0005	0.07	0.002	0.0048	0.00007	0.00005	0.0043	0.30	0.00002	0.34	0.000005	0.12	0.010	1.07	0.00001	0.00007	0.00010	0.000113	0.00030	0.0010	0.000005
18-Sep-12																						
25-Sep-12	0.000029	0.0005	0.07	0.002	0.0049	0.00008	0.00005	0.0044	0.29	0.00002	0.36	0.000010	0.11	0.010	1.03	0.00001	0.00005	0.00005	0.000113	0.00031	0.0010	0.000005
02-Oct-12	0.000010	0.0005	0.07	0.002	0.0048	0.00006	0.00005	0.0043	0.26	0.00002	0.28	0.000005	0.10	0.010	1.07	0.00001	0.00003	0.00005	0.000093	0.00024	0.0005	0.000005
09-Oct-12	0.000010	0.0005	0.07	0.002	0.0048	0.00007	0.00014	0.0043	0.26	0.00002	0.28	0.000005	0.10	0.010	1.13	0.00001	0.00005	0.00005	0.000095	0.00025	0.0005	0.000005
16-Oct-12	0.000010	0.0005	0.06	0.002	0.0048	0.00006	0.00005	0.0043	0.23	0.00002	0.26	0.000005	0.09	0.009	1.06	0.00001	0.00005	0.00005	0.000083	0.00025	0.0005	0.000005
23-Oct-12	0.000010	0.0005	0.06	0.002	0.0048	0.00008	0.00014	0.0043	0.23	0.00002	0.27	0.000005	0.09	0.009	0.97	0.00001	0.00005	0.00005	0.000089	0.00026	0.0005	0.000005
30-Oct-12	0.000010	0.0005	0.06	0.002	0.0048	0.00006	0.00010	0.0043	0.25	0.00002	0.33	0.000005	0.09	0.010	1.04	0.00001	0.00005	0.00005	0.000073	0.00028	0.0010	0.000005
06-Nov-12	0.000014	0.0005	0.05	0.002	0.0047	0.00006	0.00005	0.0042	0.21	0.00002	0.28	0.000005	0.08	0.009	0.92	0.00001	0.00004	0.00005	0.000060	0.00021	0.0005	0.000005
13-Nov-12	0.000014	0.0005	0.05	0.002	0.0047	0.00005	0.00005	0.0042	0.20	0.00002	0.25	0.000005	0.07	0.008	0.81	0.00001	0.00001	0.00014	0.000057	0.00023	0.0005	0.000005
20-Nov-12	0.000015	0.0005	0.05	0.002	0.0050	0.00008	0.00005	0.0045	0.22	0.00002	0.30	0.000005	0.09	0.009	0.79	0.00001	0.00007	0.00005	0.000079	0.00026	0.0010	0.000005
27-Nov-12	0.000010	0.0005	0.06	0.002	0.0050	0.00005	0.00005	0.0045	0.25	0.00002	0.36	0.000005	0.09	0.010	0.96	0.00001	0.00005	0.00005	0.000083	0.00009	0.0005	0.000005
04-Dec-12	0.000009	0.0005	0.04	0.002	0.0045	0.00005	0.00009	0.0041	0.23	0.00002	0.23	0.000005	0.05	0.008	0.80	0.00001	0.00005	0.00005	0.000063	0.00020	0.0005	0.000005
11-Dec-12	0.000010	0.0005	0.04	0.001	0.0051	0.00004	0.00005	0.0046	0.28	0.00002	0.29	0.000005	0.08	0.008	0.66	0.00001	0.00004	0.00005	0.000084	0.00026	0.0005	0.000005
18-Dec-12	0.000010	0.0005	0.04	0.002	0.0050	0.00003	0.00005	0.0045	0.24	0.00002	0.26	0.000025	0.08	0.009	0.85	0.00001	0.00005	0.00005	0.000070	0.00023	0.0005	0.000005
25-Dec-12	0.000010	0.0005	0.04	0.002	0.0049	0.00003	0.00005	0.0044	0.20	0.00002	0.19	0.000005	0.07	0.008	0.69	0.00001	0.00006	0.00005	0.000050	0.00016	0.0005	0.000005
01-Jan-13	0.000010	0.0005	0.04	0.002	0.0050	0.00004	0.00005	0.0045	0.23	0.00002	0.24	0.000005	0.08	0.007	0.56	0.00001	0.00008	0.00005	0.000059	0.00021	0.0005	0.000005
08-Jan-13	0.000010	0.0005	0.04	0.002	0.0050	0.00002	0.00005	0.0045	0.24	0.00002	0.24	0.000010	0.07	0.007	0.55	0.00001	0.00005	0.00005	0.000062	0.00024	0.0005	0.000005
15-Jan-13	0.000010	0.0005	0.05	0.019	0.0052	0.00003	0.00010	0.0077	0.24	0.00002	0.23	0.000005	0.08	0.008	0.78	0.00001	0.00009	0.00005	0.000066	0.00026	0.0005	0.000005
22-Jan-13	0.000010	0.0005	0.05	0.002	0.0051	0.00002	0.00010	0.0046	0.24	0.00002	0.24	0.000005	0.04	0.008	0.89	0.00001	0.00003	0.00005	0.000069	0.00022	0.0005	0.000005
29-Jan-13	0.000010	0.0005	0.04	0.002	0.0049	0.00002	0.00005	0.0044	0.21	0.00002	0.22	0.000005	0.08	0.008	0.90	0.00001	0.00005	0.00005	0.000052	0.00022	0.0005	0.000005
05-Feb-13																						
12-Feb-13																						

HC 13
Sample = L032154

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	1	445	350	7.86	1.71	11.53	4.72	0.087	0.0009	0.00079	0.0002	0.000008	0.0000039	0.0136	0.000001	2.58	0.00020	0.000030	0.00110	0.0016
08-May-12	2	500	460	7.71	1.37	12.15	2.58	0.084	0.0025	0.00155	0.0002	0.000010	0.0000052	0.0217	0.000002	2.65	0.00026	0.000027	0.00160	0.0016
15-May-12	3	445	405	7.68	1.18	10.31	2.73	0.096	0.0020	0.00137	0.0002	0.000009	0.0000046	0.0192	0.000001	2.32	0.00023	0.000016	0.00055	0.0014
22-May-12	4	500	465	7.58	1.64	10.95	2.61	0.114	0.0016	0.00115	0.0001	0.000010	0.0000052	0.0144	0.000002	2.73	0.00026	0.000014	0.00037	0.0016
29-May-12	5	445	390	7.43	1.59	7.50	1.75	0.093	0.0011	0.00079	0.0001	0.000009	0.0000044	0.0114	0.000001	2.29	0.00022	0.000016	0.00039	0.0018
05-Jun-12	6	500	455	7.4	1.70	7.64	2.04	0.088	0.0012	0.00072	0.0004	0.000010	0.0000051	0.0124	0.000002	2.47	0.00026	0.000023	0.00046	0.0020
12-Jun-12	7	445	390	7.54	1.24	6.31	2.63	0.088	0.0010	0.00061	0.0002	0.000009	0.0000044	0.0091	0.000001	2.00	0.00022	0.000023	0.00044	0.0048
19-Jun-12	8	445	405	7.40	1.09	6.44	1.37	0.056	0.0010	0.00064	0.0001	0.000009	0.0000046	0.0082	0.000001	2.05	0.00023	0.000029	0.00027	0.0014
26-Jun-12	9	445	410	7.49	1.23	6.79	2.30	0.087	0.0010	0.00069	0.0002	0.000009	0.0000046	0.0088	0.000001	2.28	0.00189	0.000022	0.00051	0.1023
03-Jul-12	10	445	475	7.51	3.13	7.79	2.13	0.064	0.0009	0.00064	0.0001	0.000011	0.0000053	0.0072	0.000003	2.42	0.00027	0.000013	0.00043	0.0016
10-Jul-12	11	445	435	7.51	1.54	8.38	2.93	0.078	0.0012	0.00054	0.0001	0.000010	0.0000049	0.0081	0.000001	2.73	0.00024	0.000008	0.00054	0.0024
17-Jul-12	12	445	405	7.51	0.83	6.43	1.82	0.073	0.0009	0.00059	0.0001	0.000009	0.0000046	0.0064	0.000001	2.41	0.00023	0.000024	0.00023	0.0014
24-Jul-12	13	445	410	7.41	1.14	5.76	2.30	0.053	0.0007	0.00051	0.0001	0.000009	0.0000046	0.0055	0.000003	2.28	0.00023	0.000016	0.00028	0.0014
31-Jul-12	14	445	425	7.35	0.87	5.19	1.91	0.057	0.0007	0.00048	0.0001	0.000010	0.0000048	0.0048	0.000004	2.01	0.00024	0.000011	0.00788	0.0014
07-Aug-12	15	500	465	7.35	0.95	5.67	2.09	0.065	0.0008	0.00052	0.0001	0.000010	0.0000052	0.0056	0.000002	1.98	0.00026	0.000016	0.00073	0.0016
14-Aug-12	16	445	405	7.26	1.04	4.91	1.82	0.050	0.0006	0.00050	0.0001	0.000009	0.0000046	0.0050	0.000003	1.84	0.00023	0.000013	0.00027	0.0014
21-Aug-12	17	445	410	7.18	1.53	4.43	1.84	0.060	0.0008	0.00041	0.0002	0.000009	0.0000046	0.0053	0.000006	1.79	0.00023	0.000021	0.00046	0.0018
28-Aug-12	18	445	420	7.31	2.00	5.63	2.36	0.043	0.0008	0.00038	0.0001	0.000009	0.0000047	0.0048	0.000004	1.93	0.00024	0.000021	0.00033	0.0014
04-Sep-12	19	445	420	7.17	2.02	4.87	2.36	0.044	0.0008	0.00028	0.0001	0.000009	0.0000047	0.0043	0.000004	1.89	0.00024	0.000018	0.00028	0.0014
11-Sep-12	20	445	435	7.20	1.27	5.65	2.93	0.027	0.0007	0.00044	0.0001	0.000010	0.0000049	0.0045	0.000005	2.04	0.00024	0.000018	0.00024	0.0015
18-Sep-12	21	445	430	7.21																
25-Sep-12	22	445	435	7.18	1.27	5.38	2.93	0.027	0.0007	0.00039	0.0001	0.000010	0.0000049	0.0041	0.000006	2.04	0.00024	0.000023	0.00029	0.0015
02-Oct-12	23	445	440	7.10	1.58	5.07	1.48	0.019	0.0007	0.00035	0.0001	0.000010	0.0000049	0.0042	0.000005	2.03	0.00025	0.000041	0.00049	0.0015
09-Oct-12	24	445	445	7.05	2.34	4.43	2.00	0.025	0.0006	0.00065	0.0001	0.000010	0.0000050	0.0032	0.000005	1.88	0.00025	0.000013	0.00035	0.0015
16-Oct-12	25	445	500	7.46	2.53	5.31	3.37	0.025	0.0005	0.00034	0.0001	0.000011	0.0000056	0.0036	0.000006	2.04	0.00028	0.000014	0.00039	0.0017
23-Oct-12	26	445	445	7.05	1.70	5.40	2.50	0.034	0.0005	0.00025	0.0001	0.000010	0.0000050	0.0028	0.000008	2.21	0.00025	0.000033	0.00040	0.0015
30-Oct-12	27	445	430	7.04	1.94	5.38	3.38	0.024	0.0006	0.00024	0.0003	0.000010	0.0000048	0.0035	0.000193	2.37	0.00024	0.000008	0.00024	0.0014
06-Nov-12	28	445	430	7.31	1.63	5.37	1.45	0.026	0.0005	0.00039	0.0001	0.000010	0.0000048	0.0032	0.000008	2.36	0.00024	0.000019	0.00024	0.0014
13-Nov-12	29	445	430	7.41	2.17	4.92	1.45	0.018	0.0004	0.00029	0.0001	0.000010	0.0000048	0.0028	0.000011	2.24	0.00024	0.000025	0.00024	0.0014
20-Nov-12	30	445	500	7.69	3.23	6.54	2.81	0.026	0.0005	0.00045	0.0002	0.000011	0.0000056	0.0031	0.000006	2.61	0.00028	0.000078	0.00034	0.0017
27-Nov-12	31	445	440	7.28	2.33	6.38	2.97	0.022	0.0005	0.00030	0.0001	0.000010	0.0000049	0.0029	0.000009	2.59	0.00025	0.000007	0.00025	0.0015
04-Dec-12	32	445	385	7.33	0.77	3.39	3.03	0.027	0.0003	0.00026	0.0001	0.000009	0.0000043	0.0016	0.000004	1.86	0.00022	0.000019	0.00039	0.0013
11-Dec-12	33	445	410	7.37	0.94	4.09	2.30	0.026	0.0005	0.00028	0.0001	0.000009	0.0000046	0.0023	0.000005	1.79	0.00023	0.000030	0.00032	0.0014
18-Dec-12	34	445	395	7.29	0.91	3.46	1.33	0.030	0.0003	0.00022	0.0001	0.000009	0.0000044	0.0016	0.000004	1.72	0.00022	0.000015	0.00031	0.0013
25-Dec-12	35	445	410	7.35	1.26	4.29	0.92	0.029	0.0003	0.00028	0.0001	0.000009	0.0000046	0.0019	0.000003	1.76	0.00023	0.000015	0.00023	0.0014
01-Jan-13	36	445	400	7.35	1.13	3.48	1.35	0.025	0.0003	0.00022	0.0001	0.000009	0.0000045	0.0016	0.000004	1.43	0.00022	0.000014	0.00022	0.0013
08-Jan-13	37	445	405	7.54	1.21	4.25	0.91	0.031	0.0004	0.00027	0.0002	0.000009	0.0000091	0.0016	0.000006	1.83	0.00023	0.000033	0.00023	0.0014
15-Jan-13	38	445	410	7.34	1.24	3.95	2.30	0.024	0.0004	0.00023	0.0001	0.000009	0.0000046	0.0016	0.000002	1.55	0.00023	0.000011	0.00023	0.2216
22-Jan-13	39	445	410	7.28	1.49	4.22	1.84	0.026	0.0003	0.00028	0.0001	0.000009	0.0000046	0.0018	0.000023	1.64	0.00023	0.000014	0.00023	0.0014
29-Jan-13	40	445	400	7.35	1.15	3.17	2.25	0.023	0.0002	0.00027	0.0001	0.000009	0.0000045	0.0012	0.000004	1.82	0.00022	0.000011	0.00022	0.0067
05-Feb-13	41	445	400	7.39	1.40	3.24	3.15													
12-Feb-13	42	445	400	7.51	1.80	3.79	2.70													

HC 13
Sample = L032154

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	0.000024	0.0008	0.15	0.001	0.0236	0.00055	0.00012	0.0035	1.12	0.00002	0.42	0.000004	3.59	0.022	1.40	0.00001	0.00024	0.00012	0.000018	0.00035	0.0012	0.000051
08-May-12	0.000036	0.0005	0.14	0.002	0.0052	0.00088	0.00021	0.0047	0.78	0.00002	0.35	0.000005	3.24	0.021	1.52	0.00001	0.00028	0.00010	0.000108	0.00022	0.0010	0.000041
15-May-12	0.000018	0.0005	0.12	0.002	0.0091	0.00059	0.00014	0.0041	0.59	0.00002	0.38	0.000005	2.35	0.018	1.16	0.00001	0.00012	0.00009	0.000131	0.00030	0.0009	0.000068
22-May-12	0.000010	0.0005	0.14	0.002	0.0052	0.00038	0.00005	0.0047	0.56	0.00020	0.39	0.000005	1.92	0.022	1.12	0.00001	0.00012	0.00005	0.000155	0.00031	0.0005	0.000016
29-May-12	0.000013	0.0004	0.11	0.002	0.0044	0.00019	0.00004	0.0039	0.45	0.00004	0.34	0.000004	1.24	0.018	0.86	0.00001	0.00016	0.00009	0.000123	0.00035	0.0009	0.000013
05-Jun-12	0.000082	0.0005	0.13	0.003	0.0051	0.00057	0.00005	0.0046	0.42	0.00002	0.34	0.000005	1.29	0.020	1.10	0.00001	0.00008	0.00020	0.000157	0.00025	0.0015	0.000010
12-Jun-12	0.000070	0.0004	0.11	0.002	0.0613	0.00011	0.00004	0.0039	0.35	0.00003	0.33	0.000004	0.90	0.016	0.79	0.00001	0.00016	0.00022	0.000105	0.00027	0.0013	0.000018
19-Jun-12	0.000023	0.0005	0.11	0.002	0.0046	0.00007	0.00005	0.0041	0.30	0.00003	0.28	0.000005	0.68	0.017	0.68	0.00001	0.00008	0.00005	0.000141	0.00028	0.0009	0.000005
26-Jun-12	0.000078	0.0005	0.12	0.004	0.0046	0.00031	0.00092	0.0041	0.32	0.00002	0.37	0.000005	0.66	0.018	0.80	0.00001	0.00011	0.00032	0.000154	0.00029	0.0023	0.000028
03-Jul-12	0.000037	0.0005	0.12	0.003	0.0053	0.00013	0.00005	0.0048	0.29	0.00002	0.31	0.000005	0.56	0.019	0.74	0.00001	0.00031	0.00005	0.000148	0.00025	0.0027	0.000005
10-Jul-12	0.000039	0.0005	0.14	0.002	0.0049	0.00006	0.00005	0.0044	0.29	0.00002	0.36	0.000005	0.54	0.023	0.75	0.00001	0.00031	0.00020	0.000248	0.00033	0.0024	0.000010
17-Jul-12	0.000014	0.0005	0.13	0.002	0.0046	0.00005	0.00005	0.0041	0.26	0.00002	0.30	0.000005	0.46	0.020	0.82	0.00001	0.00002	0.00005	0.000145	0.00023	0.0009	0.000005
24-Jul-12	0.000014	0.0005	0.12	0.002	0.0046	0.00005	0.00005	0.0235	0.24	0.00006	0.30	0.000005	0.47	0.019	0.82	0.00001	0.00005	0.00009	0.000124	0.00022	0.0009	0.000005
31-Jul-12	0.000105	0.0005	0.11	0.002	0.0096	0.00003	0.00005	0.0043	0.21	0.00002	0.27	0.000005	0.36	0.017	0.61	0.00001	0.00141	0.00010	0.000095	0.00028	0.0062	0.000029
07-Aug-12	0.000104	0.0005	0.11	0.002	0.0052	0.00005	0.00005	0.0047	0.21	0.00002	0.30	0.000005	0.34	0.017	0.70	0.00001	0.00102	0.00016	0.000096	0.00030	0.0026	0.000010
14-Aug-12	0.000018	0.0005	0.10	0.002	0.0182	0.00004	0.00005	0.0041	0.19	0.00002	0.26	0.000005	0.30	0.016	0.70	0.00001	0.00008	0.00009	0.000096	0.00020	0.0009	0.000005
21-Aug-12	0.000037	0.0005	0.10	0.002	0.0138	0.00006	0.00009	0.0041	0.16	0.00002	0.24	0.000005	0.27	0.015	0.70	0.00001	0.00013	0.00028	0.000098	0.00029	0.0018	0.000005
28-Aug-12	0.000024	0.0005	0.10	0.002	0.0142	0.00005	0.00005	0.0042	0.16	0.00002	0.25	0.000005	0.25	0.016	0.63	0.00001	0.00010	0.00009	0.000117	0.00023	0.0019	0.000005
04-Sep-12	0.000009	0.0005	0.10	0.002	0.0425	0.00004	0.00005	0.0042	0.14	0.00002	0.22	0.000005	0.22	0.016	0.65	0.00001	0.00006	0.00014	0.000151	0.00026	0.0014	0.000005
11-Sep-12	0.000010	0.0005	0.11	0.002	0.0049	0.00003	0.00005	0.0044	0.18	0.00002	0.28	0.000005	0.24	0.017	0.79	0.00001	0.00002	0.00005	0.000120	0.00013	0.0010	0.000005
18-Sep-12																						
25-Sep-12	0.000029	0.0005	0.11	0.002	0.0049	0.00003	0.00010	0.0044	0.16	0.00002	0.27	0.000010	0.22	0.017	0.77	0.00001	0.00004	0.00005	0.000153	0.00015	0.0039	0.000010
02-Oct-12	0.000020	0.0005	0.11	0.002	0.0049	0.00003	0.00005	0.0044	0.15	0.00002	0.24	0.000005	0.19	0.017	0.82	0.00001	0.00002	0.00005	0.000151	0.00013	0.0015	0.000005
09-Oct-12	0.000010	0.0005	0.11	0.002	0.0050	0.00004	0.00015	0.0045	0.14	0.00002	0.22	0.000005	0.18	0.016	0.74	0.00001	0.00007	0.00010	0.000141	0.00016	0.0040	0.000005
16-Oct-12	0.000011	0.0006	0.12	0.002	0.0056	0.00003	0.00006	0.0051	0.14	0.00002	0.24	0.000006	0.19	0.017	1.04	0.00001	0.00004	0.00006	0.000151	0.00015	0.0022	0.000006
23-Oct-12	0.000025	0.0005	0.12	0.002	0.0050	0.00007	0.00015	0.0045	0.13	0.00002	0.26	0.000005	0.18	0.018	0.79	0.00001	0.00004	0.00005	0.000154	0.00014	0.0025	0.000005
30-Oct-12	0.000010	0.0005	0.13	0.002	0.0048	0.00007	0.00005	0.0043	0.15	0.00002	0.28	0.000005	0.19	0.020	0.95	0.00001	0.00006	0.00005	0.000133	0.00013	0.0019	0.000005
06-Nov-12	0.000014	0.0005	0.11	0.002	0.0048	0.00006	0.00005	0.0043	0.13	0.00002	0.25	0.000005	0.18	0.018	0.82	0.00001	0.00006	0.00005	0.000128	0.00011	0.0014	0.000005
13-Nov-12	0.000014	0.0005	0.11	0.002	0.0097	0.00005	0.00005	0.0043	0.11	0.00002	0.23	0.000005	0.15	0.017	0.90	0.00001	0.00028	0.00010	0.000103	0.00012	0.0024	0.000005
20-Nov-12	0.000022	0.0006	0.13	0.002	0.0056	0.00007	0.00006	0.0051	0.13	0.00002	0.26	0.000006	0.19	0.021	0.93	0.00001	0.00010	0.00011	0.000139	0.00015	0.0028	0.000006
27-Nov-12	0.000015	0.0005	0.13	0.002	0.0049	0.00005	0.00015	0.0044	0.13	0.00002	0.27	0.000005	0.16	0.020	0.92	0.00001	0.00004	0.00015	0.000143	0.00003	0.0015	0.000005
04-Dec-12	0.000026	0.0004	0.10	0.001	0.0043	0.00006	0.00004	0.0039	0.09	0.00002	0.15	0.000004	0.14	0.015	0.97	0.00001	0.00006	0.00004	0.000071	0.00011	0.0009	0.000004
11-Dec-12	0.000028	0.0005	0.08	0.001	0.0046	0.00005	0.00005	0.0041	0.11	0.00002	0.20	0.000005	0.14	0.013	0.61	0.00001	0.00010	0.00005	0.000073	0.00013	0.0009	0.000005
18-Dec-12	0.000036	0.0004	0.09	0.001	0.0044	0.00006	0.00009	0.0040	0.10	0.00002	0.15	0.000027	0.13	0.014	0.79	0.00001	0.00006	0.00013	0.000051	0.00012	0.0009	0.000004
25-Dec-12	0.000032	0.0005	0.09	0.001	0.0046	0.00004	0.00005	0.0046	0.09	0.00002	0.17	0.000005	0.11	0.015	0.57	0.00001	0.00006	0.00005	0.000064	0.00006	0.0009	0.000005
01-Jan-13	0.000031	0.0004	0.07	0.001	0.0045	0.00005	0.00018	0.0040	0.09	0.00002	0.17	0.000004	0.14	0.012	0.58	0.00001	0.00007	0.00027	0.000058	0.00014	0.0013	0.000004
08-Jan-13	0.000032	0.0005	0.08	0.001	0.0046	0.00003	0.00005	0.0041	0.10	0.00002	0.20	0.000009	0.11	0.014	0.63	0.00001	0.00005	0.00018	0.000059	0.00017	0.0009	0.000005
15-Jan-13	0.000009	0.0005	0.08	0.012	0.0046	0.00005	0.00005	0.0088	0.09	0.00002	0.16	0.000005	0.11	0.012	0.59	0.00001	0.00003	0.00005	0.000056	0.00009	0.0005	0.000005
22-Jan-13	0.000023	0.0005	0.08	0.001	0.0046	0.00005	0.00005	0.0041	0.09	0.00002	0.15	0.000005	0.08	0.013	0.61	0.00001	0.00003	0.00005	0.000059	0.00012	0.0014	0.000005
29-Jan-13	0.000022	0.0004	0.09	0.001	0.0045	0.00005	0.00004	0.0108	0.10	0.00002	0.15	0.000004	0.15	0.014	0.84	0.00001	0.00007	0.00009	0.000039	0.00017	0.0009	0.000004
05-Feb-13																						
12-Feb-13																						

HC 14
Sample = L032135

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	1	500	395	7.77	1.87	10.68	3.16	0.070	0.0010	0.00340	0.0006	0.000008	0.0000040	0.0076	0.000001	2.68	0.00020	0.000028	0.00059	0.0016
08-May-12	2	500	475	7.61	1.34	10.27	2.38	0.068	0.0018	0.00413	0.0007	0.000010	0.0000048	0.0103	0.000001	2.52	0.00024	0.000023	0.00048	0.0019
15-May-12	3	500	465	7.64	1.27	9.96	2.33	0.140	0.0013	0.00591	0.0009	0.000009	0.0000047	0.0088	0.000001	2.56	0.00023	0.000013	0.00023	0.0033
22-May-12	4	500	455	7.46	1.52	6.73	1.82	0.091	0.0010	0.00428	0.0005	0.000009	0.0000046	0.0062	0.000001	1.80	0.00023	0.000006	0.00023	0.0014
29-May-12	5	500	450	7.38	1.58	6.81	1.35	0.078	0.0010	0.00243	0.0004	0.000009	0.0000045	0.0063	0.000001	1.84	0.00023	0.000008	0.00023	0.0014
05-Jun-12	6	500	450	7.41	1.60	7.17	0.90	0.077	0.0011	0.00194	0.0005	0.000009	0.0000045	0.0068	0.000001	1.84	0.00023	0.000009	0.00023	0.0018
12-Jun-12	7	500	430	7.53	1.11	6.48	1.72	0.085	0.0009	0.00172	0.0005	0.000009	0.0000043	0.0051	0.000001	1.66	0.00022	0.000001	0.00022	0.0017
19-Jun-12	8	500	435	7.40	1.04	5.96	0.87	0.055	0.0007	0.00152	0.0004	0.000009	0.0000044	0.0043	0.000001	1.49	0.00022	0.000017	0.00022	0.0013
26-Jun-12	9	500	445	7.52	1.18	6.62	1.78	0.097	0.0007	0.00138	0.0006	0.000009	0.0000045	0.0047	0.000001	1.60	0.00022	0.000001	0.00022	0.0036
03-Jul-12	10	500	455	7.43	2.68	6.66	1.37	0.058	0.0007	0.00173	0.0004	0.000009	0.0000046	0.0039	0.000001	1.53	0.00023	0.000006	0.00023	0.0014
10-Jul-12	11	500	440	7.30	1.43	5.54	1.32	0.060	0.0007	0.00101	0.0005	0.000009	0.0000044	0.0042	0.000001	1.32	0.00022	0.000004	0.00022	0.0018
17-Jul-12	12	500	445	7.51	0.86	5.97	1.34	0.068	0.0007	0.00111	0.0003	0.000009	0.0000045	0.0039	0.000001	1.57	0.00022	0.000017	0.00022	0.0013
24-Jul-12	13	500	440	7.22	1.05	5.22	1.76	0.057	0.0006	0.00092	0.0004	0.000009	0.0000044	0.0034	0.000001	1.41	0.00022	0.000007	0.00022	0.0013
31-Jul-12	14	500	440	7.32	0.83	4.79	0.88	0.050	0.0007	0.00088	0.0003	0.000009	0.0000044	0.0034	0.000001	1.32	0.00022	0.000001	0.00022	0.0013
07-Aug-12	15	500	445	7.45	1.00	5.11	0.89	0.062	0.0007	0.00098	0.0004	0.000009	0.0000045	0.0040	0.000001	1.31	0.00022	0.000004	0.00022	0.0018
14-Aug-12	16	500	450	7.24	1.11	5.06	0.90	0.041	0.0005	0.00068	0.0003	0.000009	0.0000045	0.0028	0.000001	1.27	0.00023	0.000001	0.00023	0.0014
21-Aug-12	17	500	450	7.16	1.45	4.59	1.35	0.047	0.0006	0.00072	0.0003	0.000009	0.0000045	0.0033	0.000001	1.25	0.00023	0.000006	0.00023	0.0014
28-Aug-12	18	500	450	7.32	1.88	5.29	2.25	0.041	0.0006	0.00059	0.0003	0.000009	0.0000045	0.0029	0.000001	1.27	0.00023	0.000005	0.00023	0.0027
04-Sep-12	19	500	445	7.21	1.81	4.72	1.78	0.030	0.0008	0.00040	0.0003	0.000009	0.0000045	0.0029	0.000001	1.26	0.00022	0.000004	0.00022	0.0013
11-Sep-12	20	500	485	6.92	1.26	4.85	0.97	0.026	0.0007	0.00063	0.0004	0.000010	0.0000049	0.0030	0.000001	1.36	0.00024	0.000009	0.00024	0.0015
18-Sep-12	21	500	480	7.17																
25-Sep-12	22	500	480	7.20	1.01	5.66	1.92	0.021	0.0006	0.00048	0.0003	0.000010	0.0000048	0.0026	0.000001	1.34	0.00024	0.000002	0.00024	0.0014
02-Oct-12	23	500	485	7.10	1.75	5.36	0.97	0.022	0.0006	0.00049	0.0003	0.000010	0.0000049	0.0028	0.000001	1.30	0.00024	0.000030	0.00029	0.0015
09-Oct-12	24	500	480	7.17	2.00	5.41	0.96	0.019	0.0005	0.00043	0.0004	0.000010	0.0000048	0.0023	0.000001	1.29	0.00024	0.000002	0.00024	0.0014
16-Oct-12	25	500	495	7.45	2.22	5.47	1.98	0.020	0.0004	0.00045	0.0003	0.000010	0.0000050	0.0025	0.000001	1.32	0.00025	0.000003	0.00025	0.0015
23-Oct-12	26	500	485	7.05	1.65	5.37	2.43	0.035	0.0004	0.00039	0.0003	0.000010	0.0000049	0.0017	0.000001	1.30	0.00024	0.000022	0.00034	0.0015
30-Oct-12	27	500	475	7.07	1.73	6.12	1.43	0.020	0.0004	0.00038	0.0004	0.000010	0.0000048	0.0023	0.000178	1.51	0.00024	0.000001	0.00024	0.0014
06-Nov-12	28	500	470	7.27	1.54	4.75	0.94	0.016	0.0004	0.00052	0.0003	0.000009	0.0000047	0.0020	0.000007	1.26	0.00024	0.000016	0.00024	0.0014
13-Nov-12	29	500	475	7.44	2.11	4.86	1.90	0.013	0.0004	0.00038	0.0003	0.000010	0.0000048	0.0020	0.000004	1.22	0.00024	0.000016	0.00024	0.0014
20-Nov-12	30	500	500	7.79	2.60	6.88	1.50	0.016	0.0005	0.00045	0.0003	0.000010	0.0000050	0.0019	0.000002	1.46	0.00025	0.000064	0.00040	0.0015
27-Nov-12	31	500	500	7.07	2.22	6.46	2.00	0.016	0.0004	0.00040	0.0003	0.000010	0.0000050	0.0022	0.000002	1.45	0.00025	0.000003	0.00025	0.0015
04-Dec-12	32	500	450	7.37	0.77	3.49	1.35	0.021	0.0003	0.00036	0.0002	0.000009	0.0000045	0.0011	0.000001	0.84	0.00023	0.000001	0.00023	0.0014
11-Dec-12	33	500	475	7.35	1.04	4.70	1.43	0.018	0.0005	0.00038	0.0002	0.000010	0.0000095	0.0018	0.000001	1.14	0.00024	0.000023	0.00052	0.0014
18-Dec-12	34	500	455	7.36	0.92	4.56	0.91	0.025	0.0004	0.00036	0.0002	0.000009	0.0000046	0.0013	0.000001	1.09	0.00023	0.000008	0.00023	0.0014
25-Dec-12	35	500	445	7.33	1.20	4.07	0.89	0.023	0.0003	0.00040	0.0002	0.000009	0.0000045	0.0013	0.000002	1.02	0.00022	0.000004	0.00022	0.0013
01-Jan-13	36	500	465	7.40	1.14	4.43	0.93	0.021	0.0003	0.00037	0.0002	0.000009	0.0000047	0.0013	0.000001	0.95	0.00023	0.000007	0.00023	0.0014
08-Jan-13	37	500	430	7.56	1.13	4.40	0.86	0.025	0.0004	0.00034	0.0003	0.000009	0.0000043	0.0013	0.000001	0.95	0.00022	0.000027	0.00022	0.0013
15-Jan-13	38	500	455	7.17	1.31	4.58	1.37	0.023	0.0004	0.00036	0.0004	0.000009	0.0000046	0.0013	0.000003	1.01	0.00023	0.000011	0.00023	0.0496
22-Jan-13	39	500	455	7.27	1.43	4.25	1.82	0.017	0.0003	0.00032	0.0002	0.000009	0.0000046	0.0014	0.000001	0.95	0.00023	0.000004	0.00023	0.0014
29-Jan-13	40	500	455	7.41	1.09	3.58	1.37	0.020	0.0002	0.00032	0.0002	0.000009	0.0000046	0.0010	0.000001	0.87	0.00023	0.000005	0.00023	0.0041
05-Feb-13	41	500	455	7.35	1.31	4.07	1.37													
12-Feb-13	42	500	460	7.42	1.74	4.14	1.84													

HC 14
Sample = L032135

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	0.000008	0.0008	0.51	0.006	0.0040	0.00114	0.00008	0.0036	2.23	0.00002	0.32	0.000004	1.05	0.014	1.06	0.00001	0.00016	0.00004	0.000039	0.00022	0.0012	0.000067
08-May-12	0.000014	0.0005	0.57	0.009	0.0048	0.00181	0.00014	0.0043	1.67	0.00002	0.27	0.000005	0.81	0.013	1.23	0.00001	0.00024	0.00005	0.000127	0.00018	0.0010	0.000029
15-May-12	0.000009	0.0009	0.55	0.011	0.0047	0.00118	0.00009	0.0042	1.34	0.00002	0.40	0.000005	0.55	0.013	0.94	0.00001	0.00010	0.00019	0.000106	0.00022	0.0005	0.000112
22-May-12	0.000009	0.0005	0.43	0.008	0.0091	0.00059	0.00005	0.0041	0.93	0.00002	0.26	0.000005	0.32	0.009	0.62	0.00001	0.00010	0.00009	0.000078	0.00021	0.0005	0.000018
29-May-12	0.000009	0.0005	0.41	0.011	0.0045	0.00032	0.00005	0.0041	0.70	0.00002	0.24	0.000005	0.18	0.009	0.40	0.00001	0.00016	0.00005	0.000081	0.00018	0.0005	0.000005
05-Jun-12	0.000027	0.0005	0.45	0.009	0.0045	0.00048	0.00005	0.0041	0.67	0.00002	0.24	0.000005	0.16	0.009	0.43	0.00001	0.00008	0.00005	0.000099	0.00018	0.0009	0.000014
12-Jun-12	0.000009	0.0004	0.42	0.008	0.0043	0.00014	0.00004	0.0039	0.59	0.00003	0.25	0.000004	0.12	0.008	0.32	0.00001	0.00006	0.00009	0.000055	0.00018	0.0013	0.000017
19-Jun-12	0.000009	0.0004	0.38	0.008	0.0044	0.00012	0.00004	0.0039	0.44	0.00002	0.20	0.000004	0.09	0.007	0.29	0.00001	0.00006	0.00004	0.000058	0.00020	0.0004	0.000009
26-Jun-12	0.000009	0.0004	0.38	0.009	0.0045	0.00013	0.00004	0.0040	0.41	0.00002	0.26	0.000004	0.08	0.007	0.27	0.00001	0.00007	0.00018	0.000065	0.00022	0.0004	0.000053
03-Jul-12	0.000009	0.0005	0.37	0.010	0.0046	0.00016	0.00005	0.0041	0.35	0.00002	0.19	0.000005	0.07	0.007	0.26	0.00001	0.00008	0.00005	0.000071	0.00021	0.0005	0.000005
10-Jul-12	0.000009	0.0004	0.36	0.007	0.0088	0.00012	0.00009	0.0040	0.35	0.00002	0.17	0.000004	0.07	0.006	0.36	0.00001	0.00007	0.00018	0.000059	0.00024	0.0004	0.000013
17-Jul-12	0.000009	0.0004	0.38	0.006	0.0045	0.00009	0.00004	0.0040	0.30	0.00002	0.20	0.000004	0.06	0.007	0.29	0.00001	0.00005	0.00004	0.000054	0.00019	0.0004	0.000004
24-Jul-12	0.000009	0.0004	0.37	0.008	0.0044	0.00009	0.00004	0.0040	0.28	0.00007	0.18	0.000004	0.05	0.006	0.30	0.00001	0.00005	0.00018	0.000042	0.00023	0.0004	0.000004
31-Jul-12	0.000009	0.0004	0.37	0.007	0.0044	0.00007	0.00004	0.0040	0.24	0.00002	0.16	0.000004	0.06	0.006	0.27	0.00001	0.00005	0.00004	0.000042	0.00022	0.0004	0.000004
07-Aug-12	0.000009	0.0004	0.36	0.007	0.0045	0.00008	0.00004	0.0040	0.26	0.00002	0.19	0.000004	0.05	0.005	0.29	0.00001	0.00009	0.00004	0.000041	0.00020	0.0009	0.000013
14-Aug-12	0.000009	0.0005	0.36	0.007	0.0045	0.00006	0.00005	0.0041	0.24	0.00006	0.17	0.000005	0.05	0.005	0.32	0.00001	0.00007	0.00005	0.000034	0.00012	0.0005	0.000009
21-Aug-12	0.000009	0.0005	0.35	0.008	0.0045	0.00007	0.00005	0.0041	0.18	0.00002	0.15	0.000005	0.04	0.005	0.30	0.00001	0.00007	0.00009	0.000033	0.00017	0.0005	0.000005
28-Aug-12	0.000009	0.0005	0.36	0.009	0.0135	0.00008	0.00005	0.0041	0.18	0.00002	0.14	0.000005	0.03	0.005	0.25	0.00001	0.00012	0.00005	0.000038	0.00020	0.0005	0.000009
04-Sep-12	0.000009	0.0004	0.33	0.008	0.0045	0.00005	0.00004	0.0040	0.13	0.00002	0.12	0.000004	0.03	0.005	0.21	0.00001	0.00004	0.00004	0.000048	0.00012	0.0004	0.000004
11-Sep-12	0.000010	0.0005	0.34	0.007	0.0097	0.00006	0.00005	0.0044	0.16	0.00002	0.15	0.000005	0.03	0.005	0.28	0.00001	0.00009	0.00005	0.000061	0.00010	0.0005	0.000005
18-Sep-12																						
25-Sep-12	0.000010	0.0005	0.35	0.007	0.0048	0.00005	0.00005	0.0043	0.13	0.00002	0.14	0.000005	0.03	0.005	0.25	0.00001	0.00006	0.00005	0.000056	0.00008	0.0005	0.000005
02-Oct-12	0.000010	0.0005	0.35	0.007	0.0049	0.00004	0.00005	0.0044	0.13	0.00002	0.14	0.000005	0.02	0.005	0.24	0.00001	0.00002	0.00005	0.000050	0.00008	0.0005	0.000005
09-Oct-12	0.000010	0.0005	0.34	0.006	0.0048	0.00005	0.00010	0.0043	0.12	0.00002	0.12	0.000005	0.02	0.005	0.24	0.00001	0.00006	0.00005	0.000057	0.00010	0.0005	0.000005
16-Oct-12	0.000010	0.0005	0.33	0.005	0.0050	0.00004	0.00005	0.0045	0.11	0.00002	0.12	0.000005	0.02	0.005	0.24	0.00001	0.00005	0.00005	0.000054	0.00009	0.0015	0.000005
23-Oct-12	0.000010	0.0005	0.33	0.005	0.0049	0.00006	0.00015	0.0044	0.10	0.00002	0.12	0.000005	0.02	0.005	0.22	0.00001	0.00010	0.00005	0.000053	0.00018	0.0005	0.000005
30-Oct-12	0.000010	0.0005	0.37	0.007	0.0048	0.00004	0.00005	0.0043	0.11	0.00002	0.14	0.000005	0.02	0.006	0.24	0.00001	0.00007	0.00005	0.000046	0.00008	0.0005	0.000005
06-Nov-12	0.000009	0.0005	0.31	0.006	0.0047	0.00004	0.00009	0.0042	0.09	0.00002	0.10	0.000005	0.02	0.005	0.22	0.00001	0.00005	0.00005	0.000037	0.00006	0.0005	0.000005
13-Nov-12	0.000019	0.0005	0.31	0.006	0.0048	0.00003	0.00005	0.0043	0.08	0.00002	0.10	0.000005	0.01	0.004	0.21	0.00001	0.00000	0.00005	0.000035	0.00006	0.0005	0.000005
20-Nov-12	0.000015	0.0005	0.33	0.007	0.0050	0.00004	0.00005	0.0045	0.08	0.00002	0.13	0.000005	0.03	0.005	0.19	0.00001	0.00009	0.00005	0.000043	0.00008	0.0010	0.000010
27-Nov-12	0.000010	0.0005	0.32	0.006	0.0050	0.00003	0.00005	0.0045	0.08	0.00002	0.11	0.000005	0.02	0.005	0.20	0.00001	0.00006	0.00005	0.000044	0.00002	0.0015	0.000005
04-Dec-12	0.000009	0.0005	0.25	0.003	0.0045	0.00003	0.00005	0.0041	0.07	0.00004	0.08	0.000005	0.01	0.003	0.18	0.00001	0.00003	0.00005	0.000029	0.00008	0.0005	0.000009
11-Dec-12	0.000019	0.0005	0.27	0.004	0.0048	0.00002	0.00005	0.0043	0.07	0.00002	0.09	0.000010	0.02	0.004	0.18	0.00001	0.00010	0.00005	0.000036	0.00008	0.0005	0.000005
18-Dec-12	0.000009	0.0005	0.29	0.004	0.0046	0.00004	0.00009	0.0041	0.08	0.00004	0.08	0.000005	0.02	0.004	0.21	0.00001	0.00007	0.00005	0.000030	0.00008	0.0005	0.000014
25-Dec-12	0.000009	0.0004	0.34	0.004	0.0045	0.00004	0.00004	0.0049	0.07	0.00002	0.07	0.000004	0.02	0.004	0.22	0.00001	0.00006	0.00004	0.000022	0.00002	0.0004	0.000004
01-Jan-13	0.000009	0.0005	0.29	0.004	0.0047	0.00004	0.00009	0.0042	0.07	0.00002	0.07	0.000005	0.03	0.003	0.16	0.00001	0.00004	0.00005	0.000023	0.00006	0.0005	0.000014
08-Jan-13	0.000009	0.0004	0.29	0.003	0.0043	0.00003	0.00004	0.0043	0.08	0.00002	0.09	0.000004	0.02	0.003	0.18	0.00001	0.00006	0.00009	0.000018	0.00010	0.0009	0.000022
15-Jan-13	0.000009	0.0005	0.29	0.007	0.0046	0.00003	0.00009	0.0077	0.07	0.00002	0.08	0.000005	0.02	0.003	0.19	0.00001	0.00008	0.00005	0.000022	0.00007	0.0005	0.000009
22-Jan-13	0.000009	0.0005	0.28	0.004	0.0046	0.00002	0.00005	0.0041	0.06	0.00002	0.07	0.000005	0.02	0.003	0.18	0.00001	0.00004	0.00005	0.000020	0.00008	0.0005	0.000014
29-Jan-13	0.000009	0.0005	0.26	0.003	0.0046	0.00002	0.00005	0.0041	0.06	0.00002	0.06	0.000005	0.03	0.003	0.17	0.00001	0.00008	0.00009	0.000017	0.00010	0.0005	0.000005
05-Feb-13																						
12-Feb-13																						

HC 15
Sample = L032201

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	1	500	420	7.97	1.97	20.42	22.68	0.060	0.0005	0.00080	0.0131	0.000008	0.0000042	0.0090	0.000001	2.21	0.00021	0.000036	0.00143	0.0029
08-May-12	2	500	460	8.28	0.43	16.08	16.56	0.075	0.0004	0.00055	0.0057	0.000009	0.0000046	0.0106	0.000001	2.19	0.00023	0.000026	0.00156	0.0051
15-May-12	3	500	415	8.07	0.67	13.99	14.11	0.097	0.0003	0.00071	0.0056	0.000008	0.0000042	0.0090	0.000001	2.13	0.00021	0.000024	0.00079	0.0075
22-May-12	4	500	450	7.83	1.16	13.54	9.90	0.083	0.0003	0.00054	0.0046	0.000009	0.0000045	0.0068	0.000001	2.21	0.00023	0.000019	0.00045	0.0054
29-May-12	5	500	450	7.71	1.33	12.63	6.30	0.067	0.0003	0.00045	0.0047	0.000009	0.0000045	0.0061	0.000001	2.68	0.00023	0.000016	0.00032	0.0050
05-Jun-12	6	500	450	7.56	1.47	11.68	6.30	0.057	0.0003	0.00036	0.0044	0.000009	0.0000045	0.0054	0.000001	2.43	0.00023	0.000018	0.00032	0.0036
12-Jun-12	7	500	435	7.66	1.17	10.51	6.53	0.042	0.0003	0.00087	0.0045	0.000009	0.0000044	0.0042	0.000001	2.44	0.00022	0.000005	0.00026	0.0013
19-Jun-12	8	500	440	7.53	1.10	9.90	4.84	0.036	0.0002	0.00048	0.0041	0.000009	0.0000044	0.0037	0.000001	2.30	0.00022	0.000023	0.00022	0.0013
26-Jun-12	9	500	440	7.64	1.13	9.17	5.28	0.046	0.0002	0.00035	0.0043	0.000009	0.0000044	0.0037	0.000001	2.46	0.00022	0.000001	0.00053	0.0048
03-Jul-12	10	500	440	7.63	2.83	11.65	5.28	0.057	0.0003	0.00040	0.0063	0.000009	0.0000044	0.0030	0.000001	3.15	0.00022	0.000011	0.00370	0.0022
10-Jul-12	11	500	445	7.53	1.36	10.16	4.90	0.049	0.0003	0.00027	0.0060	0.000009	0.0000045	0.0030	0.000001	3.19	0.00022	0.000011	0.00031	0.0031
17-Jul-12	12	500	460	7.64	0.90	9.96	4.60	0.043	0.0002	0.00037	0.0058	0.000009	0.0000046	0.0030	0.000001	3.51	0.00023	0.000030	0.00023	0.0014
24-Jul-12	13	500	445	7.34	1.05	7.34	5.34	0.041	0.0002	0.00031	0.0053	0.000009	0.0000045	0.0024	0.000001	3.43	0.00022	0.000015	0.00027	0.0027
31-Jul-12	14	500	450	7.52	0.89	9.01	4.05	0.045	0.0002	0.00041	0.0057	0.000009	0.0000045	0.0024	0.000001	3.42	0.00023	0.000010	0.00027	0.0018
07-Aug-12	15	500	445	7.62	0.99	9.07	3.56	0.050	0.0003	0.00036	0.0059	0.000009	0.0000045	0.0024	0.000001	3.36	0.00022	0.000009	0.00045	0.0013
14-Aug-12	16	500	445	7.39	1.11	7.44	4.01	0.040	0.0002	0.00031	0.0056	0.000009	0.0000045	0.0023	0.000001	3.24	0.00022	0.000007	0.00058	0.0013
21-Aug-12	17	500	450	7.29	1.39	7.65	4.05	0.043	0.0003	0.00023	0.0049	0.000009	0.0000045	0.0023	0.000001	3.29	0.00023	0.000013	0.00023	0.0014
28-Aug-12	18	500	460	7.35	1.96	8.09	5.06	0.023	0.0002	0.00032	0.0052	0.000009	0.0000046	0.0022	0.000001	3.36	0.00023	0.000015	0.00032	0.0018
04-Sep-12	19	500	460	7.23	1.85	7.57	2.76	0.040	0.0002	0.00018	0.0051	0.000009	0.0000046	0.0018	0.000001	3.01	0.00023	0.000006	0.00023	0.0014
11-Sep-12	20	500	440	7.39	1.19	7.52	3.96	0.028	0.0002	0.00040	0.0061	0.000009	0.0000044	0.0017	0.000001	3.09	0.00022	0.000013	0.00026	0.0013
18-Sep-12	21	500	430	7.41																
25-Sep-12	22	500	435	7.45	1.00	9.14	2.61	0.027	0.0002	0.00030	0.0057	0.000009	0.0000044	0.0016	0.000001	2.56	0.00022	0.000006	0.00022	0.0013
02-Oct-12	23	500	435	7.38	1.33	9.54	1.31	0.022	0.0003	0.00035	0.0060	0.000009	0.0000044	0.0018	0.000001	2.67	0.00022	0.000030	0.00030	0.0013
09-Oct-12	24	500	440	7.33	1.93	9.25	1.76	0.026	0.0003	0.00066	0.0062	0.000009	0.0000044	0.0015	0.000001	2.48	0.00022	0.000011	0.00031	0.0013
16-Oct-12	25	500	440	7.67	1.73	11.11	2.20	0.048	0.0003	0.00040	0.0075	0.000009	0.0000044	0.0015	0.000001	3.01	0.00022	0.000007	0.00026	0.0013
23-Oct-12	26	500	440	7.32	1.66	9.94	2.20	0.038	0.0002	0.00022	0.0069	0.000009	0.0000044	0.0009	0.000001	2.66	0.00022	0.000023	0.00031	0.0013
30-Oct-12	27	500	430	7.36	1.40	9.99	1.29	0.028	0.0002	0.00034	0.0072	0.000009	0.0000043	0.0014	0.000160	2.80	0.00022	0.000001	0.00034	0.0022
06-Nov-12	28	500	435	7.57	1.12	9.99	0.87	0.022	0.0003	0.00048	0.0074	0.000009	0.0000044	0.0016	0.000002	3.01	0.00022	0.000015	0.00035	0.0013
13-Nov-12	29	500	430	7.53	1.97	9.90	0.86	0.018	0.0003	0.00039	0.0072	0.000009	0.0000043	0.0012	0.000001	2.73	0.00022	0.000011	0.00022	0.0013
20-Nov-12	30	500	495	7.83	2.94	11.32	1.98	0.023	0.0003	0.00045	0.0101	0.000010	0.0000050	0.0011	0.000001	3.12	0.00025	0.000059	0.00035	0.0015
27-Nov-12	31	500	495	7.55	2.08	11.61	2.48	0.024	0.0002	0.00040	0.0105	0.000010	0.0000050	0.0014	0.000001	3.26	0.00025	0.000001	0.00025	0.0015
04-Dec-12	32	500	460	7.81	0.70	9.87	2.76	0.029	0.0003	0.00037	0.0099	0.000009	0.0000046	0.0008	0.000002	3.09	0.00023	0.000006	0.00041	0.0023
11-Dec-12	33	500	480	7.67	0.85	10.92	2.40	0.025	0.0004	0.00038	0.0103	0.000010	0.0000096	0.0011	0.000001	3.08	0.00024	0.000032	0.00048	0.0014
18-Dec-12	34	500	460	7.56	0.91	10.07	1.38	0.025	0.0002	0.00032	0.0098	0.000009	0.0000046	0.0006	0.000001	3.07	0.00023	0.000010	0.00023	0.0014
25-Dec-12	35	500	450	7.49	1.25	7.71	1.80	0.021	0.0002	0.00032	0.0085	0.000009	0.0000045	0.0007	0.000004	2.66	0.00023	0.000012	0.00023	0.0023
01-Jan-13	36	500	455	7.57	1.13	9.11	1.82	0.024	0.0002	0.00036	0.0087	0.000009	0.0000046	0.0006	0.000001	2.62	0.00023	0.000015	0.00023	0.0023
08-Jan-13	37	500	440	7.65	1.13	7.79	1.32	0.026	0.0002	0.00035	0.0078	0.000009	0.0000044	0.0007	0.000001	2.57	0.00022	0.000037	0.00031	0.0026
15-Jan-13	38	500	455	7.70	1.06	9.46	2.28	0.022	0.0002	0.00032	0.0089	0.000009	0.0000046	0.0007	0.000001	2.70	0.00023	0.000017	0.00041	0.0023
22-Jan-13	39	500	450	7.43	1.46	7.75	3.15	0.025	0.0002	0.00041	0.0079	0.000009	0.0000045	0.0007	0.000001	2.49	0.00023	0.000013	0.00023	0.0032
29-Jan-13	40	500	460	7.52	1.15	7.35	2.76	0.019	0.0001	0.00032	0.0074	0.000009	0.0000046	0.0005	0.000001	2.74	0.00023	0.000011	0.00028	0.0018
05-Feb-13	41	500	450	7.57	1.24	7.35	3.15													
12-Feb-13	42	500	450	7.54	1.82	7.51	2.25													

HC 15
Sample = L032201

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	0.000113	0.0004	0.42	0.000	0.0168	0.00183	0.00017	0.0042	1.54	0.00065	0.37	0.000004	14.99	0.058	7.27	0.00001	0.00006	0.00021	0.000076	0.00200	0.0004	0.000025
08-May-12	0.000014	0.0005	0.36	0.002	0.0046	0.00201	0.00009	0.0041	1.18	0.00044	0.29	0.000005	11.41	0.051	6.21	0.00001	0.00031	0.00018	0.000012	0.00154	0.0009	0.000009
15-May-12	0.000021	0.0004	0.34	0.002	0.0042	0.00127	0.00012	0.0037	1.07	0.00027	0.34	0.000004	9.25	0.055	5.19	0.00001	0.00026	0.00054	0.000015	0.00166	0.0004	0.000025
22-May-12	0.000009	0.0005	0.31	0.003	0.0090	0.00084	0.00009	0.0041	0.86	0.00028	0.30	0.000005	6.66	0.043	3.68	0.00001	0.00027	0.00059	0.000014	0.00138	0.0005	0.000018
29-May-12	0.000009	0.0005	0.34	0.004	0.0045	0.00045	0.00005	0.0041	0.75	0.00016	0.27	0.000005	4.36	0.051	2.68	0.00001	0.00027	0.00027	0.000009	0.00107	0.0009	0.000009
05-Jun-12	0.000009	0.0005	0.33	0.005	0.0090	0.00049	0.00005	0.0041	0.73	0.00007	0.23	0.000005	4.16	0.047	2.73	0.00001	0.00019	0.00023	0.000012	0.00088	0.0009	0.000005
12-Jun-12	0.000009	0.0004	0.34	0.004	0.0087	0.00024	0.00004	0.0039	0.69	0.00006	0.21	0.000004	3.28	0.049	2.34	0.00001	0.00014	0.00004	0.000007	0.00080	0.0004	0.000004
19-Jun-12	0.000009	0.0004	0.33	0.005	0.0044	0.00019	0.00004	0.0040	0.61	0.00006	0.18	0.000004	2.37	0.046	1.88	0.00001	0.00010	0.00009	0.000006	0.00072	0.0004	0.000004
26-Jun-12	0.000057	0.0004	0.38	0.005	0.0088	0.00020	0.00004	0.0040	0.62	0.00005	0.22	0.000004	1.90	0.050	1.81	0.00001	0.00042	0.00031	0.000009	0.00074	0.0018	0.000009
03-Jul-12	0.000040	0.0004	0.54	0.004	0.0044	0.00021	0.00004	0.0040	0.69	0.00004	0.28	0.000004	1.59	0.071	1.98	0.00001	0.00028	0.00035	0.000007	0.00085	0.0018	0.000004
10-Jul-12	0.000009	0.0004	0.51	0.005	0.0089	0.00016	0.00004	0.0040	0.59	0.00009	0.23	0.000004	1.14	0.068	1.71	0.00001	0.00023	0.00018	0.000006	0.00070	0.0013	0.000009
17-Jul-12	0.000009	0.0005	0.57	0.005	0.0046	0.00017	0.00005	0.0041	0.57	0.00005	0.25	0.000005	0.89	0.077	1.93	0.00001	0.00008	0.00018	0.000007	0.00069	0.0009	0.000005
24-Jul-12	0.000009	0.0004	0.59	0.005	0.0045	0.00018	0.00004	0.0040	0.52	0.00012	0.25	0.000004	0.72	0.077	2.10	0.00001	0.00007	0.00018	0.000010	0.00060	0.0004	0.000004
31-Jul-12	0.000009	0.0009	0.59	0.004	0.0045	0.00015	0.00005	0.0041	0.47	0.00005	0.24	0.000005	0.53	0.079	1.69	0.00001	0.00008	0.00014	0.000005	0.00077	0.0005	0.000005
07-Aug-12	0.000027	0.0009	0.60	0.004	0.0045	0.00016	0.00004	0.0040	0.42	0.00006	0.27	0.000004	0.40	0.076	1.74	0.00001	0.00040	0.00013	0.000007	0.00072	0.0009	0.000004
14-Aug-12	0.000009	0.0004	0.57	0.004	0.0045	0.00016	0.00004	0.0040	0.36	0.00005	0.23	0.000004	0.32	0.073	1.77	0.00001	0.00016	0.00013	0.000006	0.00061	0.0009	0.000004
21-Aug-12	0.000014	0.0005	0.54	0.005	0.0090	0.00018	0.00009	0.0041	0.28	0.00003	0.21	0.000005	0.24	0.068	1.60	0.00001	0.00009	0.00014	0.000006	0.00057	0.0005	0.000005
28-Aug-12	0.000009	0.0005	0.56	0.005	0.0046	0.00017	0.00005	0.0041	0.29	0.00003	0.22	0.000005	0.23	0.072	1.60	0.00001	0.00007	0.00009	0.000017	0.00044	0.0005	0.000005
04-Sep-12	0.000009	0.0005	0.49	0.004	0.0092	0.00012	0.00005	0.0041	0.21	0.00003	0.18	0.000005	0.16	0.065	1.06	0.00001	0.00006	0.00009	0.000007	0.00049	0.0005	0.000005
11-Sep-12	0.000009	0.0004	0.55	0.003	0.0044	0.00012	0.00004	0.0040	0.26	0.00004	0.22	0.000004	0.16	0.071	1.50	0.00001	0.00008	0.00004	0.000006	0.00046	0.0004	0.000004
18-Sep-12																						
25-Sep-12	0.000009	0.0004	0.43	0.004	0.0044	0.00013	0.00004	0.0039	0.19	0.00004	0.20	0.000009	0.12	0.056	0.87	0.00001	0.00012	0.00009	0.000006	0.00053	0.0009	0.000004
02-Oct-12	0.000009	0.0004	0.48	0.004	0.0044	0.00013	0.00004	0.0039	0.21	0.00002	0.24	0.000004	0.12	0.059	0.83	0.00001	0.00004	0.00004	0.000005	0.00047	0.0004	0.000004
09-Oct-12	0.000009	0.0004	0.43	0.004	0.0044	0.00011	0.00022	0.0040	0.18	0.00003	0.22	0.000004	0.11	0.052	0.73	0.00001	0.00015	0.00009	0.000012	0.00046	0.0004	0.000004
16-Oct-12	0.000009	0.0004	0.51	0.003	0.0044	0.00011	0.00009	0.0040	0.19	0.00004	0.27	0.000004	0.10	0.062	0.61	0.00001	0.00008	0.00018	0.000004	0.00059	0.0009	0.000004
23-Oct-12	0.000009	0.0004	0.43	0.004	0.0044	0.00011	0.00013	0.0040	0.15	0.00003	0.25	0.000004	0.08	0.054	0.53	0.00001	0.00006	0.00018	0.000005	0.00053	0.0004	0.000004
30-Oct-12	0.000009	0.0004	0.45	0.004	0.0043	0.00009	0.00013	0.0039	0.14	0.00003	0.28	0.000004	0.08	0.056	0.58	0.00001	0.00014	0.00013	0.000006	0.00056	0.0004	0.000004
06-Nov-12	0.000009	0.0004	0.47	0.004	0.0044	0.00010	0.00017	0.0039	0.15	0.00003	0.28	0.000004	0.09	0.059	0.52	0.00001	0.00011	0.00013	0.000004	0.00051	0.0004	0.000004
13-Nov-12	0.000009	0.0004	0.43	0.004	0.0043	0.00007	0.00004	0.0039	0.13	0.00003	0.35	0.000004	0.07	0.053	0.42	0.00001	0.00009	0.00004	0.000004	0.00046	0.0004	0.000004
20-Nov-12	0.000010	0.0005	0.43	0.004	0.0050	0.00009	0.00005	0.0045	0.10	0.00004	0.28	0.000010	0.07	0.061	0.52	0.00001	0.00007	0.00015	0.000004	0.00062	0.0005	0.000005
27-Nov-12	0.000010	0.0005	0.47	0.004	0.0050	0.00008	0.00010	0.0045	0.10	0.00006	0.29	0.000005	0.06	0.069	0.67	0.00001	0.00006	0.00005	0.000006	0.00047	0.0005	0.000005
04-Dec-12	0.000009	0.0005	0.51	0.003	0.0046	0.00010	0.00005	0.0041	0.11	0.00002	0.24	0.000005	0.06	0.065	0.88	0.00001	0.00008	0.00023	0.000008	0.00067	0.0005	0.000009
11-Dec-12	0.000010	0.0005	0.42	0.003	0.0048	0.00008	0.00005	0.0043	0.10	0.00005	0.23	0.000014	0.06	0.059	0.66	0.00001	0.00007	0.00010	0.000008	0.00065	0.0005	0.000005
18-Dec-12	0.000009	0.0005	0.45	0.003	0.0046	0.00008	0.00005	0.0041	0.09	0.00002	0.21	0.000009	0.06	0.064	0.78	0.00001	0.00005	0.00009	0.000006	0.00057	0.0005	0.000005
25-Dec-12	0.000009	0.0005	0.45	0.003	0.0045	0.00009	0.00005	0.0041	0.07	0.00003	0.16	0.000005	0.05	0.065	0.79	0.00001	0.00005	0.00014	0.000006	0.00043	0.0005	0.000005
01-Jan-13	0.000009	0.0005	0.40	0.003	0.0046	0.00009	0.00005	0.0041	0.07	0.00003	0.20	0.000014	0.06	0.055	0.73	0.00001	0.00007	0.00023	0.000006	0.00051	0.0005	0.000005
08-Jan-13	0.000009	0.0004	0.36	0.002	0.0044	0.00007	0.00004	0.0040	0.07	0.00003	0.18	0.000009	0.05	0.050	0.66	0.00001	0.00006	0.00013	0.000006	0.00054	0.0004	0.000004
15-Jan-13	0.000009	0.0005	0.42	0.003	0.0046	0.00008	0.00009	0.0041	0.07	0.00004	0.19	0.000005	0.05	0.056	0.80	0.00001	0.00005	0.00018	0.000010	0.00047	0.0005	0.000005
22-Jan-13	0.000009	0.0005	0.37	0.003	0.0045	0.00009	0.00009	0.0041	0.05	0.00003	0.16	0.000009	0.02	0.050	0.70	0.00001	0.00005	0.00014	0.000008	0.00051	0.0005	0.000005
29-Jan-13	0.000009	0.0005	0.41	0.003	0.0046	0.00010	0.00005	0.0041	0.06	0.00002	0.16	0.000005	0.06	0.055	0.86	0.00001	0.00006	0.00014	0.000007	0.00046	0.0005	0.000005
05-Feb-13																						
12-Feb-13																						

HC 16
Sample = L032044

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	1	500	415	7.67	2.08	12.54	14.11	0.054	0.0017	0.00021	0.0010	0.000008	0.0000042	0.0047	0.000001	6.02	0.00021	0.000025	0.00075	0.0012
08-May-12	2	500	465	7.79	1.15	11.76	13.95	0.071	0.0050	0.00023	0.0007	0.000009	0.0000047	0.0071	0.000001	5.63	0.00023	0.000014	0.00042	0.0014
15-May-12	3	500	440	7.67	1.27	10.80	10.56	0.099	0.0031	0.00022	0.0007	0.000009	0.0000044	0.0051	0.000001	5.54	0.00022	0.000008	0.00022	0.0013
22-May-12	4	500	455	7.58	1.35	11.01	7.74	0.092	0.0023	0.00023	0.0006	0.000009	0.0000046	0.0035	0.000001	5.10	0.00023	0.000009	0.00023	0.0014
29-May-12	5	500	450	7.48	1.35	9.83	5.85	0.086	0.0019	0.00014	0.0004	0.000009	0.0000045	0.0034	0.000001	4.64	0.00023	0.000010	0.00023	0.0014
05-Jun-12	6	500	500	7.54	1.67	12.96	3.50	0.093	0.0018	0.00015	0.0009	0.000010	0.0000050	0.0032	0.000002	4.69	0.00025	0.000012	0.00025	0.0015
12-Jun-12	7	500	445	7.64	1.24	10.15	4.01	0.141	0.0013	0.00013	0.0005	0.000009	0.0000045	0.0085	0.000001	4.67	0.00022	0.000002	0.00022	0.0027
19-Jun-12	8	500	495	7.58	1.16	11.45	2.97	0.075	0.0012	0.00020	0.0004	0.000010	0.0000050	0.0020	0.000001	4.07	0.00025	0.000024	0.00025	0.0015
26-Jun-12	9	500	460	7.67	1.18	10.17	3.68	0.087	0.0012	0.00009	0.0004	0.000009	0.0000046	0.0019	0.000001	3.90	0.00023	0.000001	0.00207	0.0014
03-Jul-12	10	500	450	7.61	2.79	10.82	2.25	0.076	0.0010	0.00023	0.0003	0.000009	0.0000045	0.0014	0.000001	3.23	0.00023	0.000006	0.00027	0.0014
10-Jul-12	11	500	490	7.49	1.67	10.44	4.41	0.083	0.0014	0.00020	0.0004	0.000010	0.0000049	0.0022	0.000001	4.06	0.00025	0.000008	0.00034	0.0015
17-Jul-12	12	500	455	7.66	0.76	8.00	3.19	0.080	0.0009	0.00059	0.0004	0.000009	0.0000046	0.0014	0.000001	3.78	0.00023	0.000022	0.00337	0.0014
24-Jul-12	13	500	455	7.47	1.09	9.53	4.10	0.081	0.0008	0.00009	0.0003	0.000009	0.0000046	0.0013	0.000001	3.58	0.00023	0.000005	0.00023	0.0014
31-Jul-12	14	500	450	7.55	0.89	7.93	3.15	0.080	0.0008	0.00009	0.0003	0.000009	0.0000045	0.0014	0.000001	3.41	0.00023	0.000003	0.00023	0.0014
07-Aug-12	15	500	455	7.71	0.96	9.29	2.73	0.086	0.0008	0.00009	0.0005	0.000009	0.0000046	0.0015	0.000001	3.47	0.00023	0.000005	0.00032	0.0014
14-Aug-12	16	500	445	7.51	1.09	7.93	2.23	0.086	0.0007	0.00009	0.0003	0.000009	0.0000045	0.0014	0.000001	3.12	0.00022	0.000002	0.00027	0.0013
21-Aug-12	17	500	455	7.41	1.33	8.14	2.73	0.087	0.0008	0.00009	0.0003	0.000009	0.0000046	0.0014	0.000001	3.68	0.00023	0.000009	0.00032	0.0014
28-Aug-12	18	500	455	7.44	1.87	9.43	2.73	0.084	0.0006	0.00009	0.0003	0.000009	0.0000046	0.0014	0.000001	3.62	0.00023	0.000007	0.00241	0.0014
04-Sep-12	19	500	450	7.28	1.84	7.16	3.60	0.065	0.0007	0.00009	0.0003	0.000009	0.0000045	0.0013	0.000001	3.66	0.00023	0.000006	0.00054	0.0014
11-Sep-12	20	500	490	7.46	1.11	8.42	5.39	0.062	0.0008	0.00010	0.0004	0.000010	0.0000049	0.0015	0.000001	4.06	0.00025	0.000012	0.00039	0.0015
18-Sep-12	21	500	450	7.58																
25-Sep-12	22	500	450	7.55	1.04	9.32	2.25	0.060	0.0005	0.00009	0.0003	0.000009	0.0000045	0.0009	0.000001	2.98	0.00023	0.000003	0.00023	0.0014
02-Oct-12	23	500	450	7.45	1.27	9.12	1.80	0.051	0.0005	0.00009	0.0002	0.000009	0.0000045	0.0012	0.000001	2.80	0.00023	0.000027	0.00023	0.0014
09-Oct-12	24	500	475	7.47	2.14	10.10	2.38	0.057	0.0005	0.00010	0.0003	0.000010	0.0000048	0.0012	0.000001	3.32	0.00024	0.000015	0.00033	0.0014
16-Oct-12	25	500	450	7.67	1.98	7.56	2.70	0.063	0.0003	0.00009	0.0002	0.000009	0.0000045	0.0010	0.000001	2.77	0.00023	0.000003	0.00027	0.0023
23-Oct-12	26	500	450	7.35	1.70	7.81	2.25	0.067	0.0003	0.00009	0.0002	0.000009	0.0000045	0.0004	0.000001	2.64	0.00023	0.000019	0.00027	0.0014
30-Oct-12	27	500	450	7.42	1.50	9.33	1.80	0.068	0.0003	0.00009	0.0002	0.000009	0.0000045	0.0011	0.000159	3.07	0.00023	0.000001	0.00023	0.0018
06-Nov-12	28	500	450	7.56	1.12	7.93	0.90	0.055	0.0004	0.00018	0.0002	0.000009	0.0000045	0.0010	0.000001	2.89	0.00023	0.000008	0.00023	0.0014
13-Nov-12	29	500	450	7.52	2.03	9.05	1.35	0.046	0.0003	0.00009	0.0002	0.000009	0.0000045	0.0010	0.000001	2.71	0.00023	0.000008	0.00023	0.0014
20-Nov-12	30	500	495	7.55	2.90	10.45	1.98	0.051	0.0004	0.00010	0.0003	0.000010	0.0000050	0.0008	0.000001	3.50	0.00025	0.000061	0.00030	0.0015
27-Nov-12	31	500	505	7.54	1.98	10.14	3.54	0.048	0.0005	0.00010	0.0003	0.000010	0.0000051	0.0010	0.000002	3.76	0.00025	0.000001	0.00025	0.0015
04-Dec-12	32	500	455	7.62	0.72	6.32	3.19	0.045	0.0004	0.00009	0.0003	0.000009	0.0000046	0.0004	0.000001	2.75	0.00023	0.000001	0.00027	0.0014
11-Dec-12	33	500	480	7.60	0.88	7.47	2.40	0.052	0.0006	0.00010	0.0003	0.000010	0.0000048	0.0007	0.000002	3.04	0.00024	0.000022	0.00024	0.0014
18-Dec-12	34	500	465	7.55	1.00	6.57	3.26	0.052	0.0004	0.00009	0.0003	0.000009	0.0000047	0.0005	0.000012	3.27	0.00023	0.000070	0.00298	0.0014
25-Dec-12	35	500	450	7.49	1.23	5.97	3.60	0.044	0.0003	0.00009	0.0003	0.000009	0.0000045	0.0003	0.000001	3.13	0.00023	0.000009	0.00023	0.0014
01-Jan-13	36	500	450	7.59	1.09	6.73	3.15	0.049	0.0004	0.00009	0.0002	0.000009	0.0000045	0.0006	0.000001	2.84	0.00023	0.000009	0.00023	0.0014
08-Jan-13	37	500	445	7.69	1.14	6.92	3.56	0.049	0.0004	0.00009	0.0002	0.000009	0.0000045	0.0004	0.000001	2.83	0.00022	0.000030	0.00022	0.0013
15-Jan-13	38	500	455	7.61	1.12	6.99	3.64	0.041	0.0003	0.00009	0.0003	0.000009	0.0000046	0.0004	0.000001	3.26	0.00023	0.000007	0.00023	0.0014
22-Jan-13	39	500	455	7.44	1.42	6.21	6.37	0.048	0.0003	0.00009	0.0003	0.000009	0.0000046	0.0005	0.000001	3.48	0.00023	0.000009	0.00023	0.0014
29-Jan-13	40	500	460	7.58	1.13	6.29	5.06	0.047	0.0003	0.00009	0.0003	0.000009	0.0000046	0.0003	0.000001	4.02	0.00023	0.000010	0.00028	0.0023
05-Feb-13	41	500	465	7.54	1.32	6.14	5.58													
12-Feb-13	42	500	455	7.56	1.95	6.27	4.55													

HC 16
Sample = L032044

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	0.000033	0.0012	0.74	0.012	0.0083	0.00017	0.00012	0.0037	1.29	0.00002	0.19	0.000004	2.67	0.039	4.73	0.00001	0.00027	0.00004	0.000018	0.00032	0.0008	0.000008
08-May-12	0.000009	0.0014	1.03	0.020	0.0047	0.00018	0.00014	0.0042	0.86	0.00006	0.21	0.000005	2.26	0.039	5.07	0.00001	0.00039	0.00005	0.000007	0.00034	0.0005	0.000005
15-May-12	0.000009	0.0018	0.89	0.021	0.0044	0.00009	0.00009	0.0040	0.63	0.00005	0.25	0.000004	1.21	0.038	4.07	0.00001	0.00026	0.00004	0.000006	0.00045	0.0004	0.000004
22-May-12	0.000009	0.0014	0.73	0.027	0.0137	0.00007	0.00005	0.0041	0.42	0.00005	0.24	0.000005	0.70	0.030	3.05	0.00001	0.00038	0.00009	0.000008	0.00049	0.0005	0.000005
29-May-12	0.000009	0.0014	0.73	0.026	0.0045	0.00005	0.00005	0.0041	0.39	0.00002	0.23	0.000005	0.52	0.026	2.79	0.00001	0.00030	0.00005	0.000005	0.00045	0.0005	0.000005
05-Jun-12	0.000010	0.0015	0.52	0.033	0.0100	0.00018	0.00005	0.0045	0.29	0.00003	0.25	0.000005	0.35	0.023	1.91	0.00001	0.00029	0.00005	0.000006	0.00049	0.0005	0.000005
12-Jun-12	0.000040	0.0009	0.52	0.024	0.0045	0.00003	0.00004	0.0040	0.25	0.00008	0.22	0.000004	0.29	0.020	1.62	0.00001	0.00023	0.00004	0.000004	0.00049	0.0004	0.000004
19-Jun-12	0.000010	0.0010	0.41	0.033	0.0050	0.00002	0.00005	0.0045	0.22	0.00005	0.23	0.000005	0.23	0.018	1.31	0.00001	0.00020	0.00005	0.000001	0.00046	0.0005	0.000005
26-Jun-12	0.000018	0.0009	0.45	0.029	0.0230	0.00003	0.00009	0.0041	0.22	0.00002	0.24	0.000005	0.23	0.017	1.58	0.00001	0.00024	0.00009	0.000005	0.00052	0.0014	0.000005
03-Jul-12	0.000009	0.0009	0.44	0.021	0.0045	0.00005	0.00005	0.0041	0.21	0.00002	0.19	0.000005	0.21	0.014	1.25	0.00001	0.00020	0.00005	0.000007	0.00044	0.0009	0.000005
10-Jul-12	0.000020	0.0010	0.46	0.026	0.0049	0.00002	0.00005	0.0044	0.20	0.00006	0.24	0.000005	0.23	0.018	1.55	0.00001	0.00027	0.00005	0.000007	0.00055	0.0010	0.000005
17-Jul-12	0.000091	0.0018	0.43	0.022	0.0046	0.00001	0.00073	0.0041	0.20	0.00004	0.22	0.000005	0.19	0.016	1.72	0.00001	0.00010	0.00018	0.000002	0.00051	0.0005	0.000005
24-Jul-12	0.000009	0.0009	0.35	0.026	0.0046	0.00001	0.00005	0.0041	0.16	0.00008	0.20	0.000005	0.15	0.014	1.35	0.00001	0.00010	0.00005	0.000002	0.00047	0.0005	0.000005
31-Jul-12	0.000009	0.0009	0.39	0.023	0.0045	0.00001	0.00005	0.0041	0.16	0.00002	0.20	0.000005	0.16	0.013	1.22	0.00001	0.00006	0.00005	0.000003	0.00056	0.0009	0.000005
07-Aug-12	0.000014	0.0009	0.40	0.022	0.0273	0.00001	0.00005	0.0041	0.18	0.00003	0.22	0.000005	0.16	0.013	1.38	0.00001	0.00021	0.00005	0.000005	0.00055	0.0009	0.000005
14-Aug-12	0.000009	0.0009	0.35	0.019	0.0045	0.00001	0.00009	0.0040	0.16	0.00002	0.20	0.000004	0.13	0.012	1.17	0.00001	0.00008	0.00004	0.000004	0.00047	0.0004	0.000004
21-Aug-12	0.000009	0.0009	0.34	0.027	0.0046	0.00001	0.00009	0.0041	0.14	0.00004	0.20	0.000005	0.12	0.013	1.51	0.00001	0.00011	0.00005	0.000005	0.00045	0.0009	0.000005
28-Aug-12	0.000032	0.0009	0.37	0.026	0.0046	0.00002	0.00005	0.0041	0.15	0.00002	0.19	0.000005	0.13	0.013	1.48	0.00001	0.00022	0.00005	0.000007	0.00046	0.0018	0.000005
04-Sep-12	0.000009	0.0009	0.39	0.026	0.0045	0.00001	0.00005	0.0041	0.12	0.00003	0.16	0.000005	0.13	0.013	1.58	0.00001	0.00015	0.00005	0.000008	0.00037	0.0005	0.000005
11-Sep-12	0.000015	0.0010	0.44	0.025	0.0049	0.00002	0.00005	0.0044	0.15	0.00003	0.22	0.000005	0.14	0.015	1.98	0.00001	0.00007	0.00005	0.000014	0.00043	0.0010	0.000005
18-Sep-12																						
25-Sep-12	0.000014	0.0005	0.29	0.020	0.0090	0.00001	0.00005	0.0041	0.12	0.00006	0.17	0.000005	0.09	0.010	0.79	0.00001	0.00009	0.00005	0.000002	0.00033	0.0005	0.000005
02-Oct-12	0.000009	0.0005	0.25	0.021	0.0045	0.00001	0.00005	0.0041	0.11	0.00002	0.17	0.000005	0.07	0.009	0.66	0.00001	0.00006	0.00005	0.000002	0.00032	0.0005	0.000005
09-Oct-12	0.000010	0.0005	0.27	0.029	0.0048	0.00004	0.00033	0.0043	0.11	0.00003	0.16	0.000005	0.09	0.010	1.03	0.00001	0.00010	0.00005	0.000008	0.00034	0.0005	0.000005
16-Oct-12	0.000009	0.0005	0.24	0.021	0.0045	0.00001	0.00005	0.0041	0.09	0.00002	0.14	0.000005	0.08	0.008	0.84	0.00001	0.00023	0.00005	0.000004	0.00033	0.0005	0.000005
23-Oct-12	0.000009	0.0005	0.23	0.018	0.0045	0.00002	0.00018	0.0041	0.10	0.00003	0.14	0.000005	0.07	0.008	0.55	0.00001	0.00006	0.00005	0.000006	0.00027	0.0005	0.000005
30-Oct-12	0.000009	0.0005	0.24	0.024	0.0045	0.00001	0.00009	0.0041	0.11	0.00002	0.18	0.000005	0.07	0.009	0.72	0.00001	0.00008	0.00005	0.000005	0.00035	0.0005	0.000005
06-Nov-12	0.000009	0.0005	0.21	0.021	0.0045	0.00004	0.00005	0.0041	0.09	0.00003	0.14	0.000005	0.06	0.008	0.58	0.00001	0.00016	0.00005	0.000002	0.00029	0.0005	0.000005
13-Nov-12	0.000009	0.0005	0.20	0.022	0.0090	0.00001	0.00005	0.0041	0.09	0.00002	0.17	0.000005	0.05	0.007	0.55	0.00001	0.00007	0.00005	0.000005	0.00027	0.0005	0.000005
20-Nov-12	0.000010	0.0005	0.23	0.027	0.0099	0.00001	0.00005	0.0045	0.10	0.00002	0.18	0.000005	0.08	0.010	0.87	0.00001	0.00008	0.00005	0.000005	0.00034	0.0005	0.000005
27-Nov-12	0.000010	0.0005	0.28	0.027	0.0051	0.00001	0.00010	0.0045	0.11	0.00005	0.18	0.000005	0.09	0.011	1.18	0.00001	0.00007	0.00005	0.000006	0.00018	0.0005	0.000005
04-Dec-12	0.000014	0.0005	0.27	0.016	0.0046	0.00001	0.00005	0.0041	0.10	0.00002	0.12	0.000005	0.06	0.008	1.06	0.00001	0.00004	0.00005	0.000005	0.00029	0.0005	0.000005
11-Dec-12	0.000010	0.0005	0.22	0.017	0.0048	0.00000	0.00005	0.0043	0.10	0.00002	0.15	0.000010	0.07	0.008	0.97	0.00001	0.00005	0.00005	0.000007	0.00035	0.0005	0.000005
18-Dec-12	0.000009	0.0005	0.27	0.020	0.0047	0.00005	0.00084	0.0042	0.10	0.00002	0.13	0.000014	0.07	0.009	1.46	0.00001	0.00008	0.00005	0.000012	0.00032	0.0005	0.000005
25-Dec-12	0.000009	0.0005	0.32	0.016	0.0045	0.00002	0.00005	0.0063	0.09	0.00002	0.10	0.000005	0.07	0.010	1.54	0.00001	0.00004	0.00005	0.000005	0.00020	0.0005	0.000005
01-Jan-13	0.000009	0.0005	0.25	0.014	0.0045	0.00002	0.00005	0.0041	0.09	0.00002	0.12	0.000014	0.08	0.008	1.25	0.00001	0.00005	0.00005	0.000005	0.00028	0.0005	0.000005
08-Jan-13	0.000009	0.0004	0.21	0.012	0.0045	0.00001	0.00004	0.0040	0.09	0.00002	0.12	0.000009	0.06	0.007	1.02	0.00001	0.00004	0.00004	0.000004	0.00030	0.0004	0.000004
15-Jan-13	0.000009	0.0005	0.26	0.019	0.0046	0.00001	0.00005	0.0041	0.10	0.00002	0.11	0.000005	0.07	0.009	1.56	0.00001	0.00005	0.00005	0.000009	0.00025	0.0005	0.000005
22-Jan-13	0.000009	0.0005	0.28	0.020	0.0046	0.00001	0.00009	0.0041	0.11	0.00002	0.12	0.000005	0.04	0.009	1.83	0.00001	0.00005	0.00005	0.000007	0.00026	0.0005	0.000005
29-Jan-13	0.000009	0.0005	0.30	0.021	0.0046	0.00002	0.00009	0.0051	0.11	0.00002	0.11	0.000005	0.09	0.010	2.09	0.00001	0.00008	0.00005	0.000006	0.00028	0.0005	0.000005
05-Feb-13																						
12-Feb-13																						

HC 17
Sample = L032104

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	1	470	395	7.74	2.14	12.48	17.23	0.064	0.0004	0.00017	0.0019	0.000008	0.0000042	0.0073	0.000001	6.22	0.00021	0.000024	0.00059	0.0034
08-May-12	2	500	500	7.69	1.36	13.42	14.89	0.066	0.0004	0.00021	0.0019	0.000011	0.0000053	0.0104	0.000002	6.49	0.00027	0.000028	0.00229	0.0016
15-May-12	3	470	400	7.59	1.20	9.79	14.04	0.080	0.0003	0.00013	0.0019	0.000009	0.0000043	0.0071	0.000001	6.00	0.00021	0.000021	0.00047	0.0021
22-May-12	4	500	430	7.52	1.43	8.13	10.06	0.085	0.0002	0.00018	0.0016	0.000009	0.0000046	0.0049	0.000001	5.31	0.00023	0.000016	0.00023	0.0018
29-May-12	5	470	395	7.40	1.22	7.37	6.72	0.070	0.0002	0.00013	0.0011	0.000008	0.0000042	0.0040	0.000001	4.45	0.00021	0.000018	0.00038	0.0029
05-Jun-12	6	470	460	7.38	1.74	11.50	5.38	0.076	0.0001	0.00015	0.0019	0.000010	0.0000049	0.0040	0.000001	5.38	0.00024	0.000024	0.00029	0.0029
12-Jun-12	7	470	415	7.54	1.25	9.01	5.30	0.074	0.0001	0.00018	0.0017	0.000009	0.0000044	0.0030	0.000001	4.68	0.00022	0.000012	0.00022	0.0018
19-Jun-12	8	470	445	7.52	1.16	9.97	5.68	0.060	0.0001	0.00014	0.0017	0.000009	0.0000047	0.0027	0.000001	4.88	0.00024	0.000035	0.00024	0.0057
26-Jun-12	9	470	425	7.60	1.15	7.97	5.88	0.075	0.0001	0.00014	0.0018	0.000009	0.0000045	0.0025	0.000001	4.61	0.00023	0.000003	0.00027	0.0059
03-Jul-12	10	470	440	7.51	2.82	9.45	4.68	0.060	0.0001	0.00014	0.0014	0.000009	0.0000047	0.0018	0.000001	3.89	0.00023	0.000014	0.00037	0.0014
10-Jul-12	11	470	410	7.38	1.57	7.19	4.36	0.066	0.0001	0.00009	0.0015	0.000009	0.0000044	0.0020	0.000004	3.93	0.00022	0.000009	0.00026	0.0013
17-Jul-12	12	470	420	7.53	0.83	7.48	4.02	0.061	0.0001	0.00022	0.0014	0.000009	0.0000045	0.0020	0.000003	4.15	0.00022	0.000033	0.00022	0.0013
24-Jul-12	13	470	430	7.34	1.12	6.98	4.57	0.060	0.0001	0.00009	0.0014	0.000009	0.0000046	0.0019	0.000005	4.19	0.00023	0.000020	0.00027	0.0014
31-Jul-12	14	470	415	7.43	0.91	6.47	3.53	0.059	0.0001	0.00013	0.0012	0.000009	0.0000044	0.0015	0.000006	3.54	0.00022	0.000013	0.00022	0.0018
07-Aug-12	15	500	475	7.59	1.13	7.82	6.06	0.074	0.0001	0.00015	0.0017	0.000010	0.0000051	0.0024	0.000006	5.02	0.00025	0.000017	0.00096	0.0015
14-Aug-12	16	470	405	7.34	1.09	6.28	5.60	0.049	0.0001	0.00009	0.0010	0.000009	0.0000043	0.0013	0.000007	4.24	0.00022	0.000007	0.00022	0.0060
21-Aug-12	17	470	415	7.33	1.38	6.68	6.18	0.067	0.0001	0.00009	0.0014	0.000009	0.0000044	0.0016	0.000011	4.50	0.00022	0.000019	0.00040	0.0026
28-Aug-12	18	470	430	7.44	1.92	9.69	4.57	0.062	0.0001	0.00009	0.0015	0.000009	0.0000046	0.0016	0.000008	4.55	0.00023	0.000016	0.00055	0.0018
04-Sep-12	19	470	435	7.14	2.12	5.96	5.55	0.046	0.0001	0.00009	0.0013	0.000009	0.0000046	0.0016	0.000008	4.36	0.00023	0.000021	0.00023	0.0014
11-Sep-12	20	470	415	7.39	1.11	6.14	6.18	0.043	0.0001	0.00009	0.0014	0.000009	0.0000044	0.0013	0.000009	4.64	0.00022	0.000016	0.00022	0.0013
18-Sep-12	21	470	410	7.34																
25-Sep-12	22	470	420	7.40	1.16	7.06	4.02	0.048	0.0001	0.00022	0.0022	0.000009	0.0000045	0.0016	0.000046	3.67	0.00022	0.000030	0.00022	0.0013
02-Oct-12	23	470	415	7.34	1.31	6.49	2.65	0.040	0.0001	0.00009	0.0009	0.000009	0.0000044	0.0013	0.000007	3.13	0.00022	0.000036	0.00035	0.0013
09-Oct-12	24	470	460	7.34	2.16	7.85	3.43	0.046	0.0001	0.00024	0.0013	0.000010	0.0000049	0.0013	0.000011	3.78	0.00024	0.000013	0.00029	0.0015
16-Oct-12	25	470	445	7.59	2.09	6.72	2.84	0.041	0.0001	0.00009	0.0010	0.000009	0.0000047	0.0011	0.000007	3.17	0.00024	0.000010	0.00024	0.0014
23-Oct-12	26	470	415	7.24	1.65	6.59	3.97	0.053	0.0001	0.00009	0.0010	0.000009	0.0000044	0.0006	0.000008	3.10	0.00022	0.000023	0.00026	0.0013
30-Oct-12	27	470	430	7.29	1.67	7.85	3.20	0.047	0.0001	0.00009	0.0012	0.000009	0.0000046	0.0013	0.000158	3.87	0.00023	0.000007	0.00027	0.0046
06-Nov-12	28	470	415	7.49	1.16	6.99	2.21	0.039	0.0001	0.00018	0.0010	0.000009	0.0000044	0.0011	0.000010	3.59	0.00022	0.000015	0.00022	0.0013
13-Nov-12	29	470	410	7.51	2.03	6.65	1.31	0.031	0.0001	0.00009	0.0009	0.000009	0.0000044	0.0009	0.000011	2.98	0.00022	0.000016	0.00022	0.0013
20-Nov-12	30	470	450	7.70	2.96	7.46	4.79	0.035	0.0001	0.00019	0.0013	0.000010	0.0000048	0.0008	0.000010	4.33	0.00024	0.000067	0.00029	0.0014
27-Nov-12	31	470	465	7.37	2.10	6.91	7.91	0.031	0.0001	0.00015	0.0014	0.000010	0.0000049	0.0010	0.000019	4.82	0.00025	0.000027	0.00025	0.0015
04-Dec-12	32	470	465	7.47	1.01	6.07	8.90	0.030	0.0001	0.00010	0.0013	0.000010	0.0000049	0.0006	0.000020	5.54	0.00025	0.000028	0.00030	0.0015
11-Dec-12	33	470	470	7.45	1.01	7.02	10.00	0.032	0.0001	0.00010	0.0016	0.000010	0.0000050	0.0010	0.000026	5.90	0.00025	0.000056	0.00025	0.0015
18-Dec-12	34	470	430	7.39	1.09	5.58	7.78	0.034	0.0001	0.00009	0.0013	0.000009	0.0000046	0.0006	0.000021	4.71	0.00023	0.000022	0.00023	0.0014
25-Dec-12	35	470	420	7.36	1.34	4.93	8.04	0.028	0.0001	0.00009	0.0012	0.000009	0.0000045	0.0005	0.000018	4.51	0.00022	0.000022	0.00022	0.0013
01-Jan-13	36	470	455	7.50	1.23	6.79	7.74	0.036	0.0001	0.00010	0.0011	0.000010	0.0000048	0.0006	0.000015	4.23	0.00024	0.000024	0.00024	0.0015
08-Jan-13	37	470	425	7.54	1.26	5.75	5.43	0.034	0.0001	0.00009	0.0010	0.000009	0.0000045	0.0007	0.000017	4.05	0.00023	0.000038	0.00027	0.0014
15-Jan-13	38	470	420	7.43	1.14	5.60	7.15	0.029	0.0001	0.00009	0.0013	0.000009	0.0000045	0.0005	0.000010	4.22	0.00022	0.000015	0.00022	0.0058
22-Jan-13	39	470	430	7.39	1.58	5.43	7.78	0.032	0.0001	0.00009	0.0012	0.000009	0.0000046	0.0006	0.000020	4.25	0.00023	0.000022	0.00023	0.0014
29-Jan-13	40	470	425	7.46	1.15	4.82	9.04	0.030	0.0001	0.00009	0.0011	0.000009	0.0000045	0.0005	0.000020	5.11	0.00023	0.000026	0.00041	0.0018
05-Feb-13	41	470	430	7.39	1.44	4.70	8.23													
12-Feb-13	42	470	425	7.47	2.14	5.35	9.04													

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Sample = L032104

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	0.000013	0.0059	0.55	0.008	0.0252	0.00020	0.00017	0.0038	2.56	0.00002	0.22	0.000004	4.08	0.034	6.56	0.00001	0.00018	0.00013	0.000003	0.00045	0.0008	0.000004
08-May-12	0.000032	0.0053	0.55	0.021	0.0053	0.00019	0.00021	0.0048	2.01	0.00003	0.25	0.000005	3.89	0.033	7.71	0.00001	0.00045	0.00005	0.000006	0.00044	0.0016	0.000005
15-May-12	0.000009	0.0055	0.54	0.015	0.0170	0.00017	0.00009	0.0038	1.70	0.00005	0.25	0.000004	2.45	0.034	7.15	0.00001	0.00023	0.00009	0.000006	0.00047	0.0009	0.000004
22-May-12	0.000009	0.0046	0.39	0.014	0.0137	0.00015	0.00014	0.0041	1.26	0.00026	0.24	0.000005	1.26	0.026	5.31	0.00001	0.00023	0.00014	0.000003	0.00054	0.0027	0.000005
29-May-12	0.000008	0.0042	0.33	0.014	0.0042	0.00011	0.00004	0.0038	1.04	0.00010	0.21	0.000008	0.82	0.020	4.00	0.00001	0.00024	0.00008	0.000002	0.00047	0.0008	0.000004
05-Jun-12	0.000010	0.0039	0.27	0.021	0.0049	0.00016	0.00005	0.0044	0.98	0.00002	0.26	0.000005	0.65	0.022	3.37	0.00001	0.00022	0.00015	0.000004	0.00053	0.0005	0.000005
12-Jun-12	0.000009	0.0035	0.25	0.019	0.0044	0.00005	0.00009	0.0040	0.83	0.00008	0.23	0.000004	0.54	0.019	3.12	0.00001	0.00015	0.00004	0.000002	0.00049	0.0013	0.000004
19-Jun-12	0.000009	0.0033	0.22	0.023	0.0047	0.00005	0.00014	0.0043	0.78	0.00004	0.24	0.000005	0.45	0.018	2.96	0.00001	0.00013	0.00005	0.000000	0.00050	0.0009	0.000005
26-Jun-12	0.000009	0.0036	0.24	0.019	0.0090	0.00005	0.00009	0.0041	0.75	0.00004	0.25	0.000005	0.43	0.018	3.41	0.00001	0.00016	0.00023	0.000005	0.00059	0.0014	0.000005
03-Jul-12	0.000014	0.0028	0.20	0.017	0.0047	0.00010	0.00005	0.0042	0.63	0.00002	0.20	0.000028	0.31	0.014	3.01	0.00001	0.00024	0.00009	0.000124	0.00042	0.0014	0.000005
10-Jul-12	0.000009	0.0026	0.20	0.015	0.0087	0.00003	0.00009	0.0039	0.62	0.00004	0.19	0.000017	0.30	0.014	2.55	0.00001	0.00011	0.00009	0.000001	0.00048	0.0009	0.000004
17-Jul-12	0.000009	0.0027	0.17	0.016	0.0045	0.00002	0.00112	0.0040	0.62	0.00004	0.22	0.000018	0.26	0.014	3.30	0.00001	0.00009	0.00013	0.000000	0.00052	0.0009	0.000004
24-Jul-12	0.000009	0.0023	0.17	0.018	0.0046	0.00002	0.00005	0.0041	0.58	0.00011	0.21	0.000018	0.25	0.014	2.81	0.00001	0.00010	0.00014	0.000004	0.00046	0.0009	0.000005
31-Jul-12	0.000009	0.0022	0.16	0.013	0.0044	0.00002	0.00004	0.0040	0.51	0.00002	0.19	0.000026	0.21	0.012	2.60	0.00001	0.00005	0.00004	0.000000	0.00051	0.0009	0.000004
07-Aug-12	0.000010	0.0030	0.20	0.020	0.0101	0.00003	0.00010	0.0045	0.64	0.00002	0.26	0.000005	0.28	0.017	3.35	0.00001	0.00015	0.00015	0.000005	0.00074	0.0015	0.000005
14-Aug-12	0.000009	0.0022	0.19	0.014	0.0043	0.00002	0.00009	0.0039	0.59	0.00003	0.21	0.000004	0.20	0.014	2.71	0.00001	0.00006	0.00004	0.000003	0.00035	0.0017	0.000004
21-Aug-12	0.000009	0.0026	0.14	0.017	0.0177	0.00002	0.00013	0.0040	0.49	0.00002	0.19	0.000013	0.15	0.013	2.68	0.00001	0.00014	0.00013	0.000003	0.00045	0.0009	0.000004
28-Aug-12	0.000018	0.0023	0.14	0.022	0.0091	0.00002	0.00009	0.0041	0.53	0.00004	0.21	0.000005	0.15	0.013	2.31	0.00001	0.00023	0.00005	0.000004	0.00042	0.0018	0.000005
04-Sep-12	0.000009	0.0023	0.15	0.022	0.0231	0.00002	0.00005	0.0042	0.44	0.00002	0.16	0.000005	0.16	0.013	2.51	0.00001	0.00004	0.00005	0.000003	0.00032	0.0009	0.000005
11-Sep-12	0.000009	0.0022	0.16	0.016	0.0088	0.00002	0.00004	0.0040	0.51	0.00002	0.18	0.000004	0.15	0.014	3.21	0.00001	0.00011	0.00004	0.000004	0.00036	0.0009	0.000004
18-Sep-12																						
25-Sep-12	0.000147	0.0022	0.11	0.015	0.0045	0.00002	0.00040	0.0040	0.44	0.00005	0.18	0.000004	0.11	0.010	1.84	0.00001	0.00048	0.00004	0.000008	0.00036	0.0013	0.000004
02-Oct-12	0.000009	0.0018	0.10	0.013	0.0044	0.00001	0.00004	0.0040	0.40	0.00002	0.15	0.000004	0.09	0.008	1.51	0.00001	0.00008	0.00004	0.000003	0.00031	0.0009	0.000004
09-Oct-12	0.000010	0.0015	0.08	0.021	0.0049	0.00001	0.00015	0.0044	0.40	0.00002	0.17	0.000005	0.08	0.009	1.61	0.00001	0.00019	0.00005	0.000006	0.00033	0.0010	0.000005
16-Oct-12	0.000009	0.0014	0.09	0.014	0.0047	0.00001	0.00005	0.0043	0.37	0.00002	0.13	0.000005	0.09	0.008	1.46	0.00001	0.00007	0.00005	0.000001	0.00028	0.0009	0.000005
23-Oct-12	0.000009	0.0018	0.08	0.013	0.0044	0.00003	0.00013	0.0040	0.38	0.00002	0.14	0.000004	0.08	0.008	1.38	0.00001	0.00009	0.00009	0.000002	0.00031	0.0004	0.000004
30-Oct-12	0.000009	0.0018	0.09	0.019	0.0046	0.00001	0.00009	0.0041	0.42	0.00002	0.19	0.000005	0.08	0.009	1.83	0.00001	0.00026	0.00005	0.000005	0.00034	0.0009	0.000005
06-Nov-12	0.000009	0.0018	0.09	0.015	0.0044	0.00001	0.00004	0.0040	0.39	0.00002	0.16	0.000009	0.08	0.008	1.62	0.00001	0.00012	0.00004	0.000001	0.00028	0.0009	0.000004
13-Nov-12	0.000009	0.0013	0.07	0.015	0.0087	0.00001	0.00004	0.0039	0.34	0.00002	0.17	0.000013	0.06	0.007	1.30	0.00001	0.00014	0.00009	0.000002	0.00027	0.0013	0.000004
20-Nov-12	0.000029	0.0014	0.11	0.022	0.0048	0.00001	0.00005	0.0043	0.44	0.00002	0.19	0.000010	0.10	0.011	2.08	0.00001	0.00009	0.00005	0.000003	0.00031	0.0010	0.000005
27-Nov-12	0.000010	0.0020	0.12	0.026	0.0049	0.00001	0.00005	0.0045	0.46	0.00002	0.19	0.000005	0.10	0.012	2.57	0.00001	0.00006	0.00005	0.000001	0.00014	0.0015	0.000005
04-Dec-12	0.000010	0.0020	0.14	0.029	0.0049	0.00001	0.00005	0.0045	0.50	0.00002	0.19	0.000005	0.09	0.014	3.31	0.00001	0.00009	0.00005	0.000005	0.00028	0.0015	0.000005
11-Dec-12	0.000010	0.0025	0.14	0.027	0.0050	0.00001	0.00005	0.0045	0.54	0.00002	0.20	0.000015	0.10	0.014	3.38	0.00001	0.00003	0.00005	0.000006	0.00031	0.0020	0.000005
18-Dec-12	0.000009	0.0018	0.12	0.020	0.0046	0.00002	0.00018	0.0041	0.44	0.00002	0.15	0.000014	0.09	0.012	2.95	0.00001	0.00004	0.00014	0.000003	0.00032	0.0009	0.000005
25-Dec-12	0.000009	0.0018	0.13	0.016	0.0045	0.00002	0.00004	0.0040	0.40	0.00002	0.10	0.000004	0.07	0.012	2.87	0.00001	0.00004	0.00004	0.000001	0.00018	0.0013	0.000004
01-Jan-13	0.000010	0.0015	0.09	0.014	0.0048	0.00001	0.00005	0.0044	0.36	0.00002	0.15	0.000010	0.07	0.010	2.39	0.00001	0.00006	0.00005	0.000001	0.00031	0.0015	0.000005
08-Jan-13	0.000014	0.0018	0.09	0.014	0.0045	0.00001	0.00005	0.0041	0.40	0.00003	0.14	0.000005	0.07	0.009	2.17	0.00001	0.00013	0.00005	0.000002	0.00029	0.0014	0.000005
15-Jan-13	0.000009	0.0013	0.10	0.017	0.0045	0.00001	0.00009	0.0049	0.40	0.00002	0.13	0.000004	0.07	0.010	2.57	0.00001	0.00005	0.00004	0.000001	0.00025	0.0009	0.000004
22-Jan-13	0.000009	0.0018	0.10	0.017	0.0046	0.00001	0.00014	0.0041	0.39	0.00002	0.12	0.000005	0.04	0.010	2.65	0.00001	0.00004	0.00005	0.000001	0.00027	0.0014	0.000005
29-Jan-13	0.000009	0.0014	0.12	0.019	0.0045	0.00002	0.00009	0.0041	0.42	0.00002	0.13	0.000005	0.09	0.011	3.29	0.00001	0.00014	0.00009	0.000001	0.00028	0.0018	0.000005
05-Feb-13																						
12-Feb-13																						

HC 18
Sample = L032148

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	1	445	360	7.72	2.39	13.06	12.94	0.047	0.0004	0.00044	0.0052	0.000008	0.0000040	0.0099	0.000001	5.50	0.00020	0.000026	0.00154	0.0020
08-May-12	2	500	475	7.98	0.96	14.46	12.81	0.060	0.0004	0.00048	0.0034	0.000011	0.0000053	0.0140	0.000002	5.60	0.00027	0.000019	0.00117	0.0037
15-May-12	3	445	395	7.83	0.91	11.73	9.32	0.063	0.0003	0.00040	0.0035	0.000009	0.0000044	0.0089	0.000001	4.62	0.00022	0.000013	0.00084	0.0013
22-May-12	4	500	450	7.75	1.35	12.41	4.04	0.069	0.0002	0.00035	0.0026	0.000010	0.0000051	0.0054	0.000002	3.95	0.00025	0.000010	0.00051	0.0015
29-May-12	5	445	405	7.65	1.11	11.52	3.19	0.062	0.0002	0.00032	0.0024	0.000009	0.0000046	0.0048	0.000001	3.69	0.00023	0.000011	0.00064	0.0023
05-Jun-12	6	445	405	7.6	1.45	11.15	2.28	0.052	0.0002	0.00027	0.0025	0.000009	0.0000046	0.0041	0.000001	3.44	0.00023	0.000013	0.00059	0.0014
12-Jun-12	7	445	405	7.68	1.31	11.08	2.28	0.054	0.0002	0.00036	0.0023	0.000009	0.0000046	0.0033	0.000001	3.36	0.00023	0.000005	0.00032	0.0018
19-Jun-12	8	445	400	7.66	0.90	10.29	2.25	0.050	0.0002	0.00031	0.0020	0.000009	0.0000045	0.0032	0.000001	3.13	0.00022	0.000020	0.00045	0.0013
26-Jun-12	9	445	435	7.92	1.03	12.93	2.44	0.055	0.0001	0.00029	0.0025	0.000010	0.0000049	0.0027	0.000001	3.75	0.00024	0.000001	0.00054	0.0020
03-Jul-12	10	445	460	7.65	3.15	12.13	2.07	0.045	0.0002	0.00031	0.0022	0.000010	0.0000052	0.0021	0.000002	3.38	0.00026	0.000007	0.00047	0.0016
10-Jul-12	11	445	420	7.53	1.44	11.25	2.83	0.051	0.0002	0.00024	0.0022	0.000009	0.0000047	0.0023	0.000001	3.40	0.00024	0.000006	0.00052	0.0028
17-Jul-12	12	445	400	7.73	0.64	9.83	2.25	0.045	0.0001	0.00027	0.0021	0.000009	0.0000045	0.0020	0.000001	3.11	0.00022	0.000027	0.00027	0.0013
24-Jul-12	13	445	400	7.50	0.89	10.21	2.70	0.041	0.0001	0.00031	0.0019	0.000009	0.0000045	0.0016	0.000001	3.17	0.00022	0.000011	0.00036	0.0013
31-Jul-12	14	445	400	7.68	0.78	9.73	2.25	0.053	0.0001	0.00022	0.0020	0.000009	0.0000045	0.0016	0.000001	3.28	0.00022	0.000004	0.00036	0.0013
07-Aug-12	15	445	440	7.76	0.99	11.57	1.98	0.067	0.0002	0.00035	0.0022	0.000010	0.0000049	0.0026	0.000001	3.62	0.00025	0.000013	0.00059	0.0020
14-Aug-12	16	445	395	7.56	0.95	9.94	1.78	0.051	0.0001	0.00036	0.0018	0.000009	0.0000044	0.0017	0.000001	3.05	0.00022	0.000007	0.00044	0.0013
21-Aug-12	17	445	405	7.48	1.12	9.85	2.28	0.070	0.0002	0.00023	0.0017	0.000009	0.0000137	0.0016	0.000001	3.17	0.00023	0.000012	0.00073	0.0023
28-Aug-12	18	445	400	7.46	1.88	10.74	1.80	0.045	0.0001	0.00027	0.0016	0.000009	0.0000045	0.0014	0.000001	3.11	0.00022	0.000009	0.00054	0.0013
04-Sep-12	19	445	410	7.37	1.80	9.73	2.30	0.043	0.0001	0.00023	0.0017	0.000009	0.0000046	0.0016	0.000001	3.12	0.00023	0.000009	0.00023	0.0014
11-Sep-12	20	445	400	7.60	1.00	9.46	2.70	0.030	0.0001	0.00031	0.0016	0.000009	0.0000045	0.0013	0.000001	2.95	0.00022	0.000010	0.00027	0.0013
18-Sep-12	21	445	400	7.65																
25-Sep-12	22	445	390	7.56	0.99	10.25	2.19	0.032	0.0001	0.00022	0.0015	0.000009	0.0000044	0.0010	0.000001	2.79	0.00022	0.000005	0.00026	0.0013
02-Oct-12	23	445	390	7.60	1.12	10.14	1.31	0.025	0.0001	0.00026	0.0015	0.000009	0.0000044	0.0011	0.000001	2.61	0.00022	0.000032	0.00035	0.0013
09-Oct-12	24	445	415	7.49	1.88	10.04	1.87	0.030	0.0001	0.00023	0.0015	0.000009	0.0000047	0.0012	0.000001	2.67	0.00023	0.000005	0.01301	0.0205
16-Oct-12	25	445	455	7.7	2.26	11.14	2.56	0.032	0.0001	0.00020	0.0014	0.000010	0.0000051	0.0012	0.000002	2.88	0.00026	0.000004	0.00026	0.0015
23-Oct-12	26	445	400	7.40	1.77	9.80	2.25	0.030	0.0001	0.00018	0.0015	0.000009	0.0000045	0.0006	0.000001	2.69	0.00022	0.000020	0.00036	0.0013
30-Oct-12	27	445	390	7.46	1.46	9.82	1.31	0.029	0.0001	0.00018	0.0015	0.000009	0.0000044	0.0011	0.000141	2.66	0.00022	0.000001	0.00026	0.0013
06-Nov-12	28	445	395	7.68	1.03	9.47	0.89	0.022	0.0001	0.00027	0.0014	0.000009	0.0000044	0.0011	0.000001	2.59	0.00022	0.000009	0.00031	0.0013
13-Nov-12	29	445	395	7.59	1.98	9.48	2.22	0.021	0.0001	0.00022	0.0014	0.000009	0.0000044	0.0009	0.000001	2.66	0.00022	0.000013	0.00022	0.0013
20-Nov-12	30	445	420	7.74	2.47	11.45	1.42	0.023	0.0001	0.00033	0.0020	0.000009	0.0000047	0.0007	0.000001	3.26	0.00024	0.000058	0.00038	0.0014
27-Nov-12	31	445	450	7.47	2.15	12.26	2.02	0.021	0.0001	0.00025	0.0019	0.000010	0.0000051	0.0007	0.000002	3.40	0.00025	0.000001	0.00025	0.0015
04-Dec-12	32	445	445	7.79	0.71	10.98	2.00	0.021	0.0002	0.00025	0.0020	0.000010	0.0000050	0.0005	0.000002	3.05	0.00025	0.000001	0.00025	0.0015
11-Dec-12	33	445	425	7.70	0.82	10.32	1.91	0.026	0.0002	0.00033	0.0019	0.000010	0.0000048	0.0006	0.000001	3.04	0.00024	0.000026	0.00033	0.0014
18-Dec-12	34	445	400	7.60	0.85	7.56	1.35	0.028	0.0001	0.00027	0.0016	0.000009	0.0000045	0.0004	0.000001	2.53	0.00022	0.000007	0.00027	0.0013
25-Dec-12	35	445	375	7.55	1.10	7.02	1.26	0.023	0.0001	0.00029	0.0015	0.000008	0.0000042	0.0004	0.000001	2.42	0.00021	0.000010	0.00029	0.0013
01-Jan-13	36	445	405	7.64	1.03	7.64	1.37	0.024	0.0001	0.00027	0.0015	0.000009	0.0000046	0.0003	0.000001	2.12	0.00023	0.000011	0.00023	0.0023
08-Jan-13	37	445	395	7.72	1.10	7.39	0.89	0.028	0.0001	0.00027	0.0015	0.000009	0.0000044	0.0005	0.000004	2.51	0.00022	0.000030	0.00049	0.0022
15-Jan-13	38	445	440	7.81	1.07	10.92	1.98	0.022	0.0001	0.00030	0.0022	0.000010	0.0000049	0.0005	0.000001	2.99	0.00025	0.000011	0.00030	0.0089
22-Jan-13	39	445	405	7.58	1.38	7.59	1.82	0.028	0.0001	0.00032	0.0016	0.000009	0.0000046	0.0004	0.000001	2.42	0.00023	0.000011	0.00023	0.0027
29-Jan-13	40	445	400	7.68	0.96	6.78	2.25	0.025	0.0001	0.00027	0.0013	0.000009	0.0000045	0.0003	0.000001	2.43	0.00022	0.000013	0.00040	0.0018
05-Feb-13	41	445	410	7.63	1.24	6.57	2.30													
12-Feb-13	42	445	380	7.67	1.69	7.03	1.71													

HC 18
Sample = L032148

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	0.000061	0.0004	1.59	0.002	0.0081	0.00090	0.00016	0.0036	1.33	0.00013	0.33	0.000004	2.40	0.113	4.33	0.00001	0.00016	0.00028	0.000007	0.00072	0.0008	0.000073
08-May-12	0.000011	0.0005	1.80	0.004	0.0053	0.00116	0.00021	0.0048	1.27	0.00024	0.36	0.000005	2.26	0.122	4.60	0.00001	0.00042	0.00005	0.000010	0.00080	0.0011	0.000037
15-May-12	0.000013	0.0009	1.42	0.004	0.0044	0.00061	0.00009	0.0040	0.89	0.00013	0.36	0.000004	1.37	0.101	3.40	0.00001	0.00023	0.00022	0.000009	0.00080	0.0009	0.000018
22-May-12	0.000010	0.0005	0.99	0.005	0.0152	0.00029	0.00005	0.0046	0.57	0.00010	0.32	0.000005	0.69	0.070	1.89	0.00001	0.00024	0.00020	0.000009	0.00079	0.0005	0.000015
29-May-12	0.000009	0.0005	0.80	0.006	0.0046	0.00019	0.00005	0.0041	0.43	0.00009	0.30	0.000005	0.41	0.058	1.30	0.00001	0.00032	0.00014	0.000007	0.00074	0.0014	0.000009
05-Jun-12	0.000009	0.0005	0.75	0.006	0.0046	0.00030	0.00005	0.0041	0.34	0.00003	0.28	0.000005	0.33	0.053	1.23	0.00001	0.00016	0.00009	0.000007	0.00070	0.0009	0.000005
12-Jun-12	0.000009	0.0005	0.70	0.007	0.0137	0.00012	0.00009	0.0041	0.28	0.00004	0.27	0.000005	0.25	0.048	1.00	0.00001	0.00011	0.00014	0.000007	0.00068	0.0009	0.000005
19-Jun-12	0.000009	0.0004	0.65	0.007	0.0045	0.00009	0.00004	0.0040	0.23	0.00006	0.26	0.000004	0.20	0.042	0.93	0.00001	0.00011	0.00018	0.000006	0.00073	0.0004	0.000004
26-Jun-12	0.000020	0.0005	0.56	0.009	0.0098	0.00009	0.00010	0.0044	0.20	0.00002	0.29	0.000005	0.16	0.042	0.71	0.00001	0.00022	0.00015	0.000010	0.00079	0.0010	0.000005
03-Jul-12	0.000010	0.0005	0.58	0.008	0.0052	0.00012	0.00005	0.0047	0.19	0.00002	0.24	0.000005	0.16	0.042	0.93	0.00001	0.00010	0.00005	0.000018	0.00060	0.0005	0.000005
10-Jul-12	0.000019	0.0005	0.55	0.008	0.0094	0.00008	0.00005	0.0042	0.17	0.00005	0.27	0.000005	0.15	0.039	0.84	0.00001	0.00022	0.00009	0.000010	0.00068	0.0028	0.000005
17-Jul-12	0.000009	0.0004	0.55	0.008	0.0045	0.00007	0.00117	0.0040	0.16	0.00005	0.25	0.000004	0.13	0.037	0.93	0.00001	0.00007	0.00022	0.000007	0.00071	0.0009	0.000004
24-Jul-12	0.000009	0.0004	0.52	0.009	0.0090	0.00008	0.00004	0.0040	0.14	0.00007	0.24	0.000004	0.12	0.036	0.88	0.00001	0.00006	0.00009	0.000007	0.00057	0.0004	0.000004
31-Jul-12	0.000009	0.0004	0.54	0.007	0.0045	0.00007	0.00004	0.0040	0.12	0.00002	0.24	0.000004	0.12	0.039	0.82	0.00001	0.00006	0.00018	0.000010	0.00075	0.0004	0.000004
07-Aug-12	0.000020	0.0005	0.58	0.008	0.0049	0.00008	0.00005	0.0044	0.13	0.00002	0.30	0.000005	0.12	0.040	0.97	0.00001	0.00017	0.00030	0.000009	0.00086	0.0010	0.000005
14-Aug-12	0.000009	0.0004	0.53	0.008	0.0044	0.00007	0.00009	0.0040	0.12	0.00002	0.25	0.000004	0.11	0.035	0.92	0.00001	0.00006	0.00009	0.000009	0.00065	0.0004	0.000004
21-Aug-12	0.000014	0.0005	0.50	0.009	0.0182	0.00008	0.00009	0.0041	0.10	0.00002	0.23	0.000005	0.10	0.033	0.86	0.00001	0.00023	0.00014	0.000010	0.00068	0.0009	0.000009
28-Aug-12	0.000013	0.0004	0.47	0.010	0.0045	0.00007	0.00004	0.0040	0.09	0.00002	0.22	0.000004	0.08	0.031	0.71	0.00001	0.00022	0.00004	0.000021	0.00053	0.0009	0.000004
04-Sep-12	0.000009	0.0005	0.41	0.008	0.0415	0.00006	0.00005	0.0041	0.07	0.00002	0.18	0.000005	0.07	0.033	0.68	0.00001	0.00006	0.00005	0.000013	0.00044	0.0005	0.000005
11-Sep-12	0.000009	0.0004	0.44	0.007	0.0045	0.00004	0.00004	0.0040	0.10	0.00002	0.22	0.000004	0.08	0.031	0.72	0.00001	0.00002	0.00004	0.000006	0.00040	0.0004	0.000004
18-Sep-12																						
25-Sep-12	0.000013	0.0004	0.38	0.008	0.0131	0.00004	0.00004	0.0039	0.08	0.00003	0.20	0.000004	0.07	0.026	0.45	0.00001	0.00006	0.00004	0.000018	0.00045	0.0009	0.000004
02-Oct-12	0.000009	0.0004	0.37	0.008	0.0044	0.00004	0.00004	0.0039	0.10	0.00002	0.21	0.000004	0.06	0.024	0.43	0.00001	0.00002	0.00004	0.000012	0.00043	0.0004	0.000004
09-Oct-12	0.000242	0.0005	0.30	0.008	0.0047	0.00005	0.00009	0.0042	0.08	0.00003	0.19	0.000005	0.06	0.023	0.38	0.00001	0.00363	0.00005	0.000013	0.00043	0.0070	0.000005
16-Oct-12	0.000010	0.0005	0.35	0.008	0.0051	0.00004	0.00005	0.0046	0.08	0.00002	0.19	0.000005	0.07	0.024	0.54	0.00001	0.00006	0.00005	0.000013	0.00043	0.0005	0.000005
23-Oct-12	0.000009	0.0004	0.35	0.007	0.0045	0.00005	0.00009	0.0040	0.08	0.00003	0.21	0.000004	0.06	0.024	0.41	0.00001	0.00008	0.00004	0.000014	0.00044	0.0004	0.000004
30-Oct-12	0.000009	0.0004	0.37	0.007	0.0044	0.00005	0.00009	0.0039	0.09	0.00002	0.22	0.000004	0.06	0.025	0.37	0.00001	0.00007	0.00004	0.000018	0.00043	0.0004	0.000004
06-Nov-12	0.000009	0.0004	0.33	0.007	0.0044	0.00005	0.00004	0.0040	0.08	0.00002	0.22	0.000004	0.05	0.022	0.32	0.00001	0.00012	0.00004	0.000013	0.00038	0.0009	0.000004
13-Nov-12	0.000009	0.0004	0.32	0.008	0.0044	0.00004	0.00004	0.0040	0.07	0.00002	0.24	0.000004	0.05	0.021	0.30	0.00001	0.00004	0.00009	0.000012	0.00039	0.0004	0.000004
20-Nov-12	0.000009	0.0005	0.33	0.008	0.0047	0.00007	0.00005	0.0042	0.06	0.00002	0.26	0.000009	0.05	0.028	0.39	0.00001	0.00011	0.00009	0.000015	0.00048	0.0005	0.000005
27-Nov-12	0.000010	0.0005	0.36	0.008	0.0051	0.00005	0.00010	0.0046	0.07	0.00002	0.26	0.000005	0.06	0.031	0.49	0.00001	0.00005	0.00005	0.000025	0.00029	0.0005	0.000005
04-Dec-12	0.000010	0.0005	0.34	0.006	0.0050	0.00007	0.00005	0.0045	0.06	0.00002	0.24	0.000005	0.04	0.030	0.49	0.00001	0.00004	0.00010	0.000024	0.00048	0.0005	0.000005
11-Dec-12	0.000010	0.0005	0.34	0.005	0.0048	0.00010	0.00005	0.0043	0.07	0.00002	0.25	0.000010	0.05	0.028	0.50	0.00001	0.00005	0.00010	0.000021	0.00059	0.0005	0.000005
18-Dec-12	0.000013	0.0004	0.29	0.005	0.0045	0.00012	0.00004	0.0040	0.05	0.00002	0.17	0.000009	0.04	0.023	0.53	0.00001	0.00006	0.00018	0.000014	0.00049	0.0004	0.000004
25-Dec-12	0.000008	0.0004	0.38	0.005	0.0042	0.00014	0.00004	0.0038	0.05	0.00002	0.16	0.000004	0.05	0.026	0.62	0.00001	0.00003	0.00008	0.000013	0.00038	0.0004	0.000004
01-Jan-13	0.000014	0.0005	0.25	0.005	0.0046	0.00010	0.00005	0.0041	0.04	0.00002	0.15	0.000009	0.05	0.018	0.41	0.00001	0.00008	0.00018	0.000013	0.00043	0.0005	0.000005
08-Jan-13	0.000009	0.0004	0.29	0.004	0.0044	0.00011	0.00004	0.0040	0.06	0.00002	0.19	0.000009	0.05	0.021	0.52	0.00001	0.00013	0.00013	0.000017	0.00049	0.0004	0.000293
15-Jan-13	0.000010	0.0005	0.32	0.006	0.0049	0.00011	0.00005	0.0044	0.05	0.00002	0.20	0.000005	0.04	0.028	0.61	0.00001	0.00005	0.00005	0.000022	0.00046	0.0005	0.000005
22-Jan-13	0.000014	0.0005	0.26	0.005	0.0046	0.00009	0.00009	0.0041	0.04	0.00002	0.16	0.000005	0.01	0.021	0.55	0.00001	0.00007	0.00014	0.000014	0.00045	0.0005	0.000005
29-Jan-13	0.000009	0.0004	0.28	0.005	0.0045	0.00009	0.00013	0.0040	0.04	0.00002	0.14	0.000004	0.05	0.020	0.55	0.00001	0.00012	0.00018	0.000012	0.00043	0.0004	0.000004
05-Feb-13																						
12-Feb-13																						

HC 19
Sample = L032097

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	1	500	415	7.74	2.11	11.15	13.70	0.057	0.0005	0.00054	0.0007	0.000008	0.0000083	0.0067	0.000001	5.10	0.00021	0.000063	0.00195	0.0017
08-May-12	2	500	460	7.8	1.03	7.94	12.88	0.054	0.0006	0.00046	0.0007	0.000009	0.0000092	0.0086	0.000001	4.88	0.00023	0.000044	0.00115	0.0014
15-May-12	3	500	475	7.74	1.11	10.87	8.08	0.065	0.0007	0.00038	0.0006	0.000010	0.0000048	0.0081	0.000001	4.89	0.00024	0.000032	0.00067	0.0014
22-May-12	4	500	450	7.57	1.31	7.28	5.85	0.075	0.0005	0.00036	0.0004	0.000009	0.0000045	0.0044	0.000001	3.56	0.00023	0.000022	0.00032	0.0014
29-May-12	5	500	440	7.48	1.22	6.67	4.40	0.073	0.0004	0.00022	0.0003	0.000009	0.0000044	0.0039	0.000001	3.23	0.00022	0.000022	0.00040	0.0035
05-Jun-12	6	500	445	7.5	1.53	7.32	3.12	0.069	0.0004	0.00027	0.0004	0.000009	0.0000045	0.0032	0.000001	3.16	0.00022	0.000023	0.00036	0.0027
12-Jun-12	7	500	480	7.60	1.38	10.15	2.40	0.059	0.0005	0.00019	0.0003	0.000010	0.0000048	0.0034	0.000001	3.58	0.00024	0.000013	0.00024	0.0014
19-Jun-12	8	500	450	7.51	0.93	6.75	2.70	0.059	0.0003	0.00023	0.0003	0.000009	0.0000045	0.0022	0.000001	2.82	0.00023	0.000029	0.00036	0.0014
26-Jun-12	9	500	445	7.26	1.55	5.49	3.12	0.069	0.0003	0.00022	0.0003	0.000009	0.0000045	0.0021	0.000001	2.70	0.00022	0.000002	0.00031	0.0013
03-Jul-12	10	500	435	7.52	2.60	6.82	3.48	0.057	0.0003	0.00022	0.0003	0.000009	0.0000044	0.0017	0.000001	2.61	0.00022	0.000013	0.00048	0.0013
10-Jul-12	11	500	470	7.45	1.51	7.46	3.29	0.065	0.0004	0.00014	0.0003	0.000009	0.0000047	0.0022	0.000001	3.21	0.00024	0.000012	0.00033	0.0014
17-Jul-12	12	500	455	7.60	0.65	6.47	2.28	0.064	0.0003	0.00018	0.0003	0.000009	0.0000046	0.0018	0.000001	3.00	0.00023	0.000032	0.00023	0.0014
24-Jul-12	13	500	440	7.36	0.91	5.66	2.64	0.063	0.0002	0.00035	0.0002	0.000009	0.0000044	0.0013	0.000001	2.62	0.00022	0.000022	0.00026	0.0013
31-Jul-12	14	500	450	7.46	0.87	5.67	3.15	0.061	0.0002	0.00027	0.0002	0.000009	0.0000045	0.0016	0.000001	2.81	0.00023	0.000014	0.00023	0.0014
07-Aug-12	15	500	465	7.53	0.97	6.33	2.79	0.073	0.0003	0.00019	0.0003	0.000009	0.0000047	0.0022	0.000001	3.01	0.00023	0.000013	0.00028	0.0014
14-Aug-12	16	500	460	7.41	1.05	6.18	2.76	0.067	0.0002	0.00018	0.0003	0.000009	0.0000046	0.0016	0.000001	2.81	0.00023	0.000017	0.00032	0.0014
21-Aug-12	17	500	455	7.37	1.32	5.72	2.73	0.066	0.0003	0.00014	0.0002	0.000009	0.0000046	0.0014	0.000001	2.80	0.00023	0.000015	0.00027	0.0014
28-Aug-12	18	500	470	7.27	2.39	6.71	2.82	0.063	0.0002	0.00028	0.0002	0.000009	0.0000047	0.0015	0.000001	2.92	0.00024	0.000016	0.00042	0.0014
04-Sep-12	19	500	465	7.17	1.73	5.90	2.79	0.053	0.0002	0.00009	0.0002	0.000009	0.0000047	0.0014	0.000001	2.88	0.00023	0.000013	0.00023	0.0014
11-Sep-12	20	500	450	7.41	0.95	5.97	3.60	0.048	0.0002	0.00014	0.0003	0.000009	0.0000045	0.0012	0.000001	2.90	0.00023	0.000015	0.00050	0.0014
18-Sep-12	21	500	440	7.40																
25-Sep-12	22	500	445	7.41	1.07	6.81	2.23	0.051	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0010	0.000001	2.50	0.00022	0.000007	0.00036	0.0013
02-Oct-12	23	500	440	7.41	1.16	5.96	1.76	0.044	0.0002	0.00013	0.0002	0.000009	0.0000044	0.0012	0.000001	2.24	0.00022	0.000036	0.00044	0.0013
09-Oct-12	24	500	445	7.38	1.78	6.42	1.34	0.050	0.0001	0.00009	0.0002	0.000009	0.0000045	0.0010	0.000001	2.17	0.00022	0.000005	0.00053	0.0013
16-Oct-12	25	500	460	7.54	2.30	6.99	2.30	0.051	0.0001	0.00014	0.0003	0.000009	0.0000046	0.0011	0.000001	2.34	0.00023	0.000009	0.00041	0.0014
23-Oct-12	26	500	460	7.31	1.78	6.81	2.76	0.051	0.0001	0.00009	0.0002	0.000009	0.0000046	0.0005	0.000001	2.37	0.00023	0.000036	0.00041	0.0014
30-Oct-12	27	500	455	7.32	1.66	7.20	1.37	0.052	0.0001	0.00009	0.0003	0.000009	0.0000046	0.0011	0.000143	2.45	0.00023	0.000001	0.00027	0.0014
06-Nov-12	28	500	455	7.55	1.15	6.27	0.91	0.043	0.0001	0.00023	0.0002	0.000009	0.0000046	0.0011	0.000001	2.33	0.00023	0.000013	0.00023	0.0014
13-Nov-12	29	500	475	7.56	2.10	6.63	1.43	0.036	0.0001	0.00010	0.0002	0.000010	0.0000048	0.0011	0.000001	2.44	0.00024	0.000016	0.00024	0.0014
20-Nov-12	30	500	500	7.78	2.63	7.26	1.50	0.037	0.0003	0.00025	0.0003	0.000010	0.0000050	0.0010	0.000002	2.91	0.00025	0.000070	0.00035	0.0015
27-Nov-12	31	500	505	7.45	2.05	7.12	2.53	0.033	0.0003	0.00010	0.0003	0.000010	0.0000051	0.0009	0.000002	2.86	0.00025	0.000002	0.00025	0.0015
04-Dec-12	32	500	445	7.53	0.64	4.35	2.23	0.043	0.0001	0.00009	0.0002	0.000009	0.0000089	0.0003	0.000001	1.95	0.00022	0.000014	0.00031	0.0013
11-Dec-12	33	500	495	7.54	0.81	6.29	1.98	0.037	0.0002	0.00010	0.0002	0.000010	0.0000050	0.0008	0.000001	2.75	0.00025	0.000027	0.00025	0.0015
18-Dec-12	34	500	485	7.45	0.98	6.11	1.46	0.039	0.0001	0.00010	0.0003	0.000010	0.0000049	0.0004	0.000001	2.59	0.00024	0.000006	0.00024	0.0015
25-Dec-12	35	500	465	7.47	1.11	5.11	0.93	0.035	0.0001	0.00009	0.0002	0.000009	0.0000047	0.0004	0.000001	2.40	0.00023	0.000013	0.00023	0.0014
01-Jan-13	36	500	490	7.49	1.16	5.96	1.96	0.033	0.0001	0.00010	0.0003	0.000010	0.0000049	0.0004	0.000001	2.47	0.00025	0.000014	0.00025	0.0015
08-Jan-13	37	500	480	7.61	1.20	6.14	1.92	0.039	0.0002	0.00010	0.0003	0.000010	0.0000048	0.0005	0.000001	2.80	0.00024	0.000037	0.00024	0.0014
15-Jan-13	38	500	470	7.61	0.94	5.56	2.82	0.035	0.0001	0.00009	0.0003	0.000009	0.0000047	0.0003	0.000001	2.51	0.00024	0.000009	0.00024	0.0014
22-Jan-13	39	500	485	7.43	1.45	5.73	2.91	0.043	0.0001	0.00015	0.0002	0.000010	0.0000049	0.0005	0.000006	2.60	0.00024	0.000010	0.00024	0.0019
29-Jan-13	40	500	480	7.55	1.03	5.03	3.36	0.037	0.0001	0.00010	0.0004	0.000010	0.0000048	0.0004	0.000001	2.72	0.00024	0.000012	0.00029	0.0014
05-Feb-13	41	500	490	7.45	1.50	5.36	3.43													
12-Feb-13	42	500	485	7.57	2.09	5.63	2.91													

HC 19
Sample = L032097

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	0.000037	0.0017	0.52	0.009	0.0166	0.00059	0.00012	0.0037	1.56	0.00012	0.36	0.000004	3.24	0.035	4.65	0.00001	0.00019	0.00008	0.000026	0.00023	0.0017	0.000054
08-May-12	0.000014	0.0018	0.57	0.014	0.0046	0.00074	0.00014	0.0041	1.00	0.00016	0.30	0.000005	2.48	0.036	4.45	0.00001	0.00060	0.00009	0.000109	0.00019	0.0009	0.000037
15-May-12	0.000010	0.0019	0.57	0.015	0.0048	0.00065	0.00010	0.0043	0.81	0.00011	0.41	0.000005	1.64	0.034	3.19	0.00001	0.00025	0.00005	0.000193	0.00021	0.0005	0.000019
22-May-12	0.000014	0.0009	0.38	0.011	0.0090	0.00040	0.00005	0.0041	0.53	0.00015	0.31	0.000005	0.95	0.024	2.28	0.00001	0.00167	0.00018	0.000099	0.00030	0.0005	0.000009
29-May-12	0.000026	0.0009	0.33	0.012	0.0044	0.00026	0.00004	0.0040	0.44	0.00007	0.30	0.000004	0.64	0.020	1.73	0.00001	0.00051	0.00009	0.000084	0.00022	0.0009	0.000018
05-Jun-12	0.000009	0.0009	0.32	0.012	0.0045	0.00030	0.00004	0.0040	0.37	0.00005	0.28	0.000004	0.54	0.019	1.53	0.00001	0.00019	0.00013	0.000091	0.00025	0.0004	0.000018
12-Jun-12	0.000010	0.0010	0.31	0.014	0.0096	0.00017	0.00005	0.0043	0.31	0.00005	0.33	0.000005	0.41	0.020	1.16	0.00001	0.00028	0.00005	0.000157	0.00020	0.0010	0.000005
19-Jun-12	0.000009	0.0005	0.24	0.011	0.0045	0.00013	0.00005	0.0041	0.24	0.00003	0.27	0.000005	0.31	0.015	1.04	0.00001	0.00015	0.00005	0.000102	0.00025	0.0009	0.000005
26-Jun-12	0.000009	0.0004	0.23	0.010	0.0089	0.00014	0.00004	0.0040	0.22	0.00018	0.29	0.000004	0.28	0.014	0.99	0.00001	0.00016	0.00009	0.000108	0.00029	0.0004	0.000004
03-Jul-12	0.000030	0.0004	0.21	0.011	0.0044	0.00013	0.00004	0.0039	0.20	0.00002	0.26	0.000004	0.23	0.013	0.96	0.00001	0.00040	0.00009	0.000121	0.00023	0.0013	0.000004
10-Jul-12	0.000009	0.0005	0.24	0.013	0.0047	0.00012	0.00005	0.0042	0.21	0.00007	0.30	0.000005	0.25	0.015	1.07	0.00001	0.00012	0.00005	0.000174	0.00025	0.0005	0.000005
17-Jul-12	0.000009	0.0005	0.20	0.011	0.0046	0.00009	0.00114	0.0041	0.19	0.00005	0.30	0.000005	0.21	0.014	1.08	0.00001	0.00013	0.00005	0.000117	0.00024	0.0005	0.000009
24-Jul-12	0.000009	0.0004	0.19	0.010	0.0044	0.00008	0.00004	0.0040	0.17	0.00009	0.25	0.000004	0.19	0.012	1.03	0.00001	0.00006	0.00004	0.000087	0.00024	0.0004	0.000004
31-Jul-12	0.000009	0.0005	0.19	0.010	0.0045	0.00009	0.00005	0.0041	0.14	0.00003	0.26	0.000005	0.19	0.012	0.94	0.00001	0.00006	0.00005	0.000106	0.00031	0.0009	0.000005
07-Aug-12	0.000014	0.0005	0.20	0.011	0.0047	0.00011	0.00014	0.0042	0.16	0.00003	0.32	0.000005	0.18	0.013	1.16	0.00001	0.00008	0.00051	0.000128	0.00045	0.0009	0.000009
14-Aug-12	0.000009	0.0005	0.19	0.010	0.0046	0.00010	0.00005	0.0041	0.15	0.00002	0.28	0.000005	0.17	0.012	1.24	0.00001	0.00008	0.00005	0.000118	0.00028	0.0005	0.000009
21-Aug-12	0.000009	0.0005	0.17	0.011	0.0046	0.00011	0.00005	0.0041	0.12	0.00004	0.25	0.000005	0.14	0.011	1.06	0.00001	0.00009	0.00009	0.000125	0.00022	0.0005	0.000005
28-Aug-12	0.000009	0.0005	0.17	0.012	0.0047	0.00011	0.00005	0.0042	0.13	0.00002	0.26	0.000005	0.14	0.012	1.00	0.00001	0.00012	0.00005	0.000176	0.00024	0.0009	0.000005
04-Sep-12	0.000009	0.0005	0.15	0.013	0.0047	0.00009	0.00005	0.0042	0.10	0.00002	0.21	0.000005	0.12	0.011	1.02	0.00001	0.00006	0.00005	0.000186	0.00022	0.0005	0.000005
11-Sep-12	0.000009	0.0005	0.14	0.010	0.0180	0.00007	0.00009	0.0041	0.12	0.00002	0.25	0.000005	0.12	0.011	1.21	0.00001	0.00018	0.00014	0.000118	0.00022	0.0005	0.000014
18-Sep-12																						
25-Sep-12	0.000009	0.0004	0.11	0.010	0.0045	0.00005	0.00004	0.0040	0.12	0.00006	0.24	0.000009	0.11	0.009	0.68	0.00001	0.00007	0.00004	0.000099	0.00021	0.0004	0.000004
02-Oct-12	0.000013	0.0004	0.12	0.009	0.0044	0.00006	0.00009	0.0040	0.12	0.00002	0.23	0.000004	0.11	0.008	0.63	0.00001	0.00004	0.00004	0.000100	0.00019	0.0004	0.000004
09-Oct-12	0.000009	0.0004	0.11	0.010	0.0045	0.00004	0.00009	0.0040	0.11	0.00004	0.21	0.000004	0.11	0.007	0.48	0.00001	0.00013	0.00013	0.000094	0.00023	0.0004	0.000004
16-Oct-12	0.000009	0.0005	0.09	0.011	0.0046	0.00004	0.00005	0.0041	0.09	0.00002	0.20	0.000005	0.09	0.007	0.50	0.00001	0.00017	0.00005	0.000098	0.00017	0.0005	0.000009
23-Oct-12	0.000009	0.0005	0.09	0.011	0.0046	0.00005	0.00028	0.0041	0.10	0.00002	0.23	0.000005	0.09	0.008	0.44	0.00001	0.00005	0.00009	0.000095	0.00016	0.0005	0.000005
30-Oct-12	0.000009	0.0005	0.09	0.012	0.0091	0.00003	0.00005	0.0041	0.10	0.00003	0.25	0.000005	0.09	0.008	0.45	0.00001	0.00007	0.00005	0.000082	0.00020	0.0005	0.000005
06-Nov-12	0.000009	0.0005	0.08	0.011	0.0046	0.00004	0.00005	0.0041	0.09	0.00003	0.22	0.000005	0.09	0.008	0.42	0.00001	0.00009	0.00005	0.000074	0.00016	0.0005	0.000005
13-Nov-12	0.000010	0.0005	0.08	0.014	0.0048	0.00004	0.00005	0.0043	0.08	0.00002	0.19	0.000005	0.08	0.007	0.49	0.00001	0.00003	0.00005	0.000094	0.00015	0.0005	0.000005
20-Nov-12	0.000010	0.0005	0.11	0.013	0.0050	0.00006	0.00010	0.0045	0.09	0.00003	0.26	0.000005	0.11	0.009	0.65	0.00001	0.00008	0.00010	0.000167	0.00020	0.0005	0.000005
27-Nov-12	0.000010	0.0005	0.11	0.011	0.0051	0.00005	0.00005	0.0045	0.08	0.00004	0.25	0.000005	0.10	0.009	0.70	0.00001	0.00006	0.00005	0.000177	0.00016	0.0005	0.000005
04-Dec-12	0.000013	0.0004	0.09	0.007	0.0045	0.00004	0.00004	0.0040	0.06	0.00018	0.16	0.000004	0.06	0.006	0.66	0.00001	0.00008	0.00004	0.000093	0.00017	0.0004	0.000004
11-Dec-12	0.000010	0.0005	0.09	0.009	0.0050	0.00004	0.00005	0.0045	0.08	0.00002	0.23	0.000010	0.08	0.008	0.76	0.00001	0.00006	0.00010	0.000148	0.00021	0.0005	0.000005
18-Dec-12	0.000010	0.0005	0.08	0.010	0.0049	0.00005	0.00005	0.0044	0.07	0.00017	0.18	0.000005	0.07	0.008	0.88	0.00001	0.00011	0.00005	0.000126	0.00015	0.0005	0.000005
25-Dec-12	0.000009	0.0005	0.08	0.009	0.0047	0.00004	0.00005	0.0065	0.06	0.00002	0.14	0.000005	0.07	0.008	0.86	0.00001	0.00011	0.00005	0.000086	0.00009	0.0005	0.000005
01-Jan-13	0.000010	0.0005	0.08	0.011	0.0049	0.00006	0.00005	0.0044	0.06	0.00002	0.19	0.000010	0.08	0.008	0.88	0.00001	0.00012	0.00005	0.000118	0.00015	0.0005	0.000005
08-Jan-13	0.000010	0.0005	0.08	0.010	0.0048	0.00005	0.00005	0.0043	0.06	0.00002	0.20	0.000005	0.07	0.008	0.95	0.00001	0.00007	0.00005	0.000105	0.00017	0.0005	0.000005
15-Jan-13	0.000009	0.0005	0.08	0.010	0.0047	0.00005	0.00005	0.0042	0.06	0.00002	0.17	0.000005	0.06	0.007	0.95	0.00001	0.00007	0.00005	0.000094	0.00014	0.0005	0.000005
22-Jan-13	0.000010	0.0005	0.08	0.011	0.0049	0.00006	0.00010	0.0044	0.06	0.00002	0.18	0.000005	0.03	0.007	0.99	0.00001	0.00008	0.00005	0.000105	0.00017	0.0010	0.000005
29-Jan-13	0.000010	0.0005	0.08	0.010	0.0048	0.00004	0.00010	0.0043	0.06	0.00002	0.17	0.000005	0.09	0.008	1.02	0.00001	0.00006	0.00005	0.000076	0.00017	0.0005	0.000005
05-Feb-13																						
12-Feb-13																						

HC 20
Sample = L032066

Date	Cycle	Volume mL		pH	Acidity (pH 8.3)	Alkalinity	Sulphate	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe
		Input	Output		mgCaCO3/kg/wk	mgCaCO3/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	1	490	425	7.78	2.18	14.33	8.67	0.068	0.0011	0.00334	0.0007	0.000009	0.0000043	0.0114	0.000001	3.73	0.00022	0.000023	0.00056	0.0035
08-May-12	2	500	460	8	0.82	12.01	8.45	0.078	0.0019	0.00399	0.0006	0.000009	0.0000047	0.0124	0.000001	4.07	0.00023	0.000018	0.00047	0.0014
15-May-12	3	490	470	7.93	0.98	13.24	6.23	0.104	0.0023	0.00537	0.0006	0.000010	0.0000048	0.0155	0.000001	4.26	0.00024	0.000015	0.00029	0.0014
22-May-12	4	500	440	7.72	1.26	11.12	6.29	0.120	0.0015	0.00350	0.0006	0.000009	0.0000045	0.0091	0.000001	4.04	0.00022	0.000012	0.00022	0.0013
29-May-12	5	490	440	7.70	1.06	10.81	4.49	0.115	0.0014	0.00292	0.0004	0.000009	0.0000045	0.0097	0.000001	3.82	0.00022	0.000015	0.00022	0.0013
05-Jun-12	6	490	445	7.6	1.48	11.92	2.72	0.089	0.0014	0.00245	0.0006	0.000009	0.0000045	0.0089	0.000001	3.77	0.00023	0.000020	0.00027	0.0014
12-Jun-12	7	490	470	7.71	1.38	11.91	3.36	0.093	0.0015	0.00273	0.0004	0.000010	0.0000048	0.0087	0.000001	3.94	0.00024	0.000011	0.00024	0.0014
19-Jun-12	8	490	440	7.64	0.92	10.19	3.14	0.069	0.0010	0.00233	0.0004	0.000009	0.0000045	0.0060	0.000001	3.44	0.00022	0.000026	0.00108	0.0013
26-Jun-12	9	490	440	7.76	1.01	10.06	3.14	0.088	0.0010	0.00256	0.0004	0.000009	0.0000045	0.0059	0.000001	3.44	0.00022	0.000001	0.00022	0.0013
03-Jul-12	10	490	445	7.66	2.73	11.82	3.18	0.096	0.0010	0.00254	0.0003	0.000009	0.0000045	0.0048	0.000002	3.41	0.00023	0.000009	0.00023	0.0014
10-Jul-12	11	490	445	7.55	1.52	10.31	3.18	0.095	0.0009	0.00204	0.0005	0.000009	0.0000045	0.0052	0.000001	3.41	0.00023	0.000007	0.00023	0.0014
17-Jul-12	12	490	450	7.73	0.74	10.18	2.30	0.078	0.0010	0.00216	0.0005	0.000009	0.0000046	0.0048	0.000001	3.54	0.00023	0.000037	0.00023	0.0064
24-Jul-12	13	490	435	7.55	0.87	9.17	3.11	0.071	0.0008	0.00195	0.0003	0.000009	0.0000044	0.0039	0.000001	3.29	0.00022	0.000016	0.00022	0.0013
31-Jul-12	14	490	450	7.63	0.87	9.50	2.30	0.076	0.0009	0.00188	0.0004	0.000009	0.0000046	0.0044	0.000001	3.44	0.00023	0.000020	0.00023	0.0032
07-Aug-12	15	500	450	7.75	0.81	9.96	1.38	0.093	0.0009	0.00211	0.0004	0.000009	0.0000046	0.0074	0.000001	3.72	0.00023	0.000012	0.00023	0.0014
14-Aug-12	16	490	460	7.60	1.07	10.11	1.88	0.063	0.0007	0.00160	0.0003	0.000009	0.0000047	0.0031	0.000001	3.44	0.00023	0.000011	0.00023	0.0014
21-Aug-12	17	490	460	7.50	1.24	9.91	2.35	0.071	0.0008	0.00169	0.0003	0.000009	0.0000047	0.0036	0.000001	3.50	0.00023	0.000019	0.00023	0.0019
28-Aug-12	18	490	460	7.35	2.05	10.56	2.35	0.065	0.0008	0.00155	0.0004	0.000009	0.0000047	0.0035	0.000001	3.36	0.00023	0.000016	0.00038	0.0033
04-Sep-12	19	490	470	7.31	1.76	8.08	2.40	0.059	0.0006	0.00125	0.0003	0.000010	0.0000048	0.0030	0.000001	3.34	0.00024	0.000015	0.00024	0.0014
11-Sep-12	20	490	435	7.54	0.97	8.97	3.55	0.046	0.0007	0.00164	0.0004	0.000009	0.0000044	0.0030	0.000001	3.21	0.00022	0.000014	0.00044	0.0013
18-Sep-12	21	490	445	7.54																
25-Sep-12	22	490	430	7.53	1.05	9.57	2.19	0.048	0.0008	0.00167	0.0003	0.000009	0.0000044	0.0031	0.000001	2.87	0.00022	0.000009	0.00026	0.0013
02-Oct-12	23	490	440	7.57	1.11	9.71	1.80	0.037	0.0007	0.00162	0.0003	0.000009	0.0000045	0.0030	0.000001	2.85	0.00022	0.000036	0.00031	0.0013
09-Oct-12	24	490	440	7.48	1.85	10.11	1.35	0.046	0.0008	0.00180	0.0003	0.000009	0.0000045	0.0029	0.000001	2.80	0.00022	0.000005	0.00036	0.0013
16-Oct-12	25	490	450	7.63	1.86	9.68	2.30	0.051	0.0006	0.00152	0.0002	0.000009	0.0000046	0.0027	0.000001	2.70	0.00023	0.000009	0.00023	0.0018
23-Oct-12	26	490	435	7.39	1.52	9.40	2.22	0.058	0.0004	0.00138	0.0002	0.000009	0.0000044	0.0019	0.000003	2.66	0.00022	0.000034	0.00036	0.0013
30-Oct-12	27	490	450	7.44	1.81	10.79	1.84	0.049	0.0005	0.00161	0.0003	0.000009	0.0000046	0.0024	0.000146	3.34	0.00023	0.000006	0.00023	0.0037
06-Nov-12	28	490	460	7.68	1.11	10.30	0.94	0.042	0.0006	0.00174	0.0003	0.000009	0.0000047	0.0029	0.000001	3.26	0.00023	0.000025	0.00028	0.0014
13-Nov-12	29	490	465	7.56	2.03	10.14	1.42	0.034	0.0005	0.00138	0.0002	0.000009	0.0000047	0.0024	0.000001	3.17	0.00024	0.000028	0.00024	0.0014
20-Nov-12	30	490	485	7.86	2.70	10.89	1.48	0.044	0.0007	0.00173	0.0003	0.000010	0.0000049	0.0024	0.000001	3.42	0.00025	0.000067	0.00045	0.0015
27-Nov-12	31	490	490	7.59	2.08	10.90	2.50	0.033	0.0007	0.00140	0.0003	0.000010	0.0000050	0.0023	0.000002	3.14	0.00025	0.000043	0.00025	0.0015
04-Dec-12	32	490	440	7.65	0.68	7.49	2.24	0.038	0.0005	0.00130	0.0002	0.000009	0.0000045	0.0013	0.000002	2.36	0.00022	0.000015	0.00040	0.0013
11-Dec-12	33	490	465	7.65	0.80	7.91	1.90	0.032	0.0007	0.00142	0.0002	0.000009	0.0000047	0.0019	0.000002	2.94	0.00024	0.000035	0.00028	0.0019
18-Dec-12	34	490	430	7.53	0.86	6.72	0.88	0.034	0.0004	0.00114	0.0002	0.000009	0.0000044	0.0014	0.000001	2.36	0.00022	0.000007	0.00022	0.0013
25-Dec-12	35	490	455	7.51	1.19	6.82	0.93	0.028	0.0005	0.00125	0.0002	0.000009	0.0000046	0.0018	0.000001	2.51	0.00023	0.000021	0.00033	0.0014
01-Jan-13	36	490	460	7.59	1.14	7.03	1.41	0.029	0.0005	0.00127	0.0002	0.000009	0.0000047	0.0014	0.000001	2.26	0.00023	0.000018	0.00023	0.0014
08-Jan-13	37	490	430	7.69	1.13	6.72	1.32	0.032	0.0006	0.00114	0.0002	0.000009	0.0000044	0.0014	0.000003	2.44	0.00022	0.000036	0.00022	0.0013
15-Jan-13	38	490	440	7.87	0.86	7.03	1.80	0.030	0.0005	0.00112	0.0003	0.000009	0.0000045	0.0013	0.000001	2.42	0.00022	0.000013	0.00022	0.0013
22-Jan-13	39	490	465	7.50	1.27	7.50	2.37	0.030	0.0006	0.00114	0.0003	0.000009	0.0000047	0.0016	0.000002	2.68	0.00024	0.000015	0.00024	0.0014
29-Jan-13	40	490	475	7.63	1.01	7.16	2.42	0.032	0.0005	0.00111	0.0002	0.000010	0.0000048	0.0013	0.000001	2.70	0.00024	0.000017	0.00029	0.0015
05-Feb-13	41	490	455	7.56	1.25	6.38	2.32													
12-Feb-13	42	490	440	7.63	1.66	6.12	2.24													

HC 20
Sample = L032066

Date	Pb	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr
	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
01-May-12	0.000035	0.0009	0.61	0.002	0.0043	0.00056	0.00013	0.0039	1.87	0.00079	0.33	0.000004	4.06	0.033	2.74	0.00001	0.00015	0.00004	0.000006	0.00032	0.0009	0.000009
08-May-12	0.000009	0.0009	0.73	0.006	0.0047	0.00065	0.00014	0.0042	1.26	0.00055	0.29	0.000005	2.72	0.039	3.19	0.00001	0.00051	0.00005	0.000015	0.00027	0.0005	0.000009
15-May-12	0.000010	0.0010	0.77	0.007	0.0048	0.00044	0.00005	0.0043	1.06	0.00043	0.37	0.000005	1.53	0.041	2.44	0.00001	0.00020	0.00005	0.000025	0.00033	0.0005	0.000010
22-May-12	0.000009	0.0009	0.70	0.005	0.0135	0.00030	0.00009	0.0040	0.80	0.00039	0.33	0.000004	1.06	0.040	2.47	0.00001	0.00031	0.00009	0.000023	0.00039	0.0004	0.000004
29-May-12	0.000009	0.0009	0.62	0.006	0.0045	0.00017	0.00004	0.0040	0.68	0.00012	0.32	0.000004	0.63	0.034	1.72	0.00001	0.00027	0.00004	0.000018	0.00034	0.0004	0.000009
05-Jun-12	0.000018	0.0009	0.59	0.008	0.0045	0.00021	0.00005	0.0041	0.55	0.00023	0.29	0.000005	0.45	0.032	1.47	0.00001	0.00020	0.00009	0.000020	0.00030	0.0009	0.000005
12-Jun-12	0.000010	0.0005	0.55	0.008	0.0048	0.00010	0.00010	0.0043	0.48	0.00016	0.31	0.000005	0.30	0.032	1.12	0.00001	0.00020	0.00005	0.000019	0.00030	0.0005	0.000005
19-Jun-12	0.000009	0.0004	0.46	0.009	0.0045	0.00007	0.00009	0.0040	0.38	0.00022	0.25	0.000004	0.23	0.026	1.14	0.00001	0.00018	0.00004	0.000017	0.00031	0.0013	0.000004
26-Jun-12	0.000009	0.0004	0.44	0.008	0.0090	0.00008	0.00009	0.0040	0.36	0.00018	0.27	0.000004	0.20	0.025	1.00	0.00001	0.00011	0.00004	0.000018	0.00033	0.0009	0.000013
03-Jul-12	0.000009	0.0005	0.45	0.006	0.0045	0.00009	0.00005	0.0041	0.35	0.00024	0.29	0.000005	0.18	0.026	0.94	0.00001	0.00014	0.00005	0.000029	0.00030	0.0018	0.000005
10-Jul-12	0.000009	0.0005	0.40	0.007	0.0045	0.00006	0.00005	0.0041	0.29	0.00023	0.26	0.000005	0.15	0.023	0.81	0.00001	0.00010	0.00005	0.000018	0.00030	0.0005	0.000005
17-Jul-12	0.000073	0.0005	0.41	0.008	0.0046	0.00009	0.00005	0.0041	0.29	0.00025	0.26	0.000005	0.15	0.024	0.99	0.00001	0.00007	0.00018	0.000019	0.00030	0.0009	0.000096
24-Jul-12	0.000009	0.0004	0.35	0.010	0.0044	0.00005	0.00004	0.0040	0.24	0.00028	0.22	0.000004	0.12	0.020	0.90	0.00001	0.00006	0.00004	0.000014	0.00029	0.0004	0.000013
31-Jul-12	0.000014	0.0005	0.36	0.010	0.0046	0.00004	0.00005	0.0041	0.24	0.00022	0.25	0.000005	0.11	0.021	0.79	0.00001	0.00007	0.00005	0.000016	0.00034	0.0005	0.000005
07-Aug-12	0.000023	0.0005	0.35	0.010	0.0046	0.00004	0.00009	0.0041	0.22	0.00017	0.26	0.000005	0.10	0.021	0.90	0.00001	0.00008	0.00018	0.000020	0.00040	0.0009	0.000005
14-Aug-12	0.000009	0.0005	0.33	0.008	0.0047	0.00003	0.00005	0.0042	0.24	0.00031	0.24	0.000005	0.09	0.021	0.97	0.00001	0.00005	0.00005	0.000020	0.00023	0.0009	0.000009
21-Aug-12	0.000009	0.0005	0.32	0.011	0.0188	0.00005	0.00009	0.0042	0.18	0.00039	0.21	0.000005	0.08	0.019	0.90	0.00001	0.00013	0.00009	0.000021	0.00029	0.0005	0.000005
28-Aug-12	0.000033	0.0005	0.30	0.010	0.0047	0.00006	0.00009	0.0042	0.18	0.00031	0.20	0.000005	0.07	0.018	0.83	0.00001	0.00019	0.00009	0.000045	0.00026	0.0005	0.000014
04-Sep-12	0.000010	0.0005	0.26	0.010	0.0048	0.00004	0.00005	0.0043	0.14	0.00028	0.15	0.000005	0.06	0.017	0.77	0.00001	0.00005	0.00005	0.000024	0.00022	0.0005	0.000005
11-Sep-12	0.000009	0.0004	0.34	0.008	0.0044	0.00006	0.00004	0.0040	0.20	0.00052	0.20	0.000004	0.10	0.020	1.21	0.00001	0.00007	0.00004	0.000026	0.00019	0.0004	0.000004
18-Sep-12																						
25-Sep-12	0.000009	0.0004	0.29	0.007	0.0044	0.00004	0.00009	0.0039	0.19	0.00025	0.20	0.000004	0.10	0.016	0.61	0.00001	0.00004	0.00004	0.000018	0.00020	0.0004	0.000004
02-Oct-12	0.000009	0.0004	0.26	0.009	0.0045	0.00003	0.00004	0.0040	0.16	0.00017	0.19	0.000004	0.09	0.015	0.54	0.00001	0.00001	0.00004	0.000017	0.00013	0.0004	0.000004
09-Oct-12	0.000009	0.0004	0.27	0.008	0.0045	0.00004	0.00009	0.0040	0.17	0.00019	0.18	0.000004	0.09	0.015	0.48	0.00001	0.00007	0.00004	0.000022	0.00018	0.0004	0.000004
16-Oct-12	0.000009	0.0005	0.24	0.008	0.0046	0.00006	0.00005	0.0041	0.15	0.00015	0.17	0.000005	0.09	0.013	0.40	0.00001	0.00010	0.00005	0.000017	0.00017	0.0005	0.000009
23-Oct-12	0.000009	0.0004	0.20	0.008	0.0044	0.00004	0.00036	0.0040	0.12	0.00012	0.16	0.000004	0.07	0.013	0.37	0.00001	0.00006	0.00022	0.000018	0.00022	0.0004	0.000004
30-Oct-12	0.000009	0.0005	0.22	0.011	0.0046	0.00002	0.00005	0.0041	0.13	0.00010	0.20	0.000005	0.07	0.015	0.45	0.00001	0.00014	0.00005	0.000016	0.00018	0.0005	0.000005
06-Nov-12	0.000009	0.0005	0.19	0.010	0.0047	0.00003	0.00005	0.0042	0.10	0.00011	0.18	0.000005	0.07	0.014	0.39	0.00001	0.00017	0.00005	0.000017	0.00016	0.0005	0.000005
13-Nov-12	0.000009	0.0005	0.19	0.011	0.0047	0.00003	0.00005	0.0043	0.09	0.00010	0.16	0.000005	0.05	0.013	0.46	0.00001	0.00003	0.00005	0.000020	0.00015	0.0005	0.000005
20-Nov-12	0.000015	0.0005	0.23	0.007	0.0049	0.00003	0.00005	0.0045	0.11	0.00014	0.19	0.000005	0.06	0.016	0.54	0.00001	0.00006	0.00005	0.000027	0.00017	0.0005	0.000010
27-Nov-12	0.000010	0.0005	0.21	0.008	0.0050	0.00003	0.00005	0.0045	0.10	0.00018	0.17	0.000005	0.06	0.015	0.53	0.00001	0.00005	0.00005	0.000024	0.00015	0.0005	0.000005
04-Dec-12	0.000009	0.0004	0.20	0.005	0.0045	0.00003	0.00004	0.0040	0.10	0.00009	0.11	0.000004	0.04	0.011	0.58	0.00001	0.00007	0.00009	0.000019	0.00014	0.0004	0.000009
11-Dec-12	0.000009	0.0005	0.18	0.007	0.0047	0.00002	0.00005	0.0043	0.10	0.00017	0.15	0.000005	0.05	0.013	0.52	0.00001	0.00008	0.00009	0.000019	0.00019	0.0005	0.000005
18-Dec-12	0.000009	0.0004	0.17	0.005	0.0044	0.00003	0.00004	0.0039	0.08	0.00016	0.11	0.000004	0.04	0.011	0.57	0.00001	0.00006	0.00004	0.000014	0.00014	0.0004	0.000009
25-Dec-12	0.000019	0.0005	0.20	0.006	0.0046	0.00004	0.00005	0.0070	0.07	0.00015	0.09	0.000005	0.04	0.013	0.62	0.00001	0.00005	0.00005	0.000016	0.00007	0.0005	0.000005
01-Jan-13	0.000009	0.0005	0.17	0.006	0.0047	0.00003	0.00005	0.0042	0.07	0.00015	0.11	0.000005	0.05	0.010	0.51	0.00001	0.00003	0.00005	0.000015	0.00014	0.0005	0.000014
08-Jan-13	0.000009	0.0004	0.17	0.004	0.0044	0.00003	0.00004	0.0039	0.08	0.00014	0.11	0.000004	0.04	0.010	0.57	0.00001	0.00007	0.00004	0.000013	0.00017	0.0004	0.000009
15-Jan-13	0.000009	0.0004	0.18	0.004	0.0045	0.00002	0.00009	0.0081	0.07	0.00015	0.10	0.000004	0.03	0.011	0.62	0.00001	0.00009	0.00009	0.000014	0.00014	0.0004	0.000013
22-Jan-13	0.000009	0.0005	0.18	0.006	0.0047	0.00002	0.00009	0.0043	0.07	0.00017	0.11	0.000005	0.00	0.012	0.65	0.00001	0.00007	0.00005	0.000017	0.00016	0.0005	0.000005
29-Jan-13	0.000010	0.0005	0.17	0.006	0.0048	0.00002	0.00005	0.0044	0.06	0.00015	0.10	0.000005	0.04	0.012	0.66	0.00001	0.00008	0.00005	0.000018	0.00015	0.0005	0.000010
05-Feb-13																						
12-Feb-13																						

HC-1
ODM Master Comp A

Parameter	LIMS	pH	Acidity	Alkalinity	Conductivity	SO4	Hg	Ag	Al	As	Ba	Be	B	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Units			mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
0	10343-APR12	7.93	0.78	12.54		16.46	0.000039	0.0000039	0.027	0.0004	0.0003	0.00001	0.0007	0.000004	7.72	0.000001	0.00014	0.0002	0.0002	0.0016	0.73
1	10344-APR12	7.95	2.00	73.07		250.25	0.000100	0.0000501	0.060	0.0032	0.0056	0.00002	0.0317	0.000010	105.11	0.000105	0.00205	0.0005	0.0011	0.0220	9.57
2	10345-APR12	7.9	1.90	50.40		33.29	0.000095	0.0000095	0.057	0.0020	0.0014	0.00002	0.0143	0.000010	28.72	0.000003	0.00017	0.0005	0.0005	0.0029	3.81
3	10053-MAY12	8.1	1.88	18.84		2.26	0.000094	0.0000094	0.057	0.0008	0.0004	0.00002	0.0010	0.000009	5.94	0.000003	0.00002	0.0005	0.0005	0.0104	0.52
4	10077-MAY12	7.92	1.76	13.17		2.37	0.000088	0.0000088	0.044	0.0006	0.0002	0.00002	0.0006	0.000009	5.11	0.000003	0.00001	0.0004	0.0004	0.0044	0.45
5	10130-MAY12	7.51	1.88	12.25		7.44	0.000094	0.0000094	0.038	0.0004	0.0003	0.00002	0.0016	0.000009	6.96	0.000003	0.00002	0.0005	0.0005	0.0038	0.62
6	11139-MAY12	7.59	1.70	10.18		3.39															
7	10340-MAY12	7.52	1.84	9.22		6.55															
8	10011-JUN12	7.23	1.84	13.82		7.18															
9	10066-JUN12	7.35	1.87	9.37		8.06															
10	10108-JUN12	7.28	1.87	8.42		9.17	0.000094	0.0000094	0.037	0.0004	0.0004	0.00002	0.0008	0.000009	6.19	0.000003	0.00006	0.0005	0.0005	0.0066	0.54
11	10150-JUN12	7.31	1.85	8.33		11.11															
12	10020-JUL12	7.05	1.85	7.41		10.19															
13	10059-JUL12	6.87	1.84	7.35		11.03															
14	10098-JUL12	7.29	1.87	6.54		12.14															
15	10137-JUL12	7.35	1.85	6.48		10.18	0.000093	0.0000093	0.028	0.0002	0.0003	0.00002	0.0009	0.000009	6.13	0.000040	0.00007	0.0005	0.0005	0.0056	0.49
16	11065-JUL12	7.11	1.83	6.41		7.88															
17	10039-AUG12	7.23	1.86	6.50		12.08															
18	10082-AUG12	7.24	1.84	5.51		10.10															
19	10202-AUG12	7.2	1.84	6.44		10.12															
20	10411-AUG12	7.13	1.85	5.56		8.61	0.000093	0.0000093	0.009	0.0004	0.0004	0.00002	0.0005	0.000009	5.33	0.000044	0.00005	0.0005	0.0005	0.0083	0.44
21	10020-SEP12	7.08	1.98	5.95		5.75															
22	10064-SEP12	7.04	1.83	5.49		9.06															
23	10107-SEP12	7.32	1.82	5.46		10.01															
24	10151-SEP12	7.46	1.89	11.32		12.26															
25	10006-OCT12	7.15	1.87	6.55		10.29	0.000094	0.0000094	0.009	0.0002	0.0004	0.00002	0.0005	0.000009	5.58	0.000056	0.00003	0.0005	0.0006	0.0028	0.51
26	10047-OCT12	6.97	1.87	5.62		8.06															
27	10091-OCT12	7.08	1.89	4.73		9.46															
28	10221-OCT12	7.06	1.83	4.59		11.92															
29	11192-OCT12	7.45	1.90	6.64		4.27															
30	10006-NOV12	7.15	1.87	14.06		10.31	0.000094	0.0000094	0.037	0.0002	0.0004	0.00002	0.0015	0.000009	6.76	0.000082	0.00001	0.0005	0.0005	0.0028	0.45
31	10048-NOV12	7.13	1.88	5.65		12.23															
32	11038-NOV12	7.06	1.92	5.75		13.43															
33	11038-NOV12	7.38	1.91	6.70		12.44															
34	11147-NOV12	7.08	1.97	10.86		14.81															
35	10007-DEC12	6.96	1.93	4.82		15.42	0.000010	0.0000096	0.019	0.0002	0.0006	0.00002	0.0006	0.000010	7.07	0.000142	0.00003	0.0005	0.0005	0.0039	0.53
36	10050-DEC12	6.89	1.89	6.62		13.24															
37	10092-DEC12	7.11	1.91	6.69		10.52															
38	11089-DEC12	6.96	1.88	5.63		11.27															
39	11175-DEC12	6.99	1.94	5.83		14.57															
40	10029-JAN13	6.77	1.87	5.62		11.24	0.000009	0.0000094	0.009	0.0002	0.0005	0.00002	0.0007	0.000009	5.59	0.000106	0.00002	0.0005	0.0005	0.0075	0.42

HC-1
ODM Master Comp A

Parameter	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti	Tl	Th	U	V	W	Y	Zn
Units	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
0	0.0004	0.27	0.009	0.0001	0.90	0.00004	0.0035	0.00009	0.0007	0.00039	0.06	0.00047	0.019	0.000039	0.000008	0.0000016	0.000084	0.000012	0.0039	0.0000004	0.0008
1	0.0070	6.88	0.136	0.0071	14.11	0.00140	0.0090	0.00102	0.0137	0.00100	2.43	0.00274	0.301	0.000100	0.000030	0.0000040	0.001582	0.000080	0.0002	0.0000060	0.0080
2	0.0038	2.03	0.058	0.0034	1.48	0.00038	0.0086	0.00012	0.0117	0.00095	1.67	0.00057	0.074	0.000095	0.000019	0.0000038	0.000378	0.000095	0.0095	0.0000029	0.0038
3	0.0009	0.20	0.037	0.0002	0.10	0.00019	0.0085	0.00051	0.0011	0.00094	0.24	0.00057	0.010	0.000188	0.000019	0.0000038	0.000014	0.000047	0.0094	0.0000028	0.0170
4	0.0009	0.16	0.038	0.0001	0.06	0.00009	0.0079	0.00028	0.0007	0.00088	0.19	0.00027	0.008	0.000088	0.000018	0.0000035	0.000008	0.000044	0.0088	0.0000018	0.0018
5	0.0009	0.31	0.058	0.0004	0.11	0.00009	0.0085	0.00025	0.0008	0.00094	0.20	0.00016	0.013	0.000094	0.000019	0.0000038	0.000025	0.000028	0.0000	0.0000009	0.0019
6																					
7																					
8																					
9																					
10	0.0009	0.35	0.053	0.0004	0.12	0.00262	0.0084	0.00035	0.0005	0.00094	0.18	0.00009	0.013	0.000094	0.000028	0.0000037	0.000085	0.000028	0.0094	0.0000009	0.0019
11																					
12																					
13																					
14																					
15	0.0009	0.42	0.052	0.0008	0.12	0.00009	0.0083	0.00030	0.0005	0.00093	0.15	0.00017	0.014	0.000093	0.000019	0.0000037	0.000024	0.000028	0.0093	0.0000009	0.0019
16																					
17																					
18																					
19																					
20	0.0009	0.42	0.043	0.0002	0.11	0.00009	0.0083	0.00055	0.0006	0.00093	0.16	0.00031	0.012	0.000093	0.000019	0.0000037	0.000028	0.000028	0.0093	0.0000056	0.0046
21																					
22																					
23																					
24																					
25	0.0009	0.59	0.034	0.0002	0.16	0.00009	0.0084	0.00022	0.0007	0.00094	0.15	0.00039	0.015	0.000094	0.000019	0.0000037	0.000052	0.000028	0.0094	0.0000009	0.0037
26																					
27																					
28																					
29																					
30	0.0009	0.68	0.049	0.0002	0.16	0.00009	0.0084	0.00031	0.0003	0.00094	0.16	0.00036	0.016	0.000094	0.000019	0.0000037	0.000006	0.000028	0.0094	0.0000047	0.0375
31																					
32																					
33																					
34																					
35	0.0010	0.85	0.052	0.0002	0.19	0.00010	0.0087	0.00030	0.0006	0.00096	0.17	0.00031	0.019	0.000096	0.000019	0.0000039	0.000024	0.000029	0.0096	0.0000010	0.0106
36																					
37																					
38																					
39																					
40	0.0009	0.63	0.037	0.0002	0.14	0.00009	0.0084	0.00031	0.0005	0.00094	0.16	0.00021	0.015	0.000094	0.000019	0.0000037	0.000025	0.000028	0.0094	0.0000009	0.0056

HC-2
ODM Master Comp B

Parameter	LIMS	pH	Acidity	Alkalinity	Conductivity	SO4	Hg	Ag	Al	As	Ba	Be	B	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Units			mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
0	10343-APR12	8.00	0.85	14.91		11.08	0.00004	0.0000043	0.038	0.00047	0.00020	0.00001	0.0006	0.000004	6.13	0.000001	0.00009	0.0002	0.0002	0.0013	0.61
1	10344-APR12	7.81	2.01	57.29		231.15	0.00010	0.0000302	0.050	0.00412	0.00543	0.00002	0.0308	0.000010	100.50	0.000079	0.00199	0.0005	0.0008	0.0201	9.62
2	10345-APR12	7.72	1.88	33.84		20.68	0.00009	0.0000094	0.028	0.00113	0.00084	0.00002	0.0086	0.000009	17.77	0.000003	0.00012	0.0005	0.0005	0.0038	2.01
3	10053-MAY12	7.48	1.86	14.90		1.96	0.00009	0.0000093	0.037	0.00047	0.00021	0.00002	0.0006	0.000009	4.81	0.000003	0.00001	0.0005	0.0005	0.0056	0.36
4	10077-MAY12	7.73	1.80	12.61		2.61	0.00009	0.0000090	0.045	0.00045	0.00021	0.00002	0.0006	0.000009	4.78	0.000003	0.00001	0.0005	0.0005	0.0054	0.43
5	10130-MAY12	7.58	1.82	9.99		5.18	0.00009	0.0000091	0.045	0.00027	0.00025	0.00002	0.0011	0.000009	5.32	0.000003	0.00001	0.0005	0.0005	0.0045	0.47
6	11139-MAY12	7.44	1.74	9.55		3.91															
7	10340-MAY12	7.46	1.75	7.86		7.68															
8	10011-JUN12	7.19	1.91	26.74		24.83															
9	10066-JUN12	7.15	1.81	8.15		6.34															
10	10108-JUN12	7.28	1.86	7.44		8.18	0.00009	0.0000093	0.037	0.00019	0.00031	0.00002	0.0006	0.000009	5.51	0.000003	0.00004	0.0005	0.0005	0.0047	0.44
11	10150-JUN12	7.13	1.85	7.42		7.69															
12	10020-JUL12	7.01	1.82	7.30		8.76															
13	10059-JUL12	6.98	1.84	7.38		9.22															
14	10098-JUL12	7.22	1.85	6.49		11.12															
15	10137-JUL12	7.36	1.85	5.55		10.18	0.00009	0.0000093	0.028	0.00037	0.00031	0.00002	0.0006	0.000009	5.61	0.000025	0.00008	0.0005	0.0005	0.0065	0.43
16	11065-JUL12	7.27	1.84	7.34		8.17															
17	10039-AUG12	7.53	1.82	6.37		9.10															
18	10082-AUG12	7.14	1.81	6.33		9.94															
19	10202-AUG12	7.22	1.85	5.56		9.08															
20	10411-AUG12	7.05	1.85	5.56		10.20	0.00009	0.0000093	0.009	0.00019	0.00033	0.00002	0.0005	0.000009	5.89	0.000039	0.00004	0.0005	0.0005	0.0028	0.50
21	10020-SEP12	6.98	1.96	4.90		10.77															
22	10064-SEP12	6.93	1.87	5.60		7.85															
23	10107-SEP12	7.02	1.84	5.53		14.75															
24	10151-SEP12	6.89	1.91	9.54		10.49															
25	10006-OCT12	7.01	1.85	5.56		10.19	0.00009	0.0000093	0.019	0.00019	0.00031	0.00002	0.0005	0.000009	5.37	0.000052	0.00002	0.0005	0.0005	0.0028	0.52
26	10047-OCT12	7.01	1.84	3.68		6.44															
27	10091-OCT12	7.04	1.90	3.79		8.91															
28	10221-OCT12	6.91	1.85	4.64		11.12															
29	11192-OCT12	6.64	1.87	1.87		3.56															
30	10006-NOV12	6.95	1.87	4.67		11.20	0.00009	0.0000093	0.019	0.00019	0.00042	0.00002	0.0016	0.000009	5.82	0.000075	0.00001	0.0005	0.0005	0.0028	0.46
31	10048-NOV12	6.79	1.88	5.65		12.25															
32	11038-NOV12	6.75	1.91	5.73		1.62															
33	10048-NOV13	6.93	1.89	5.68		11.35															
34	11038-NOV13	7.08	1.99	6.97		19.90															
35	10048-NOV14	6.78	1.92	3.84		12.47	0.00001	0.0000096	0.010	0.00019	0.00043	0.00002	0.0005	0.000010	5.24	0.000092	0.00003	0.0005	0.0005	0.0029	0.47
36	11038-NOV14	6.93	1.89	3.79		12.31															
37	10048-NOV15	7.24	1.81	5.44		9.97															
38	11038-NOV15	7.05	1.91	6.69		13.38															
39	10048-NOV16	7.02	1.93	5.78		16.39															
40	11038-NOV16	6.74	1.69	5.06		10.12	0.00001	0.0000084	0.008	0.00025	0.00043	0.00002	0.0006	0.000008	4.95	0.000098	0.00005	0.0004	0.0004	0.0067	0.38

HC-2
ODM Master Comp B

Parameter	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti	Tl	Th	U	V	W	Y	Zn
Units	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
0	0.0004	0.20	0.007	0.0001	0.70	0.00004	0.0038	0.00009	0.00055	0.0004	0.07	0.00048	0.013	0.00004	0.00001	0.0000017	0.00001	0.00001	0.00426	0.0000004	0.0009
1	0.0070	6.61	0.127	0.0076	13.67	0.00121	0.0090	0.00055	0.01377	0.0030	2.45	0.00094	0.288	0.00010	0.00003	0.0000040	0.00149	0.00012	0.00021	0.0000060	0.0070
2	0.0019	1.20	0.059	0.0019	0.78	0.00028	0.0085	0.00027	0.00611	0.0009	0.86	0.00025	0.045	0.00009	0.00002	0.0000038	0.00026	0.00006	0.00940	0.0000038	0.0028
3	0.0009	0.14	0.036	0.0002	0.07	0.00009	0.0084	0.00028	0.00056	0.0009	0.14	0.00014	0.007	0.00009	0.00002	0.0000037	0.00002	0.00004	0.00931	0.0000009	0.0019
4	0.0009	0.14	0.035	0.0002	0.07	0.00009	0.0081	0.00028	0.00063	0.0009	0.15	0.00085	0.007	0.00018	0.00002	0.0000036	0.00002	0.00004	0.00901	0.0000018	0.0018
5	0.0009	0.21	0.049	0.0004	0.10	0.00009	0.0082	0.00027	0.00054	0.0009	0.14	0.00010	0.009	0.00009	0.00002	0.0000036	0.00001	0.00003	0.00003	0.0000027	0.0018
6																					
7																					
8																					
9																					
10	0.0009	0.31	0.047	0.0003	0.10	0.00121	0.0084	0.00023	0.00037	0.0009	0.13	0.00011	0.011	0.00009	0.00002	0.0000037	0.00001	0.00003	0.00930	0.0000037	0.0019
11																					
12																					
13																					
14																					
15	0.0009	0.31	0.048	0.0005	0.10	0.00009	0.0083	0.00033	0.00028	0.0009	0.12	0.00022	0.012	0.00009	0.00002	0.0000037	0.00003	0.00003	0.00925	0.0000019	0.0019
16																					
17																					
18																					
19																					
20	0.0009	0.52	0.037	0.0003	0.14	0.00009	0.0083	0.00026	0.00046	0.0009	0.14	0.00023	0.014	0.00009	0.00002	0.0000037	0.00001	0.00003	0.00927	0.0000009	0.0019
21																					
22																					
23																					
24																					
25	0.0009	0.55	0.038	0.0002	0.16	0.00009	0.0083	0.00031	0.00065	0.0009	0.18	0.00026	0.014	0.00009	0.00002	0.0000037	0.00003	0.00003	0.00926	0.0000009	0.0028
26																					
27																					
28																					
29																					
30	0.0009	0.71	0.032	0.0003	0.21	0.00009	0.0084	0.00022	0.00028	0.0009	0.14	0.00030	0.016	0.00009	0.00002	0.0000037	0.00001	0.00003	0.00933	0.0000009	0.0056
31																					
32																					
33																					
34																					
35	0.0010	0.63	0.033	0.0002	0.16	0.00010	0.0086	0.00021	0.00038	0.0010	0.14	0.00026	0.014	0.00010	0.00002	0.0000038	0.00002	0.00003	0.00959	0.0000019	0.0067
36																					
37																					
38																					
39																					
40	0.0008	0.56	0.032	0.0002	0.13	0.00008	0.0076	0.00020	0.00051	0.0008	0.12	0.00022	0.014	0.00008	0.00002	0.0000034	0.00002	0.00003	0.00843	0.0000008	0.0051

HC-3
ROM Sample A

Parameter	LIMS	pH	Alkalinity	Acidity	Conductivity	SO4	Hg	Al	As	Ag	Ba	Be	B	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Units			mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
0	10112-MAY12	7.73	17.47	1.00		129.74	0.000050	0.032	0.0003	0.000005	0.0044	0.000010	0.0039	0.000005	43.91	0.000130	0.000299	0.0002	0.0006	0.0020	3.74
1	10113-MAY12	7.80	73.48	1.99		268.11	0.000099	0.032	0.0012	0.000010	0.0115	0.000020	0.0179	0.000010	104.27	0.000497	0.000745	0.0005	0.0022	0.0030	11.52
2	10132-MAY12	8.03	48.90	2.00		39.92	0.000100	0.124	0.0004	0.000010	0.0028	0.000020	0.0076	0.000010	26.95	0.000060	0.000160	0.0005	0.0006	0.0030	3.86
3	11119-MAY12	7.62	21.82	1.98		11.90	0.000099	0.033	0.0004	0.000010	0.0011	0.000020	0.0023	0.000010	10.52	0.000003	0.000060	0.0005	0.0005	0.0109	1.36
4	10342-MAY12	7.64	8.36	1.86		6.78	0.000093	0.033	0.0002	0.000009	0.0007	0.000019	0.0012	0.000009	5.67	0.000003	0.000037	0.0005	0.0005	0.0074	0.75
5	10013-JUN12	7.39	10.18	1.85		10.18	0.000093	0.035	0.0002	0.000009	0.0006	0.000019	0.0011	0.000009	6.59	0.000003	0.000028	0.0005	0.0005	0.0046	0.81
6	10044-JUN12	7.59	10.96	1.83		12.78															
7	10086-JUN12	7.33	7.44	1.86		15.81															
8	10128-JUN12	7.07	7.50	1.87		18.74															
9	10001-JUL12	6.92	11.14	1.86		17.63															
10	10042-JUL12	6.95	7.62	1.91		21.92	0.000095	0.019	0.0003	0.000010	0.0010	0.000019	0.0029	0.000010	8.89	0.000028	0.000049	0.0005	0.0005	0.0038	1.02
11	10081-JUL12	7.35	8.33	1.85		20.37															
12	10120-JUL12	7.30	7.41	1.85		17.59															
13	11048-JUL12	7.06	7.36	1.84		17.48															
14	10019-AUG12	7.26	5.84	1.67		20.02															
15	10062-AUG12	7.08	6.37	1.82		20.02	0.000091	0.018	0.0002	0.000009	0.0008	0.000018	0.0052	0.000009	8.31	0.000046	0.000055	0.0005	0.0005	0.0027	0.89
16	10182-AUG12	7.25	5.58	1.86		18.60															
17	10391-AUG12	7.53	7.96	1.77		1.33															
18	10001-SEP12	7.26	6.27	1.79		16.13															
19	10045-SEP12	7.01	5.47	1.82		18.24															
20	10088-SEP12	7.34	6.38	1.82		18.22	0.000091	0.014	0.0002	0.000009	0.0007	0.000018	0.0018	0.000009	7.11	0.000036	0.000002	0.0005	0.0005	0.0027	0.72
21	10132-SEP12	7.08	4.68	1.87		20.57															
22	10011-OCT12	7.36	3.66	1.83		17.37															
23	10052-OCT12	7.21	6.48	1.85		14.82															
24	10096-OCT12	7.04	6.53	1.87		14.93															
25	10207-OCT12	6.92	5.54	1.85		17.54	0.000092	0.015	0.0002	0.000009	0.0007	0.000018	0.0011	0.000009	6.99	0.000048	0.000014	0.0005	0.0005	0.0028	0.70
26	11178-OCT12	6.72	3.58	1.79		2.42															
27	10011-NOV12	6.91	5.47	1.82		18.24															
28	10054-NOV12	6.88	14.62	1.83		18.28															
29	11031-NOV12	7.28	5.56	1.85		18.54															
30	11031-NOV13	6.88	6.43	1.84		14.70	0.000028	0.021	0.0003	0.000009	0.0006	0.000018	0.0027	0.000009	6.78	0.000048	0.000108	0.0005	0.0005	0.0028	0.57
31	11031-NOV14	7.08	6.38	1.82		14.59															
32	11031-NOV15	6.82	5.45	1.82		15.44															
33	11031-NOV16	7.01	6.31	1.80		14.42															
34	11031-NOV17	7.26	5.60	1.87		15.88															
35	11031-NOV18	6.96	7.20	1.80		11.70	0.000009	0.016	0.0002	0.000009	0.0005	0.000018	0.0006	0.000009	4.97	0.000046	0.000018	0.0005	0.0005	0.0027	0.57
36	11031-NOV19	6.88	4.50	1.80		13.50															
37	11031-NOV20	6.73	5.40	1.80		14.40															
38	11031-NOV21	6.73	4.50	1.80		12.60															
39	11031-NOV22	6.89	4.50	1.80		12.60															
40	11031-NOV23	7.10	5.40	1.80		14.40	0.000009	0.010	0.0002	0.000018	0.0006	0.000018	0.0015	0.000009	5.52	0.000044	0.000011	0.0005	0.0005	0.0027	0.49
41	11031-NOV24	6.89	5.40	1.80		11.70															

HC-3
ROM Sample A

Parameter	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Si	Se	Sn	Sr	Th	Ti	Tl	U	V	W	Y	Zn
Units	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
0	0.0025	6.94	0.110	0.0020	4.13	0.00040	0.0050	0.00020	0.0024	0.45	0.00050	0.00162	0.17	0.000002	0.000050	0.000010	0.000167	0.000025	0.000015	0.000005	0.005
1	0.0089	17.38	0.304	0.0065	9.22	0.00089	0.0089	0.00119	0.0102	2.37	0.00199	0.00164	0.40	0.000004	0.000099	0.000030	0.000557	0.000050	0.000109	0.000030	0.038
2	0.0030	4.03	0.110	0.0027	1.26	0.00050	0.0090	0.00020	0.0057	1.16	0.00100	0.00035	0.09	0.000010	0.000100	0.000020	0.000161	0.000030	0.000080	0.000010	0.007
3	0.0010	1.22	0.067	0.0007	0.29	0.00020	0.0089	0.00010	0.0017	0.41	0.00099	0.00008	0.03	0.000004	0.000099	0.000020	0.000027	0.000040	0.000030	0.000001	0.007
4	0.0009	0.56	0.048	0.0002	0.11	0.00019	0.0084	0.00019	0.0007	0.18	0.00093	0.00007	0.01	0.000005	0.000093	0.000019	0.000011	0.000046	0.000028	0.000002	0.006
5	0.0009	0.78	0.042	0.0002	0.14	0.00009	0.0083	0.00009	0.0006	0.17	0.00093	0.00019	0.02	0.000006	0.000093	0.000019	0.000016	0.000028	0.000028	0.000002	0.004
6																					
7																					
8																					
9																					
10	0.0010	1.65	0.046	0.0002	0.22	0.00010	0.0086	0.00007	0.0007	0.20	0.00095	0.00006	0.03	0.000004	0.000095	0.000019	0.000019	0.000029	0.000029	0.000002	0.004
11																					
12																					
13																					
14																					
15	0.0009	1.70	0.040	0.0002	0.21	0.00009	0.0082	0.00009	0.0005	0.16	0.00091	0.00018	0.02	0.000004	0.000091	0.000018	0.000059	0.000036	0.000082	0.000002	0.005
16																					
17																					
18																					
19																					
20	0.0009	1.59	0.033	0.0002	0.17	0.00009	0.0082	0.00009	0.0003	0.14	0.00091	0.00005	0.02	0.000004	0.000091	0.000018	0.000024	0.000027	0.000027	0.000001	0.004
21																					
22																					
23																					
24																					
25	0.0009	1.57	0.042	0.0002	0.16	0.00009	0.0083	0.00005	0.0006	0.17	0.00092	0.00003	0.02	0.000004	0.000092	0.000018	0.000068	0.000028	0.000028	0.000001	0.003
26																					
27																					
28																					
29																					
30	0.0009	1.40	0.050	0.0002	0.15	0.00009	0.0083	0.00009	0.0004	0.11	0.00092	0.00002	0.02	0.000004	0.000092	0.000018	0.000008	0.000028	0.000055	0.000004	0.002
31																					
32																					
33																					
34																					
35	0.0009	1.10	0.035	0.0003	0.11	0.00009	0.0081	0.00009	0.0004	0.17	0.00090	0.00006	0.01	0.000004	0.000090	0.000018	0.000061	0.000036	0.000054	0.000002	0.002
36																					
37																					
38																					
39																					
40	0.0009	1.40	0.032	0.0002	0.12	0.00009	0.0081	0.00009	0.0004	0.12	0.00090	0.00001	0.02	0.000004	0.000090	0.000018	0.000061	0.000027	0.000027	0.000001	0.004
41																					

HC-4
ROM Sample B

Parameter	LIMS	pH	Alkalinity	Acidity	Conductivity	SO4	Hg	Al	As	Ag	Ba	Be	B	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Units			mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
0	10112-MAY12	7.66	14.79	1.02		117.30	0.00005	0.036	0.00036	0.000005	0.0041	0.000010	0.0037	0.000005	41.87	0.000250	0.000265	0.00026	0.00051	0.002	3.47
1	10113-MAY12	7.77	80.24	2.01		280.84	0.00010	0.037	0.00130	0.000010	0.0121	0.000020	0.0198	0.000010	111.33	0.000201	0.000662	0.00050	0.00130	0.003	12.74
2	10132-MAY12	7.98	49.10	2.00		44.09	0.00010	0.038	0.00050	0.000010	0.0027	0.000020	0.0073	0.000010	28.16	0.000010	0.000120	0.00050	0.00050	0.003	4.09
3	11119-MAY12	7.70	32.77	1.99		25.82	0.00010	0.044	0.00050	0.000010	0.0017	0.000020	0.0040	0.000010	17.18	0.000003	0.000079	0.00050	0.00050	0.005	2.43
4	10342-MAY12	7.56	15.90	1.87		9.35	0.00009	0.039	0.00019	0.000009	0.0007	0.000019	0.0014	0.000009	8.06	0.000003	0.000037	0.00047	0.00047	0.010	0.92
5	10013-JUN12	7.56	14.78	1.85		6.65	0.00009	0.044	0.00018	0.000009	0.0005	0.000018	0.0009	0.000009	5.69	0.000003	0.000018	0.00046	0.00046	0.006	0.70
6	10044-JUN12	7.17	8.33	1.85		9.26															
7	10086-JUN12	7.13	8.50	1.89		12.27															
8	10128-JUN12	6.67	7.55	1.89		14.16															
9	10001-JUL12	7.10	7.55	1.89		15.10															
10	10042-JUL12	7.07	7.74	1.93		18.37	0.00010	0.017	0.00019	0.000010	0.0007	0.000019	0.0025	0.000010	7.85	0.000025	0.000034	0.00048	0.00048	0.003	0.94
11	10081-JUL12	7.19	6.57	1.88		17.84															
12	10120-JUL12	7.01	6.51	1.86		13.95															
13	11048-JUL12	7.12	5.62	1.87		14.98															
14	10019-AUG12	7.05	6.52	1.86		16.76															
15	10062-AUG12	7.09	5.56	1.85		17.59	0.00009	0.018	0.00019	0.000009	0.0006	0.000019	0.0043	0.000009	7.12	0.000028	0.000037	0.00046	0.00046	0.003	0.77
16	10182-AUG12	7.10	6.54	1.87		16.81															
17	10391-AUG12	7.08	9.10	1.82		17.29															
18	10001-SEP12	7.06	8.15	1.81		19.93															
19	10045-SEP12	7.15	3.66	1.83		12.82															
20	10088-SEP12	7.15	6.55	1.87		11.22	0.00009	0.016	0.00019	0.000009	0.0005	0.000019	0.0013	0.000009	5.73	0.000028	0.000002	0.00047	0.00047	0.003	0.56
21	10132-SEP12	7.17	4.75	1.90		25.65															
22	10011-OCT12	7.52	4.63	1.85		13.88															
23	10052-OCT12	7.20	8.58	1.91		32.40															
24	10096-OCT12	7.31	4.73	1.89		15.14															
25	10207-OCT12	7.24	8.42	1.87		17.77	0.00009	0.019	0.00047	0.000009	0.0007	0.000019	0.0010	0.000009	7.09	0.000036	0.000024	0.00047	0.00047	0.003	0.72
26	10207-OCT13	6.86	3.62	1.81		3.17															
27	10207-OCT14	7.05	5.54	1.85		15.71															
28	10207-OCT15	6.74	10.11	1.84		20.22															
29	10207-OCT16	7.19	6.60	1.89		19.80															
30	10207-OCT17	7.00	9.20	1.84		38.64	0.00002	0.029	0.00046	0.000009	0.0016	0.000018	0.0024	0.000009	13.43	0.000056	0.000121	0.00046	0.00046	0.003	1.23
31	10207-OCT18	7.21	9.35	1.87		26.18															
32	10207-OCT19	7.12	11.99	1.84		32.27															
33	10207-OCT20	7.30	14.85	1.86		41.76															
34	10207-OCT21	7.56	15.83	1.86		34.45															
35	10207-OCT22	7.16	12.09	1.86		19.53	0.00001	0.026	0.00019	0.000009	0.0010	0.000019	0.0011	0.000009	8.64	0.000047	0.000026	0.00047	0.00047	0.003	1.04
36	10207-OCT23	7.31	26.97	1.86		27.90															
37	10207-OCT24	7.00	23.25	1.86		13.95															
38	10207-OCT25	7.37	23.25	1.86		23.25															
39	10207-OCT26	7.30	21.39	1.86		18.60															
40	10207-OCT27	7.24	46.50	1.86		33.48	0.00001	0.033	0.00028	0.000037	0.0030	0.000019	0.0046	0.000009	22.60	0.000128	0.000052	0.00047	0.00047	0.003	2.75
41	10207-OCT28	7.51	25.11	1.86		7.25															

HC-4
ROM Sample B

Parameter	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Si	Se	Sn	Sr	Th	Ti	Tl	U	V	W	Y	Zn
Units	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
0	0.0026	6.27	0.099	0.0019	3.79	0.00036	0.006	0.00020	0.0023	0.41	0.0005	0.00486	0.155	0.0000020	0.00005	0.000010	0.00018	0.000026	0.00002	0.0000051	0.0046
1	0.0100	18.35	0.305	0.0080	9.95	0.00090	0.009	0.00030	0.0117	2.74	0.0020	0.00281	0.423	0.0000040	0.00010	0.000030	0.00054	0.000060	0.00014	0.0000100	0.0160
2	0.0030	4.15	0.083	0.0028	1.18	0.00040	0.009	0.00010	0.0064	1.24	0.0010	0.00057	0.093	0.0000040	0.00010	0.000020	0.00011	0.000030	0.00010	0.0000100	0.0050
3	0.0020	2.44	0.070	0.0011	0.47	0.00030	0.009	0.00010	0.0033	0.74	0.0010	0.00014	0.056	0.0000040	0.00020	0.000020	0.00011	0.000060	0.00003	0.0000010	0.0040
4	0.0009	0.90	0.062	0.0002	0.13	0.00019	0.008	0.00019	0.0007	0.24	0.0009	0.00010	0.020	0.0000037	0.00009	0.000019	0.00002	0.000028	0.00003	0.0000028	0.0019
5	0.0009	0.56	0.034	0.0001	0.09	0.00009	0.008	0.00009	0.0005	0.16	0.0009	0.00010	0.012	0.0000037	0.00009	0.000018	0.00001	0.000028	0.00003	0.0000018	0.0009
6																					
7																					
8																					
9																					
10	0.0010	1.43	0.043	0.0002	0.18	0.00010	0.009	0.00006	0.0007	0.18	0.0010	0.00001	0.024	0.0000039	0.00010	0.000019	0.00002	0.000029	0.00003	0.0000010	0.0019
11																					
12																					
13																					
14																					
15	0.0009	1.37	0.036	0.0001	0.16	0.00009	0.008	0.00009	0.0005	0.15	0.0009	0.00008	0.020	0.0000037	0.00009	0.000019	0.00001	0.000028	0.00003	0.0000009	0.0019
16																					
17																					
18																					
19																					
20	0.0009	1.07	0.037	0.0001	0.12	0.00009	0.008	0.00009	0.0003	0.13	0.0009	0.00001	0.016	0.0000037	0.00009	0.000019	0.00002	0.000028	0.00003	0.0000009	0.0028
21																					
22																					
23																					
24																					
25	0.0009	1.55	0.041	0.0002	0.16	0.00009	0.008	0.00008	0.0007	0.18	0.0009	0.00004	0.020	0.0000037	0.00019	0.000019	0.00005	0.000028	0.00003	0.0000009	0.0019
26																					
27																					
28																					
29																					
30	0.0009	3.62	0.051	0.0006	0.36	0.00009	0.008	0.00009	0.0007	0.27	0.0009	0.00004	0.040	0.0000037	0.00009	0.000018	0.00003	0.000037	0.00005	0.0000018	0.0028
31																					
32																					
33																					
34																					
35	0.0009	1.80	0.037	0.0004	0.17	0.00019	0.008	0.00019	0.0008	0.38	0.0009	0.00009	0.024	0.0000037	0.00009	0.000019	0.00003	0.000037	0.00005	0.0000019	0.0047
36																					
37																					
38																					
39																					
40	0.0037	5.07	0.113	0.0010	0.45	0.00019	0.008	0.00004	0.0030	1.26	0.0009	0.00020	0.066	0.0000037	0.00009	0.000019	0.00009	0.000028	0.00005	0.0000056	0.0093
41																					

HC-5
Starter Pit Sample A

Parameter	LIMS	pH	Acidity	Alkalinity	Conductivity	SO4	Hg	Ag	Al	As	Ba	Be	B	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Units			mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
0	10555-MAY12	7.61	1.95	13.65		24.38	0.00010	0.000010	0.049	0.00078	0.0016	0.000020	0.0027	0.000010	11.31	0.000003	0.00014	0.00049	0.00049	0.0088	1.82
1	10154-JUN12	7.42	1.87	9.35		7.67	0.00009	0.000009	0.028	0.00037	0.0003	0.000019	0.0010	0.000009	5.44	0.000003	0.00004	0.00047	0.00047	0.0075	0.72
2	10067-JUN12	7.58	1.86	6.50		9.29	0.00009	0.000009	0.037	0.00019	0.0003	0.000019	0.0006	0.000009	5.66	0.000003	0.00003	0.00046	0.00056	0.0074	0.77
3	10109-JUN12	7.11	1.90	4.75		13.29	0.00009	0.000009	0.028	0.00019	0.0005	0.000019	0.0008	0.000009	5.91	0.000003	0.00006	0.00047	0.00057	0.0057	0.86
4	10151-JUN12	6.81	1.94	4.86		19.42	0.00010	0.000010	0.010	0.00019	0.0004	0.000019	0.0013	0.000010	7.48	0.000003	0.00004	0.00049	0.00049	0.0039	1.05
5	10021-JUL12	7.03	1.84	8.29		11.97	0.00009	0.000009	0.046	0.00018	0.0004	0.000018	0.0006	0.000009	7.30	0.000003	0.00002	0.00046	0.00064	0.0083	0.72
6	10060-JUL12	7.19	1.87	7.47		17.75															
7	10099-JUL12	7.36	1.87	7.50		17.80															
8	10138-JUL12	6.84	1.85	6.46		14.77															
9	11066-JUL12	6.90	1.84	7.37		13.82															
10	10040-AUG12	7.17	1.87	5.60		18.68	0.00009	0.000009	0.009	0.00019	0.0004	0.000019	0.0165	0.000009	7.92	0.000043	0.00003	0.00047	0.00047	0.0037	0.85
11	10083-AUG12	7.13	1.84	4.60		15.62															
12	10203-AUG12	7.06	1.88	4.69		15.95															
13	10412-AUG12	7.29	1.85	4.63		14.80															
14	10021-SEP12	7.10	1.99	7.95		21.87															
15	10065-SEP12	7.08	1.88	5.65		13.19	0.00009	0.000009	0.009	0.00019	0.0005	0.000019	0.0007	0.000009	5.99	0.000063	0.00004	0.00047	0.00047	0.0028	0.67
16	10108-SEP12	6.98	1.87	4.69		16.87															
17	10152-SEP12	6.73	1.89	7.58		22.73															
18	10007-OCT12	7.17	1.86	4.66		17.69															
19	10048-OCT12	6.80	1.89	6.63		16.10															
20	10092-OCT12	7.16	1.89	4.73		16.07	0.00009	0.000009	0.009	0.00019	0.0003	0.000019	0.0009	0.000009	6.31	0.000077	0.00003	0.00047	0.00047	0.0028	0.61
21	10222-OCT12	7.19	1.88	5.65		20.72															
22	11193-OCT12	7.04	1.89	3.78		8.04															
23	10007-NOV12	6.83	1.89	4.73		17.97															
24	10049-NOV12	6.81	1.89	5.68		18.94															
25	11039-NOV12	7.11	1.93	9.63		18.30	0.00010	0.000019	0.029	0.00019	0.0008	0.000019	0.0006	0.000010	7.90	0.000156	0.00003	0.00048	0.00048	0.0029	0.66
26	11039-NOV13	6.77	1.94	4.84		16.46															
27	11039-NOV14	7.07	1.99	7.97		21.91															
28	11039-NOV15	6.84	1.94	4.86		19.42															
29	11039-NOV16	6.92	1.93	5.80		17.39															
30	11039-NOV17	7.07	1.94	5.81		12.60	0.00001	0.000039	0.010	0.00019	0.0025	0.000019	0.0058	0.000010	5.38	0.000138	0.00006	0.00048	0.00048	0.0029	0.39

HC-5
Starter Pit Sample A

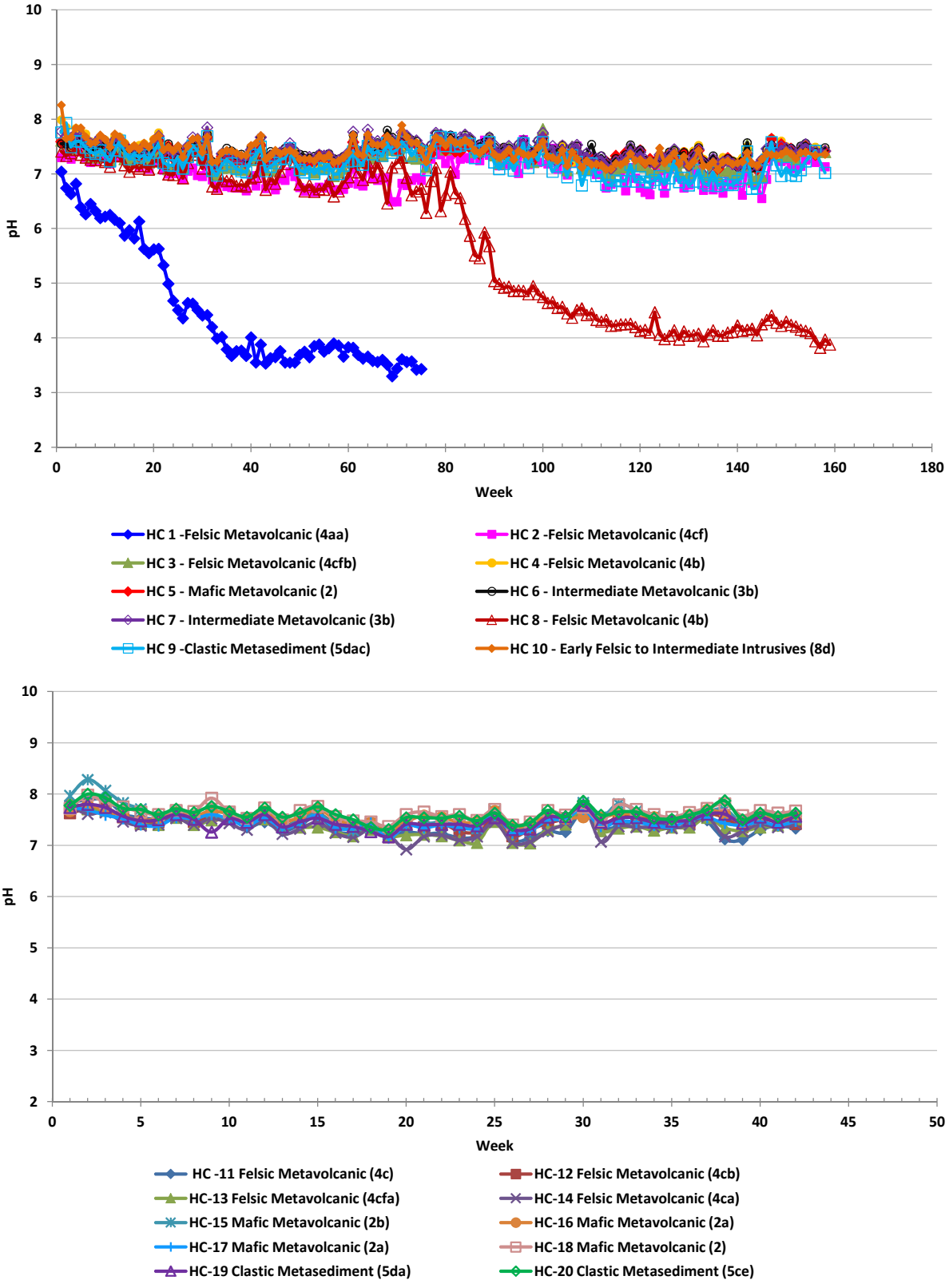
Parameter	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti	Tl	Th	U	V	W	Y	Zn
Units	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
0	0.0010	0.89	0.048	0.00221	2.94	0.00029	0.0088	0.00035	0.0033	0.0010	0.25	0.00099	0.027	0.00020	0.000020	0.000004	0.000036	0.000029	0.0098	0.0000029	0.0020
1	0.0009	0.34	0.038	0.00051	0.73	0.00131	0.0084	0.00033	0.0007	0.0009	0.10	0.00099	0.010	0.00009	0.000019	0.000007	0.000022	0.000028	0.0094	0.0000047	0.0019
2	0.0009	0.46	0.037	0.00037	0.67	0.00009	0.0084	0.00031	0.0007	0.0009	0.10	0.00041	0.011	0.00009	0.000019	0.000004	0.000017	0.000028	0.0093	0.0000019	0.0019
3	0.0009	0.60	0.034	0.00043	0.74	0.00085	0.0085	0.00024	0.0007	0.0009	0.09	0.00019	0.014	0.00009	0.000019	0.000004	0.000002	0.000028	0.0095	0.0000009	0.0019
4	0.0010	0.93	0.034	0.00047	0.93	0.00010	0.0087	0.00022	0.0010	0.0010	0.13	0.00011	0.020	0.00010	0.000019	0.000004	0.000009	0.000029	0.0097	0.0000029	0.0019
5	0.0009	0.57	0.042	0.00022	0.52	0.00009	0.0083	0.00039	0.0006	0.0009	0.12	0.00013	0.015	0.00009	0.000018	0.000004	0.000004	0.000028	0.0092	0.0000018	0.0018
6																					
7																					
8																					
9																					
10	0.0009	1.18	0.040	0.00052	0.63	0.00019	0.0084	0.00023	0.0007	0.0009	0.13	0.00021	0.020	0.00019	0.000019	0.000004	0.000035	0.000065	0.0093	0.0000009	0.0019
11																					
12																					
13																					
14																					
15	0.0009	0.97	0.030	0.00034	0.38	0.00009	0.0085	0.00023	0.0002	0.0009	0.09	0.00020	0.016	0.00009	0.000019	0.000004	0.000010	0.000028	0.0094	0.0000019	0.0047
16																					
17																					
18																					
19																					
20	0.0009	1.13	0.035	0.00040	0.31	0.00009	0.0085	0.00029	0.0004	0.0009	0.12	0.00020	0.016	0.00009	0.000019	0.000004	0.000004	0.000028	0.0095	0.0000009	0.0038
21																					
22																					
23																					
24																					
25	0.0010	1.32	0.049	0.00049	0.32	0.00010	0.0087	0.00029	0.0007	0.0010	0.14	0.00018	0.020	0.00010	0.000019	0.000004	0.000045	0.000029	0.0096	0.0000010	0.0048
26																					
27																					
28																					
29																					
30	0.0010	0.81	0.035	0.00034	0.18	0.00010	0.0087	0.00021	0.0004	0.0010	0.07	0.00017	0.013	0.00010	0.000019	0.000004	0.000005	0.000029	0.0097	0.0000010	0.0078

HC-6
Starter Pit Sample B

Parameter	LIMS	pH	Acidity	Alkalinity	Conductivity	SO4	Hg	Ag	Al	As	Ba	Be	B	Bi	Ca	Cd	Co	Cr	Cu	Fe	K
Units			mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
0	10555-MAY12	7.72	1.93	30.85		82.90	0.00010	0.000010	0.058	0.00135	0.00201	0.000019	0.0107	0.000010	29.40	0.000003	0.00035	0.00048	0.0011	0.0067	5.70
1	10154-JUN12	7.50	1.82	15.50		3.47	0.00009	0.000009	0.046	0.00055	0.00027	0.000018	0.0008	0.000009	4.90	0.000003	0.00002	0.00046	0.0005	0.0100	0.50
2	10067-JUN12	7.22	1.90	7.60		7.22	0.00010	0.000010	0.038	0.00019	0.00035	0.000019	0.0006	0.000010	5.52	0.000003	0.00002	0.00048	0.0005	0.0067	0.66
3	10109-JUN12	7.08	1.93	6.75		10.60	0.00010	0.000010	0.039	0.00029	0.00038	0.000019	0.0008	0.000010	5.89	0.000003	0.00005	0.00048	0.0005	0.0048	0.70
4	10151-JUN12	7.04	1.88	5.65		11.29	0.00009	0.000009	0.019	0.00019	0.00033	0.000019	0.0011	0.000009	5.79	0.000003	0.00028	0.00047	0.0005	0.0056	0.74
5	10021-JUL12	6.99	1.87	5.62		12.18	0.00009	0.000009	0.028	0.00019	0.00038	0.000019	0.0007	0.000009	6.60	0.000003	0.00002	0.00047	0.0005	0.0094	0.72
6	10060-JUL12	6.97	1.87	5.62		16.85															
7	10099-JUL12	7.34	1.87	6.55		15.91															
8	10138-JUL12	7.53	1.87	5.61		13.09															
9	11066-JUL12	7.04	1.84	4.61		12.91															
10	10040-AUG12	7.13	1.86	5.57		15.79	0.00009	0.000009	0.009	0.00019	0.00035	0.000019	0.0067	0.000009	6.92	0.000047	0.00004	0.00046	0.0005	0.0037	0.70
11	10083-AUG12	7.22	1.85	5.54		14.78															
12	10203-AUG12	7.19	1.86	5.57		15.78															
13	10412-AUG12	6.95	1.87	6.54		15.88															
14	10021-SEP12	7.17	1.97	8.85		28.51															
15	10065-SEP12	7.13	1.82	6.36		20.00	0.00009	0.000009	0.009	0.00018	0.00078	0.000018	0.0008	0.000009	9.18	0.000093	0.00004	0.00045	0.0005	0.0036	0.86
16	10108-SEP12	7.07	1.86	5.58		18.60															
17	10152-SEP12	6.85	1.88	6.57		21.57															
18	10007-OCT12	6.98	1.89	3.77		16.97															
19	10048-OCT12	7.05	1.89	6.62		14.18															
20	10092-OCT12	7.11	1.90	5.69		17.06	0.00009	0.000009	0.009	0.00019	0.00040	0.000019	0.0009	0.000009	7.11	0.000102	0.00003	0.00047	0.0005	0.0038	0.57
21	10222-OCT12	7.15	1.89	5.66		18.86															
22	11193-OCT12	6.89	1.91	2.87		10.52															
23	10007-NOV12	6.99	1.89	3.78		16.05															
24	10049-NOV12	6.83	1.89	6.62		18.90															
25	11039-NOV12	7.15	1.92	6.71		22.03	0.00010	0.000010	0.010	0.00019	0.00059	0.000019	0.0006	0.000010	9.06	0.000169	0.00002	0.00048	0.0005	0.0029	0.67
26	11039-NOV13	6.84	1.91	4.78		18.15															
27	11039-NOV14	6.95	1.96	6.86		27.44															
28	11039-NOV15	6.95	1.94	5.82		22.31															
29	11039-NOV16	6.87	1.92	5.77		17.30															
30	11039-NOV17	7.17	1.92	7.68		17.28	0.00001	0.000029	0.010	0.00019	0.00041	0.000019	0.0012	0.000010	5.94	0.000158	0.00006	0.00048	0.0005	0.0029	0.39

HC-6
Starter Pit Sample B

Parameter	Li	Mg	Mn	Mo	Na	Ni	P	Pb	Sb	Se	Si	Sn	Sr	Ti	Tl	Th	U	V	W	Y	Zn
Units	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk	mg/kg/wk
0	0.0019	3.32	0.051	0.0087	10.12	0.00067	0.0087	0.00033	0.0140	0.0010	0.85	0.0069	0.091	0.00019	0.000019	0.000004	0.000198	0.000048	0.0096	0.0000058	0.0019
1	0.0009	0.22	0.035	0.0003	0.19	0.00009	0.0082	0.00047	0.0007	0.0009	0.13	0.0033	0.007	0.00009	0.000018	0.000005	0.000016	0.000027	0.0091	0.0000027	0.0018
2	0.0010	0.41	0.043	0.0003	0.21	0.00010	0.0086	0.00036	0.0009	0.0010	0.13	0.0014	0.010	0.00010	0.000019	0.000004	0.000039	0.000029	0.0095	0.0000029	0.0019
3	0.0010	0.55	0.047	0.0003	0.24	0.00067	0.0087	0.00026	0.0007	0.0010	0.13	0.0006	0.012	0.00010	0.000019	0.000004	0.000004	0.000029	0.0096	0.0000010	0.0019
4	0.0009	0.64	0.036	0.0007	0.24	0.00028	0.0085	0.00036	0.0008	0.0009	0.13	0.0003	0.013	0.00009	0.000019	0.000004	0.000007	0.000028	0.0094	0.0000028	0.0019
5	0.0009	0.73	0.041	0.0002	0.26	0.00009	0.0084	0.00032	0.0007	0.0009	0.12	0.0002	0.015	0.00009	0.000019	0.000004	0.000005	0.000028	0.0094	0.0000037	0.0028
6																					
7																					
8																					
9																					
10	0.0009	0.97	0.039	0.0004	0.24	0.00009	0.0084	0.00020	0.0007	0.0009	0.12	0.0001	0.017	0.00009	0.000019	0.000004	0.000007	0.000046	0.0093	0.0000009	0.0037
11																					
12																					
13																					
14																					
15	0.0009	1.34	0.052	0.0005	0.28	0.00009	0.0082	0.00025	0.0003	0.0009	0.15	0.0002	0.022	0.00009	0.000018	0.000008	0.000008	0.000027	0.0091	0.0000009	0.0045
16																					
17																					
18																					
19																					
20	0.0009	1.04	0.047	0.0004	0.18	0.00009	0.0085	0.00029	0.0005	0.0009	0.12	0.0001	0.017	0.00009	0.000019	0.000004	0.000005	0.000028	0.0095	0.0000009	0.0038
21																					
22																					
23																					
24																					
25	0.0010	1.36	0.052	0.0005	0.23	0.00010	0.0086	0.00102	0.0007	0.0010	0.14	0.0001	0.022	0.00010	0.000019	0.000004	0.000005	0.000029	0.0096	0.0000029	0.0067
26																					
27																					
28																					
29																					
30	0.0010	0.92	0.042	0.0004	0.14	0.00010	0.0086	0.00025	0.0004	0.0010	0.09	0.0002	0.014	0.00010	0.000019	0.000004	0.000049	0.000029	0.0096	0.0000010	0.0058

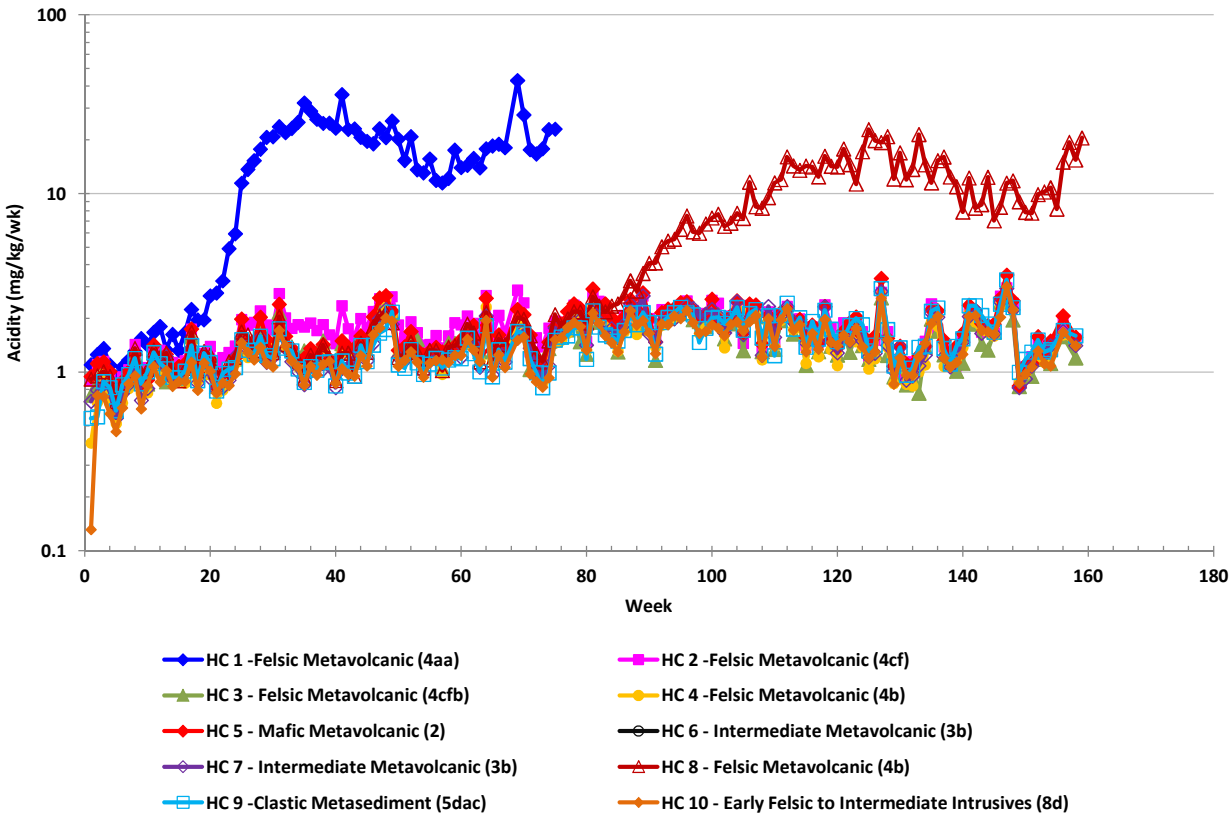


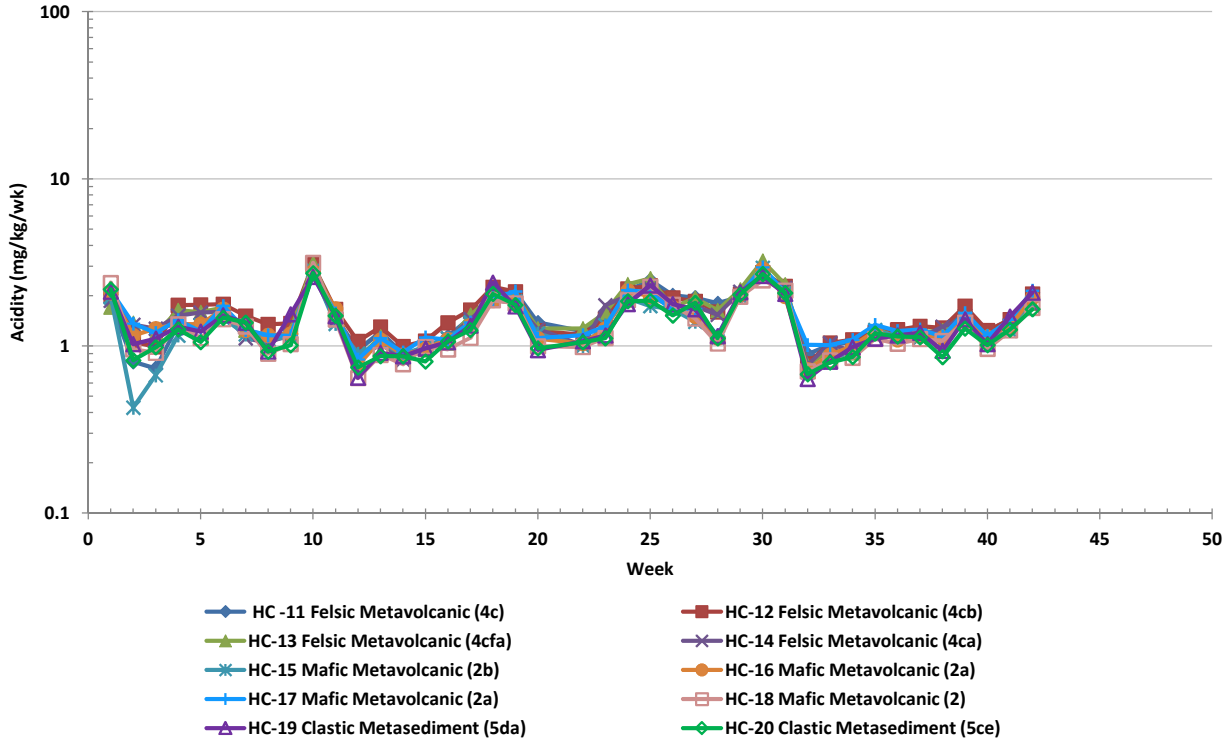
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Rainy River Gold Project

pH of Mine Rock Humidity Cell Leachate

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-1





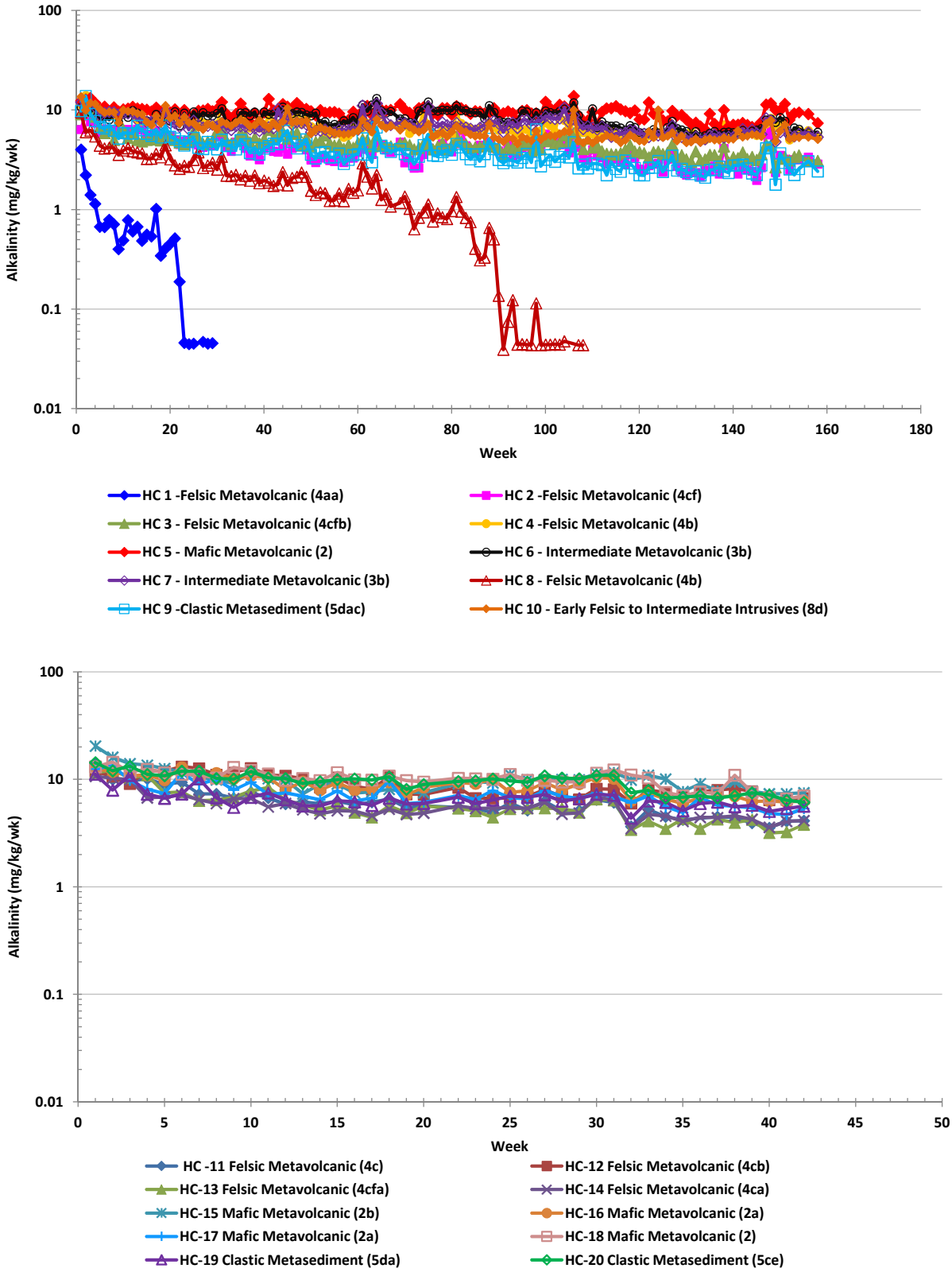
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Rainy River Gold Project

Mine Rock Humidity Cell Acidity Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-2



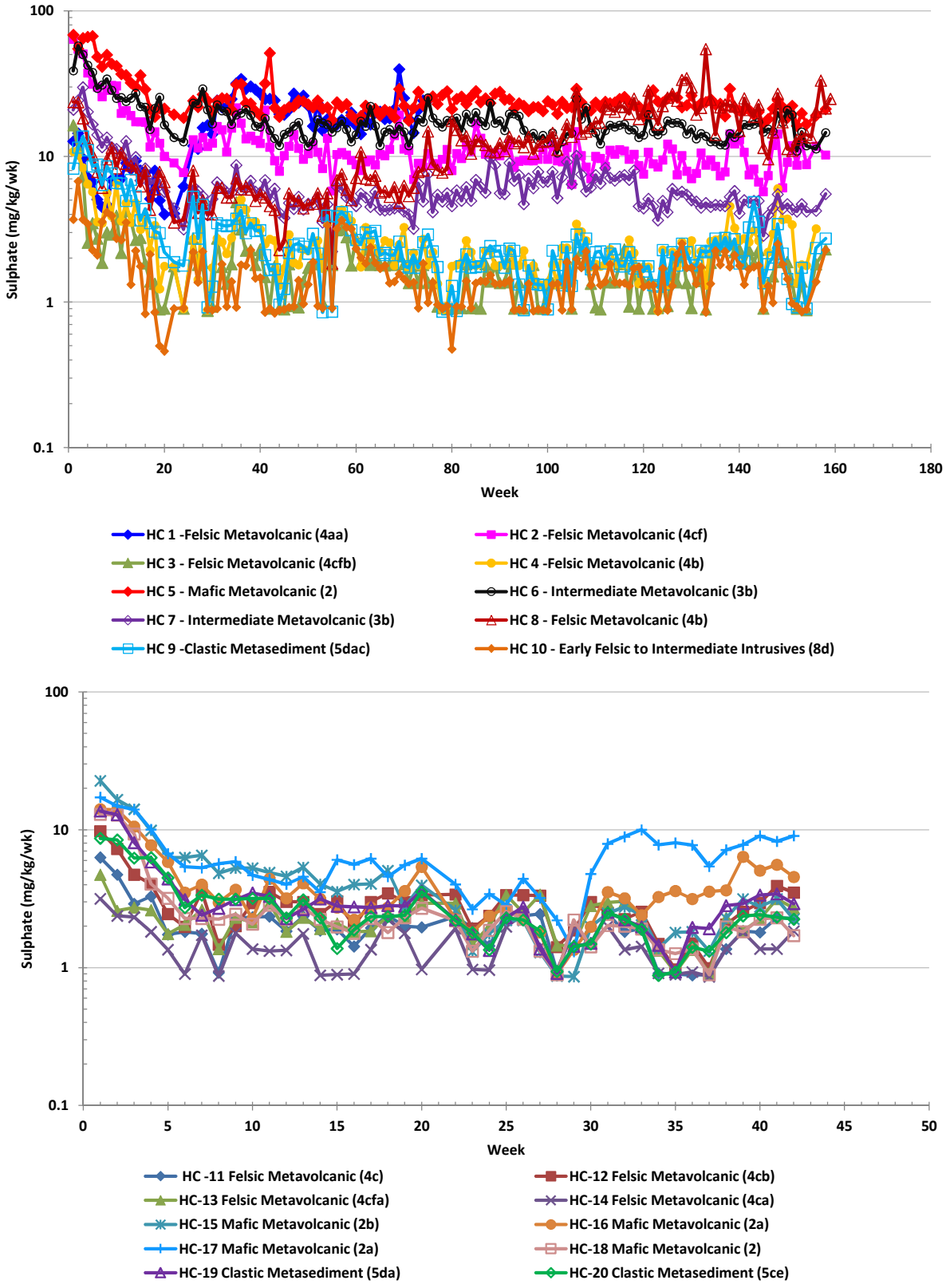
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Rainy River Gold Project

Mine Rock Humidity Cell Alkalinity Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-3



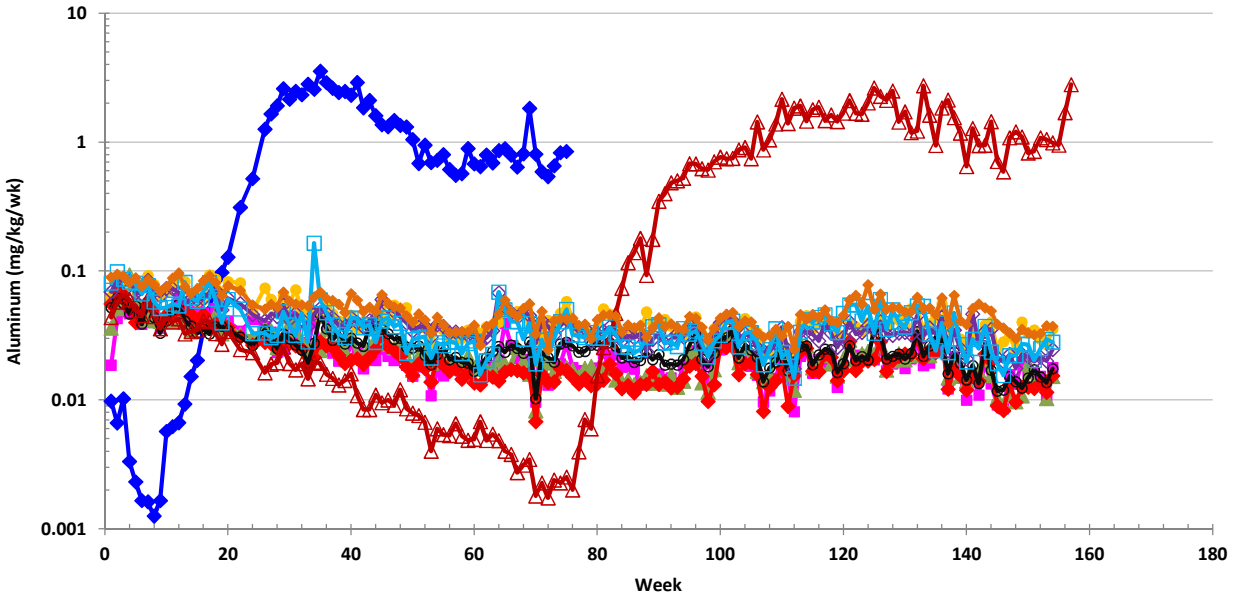
RAINYRIVER

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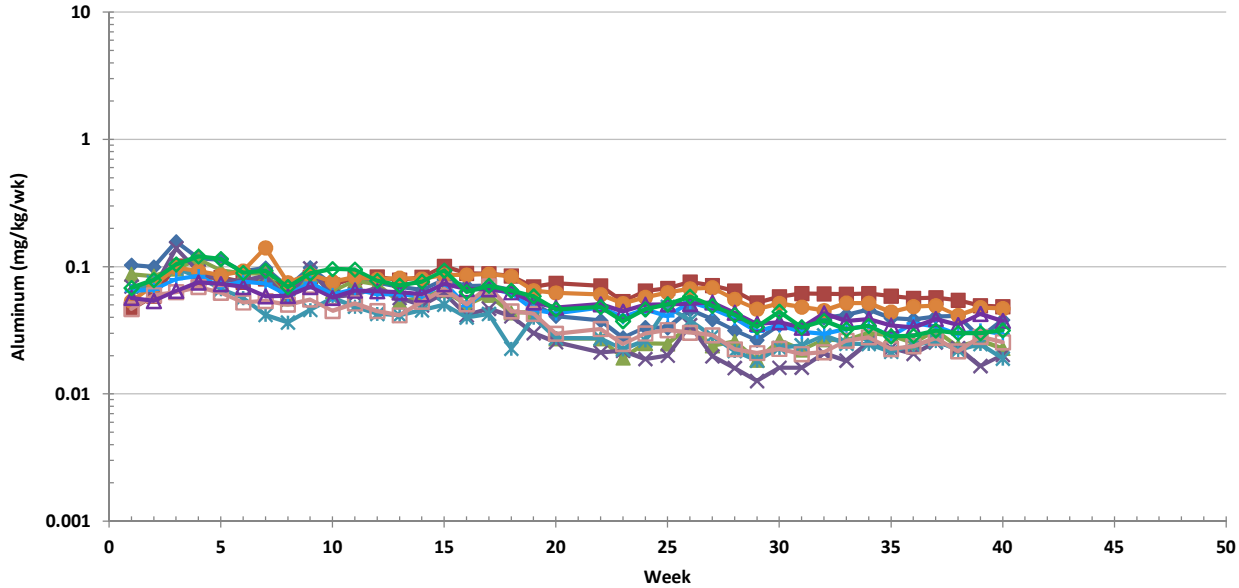
Rainy River Gold Project

Mine Rock Humidity Cell Sulphate Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-4



HC 1 -Felsic Metavolcanic (4aa)
HC 2 -Felsic Metavolcanic (4cf)
HC 3 - Felsic Metavolcanic (4cfb)
HC 4 -Felsic Metavolcanic (4b)
HC 5 - Mafic Metavolcanic (2)
HC 6 - Intermediate Metavolcanic (3b)
HC 7 - Intermediate Metavolcanic (3b)
HC 8 - Felsic Metavolcanic (4b)
HC 9 -Clastic Metasediment (5dac)
HC 10 - Early Felsic to Intermediate Intrusives (8d)



HC -11 Felsic Metavolcanic (4c)
HC-12 Felsic Metavolcanic (4cb)
HC-13 Felsic Metavolcanic (4cfa)
HC-14 Felsic Metavolcanic (4ca)
HC-15 Mafic Metavolcanic (2b)
HC-16 Mafic Metavolcanic (2a)
HC-17 Mafic Metavolcanic (2a)
HC-18 Mafic Metavolcanic (2)
HC-19 Clastic Metasediment (5da)
HC-20 Clastic Metasediment (5ce)

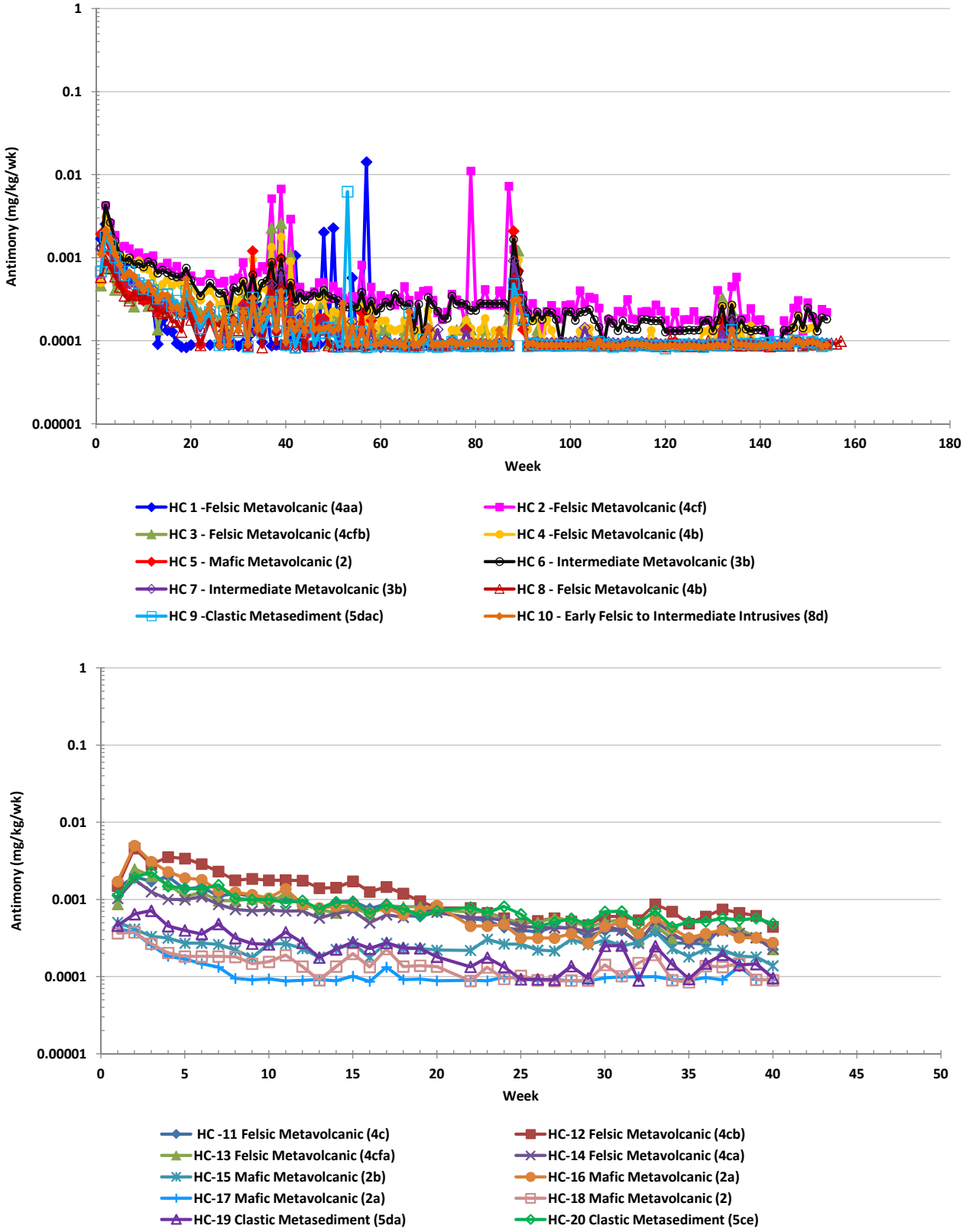
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Rainy River Gold Project

Mine Rock Humidity Cell Aluminum Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-5



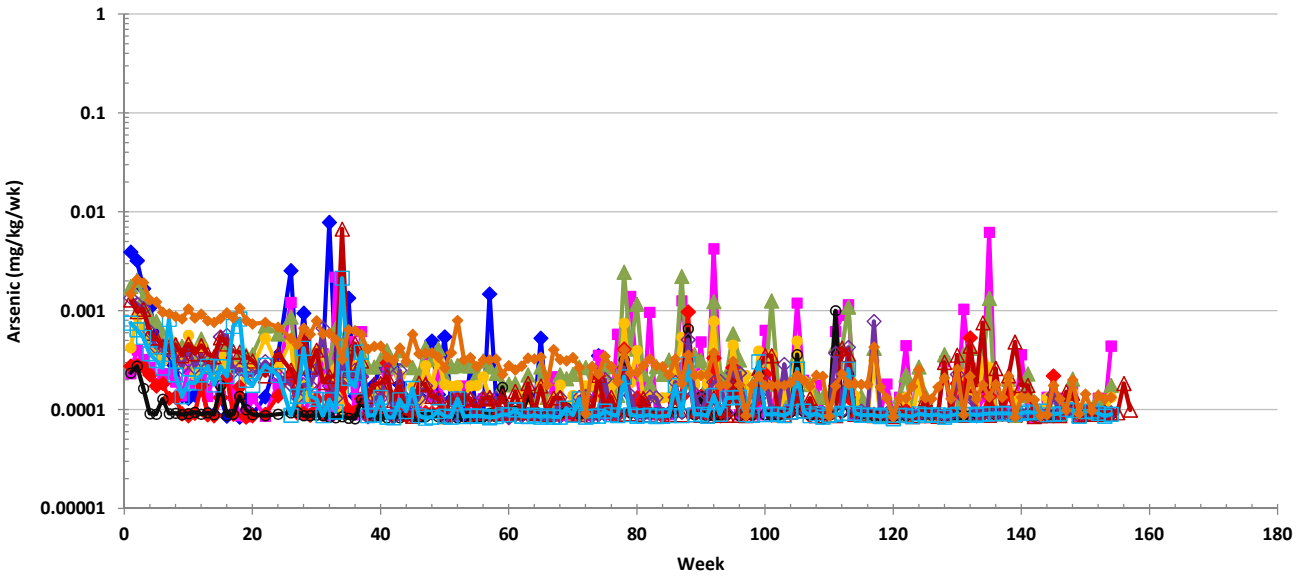
RAINYRIVER

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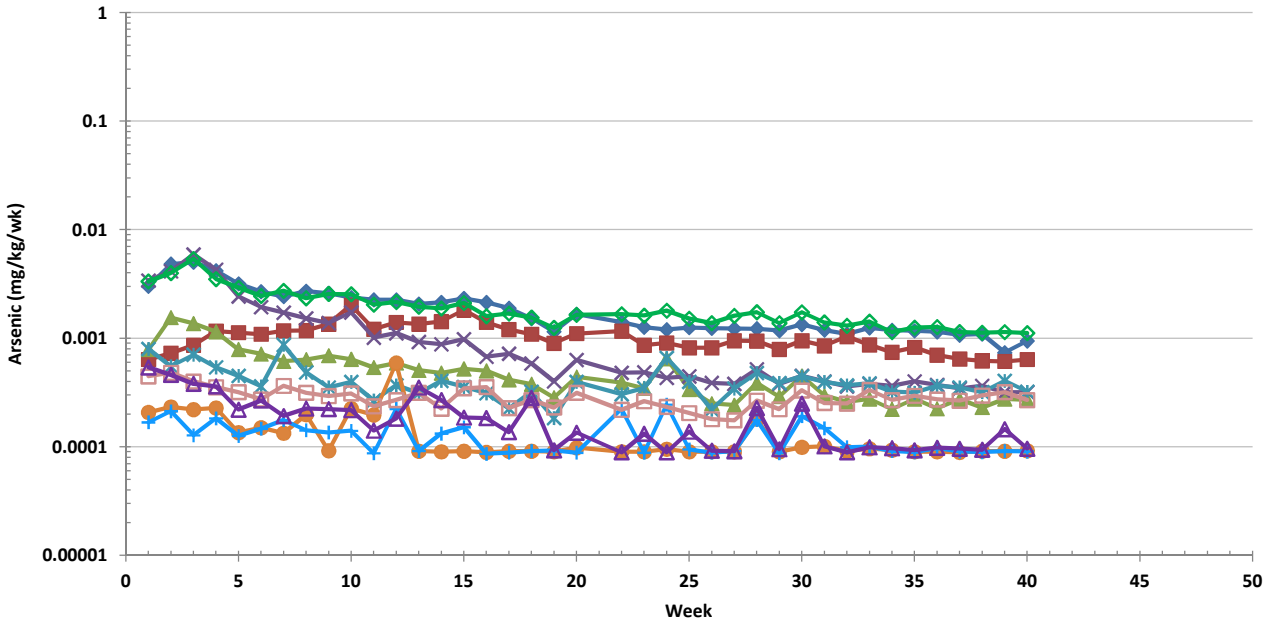
Rainy River Gold Project

Mine Rock Humidity Cell Antimony Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-6



HC 1 -Felsic Metavolcanic (4aa)
HC 2 -Felsic Metavolcanic (4cf)
HC 3 - Felsic Metavolcanic (4cfb)
HC 4 -Felsic Metavolcanic (4b)
HC 5 - Mafic Metavolcanic (2)
HC 6 - Intermediate Metavolcanic (3b)
HC 7 - Intermediate Metavolcanic (3b)
HC 8 - Felsic Metavolcanic (4b)
HC 9 -Clastic Metasediment (5dac)
HC 10 - Early Felsic to Intermediate Intrusives (8d)



HC -11 Felsic Metavolcanic (4c)
HC-12 Felsic Metavolcanic (4cb)
HC-13 Felsic Metavolcanic (4cfa)
HC-14 Felsic Metavolcanic (4ca)
HC-15 Mafic Metavolcanic (2b)
HC-16 Mafic Metavolcanic (2a)
HC-17 Mafic Metavolcanic (2a)
HC-18 Mafic Metavolcanic (2)
HC-19 Clastic Metasediment (5da)
HC-20 Clastic Metasediment (5ce)

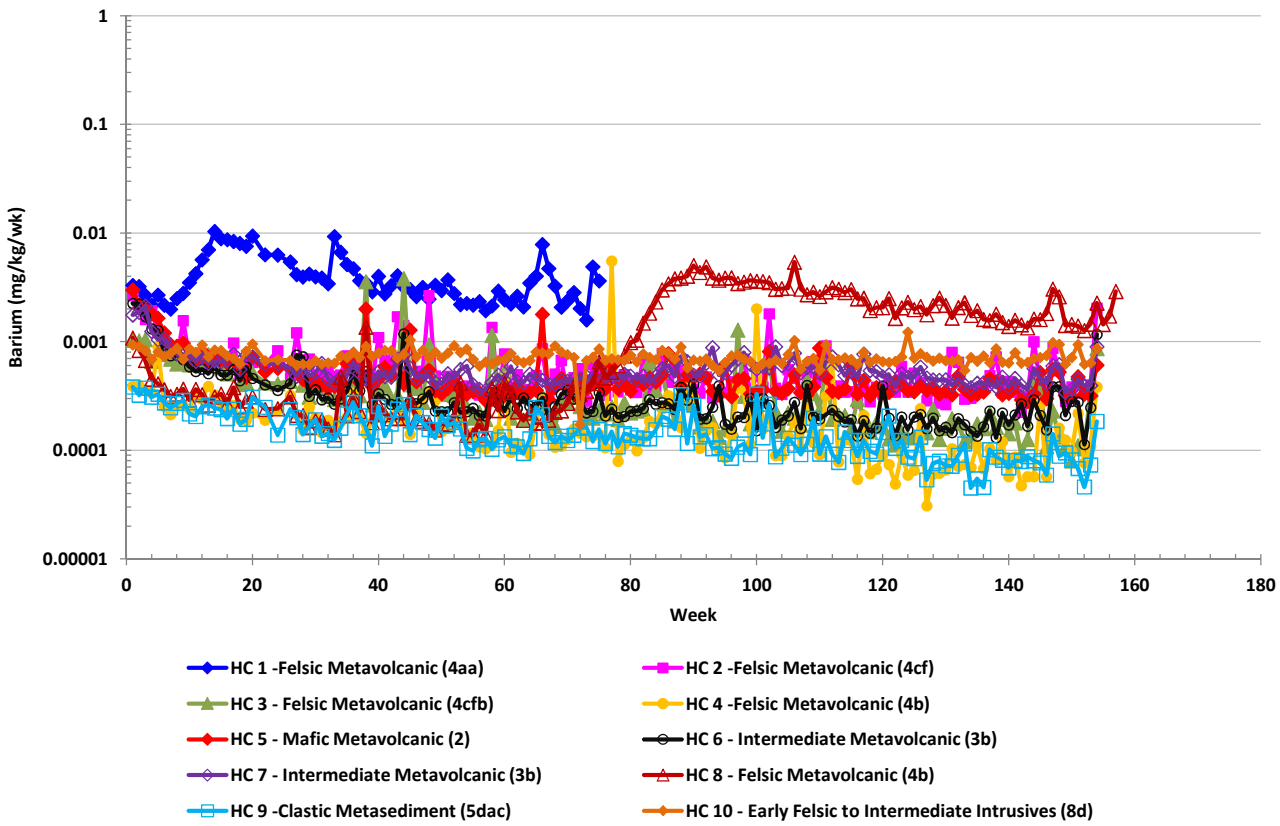
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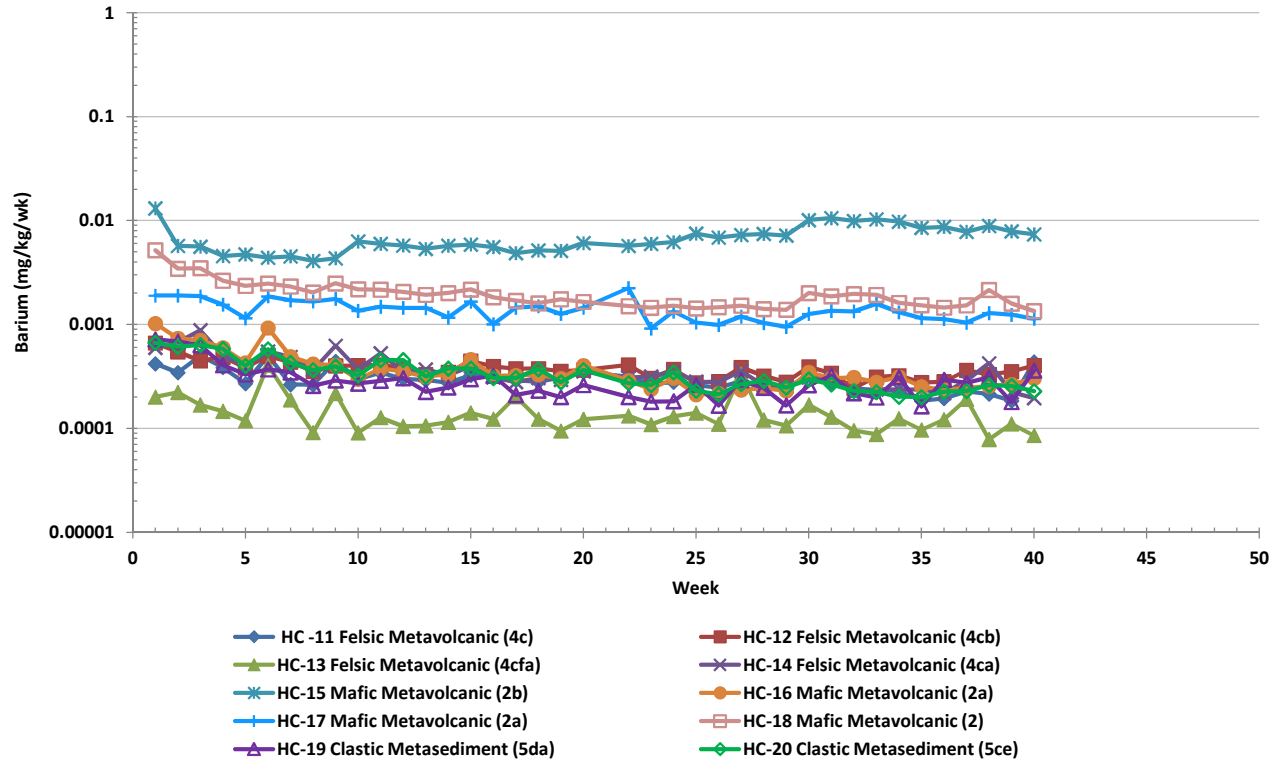
amec

Rainy River Gold Project

Mine Rock Humidity Cell Arsenic Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-7





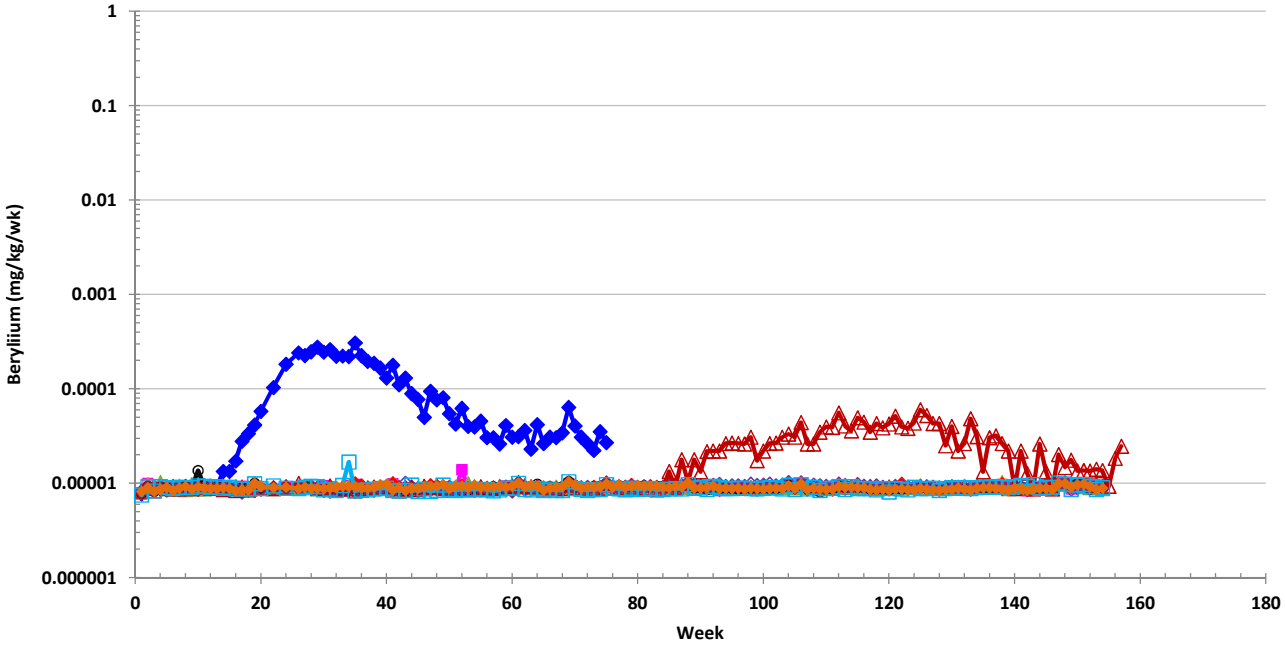
RAINYRIVER

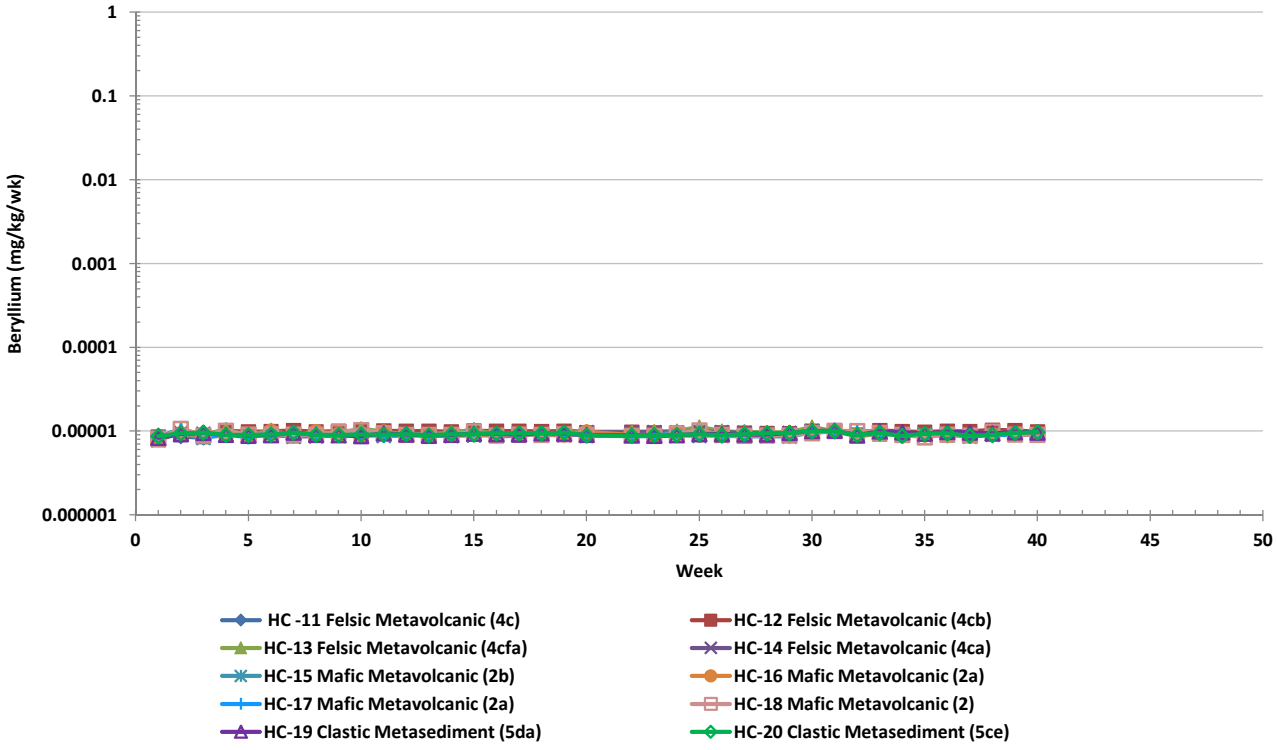
amec

Rainy River Gold Project

Mine Rock Humidity Cell Barium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-8





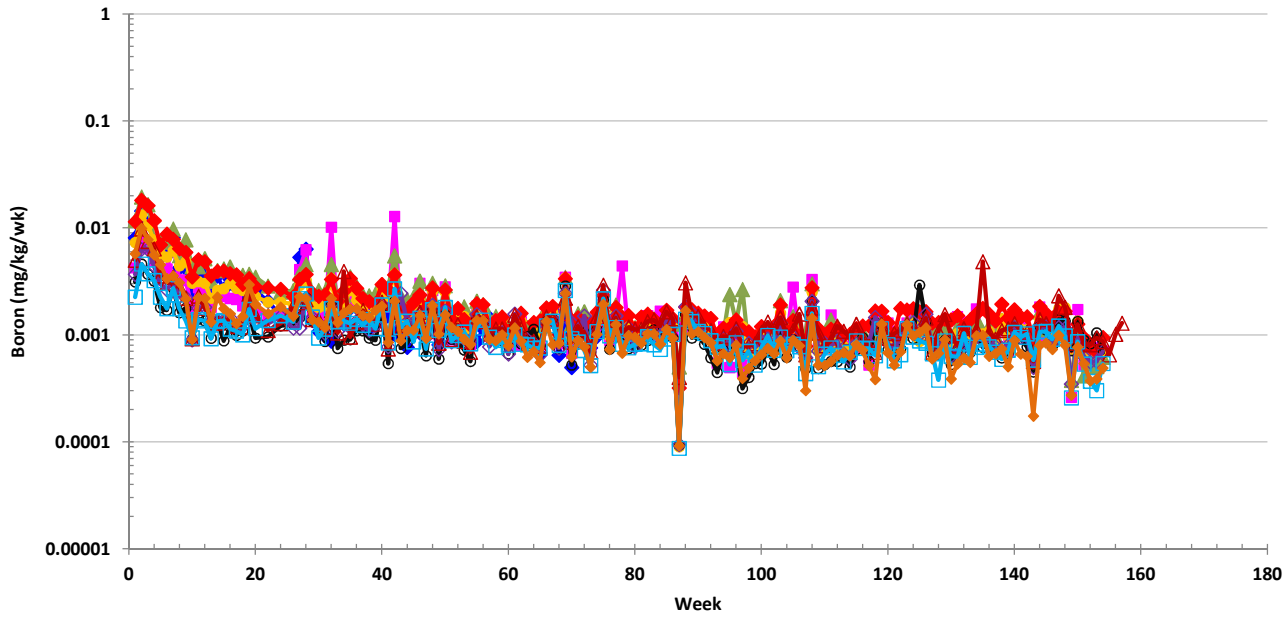
RAINYRIVER

amec

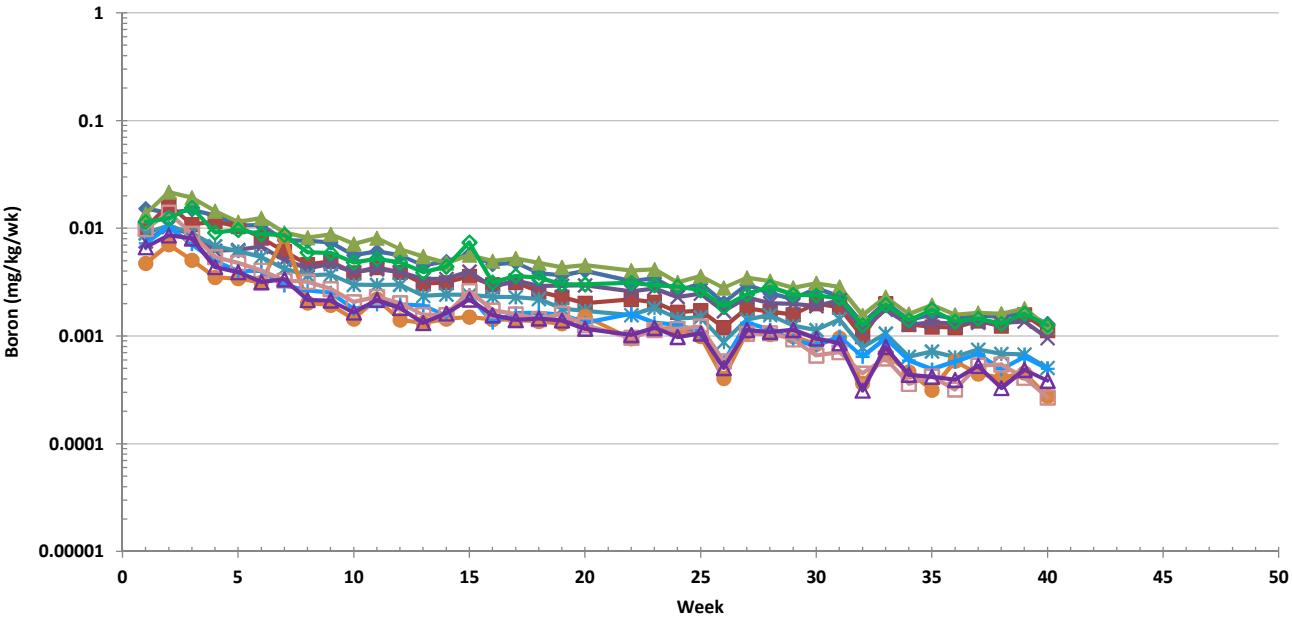
Rainy River Gold Project

Mine Rock Humidity Cell Beryllium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-9



HC 1 -Felsic Metavolcanic (4aa)
HC 2 -Felsic Metavolcanic (4cf)
HC 3 - Felsic Metavolcanic (4cfb)
HC 4 -Felsic Metavolcanic (4b)
HC 5 - Mafic Metavolcanic (2)
HC 6 - Intermediate Metavolcanic (3b)
HC 7 - Intermediate Metavolcanic (3b)
HC 8 - Felsic Metavolcanic (4b)
HC 9 -Clastic Metasediment (5dac)
HC 10 - Early Felsic to Intermediate Intrusives (8d)



HC -11 Felsic Metavolcanic (4c)
HC-12 Felsic Metavolcanic (4cb)
HC-13 Felsic Metavolcanic (4cfa)
HC-14 Felsic Metavolcanic (4ca)
HC-15 Mafic Metavolcanic (2b)
HC-16 Mafic Metavolcanic (2a)
HC-17 Mafic Metavolcanic (2a)
HC-18 Mafic Metavolcanic (2)
HC-19 Clastic Metasediment (5da)
HC-20 Clastic Metasediment (5ce)

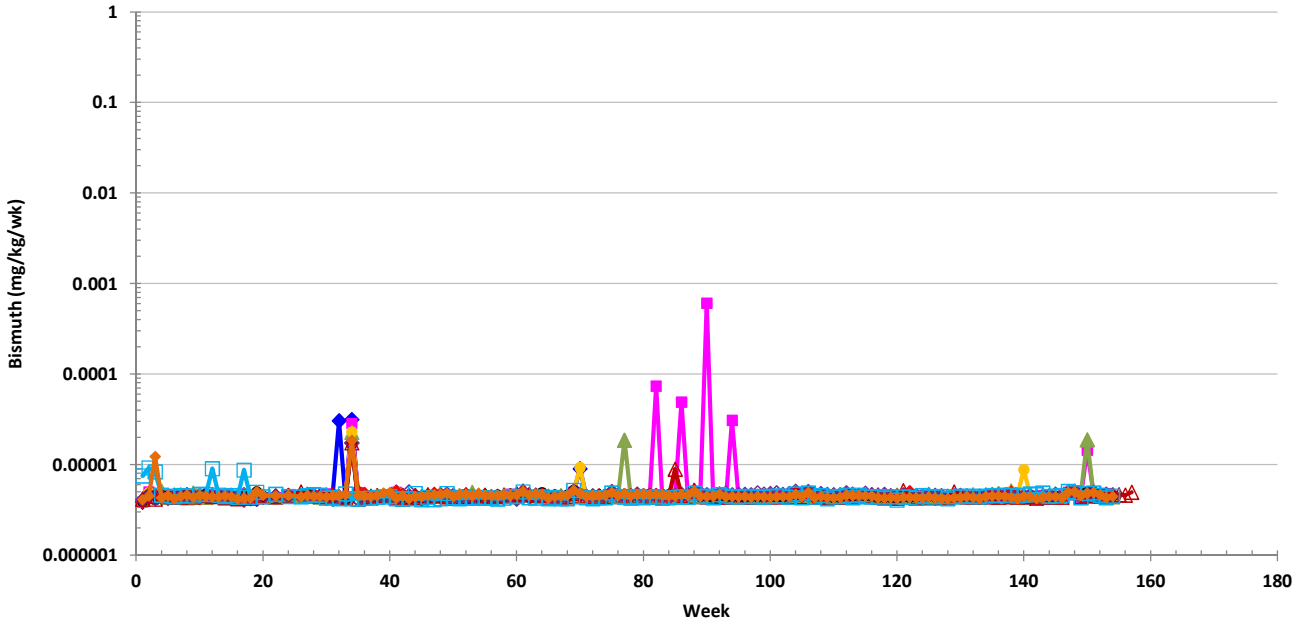
RAINYRIVER

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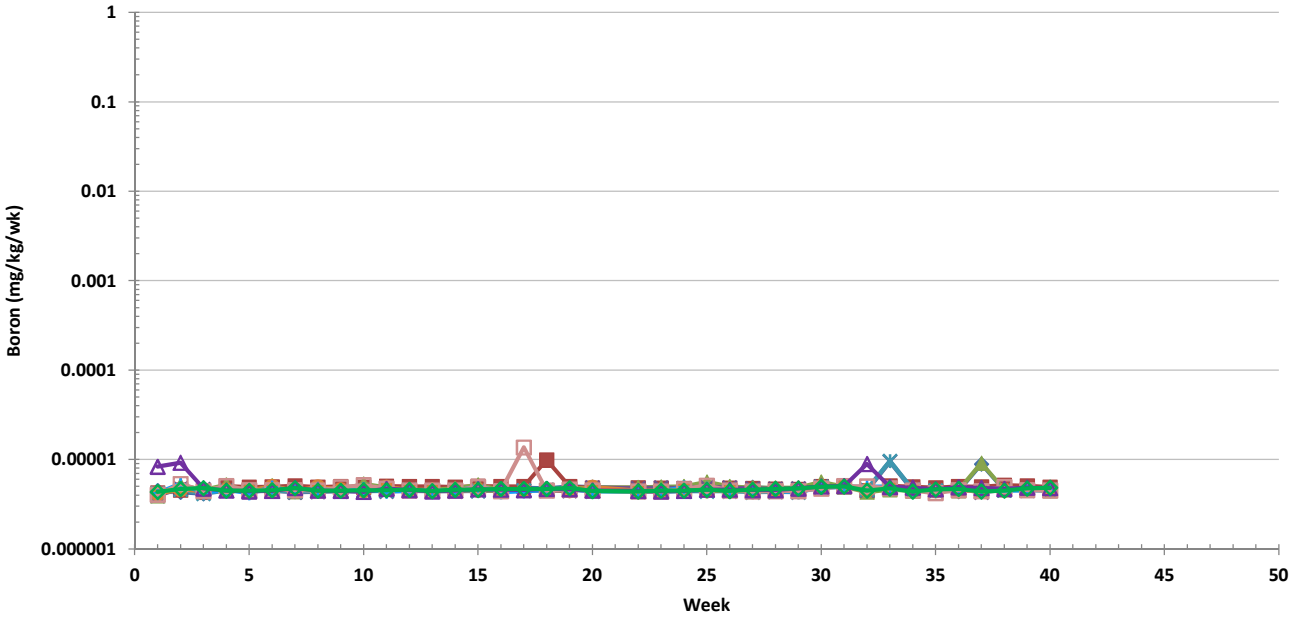
Rainy River Gold Project

Mine Rock Humidity Cell Boron Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-10



HC 1 -Felsic Metavolcanic (4aa)
HC 2 -Felsic Metavolcanic (4cf)
HC 3 - Felsic Metavolcanic (4cfb)
HC 4 -Felsic Metavolcanic (4b)
HC 5 - Mafic Metavolcanic (2)
HC 6 - Intermediate Metavolcanic (3b)
HC 7 - Intermediate Metavolcanic (3b)
HC 8 - Felsic Metavolcanic (4b)
HC 9 -Clastic Metasediment (5dac)
HC 10 - Early Felsic to Intermediate Intrusives (8d)



HC -11 Felsic Metavolcanic (4c)
HC-12 Felsic Metavolcanic (4cb)
HC-13 Felsic Metavolcanic (4cfa)
HC-14 Felsic Metavolcanic (4ca)
HC-15 Mafic Metavolcanic (2b)
HC-16 Mafic Metavolcanic (2a)
HC-17 Mafic Metavolcanic (2a)
HC-18 Mafic Metavolcanic (2)
HC-19 Clastic Metasediment (5da)
HC-20 Clastic Metasediment (5ce)

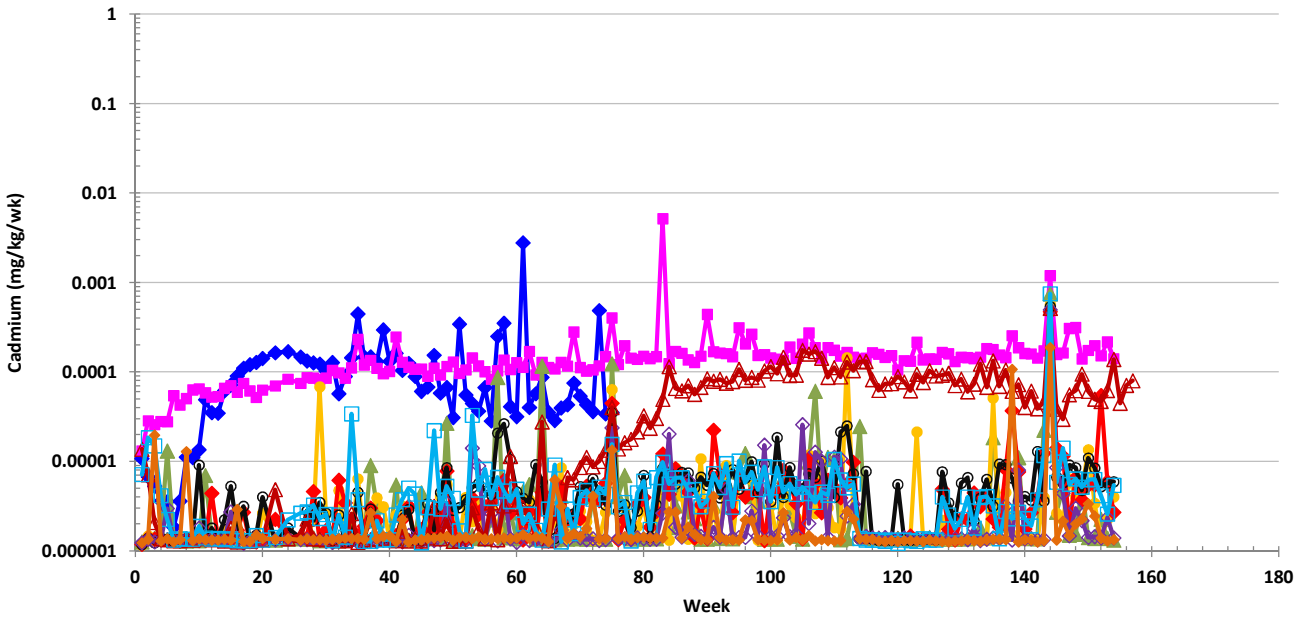
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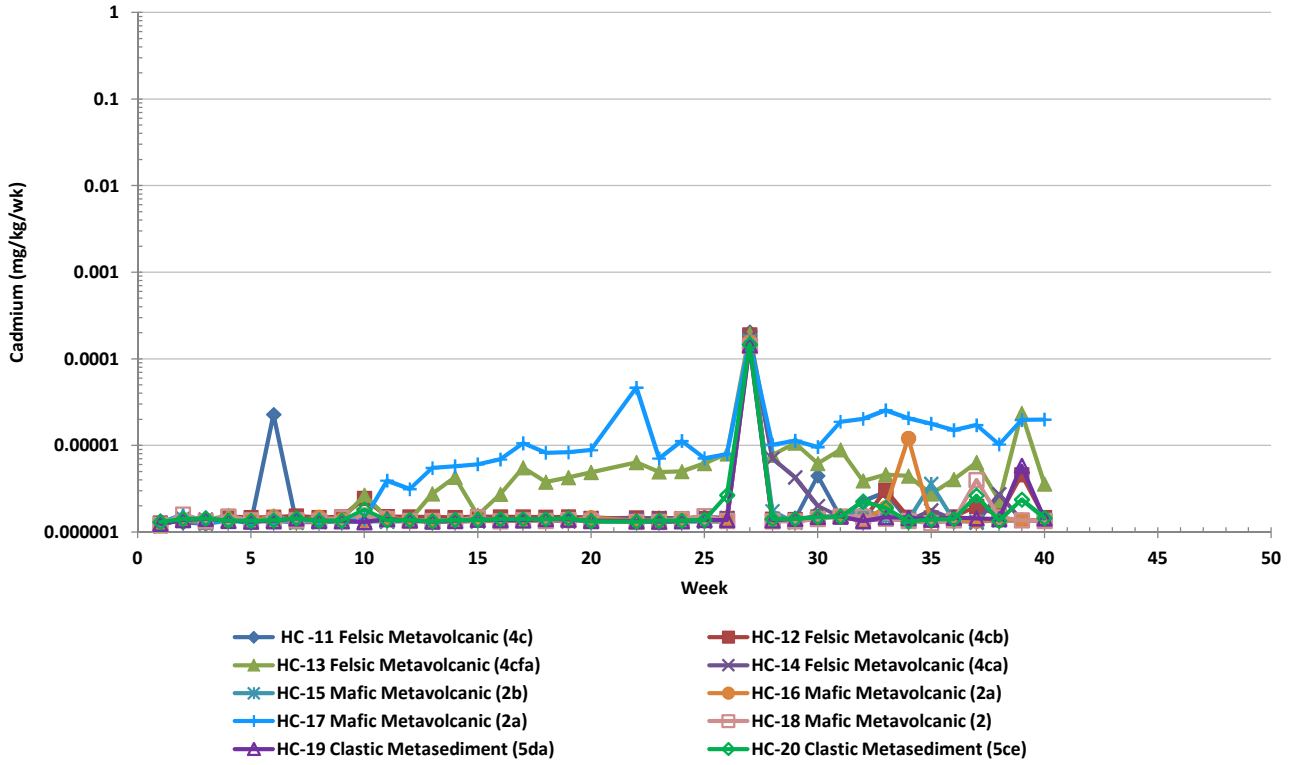
amec

Rainy River Gold Project

Mine Rock Humidity Cell Bismuth Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-11





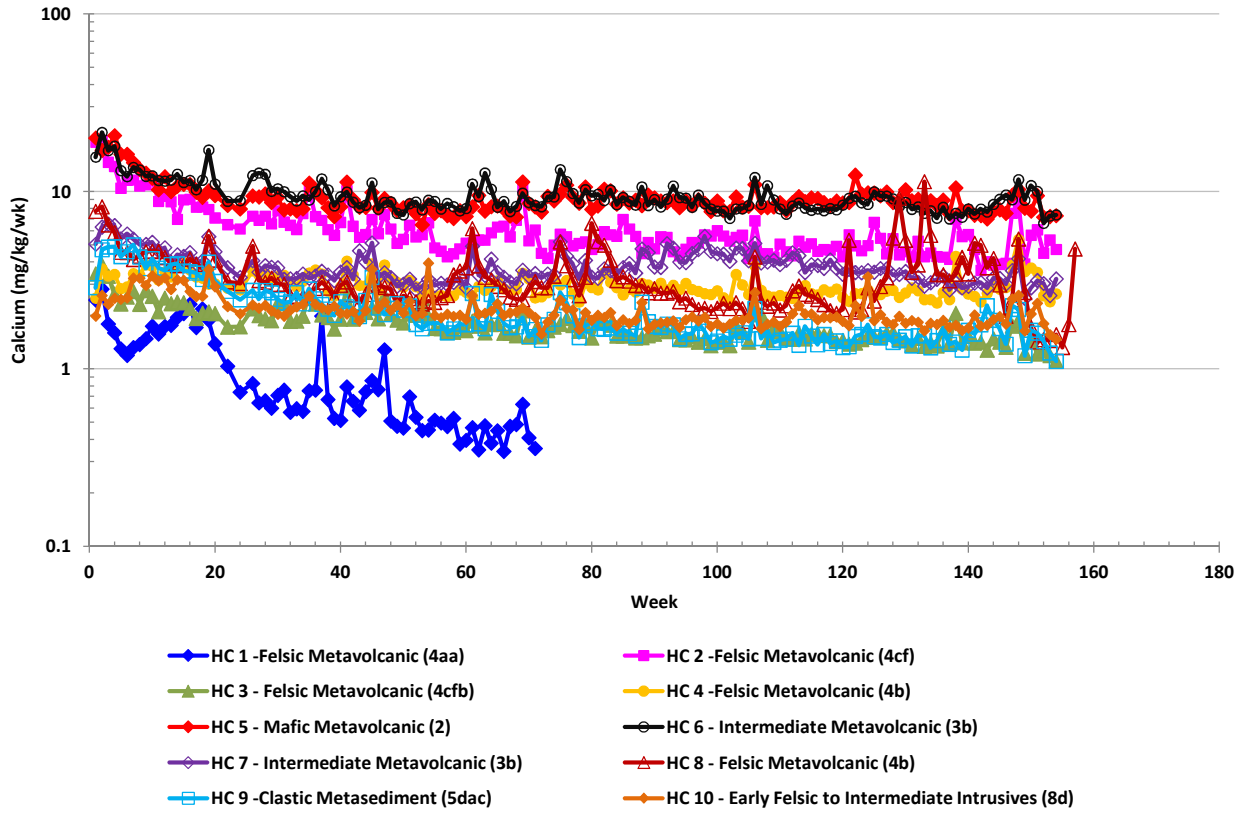
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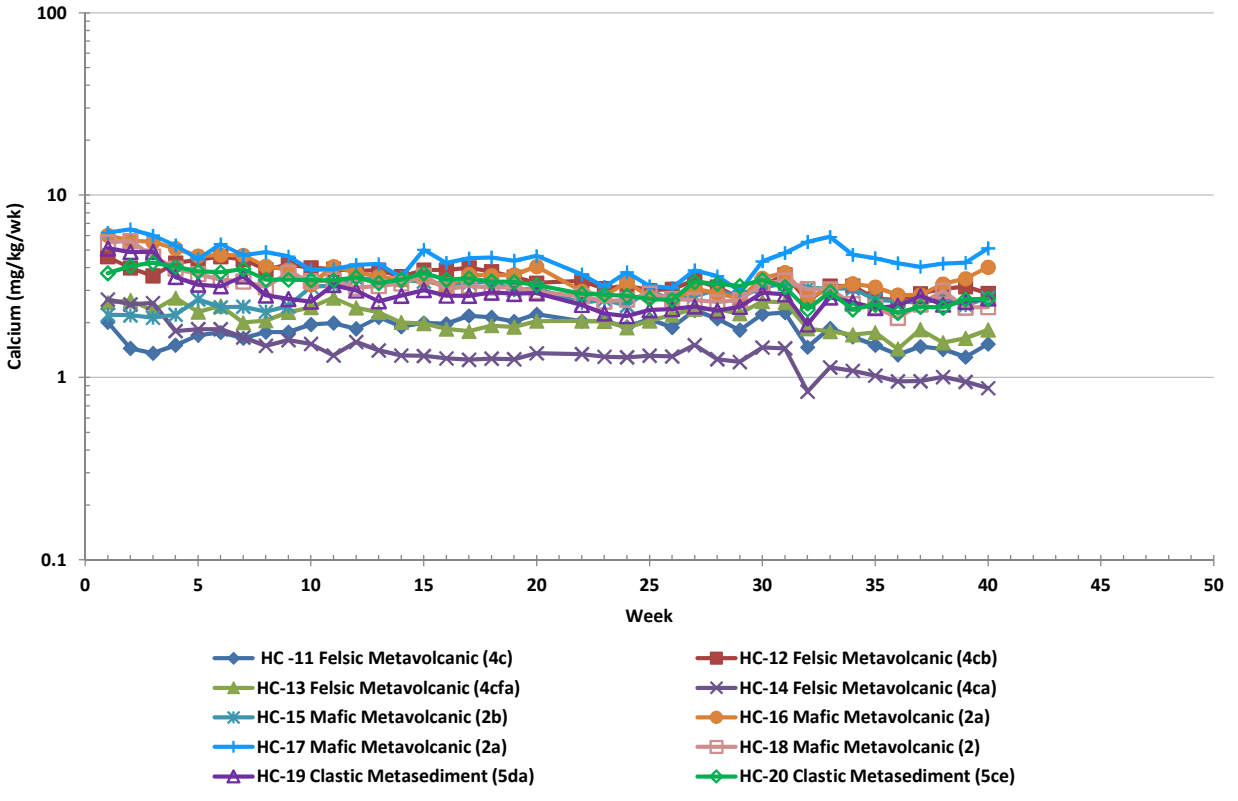
amec

Rainy River Gold Project

Mine Rock Humidity Cell Cadmium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-12





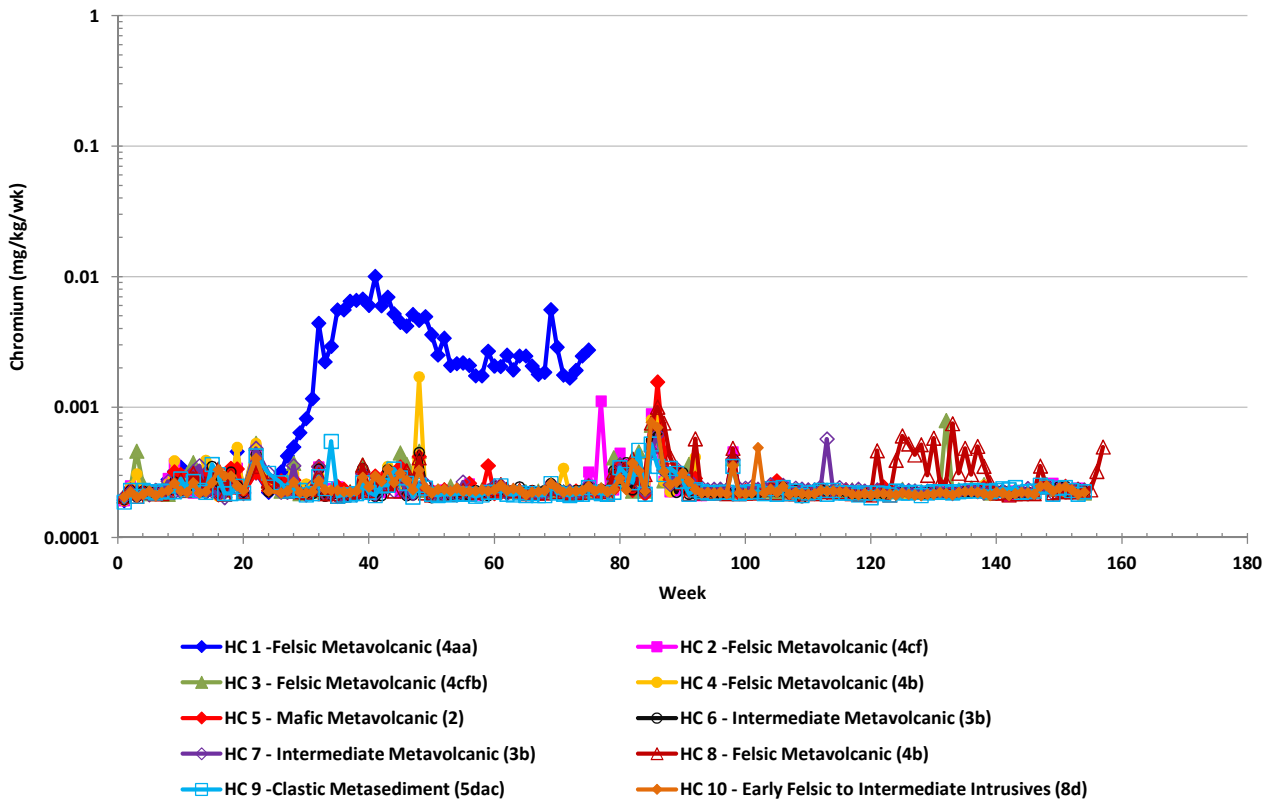
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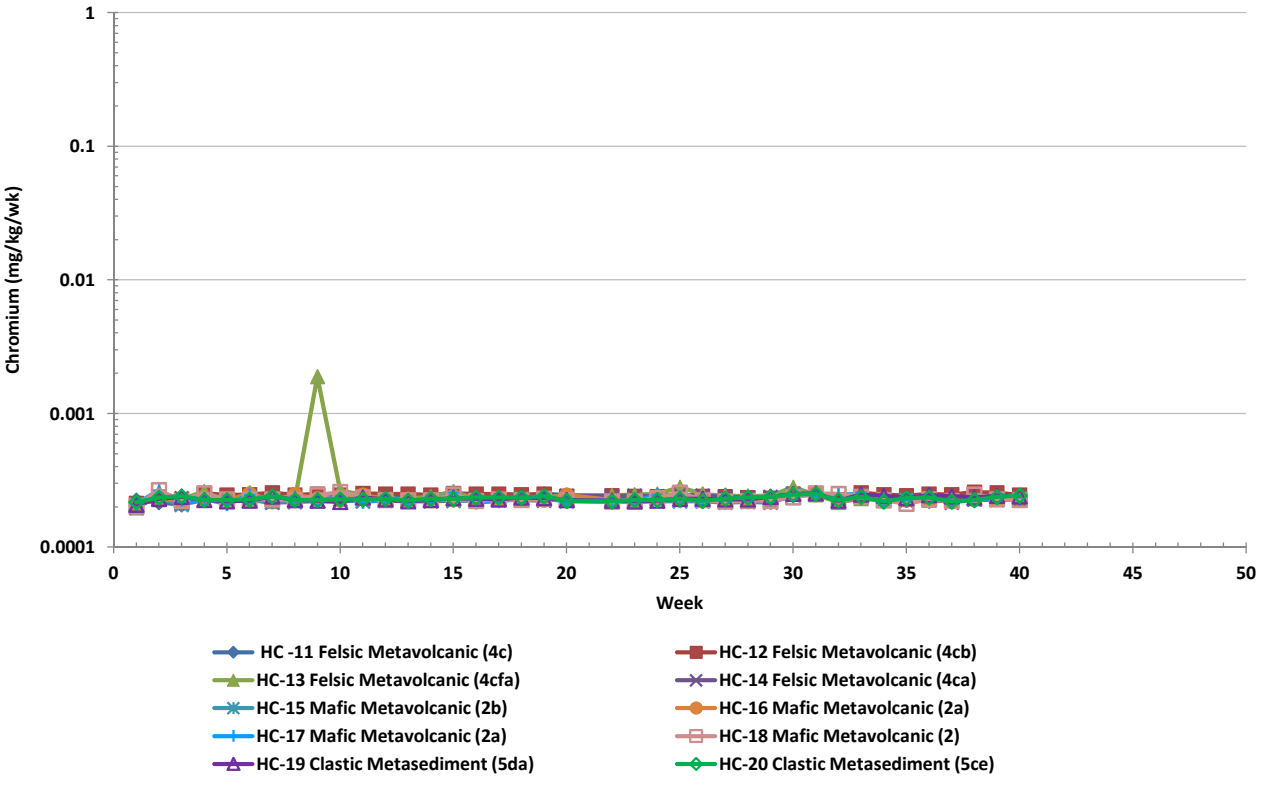
amec

Rainy River Gold Project

Mine Rock Humidity Cell Calcium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-13



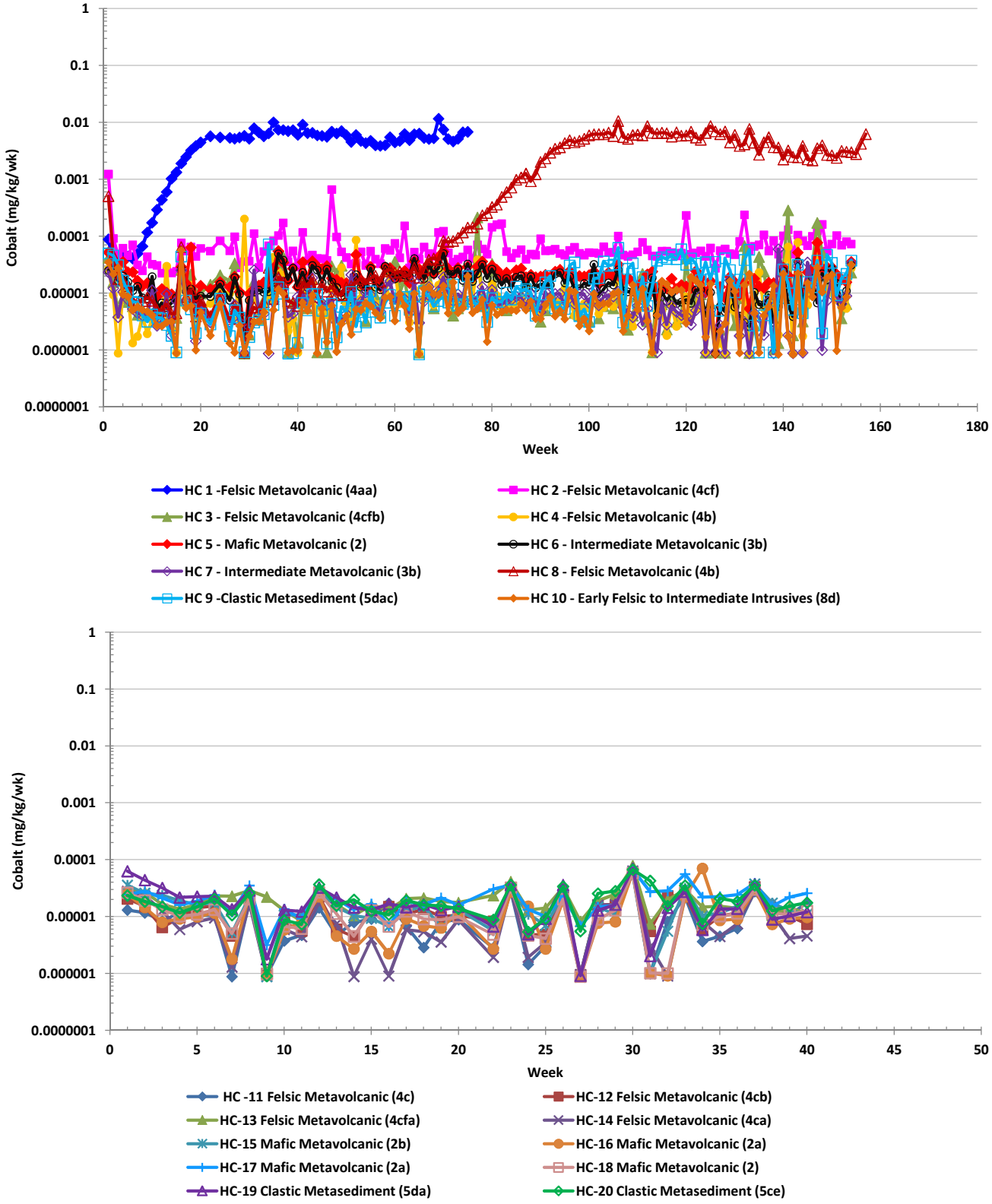


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Rainy River Gold Project

Mine Rock Humidity Cell Chromium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-14



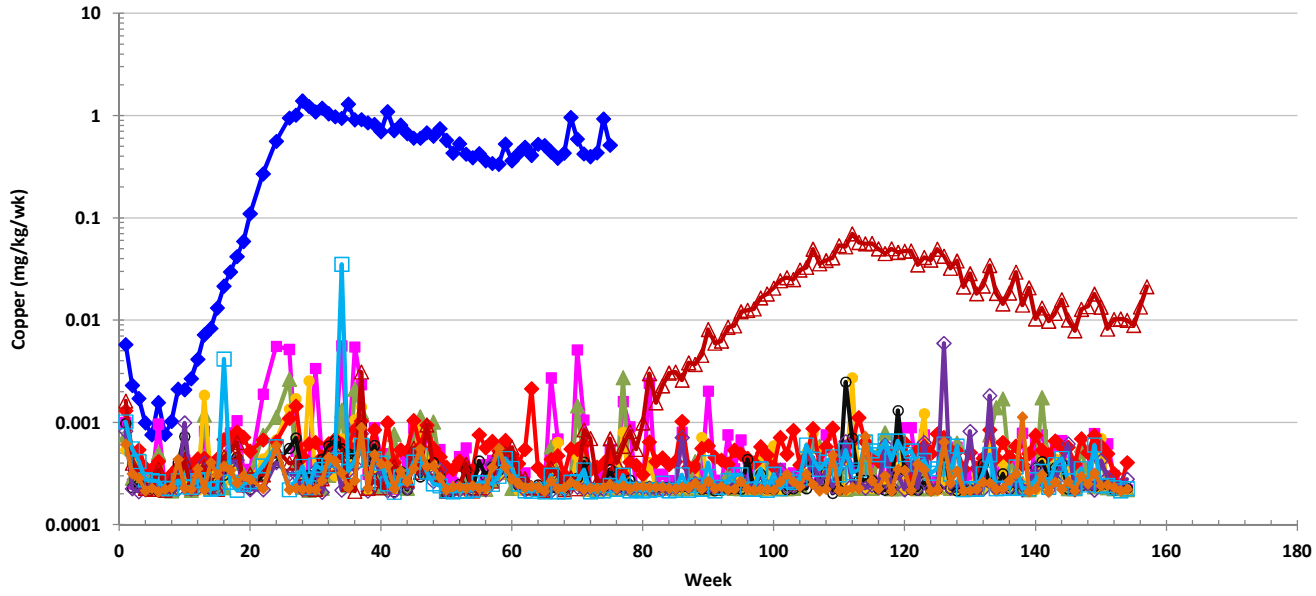
RAINYRIVER

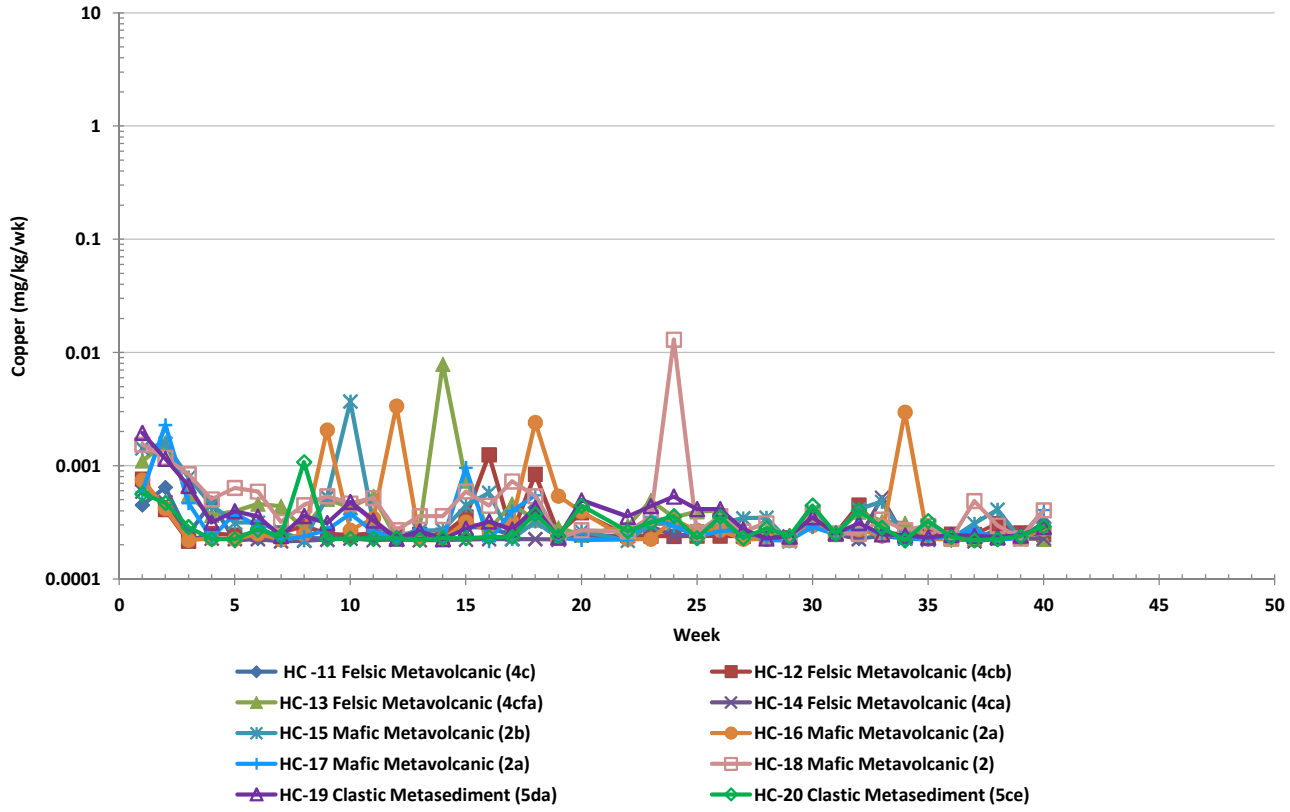
amec

Rainy River Gold Project

Mine Rock Humidity Cell Cobalt Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-15



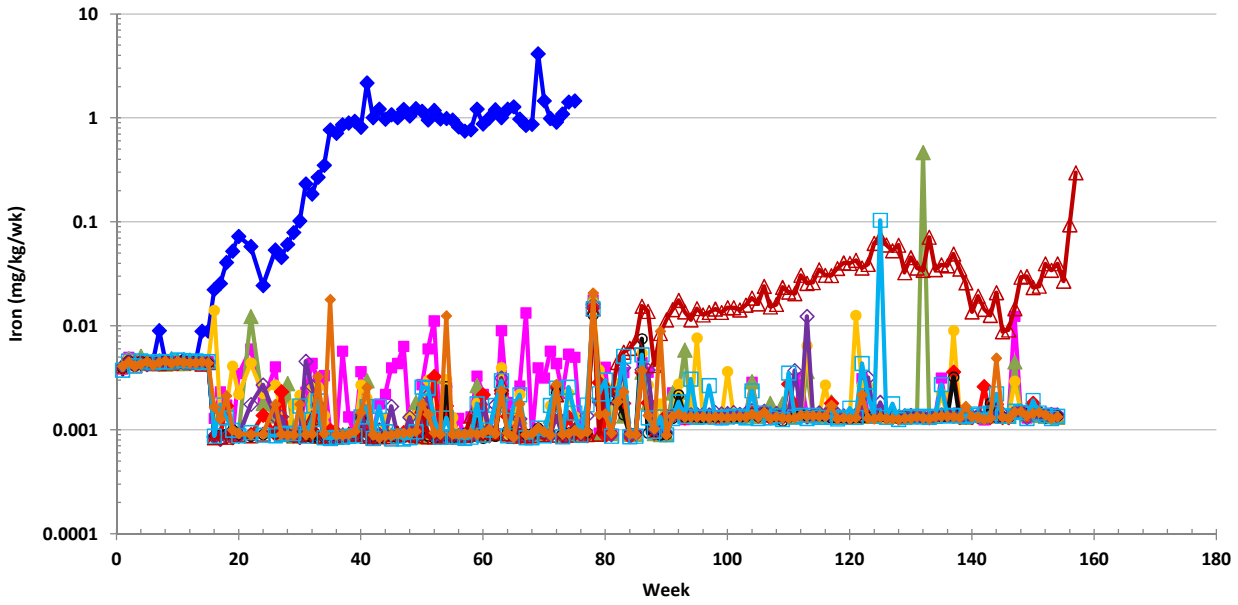


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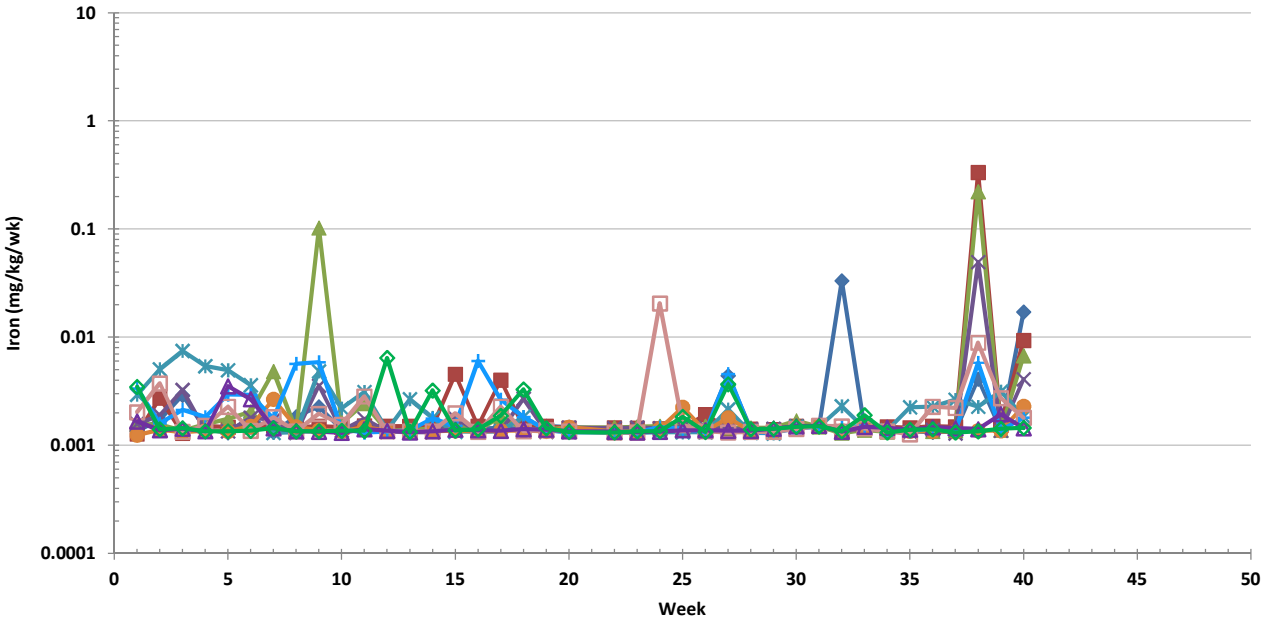
Rainy River Gold Project

Mine Rock Humidity Cell Copper Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-16



HC 1 -Felsic Metavolcanic (4aa)
HC 2 -Felsic Metavolcanic (4cf)
HC 3 - Felsic Metavolcanic (4cfb)
HC 4 -Felsic Metavolcanic (4b)
HC 5 - Mafic Metavolcanic (2)
HC 6 - Intermediate Metavolcanic (3b)
HC 7 - Intermediate Metavolcanic (3b)
HC 8 - Felsic Metavolcanic (4b)
HC 9 -Clastic Metasediment (5dac)
HC 10 - Early Felsic to Intermediate Intrusives (8d)



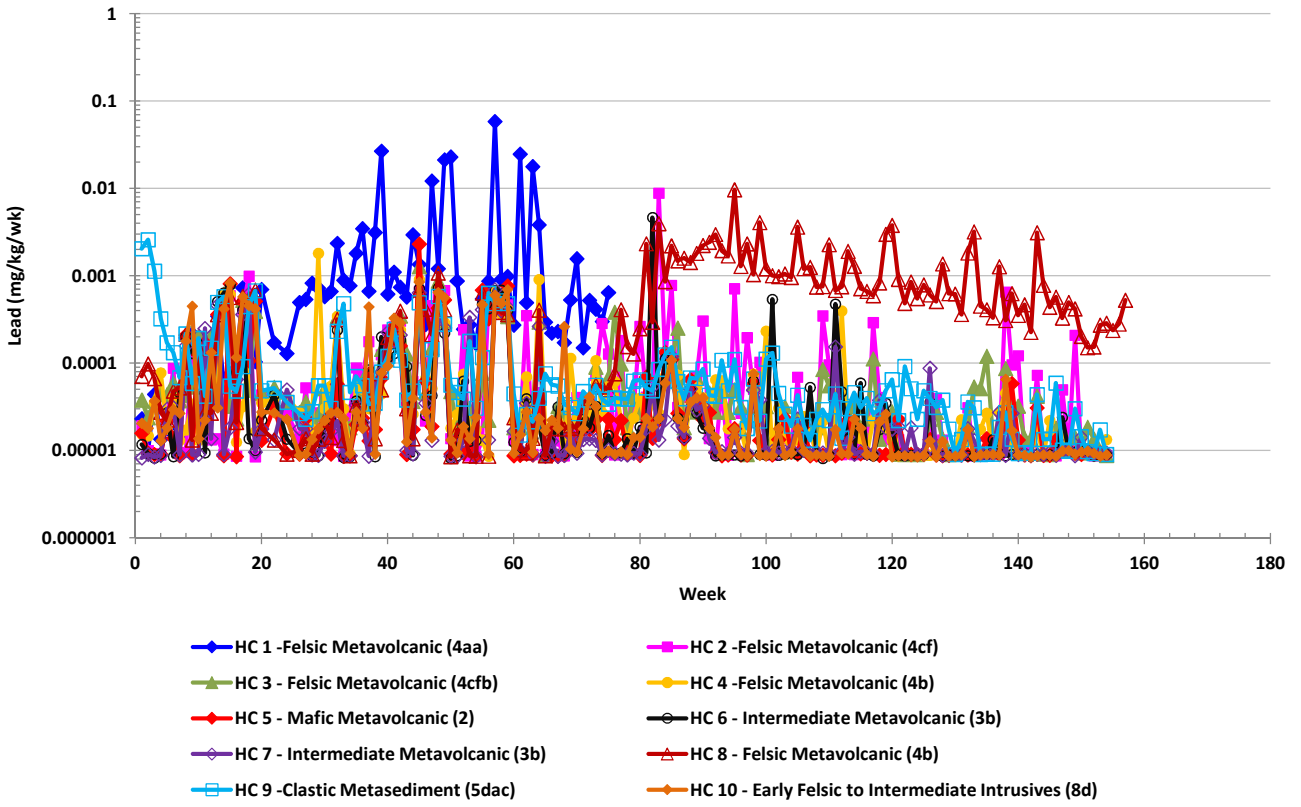
HC -11 Felsic Metavolcanic (4c)
HC-12 Felsic Metavolcanic (4cb)
HC-13 Felsic Metavolcanic (4cfa)
HC-14 Felsic Metavolcanic (4ca)
HC-15 Mafic Metavolcanic (2b)
HC-16 Mafic Metavolcanic (2a)
HC-17 Mafic Metavolcanic (2a)
HC-18 Mafic Metavolcanic (2)
HC-19 Clastic Metasediment (5da)
HC-20 Clastic Metasediment (5ce)

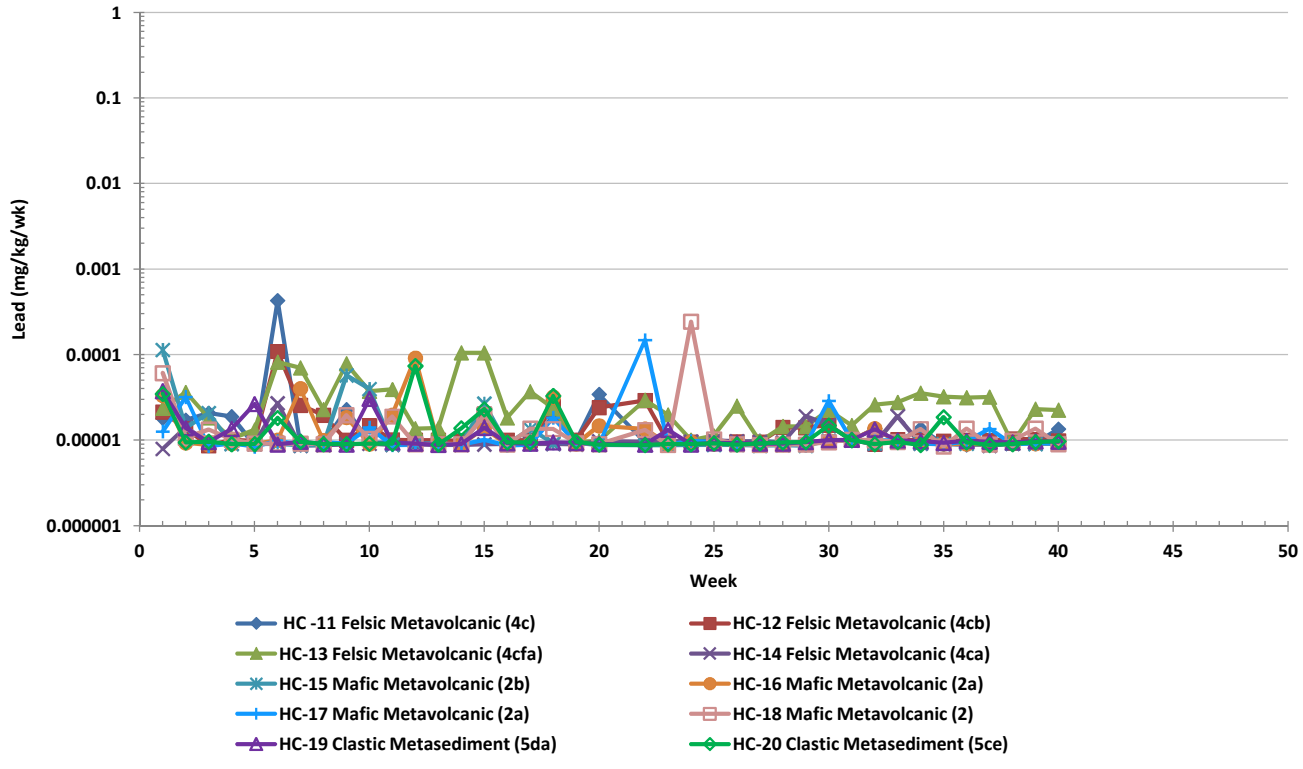
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Rainy River Gold Project

Mine Rock Humidity Cell Iron Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-17





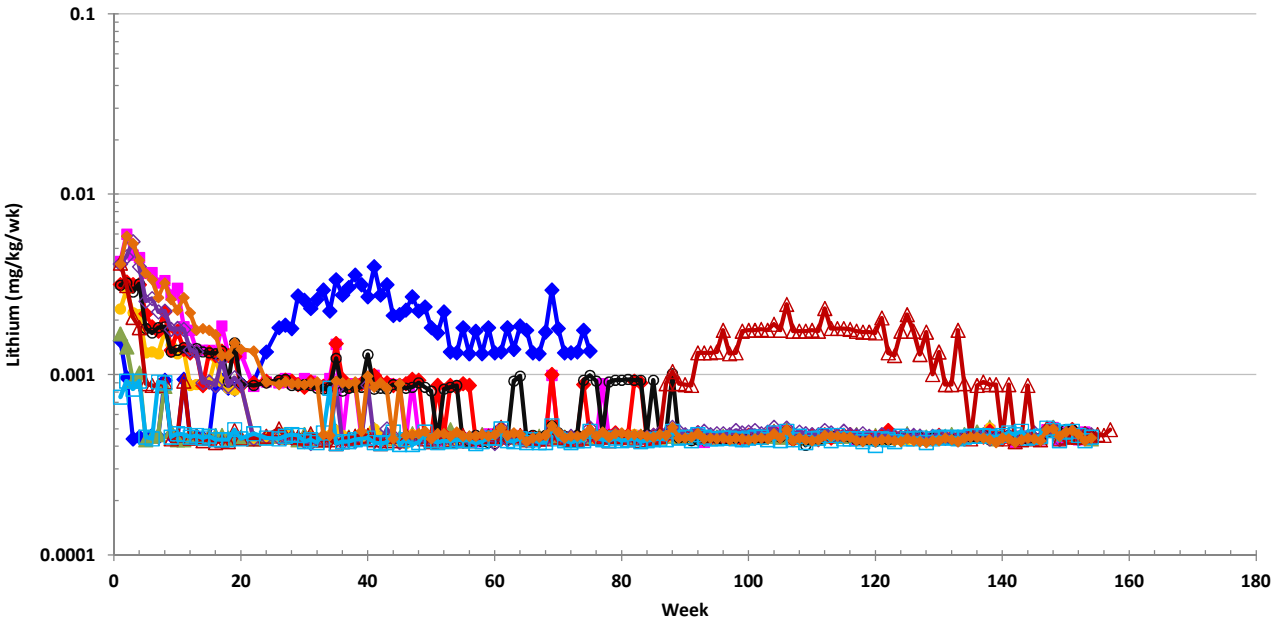
RAINYRIVER

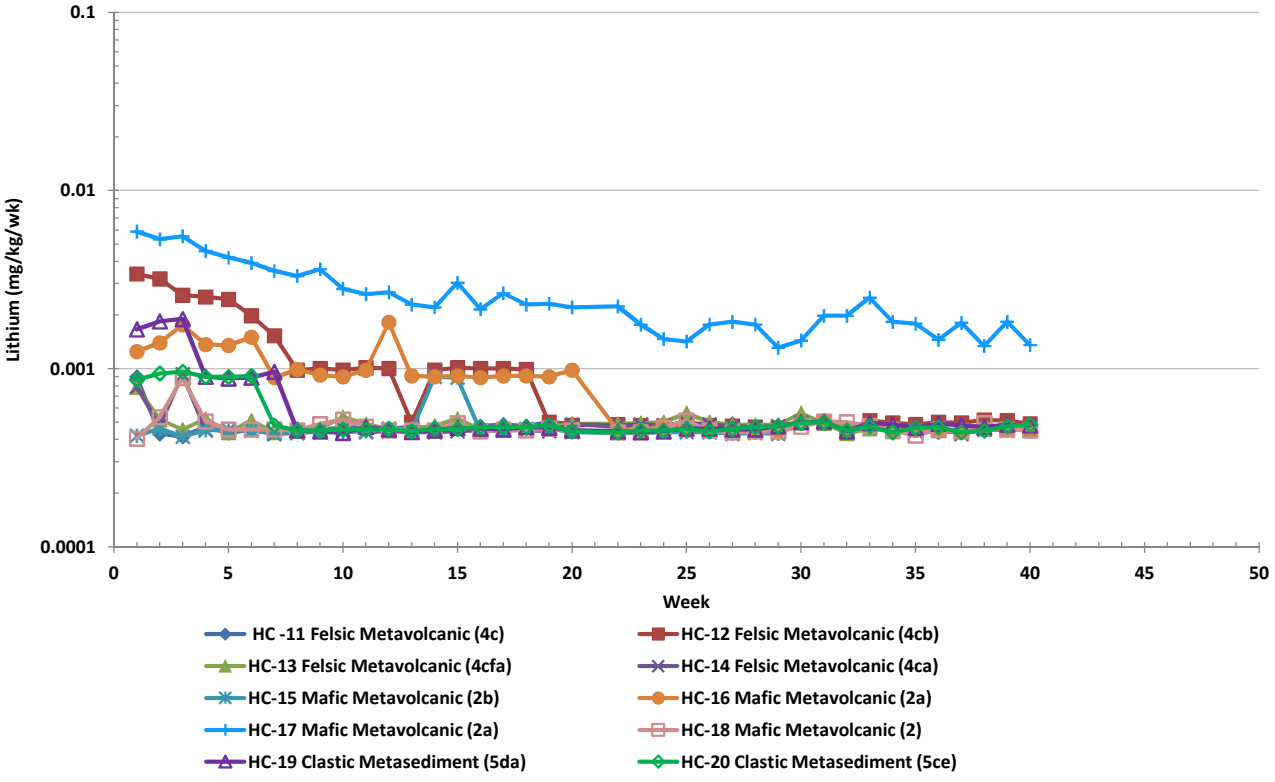
amec

Rainy River Gold Project

Mine Rock Humidity Cell Lead Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-18



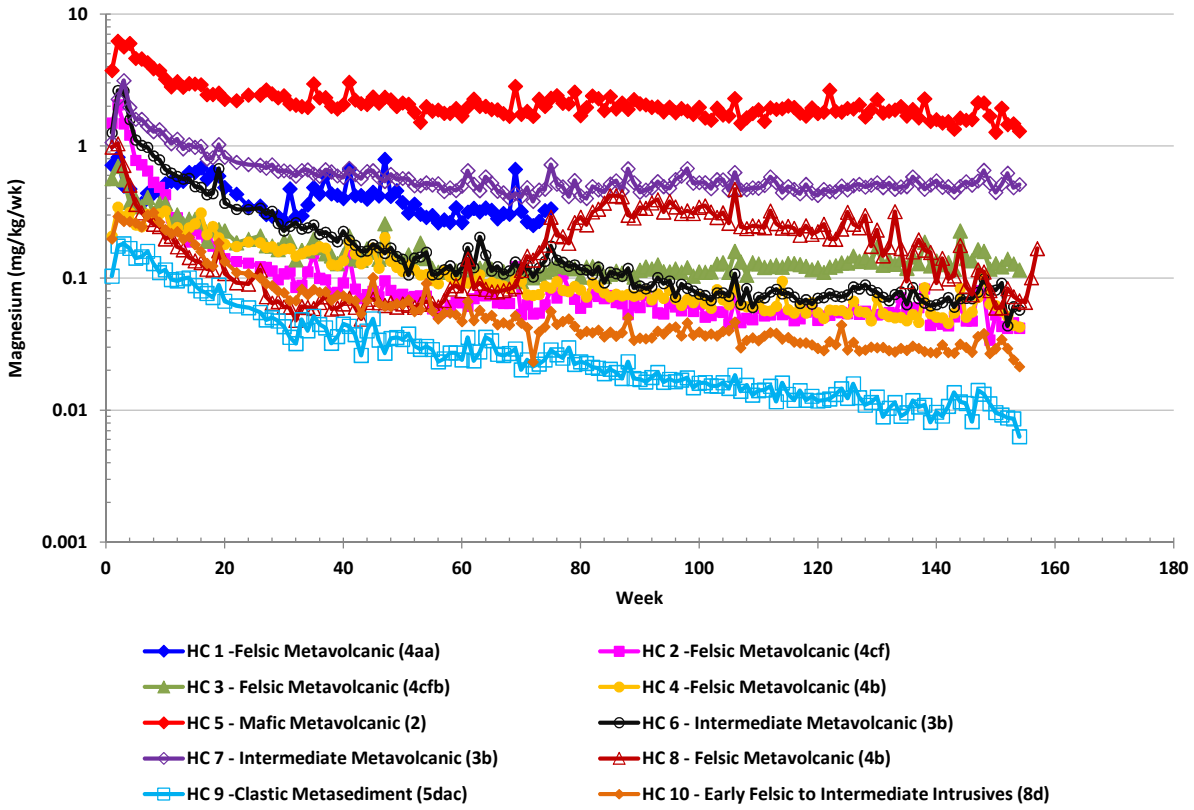


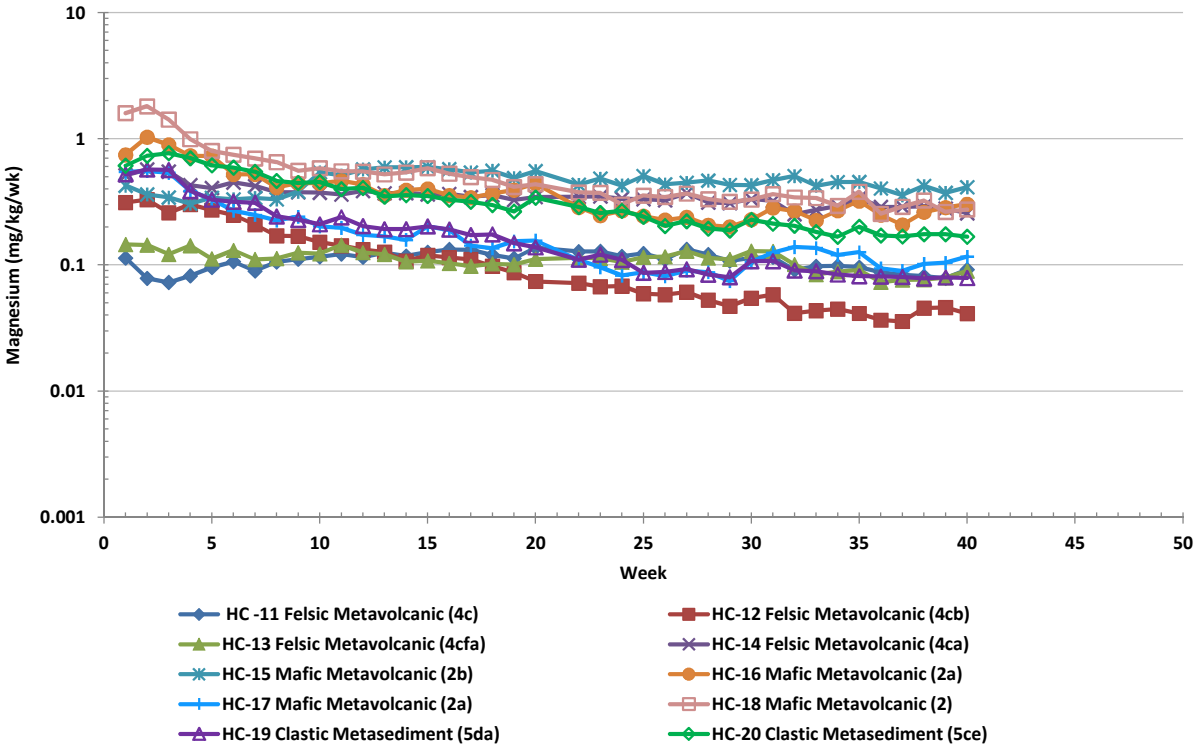
RAINYRIVER amec

Rainy River Gold Project

Mine Rock Humidity Cell Lithium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-19





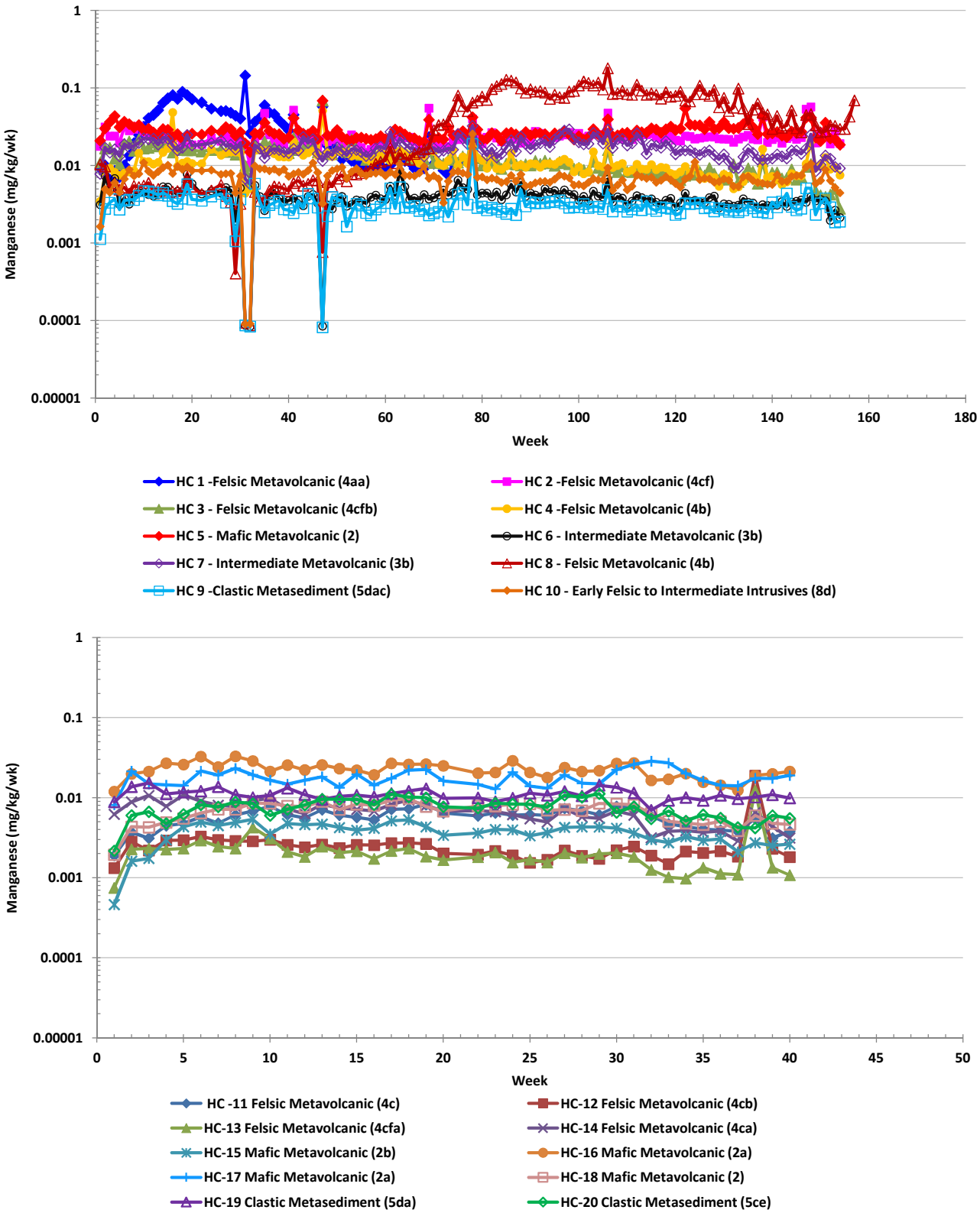
RAINYRIVER

amec

Rainy River Gold Project

Mine Rock Humidity Cell Magnesium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-20



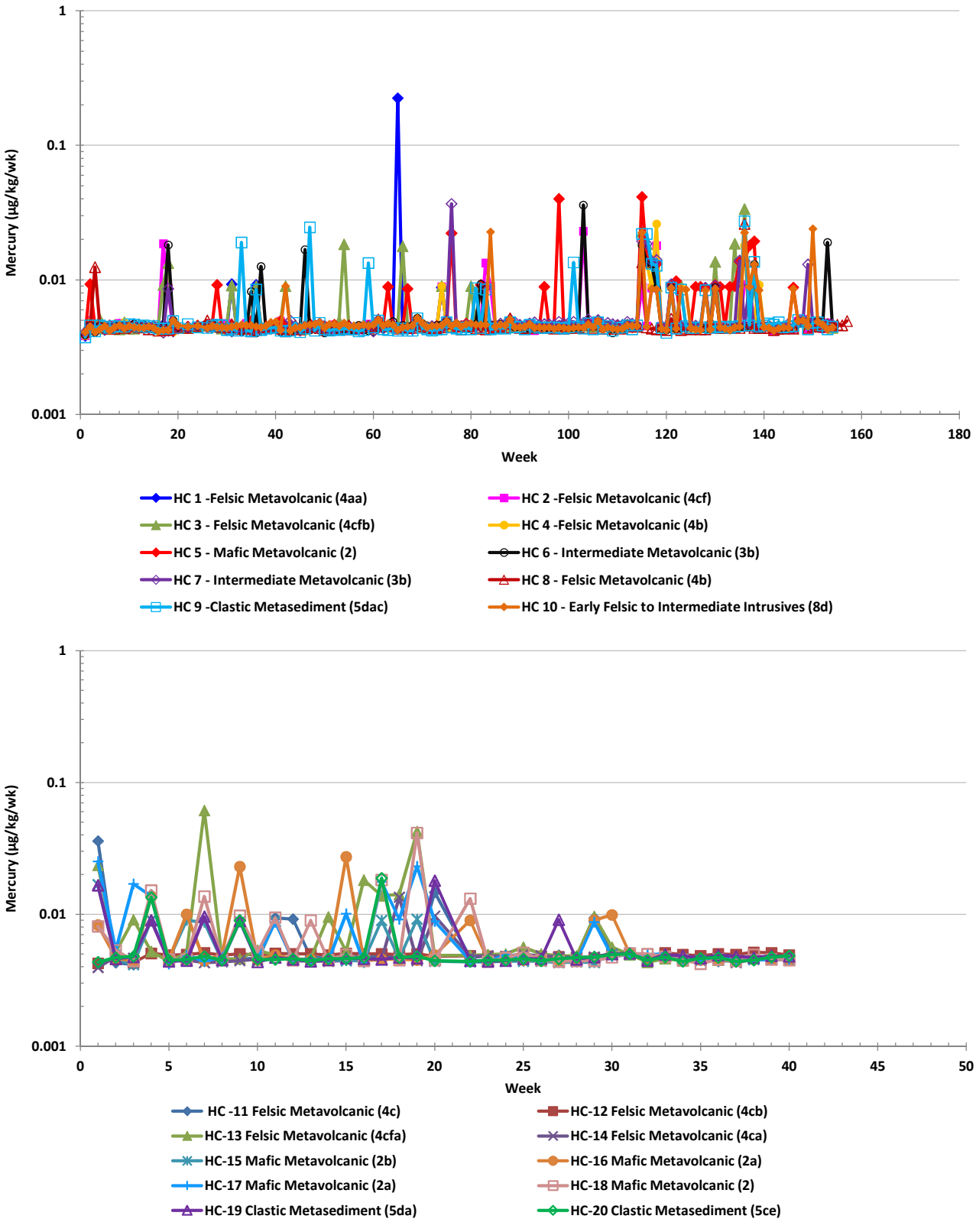
RAINYRIVER

amec

Rainy River Gold Project

Mine Rock Humidity Cell Manganese Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-21



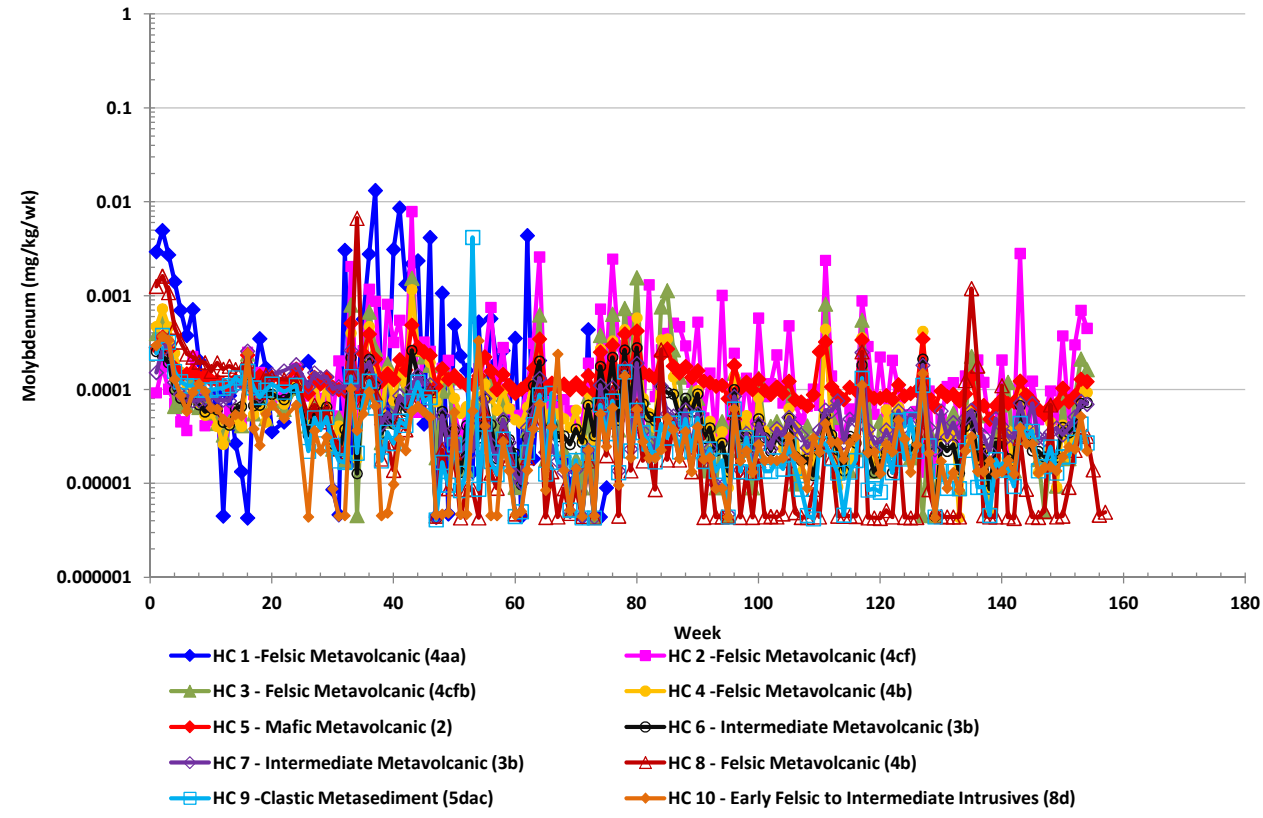
RAINYRIVER

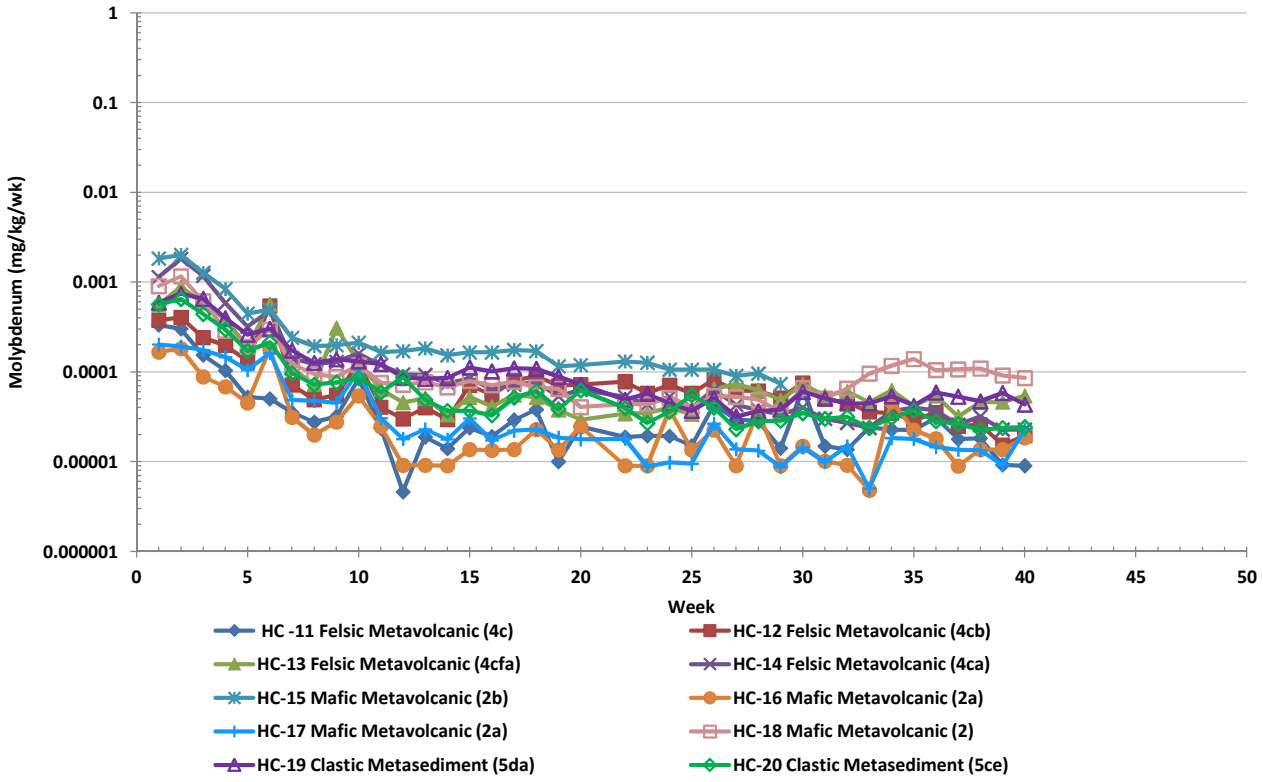
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Rainy River Gold Project

Mine Rock Humidity Cell Mercury Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-22





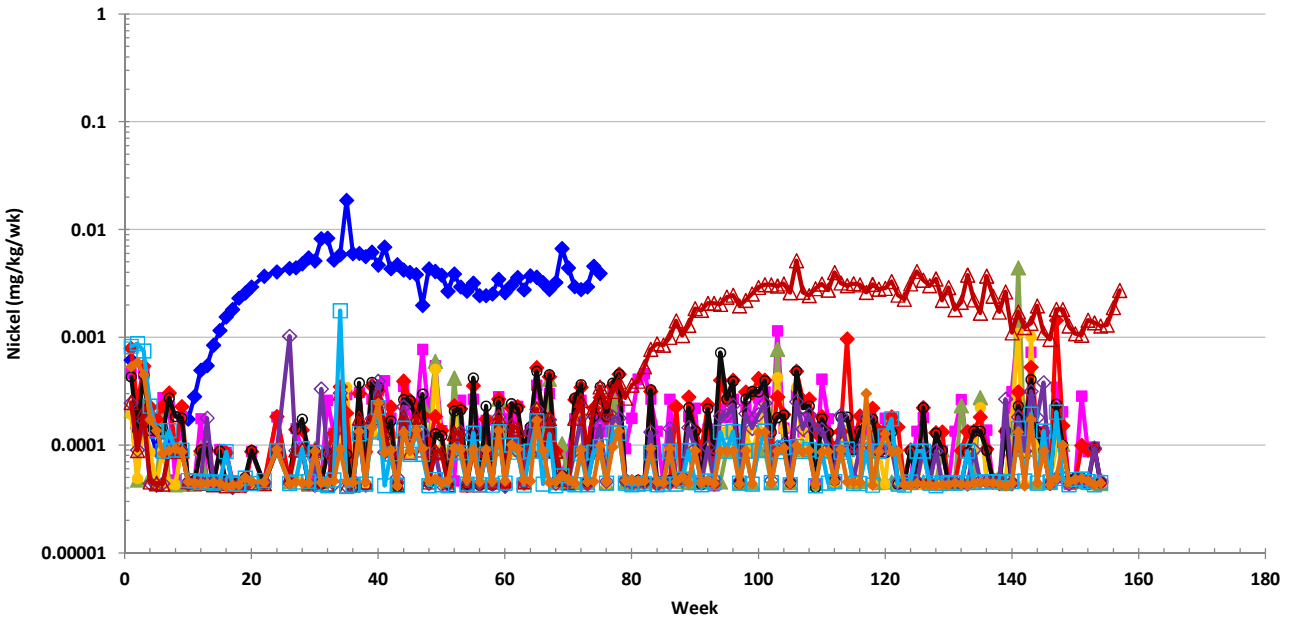
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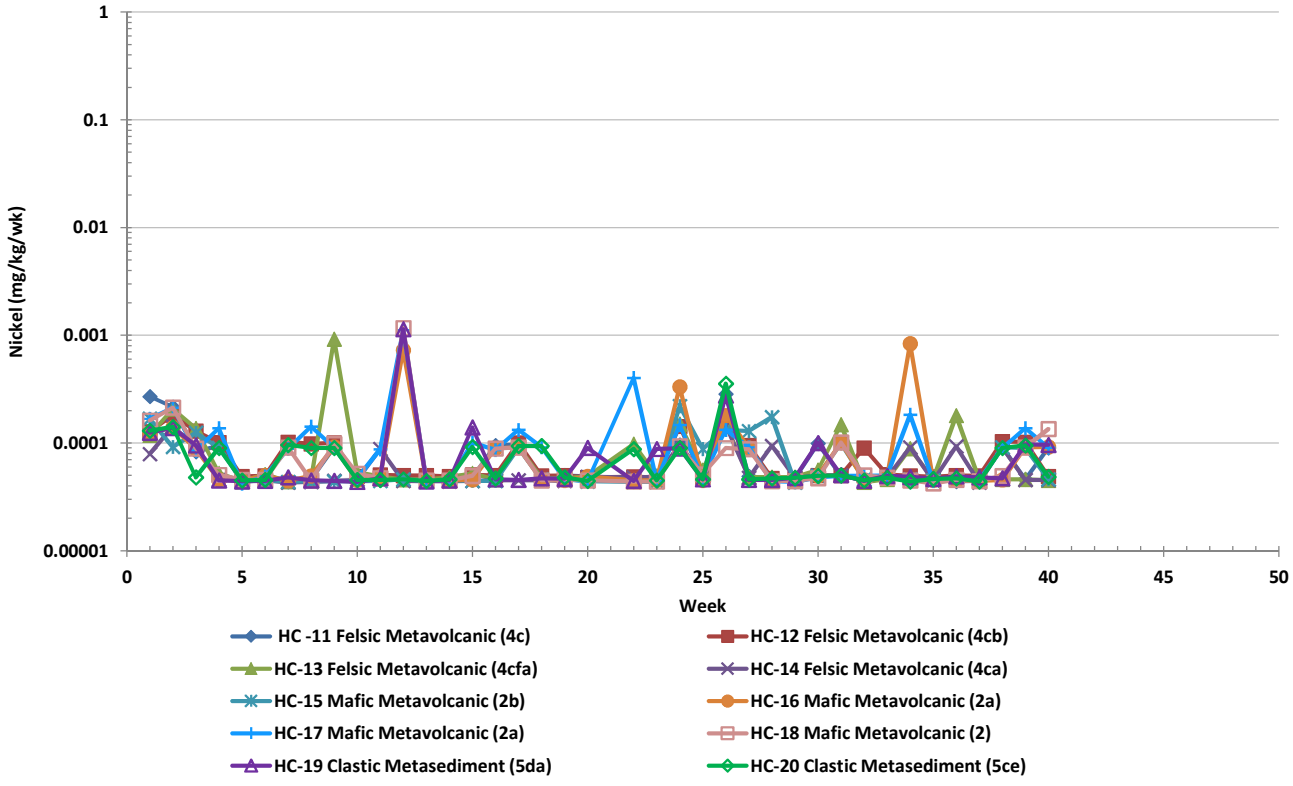
amec

Rainy River Gold Project

Mine Rock Humidity Cell Molybdenum Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-23





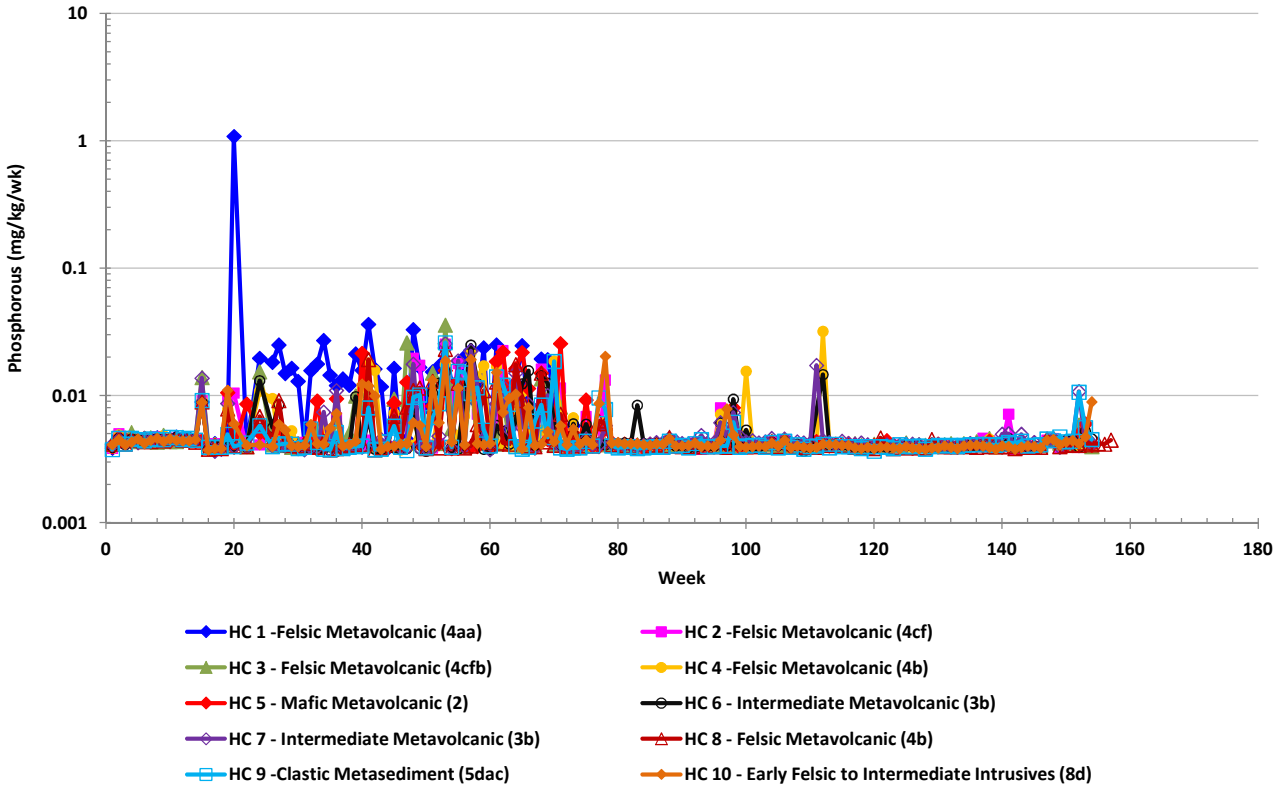
RAINYRIVER

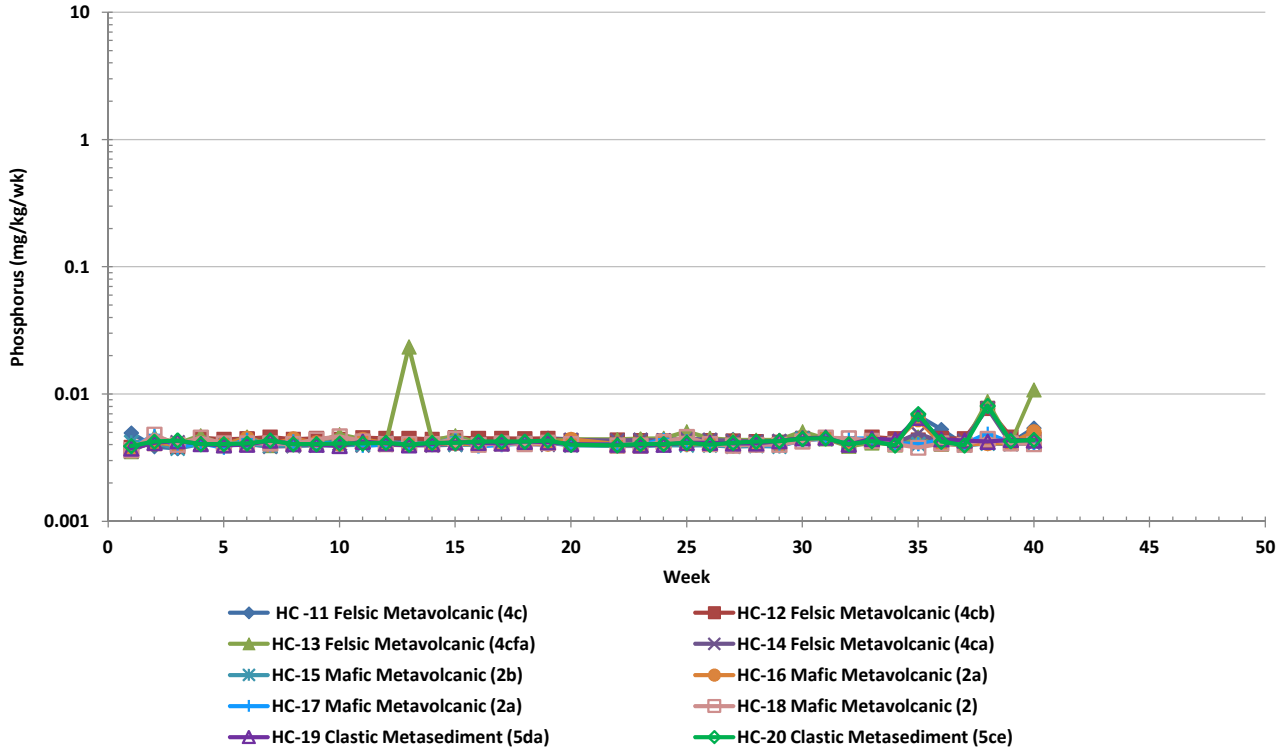
amec

Rainy River Gold Project

Mine Rock Humidity Cell Nickel Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-24



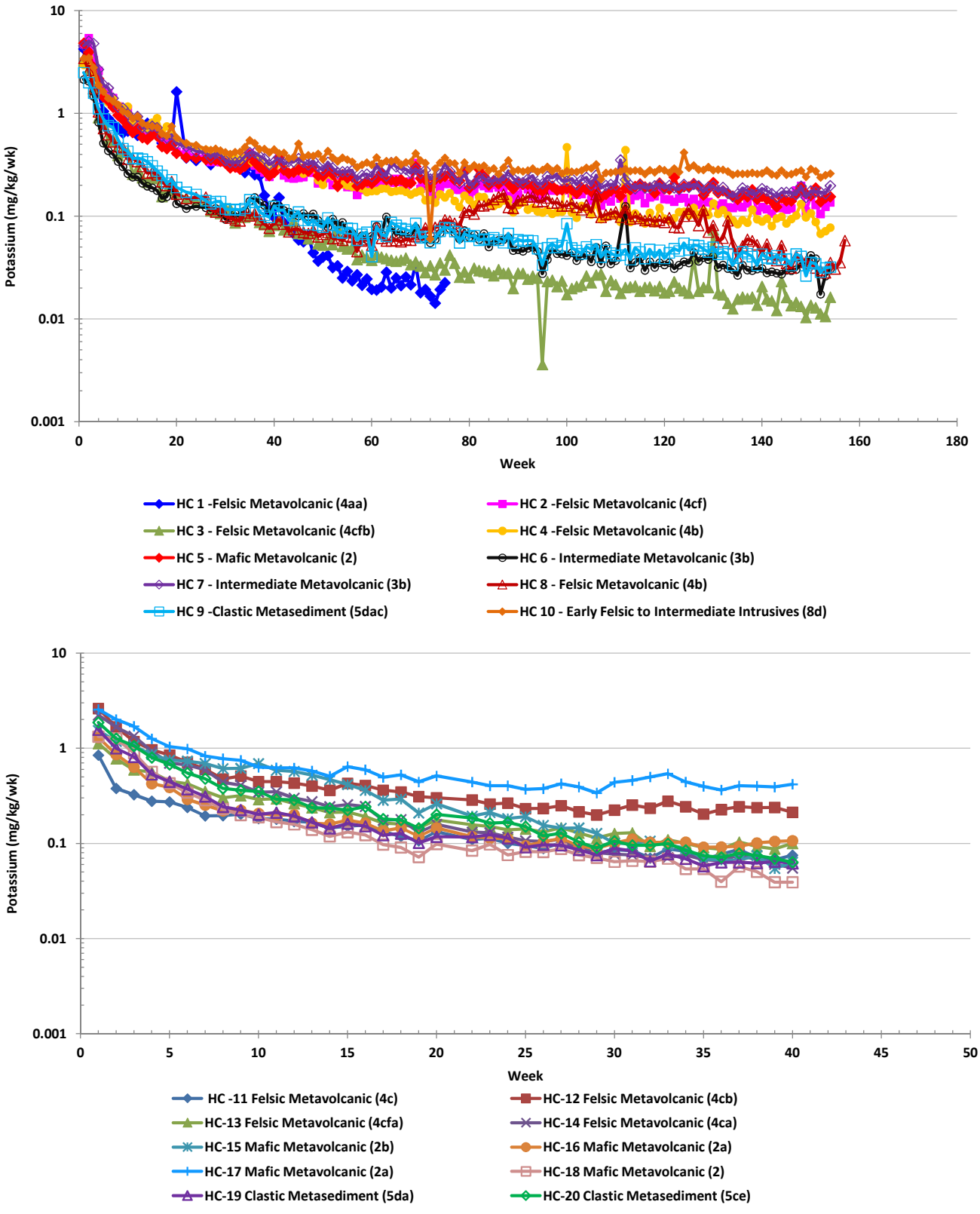


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Rainy River Gold Project

Mine Rock Humidity Cell Phosphorus Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-25



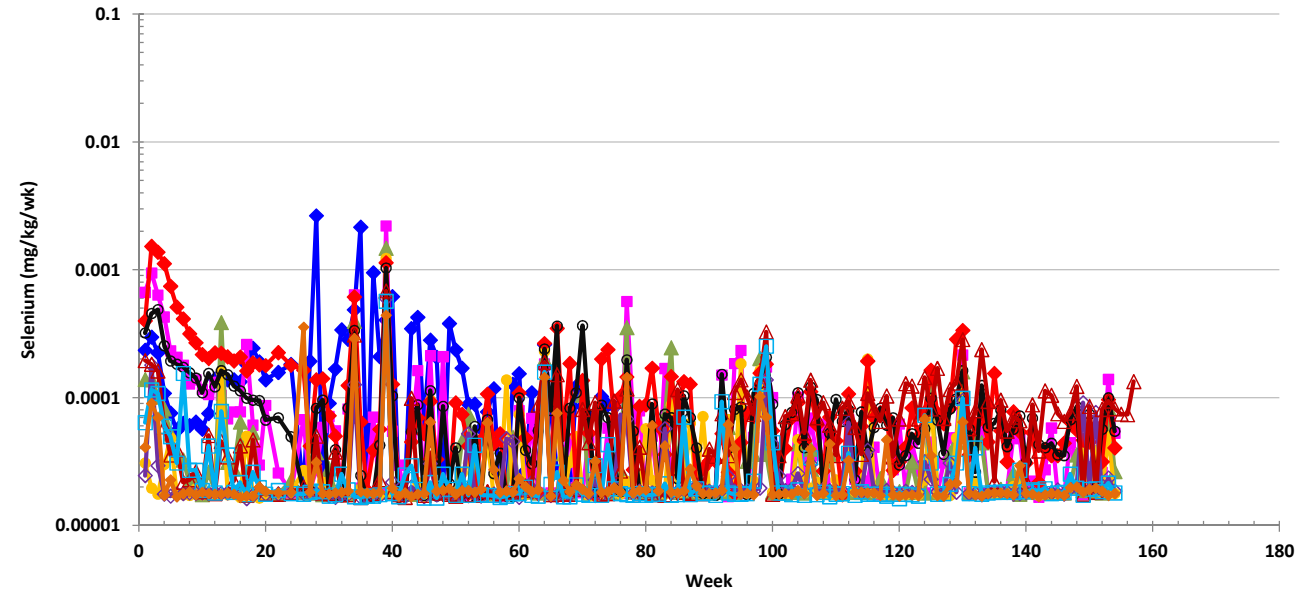
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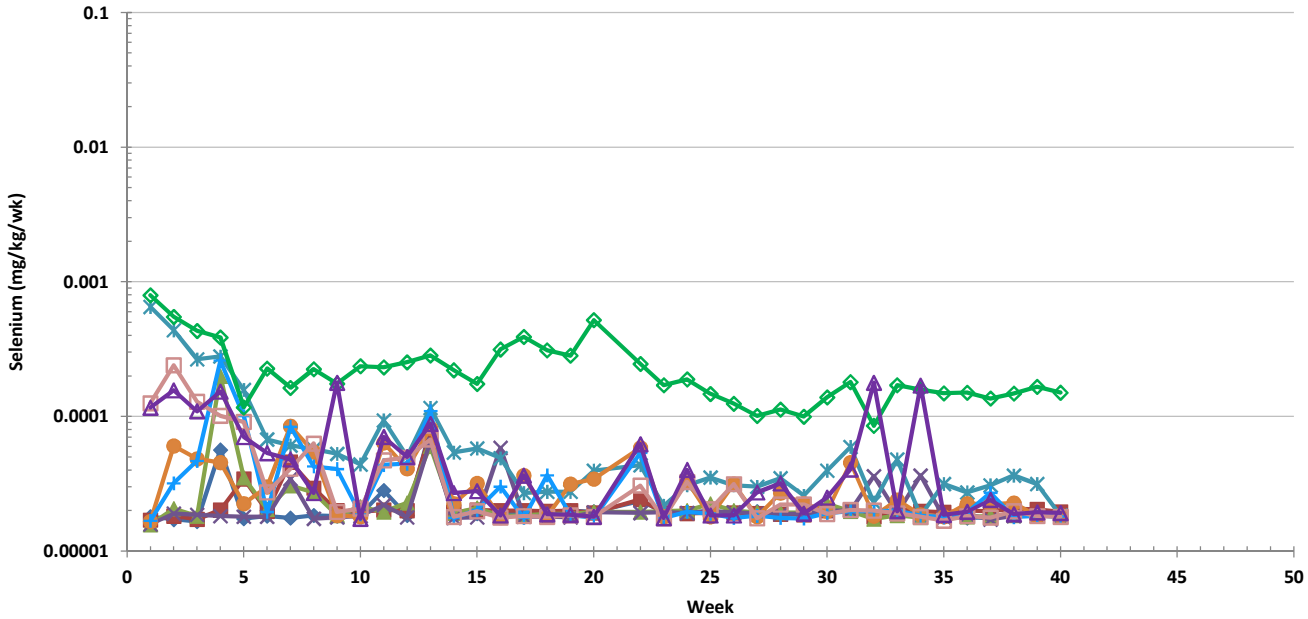
Rainy River Gold Project

Mine Rock Humidity Cell Potassium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-26



HC 1 -Felsic Metavolcanic (4aa)
HC 2 -Felsic Metavolcanic (4cf)
HC 3 - Felsic Metavolcanic (4cfb)
HC 4 -Felsic Metavolcanic (4b)
HC 5 - Mafic Metavolcanic (2)
HC 6 - Intermediate Metavolcanic (3b)
HC 7 - Intermediate Metavolcanic (3b)
HC 8 - Felsic Metavolcanic (4b)
HC 9 -Clastic Metasediment (5dac)
HC 10 - Early Felsic to Intermediate Intrusives (8d)



HC -11 Felsic Metavolcanic (4c)
HC-12 Felsic Metavolcanic (4cb)
HC-13 Felsic Metavolcanic (4cfa)
HC-14 Felsic Metavolcanic (4ca)
HC-15 Mafic Metavolcanic (2b)
HC-16 Mafic Metavolcanic (2a)
HC-17 Mafic Metavolcanic (2a)
HC-18 Mafic Metavolcanic (2)
HC-20 Clastic Metasediment (5ce)
HC-19 Clastic Metasediment (5da)

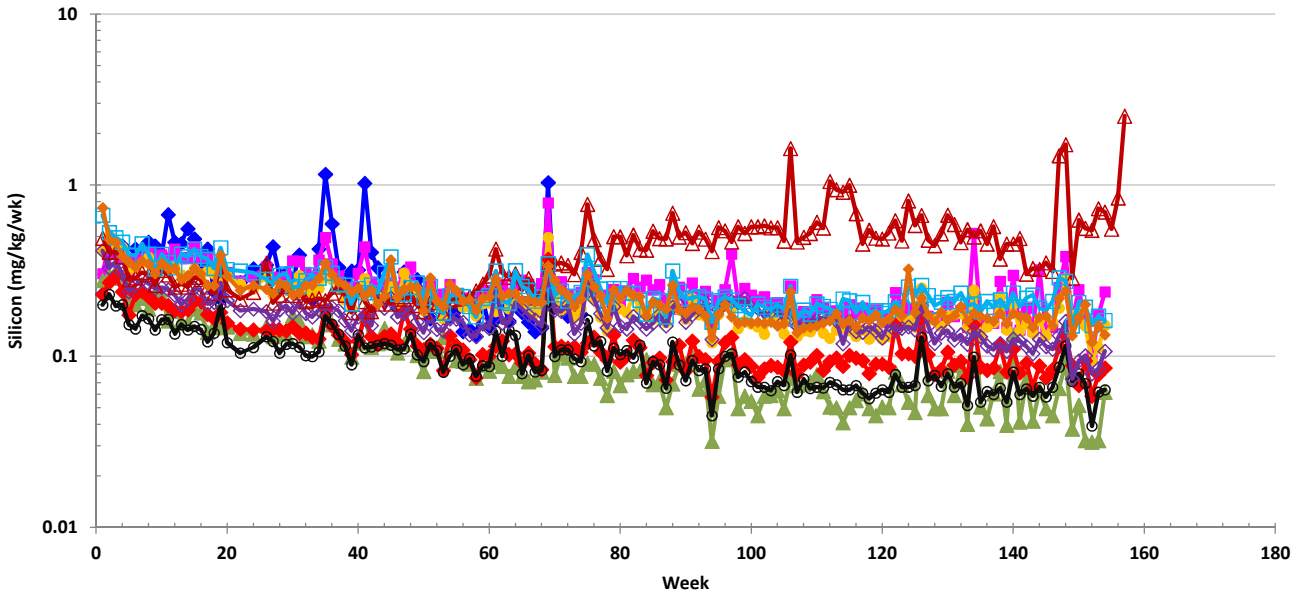
RAINYRIVER

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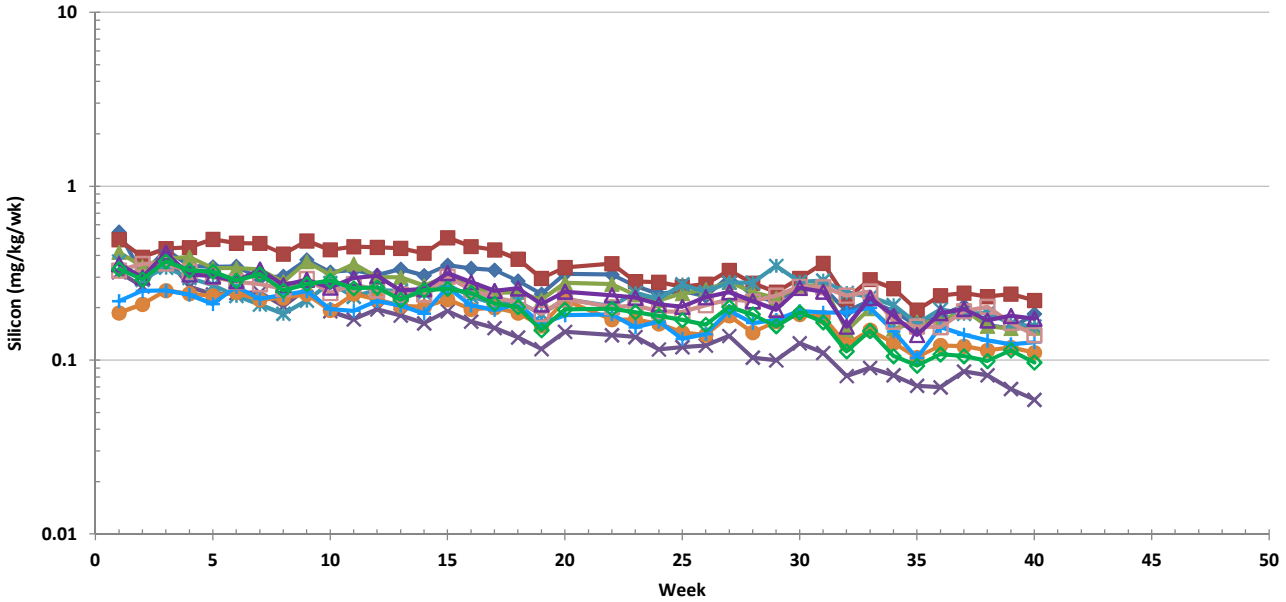
Rainy River Gold Project

Mine Rock Humidity Cell Selenium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-27



HC 1 -Felsic Metavolcanic (4aa)
HC 2 -Felsic Metavolcanic (4cf)
HC 3 - Felsic Metavolcanic (4cfb)
HC 4 -Felsic Metavolcanic (4b)
HC 5 - Mafic Metavolcanic (2)
HC 6 - Intermediate Metavolcanic (3b)
HC 7 - Intermediate Metavolcanic (3b)
HC 8 - Felsic Metavolcanic (4b)
HC 9 -Clastic Metasediment (5dac)
HC 10 - Early Felsic to Intermediate Intrusives (8d)



HC -11 Felsic Metavolcanic (4c)
HC-12 Felsic Metavolcanic (4cb)
HC-13 Felsic Metavolcanic (4cfa)
HC-14 Felsic Metavolcanic (4ca)
HC-15 Mafic Metavolcanic (2b)
HC-16 Mafic Metavolcanic (2a)
HC-17 Mafic Metavolcanic (2a)
HC-18 Mafic Metavolcanic (2)
HC-19 Clastic Metasediment (5da)
HC-20 Clastic Metasediment (5ce)

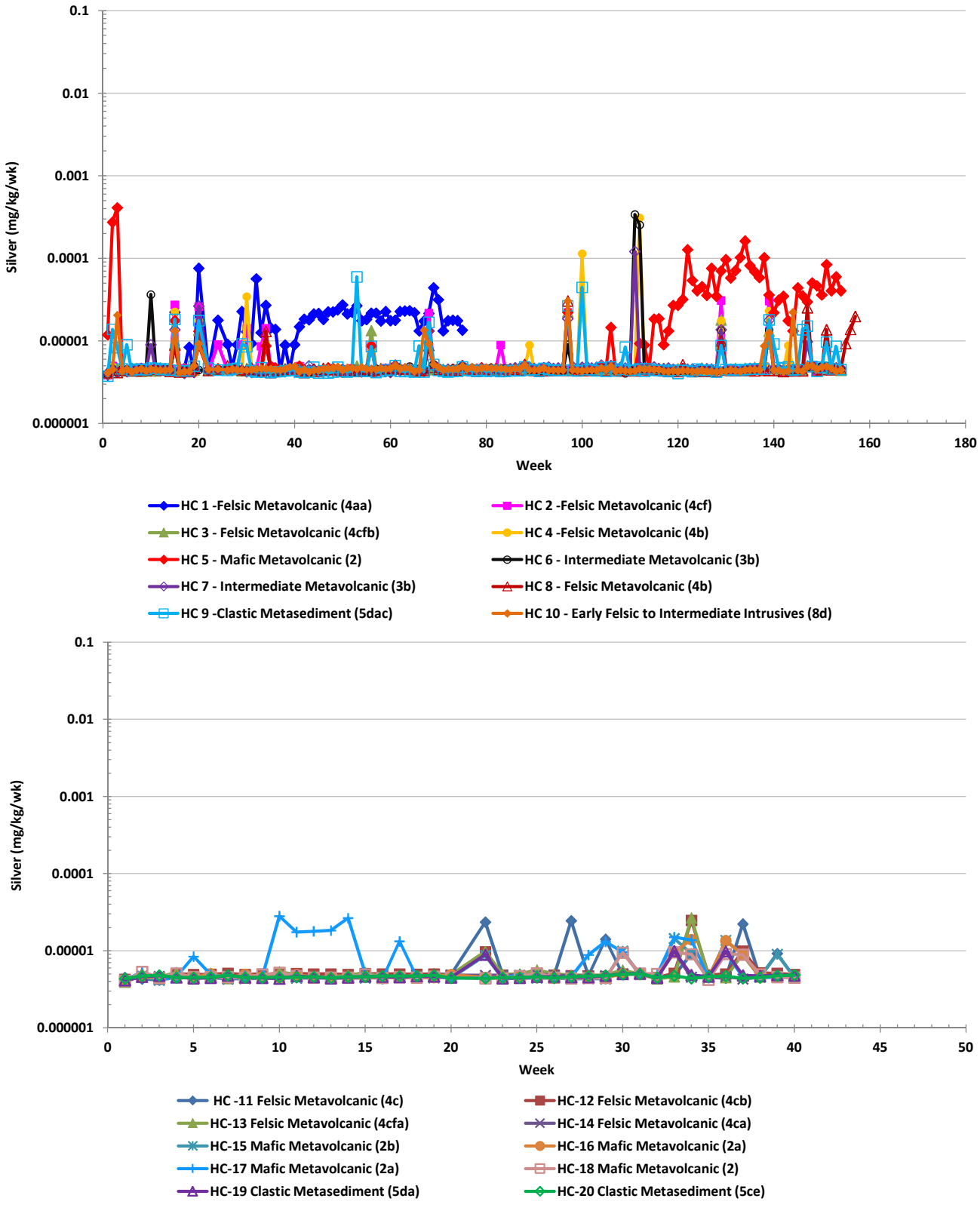
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Rainy River Gold Project

Mine Rock Humidity Cell Silicon Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-28



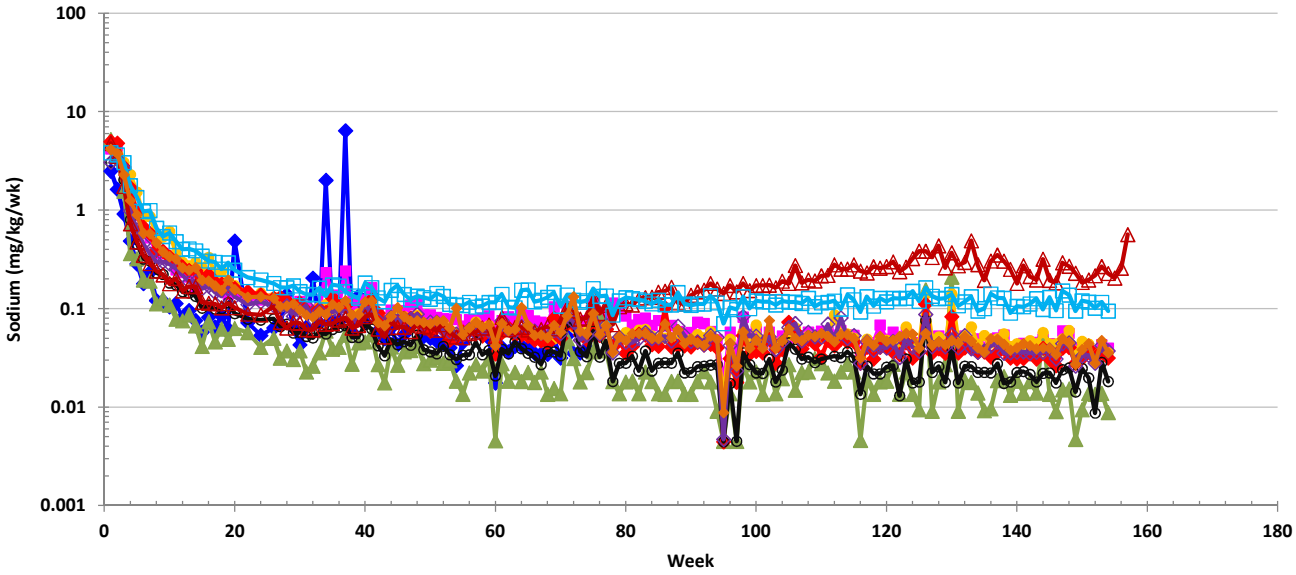
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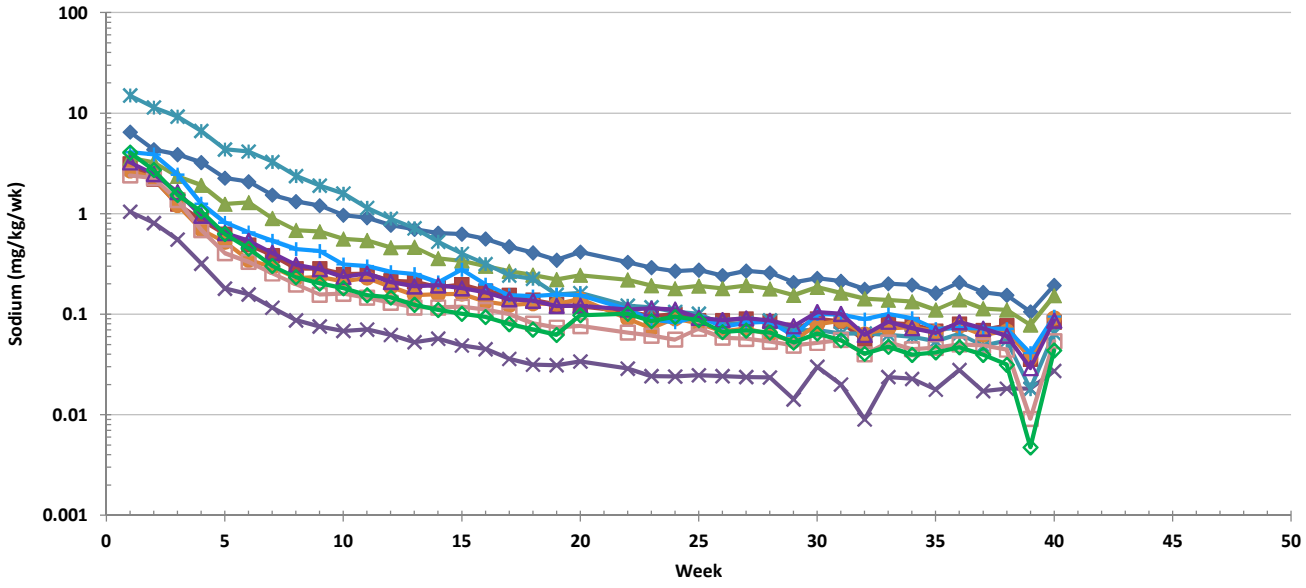
Rainy River Gold Project

Mine Rock Humidity Cell Silver Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-29



HC 1 -Felsic Metavolcanic (4aa)
HC 2 -Felsic Metavolcanic (4cf)
HC 3 - Felsic Metavolcanic (4cfb)
HC 4 -Felsic Metavolcanic (4b)
HC 5 - Mafic Metavolcanic (2)
HC 6 - Intermediate Metavolcanic (3b)
HC 7 - Intermediate Metavolcanic (3b)
HC 8 - Felsic Metavolcanic (4b)
HC 9 -Clastic Metasediment (5dac)
HC 10 - Early Felsic to Intermediate Intrusives (8d)



HC -11 Felsic Metavolcanic (4c)
HC-12 Felsic Metavolcanic (4cb)
HC-13 Felsic Metavolcanic (4cfa)
HC-14 Felsic Metavolcanic (4ca)
HC-15 Mafic Metavolcanic (2b)
HC-16 Mafic Metavolcanic (2a)
HC-17 Mafic Metavolcanic (2a)
HC-18 Mafic Metavolcanic (2)
HC-19 Clastic Metasediment (5da)
HC-20 Clastic Metasediment (5ce)

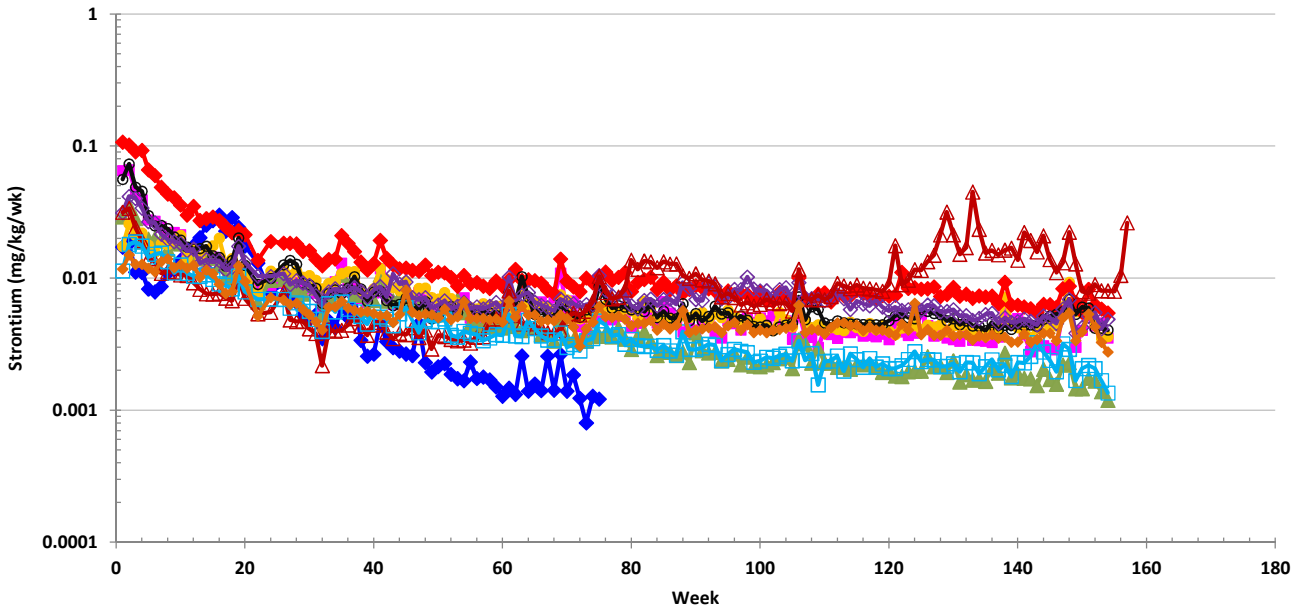
RAINYRIVER

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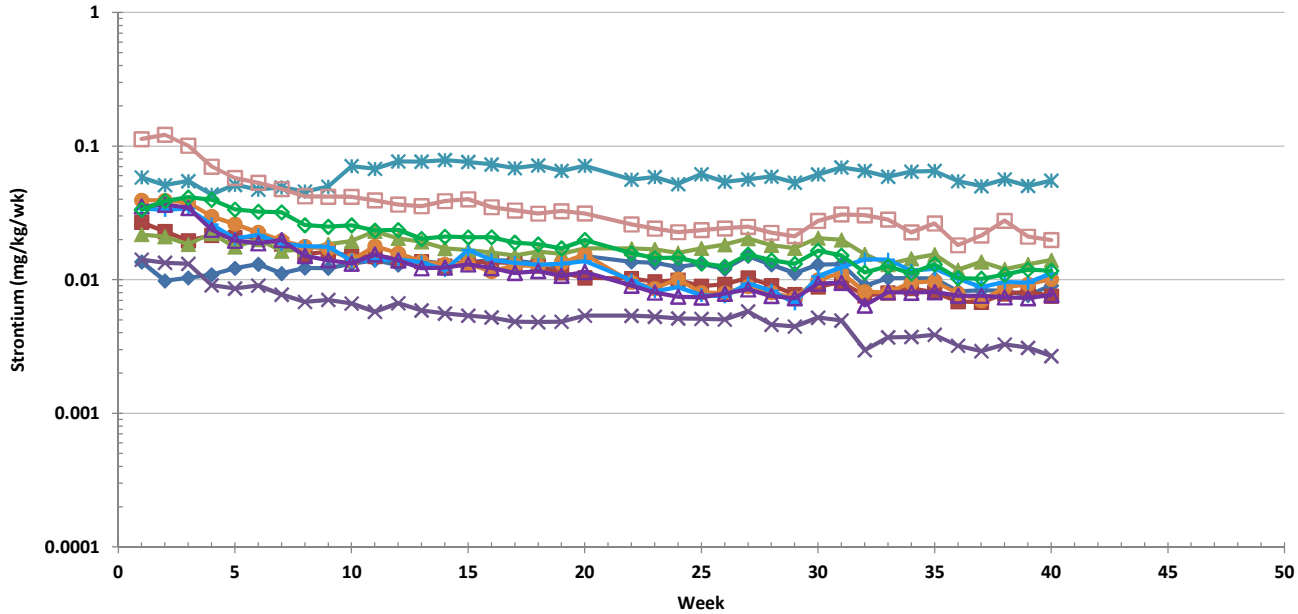
Rainy River Gold Project

Mine Rock Humidity Cell Sodium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-30



HC 1 -Felsic Metavolcanic (4aa)
HC 2 -Felsic Metavolcanic (4cf)
HC 3 - Felsic Metavolcanic (4cfb)
HC 4 -Felsic Metavolcanic (4b)
HC 5 - Mafic Metavolcanic (2)
HC 6 - Intermediate Metavolcanic (3b)
HC 7 - Intermediate Metavolcanic (3b)
HC 8 - Felsic Metavolcanic (4b)
HC 9 -Clastic Metasediment (5dac)
HC 10 - Early Felsic to Intermediate Intrusives (8d)



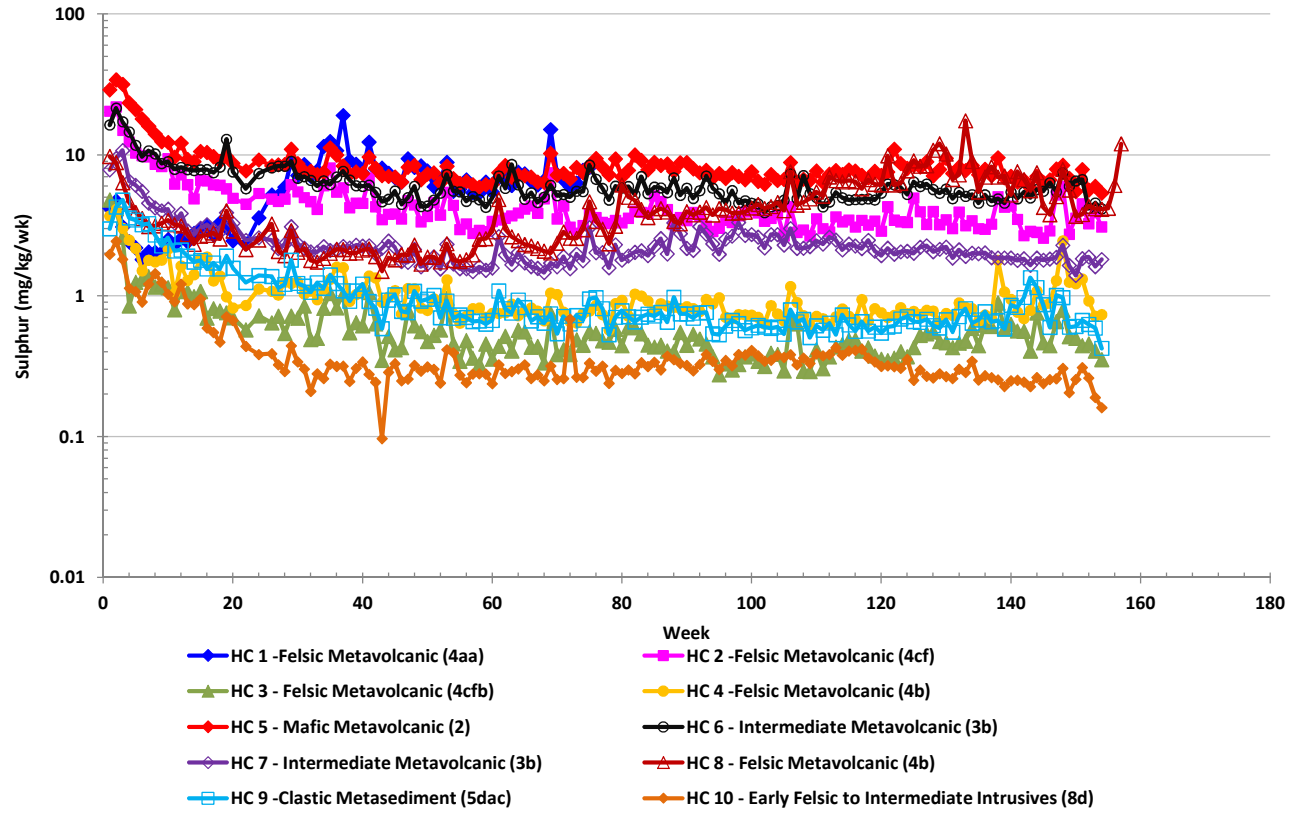
HC -11 Felsic Metavolcanic (4c)
HC-12 Felsic Metavolcanic (4cb)
HC-13 Felsic Metavolcanic (4cfa)
HC-14 Felsic Metavolcanic (4ca)
HC-15 Mafic Metavolcanic (2b)
HC-16 Mafic Metavolcanic (2a)
HC-17 Mafic Metavolcanic (2a)
HC-18 Mafic Metavolcanic (2)
HC-19 Clastic Metasediment (5da)
HC-20 Clastic Metasediment (5ce)

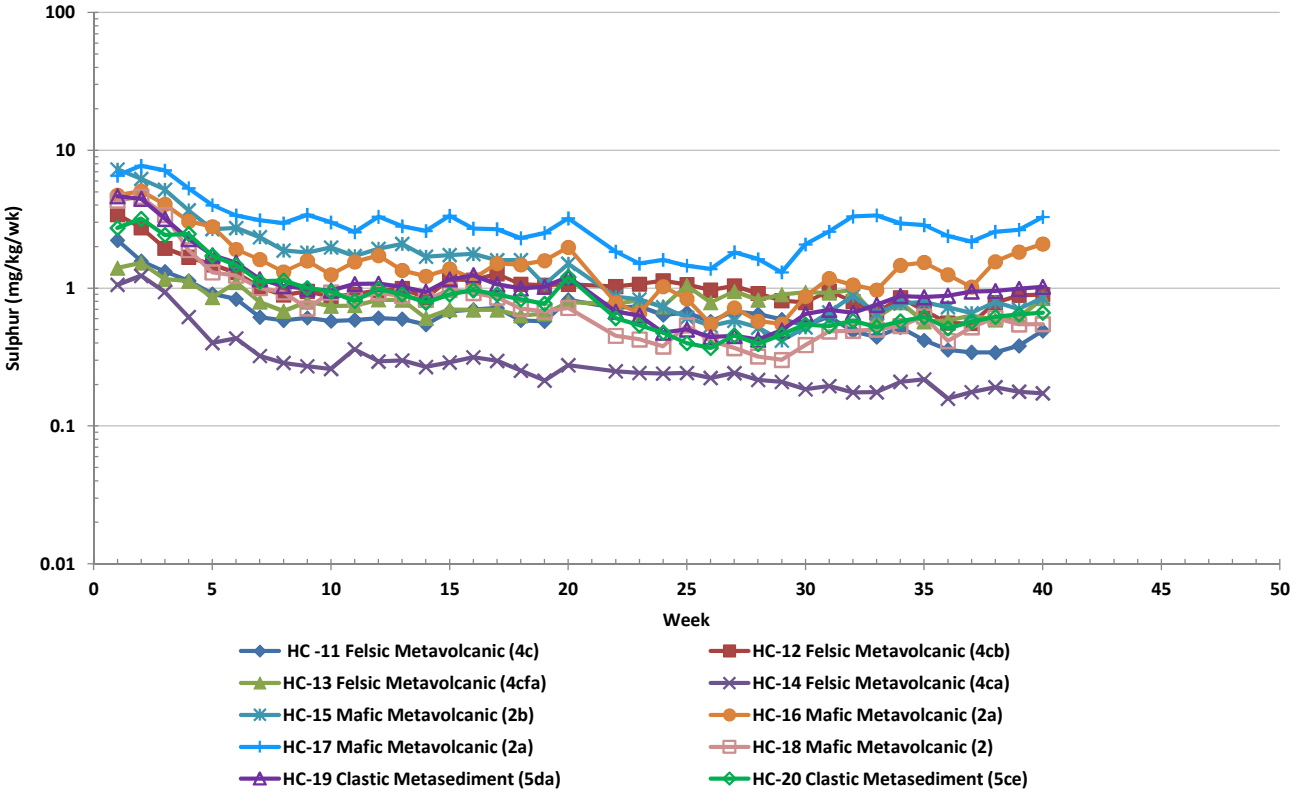
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Rainy River Gold Project

Mine Rock Humidity Cell Strontium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-31



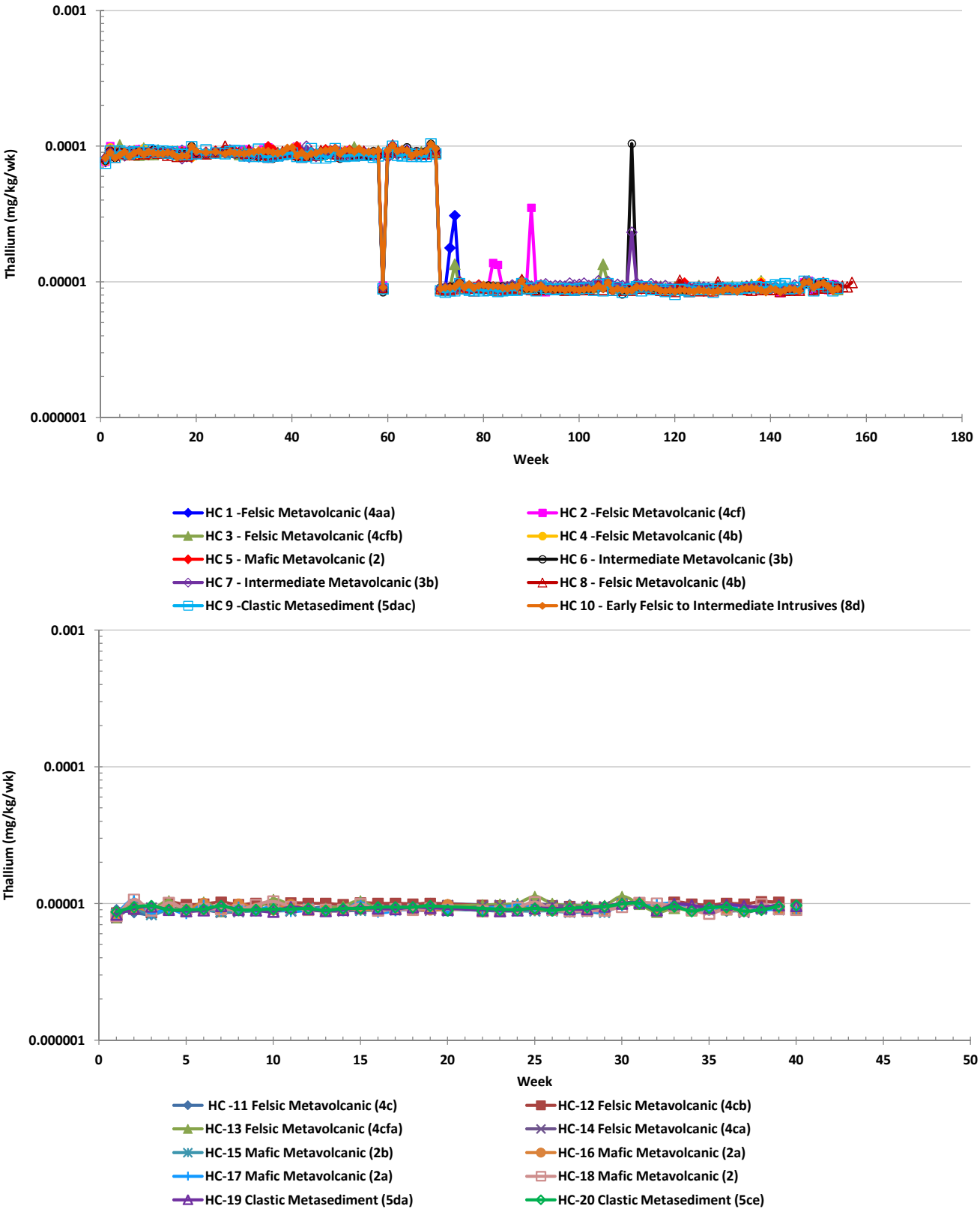


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Rainy River Gold Project

Mine Rock Humidity Cell Sulphur Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-32



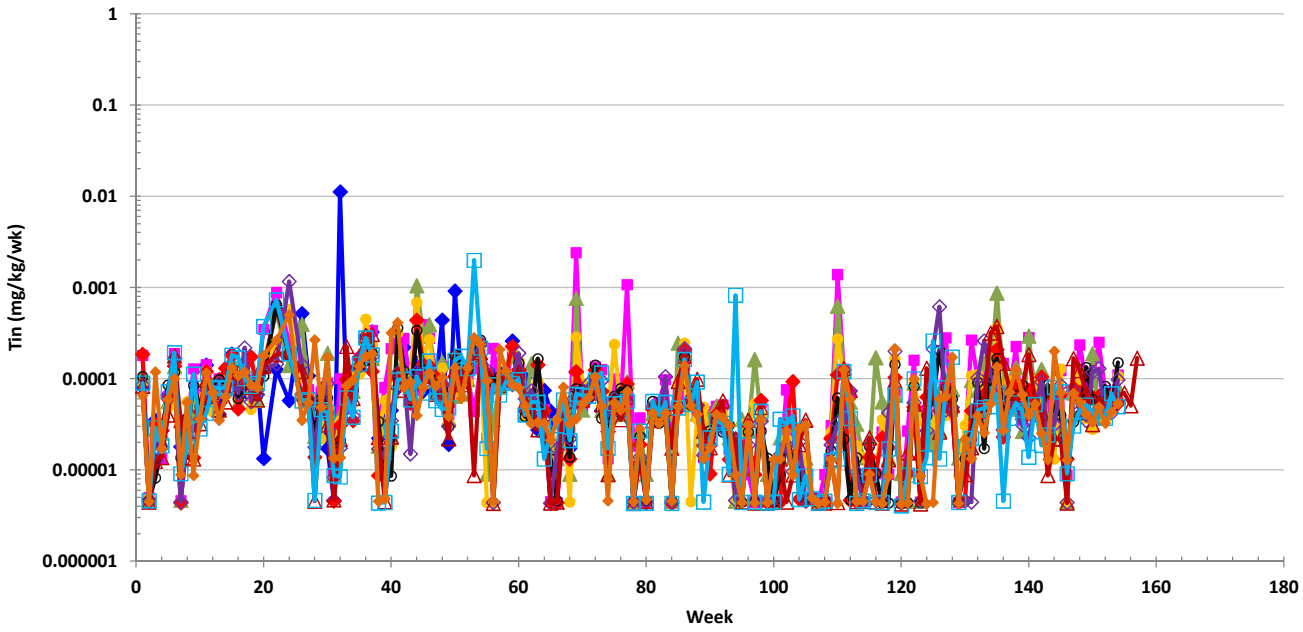
RAINYRIVER

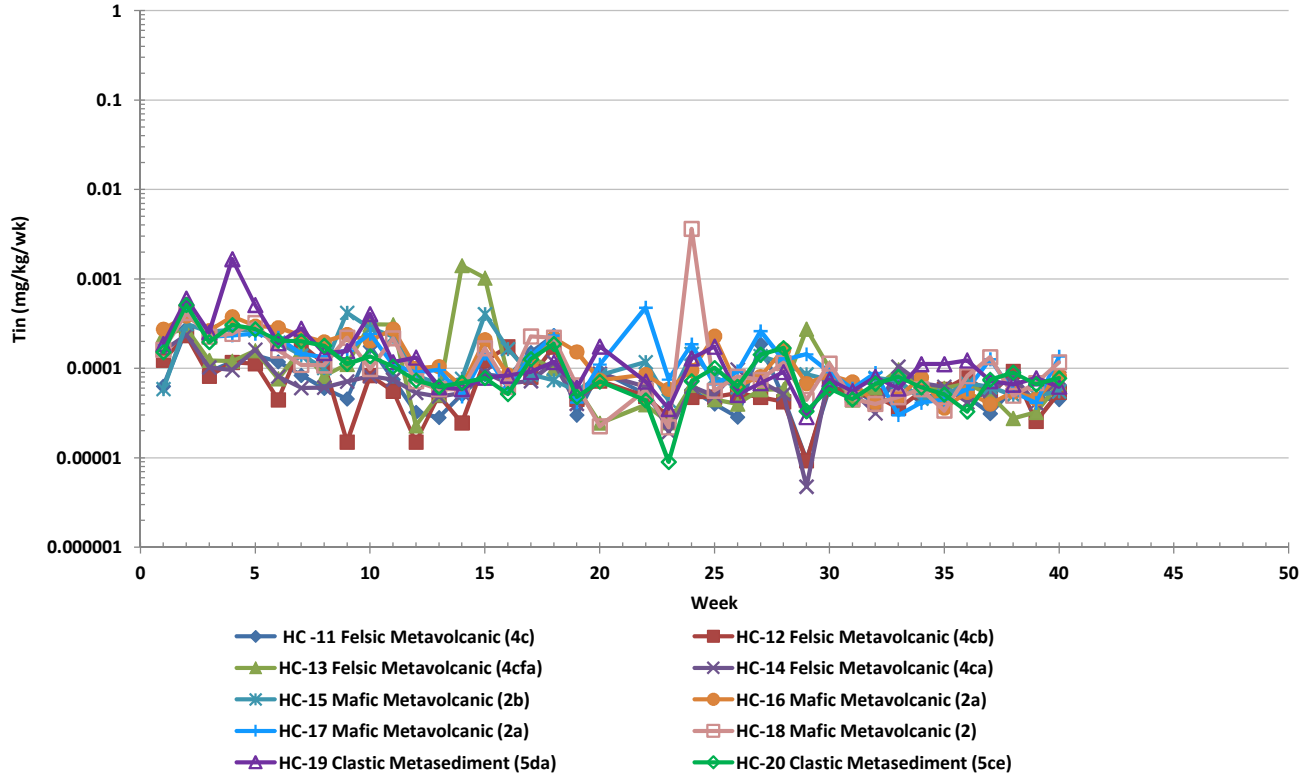
amec

Rainy River Gold Project

Mine Rock Humidity Cell Thallium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-33





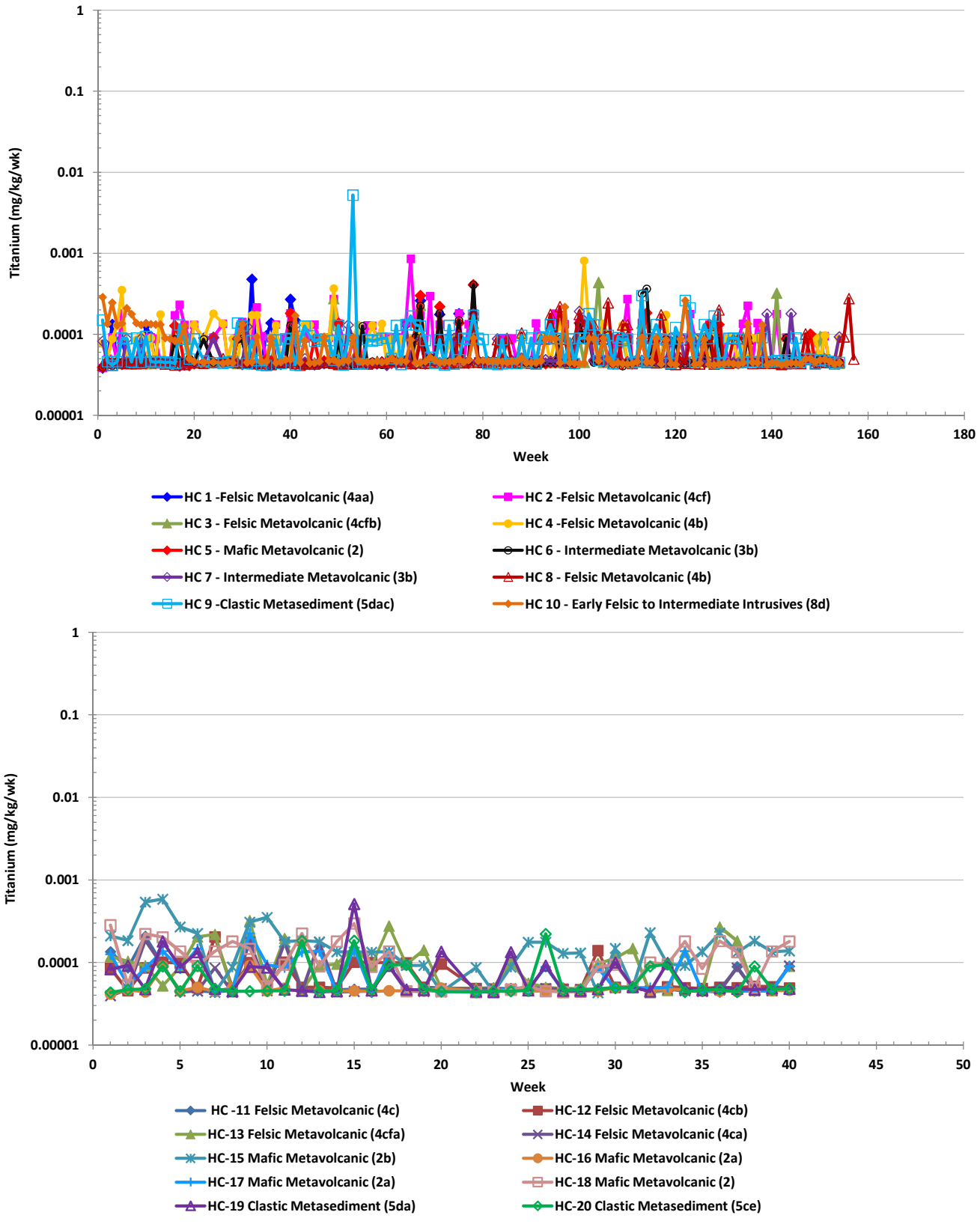
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Rainy River Gold Project

Mine Rock Humidity Cell Tin Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-34



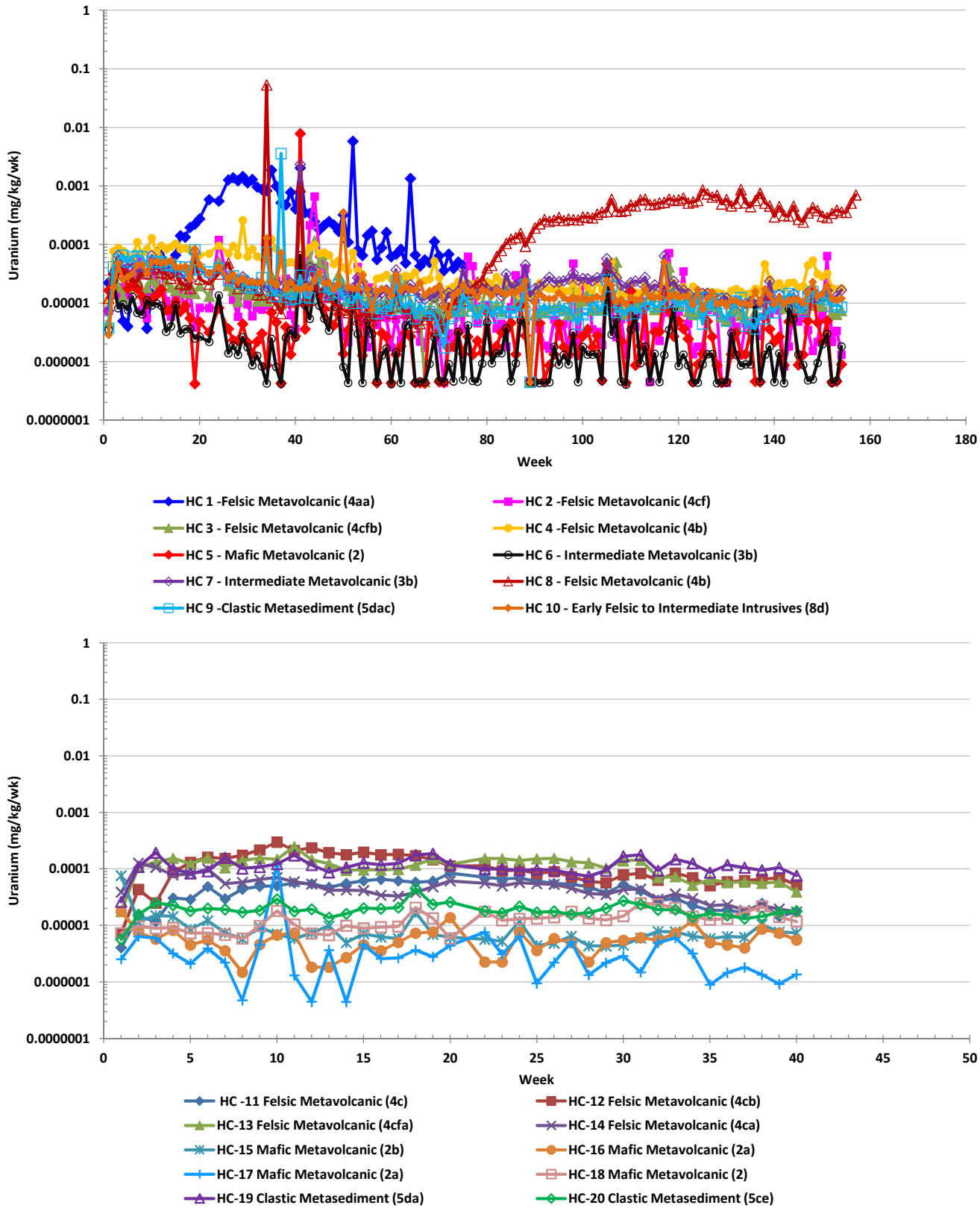
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Rainy River Gold Project

Mine Rock Humidity Cell Titanium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-35



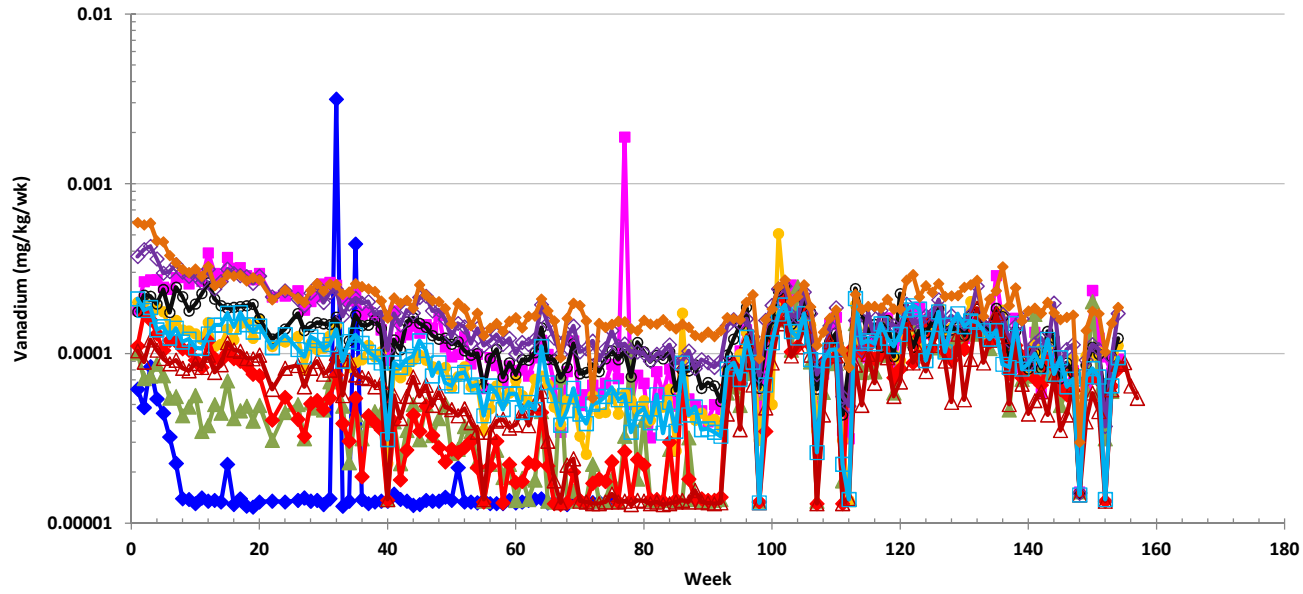
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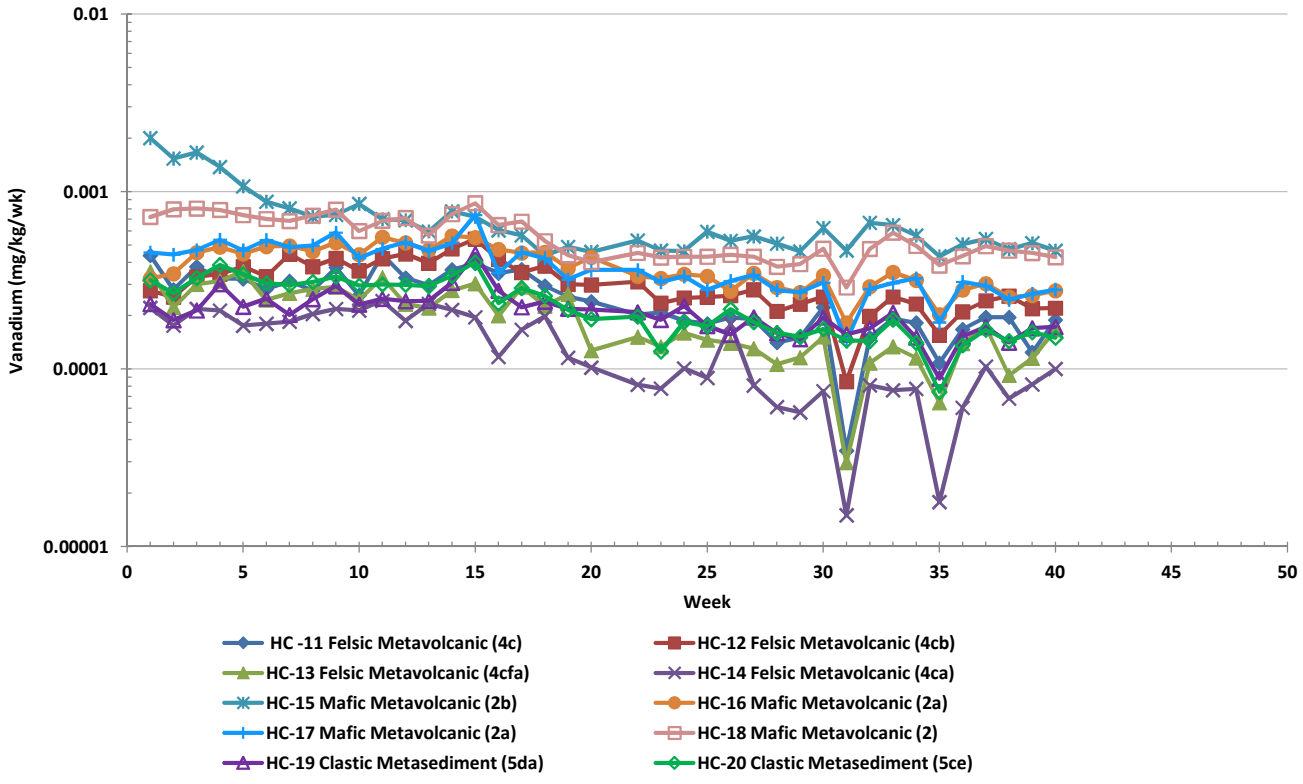
amec

Rainy River Gold Project

Mine Rock Humidity Cell Uranium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-36



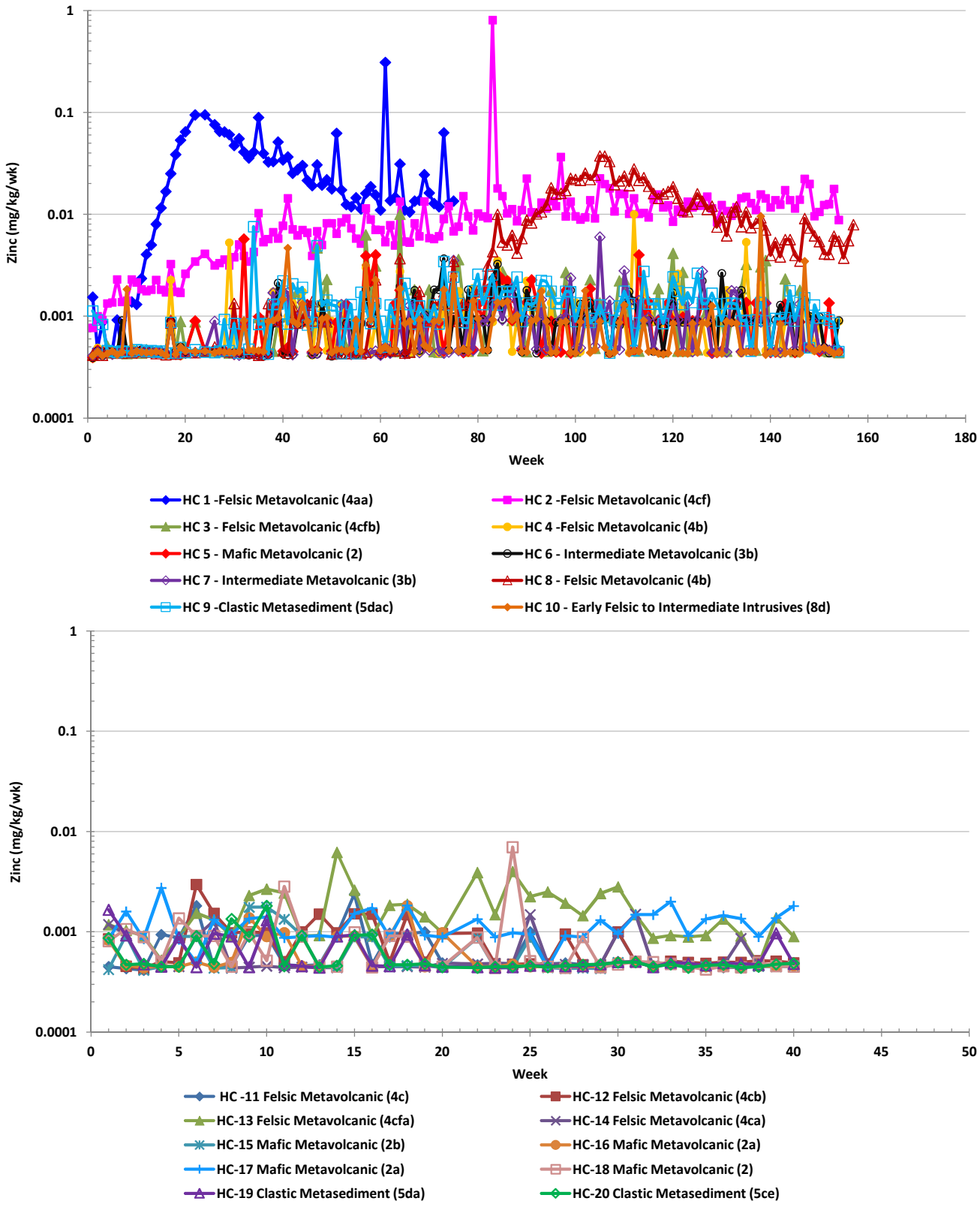


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Rainy River Gold Project

Mine Rock Humidity Cell Vanadium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-37



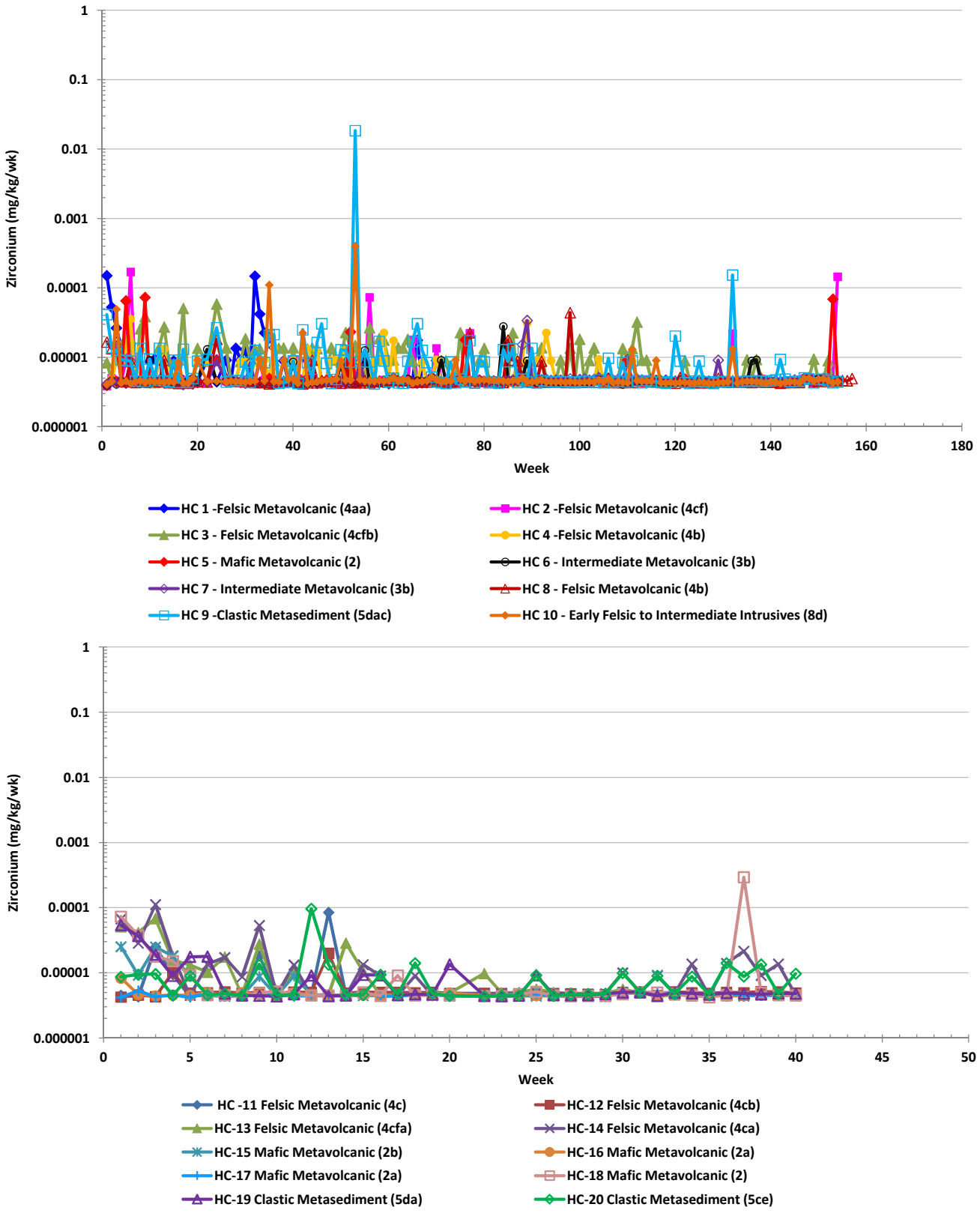
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Rainy River Gold Project

Mine Rock Humidity Cell Zinc Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-38



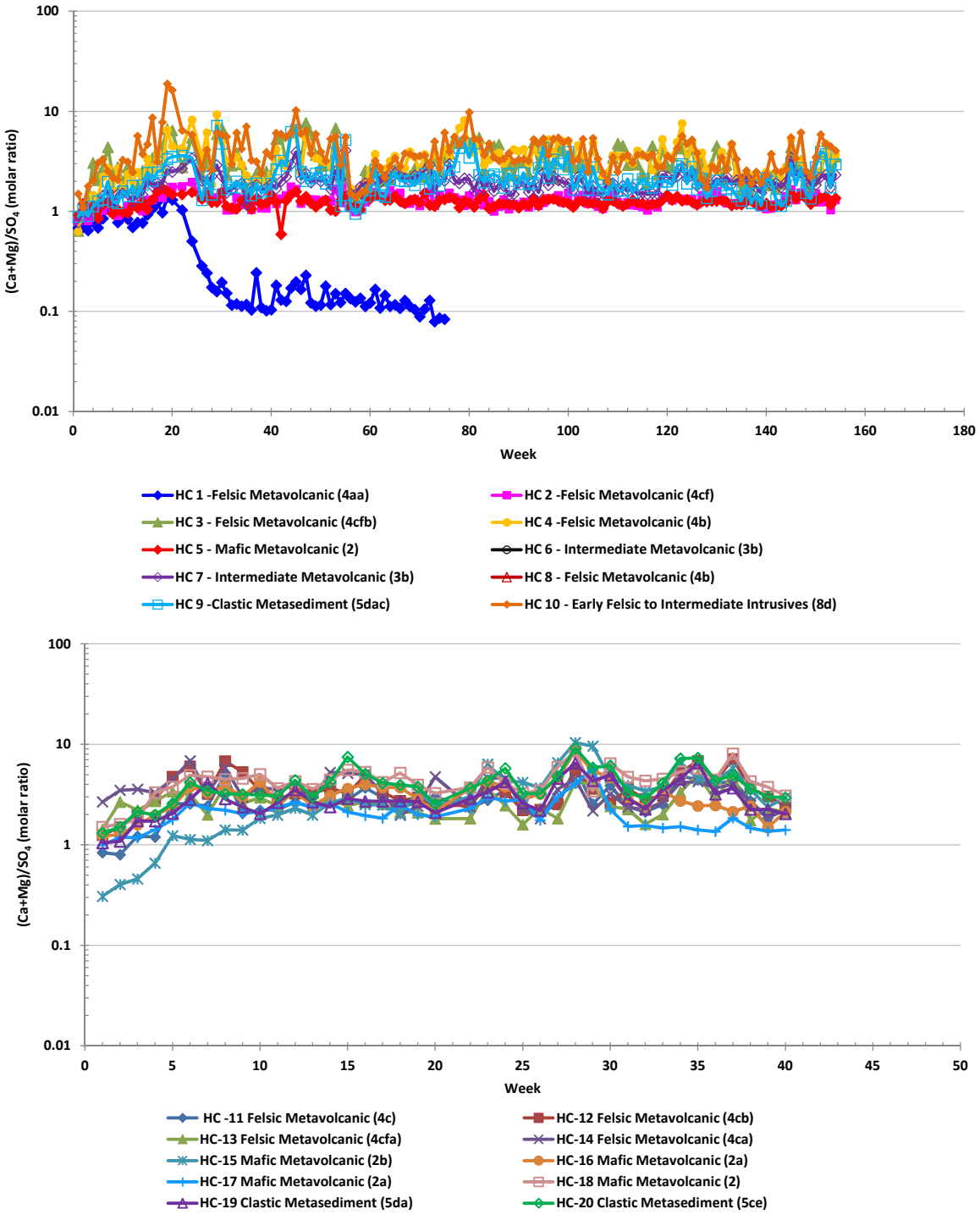
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Rainy River Gold Project

Mine Rock Humidity Cell Zirconium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-39



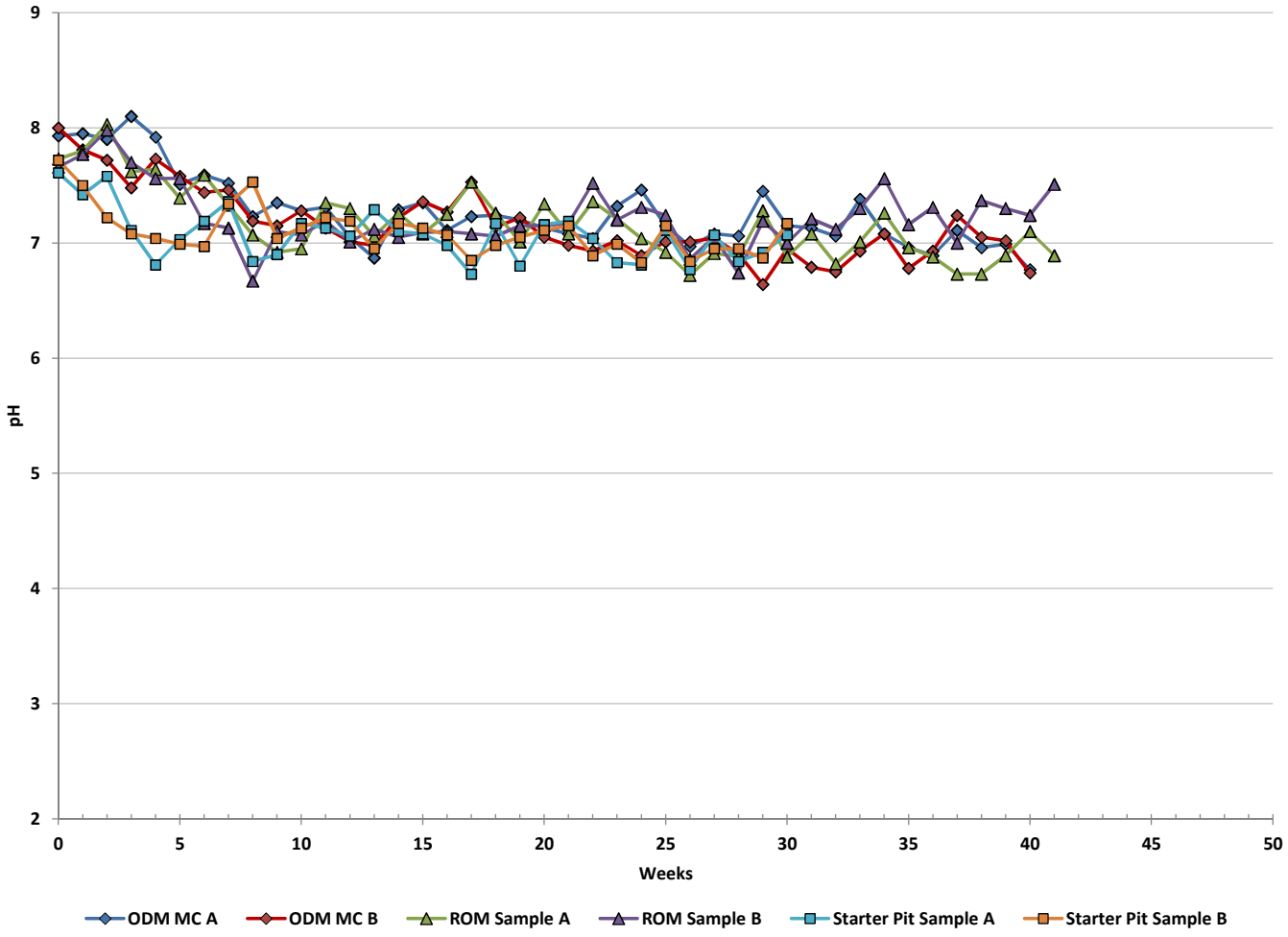
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Rainy River Gold Project

Time Plot of (Calcium + Magnesium) / Sulphate Molar ratio in Mine Rock Humidity Cells

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-40



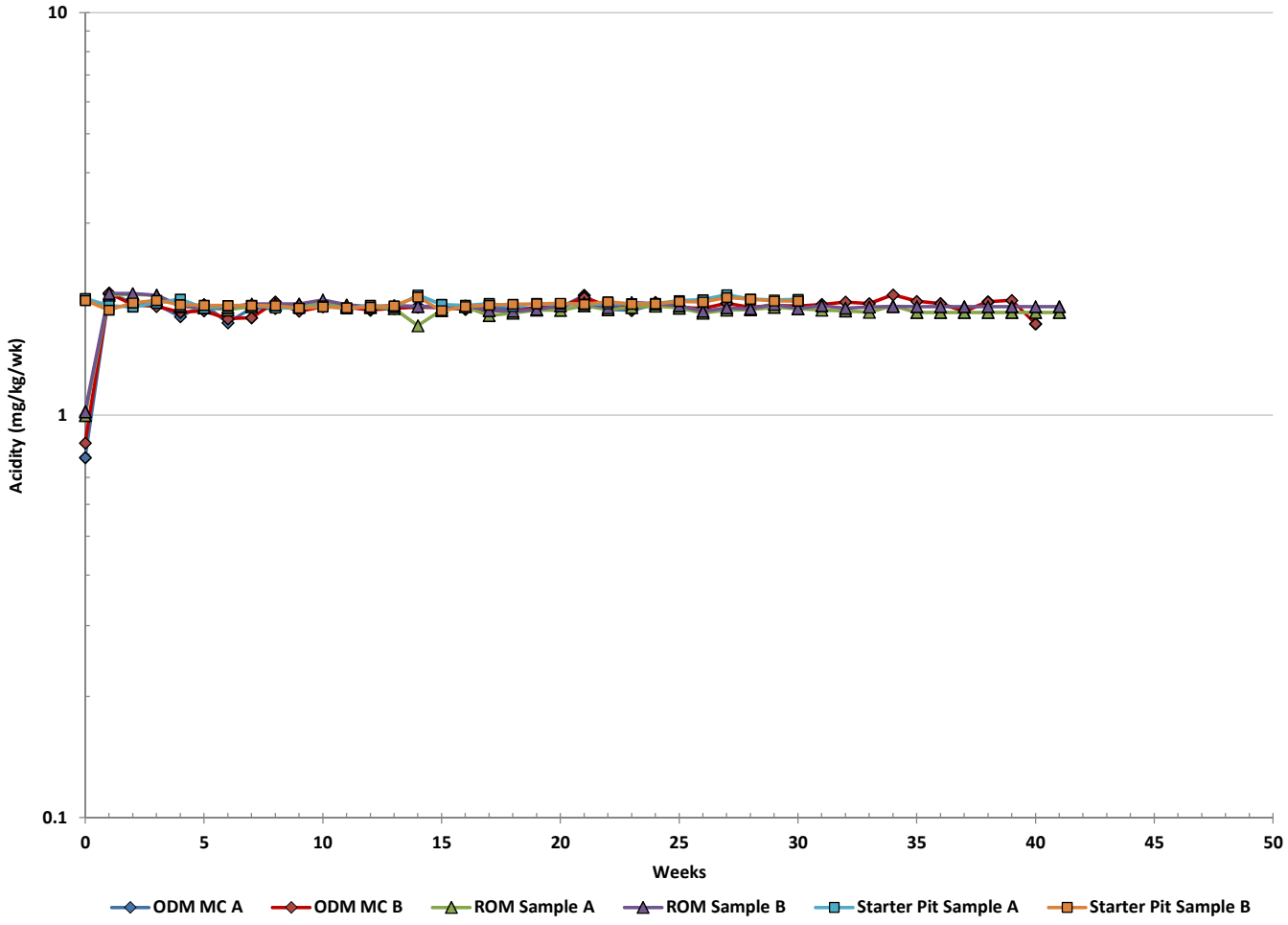
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Rainy River Gold Project

pH of Tailings Humidity Cell Leachate

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-41



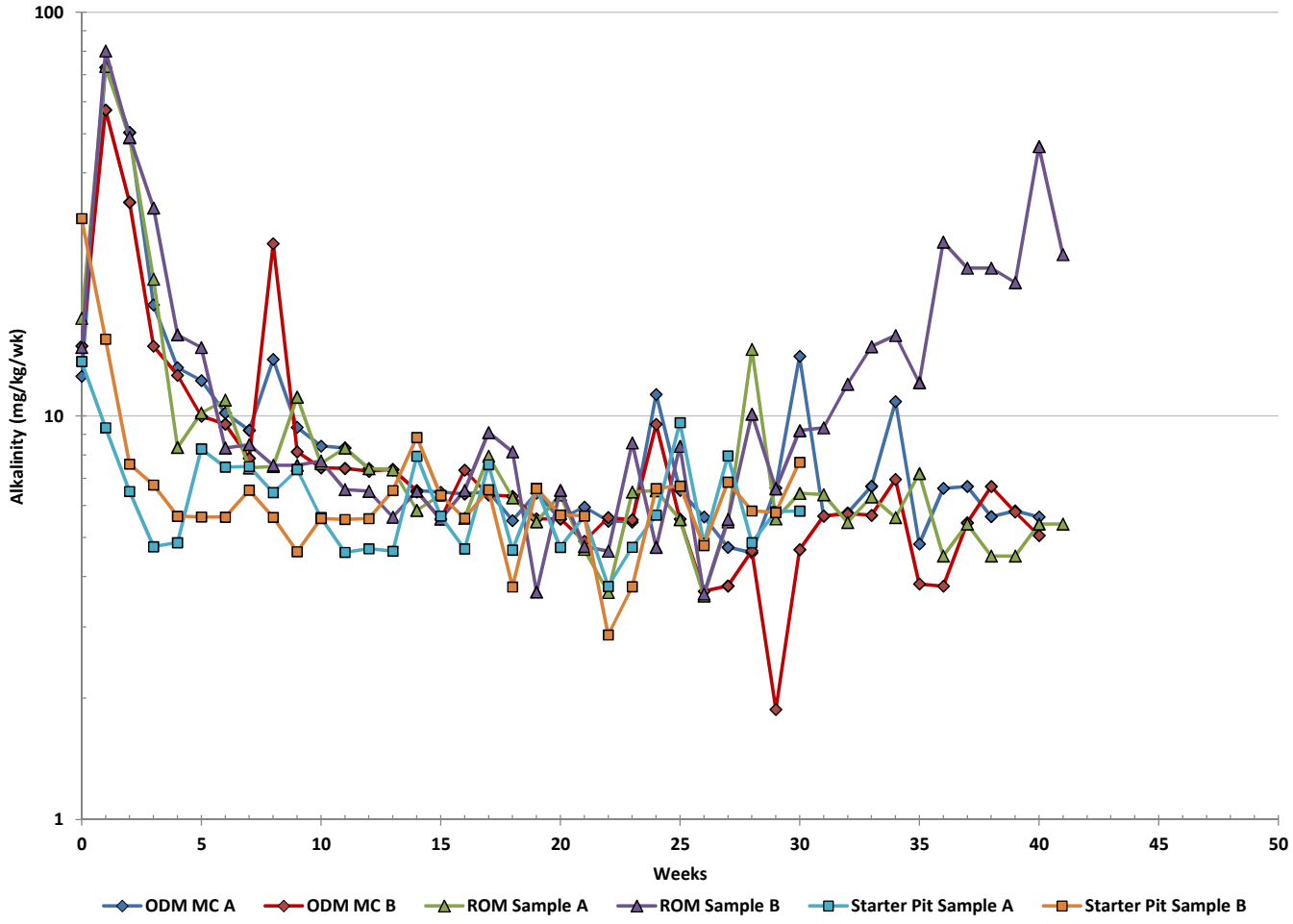
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Rainy River Gold Project

Tailings Humidity Cell Acidity Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-42



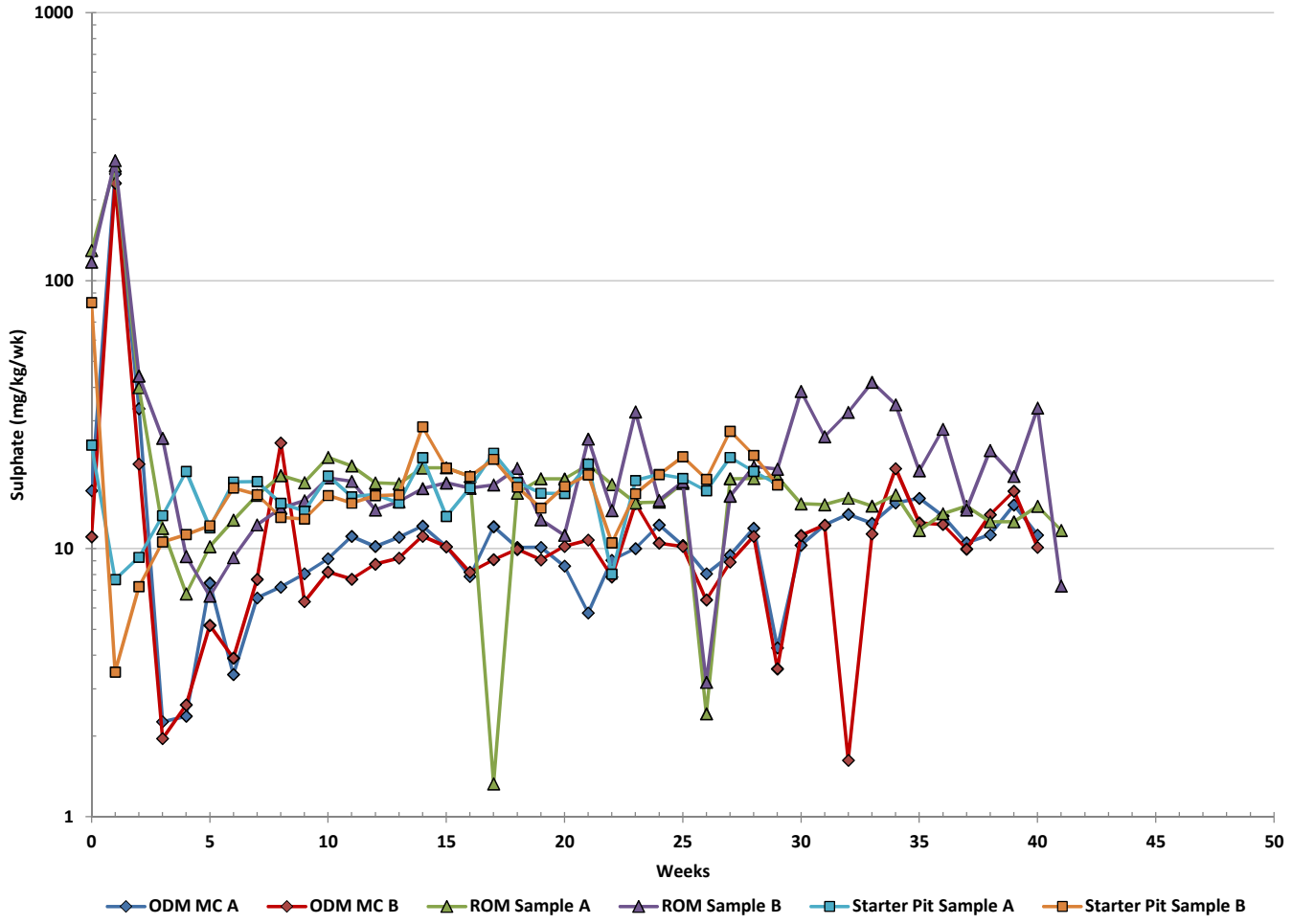
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Rainy River Gold Project

Tailings Humidity Cell Alkalinity Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-43



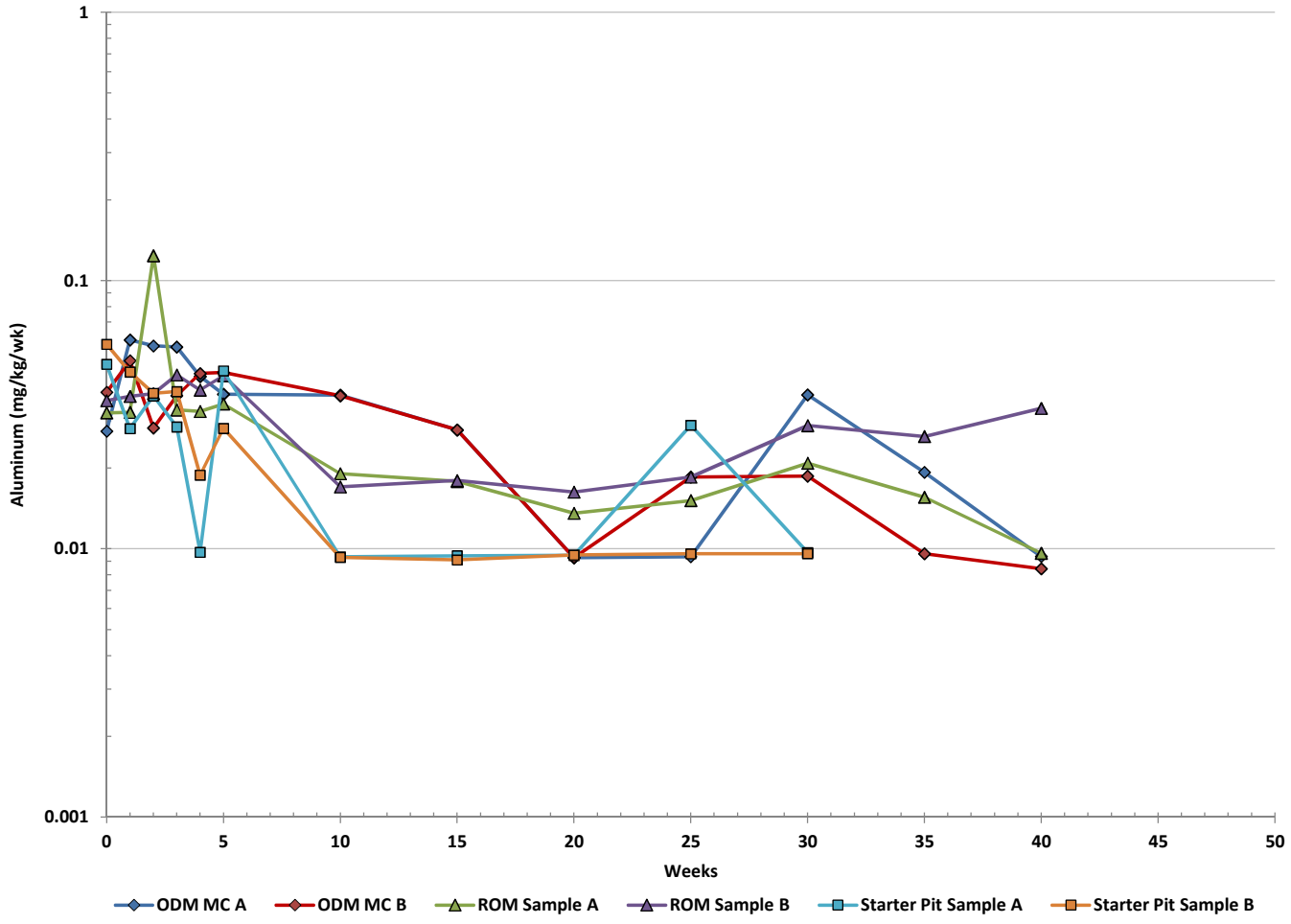
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Sulphate Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-44



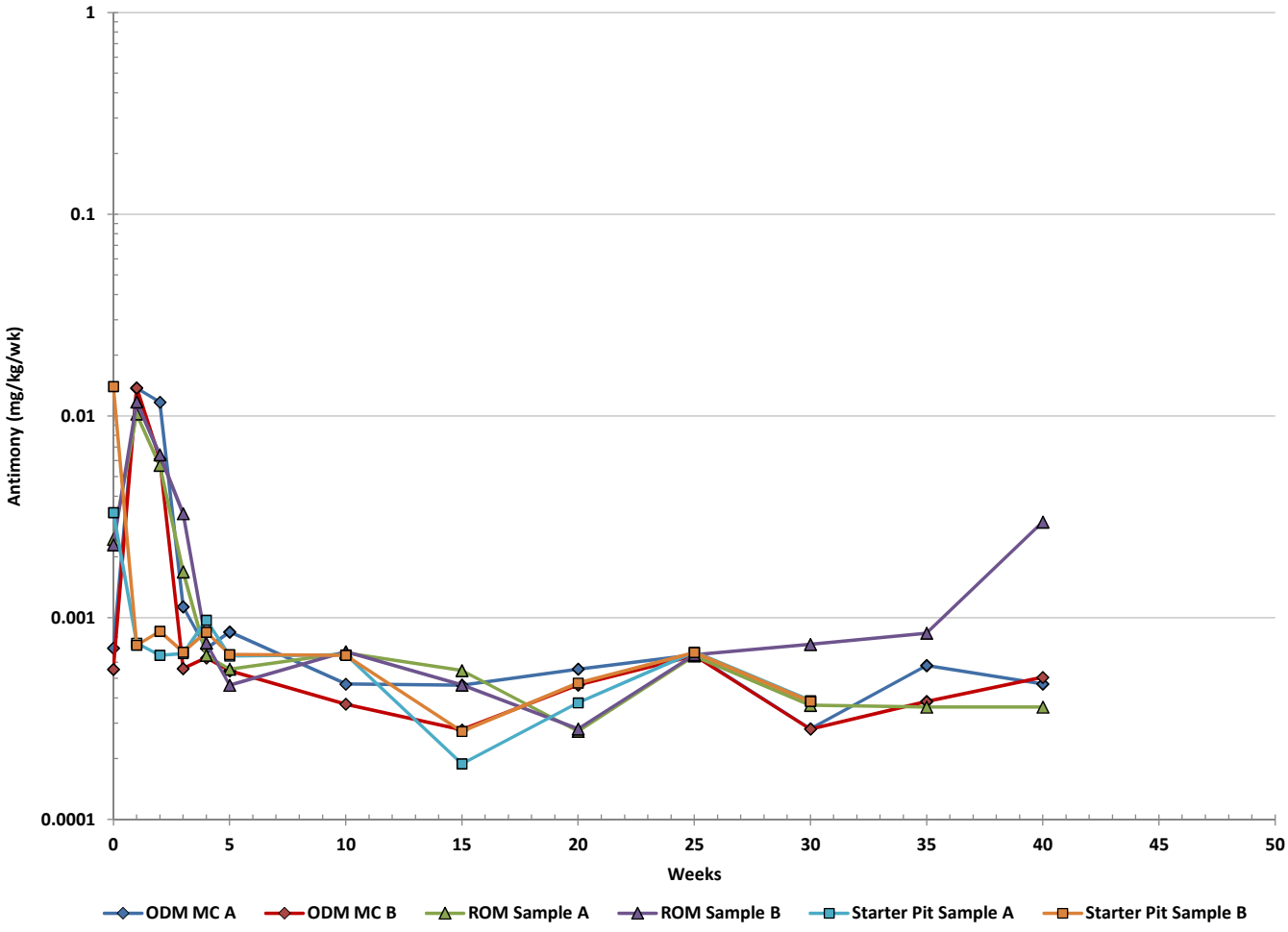
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Aluminum Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-45



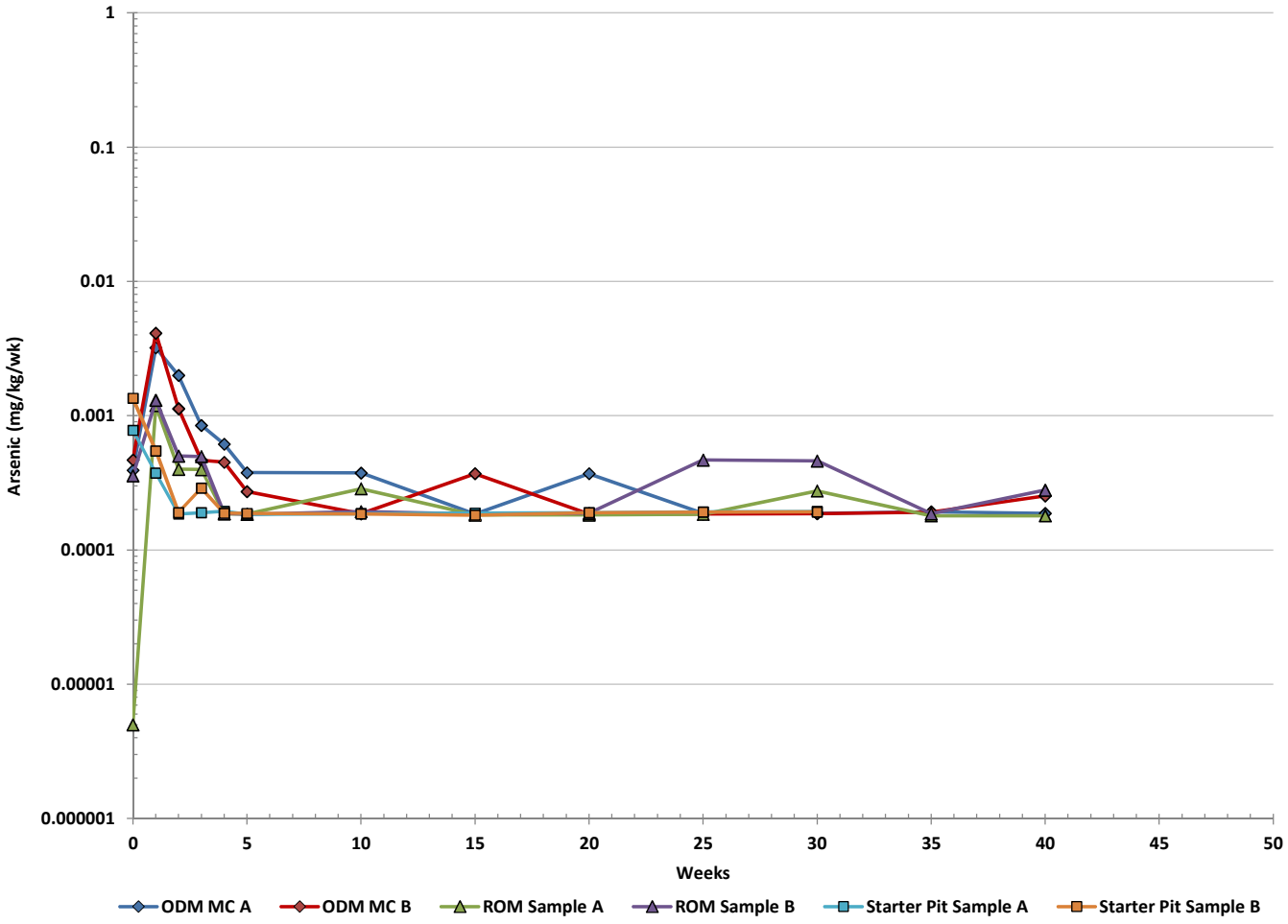
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Rainy River Gold Project

Tailings Humidity Cell Antimony Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-46



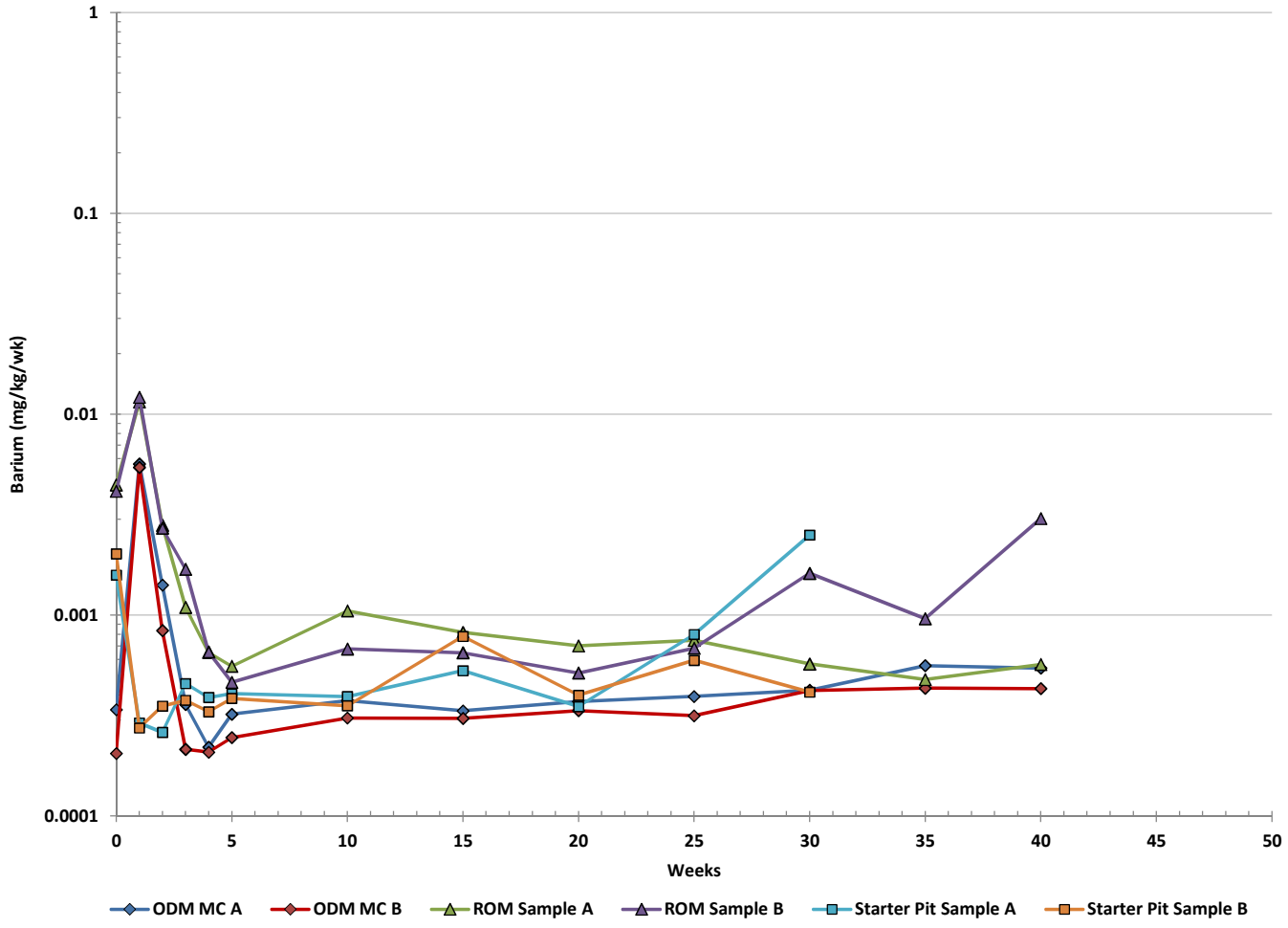
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Rainy River Gold Project

Tailings Humidity Cell Arsenic Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-47



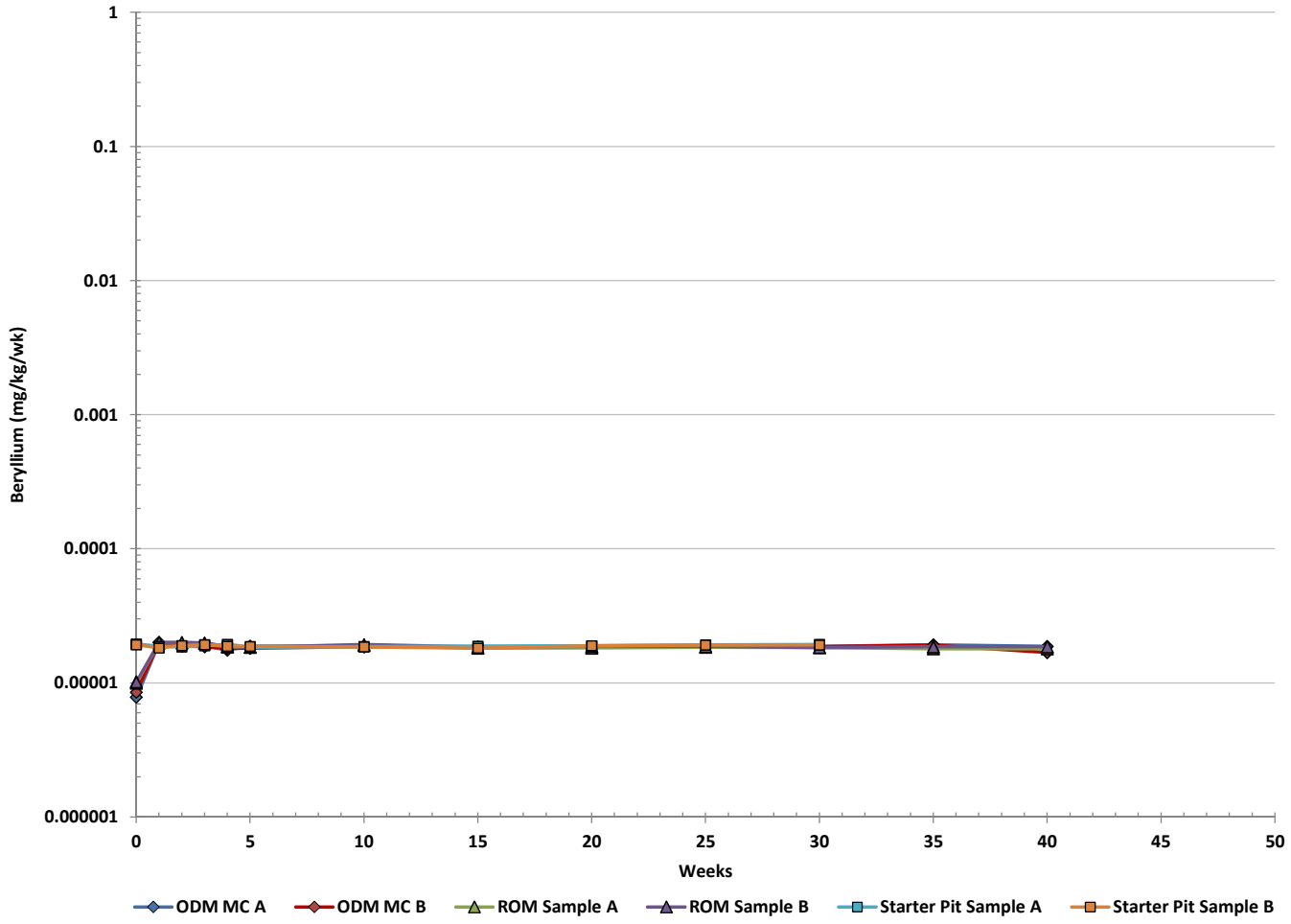
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Rainy River Gold Project

Tailings Humidity Cell Barium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-48



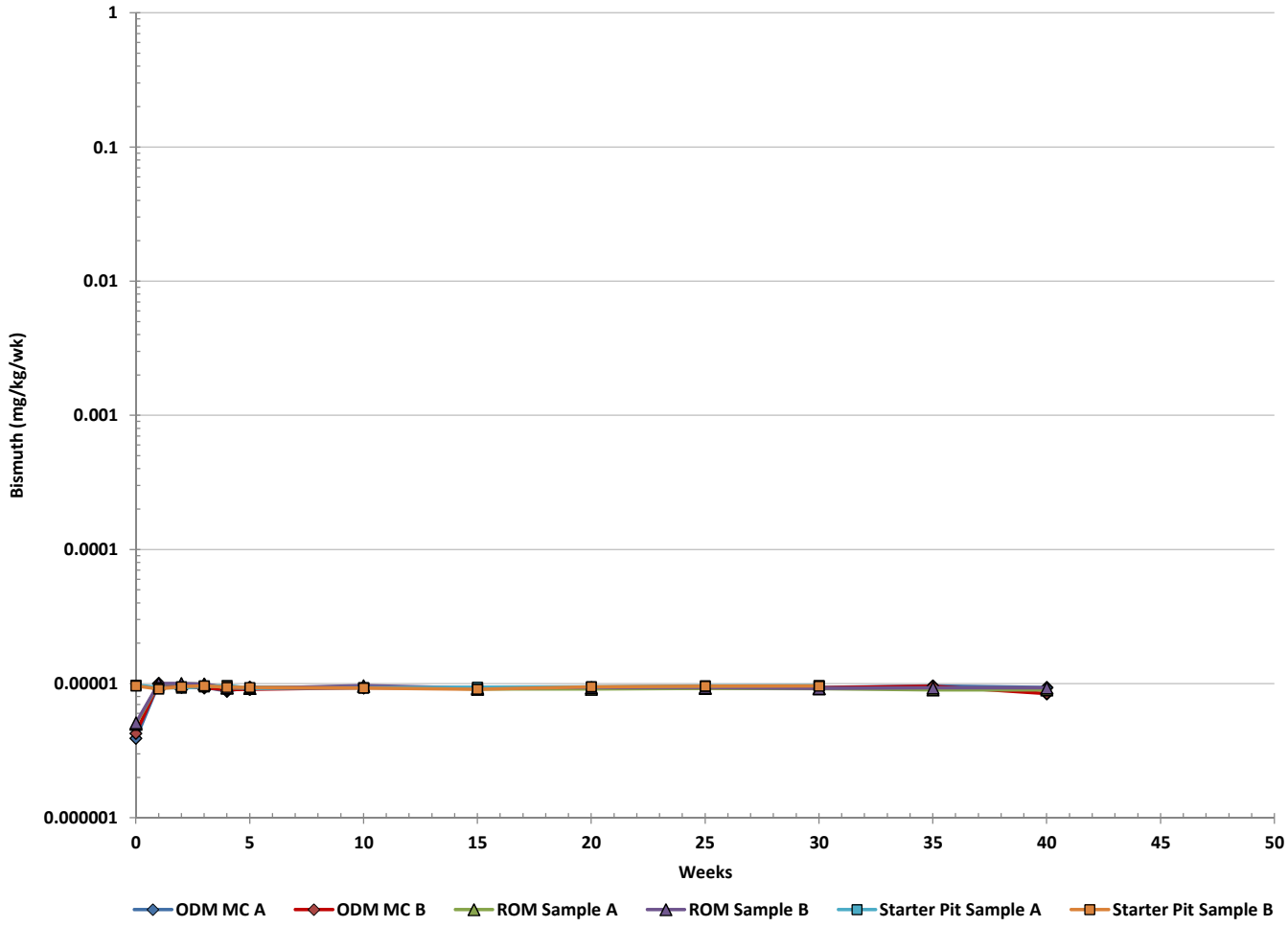
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Beryllium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-49



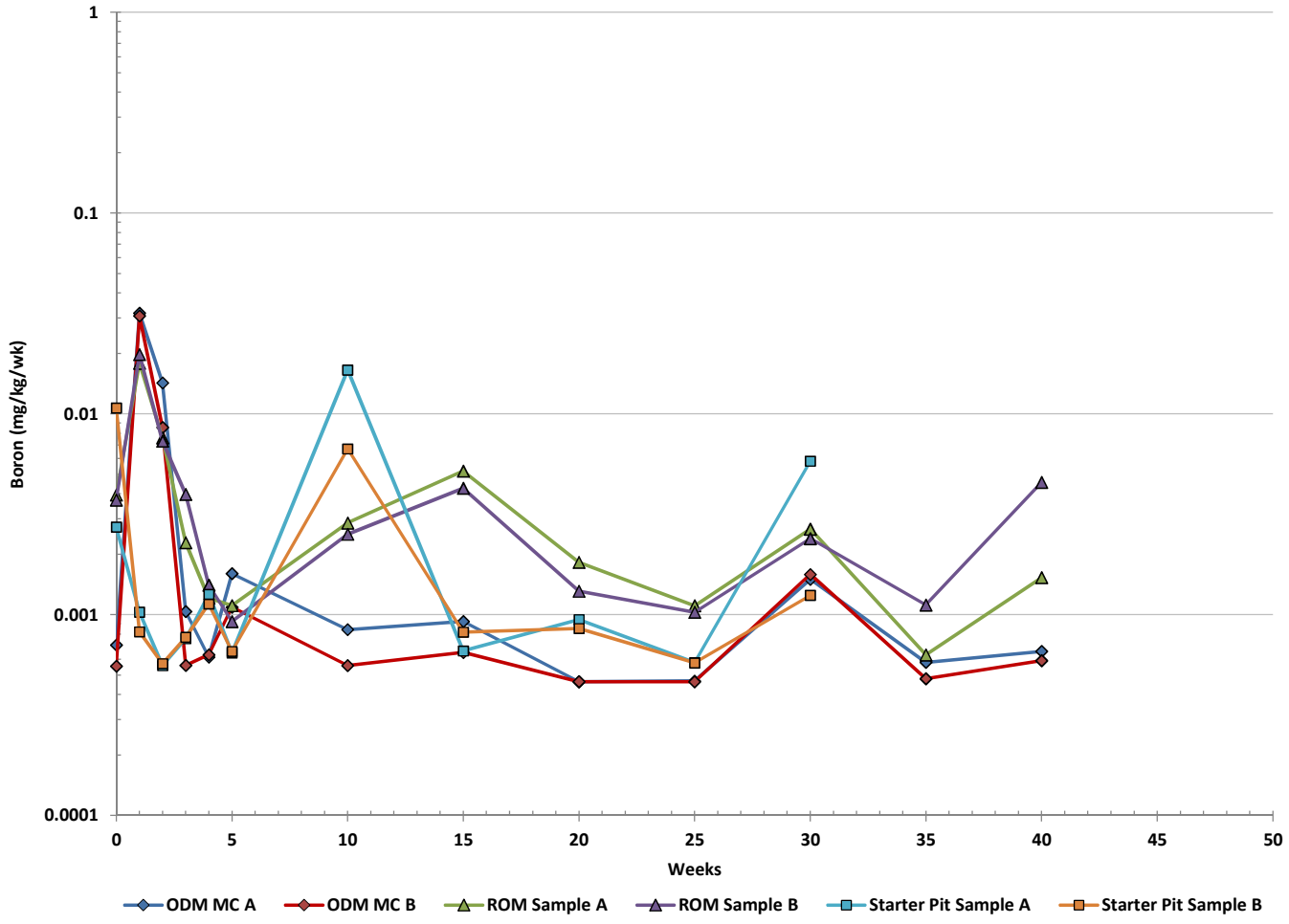
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Bismuth Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-50



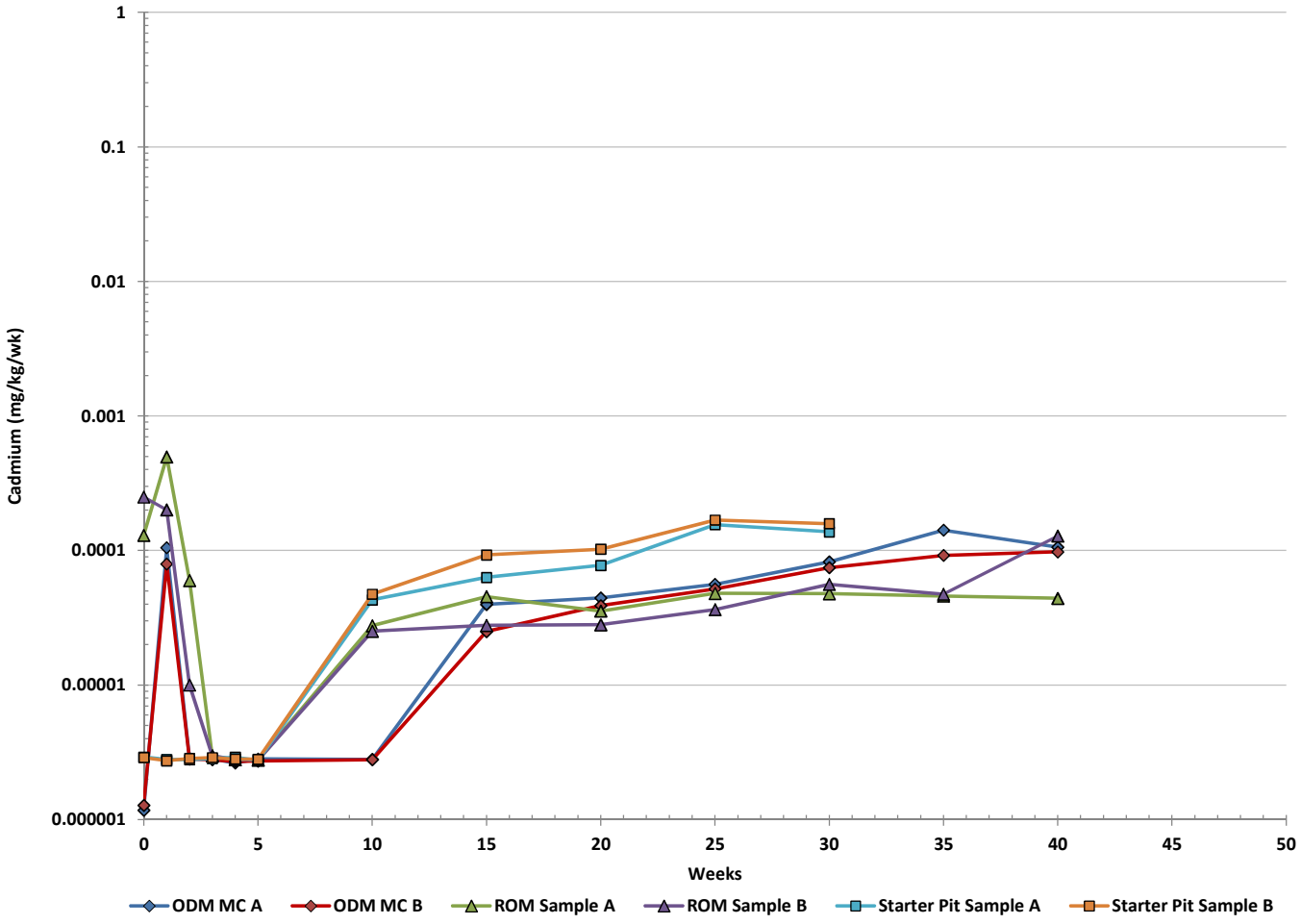
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Boron Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-51



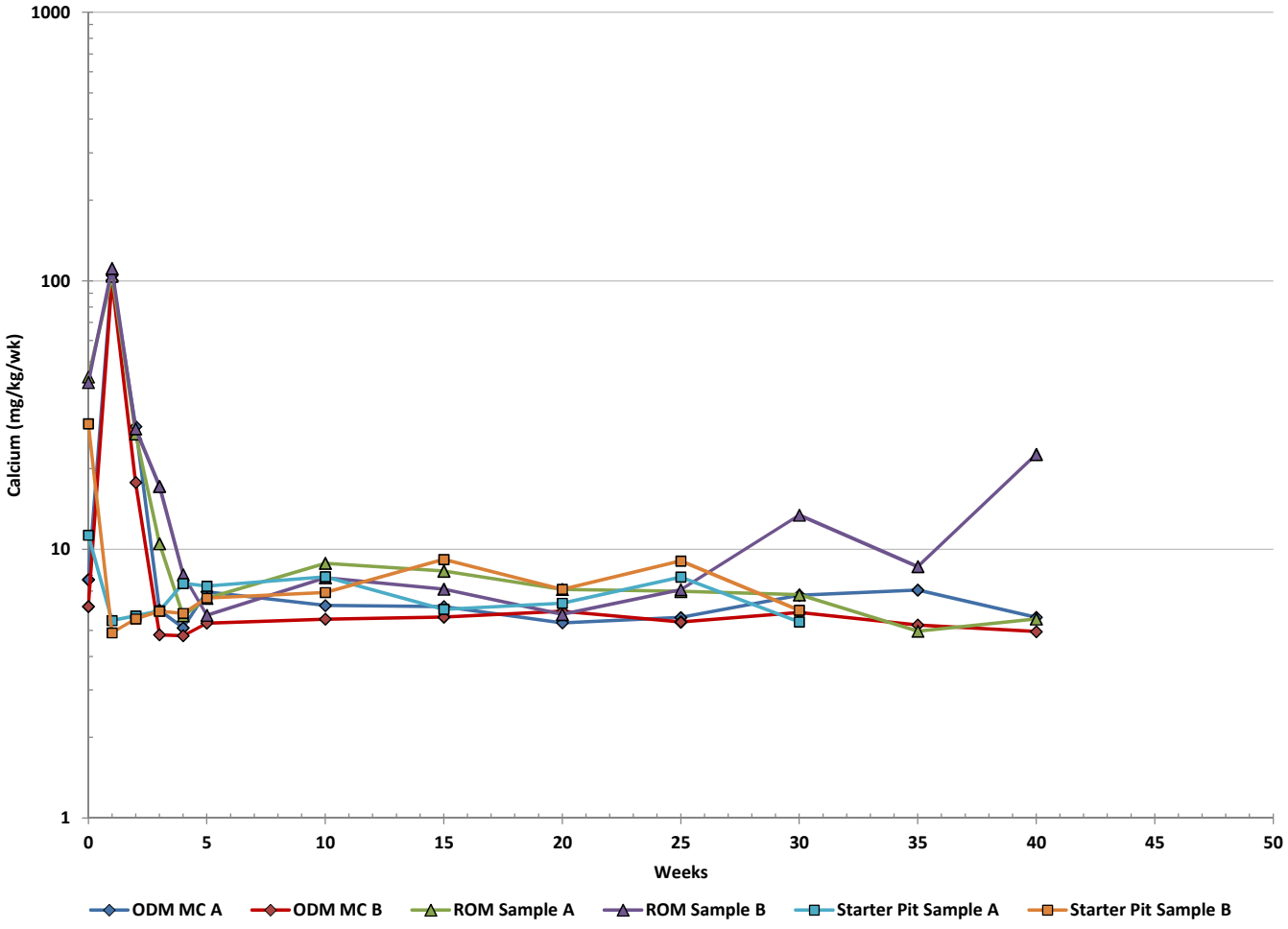
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Cadmium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-52



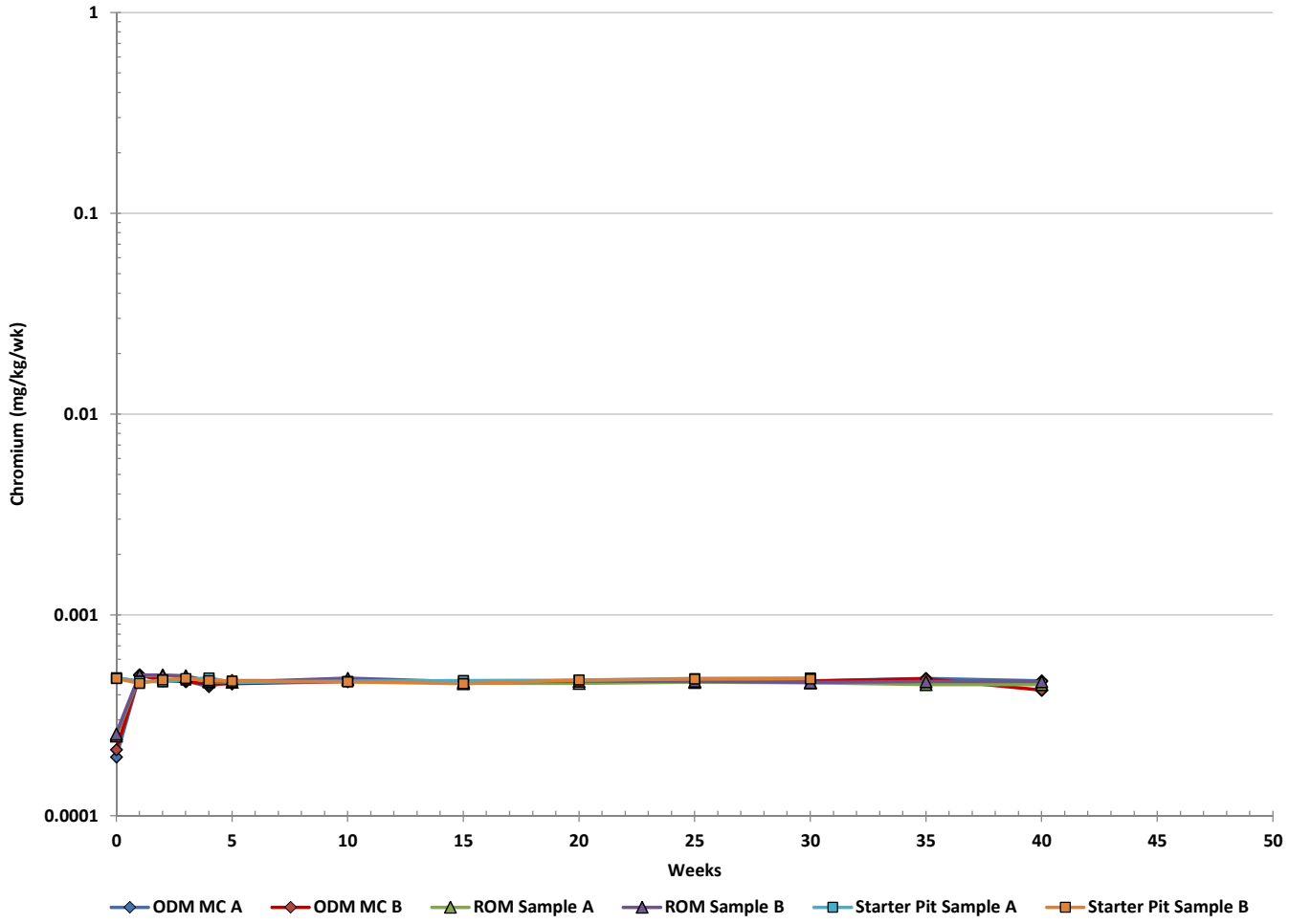
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Calcium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-53



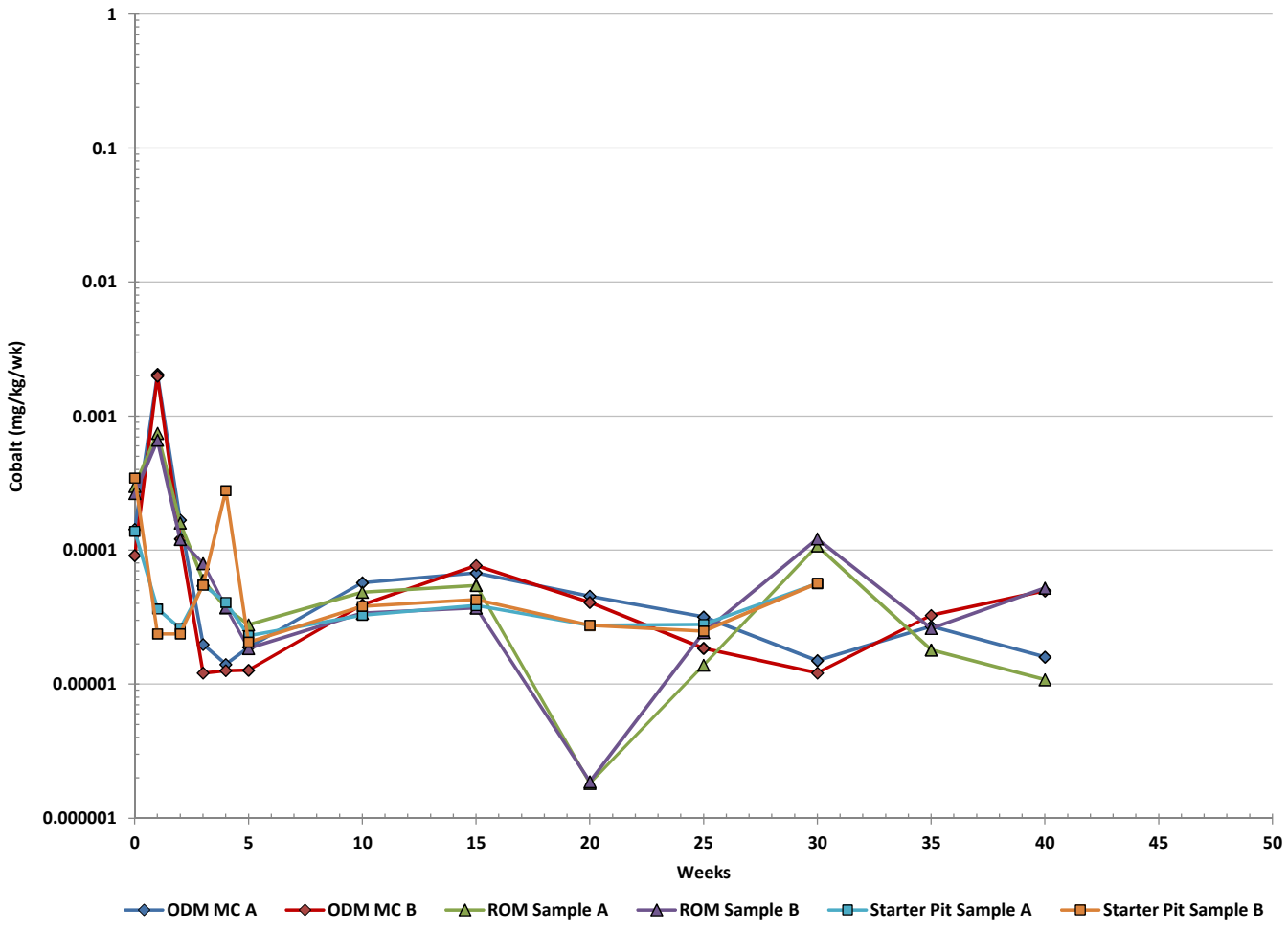
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Rainy River Gold Project

Tailings Humidity Cell Chromium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-54



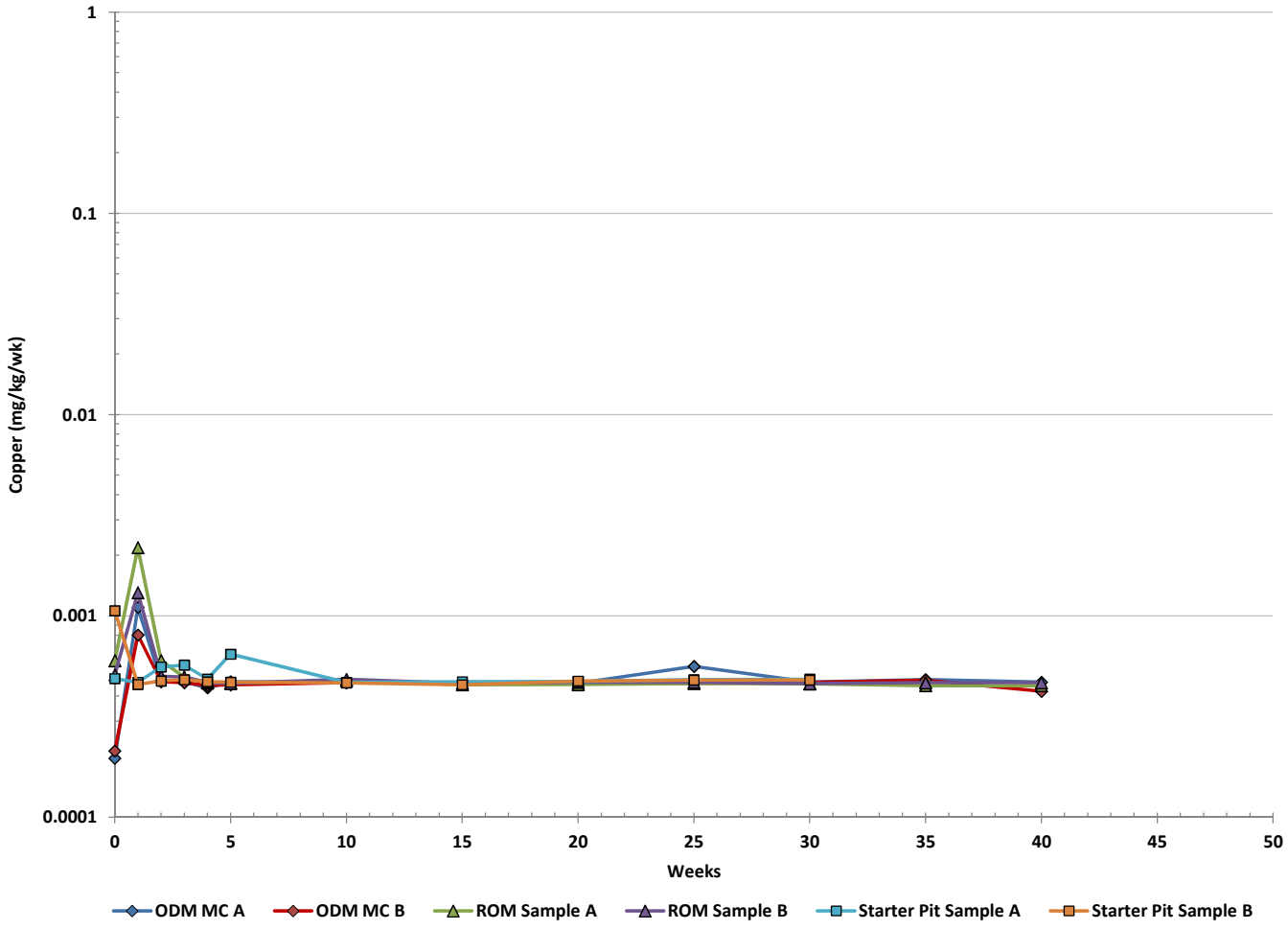
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Cobalt Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-55



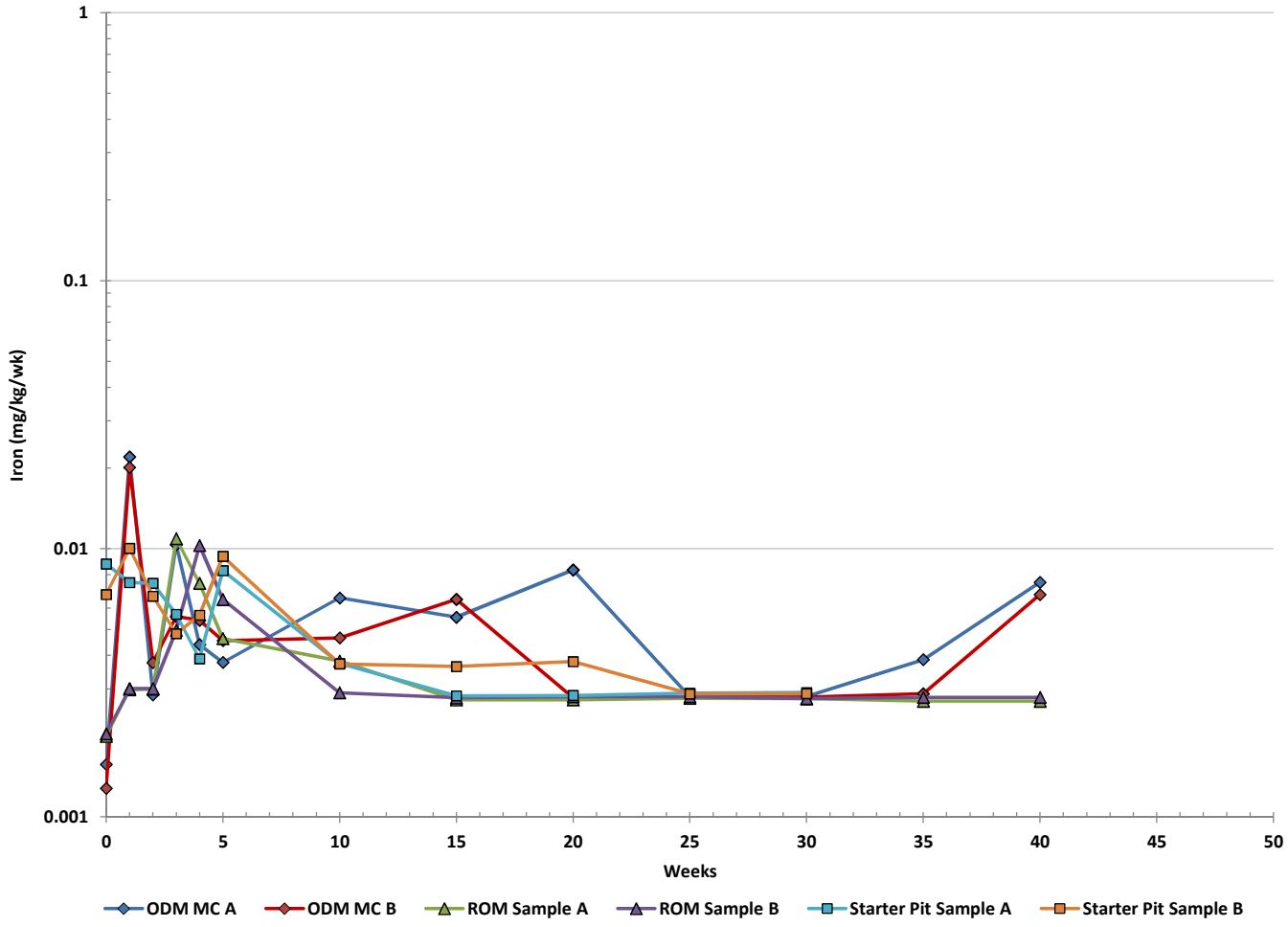
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Rainy River Gold Project

Tailings Humidity Cell Copper Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-56



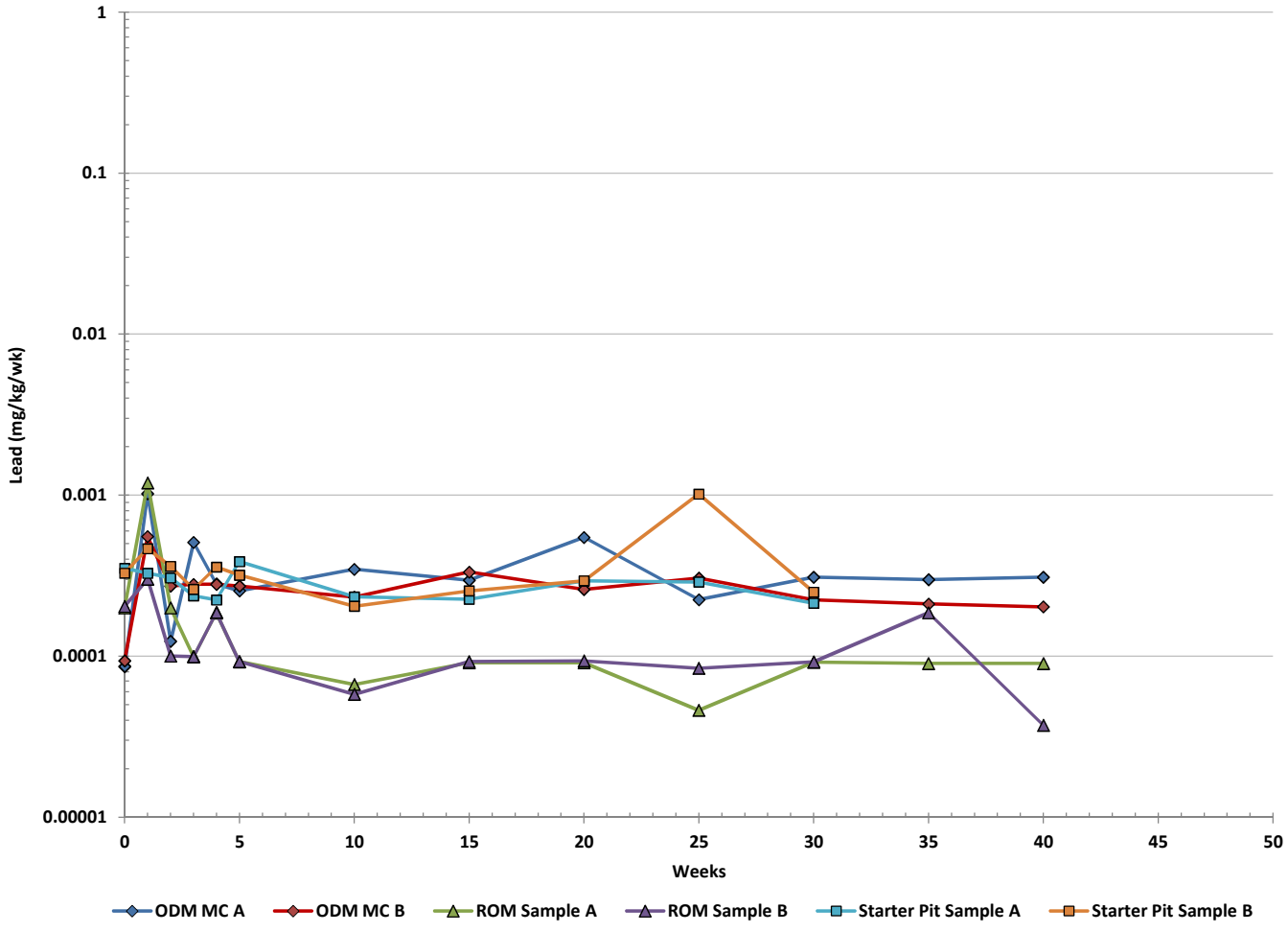
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Rainy River Gold Project

Tailings Humidity Cell Iron Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-57



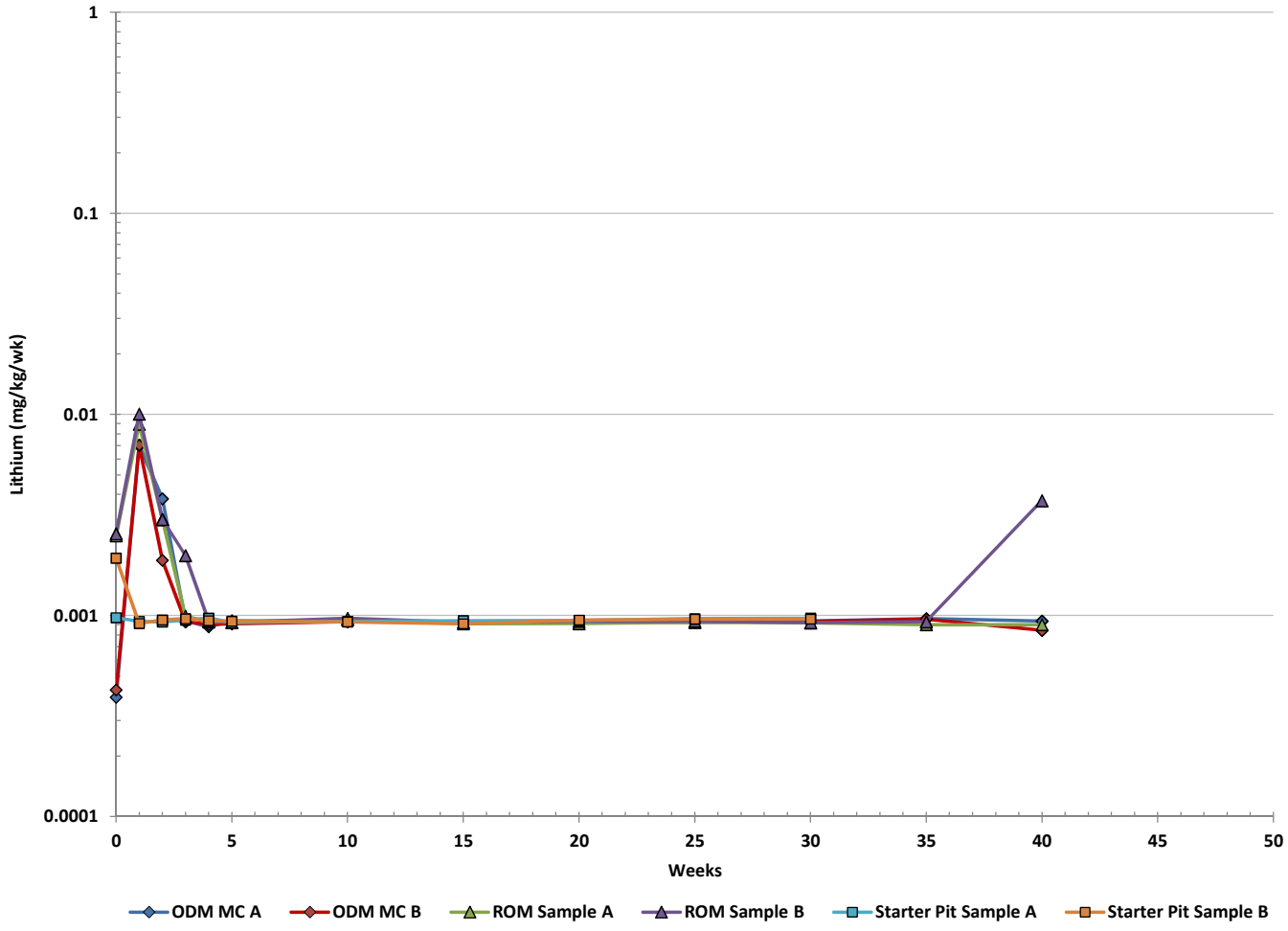
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Rainy River Gold Project

Tailings Humidity Cell Lead Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-58



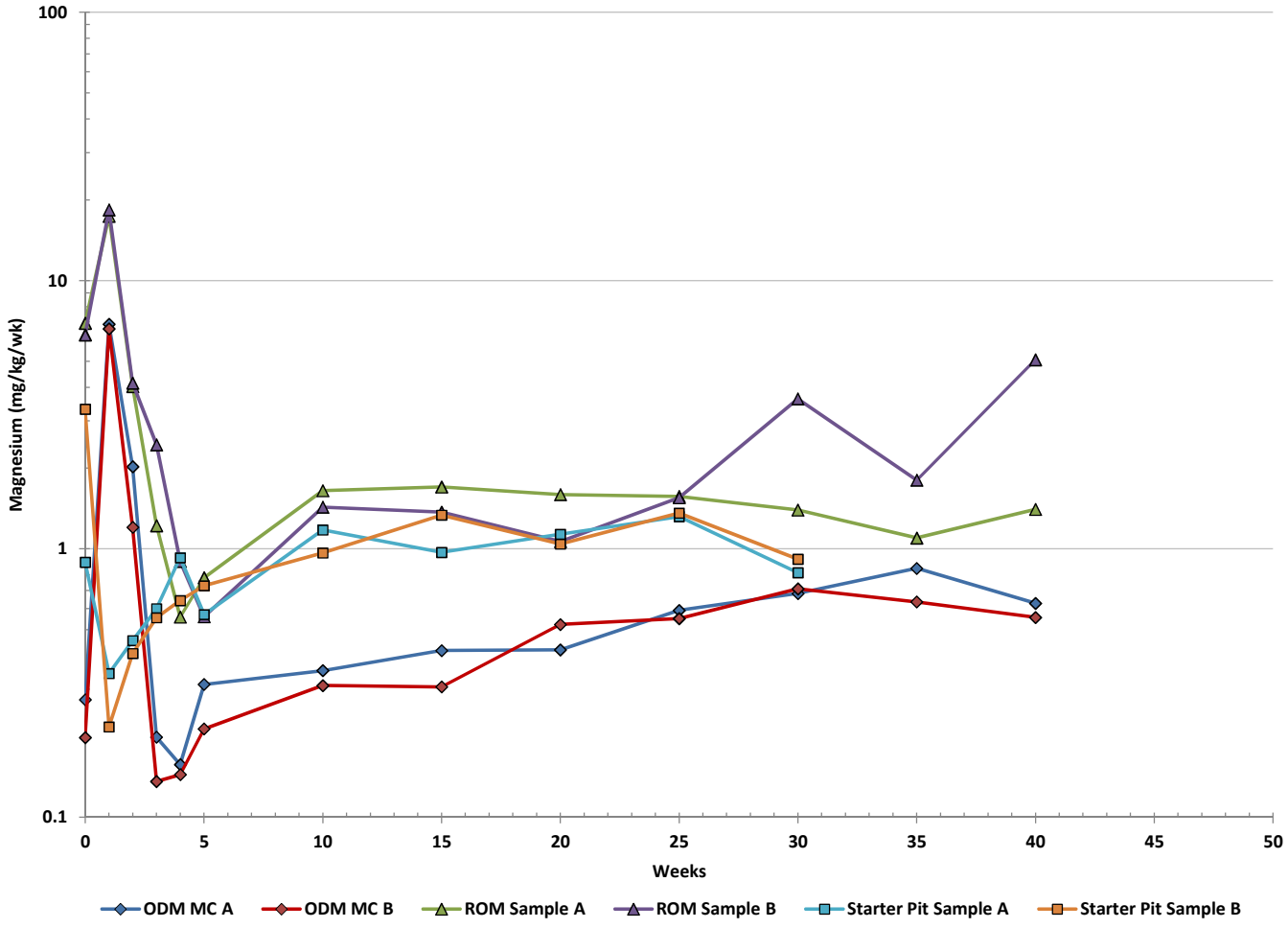
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Rainy River Gold Project

Tailings Humidity Cell Lithium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-59



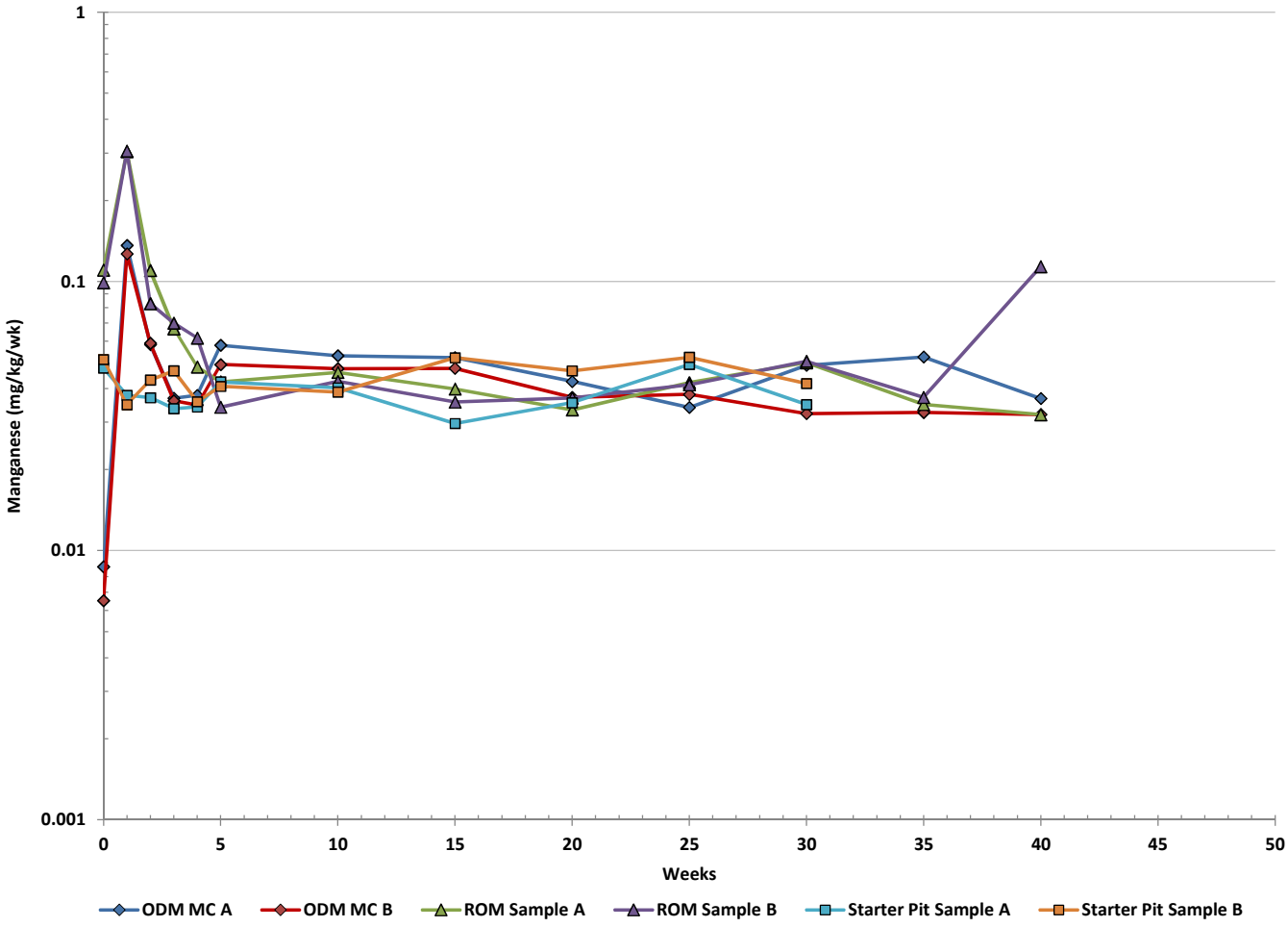
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Rainy River Gold Project

Tailings Humidity Cell Magnesium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-60



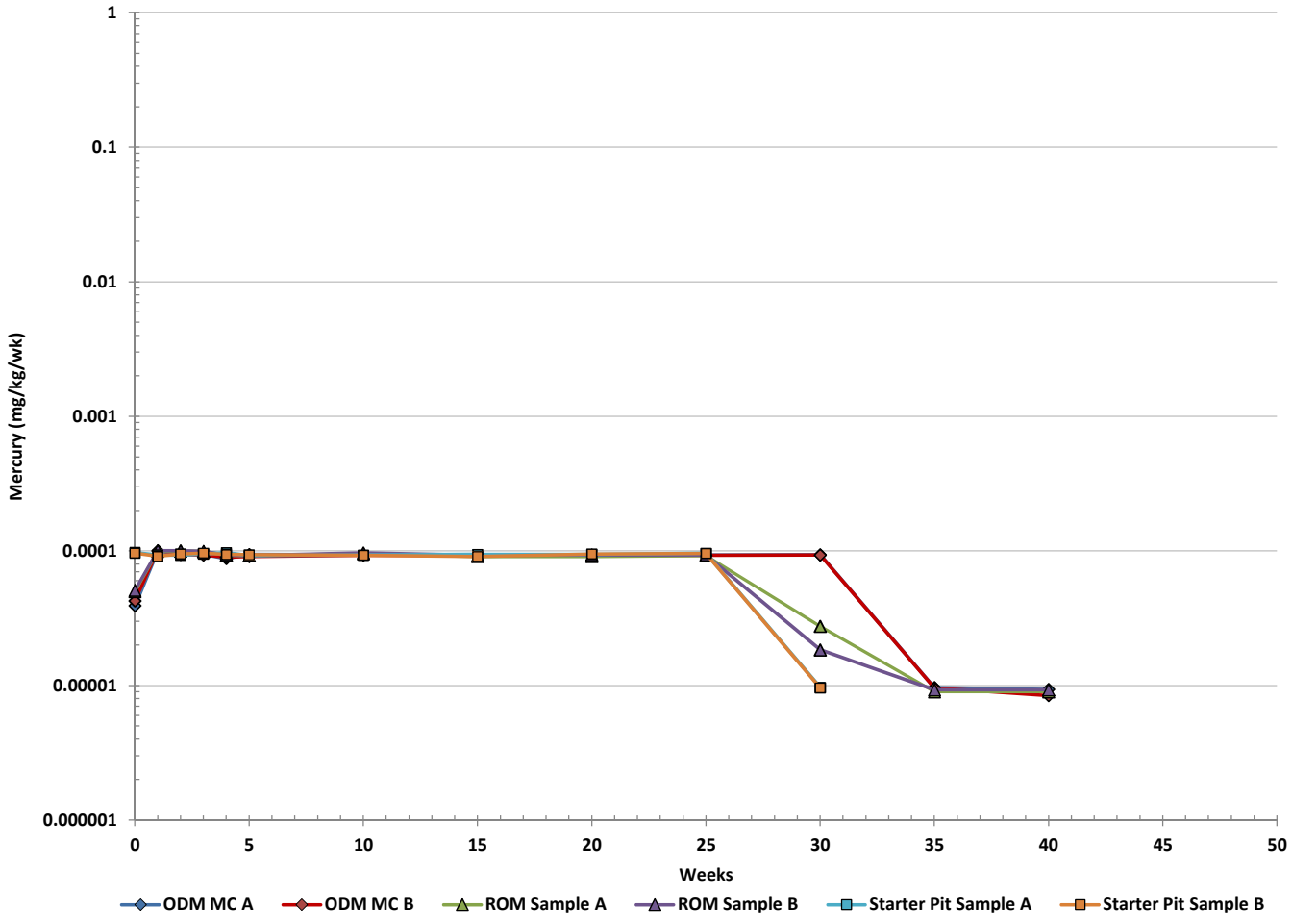
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Rainy River Gold Project

Tailings Humidity Cell Manganese Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-61



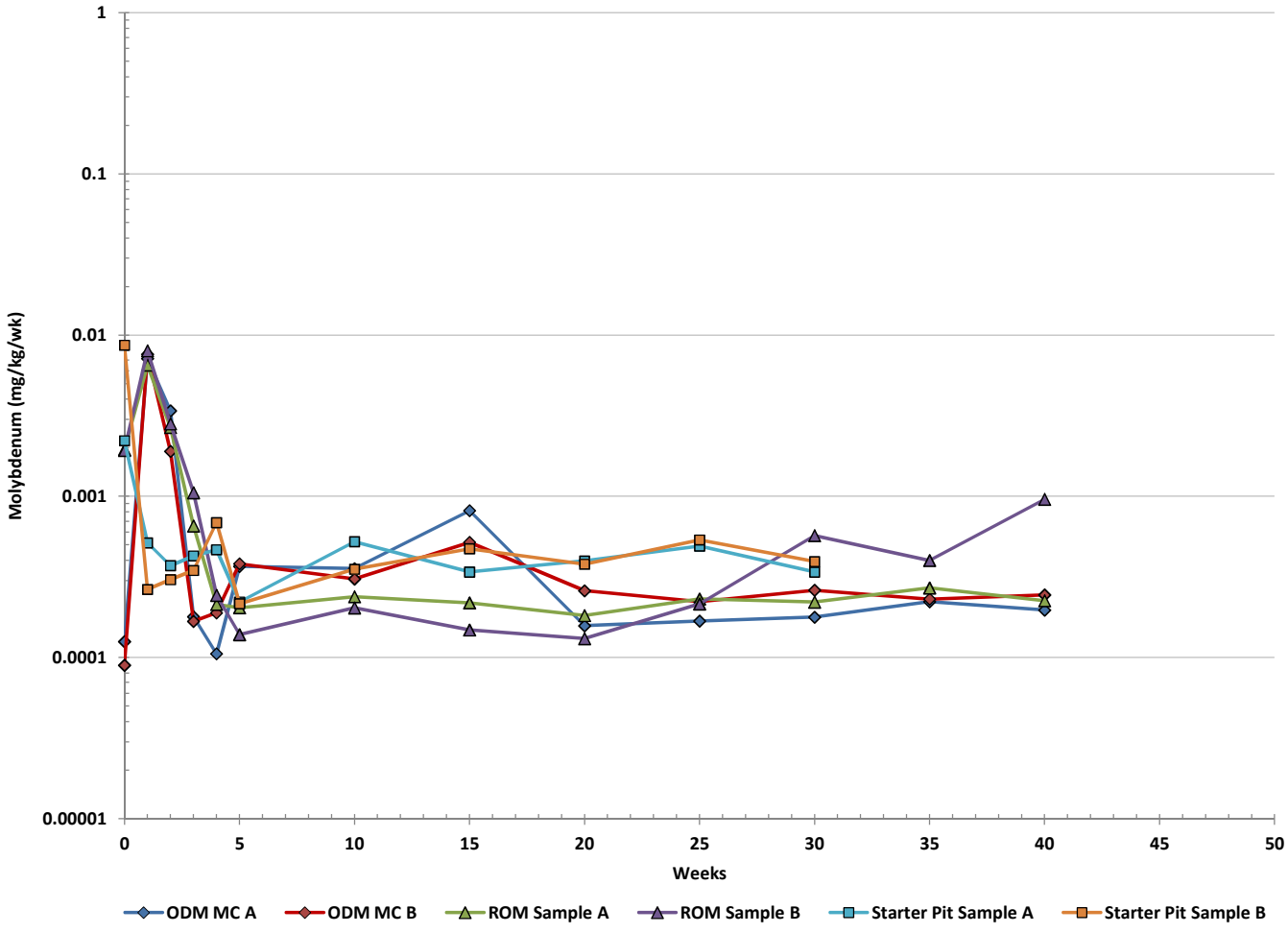
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Rainy River Gold Project

Tailings Humidity Cell Mercury Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-62



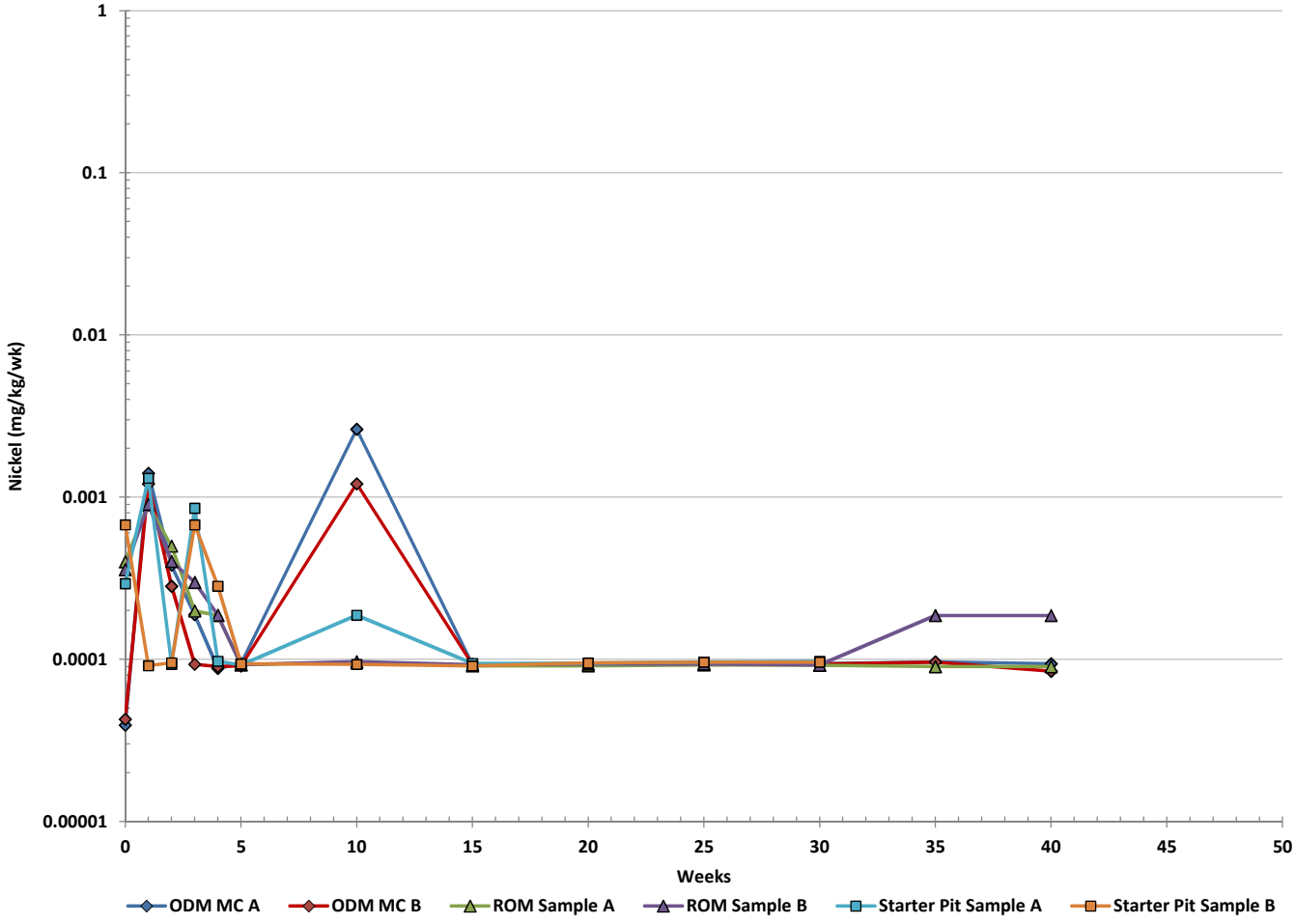
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Molybdenum Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-63



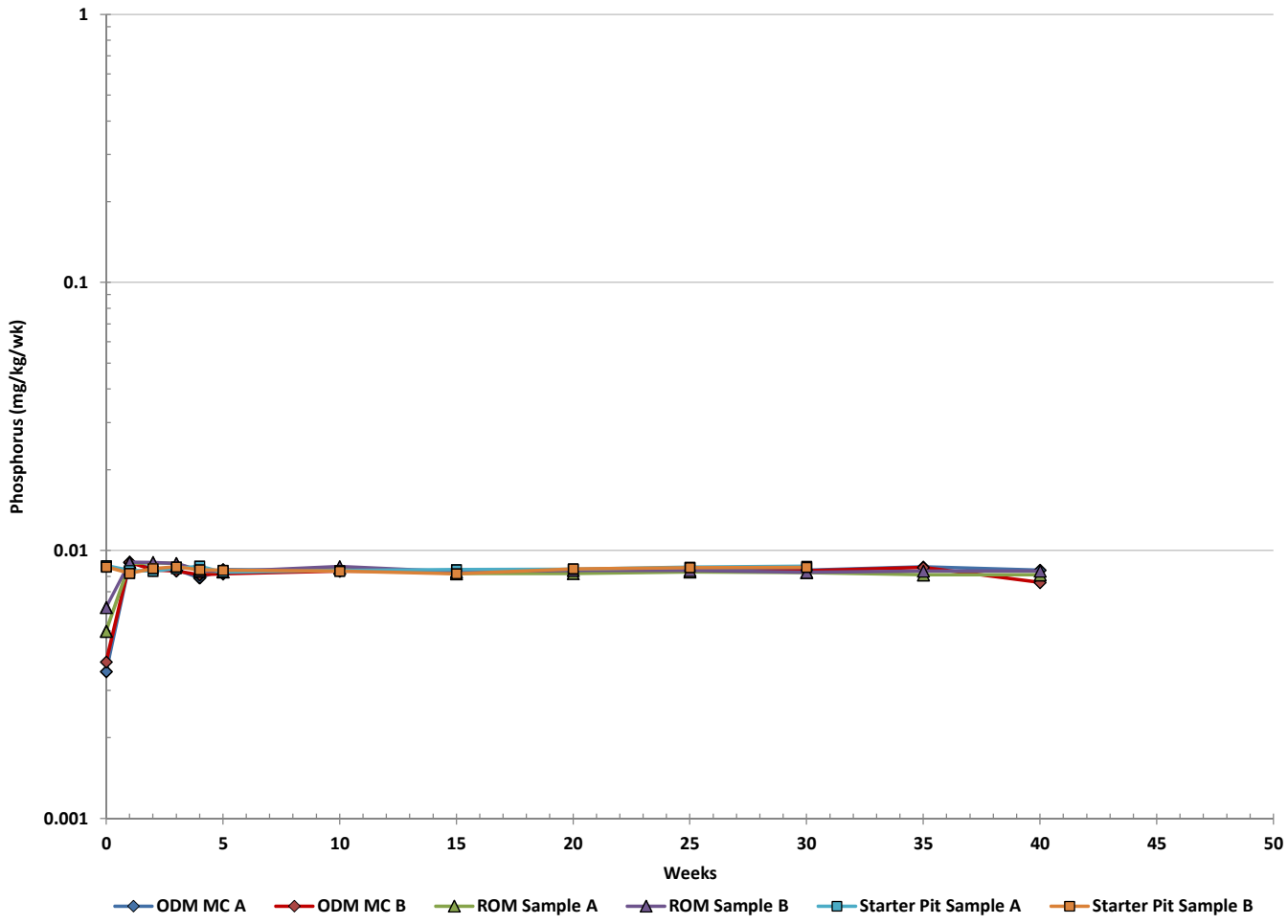
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Rainy River Gold Project

Tailings Humidity Cell Nickel Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-64



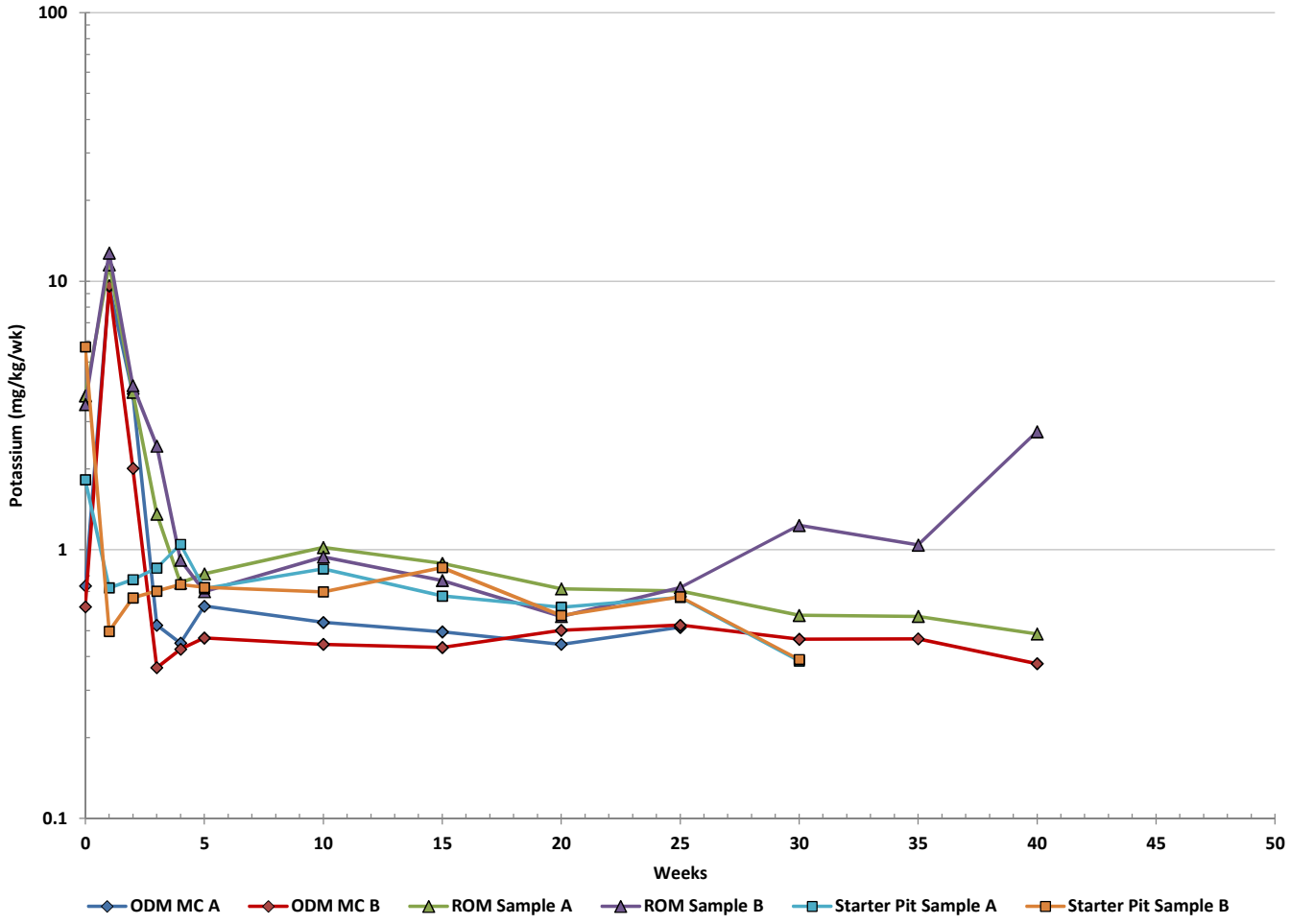
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Rainy River Gold Project

Tailings Humidity Cell Phosphorus Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-65



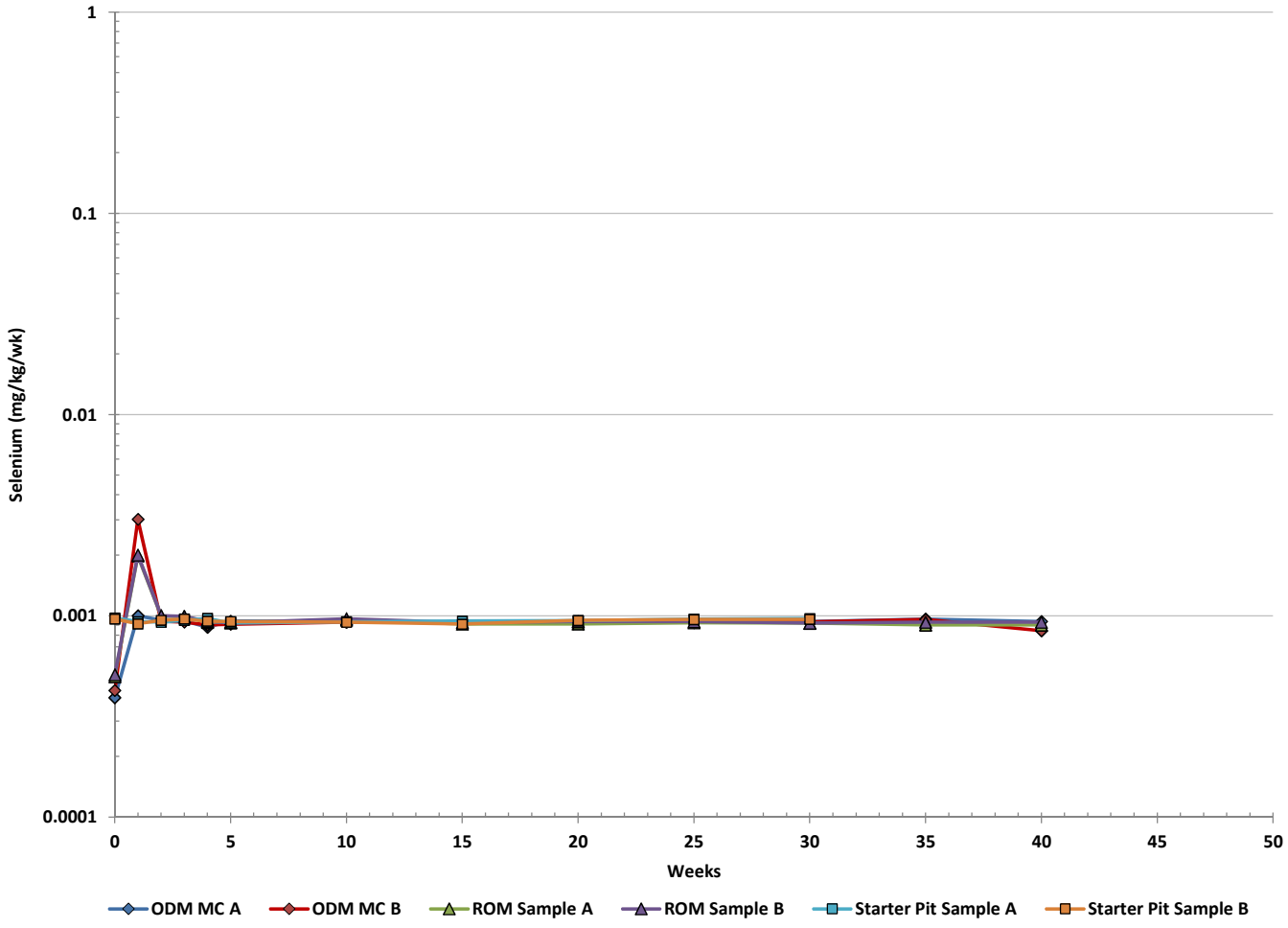
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Rainy River Gold Project

Tailings Humidity Cell Potassium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-66



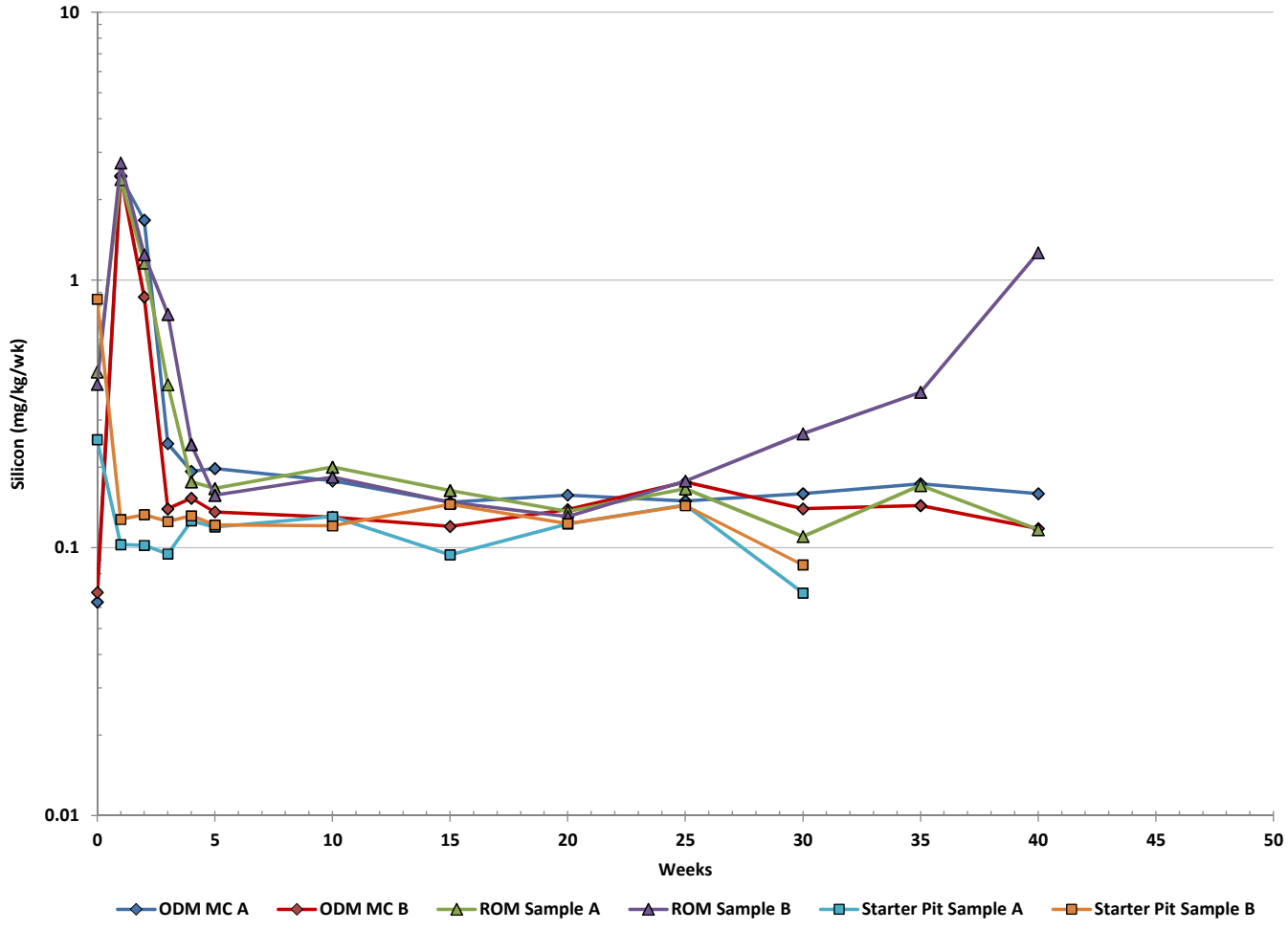
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Selenium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-67



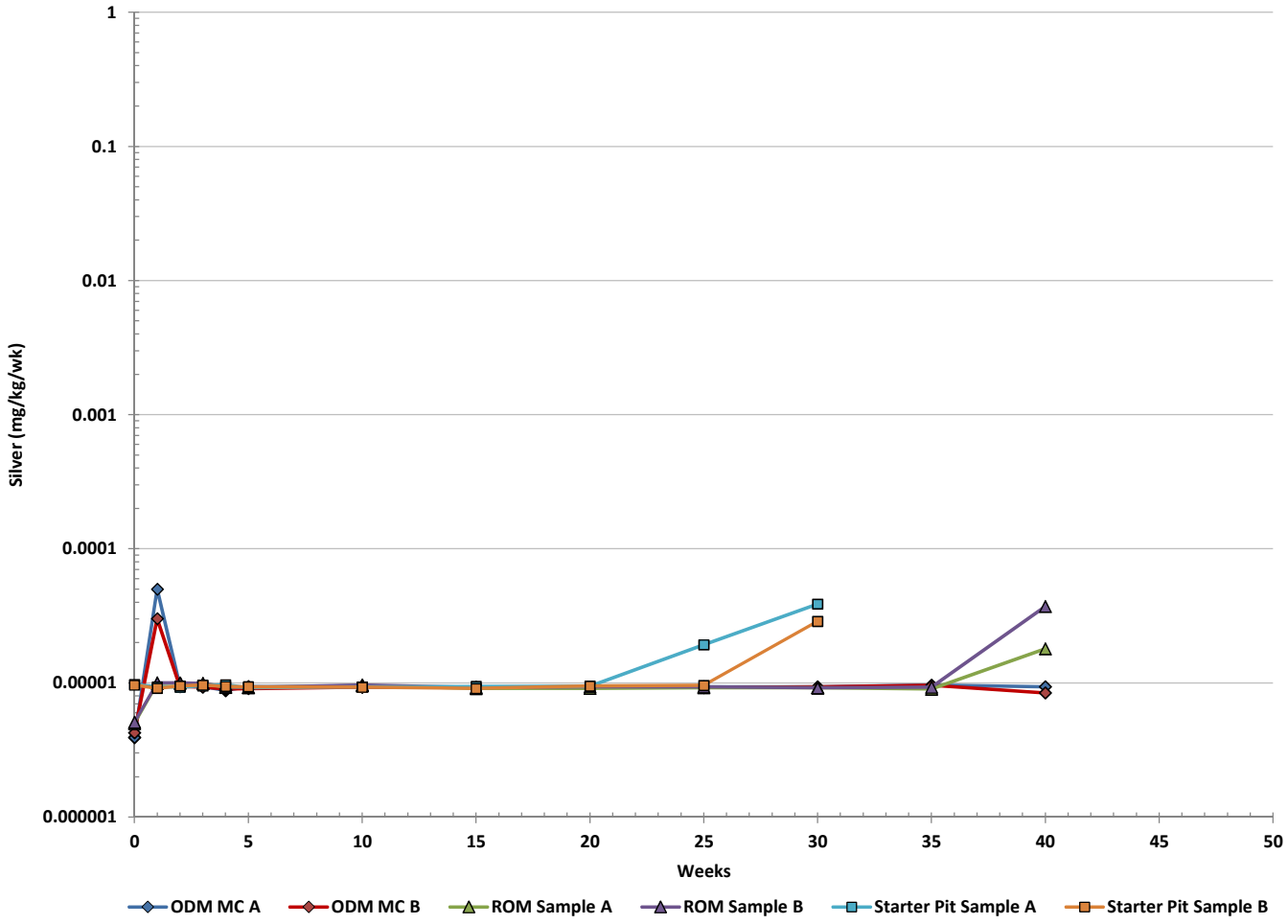
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Silicon Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-68



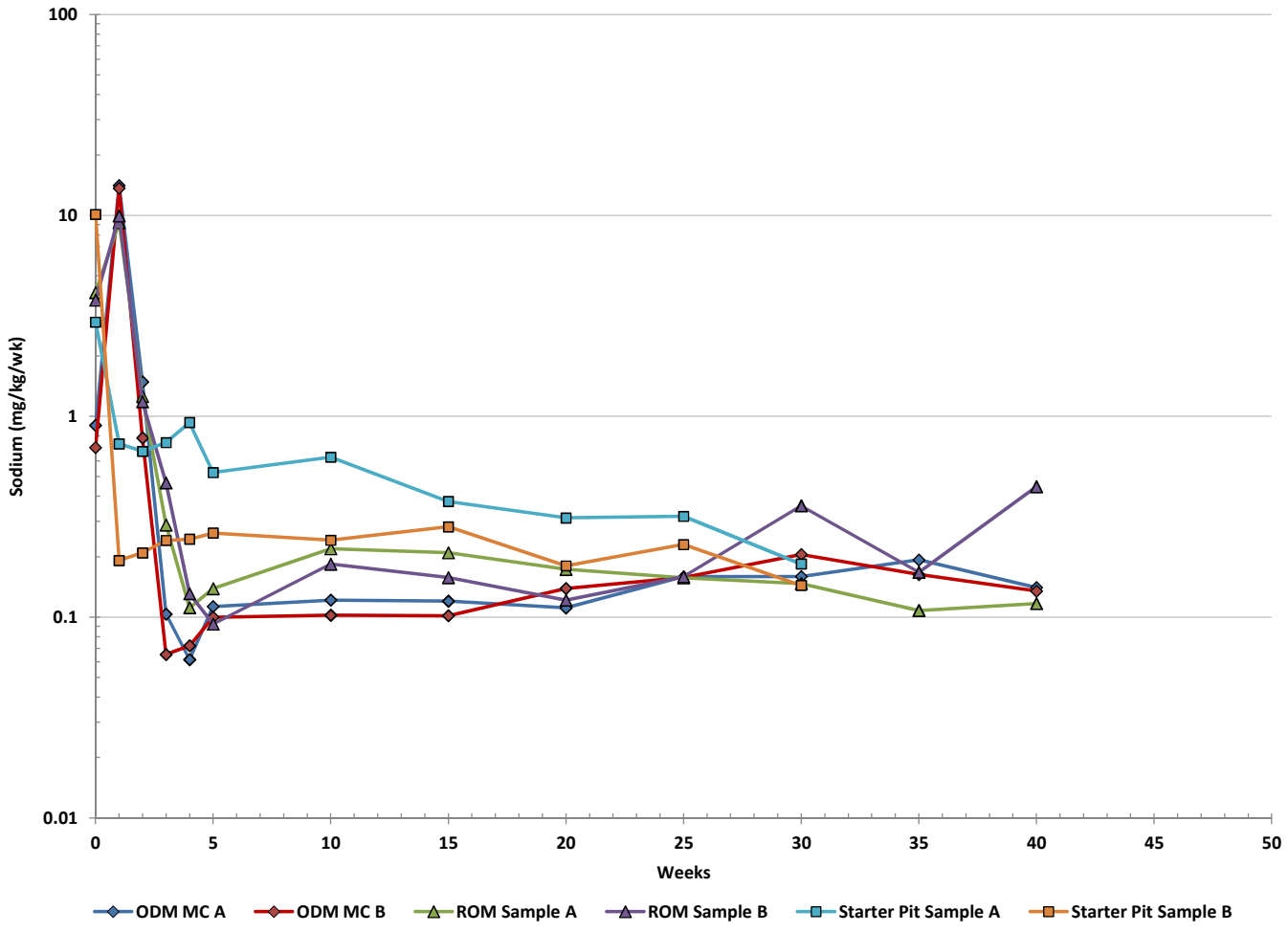
RAINY RIVER

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Rainy River Gold Project

Tailings Humidity Cell Silver Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-69



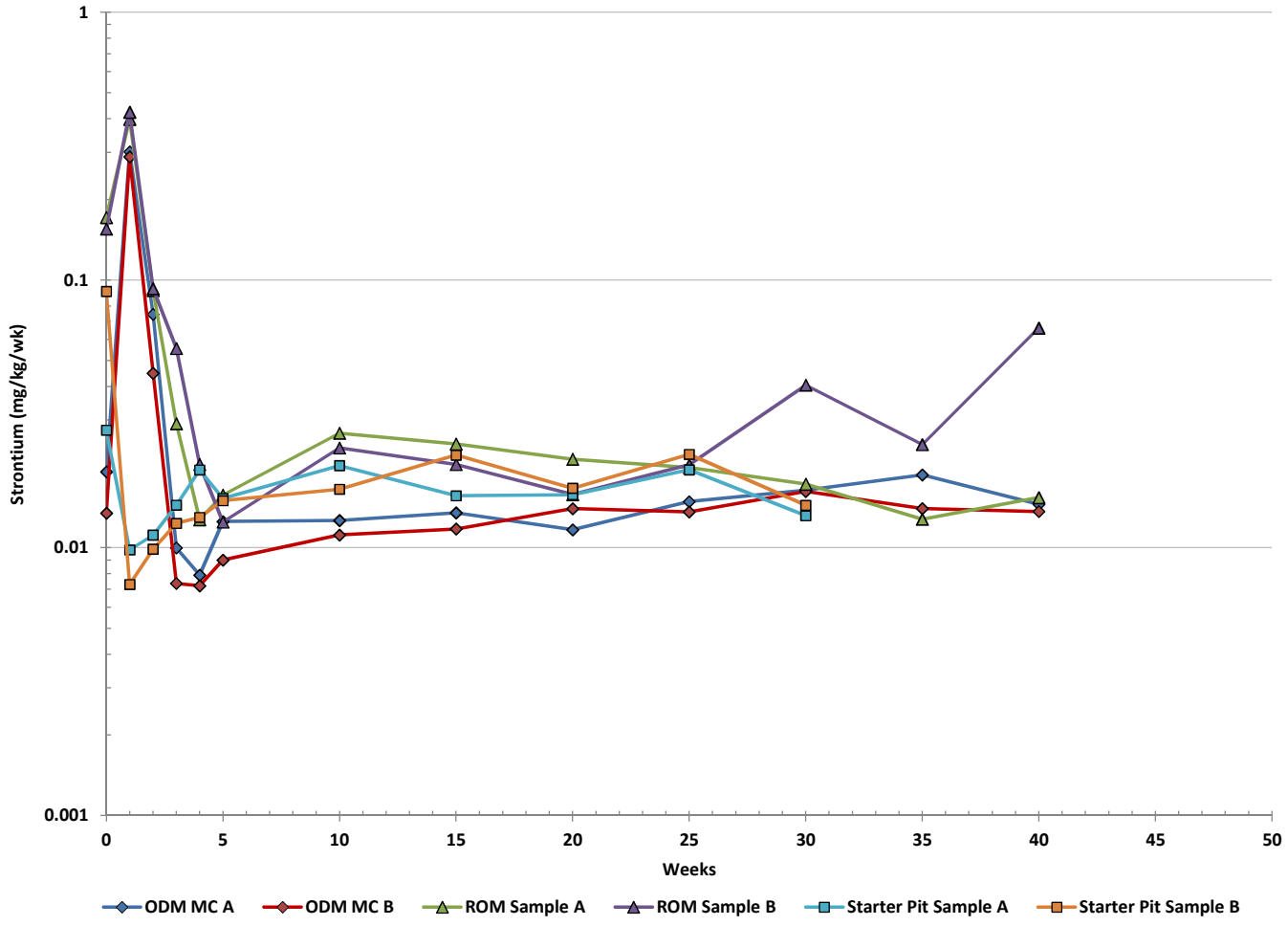
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Rainy River Gold Project

Tailings Humidity Cell Sodium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-70



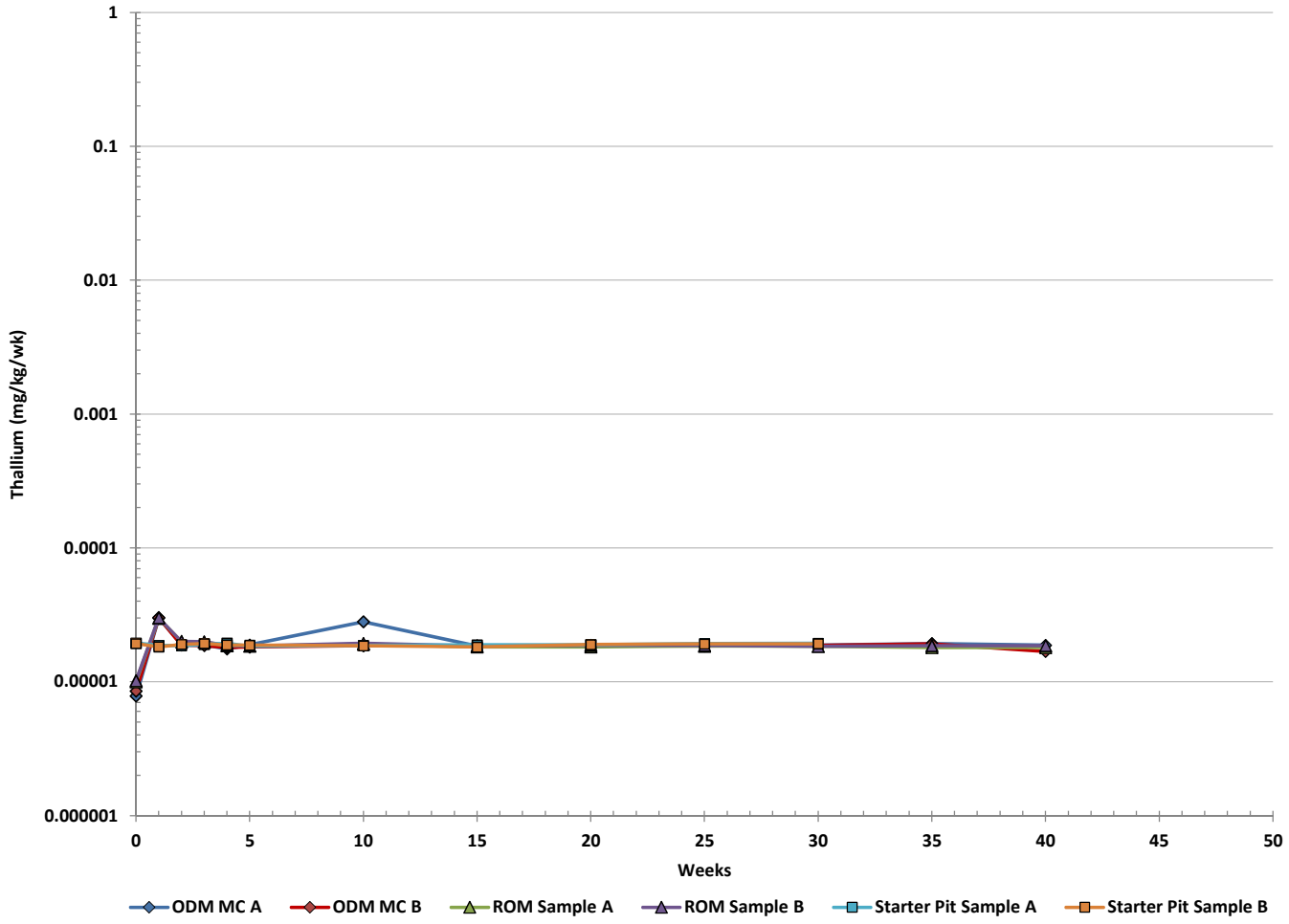
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Strontium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-71



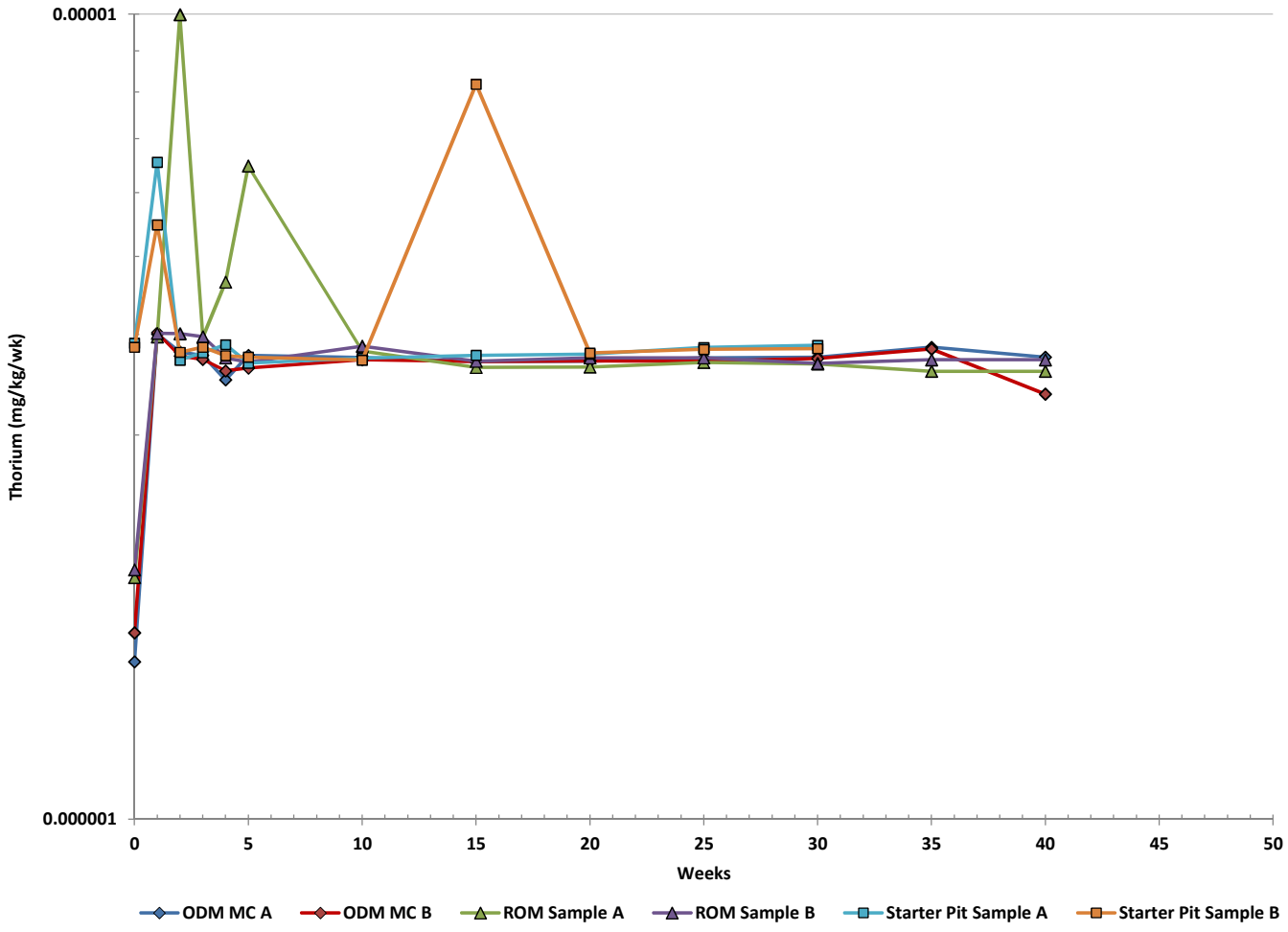
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Thallium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-72



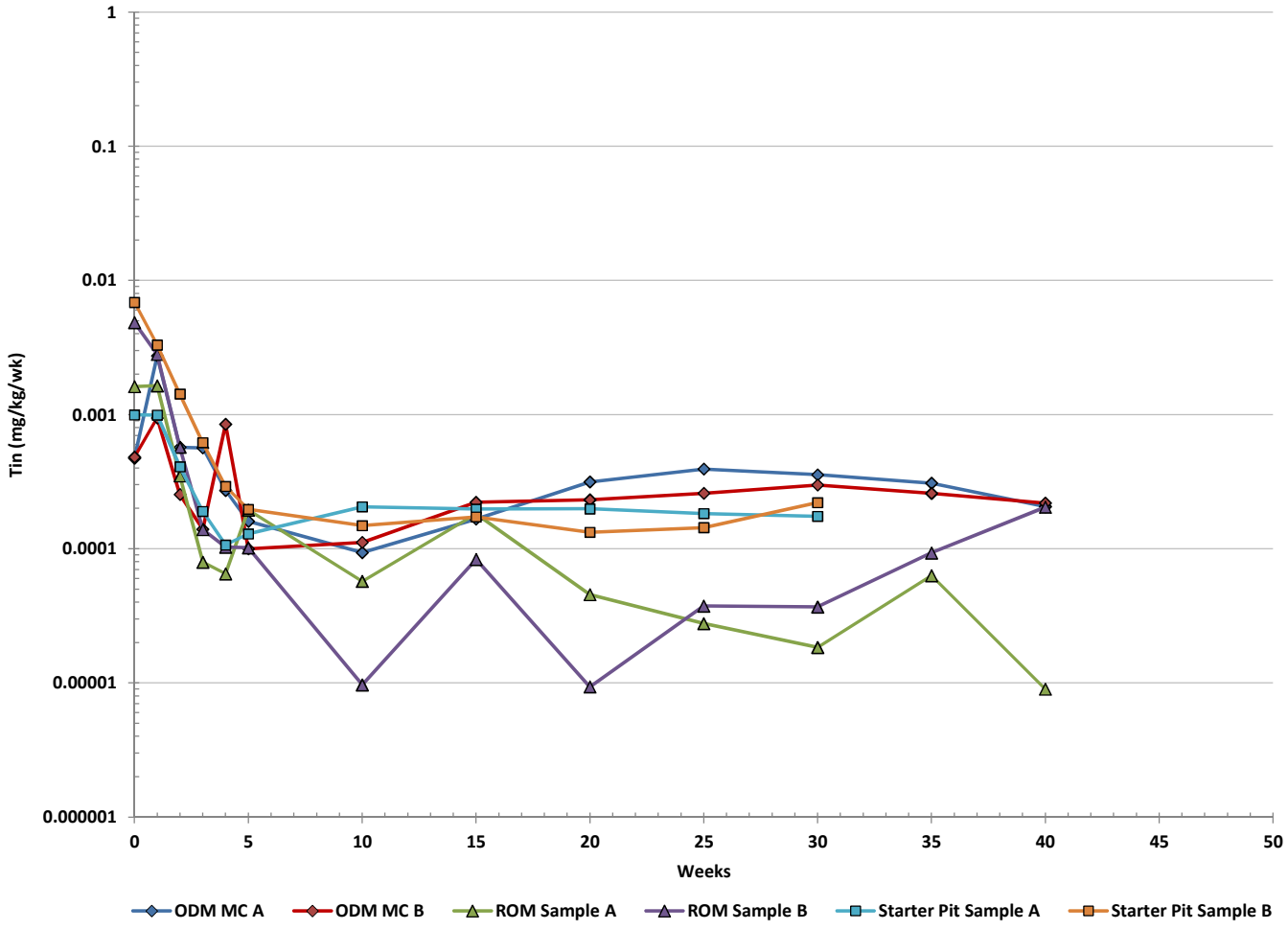
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Rainy River Gold Project

Tailings Humidity Cell Thorium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-73



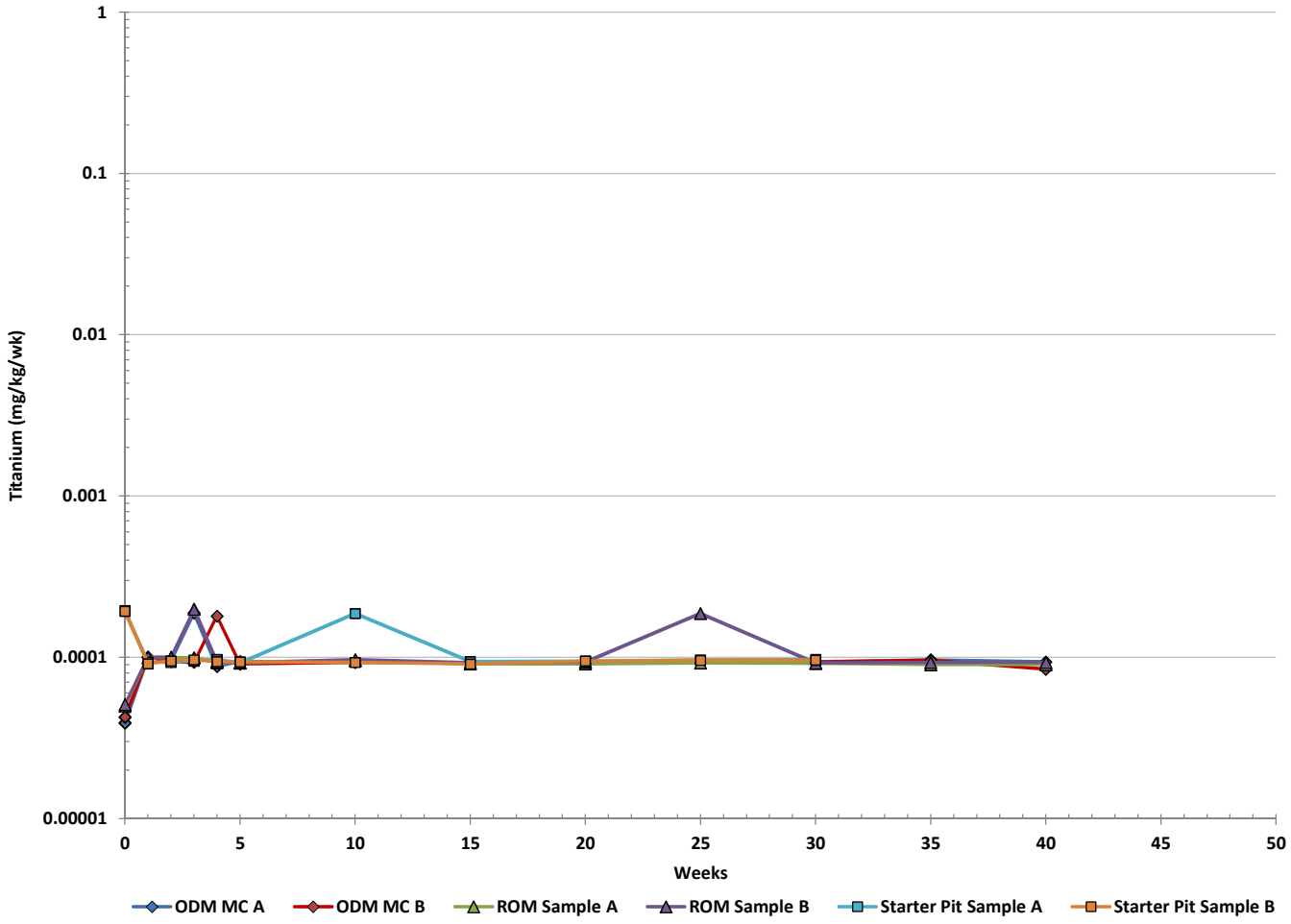
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Rainy River Gold Project

Tailings Humidity Cell Tin Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-74



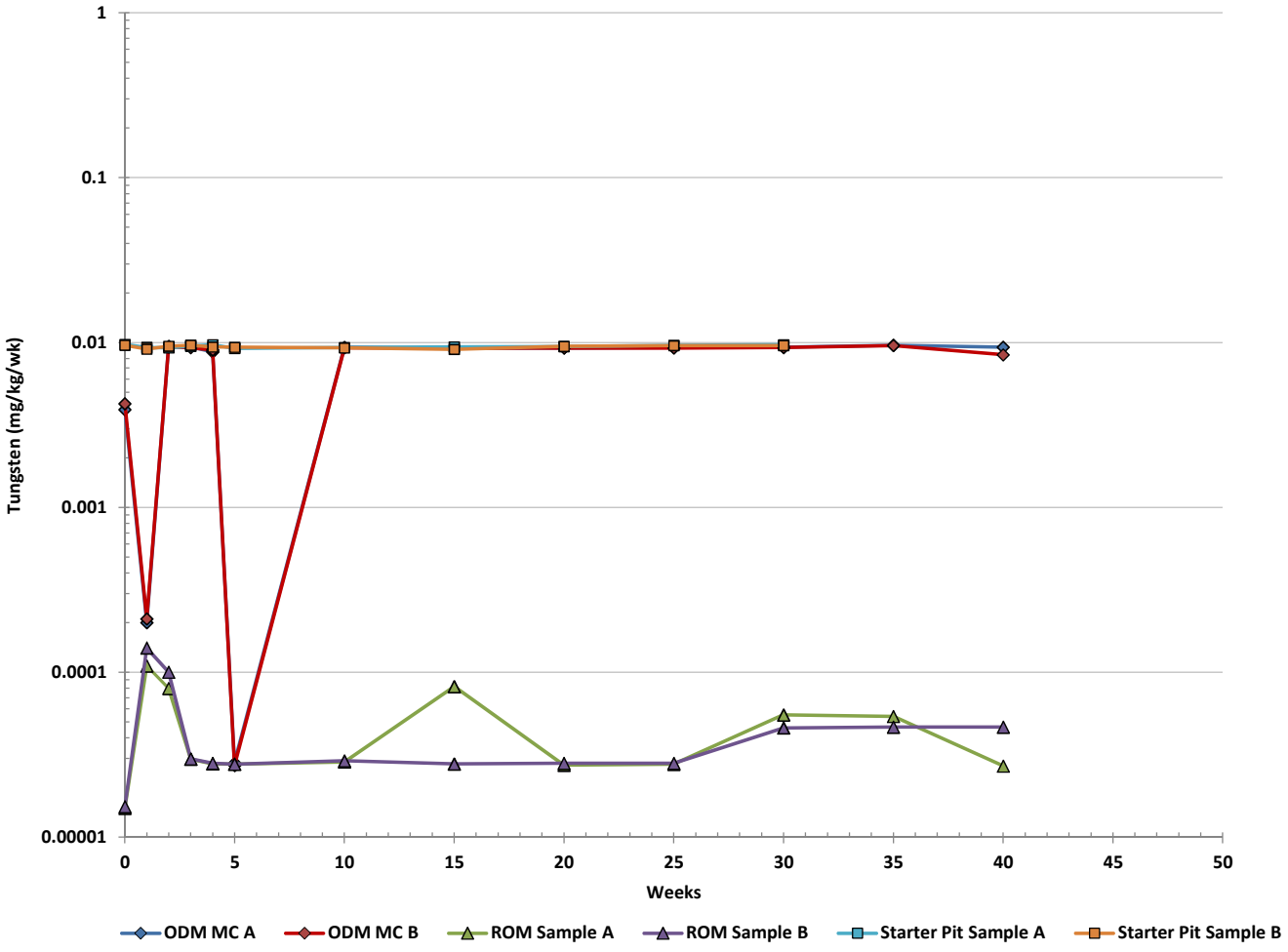
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Rainy River Gold Project

Tailings Humidity Cell Titanium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-75



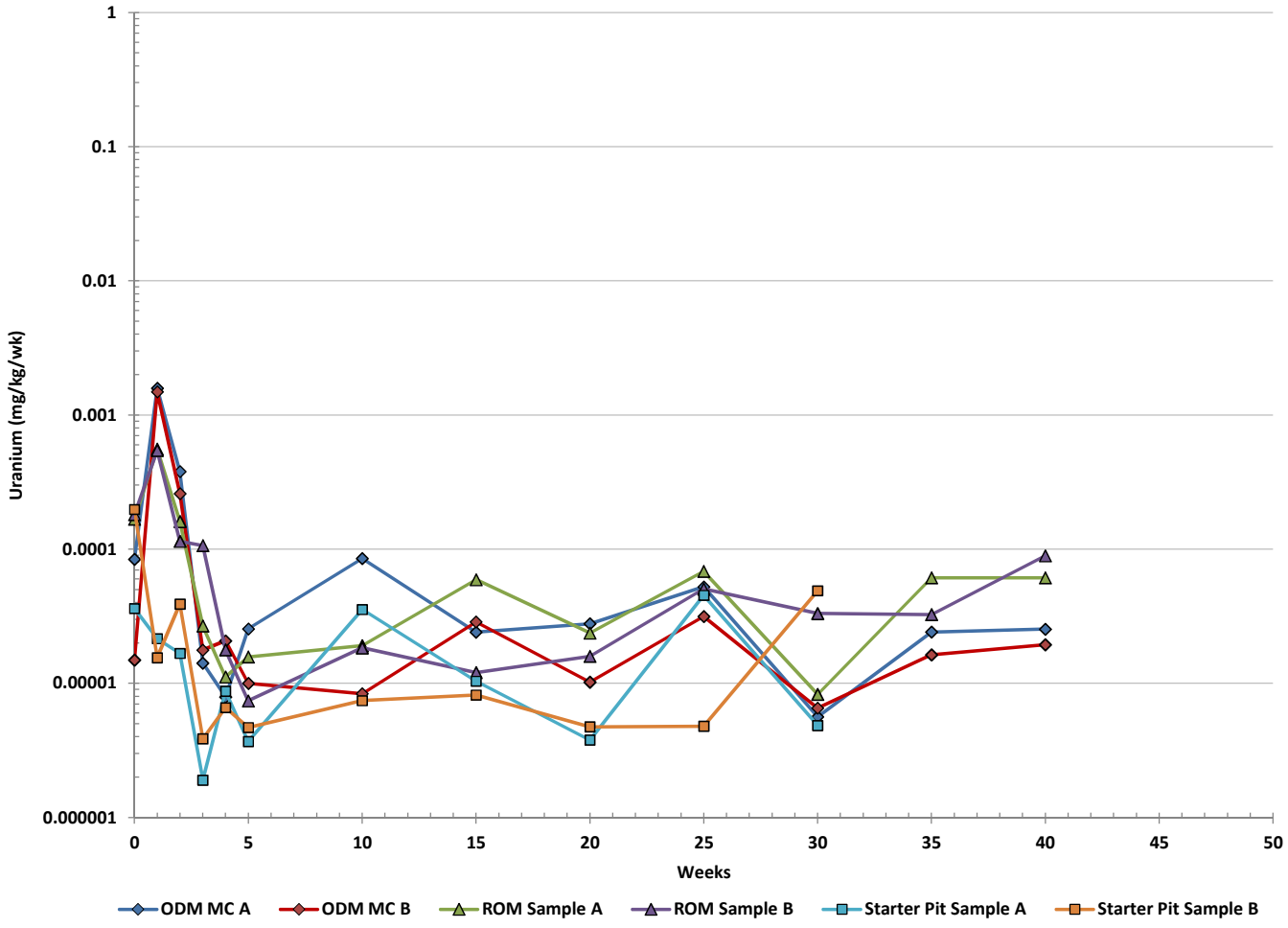
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Rainy River Gold Project

Tailings Humidity Cell Tungsten Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-76



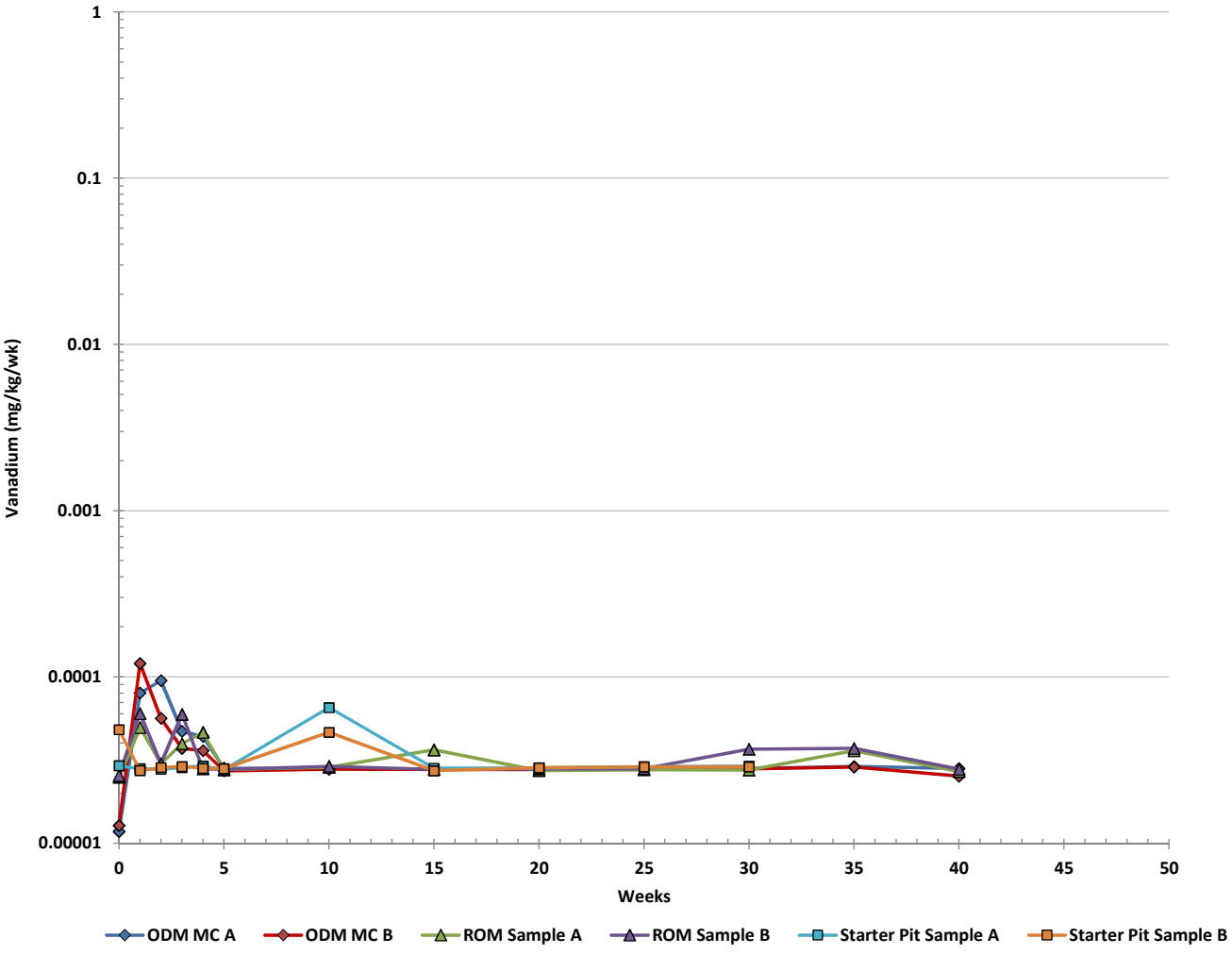
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Rainy River Gold Project

Tailings Humidity Cell Uranium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-77



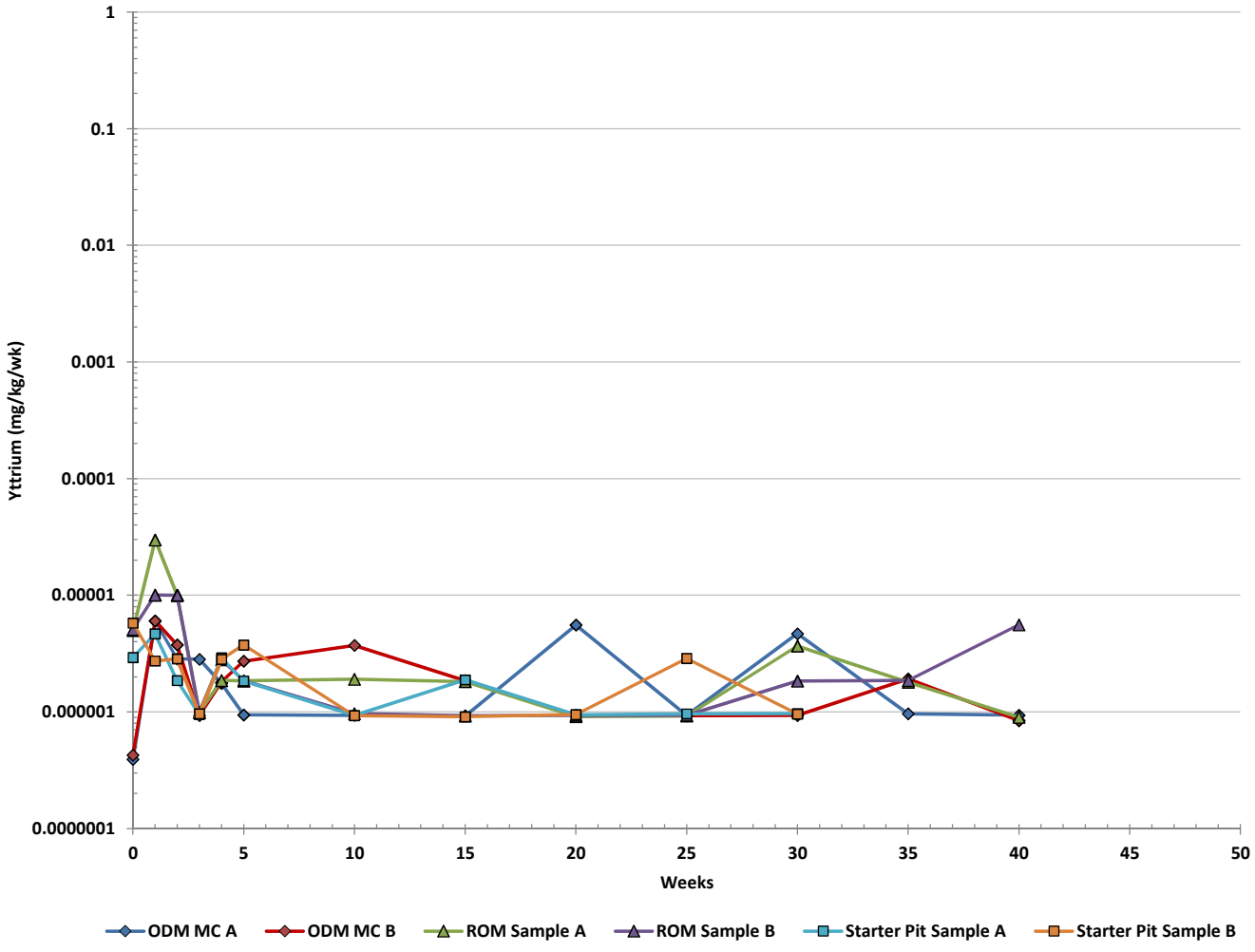
RAINYRIVER

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Rainy River Gold Project

Tailings Humidity Cell Vanadium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-78



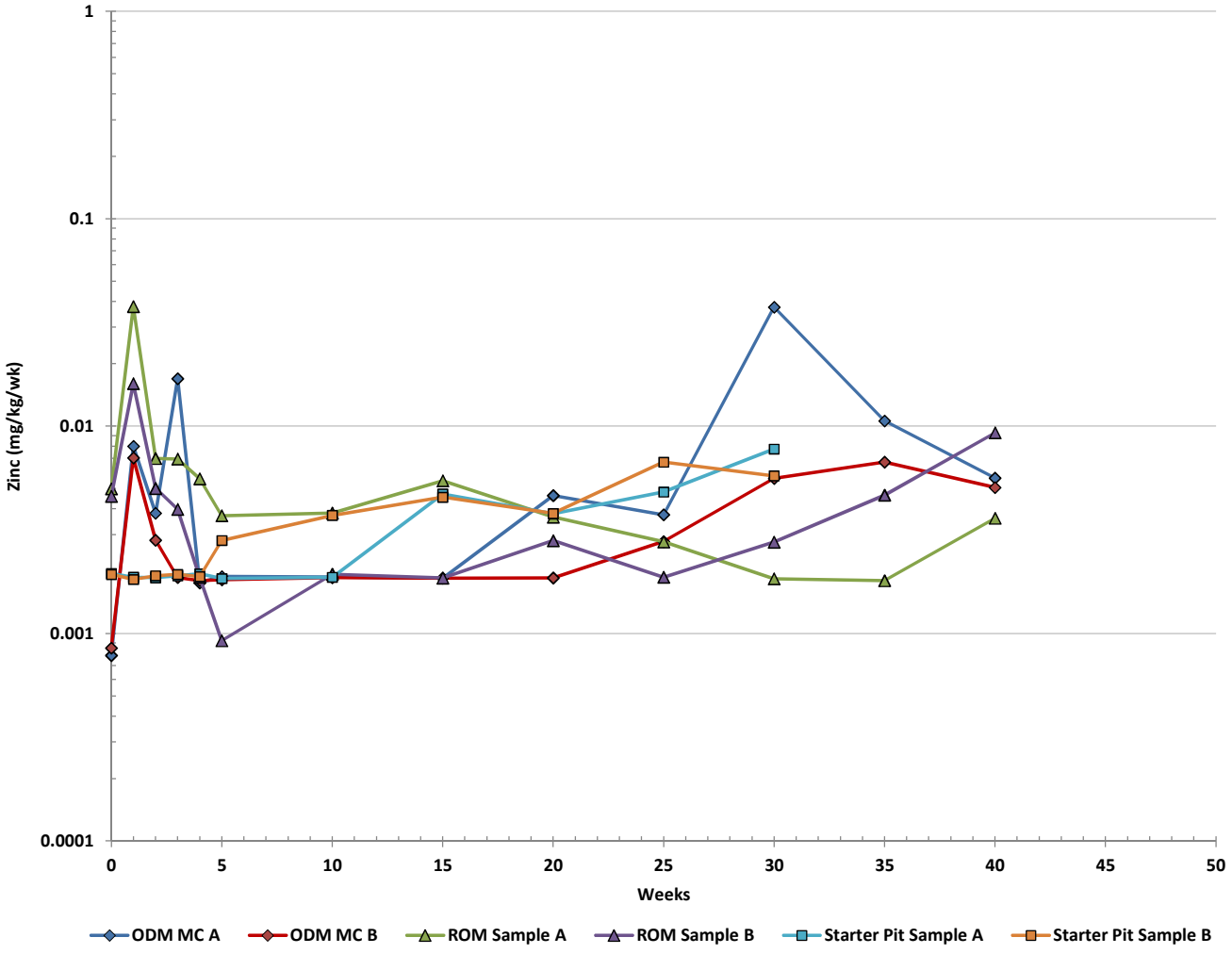
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Rainy River Gold Project

Tailings Humidity Cell Yttrium Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-79



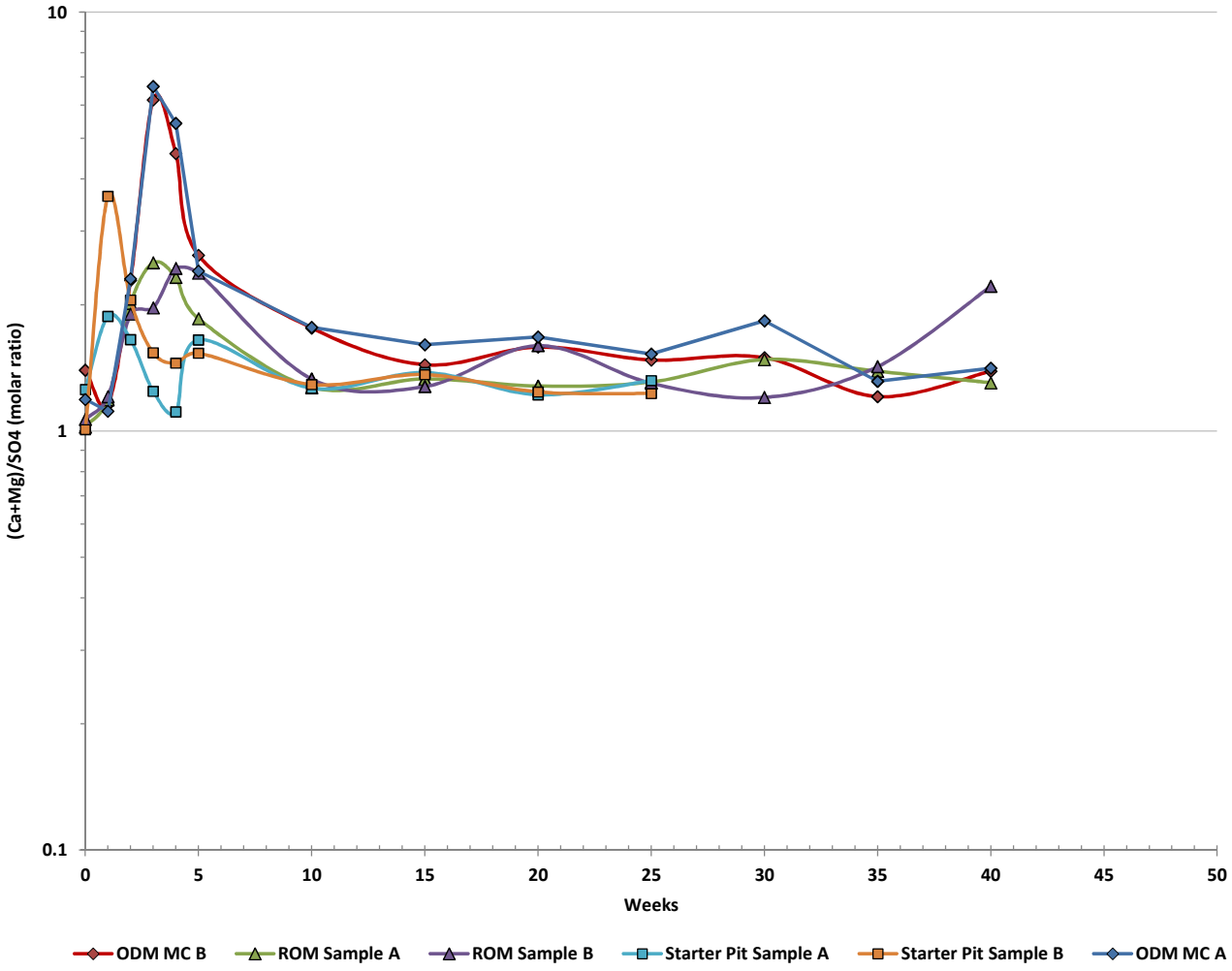
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Rainy River Gold Project

Tailings Humidity Cell Zinc Loadings

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-80



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Rainy River Gold Project

Time Plot of (Calcium + Magnesium) / Sulphate Molar ration in Tailings Humidity Cells

Drawn by: LC	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-81

FIELD CELLS

Sample ID	Description	Lithology	Borehole	Interval (m)		Al	B	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr
				Top	Bottom	%	ppm	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm
Method						ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
MDL						0.01	10	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	0.5	50	0.01	0.5	0.01	1	1	0.5
L032225	FC 1	4cfa	NR10-561	143.0	171.0	2.5	60	29	0.83	51	145	3.14	0.1	31	0.94	382	0.12	7.5	460	1.45	87.1	<0.01	8	46	13.1
L032226	FC 1		NR10-561	171.0	199.0	1.8	30	34	0.76	46	72	2.99	0.14	25	1.01	300	0.17	10.7	500	3.07	97.5	<0.01	8	152	16.3
L032227	FC 1		NR10-561	199.0	226.9	1.8	30	35	0.72	58	204	3.03	0.17	23	1.07	253	0.11	8.5	430	2.93	39.5	<0.01	7	47	16.3
	FC 1 Average					2.0	40	33	0.77	52	140	3.05	0.14	26	1.01	312	0.13	8.9	463	2.48	74.7	0.01	8	82	15.2
L032228	FC 2	4a	NR10-567	51.0	78.0	1.4	40	103	1.51	83	16	2.18	0.47	47	0.87	376	0.07	16.2	510	0.67	28.8	0.07	24	64	20.4
L032229	FC 2		NR10-567	78.0	107.0	0.9	40	36	2.58	63	13	1.92	0.16	25	0.89	742	0.03	8.5	410	0.60	35.6	<0.01	5	61	5.4
L032230	FC 2		NR10-567	107.0	132.0	1.1	40	46	1.85	87	48	2.05	0.22	36	0.79	538	0.04	8.7	420	0.52	29.5	0.02	12	48	8.9
	FC 2 Average					1.2	40	62	1.98	78	26	2.05	0.28	36	0.85	552	0.05	11.1	447	0.60	31.3	0.05	14	58	11.6
L032231	FC 3	4c	NR10-544	185.3	209.0	1.6	30	34	0.97	51	225	2.87	0.15	27	0.90	454	0.13	8.6	460	2.89	41.2	0.01	7	156	17.2
L032232	FC 3		NR10-544	209.0	232.5	2.1	40	34	1.33	62	101	2.67	0.12	36	1.41	627	0.12	11.1	440	2.35	49.8	0.03	13	641	17.2
L032233	FC 3		NR10-544	232.5 276.0	243.2 288.5	2.2	30	50	1.07	57	39	2.36	0.23	28	1.34	457	0.10	7.7	430	1.44	53.5	0.05	13	127	14.9
	FC 3 Average					2.0	33	39	1.12	57	122	2.63	0.17	30	1.22	513	0.12	9.1	443	2.23	48.2	0.03	11	308	16.4
L032234	FC 4	2a	NR10-560	172.5	199.5	4.4	30	50	5.97	128	106	8.49	0.43	88	2.55	1600	0.15	73.5	720	0.81	77.9	0.1	190	154	5.9
L032235	FC 4		NR10-560	199.5	227.0	3.3	30	80	6.81	115	72	6.64	0.57	72	1.66	1740	0.14	60.4	730	0.37	70.2	0.15	175	115	4.7
L032236	FC 4		NR10-560	227.0	252.5	3.4	30	76	4.66	90	65	5.64	0.47	71	1.34	1210	0.18	46.9	730	0.38	75.3	0.15	141	125	4.9
	FC 4 Average					3.7	30	69	5.81	111	81	6.92	0.49	77	1.85	1517	0.16	60.3	727	0.52	74.5	0.13	169	131	5.2
L032237	FC 5	3b	NR09-365	167.0	193.0	1.3	40	51	1.81	62	32	2.19	0.32	34	0.87	652	0.07	14.7	770	1.10	38.8	0.04	16	231	24.8
L032238	FC 5		NR09-365	193.0	219.0	1.7	40	57	1.89	71	19	2.17	0.41	41	0.96	663	0.10	18.0	640	0.81	53.7	0.05	19	435	21.4
L032239	FC 5		NR09-365	219.0	245.5	1.6	40	49	2.76	88	17	2.58	0.34	49	1.34	891	0.06	38.7	650	0.77	69.4	0.04	25	124	21.7
	FC 5 Average					1.5	40	52	2.15	74	23	2.31	0.36	41	1.06	735	0.08	23.8	687	0.89	54.0	0.04	20	263	22.6
L032240	FC 7	5f	NR10-569	87.0	109.6	3.4	30	35	3.85	37	112	9.55	0.21	88	2.55	1700	0.13	26.3	720	>5	78.5	0.06	319	169	11.5
L032241	FC 7		NR10-546	186.0	203.0	2.9	30	62	4.61	51	65	5.9	0.19	77	2.01	1330	0.16	34.7	690	2.93	70.6	0.05	101	139	15.9
L032242	FC 7		NR10-602	73.5	93.9	2.5	30	19	4.86	69	92	8.63	0.07	58	2.50	2270	0.04	39.3	710	>5	57.2	<0.01	63	287	9.8
L032243	FC 7		NR10-612	117.5	133.6	2.1	30	24	3.37	70	173	8.74	0.11	51	2.40	1980	0.04	66.0	660	>5	31.8	<0.01	56	1170	9.0
	FC 7 Average					2.7	30	35	4.17	57	111	8.21	0.15	69	2.37	1820	0.09	41.6	695	2.93	59.5	0.06	135	441	11.6
L032244	FC 6	5dac	NR10-463	108.5	147.9	1.5	40	31	0.65	54	108	2.85	0.14	27	0.95	419	0.10	7.5	490	2.97	38.1	0.01	6	350	17.7
L032245	FC 6		NR10-468	74.2	108.5	1.4	40	30	0.65	52	61	2.64	0.14	27	0.77	259	0.09	8.6	470	2.81	45.0	0.01	5	48	15.0
	FC 6 Average					1.5	40	31	0.65	53	85	2.75	0.14	27	0.86	339	0.10	8.1	480	2.89	41.6	0.01	6	199	16.4

Sample ID	Description	Lithology	Borehole	Inteval (m)		Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb
				Top	Bottom	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method						ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
MDL						0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05
L032225	FC 1	4cfa	NR10-561	143.0	171.0	0.43	6	0.1	2.54	0.1	25	6.4	1.18	5.3	<0.1	0.4	<0.01	<0.02	12.2	0.02	1.28	0.07	2.8	3.1	0.2
L032226	FC 1		NR10-561	171.0	199.0	0.39	8	0.2	3.40	0.38	33	9.1	1.31	4.1	<0.1	0.51	<0.01	0.03	16.2	0.03	2.97	0.07	4.0	4.7	0.15
L032227	FC 1		NR10-561	199.0	226.9	0.38	7	0.2	3.89	0.04	30	8.4	2.6	4.4	<0.1	0.45	<0.01	0.03	14.6	0.02	0.72	0.07	2.4	5.1	0.12
	FC 1 Average					0.40	7	0.17	3.28	0.17	29	8.0	1.70	4.6	0.10	0.45	0.01	0.03	14.3	0.02	1.66	0.07	3.1	4.3	0.16
L032228	FC 2	4a	NR10-567	51.0	78.0	0.16	8	<0.1	0.10	0.07	35	14.3	7.25	5.3	<0.1	0.58	0.01	<0.02	17.0	0.04	0.35	0.19	4.1	16.3	0.2
L032229	FC 2		NR10-567	78.0	107.0	0.80	21	0.1	0.21	0.1	26	8.7	1.2	2.7	<0.1	0.2	<0.01	<0.02	13.1	0.04	0.62	0.06	2.2	4.1	0.36
L032230	FC 2		NR10-567	107.0	132.0	0.27	7	0.1	0.46	0.06	30	8.7	2.81	4.0	<0.1	0.32	0.02	<0.02	14.7	0.04	1.33	0.1	1.1	7.2	0.29
	FC 2 Average					0.41	12	0.10	0.26	0.08	30	10.6	3.75	4.0	0.10	0.37	0.02	0.02	14.9	0.04	0.77	0.12	2.5	9.2	0.28
L032231	FC 3	4c	NR10-544	185.3	209.0	1.50	14	0.1	5.50	0.41	32	9.4	1.08	4.0	<0.1	0.48	0.02	0.09	15.9	0.02	0.98	0.07	3.5	4.5	0.19
L032232	FC 3		NR10-544	209.0	232.5	2.36	14	0.2	4.79	2.3	35	8.2	1.94	5.4	<0.1	0.45	0.07	0.17	17.1	0.03	0.63	0.11	2.9	3.9	0.13
L032233	FC 3		NR10-544	232.5 276.0	243.2 288.5	0.33	5	0.3	1.02	0.27	26	6.9	2.18	5.6	<0.1	0.42	<0.01	0.05	12.2	0.03	1.06	0.12	1.4	6.8	0.08
	FC 3 Average					1.40	11	0.20	3.77	0.99	31	8.2	1.73	5.0	0.10	0.45	0.05	0.10	15.1	0.03	0.89	0.10	2.6	5.1	0.13
L032234	FC 4	2a	NR10-560	172.5	199.5	0.41	312	0.2	0.05	0.23	12	40.8	8.37	12.0	0.2	0.09	0.03	0.04	5.1	0.13	0.47	0.14	4.0	16.4	0.77
L032235	FC 4		NR10-560	199.5	227.0	0.19	12	0.2	0.02	0.15	16	35.4	8.04	9.8	0.2	0.08	0.02	0.03	6.3	0.15	0.4	0.18	2.6	23.6	0.39
L032236	FC 4		NR10-560	227.0	252.5	0.16	11	0.2	0.05	0.14	18	30.7	8.68	9.4	0.1	0.1	0.03	0.03	7.5	0.13	0.36	0.18	4.8	20.7	0.38
	FC 4 Average					0.25	112	0.20	0.04	0.17	15	35.6	8.36	10.4	0.17	0.09	0.03	0.03	6.3	0.14	0.41	0.17	3.8	20.2	0.51
L032237	FC 5	3b	NR09-365	167.0	193.0	0.13	10	0.1	0.12	0.65	54	8.2	3.7	4.3	<0.1	0.55	0.04	<0.02	26.3	0.04	0.47	0.06	2.4	10.5	0.27
L032238	FC 5		NR09-365	193.0	219.0	0.10	10	0.1	0.09	1.64	45	8.9	4.7	4.9	<0.1	0.47	0.14	0.04	21.9	0.03	0.47	0.08	2.0	13.1	0.16
L032239	FC 5		NR09-365	219.0	245.5	0.12	10	0.1	0.09	0.29	44	10.8	3.93	5.3	<0.1	0.54	0.02	<0.02	21.0	0.04	0.47	0.06	1.7	11.3	0.18
	FC 5 Average					0.12	10	0.10	0.10	0.86	48	9.3	4.11	4.8	0.10	0.52	0.07	0.04	23.1	0.04	0.47	0.07	2.0	11.6	0.20
L032240	FC 7	5f	NR10-569	87.0	109.6	0.84	14	0.2	0.22	0.16	13	40.3	4.46	11.0	0.1	0.2	0.04	0.03	5.9	0.1	0.79	0.11	5.1	7.6	0.4
L032241	FC 7		NR10-546	186.0	203.0	0.36	13	0.2	0.15	0.21	21	23.4	3.55	7.8	<0.1	0.33	0.03	0.02	9.5	0.1	0.65	0.09	4.0	5.6	0.33
L032242	FC 7		NR10-602	73.5	93.9	0.58	14	0.1	0.79	0.84	16	28.2	0.96	7.3	<0.1	0.19	0.05	0.06	7.0	0.11	1.08	<0.05	2.4	1.8	0.49
L032243	FC 7		NR10-612	117.5	133.6	0.96	24	0.1	0.57	4.42	12	37.7	0.81	5.3	<0.1	0.16	0.44	0.13	5.3	0.05	0.69	0.06	1.9	2.7	0.33
	FC 7 Average					0.69	16	0.15	0.43	1.41	16	32.4	2.45	7.9	0.10	0.22	0.14	0.06	6.9	0.09	0.80	0.09	3.4	4.4	0.39
L032244	FC 6	5dac	NR10-463	108.5	147.9	0.49	7	0.2	3.78	1.24	32	7.2	1.12	3.6	<0.1	0.49	0.03	0.1	15.7	0.03	1.66	0.06	2.0	4.1	0.19
L032245	FC 6		NR10-468	74.2	108.5	0.28	8	0.2	2.44	0.07	26	7.3	1.11	3.3	<0.1	0.42	<0.01	<0.02	12.3	0.02	4.12	0.08	3.5	3.8	0.17
	FC 6 Average					0.39	8	0.20	3.11	0.66	29	7.3	1.12	3.5	0.10	0.46	0.03	0.10	14.0	0.03	2.89	0.07	2.8	4.0	0.18

Sample ID	Description	Lithology	Borehole	Inteval (m)		Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
				Top	Bottom	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method						ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
MDL						0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
L032225	FC 1	4cfa	NR10-561	143.0	171.0	1.1	<1	<0.3	<0.05	0.14	0.08	1.7	0.04	0.28	<0.1	2.41	0.2
L032226	FC 1		NR10-561	171.0	199.0	1.3	<1	<0.3	<0.05	0.17	0.39	2.0	0.06	0.3	<0.1	3.15	0.2
L032227	FC 1		NR10-561	199.0	226.9	1.1	<1	<0.3	<0.05	0.15	0.3	1.9	0.05	0.27	<0.1	2.66	0.2
	FC 1 Average					1.2	1	0.3	0.05	0.15	0.26	1.9	0.05	0.28	0.1	2.74	0.2
L032228	FC 2	4a	NR10-567	51.0	78.0	2.3	<1	<0.3	<0.05	0.17	0.14	1.6	0.18	0.36	<0.1	2.99	0.2
L032229	FC 2		NR10-567	78.0	107.0	0.8	<1	<0.3	<0.05	0.15	0.73	1.4	0.04	0.31	<0.1	3.07	0.3
L032230	FC 2		NR10-567	107.0	132.0	1.2	<1	<0.3	<0.05	0.17	0.4	1.7	0.08	0.44	<0.1	3.35	0.3
	FC 2 Average					1.4	1	0.3	0.05	0.16	0.42	1.6	0.10	0.37	0.1	3.14	0.3
L032231	FC 3	4c	NR10-544	185.3	209.0	1.2	<1	<0.3	<0.05	0.16	1.2	1.7	0.05	0.26	0.1	2.71	0.2
L032232	FC 3		NR10-544	209.0	232.5	1.6	<1	<0.3	<0.05	0.18	3.99	1.8	0.04	0.3	0.2	3.17	0.2
L032233	FC 3		NR10-544	232.5 276.0	243.2 288.5	1.5	<1	<0.3	<0.05	0.17	0.48	1.7	0.06	0.32	0.2	3.4	0.3
	FC 3 Average					1.4	1	0.3	0.05	0.17	1.89	1.7	0.05	0.29	0.2	3.09	0.2
L032234	FC 4	2a	NR10-560	172.5	199.5	13.1	<1	<0.3	<0.05	0.4	0.11	0.6	0.28	0.08	1.5	11.3	0.9
L032235	FC 4		NR10-560	199.5	227.0	11.2	<1	<0.3	<0.05	0.46	<0.05	0.6	0.24	0.08	0.7	11.8	1
L032236	FC 4		NR10-560	227.0	252.5	10.0	<1	<0.3	<0.05	0.44	0.07	0.7	0.26	0.11	1.6	11	0.9
	FC 4 Average					11.4	1	0.3	0.05	0.43	0.09	0.6	0.26	0.09	1.3	11.37	0.9
L032237	FC 5	3b	NR09-365	167.0	193.0	1.4	<1	<0.3	<0.05	0.23	0.1	2.4	0.16	0.37	<0.1	3.63	0.3
L032238	FC 5		NR09-365	193.0	219.0	1.7	<1	<0.3	<0.05	0.21	0.08	2.2	0.16	0.33	<0.1	3.52	0.2
L032239	FC 5		NR09-365	219.0	245.5	2.5	<1	0.3	<0.05	0.25	0.05	2.1	0.14	0.36	<0.1	4.24	0.3
	FC 5 Average					1.9	1	0.3	0.05	0.23	0.08	2.2	0.15	0.35	0.1	3.80	0.3
L032240	FC 7	5f	NR10-569	87.0	109.6	8.8	1	0.6	<0.05	0.24	1.15	0.6	0.1	0.1	0.6	6.41	0.6
L032241	FC 7		NR10-546	186.0	203.0	6.4	<1	<0.3	<0.05	0.25	0.47	1.0	0.08	0.18	3.4	6.72	0.6
L032242	FC 7		NR10-602	73.5	93.9	6.5	1	<0.3	<0.05	0.31	1.29	0.7	<0.02	0.1	<0.1	8.1	0.8
L032243	FC 7		NR10-612	117.5	133.6	6.3	1	<0.3	<0.05	0.13	1.36	0.6	0.03	0.07	<0.1	3.15	0.4
	FC 7 Average					7.0	1	0.6	0.05	0.23	1.07	0.7	0.07	0.11	2.0	6.10	0.6
L032244	FC 6	5dac	NR10-463	108.5	147.9	1.1	<1	<0.3	<0.05	0.16	1.63	1.9	0.04	0.32	<0.1	2.87	0.2
L032245	FC 6		NR10-468	74.2	108.5	0.9	<1	<0.3	<0.05	0.12	0.47	1.7	0.04	0.25	0.5	2.09	0.2
	FC 6 Average					1.0	1	0.3	0.05	0.14	1.05	1.8	0.04	0.29	0.5	2.48	0.2

Sample ID	NAG pH after reaction	Vol. of 0.1 N NaOH		NAG (kg H2SO4/tonne)	
		to pH 4.5	to pH 7.0	to pH 4.5	to pH 7.0
L032188	2.33	20.70	24.45	40.57	47.92
L032189	2.47	14.50	17.80	28.42	34.89
L032225	2.73	7.60	12.50	14.90	24.50
L032226	2.23	18.95	23.90	37.14	46.84
L032227	2.24	17.00	24.15	33.32	47.33
L032228	6.13	#N/A	0.85	#N/A	1.67
L032229	6.00	#N/A	2.55	#N/A	5.00
L032230	6.23	#N/A	1.10	#N/A	2.16
L032231	2.48	14.15	18.55	27.73	36.36
L032232	2.90	11.60	15.60	22.74	30.58
L032233	2.63	6.10	8.85	11.96	17.35
L032234	6.79	#N/A	0.05	#N/A	0.10
L032235	6.73	#N/A	0.20	#N/A	0.39
L032236	6.56	#N/A	0.60	#N/A	1.18
L032237	6.61	#N/A	0.10	#N/A	0.20
L032238	6.03	#N/A	0.50	#N/A	0.98
L032239	6.32	#N/A	0.30	#N/A	0.59
L032240	2.76	6.75	11.30	13.23	22.15
L032241	7.60	#N/A	#N/A	#N/A	#N/A
L032242	2.80	7.60	12.20	14.90	23.91
L032243	3.44	2.60	4.80	5.10	9.41
L032244	2.21	19.75	23.75	38.71	46.55
L032245	2.27	19.30	22.90	37.83	44.88

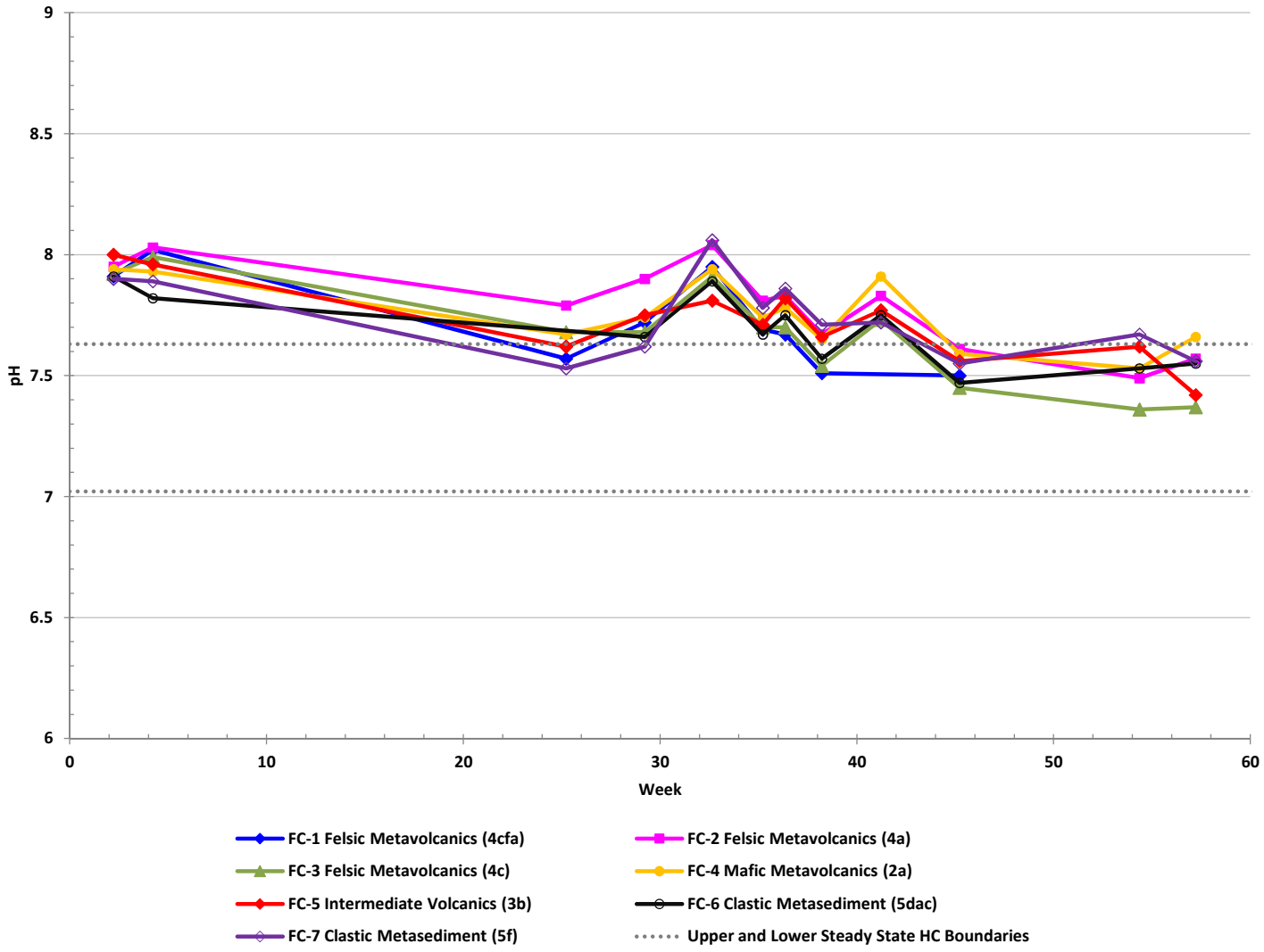
Table B-29: Field Cell Surface Area

Sample Collection Date	Weeks Between Sampling	Cumulative Weeks	FC 1	FC 2	FC 3	FC 4	FC 5	FC 6	FC 7	Average*
			Volume Collected (L)							
17-Oct-2011	2.2	2.2	0.9	2.6	4.3	3.0	3.0	4.3	4.3	3.6
31-Oct-2011	2.0	4.2	0.2	3.0	2.9	2.1	4.1	2.7	2.8	2.9
26-Mar-2012	21.0	25.2	9.2	9.6	10.0	9.4	9.6	n/a**	9.8	9.7
23-Apr-2012	4.0	29.2	5.9	4.5	6.8	7.7	9.0	8.1	6.2	7.1
17-May-2012	3.4	32.6	0.4	2.1	2.9	3.1	1.3	3.2	2.8	2.6
04-Jun-2012	2.6	35.2	2.4	5.5	5.7	5.9	6.0	5.8	5.9	5.8
12-Jun-2012	1.1	36.4	1.3	3.3	2.9	2.9	3.3	3.1	3.1	3.1
25-Jun-2012	1.9	38.2	4.1	7.7	7.9	8.1	8.2	8.0	8.4	8.1
16-Jul-2012	3.0	41.2	n/a	3.7	3.5	3.3	4.0	3.1	3.3	3.5
1-Aug-12	2.3	43.5	5.6	10.4	10.4	10.1	10.5	9.9	10.4	10.3
13-Aug-12	1.7	45.2	2.6	7.5	4.4	4.9	5.2	5.3	5.1	5.4
28-Aug-12	2.1	47.4	1.3	6.2	6.4	6.4	6.9	6.6	6.3	6.5
16-Oct-2012	7.0	54.4	n/a	9.5	8.5	9.1	10.2	9.4	10.1	9.5
05-Nov-2012	2.9	57.2	n/a	6.8	6.3	8.8	6.4	9.2	8.8	7.7
Total			33.83	82.27	82.99	84.86	87.52	78.68	87.3	85.6

* Average values omit volume collected from FC 1
**n/a represents where no sample was taken due to leaks in the barrels

Table B-30: Field Cell Surface Area

Field Cell	Surface Area		Core Mass	Density	Core Volume
	m^2/cell	m^2/kg	kg	g/cm^3	cm^3
FC 1	10.7	0.128	83.8	2770	30252.1
FC 2	10.3	0.128	80.8	2770	29169.7
FC 3	7.4	0.128	57.8	2770	20883.5
FC 4	10.3	0.124	83.2	2890	28796.4
FC 5	10.0	0.129	77.5	2740	28292.5
FC 6	8.5	0.118	79.1	3060	23645.6
FC 7	9.3	0.118	72.4	3060	25847.7



Note: Upper and lower steady state HC boundaries excludes data from acidic cells HC 1 and HC8

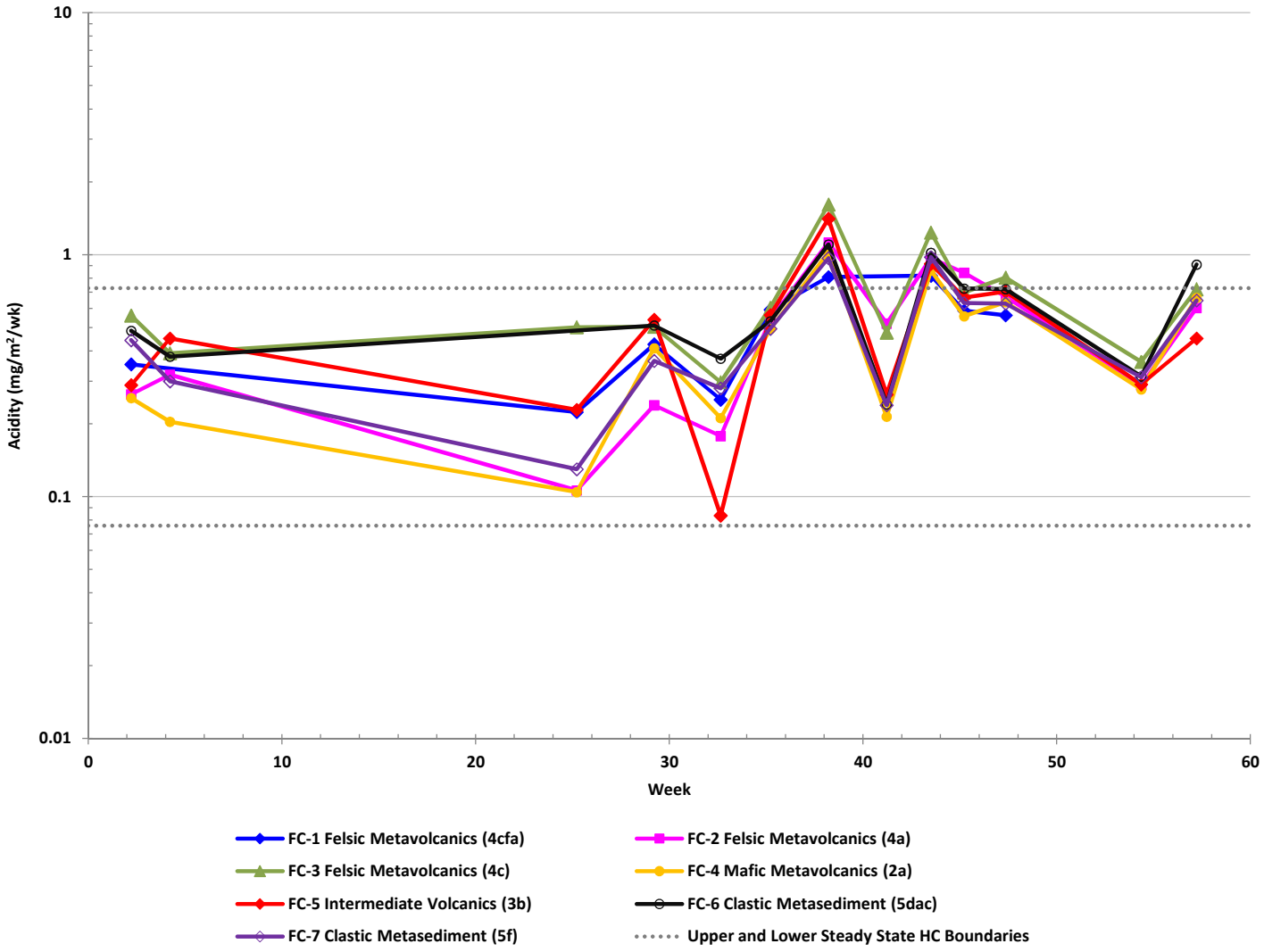
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Rainy River Gold Project

Field Cell pH

Drawn by: KS	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-82



Note: Upper and lower steady state HC boundaries excludes data from acidic cells HC 1 and HC8

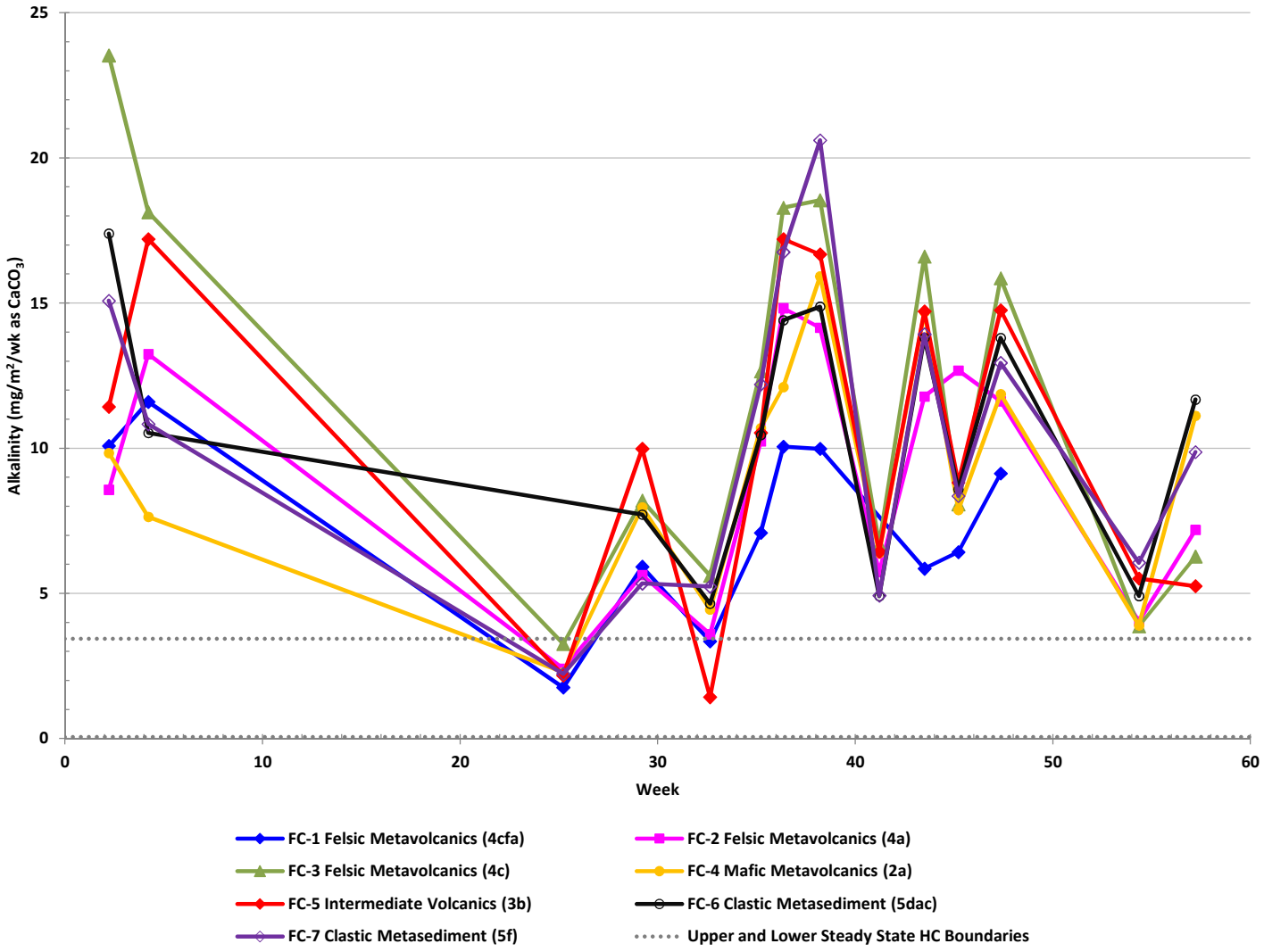
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Rainy River Gold Project

Field Cell Acidity Loadings

Drawn by: KS	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-83



Note: Upper and lower steady state HC boundaries excludes data from acidic cells HC 1 and HC8

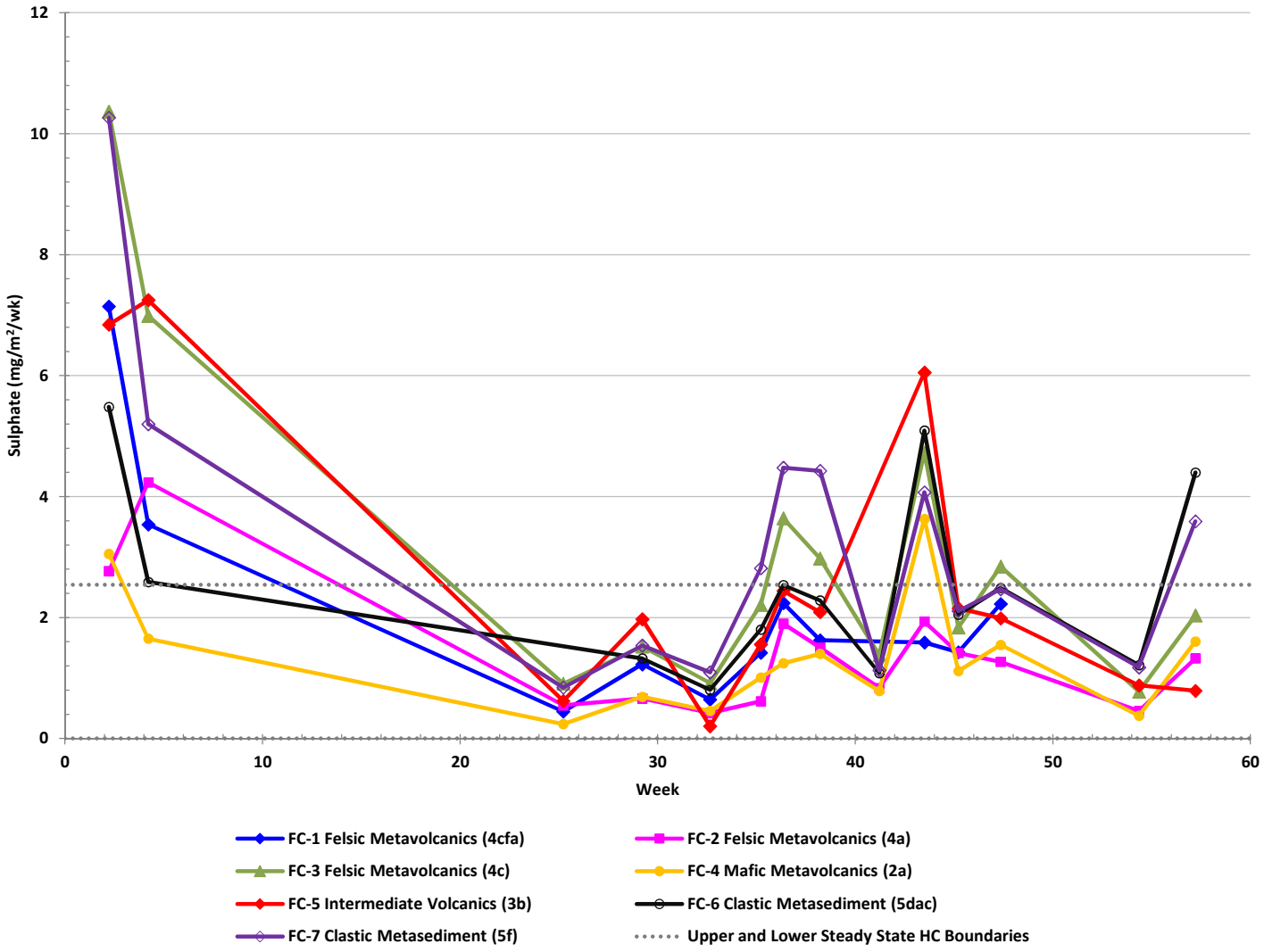
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Rainy River Gold Project

Field Cell Alkalinity Loadings

Drawn by: KS	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-84



Note: Upper and lower steady state HC boundaries excludes data from acidic cells HC 1 and HC8

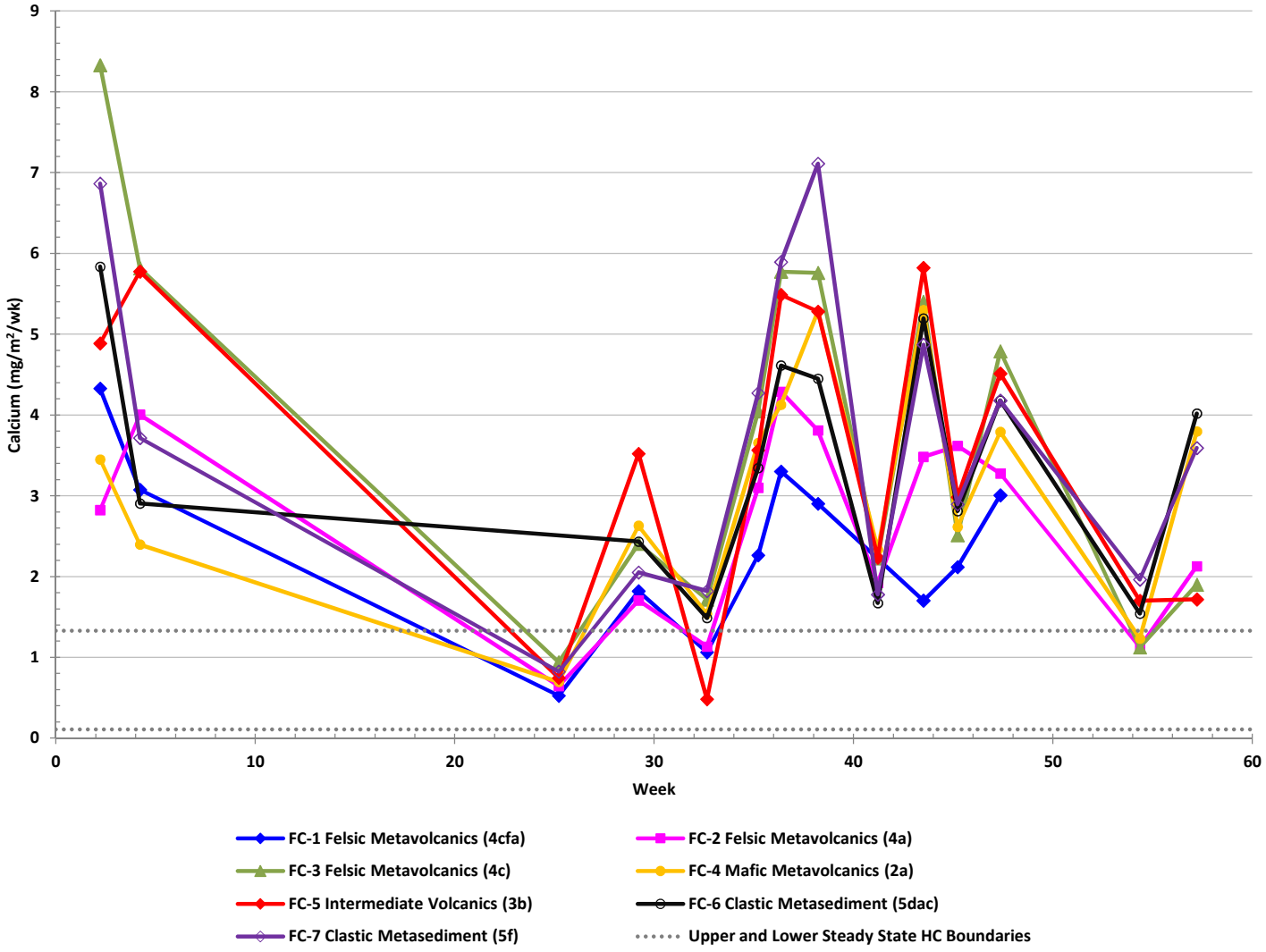
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Rainy River Gold Project

Field Cell Sulphate Loadings

Drawn by: KS	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-85



Note: Upper and lower steady state HC boundaries excludes data from acidic cells HC 1 and HC8

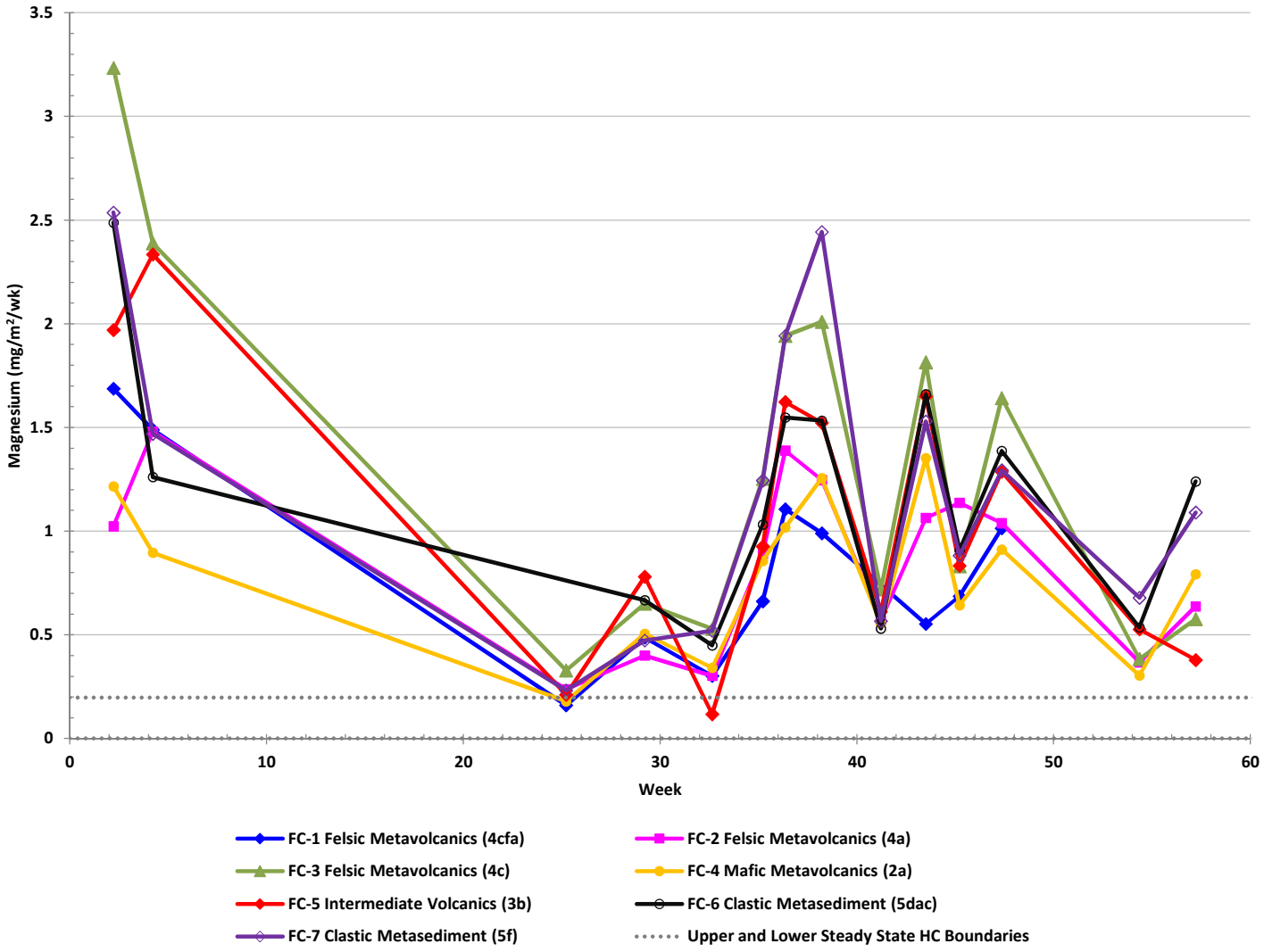
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Rainy River Gold Project

Field Cell Calcium Loadings

Drawn by: KS	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-86



Note: Upper and lower steady state HC boundaries excludes data from acidic cells HC 1 and HC8

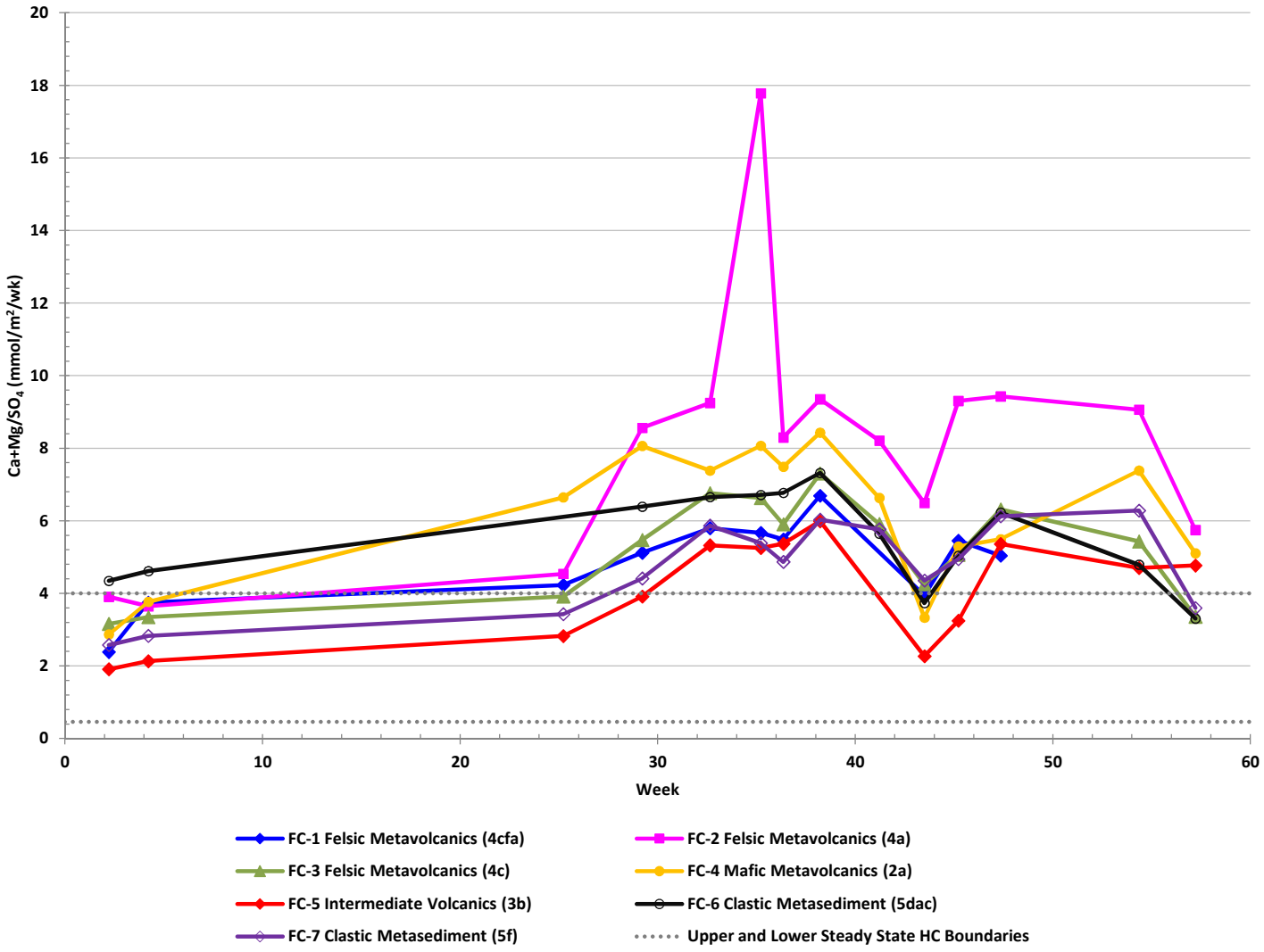
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Rainy River Gold Project

Field Cell Magnesium Loadings

Drawn by: KS	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-87



Note: Upper and lower steady state HC boundaries excludes data from acidic cells HC 1 and HC8

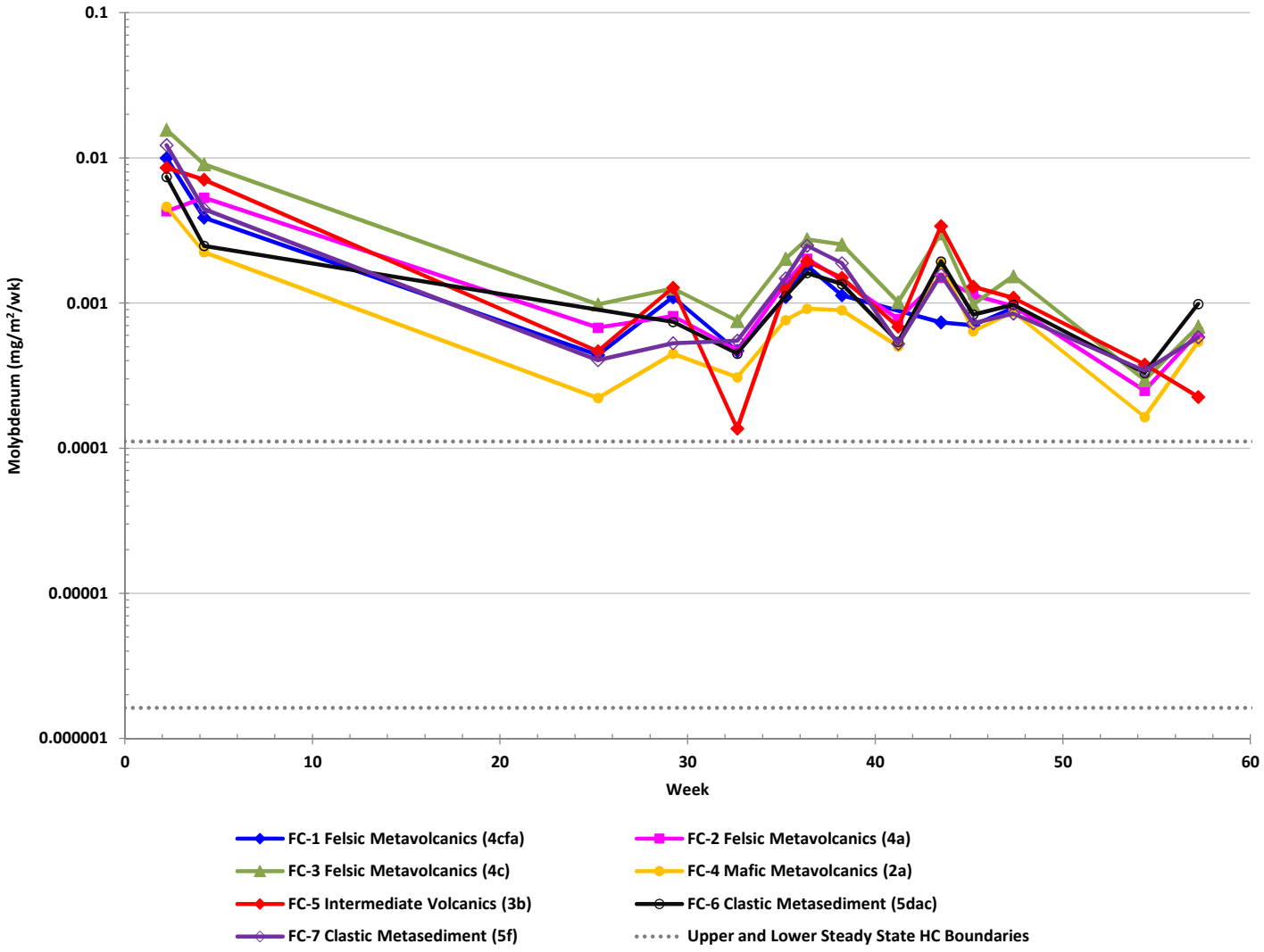
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Rainy River Gold Project

Field Cell Ca+Mg/SO_4 Loadings

Drawn by: KS	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-88



Note: Upper and lower steady state HC boundaries excludes data from acidic cells HC 1 and HC8

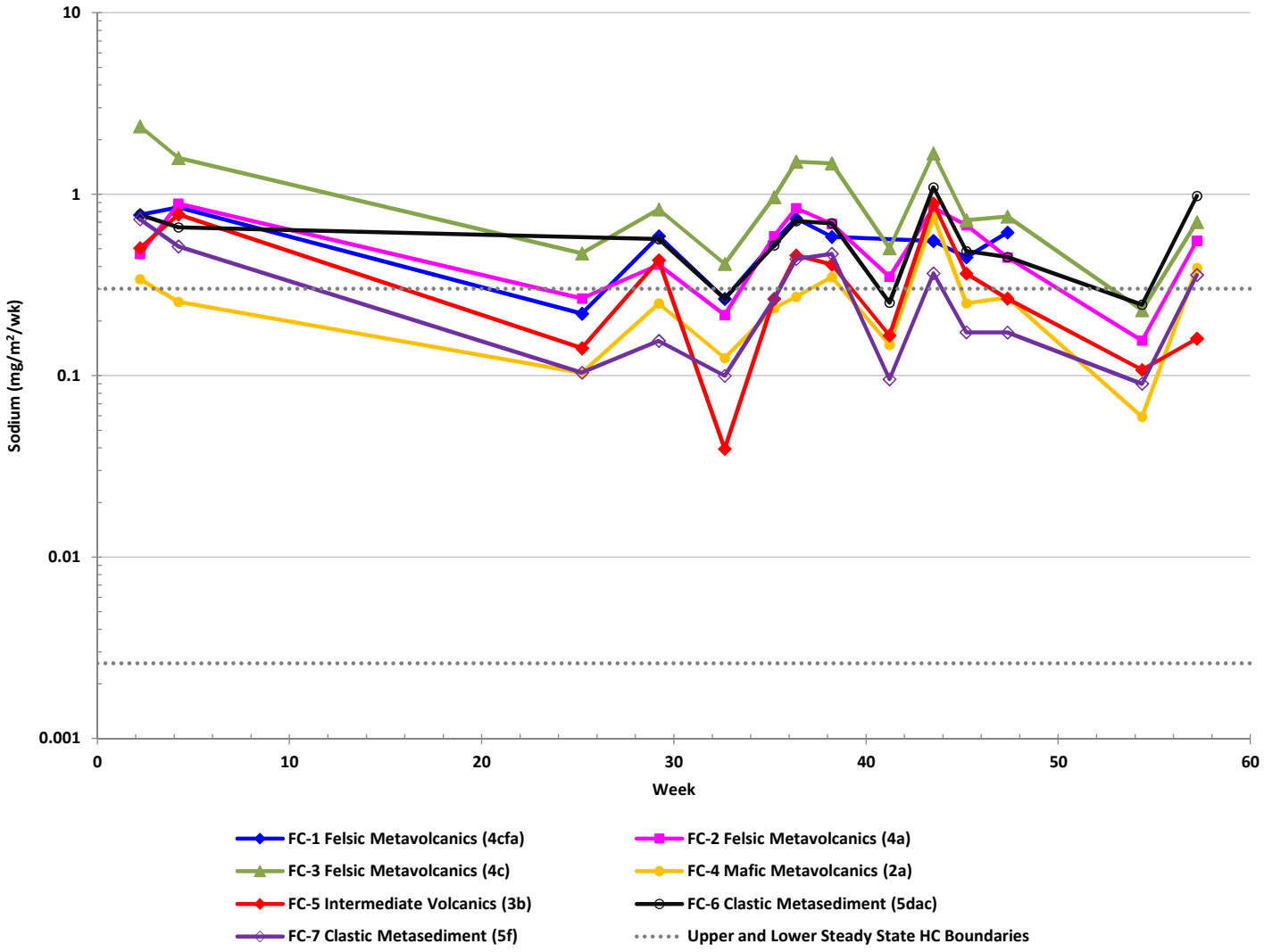
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Rainy River Gold Project

Field Cell Molybdenum Loadings

Drawn by: KS	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-89



Note: Upper and lower steady state HC boundaries excludes data from acidic cells HC 1 and HC8

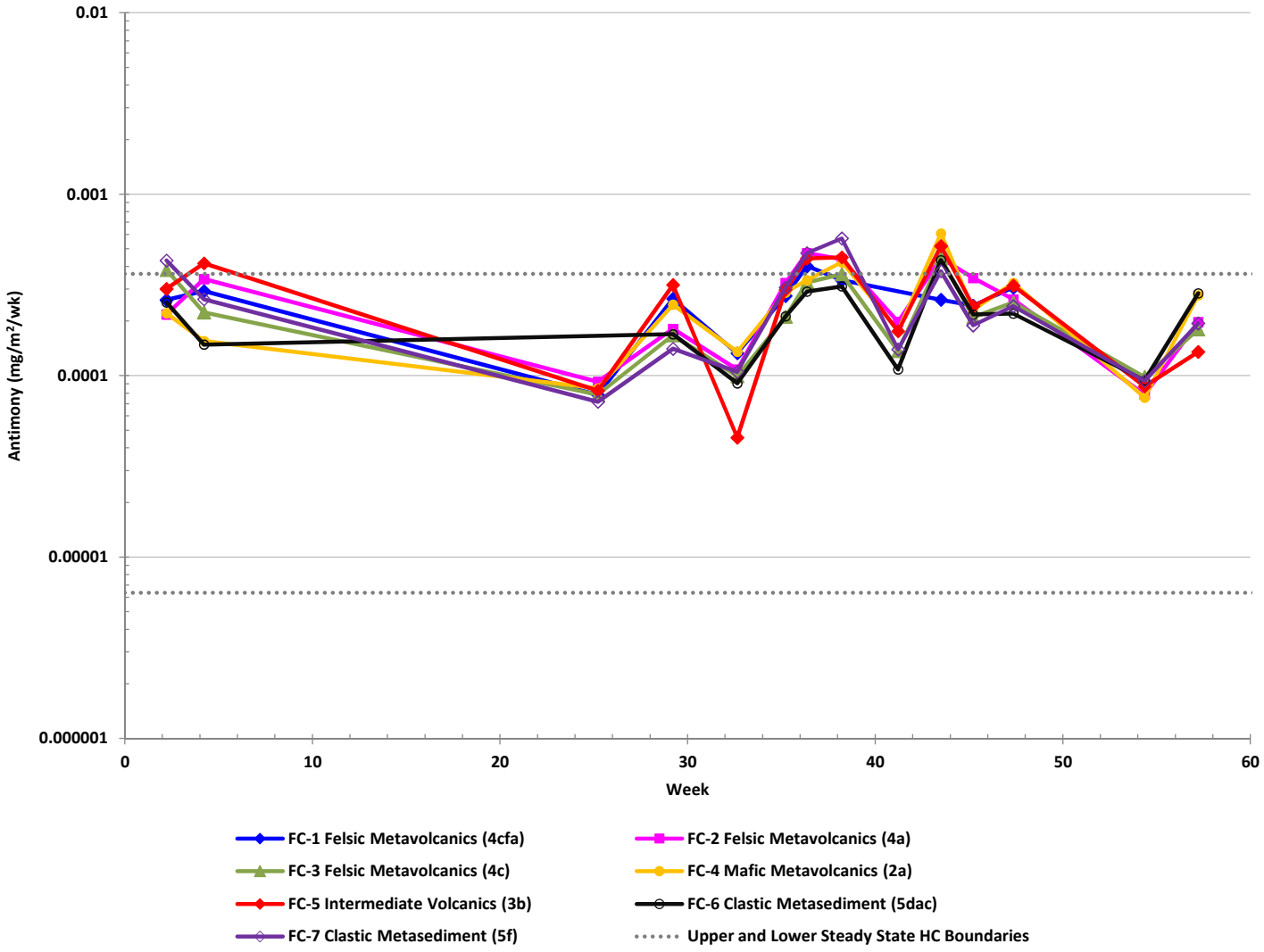
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Rainy River Gold Project

Field Cell Sodium Loadings

Drawn by: KS	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-90



Note: Upper and lower steady state HC boundaries excludes data from acidic cells HC 1 and HC8

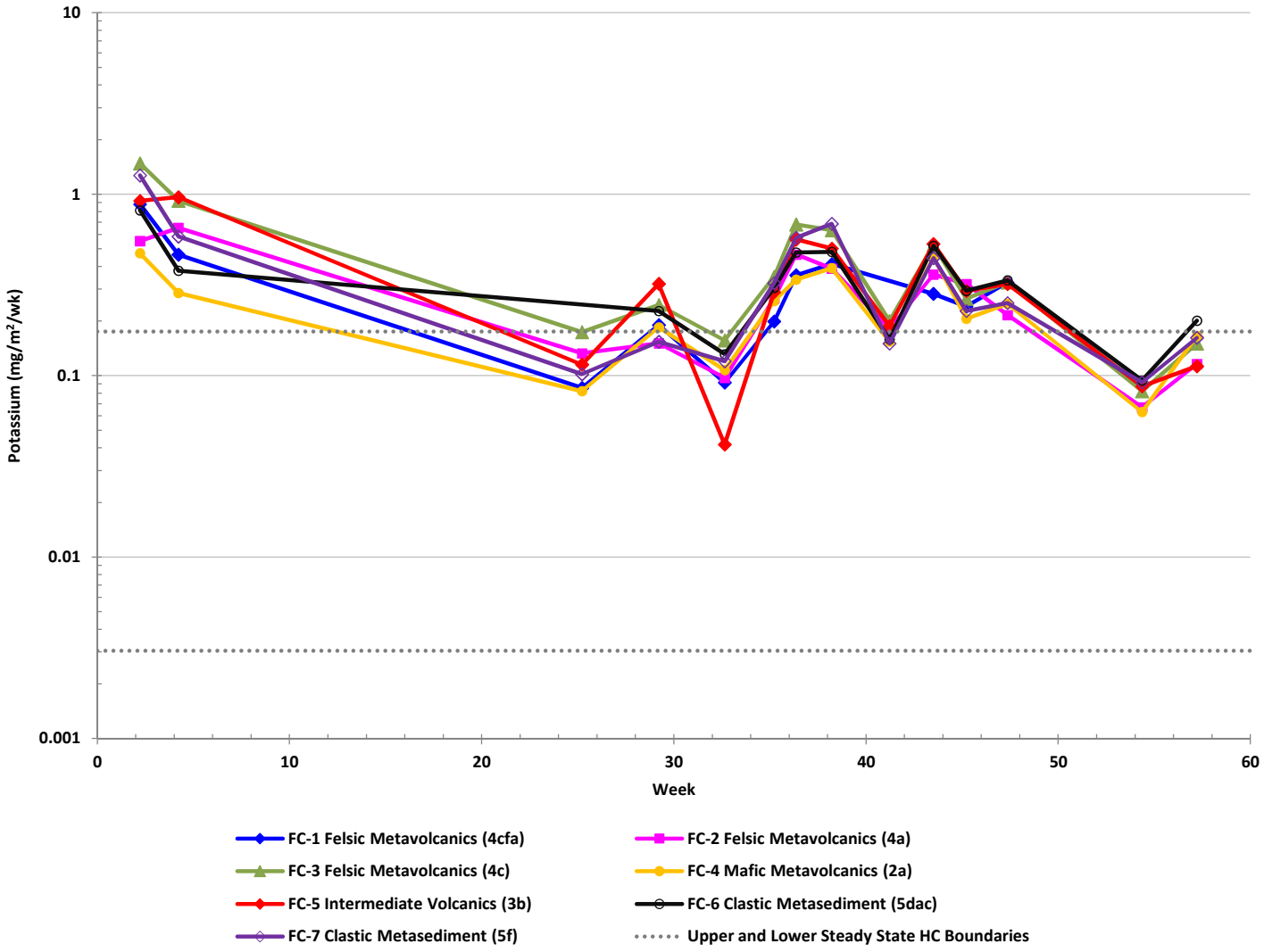
RAINY RIVER

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Rainy River Gold Project

Field Cell Antimony Loadings

Drawn by: KS	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-91



Note: Upper and lower steady state HC boundaries excludes data from acidic cells HC 1 and HC8

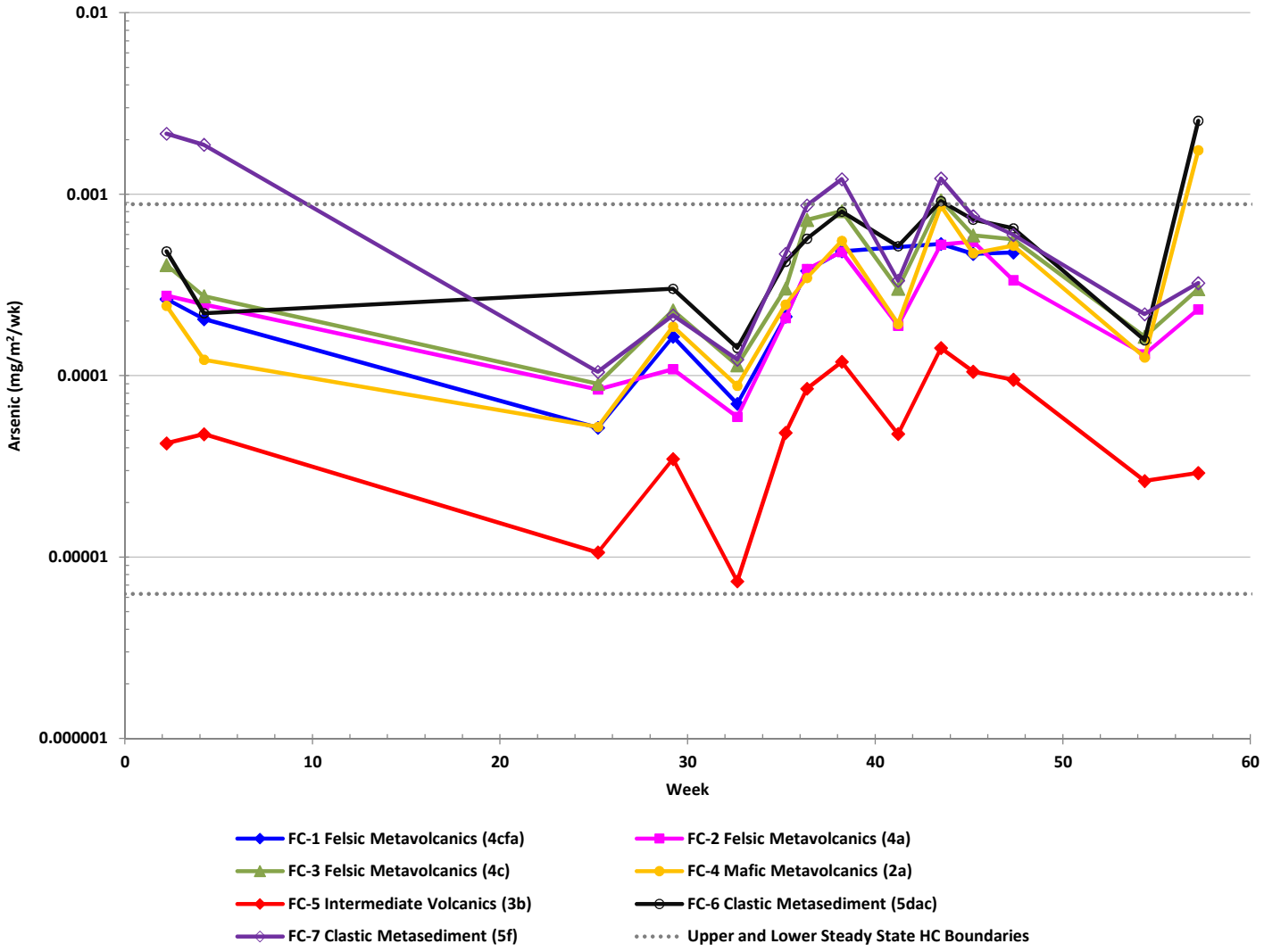
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Rainy River Gold Project

Field Cell Potassium Loadings

Drawn by: KS	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-92



Note: Upper and lower steady state HC boundaries excludes data from acidic cells HC 1 and HC8

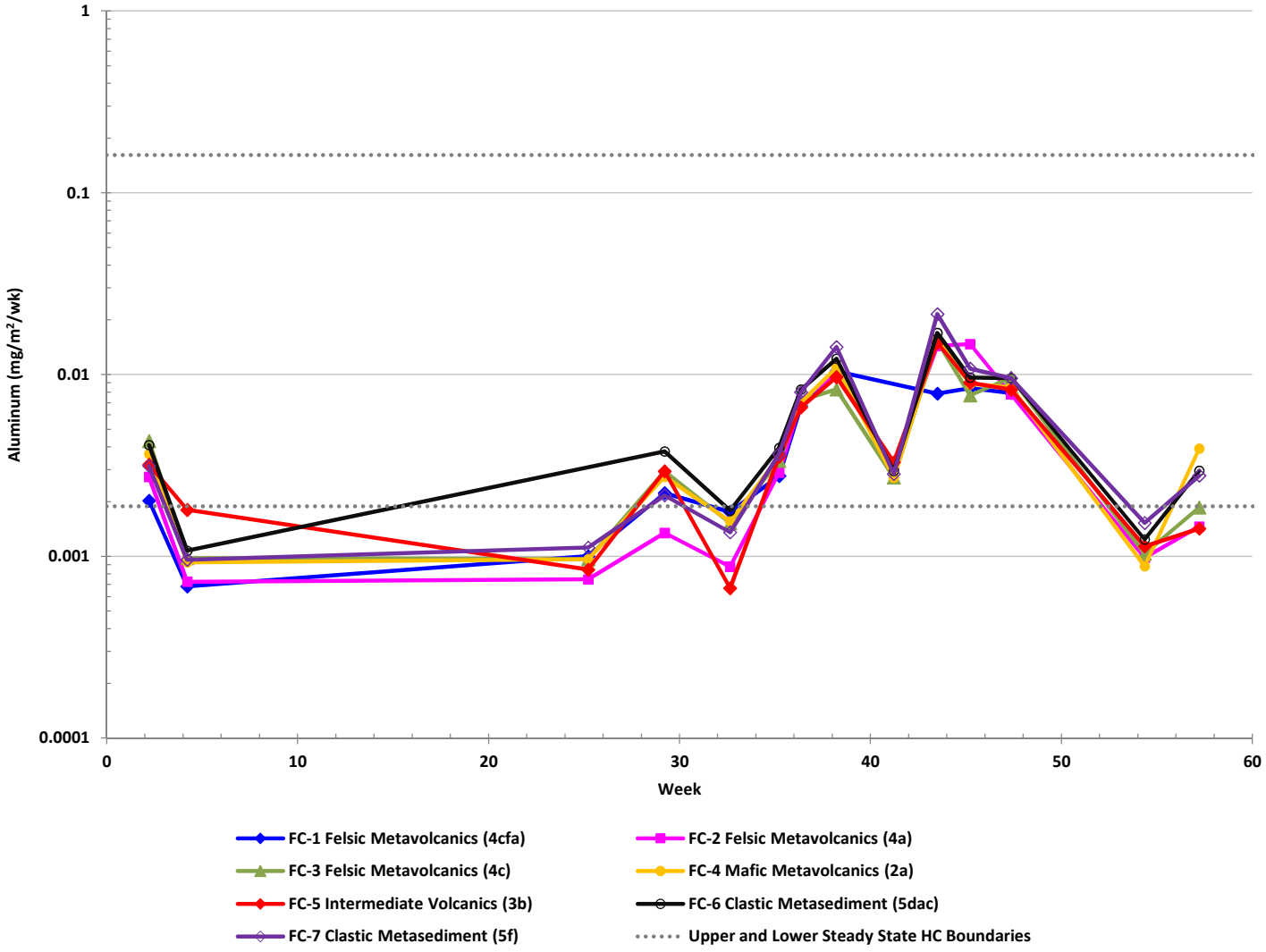
RAINY RIVER

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Rainy River Gold Project

Field Cell Arsenic Loadings

Drawn by: KS	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-93



Note: Upper and lower steady state HC boundaries excludes data from acidic cells HC 1 and HC8

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Rainy River Gold Project

Field Cell Aluminum Loadings

Drawn by: KS	Checked by: SW	Date: May 2013
Project: TC111504		FIGURE B-94



Figure B-95: Field cells 1 through 7 (left to right) and leachate collection system.



Figure B-96: Placement of core fragments in field cell 1 bin.

APPENDIX C

LABORATORY CERTIFICATES OF ANALYSES

ACID BASE ACCOUNTING

Client : AMEC
Project : Rainy River
SGS Project : 08121
Test : Acid-Base Accounting with Siderite Correction
Date : October 3- October 20, 2011

Sample ID	Paste pH	TIC %	CaCO3 NP	S(T) %	S(SO4) %	S(S-2) %	Insoluble S %	AP	Siderite NP	Net NP	Fizz Test
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA07V	Calc.	Calc	Calc.	Siderite Corr.	Calc.	Sobek
LOD	0.2	0.1	#N/A	0.01	0.01	#N/A		#N/A	0.5	#N/A	#N/A
L032001	8.87	0.64	53.3	1.94	<0.01	1.68	0.26	52.5	58.6	6.1	slight
L032002	8.79	0.68	56.7	0.98	<0.01	0.93	0.05	29.1	63.6	34.6	slight
L032003	8.49	1.55	129.2	5.63	0.02	5.36	0.25	167.5	165.8	-1.7	slight
L032004	8.67	1.77	147.5	0.12	<0.01	0.10	0.02	3.1	200.5	197.4	moderate
L032005	9.01	1.52	126.7	0.20	<0.01	0.21	<0.01	6.6	177.0	170.4	moderate
L032006	9.48	0.74	61.7	0.14	<0.01	0.12	0.02	3.8	67.9	64.2	slight
L032007	9.37	0.77	64.2	0.14	<0.01	0.11	0.03	3.4	73.3	69.9	slight
L032008	8.69	1.64	136.7	<0.01	<0.01	<0.01	<0.01	<0.3	196.8	196.8	moderate
L032009	9.55	1.04	86.7	1.77	<0.01	1.70	0.07	53.1	80.3	27.2	slight
L032010	9.37	0.32	26.7	0.21	<0.01	0.20	0.01	6.3	43.7	37.5	slight
L032011	9.48	0.87	72.5	1.65	<0.01	1.53	0.12	47.8	72.1	24.3	slight
L032012	9.22	1.65	137.5	0.37	<0.01	0.32	0.05	10.0	216.6	206.6	moderate
L032013	8.83	1.86	155.0	0.41	<0.01	0.41	<0.01	12.8	213.5	200.7	moderate
L032014	9.60	0.72	60.0	0.93	<0.01	0.87	0.06	27.2	66.5	39.3	slight
L032015	8.76	1.58	131.7	0.37	<0.01	0.30	0.07	9.4	205.4	196.1	moderate
L032016	9.65	0.59	49.2	0.12	<0.01	0.10	0.02	3.1	59.2	56.1	slight
L032017	9.20	0.05	4.2	1.38	<0.01	1.31	0.07	40.9	18.8	-22.1	none
L032018	9.28	0.20	16.7	2.49	<0.01	2.29	0.2	71.6	35.1	-36.4	slight
L032019	9.37	0.34	28.3	2.41	<0.01	2.32	0.09	72.5	40.8	-31.7	slight
L032020	9.51	0.29	24.2	2.04	<0.01	1.89	0.15	59.1	33.7	-25.4	slight
L032021	8.89	0.39	32.5	2.42	<0.01	2.32	0.1	72.5	43.4	-29.1	slight
L032022	8.91	0.21	17.5	0.26	<0.01	0.24	0.02	7.5	33.9	26.4	slight
L032023	8.69	1.32	110.0	1.29	<0.01	1.20	0.09	37.5	131.2	93.7	slight
L032024	8.80	0.68	56.7	0.50	<0.01	0.44	0.06	13.8	66.6	52.8	slight
L032025	8.82	1.06	88.3	1.06	<0.01	0.96	0.1	30.0	88.0	58.0	slight
L032026	9.07	0.72	60.0	0.47	<0.01	0.43	0.04	13.4	66.7	53.3	slight
L032027	9.05	0.32	26.7	0.56	<0.01	0.47	0.09	14.7	42.3	27.6	slight
L032028	8.47	1.20	100.0	0.36	<0.01	0.35	0.01	10.9	204.2	193.3	moderate
L032029	8.63	0.14	11.7	1.63	<0.01	1.45	0.18	45.3	16.6	-28.7	none
L032030	8.60	0.08	6.7	2.29	<0.01	2.26	0.03	70.6	17.7	-52.9	none
L032031	8.63	0.16	13.3	0.13	<0.01	0.09	0.04	2.8	40.8	38.0	slight
L032032	8.74	0.07	5.8	0.55	<0.01	0.50	0.05	15.6	34.4	18.8	slight
L032033	8.69	0.18	15.0	1.37	<0.01	1.26	0.11	39.4	35.1	-4.2	slight
L032034	8.58	0.08	6.7	2.25	<0.01	2.22	0.03	69.4	22.2	-47.1	slight
L032035	8.47	0.06	5.0	0.30	<0.01	0.27	0.03	8.4	17.3	8.9	none
L032036	9.20	1.41	117.5	0.58	<0.01	0.55	0.03	17.2	86.6	69.4	slight
L032037	8.55	2.07	172.5	1.49	<0.01	1.45	0.04	45.3	263.6	218.3	moderate
L032038	9.10	0.20	16.7	0.34	<0.01	0.28	0.06	8.8	43.1	34.4	slight
L032039	9.13	0.83	69.2	0.82	<0.01	0.79	0.03	24.7	72.1	47.4	slight
L032040	9.14	0.92	76.7	1.87	<0.01	1.78	0.09	55.6	76.4	20.8	slight
L032041	9.30	0.72	60.0	0.62	<0.01	0.46	0.16	14.4	102.7	88.3	moderate
L032042	9.43	0.12	10.0	0.17	<0.01	0.15	0.02	4.7	26.5	21.8	slight
L032043	9.37	0.83	69.2	0.17	<0.01	0.14	0.03	4.4	74.0	69.6	slight
L032044	8.84	1.02	85.0	2.02	<0.01	1.52	0.5	47.5	132.4	84.9	moderate
L032045	9.18	0.17	14.2	0.98	<0.01	0.91	0.07	28.4	27.3	-1.2	slight
L032046	9.10	0.07	5.8	1.92	<0.01	1.70	0.22	53.1	15.1	-38.0	none
L032047	8.49	0.33	27.5	0.50	0.16	0.31	0.03	9.7	51.5	41.8	slight
L032048	9.17	0.22	18.3	1.81	<0.01	1.64	0.17	51.3	35.1	-16.1	slight
L032049	8.84	1.75	145.8	3.55	<0.01	1.98	1.57	61.9	171.4	109.5	moderate
L032050	9.27	1.16	96.7	0.44	<0.01	0.06	0.38	1.9	158.4	156.5	moderate
L032051	9.30	0.98	81.7	0.68	<0.01	0.66	0.02	20.6	126.2	105.6	moderate
L032052	9.07	0.11	9.2	1.22	<0.01	1.21	0.01	37.8	17.6	-20.2	none
L032053	9.53	0.98	81.7	1.49	<0.01	1.46	0.03	45.6	80.5	34.8	slight
L032054	9.36	0.34	28.3	2.42	<0.01	2.29	0.13	71.6	58.0	-13.6	slight
L032055	9.38	0.16	13.3	2.23	<0.01	2.31	<0.01	72.2	27.8	-44.4	slight
L032056	9.32	0.24	20.0	2.50	<0.01	2.49	0.01	77.8	34.0	-43.8	slight
L032057	9.33	2.97	247.5	0.27	<0.01	0.29	<0.01	9.1	274.8	265.7	moderate
L032058	9.03	0.17	14.2	0.91	<0.01	0.86	0.05	26.9	36.0	9.1	slight
L032059	9.50	1.24	103.3	0.12	<0.01	0.12	<0.01	3.8	85.0	81.3	slight
L032060	8.64	1.58	131.7	9.00	<0.01	8.50	0.5	265.6	86.5	-179.1	slight
L032061	8.52	2.09	174.2	5.31	<0.01	5.35	<0.01	167.2	187.5	20.3	slight

Client : AMEC
Project : Rainy River
SGS Project : 08121
Test : Acid-Base Accounting with Siderite Correction
Date : October 3- October 20, 2011

Sample ID	Paste pH	TIC %	CaCO3 NP	S(T) %	S(SO4) %	S(S-2) %	Insoluble S %	AP	Siderite NP	Net NP	Fizz Test
L032062	7.70	0.05	4.2	0.38	<0.01	0.35	0.03	10.9	16.0	5.0	none
L032063	8.41	0.37	30.8	2.28	<0.01	2.26	0.02	70.6	47.4	-23.2	slight
L032064	8.53	1.08	90.0	4.27	<0.01	3.76	0.51	117.5	83.7	-33.8	slight
L032065	9.08	0.97	80.8	0.23	<0.01	0.21	0.02	6.6	79.5	72.9	slight
L032066	8.77	0.72	60.0	1.16	<0.01	1.04	0.12	32.5	67.3	34.8	slight
L032067	7.95	0.56	46.7	7.17	0.03	6.73	0.41	210.3	51.1	-159.2	slight
L032068	8.68	1.87	155.8	0.37	<0.01	0.36	0.01	11.3	185.6	174.4	moderate
L032069	8.86	0.96	80.0	2.12	<0.01	1.33	0.79	41.6	80.1	38.5	slight
L032070	8.88	1.99	165.8	1.20	<0.01	0.90	0.3	28.1	214.7	186.6	moderate
L032071	8.61	2.60	216.7	0.52	<0.01	0.14	0.38	4.4	164.6	160.2	moderate
L032072	8.55	0.69	57.5	1.21	<0.01	0.30	0.91	9.4	60.0	50.6	slight
L032073	8.58	1.37	114.2	2.49	<0.01	1.27	1.22	39.7	165.8	126.2	moderate
L032074	9.00	0.28	23.3	0.02	<0.01	0.01	0.01	0.3	39.1	38.8	slight
L032075	9.08	0.84	70.0	0.63	<0.01	0.59	0.04	18.4	97.8	79.3	moderate
L032076	9.16	0.75	62.5	0.08	<0.01	0.06	0.02	1.9	70.9	69.0	slight
L032077	8.92	0.28	23.3	1.05	<0.01	0.82	0.23	25.6	42.1	16.5	slight
L032078	8.61	0.06	5.0	1.84	<0.01	1.61	0.23	50.3	26.0	-24.3	slight
L032079	8.83	0.11	9.2	0.59	<0.01	0.47	0.12	14.7	27.5	12.8	slight
L032080	8.62	1.35	112.5	1.99	0.01	1.34	0.64	41.9	172.0	130.2	moderate
L032081	8.67	1.04	86.7	8.45	<0.01	8.44	0.01	263.8	131.2	-132.6	moderate
L032082	8.70	1.85	154.2	8.67	0.01	8.70	<0.01	271.9	199.9	-72.0	moderate
L032083	9.50	1.09	90.8	1.02	<0.01	0.85	0.17	26.6	85.5	58.9	slight
L032084	8.93	0.17	14.2	2.08	<0.01	0.16	1.92	5.0	26.8	21.8	slight
L032085	9.17	1.31	109.2	1.76	<0.01	0.67	1.09	20.9	140.5	119.5	moderate
L032086	9.24	0.80	66.7	0.84	<0.01	0.80	0.04	25.0	113.2	88.2	moderate
L032087	9.52	1.02	85.0	0.87	<0.01	0.81	0.06	25.3	123.8	98.4	moderate
L032088	8.86	1.23	102.5	4.42	<0.01	4.37	0.05	136.6	167.1	30.5	moderate
L032089	8.54	1.19	99.2	9.89	0.02	9.33	0.54	291.6	84.6	-206.9	slight
L032090	9.36	0.93	77.5	0.44	<0.01	0.43	0.01	13.4	74.7	61.3	slight
L032091	8.86	2.10	175.0	3.22	0.02	3.08	0.12	96.3	216.0	119.7	moderate
L032092	8.85	1.83	152.5	0.91	<0.01	0.82	0.09	25.6	200.5	174.9	moderate
L032093	8.83	0.54	45.0	1.79	<0.01	0.33	1.46	10.3	53.1	42.8	slight
L032094	8.84	0.15	12.5	3.03	<0.01	2.91	0.12	90.9	34.2	-56.8	slight
L032095	9.22	2.05	170.8	0.49	<0.01	0.44	0.05	13.8	223.4	209.6	moderate
L032096	9.18	0.19	15.8	1.85	<0.01	1.77	0.08	55.3	27.3	-28.0	slight
L032097	9.12	0.32	26.7	1.91	<0.01	1.82	0.09	56.9	40.4	-16.5	slight
L032098	9.27	0.25	20.8	1.27	<0.01	1.24	0.03	38.8	35.1	-3.6	slight
L032099	9.05	0.05	4.2	2.58	<0.01	2.36	0.22	73.8	19.3	-54.5	none
L032100	8.95	0.04	3.3	2.90	<0.01	2.77	0.13	86.6	15.8	-70.7	none
L032101	9.28	2.23	185.8	0.65	0.01	0.07	0.57	2.2	214.7	212.5	moderate
L032102	9.38	0.47	39.2	0.97	<0.01	0.80	0.17	25.0	52.5	27.5	slight
L032103	9.63	0.40	33.3	0.33	<0.01	0.32	0.01	10.0	50.6	40.6	slight
L032104	8.80	0.51	42.5	2.57	<0.01	0.95	1.62	29.7	102.1	72.4	moderate
L032105	9.08	0.26	21.7	1.62	<0.01	1.51	0.11	47.2	35.3	-11.9	slight
L032106	9.24	1.37	114.2	0.06	<0.01	0.05	0.01	1.6	212.9	211.3	moderate
L032107	9.36	0.08	6.7	0.79	<0.01	0.73	0.06	22.8	28.0	5.2	slight
L032108	8.12	<0.01	<0.8	0.45	<0.01	0.40	0.05	12.5	8.2	-4.3	none
L032109	9.60	1.03	85.8	0.22	<0.01	0.16	0.06	5.0	110.1	105.1	moderate
L032110	9.39	1.00	83.3	1.85	<0.01	1.74	0.11	54.4	119.4	65.1	moderate
L032111	9.40	0.63	52.5	0.99	<0.01	0.93	0.06	29.1	56.0	27.0	slight
L032112	8.97	1.76	146.7	0.68	<0.01	0.70	<0.01	21.9	217.2	195.3	moderate
L032113	9.44	0.89	74.2	0.37	<0.01	0.36	0.01	11.3	65.8	54.6	slight
L032114	9.43	0.57	47.5	0.19	<0.01	0.17	0.02	5.3	49.5	44.2	slight
L032115	9.55	1.69	140.8	0.30	<0.01	0.28	0.02	8.8	85.0	76.3	slight
L032116	9.58	1.44	120.0	0.18	<0.01	0.17	0.01	5.3	84.4	79.1	slight
L032117	9.38	2.03	169.2	1.00	<0.01	0.96	0.04	30.0	92.4	62.4	slight
L032118	9.33	3.18	265.0	0.95	<0.01	0.92	0.03	28.8	240.7	212.0	moderate
L032119	9.69	0.91	75.8	0.29	<0.01	0.28	0.01	8.8	134.9	126.2	moderate
L032120	9.56	0.79	65.8	0.24	0.1	0.13	0.01	4.1	70.3	66.2	slight
L032121	9.86	1.74	145.0	0.22	<0.01	0.08	0.14	2.5	147.3	144.8	moderate
L032122	9.30	1.40	116.7	2.32	<0.01	2.22	0.1	69.4	91.8	22.4	slight
L032123	9.75	1.24	103.3	0.17	<0.01	0.15	0.02	4.7	82.8	78.1	slight
L032124	9.74	0.96	80.0	0.19	<0.01	0.18	0.01	5.6	74.7	69.1	slight
L032125	8.94	0.10	8.3	0.02	<0.01	<0.01	0.02	<0.3	32.7	32.7	slight
L032126	9.38	0.84	70.0	1.36	<0.01	1.32	0.04	41.3	113.9	72.6	moderate
L032127	9.77	1.12	93.3	0.30	0.01	0.28	0.01	8.8	80.0	71.2	slight
L032128	9.60	1.86	155.0	0.08	<0.01	0.06	0.02	1.9	170.8	168.9	slight
L032129	9.64	1.94	161.7	1.22	<0.01	1.13	0.09	35.3	92.6	57.3	slight
L032130	9.76	0.91	75.8	0.29	<0.01	0.27	0.02	8.4	72.1	63.7	slight

Client : AMEC
Project : Rainy River
SGS Project : 08121
Test : Acid-Base Accounting with Siderite Correction
Date : October 3- October 20, 2011

Sample ID	Paste pH	TIC %	CaCO3 NP	S(T) %	S(SO4) %	S(S-2) %	Insoluble S %	AP	Siderite NP	Net NP	Fizz Test
L032131	9.83	1.34	111.7	0.07	<0.01	0.08	<0.01	2.5	86.1	83.6	slight
L032132	9.21	2.93	244.2	0.12	<0.01	0.09	0.03	2.8	313.1	310.3	moderate
L032133	8.10	0.16	13.3	13.80	0.03	13.20	0.57	412.5	32.4	-380.1	slight
L032134	9.81	0.97	80.8	1.40	<0.01	1.33	0.07	41.6	117.6	76.0	moderate
L032135	9.48	0.79	65.8	0.63	<0.01	0.52	0.11	16.3	61.1	44.8	slight
L032136	9.34	0.70	58.3	1.83	<0.01	1.78	0.05	55.6	62.0	6.4	slight
L032137	9.44	0.59	49.2	1.61	<0.01	1.42	0.19	44.4	54.4	10.0	slight
L032138	9.47	0.80	66.7	1.59	<0.01	1.47	0.12	45.9	68.8	22.9	slight
L032139	9.27	1.10	91.7	0.29	<0.01	0.23	0.06	7.2	146.0	138.9	moderate
L032140	9.45	0.77	64.2	2.51	<0.01	2.38	0.13	74.4	89.7	15.4	moderate
L032141	9.61	0.77	64.2	1.95	<0.01	1.74	0.21	54.4	65.5	11.1	slight
L032142	8.95	0.35	29.2	0.59	<0.01	0.53	0.06	16.6	48.9	32.3	slight
L032143	9.38	1.29	107.5	1.46	<0.01	1.44	0.02	45.0	137.4	92.4	moderate
L032144	9.74	1.18	98.3	1.51	<0.01	1.43	0.08	44.7	91.0	46.3	slight
L032145	9.78	0.78	65.0	1.71	<0.01	1.59	0.12	49.7	72.0	22.3	slight
L032146	9.64	0.19	15.8	0.14	<0.01	0.08	0.06	2.5	34.2	31.7	slight
L032147	9.00	1.58	131.7	0.86	<0.01	0.66	0.2	20.6	185.0	164.4	moderate
L032148	9.16	1.27	105.8	1.21	0.01	0.94	0.26	29.4	159.7	130.3	moderate
L032149	8.94	2.50	208.3	2.89	<0.01	2.50	0.39	78.1	244.4	166.3	moderate
L032150	9.60	0.60	50.0	1.21	<0.01	1.00	0.21	31.3	55.8	24.5	slight
L032151	9.45	0.41	34.2	0.05	<0.01	0.03	0.02	0.9	61.1	60.1	slight
L032152	8.38	1.50	125.0	1.98	0.76	1.21	0.01	37.8	177.0	139.2	moderate
L032153	8.69	1.81	150.8	7.03	0.01	6.59	0.43	205.9	183.2	-22.8	moderate
L032154	8.93	0.12	10.0	0.57	<0.01	0.51	0.06	15.9	28.9	12.9	slight
L032155	9.08	0.13	10.8	0.09	<0.01	0.07	0.02	2.2	37.6	35.4	slight
L032156	9.22	0.11	9.2	1.68	<0.01	1.55	0.13	48.4	26.2	-22.3	slight
L032157	8.68	0.46	38.3	7.07	0.01	7.21	<0.01	225.3	55.1	-170.2	slight
L032158	8.46	0.04	3.3	5.48	<0.01	4.94	0.54	154.4	23.7	-130.7	none
L032159	9.12	0.34	28.3	0.11	<0.01	0.08	0.03	2.5	46.9	44.4	slight
L032160	9.93	0.36	30.0	0.09	<0.01	0.07	0.02	2.2	40.7	38.5	slight
L032161	8.95	2.62	218.3	0.95	<0.01	1.00	0.01	31.3	251.2	220.0	moderate
L032162	9.42	0.78	65.0	0.16	<0.01	0.14	0.02	4.4	122.5	118.1	moderate
L032163	9.07	2.16	180.0	1.06	<0.01	1.03	0.03	32.2	206.1	173.9	moderate
L032164	9.51	0.56	46.7	2.59	<0.01	2.67	0.01	83.4	53.4	-30.0	slight
L032165	9.64	0.45	37.5	0.34	<0.01	0.30	0.04	9.4	45.7	36.3	slight
L032166	9.57	0.34	28.3	1.63	<0.01	1.50	0.13	46.9	37.6	-9.3	slight
L032167	9.14	1.63	135.8	0.37	<0.01	0.32	0.05	10.0	193.1	183.1	moderate
L032168	9.39	0.39	32.5	1.16	<0.01	0.93	0.23	29.1	47.3	18.2	slight
L032169	8.83	3.28	273.3	2.87	<0.01	2.87	0.01	89.7	337.9	248.2	moderate
L032170	9.55	2.00	166.7	0.13	0.07	0.02	0.04	0.6	274.1	273.5	moderate
L032171	9.38	2.26	188.3	0.13	<0.01	0.11	0.02	3.4	252.5	249.0	moderate
L032172	8.99	0.04	3.3	0.09	<0.01	0.06	0.03	1.9	19.8	17.9	none
L032173	9.25	0.15	12.5	0.43	<0.01	0.40	0.03	12.5	34.0	21.5	slight
L032174	9.40	0.25	20.8	0.88	<0.01	0.77	0.11	24.1	41.3	17.2	slight
L032175	9.48	0.22	18.3	0.44	<0.01	0.33	0.11	10.3	37.0	26.7	slight
L032176	9.79	0.50	41.7	0.28	<0.01	0.23	0.05	7.2	53.4	46.3	slight
L032177	9.51	0.19	15.8	0.46	<0.01	0.34	0.12	10.6	36.7	26.1	slight
L032178	9.10	0.05	4.2	0.13	<0.01	0.10	0.03	3.1	20.0	16.9	none
L032179	9.36	0.30	25.0	0.22	<0.01	0.18	0.04	5.6	40.5	34.9	slight
L032180	9.44	0.45	37.5	1.61	<0.01	1.43	0.18	44.7	47.3	2.6	slight
L032181	9.41	0.56	46.7	0.87	<0.01	0.70	0.17	21.9	69.3	47.4	moderate
L032182	9.78	0.60	50.0	0.34	<0.01	0.28	0.06	8.8	57.5	48.7	slight
L032183	9.60	0.57	47.5	0.65	<0.01	0.59	0.06	18.4	55.2	36.7	slight
L032184	9.33	0.68	56.7	0.57	<0.01	0.46	0.11	14.4	63.6	49.3	slight
L032185	9.64	0.98	81.7	1.38	<0.01	1.22	0.16	38.1	81.1	43.0	slight
L032186	8.17	0.17	14.2	0.65	<0.01	0.55	0.1	17.2	20.3	3.1	none
L032187	9.50	0.46	38.3	0.88	<0.01	0.62	0.26	19.4	58.5	39.1	slight
L032201	9.31	0.72	60.0	1.96	<0.01	1.83	0.13	57.2	114.5	57.3	moderate
L032202	9.70	0.67	55.8	1.50	<0.01	1.30	0.2	40.6	82.9	42.3	moderate
L032203	9.74	0.48	40.0	0.70	<0.01	0.56	0.14	17.5	50.0	32.5	slight
L032204	9.84	1.18	98.3	0.80	<0.01	0.66	0.14	20.6	87.0	66.4	slight
L032205	9.63	0.88	73.3	1.57	<0.01	1.41	0.16	44.1	73.7	29.6	slight
L032206	9.93	0.37	30.8	0.23	<0.01	0.14	0.09	4.4	45.0	40.6	slight
L032207	9.37	0.54	45.0	2.05	<0.01	1.80	0.25	56.3	68.7	12.4	moderate
L032208	9.49	0.21	17.5	0.41	<0.01	0.33	0.08	10.3	47.7	37.4	slight
L032209	9.52	0.70	58.3	0.32	<0.01	0.23	0.09	7.2	73.8	66.6	slight
L032210	9.65	1.08	90.0	0.30	<0.01	0.25	0.05	7.8	157.8	150.0	slight
L032211	9.47	0.20	16.7	0.18	<0.01	0.13	0.05	4.1	36.4	32.3	slight
L032212	9.48	0.26	21.7	0.39	<0.01	0.36	0.03	11.3	48.2	36.9	slight
L032213	9.47	0.21	17.5	1.58	<0.01	1.08	0.5	33.8	39.4	5.7	slight
L032214	9.19	0.55	45.8	0.40	<0.01	0.36	0.04	11.3	57.9	46.6	slight

Client : AMEC
Project : Rainy River
SGS Project : 08121
Test : Acid-Base Accounting with Siderite Correction
Date : October 3- October 20, 2011

Sample ID	Paste pH	TIC %	CaCO3 NP	S(T) %	S(SO4) %	S(S-2) %	Insoluble S %	AP	Siderite NP	Net NP	Fizz Test
L032215	8.99	0.76	63.3	1.14	<0.01	1.03	0.11	32.2	101.5	69.3	moderate
L032216	8.91	0.25	20.8	0.87	<0.01	0.67	0.2	20.9	42.9	21.9	slight
L032217	8.96	3.71	309.2	0.54	<0.01	0.38	0.16	11.9	305.1	293.2	moderate
L032218	8.52	0.05	4.2	0.99	<0.01	0.90	0.09	28.1	10.2	-17.9	none
L032219	9.84	0.79	65.8	0.42	<0.01	0.38	0.04	11.9	68.4	56.6	slight
L032220	9.85	0.22	18.3	0.83	<0.01	0.71	0.12	22.2	26.3	4.1	slight
L032221	9.84	1.05	87.5	0.54	<0.01	0.45	0.09	14.1	80.1	66.0	slight
L032222	9.00	1.57	130.8	0.26	<0.01	0.18	0.08	5.6	198.6	193.0	moderate
L032223	9.66	0.67	55.8	0.26	<0.01	0.19	0.07	5.9	89.1	83.2	moderate
L032224	8.96	2.79	232.5	0.73	<0.01	0.68	0.05	21.3	287.7	266.5	moderate
Duplicate											
L032001	9.04				<0.01				58.2		slight
L032009						1.55					
L032011		0.86		1.68							
L032020	9.45								31.8		slight
L032021	9.02								44.2		slight
L032040	9.09								76.0		slight
L032041	9.44								104.0		moderate
L032043				0.17							
L032046						1.65					
L032060	8.61	1.59							86.7		slight
L032061	8.73								188.7		moderate
L032064					<0.01						
L032074						<0.01					
L032080	8.61								161.5		moderate
L032081	8.70								136.8		moderate
L032083						0.93					
L032089		1.18									
L032093					<0.01						
L032097				1.87							
L032100	8.90								16.7		none
L032101	9.36								198.0		moderate
L032108						0.39					
L032111				1							
L032120	9.55								70.5		slight
L032121	9.90								140.5		moderate
L032134						1.27					
L032135		0.78			<0.01						
L032140	9.50								92.2		moderate
L032141	9.66								64.6		slight
L032152		1.5									
L032160	9.98					0.07			40.5		slight
L032161	8.96								257.4		moderate
L032176					<0.01						
L032178				0.13							
L032180	9.48								46.8		slight
L032181	9.55								70.5		moderate
L032204				0.79							
L032207		0.55									
L032213	9.50				<0.01				40.05		slight
L032214	9.24								57.1		slight
L032222						0.17					
QC											
RTS-3A					1.13/1.09	2.48/ 2.47					
SY4		0.93/ 0.93									
RTS-1				1.65							
NBM-1									57.1		slight
NBM-1									56.3		slight
NBM-1									56.4		slight
Expected Value		0.95		1.66	1.1	2.34			52.0		slight
Tolerance +/-		0.06		0.08	0.11	0.23			5.2		

Note:

AP = Acid potential in tonnes CaCO3 equivalent per 1000 tonnes of material. AP is determined from sulphide sulphur content.

Insoluble sulphur = Total S - Sulphate S - Sulphide S

NP = Neutralization potential in tonnes CaCO3 equivalent per 1000 tonnes of material.

NET NP = NP - AP

Carbonate NP is calculated from TIC originating from carbonate minerals and is expressed in kg CaCO3/tonne.

CLIENT : **AMEC**
PROJECT : **Rainy River**
CEMI Project # : **08121**
Test : **Modified Acid-Base Accounting**
Date : **October 20, 2011**

Sample ID	**NP**
Method	Modified
LOD	#N/A
L032002	56.4
L032004	144.7
L032008	134.2
L032009	75.3
L032019	28.9
L032031	18.3
L032036	97.9
L032041	57.2
L032042	11.8
L032068	155.0
L032073	106.2
L032102	41.2
L032104	47.9
L032118	212.5
L032120	64.9
L032139	93.2
L032140	61.8
L032143	104.3
L032145	61.1
L032154	13.4
L032158	11.1
L032160	30.3
L032167	134.9
L032178	11.8
L032207	46.5
L032211	20.4
L032215	64.9
L032217	275.0
L032219	61.8
L032222	138.3
Duplicates	
L032002	57.3
L032154	14.6
L032158	10.1
QC	
NBM-1 Reference	40.1
Expected Value	42.0
Tolerance +/-	3

Note:

NP = Neutralization potential in tonnes CaCO3 equivalent per 1000 tonnes of material.

Client : **AMEC**
Project : **Rainy River**
SGS Project : **08121**
Test : **Modified Acid-Base Accounting with Siderite Correction**
Date : **January 11, 2012**

Sample ID	Paste pH	TIC %	CaCO3 NP	S(T) %	S(SO4) %	S(S-2) %	Insoluble S %	AP	Modified Siderite NP	Net NP	Fizz Test
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA07V	CSA08D	Calc	Calc.	Siderite Corr.	Calc.	Sobek
LOD	0.2	0.1	#N/A	0.01	0.01	0.01	#N/A	#N/A	0.5	#N/A	#N/A
Keewatin Till	7.53	0.61	50.8	0.04	<0.01	0.02	0.02	0.6	65.9	65.3	Slight
Labradorean 2m	8.28	0.9	75.0	3.1	<0.01	3.1	<0.01	96.9	120.0	23.1	Moderate
Labradorean 4m	8.63	0.22	18.3	0.59	<0.01	0.51	0.08	15.9	24.0	8.1	Slight
RRR 253655	8.40	1.67	139.2	0.11	<0.01	0.06	0.05	1.9	152.6	150.7	Moderate
Duplicates											
Keewatin Till	7.59								66.5		Slight
Labradorean 2m				3.11							
Labradorean 4m		0.23			<0.01	0.53					
QC											
GTS-2A											
RTS-3A				0.32	1.04	2.37					
SY4		0.91									
Expected Value		0.95		0.35	1.1	2.34					
Tolerance +/-		0.06		0.03	0.11	0.23					

Note:

AP = Acid potential in tonnes CaCO3 equivalent per 1000 tonnes of material. AP is determined from the measured sulphide sulphur content.

Insoluble sulphur = Total S - Sulphate S - Sulphide S

NET NP = NP - AP

Carbonate NP is calculated from TIC originating from carbonate minerals and is expressed in kg CaCO3/tonne.

Client : **AMEC**
Project : **Rainy River**
SGS Project # : **08121**
Test : **Acid-Base Accounting with Siderite Correction**
Date : **November 2/3, 2011**

Sample ID	Paste pH	TIC %	CaCO3 NP	S(T) %	S(SO4) %	S(S-2) %	Insoluble S %	AP	Siderite NP	Net NP	Fizz Test
Method Code	Sobek	CSB02V	Calc.	CSA06V	CSA07V	Calc.	Calc	Calc.	Siderite Corr.	Calc.	Sobek
LOD	0.2	0.1	#N/A	0.01	0.01	#N/A	#N/A	#N/A	0.5	#N/A	#N/A
L032188	8.27	0.07	5.8	2.5	0.02	2.39	0.09	74.7	13.8	-60.9	None
L032189	8.97	0.25	20.8	2.25	<0.01	2.21	0.04	69.1	23.2	-45.9	None
L032225	8.99	0.06	5.0	1.31	<0.01	1.1	0.21	34.4	15.0	-19.4	None
L032226	9.12	0.08	6.7	2.64	<0.01	2.62	0.02	81.9	16.9	-65.0	None
L032227	8.93	0.04	3.3	2.59	<0.01	2.37	0.22	74.1	16.7	-57.4	None
L032228	9.42	0.39	32.5	0.51	<0.01	0.55	<0.01	17.2	45.2	28.0	Slight
L032229	9.43	0.96	80.0	0.53	<0.01	0.46	0.07	14.4	77.3	62.9	Slight
L032230	9.57	0.59	49.2	0.46	<0.01	0.42	0.04	13.1	56.8	43.7	Slight
L032231	9.16	0.15	12.5	2.5	<0.01	2.28	0.22	71.3	27.5	-43.8	Slight
L032232	9.00	0.19	15.8	2.09	<0.01	1.6	0.49	50.0	33.3	-16.7	Slight
L032233	9.15	0.11	9.2	1.29	<0.01	1.22	0.07	38.1	31.5	-6.6	Slight
L032234	9.14	2.01	167.5	0.72	<0.01	0.44	0.28	13.8	207.9	194.2	Moderate
L032235	9.30	2.13	177.5	0.35	<0.01	0.09	0.26	2.8	214.1	211.3	Moderate
L032236	9.37	1.19	99.2	0.34	<0.01	0.09	0.25	2.8	133.7	130.9	Moderate
L032237	9.56	0.47	39.2	1.03	<0.01	0.97	0.06	30.3	53.2	22.9	Slight
L032238	9.59	0.46	38.3	0.75	<0.01	0.7	0.05	21.9	52.7	30.8	Slight
L032239	9.52	0.84	70.0	0.73	<0.01	0.61	0.12	19.1	75.8	56.7	Slight
L032240	8.68	1.16	96.7	4.38	0.01	4.43	<0.01	138.4	134.3	-4.1	Moderate
L032241	9.20	1.44	120.0	2.52	<0.01	2.23	0.29	69.7	162.1	92.4	Moderate
L032242	8.98	1.62	135.0	6.37	<0.01	6.92	<0.01	216.3	168.3	-48.0	Moderate
L032243	8.62	1.63	135.8	6.43	<0.01	5.81	0.62	181.6	88.8	-92.8	Slight
L032244	8.71	0.06	5.0	2.77	<0.01	2.48	0.29	77.5	17.6	-59.9	None
L032245	8.83	0.07	5.8	2.49	<0.01	2.31	0.18	72.2	17.5	-54.7	None
Duplicate											
L032188	8.31	0.07							13.6		None
L032230					<0.01						
L032237						0.96					
L032241				2.54							
L032242	8.99								164.6		Moderate
QC											
RTS-3A					1.11	2.36					
PD-1				8.35							
SY4		0.92									
NBM-1											
Expected Value		0.95		8.23	1.1	2.34			52.0		Slight
Tolerance +/-		0.06		-	0.11	0.23			5.2		

Note:

AP = Acid potential in tonnes CaCO3 equivalent per 1000 tonnes of material. AP is determined from the measured sulphide sulphur content.

Insoluble sulphur = Total S - Sulphate S - Sulphide S

NET NP = NP - AP

Carbonate NP is calculated from TIC originating from carbonate minerals and is expressed in kg CaCO3/tonne.

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Modified ABA (Price 1997)

Project : CALR-11736-004

Tuesday, April 24, 2012

Environmental Met
Attn : Barb Bowman

Date Rec. : 29 March 2012
LR Report: **CA11363-MAR12**

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ODM Zone Master Comp A	6: ODM Zone Master Comp B
Sample Date & Time			Date: n/a	Date: n/a
Paste pH [units]	05-Apr-12	10:39	8.18	8.23
Fizz Rate [---]	05-Apr-12	10:39	3	3
Sample weight [g]	05-Apr-12	10:39	2.04	1.99
HCl added [mL]	05-Apr-12	10:39	27.80	27.00
HCl [Normality]	05-Apr-12	10:39	0.10	0.10
NaOH [Normality]	05-Apr-12	10:39	0.10	0.10
NaOH to [pH=8.3 mL]	05-Apr-12	10:39	11.01	10.47
Final pH [units]	05-Apr-12	10:39	1.59	1.55
NP [t CaCO3/1000 t]	05-Apr-12	10:39	41.2	41.5
AP [t CaCO3/1000 t]	24-Apr-12	14:27	50.3	45.5
Net NP [t CaCO3/1000 t]	24-Apr-12	14:27	-9.08	-4.03
NP/AP [ratio]	24-Apr-12	14:27	0.82	0.91
Sulphur (total) [%]	02-Apr-12	16:02	2.29	2.24
Acid Leachable SO4-S [%]	09-Apr-12	15:31	0.68	0.78
Sulphide [%]	09-Apr-12	15:31	1.61	1.46
Carbon (total) [%]	02-Apr-12	16:01	0.528	0.531
Carbonate [%]	03-Apr-12	15:46	2.15	2.15

OnLine LIMS

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Test method information available upon request. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.

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P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Modified ABA (Price 1997)

Project : CALR-11736-004

LR Report : **CA11363-MAR12**

*NP (Neutralization Potential)

$$= \frac{50 \times (N \text{ of HCL} \times \text{Total HCL added} - N \text{ NaOH} \times \text{NaOH added})}{\text{Weight of Sample}}$$

*AP (Acid Potential) = % Sulphide Sulphur x 31.25
*Net NP (Net Neutralization Potential) = NP-AP
NP/AP Ratio = NP/AP
*Results expressed as tonnes CaCO3 equivalent/1000 tonnes of material
Samples with a % Sulphide value of <0.01 will be calculated using a 0.01 value.

Sulphur analysis performed following BC ARD Guidelines (Price 1997)

Dianne Griffin
Project Specialist

OnLine LIMS

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P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Modified ABA (Price 1997)

Project : CALR-11736-004

Friday, April 27, 2012

Environmental Met
Attn : Barb Bowman

Date Rec. : 18 April 2012
LR Report: **CA10467-APR12**

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ROM Sample A	6: ROM Sample B
Paste pH [units]	27-Apr-12	14:03	8.70	8.76
Fizz Rate [---]	27-Apr-12	14:03	4	4
Sample weight [g]	27-Apr-12	14:03	2.01	1.96
HCl added [mL]	27-Apr-12	14:03	40.00	40.00
HCl [Normality]	27-Apr-12	14:03	0.10	0.10
NaOH [Normality]	27-Apr-12	14:03	0.10	0.10
NaOH to [pH=8.3 mL]	27-Apr-12	14:03	21.34	22.25
Final pH [units]	27-Apr-12	14:03	1.53	1.53
NP [t CaCO3/1000 t]	27-Apr-12	14:03	46.4	45.3
AP [t CaCO3/1000 t]	27-Apr-12	14:03	52.9	60.9
Net NP [t CaCO3/1000 t]	27-Apr-12	14:03	-6.53	-15.6
NP/AP [ratio]	27-Apr-12	14:03	0.88	0.74
Sulphur (total) [%]	23-Apr-12	12:02	2.24	2.19
Acid Leachable SO4-S [%]	23-Apr-12	16:02	0.54	0.24
Sulphide [%]	23-Apr-12	16:02	1.69	1.95
Carbon (total) [%]	23-Apr-12	12:02	0.587	0.586
Carbonate [%]	20-Apr-12	16:05	2.14	1.99

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Test method information available upon request. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Modified ABA (Price 1997)

Project : CALR-11736-004

LR Report : **CA10467-APR12**

*NP (Neutralization Potential)

$$= \frac{50 \times (N \text{ of HCL} \times \text{Total HCL added} - N \text{ NaOH} \times \text{NaOH added})}{\text{Weight of Sample}}$$

*AP (Acid Potential) = % Sulphide Sulphur x 31.25
*Net NP (Net Neutralization Potential) = NP-AP
NP/AP Ratio = NP/AP
*Results expressed as tonnes CaCO3 equivalent/1000 tonnes of material
Samples with a % Sulphide value of <0.01 will be calculated using a 0.01 value.

Sulphur analysis performed following BC ARD Guidelines (Price 1997)

Dianne Griffin
Project Specialist

OnLine LIMS

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SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Modified ABA (Price 1997)

Project : CALR-11736-004

Friday, June 01, 2012

Environmental Met
Attn : Barb Bowman

Date Rec. : 18 May 2012
LR Report: **CA10459-MAY12**

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: Starter Pit Sample A	6: Starter Pit Sample B
Sample Date & Time			Date: n/a	Date: n/a
Paste pH [units]	30-May-12	15:16	8.32	8.36
Fizz Rate [---]	30-May-12	15:16	3	3
Sample weight [g]	30-May-12	15:16	2.02	2.09
HCl added [mL]	30-May-12	15:16	25.60	25.60
HCl [Normality]	30-May-12	15:16	0.10	0.10
NaOH [Normality]	30-May-12	15:16	0.10	0.10
NaOH to pH=8.3 [mL]	30-May-12	15:16	7.75	7.23
Final pH [units]	30-May-12	15:16	1.93	1.97
NP [t CaCO3/1000 t]	30-May-12	15:16	44.2	44.0
AP [t CaCO3/1000 t]	30-May-12	15:18	56.1	53.3
Net NP [t CaCO3/1000 t]	30-May-12	15:18	-11.9	-9.30
NP/AP [ratio]	30-May-12	15:18	0.79	0.83
Sulphur (total) [%]	23-May-12	09:49	2.15	2.10
Acid Leachable SO4-S [%]	23-May-12	12:37	0.35	0.40
Sulphide [%]	23-May-12	12:37	1.80	1.71
Carbon (total) [%]	23-May-12	09:49	0.551	0.581
Carbonate [%]	23-May-12	15:12	2.28	2.45

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Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Modified ABA (Price 1997)

Project : CALR-11736-004

LR Report : **CA10459-MAY12**

*NP (Neutralization Potential)

$$= \frac{50 \times (N \text{ of HCL} \times \text{Total HCL added} - N \text{ NaOH} \times \text{NaOH added})}{\text{Weight of Sample}}$$

*AP (Acid Potential) = % Sulphide Sulphur x 31.25
*Net NP (Net Neutralization Potential) = NP-AP
NP/AP Ratio = NP/AP
*Results expressed as tonnes CaCO3 equivalent/1000 tonnes of material
Samples with a % Sulphide value of <0.01 will be calculated using a 0.01 value.

Sulphur analysis performed following BC ARD Guidelines (Price 1997)

Dianne Griffin
Project Specialist

OnLine LIMS

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Test method information available upon request. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.

NET ACID GENERATION TEST

CLIENT : AMEC
PROJECT : Rainy River
PROJECT # : 08121
TEST : Net Acid Generation (NAG)
Sample Weight : 2.50 g
NAG Solution : 250 mL of 17.5% H_2O_2 adjusted to pH 5.23 with 1N NaOH.
Date : October 3- October 21, 2011

Sample ID	NAG pH after reaction	Vol. of 0.1 N NaOH		NAG (kg H_2SO_4/tonne)	
		to pH 4.5	to pH 7.0	to pH 4.5	to pH 7.0
L032001	6.27	#N/A	0.35	#N/A	0.69
L032002	6.88	#N/A	0.05	#N/A	0.10
L032003	2.94	6.45	12.10	12.64	23.72
L032004	7.06	#N/A	#N/A	#N/A	#N/A
L032005	6.70	#N/A	0.70	#N/A	1.37
L032006	6.65	#N/A	1.05	#N/A	2.06
L032007	6.68	#N/A	1.00	#N/A	1.96
L032008	6.97	#N/A	0.05	#N/A	0.10
L032009	6.97	#N/A	0.05	#N/A	0.10
L032010	6.41	#N/A	1.20	#N/A	2.35
L032011	6.89	#N/A	0.05	#N/A	0.10
L032012	6.79	#N/A	0.20	#N/A	0.39
L032013	6.83	#N/A	0.10	#N/A	0.20
L032014	6.79	#N/A	0.10	#N/A	0.20
L032015	6.88	#N/A	0.15	#N/A	0.29
L032016	6.43	#N/A	3.80	#N/A	7.45
L032017	2.58	11.20	13.85	21.95	27.15
L032018	2.49	15.95	19.95	31.26	39.10
L032019	2.36	13.20	16.85	25.87	33.03
L032020	2.71	8.50	11.15	16.66	21.85
L032021	2.58	10.20	13.30	19.99	26.07
L032022	6.16	#N/A	2.15	#N/A	4.21
L032023	7.35	#N/A	#N/A	#N/A	#N/A
L032024	6.72	#N/A	0.30	#N/A	0.59
L032025	7.05	#N/A	#N/A	#N/A	#N/A
L032026	6.42	#N/A	0.60	#N/A	1.18
L032027	5.85	#N/A	1.35	#N/A	2.65
L032028	6.90	#N/A	0.15	#N/A	0.29
L032029	2.70	9.70	12.75	19.01	24.99
L032030	2.38	15.45	21.10	30.28	41.36
L032031	6.43	#N/A	1.00	#N/A	1.96
L032032	4.59	#N/A	1.45	#N/A	2.84
L032033	3.04	4.40	6.35	8.62	12.45
L032034	2.30	16.30	21.40	31.95	41.94
L032035	4.47	0.05	2.85	0.10	5.59
L032036	5.49	#N/A	0.85	#N/A	1.67
L032037	7.82	#N/A	#N/A	#N/A	#N/A
L032038	5.81	#N/A	1.75	#N/A	3.43
L032039	6.38	#N/A	0.50	#N/A	0.98
L032040	6.80	#N/A	0.10	#N/A	0.20
L032041	6.53	#N/A	0.35	#N/A	0.69
L032042	6.00	#N/A	2.95	#N/A	5.78
L032043	6.53	#N/A	1.40	#N/A	2.74
L032044	7.21	#N/A	#N/A	#N/A	#N/A
L032045	3.21	2.40	4.20	4.70	8.23
L032046	2.63	15.55	19.50	30.48	38.22
L032047	6.18	#N/A	1.20	#N/A	2.35
L032048	2.98	6.60	11.10	12.94	21.76
L032049	7.53	#N/A	#N/A	#N/A	#N/A
L032050	6.43	#N/A	0.70	#N/A	1.37
L032051	6.78	#N/A	0.10	#N/A	0.20
L032052	2.84	7.10	9.35	13.92	18.33
L032053	7.10	#N/A	#N/A	#N/A	#N/A
L032054	2.72	11.55	14.95	22.64	29.30
L032055	2.39	15.55	19.25	30.48	37.73
L032056	2.46	12.75	17.10	24.99	33.52
L032057	6.25	#N/A	1.50	#N/A	2.94
L032058	3.63	1.10	2.65	2.16	5.19
L032059	5.80	#N/A	7.50	#N/A	14.70
L032060	3.26	3.80	10.45	7.45	20.48
L032061	6.45	#N/A	0.40	#N/A	0.78
L032062	3.04	2.50	11.95	4.90	23.42
L032063	2.73	7.65	12.40	14.99	24.30
L032064	3.30	2.55	6.30	5.00	12.35
L032065	6.23	#N/A	1.95	#N/A	3.82
L032066	7.13	#N/A	#N/A	#N/A	#N/A
L032067	2.15	36.75	49.50	72.03	97.02
L032068	6.31	#N/A	1.00	#N/A	1.96
L032069	6.63	#N/A	0.15	#N/A	0.29
L032070	6.96	#N/A	0.10	#N/A	0.20
L032071	6.67	#N/A	0.20	#N/A	0.39
L032072	7.14	#N/A	#N/A	#N/A	#N/A
L032073	7.65	#N/A	#N/A	#N/A	#N/A
L032074	6.06	#N/A	7.50	#N/A	14.70
L032075	6.58	#N/A	0.40	#N/A	0.78
L032076	6.67	#N/A	1.65	#N/A	3.23
L032077	5.68	#N/A	0.80	#N/A	1.57
L032078	2.65	9.30	15.50	18.23	30.38
L032079	4.48	0.10	3.15	0.20	6.17
L032080	7.53	#N/A	#N/A	#N/A	#N/A
L032081	2.25	30.50	37.50	59.78	73.50
L032082	2.79	13.20	19.55	25.87	38.32

CLIENT : AMEC
PROJECT : Rainy River
PROJECT # : 08121
TEST : Net Acid Generation (NAG)
Sample Weight : 2.50 g
NAG Solution : 250 mL of 17.5% H_2O_2 adjusted to pH 5.23 with 1N NaOH.
Date : October 3- October 21, 2011

Sample ID	NAG pH after reaction	Vol. of 0.1 N NaOH		NAG (kg H_2SO_4/tonne)	
		to pH 4.5	to pH 7.0	to pH 4.5	to pH 7.0
L032083	6.55	#N/A	0.25	#N/A	0.49
L032084	2.53	11.80	16.05	23.13	31.46
L032085	7.62	#N/A	#N/A	#N/A	#N/A
L032086	6.70	#N/A	0.15	#N/A	0.29
L032087	6.50	#N/A	0.30	#N/A	0.59
L032088	3.09	4.80	9.35	9.41	18.33
L032089	2.67	16.20	28.25	31.75	55.37
L032090	5.97	#N/A	1.90	#N/A	3.72
L032091	8.06	#N/A	#N/A	#N/A	#N/A
L032092	6.97	#N/A	0.05	#N/A	0.10
L032093	4.90	#N/A	0.80	#N/A	1.57
L032094	2.44	17.80	24.35	34.89	47.73
L032095	6.75	#N/A	0.25	#N/A	0.49
L032096	2.52	9.75	12.55	19.11	24.60
L032097	2.73	8.50	10.65	16.66	20.87
L032098	3.10	2.30	4.00	4.51	7.84
L032099	2.36	17.10	21.20	33.52	41.55
L032100	2.26	22.60	26.50	44.30	51.94
L032101	6.65	#N/A	0.20	#N/A	0.39
L032102	6.37	#N/A	0.30	#N/A	0.59
L032103	6.43	#N/A	1.10	#N/A	2.16
L032104	3.07	3.45	7.45	6.76	14.60
L032105	3.03	3.50	6.70	6.86	13.13
L032106	6.92	#N/A	0.25	#N/A	0.49
L032107	3.43	1.55	3.40	3.04	6.66
L032108	2.87	3.60	8.75	7.06	17.15
L032109	6.37	#N/A	1.90	#N/A	3.72
L032110	7.19	#N/A	#N/A	#N/A	#N/A
L032111	6.75	#N/A	0.05	#N/A	0.10
L032112	7.04	#N/A	#N/A	#N/A	#N/A
L032113	5.14	#N/A	2.25	#N/A	4.41
L032114	5.87	#N/A	4.15	#N/A	8.13
L032115	5.67	#N/A	1.70	#N/A	3.33
L032116	5.82	#N/A	2.70	#N/A	5.29
L032117	6.80	#N/A	0.10	#N/A	0.20
L032118	7.31	#N/A	#N/A	#N/A	#N/A
L032119	6.12	#N/A	2.65	#N/A	5.19
L032120	6.42	#N/A	2.20	#N/A	4.31
L032121	6.08	#N/A	2.60	#N/A	5.10
L032122	7.21	#N/A	#N/A	#N/A	#N/A
L032123	5.69	#N/A	5.30	#N/A	10.39
L032124	6.34	#N/A	2.35	#N/A	4.61
L032125	6.73	#N/A	0.50	#N/A	0.98
L032126	7.10	#N/A	#N/A	#N/A	#N/A
L032127	5.95	#N/A	1.85	#N/A	3.63
L032128	6.21	#N/A	3.20	#N/A	6.27
L032129	7.01	#N/A	#N/A	#N/A	#N/A
L032130	6.01	#N/A	1.85	#N/A	3.63
L032131	4.95	#N/A	8.45	#N/A	16.56
L032132	6.68	#N/A	0.65	#N/A	1.27
L032133	1.82	12.00	15.70	117.60	153.86
L032134	6.85	#N/A	0.10	#N/A	0.20
L032135	5.27	#N/A	1.00	#N/A	1.96
L032136	5.94	#N/A	0.40	#N/A	0.78
L032137	5.88	#N/A	0.45	#N/A	0.88
L032138	6.40	#N/A	0.10	#N/A	0.20
L032139	5.87	#N/A	2.35	#N/A	4.61
L032140	3.44	1.10	2.95	2.16	5.78
L032141	6.62	#N/A	0.25	#N/A	0.49
L032142	6.34	#N/A	0.50	#N/A	0.98
L032143	7.30	#N/A	#N/A	#N/A	#N/A
L032144	6.91	#N/A	0.05	#N/A	0.10
L032145	7.21	#N/A	#N/A	#N/A	#N/A
L032146	6.23	#N/A	1.45	#N/A	2.84
L032147	7.07	#N/A	#N/A	#N/A	#N/A
L032148	7.28	#N/A	#N/A	#N/A	#N/A
L032149	8.11	#N/A	#N/A	#N/A	#N/A
L032150	6.69	#N/A	0.25	#N/A	0.49
L032151	5.90	#N/A	4.75	#N/A	9.31
L032152	7.37	#N/A	#N/A	#N/A	#N/A
L032153	2.38	10.70	16.90	20.97	33.12
L032154	3.87	0.70	4.05	1.37	7.94
L032155	6.50	#N/A	0.95	#N/A	1.86
L032156	2.55	10.45	14.60	20.48	28.62
L032157	2.10	33.85	46.10	66.35	90.36
L032158	2.15	32.80	41.85	64.29	82.03
L032159	6.45	#N/A	1.60	#N/A	3.14
L032160	6.01	#N/A	4.30	#N/A	8.43
L032161	6.93	#N/A	0.05	#N/A	0.10
L032162	6.90	#N/A	0.20	#N/A	0.39
L032163	6.78	#N/A	0.10	#N/A	0.20
L032164	2.70	8.10	11.35	15.88	22.25
L032165	6.42	#N/A	1.15	#N/A	2.25
L032166	2.92	4.40	6.35	8.62	12.45
L032167	6.76	#N/A	0.35	#N/A	0.69
L032168	6.46	#N/A	0.25	#N/A	0.49
L032169	8.23	#N/A	#N/A	#N/A	#N/A
L032170	6.48	#N/A	1.85	#N/A	3.63
L032171	6.66	#N/A	1.20	#N/A	2.35
L032172	6.24	#N/A	1.30	#N/A	2.55
L032173	5.62	#N/A	1.75	#N/A	3.43
L032174	5.58	#N/A	0.75	#N/A	1.47
L032175	5.80	#N/A	1.10	#N/A	2.16

CLIENT : AMEC
PROJECT : Rainy River
PROJECT # : 08121
TEST : Net Acid Generation (NAG)
Sample Weight : 2.50 g
NAG Solution : 250 mL of 17.5% H_2O_2 adjusted to pH 5.23 with 1N NaOH.
Date : October 3- October 21, 2011

Sample ID	NAG pH after reaction	Vol. of 0.1 N NaOH		NAG (kg H_2SO_4/tonne)	
		to pH 4.5	to pH 7.0	to pH 4.5	to pH 7.0
L032176	6.07	#N/A	2.45	#N/A	4.80
L032177	6.03	#N/A	0.95	#N/A	1.86
L032178	5.88	#N/A	1.90	#N/A	3.72
L032179	5.81	#N/A	3.30	#N/A	6.47
L032180	4.08	0.25	1.75	0.49	3.43
L032181	5.95	#N/A	0.50	#N/A	0.98
L032182	6.11	#N/A	1.45	#N/A	2.84
L032183	6.00	#N/A	0.65	#N/A	1.27
L032184	5.99	#N/A	1.15	#N/A	2.25
L032185	6.71	#N/A	0.10	#N/A	0.20
L032186	3.37	1.30	2.80	2.55	5.49
L032187	5.70	#N/A	0.95	#N/A	1.86
L032201	6.79	#N/A	0.20	#N/A	0.39
L032202	7.01	#N/A	#N/A	#N/A	#N/A
L032203	6.05	#N/A	0.55	#N/A	1.08
L032204	6.16	#N/A	0.45	#N/A	0.88
L032205	6.81	#N/A	0.05	#N/A	0.10
L032206	6.41	#N/A	1.10	#N/A	2.16
L032207	3.31	1.60	3.50	3.14	6.86
L032208	6.41	#N/A	0.65	#N/A	1.27
L032209	6.73	#N/A	0.25	#N/A	0.49
L032210	6.93	#N/A	0.10	#N/A	0.20
L032211	4.94	#N/A	5.40	#N/A	10.58
L032212	6.25	#N/A	0.85	#N/A	1.67
L032213	3.07	2.40	5.60	4.70	10.98
L032214	6.03	#N/A	1.10	#N/A	2.16
L032215	7.17	#N/A	#N/A	#N/A	#N/A
L032216	5.83	#N/A	0.50	#N/A	0.98
L032217	6.59	#N/A	0.25	#N/A	0.49
L032218	2.54	7.55	9.60	14.80	18.82
L032219	5.92	#N/A	1.00	#N/A	1.96
L032220	4.51	#N/A	1.25	#N/A	2.45
L032221	5.70	#N/A	1.05	#N/A	2.06
L032222	6.55	#N/A	0.60	#N/A	1.18
L032223	6.50	#N/A	0.60	#N/A	1.18
L032224	7.15	#N/A	#N/A	#N/A	#N/A
Blank	4.48	#N/A	#N/A	#N/A	#N/A
Duplicate					
L032001	6.02	#N/A	0.30	#N/A	0.59
L032020	2.85	7.80	10.80	15.29	21.17
L032021	2.49	10.35	13.15	20.29	25.77
L032040	6.87	#N/A	0.05	#N/A	0.10
L032041	6.51	#N/A	0.50	#N/A	0.98
L032060	3.28	3.70	9.50	7.25	18.62
L032061	6.65	#N/A	0.35	#N/A	0.69
L032080	7.54	#N/A	#N/A	#N/A	#N/A
L032081	2.29	29.90	37.45	58.60	73.40
L032100	2.25	21.85	26.10	42.83	51.16
L032101	6.68	#N/A	0.30	#N/A	0.59
L032120	6.33	#N/A	2.60	#N/A	5.10
L032121	6.08	#N/A	2.45	#N/A	4.80
L032140	3.53	1.00	2.80	1.96	5.49
L032141	6.53	#N/A	0.20	#N/A	0.39
L032160	5.82	#N/A	4.75	#N/A	9.31
L032161	7.07	#N/A	#N/A	#N/A	#N/A
L032180	4.03	0.30	1.50	0.59	2.94
L032181	5.64	#N/A	0.70	#N/A	1.37
L032213	3.09	2.60	6.25	5.10	12.25
L032214	6.06	#N/A	1.10	#N/A	2.16

CLIENT : **AMEC**
PROJECT : **Rainy River**
PROJECT # : **08121**
TEST : **Net Acid Generation (NAG)**
Sample Weight : **2.50 g**
NAG Solution : **250 mL of 17.5% H2O2 adjusted to pH 5.23 with 1N NaOH.**
Date : **January 10, 2012**

Sample ID	**NAG pH after reaction**	**Vol. of 0.1 N NaOH**		**NAG (kg H2SO4/tonne)**	
		to pH 4.5	**to pH 7.0**	**to pH 4.5**	**to pH 7.0**
Keewatin Till	6.82	#N/A	0.40	#N/A	0.78
Labradorean 2m	7.54	#N/A	#N/A	#N/A	#N/A
Labradorean 4m	6.03	#N/A	0.85	#N/A	1.67
RRR 253655	6.95	#N/A	0.10	#N/A	0.20
Blank	4.51	#N/A	#N/A	#N/A	#N/A
Duplicate					
Keewatin Till	6.77	#N/A	0.50	#N/A	0.98

Client : **AMEC**
Project : **Rainy River**
SGS Project # : **08121**
Test : **Net Acid Generation (NAG)**
Sample Weight : **2.50 g**
NAG Solution : **250 mL of 17.5% H2O2 adjusted to pH 5.23 with 1N NaOH.**
Date : **November 2-4, 2011**

Sample ID	NAG pH after reaction	Vol. of 0.1 N NaOH		NAG (kg H2SO4/tonne)	
		to pH 4.5	to pH 7.0	to pH 4.5	to pH 7.0
L032188	2.33	20.70	24.45	40.57	47.92
L032189	2.47	14.50	17.80	28.42	34.89
L032225	2.73	7.60	12.50	14.90	24.50
L032226	2.23	18.95	23.90	37.14	46.84
L032227	2.24	17.00	24.15	33.32	47.33
L032228	6.13	#N/A	0.85	#N/A	1.67
L032229	6.00	#N/A	2.55	#N/A	5.00
L032230	6.23	#N/A	1.10	#N/A	2.16
L032231	2.48	14.15	18.55	27.73	36.36
L032232	2.90	11.60	15.60	22.74	30.58
L032233	2.63	6.10	8.85	11.96	17.35
L032234	6.79	#N/A	0.05	#N/A	0.10
L032235	6.73	#N/A	0.20	#N/A	0.39
L032236	6.56	#N/A	0.60	#N/A	1.18
L032237	6.61	#N/A	0.10	#N/A	0.20
L032238	6.03	#N/A	0.50	#N/A	0.98
L032239	6.32	#N/A	0.30	#N/A	0.59
L032240	2.76	6.75	11.30	13.23	22.15
L032241	7.60	#N/A	#N/A	#N/A	#N/A
L032242	2.80	7.60	12.20	14.90	23.91
L032243	3.44	2.60	4.80	5.10	9.41
L032244	2.21	19.75	23.75	38.71	46.55
L032245	2.27	19.30	22.90	37.83	44.88
Blank	4.98	#N/A	#N/A	#N/A	#N/A
Duplicate					
L032188	2.20	20.90	24.60	40.96	48.22
L032242	2.87	7.00	11.95	13.72	23.42

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

NAG Test

Project : CALR-11736-004

Wednesday, April 04, 2012

Environmental Met
Attn : Barb Bowman

Date Rec. : 29 March 2012
LR Report: **CA11364-MAR12**

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ODM Zone Master Comp A	6: ODM Zone Master Comp B
Sample Date & Time			Date: n/a	Date: n/a
Sample weight [g]	04-Apr-12	08:57	1.47	1.54
Vol H2O2 [mL]	04-Apr-12	08:57	150	150
Final pH [units]	04-Apr-12	08:57	2.87	2.93
NaOH [Normality]	04-Apr-12	08:57	0.10	0.10
Vol NaOH to PH 4.5 [mL]	04-Apr-12	08:57	3.78	3.60
Vol NaOH to PH 7.0 [mL]	04-Apr-12	08:57	4.74	4.37
NAG (pH 4.5) [kg H2SO4/tonne]	04-Apr-12	08:57	13	12
NAG (pH 7.0) [kg H2SO4/tonne]	04-Apr-12	08:57	16	14

NAG = (49 x Vol. of base x N of base)/sample weight
kg H2SO4/tonne

Dianne Griffin
Project Specialist

OnLine LIMS

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Test method information available upon request. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.

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NAG Test

Project : CALR-11736-004

Thursday, May 03, 2012

Environmental Met
Attn : Barb Bowman

Date Rec. : 18 April 2012
LR Report: **CA10468-APR12**

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ROM Sample A	6: ROM Sample B
Sample Date & Time			Date: n/a	Date: n/a
Sample weight [g]	27-Apr-12	14:21	1.53	1.53
Vol H2O2 [mL]	27-Apr-12	14:21	150	150
Final pH [units]	27-Apr-12	14:21	2.77	2.84
NaOH [Normality]	27-Apr-12	14:21	0.10	0.10
Vol NaOH to PH 4.5 [mL]	27-Apr-12	14:21	3.57	3.22
Vol NaOH to PH 7.0 [mL]	27-Apr-12	14:21	5.33	5.37
NAG (pH 4.5) [kg H2SO4/tonne]	27-Apr-12	14:21	11	10
NAG (pH 7.0) [kg H2SO4/tonne]	27-Apr-12	14:21	17	17

NAG = (49 x Vol. of base x N of base)/sample weight
kg H2SO4/tonne

Dianne Griffin
Project Specialist

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Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

NAG Test

Project : CALR-11736-004

Friday, June 01, 2012

Environmental Met
Attn : Barb Bowman

Date Rec. : 18 May 2012
LR Report: **CA10460-MAY12**

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: Start Pit sample A	6: Start Pit sample B
Sample weight [g]	30-May-12	15:09	1.53	1.49
Vol H2O2 [mL]	30-May-12	15:09	150	150
Final pH [units]	30-May-12	15:09	3.01	2.99
NaOH [Normality]	30-May-12	15:09	0.10	0.10
Vol NaOH to PH 4.5 [mL]	30-May-12	15:09	2.75	2.65
Vol NaOH to PH 7.0 [mL]	30-May-12	15:09	4.67	4.37
NAG (pH 4.5) [kg H2SO4/tonne]	30-May-12	15:09	8.8	8.7
NAG (pH 7.0) [kg H2SO4/tonne]	30-May-12	15:09	17	17

NAG = (49 x Vol. of base x N of base)/sample weight
kg H2SO4/tonne

Dianne Griffin
Project Specialist

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Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Environmental Met
Attn : Barb Bowman

Sequential NAG to pH 4.5

Project : CALR-11736-004

Thursday, July 05, 2012

Date Rec. : 11 June 2012
LR Report: **CA10261-JUN12**
Reference: Stage 1

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ODM Zone Master Comp A	6: ODM Zone Master Comp B	7: ROM Sample A	8: ROM Sample B	9: Starter Pit Sample A	10: Starter Pit Sample B
Sample weight [g]	03-Jul-12	13:15	1.49	1.51	1.50	1.49	1.51	1.52
Vol H2O2 [mL]	03-Jul-12	13:15	150	150	150	150	150	150
Final pH [units]	03-Jul-12	13:15	2.88	2.91	2.83	2.85	2.79	2.74
NaOH [Normality]	03-Jul-12	13:15	0.10	0.10	0.10	0.10	0.10	0.10
Vol NaOH to PH 4.5 [mL]	03-Jul-12	13:15	2.44	2.26	3.02	2.76	3.16	3.73
Vol NaOH to PH 7.0 [mL]	03-Jul-12	13:15	3.07	2.81	4.16	4.04	3.78	4.46
NAG (pH 4.5) [kg H2SO4/tonne]	03-Jul-12	13:15	8.0	7.3	9.9	9.1	10	12
NAG (pH 7.0) [kg H2SO4/tonne]	03-Jul-12	13:15	10	9.1	14	13	12	14

NAG = (49 x Vol. of base x N of base)/sample weight
kg H2SO4/tonne

Dianne Griffin
Project Specialist

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SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Environmental Met
Attn : Barb Bowman

Sequential NAG to pH 4.5

Project : CALR-11736-004

Thursday, July 05, 2012

Date Rec. : 29 June 2012
LR Report: **CA10476-JUN12**
Reference: Stage 2

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ODM Zone Master Comp A	6: ODM Zone Master Comp B	7: ROM Sample A	8: ROM Sample B	9: Starter Pit Sample A	10: Starter Pit Sample B
Sample Date & Time			Date:N/A	Date:N/A	Date:N/A	Date:N/A	Date:N/A	Date:N/A
Sample weight [g]	03-Jul-12	13:29	1.49	1.51	1.50	1.49	1.51	1.52
Vol H2O2 [mL]	03-Jul-12	13:29	150	150	150	150	150	150
Final pH [units]	03-Jul-12	13:29	4.29	4.34	3.87	3.98	3.50	3.69
NaOH [Normality]	03-Jul-12	13:29	0.10	0.10	0.10	0.10	0.10	0.10
Vol NaOH to PH 4.5 [mL]	03-Jul-12	13:29	0.05	0.04	0.16	0.13	0.48	0.27
Vol NaOH to PH 7.0 [mL]	03-Jul-12	13:29	0.16	0.16	0.37	0.27	0.68	0.47
NAG (pH 4.5) [kg H2SO4/tonne]	03-Jul-12	13:29	0.2	0.1	0.5	0.4	1.6	0.9
NAG (pH 7.0) [kg H2SO4/tonne]	03-Jul-12	13:29	0.5	0.5	1.2	0.9	2.2	1.5

Dianne Griffin
Project Specialist

OnLine LIMS

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SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Environmental Met
Attn : Barb Bowman

Sequential NAG to pH 4.5

Project : CALR-11736-004

Thursday, July 05, 2012

Date Rec. : 03 July 2012
LR Report: **CA10166-JUL12**
Reference: Stage 3

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ODM Zone Master Comp A	6: ODM Zone Master Comp B	7: ROM Sample A	8: ROM Sample B	9: Starter Pit Sample A	10: Starter Pit Sample B
Sample weight [g]	04-Jul-12	13:02	1.49	1.51	1.50	1.49	1.51	1.52
Vol H2O2 [mL]	04-Jul-12	13:02	150	150	150	150	150	150
Final pH [units]	04-Jul-12	13:02	5.26	5.20	4.80	4.86	4.61	4.73
NaOH [Normality]	04-Jul-12	13:02	0.10	0.10	0.10	0.10	0.10	0.10
Vol NaOH to PH 4.5 [mL]	04-Jul-12	13:02	0.00	0.00	0.00	0.00	0.00	0.00
Vol NaOH to PH 7.0 [mL]	04-Jul-12	13:02	0.16	0.28	0.19	0.19	0.20	0.21
NAG (pH 4.5) [kg H2SO4/tonne]	04-Jul-12	13:02	0	0	0	0	0	0
NAG (pH 7.0) [kg H2SO4/tonne]	04-Jul-12	13:02	0.5	0.9	0.6	0.6	0.6	0.7

Dianne Griffin
Project Specialist

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AQUA-REGIA METALS

Client : AMEC
Project : Rainy River
SGS Project : 08121
Test : Metals by Aqua Regia Digestion with ICP-MS Finish
Date : October 18 , 2011

Sample ID	Al	B	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga
	%	ppm	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
LOD	0.01	10	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	0.5	50	0.01	0.5	0.01	1	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1
L032001	0.9	40	21	1.44	50	7.3	1.89	0.1	23	1	466	0.04	11	440	2.24	29.6	<0.01	3	38	5.8	2.31	8	0.1	0.04	0.05	16.3	8.5	0.43	2.3
L032002	1.15	40	22	2.27	75	147	2.39	0.09	32	0.94	360	0.04	16.4	470	1.15	33.3	<0.01	9	33	5.7	0.12	1	0.1	0.13	0.03	20.5	7.3	0.6	4
L032003	2.76	30	11	4.79	90	235	9.53	0.08	94	2.2	1350	0.03	62.9	770	>5	70.6	<0.01	113	91	15	0.63	3	0.1	0.96	0.04	14.5	16.6	0.69	9.3
L032004	4.66	40	8	5.94	505	222	6.41	0.02	156	4.31	1150	0.02	143	420	0.13	113	<0.01	152	84	8.4	0.17	3	0.3	0.03	0.1	21.7	41.8	0.71	11.2
L032005	3.31	40	15	4.86	392	21.8	4.68	0.06	117	3.05	787	0.02	112	370	0.27	116	<0.01	75	63	8.2	0.08	4	0.1	0.04	0.09	19.6	26.7	0.52	10
L032006	1.49	40	36	2.69	67	37.2	2.42	0.08	46	0.79	303	0.05	13.4	890	0.15	70	<0.01	16	30	10.1	0.02	2	0.1	<0.02	0.02	55.6	9	0.67	6
L032007	1.48	40	41	3.09	62	45.5	2.34	0.08	51	0.78	312	0.05	11.7	840	0.15	78.4	<0.01	16	30	10.2	0.05	2	0.1	0.03	0.03	52.6	9.9	1.17	6.4
L032008	4.81	30	<5	5.67	167	21.3	8.15	<0.01	174	3.59	1230	0.02	55.3	520	<0.01	39.8	<0.01	248	110	8.2	0.17	2	0.2	0.09	0.1	12.2	43	0.85	17.2
L032009	0.47	40	19	1.96	66	7.5	2.45	0.08	13	1.01	474	0.06	9	420	2.12	42	<0.01	4	19	6.3	0.23	3	<0.1	0.28	0.02	19	8.7	0.49	1.8
L032010	2.15	40	<5	1.73	131	26.7	7.11	<0.01	37	2.16	576	0.05	43.9	540	0.23	43.9	0.23	177	36	5.9	0.06	5	0.2	0.06	0.02	3.51	33	0.29	7.4
L032011	0.76	40	27	2.4	82	73.7	2.46	0.1	22	0.98	466	0.06	14.5	520	1.98	47.7	<0.01	6	18	8.2	0.22	3	<0.1	0.94	0.02	25.6	10.3	0.63	2.9
L032012	4.06	40	<5	6.11	531	258	5.42	<0.01	85	4.57	1270	0.03	165	240	0.41	63.1	0.16	110	55	4	0.28	8	0.1	0.03	0.04	1.24	50.2	0.3	8
L032013	4.95	40	<5	6.3	649	164	7.2	0.01	116	5.22	1480	0.01	204	250	0.5	73.8	0.11	177	74	4.7	0.24	12	0.1	0.05	0.05	3.5	58.3	0.39	10.7
L032014	1.02	40	32	2.48	81	66.3	1.88	0.09	38	0.61	333	0.06	11.8	510	1.18	57	<0.01	6	30	10.4	0.14	3	0.1	0.1	0.03	29.3	7.7	0.78	3.6
L032015	6.07	40	<5	5.17	713	100	7.66	<0.01	171	6.39	1300	0.01	213	270	0.37	76	0.02	207	68	5	0.16	3	0.3	0.11	0.07	4.59	61.2	0.44	13.5
L032016	0.6	40	145	2.26	40	10.3	1.16	0.2	8	0.22	458	0.04	2.7	870	0.12	109	<0.01	3	34	22.3	0.09	2	0.2	0.24	0.05	100	4.4	0.71	2.9
L032017	1.88	40	117	0.43	54	12.1	2.73	0.17	52	1.58	633	0.04	10.4	460	1.54	22.6	0.03	9	180	17.3	0.41	14	0.2	1.75	0.27	27.8	10.4	1.66	5.8
L032018	0.84	40	28	0.85	79	67.6	2.7	0.09	28	0.71	296	0.05	10.1	440	2.95	22.7	<0.01	6	1160	13.7	0.29	6	<0.1	1.28	4.06	22.8	9	0.74	3.2
L032019	0.81	40	25	1.23	77	41.9	2.39	0.11	24	0.69	651	0.04	9.9	550	2.86	14.8	<0.01	5	461	14.5	0.82	4	0.1	0.5	2.04	34.6	9.3	0.94	2.9
L032020	0.79	40	32	1.01	63	334	1.88	0.11	24	0.6	407	0.05	11	440	2.37	20.6	<0.01	3	87	13.5	1.86	7	0.2	2.68	0.21	14.2	8.1	1.07	2.3
L032021	0.99	40	38	1.37	46	116	2.32	0.1	34	0.92	707	0.05	9.7	540	2.7	20.5	<0.01	4	97	15.2	0.84	10	0.1	3.41	0.14	22.2	8.9	0.97	2.9
L032022	1.44	40	27	1.23	62	30.4	0.71	0.16	23	0.64	349	0.13	5.6	480	0.29	84.4	<0.01	6	40	9.6	0.14	19	0.2	0.09	0.06	22.2	5.1	1.17	3.5
L032023	1.19	50	28	4.34	40	15	1.9	0.16	38	1.18	1680	0.02	12	460	1.49	41.7	<0.01	6	172	12.3	0.52	45	0.2	0.21	0.46	17.7	7.9	0.76	2.8
L032024	2.06	40	29	2.75	63	116	2.46	0.14	60	1.25	675	0.04	37.6	570	0.54	36.6	<0.01	15	107	14.9	0.28	18	0.2	0.08	0.12	32	12.9	1.53	5.3
L032025	3.1	40	137	4.1	47	14.1	3.13	0.23	28	1.64	1270	0.08	17.2	650	1.23	84.4	0.03	23	74	29.1	0.24	19	0.3	0.18	0.11	38.9	11.3	4.36	7.5
L032026	0.73	40	160	2.43	57	7.8	1.74	0.17	14	0.41	855	0.04	6	1170	0.54	171	<0.01	6	62	39.2	0.23	3	0.3	0.27	0.12	149	7	1.26	3.8
L032027	2.02	40	37	1.71	68	12.2	1.57	0.16	16	0.61	777	0.19	8.9	410	0.64	95.4	0.03	6	379	10.7	0.16	8	0.3	0.28	1.41	18.6	7.2	1.51	4.3
L032028	3.98	50	22	4.82	520	38	6.01	0.08	173	4.34	978	0.03	175	1990	0.41	49.8	0.25	130	123	17.8	0.46	16	0.8	0.09	0.27	82.9	42	2.22	14.1
L032029	0.51	40	50	0.29	51	146	1.89	0.27	5	0.27	904	0.01	7.7	420	1.87	23.9	<0.01	2	1530	9	1.08	55	<0.1	0.48	4.89	18.3	6.3	0.73	1.5
L032030	1.68	40	28	0.7	66	53	2.41	0.12	29	0.89	512	0.12	11.1	460	2.61	36.8	0.01	5	288	17.1	0.98	4	0.2	0.63	0.82	34.8	9.3	4.5	4
L032031	5.47	40	7	3.16	113	113	3.77	0.03	25	1.9	700	0.49	48.3	230	0.13	54.4	0.22	121	81	6.2	0.19	4	<0.1	0.06	0.17	3.18	28.4	1.09	8.2
L032032	5.54	40	29	3.1	86	107	3.49	0.12	18	1.29	442	0.59	38.3	280	0.6	57.5	0.15	95	53	7.7	0.2	5	0.1	1.02	0.1	6.81	20.6	2.23	9
L032033	2.15	40	33	1.45	52	40.2	2.58	0.16	36	1.12	506	0.06	7.9	460	1.47	40	0.05	12	27	16.5	0.17	8	0.3	2.18	<0.01	23.7	10.4	2.18	6
L032034	1.8	40	54	1.1	54	94.7	2.42	0.18	10	0.26	217	0.24	10.8	500	2.62	179	<0.01	5	24	15.9	0.99	18	0.2	3.61	0.05	25.8	9.3	1.3	3.3
L032035	2.16	40	24	0.53	64	27.3	3.11	0.18	45	1.49	707	0.02	27	510	0.33	14.3	0.04	34	78	6	0.47	15	0.2	0.04	0.08	16.2	14.4	0.93	5.6
L032036	1.17	30	30	2.75	46	31	2.75	0.14	26	1.72	1340	0.02	34.6	500	0.63	18	<0.01	9	120	6.8	1.12	14	0.1	0.3	0.27	8.71	11.8	0.64	2.6
L032037	5.72	40	<5	7.56	666	152	8.17	<0.01	167	5.9	1630	0.01	206	250	1.87	112	0.12	183	115	5	0.19	12	0.1	0.49	0.1	4.18	73.7	0.41	12.6
L032038	2.55	40	60	1.21	414	89.5	3.89	0.34	59	2.85	569	0.05	135	240	0.38	21.4	0.16	64	54	2.6	0.2	8	<0.1	0.17	0.02	1.17	42.7	3.97	5.2
L032039	1.06	30	20	2.68	75	11.1	2.26	0.07	51	0.58	417	0.06	14.6	490	0.95	50.6	<0.01	9	39	6.5	0.18	5	0.1	0.32	0.02	18.4	8.7	1.07	3.8
L032040	1.09	30	21	2.04	36	31.9	2.27	0.11	35	1.21	744	0.05	11.4	430	2.14	30.1	<0.01	4	83	13.3	0.85	14	0.2	1.12	0.22	18.5	8.6	0.97	2.7
L032041	2.62	40	58	2.88	57	21.5	2.87	0.24	52	0.99	818	0.25	11.3	570	0.67	75.6	0.05	25	77	20.2	0.29	7	0.2	0.23	0.24	42.5	11.3	8.55	7.2
L032042	2.01	40	40	0.82	65	14.8	1.95	0.15	58	0.91	316	0.15	11.4	550	0.17	40.6	0.03	15	83	26.1	0.11	6	0.2	0.06	0.06	38.4	8.3	4.32	6.6
L032043	1.39	40	67	2.73	77	29.5	2.59	0.21	68	0.99	550	0.05	28.8	470	0.17	69.4	0.03	34	98	15.7	0.09	7	0.1	0.14	0.24	28.3	14.2	5.96	6.5
L032044	4.26	30	24	3.64	95	156	8.69	0.12	91	1.86	1860	0.19	60.2	780	2	127	0.13	238	282	6.5	1	20	0.2	0.22	0.27	13.5	44.1	3.74	15.8
L032045	1.54	30	19	0.79	61	16.1	1.64	0.12	29	0.69	452	0.06	7.6	440	1.03	25	<0.01	6	90	15.2	0.15	19	0.2	0.02	0.14	26.9	7.2	1.58	4.4
L032046	1	40	20	0.4	41	25.9	2.17	0.18	17	0.6	330	0.02	11.8	440	2.07	17.9	<0.01	4	2100	14.9	0.47	57	0.2	<0.02	8.23	27.1	10.3	2.07	2.7
L032047	3.04	40	124	2.27	109	63.7	3.03	0.12	93	3.08	821	0.02	85.1	1520	0.53	192	0.16	51	111	27.6	0.36	5	0.3	0.1	0.04	58.3	31.3	6.03	7.3
L032048	2.46	30	32	1.96	51	9.7	1.78	0.14	22	0.39	336	0.18	10.4	370	1.89	216	<0.01	5	67	13.7	0.56	13	0.2	1.52	0.16	21.9	7.9	1.45	5
L032049	2.66	30	21	4.24	78	137	9.02	0.27	46	1.69	1710	0.13	73.7	480	3.86	43.7	0.09	129	132	6.4	0.69	56	0.2	0.07	0.22	8.9	54.1	4.61	8.5
L032050	2.95	40	78	4.85	112	97.7	5.5	0.47	70	1.04	833	0.17	59.8	560	0.46	41.4	0.18	152	95	3.5	0.17	8	0.1	0.05	0.11	11.5	37.7	8.33	9.5
L032051	2.45	30	21	3.38	124	114	5.23	0.09	82	1.92	582	0.03	35.8	470	0.76	46.2	<0.01	102	54	9.1	0.15	5	0.1	0.1	0.09	13.1	37	0.72	8.8
L032052	1.1	30	30	0.44	65	21.3	1.79	0.13	37	0.91	207	0.04	9.4	350	1.35	19.8	<0.01	4	61	5.2	0.25	95	0.2	0.03	0.09	23.1	7.8	1.04	3.1
L032053	0.68	30	26	2.05	45	96.7	1.81	0.13	11	0.97	1050	0.03	8	430	1.71	41	<0.01	2	146	7.1	2.74	33	0.2	0.17	0.73	19.8	7.6	0.72	2
L032054	1.21	30	21	1.4	47	40.8	2.59	0.1	28	0.88	826	0.1	10.4	620	2.71	28	<0.01	6	320	21.1	0.4	13	0.1	0.42	1.14	39.3	11.6	1.36	3.8
L032055	0.95	30	27	0.6	72	59.6	2.26	0.12	30	0.88	487	0.05	12.2	450	2.47	14.7	<0.01	7	91	13.9	0.71	10	0.1	0.49	0.15	22	11.1	1.65	3.7
L032056	1.09	30	25	0.9	60	258	2.42	0.1	43	1.06	915	0.04	12.4	360	2.91	15.4	<0.01	5	2440	23.8	3.55	57	0.2	1.4	11.9	29.7	9.7	0.98	3.7
L032057	2.37	30	25	5.73	308	29.2	4.05	0.1	39	3.91	1100	0.02	113	1250	0.31	111	<0.01	30	90	16.5	0.06	4	0.1	0.04	0.31	63.3	32.6	1	6.6
L032058	2.32	50	34	1.07	59	21.4	2.61	0.18	41	1.36	708	0.06	7.8	470	0.95	43.1	0.04	13	237	17.9	0.21	8	0.4	0.95	0.5	32.2	7.4	2.8	6.9
L032059	1.4	30	29	2.83	63	12.6	1.88	0.1	22	1.16	519	0.04	10.7	450	0.12	68.4	<0.01	6	99	5	0.06	8	0.3	0.02	0.3	30.8	8.1	0.51	4.2
L032060	2.92	20	11	2.97	76	515	11.5	0.07	75	2.7	2860	0.02	43.3	740	>5	22.5	<0.01	108	5630	9.1	1.82	45	0.1	0.28	34.6	4.4	49.5	0.69	10.3
L032061	1.69	30	19	4.15	81	65.7	7.39	0.1	48	2.55	1780	0.04	83.1	390	>5	38	<0.01	38	214	7.6	0.86	16	0.1	0.39	0.29	5.84	38	0.89	4.4
L032062	1.8	40	50	0.55	44	9.9	1.94	0.33	29	0.73	856	0.1	7.2	420	0.39	40.3	0.05	13	75	11.3	0.3	15	0.4	0.04	0.11	26.1	7.4	3.82	5.2
L032063	1.8	40	27	1.79	58	13.9	2.31	0.34	34	1.17	1370	0.14	18.1	490	2.5	30.2	0.03	9	119	25.6	2.34	62	0.4	0.04	0.43	34.2	10.8	3.61	4.8
L032064	2.22	30	29	2.63	56	181	6.59	0.12	52	1.9	1690	0.04	36.3	700	4.58	29.6	<0.01	36	351	11.5	0.78	22	0.2	0.4	0.65	21.6	28.2	1.25	6.6
L032065	0.77	40	190	2.59	62	17.6	2.32	0.3	18	0.79	777	0.04	13.8	1850	0.26	302	0.02	13	92	29.4	0.09	3	0.4	0.04	0.25	217	10.6	2.59	5.5
L032066	1.6	30	22	2.48	51	23.7	2.55	0.09	37	0.94	384	0.05	15.7	490	1.28	36.6	<0.01	10	62	7.9	0.18	23	0.2	0.1	0.08	22.5	13.5	1.17	4.6
L032067	0.43	30	22	1.13	135	77.9	6.43	0.13	8	0.52	455	0.04	35.1	380	>5	29	<0.01	2	46	14.2	0.77	151	0.2	0.64	0.11	19.6	30.1	0.59	1.4
L032068	1.94	30	26	4.9	149	28.2	3.2	0.12	42	2.56	900	0.03	70.4	1220	0.43	147	<0.01	42	85	12.3	0.17	22	0.2	0.08	0.21	58.8	22.8	1.76	5.6
L032069	1.87	30	24	2.29	33	85.7	4.11	0.12	41	1.85	1280	0.02	22.3	520	2.47	26.4	<0.01	11	4630	14.6	0.58	19	0.1	0.09	16.7	29	15.4	1.14	5
L032070	3.38	30	19	4.61	127	197	5.9	0.11	52	3.38	2630	0.04	57.2	350	1.24	35.9	0.01	93	2810	8.2	1.29	25	0.2	0.14	10.9	11.2	33.2	4.73	8.6
L032071	3.5	30	40	7.47	81	83.4	6.9	0.39	60	1.41	2260	0.28	53.2	620	0.57	93.6	0.12	152	149	4.3	0.3	117	0.3	0.03	0.44	10.1	43.4	6.78	10.7
L032072	3.5	30	41	2.02	84	104	9.3	0.2	73	1.89	1560	0.09	61.3	710	1.25	48.2	0.15	247	308	6.8	0.47	5	0.2	0.17	0.47	9.79	48.4	9.79	14.6
L032073	3.85	30	120	4.64	95	96.3	8.65	0.62	79	1.67	1880	0.32	48.3	840	2.55	91.9	0.17	213	334	5.8	2.57	26	0.2	0.21	2.09	10	40.6	11.9	12.8
L032074	2.22	40	41	1.55	71	10.2	2.05	0.14	62	0.89	366	0.2	11.2	540	<0.01	65.3	0.05	24	73	19.7	0.13	2	0.1	<0.02	0.06	37.8	7.8	6.25	7.6
L032075	0.93	30	37	2.59	66	6	1.71	0.12	51	0.65	736	0.04	11.1	410	0.71	47.2	<0.01	6	48	8.5	0.16	9	0.2	0.05	0.09	21.7	9.4	1.26	3.2
L032076	1.48	40	74	2.59	77	13.9	2.41	0.36	68	1.05	598	0.06	28.9	480	0.06	64.9	0.06	35	70	18	0.09	4	0.1	0.03	0.07	27	12.3	7.11	6.5
L032077	1.79	30	20	1.62	53	15.6	1.74	0.14	16	0.84	540	0.13	7.5	410	1.16	35.8	<0.01	6	102	20.4	0.26	30	0.2	0.16	0.23	26.8	7.1	2.7	4.5
L032078	2.47	30	31	1.52	58	8.4	1.84	0.09	36	0.44	267	0.19	6.9	520	1.91	230	<0.01	5	65	11.2	0.51	6	0.2	1.48	0.06	26.7	8.2	1.12	5.6
L032079	2.16	30	30	1.48	49	10.2	1.47	0.12	27	0.39	394	0.13	6.3	440	0.62	170	0.01	6	72	11.5	0.11	11	0.2	0.09	0.11	25.8	7.3	1.31	5.2
L032080	4.52	30	53	4.87	87	99.2	9.71	0.24	81	1.7	2120	0.31	56	820	2.02	191	0.15	282	212	6.3	0.76	10	0.2	0.06	0.23	10.5	42	7.23	16.3
L032081	3.31	40	13	3.32	64	140	10.5	0.05	81	2.58	2660	0.03	45.6	790	>5	37.2	<0.01	90	609	10.9	0.44	15	0.1	0.64	1.45	17.4	33.1	0.91	8.9
L032082	2.06	30	6	5.04	70	136	9.63	0.05	56	2.15	2760	0.04	51.3	760	>5	51.2	<0.01	63	280	7.1	0.43	15	<0.1	0.93	0.6	9.62	37.8	0.67	5.4
L032083	1.09	30	26	2.86	42	27.7	2.22	0.09	27	1.09	945	0.04	9.6	480	1.03	32.1	<0.01	6	58	10.7	0.19	7	0.1	0.55	0.16	32.4	8	0.88	2.9
L032084	2.64	40	165	1.11	111	200	8.02	0.82	81	0.94	593	0.11	58	800	2.1	37.8	0.18	186	204	7.1	0.99	5	<0.1	0.23	0.12	16.9	32.8	12.6	9.3
L032085	2.46	40	99	3.59	66	85.9	8.38	0.49	65	1.59	1540	0.09	37.3	770	1.92	86.3	0.12	193	146	12.6	0.46	9	0.1	0.04	0.12	23.5	30.2	8.16	9.5
L032086	1.24	30	48	2.69	53	41.8	1.9	0.14	38	1.04	627	0.04	16.4	460	0.91	40.4	<0.01	9	44	18.2	0.26	7	<0.1	0.04	0.06	33.8	8.9	1.56	3.3
L032087	1.11	40	226	2.64	56	32.4	2.76	0.58	58	1.26	640	0.05	17.4	720	0.87	55.4	0.07	39	83	29	0.1	3	0.1	0.06	0.05	73.3	13.4	7.36	4.8
L032088	4.05	30	102	4.25	117	25.1	6.59	0.55	67	2.56	1650	0.26	70.3	550	4.92	91.4	0.08	111	166	6.8	0.19	9	0.2	0.19	0.1	6.84	45	12	8.4

Client : AMEC
Project : Rainy River
SGS Project : 08121
Test : Metals by Aqua Regia Digestion with ICP-MS Finish
Date : October 18 , 2011

Sample ID	Al	B	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga
	%	ppm	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
L032089	2.32	40	43	2.94	45	437	10.7	0.3	36	1.81	1610	0.1	2.6	1070	>5	70.1	0.09	80	8000	9.6	4.02	124	0.2	1	38.7	6.73	29	5.46	6.9
L032090	2.08	30	57	2.78	47	16	2.09	0.35	32	1.21	702	0.2	19.8	590	0.46	95.2	0.04	14	75	22.6	0.13	6	0.3	0.04	0.12	37	9.9	8.69	4.6
L032091	2.57	40	28	5.09	154	175	8.06	0.06	106	3.35	1740	0.02	79.4	850	3.66	143	<0.01	268	154	10.4	0.73	9	0.1	0.19	0.16	23.5	35.4	1.21	7.4
L032092	5.36	40	44	4.52	139	57.7	8.13	0.2	153	5.11	1420	0.07	184	430	0.92	122	0.06	153	239	6.5	0.26	11	0.2	0.04	0.2	7.36	52.8	6.27	12.2
L032093	2.68	40	50	2.42	84	237	8.59	0.16	56	1.22	1020	0.09	69.3	760	1.93	35.5	0.12	192	220	5.8	0.61	5	0.1	0.8	0.15	13.9	41.5	6.8	8.5
L032094	3.87	40	26	2.06	59	75	4.46	0.08	36	1.71	707	0.14	28.4	730	3.25	178	<0.01	24	75	13.1	0.55	11	0.2	5.02	0.05	48.4	13.6	0.98	8
L032095	2.04	40	556	6.44	79	27.4	4.06	0.57	66	2.36	1080	0.03	42.6	2760	0.56	256	0.06	73	72	32.5	0.07	3	0.5	0.21	0.08	152	24.6	7.36	6.5
L032096	0.84	40	34	0.7	62	280	2.44	0.08	31	0.67	463	0.05	9.9	410	1.98	18.2	<0.01	10	89	10.8	0.62	5	<0.1	1.22	0.16	24.6	8.3	0.68	3.2
L032097	1.05	30	32	1.21	54	34.3	2.81	0.08	34	0.88	527	0.05	11.7	390	2.12	18.3	0.02	16	68	10.3	0.25	6	<0.1	1.56	0.03	29.3	8.9	2.49	4.1
L032098	1.13	30	34	1.06	55	82.3	2.1	0.09	39	0.71	511	0.07	9.6	440	1.36	41.7	<0.01	7	327	9.9	0.25	6	0.2	1.01	1.11	26	8.2	1.1	3.5
L032099	1.5	40	24	0.35	44	235	3.23	0.1	45	1.5	335	0.04	9.1	440	2.97	17	<0.01	6	69	15	0.73	4	<0.1	6.02	0.06	28	8.5	0.54	3.8
L032100	1.63	30	24	0.35	38	101	3.54	0.11	25	1.23	242	0.06	9.3	360	3.11	30.6	<0.01	5	36	17.2	0.41	11	0.1	3	0.03	17.1	10.9	0.61	3.8
L032101	3.53	30	98	6.34	82	93.4	7.15	0.75	59	1.27	2430	0.24	45.2	640	0.6	122	0.15	171	150	4.2	0.45	20	0.2	0.06	0.32	13.8	33.6	7.35	9.9
L032102	2.35	30	64	2.06	62	52	3.03	0.54	51	1.05	665	0.2	14.9	520	1.06	75.5	0.06	19	701	16.5	0.22	29	0.2	0.24	3.68	48.5	12.4	16.1	6.2
L032103	1.58	50	214	1.58	75	4.4	3.19	0.71	107	1.3	505	0.06	22.2	720	0.35	67	0.12	70	100	27.9	0.07	2	<0.1	0.06	0.03	60.5	12	9.54	7.9
L032104	3.13	40	135	2.66	98	157	9.29	0.52	86	1.08	1370	0.17	74.8	780	2.73	72.3	0.19	258	1390	5.3	1.77	5	0.1	0.18	5.59	12.9	45.7	7.66	9.8
L032105	1.01	30	20	1.2	43	15.3	1.81	0.16	16	0.53	482	0.07	7.3	400	1.76	30.8	0.01	3	129	27	0.59	27	0.2	<0.02	0.39	25.4	6.6	1.9	2.5
L032106	3.67	40	368	4.69	725	52.9	3.98	1.02	116	4.66	965	0.04	173	1220	0.05	196	0.16	90	106	27.1	0.34	6	0.4	0.1	0.18	69.2	29.6	23.5	9.8
L032107	2.34	40	30	0.94	45	20.6	2.26	0.11	40	1.02	674	0.08	10.6	560	0.78	44.4	<0.01	12	123	14.3	0.12	9	0.2	0.16	0.07	52.9	8.5	2.69	5.9
L032108	0.78	30	6	0.13	97	11.5	1.1	0.02	14	0.35	99	0.02	8.8	250	0.42	8.2	<0.01	5	30	6.2	0.07	12	0.1	0.13	0.01	10.3	5	0.61	3
L032109	0.88	40	34	2.88	62	13.4	1.8	0.15	25	0.69	1060	0.04	8.8	380	0.26	41.7	0.01	9	58	9.8	0.06	4	<0.1	0.08	0.12	28.7	5.3	1.97	2.9
L032110	1.21	30	28	3.2	32	25.1	2.32	0.1	27	0.99	1430	0.03	14.2	550	2	43.6	<0.01	7	63	14.5	0.31	21	<0.1	0.09	0.05	34.1	9.4	0.91	2.8
L032111	1.05	30	20	1.76	35	31.7	1.7	0.09	26	0.7	557	0.03	7.3	400	1.09	29	<0.01	4	126	5.4	0.35	14	<0.1	0.04	0.38	18	6.1	0.59	2.5
L032112	3.01	40	19	5.74	96	38.4	3.45	0.08	80	2.46	1200	0.02	72.3	1240	0.8	51	<0.01	32	326	10.8	0.12	4	<0.1	0.04	0.23	66.9	19.7	2.76	6.8
L032113	1.39	40	23	1.84	32	6.4	2.4	0.09	24	1.01	475	0.03	7.7	540	0.39	50.8	<0.01	6	59	10.1	0.04	3	0.2	0.08	0.07	39.6	6.2	0.48	3.5
L032114	1.36	40	26	1.44	34	2.1	1.78	0.1	22	0.64	347	0.04	8.1	530	0.19	65.3	<0.01	6	31	12.4	0.02	2	0.2	0.05	0.04	37.5	4.8	0.57	3.5
L032115	1.13	30	28	3.03	26	3.1	2.36	0.11	21	1.42	1030	0.04	7.2	520	0.3	81.4	<0.01	4	81	11	0.03	8	0.1	0.04	0.31	40.1	5.6	0.55	2.9
L032116	1.38	40	27	2.76	19	1.8	2.75	0.1	22	1.33	612	0.03	9.9	700	0.2	60.8	<0.01	7	43	13	<0.01	9	0.2	0.03	0.06	51.3	5.8	0.42	3.6
L032117	2.04	30	15	3.78	90	59.7	5.05	0.08	32	2.12	1090	0.03	48.7	460	1.12	64.2	<0.01	30	109	7.3	0.44	49	0.1	0.17	0.22	23.7	21	0.54	4.4
L032118	1.73	40	17	5.42	59	85.8	6.09	0.07	30	2.4	1800	0.03	63.8	220	1.02	67	<0.01	48	109	6	0.41	36	<0.1	0.04	0.16	10.8	35.8	0.49	3.4
L032119	1.28	30	18	2.42	27	17.5	2.02	0.1	37	0.94	388	0.04	9.8	680	0.34	67.7	<0.01	6	61	11.6	0.1	4	0.1	0.04	0.06	48.6	8.1	0.78	3.5
L032120	0.65	40	1140	2.31	39	7.9	2.09	0.49	30	0.57	679	0.03	7.9	1690	0.25	2080	0.05	10	56	61	0.07	1	0.2	0.05	0.06	218	6.7	4.24	3.8
L032121	0.73	30	18	3.97	38	15.6	2.34	0.1	19	0.89	473	0.04	9.1	360	0.22	119	<0.01	3	56	8.3	0.06	1	<0.1	0.05	0.06	23	6.3	0.8	1.9
L032122	0.7	30	29	2.71	39	35.1	3.28	0.11	22	1.24	634	0.04	16.4	670	2.65	47.1	<0.01	3	249	11.4	0.18	57	<0.1	0.19	0.85	28.7	9.7	0.77	1.9
L032123	1.14	30	17	2.53	42	8.8	1.93	0.08	34	1.23	464	0.05	11.1	400	0.15	34	<0.01	5	103	5.2	0.07	5	0.1	0.03	0.23	27.3	6.5	0.89	2.9
L032124	0.48	40	287	2.37	45	3.5	1.19	0.19	8	0.53	623	0.03	6.9	900	0.2	182	<0.01	5	30	21.3	0.12	1	0.2	0.18	0.05	105	6.2	0.8	2.3
L032125	3.08	40	33	0.72	975	64.5	3.98	0.1	63	4.38	330	0.04	194	1140	<0.01	49.6	0.09	69	36	14.3	0.47	9	0.3	<0.02	0.06	54.4	30.3	3.92	8.3
L032126	1.97	30	28	2.78	57	47.3	3.84	0.14	38	1.44	776	0.02	31.2	400	1.6	55.8	<0.01	20	119	8.4	0.3	20	0.1	0.08	0.22	24.1	20.8	1.17	4
L032127	0.37	30	521	2.35	43	8	1.96	0.24	3	0.7	783	0.03	5.7	1760	0.34	213	<0.01	5	31	33.9	0.06	2	0.2	0.08	0.11	190	6.5	0.87	2.4
L032128	1.97	30	40	4.24	43	63.7	3.61	0.09	66	2.03	694	0.05	44.2	870	0.08	122	<0.01	30	95	15.1	0.03	2	0.2	<0.02	0.09	51.2	15.9	0.87	5
L032129	1.06	30	43	3.94	41	22.8	3.07	0.1	34	1.65	1030	0.04	31.1	870	1.39	94.7	<0.01	9	104	17.1	0.07	8	0.1	0.07	0.28	63.1	15.5	0.76	3.1
L032130	0.5	30	137	2.19	41	13.3	1.39	0.19	8	0.47	605	0.04	10	930	0.33	266	<0.01	5	97	22.4	0.1	12	0.2	0.1	0.29	107	5.4	0.74	2.3
L032131	0.88	30	19	2.32	31	2.7	1.59	0.09	20	1.2	477	0.04	9.4	370	0.07	34.8	<0.01	3	51	6.9	0.02	8	<0.1	<0.02	0.04	23.3	4.8	0.75	2.3
L032132	3.51	40	526	8.62	404	113	5.37	1.89	95	4.76	1200	0.03	121	2120	0.1	401	0.22	159	95	17.1	0.15	13	0.9	0.19	0.12	86.5	36.8	136	8.6
L032133	2.32	30	26	0.83	62	253	13.2	0.12	41	1.75	620	0.06	52.3	680	>5	26.7	0.05	88	295	9.1	4.21	56	0.1	9.33	0.61	9.33	40.2	2.14	6.7
L032134	1.29	30	16	2.92	49	150	2.87	0.05	31	1.01	633	0.05	15.8	640	1.58	45.2	<0.01	14	40	10.9	0.22	<1	<0.1	0.24	0.02	35.4	8.6	0.46	4.5
L032135	1.18	30	20	1.6	44	9	2.27	0.09	15	0.87	679	0.03	9.2	440	0.67	35.7	<0.01	5	97	5.7	0.1	8	<0.1	0.04	0.13	30.1	7.5	0.47	3
L032136	0.52	30	29	1.81	58	41.7	2.36	0.08	18	0.68	230	0.04	19.5	430	2.17	41.2	<0.01	5	44	4.8	0.09	1	<0.1	0.08	0.04	22.3	9.1	0.56	1.7
L032137	0.61	30	33	1.64	68	369	2.03	0.09	21	0.59	272	0.05	13.1	440	1.9	42.6	<0.01	4	31	6.2	0.27	1	<0.1	0.09	0.04	24.1	7.7	0.56	2
L032138	0.59	30	36	2.26	66	10.4	1.91	0.08	19	0.57	322	0.05	12	430	1.78	52.3	<0.01	3	26	6.3	0.04	<1	<0.1	0.06	0.02	26.3	7.4	0.61	1.9
L032139	2.62	40	24	3.63	67	25.2	3.88	0.04	94	2.19	479	0.03	51.2	920	0.34	156	<0.01	68	52	10.3	0.04	1	0.2	0.05	0.04	42.8	17.8	0.6	9.5
L032140	0.76	30	31	2.23	61	38.5	2.76	0.08	27	0.73	398	0.05	14.1	450	2.88	56.7	<0.01	6	43	6.8	0.15	4	<0.1	0.27	0.08	25.3	11.2	0.62	2.3
L032141	0.56	40	33	1.92	39	58.8	2.15	0.11	15	0.69	567	0.04	9.6	390	2.17	36.8	<0.01	2	50	8.4	0.2	3	0.1	0.46	0.08	26	9.3	0.65	1.6
L032142	3.82	30	15	1.34	74	179	10.2	0.02	91	3.01	1690	0.02	37.4	990	0.64	35.2	<0.01	284	190	7	0.32	4	0.2	0.02	0.04	4.82	35.9	0.46	14.3
L032143	2.06	30	10	3.58	45	102	8.29	0.07	49	1.55	1070	0.03	27.8	530	1.65	51.2	<0.01	95	83	8.3	0.24	4	0.1	0.15	0.04	18.4	29.8	0.61	6.4
L032144	0.77	30	25	2.95	50	10.5	1.82	0.08	21	1.03	539	0.05	11.7	590	1.71	52.5	<0.01	4	22	8.9	0.1	3	0.1	0.19	0.03	21.6	9.5	0.79	2.2
L032145	2.35	30	16	2.62	106	90.2	6.11	0.03	51	1.55	607	0.05	47.7	660	1.93	35.9	<0.01	113	85	6	0.14	2	<0.1	0.15	0.03	12.2	28.3	0.57	7.7
L032146	1.85	30	7	1.06	362	229	2.79	0.01	25	2.01	391	0.03	101	220	0.13	26.8	0.15	47	30	2.6	0.2	7	<0.1	<0.02	0.01	0.9	26.2	0.35	3.8
L032147	2.9	30	18	5.21	393	448	4.37	0.01	39	3.25	1060	0.02	124	240	0.96	48.4	0.11	64	52	4.7	0.42	10	<0.1	0.04	0.04	2.59	50.5	0.35	5.6
L032148	2.66	30	10	4.22	136	190	7.16	0.01	39	2.86	808	0.02	53.3	480	1.34	56.3	0.19	184	56	6.9	0.44	6	0.1	0.16	0.04	5.41	36.8	0.49	9.5
L032149	2.6	30	19	7.68	124	400	8.13	0.03	47	2.8	974	0.02	51.1	430	3.2	221	0.04	155	55	6.1	0.41	6	0.1	0.18	0.06	8.6	49.2	0.4	9.4
L032150	0.59	30	42	2.08	60	122	1.65	0.13	10	0.46	146	0.04	10.1	420	1.37	56.4	0.02	4	18	6.1	0.17	2	<0.1	0.13	0.06	26	8.6	0.45	2.3
L032151	3.47	40	1270	1.98	263	17.6	4.92	2.22	71	3.81	867	0.06	86.4	2730	0.02	129	0.27	144	81	32.2	0.07	6	0.5	0.1	0.08	144	33.7	17.2	12.5
L032152	2.38	30	32	5.27	70	65.6	7.64	0.06	120	2.05	1370	0.04	52.6	640	2.36	138	<0.01	183	116	8	0.25	9	<0.1	0.15	0.06	11.4	32.3	1.47	8.1
L032153	3.01	40	80	4.35	33	23.3	9.89	0.37	64	2.32	1690	0.15	8.7	1110	>5	87.5	0.1	72	163	8.3	1.11	101	0.3	0.36	0.2	7.7	31.8	5.36	11.6
L032154	2.25	30	19	1.2	50	25.6	2.01	0.09	27	0.78	346	0.12	8.5	490	0.62	78.3	<0.01	10	524	10.5	0.14	9	0.1	0.19	1.05	29.2	8.7	2.15	5.3
L032155	4.4	40	5	2.44	101	117	3.84	0.01	19	1.82	534	0.35	45	200	0.07	41.5	0.19	113	56	5.8	0.09	2	<0.1	0.04	0.06	2.51	23.4	0.93	7
L032156	1.68	30	28	0.65	40	37	2.91	0.14	26	1.01	578	0.08	5.3	480	1.89	36.7	<0.01	7	487	12.1	0.53	15	0.2	2.02	1.75	34.7	5.9	1.22	4.5
L032157	3.34	30	37	2.24	85	69.7	8.89	0.36	62	2.05	834	0.18	60.8	720	>5	78.6	0.15	203	211	6.7	0.96	29	0.2	5.09	0.75	9.4	49.1	5.67	11.1
L032158	3.1	40	34	1.36	84	157	7.42	0.14	47	2.1	1060	0.15	59.8	810	>5	54.7	0.23	197	287	5.8	1.79	31	0.3	3.03	0.33	7.61	41.8	2.8	11.4
L032159	2.63	40	<5	1.36	346	60.4	3.65	<0.01	67	2.87	606	0.03	108	220	0.09	13.2	0.11	48	57	2.2	0.16	6	<0.1	0.05	0.02	1.36	32.7	0.36	5.2
L032160	1.27	40	<5	1.28	66	31.8	2.33	<0.01	35	1.11	305	0.05	16.6	510	0.09	18.4	0.05	37	45	5.9	0.06	4	<0.1	0.03	0.02	26.1	10.1	0.13	6
L032161	4.03	30	16	8.25	512	20.8	6.87	<0.01	104	4.18	1540	0.01	160	180	1.13	57.1	0.07	133	68	4.1	0.45	13	0.1	0.52	0.08	1.41	55.8	0.28	8.3
L032162	2.49	30	<5	2.6	376	61.7	3.93	<0.01	67	2.82	661	0.03	116	190	0.14	23.1	0.08	59	47	2.1	0.22	7	<0.1	0.06	0.02	1.1	35.5	0.61	5.5
L032163	3.7	30	<5	6.24	188	102	8.78	<0.01	132	2.71	1080	0.02	63.7	420	1.18	141	0.01	251	64	5.9	0.35	7	0.1	0.36	0.06	6.92	47.8	0.45	13.4
L032164	0.77	30	27	2.05	57	61.4	2.69	0.08	27	0.57	141	0.06	14.8	660	3.09	58.5	<0.01	5	10	11.4	0.09	4	0.2	0.35	0.05	55.9	9.7	0.62	2.9
L032165	0.92	30	35	1.53	61	35.4	1.59	0.1	29	0.62	136	0.04	9.6	380	0.37	31.3	<0.01	6	28	6	0.04	2	0.2	0.04	0.07	26.7	5.8	0.62	3.8
L032166	0.51	40	36	1.18	69	38.1	1.81	0.09	12	0.4	67	0.06	9.4	380	1.8	38.1	<0.01	4	7	5.9	0.08	2	0.1	0.3	0.02	26.5	5.6	0.47	2.2
L032167	4.36	40	9	5.04	460	189	7.11	0.03	88	4.58	1160	0.02	142	300	0.41	76.1	0.11	171	73	4.6	0.28	9	0.2	0.08	0.06	2.94	46.6	0.69	10.8
L032168	1.33	30	18	1.77	44	18.1	1.53	0.16	23	0.73	770	0.03	7.2	400	1.3	50.3	<0.01	4	69	23.2	0.34	25	0.2	0.02	0.14	25.9	6.4	1.24	3.2
L032169	3.12	30	<5	10.1	773	69.7	4.65	<0.01	64	4.02	2180	<0.01	164	1970	3.47	50.4	<0.01	107	397	25	0.46	9	<0.1	1.66	0.31	45.8	51.5	0.36	7.7
L032170	3.96	40	3220	7.1	283	54.2	6.28	3.46	188	4.33	1320	0.03	56.4	5640	0.12	1840	0.51	176	140	43.8	0.61	12	3.7	0.32	0.36	227	35	35.1	13.3
L032171	2.79	30	91	4.98	522	59.7	3.89	0.21	105	4.33	859	0.02	134	1260	0.12	278	0.03	67	52	18.6	0.14	6	0.3	0.09	0.09	74.5	31.2	6.67	9.3
L032172	4.7	40	12	2.61	81	117	3.73	0.03	15	1.56	469	0.49	41.5	210	0.07	59.2	0.18	118	39	5.5	0.05	<1	<0.1	<0.02	0.02	2.7	23.1	2.4	7.9
L032173	1.95	40	31	1.69	57	10.5	1.86	0.2	20	0.91	362	0.03	13.7	370	0.45	13.2	0.06	21	18	11.1	0.04	3	0.4	0.06	0.02	20.9	8.8	2.48	7.6
L032174	2.08	40	38	1.84	48	12.7	2.5	0.23	57	0.99	581	0.11	13.8	530	0.84	63.8	0.09	26	88	13.7	0.19	7	0.2	0.09	0.16	48.9	12.5	2.89	6.5
L032175	1.52	30	28	1.07	51	15.7	2.5	0.15	36	0.82	877	0.08	9.2	520	0.45	44.3	0.05	20	187	16.2	0.3	9	0.1	0.1	0.48	38.2	10.1	1.97	5.6
L032176	1.07	30	29	1.81	55	10.3	1.82	0.13	41	0.84	460	0.03	11.4	390	0.32	25.2	0.03	12	154	11.2	0.28	11	<0.1	0.06	0.4	25	7.1	1.22	4.3
L032177	2.7	30	41	1.79	56	21.6	1.87	0.22	24	0.82	391	0.23	11.5	440	0.46	114	0.04	18	81	12.5	0.15	8	0.2	0.05	0.14	27.2	8.1	3.76	7.2
L032178	5.27	30	10	3.02	56	117	3.56	0.03	12	1.32	383	0.55	37.4	190	0.11	50.3	0.19	117	50	5.3	0.1	2	<0.1	0.04	0.09	2.91	21.8	2.47	8.3

Client : AMEC
Project : Rainy River
SGS Project : 08121
Test : Metals by Aqua Regia Digestion with ICP-MS Finish
Date : October 18 , 2011

Sample ID	Al	B	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce	Co	Cs	Ga
	%	ppm	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
L032179	0.95	30	42	1.05	69	15.4	1.66	0.24	26	0.67	321	0.04	7.4	390	0.26	15	0.05	18	80	12.8	0.22	3	<0.1	0.05	0.14	22.5	7	3.21	4.9
L032180	1.28	30	14	1.48	37	33.4	2.02	0.08	26	0.95	1150	0.03	7.7	410	1.83	22.8	<0.01	6	229	8.4	0.77	16	0.1	0.14	0.91	22.5	7.7	0.56	3.2
L032181	1.23	30	20	2.05	28	21.2	1.55	0.08	23	0.78	723	0.03	7.8	440	0.96	26.5	<0.01	4	109	4.3	0.23	23	0.2	0.04	0.35	27.9	7.5	0.53	3
L032182	1.06	30	21	2.09	75	17.2	1.9	0.07	54	0.67	441	0.04	10.6	500	0.39	28.7	<0.01	12	61	5.6	0.19	5	<0.1	0.09	0.04	30.7	7.4	0.89	4.4
L032183	1.06	30	22	1.93	68	10.4	1.94	0.08	51	0.81	448	0.03	10.7	470	0.72	31.7	<0.01	14	61	7.7	0.53	11	<0.1	0.14	0.05	30.3	8.5	1.35	4.4
L032184	0.99	30	21	2.42	49	21.3	1.41	0.1	44	0.74	447	0.03	8	370	0.61	43.9	<0.01	3	91	4.4	0.24	11	<0.1	0.03	0.25	22.6	6.6	1.23	2.6
L032185	0.87	30	21	2.91	36	26.8	1.96	0.08	24	0.95	561	0.03	8.4	390	1.52	85.2	<0.01	3	133	5	1.63	45	<0.1	0.09	0.28	16.2	6.8	0.54	2.2
L032186	1.16	30	16	0.46	43	19.6	2.01	0.18	19	0.82	1200	0.01	6.4	660	0.7	8.6	0.01	9	159	7.4	1.36	40	0.3	0.53	0.52	30.5	6.8	1.93	3.8
L032187	1.82	30	16	2.19	71	38.5	1.89	0.09	21	0.67	815	0.16	7.9	410	0.89	83.1	<0.01	12	58	5.5	0.39	8	0.1	0.14	0.04	23.7	6	1.2	4.8
L032201	2.96	30	11	2.69	151	323	7.81	<0.01	75	2.78	676	0.02	55.4	490	2.12	57.7	0.11	142	38	6.4	0.37	6	0.1	0.08	0.02	3.26	52.6	0.21	7.6
L032202	0.54	30	34	2.36	62	186	1.85	0.06	20	0.44	137	0.04	12	460	1.69	45.2	<0.01	5	12	5.7	0.22	2	<0.1	0.16	0.03	29.4	8.8	0.42	2.4
L032203	0.81	30	34	1.74	59	42	1.64	0.08	27	0.5	130	0.04	10.6	490	0.74	36.9	<0.01	6	15	2.5	0.1	2	<0.1	0.06	0.03	23.2	8.1	0.65	2.9
L032204	0.62	30	27	2.55	35	13.7	1.72	0.1	20	1.05	968	0.03	7	520	0.89	70.8	<0.01	2	144	4.5	0.17	10	0.1	0.1	0.49	26	7	0.77	1.8
L032205	0.88	30	30	1.82	39	14.6	1.97	0.07	22	1.15	487	0.04	13.7	440	1.75	48.5	<0.01	4	59	5.5	0.9	12	<0.1	0.3	0.06	13.1	7.8	0.88	2.2
L032206	0.94	30	33	1.42	62	41	1.78	0.14	33	0.58	253	0.04	7.7	430	0.26	26.3	0.04	19	62	14.7	0.26	4	<0.1	0.06	0.06	27.4	7.5	2.59	4.2
L032207	0.92	30	15	1.91	36	46.5	2.94	0.12	21	0.62	1110	0.02	9.4	410	2.25	20.2	<0.01	4	422	7.3	0.78	56	<0.1	0.41	1.63	24.5	6.8	1.1	2.4
L032208	2.35	30	58	1.14	573	159	3	0.19	70	3.08	417	0.05	491	530	0.42	49.9	0.12	44	46	4.1	0.22	12	<0.1	0.25	0.08	20.5	49	4.89	5.1
L032209	1.45	30	23	1.72	861	383	3.33	0.04	9	3.1	463	0.04	448	380	0.33	156	0.02	47	17	3.9	0.29	29	<0.1	0.2	0.1	6.88	51.3	1.58	3.1
L032210	2.25	30	291	2.52	1160	438	3.65	0.74	49	4.23	690	0.03	474	350	0.34	202	0.09	73	27	3.9	0.34	38	<0.1	0.07	0.1	8.33	57.8	24.6	4.6
L032211	1.55	30	14	1.1	49	88.2	1.95	0.07	45	1.55	281	0.05	41.6	350	0.17	34.7	0.06	32	65	3.8	0.13	12	<0.1	0.03	0.36	6.87	31.7	0.62	2.5
L032212	2.19	40	22	1.47	22	71.2	4.14	0.08	57	1.99	468	0.06	10.7	560	0.46	45.1	0.15	147	96	4.1	0.13	4	<0.1	0.07	0.11	9.52	41.7	1.71	5.8
L032213	1.46	40	34	1.27	87	110	2.28	0.18	44	0.97	575	0.07	17.1	770	1.7	32.1	0.05	13	6930	11.4	0.26	3	0.1	0.2	29.5	47.8	11.2	1.27	4.4
L032214	1.51	40	22	2.18	43	7.9	1.68	0.12	52	1.08	579	0.02	9.5	440	0.4	20.3	0.01	12	89	4.3	0.06	8	0.4	0.07	0.19	21.8	6.9	2.21	4.7
L032215	1.36	30	26	2.73	56	20.2	2.31	0.14	55	1.22	649	0.02	14.1	810	1.23	28.1	<0.01	13	95	5.2	0.16	4	0.2	0.23	0.09	34.9	9.4	1.52	4.8
L032216	2.75	40	33	1.72	41	35.3	4.8	0.17	63	1.71	679	0.09	7.5	790	0.89	34.8	0.14	146	122	7.1	0.19	10	0.2	0.1	0.13	25.2	26.7	3.09	8.2
L032217	3.54	30	19	8.31	110	94.3	6.84	0.19	83	4.29	2400	0.08	111	300	0.56	124	0.05	117	163	4.5	0.22	5	0.1	0.43	0.45	3.86	41.4	5.34	8.8
L032218	0.51	30	12	0.16	40	21.9	1.12	0.16	8	0.36	733	0.01	9.7	440	0.98	6.3	<0.01	3	90	9.5	1.51	47	0.2	0.11	0.3	30.4	8	1	1.4
L032219	0.7	30	27	2.29	74	48.9	1.59	0.07	24	0.55	166	0.05	15.2	490	0.45	56.7	<0.01	7	33	3.7	0.11	1	<0.1	0.09	0.06	27.4	7.7	0.87	3
L032220	0.57	30	26	0.61	33	24.4	1.2	0.11	15	0.39	259	0.05	7.4	450	0.86	24.8	<0.01	3	387	6.8	1.48	21	<0.1	0.79	1.12	18.8	5.8	0.75	1.4
L032221	0.74	30	17	2.22	25	24.4	1.79	0.08	22	1.09	472	0.04	9.2	560	0.55	120	<0.01	4	62	7.5	0.46	21	<0.1	1.08	0.11	24	7.5	0.61	2.2
L032222	3.48	30	<5	5.65	655	64.9	3.88	0.01	95	4.25	1060	0.01	137	1430	0.27	130	0.14	82	83	19.7	0.31	5	0.4	0.04	0.09	58.7	35.1	2.24	9.6
L032223	1.48	30	33	2.39	102	184	2.36	0.1	56	1.1	426	0.03	23.4	620	0.29	55.7	<0.01	16	48	9.1	0.55	4	0.1	0.13	0.06	27.6	13	1.82	5.1
L032224	4.32	40	736	8.97	383	56.2	6.25	2.9	215	5.16	2090	0.03	133	2680	0.9	227	0.33	159	203	14.4	0.56	17	0.9	0.47	0.11	111	55	59.7	12.7
Duplicate																													
L032040	1.09	30	21	2.03	38	29.8	2.31	0.11	34	1.25	747	0.05	12.2	390	2.3	28.9	<0.01	4	98	14	0.85	14	0.1	1.17	0.25	17.8	8.6	0.97	2.7
L032080	4.46	30	53	4.65	84	94.9	9.23	0.24	79	1.67	2100	0.31	53.7	790	2.02	186	0.15	277	207	6.2	0.71	10	0.2	0.06	0.22	10.3	42.5	7.35	16.4
L032100	1.61	30	24	0.34	40	96.8	3.38	0.11	25	1.21	239	0.06	9	370	3	30.1	<0.01	4	35	16.8	0.37	11	0.2	6.29	0.03	18.3	10.6	0.59	3.8
L032140	0.73	30	30	2.17	59	37.3	2.67	0.08	26	0.7	392	0.05	14.1	450	2.88	55.6	<0.01	6	41	7	0.14	4	<0.1	0.26	0.07	24.6	11	0.62	2.3
L032180	1.25	30	14	1.47	38	31.7	2	0.08	25	0.94	1130	0.03	7.9	410	1.83	22.5	<0.01	6	227	8.1	0.8	16	0.1	0.13	0.88	22.2	7.5	0.57	3.2
L032224	4.28	40	749	8.84	376	56.2	6.13	2.89	213	5.12	2050	0.03	133	2660	0.89	225	0.32	158	203	14.3	0.6	18	0.9	0.56	0.11	109	53.3	59	12.7
QC																													
CH4	1.8	40	313	0.61	108	2050	4.74	1.38	13	1.22	343	0.05	47.3	660	0.72	9.8	0.22	80	199	15.6	2.09	7	0.1	0.57	1.07	26.6	22	2.5	8.1
CH4	1.84	40	291	0.6	106	2020	4.84	1.43	13	1.21	316	0.05	48.4	630	0.79	10.1	0.21	80	195	14.8	2.1	8	<0.1	0.46	1.14	29.5	21	2.71	8.4
Certified Values	1.72	#N/A	276	0.56	98	2000	4.39	1.37	12.6	1.07	306	0.05	45.6	570	0.75	8	0.188	75	195	9	2.2	7.9	1	0.5	1.14	26	21.3	2.3	8
Tolerance +/-	0.41	#N/A	70	0.15	17	202	0.54	0.27	5.5	0.2	38	0.04	5.4	120	0.26	5	0.036	12	26	5	0.8	2.3	1	0.2	0.2	7	4.7	0.6	2

Client : AMEC
Project : Rainy River
SGS Project : 08121
Test : Metals by Aqua Regia Digestion with ICP-MS Finish
Date : October 18 , 2011

Sample ID	Ge ppm	Hf ppm	Hg ppm	In ppm	La ppm	Lu ppm	Mo ppm	Nb ppm	Pb ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Tl ppm	U ppm	W ppm	Y ppm	Yb ppm
Method Code	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
LOD	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
L032001	<0.1	0.24	0.08	<0.02	8.4	<0.01	0.34	0.19	8.9	3	0.26	0.6	<1	0.9	0.08	0.09	1.81	0.8	0.04	0.09	0.1	1.18	<0.1
L032002	<0.1	0.23	0.01	<0.02	10.1	0.03	14.4	0.11	0.7	2.6	<0.05	1.1	<1	<0.3	<0.05	0.15	0.29	1.3	0.03	0.45	<0.1	3.04	0.2
L032003	0.1	0.32	0.08	0.13	6	0.18	46.2	0.15	1.2	2.4	0.07	10	1	<0.3	<0.05	0.39	2.14	0.4	0.02	0.29	<0.1	10.6	1.2
L032004	0.2	0.18	0.01	0.06	10.6	0.12	1.02	0.1	1.3	0.7	0.09	23	<1	<0.3	<0.05	0.25	0.07	1	<0.02	0.12	<0.1	7.02	0.8
L032005	<0.1	0.19	<0.01	<0.02	9.5	0.08	0.42	0.09	1.4	1.5	<0.05	14.2	<1	<0.3	<0.05	0.17	0.07	0.8	<0.02	0.17	<0.1	4.06	0.5
L032006	<0.1	0.28	<0.01	<0.02	23.9	0.05	0.4	0.06	1.1	2.3	0.05	1.9	<1	<0.3	<0.05	0.25	<0.05	3.9	0.02	0.29	<0.1	3.99	0.3
L032007	<0.1	0.27	<0.01	<0.02	22.2	0.04	0.5	0.06	1.2	2.2	0.07	2.3	<1	0.4	<0.05	0.24	<0.05	3.5	0.02	0.25	<0.1	4.21	0.3
L032008	0.3	0.13	0.02	0.04	5.9	0.13	0.4	0.07	0.8	0.3	0.22	32.3	<1	0.3	<0.05	0.28	0.07	0.3	<0.02	0.16	<0.1	7.39	0.8
L032009	<0.1	0.19	<0.01	<0.02	9.7	0.03	4.27	<0.05	0.9	1.8	0.09	1.1	<1	<0.3	<0.05	0.11	0.47	1	<0.02	0.21	<0.1	2.28	0.2
L032010	0.2	0.13	<0.01	<0.02	1.6	0.12	3.12	0.32	0.4	0.3	0.42	6.8	<1	0.4	<0.05	0.15	0.16	0.2	<0.02	<0.05	0.2	6.26	0.8
L032011	<0.1	0.19	0.01	0.04	12.8	0.03	0.67	0.05	1.1	2.2	0.09	1	<1	<0.3	<0.05	0.15	0.9	1.8	<0.02	0.29	<0.1	2.66	0.2
L032012	0.1	<0.05	<0.01	<0.02	0.6	0.08	12.9	0.09	0.7	<0.2	0.28	8.2	<1	0.6	<0.05	0.07	0.18	<0.1	<0.02	<0.05	<0.1	3.08	0.5
L032013	0.3	<0.05	0.03	<0.02	1.6	0.09	1.27	0.08	0.9	0.5	0.14	15.7	<1	0.6	<0.05	0.11	0.17	0.2	<0.02	<0.05	<0.1	3.76	0.5
L032014	<0.1	0.25	0.01	<0.02	15.2	0.03	0.66	<0.05	0.8	2.4	0.09	1.2	<1	<0.3	<0.05	0.14	0.14	1.7	0.03	0.21	<0.1	2.3	0.2
L032015	0.3	<0.05	0.02	0.08	2.1	0.13	2.15	0.05	1.5	0.2	<0.05	33.5	<1	0.6	<0.05	0.19	0.29	0.1	<0.02	<0.05	<0.1	6.96	0.8
L032016	<0.1	0.62	<0.01	<0.02	52.2	0.05	0.13	0.13	2.6	6.6	0.06	0.7	<1	<0.3	<0.05	0.29	0.12	10.1	0.04	1.64	<0.1	4.9	0.3
L032017	<0.1	0.48	<0.01	<0.02	13.7	0.04	0.84	0.07	2.7	5.8	0.2	1.2	<1	<0.3	<0.05	0.18	0.47	1.7	0.06	0.34	<0.1	3.6	0.3
L032018	<0.1	0.35	0.12	0.11	12	0.02	2.09	<0.05	1.6	2.3	0.28	1	1	<0.3	<0.05	0.12	0.36	1.5	0.02	0.2	<0.1	1.86	0.2
L032019	<0.1	0.36	0.09	0.06	17.7	0.02	0.66	<0.05	24.9	3	0.09	0.9	<1	<0.3	<0.05	0.15	0.53	2	0.04	0.26	<0.1	2.19	0.2
L032020	<0.1	0.31	0.03	0.09	7.3	0.02	0.5	<0.05	7.2	3	2.12	0.6	<1	<0.3	<0.05	0.09	0.87	1.2	0.04	0.16	<0.1	1.95	0.1
L032021	<0.1	0.35	0.01	0.03	11.5	0.02	1.02	<0.05	9.4	2.7	0.94	0.9	1	<0.3	<0.05	0.13	0.42	1.4	0.03	0.2	<0.1	2.01	0.2
L032022	<0.1	0.23	<0.01	<0.02	11.8	0.01	0.54	<0.05	10.4	4	0.36	1.8	<1	<0.3	<0.05	0.09	<0.05	1.3	0.04	0.11	<0.1	1.44	<0.1
L032023	<0.1	0.28	0.07	<0.02	9.5	0.01	2.06	<0.05	8.5	4.1	0.79	0.9	<1	<0.3	<0.05	0.09	<0.05	0.9	0.06	0.12	<0.1	1.63	0.1
L032024	<0.1	0.37	0.02	<0.02	15.7	0.04	0.47	<0.05	1.1	3.4	0.47	2	<1	<0.3	<0.05	0.18	0.06	1.7	0.04	0.3	0.3	3.35	0.3
L032025	<0.1	0.6	<0.01	<0.02	18.5	0.05	0.77	0.05	6.9	8.1	1.01	2.6	<1	<0.3	<0.05	0.23	0.05	2.8	0.17	0.44	1.6	4.52	0.3
L032026	0.2	1.18	0.01	<0.02	78.2	0.09	2.96	0.16	7.7	6.2	0.28	0.9	<1	<0.3	<0.05	0.45	<0.05	14.5	0.05	2.42	0.1	7.18	0.6
L032027	<0.1	0.36	0.19	<0.02	8.9	0.03	0.3	0.05	4.3	3.7	0.57	1	<1	<0.3	<0.05	0.15	<0.05	1.6	0.05	0.2	0.1	2.99	0.2
L032028	0.3	0.45	0.04	0.03	37.3	0.07	0.72	0.44	2.9	2.8	0.81	12.7	<1	0.7	<0.05	0.51	0.09	3.6	0.04	0.62	0.8	9.14	0.6
L032029	<0.1	0.3	0.07	0.03	10.1	<0.01	0.18	<0.05	90.6	7.4	1.05	0.5	<1	<0.3	<0.05	0.09	<0.05	1.5	0.11	0.19	<0.1	1.17	<0.1
L032030	<0.1	0.54	0.03	<0.02	18.3	0.03	0.79	0.08	4.2	3.5	0.2	1.1	<1	<0.3	<0.05	0.19	0.85	2	0.05	0.38	0.2	3.32	0.2
L032031	<0.1	0.13	<0.01	<0.02	1.4	0.06	0.24	0.14	2.2	0.6	0.18	4.9	<1	<0.3	<0.05	0.13	<0.05	0.1	0.03	<0.05	0.1	4.24	0.4
L032032	<0.1	0.18	<0.01	<0.02	3.3	0.04	0.52	0.14	3.5	3.7	0.18	3.9	<1	<0.3	<0.05	0.11	0.07	0.5	0.09	0.09	0.2	3.22	0.3
L032033	<0.1	0.43	<0.01	0.03	12.4	0.03	1.39	0.16	2.2	5.1	0.12	1.6	<1	<0.3	<0.05	0.15	0.25	1.7	0.06	0.3	0.4	2.63	0.2
L032034	<0.1	0.41	<0.01	<0.02	13.2	0.03	2.01	<0.05	6.8	5.6	0.33	0.7	<1	<0.3	<0.05	0.16	0.27	1.8	0.09	0.31	<0.1	2.77	0.2
L032035	<0.1	0.14	0.01	<0.02	7.6	0.03	0.66	0.09	6.3	4.9	0.87	2.6	<1	<0.3	<0.05	0.2	<0.05	1.1	0.09	0.21	0.9	3.64	0.3
L032036	<0.1	0.19	0.07	0.02	4.1	0.02	2.72	<0.05	2.9	2.7	0.11	1.6	<1	<0.3	<0.05	0.1	3.28	0.5	0.03	0.07	<0.1	2.17	0.2
L032037	0.3	<0.05	0.01	0.11	1.8	0.11	1.44	0.09	1.3	0.2	0.16	30.3	<1	0.4	<0.05	0.17	0.33	0.1	<0.02	<0.05	<0.1	5.85	0.6
L032038	<0.1	<0.05	0.03	<0.02	0.6	0.04	0.61	0.09	1.4	14	0.66	4	<1	<0.3	<0.05	0.06	0.3	<0.1	0.14	<0.05	0.2	2.44	0.3
L032039	<0.1	0.19	<0.01	<0.02	9.9	0.03	0.54	<0.05	1.7	2.3	0.09	1.5	<1	<0.3	<0.05	0.15	0.36	1.5	0.02	0.29	<0.1	2.92	0.2
L032040	<0.1	0.35	0.02	<0.02	9.5	0.02	0.64	<0.05	61.2	3.2	0.92	1.2	<1	<0.3	<0.05	0.1	0.28	1.5	0.04	0.22	<0.1	1.74	0.2
L032041	<0.1	0.53	<0.01	<0.02	20	0.05	0.65	0.16	3.4	10.4	0.53	2.6	<1	<0.3	<0.05	0.24	0.32	2.4	0.2	0.45	0.1	4.75	0.4
L032042	<0.1	0.59	<0.01	<0.02	19	0.03	0.23	0.08	2.3	6.2	0.35	1.5	<1	<0.3	<0.05	0.18	<0.05	2.4	0.11	0.37	0.5	2.95	0.2
L032043	<0.1	0.4	0.02	<0.02	14	0.05	0.27	0.08	1.1	8.6	0.15	3.2	<1	<0.3	<0.05	0.21	<0.05	1.4	0.11	0.26	<0.1	4.36	0.3
L032044	0.2	0.07	0.03	0.05	5.5	0.14	0.49	0.18	5.5	5.4	0.51	14.1	<1	<0.3	<0.05	0.5	0.95	0.5	0.1	0.1	1.3	12.9	1.4
L032045	<0.1	0.52	0.02	<0.02	14.8	0.02	0.23	<0.05	19.4	4.1	0.51	1	<1	<0.3	<0.05	0.14	<0.05	2.2	0.06	0.36	<0.1	2.3	0.2
L032046	<0.1	0.35	0.48	0.2	14.2	0.02	0.36	<0.05	7.1	6.3	0.88	0.7	<1	<0.3	<0.05	0.14	<0.05	1.7	0.09	0.21	0.1	1.91	0.1
L032047	0.1	0.5	<0.01	<0.02	29.4	0.04	0.4	0.35	16.1	8.6	0.41	3.4	<1	<0.3	<0.05	0.19	<0.05	5.6	0.2	1.16	<0.1	3	0.2
L032048	<0.1	0.35	<0.01	<0.02	11.2	0.02	0.53	0.06	5.3	4.1	0.15	1.1	<1	<0.3	<0.05	0.13	0.69	1.5	0.05	0.23	<0.1	2.27	0.1
L032049	0.1	0.09	0.02	0.03	3.6	0.11	0.5	0.22	4.6	12.4	0.8	10	<1	<0.3	<0.05	0.34	0.2	0.4	0.31	<0.05	0.6	9.28	0.8
L032050	0.2	0.05	0.01	0.03	4.6	0.14	0.42	0.27	4.5	19.4	0.41	11.2	<1	0.4	<0.05	0.43	0.06	0.5	0.21	0.05	1.3	10.5	0.9
L032051	<0.1	0.21	0.01	<0.02	6.8	0.12	5.68	<0.05	0.7	2.5	0.07	9.8	<1	<0.3	<0.05	0.26	0.11	0.6	0.02	0.11	<0.1	6.68	0.7
L032052	<0.1	0.24	<0.01	<0.02	12.4	0.01	0.52	<0.05	11.6	3.3	0.24	0.6	<1	<0.3	<0.05	0.11	<0.05	1.3	0.04	0.2	<0.1	1.39	0.1
L032053	<0.1	0.2	0.06	<0.02	10.3	0.02	3.82	<0.05	49.7	4	0.5	0.7	<1	<0.3	<0.05	0.09	0.78	1.3	0.06	0.16	<0.1	1.33	0.1
L032054	<0.1	0.42	0.04	0.05	19.4	0.02	0.76	<0.05	19	3.1	0.14	1	<1	1.1	<0.05	0.2	0.13	2.3	0.04	0.25	<0.1	2.75	0.2
L032055	<0.1	0.36	0.01	<0.02	11.4	0.02	1.69	<0.05	6	3.6	0.09	1.2	<1	<0.3	<0.05	0.12	0.43	1.5	0.04	0.22	<0.1	2.18	0.2
L032056	<0.1	0.5	0.43	0.12	15.5	0.02	0.94	<0.05	8.4	3	4.25	1.1	<1	0.3	<0.05	0.16	1.24	1.8	0.03	0.2	<0.1	2.24	0.2
L032057	0.1	0.33	<0.01	<0.02	30.4	0.05	0.18	<0.05	1.7	2.7	0.26	6.1	<1	<0.3	<0.05	0.34	<0.05	3.9	0.03	0.42	<0.1	5.21	0.4
L032058	<0.1	0.5	0.01	0.03	17.2	0.02	0.99	0.1	4.6	5.8	0.28	1.6	<1	0.3	<0.05	0.11	0.12	2.1	0.04	0.34	0.2	1.77	0.1
L032059	<0.1	0.15	0.02	<0.02	15.5	0.02	0.52	<0.05	2.3	2.6	1.48	1.4	<1	<0.3	<0.05	0.14	<0.05	1.7	0.03	0.17	<0.1	1.93	0.2
L032060	0.1	0.16	1.82	1.19	1.9	0.07	1.07	0.09	1.9	1.7	0.22	12.5	3	<0.3	<0.05	0.14	1.92	0.3	0.02	<0.05	<0.1	4.14	0.5
L032061	<0.1	0.13	0.03	0.04	2.6	0.06	0.5	<0.05	2	2.6	0.42	5.6	<1	<0.3	<0.05	0.1	1.12	0.3	0.03	<0.05	<0.1	2.67	0.4
L032062	<0.1	0.43	<0.01	<0.02	13.7	0.02	0.36	0.14	13.4	17.2	0.47	1.2	<1	<0.3	<0.05	0.11	<0.05	1.8	0.37	0.29	<0.1	1.69	0.1
L032063	<0.1	0.65	0.03	<0.02	17	0.03	0.44	0.07	41.7	15.2	1.07	1.2	<1	<0.3	<0.05	0.15	0.22	1.9	0.4	0.36	<0.1	2.17	0.2
L032064	<0.1	0.28	0.05	0.08	10.3	0.09	1.24	0.05	2.1	3.1	0.36	4.7	<1	<0.3	<0.05	0.32	1.71	1.3	0.04	0.23	<0.1	7.5	0.7
L032065	0.3	0.85	0.09	<0.02	106	0.06	0.17	0.09	8.7	11.6	0.24	1.8	<1	<0.3	<0.05	0.78	<0.05	14.9	0.1	1.24	<0.1	9.24	0.5
L032066	<0.1	0.24	0.01	<0.02	11.6	0.02	0.66	<0.05	2.8	2.3	0.45	1.5	<1	0.4	<0.05	0.13	0.09	1	0.02	0.15	<0.1	1.77	0.1
L032067	<0.1	0.32	0.06	0.06	9.8	0.02	2.84	0.08	20.1	3.2	9.42	0.7	3	0.3	<0.05	0.13	0.4	1.4	0.13	0.14	0.2	2.18	0.2
L032068	<0.1	0.3	<0.01	<0.02	26.7	0.04	0.4	<0.05	3.9	3.5	1.07	8	<1	<0.3	<0.05	0.34	<0.05	3.8	0.04	0.45	<0.1	4.68	0.3
L032069	<0.1	0.3	0.9	0.21	14.2	0.03	0.89	<0.05	1.9	2.9	2.13	1.8	<1	<0.3	<0.05	0.17	0.52	1.5	0.04	0.15	<0.1	2.78	0.2
L032070	<0.1	0.13	0.56	0.17	5.1	0.09	0.61	<0.05	4	3.9	3.12	11.3	<1	<0.3	<0.05	0.23	1.47	0.6	0.09	0.09	<0.1	6.2	0.6
L032071	0.1	0.07	0.01	0.03	4.1	0.16	0.34	0.21	6.4	18.8	0.85	12.1	<1	<0.3	<0.05	0.45	0.08	0.4	0.28	0.06	0.9	12.4	1.1
L032072	0.2	<0.05	0.09	0.07	4.1	0.1	0.46	0.19	3.1	11.2	0.64	20.3	<1	0.3	<0.05	0.4	0.28	0.4	0.21	0.05	15.1	9.5	0.8
L032073	0.2	0.05	0.07	0.06	4.2	0.13	0.69	0.29	6.5	22	0.68	14.4	1	0.4	<0.05	0.37	2.16	0.4	0.28	0.06	1.5	9.62	0.9
L032074	<0.1	0.47	<0.01	<0.02	18.8	0.03	0.35	0.11	1.5	7.7	0.23	2.4	<1	<0.3	<0.05	0.2	<0.05	2.1	0.13	0.31	0.2	3.09	0.2
L032075	<0.1	0.27	0.01	<0.02	11.3	0.04	0.78	<0.05	2	2.9	0.47	1.1	<1	<0.3	<0.05	0.15	0.2	1.5	0.04	0.31	0.4	3.15	0.3
L032076	<0.1	0.45	<0.01	<0.02	13.2	0.06	0.27	0.11	1.6	15.3	0.15	3.8	<1	<0.3	<0.05	0.22	<0.05	1.5	0.21	0.29	0.1	4.47	0.4
L032077	<0.1	0.59	<0.01	<0.02	14.5	0.02	0.54	<0.05	17.1	5	0.38	1.1	<1	<0.3	<0.05	0.15	<0.05	2.1	0.06	0.41	0.1	2.46	0.2
L032078	<0.1	0.3	<0.01	<0.02	13.5	0.02	0.88	<0.05	9.9	2.6	0.29	1	<1	<0.3	<0.05	0.16	0.76	1.9	0.03	0.31	0.1	2.4	0.1
L032079	<0.1	0.3	<0.01	<0.02	13	0.02	0.26	<0.05	12.6	3.6	0.27	0.9	<1	<0.3	<0.05	0.17	<0.05	1.8	0.04	0.3	<0.1	2.62	0.1
L032080	0.1	0.08	0.01	0.04	4.4	0.17	0.67	0.21	6.1	12.5	0.75	19.4	2	0.5	<0.05	0.47	0.74	0.4	0.26	0.07	0.2	13.5	1.2
L032081	0.2	0.11	0.06	0.1	7.3	0.14	0.87	<0.05	2.9	1.3	0.2	9.7	2	<0.3	<0.05	0.47	0.92	1	<0.02	0.12	<0.1	11.6	1
L032082	0.1	<0.05	0.05	0.11	3.8	0.09	0.67	<0.05	2.9	1	0.24	7.7	<1	<0.3	<0.05	0.2	1.13	0.3	<0.02	<0.05	<0.1	4.34	0.6
L032083	<0.1	0.23	<0.01	0.03	15.7	0.03	0.48	<0.05	2.6	2	0.17	0.9	<1	<0.3	<0.05	0.19	0.4	1.6	<0.02	0.22	<0.1	2.84	0.2
L032084	0.2	0.05	0.01	0.03	6.7	0.1	0.62	0.16	2.3	27.8	0.2	12	<1	0.5	<0.05	0.49	0.58	0.7	0.32	0.1	0.4	9.67	0.7
L032085	0.2	0.21	0.01	0.05	10.2	0.11	0.64	0.12	4.1	15.3	0.43	15.2	2	0.8	<0.05	0.44	0.22	1.1	0.21	0.16	0.1	9.39	0.8
L032086	<0.1	0.42	<0.01	<0.02	17	0.04	0.44	<0.05	3.8	3.3	0.52	1.1	<1	0.7	<0.05	0.18	0.24	1.8	0.03	0.32	<0.1	2.8	0.2
L032087	0.1	0.66	<0.01	<0.02	36.1	0.06	0.72	<0.05	4.5	20.4	0.25	3.3	<1	<0.3	<0.05	0.28	0.19	4.9	0.27	0.62	<0.1	4.6	0.4
L032088	0.1	<0.05	0.01	<0.02	3	0.1	0.22	<0.05	6.1	20.1	0.44	5.6	<1	<0.3	<0.05	0.28	0.59	0.2	0.35	0.07	0.4	7.45	0.6

Client : AMEC
Project : Rainy River
SGS Project : 08121
Test : Metals by Aqua Regia Digestion with ICP-MS Finish
Date : October 18 , 2011

Sample ID	Ge	Hf	Hg	In	La	Lu	Mo	Nb	Pb	Rb	Sb	Sc	Se	Sn	Ta	Tb	Te	Th	Tl	U	W	Y	Yb
	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
L032089	0.2	<0.05	15.7	1.75	2.5	0.14	0.82	0.17	14.1	10.5	2.03	7.7	2	0.3	<0.05	0.3	3.07	0.3	0.15	0.06	9.6	9.1	1
L032090	<0.1	0.53	0.06	<0.02	18.3	0.04	0.52	<0.05	5	15.9	0.51	1.4	<1	<0.3	<0.05	0.21	0.12	1.9	0.23	0.34	<0.1	3.79	0.3
L032091	0.1	0.1	0.05	<0.02	10.4	0.11	0.52	<0.05	5.4	1.8	0.16	7.2	<1	<0.3	<0.05	0.32	0.93	1.2	0.02	0.15	<0.1	6.58	0.7
L032092	0.2	<0.05	0.02	0.03	3	0.11	0.27	<0.05	3.2	6.8	0.28	12.2	<1	<0.3	<0.05	0.28	0.23	0.3	0.1	0.07	0.4	8.47	0.7
L032093	0.3	<0.05	0.02	0.03	5.4	0.14	0.64	0.08	2.1	8.1	0.21	11.5	<1	<0.3	<0.05	0.47	1.25	0.5	0.16	0.07	0.5	10.6	0.9
L032094	0.1	0.28	<0.01	0.06	23.3	0.05	0.54	<0.05	6.9	2.1	0.53	2.4	<1	<0.3	<0.05	0.26	0.25	4.2	0.07	0.48	0.1	4.83	0.3
L032095	0.3	0.58	0.01	0.02	74.2	0.1	0.22	<0.05	4.3	22.9	0.1	9.3	<1	<0.3	<0.05	0.74	0.07	11.2	0.3	1.46	0.1	11.2	0.7
L032096	<0.1	0.27	0.01	0.1	11.9	0.02	3.35	<0.05	2.6	2.1	0.08	1.1	<1	<0.3	<0.05	0.13	0.23	1.5	0.03	0.21	<0.1	2.02	0.1
L032097	<0.1	0.25	<0.01	0.03	15.4	0.03	3.2	<0.05	2.4	2.7	<0.05	1.4	<1	0.4	<0.05	0.17	0.21	1.6	0.04	0.22	0.1	2.47	0.2
L032098	<0.1	0.25	0.01	0.05	12.3	0.02	2	<0.05	1.9	2.1	0.09	0.9	<1	<0.3	<0.05	0.14	0.16	1.7	0.02	0.31	<0.1	2.23	0.1
L032099	<0.1	0.36	<0.01	0.05	14.2	0.03	0.47	<0.05	2.4	2.9	0.11	0.8	<1	<0.3	<0.05	0.17	0.74	1.8	0.03	0.28	<0.1	2.92	0.2
L032100	<0.1	0.38	<0.01	<0.02	8.5	0.02	0.86	<0.05	1.3	2.9	0.11	0.7	1	<0.3	<0.05	0.11	0.28	1.3	0.03	0.24	0.1	2.08	0.1
L032101	0.2	0.08	0.03	0.04	5.3	0.14	0.44	0.23	3.2	26.8	0.51	9.9	<1	0.4	<0.05	0.5	0.08	0.5	0.29	0.06	0.6	11.8	0.9
L032102	<0.1	0.44	0.21	0.06	23	0.04	1.12	0.18	2.4	24.2	0.38	1.5	<1	0.3	<0.05	0.26	0.25	2.4	0.42	0.45	9.2	3.87	0.3
L032103	0.1	0.82	0.01	<0.02	27.7	0.06	0.39	0.18	1.7	19.4	0.07	4.2	<1	0.5	<0.05	0.31	<0.05	2.6	0.23	0.46	0.1	4.86	0.4
L032104	0.3	0.06	0.32	0.07	5.1	0.12	0.59	0.22	4.2	16.3	0.23	6.8	<1	<0.3	<0.05	0.46	1.36	0.5	0.22	0.05	0.5	8.92	0.8
L032105	<0.1	0.73	0.03	<0.02	14	0.02	0.37	0.08	35.9	5	0.51	0.5	<1	<0.3	<0.05	0.13	0.05	2.3	0.07	0.45	0.3	2.25	0.2
L032106	0.3	0.49	0.02	<0.02	34.4	0.06	0.12	0.09	33.1	50.5	0.39	8.2	<1	0.3	<0.05	0.32	<0.05	4.3	0.89	0.67	<0.1	4.96	0.4
L032107	0.1	0.38	0.03	<0.02	25.6	0.04	0.35	<0.05	4	3.5	0.06	1.3	<1	<0.3	<0.05	0.26	<0.05	3.4	0.05	0.51	2.5	4.04	0.3
L032108	0.1	0.17	0.02	<0.02	5	<0.01	0.55	<0.05	<0.2	0.7	0.1	0.6	<1	<0.3	<0.05	0.06	<0.05	0.7	<0.02	0.07	4.2	0.72	<0.1
L032109	<0.1	0.3	<0.01	<0.02	14.5	0.03	0.52	0.06	0.7	4.8	0.23	0.7	<1	<0.3	<0.05	0.17	0.06	1.4	0.08	0.26	<0.1	2.73	0.2
L032110	<0.1	0.35	<0.01	<0.02	16.4	0.04	0.28	<0.05	32.8	2.6	0.1	0.9	<1	<0.3	<0.05	0.21	0.08	2.4	0.04	0.3	<0.1	3.35	0.3
L032111	<0.1	0.18	0.02	<0.02	8.7	0.01	2.45	<0.05	17.5	2.5	0.1	0.5	<1	<0.3	<0.05	0.09	0.05	0.9	0.04	0.13	<0.1	1.03	<0.1
L032112	0.1	0.27	0.02	<0.02	31.5	0.05	0.65	<0.05	2.8	2.7	0.16	3.9	<1	<0.3	<0.05	0.39	<0.05	3.1	0.04	0.4	<0.1	5.36	0.3
L032113	<0.1	0.26	0.03	<0.02	19.1	0.01	0.42	<0.05	0.4	1.8	0.27	0.8	<1	<0.3	<0.05	0.13	<0.05	2.6	0.02	0.23	<0.1	1.38	0.1
L032114	<0.1	0.32	0.02	<0.02	17.6	0.02	0.45	<0.05	0.5	2.1	0.67	0.7	<1	<0.3	<0.05	0.17	<0.05	1.8	0.02	0.28	<0.1	1.77	0.1
L032115	<0.1	0.31	0.02	<0.02	19.5	0.02	0.54	<0.05	1.2	2.2	1.81	0.7	<1	<0.3	<0.05	0.14	0.07	2.7	0.03	0.27	<0.1	1.83	0.2
L032116	<0.1	0.31	0.03	<0.02	23.6	0.02	0.44	<0.05	0.5	2	2.65	0.8	<1	<0.3	<0.05	0.17	<0.05	3.2	0.03	0.28	0.2	2.07	0.1
L032117	<0.1	0.15	0.02	<0.02	11.4	0.04	0.45	<0.05	5.9	1.9	1.69	4	<1	<0.3	<0.05	0.19	<0.05	1.4	0.03	0.14	<0.1	3.52	0.3
L032118	<0.1	0.08	0.02	<0.02	4.7	0.05	0.44	<0.05	1.9	1.4	0.96	6.5	<1	<0.3	<0.05	0.15	<0.05	0.6	0.03	0.05	0.1	3.24	0.3
L032119	<0.1	0.29	<0.01	<0.02	24	0.02	0.52	<0.05	2.5	2.1	0.59	0.8	<1	<0.3	<0.05	0.21	<0.05	2.5	0.03	0.19	<0.1	2.55	0.2
L032120	0.3	1.42	<0.01	<0.02	108	0.09	0.12	0.13	19.5	22.6	0.13	0.8	<1	<0.3	<0.05	0.75	<0.05	16.7	0.27	2.1	<0.1	10.2	0.6
L032121	<0.1	0.2	<0.01	<0.02	11.5	0.03	0.46	<0.05	1.8	2	0.48	0.8	<1	<0.3	<0.05	0.16	<0.05	1.6	<0.02	0.23	<0.1	2.92	0.2
L032122	<0.1	0.31	0.05	0.04	13.8	0.03	0.95	<0.05	3.2	2.4	1.97	1	1	<0.3	<0.05	0.14	0.2	1.5	0.04	0.2	0.1	2.59	0.2
L032123	<0.1	0.17	0.01	<0.02	13.6	0.03	0.44	<0.05	2.3	1.9	0.95	0.8	<1	<0.3	<0.05	0.13	<0.05	1.7	0.03	0.22	<0.1	2.02	0.2
L032124	0.1	0.61	<0.01	<0.02	55.5	0.06	0.43	0.08	4.8	6.4	<0.05	0.7	<1	<0.3	<0.05	0.39	<0.05	10.8	0.05	1.66	<0.1	6.01	0.4
L032125	0.2	0.42	0.13	<0.02	26.9	0.04	0.17	0.06	2.7	5.7	1.02	6.3	<1	0.5	<0.05	0.26	<0.05	4.1	0.1	0.44	<0.1	4.55	0.3
L032126	<0.1	0.21	0.04	<0.02	11.4	0.06	0.7	<0.05	1.9	3.8	0.47	1.8	<1	<0.3	<0.05	0.24	0.11	1.3	0.04	0.2	2.1	4.73	0.4
L032127	0.2	0.77	<0.01	<0.02	95.1	0.07	0.14	0.08	5.3	6.8	0.11	0.6	<1	<0.3	<0.05	0.75	<0.05	14.7	0.06	1.53	0.1	9.51	0.5
L032128	0.1	0.38	<0.01	<0.02	23.4	0.05	0.3	<0.05	0.5	2	<0.05	2.7	<1	<0.3	<0.05	0.26	<0.05	2.3	<0.02	0.27	<0.1	4.09	0.3
L032129	0.1	0.44	0.01	<0.02	29.6	0.05	0.67	<0.05	5.1	2.2	0.12	1.7	<1	<0.3	<0.05	0.28	<0.05	3.9	0.02	0.37	<0.1	3.82	0.3
L032130	0.1	0.61	0.03	<0.02	56.6	0.05	1.1	0.08	7.9	6.4	0.82	0.6	<1	<0.3	<0.05	0.33	<0.05	11.7	0.07	1.6	<0.1	5.16	0.3
L032131	<0.1	0.17	<0.01	<0.02	11.3	0.01	0.29	<0.05	<0.2	1.8	0.48	0.6	<1	<0.3	<0.05	0.1	<0.05	1.3	<0.02	0.14	<0.1	1.24	<0.1
L032132	0.3	0.45	0.03	0.03	37.9	0.08	0.24	0.12	2.7	95.2	0.36	17	<1	0.3	<0.05	0.7	0.11	4	0.86	0.59	0.1	11.4	0.6
L032133	0.1	0.11	0.02	0.08	3.9	0.08	1.39	0.11	3.4	4.5	0.15	3.6	5	<0.3	<0.05	0.25	12.2	0.6	0.07	0.05	<0.1	6.54	0.6
L032134	<0.1	0.24	0.01	0.04	17.1	0.03	0.47	<0.05	<0.2	1.1	<0.05	1.5	<1	<0.3	<0.05	0.17	0.53	1.9	<0.02	0.18	<0.1	2.64	0.2
L032135	<0.1	0.17	0.07	<0.02	14.4	0.02	0.34	<0.05	1	1.9	0.87	0.6	<1	<0.3	<0.05	0.14	<0.05	1.5	0.02	0.16	<0.1	1.36	<0.1
L032136	<0.1	0.16	0.02	<0.02	10.6	0.03	0.55	<0.05	0.6	1.7	<0.05	0.7	<1	<0.3	<0.05	0.12	0.42	1.1	<0.02	0.21	<0.1	2.22	0.2
L032137	<0.1	0.2	0.02	<0.02	11.5	0.03	6.98	<0.05	1	1.8	0.11	0.6	<1	<0.3	<0.05	0.12	0.35	1.5	<0.02	0.25	<0.1	2.02	0.2
L032138	<0.1	0.19	<0.01	<0.02	13	0.03	0.48	<0.05	1.2	1.8	<0.05	0.6	<1	<0.3	<0.05	0.14	0.33	1.5	<0.02	0.23	<0.1	2.41	0.2
L032139	0.1	0.29	<0.01	<0.02	19.8	0.06	0.6	<0.05	0.7	0.9	<0.05	5	<1	<0.3	<0.05	0.25	0.13	2	<0.02	0.17	<0.1	4.31	0.4
L032140	<0.1	0.21	0.02	<0.02	12.6	0.04	1.04	<0.05	0.6	1.6	0.32	0.9	<1	<0.3	<0.05	0.17	0.67	1.6	<0.02	0.27	<0.1	3.02	0.3
L032141	<0.1	0.26	0.03	<0.02	13.6	0.02	1.33	0.15	0.9	2.3	0.22	0.6	<1	<0.3	<0.05	0.12	0.49	1.6	0.02	0.14	<0.1	1.97	0.1
L032142	0.1	0.11	<0.01	<0.02	1.9	0.06	5.54	0.14	0.6	0.6	<0.05	4.7	<1	2.6	<0.05	0.17	0.25	0.3	<0.02	<0.05	<0.1	4.63	0.4
L032143	0.1	0.15	0.02	<0.02	8.5	0.12	1.66	0.11	0.7	1.9	0.05	5.7	<1	<0.3	<0.05	0.39	0.28	0.8	<0.02	0.09	<0.1	9.98	0.8
L032144	<0.1	0.27	0.02	<0.02	10.2	0.03	1.78	0.07	0.9	2.2	0.09	0.8	1	<0.3	<0.05	0.13	0.34	1.4	0.02	0.19	<0.1	2.68	0.2
L032145	<0.1	0.11	0.01	<0.02	5.7	0.06	1.56	0.07	0.8	0.9	<0.05	3.9	3	<0.3	<0.05	0.18	0.44	0.8	<0.02	0.07	<0.1	4.6	0.4
L032146	<0.1	0.05	0.01	<0.02	0.5	0.04	0.67	0.12	0.4	0.4	0.66	2.6	<1	<0.3	<0.05	0.05	<0.05	<0.1	<0.02	<0.05	0.2	1.99	0.3
L032147	0.1	0.07	0.03	<0.02	1.5	0.06	1.34	0.09	0.9	0.7	0.39	3.2	<1	0.4	<0.05	0.05	0.18	<0.1	<0.02	0.09	0.1	2.21	0.4
L032148	0.3	0.17	0.02	0.03	2.3	0.15	2.77	0.18	0.5	0.5	0.27	10.1	<1	0.5	<0.05	0.21	0.35	0.2	<0.02	0.1	0.1	8.07	0.9
L032149	0.2	0.1	0.02	0.04	3.8	0.16	5.99	0.1	1.2	0.9	0.07	12.3	1	<0.3	<0.05	0.24	0.31	0.3	<0.02	0.1	0.1	7.93	0.9
L032150	<0.1	0.21	0.02	<0.02	13.7	0.03	2.57	0.09	2.1	3	0.09	0.8	<1	<0.3	<0.05	0.14	0.15	1.4	0.02	0.25	<0.1	2.37	0.2
L032151	0.3	0.74	<0.01	0.03	72.5	0.08	0.33	0.2	7.9	62.2	0.18	14.3	<1	0.7	<0.05	0.5	<0.05	10.7	0.46	1.12	<0.1	8.46	0.6
L032152	<0.1	0.11	0.03	<0.02	5.1	0.12	1.73	0.07	1.5	1.8	0.16	5.1	<1	<0.3	<0.05	0.33	0.42	0.6	0.03	0.08	0.6	9.46	0.8
L032153	0.2	<0.05	0.12	0.06	3	0.18	0.92	0.28	8.9	12.7	0.71	10.2	<1	0.3	<0.05	0.36	1.16	0.3	0.21	<0.05	14.9	11.5	1.2
L032154	<0.1	0.29	0.05	<0.02	14.7	0.02	0.64	<0.05	8.1	2.3	0.1	1	<1	<0.3	<0.05	0.14	<0.05	1.8	0.03	0.28	0.4	2.19	0.1
L032155	0.1	0.15	<0.01	<0.02	1.1	0.05	0.23	0.11	1.1	0.4	<0.05	3.5	<1	<0.3	<0.05	0.11	<0.05	0.1	0.03	<0.05	<0.1	3.77	0.3
L032156	<0.1	0.31	0.02	0.24	18.2	0.02	0.42	<0.05	2.7	4.4	0.13	0.7	<1	<0.3	<0.05	0.18	1.36	2	0.05	0.27	0.2	2.66	0.1
L032157	0.2	0.06	<0.01	0.07	4.1	0.09	0.77	0.19	5.9	17.1	0.3	9.1	<1	<0.3	<0.05	0.26	2.56	0.4	0.21	<0.05	0.2	6.82	0.6
L032158	0.2	0.07	0.01	0.1	3.1	0.11	0.59	0.17	7.1	4.7	0.18	13.9	<1	0.3	<0.05	0.32	2.33	0.4	0.05	<0.05	0.9	9.54	0.9
L032159	<0.1	<0.05	<0.01	<0.02	0.7	0.04	0.25	0.09	0.8	0.3	0.54	2.7	<1	<0.3	<0.05	0.05	0.16	<0.1	<0.02	<0.05	0.1	2.13	0.3
L032160	0.1	0.16	<0.01	<0.02	12.4	0.02	0.2	0.18	1.7	0.3	0.44	2.5	<1	<0.3	<0.05	0.12	<0.05	2	<0.02	0.2	<0.1	2.09	0.1
L032161	0.3	<0.05	0.05	0.03	0.7	0.09	0.63	0.08	0.8	<0.2	0.23	8.1	<1	<0.3	<0.05	0.06	1.17	0.1	<0.02	<0.05	0.4	2.45	0.5
L032162	0.1	<0.05	<0.01	<0.02	0.5	0.05	1.61	0.08	0.4	0.4	0.46	3	<1	<0.3	<0.05	0.06	0.2	<0.1	<0.02	<0.05	0.1	2.19	0.3
L032163	0.3	<0.05	0.06	0.12	2.9	0.14	2.25	0.07	1.3	0.3	0.06	27.9	<1	<0.3	<0.05	0.26	0.81	0.3	<0.02	<0.05	0.1	7.1	0.8
L032164	<0.1	0.33	0.04	<0.02	26	0.04	2.57	<0.05	1.2	1.8	0.74	0.8	<1	<0.3	<0.05	0.24	0.33	3	<0.02	0.4	<0.1	3.41	0.3
L032165	<0.1	0.21	0.02	<0.02	12.9	0.03	0.49	<0.05	1	2.6	<0.05	0.7	<1	<0.3	<0.05	0.13	0.05	1.5	0.02	0.23	<0.1	2.1	0.2
L032166	<0.1	0.21	0.02	<0.02	13.4	0.02	0.45	<0.05	1.7	2.2	0.08	0.5	<1	<0.3	<0.05	0.13	0.28	1.4	<0.02	0.21	<0.1	2.3	0.2
L032167	0.3	<0.05	0.01	0.04	1.3	0.09	0.92	0.08	1.1	1.2	0.22	14.7	<1	<0.3	<0.05	0.09	0.15	0.2	<0.02	<0.05	<0.1	3.69	0.5
L032168	<0.1	0.62	0.02	<0.02	14.2	0.02	0.21	<0.05	39.5	5.2	0.61	0.6	<1	<0.3	<0.05	0.14	0.06	2.4	0.07	0.41	<0.1	2.43	0.2
L032169	0.3	0.52	<0.01	0.05	22.5	0.08	0.17	0.05	27.3	<0.2	0.17	16.7	1	<0.3	<0.05	0.37	1.05	3.7	<0.02	0.45	<0.1	7.8	0.5
L032170	0.5	0.88	0.05	0.06	104	0.21	0.13	0.7	15.2	185	0.27	20.2	1	2	<0.05	2.54	<0.05	7	1.75	0.56	<0.1	40.8	1.5
L032171	0.2	0.35	<0.01	<0.02	36.5	0.07	0.17	<0.05	2.1	8.9	0.11	10	<1	<0.3	<0.05	0.4	0.1	4	0.1	0.46	<0.1	7.62	0.5
L032172	0.1	0.11	<0.01	<0.02	1.2	0.04	0.25	0.08	1.3	1.1	0.13	3.5	<1	0.4	<0.05	0.1	<0.05	0.1	0.05	<0.05	<0.1	3.35	0.3
L032173	<0.1	0.34	<0.01	<0.02	10.2	0.03	0.3	0.15	2	5.9	0.13	2.3	<1	<0.3	<0.05	0.13	<0.05	1.5	0.06	0.27	0.9	2.6	0.2
L032174	<0.1	0.44	0.02	<0.02	24.5	0.04	0.64	0.19	8.6	7.8	0.27	1.9	<1	<0.3	<0.05	0.26	<0.05	3.3	0.1	0.51	0.3	4.4	0.3
L032175	<0.1	0.43	0.01	0.05	19.3	0.03	0.35	0.12	17.4	5.4	0.18	1.5	<1	0.7	<0.05	0.21	<0.05	2.2	0.07	0.46	1.1	3.7	0.2
L032176	<0.1	0.35	0.03	<0.02	13	0.03	0.55	0.05	2.8	3.9	0.26	1.1	<1	<0.3	<0.05	0.13	0.08	1.4	0.05	0.21	<0.1	2.38	0.2
L032177	<0.1	0.41	<0.01	<0.02	13.9	0.03	0.44	0.1	9.5	9.3	0.3	1.6	<1	<0.3	<0.05	0.18	<0.05	1.5	0.13	0.27	0.1	3.46	0.2
L032178	0.1	0.1	<0.01	<0.02	1.3	0.04	0.27	0.09	3	1	0.06	2.5	<1	<0.3	<0.05	0.12	<0.05	0.2	0.05	<0.05	<0.1	4.05	0.3

Client : AMEC
Project : Rainy River
SGS Project : 08121
Test : Metals by Aqua Regia Digestion with ICP-MS Finish
Date : October 18 , 2011

Sample ID	Ge ppm	Hf ppm	Hg ppm	In ppm	La ppm	Lu ppm	Mo ppm	Nb ppm	Pb ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Tl ppm	U ppm	W ppm	Y ppm	Yb ppm
L032179	<0.1	0.38	<0.01	<0.02	11.5	0.01	0.42	0.15	3.4	9.7	0.08	1.6	<1	0.5	<0.05	0.11	<0.05	1.1	0.13	0.18	<0.1	1.86	0.1
L032180	<0.1	0.23	0.08	<0.02	11.3	0.02	1.03	<0.05	26	2.4	0.44	0.8	<1	<0.3	<0.05	0.09	0.24	1.5	0.03	0.17	0.1	1.27	0.1
L032181	<0.1	0.16	0.02	<0.02	15.1	0.02	0.6	<0.05	30.8	2.1	0.16	0.6	<1	<0.3	<0.05	0.1	<0.05	1.3	0.03	0.1	<0.1	1.23	0.1
L032182	<0.1	0.19	<0.01	<0.02	15.9	0.03	0.39	0.05	3.8	1.9	0.25	1.2	<1	<0.3	<0.05	0.19	0.16	1.8	0.02	0.33	<0.1	3.21	0.2
L032183	<0.1	0.22	<0.01	<0.02	16.5	0.03	0.37	<0.05	3.5	2.5	0.2	1.3	<1	0.4	<0.05	0.19	0.42	1.9	0.04	0.29	<0.1	3.37	0.2
L032184	<0.1	0.15	0.01	<0.02	11.4	0.02	0.4	<0.05	10.6	2.6	0.21	0.6	<1	<0.3	<0.05	0.09	<0.05	1.3	0.03	0.13	<0.1	1.53	0.1
L032185	<0.1	0.16	0.05	<0.02	8.7	0.02	0.94	<0.05	16.7	2.1	1.4	0.8	<1	<0.3	<0.05	0.1	<0.05	0.9	0.03	0.12	<0.1	1.76	0.1
L032186	<0.1	0.31	0.01	<0.02	16.6	0.02	0.45	<0.05	109	9.9	0.84	1	<1	0.5	<0.05	0.13	<0.05	2	0.31	0.33	<0.1	1.73	0.1
L032187	<0.1	0.14	<0.01	<0.02	12.3	0.02	0.46	<0.05	5.3	3.2	0.19	0.9	<1	<0.3	<0.05	0.13	0.06	1.6	0.05	0.24	<0.1	2.16	0.1
L032201	0.2	0.09	0.03	<0.02	1.8	0.08	3.09	0.1	0.7	<0.2	0.18	3.2	<1	0.3	<0.05	0.1	0.37	0.1	<0.02	<0.05	<0.1	3.58	0.4
L032202	<0.1	0.17	<0.01	<0.02	15.6	0.03	5.55	<0.05	1.2	1.6	0.05	0.7	<1	<0.3	<0.05	0.15	0.12	1.5	<0.02	0.2	<0.1	2.75	0.2
L032203	<0.1	0.08	<0.01	<0.02	11.3	0.03	1.56	<0.05	0.6	2	<0.05	0.7	<1	<0.3	<0.05	0.11	<0.05	1.6	0.02	0.13	<0.1	1.61	0.2
L032204	<0.1	0.15	0.05	<0.02	13.2	0.02	0.35	<0.05	2.9	2.5	0.09	0.8	<1	<0.3	<0.05	0.14	0.05	1.6	0.03	0.14	<0.1	2.31	0.2
L032205	<0.1	0.16	<0.01	<0.02	6.6	<0.01	0.5	<0.05	5.3	2.4	0.12	0.9	<1	<0.3	<0.05	0.09	0.58	0.8	0.03	0.07	<0.1	1.54	<0.1
L032206	<0.1	0.37	<0.01	<0.02	14.7	0.02	0.5	0.11	2.8	5.5	0.12	1.3	<1	<0.3	<0.05	0.15	<0.05	2	0.1	0.3	0.1	2.25	0.2
L032207	<0.1	0.15	0.04	0.11	12.6	0.01	0.33	<0.05	17	3.7	0.57	0.5	<1	<0.3	<0.05	0.13	<0.05	1.9	0.05	0.25	<0.1	1.74	<0.1
L032208	0.1	0.06	0.02	<0.02	9.5	0.02	1.19	<0.05	7.7	8.9	0.19	2.4	<1	0.3	<0.05	0.12	0.4	1.5	0.13	0.21	0.5	1.98	0.2
L032209	<0.1	0.06	<0.01	<0.02	3.7	0.03	0.43	<0.05	3	1.8	0.15	3.5	<1	0.3	<0.05	0.07	0.11	0.8	0.02	0.16	0.1	1.88	0.2
L032210	<0.1	0.08	<0.01	<0.02	4.3	0.04	0.34	<0.05	5.3	33.6	0.23	4.3	<1	<0.3	<0.05	0.09	0.12	0.8	0.35	0.12	<0.1	2.48	0.2
L032211	<0.1	0.08	0.02	<0.02	4.1	0.02	0.36	<0.05	5.5	2.5	0.09	2.9	<1	<0.3	<0.05	0.05	0.06	0.9	0.02	0.13	0.1	1.16	0.1
L032212	<0.1	0.07	<0.01	<0.02	4.5	0.03	0.11	0.08	4.7	3.2	0.16	4.6	<1	<0.3	<0.05	0.09	0.05	1	0.03	0.08	0.2	2.12	0.2
L032213	<0.1	0.26	2.41	0.08	23.9	0.02	0.59	0.1	1.6	5.3	0.11	1.1	<1	<0.3	<0.05	0.2	0.08	2.6	0.06	0.27	0.2	2.65	0.2
L032214	<0.1	0.14	0.01	<0.02	10.6	0.02	0.35	<0.05	1.1	3.3	0.16	1	<1	<0.3	<0.05	0.11	<0.05	1.2	0.03	0.22	<0.1	2.05	0.2
L032215	<0.1	0.14	0.02	<0.02	17.7	0.02	0.42	<0.05	0.7	3.6	0.18	1.2	<1	<0.3	<0.05	0.14	0.11	1.4	0.04	0.11	<0.1	1.81	0.1
L032216	0.1	0.16	0.03	<0.02	11.9	0.07	0.4	0.1	1.9	5.7	0.3	7.5	<1	<0.3	<0.05	0.23	<0.05	1.3	0.08	0.15	1.8	5.83	0.5
L032217	0.2	<0.05	0.04	0.03	1.9	0.09	0.53	0.07	3.9	6.1	0.24	10	<1	<0.3	<0.05	0.19	<0.05	0.2	0.09	<0.05	3.2	6.64	0.6
L032218	<0.1	0.33	0.03	<0.02	16.4	0.02	0.39	<0.05	40.5	6.7	0.54	0.5	<1	<0.3	<0.05	0.09	<0.05	1.7	0.14	0.23	<0.1	1.39	0.1
L032219	<0.1	0.11	<0.01	<0.02	13.5	0.03	0.91	<0.05	1	2.1	<0.05	1.4	<1	<0.3	<0.05	0.14	0.06	1.6	0.02	0.19	<0.1	2.37	0.2
L032220	<0.1	0.17	0.15	0.03	9.9	0.01	1.99	<0.05	10.9	2.7	0.44	0.5	<1	<0.3	<0.05	0.09	0.54	1.3	0.04	0.13	<0.1	1.32	<0.1
L032221	<0.1	0.19	0.02	<0.02	12.2	0.02	0.61	<0.05	12.3	2.3	0.55	1	<1	<0.3	<0.05	0.12	0.08	1.4	0.04	0.14	0.3	1.84	0.1
L032222	0.3	0.32	<0.01	<0.02	29.2	0.05	0.09	0.1	4.8	1	0.32	7.4	<1	<0.3	<0.05	0.25	<0.05	4.3	0.03	0.57	<0.1	3.48	0.3
L032223	<0.1	0.22	<0.01	<0.02	13.5	0.04	0.29	<0.05	2.1	3.1	0.11	2.3	<1	<0.3	<0.05	0.2	0.13	2.2	0.04	0.35	<0.1	3.54	0.3
L032224	0.4	<0.05	0.69	0.06	49.9	0.09	0.44	0.25	2.8	120	0.23	24.5	<1	0.7	<0.05	0.84	1.34	5	0.98	0.65	94.9	14.4	0.7
Duplicate																							
L032040	<0.1	0.33	0.02	<0.02	9.2	0.02	0.66	<0.05	62.4	3.2	0.91	1.2	<1	<0.3	<0.05	0.1	0.31	1.5	0.05	0.23	<0.1	1.72	0.1
L032080	0.2	0.06	0.02	0.05	4.3	0.17	0.87	0.21	6	12.5	0.76	19.5	2	0.4	<0.05	0.47	0.78	0.4	0.26	0.07	0.2	13.4	1.2
L032100	<0.1	0.39	<0.01	<0.02	9	0.02	0.89	<0.05	1.3	2.9	0.13	0.7	1	<0.3	<0.05	0.11	0.28	1.3	0.03	0.24	0.1	2.09	0.1
L032140	<0.1	0.21	0.02	<0.02	12.3	0.04	1.03	<0.05	0.6	1.5	0.32	0.9	<1	<0.3	<0.05	0.16	0.66	1.6	<0.02	0.25	<0.1	3.01	0.3
L032180	<0.1	0.22	0.08	<0.02	11.2	0.02	1.13	<0.05	25.5	2.3	0.5	0.8	<1	<0.3	<0.05	0.09	0.22	1.5	0.03	0.17	0.1	1.24	0.1
L032224	0.4	<0.05	0.69	0.06	49.3	0.09	0.4	0.27	2.8	121	0.28	24.7	<1	0.7	<0.05	0.81	1.4	5	0.95	0.64	88.3	14.2	0.7
QC																							
CH4	0.3	0.29	0.01	0.09	13.7	0.06	3	0.15	8	63.3	0.25	8.1	2	<0.3	<0.05	0.26	0.45	2	0.39	0.28	2.3	5.33	0.4
CH4	0.3	0.32	0.02	0.1	15.1	0.06	2.93	0.21	7.9	67.9	0.28	6.4	2	0.5	<0.05	0.28	0.44	2.1	0.39	0.28	1.7	5.5	0.4
Certified Values	0.1	0.2	0.017	0.9	13	#N/A	2.8	#N/A	11.5	67	0.4	6.8	1.1	0.6	0.1	#N/A	0.4	1.9	0.4	0.2	2.1	4.9	#N/A
Tolerance +/-	0.2	0.1	0.023	0.01	4	#N/A	0.6	#N/A	4.5	12	0.3	1.4	2.3	0.1	0.2	#N/A	0.1	0.5	0.1	0.1	0.7	1.1	#N/A

Client : AMEC
Project : Rainy River
SGS Project : 08121
Test : Metals by Aqua Regia Digestion with ICP-MS Finish
Date : January 23, 2012

Sample ID	Al %	B ppm	Ba ppm	Ca %	Cr ppm	Cu ppm	Fe %	K %	Li ppm	Mg %	Mn ppm	Na %	Ni ppm	P ppm	S %	Sr ppm	Ti %	V ppm
Method Code	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
LOD	0.01	10	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	0.5	50	0.01	0.5	0.01	1
Keewatin Till	1.56	40	114	1.7	63	31.1	2.73	0.34	25	1.35	421	0.04	33.9	630	0.03	36.8	0.07	52
Labradorean 2m	3.3	20	44	4.36	105	174	7.23	0.32	61	2.25	1010	0.09	44.8	480	3.56	40.1	0.07	278
Labradorean 4m	1.11	30	26	0.96	70	44	2.53	0.11	19	0.78	375	0.05	22.1	460	0.67	19.4	0.06	33
RRR 253655	4.1	20	8	5.06	12	233	10.1	0.02	82	2.81	1410	0.02	51.5	440	0.13	35.4	0.08	668
Duplicate																		
RRR 253655	3.9	10	7	5.07	11	223	9.8	0.02	78	2.71	1380	0.02	50	450	0.12	34.9	0.06	646
QC																		
CH4	1.72	40	292	0.54	101	1930	4.73	1.4	12	1.11	301	0.05	44	660	0.76	8.4	0.18	77
Certified Values	1.72	#N/A	276	0.56	98	2000	4.39	1.37	12.6	1.07	306	0.05	45.6	570	0.75	8	0.188	75
Tolerance +/-	0.41	#N/A	70	0.15	17	202	0.54	0.27	5.5	0.2	38	0.04	5.4	120	0.26	5	0.036	12

Sample ID	Zn ppm	Zr ppm	Ag ppm	As ppm	Be ppm	Bi ppm	Cd ppm	Ce ppm	Co ppm	Cs ppm	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	La ppm	Lu ppm	Mo ppm
Method Code	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
LOD	1	0.5	0.01	1	0.1	0.02	0.01	0.05	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05
Keewatin Till	61	19.8	0.06	4	0.5	0.22	0.14	47.2	13.7	1.84	6	<0.1	0.53	0.02	<0.02	24	0.09	0.58
Labradorean 2m	134	4.4	1.16	23	0.2	0.35	0.18	5.5	37.7	3.82	10.6	0.1	<0.05	0.06	0.03	2.3	0.08	0.56
Labradorean 4m	479	4.8	0.31	11	<0.1	0.2	2.24	16.2	12.8	1.05	3.4	<0.1	0.14	0.08	0.03	7.8	0.04	0.41
RRR 253655	120	5.3	0.91	5	<0.1	0.03	0.09	6.36	46.5	0.45	16.3	0.3	<0.05	0.05	0.06	2.6	0.19	0.15
Duplicate																		
RRR 253655	118	5.1	0.86	4	0.1	0.03	0.08	6	44.7	0.43	15.8	0.3	<0.05	0.06	0.06	2.5	0.19	0.15
QC																		
CH4	191	9.8	2.2	9	<0.1	0.48	1.14	28.4	23.8	2.48	8.9	0.3	0.21	<0.01	0.09	14.3	0.05	3.3
Certified Values	195	9	2.2	7.9	1	0.5	1.14	26	21.3	2.3	8	0.1	0.2	0.017	0.9	13	#N/A	2.8
Tolerance +/-	26	5	0.8	2.3	1	0.2	0.2	7	4.7	0.6	2	0.2	0.1	0.023	0.01	4	#N/A	0.6

Sample ID	Nb ppm	Pb ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Tl ppm	U ppm	W ppm	Y ppm	Yb ppm
Method Code	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
LOD	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
Keewatin Till	0.56	7.5	27.5	0.12	5.2	<1	0.5	<0.05	0.35	<0.05	7.3	0.23	0.94	0.1	7.95	0.7
Labradorean 2m	0.1	4.3	10.9	0.42	8.2	<1	<0.3	<0.05	0.18	1.67	0.3	0.14	0.1	0.6	4.7	0.5
Labradorean 4m	0.15	6.2	4.5	0.16	2.4	<1	<0.3	<0.05	0.13	0.1	1.1	0.06	0.2	0.3	3	0.3
RRR 253655	0.07	2.4	0.7	0.8	27	<1	1	<0.05	0.32	0.11	0.3	<0.02	<0.05	1.9	8.37	1.2
Duplicate																
RRR 253655	0.06	2.5	0.7	0.76	26	<1	0.9	<0.05	0.3	0.11	0.3	<0.02	<0.05	2.5	8.12	1.2
QC																
CH4	0.25	7.8	65.7	0.32	7.4	2	0.6	<0.05	0.25	0.38	2	0.38	0.25	2.8	4.94	0.4
Certified Values	#N/A	11.5	67	0.4	6.8	1.1	0.6	0.1	#N/A	0.4	1.9	0.4	0.2	2.1	4.9	#N/A
Tolerance +/-	#N/A	4.5	12	0.3	1.4	2.3	0.1	0.2	#N/A	0.1	0.5	0.1	0.1	0.7	1.1	#N/A

Client : AMEC
Project : Rainy River
SGS Project # : 08121
Test : Metals by Aqua Regia Digestion with ICP-MS Finish
Date : November 14, 2011

Sample ID	Al	B	Ba	Ca	Cr	Cu	Fe	K	Li	Mg	Mn	Na	Ni	P	S	Sr	Ti	V	Zn	Zr	Ag	As	Be	Bi	Cd	Ce
	%	ppm	ppm	%	ppm	ppm	%	%	ppm	%	ppm	%	ppm	ppm	%	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Method Code	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
LOD	0.01	10	5	0.01	1	0.5	0.01	0.01	1	0.01	2	0.01	0.5	50	0.01	0.5	0.01	1	1	0.5	0.01	1	0.1	0.02	0.01	0.05
L032188	0.96	30	24	0.32	53	20.6	2.5	0.11	27	0.67	107	0.05	10.6	550	2.79	26.4	<0.01	3	129	6.4	1.56	45	0.1	0.8	0.35	18.1
L032189	0.48	60	24	0.56	42	21.3	2.25	0.18	8	0.26	1250	0.04	12.8	510	2.47	11.7	<0.01	2	184	9.5	0.65	46	0.2	0.02	0.44	18.9
L032225	2.5	60	29	0.83	51	145	3.14	0.1	31	0.94	382	0.12	7.5	460	1.45	87.1	<0.01	8	46	13.1	0.43	6	0.1	2.54	0.1	24.6
L032226	1.82	30	34	0.76	46	71.7	2.99	0.14	25	1.01	300	0.17	10.7	500	3.07	97.5	<0.01	8	152	16.3	0.39	8	0.2	3.4	0.38	32.8
L032227	1.78	30	35	0.72	58	204	3.03	0.17	23	1.07	253	0.11	8.5	430	2.93	39.5	<0.01	7	47	16.3	0.38	7	0.2	3.89	0.04	29.6
L032228	1.4	40	103	1.51	83	16.3	2.18	0.47	47	0.87	376	0.07	16.2	510	0.67	28.8	0.07	24	64	20.4	0.16	8	<0.1	0.1	0.07	34.5
L032229	0.93	40	36	2.58	63	13.2	1.92	0.16	25	0.89	742	0.03	8.5	410	0.6	35.6	<0.01	5	61	5.4	0.8	21	0.1	0.21	0.1	26.2
L032230	1.13	40	46	1.85	87	47.9	2.05	0.22	36	0.79	538	0.04	8.7	420	0.52	29.5	0.02	12	48	8.9	0.27	7	0.1	0.46	0.06	29.6
L032231	1.63	30	34	0.97	51	225	2.87	0.15	27	0.9	454	0.13	8.6	460	2.89	41.2	0.01	7	156	17.2	1.5	14	0.1	5.5	0.41	31.8
L032232	2.14	40	34	1.33	62	101	2.67	0.12	36	1.41	627	0.12	11.1	440	2.35	49.8	0.03	13	641	17.2	2.36	14	0.2	4.79	2.3	34.9
L032233	2.16	30	50	1.07	57	38.5	2.36	0.23	28	1.34	457	0.1	7.7	430	1.44	53.5	0.05	13	127	14.9	0.33	5	0.3	1.02	0.27	25.8
L032234	4.39	30	50	5.97	128	106	8.49	0.43	88	2.55	1600	0.15	73.5	720	0.81	77.9	0.1	190	154	5.9	0.41	312	0.2	0.05	0.23	12.4
L032235	3.32	30	80	6.81	115	72.2	6.64	0.57	72	1.66	1740	0.14	60.4	730	0.37	70.2	0.15	175	115	4.7	0.19	12	0.2	0.02	0.15	15.6
L032236	3.4	30	76	4.66	90	64.9	5.64	0.47	71	1.34	1210	0.18	46.9	730	0.38	75.3	0.15	141	125	4.9	0.16	11	0.2	0.05	0.14	18
L032237	1.34	40	51	1.81	62	32.1	2.19	0.32	34	0.87	652	0.07	14.7	770	1.1	38.8	0.04	16	231	24.8	0.13	10	0.1	0.12	0.65	53.9
L032238	1.68	40	57	1.89	71	18.7	2.17	0.41	41	0.96	663	0.1	18	640	0.81	53.7	0.05	19	435	21.4	0.1	10	0.1	0.09	1.64	45
L032239	1.62	40	49	2.76	88	17.1	2.58	0.34	49	1.34	891	0.06	38.7	650	0.77	69.4	0.04	25	124	21.7	0.12	10	0.1	0.09	0.29	44.3
L032240	3.44	30	35	3.85	37	112	9.55	0.21	88	2.55	1700	0.13	26.3	720	>5	78.5	0.06	319	169	11.5	0.84	14	0.2	0.22	0.16	13.4
L032241	2.92	30	62	4.61	51	65.2	5.9	0.19	77	2.01	1330	0.16	34.7	690	2.93	70.6	0.05	101	139	15.9	0.36	13	0.2	0.15	0.21	20.9
L032242	2.52	30	19	4.86	69	92.1	8.63	0.07	58	2.5	2270	0.04	39.3	710	>5	57.2	<0.01	63	287	9.8	0.58	14	0.1	0.79	0.84	16.4
L032243	2.09	30	24	3.37	70	173	8.74	0.11	51	2.4	1980	0.04	66	660	>5	31.8	<0.01	56	1170	9	0.96	24	0.1	0.57	4.42	11.9
L032244	1.53	40	31	0.65	54	108	2.85	0.14	27	0.95	419	0.1	7.5	490	2.97	38.1	0.01	6	350	17.7	0.49	7	0.2	3.78	1.24	32.4
L032245	1.42	40	30	0.65	52	61.1	2.64	0.14	27	0.77	259	0.09	8.6	470	2.81	45	0.01	5	48	15	0.28	8	0.2	2.44	0.07	25.5
Duplicate																										
L032242	2.48	30	19	4.74	69	98.8	8.28	0.07	57	2.45	2250	0.04	38.6	730	>5	56.9	<0.01	64	294	9.8	0.55	14	0.1	0.76	0.79	16.3
QC																										
CH4	1.91	40	294	0.66	106	2010	4.89	1.45	12	1.24	320	0.07	50.4	670	0.74	10	0.23	80	187	19.7	2.14	7	0.1	0.51	1.09	28.9
Certified Values	1.72	#N/A	276	0.56	98	2000	4.39	1.37	12.6	1.07	306	0.05	45.6	570	0.75	8	0.188	75	195	9	2.2	7.9	1	0.5	1.14	26
Tolerance +/-	0.41	#N/A	70	0.15	17	202	0.54	0.27	5.5	0.2	38	0.04	5.4	120	0.26	5	0.036	12	26	5	0.8	2.3	1	0.2	0.2	7

Sample ID	Co ppm	Cs ppm	Ga ppm	Ge ppm	Hf ppm	Hg ppm	In ppm	La ppm	Lu ppm	Mo ppm	Nb ppm	Pb ppm	Rb ppm	Sb ppm	Sc ppm	Se ppm	Sn ppm	Ta ppm	Tb ppm	Te ppm	Th ppm	Tl ppm	U ppm	W ppm	Y ppm	Yb ppm
Method Code	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B	ICM14B
LOD	0.1	0.05	0.1	0.1	0.05	0.01	0.02	0.1	0.01	0.05	0.05	0.2	0.2	0.05	0.1	1	0.3	0.05	0.02	0.05	0.1	0.02	0.05	0.1	0.05	0.1
L032188	6.8	0.59	2.4	<0.1	0.32	0.06	0.02	9.2	0.01	0.55	0.11	26.7	3.1	0.81	0.7	<1	<0.3	<0.05	0.08	0.51	1.4	0.05	0.15	<0.1	1.23	<0.1
L032189	8.8	0.72	1.3	<0.1	0.38	0.1	<0.02	9.4	0.02	0.54	0.08	55.8	5	0.98	0.7	<1	<0.3	<0.05	0.1	0.05	1.4	0.06	0.12	<0.1	1.63	0.1
L032225	6.4	1.18	5.3	<0.1	0.4	<0.01	<0.02	12.2	0.02	1.28	0.07	2.8	3.1	0.2	1.1	<1	<0.3	<0.05	0.14	0.08	1.7	0.04	0.28	<0.1	2.41	0.2
L032226	9.1	1.31	4.1	<0.1	0.51	<0.01	0.03	16.2	0.03	2.97	0.07	4	4.7	0.15	1.3	<1	<0.3	<0.05	0.17	0.39	2	0.06	0.3	<0.1	3.15	0.2
L032227	8.4	2.6	4.4	<0.1	0.45	<0.01	0.03	14.6	0.02	0.72	0.07	2.4	5.1	0.12	1.1	<1	<0.3	<0.05	0.15	0.3	1.9	0.05	0.27	<0.1	2.66	0.2
L032228	14.3	7.25	5.3	<0.1	0.58	0.01	<0.02	17	0.04	0.35	0.19	4.1	16.3	0.2	2.3	<1	<0.3	<0.05	0.17	0.14	1.6	0.18	0.36	<0.1	2.99	0.2
L032229	8.7	1.2	2.7	<0.1	0.2	<0.01	<0.02	13.1	0.04	0.62	0.06	2.2	4.1	0.36	0.8	<1	<0.3	<0.05	0.15	0.73	1.4	0.04	0.31	<0.1	3.07	0.3
L032230	8.7	2.81	4	<0.1	0.32	0.02	<0.02	14.7	0.04	1.33	0.1	1.1	7.2	0.29	1.2	<1	<0.3	<0.05	0.17	0.4	1.7	0.08	0.44	<0.1	3.35	0.3
L032231	9.4	1.08	4	<0.1	0.48	0.02	0.09	15.9	0.02	0.98	0.07	3.5	4.5	0.19	1.2	<1	<0.3	<0.05	0.16	1.2	1.7	0.05	0.26	0.1	2.71	0.2
L032232	8.2	1.94	5.4	<0.1	0.45	0.07	0.17	17.1	0.03	0.63	0.11	2.9	3.9	0.13	1.6	<1	<0.3	<0.05	0.18	3.99	1.8	0.04	0.3	0.2	3.17	0.2
L032233	6.9	2.18	5.6	<0.1	0.42	<0.01	0.05	12.2	0.03	1.06	0.12	1.4	6.8	0.08	1.5	<1	<0.3	<0.05	0.17	0.48	1.7	0.06	0.32	0.2	3.4	0.3
L032234	40.8	8.37	12	0.2	0.09	0.03	0.04	5.1	0.13	0.47	0.14	4	16.4	0.77	13.1	<1	<0.3	<0.05	0.4	0.11	0.6	0.28	0.08	1.5	11.3	0.9
L032235	35.4	8.04	9.8	0.2	0.08	0.02	0.03	6.3	0.15	0.4	0.18	2.6	23.6	0.39	11.2	<1	<0.3	<0.05	0.46	<0.05	0.6	0.24	0.08	0.7	11.8	1
L032236	30.7	8.68	9.4	0.1	0.1	0.03	0.03	7.5	0.13	0.36	0.18	4.8	20.7	0.38	10	<1	<0.3	<0.05	0.44	0.07	0.7	0.26	0.11	1.6	11	0.9
L032237	8.2	3.7	4.3	<0.1	0.55	0.04	<0.02	26.3	0.04	0.47	0.06	2.4	10.5	0.27	1.4	<1	<0.3	<0.05	0.23	0.1	2.4	0.16	0.37	<0.1	3.63	0.3
L032238	8.9	4.7	4.9	<0.1	0.47	0.14	0.04	21.9	0.03	0.47	0.08	2	13.1	0.16	1.7	<1	<0.3	<0.05	0.21	0.08	2.2	0.16	0.33	<0.1	3.52	0.2
L032239	10.8	3.93	5.3	<0.1	0.54	0.02	<0.02	21	0.04	0.47	0.06	1.7	11.3	0.18	2.5	<1	0.3	<0.05	0.25	0.05	2.1	0.14	0.36	<0.1	4.24	0.3
L032240	40.3	4.46	11	0.1	0.2	0.04	0.03	5.9	0.1	0.79	0.11	5.1	7.6	0.4	8.8	1	0.6	<0.05	0.24	1.15	0.6	0.1	0.1	0.6	6.41	0.6
L032241	23.4	3.55	7.8	<0.1	0.33	0.03	0.02	9.5	0.1	0.65	0.09	4	5.6	0.33	6.4	<1	<0.3	<0.05	0.25	0.47	1	0.08	0.18	3.4	6.72	0.6
L032242	28.2	0.96	7.3	<0.1	0.19	0.05	0.06	7	0.11	1.08	<0.05	2.4	1.8	0.49	6.5	1	<0.3	<0.05	0.31	1.29	0.7	<0.02	0.1	<0.1	8.1	0.8
L032243	37.7	0.81	5.3	<0.1	0.16	0.44	0.13	5.3	0.05	0.69	0.06	1.9	2.7	0.33	6.3	1	<0.3	<0.05	0.13	1.36	0.6	0.03	0.07	<0.1	3.15	0.4
L032244	7.2	1.12	3.6	<0.1	0.49	0.03	0.1	15.7	0.03	1.66	0.06	2	4.1	0.19	1.1	<1	<0.3	<0.05	0.16	1.63	1.9	0.04	0.32	<0.1	2.87	0.2
L032245	7.3	1.11	3.3	<0.1	0.42	<0.01	<0.02	12.3	0.02	4.12	0.08	3.5	3.8	0.17	0.9	<1	<0.3	<0.05	0.12	0.47	1.7	0.04	0.25	0.5	2.09	0.2
Duplicate																										
L032242	26.8	0.97	7.2	<0.1	0.19	0.05	0.07	7	0.11	1.22	<0.05	2.3	1.8	0.52	6.5	1	<0.3	<0.05	0.3	1.19	0.7	<0.02	0.09	<0.1	8.07	0.7
QC																										
CH4	22.2	2.49	8.9	0.2	0.43	0.01	0.1	14.5	0.06	3.11	0.34	8	67.1	0.29	7.9	2	0.6	<0.05	0.27	0.53	2	0.38	0.28	2.1	5.82	0.4
Certified Values	21.3	2.3	8	0.1	0.2	0.017	0.9	13	#N/A	2.8	#N/A	11.5	67	0.4	6.8	1.1	0.6	0.1	#N/A	0.4	1.9	0.4	0.2	2.1	4.9	#N/A
Tolerance +/-	4.7	0.6	2	0.2	0.1	0.023	0.01	4	#N/A	0.6	#N/A	4.5	12	0.3	1.4	2.3	0.1	0.2	#N/A	0.1	0.5	0.1	0.1	0.7	1.1	#N/A

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Project : CALR-11736-004

Tuesday, April 10, 2012

Environmental Met
Attn : Barb Bowman

Date Rec. : 29 March 2012
LR Report: **CA11360-MAR12**

Copy: #1

CERTIFICATE OF ANALYSIS

Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ODM Zone Master Comp A	6: ODM Zone Master Comp B
Sample Date & Time			Date: n/a	Date: n/a
Mercury [µg/g]	03-Apr-12	14:56	0.2	0.2
Silver [µg/g]	05-Apr-12	13:54	1.0	1.0
Aluminum [µg/g]	04-Apr-12	15:24	71000	72000
Arsenic [µg/g]	05-Apr-12	13:54	53	55
Boron [µg/g]	04-Apr-12	15:24	31	32
Barium [µg/g]	05-Apr-12	13:54	410	410
Beryllium [µg/g]	05-Apr-12	13:54	0.59	0.55
Bismuth [µg/g]	05-Apr-12	13:54	6.0	0.71
Calcium [µg/g]	04-Apr-12	15:24	17000	17000
Cadmium [µg/g]	05-Apr-12	13:54	4.3	4.4
Cobalt [µg/g]	05-Apr-12	13:54	7.4	7.3
Chromium [µg/g]	05-Apr-12	13:54	120	120
Copper [µg/g]	05-Apr-12	13:54	52	51
Iron [µg/g]	04-Apr-12	15:24	25000	26000
Potassium [µg/g]	04-Apr-12	15:24	30000	30000
Lithium [µg/g]	05-Apr-12	13:54	33	32
Magnesium [µg/g]	04-Apr-12	15:24	10000	10000
Manganese [µg/g]	05-Apr-12	13:54	970	1000
Molybdenum [µg/g]	05-Apr-12	13:54	1.9	1.9
Sodium [µg/g]	04-Apr-12	15:24	2300	2300
Nickel [µg/g]	05-Apr-12	13:54	52	52
Phosphorus [µg/g]	04-Apr-12	15:24	340	420
Lead [µg/g]	05-Apr-12	13:54	120	130
Antimony [µg/g]	05-Apr-12	13:54	2.2	2.1
Selenium [µg/g]	05-Apr-12	13:54	< 0.7	< 0.7
Silicon [%]	09-Apr-12	22:37	29.9	29.7
Tin [µg/g]	05-Apr-12	13:54	1.0	2.0
Strontium [µg/g]	05-Apr-12	13:54	150	150
Thorium [µg/g]	05-Apr-12	13:54	2.0	2.0

OnLine LIMS

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Test method information available upon request. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Project : CALR-11736-004

LR Report : **CA11360-MAR12**

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ODM Zone Master Comp A	6: ODM Zone Master Comp B
Titanium [µg/g]	04-Apr-12	15:25	890	900
Thallium [µg/g]	05-Apr-12	13:54	1.2	1.2
Uranium [µg/g]	05-Apr-12	13:54	0.62	0.53
Vanadium [µg/g]	05-Apr-12	13:54	39	38
Tungsten [µg/g]	04-Apr-12	15:25	10	8
Yttrium [µg/g]	05-Apr-12	13:54	3.0	2.9
Zinc [µg/g]	05-Apr-12	13:54	850	860

Dianne Griffin
Project Specialist

OnLine LIMS

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SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Project : CALR-11736-004

Thursday, May 03, 2012

Environmental Met
Attn : Barb Bowman

Date Rec. : 18 April 2012
LR Report: **CA10466-APR12**

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ROM Sample A	6: ROM Sample B
Sample Date & Time			Date: n/a	Date: n/a
Mercury [µg/g]	24-Apr-12	16:20	0.2	0.2
Silver [µg/g]	25-Apr-12	15:38	1.1	1.1
Aluminum [µg/g]	24-Apr-12	19:33	74000	75000
Arsenic [µg/g]	25-Apr-12	15:38	44	57
Barium [µg/g]	25-Apr-12	15:38	450	460
Beryllium [µg/g]	25-Apr-12	15:38	0.59	0.58
Bismuth [µg/g]	25-Apr-12	15:38	1.7	1.6
Boron [µg/g]	26-Apr-12	14:43	31	32
Calcium [µg/g]	24-Apr-12	19:33	21800	22000
Cadmium [µg/g]	25-Apr-12	15:38	2.5	2.6
Cobalt [µg/g]	25-Apr-12	15:38	13	11
Chromium [µg/g]	25-Apr-12	15:38	100	110
Copper [µg/g]	25-Apr-12	15:38	130	140
Iron [µg/g]	24-Apr-12	19:33	40000	41000
Potassium [µg/g]	24-Apr-12	19:33	29000	30000
Lithium [µg/g]	25-Apr-12	15:38	45	46
Magnesium [µg/g]	24-Apr-12	19:34	13000	14000
Manganese [µg/g]	25-Apr-12	15:39	970	1000
Molybdenum [µg/g]	25-Apr-12	15:39	2.4	2.4
Sodium [µg/g]	24-Apr-12	19:34	3800	3800
Nickel [µg/g]	25-Apr-12	15:39	40	43
Phosphorus [µg/g]	24-Apr-12	19:34	450	420
Lead [µg/g]	25-Apr-12	15:39	61	58
Antimony [µg/g]	25-Apr-12	15:39	7.9	2.5
Selenium [µg/g]	25-Apr-12	15:39	0.8	0.9
Silicon [%]	02-May-12	06:46	30.8	31.1
Tin [µg/g]	25-Apr-12	15:39	2.2	2.1
Strontium [µg/g]	25-Apr-12	15:39	160	170
Titanium [µg/g]	24-Apr-12	19:34	1700	1700

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Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Project : CALR-11736-004

LR Report : **CA10466-APR12**

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ROM Sample A	6: ROM Sample B
Thorium [µg/g]	26-Apr-12	14:43	2.8	2.3
Thallium [µg/g]	25-Apr-12	15:39	0.87	0.87
Uranium [µg/g]	25-Apr-12	15:39	0.49	0.49
Vanadium [µg/g]	25-Apr-12	15:39	72	75
Tungsten [µg/g]	26-Apr-12	14:43	2.4	2.5
Yttrium [µg/g]	25-Apr-12	15:39	5.1	5.2
Zinc [µg/g]	25-Apr-12	15:39	520	530

Dianne Griffin
Project Specialist

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Phone: 705-652-2000 FAX: 705-652-6365

Strong Acid Digest - ICP Metals

Project : CALR-11736-004

Friday, June 01, 2012

Environmental Met
Attn : Barb Bowman

Date Rec. : 18 May 2012
LR Report: **CA10458-MAY12**

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: Starter Pit Sample A	6: Starter Pit Sample B
Mercury [µg/g]	23-May-12	15:57	0.2	0.2
Silver [µg/g]	25-May-12	13:13	0.84	0.99
Aluminum [µg/g]	25-May-12	13:14	72000	73000
Arsenic [µg/g]	28-May-12	09:34	76	72
Barium [µg/g]	28-May-12	09:34	420	440
Beryllium [µg/g]	28-May-12	09:34	0.59	0.57
Bismuth [µg/g]	28-May-12	09:34	0.57	0.80
Boron [µg/g]	28-May-12	09:34	29	30
Calcium [µg/g]	25-May-12	13:14	17000	17000
Cadmium [µg/g]	28-May-12	09:34	5.1	5.3
Cobalt [µg/g]	28-May-12	09:34	8.8	8.2
Chromium [µg/g]	28-May-12	09:34	83	73
Copper [µg/g]	28-May-12	09:34	120	69
Iron [µg/g]	25-May-12	13:14	31000	31000
Potassium [µg/g]	25-May-12	13:14	32000	32000
Lithium [µg/g]	28-May-12	09:34	34	37
Magnesium [µg/g]	25-May-12	13:14	11000	11000
Manganese [µg/g]	28-May-12	09:34	970	1000
Molybdenum [µg/g]	28-May-12	09:34	3.4	2.8
Sodium [µg/g]	25-May-12	13:14	2300	2200
Nickel [µg/g]	28-May-12	09:34	44	37
Phosphorus [µg/g]	25-May-12	13:14	410	390
Lead [µg/g]	28-May-12	09:34	120	140
Antimony [µg/g]	28-May-12	09:34	2.2	2.6
Selenium [µg/g]	28-May-12	09:34	< 0.7	< 0.7
Silicon [%]	31-May-12	10:40	28.2	27.9
Tin [µg/g]	28-May-12	09:34	1.0	1.3
Strontium [µg/g]	28-May-12	09:34	92	95
Titanium [µg/g]	25-May-12	13:14	1200	1300
Thorium [µg/g]	28-May-12	09:35	1.8	1.3

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Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: Starter Pit Sample A	6: Starter Pit Sample B
Thallium [µg/g]	28-May-12	09:35	1.0	1.1
Uranium [µg/g]	28-May-12	09:35	0.45	0.45
Vanadium [µg/g]	28-May-12	09:35	45	49
Tungsten [µg/g]	28-May-12	09:35	1.9	2.0
Yttrium [µg/g]	28-May-12	09:35	3.6	3.5
Zinc [µg/g]	28-May-12	09:35	1100	1100

Dianne Griffin
Project Specialist

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SHAKE FLASK EXTRACTION

CLIENT : AMEC
PROJECT : Rainy River
SGS Project # : 08121
Test : 24 Hour Nanopure Water Leach Extraction Test at 3:1 Liquid to Solid Ratio
Date : November 30 - December 9, 2011

Leachate Analysis

Sample ID			L032005	L032007	L032018	L032019	L032020	L032023	L032026	L032031	L032032	L032036	L032042	L032043	L032049
Parameter	**Method**	**Units**													
Volume Nanopure Water		mL	750	750	750	750	750	750	750	750	750	750	750	750	750
Sample Weight		g	250	250	250	250	250	250	250	250	250	250	250	250	250
pH	meter		7.83	7.95	7.78	7.82	7.66	7.75	7.83	7.83	7.81	7.68	7.82	7.84	7.78
Redox	meter	mV	285	287	296	301	281	292	295	303	308	317	315	317	324
Conductivity	meter	uS/cm	85	79	75	92	81	92	73	70	53	70	68	71	108
Acidity (to pH 4.5)	titration	mg CaCO3/L	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	4.3	3.4	4.3	4.4	5.7	5.2	4.8	4.4	4.1	4.7	4.2	4.6	5.4
Alkalinity	titration	mg CaCO3/L	51.6	46.9	42.4	45.8	44.6	49.9	40.8	45.2	33.1	42.4	42.2	44.7	55.0
Chloride		mg/L	1.3	0.8	0.2	0.4	0.6	0.7	0.4	0.7	0.4	0.3	0.6	0.5	0.3
Fluoride		mg/L	0.06	0.09	< 0.06	0.06	0.08	0.06	< 0.06	< 0.06	< 0.06	< 0.06	0.07	< 0.06	< 0.06
Sulphate	Turbidity	mg/L	5	4	5	9	3	4	3	<2	2	2	2	2	7
Ion Balance															
Major Anions	Calc	meq/L	1.17	1.04	0.96	1.11	0.98	1.10	0.89	0.92	0.71	0.90	0.91	0.95	1.26
Major Cations	Calc	meq/L	0.92	0.85	0.80	0.97	0.90	1.02	0.82	0.78	0.60	0.78	0.78	0.80	1.18
Difference	Calc	meq/L	0.26	0.19	0.15	0.14	0.08	0.08	0.07	0.14	0.11	0.12	0.13	0.15	0.08
Balance (%)	Calc	%	12.3%	9.9%	8.8%	6.7%	4.0%	3.9%	4.1%	8.4%	8.6%	7.3%	7.8%	8.6%	3.3%
Dissolved Metals															
Hardness CaCO3		mg/L	39.5	23.5	34.7	40.4	32.1	43.6	31.0	30.9	20.9	32.0	26.8	31.0	51.4
Aluminum Al	ICP-MS	mg/L	0.159	0.267	0.188	0.166	0.217	0.125	0.232	0.188	0.239	0.0950	0.244	0.281	0.150
Antimony Sb	ICP-MS	mg/L	0.0003	0.0003	0.0018	0.0016	0.0041	0.0077	0.0007	0.0006	0.0003	0.0007	0.0024	0.0002	0.0048
Arsenic As	ICP-MS	mg/L	0.0009	0.0011	0.0050	0.0046	0.0400	0.0058	0.0015	0.0007	0.0008	0.0050	0.0036	0.0021	0.0005
Barium Ba	ICP-MS	mg/L	0.00411	0.0141	0.00268	0.00135	0.00087	0.00139	0.0132	0.00398	0.00597	0.00131	0.00150	0.00331	0.00085
Beryllium Be	ICP-MS	mg/L	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002
Bismuth Bi	ICP-MS	mg/L	< 0.00001	< 0.00001	0.00002	< 0.00001	0.00005	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Boron B	ICP-MS	mg/L	0.0077	0.0080	0.0059	0.0068	0.0118	0.0135	0.0066	0.0183	0.0149	0.0055	0.0168	0.0068	0.0135
Cadmium Cd	ICP-MS	mg/L	< 0.000003	0.000008	0.000168	0.000013	< 0.000003	< 0.000003	0.000006	< 0.000003	< 0.000003	0.000006	< 0.000003	< 0.000003	< 0.000003
Calcium Ca	ICP-MS	mg/L	14.1	8.19	12.5	13.7	11.1	15.0	11.6	10.3	7.77	8.50	9.89	11.3	16.7
Chromium Cr	ICP-MS	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Cobalt Co	ICP-MS	mg/L	0.000055	0.000074	0.000160	0.000215	0.000125	0.000106	0.000040	0.000052	0.000032	0.000110	0.000033	0.000040	0.000083
Copper Cu	ICP-MS	mg/L	< 0.0005	0.0011	0.0309	0.0009	0.0011	0.0010	0.0005	0.0009	0.0006	0.0009	0.0011	0.0007	0.0009
Iron Fe	ICP-MS	mg/L	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lead Pb	ICP-MS	mg/L	0.00095	0.00327	0.00764	0.00255	0.00035	0.00471	0.00010	0.00506	0.00023	0.00018	0.00057	0.00022	0.00010
Lithium Li	ICP-MS	mg/L	0.001	0.002	0.002	0.004	0.003	0.003	0.001	0.002	< 0.001	0.001	0.005	0.005	0.004
Magnesium Mg	ICP-MS	mg/L	1.06	0.754	0.837	1.51	1.07	1.47	0.494	1.22	0.369	2.62	0.503	0.702	2.35
Manganese Mn	ICP-MS	mg/L	0.0112	0.0038	0.0510	0.0580	0.0417	0.0439	0.0433	0.0030	0.0022	0.0663	0.0070	0.0117	0.0657
Mercury Hg	ICP-MS	ug/L	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	< 0.01	< 0.01	< 0.01
Molybdenum Mo	ICP-MS	mg/L	0.00026	0.00074	0.00068	0.00326	0.00039	0.00270	0.00075	0.00031	0.00016	0.00292	0.00031	0.00016	0.00010
Nickel Ni	ICP-MS	mg/L	0.0005	0.0003	0.0003	0.0004	0.0005	0.0006	0.0002	0.0002	0.0002	0.0013	0.0002	0.0002	0.0003
Phosphorus P	ICP-MS	mg/L	< 0.009	< 0.009	0.017	< 0.009	0.019	< 0.009	< 0.009	0.010	0.013	0.011	0.019	0.017	0.011
Potassium K	ICP-MS	mg/L	1.01	1.37	1.39	2.24	2.38	3.91	2.08	0.413	0.776	3.42	2.60	1.79	2.84
Selenium Se	ICP-MS	mg/L	< 0.00004	0.00017	0.00013	0.00058	0.00078	< 0.00004	< 0.00004	0.00006	< 0.00004	< 0.00004	0.00005	< 0.00004	0.00028
Silicon Si	ICP-MS	mg/L	0.87	1.15	0.82	1.25	1.23	1.30	1.05	1.69	1.05	0.80	1.45	1.06	0.70
Silver Ag	ICP-MS	mg/L	< 0.00001	< 0.00001	0.00007	0.00002	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Sodium Na	ICP-MS	mg/L	1.78	7.22	1.14	1.96	3.87	0.72	2.29	2.94	3.02	0.77	3.26	2.23	1.22
Strontium Sr	ICP-MS	mg/L	0.109	0.128	0.0346	0.0331	0.0441	0.0300	0.819	0.0412	0.0437	0.0158	0.0251	0.102	0.0262
Sulphur (S)	ICP-MS	mg/L	0.55	0.83	2.22	9.88	2.50	2.87	1.87	0.77	0.84	1.07	0.55	0.65	11.0
Thallium Tl	ICP-MS	mg/L	< 0.00002	< 0.00002	0.00003	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002
Tin Sn	ICP-MS	mg/L	< 0.00001	0.00007	0.00005	0.00002	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Titanium Ti	ICP-MS	mg/L	< 0.0001	0.0002	0.0002	0.0002	0.0002	< 0.0001	< 0.0001	0.0001	< 0.0001	< 0.0001	0.0001	< 0.0001	< 0.0001
Uranium U	ICP-MS	mg/L	0.000005	0.000022	0.000027	0.000011	0.000003	0.000003	0.000114	< 0.000001	0.000001	0.000004	0.000007	0.000008	0.000001
Vanadium V	ICP-MS	mg/L	0.00024	0.00088	0.00036	0.00027	0.00044	0.00046	0.00033	0.00197	0.00113	0.00007	0.00052	0.00044	0.00015
Zinc Zn	ICP-MS	mg/L	0.002	0.001	0.016	0.001	0.002	< 0.001	0.002	0.002	0.001	< 0.001	0.002	< 0.001	< 0.001
Zirconium Zr	ICP-MS	mg/L	< 0.00001	0.00005	0.00001	0.00002	0.00002	0.00004	< 0.00001	< 0.00001	< 0.00001	0.00004	< 0.00001	< 0.00001	< 0.00001

CLIENT : AMEC
PROJECT : Rainy River
SGS Project # : 08121
Test : 24 Hour Nanopure Water Leach Extraction Test at 3:1 Liquid to Solid Ratio
Date : November 30 - December 9, 2011

Leachate Analysis

Sample ID	L032051	L032056	L032066	L032067	L032068	L032069	L032070	L032072	L032073	L032082	L032089	L032091	L032101	L032102	L032104
Parameter															
Volume Nanopure Water	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750
Sample Weight	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
pH	7.89	7.75	7.86	7.52	7.95	7.87	7.98	7.88	7.82	7.82	7.81	7.89	7.94	7.93	7.87
Redox	315	322	317	334	311	308	301	301	308	304	303	292	289	292	297
Conductivity	75	82	83	194	68	71	81	65	130	150	152	114	64	65	65
Acidity (to pH 4.5)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Total Acidity (to pH 8.3)	4.6	4.6	4.1	4.0	2.6	2.6	2.4	2.6	3.0	3.1	3.3	2.9	2.5	2.4	2.7
Alkalinity	45.5	42.7	45.7	31.8	36.6	33.1	42.4	35.5	41.1	44.7	47.3	43.3	38.5	36.1	31.8
Chloride	0.8	0.6	1.0	0.3	0.4	0.9	0.6	0.3	0.7	0.6	0.4	0.5	< 0.2	0.3	0.3
Fluoride	< 0.06	< 0.06	< 0.06	0.09	0.10	0.08	0.08	0.09	0.08	0.06	< 0.06	0.08	< 0.06	< 0.06	< 0.06
Sulphate	2	5	3	54	2	4	4	2	24	28	28	16	2	<2	3
Ion Balance															
Major Anions	0.97	0.97	1.00	1.77	0.79	0.77	0.95	0.76	1.35	1.50	1.54	1.22	0.81	0.73	0.71
Major Cations	0.86	0.91	0.92	1.89	0.71	0.75	0.89	0.71	1.28	1.50	1.47	1.16	0.71	0.71	0.69
Difference	0.12	0.06	0.08	-0.12	0.08	0.02	0.07	0.05	0.06	0.00	0.07	0.05	0.10	0.02	0.02
Balance (%)	6.3%	3.3%	4.1%	-3.2%	5.2%	1.5%	3.7%	3.6%	2.3%	-0.1%	2.4%	2.2%	6.9%	1.3%	1.3%
Dissolved Metals															
Hardness CaCO3	35.6	37.0	36.1	88.3	25.5	27.4	27.8	27.5	52.8	65.9	67.9	51.3	27.2	21.5	23.9
Aluminum Al	0.198	0.139	0.253	0.0241	0.257	0.263	0.308	0.321	0.213	0.176	0.0829	0.161	0.315	0.309	0.295
Antimony Sb	< 0.0002	0.0033	0.0024	0.0026	0.0051	0.0115	0.0177	0.0033	0.0054	0.0031	0.0040	0.0013	0.0017	0.0037	0.0005
Arsenic As	0.0016	0.0719	0.0098	0.0005	0.0823	0.0013	0.0015	0.0004	0.0005	0.0014	0.0005	0.0065	0.0008	0.0024	0.0004
Barium Ba	0.00265	0.00114	0.00157	0.00297	0.00176	0.00090	0.00049	0.00092	0.00467	0.00076	0.00136	0.00257	0.00231	0.00083	0.00382
Beryllium Be	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002
Bismuth Bi	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Boron B	0.0073	0.0070	0.0152	0.0123	0.0137	0.0117	0.0110	0.0055	0.0058	0.0107	0.0091	0.0079	0.0036	0.0098	0.0055
Cadmium Cd	< 0.000003	0.000025	< 0.000003	0.000011	< 0.000003	< 0.000003	< 0.000003	< 0.000003	< 0.000003	0.000004	0.000020	< 0.000003	< 0.000003	< 0.000003	< 0.000003
Calcium Ca	11.6	13.4	12.0	23.9	7.78	8.94	7.96	9.37	17.3	21.7	22.7	15.6	8.92	7.71	8.96
Chromium Cr	< 0.0005	< 0.0005	< 0.0005	< 0.0005	0.0007	< 0.0005	< 0.0005	0.0012	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Cobalt Co	0.000040	0.000162	0.000078	0.00806	0.000062	0.000038	0.000028	0.000024	0.000056	0.000079	0.000158	0.000067	0.000035	0.000033	0.000045
Copper Cu	0.0006	0.0010	0.0007	0.0026	< 0.0005	0.0006	< 0.0005	0.0007	0.0007	0.0013	0.0006	0.0008	0.0007	0.0008	0.0007
Iron Fe	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.012	< 0.003
Lead Pb	0.00008	0.00088	0.00028	0.00094	0.00060	0.00002	< 0.00002	0.00018	0.00005	0.00024	0.00008	0.00051	0.00023	0.00004	0.00005
Lithium Li	0.002	0.005	0.002	0.001	0.002	0.002	0.002	0.002	0.011	0.004	0.003	0.004	0.006	0.005	0.007
Magnesium Mg	1.61	0.870	1.51	6.96	1.48	1.24	1.93	1.01	2.34	2.86	2.73	3.00	1.20	0.546	0.376
Manganese Mn	0.0070	0.157	0.0103	0.407	0.0085	0.0180	0.0133	0.0136	0.0383	0.0646	0.125	0.0214	0.0185	0.0114	0.0157
Mercury Hg	< 0.01	< 0.01	< 0.01	< 0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Molybdenum Mo	0.00056	0.00015	0.00038	0.00019	0.00045	0.00068	0.00034	0.00010	0.00016	0.00023	0.00012	0.00016	0.00013	0.00037	0.00008
Nickel Ni	0.0002	0.0002	0.0003	0.0190	0.0006	0.0003	0.0003	0.0002	0.0003	0.0003	0.0003	0.0003	0.0002	0.0003	0.0003
Phosphorus P	0.011	0.012	0.016	0.010	< 0.009	0.018	0.015	0.017	0.015	0.012	< 0.009	0.015	0.012	0.014	< 0.009
Potassium K	2.00	1.97	2.09	2.00	2.36	2.87	1.88	1.66	4.42	1.51	2.33	1.58	3.07	3.44	2.61
Selenium Se	0.00024	0.00029	0.00090	0.00242	< 0.00004	< 0.00004	0.00005	0.00011	< 0.00004	0.00011	< 0.00004	0.00018	0.00013	< 0.00004	< 0.00004
Silicon Si	0.92	1.02	1.01	0.46	0.86	0.91	0.82	0.67	0.64	0.56	0.54	0.62	0.52	1.13	0.55
Silver Ag	< 0.00001	0.00001	< 0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.00008	0.00010	0.00001	< 0.00001	< 0.00001	< 0.00001
Sodium Na	1.61	2.22	2.60	1.14	2.48	2.18	5.59	1.81	1.99	2.68	0.76	1.69	1.08	3.58	2.45
Strontium Sr	0.0872	0.0335	0.0954	0.111	0.0985	0.0465	0.0353	0.0311	0.0667	0.0858	0.0915	0.175	0.0227	0.0282	0.0437
Sulphur (S)	1.12	3.48	2.07	22.6	0.87	2.90	2.09	1.61	19.6	27.8	37.4	19.4	0.71	1.31	7.08
Thallium Tl	< 0.00002	< 0.00002	< 0.00002	0.00003	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002
Tin Sn	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.00005	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.00027	< 0.00001
Titanium Ti	< 0.0001	0.0001	< 0.0001	0.0001	0.0003	0.0001	< 0.0001	< 0.0001	0.0003	0.0001	0.0001	0.0001	< 0.0001	0.0001	0.0002
Uranium U	< 0.000001	< 0.000001	0.000004	0.000008	0.000005	0.000001	< 0.000001	< 0.000001	0.000004	< 0.000001	0.000002	0.000003	0.000002	0.000016	< 0.000001
Vanadium V	0.00060	0.00027	0.00068	0.00009	0.00100	0.00027	0.00046	0.00071	0.00029	0.00012	0.00009	0.00049	0.00039	0.00045	0.00083
Zinc Zn	0.002	0.003	0.003	0.002	0.001	0.001	< 0.001	0.002	0.001	< 0.001	0.005	0.002	< 0.001	0.002	0.001
Zirconium Zr	< 0.00001	< 0.00001	< 0.00001	0.00002	0.00005	0.00005	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001

CLIENT : AMEC
PROJECT : Rainy River
SGS Project # : 08121
Test : 24 Hour Nanopure Water Leach Extraction Test at 3:1 Liquid to Solid Ratio
Date : November 30 - December 9, 2011

Leachate Analysis

Sample ID	L032109	L032115	L032118	L032122	L032128	L032129	L032130	L032131	L032136	L032145	L032154	L032162	L032164	L032168	L032169
Parameter															
Volume Nanopure Water	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750
Sample Weight	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
pH	7.89	7.61	7.92	7.83	7.87	7.86	7.85	7.84	7.83	8.84	7.86	7.95	7.90	7.87	7.86
Redox	293	307	298	305	225	247	266	277	288	250	283	286	293	293	294
Conductivity	52	73	79	108	92	86	72	73	99	158	87	73	96	85	78
Acidity (to pH 4.5)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Total Acidity (to pH 8.3)	2.3	3.3	2.6	2.9	3.0	3.1	2.9	2.9	3.1	#N/A	3.3	2.4	2.8	2.6	2.4
Alkalinity	32.1	30.3	43.6	41.3	53.2	51.7	42.0	45.7	46.6	80.3	49.2	44.3	44.6	47.9	39.0
Chloride	0.2	0.5	0.3	0.5	0.4	0.2	0.3	0.4	0.4	0.8	0.8	0.4	1.5	1.4	1.0
Fluoride	< 0.06	< 0.06	< 0.06	< 0.06	0.14	< 0.06	< 0.06	< 0.06	< 0.06	0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Sulphate	<2	2	3	14	2	2	2	2	8	6	2	2	6	2	4
Ion Balance															
Major Anions	0.65	0.66	0.94	1.13	1.12	1.08	0.89	0.97	1.11	1.76	1.05	0.94	1.06	1.04	0.89
Major Cations	0.59	0.76	0.89	1.09	1.05	1.00	0.82	0.85	1.09	1.77	1.01	0.84	1.06	0.96	0.91
Difference	0.06	-0.10	0.05	0.04	0.08	0.08	0.07	0.12	0.02	-0.01	0.04	0.10	0.00	0.08	-0.02
Balance (%)	4.9%	-6.8%	2.7%	2.0%	3.5%	3.9%	4.0%	6.7%	0.9%	-0.2%	1.8%	5.5%	0.0%	4.2%	-0.8%
Dissolved Metals															
Hardness CaCO3	21.9	29.5	38.9	46.0	35.7	41.5	34.5	33.1	46.2	3.86	37.2	26.4	34.1	38.1	42.7
Aluminum Al	0.296	0.262	0.329	0.167	0.198	0.182	0.150	0.204	0.111	0.563	0.215	0.151	0.210	0.145	0.114
Antimony Sb	0.0013	0.0068	0.0071	0.0063	0.0004	0.0022	0.0030	0.0042	0.0009	0.0003	0.0018	0.0014	0.0015	0.0067	0.0027
Arsenic As	0.0011	0.0013	0.0016	0.0040	0.0007	0.0096	0.216	0.0042	0.0025	0.0022	0.0026	0.0009	0.0065	0.0019	0.0171
Barium Ba	0.00067	0.00321	0.00090	0.00116	0.00757	0.00262	0.00533	0.00089	0.00248	0.00219	0.00069	0.00245	0.00375	0.00053	0.00230
Beryllium Be	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002
Bismuth Bi	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Boron B	0.0066	0.0101	0.0083	0.0107	0.0162	0.0192	0.0072	0.0156	0.0107	0.0121	0.0207	0.0155	0.0168	0.0169	0.0073
Cadmium Cd	< 0.000003	< 0.000003	< 0.000003	< 0.000003	0.00441	0.000010	< 0.000003	< 0.000003	0.000014	< 0.000003	0.000006	< 0.000003	0.000006	< 0.000003	< 0.000003
Calcium Ca	7.69	7.94	10.4	14.2	9.11	12.2	11.2	9.32	13.7	1.28	13.8	8.75	11.2	14.7	15.2
Chromium Cr	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005
Cobalt Co	0.000042	0.000059	0.000052	0.000080	0.000250	0.000472	0.000049	0.000036	0.000096	0.000025	0.000076	0.000023	0.000052	0.000040	0.000025
Copper Cu	0.0007	0.0010	0.0008	0.0015	0.0012	0.0009	0.0007	0.0007	0.0015	0.0031	0.0018	0.0007	0.0017	0.0012	< 0.0005
Iron Fe	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003	0.014	< 0.003	< 0.003	< 0.003	< 0.003	< 0.003
Lead Pb	< 0.00002	< 0.00002	0.00014	< 0.00002	0.0113	< 0.00002	< 0.00002	0.00004	< 0.00002	0.00010	0.00043	< 0.00002	0.00009	0.00076	< 0.00002
Lithium Li	0.002	0.003	0.002	0.003	0.002	0.002	0.001	0.003	0.002	< 0.001	0.002	0.001	0.004	0.002	0.001
Magnesium Mg	0.659	2.34	3.11	2.53	3.14	2.68	1.57	2.38	2.91	0.160	0.663	1.11	1.51	0.364	1.16
Manganese Mn	0.0212	0.0274	0.0128	0.0253	0.0090	0.0319	0.0400	0.0237	0.0262	0.0011	0.0082	0.0033	0.0093	0.0578	0.0154
Mercury Hg	< 0.01	< 0.01	< 0.01	< 0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01
Molybdenum Mo	0.00020	0.00244	0.00132	0.00156	0.00022	0.00129	0.00098	0.00023	0.00061	0.00047	0.00051	0.00030	0.00321	0.00019	0.00110
Nickel Ni	0.0002	0.0003	0.0004	0.0010	0.0010	0.0016	0.0028	0.0003	0.0003	< 0.0001	0.0002	< 0.0001	< 0.0001	0.0003	0.0003
Phosphorus P	< 0.009	0.019	< 0.009	< 0.009	0.012	< 0.009	0.010	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	0.010	0.014
Potassium K	1.35	3.22	1.72	2.88	3.14	2.06	2.02	2.70	2.13	1.38	2.13	0.507	2.45	3.16	0.367
Selenium Se	< 0.00004	0.00007	0.00004	0.00047	0.00007	< 0.00004	0.00007	< 0.00004	0.00023	0.00141	< 0.00004	< 0.00004	< 0.00004	0.00017	0.00039
Silicon Si	0.97	0.83	0.63	0.67	1.08	0.75	0.87	0.93	0.92	1.76	1.18	1.35	1.19	1.36	0.66
Silver Ag	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.00005	0.00002	0.00003	0.00003	0.00002	< 0.00001	0.00001	0.00003	0.00003	< 0.00001
Sodium Na	1.82	1.20	0.75	1.66	5.05	1.95	1.34	1.98	2.12	36.5	4.14	6.38	6.51	2.02	0.62
Strontium Sr	0.0323	0.125	0.0707	0.118	0.360	0.306	0.175	0.0583	0.128	0.0196	0.117	0.0422	0.138	0.0444	0.0484
Sulphur (S)	0.53	1.08	1.54	18.5	0.79	1.06	0.66	0.44	4.13	3.89	1.21	0.60	3.75	1.31	2.31
Thallium Tl	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002
Tin Sn	0.00001	< 0.00001	< 0.00001	< 0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.00005	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Titanium Ti	< 0.0001	< 0.0001	< 0.0001	0.0002	< 0.0001	< 0.0001	0.0001	< 0.0001	0.0002	0.0006	0.0002	< 0.0001	0.0002	0.0002	< 0.0001
Uranium U	0.000018	0.000037	0.000003	0.000015	0.000102	0.000022	0.000446	0.000011	0.000179	0.000007	0.000038	< 0.000001	0.000020	0.000001	< 0.000001
Vanadium V	0.00026	0.00025	0.00023	0.00010	0.00073	0.00029	0.00037	0.00023	0.00029	0.00395	0.00047	0.00155	0.00063	0.00033	0.00136
Zinc Zn	< 0.001	0.001	0.001	0.001	0.031	0.002	< 0.001	0.002	0.001	0.001	< 0.001	< 0.001	< 0.001	0.002	< 0.001
Zirconium Zr	0.00001	0.00002	< 0.00001	0.00002	0.00003	< 0.00001	0.00007	< 0.00001	0.00016	0.00016	0.00006	< 0.00001	0.00002	0.00002	< 0.00001

CLIENT : AMEC
PROJECT : Rainy River
SGS Project # : 08121
Test : 24 Hour Nanopure Water Leach Extraction Test at 3:1 Liquid to Solid Ratio
Date : November 30 - December 9, 2011

Leachate Analysis

Sample ID	L032175	L032180	L032181	L032182	L032183	L032184	L032185	L032188	L032189	L032202	L032206	L032207	L032208	L032210	L032211
Parameter															
Volume Nanopure Water	750	750	750	750	750	750	750	750	750	750	750	750	750	750	750
Sample Weight	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250
pH	7.91	7.78	7.92	7.94	7.89	7.92	7.90	7.65	7.75	7.96	7.95	7.86	8.01	7.91	7.96
Redox	296	334	325	321	324	323	322	328	314	309	308	313	305	237	246
Conductivity	77	87	86	69	89	97	89	178	80	83	80	87	80	79	76
Acidity (to pH 4.5)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Total Acidity (to pH 8.3)	2.8	3.9	3.7	3.6	4.0	3.8	3.9	4.4	3.8	3.5	3.5	3.9	3.2	2.6	2.8
Alkalinity	45.7	46.2	41.6	42.7	47.2	48.5	43.0	33.0	28.8	42.9	46.0	40.5	48.9	45.4	45.3
Chloride	0.6	1.0	0.7	0.4	0.4	1.5	2.1	0.8	1.6	0.9	1.3	0.9	0.3	0.4	1.1
Fluoride	< 0.06	< 0.06	0.06	< 0.06	0.07	0.25	< 0.06	< 0.06	< 0.06	0.06	< 0.06	< 0.06	< 0.06	< 0.06	< 0.06
Sulphate	2	3	5	2	4	4	4	54	11	4	3	6	3	<2	2
Ion Balance															
Major Anions	0.97	1.02	0.96	0.91	1.04	1.11	1.00	1.81	0.85	0.97	1.02	0.96	1.05	0.92	0.98
Major Cations	0.89	0.94	0.90	0.75	0.95	1.00	0.93	1.61	0.79	0.89	0.87	0.91	0.90	0.88	0.87
Difference	0.09	0.08	0.06	0.15	0.09	0.11	0.07	0.20	0.06	0.08	0.15	0.05	0.15	0.04	0.11
Balance (%)	4.6%	3.9%	3.0%	9.2%	4.6%	5.3%	3.8%	5.8%	3.5%	4.4%	8.0%	2.4%	7.8%	2.2%	5.8%
Dissolved Metals															
Hardness CaCO3	36.0	35.5	34.8	28.3	39.9	40.4	36.6	70.2	31.9	30.7	32.0	35.0	18.6	20.9	28.5
Aluminum Al	0.213	0.219	0.308	0.245	0.237	0.171	0.157	0.0607	0.0721	0.246	0.244	0.212	0.112	0.0312	0.213
Antimony Sb	0.0021	0.0022	0.0015	0.0027	0.0020	0.0016	0.0018	0.0019	0.0015	0.0007	0.0021	0.0078	0.0008	0.0025	0.0004
Arsenic As	0.0020	0.0188	0.0135	0.0036	0.0030	0.0091	0.0043	0.0020	0.0005	0.0033	0.0015	0.0016	0.0004	0.0037	0.0097
Barium Ba	0.00100	0.00103	0.00119	0.00112	0.00143	0.00220	0.00135	0.00216	0.00113	0.01459	0.00150	0.00172	0.00477	0.0273	0.00324
Beryllium Be	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002
Bismuth Bi	< 0.00001	< 0.00001	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.00003	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.00004
Boron B	0.0072	0.0278	0.0302	0.0161	0.0078	0.0099	0.0121	0.0055	0.0060	0.0061	0.0080	0.0089	0.0142	0.0075	0.0127
Cadmium Cd	0.000004	0.000038	0.000019	0.000006	0.000003	0.000011	0.000004	0.000229	0.000035	0.000006	0.000003	0.000017	< 0.000003	< 0.000003	0.000003
Calcium Ca	13.8	12.5	12.4	10.2	14.5	12.8	12.1	19.9	8.78	10.9	12.2	13.1	6.07	6.06	10.0
Chromium Cr	< 0.0005	< 0.0005	0.0009	0.0008	0.0009	0.0008	0.0019	0.0007	0.0011	0.0010	0.0017	0.0006	0.0009	0.0012	0.0009
Cobalt Co	0.000036	0.000179	0.000208	0.000056	0.000571	0.000073	0.000060	0.00139	0.00125	0.000082	0.000078	0.000093	0.000034	0.000054	0.000069
Copper Cu	0.0017	0.0388	0.0052	0.0019	0.0079	0.0022	0.0018	0.0106	0.0018	0.0015	0.0012	0.0017	0.0011	0.0074	0.0016
Iron Fe	< 0.003	< 0.003	0.004	0.003	0.008	< 0.003	< 0.003	0.020	< 0.003	0.004	< 0.003	0.006	0.011	0.006	0.006
Lead Pb	0.00033	0.00070	0.00070	0.00015	0.00018	0.00013	0.00011	0.00140	0.00074	0.00006	0.00021	0.00017	0.00018	0.00007	0.00005
Lithium Li	0.003	0.003	0.002	0.004	0.005	0.004	0.002	0.004	0.003	0.002	0.005	0.003	0.002	0.003	0.002
Magnesium Mg	0.400	1.01	0.963	0.652	0.872	2.06	1.56	4.97	2.42	0.842	0.392	0.554	0.838	1.40	0.849
Manganese Mn	0.0090	0.149	0.0324	0.0122	0.0288	0.0168	0.0273	0.398	0.626	0.0086	0.0082	0.0773	0.0026	0.0040	0.0020
Mercury Hg	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02	0.01	0.01	0.01	0.01	0.01	< 0.01	< 0.01
Molybdenum Mo	0.00016	0.00042	0.00086	0.00046	0.00050	0.00426	0.00155	0.00201	0.00057	0.00122	0.00043	0.00025	0.00027	0.00010	0.00024
Nickel Ni	< 0.0001	< 0.0001	0.0013	< 0.0001	0.0001	0.0004	0.0011	0.0022	0.0006	< 0.0001	0.0001	0.0003	0.0006	0.0017	0.0004
Phosphorus P	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	0.015
Potassium K	2.16	3.17	3.32	1.63	1.99	3.07	2.89	3.51	3.07	1.69	2.20	3.46	1.28	6.06	1.40
Selenium Se	0.00004	0.00008	0.00028	0.00012	< 0.00004	0.00008	< 0.00004	0.00045	0.00017	0.00004	< 0.00004	0.00019	0.00017	0.00045	0.00023
Silicon Si	1.04	1.26	1.33	1.27	1.12	1.28	1.17	0.91	0.70	0.96	1.37	0.92	1.41	1.91	1.35
Silver Ag	0.00002	< 0.00001	< 0.00001	< 0.00001	< 0.00001	0.00001	< 0.00001	0.00005	0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Sodium Na	1.89	2.58	1.71	2.66	1.72	2.04	2.27	2.12	0.99	4.57	3.23	2.23	10.9	6.87	5.46
Strontium Sr	0.0427	0.0550	0.0558	0.0399	0.0389	0.0401	0.0446	0.0561	0.0233	0.107	0.0406	0.0495	0.0707	0.0758	0.0399
Sulphur (S)	1.05	1.85	2.59	0.64	1.96	2.06	2.26	18.5	4.85	2.32	0.91	5.35	1.03	0.94	0.74
Thallium Tl	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	0.00002	< 0.00002
Tin Sn	< 0.00001	0.00011	0.00012	0.00008	0.00024	0.00007	0.00006	0.00013	0.00016	0.00011	0.00009	0.00012	0.00007	0.00005	0.00007
Titanium Ti	0.0002	0.0001	0.0003	0.0003	0.0004	0.0001	< 0.0001	0.0003	0.0002	0.0002	0.0002	0.0003	0.0004	0.0001	0.0002
Uranium U	0.000021	0.000007	0.000092	0.000059	0.000244	0.000032	0.000008	0.000092	0.000015	0.000058	0.000030	0.000085	0.000001	0.000004	0.000001
Vanadium V	0.00052	0.00030	0.00044	0.00037	0.00040	0.00022	0.00012	< 0.00003	< 0.00003	0.00047	0.00063	0.00018	0.00229	0.00273	0.00150
Zinc Zn	0.002	0.007	0.002	0.001	0.003	0.004	0.002	0.015	0.003	0.003	0.002	0.003	0.001	0.001	0.002
Zirconium Zr	0.00002	0.00003	0.00041	0.00002	0.00010	0.00012	0.00001	0.00051	0.00021	0.00007	0.00005	0.00005	< 0.00001	< 0.00001	0.00002

CLIENT : AMEC
PROJECT : Rainy River
SGS Project # : 08121
Test : 24 Hour Nanopure Water Leach Extraction Test at 3:1 Liquid to Solid Ratio
Date : November 30 - December 9, 2011

Leachate Analysis

Sample ID	L032214	L032215	L032216	L032218	L032222	L032224	Blank
Parameter							
Volume Nanopure Water	750	750	750	750	750	750	750
Sample Weight	250	250	250	250	250	250	250
pH	7.89	7.91	7.54	7.43	7.80	7.88	7.07
Redox	259	261	352	340	336	334	333
Conductivity	82	83	78	62	80	104	1
Acidity (to pH 4.5)	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A
Total Acidity (to pH 8.3)	2.8	2.9	3.3	3.5	3.0	3.2	2.6
Alkalinity	48.2	44.2	41.1	12.2	46.9	47.2	2.0
Chloride	0.5	0.7	0.8	0.2	1.0	4.1	< 0.2
Fluoride	< 0.06	< 0.06	< 0.06	< 0.06	0.06	0.07	< 0.06
Sulphate	2	4	2	13	<2	2	<2
Ion Balance							
Major Anions	1.02	0.99	0.89	0.52	0.97	1.10	#N/A
Major Cations	0.92	0.94	0.78	0.58	0.88	1.08	#N/A
Difference	0.10	0.05	0.10	-0.06	0.08	0.02	#N/A
Balance (%)	5.3%	2.4%	6.2%	-5.8%	4.5%	1.1%	#N/A
Dissolved Metals							
Hardness CaCO3	37.6	40.1	33.1	23.5	37.4	39.7	< 0.05
Aluminum Al	0.151	0.137	0.217	0.148	0.129	0.108	0.0019
Antimony Sb	0.0005	0.0003	0.0006	0.0016	0.0036	0.0008	< 0.0002
Arsenic As	0.0122	0.0041	0.0013	0.0012	0.0005	0.0028	< 0.0002
Barium Ba	0.00291	0.00175	0.00327	0.00225	0.00123	0.0204	0.00025
Beryllium Be	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002
Bismuth Bi	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001
Boron B	0.0151	0.0106	0.0101	0.0130	0.0137	0.0140	0.0005
Cadmium Cd	0.000006	0.000006	< 0.000003	0.000061	< 0.000003	< 0.000003	< 0.000003
Calcium Ca	13.1	12.6	11.2	6.74	12.9	12.7	< 0.02
Chromium Cr	0.0007	0.0006	0.0007	0.0013	0.0009	0.0011	0.0008
Cobalt Co	0.000070	0.000096	0.000054	0.000889	0.000030	0.000036	0.000003
Copper Cu	0.0013	0.0015	0.0006	0.0025	< 0.0005	0.0006	< 0.0005
Iron Fe	< 0.003	0.004	0.047	0.014	< 0.003	< 0.003	< 0.003
Lead Pb	0.00010	0.00018	0.00040	0.00185	0.00013	0.00029	0.00020
Lithium Li	0.004	0.003	0.003	0.002	0.002	0.008	< 0.001
Magnesium Mg	1.18	2.08	1.24	1.62	1.25	1.94	0.002
Manganese Mn	0.0083	0.0075	0.0035	0.166	0.0039	0.0080	< 0.0002
Mercury Hg	0.01	0.01	0.01	0.01	0.02	0.01	0.01
Molybdenum Mo	0.00038	0.00035	0.00189	0.00082	0.00013	0.00172	0.00006
Nickel Ni	0.0002	0.0003	0.0003	0.0012	0.0004	0.0004	< 0.0001
Phosphorus P	< 0.009	< 0.009	0.014	0.028	0.013	< 0.009	< 0.009
Potassium K	2.95	3.03	1.94	2.58	0.359	8.15	< 0.006
Selenium Se	0.00016	< 0.00004	0.00004	0.00032	0.00048	< 0.00004	0.00027
Silicon Si	1.10	1.13	1.04	1.18	0.94	1.02	< 0.01
Silver Ag	< 0.00001	< 0.00001	< 0.00001	0.00002	< 0.00001	< 0.00001	< 0.00001
Sodium Na	1.53	1.02	1.00	0.52	2.45	1.36	0.02
Strontium Sr	0.0797	0.0614	0.0834	0.0170	0.0903	0.159	< 0.0001
Sulphur (S)	0.90	1.97	1.51	5.54	0.71	1.81	< 0.03
Thallium Tl	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002
Tin Sn	0.00007	0.00008	0.00009	0.00015	0.00003	0.00004	0.00015
Titanium Ti	< 0.0001	0.0002	0.0025	0.0015	0.0001	0.0001	< 0.0001
Uranium U	0.000011	0.000025	0.000005	0.000020	< 0.000001	0.000029	< 0.000001
Vanadium V	0.00033	0.00103	0.00189	0.00008	0.00034	0.00362	< 0.00003
Zinc Zn	0.002	0.002	0.002	0.014	0.001	< 0.001	0.008
Zirconium Zr	0.00001	0.00005	0.00009	0.00152	0.00002	0.00002	< 0.00001

Client : AMEC
Project : Rainy River
SGS Project : 08121
Test : 24 Hour Nanopure Water Leach Extraction Test at 3:1 Liquid to Solid Ratio
Date : January 11, 2012

Leachate Analysis

Sample ID			Keewatin Till	Labradorean 4m	Blank
Parameter	**Method**	**Units**			
Volume Nanopure Water		mL	750	750	750
Sample Weight		g	250	250	250
pH	meter		8.03	7.91	6.02
Redox	meter	mV	247	267	-
Conductivity	meter	uS/cm	298	213	<1
Acidity (to pH 4.5)	titration	mg CaCO3/L	#N/A	#N/A	-
Total Acidity (to pH 8.3)	titration	mg CaCO3/L	2.9	3.2	-
Alkalinity	titration	mg CaCO3/L	88.8	55.6	-
Chloride		mg/L	0.8	0.3	-
Fluoride		mg/L	0.33	0.08	-
Sulphate	Turbidity	mg/L	64	53	-
Ion Balance					
Major Anions	Calc	meq/L	3.11	2.22	#N/A
Major Cations	Calc	meq/L	2.86	2.02	#N/A
Difference	Calc	meq/L	0.25	0.19	#N/A
Balance (%)	Calc	%	4.2%	4.6%	#N/A
Dissolved Metals					
Hardness CaCO3		mg/L	121	94.9	-
Aluminum Al	ICP-MS	mg/L	0.145	0.0457	-
Antimony Sb	ICP-MS	mg/L	0.0004	0.0009	-
Arsenic As	ICP-MS	mg/L	0.0019	0.0010	-
Barium Ba	ICP-MS	mg/L	0.0559	0.0292	-
Beryllium Be	ICP-MS	mg/L	< 0.00002	< 0.00002	-
Bismuth Bi	ICP-MS	mg/L	< 0.00001	< 0.00001	-
Boron B	ICP-MS	mg/L	0.0340	0.0121	-
Cadmium Cd	ICP-MS	mg/L	0.000022	0.000069	-
Calcium Ca	ICP-MS	mg/L	28.7	28.5	-
Chromium Cr	ICP-MS	mg/L	< 0.0005	< 0.0005	-
Cobalt Co	ICP-MS	mg/L	0.000127	0.000213	-
Copper Cu	ICP-MS	mg/L	0.0057	0.0019	-
Iron Fe	ICP-MS	mg/L	0.087	0.018	-
Lead Pb	ICP-MS	mg/L	0.00010	0.00006	-
Lithium Li	ICP-MS	mg/L	0.026	0.005	-
Magnesium Mg	ICP-MS	mg/L	11.9	5.76	-
Manganese Mn	ICP-MS	mg/L	0.0375	0.141	-
Mercury Hg	ICP-MS	ug/L	< 0.01	0.01	-
Molybdenum Mo	ICP-MS	mg/L	0.00964	0.00080	-
Nickel Ni	ICP-MS	mg/L	0.0008	0.0006	-
Phosphorus P	ICP-MS	mg/L	< 0.009	< 0.009	-
Potassium K	ICP-MS	mg/L	7.09	2.45	-
Selenium Se	ICP-MS	mg/L	0.0120	0.00117	-
Silicon Si	ICP-MS	mg/L	3.44	1.10	-
Silver Ag	ICP-MS	mg/L	< 0.00001	< 0.00001	-
Sodium Na	ICP-MS	mg/L	5.58	1.29	-
Strontium Sr	ICP-MS	mg/L	0.128	0.0850	-
Sulphur (S)	ICP-MS	mg/L	23.6	20.0	-
Thallium Tl	ICP-MS	mg/L	0.00003	< 0.00002	-
Tin Sn	ICP-MS	mg/L	0.00002	< 0.00001	-
Titanium Ti	ICP-MS	mg/L	0.0096	0.0013	-
Uranium U	ICP-MS	mg/L	0.000665	0.00182	-
Vanadium V	ICP-MS	mg/L	0.00411	0.00065	-
Zinc Zn	ICP-MS	mg/L	0.003	0.003	-
Zirconium Zr	ICP-MS	mg/L	0.00027	0.00006	-

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

D.I. Leach @ 3:1 ratio filter=0.45µ, 24hr

Project : CALR-11736-004

Monday, April 16, 2012

Environmental Met
Attn : Barb Bowman

Date Rec. : 29 March 2012
LR Report: **CA11362-MAR12**

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ODM Zone Master Comp A	6: ODM Zone Master Comp B
Sample Date & Time			Date: n/a	Date: n/a
Sample weight [g]	10-Apr-12	16:20	250	250
Volume D.I. Water [mL]	10-Apr-12	16:20	750	750
Initial pH [units]	10-Apr-12	16:20	8.86	8.84
Final pH [units]	10-Apr-12	16:20	8.60	8.55
pH [units]	10-Apr-12	21:37	7.28	7.32
Alkalinity [mg/L as CaCO3]	10-Apr-12	21:37	29	30
Conductivity [µS/cm]	10-Apr-12	21:37	259	264
Acidity [mg/L as CaCO3]	10-Apr-12	21:37	< 2	< 2
Fluoride [mg/L]	10-Apr-12	21:17	0.08	0.08
Nitrite (as N) [mg/L]	10-Apr-12	14:38	< 0.06	< 0.06
Nitrate (as N) [mg/L]	10-Apr-12	14:38	0.06	0.06
Chloride [mg/L]	12-Apr-12	12:27	1.0	1.0
Sulphate [mg/L]	12-Apr-12	09:52	78	78
Mercury [mg/L]	10-Apr-12	16:12	< 0.0001	< 0.0001
Aluminum [mg/L]	12-Apr-12	09:23	0.119	0.115
Arsenic [mg/L]	12-Apr-12	09:23	0.0020	0.0019
Silver [mg/L]	12-Apr-12	09:23	< 0.00001	< 0.00001
Barium [mg/L]	12-Apr-12	09:23	0.00199	0.00165
Beryllium [mg/L]	12-Apr-12	09:23	< 0.00002	< 0.00002
Boron [mg/L]	12-Apr-12	09:23	0.0160	0.0142
Bismuth [mg/L]	12-Apr-12	09:23	< 0.00001	< 0.00001
Calcium [mg/L]	10-Apr-12	14:56	39.7	39.1
Cadmium [mg/L]	12-Apr-12	09:24	0.000008	0.000006
Cobalt [mg/L]	12-Apr-12	09:24	0.000712	0.000673
Chromium [mg/L]	12-Apr-12	09:24	0.0007	< 0.0005
Copper [mg/L]	12-Apr-12	09:24	0.0007	0.0006
Iron [mg/L]	10-Apr-12	14:56	0.056	0.029
Potassium [mg/L]	10-Apr-12	14:56	5.21	5.09
Lithium [mg/L]	12-Apr-12	09:24	0.003	0.003

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Test method information available upon request. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

D.I. Leach @ 3:1 ratio filter=0.45µ, 24hr

Project : CALR-11736-004

LR Report : **CA11362-MAR12**

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ODM Zone Master Comp A	6: ODM Zone Master Comp B
Magnesium [mg/L]	10-Apr-12	14:56	1.74	1.74
Manganese [mg/L]	12-Apr-12	09:24	0.0175	0.0163
Molybdenum [mg/L]	12-Apr-12	09:24	0.00579	0.00538
Sodium [mg/L]	10-Apr-12	14:56	4.62	4.52
Nickel [mg/L]	12-Apr-12	09:24	0.0011	0.0006
Phosphorus [mg/L]	10-Apr-12	14:56	< 0.009	< 0.009
Lead [mg/L]	12-Apr-12	09:24	0.00019	0.00016
Antimony [mg/L]	12-Apr-12	09:24	0.0089	0.0092
Silicon [mg/L]	10-Apr-12	14:56	1.49	1.52
Selenium [mg/L]	12-Apr-12	09:24	0.001	< 0.001
Tin [mg/L]	12-Apr-12	09:24	0.00005	0.00006
Strontium [mg/L]	10-Apr-12	14:56	0.0951	0.0943
Thorium [mg/L]	12-Apr-12	09:24	0.000004	< 0.000004
Titanium [mg/L]	12-Apr-12	09:24	0.0002	0.0002
Thallium [mg/L]	12-Apr-12	09:24	0.00003	0.00002
Uranium [mg/L]	12-Apr-12	09:24	0.000255	0.000228
Vanadium [mg/L]	12-Apr-12	09:24	0.00009	0.00010
Tungsten [mg/L]	12-Apr-12	09:24	0.00047	0.00030
Yttrium [mg/L]	12-Apr-12	09:24	0.000002	< 0.000001
Zinc [mg/L]	12-Apr-12	09:24	0.001	0.001

Dianne Griffin
Project Specialist

OnLine LIMS

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Test method information available upon request. "Temperature Upon Receipt" is representative of the whole shipment and may not reflect the temperature of individual samples.

SGS Canada Inc.
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Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

D.I. Leach @ 3:1 ratio filter=0.45µ, 24hr

Project : CALR-11736-004

Thursday, April 26, 2012

Environmental Met
Attn : Barb Bowman

Date Rec. : 17 April 2012
LR Report: **CA11164-APR12**

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ROM Sample A	6: ROM Sample B
Sample weight [g]	24-Apr-12	09:17	250	250
Volume D.I. Water [mL]	24-Apr-12	09:17	750	750
Initial pH [units]	24-Apr-12	09:17	8.94	9.04
Final pH [units]	24-Apr-12	09:17	8.36	8.37
pH [untis]	24-Apr-12	10:39	7.73	7.71
Alkalinity [mg/L as CaCO3]	24-Apr-12	10:39	49	48
Conductivity [µS/cm]	24-Apr-12	10:39	200	198
Acidity [mg/L as CaCO3]	24-Apr-12	10:39	< 2	< 2
Fluoride [mg/L]	23-Apr-12	08:41	0.09	0.09
Nitrite (as N) [mg/L]	23-Apr-12	15:10	< 0.06	< 0.06
Nitrate (as N) [mg/L]	23-Apr-12	15:10	< 0.05	< 0.05
Chloride [mg/L]	25-Apr-12	17:03	1.2	1.2
Sulphate [mg/L]	25-Apr-12	15:36	33	32
Mercury [mg/L]	25-Apr-12	12:57	< 0.0001	< 0.0001
Aluminum [mg/L]	25-Apr-12	16:11	0.167	0.161
Arsenic [mg/L]	25-Apr-12	16:11	0.0014	0.0014
Silver [mg/L]	25-Apr-12	16:11	0.00011	0.00012
Barium [mg/L]	25-Apr-12	16:11	0.00317	0.00269
Beryllium [mg/L]	25-Apr-12	16:11	< 0.00002	< 0.00002
Boron [mg/L]	25-Apr-12	16:11	0.0098	0.0077
Bismuth [mg/L]	25-Apr-12	16:11	< 0.00001	< 0.00001
Calcium [mg/L]	25-Apr-12	15:01	28.5	27.8
Cadmium [mg/L]	25-Apr-12	16:11	0.000057	0.000011
Cobalt [mg/L]	25-Apr-12	16:11	0.000382	0.000380
Chromium [mg/L]	25-Apr-12	16:11	< 0.0005	0.0007
Copper [mg/L]	25-Apr-12	16:11	0.0006	0.0005
Iron [mg/L]	25-Apr-12	15:01	0.012	0.012
Potassium [mg/L]	25-Apr-12	15:01	5.48	5.32
Lithium [mg/L]	25-Apr-12	16:11	0.005	0.005
Magnesium [mg/L]	25-Apr-12	15:02	3.14	3.06

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Phone: 705-652-2000 FAX: 705-652-6365

D.I. Leach @ 3:1 ratio filter=0.45µ, 24hr

Project : CALR-11736-004

LR Report : **CA11164-APR12**

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: ROM Sample A	6: ROM Sample B
Manganese [mg/L]	25-Apr-12	16:11	0.0205	0.0201
Molybdenum [mg/L]	25-Apr-12	16:11	0.00461	0.00428
Sodium [mg/L]	25-Apr-12	15:02	3.42	3.32
Nickel [mg/L]	25-Apr-12	16:11	0.0004	0.0002
Phosphorus [mg/L]	25-Apr-12	15:02	< 0.009	< 0.009
Lead [mg/L]	25-Apr-12	16:11	0.00023	0.00027
Antimony [mg/L]	25-Apr-12	16:11	0.0137	0.0141
Silicon [mg/L]	25-Apr-12	15:02	1.65	1.63
Selenium [mg/L]	25-Apr-12	16:12	0.001	< 0.001
Tin [mg/L]	25-Apr-12	16:12	< 0.00001	< 0.00001
Strontium [mg/L]	25-Apr-12	15:02	0.0995	0.101
Thorium [mg/L]	25-Apr-12	16:12	0.000004	< 0.000004
Titanium [mg/L]	25-Apr-12	16:12	0.0003	0.0002
Thallium [mg/L]	25-Apr-12	16:12	< 0.00002	< 0.00002
Uranium [mg/L]	25-Apr-12	16:12	0.000112	0.000115
Vanadium [mg/L]	25-Apr-12	16:12	0.00008	0.00008
Tungsten [mg/L]	25-Apr-12	16:12	0.00030	0.00035
Yttrium [mg/L]	25-Apr-12	16:12	0.000057	0.000017
Zinc [mg/L]	25-Apr-12	16:12	0.002	0.001

Dianne Griffin
Project Specialist

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Phone: 705-652-2000 FAX: 705-652-6365

Shake Flask @ 3:1 ratio filter=0.45µ, 24hr

Project : CALR-11736-004

Wednesday, May 30, 2012

Environmental Met
Attn : Barb Bowman

Date Rec. : 18 May 2012
LR Report: **CA10423-MAY12**
Reference: 11736-004-05

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: Starter Pit Sample A	6: Starter Pit Sample B
Sample Date & Time			Date: n/a	Date: n/a
Sample weight [g]	30-May-12	13:17	250	250
Volume D.I. Water [mL]	30-May-12	13:17	750	750
Initial pH [units]	30-May-12	13:17	9.59	9.64
Final pH [units]	30-May-12	13:17	8.64	8.65
pH [units]	25-May-12	11:59	8.17	8.46
Alkalinity [mg/L as CaCO3]	25-May-12	11:59	42	45
Conductivity [µS/cm]	25-May-12	11:59	178	174
Acidity [mg/L as CaCO3]	25-May-12	11:59	< 2	< 2
Fluoride [mg/L]	29-May-12	08:51	0.09	0.09
Nitrite (as N) [mg/L]	25-May-12	16:17	< 0.06	< 0.06
Nitrate (as N) [mg/L]	25-May-12	16:17	< 0.05	< 0.05
Chloride [mg/L]	29-May-12	13:11	1.8	1.8
Sulphate [mg/L]	29-May-12	16:33	25	21
Mercury [mg/L]	25-May-12	15:05	< 0.0001	< 0.0001
Aluminum [mg/L]	25-May-12	10:22	0.0756	0.0788
Arsenic [mg/L]	25-May-12	10:22	0.0040	0.0046
Silver [mg/L]	25-May-12	10:22	0.00002	0.00009
Barium [mg/L]	25-May-12	10:22	0.00200	0.00213
Beryllium [mg/L]	25-May-12	10:22	< 0.00002	< 0.00002
Boron [mg/L]	25-May-12	10:22	0.121	0.154
Bismuth [mg/L]	25-May-12	10:22	0.00003	0.00002
Calcium [mg/L]	25-May-12	12:42	20.8	19.6
Cadmium [mg/L]	25-May-12	10:22	< 0.000003	0.000005
Cobalt [mg/L]	25-May-12	10:22	0.000473	0.000488
Chromium [mg/L]	25-May-12	10:22	< 0.0005	< 0.0005
Copper [mg/L]	25-May-12	10:22	0.0006	< 0.0005
Iron [mg/L]	25-May-12	12:42	0.053	0.054
Potassium [mg/L]	25-May-12	12:42	4.30	3.95

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Shake Flask @ 3:1 ratio filter=0.45µ, 24hr

Project : CALR-11736-004

LR Report : **CA10423-MAY12**

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: Starter Pit Sample A	6: Starter Pit Sample B
Lithium [mg/L]	25-May-12	10:23	0.003	0.003
Magnesium [mg/L]	25-May-12	12:43	1.58	1.52
Manganese [mg/L]	25-May-12	10:23	0.00091	0.00077
Molybdenum [mg/L]	25-May-12	10:23	0.00297	0.00299
Sodium [mg/L]	25-May-12	12:43	11.6	11.5
Nickel [mg/L]	25-May-12	10:24	0.0002	0.0002
Phosphorus [mg/L]	25-May-12	12:43	< 0.009	< 0.009
Lead [mg/L]	25-May-12	10:24	0.00185	0.00185
Antimony [mg/L]	25-May-12	10:24	0.0237	0.0234
Silicon [mg/L]	25-May-12	12:43	2.29	2.96
Selenium [mg/L]	25-May-12	10:24	< 0.001	< 0.001
Tin [mg/L]	25-May-12	10:24	0.00028	0.00011
Strontium [mg/L]	25-May-12	12:43	0.0476	0.0445
Thorium [mg/L]	25-May-12	10:24	0.000010	0.000008
Titanium [mg/L]	25-May-12	10:24	0.0005	0.0005
Thallium [mg/L]	25-May-12	10:24	< 0.00002	< 0.00002
Uranium [mg/L]	25-May-12	10:24	0.000101	0.000116
Vanadium [mg/L]	25-May-12	10:24	0.00021	0.00054
Tungsten [mg/L]	25-May-12	10:24	0.00015	0.00020
Yttrium [mg/L]	25-May-12	10:24	0.000005	0.000012
Zinc [mg/L]	25-May-12	10:24	0.002	0.002

Dianne Griffin
Project Specialist

OnLine LIMS

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DECANT SOLUTION

SGS Canada Inc.
P.O. Box 4300 - 185 Concession St.
Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Environmental Met
Attn : Barb Bowman

Env ICP-MS Metals total and dissolved

Project : CALR-11736-004

Tuesday, June 26, 2012

Date Rec. : 18 June 2012
LR Report: **CA10368-JUN12**
Reference: 11736-004-07

Copy: #1

CERTIFICATE OF ANALYSIS
Final Report

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: CND-1 Decant Solution	6: CND-2 Decant Solution
Sample Date & Time			Date:N/A	Date:N/A
Temperature Upon Receipt [°C]	---	---	20.0	20.0
pH [no unit]	20-Jun-12	14:48	7.88	7.65
Alkalinity [mg/L as CaCO3]	20-Jun-12	14:48	65	82
Conductivity [µS/cm]	20-Jun-12	14:48	4580	4470
Acidity [mg/L as CaCO3]	20-Jun-12	14:48	< 2	< 2
EMF [mV]	19-Jun-12	12:42	262	241
Total Dissolved Solids [mg/L]	21-Jun-12	11:20	4100	4160
Fluoride [mg/L]	22-Jun-12	09:15	0.22	0.17
Ammonia+Ammonium (N) [mg/L]	19-Jun-12	13:02	2.0	4.4
Chloride [mg/L]	21-Jun-12	10:32	16	19
Sulphate [mg/L]	21-Jun-12	10:32	2600	2700
Nitrite (as N) [mg/L]	21-Jun-12	14:35	< 0.06	< 0.06
Nitrate (as N) [mg/L]	21-Jun-12	14:35	0.06	0.06
Nitrate + Nitrite (as N) [mg/L]	21-Jun-12	14:35	0.06	0.06
Thiosalts (total) [as S2O3 mg/L]	19-Jun-12	14:42	< 10	< 10
Mercury (total) [mg/L]	21-Jun-12	08:59	< 0.0001	< 0.0001
Hardness [mg/L as CaCO3]	22-Jun-12	15:03	749	1120
Silver (total) [mg/L]	26-Jun-12	14:16	0.00012	0.00014
Aluminum (total) [mg/L]	22-Jun-12	15:03	0.16	0.08
Arsenic (total) [mg/L]	26-Jun-12	14:16	0.0100	0.0047
Barium (total) [mg/L]	26-Jun-12	14:16	0.0646	0.0583
Beryllium (total) [mg/L]	26-Jun-12	14:16	< 0.00002	< 0.00002
Boron (total) [mg/L]	26-Jun-12	14:16	0.0245	0.0245
Bismuth (total) [mg/L]	26-Jun-12	14:16	< 0.00001	< 0.00001
Calcium (total) [mg/L]	22-Jun-12	15:03	292	438
Cadmium (total) [mg/L]	26-Jun-12	14:16	0.000019	0.000794
Cobalt (total) [mg/L]	26-Jun-12	14:16	0.0198	0.0149
Chromium (total) [mg/L]	26-Jun-12	14:16	0.0008	< 0.0005

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Lakefield - Ontario - KOL 2HO
Phone: 705-652-2000 FAX: 705-652-6365

Env ICP-MS Metals total and dissolved

Project : CALR-11736-004

LR Report : **CA10368-JUN12**

Analysis	3: Analysis Approval Date	4: Analysis Approval Time	5: CND-1 Decant Solution	6: CND-2 Decant Solution
Copper (total) [mg/L]	26-Jun-12	14:16	0.156	0.186
Iron (total) [mg/L]	22-Jun-12	15:04	0.042	0.053
Potassium (total) [mg/L]	22-Jun-12	15:04	35.5	41.2
Lithium (total) [mg/L]	26-Jun-12	14:16	0.008	0.008
Magnesium (total) [mg/L]	22-Jun-12	15:04	4.64	7.18
Manganese (total) [mg/L]	26-Jun-12	14:16	0.0447	0.436
Molybdenum (total) [mg/L]	26-Jun-12	14:16	0.0556	0.0619
Sodium (total) [mg/L]	25-Jun-12	10:26	1060	868
Nickel (total) [mg/L]	26-Jun-12	14:16	0.0038	0.0093
Phosphorus (total) [mg/L]	22-Jun-12	15:04	0.017	0.013
Lead (total) [mg/L]	26-Jun-12	14:17	0.00034	0.00152
Antimony (total) [mg/L]	26-Jun-12	14:17	0.0774	0.148
Selenium (total) [mg/L]	26-Jun-12	14:17	0.012	0.012
Silicon (total) [mg/L]	22-Jun-12	15:04	2.17	3.36
Tin (total) [mg/L]	26-Jun-12	14:17	0.0194	0.00022
Strontium (total) [mg/L]	22-Jun-12	15:04	0.906	0.858
Thorium (total) [mg/L]	26-Jun-12	14:17	0.000029	< 0.000004
Titanium (total) [mg/L]	26-Jun-12	14:17	0.0005	0.0007
Thallium (total) [mg/L]	26-Jun-12	14:17	< 0.0002	< 0.0002
Uranium (total) [mg/L]	26-Jun-12	14:17	0.00194	0.00303
Vanadium (total) [mg/L]	26-Jun-12	14:17	0.00059	0.00026
Zinc (total) [mg/L]	22-Jun-12	15:04	0.006	0.096
Tungsten (total) [mg/L]	26-Jun-12	14:17	0.00408	0.00121
Yttrium (total) [mg/L]	26-Jun-12	14:17	0.000012	0.000057
Zirconium (total) [mg/L]	26-Jun-12	14:17	0.00013	0.00006

Dianne Griffin
Project Specialist

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X-RAY DIFFRACTION

QUANTITATIVE PHASE ANALYSIS OF 19 POWDER SAMPLES USING THE RIETVELD METHOD AND X-RAY POWDER DIFFRACTION DATA.

Project: 08121 Rainy River – PO# 42437

Rik Vos
SGS CEMI Inc.
6927 Antrim Avenue
Burnaby, B.C. V5J 4M5

Mati Raudsepp, Ph.D.
Elisabetta Pani, Ph.D.
Jenny Lai, B.Sc.
Edith Czech, M.Sc.

Dept. of Earth & Ocean Sciences
The University of British Columbia
6339 Stores Road
Vancouver, BC V6T 1Z4

December 16, 2011

EXPERIMENTAL METHOD

The nineteen samples of **Project 08121 Rainy River** were reduced to the optimum grain-size range for quantitative X-ray analysis (<10 μm) by grinding under ethanol in a vibratory McCrone Micronising Mill for 7 minutes. Step-scan X-ray powder-diffraction data were collected over a range 3-80°2θ with CoKa radiation on a Bruker D8 Focus Bragg-Brentano diffractometer equipped with an Fe monochromator foil, 0.6 mm (0.3°) divergence slit, incident- and diffracted-beam Soller slits and a LynxEye detector. The long fine-focus Co X-ray tube was operated at 35 kV and 40 mA, using a take-off angle of 6°.

RESULTS

The X-ray diffractograms were analyzed using the International Centre for Diffraction Database PDF-4+ and Search-Match software by Siemens (Bruker). X-ray powder-diffraction data of the samples were refined with Rietveld program Topas 4.2 (Bruker AXS). The results of quantitative phase analysis by Rietveld refinements are given in Table 1 (separate file, ***SGS CEMI Results Dec 16 2011 - Proj 08121 Rainy River.xls***). These amounts represent the relative amounts of crystalline phases normalized to 100%. The Rietveld refinement plots are shown in Figures 1 – 19. The ideal formulae of phases present are given in Table 2.

Table 2.

Mineral	**Ideal Formula**
Actinolite	$Ca_2(Mg,Fe)_5Si_8O_{22}(OH)_2$
Ankerite – Dolomite	$Ca(Fe^{2+},Mg,Mn)(CO_3)_2 – CaMg(CO_3)_2$
Augite	$(Ca,Na)(Mg,Fe,Al,Ti)(Si,Al)_2O_6$
Calcite	$CaCO_3$
Clinochlore	$(Mg,Fe^{2+})_5Al(Si_3Al)O_{10}(OH)_8$
Clinozoisite	$Ca_2Al_3(SiO_4)_3(OH)$
Ilmenite	$Fe^{2+}TiO_3$
Kaolinite	$Al_2Si_2O_5(OH)_4$
K-Feldspar	$KAlSi_3O_8$
Magnetite	Fe_3O_4
Margarite	$CaAl_2(Al_2Si_2)O_{10}(OH)_2$
Muscovite	$KAl_2AlSi_3O_{10}(OH)_2$
Paragonite	$NaAl_2AlSi_3O_{10}(OH)_2$
Plagioclase	$NaAlSi_3O_8 – CaAl_2Si_2O_8$
Pyrite	FeS_2
Pyrrhotite	$Fe_{1-x}S$
Quartz	SiO_2
Rutile	TiO_2
Siderite	$Fe^{2+}CO_3$
Sphalerite	$(Zn,Fe)S$

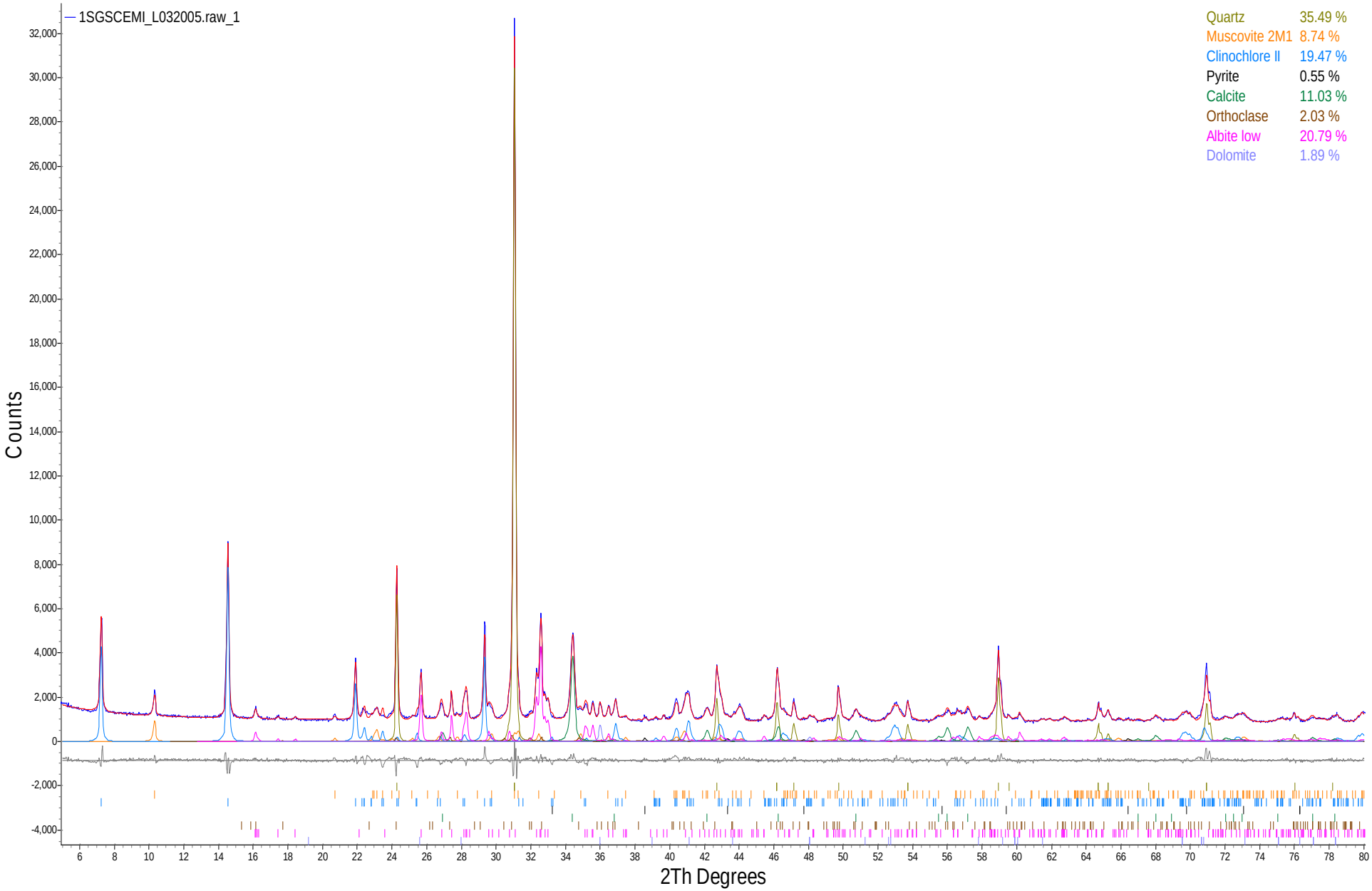


Figure 1. Rietveld refinement plot of sample **SGS CEMI "L032005"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

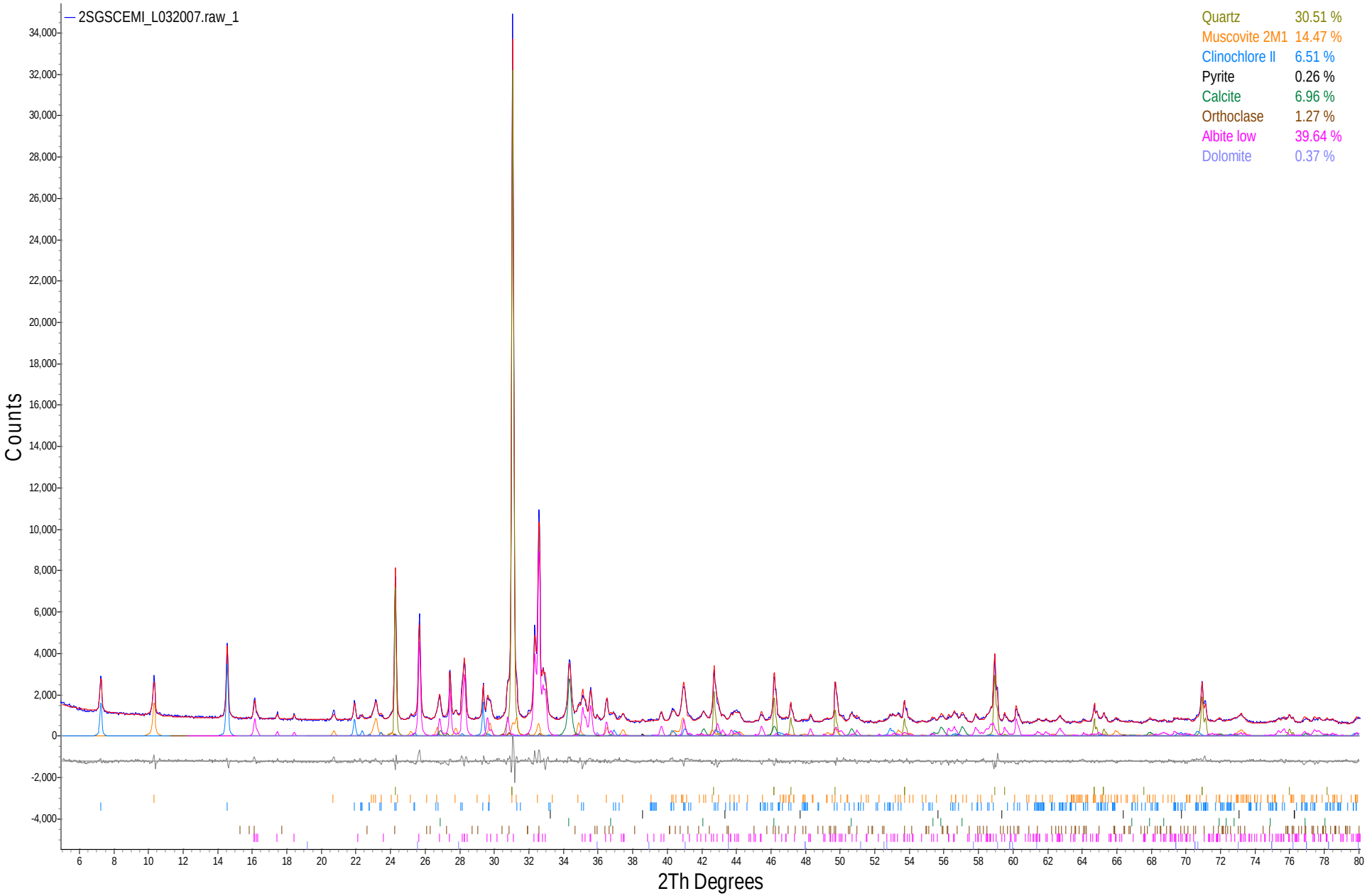


Figure 2. Rietveld refinement plot of sample **SGS CEMI "L032007"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

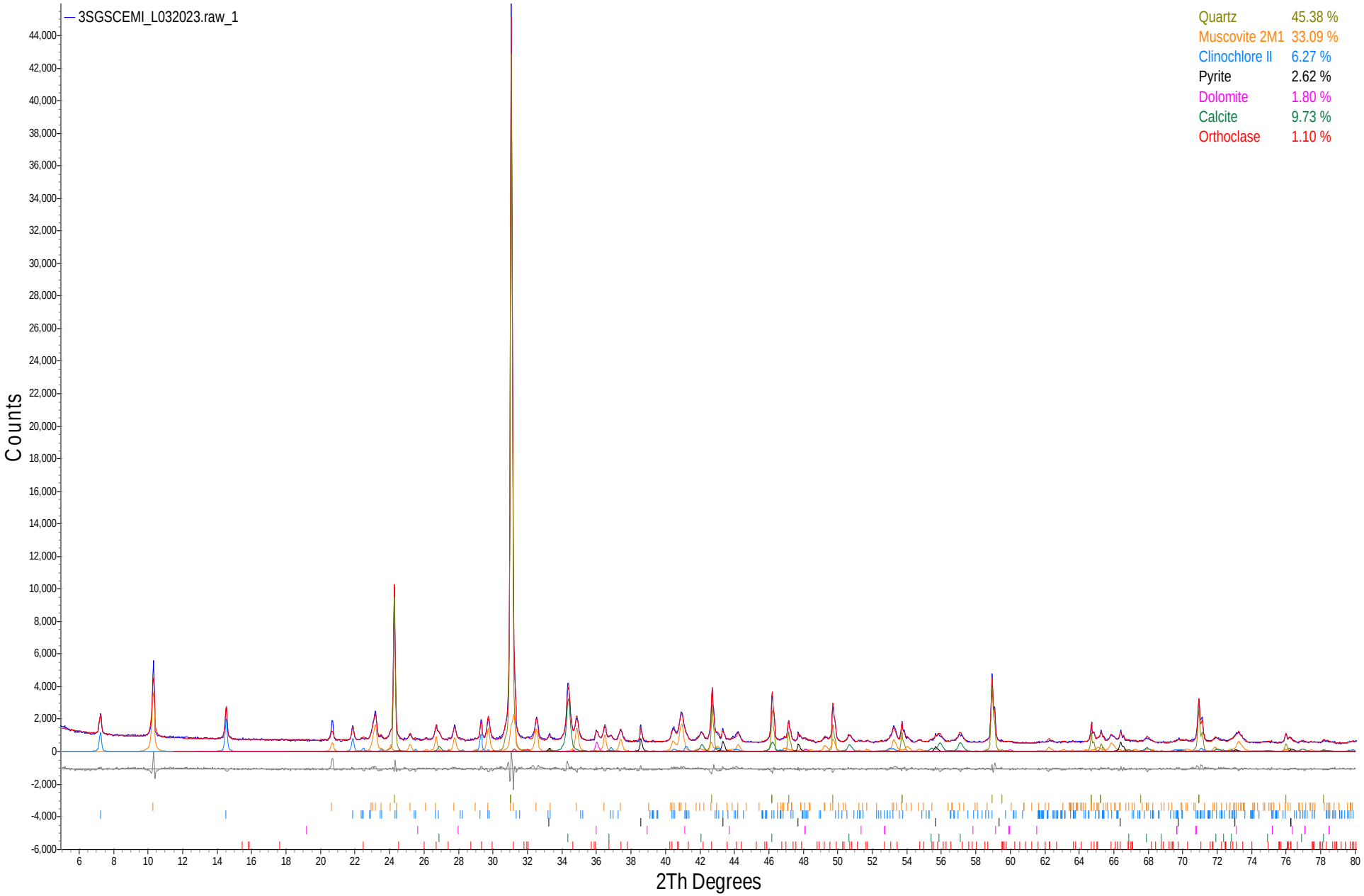


Figure 3. Rietveld refinement plot of sample **SGS CEMI "L032023"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

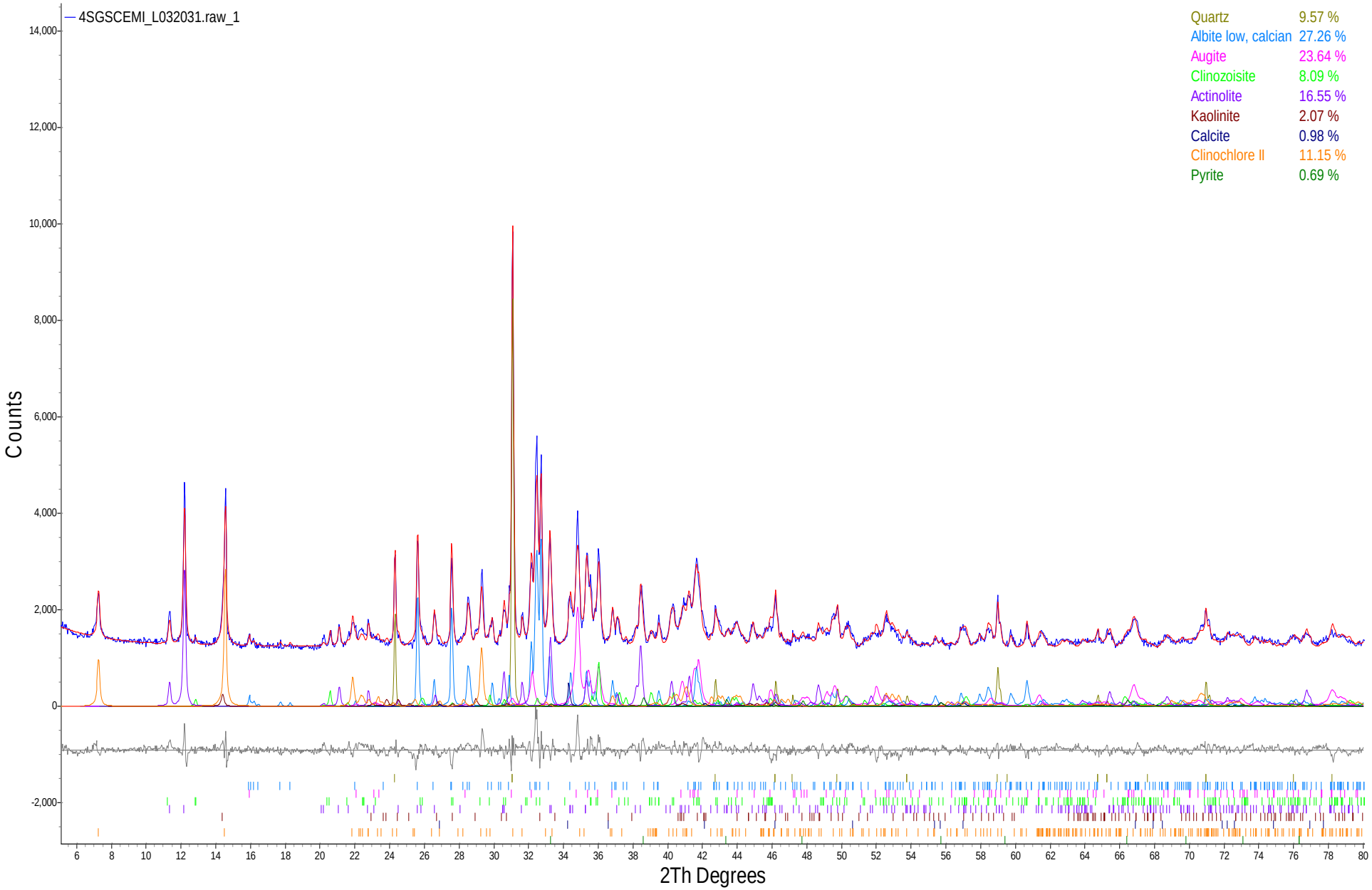


Figure 4. Rietveld refinement plot of sample **SGS CEMI "L032031"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

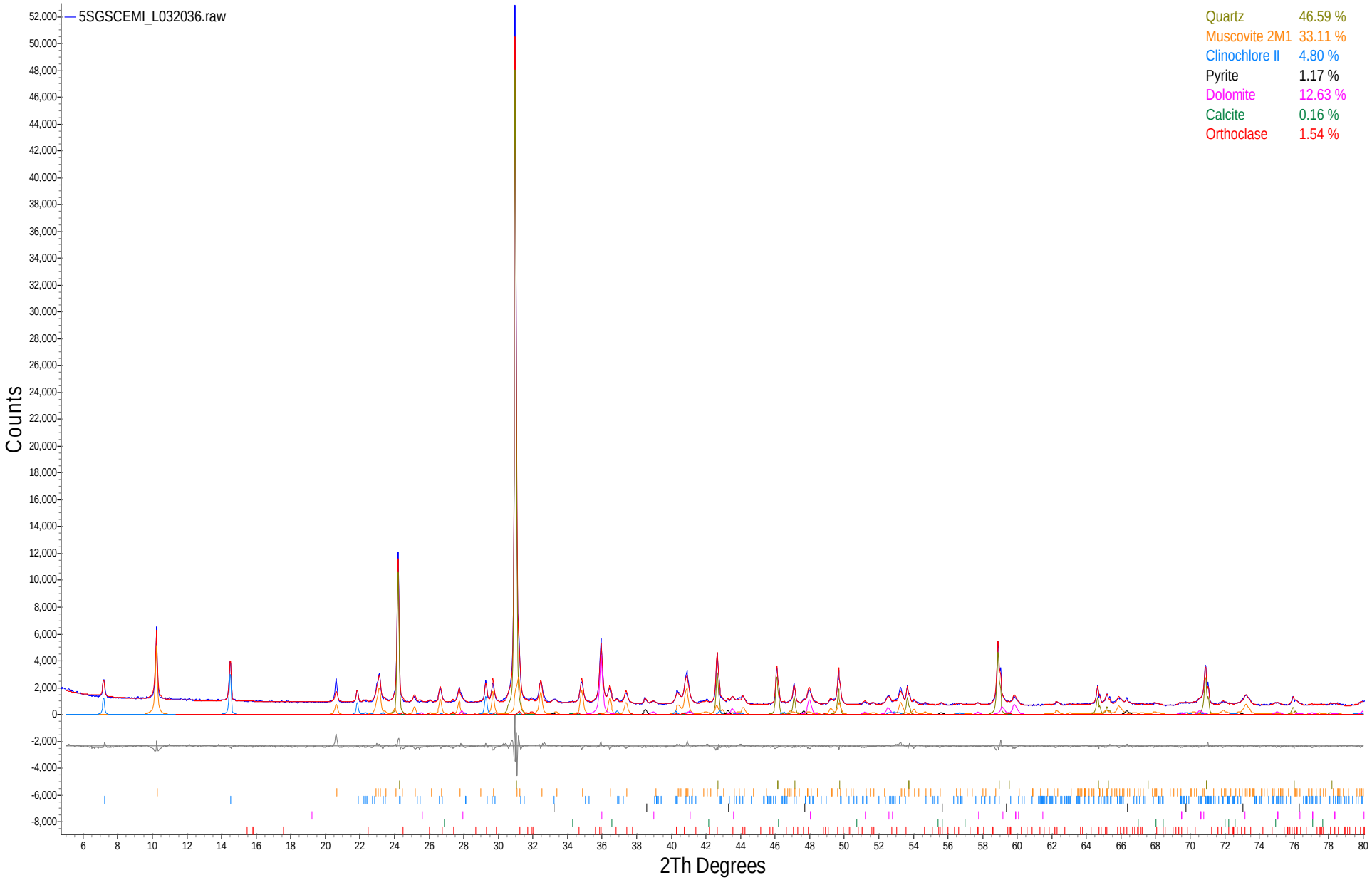


Figure 5. Rietveld refinement plot of sample **SGS CEMI "L032036"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

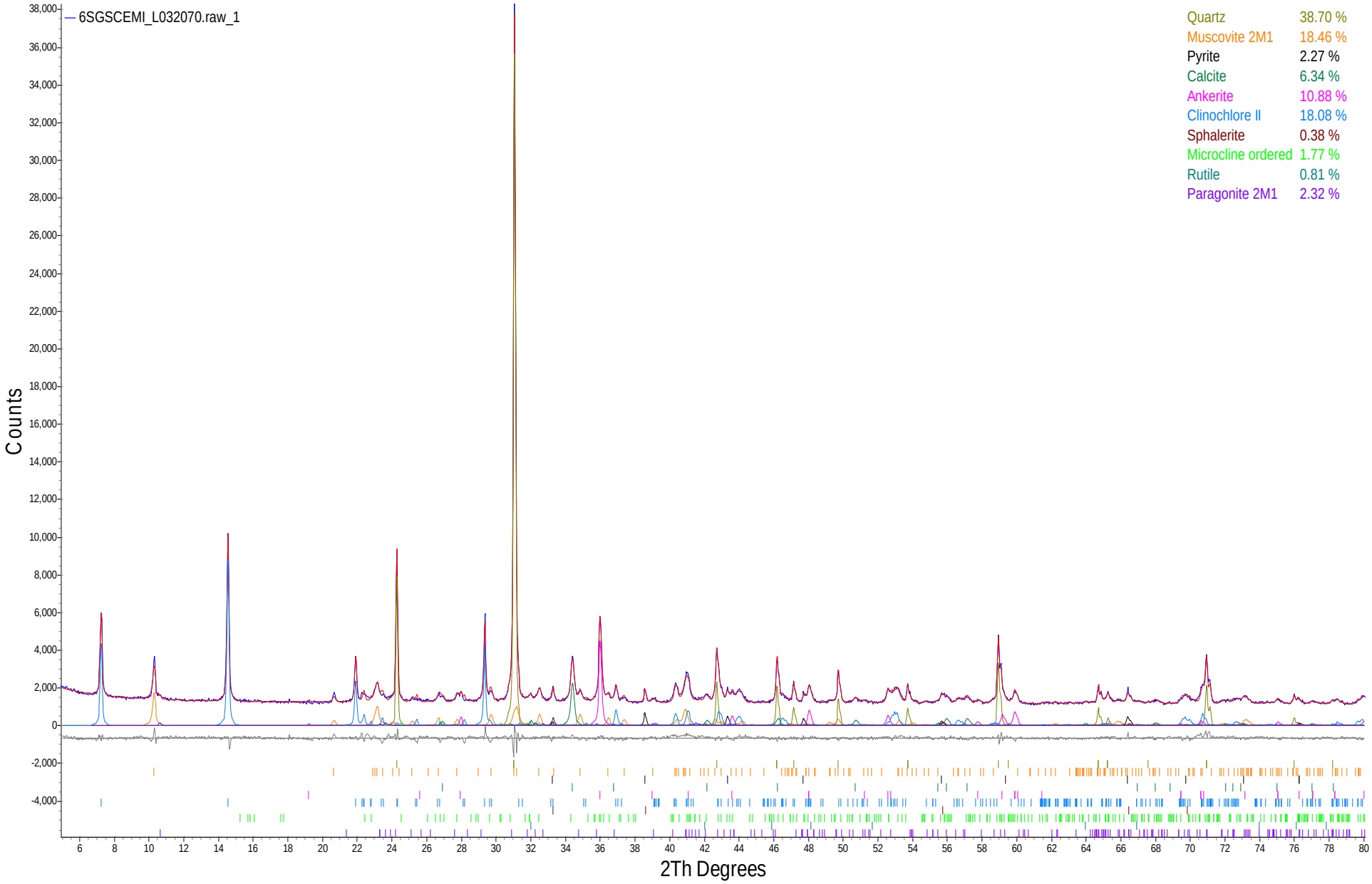


Figure 6. Rietveld refinement plot of sample **SGS CEMI "L032070"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

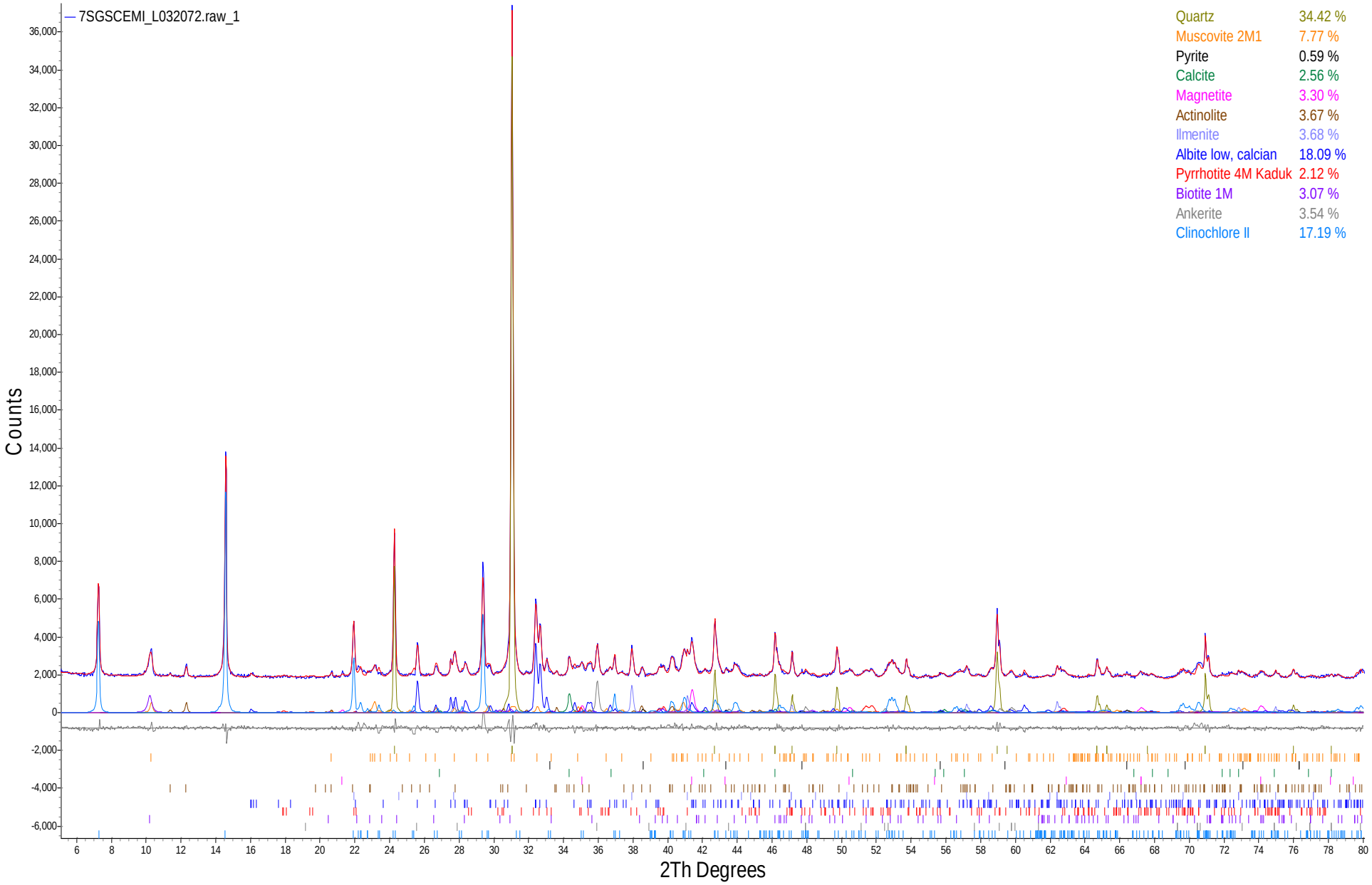


Figure 7. Rietveld refinement plot of sample **SGS CEMI "L032072"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

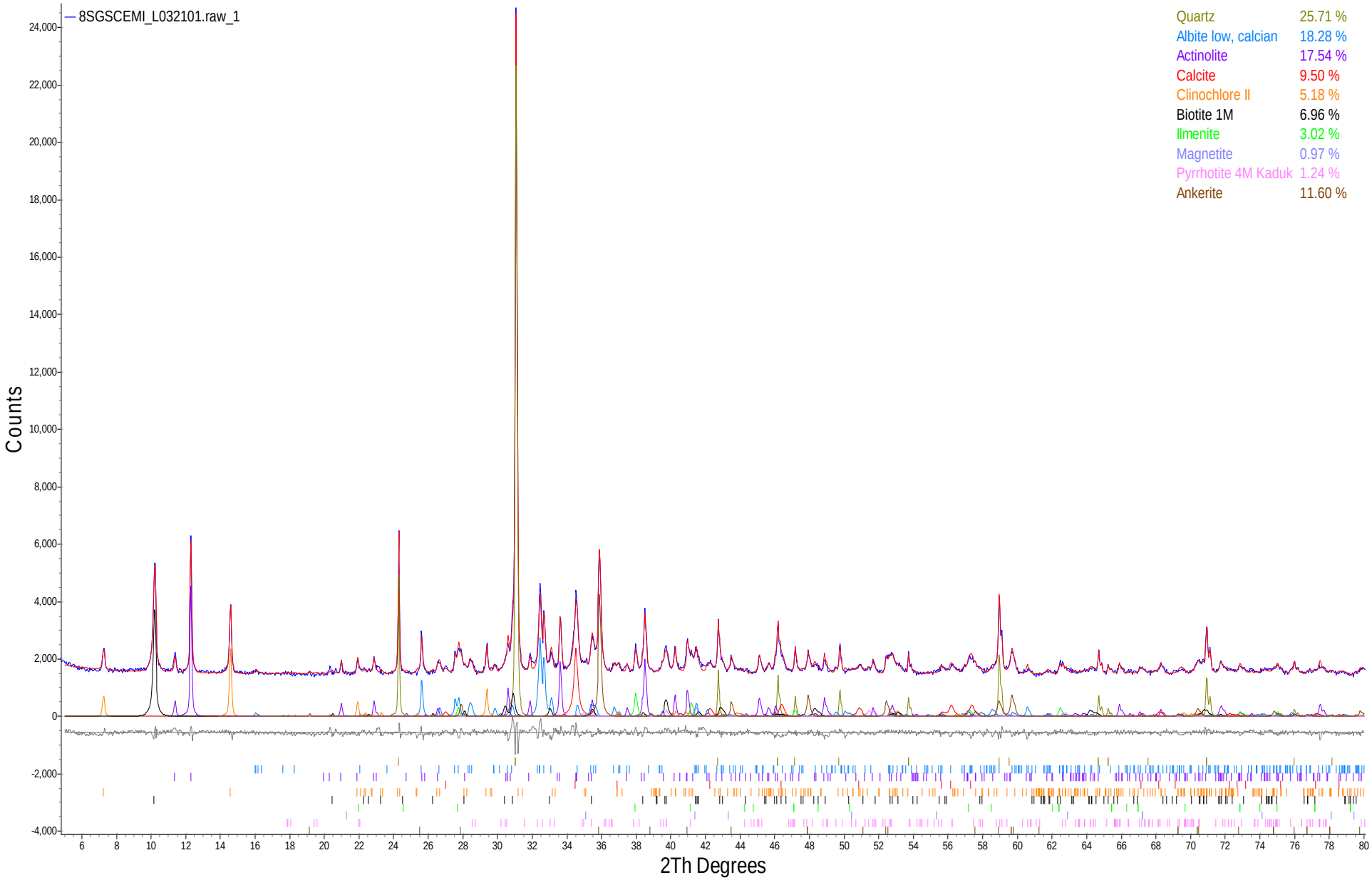


Figure 8. Rietveld refinement plot of sample **SGS CEMI "L032101"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

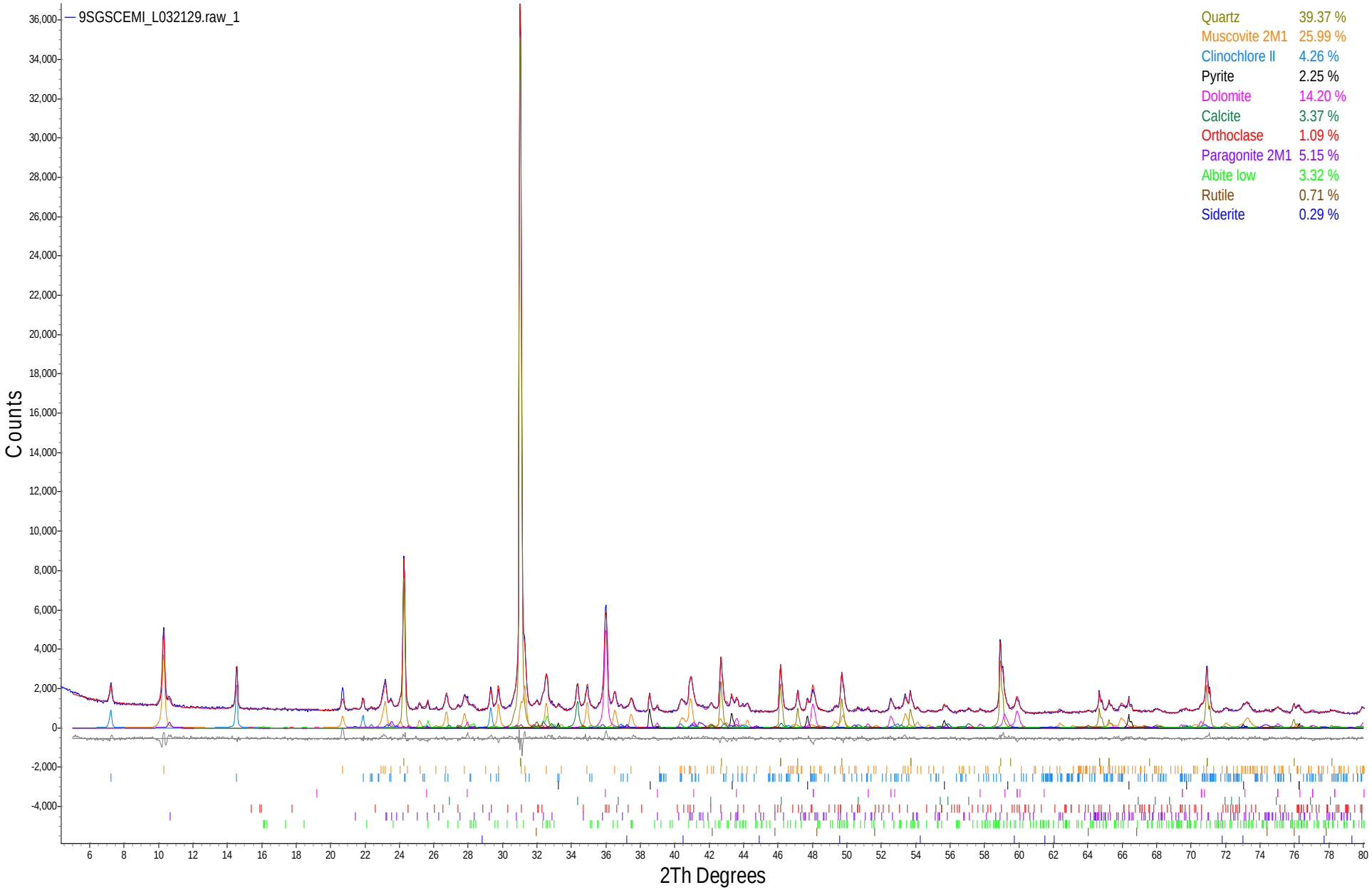


Figure 9. Rietveld refinement plot of sample **SGS CEMI "L032129"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

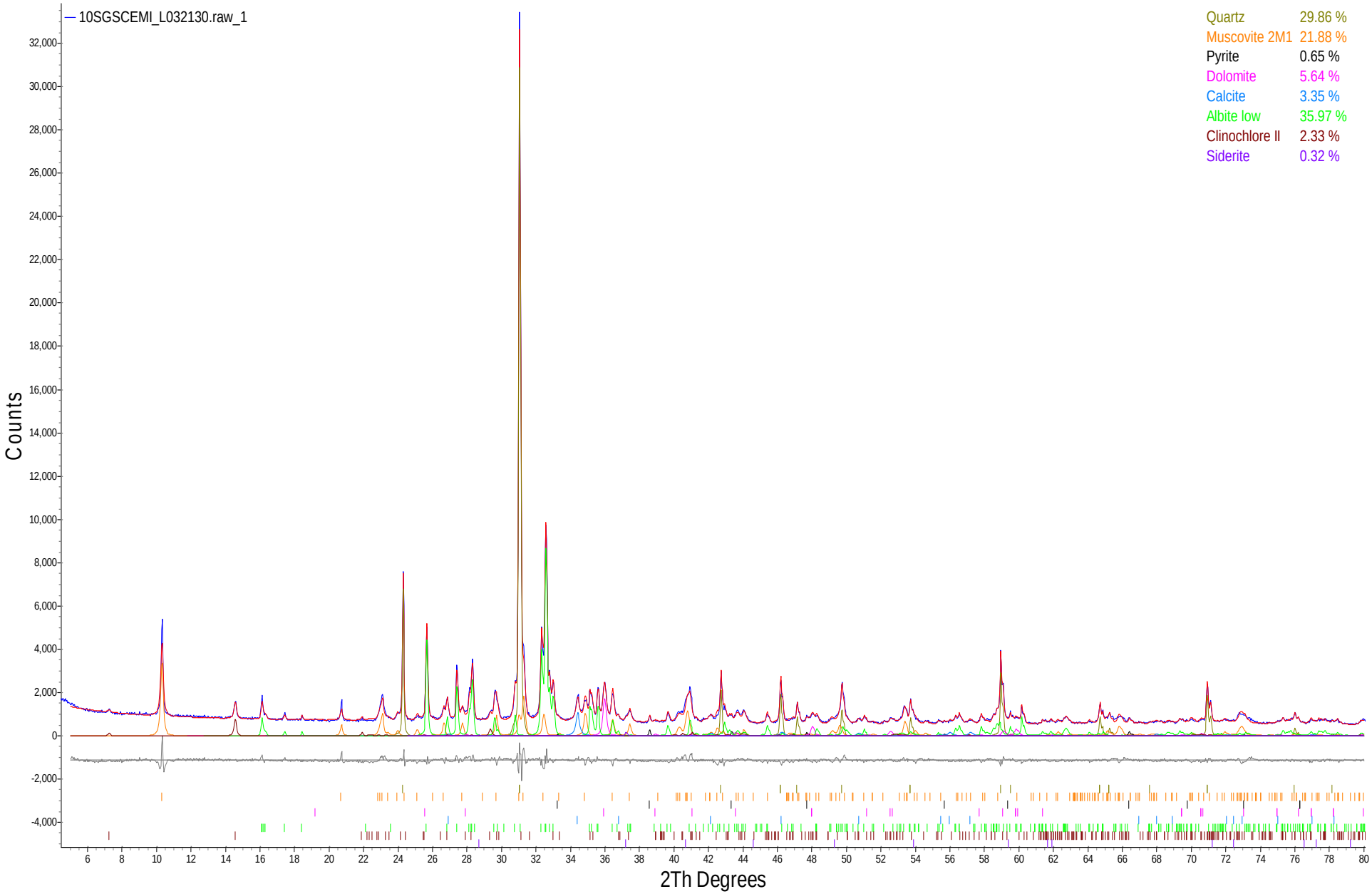


Figure 10. Rietveld refinement plot of sample **SGS CEMI "L032130"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

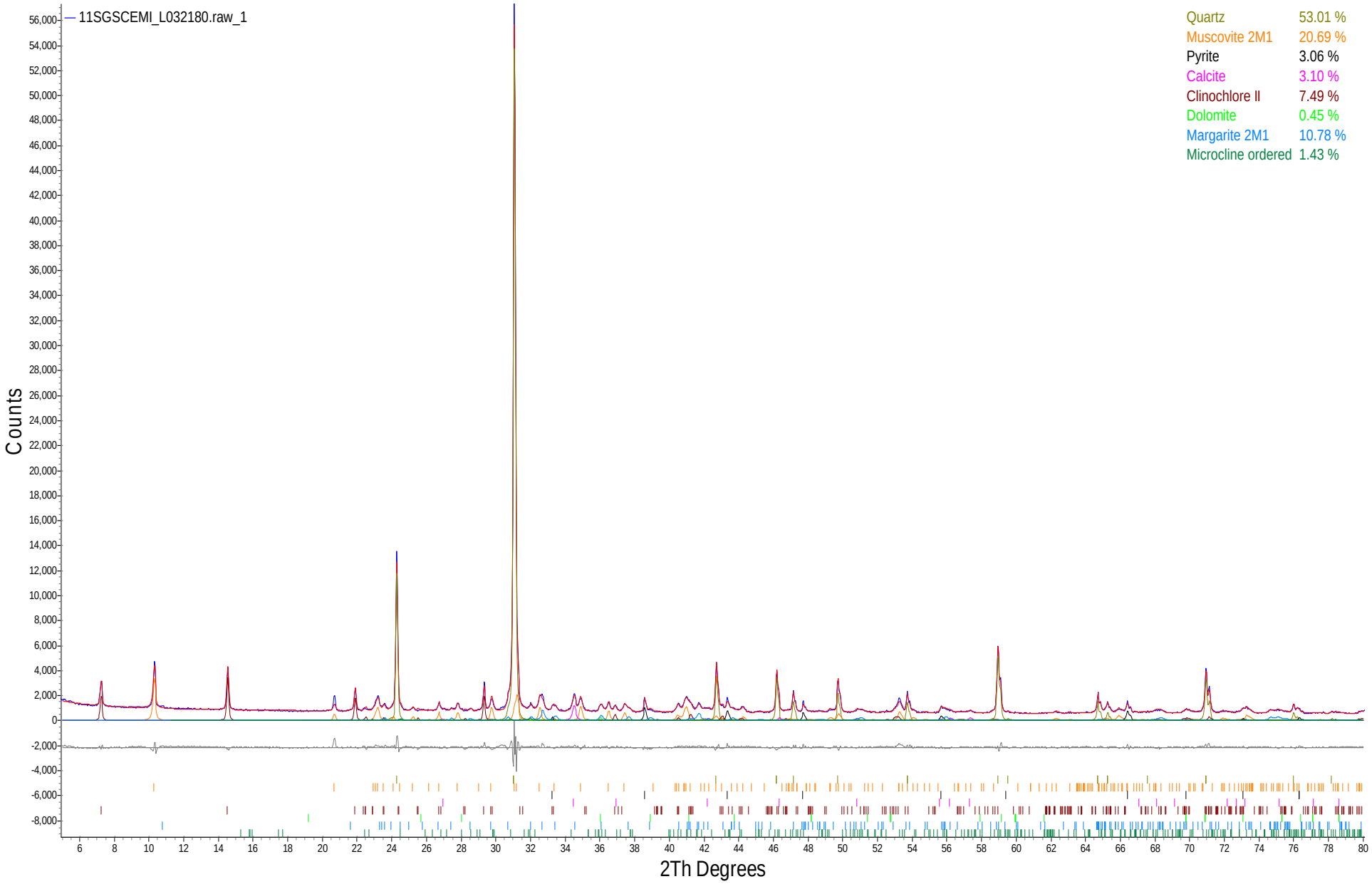


Figure 11. Rietveld refinement plot of sample **SGS CEMI "L032180"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

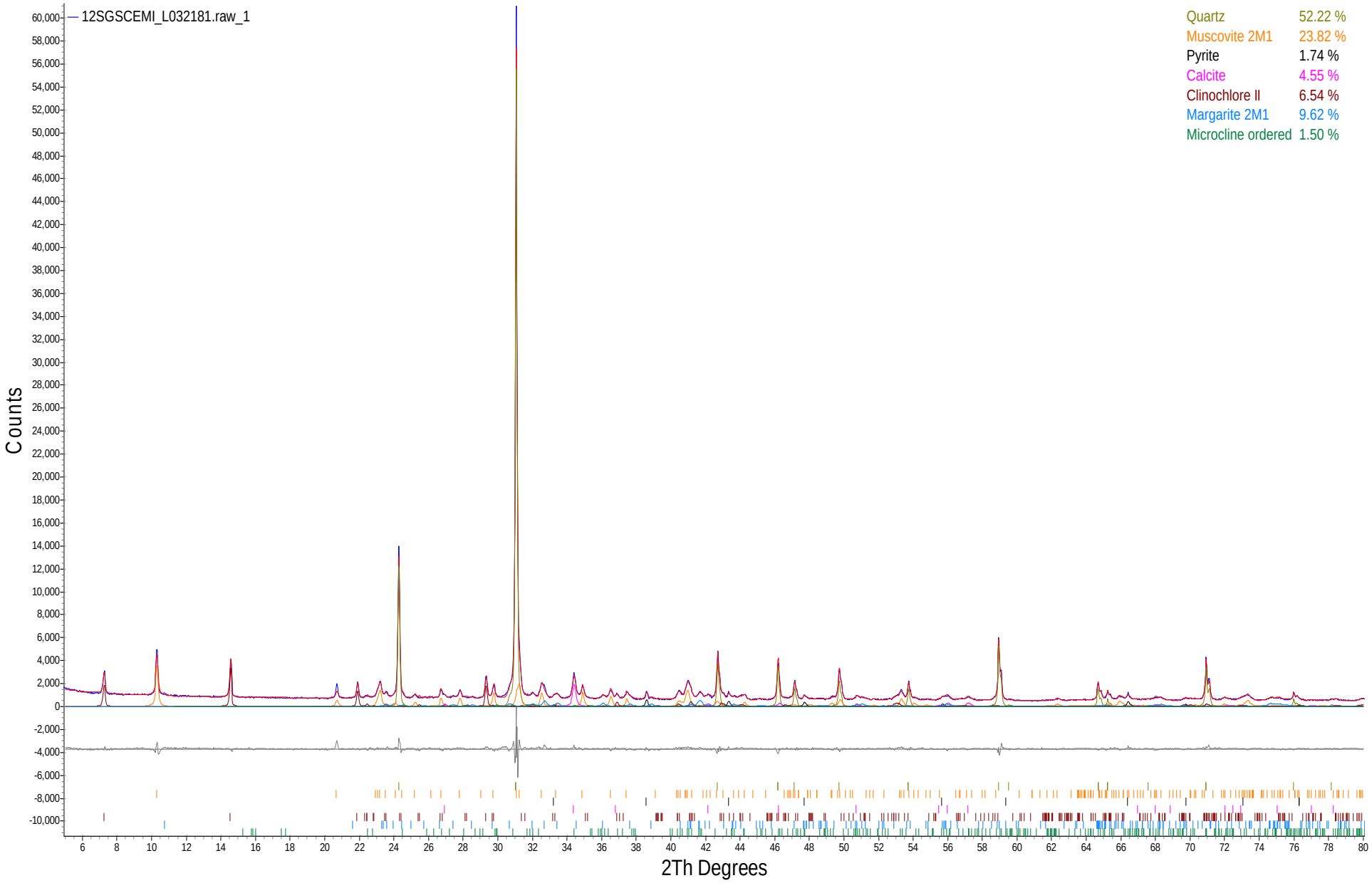


Figure 12. Rietveld refinement plot of sample **SGS CEMI "L032181"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

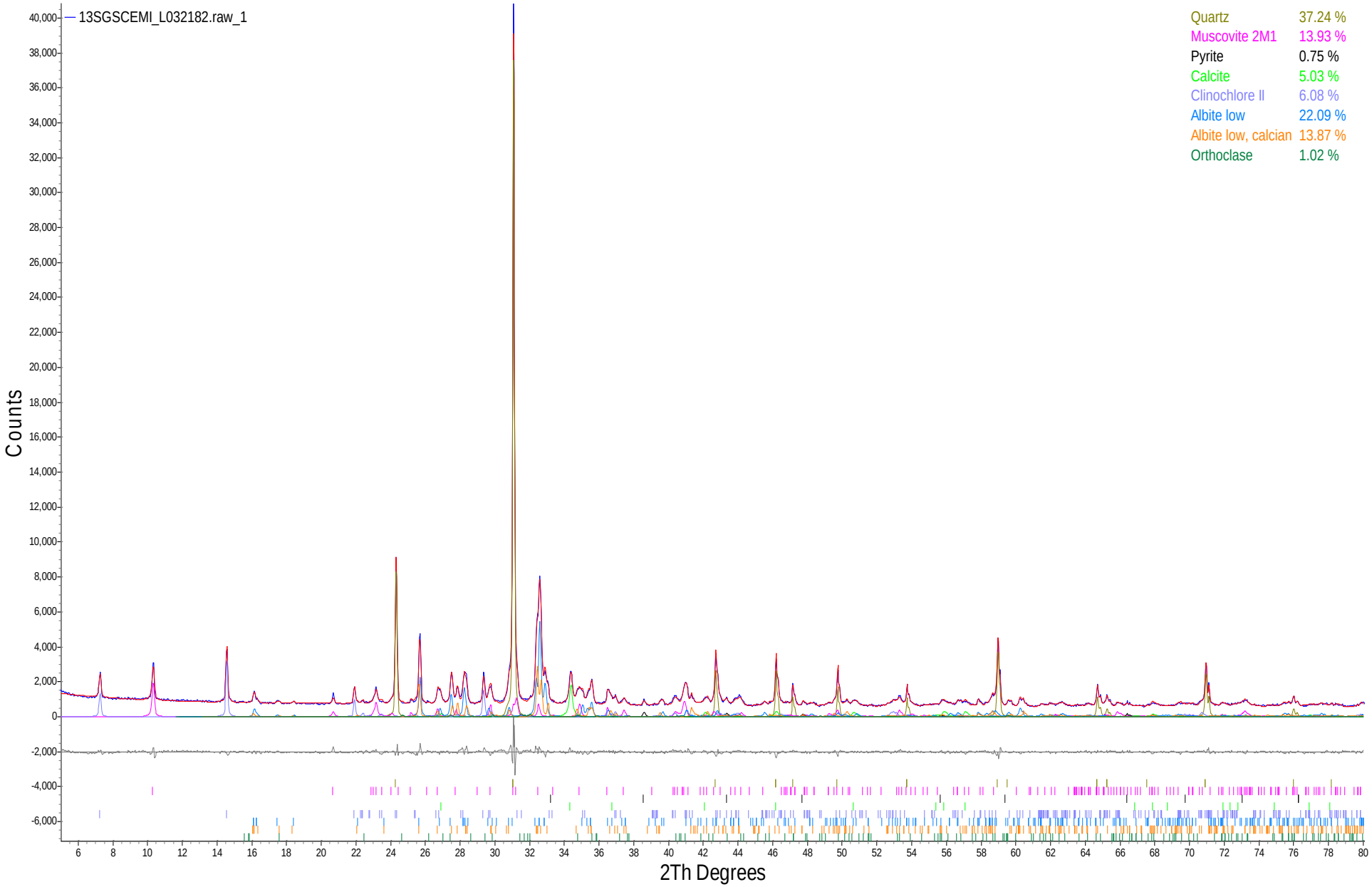


Figure 13. Rietveld refinement plot of sample **SGS CEMI "L032182"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

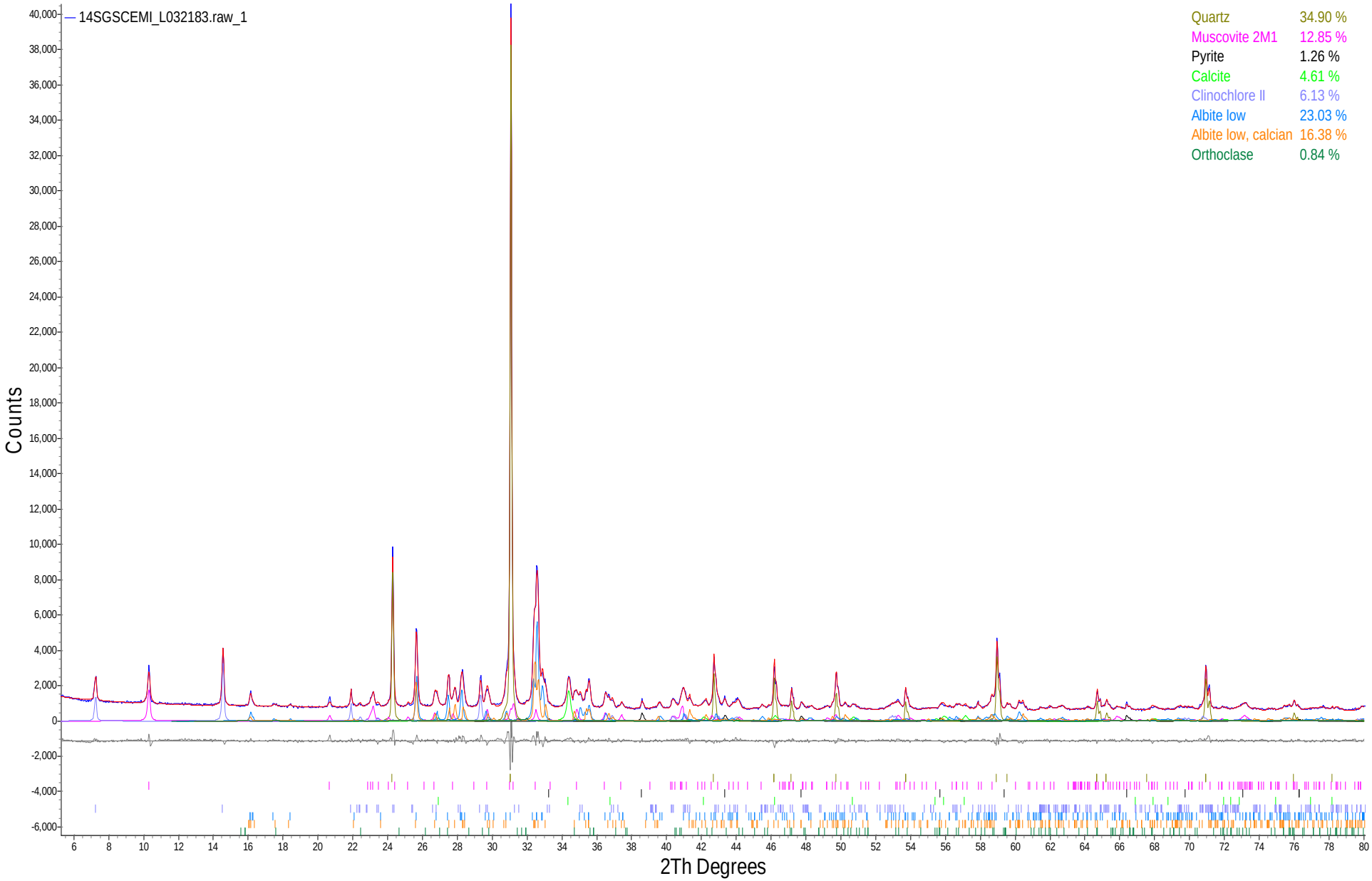


Figure 14. Rietveld refinement plot of sample **SGS CEMI "L032183"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

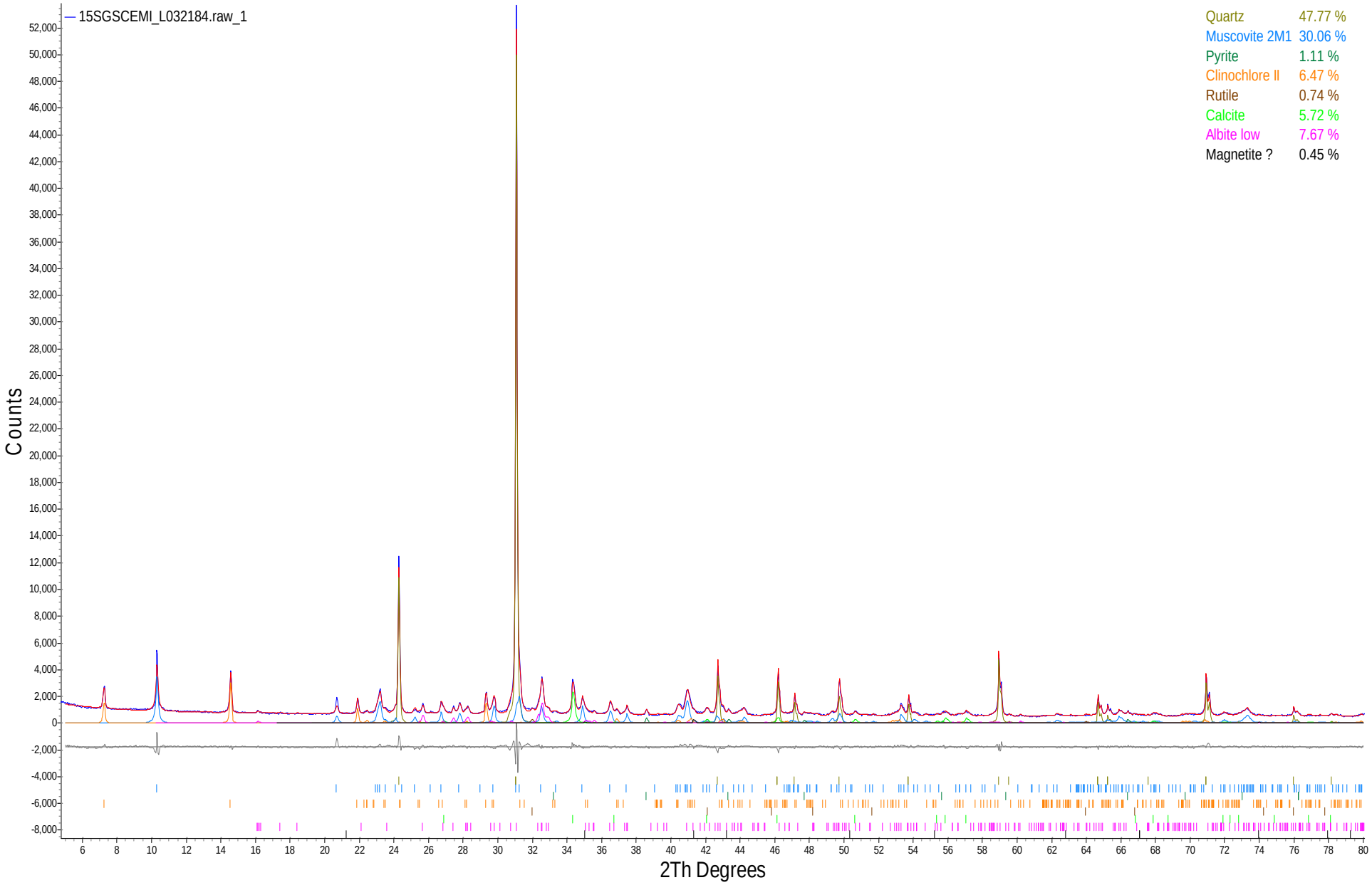


Figure 15. Rietveld refinement plot of sample **SGS CEMI "L032184"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

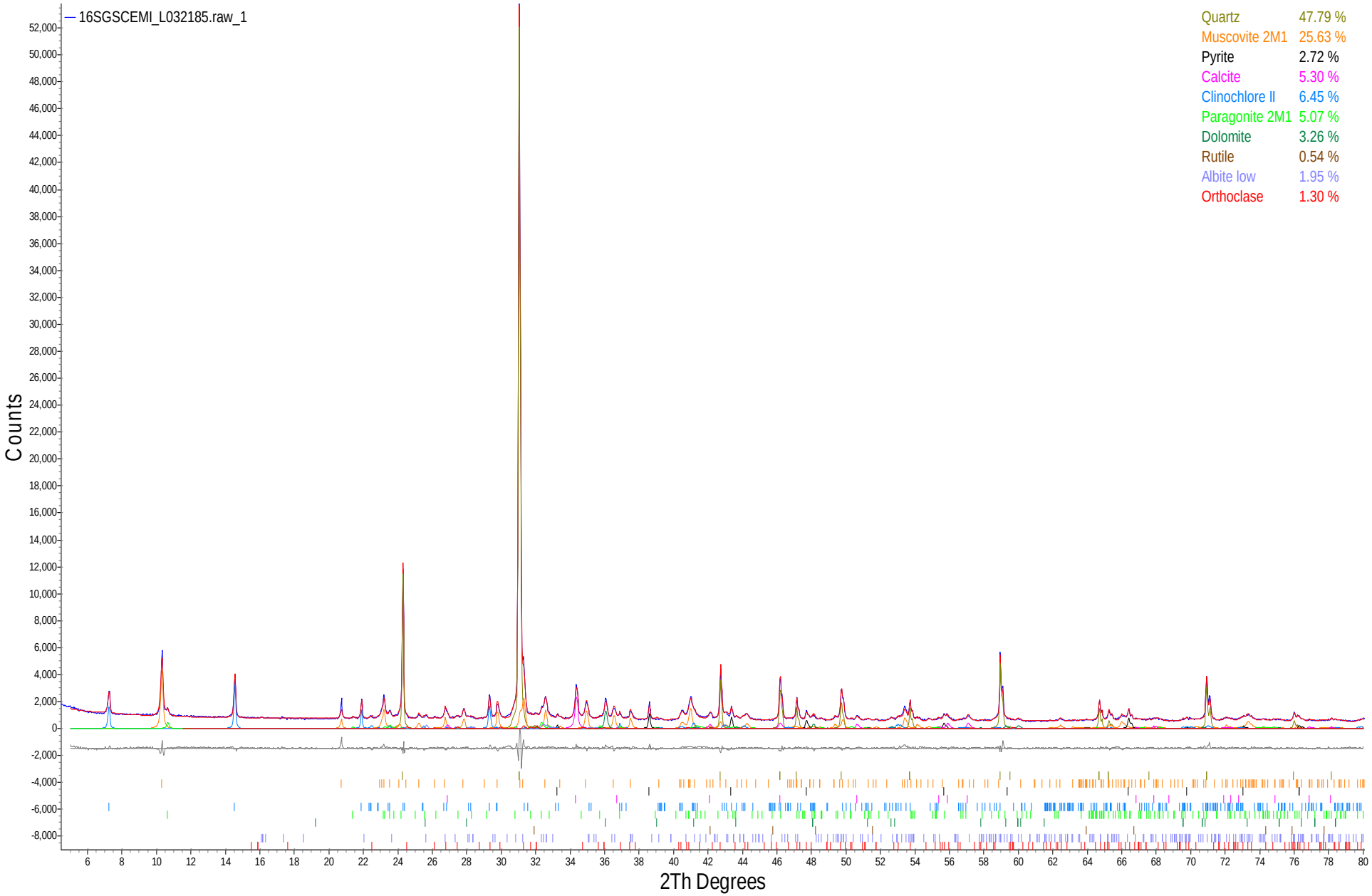


Figure 16. Rietveld refinement plot of sample **SGS CEMI "L032185"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

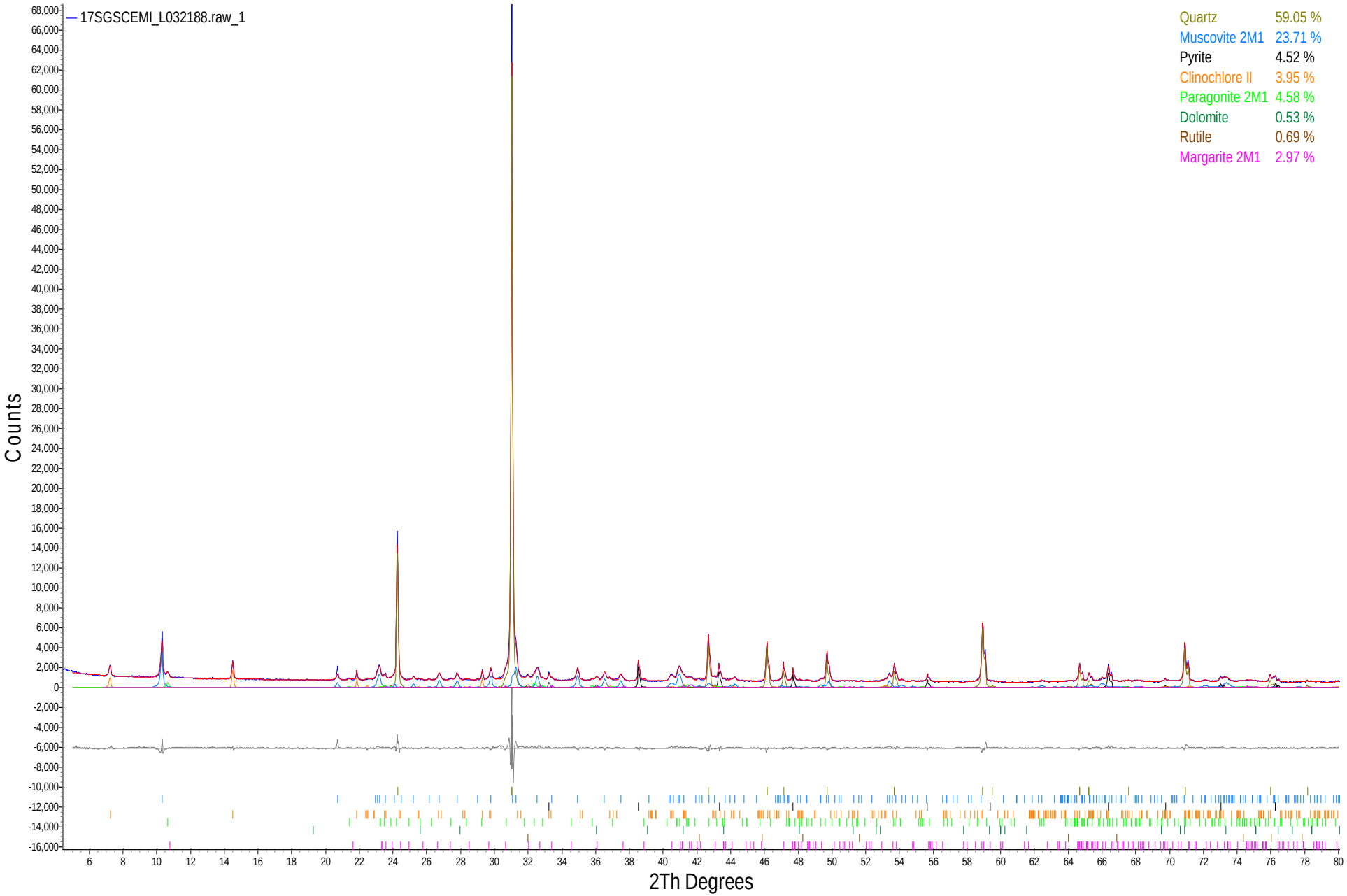


Figure 17. Rietveld refinement plot of sample **SGS CEMI "L032188"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

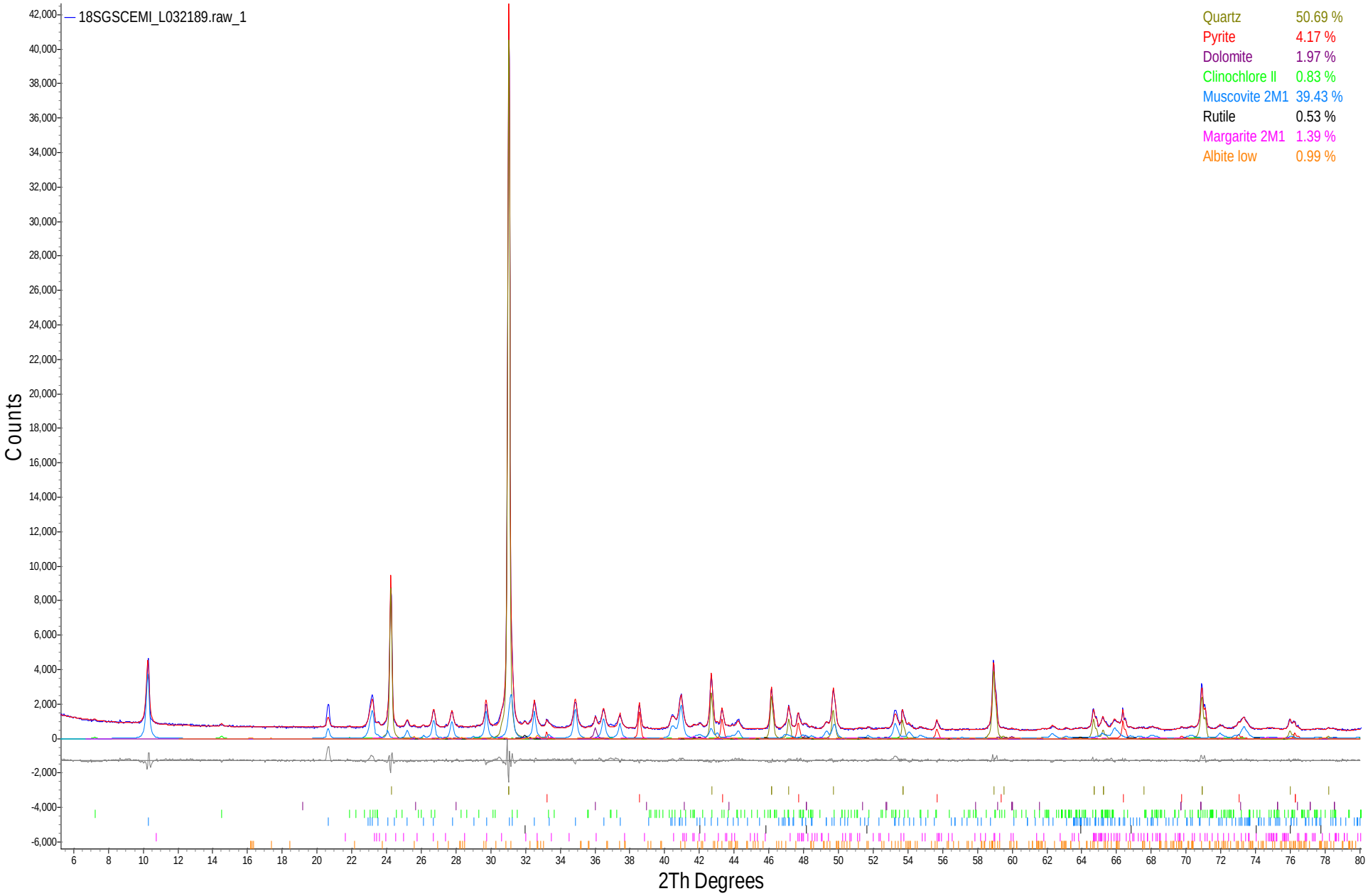


Figure 18. Rietveld refinement plot of sample **SGS CEMI "L032189"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

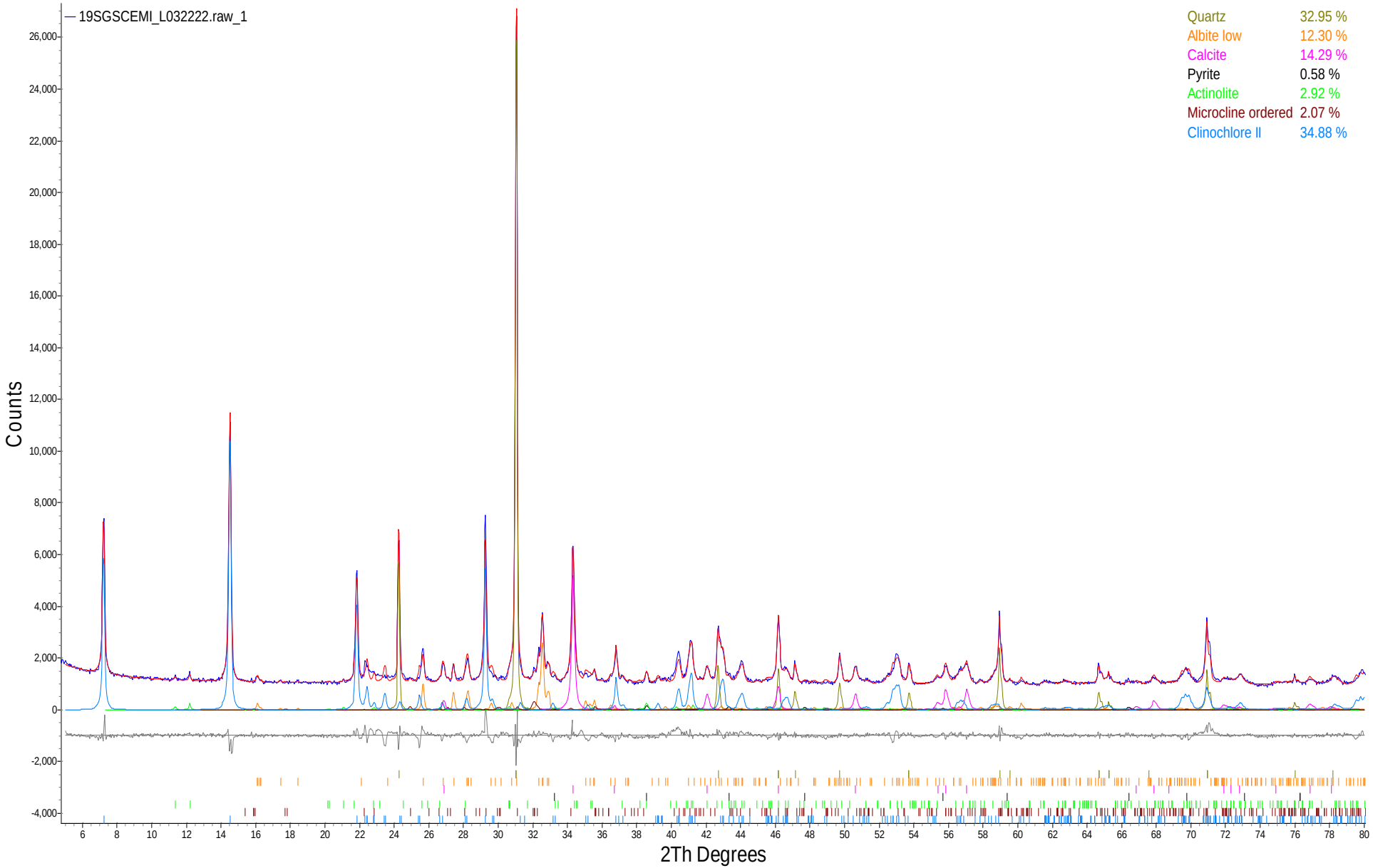


Figure 19. Rietveld refinement plot of sample **SGS CEMI "L032222"** (blue line - observed intensity at each step; red line - calculated pattern; solid grey line below – difference between observed and calculated intensities; vertical bars, positions of all Bragg reflections). Coloured lines are individual diffraction patterns of all phases.

Table 1. Results of Quantitative Phase Analysis (wt.%) XRD-Rietveld - SGS CEMI Inc. Project 08121 Rainy River - PO# 42437

	#1		#2		#3		#4		#5		#6		#7		#8		#9		#10
	L032005		L032007		L032023		L032031		L032036		L032070		L032072		L032101		L032129		L032130
Quartz	35.5	Quartz	30.5	Quartz	45.4	Quartz	9.6	Quartz	46.6	Quartz	38.7	Quartz	34.4	Quartz	25.7	Quartz	39.4	Quartz	29.9
Muscovite	8.7	Muscovite	14.5	Muscovite	33.1	Plagioclase	27.3	Muscovite	33.1	Muscovite	18.5	Muscovite	7.8	Plagioclase	18.3	Muscovite	26.0	Muscovite	21.9
Clinochlore	19.5	Clinochlore	6.5	Clinochlore	6.3	Augite	23.6	Clinochlore	4.8	Pyrite	2.3	Pyrite	0.6	Actinolite	17.5	Clinochlore	4.3	Pyrite	0.7
Pyrite	0.5	Pyrite	0.3	Pyrite	2.6	Clinozoisite	8.1	Pyrite	1.2	Calcite	6.3	Calcite	2.6	Calcite	9.5	Pyrite	2.2	Dolomite	5.6
Calcite	11.0	Calcite	7.0	Dolomite	1.8	Actinolite	16.5	Dolomite	12.6	Ankerite	10.9	Magnetite	3.3	Clinochlore	5.2	Dolomite	14.2	Calcite	3.3
K-feldspar	2.0	K-feldspar	1.3	Calcite	9.7	Kaolinite	2.1	Calcite	0.2	Clinochlore	18.1	Actinolite	3.7	Biotite	7.0	Calcite	3.4	Plagioclase	36.0
Plagioclase	20.8	Plagioclase	39.6	K-feldspar	1.1	Calcite	1.0	K-feldspar	1.5	Sphalerite	0.4	Ilmenite	3.7	Ilmenite	3.0	K-feldspar	1.1	Clinochlore	2.3
Dolomite	1.9	Dolomite	0.4			Clinochlore	11.1			K-feldspar	1.8	Plagioclase	18.1	Magnetite	1.0	Paragonite	5.1	Siderite	0.3
						Pyrite	0.7			Rutile	0.8	Pyrrhotite	2.1	Pyrrhotite	1.2	Plagioclase	3.3		
										Paragonite	2.3	Biotite	3.1	Ankerite	11.6	Rutile	0.7		
												Ankerite	3.5			Siderite	0.3		
												Clinochlore	17.2						
Total	100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0

	#11		#12		#13		#14		#15		#16		#17		#18		#19
	L032180		L032181		L032182		L032183		L032184		L032185		L032188		L032189		L032222
Quartz	53.0	Quartz	52.2	Quartz	37.2	Quartz	34.9	Quartz	47.8	Quartz	47.8	Quartz	59.0	Quartz	50.7	Quartz	32.9
Muscovite	20.7	Muscovite	23.8	Muscovite	13.9	Muscovite	12.9	Muscovite	30.1	Muscovite	25.6	Muscovite	23.7	Pyrite	4.2	Plagioclase	12.3
Pyrite	3.1	Pyrite	1.7	Pyrite	0.8	Pyrite	1.3	Pyrite	1.1	Pyrite	2.7	Pyrite	4.5	Dolomite	2.0	Calcite	14.3
Calcite	3.1	Calcite	4.5	Calcite	5.0	Calcite	4.6	Clinochlore	6.5	Calcite	5.3	Clinochlore	4.0	Clinochlore	0.8	Pyrite	0.6
Clinochlore	7.5	Clinochlore	6.5	Clinochlore	6.1	Clinochlore	6.1	Rutile	0.7	Clinochlore	6.5	Paragonite	4.6	Muscovite	39.4	Actinolite	2.9
Dolomite	0.4	Margarite	9.6	Plagioclase	36.0	Plagioclase	39.4	Calcite	5.7	Paragonite	5.1	Dolomite	0.5	Rutile	0.5	K-feldspar	2.1
Margarite	10.8	K-feldspar	1.5	K-feldspar	1.0	K-feldspar	0.8	Plagioclase	7.7	Dolomite	3.3	Rutile	0.7	Margarite	1.4	Clinochlore	34.9
K-feldspar	1.4							Magnetite ?	0.5	Rutile	0.5	Margarite	3.0	Plagioclase	1.0		
										Plagioclase	1.9						
										K-feldspar	1.3						
Total	100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0		100.0

Quantitative X-Ray Diffraction by Rietveld Refinement

Report Prepared for:	*Enviro-Met*
Project Number/ LIMS No.	*11736-004/MI4531-MAR12*
Reporting Date:	*May 8, 2012*

Instrument:	BRUKER AXS D8 Advance Diffractometer
Test Conditions:	Co radiation, 40 kV, 35 mA Regular Scanning: Step: 0.02°, Step time: 1s, 2θ range: 3-80°
Interpretations :	PDF2/PDF4 powder diffraction databases issued by the International Center for Diffraction Data (ICDD). DiffracPlus Eva and Topas software.
Detection Limit :	0.5-2%. Strongly dependent on crystallinity.

Contents:

1) Method Summary
2) Summary of Mineral Asemblages
3) Semi-Quantitative XRD Results
4) Chemical Balance(s)
5) XRD Pattern(s)

Bernie C. Yeung, B. Sc.
Mineralogist

Huyun Zhou, Ph.D., P.Geo.
Senior Mineralogist

Method Summary

Mineral Identification and Interpretation:

Mineral identification and interpretation involve matching the diffraction pattern of an unknown material to patterns of single-phase reference materials. The reference patterns are compiled by the Joint Committee on Powder Diffraction Standards - International Center for Diffraction Data (JCPDS-ICDD) database and released on software as Powder Diffraction Files (PDF).

Interpretations do not reflect the presence of non-crystalline and/or amorphous compounds, except when internal standards added by request. Mineral proportions may be strongly influenced by crystallinity, crystal structure and preferred orientations. Minerals or compounds identification and quantitative analysis results should be accompanied by supporting chemical assay data or other tests.

Rietveld Method Quantitative Analysis:

Whole-pattern Rietveld Method Quantitative Analysis is performed by using Topas 4.1 (Bruker AXS), a graphics based profile analysis program built around a general non-linear least squares fitting system, to determine the amount of different phases in a multicomponent sample. Whole pattern analyses are predicated by the fact that the X-ray diffraction pattern is a total sum of both instrumental factors and specimen. Unlike other peak intensity-based methods, the Rietveld method uses a least square approach to refine a theoretical line profile until it matches the obtained experimental patterns.

Rietveld refinement is completed with a set of minerals specifically identified for the sample(s). Zero values indicate that the mineral was included in the refinement calculations, but the calculated concentration was less than 0.05wt%. Minerals not identified by the analyst are not included in refinement calculations for specific samples and are indicated with a dash.

SGS Minerals
a division of SGS Canada Inc.
P.O. Box 4300, 185 Concession Street, Lakefield, Ontario, Canada K0L 2H0
Tel: (705) 652-2000 Fax: (705) 652-6365 www.sgs.com www.sgs.com/met
Member of the SGS Group (SGS SA)

Summary of Rietveld Quantitative Analysis X-ray Diffraction Results

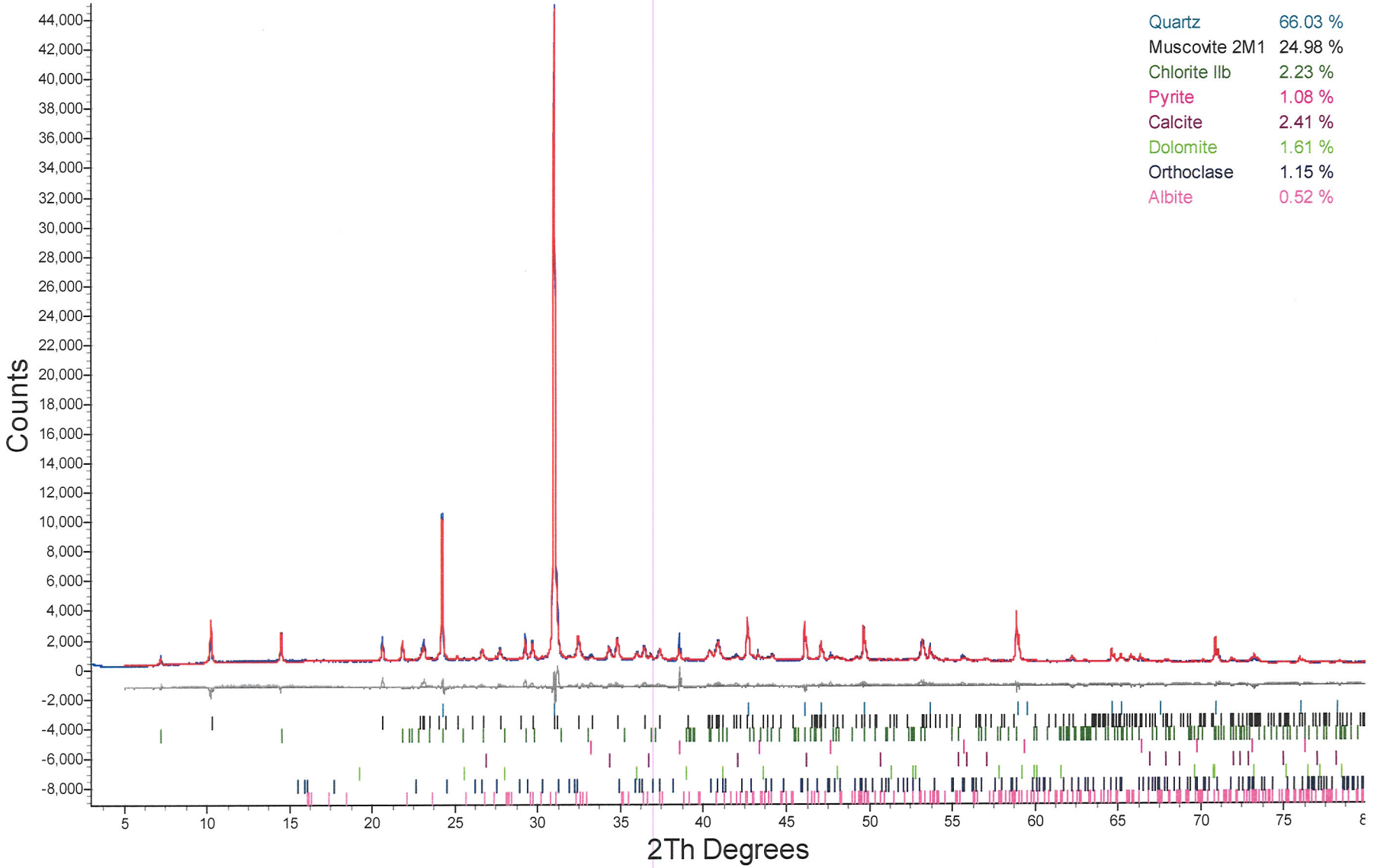
Quantitative X-ray Diffraction Results

Mineral/Compound	ODM Zone Master Comp A Mar4531-1 (wt %)	ODM Zone Master Comp B Mar4531-2 (wt %)
Quartz	66.0	66.1
Muscovite	25.0	24.7
Chlorite	2.2	2.0
Pyrite	1.1	1.1
Calcite	2.4	1.9
Dolomite	1.6	1.2
Orthoclase	1.1	1.2
Albite	0.5	1.9
TOTAL	99.8	100.1

Mineral/Compound	Formula
Albite	$NaAlSi_3O_8$
Calcite	$CaCO_3$
Chlorite	$(Fe,(Mg,Mn)_5,Al)(Si_3Al)O_{10}(OH)_8$
Dolomite	$CaMg(CO_3)_2$
Muscovite	$KAl_2(AlSi_3O_{10})(OH)_2$
Orthoclase	$KAlSi_3O_8$
Pyrite	FeS_2
Quartz	SiO_2

Enviro-Met
11736-004/MI4531-MAR12
05/08/2012

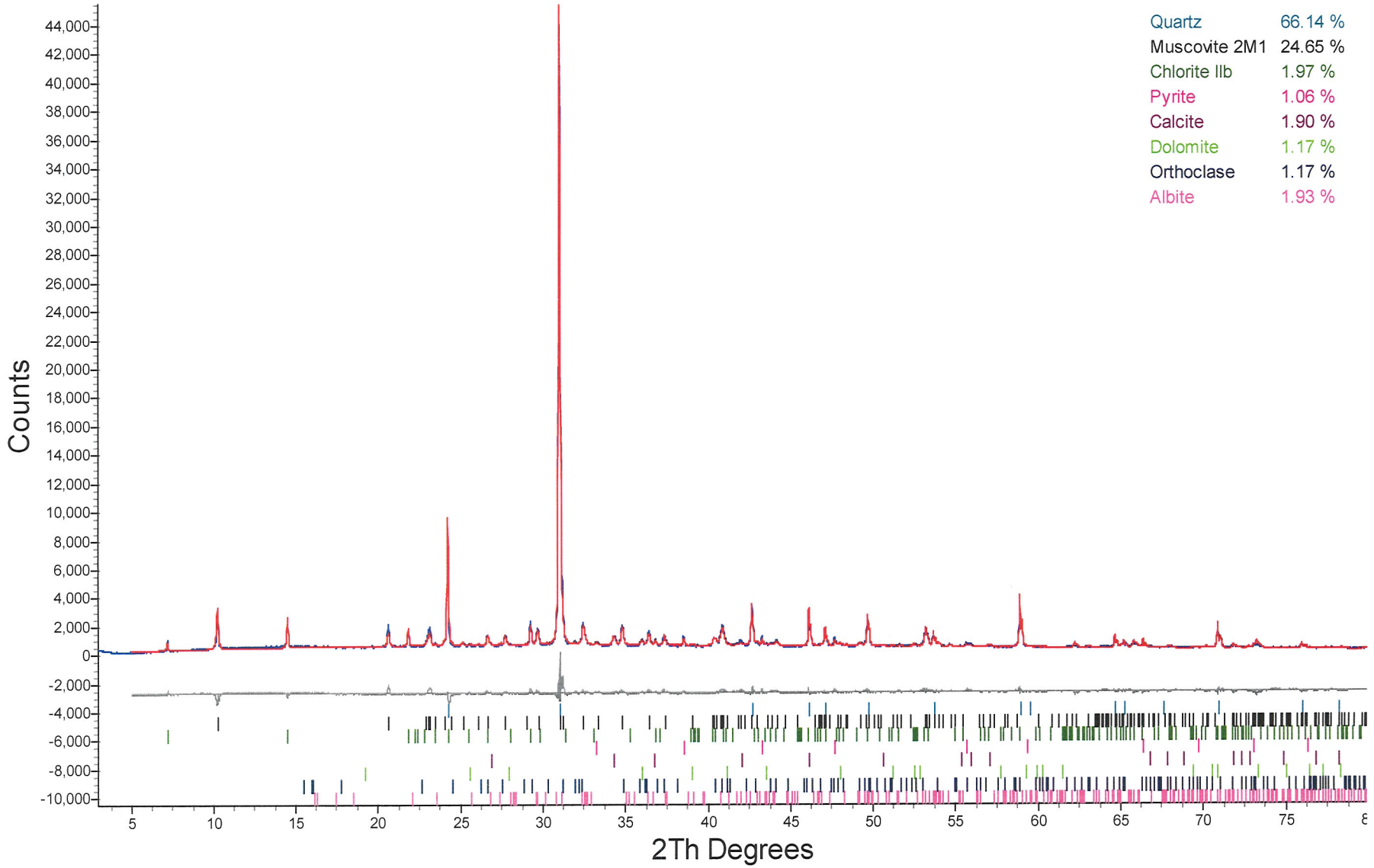
ODM Zone Master Comp A



The Qualitative XRD method (METH # 8-8-1) used by SGS Minerals Services, P.O. Box 4300, 185 Concession Street, Lakefield, Ontario, Canada K0L 2H0.
Tel: (705) 652-2000 Fax: (705) 652-6365 Mini-method available upon request.

Enviro-Met
11736-004/MI4531-MAR12
05/08/2012

ODM Zone Master Comp B



The Qualitative XRD method (METH # 8-8-1) used by SGS Minerals Services, P.O. Box 4300, 185 Concession Street, Lakefield, Ontario, Canada K0L 2H0.
Tel: (705) 652-2000 Fax: (705) 652-6365 Mini-method available upon request.

Quantitative X-Ray Diffraction by Rietveld Refinement

Report Prepared for: *Enviro-Met*

Project Number/ LIMS No. *11736-004/MI4516-APR12*

Reporting Date: *May 30, 2012*

Instrument: BRUKER AXS D8 Advance Diffractometer

Test Conditions: Co radiation, 40 kV, 35 mA
Regular Scanning: Step: 0.02°, Step time: 1s, 2θ range: 3-80°

***Interpretations*:** PDF2/PDF4 powder diffraction databases issued by the International Center for Diffraction Data (ICDD). DiffracPlus Eva and Topas software.

***Detection Limit*:** 0.5-2%. Strongly dependent on crystallinity.

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2) Summary of Mineral Asemblages
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Method Summary

Mineral Identification and Interpretation:

Mineral identification and interpretation involve matching the diffraction pattern of an unknown material to patterns of single-phase reference materials. The reference patterns are compiled by the Joint Committee on Powder Diffraction Standards - International Center for Diffraction Data (JCPDS-ICDD) database and released on software as Powder Diffraction Files (PDF).

Interpretations do not reflect the presence of non-crystalline and/or amorphous compounds, except when internal standards added by request. Mineral proportions may be strongly influenced by crystallinity, crystal structure and preferred orientations. Minerals or compounds identification and quantitative analysis results should be accompanied by supporting chemical assay data or other tests.

Rietveld Method Quantitative Analysis:

Whole-pattern Rietveld Method Quantitative Analysis is performed by using Topas 4.1 (Bruker AXS), a graphics based profile analysis program built around a general non-linear least squares fitting system, to determine the amount of different phases in a multicomponent sample. Whole pattern analyses are predicated by the fact that the X-ray diffraction pattern is a total sum of both instrumental factors and specimen. Unlike other peak intensity-based methods, the Rietveld method uses a least square approach to refine a theoretical line profile until it matches the obtained experimental patterns.

Rietveld refinement is completed with a set of minerals specifically identified for the sample(s). Zero values indicate that the mineral was included in the refinement calculations, but the calculated concentration was less than 0.05wt%. Minerals not identified by the analyst are not included in refinement calculations for specific samples and are indicated with a dash.

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Summary of Rietveld Quantitative Analysis X-ray Diffraction Results

Quantitative X-ray Diffraction Results

Mineral/Compound	ROM Sample A Apr4516-1 (wt %)	ROM Sample B Apr4516-2 (wt %)
Quartz	70.3	71.8
Chlorite IIb	3.41	2.40
Pyrite	0.85	0.89
Dolomite	1.05	0.92
Ankerite Fe0.2	1.38	1.34
Calcite	1.43	1.38
Albite intermediate	5.69	5.52
Alunite	0.36	0.14
Muscovite 2M1	15.6	15.6
TOTAL	100.0	100.0

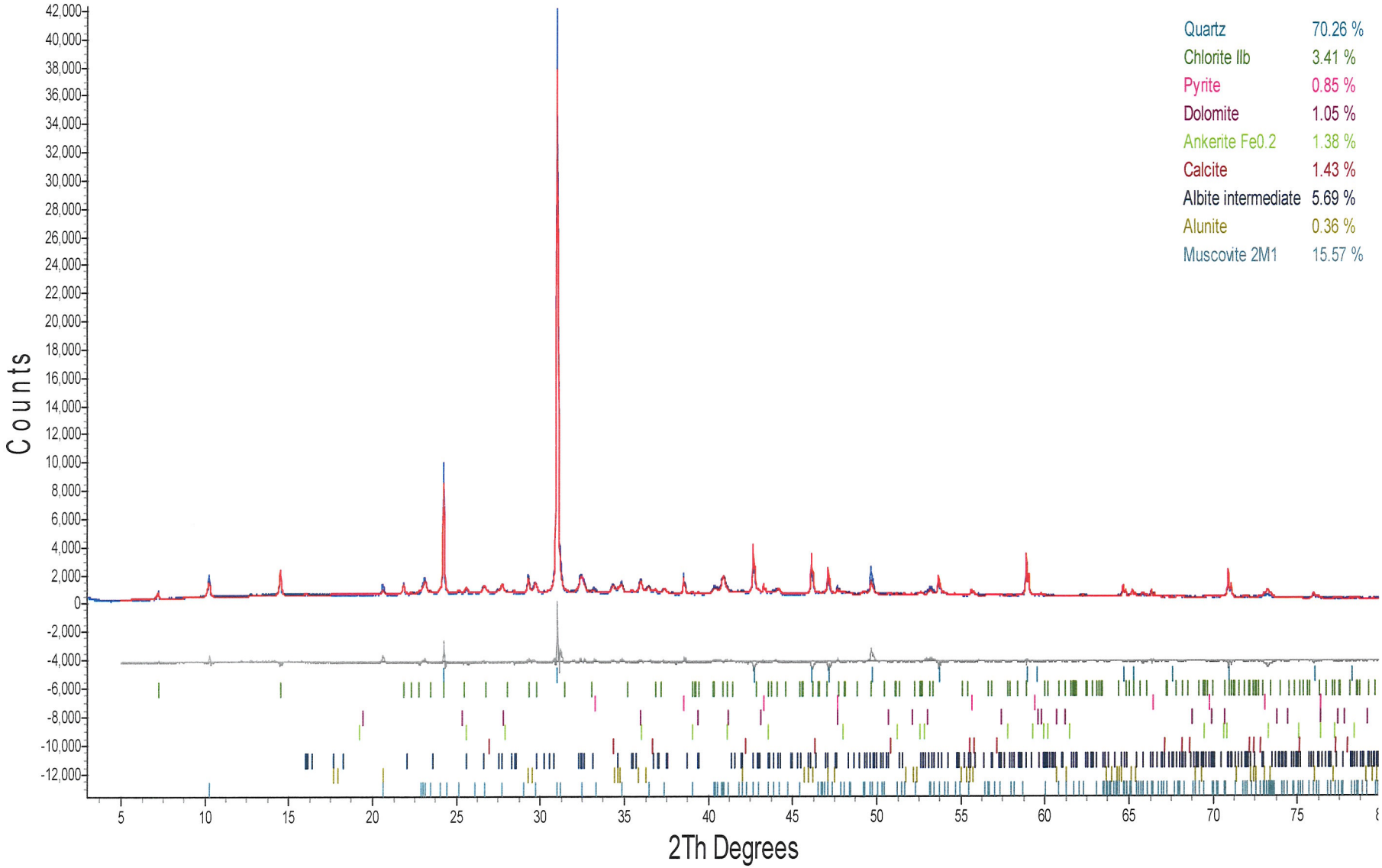
Zero values indicate that the mineral was included in the refinement, but the calculated concentration is below a measurable value.

Dashes indicate that the mineral was not identifed by the analyst and not included in the refinement calculation for the sample.

Mineral/Compound	Formula
Quartz	SiO_2
Chlorite	$(Fe,(Mg,Mn)_5,Al)(Si_3Al)O_{10}(OH)_8$
Pyrite	FeS_2
Dolomite	$CaMg(CO_3)_2$
Ankerite	$CaFe(CO_3)_2$
Calcite	$CaCO_3$
Albite	$NaAlSi_3O_8$
Alunite	$(K,Na)Al_6(SO_4)_4(OH)_{12}$
Muscovite	$KAl_2(AlSi_3O_{10})(OH)_2$

Enviro-Met
11736-004/MI4516-APR12
30/05/2012

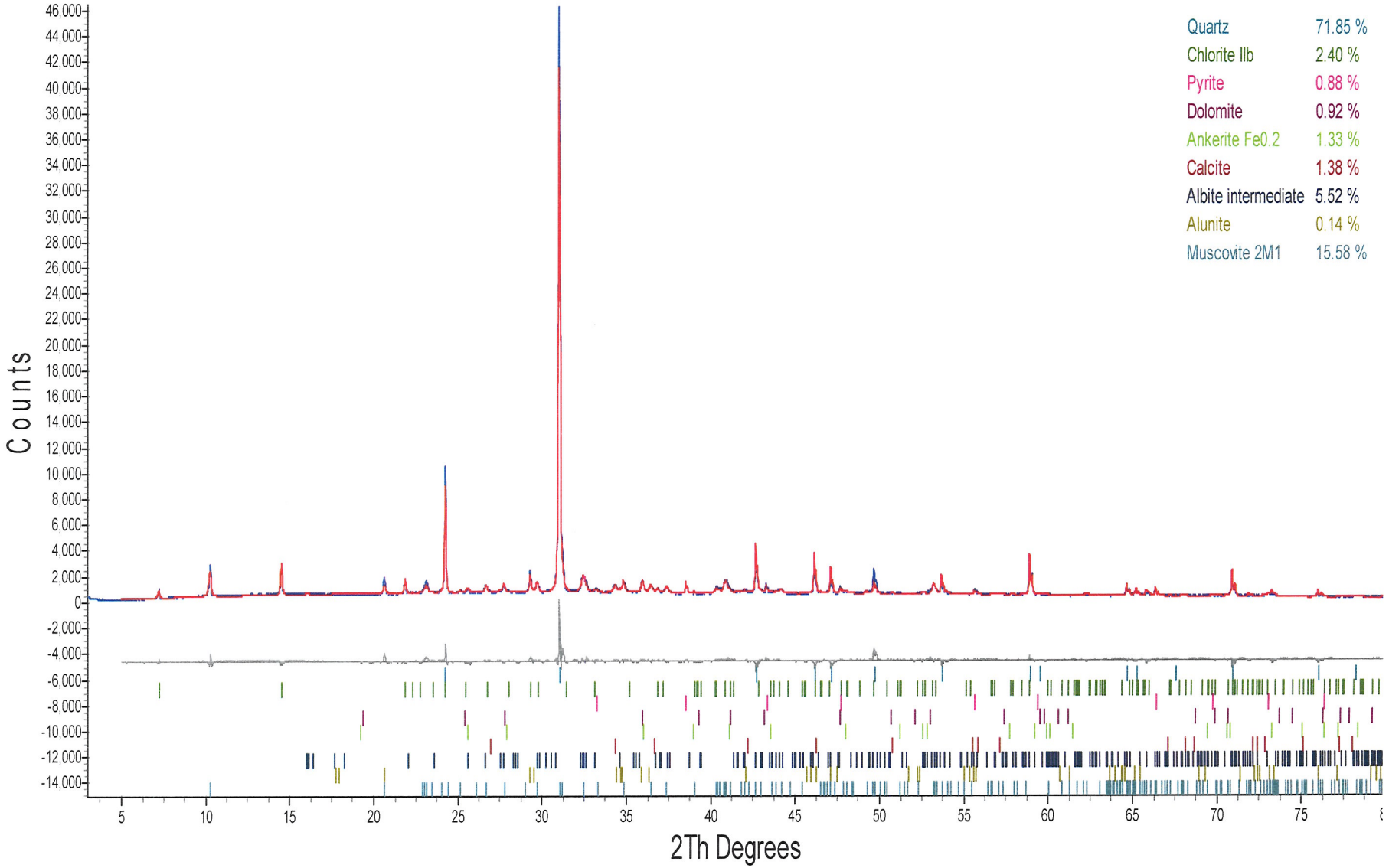
ROM Sample A



The Qualitative XRD method (METH # 8-8-1) used by SGS Minerals Services, P.O. Box 4300, 185 Concession Street, Lakefield, Ontario, Canada K0L 2H0.
Tel: (705) 652-2000 Fax: (705) 652-6365 Mini-method available upon request.

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11736-004/MI4516-APR12
30/05/2012

ROM Sample B



The Qualitative XRD method (METH # 8-8-1) used by SGS Minerals Services, P.O. Box 4300, 185 Concession Street, Lakefield, Ontario, Canada K0L 2H0.
Tel: (705) 652-2000 Fax: (705) 652-6365 Mini-method available upon request.

Quantitative X-Ray Diffraction by Rietveld Refinement

Report Prepared for:	*Enviro-Met*
Project Number/ LIMS No.	*11736-004/MI4528-MAY12*
Reporting Date:	*July 20, 2012*

Instrument:	BRUKER AXS D8 Advance Diffractometer
Test Conditions:	Co radiation, 40 kV, 35 mA Regular Scanning: Step: 0.02°, Step time: 1s, 2θ range: 3-80°
Interpretations :	PDF2/PDF4 powder diffraction databases issued by the International Center for Diffraction Data (ICDD). DiffracPlus Eva and Topas software.
Detection Limit :	0.5-2%. Strongly dependent on crystallinity.

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Summary of Rietveld Quantitative Analysis X-ray Diffraction Results

Quantitative X-ray Diffraction Results

Mineral/Compound	Starter Pit Sample A May4528-1 (wt %)	Starter Pit Sample B May4528-2 (wt %)
Quartz	70.0	71.2
Muscovite	21.8	20.7
Chlorite	3.0	2.5
Calcite	2.0	2.1
Ankerite	0.9	1.4
Dolomite	1.2	1.1
Pyrite	1.1	1.1
TOTAL	100.0	100.0

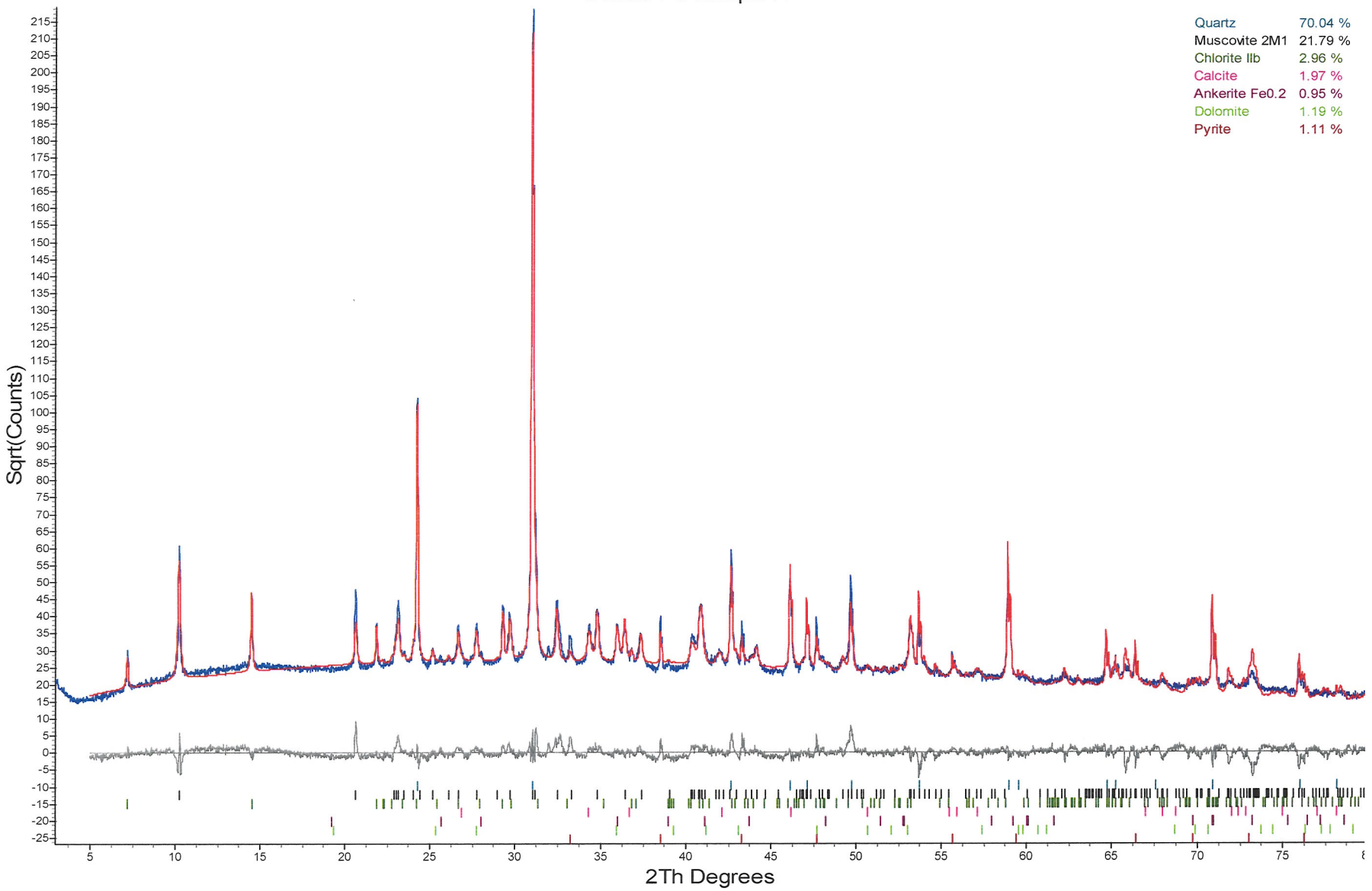
Zero values indicate that the mineral was included in the refinement, but the calculated concentration is below a measurable value.

Dashes indicate that the mineral was not identifed by the analyst and not included in the refinement calculation for the sample.

Mineral/Compound	Formula
Quartz	SiO_2
Muscovite	$KAl_2(AlSi_3O_{10})(OH)_2$
Chlorite	$(Fe,(Mg,Mn)_5,Al)(Si_3Al)O_{10}(OH)_8$
Calcite	$CaCO_3$
Ankerite	$CaFe(CO_3)_2$
Dolomite	$CaMg(CO_3)_2$
Pyrite	FeS_2

Enviromental - Analytical
Custum XRD/MI4511-SEP10
10/28/2010

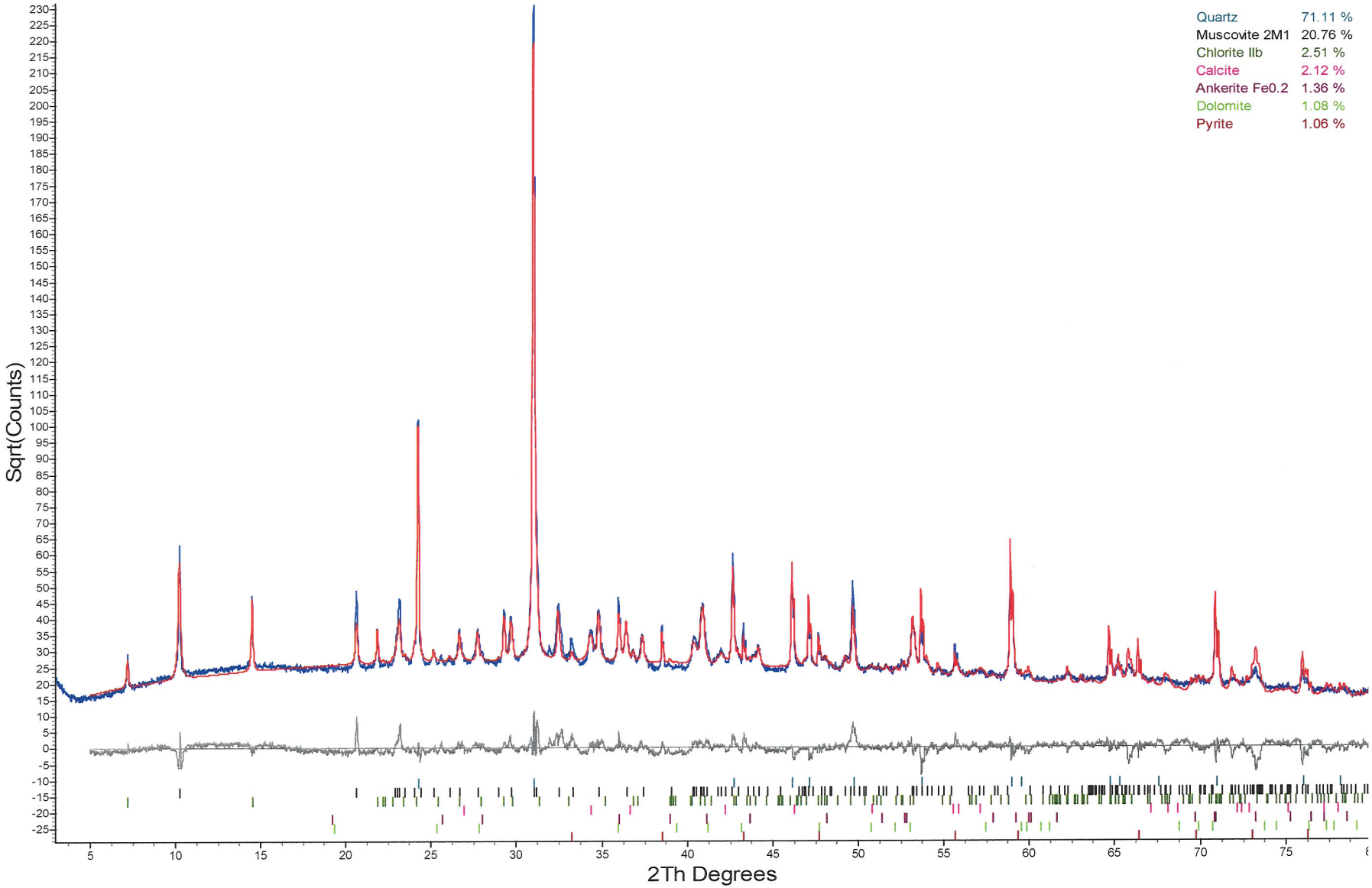
Starter Pit Sample A



The Qualitative XRD method (METH # 8-8-1) used by SGS Minerals Services, P.O. Box 4300, 185 Concession Street, Lakefield, Ontario, Canada K0L 2H0.
Tel: (705) 652-2000 Fax: (705) 652-6365 Mini-method available upon request.

Enviromental - Analytical
Custum XRD/MI4511-SEP10
10/28/2010

Starter Pit Sample B



The Qualitative XRD method (METH # 8-8-1) used by SGS Minerals Services, P.O. Box 4300, 185 Concession Street, Lakefield, Ontario, Canada K0L 2H0.
Tel: (705) 652-2000 Fax: (705) 652-6365 Mini-method available upon request.

SCREEN ASSAY

CLIENT : Klohn Crippen Berger
PROJECT : Rainy River
CEMI Project # : 08121
Test : Size Fraction Analysis
Test Date : February 4, 2010

ALT 09-01

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+1/4"	6.3	21	21.1%	21.1%
-1/4" +10	1.7	33.5	33.6%	54.7%
-10 + 35	0.425	21.8	21.9%	76.5%
-35 + 100	0.15	8.6	8.6%	85.2%
-100 + 270	0.053	6.8	6.8%	92.0%
-270	0.053	8	8.0%	100.0%
TOTAL		99.7	100.0%	

731259

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+3/8"	9.5	8.25	8.3%	8.3%
-3/8" +1/4"	6.3	27.71	27.8%	36.1%
-1/4" +10	1.7	28.54	28.7%	64.8%
-10 +30	0.6	13.58	13.6%	78.4%
-30 + 60	0.25	6.52	6.6%	85.0%
-60 + 100	0.15	2.42	2.4%	87.4%
-100 + 270	0.053	2.97	3.0%	90.4%
-270	0.053	9.54	9.6%	100.0%
TOTAL		99.53	100.0%	

ALT 09-07

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+1/4"	6.3	18.8	18.9%	18.9%
-1/4" +10	1.7	35.6	35.7%	54.6%
-10 + 35	0.425	23.9	24.0%	78.6%
-35 + 100	0.15	8.7	8.7%	87.3%
-100 + 270	0.053	4.8	4.8%	92.2%
-270	0.053	7.8	7.8%	100.0%
TOTAL		99.6	100.0%	

638478

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+3/8"	9.5	2.8	2.8%	2.8%
-3/8" +1/4"	6.3	19.14	19.2%	22.1%
-1/4" +6	3.36	28.8	29.0%	51.0%
-6 + 10	1.7	12.92	13.0%	64.0%
-10 + 100	0.15	26.14	26.3%	90.3%
-100 + 270	0.053	2.72	2.7%	93.0%
-270	-0.053	6.95	7.0%	100.0%
TOTAL		99.47	100.0%	

ALT 09-08

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+1/4"	6.3	21.6	21.7%	21.7%
-1/4" +10	1.7	39.2	39.4%	61.0%
-10 + 35	0.425	21.4	21.5%	82.5%
-35 + 100	0.15	7.4	7.4%	90.0%
-100 + 270	0.053	4.2	4.2%	94.2%
-270	0.053	5.8	5.8%	100.0%
TOTAL		99.6	100.0%	

588142

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+3/8"	9.5	6	6.1%	6.1%
-3/8" +1/4"	6.3	29.55	30.1%	36.2%
-1/4" +6	3.36	22.72	23.2%	59.4%
-6 + 10	1.7	10.65	10.9%	70.3%
-10 + 100	0.15	21.42	21.8%	92.1%
-100 + 270	0.053	2.87	2.9%	95.0%
-270	-0.053	4.86	5.0%	100.0%
TOTAL		98.07	100.0%	

ALT 09-11

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+1/4"	6.3	15.1	15.2%	15.2%
-1/4" +10	1.7	34.3	34.5%	49.6%
-10 + 35	0.425	24.5	24.6%	74.3%
-35 + 100	0.15	9.5	9.5%	83.8%
-100 + 270	0.053	5.6	5.6%	89.4%
-270	0.053	10.5	10.6%	100.0%
TOTAL		99.5	100.0%	

04250

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+3/8"	9.5	3	3.0%	3.0%
-3/8" +1/4"	6.3	12.94	13.0%	16.0%
-1/4" +6	3.36	27.04	27.1%	43.2%
-6 + 10	1.7	14.84	14.9%	58.1%
-10 + 100	0.15	29.3	29.4%	87.5%
-100 + 270	0.053	4.14	4.2%	91.6%
-270	-0.053	8.34	8.4%	100.0%
TOTAL		99.6	100.0%	

ALT 09-13

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+1/4"	6.3	29.1	29.2%	29.2%
-1/4" +10	1.7	30	30.1%	59.3%
-10 + 35	0.425	20	20.1%	79.4%
-35 + 100	0.15	8.2	8.2%	87.7%
-100 + 270	0.053	5.2	5.2%	92.9%
-270	0.053	7.1	7.1%	100.0%
TOTAL		99.6	100.0%	

ALT 09-20

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+1/4"	6.3	21.7	21.8%	21.8%
-1/4" +10	1.7	33.9	34.0%	55.8%
-10 + 35	0.425	23.8	23.9%	79.6%
-35 + 100	0.15	8.6	8.6%	88.3%
-100 + 270	0.053	4.8	4.8%	93.1%
-270	0.053	6.9	6.9%	100.0%
TOTAL		99.7	100.0%	

Client : AMEC
Project : Rainy River
SGS Project : 08121
Test : Size Fraction Analysis
Test Date : April 19, 2012

L032044

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+ 3/8	9.500	18.67	18.7%	18.7%
-3/8 + 1/4	6.300	27.30	27.3%	46.0%
-1/4 + 5	4.000	21.07	21.1%	67.0%
-5 + 10	2.000	14.35	14.4%	81.4%
-10 + 35	0.425	11.52	11.5%	92.9%
-35 + 100	0.150	2.17	2.2%	95.1%
-100 + 270	0.053	2.15	2.2%	97.2%
-270	-0.053	2.77	2.8%	100.0%
TOTAL		100.00	100.0%	

L032107

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+ 3/8	9.500	25.67	25.7%	25.7%
-3/8 + 1/4	6.300	37.04	37.0%	62.7%
-1/4 + 5	4.000	10.04	10.0%	72.8%
-5 + 10	2.000	12.59	12.6%	85.3%
-10 + 35	0.425	9.70	9.7%	95.0%
-35 + 100	0.150	1.21	1.2%	96.3%
-100 + 270	0.053	1.56	1.6%	97.8%
-270	-0.053	2.19	2.2%	100.0%
TOTAL		100.00	100.0%	

L032104

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+ 3/8	9.500	27.58	27.6%	27.6%
-3/8 + 1/4	6.300	27.53	27.5%	55.1%
-1/4 + 5	4.000	12.78	12.8%	67.9%
-5 + 10	2.000	10.33	10.3%	78.2%
-10 + 35	0.425	13.13	13.1%	91.4%
-35 + 100	0.150	2.77	2.8%	94.1%
-100 + 270	0.053	2.63	2.6%	96.8%
-270	-0.053	3.25	3.3%	100.0%
TOTAL		100.00	100.0%	

L032135

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+ 3/8	9.500	21.38	21.4%	21.4%
-3/8 + 1/4	6.300	22.36	22.4%	43.7%
-1/4 + 5	4.000	15.00	15.0%	58.7%
-5 + 10	2.000	13.97	14.0%	72.7%
-10 + 35	0.425	16.03	16.0%	88.7%
-35 + 100	0.150	3.70	3.7%	92.4%
-100 + 270	0.053	3.30	3.3%	95.7%
-270	-0.053	4.26	4.3%	100.0%
TOTAL		100.00	100.0%	

L032154

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+ 3/8	9.500	23.59	23.6%	23.6%
-3/8 + 1/4	6.300	26.00	26.0%	49.6%
-1/4 + 5	4.000	14.11	14.1%	63.7%
-5 + 10	2.000	13.40	13.4%	77.1%
-10 + 35	0.425	13.07	13.1%	90.2%
-35 + 100	0.150	3.14	3.1%	93.3%
-100 + 270	0.053	2.64	2.6%	96.0%
-270	-0.053	4.05	4.1%	100.0%
TOTAL		100.00	100.0%	

L032066

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+ 3/8	9.500	28.95	29.0%	29.0%
-3/8 + 1/4	6.300	16.54	16.5%	45.5%
-1/4 + 5	4.000	12.36	12.4%	57.9%
-5 + 10	2.000	14.33	14.3%	72.2%
-10 + 35	0.425	16.16	16.2%	88.3%
-35 + 100	0.150	3.90	3.9%	92.2%
-100 + 270	0.053	3.27	3.3%	95.5%
-270	-0.053	4.49	4.5%	100.0%
TOTAL		100.00	100.0%	

L032174

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+ 3/8	9.500	22.23	22.2%	22.2%
-3/8 + 1/4	6.300	27.20	27.2%	49.4%
-1/4 + 5	4.000	11.63	11.6%	61.1%
-5 + 10	2.000	12.90	12.9%	74.0%
-10 + 35	0.425	14.90	14.9%	88.9%
-35 + 100	0.150	3.68	3.7%	92.5%
-100 + 270	0.053	3.39	3.4%	95.9%
-270	-0.053	4.07	4.1%	100.0%
TOTAL		100.00	100.0%	

L032201

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+ 3/8	9.500	14.56	14.6%	14.6%
-3/8 + 1/4	6.300	34.61	34.6%	49.2%
-1/4 + 5	4.000	19.04	19.0%	68.2%
-5 + 10	2.000	13.45	13.5%	81.7%
-10 + 35	0.425	10.31	10.3%	92.0%
-35 + 100	0.150	2.12	2.1%	94.1%
-100 + 270	0.053	2.22	2.2%	96.3%
-270	-0.053	3.69	3.7%	100.0%
TOTAL		100.00	100.0%	

L032148

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+ 3/8	9.500	19.71	19.7%	19.7%
-3/8 + 1/4	6.300	31.80	31.8%	51.5%
-1/4 + 5	4.000	18.27	18.3%	69.8%
-5 + 10	2.000	11.77	11.8%	81.6%
-10 + 35	0.425	11.05	11.1%	92.6%
-35 + 100	0.150	1.73	1.7%	94.3%
-100 + 270	0.053	1.91	1.9%	96.2%
-270	-0.053	3.76	3.8%	100.0%
TOTAL		100.00	100.0%	

L032097

Sieve Designation	Aperture	Weight Retained		
	(mm)	(g)	(%)	Cumulative (%)
+ 3/8	9.500	27.08	27.1%	27.1%
-3/8 + 1/4	6.300	28.27	28.3%	55.4%
-1/4 + 5	4.000	13.64	13.6%	69.0%
-5 + 10	2.000	12.97	13.0%	82.0%
-10 + 35	0.425	10.63	10.6%	92.6%
-35 + 100	0.150	2.33	2.3%	94.9%
-100 + 270	0.053	2.12	2.1%	97.0%
-270	-0.053	2.96	3.0%	100.0%
TOTAL		100.00	100.0%	

Client : **AMEC**
Project : **Rainy River**
SGS Project : **08121**
TEST : **Screen Assay**
Date : **January 3, 2012**

Sample ID	Weight	+ 9.52mm		- 9.52mm	
	(kg)	(g)	(%)	(g)	(%)
Keewatin Till	1.00	389.6	39.0%	610.4	61.0%
Labradorean 4m	17.25	6.1	35.1%	11.2	64.9%

HUMIDITY CELLS

Cell No.	Sample ID	Sample Type	Method Reference	Column Dimensions			Column Packing			Pore Volume	Total Volume of Initial Flushings	Flushing Rate/Weekly Input*	Temp	Sampling Frequency	Start-up date	Sampling Day	Operation Procedure	Sample prep for flushings
				Inner Diameter (cm)	Length (cm)	Distance from Top of column to Sample (cm)	Dry Wt. of Sample (kg)	Other Materials Used	Column Material	(mL)	(mL)	(mL)	(°C)		**2010/2012**			
HC 1	638478	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	02-Feb	Tuesday	Flood Leach	None
HC 2	RRR04250	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	02-Feb	Tuesday	Flood Leach	None
HC 3	588142	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	02-Feb	Tuesday	Flood Leach	None
HC 4	731259	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	02-Feb	Tuesday	Flood Leach	None
HC 5	Alt 09 13	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	02-Feb	Tuesday	Flood Leach	None
HC 6	Alt 09 01	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	02-Feb	Tuesday	Flood Leach	None
HC 7	Alt 09 08	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	02-Feb	Tuesday	Flood Leach	None
HC 8	Alt 09 07	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	02-Feb	Tuesday	Flood Leach	None
HC 9	Alt 09 11	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	02-Feb	Tuesday	Flood Leach	None
HC 10	Alt 09 20	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	02-Feb	Tuesday	Flood Leach	None
HC 11	L032107	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	01-May	Tuesday	Flood Leach	None
HC 12	L032174	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	01-May	Tuesday	Flood Leach	None
HC 13	L032154	Waste Rock		10.20	25.50		0.89	Acrylic perforated disk & nylon mesh	Plexiglas		445	445	20-22 °C	Weekly	01-May	Tuesday	Flood Leach	None
HC 14	L032135	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	01-May	Tuesday	Flood Leach	None
HC 15	L032201	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	01-May	Tuesday	Flood Leach	None
HC 16	L032044	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	01-May	Tuesday	Flood Leach	None
HC 17	L032104	Waste Rock		10.20	25.50		0.94	Acrylic perforated disk & nylon mesh	Plexiglas		470	470	20-22 °C	Weekly	01-May	Tuesday	Flood Leach	None
HC 18	L032148	Waste Rock		10.20	25.50		0.89	Acrylic perforated disk & nylon mesh	Plexiglas		445	445	20-22 °C	Weekly	01-May	Tuesday	Flood Leach	None
HC 19	L032097	Waste Rock		10.20	25.50		1.00	Acrylic perforated disk & nylon mesh	Plexiglas		500	500	20-22 °C	Weekly	01-May	Tuesday	Flood Leach	None
HC 20	L032066	Waste Rock		10.20	25.50		0.98	Acrylic perforated disk & nylon mesh	Plexiglas		490	490	20-22 °C	Weekly	01-May	Tuesday	Flood Leach	None

HC 1
Sample = 638478

CONFIDENTIAL ***DRAFT***

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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
02-Feb-10	1	500	385	7.04	378	105	#N/A	2.9	10.4	33	-	-	23.5	0.0254	0.0044	0.0102	0.00856	< 0.00002	< 0.00001	0.021	0.000028	6.34	< 0.0005	0.000229	0.0150	< 0.01	0.00006
09-Feb-10	2	500	480	6.74	354	93	#N/A	2.6	4.6	30	-	-	21.7	0.0138	0.0053	0.0067	0.00670	< 0.00002	< 0.00001	0.030	0.000014	5.86	< 0.0005	0.000070	0.0048	< 0.01	< 0.00002
16-Feb-10	3	500	440	6.63	320	62	#N/A	3.1	3.2	22	-	-	14.8	0.0232	0.0039	0.0038	0.00605	< 0.00002	< 0.00001	0.025	0.000012	4.07	< 0.0005	0.000044	0.0039	< 0.01	0.00010
23-Feb-10	4	500	450	6.82	365	43	#N/A	2.4	2.5	16	-	-	13.2	0.0074	0.0030	0.0024	0.00480	< 0.00002	< 0.00001	0.017	0.000008	3.55	< 0.0005	0.000111	0.0022	< 0.01	0.00003
02-Mar-10	5	500	445	6.39	363	40	#N/A	2.1	1.5	15	-	-	10.7	0.0052	0.0019	0.0013	0.00603	< 0.00002	< 0.00001	0.012	0.000008	2.92	< 0.0005	0.000099	0.0017	< 0.01	0.00004
09-Mar-10	6	500	460	6.26	420	33	#N/A	2.3	1.5	11	-	-	9.7	0.0036	0.0018	0.0009	0.00471	< 0.00002	< 0.00001	0.012	0.000004	2.59	< 0.0005	0.000088	0.0034	< 0.01	0.00009
16-Mar-10	7	500	450	6.45	380	27	#N/A	2.6	1.8	10	< 0.2	< 0.06	11.3	0.0036	0.0013	0.0007	0.00442	< 0.00002	< 0.00001	0.018	0.000008	2.93	< 0.0005	0.000110	0.0017	0.02	0.00003
23-Mar-10	8	500	465	6.32	379	34	#N/A	2.8	1.5	10	< 0.2	< 0.06	11.3	0.0027	0.0011	0.0006	0.00536	< 0.00002	< 0.00001	0.0091	0.000024	2.95	0.0006	0.000143	0.0022	< 0.01	0.00042
30-Mar-10	9	500	460	6.19	401	34	#N/A	3.4	0.9	15	< 0.2	< 0.06	12.1	0.0036	0.0010	0.0003	0.00606	< 0.00002	< 0.00001	0.009	0.000024	3.22	0.0007	0.000254	0.0046	< 0.01	0.00047
06-Apr-10	10	500	435	6.22	396	44	#N/A	3.3	1.1	16	< 0.2	0.52	14.9	0.0131	0.0007	0.0003	0.00804	< 0.00002	< 0.00001	0.005	0.000031	4.00	0.0008	0.000398	0.0048	< 0.01	0.00045
13-Apr-10	11	500	470	6.25	378	40	#N/A	3.6	1.7	15	< 0.2	0.06	13.1	0.0132	0.0009	0.0003	0.00900	< 0.00002	< 0.00001	0.009	0.000104	3.35	< 0.0005	0.000622	0.0057	< 0.01	0.00006
20-Apr-10	12	500	450	6.16	363	45	#N/A	4.0	1.3	20	< 0.2	0.06	14.5	0.0148	0.0006	0.0004	0.0126	0.00002	< 0.00001	0.008	0.000078	3.86	0.0007	0.000972	0.0092	< 0.01	0.00007
27-Apr-10	13	500	455	6.10	359	45	#N/A	2.9	1.5	18	< 0.2	< 0.06	14.6	0.0204	0.0002	0.0002	0.0154	< 0.00002	< 0.00001	0.006	0.000076	3.87	< 0.0005	0.001319	0.0158	< 0.01	0.00076
04-May-10	14	500	445	5.87	386	59	#N/A	3.7	1.1	21	< 0.2	0.06	16.8	0.0342	0.0004	0.0002	0.0232	0.00003	< 0.00001	0.008	0.000138	4.39	< 0.0005	0.00231	0.0187	0.02	0.00012
11-May-10	15	500	445	5.97	353	54	#N/A	3.0	1.3	18	< 0.2	0.08	17.4	0.0456	0.0003	0.0003	0.0199	0.00003	< 0.00001	0.006	0.000161	4.61	0.0007	0.00299	0.0296	0.02	0.00017
18-May-10	16	500	430	5.82	356	58	#N/A	3.9	1.3	18	< 0.2	0.11	20.0	0.0806	0.0003	< 0.0002	0.02021	0.00004	< 0.00001	0.0077	0.000210	5.38	0.0005	0.00443	0.0500	0.052	0.00020
25-May-10	17	500	465	6.13	371	46	#N/A	4.8	2.2	11	< 0.2	0.12	14.2	0.104	< 0.0002	< 0.0002	0.0180	0.00006	< 0.00001	0.0059	0.000237	3.68	< 0.0005	0.00534	0.0637	0.055	0.00157
01-Jun-10	18	500	420	5.63	395	59	#N/A	4.7	0.8	19	< 0.2	0.17	19.2	0.203	0.0002	< 0.0002	0.0191	0.00008	< 0.00001	0.0059	0.000287	5.19	0.0006	0.00772	0.0997	0.097	0.00023
08-Jun-10	19	500	415	5.55	360	54	#N/A	4.7	1.0	12	< 0.2	0.19	17.2	0.235	< 0.0002	0.0003	0.0182	0.00010	< 0.00001	0.0058	0.000308	4.53	0.0011	0.00934	0.142	0.126	0.00025
15-Jun-10	20	500	445	5.62	403	44	#N/A	6.0	1.0	9	< 0.2	0.20	12.3	0.288	< 0.0002	0.0002	0.0211	0.00013	< 0.00001	0.0058	0.000318	3.11	< 0.0005	0.010030	0.247	0.163	0.00157
22-Jun-10	21	500	435	5.63	419	49	#N/A	6.4	1.2																		
29-Jun-10	22	500	450	5.33	394	48	#N/A	7.2	0.4	9	< 0.2	0.27	9.7	0.692	< 0.0002	0.0003	0.0140	0.00023	< 0.00001	0.0046	0.000364	2.30	0.0007	0.0127	0.599	0.129	0.00038
06-Jul-10	23	500	460	4.99	443	58	#N/A	10.7	<0.1																		
13-Jul-10	24	500	445	4.68	443	61	#N/A	13.4	<0.1	14	< 0.2	0.25	7.4	1.17	< 0.0002	0.0008	0.0141	0.00041	< 0.00001	0.0034	0.000379	1.66	< 0.0005	0.0123	1.26	0.055	0.00029
20-Jul-10	25	500	450	4.51	452	79	#N/A	25.4	<0.1																		
27-Jul-10	26	500	455	4.36	472	91	5.9	30.0	#N/A	26	< 0.2	0.24	7.7	2.77	< 0.0002	0.0056	0.0119	0.00053	< 0.00001	0.0033	0.000324	1.82	0.0007	0.0118	2.08	0.118	0.00109
03-Aug-10	27	500	470	4.64	403	92	#N/A	32.5	<0.1	24	< 0.2	0.19	6.1	3.52	< 0.0002	0.0005	0.00883	0.00048	< 0.00001	0.0113	0.000282	1.37	0.0009	0.0110	2.15	0.097	0.00114
10-Aug-10	28	500	450	4.63	342	106	#N/A	39.3	<0.1	35	< 0.2	0.15	6.4	4.25	< 0.0002	0.0021	0.00875	0.00055	< 0.00001	0.0141	0.000281	1.47	0.0011	0.0121	3.09	0.135	0.00183
17-Aug-10	29	500	455	4.51	365	116	#N/A	45.3	<0.1	36	< 0.2	0.14	5.9	5.71	0.0002	0.0005	0.00924	0.00061	0.00001	0.0030	0.000270	1.32	0.0014	0.0128	2.70	0.174	0.00159
24-Aug-10	30	500	430	4.41	459	122	7.7	48.4	#N/A	33	< 1	0.15	6.7	5.00	0.0002	0.0006	0.00920	0.00057	< 0.00001	0.0025	0.000237	1.65	0.0019	0.0120	2.52	0.238	0.00134
31-Aug-10	31	500	465	4.42	392	118	6.8	50.9	#N/A	52	< 1	< 0.06	8.3	5.34	< 0.0002	0.0007	0.00829	0.00056	< 0.00001	0.0021	0.000274	1.63	0.0025	0.0170	2.55	0.500	0.00142
07-Sep-10	32	500	435	4.20	463	139	19.7	50.3	#N/A	50	< 0.2	0.12	6.0	5.35	< 0.0002	0.0180	0.00785	0.00051	0.00007	0.0020	0.000131	1.31	0.0101	0.0153	2.40	0.427	0.00542
14-Sep-10	33	500	420	3.99	470	150	25.9	55.1	#N/A	52	< 0.2	0.12	6.4	6.71	0.0003	0.0006	0.0221	0.00053	< 0.00001	0.0051	0.000212	1.42	0.0053	0.0136	2.32	0.641	0.00212
21-Sep-10	34	500	450	4.02	438	138	26.9	55.6	#N/A	55	< 0.2	0.10	6.5	5.70	0.0006	0.0007	0.01476	0.00049	0.00007	0.0028	0.000320	1.28	0.0065	0.0142	2.09	0.779	0.00171
28-Sep-10	35	500	480	3.79	455	230	37.7	67.0	#N/A	66	< 1	0.11	8.1	7.39	< 0.0002	0.0028	0.0107	0.00064	< 0.00001	0.0037	0.000928	1.57	0.0116	0.0210	2.70	1.60	0.00376
05-Oct-10	36	500	460	3.67	449	214	33.6	62.8	#N/A	74	< 0.2	0.11	8.0	6.30	0.0005	0.0003	0.0102	0.00049	< 0.00001	0.0039	0.000318	1.65	0.0121	0.0161	1.98	1.55	0.00754
12-Oct-10	37	500	435	3.76	436	201	31.3	59.8	#N/A	67	< 1	0.12	17.0	6.02	< 0.0002	0.0005	0.00838	0.00045	< 0.00001	0.0033	0.000339	4.56	0.0149	0.0169	2.10	1.98	0.00153
19-Oct-10	38	500	445	3.77	431	196	28.6	55.5	#N/A	68	< 0.2	0.11	7.8	5.45	< 0.0002	< 0.0002	0.00777	0.00042	< 0.00001	0.0026	0.000293	1.51	0.0148	0.0158	1.91	2.01	0.00703
26-Oct-10	39	500	450	3.67	472	198	26.8	55.1	#N/A	64	< 0.2	0.10	7.0	5.50	< 0.0002	0.0004	0.00639	0.00037	< 0.00001	0.0039	0.000657	1.17	0.0150	0.0163	1.82	2.07	0.0595
02-Nov-10	40	500	450	4.01	351	26	17.6	51.5	#N/A	60	< 0.2	0.10	6.5	5.14	< 0.0002	0.0006	0.00887	0.00029	< 0.00001	0.0030	0.000292	1.14	0.0134	0.0134	1.55	1.81	0.00137
09-Nov-10	41	500	495	3.55	452	203	31.3	72.3	#N/A	50	< 1	< 0.06	9.5	5.86	< 0.0002	0.0005	0.00556	0.00036	< 0.00001	0.0031	0.000327	1.60	0.0203	0.0185	2.21	4.38	0.00223
16-Nov-10	42	500	460	3.88	325	197	17.2	49.7	#N/A	54	< 1	0.09	7.3	4.02	0.0023	0.0006	0.00712	0.00024	< 0.00001	0.0022	0.000226	1.43	0.0130	0.0141	1.55	2.19	0.00161
23-Nov-10	43	500	450	3.53	451	238	25.3	51.2	#N/A	54	< 1	0.09	7.1	4.68	< 0.0002	0.0004	0.00899	0.00029	< 0.00001	0.0026	0.000277	1.30	0.0155	0.0146	1.79	2.71	0.00127
30-Nov-10	44	500	425	3.63	460	217	24.3	48.6	#N/A	46	< 1	0.11	8.2	3.77	< 0.0002	0.0003	0.00751	0.00021	< 0.00001	0.0018	0.000209	1.75	0.0122	0.0139	1.57	2.29	0.00694
07-Dec-10	45	500	430	3.65	440	204	22.7	45.6	#N/A	45	< 1	0.12	9.29	3.17	< 0.0002	0.0002	0.00706	0.00018	< 0.00001	0.0049	0.000141	2.00	0.0104	0.0135	1.40	2.50	0.00314
14-Dec-10	46	500	455	3.76	482	189	19.7	41.8	#N/A	46	< 1	0.12	8.0	2.90	< 0.0002	0.0003	0.00572	0.00011	< 0.00001	0.0023	0.000149	1.68	0.0092	0.0123	1.32	2.21	0.00061
21-Dec-10	47	500	450	3.55	518	220	26.0	51.2	#N/A	60	< 1	0.13	14.4	3.28	0.0002	0.0004	0.00702	0.00021	< 0.00001	0.0036	0.000341	2.85	0.0114	0.0153	1.51	2.69	0.0271
28-Dec-10	48	500	450	3.55	486	192	23.0	45.7	#N/A	52	< 0.2	0.14	6.6	2.99	0.0045	0.0011	0.00547	0.00017	< 0.00001	0.0030	0.000129	1.13	0.0103	0.0142	1.40	2.32	0.00268
04-Jan-11	49	500	475	3.55	483	211	27.9	53.6	#N/A	55	< 0.2	0.12	6.48	2.76	< 0.0002	0.0003	0.00698	0.00017	< 0.00001	0.0017	0.000141	1.00	0.0104	0.0148	1.57	2.59	0.0447
11-Jan-11	50	500	455	3.69	461	191	22.8	44.4	#N/A	49	< 0.2	0.10	5.9	2.30	0.0050	0.0012	0.00650	0.00012	< 0.00001	0.0032	0.000068	1.02	0.0079	0.0131	1.26	2.55	0.0503
18-Jan-11	51	500	425	3.75	427	189	18.9	36.1	#N/A	38	< 0.2	0.11	7.1	1.61	< 0.0002	0.0003	0.00873	0.00010	< 0.00001	0.0027	0.000807	1.64	0.0059	0.0107	1.01	2.25	0.00205
25-Jan-11	52	500	445	3.65	431	216	25.3	46.8	#N/A	52	< 1	0.11	6.36	2.13	< 0.0002	0.0002	0.00623	0.00014	< 0.00001	0.0035	0.000124	1.20	0.0076	0.0136	1.19	2.65	0.00055
01-Feb-11	53	500	445	3.85	396	168	15.4	30.5	#N/A	34	< 1	0.10	5.36	1.56	< 0.0002	< 0.0002	0.00494	0.00009	< 0.00001	0.0028	0.000100	1.01	0.0047	0.0106	0.944	2.20	0.00062
08-Feb-11	54	500	440	3.88	401	169	15.1	29.7	#N/A	41	< 0.2	0.10	5.28	1.64	0.0013	0.0006	0.00512	0.00009	< 0.00001	0.0022	0.000083	1.03	0.0049	0.00987	0.882	2.25	0.00038
15-Feb-11	55	500	455	3.75	420	188	18.3	34.4	#N/A	35	< 1	0.11	5.5	1.76	< 0.0002	< 0.0002	0.00477	0.00010	< 0.00001	0.0019	0.000147	1.13	0.0048	0.0105	0.932	2.10	0.00120
22-Feb-11	56	500	435	3.81	364	181	13.5	27.2	#N/A	38	< 0.2	0.08	5.3	1.41	0.0003	< 0.0002	0.00538	0.00007	< 0.00001	0.0026	0.000065	1.14	0.0048	0.00909	0.830	1.88	0.00200
01-Mar-11	57	500	435	3.90	383	178	12.5	26.4	#N/A	41	< 1	0.10	5.34	1.27	0.0327	0.0034	0.00442	0.00007	< 0.00001	0.0033	0.000574	1.09	0.0040	0.00889	0.784	1.72	0.134
08-Mar-11	58	500	435	3.86	371	184	14.4	28.0	#N/A	39	< 0.2	0.11	5.52	1.31	0.0003	0.0003	0.00490	0.00006	< 0.00001	0.0022	0.000805	1.21	0.0040	0.00915	0.769	1.77	0.00210
15-Mar-11	59	500	455	3.66	387	234	21.4	38.4	#N/A	44	< 0.2	0.10	5.2	1.96	< 0.0002	< 0.0002	0.00643	0.00009	< 0.00001	0.0026	0.000090	0.83	0.0059	0.0121	1.16	2.68	0.00217
22-Mar-11	60	500	440	3.83	342	207	17.0	31.7	#N/A	37	< 0.2	0.09	4.71	1.54	< 0.0002	< 0.0002	0.00553	0.00007	< 0.00001	0.0019	0.000072	0.90	0.0047	0.0101	0.823	1.99	0.00062
29-Mar-11	61	500	445	3.82	405	193	16.4	32.3	#N/A	32	< 0.2	0.11	5.6	1.45	< 0.0002	< 0.0002	0.00500	0.00007	< 0.00001	0.0023	0.00624	1.05	0.0046	0.0106	0.955	2.25	0.0555
05-Apr-11	62	500	455	3.69	321	240	18.8	34.6	#N/A	44	< 0.2	0.09	5.0	1.75	< 0.0002	0.0002	0.00577	0.00008	< 0.00001	0.0028	0.000088	0.77	0.0055	0.0138	1.08	2.63	0.00108
12-Apr-11	63	500	460	3.62	386	194	17.1	30.3	#N/A	36	< 0.2	0.10	5.4	1.50	< 0.0002	0.0003	0.00454	0.00005	< 0.00001	0.0020	0.000124	1.04	0.0042	0.0106	0.890	2.19	0.0386
19-Apr-11	64	500	465	3.66	307	248	21.2	38.3	#N/A	43	< 0.2	0.10	5.1	1.85	< 0.0002	< 0.0002	0.00743	0.00009	< 0.00001	0.0017	0.000187	0.82	0.0053	0.0134	1.13	2.61	0.00824
26-Apr-11	65	500	440	3.58	398	237	24.6	42.0	#N/A	46	< 0.2	0.14	5.6	2.02	< 0.0002	0.0012	0.00910	0.00006	0.00001	0.0015	0.000080	1.02	0.0056	0.0145	1.16	2.91	0.00067
03-May-11	66	500	440	3.56	441	219	25.5	42.9	#N/A	41	< 0.2	0.10	4.6	1.80	< 0.0002	< 0.0002	0.01782	0.00007	< 0.00001	0.0031	0.000065	0.78	0.0047	0.0121	1.00	2.22	0.00050
10-May-11	67	500	435	3.60	467	209	24.2	41.5	#N/A	42	< 0.2	0.13	5.65	1.47	< 0.0002	0.0002	0.01083	0.00007	< 0.00001	0.0039	0.000091	1.09	0.0041	0.011733	0.882	1.95	0.00053
17-May-11	68	500	430	3.51	422	224	26.7	43.9	#N/A	49	0.3	0.11	5.7	1.89	< 0.0002	< 0.0002	0.00756	0.00008	< 0.00001	0.0015	0.000100	1.13	0.0043	0.0122	1.00	2.02	0.00040
24-May-11	69	500	490	3.30	395	384	52.5	87.6	#N/A	81	< 0.2	0.13	8.8	3.73	< 0.0002	< 0.0002	0.00423	0.00013	< 0.00001	0.0030	0.000153	1.29	0.0114	0.0237	1.96	8.46	0.00108
31-May-11	70	500	450	3.44	390	273	37.3	61.2	#N/A	56	< 0.2	0.11	5.2	1.79	0.0002	0.0002	0.00529	0.00009	0.00002	0.0011	0.000119	0.91	0.0064	0.0166	1.31	3.25	0.00348
07-Jun-11	71	500	440	3.61	422	212	25.5	40.0	#N/A	41	< 0.2	0.09	4.5	1.34	< 0.0002	< 0.0002	0.00644	0.00007	< 0.00001	0.0021	0.000098	0.81	0.0040	0.0116	0.959	2.25	0.00034
14-Jun-11	72	500	440	3.56	256	194	22.0	37.9	#N/A	33	< 0.2	0.08	4.4	1.23	< 0.0002	< 0.0002	0.00459	0.00006	< 0.00001	0.0030	0.000082	0.84	0.0038	0.010534	0.904	2.08	0.00119
21-Jun-11	73	500	445	3.57	271	218	23.1	40.0	#N/A	47	< 0.2	0.07	3.89	1.47	< 0.0002	0.0002	0.00357	0.00005	< 0.00001	0.0017	0.00109	0.56	0.0043	0.0116	0.972	2.45	0.00093
28-Jun-11	74	500	440	3.42	213	253	32.1	51.8	#N/A	55	< 0.2	0.08	4.9	1.88	< 0.0002	0.0008	0.0111	0.00008	< 0.00001	0.0022	0.000077	0.76	0.0056	0.0152	2.11	3.23	0.00068
05-Jul-11	75	500	450	3.43	412	267	32.1	51.0	#N/A	54	< 0.2	< 0.06	4.72	1.88	< 0.0002	< 0.0002	0.00805	0.00006	< 0.00001	0.0031	0.000078	0.66	0.0061	0.0152	1.14	3.24	0.00143

Cell Terminated

Apr 20/10 Al, Mo, Cu, Co, and K repeated due to carryover of solution during ICP analysis.

HC 1
Sample = 638478

Date	Cycle	Li	Mg	Mn	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		mg/L	mg/L	mg/L	ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L					
02-Feb-10	1	0.004	1.86	0.024	< 0.01	0.00763	0.0016	< 0.01	11.0	0.00061	0.60	0.00001	6.48	0.0446	10.9	< 0.0002	0.00021	0.0001	0.000058	0.00016	0.004	0.00039		0.90	1.03	0.14	7.1%
09-Feb-10	2	0.002	1.71	0.021	< 0.01	0.0103	0.0003	< 0.01	7.68	0.00062	0.88	< 0.00001	3.39	0.0379	9.78	< 0.0002	< 0.00001	< 0.0001	0.000030	0.00010	< 0.001	0.00011		0.72	0.78	0.06	4.0%
16-Feb-10	3	0.001	1.13	0.015	< 0.01	0.00620	0.0004	< 0.01	4.58	0.00051	1.00	0.00001	2.08	0.0252	7.00	< 0.0002	0.00008	0.0003	0.000038	0.00019	0.002	0.00006		0.52	0.50	-0.02	-1.8%
23-Feb-10	4	0.001	1.05	0.019	< 0.01	0.00313	0.0003	< 0.01	3.56	0.00024	0.98	< 0.00001	1.08	0.0245	5.37	< 0.0002	0.00006	< 0.0001	0.000011	0.00012	< 0.001	0.00003		0.38	0.40	0.02	2.2%
02-Mar-10	5	< 0.001	0.838	0.016	< 0.01	0.00157	0.0002	< 0.01	2.36	0.00017	0.70	< 0.00001	0.64	0.0186	4.91	< 0.0002	0.00015	0.0002	0.000009	0.00010	0.001	0.00002		0.34	0.30	-0.04	-6.2%
09-Mar-10	6	< 0.001	0.797	0.022	< 0.01	0.00082	0.0005	< 0.01	1.94	0.00012	0.92	< 0.00001	0.39	0.0171	3.93	< 0.0002	0.00036	< 0.0001	0.000056	0.00007	0.002	0.00002		0.26	0.26	0.00	0.6%
16-Mar-10	7	< 0.001	0.977	0.030	< 0.01	0.00158	0.0002	< 0.01	1.76	0.00014	0.85	< 0.00001	0.52	0.0192	4.55	< 0.0002	0.00004	< 0.0001	0.000109	0.00005	0.001	0.00001		0.24	0.29	0.05	9.4%
23-Mar-10	8	0.002	0.948	0.042	< 0.01	0.00044	0.0002	< 0.01	1.56	0.00013	1.00	< 0.00001	0.26	0.0235	4.38	< 0.0002	0.00008	< 0.0001	0.000017	< 0.00003	0.003	< 0.00001		0.24	0.28	0.04	7.3%
30-Mar-10	9	0.001	0.989	0.054	< 0.01	0.00016	0.0004	< 0.01	1.40	0.00014	0.96	< 0.00001	0.26	0.0251	4.38	< 0.0002	0.00011	< 0.0001	0.000008	< 0.00003	0.003	< 0.00001		0.33	0.29	-0.04	-6.6%
06-Apr-10	10	0.001	1.19	0.073	< 0.01	0.00013	0.0004	< 0.01	1.55	0.00013	0.90	< 0.00001	0.24	0.0314	5.77	< 0.0002	0.00012	0.0003	0.000033	< 0.00003	0.003	0.00002		0.36	0.35	-0.01	-1.2%
13-Apr-10	11	0.002	1.15	0.087	< 0.01	0.00019	0.0006	< 0.01	1.49	0.00016	1.43	< 0.00001	0.24	0.0311	4.91	< 0.0002	0.00030	0.0002	0.000031	< 0.00003	0.005	0.00002		0.35	0.31	-0.04	-5.4%
20-Apr-10	12	0.001	1.17	0.100	< 0.01	0.00001	0.0011	< 0.01	1.36	0.00031	1.03	< 0.00001	0.18	0.0391	5.64	< 0.0002	0.00016	< 0.0001	0.000190	< 0.00003	0.009	0.00002		0.44	0.33	-0.11	-14.4%
27-Apr-10	13	0.001	1.19	0.114	< 0.01	0.00019	0.0012	< 0.01	1.30	0.00029	1.00	< 0.00001	0.21	0.0445	5.30	< 0.0002	0.00009	< 0.0001	0.000099	< 0.00003	0.011	0.00001		0.40	0.33	-0.07	-9.6%
04-May-10	14	0.001	1.42	0.145	< 0.01	0.00006	0.0019	< 0.01	1.80	0.00031	1.25	< 0.00001	0.17	0.0565	6.24	< 0.0002	0.00023	< 0.0001	0.000107	< 0.00003	0.018	< 0.00001		0.46	0.39	-0.07	-8.2%
11-May-10	15	0.001	1.42	0.166	< 0.01	0.00003	0.0026	0.02	1.51	0.00031	1.09	0.00005	0.13	0.0611	6.72	< 0.0002	0.00042	< 0.0001	0.000149	0.00005	0.026	0.00002		0.40	0.39	-0.01	-1.1%
18-May-10	16	0.002	1.59	0.189	< 0.01	< 0.00001	0.0036	< 0.009	1.56	0.00031	0.82	< 0.00001	0.19	0.0698	7.23	< 0.0002	0.00021	< 0.0001	0.000329	< 0.00003	0.039	0.00001		0.40	0.45	0.05	5.6%
25-May-10	17	0.002	1.21	0.156	< 0.01	0.00026	0.0039	< 0.009	1.11	0.00039	0.91	0.00001	0.14	0.0488	5.82	< 0.0002	0.00021	< 0.0001	0.000288	< 0.00003	0.054	0.00001		0.27	0.32	0.04	7.6%
01-Jun-10	18	0.002	1.53	0.213	< 0.01	0.00083	0.0055	< 0.009	1.34	0.00058	0.57	0.00002	0.20	0.0685	7.85	< 0.0002	0.00015	< 0.0001	0.000467	< 0.00003	0.092	< 0.00001		0.41	0.43	0.02	1.9%
08-Jun-10	19	0.002	1.43	0.196	< 0.01	0.00041	0.0062	0.012	1.22	0.00046	0.52	< 0.00001	0.15	0.0585	7.34	< 0.0002	0.00026	< 0.0001	0.000535	< 0.00003	0.129	0.00001		0.27	0.38	0.11	17.2%
15-Jun-10	20	0.002	1.09	0.161	< 0.01	0.00008	0.0066	2.43	3.65	0.00031	0.68	0.00017	1.09	0.0394	5.52	< 0.0002	0.00003	< 0.0001	0.000618	< 0.00003	0.145	0.00001		0.21	0.39	0.18	29.9%
22-Jun-10	21																										
29-Jun-10	22	0.002	0.960	0.145	< 0.01	0.00010	0.0082	< 0.009	0.822	0.00035	0.60	< 0.00001	0.16	0.0289	5.18	< 0.0002	0.00028	0.0002	0.00130	< 0.00003	0.210	0.00002		0.20	0.22	0.03	6.2%
06-Jul-10	23																										
13-Jul-10	24	0.003	0.780	0.122	< 0.01	0.00033	0.0091	0.044	0.784	0.00041	0.73	0.00004	0.12	0.0174	8.03	< 0.0002	0.00013	< 0.0001	0.00124	< 0.00003	0.213	< 0.00001		0.29	0.35	0.06	9.5%
20-Jul-10	25																										
27-Jul-10	26	0.004	0.772	0.111	< 0.01	0.00044	0.0096	0.040	0.830	< 0.00004	0.75	0.00002	0.14	0.0200	11.4	< 0.0002	0.00114	< 0.0001	0.00279	< 0.00003	0.167	0.00002		0.54	0.61	0.07	6.3%
03-Aug-10	27	0.004	0.644	0.108	< 0.01	0.00026	0.0094	0.053	0.676	0.00041	0.93	0.00001	0.15	0.0143	10.9	< 0.0002	0.00023	< 0.0001	0.00294	< 0.00003	0.139	< 0.00001		0.50	0.64	0.14	12.3%
10-Aug-10	28	0.004	0.654	0.107	< 0.01	0.00015	0.0107	0.033	0.817	0.00588	0.66	0.00002	0.31	0.0145	13.1	< 0.0002	0.00009	< 0.0001	0.00274	< 0.00003	0.143	0.00003		0.73	0.77	0.04	2.7%
17-Aug-10	29	0.006	0.643	0.0966	< 0.01	0.00012	0.0120	0.036	0.771	< 0.00004	0.67	0.00005	0.14	0.0116	19.7	< 0.0002	0.00012	0.0002	0.00319	< 0.00003	0.133	0.00002		0.75	0.91	0.16	9.7%
24-Aug-10	30	0.006	0.635	0.0940	< 0.01	0.00002	0.0119	0.030	0.789	0.00021	0.64	0.00003	0.10	0.0113	16.6	< 0.0002	0.00004	0.0002	0.00264	< 0.00003	0.110	0.00003		0.69	0.85	0.17	10.7%
31-Aug-10	31	0.005	1.02	0.312	0.02	< 0.00001	0.0177	< 0.009	0.649	0.00036	0.84	0.00002	0.14	0.0114	18.4	< 0.0002	0.00001	< 0.0001	0.00277	< 0.00003	0.119	0.00001		1.08	0.94	-0.14	-7.0%
07-Sep-10	32	0.006	0.670	0.0600	< 0.01	0.00701	0.0191	0.036	0.720	0.00078	0.62	0.00013	0.47	0.0080	16.2	< 0.0002	0.0257	0.0011	0.00221	0.00724	0.094	0.00034		1.04	0.92	-0.12	-6.2%
14-Sep-10	33	0.007	0.705	0.0877	< 0.01	0.00004	0.0124	0.042	0.701	0.00068	0.51	0.00003	0.17	0.0113	18.4	< 0.0002	0.00016	< 0.0001	0.00207	< 0.00003	0.085	0.00010		1.08	1.12	0.03	1.5%
21-Sep-10	34	0.005	0.798	0.0920	< 0.01	0.00018	0.0130	0.060	0.591	0.00108	0.94	0.00006	4.47	0.0094	25.5	< 0.0002	0.00027	< 0.0001	0.001843	< 0.00003	0.091	0.00005		1.15	1.18	0.04	1.5%
28-Sep-10	35	0.007	1.01	0.125	< 0.01	0.00117	0.0389	0.030	0.652	0.00449	2.41	0.00003	0.16	0.0126	25.9	< 0.0002	0.00026	0.0002	0.00387	0.00092	0.186	0.00004		1.38	1.35	-0.03	-0.9%
05-Oct-10	36	0.006	0.942	0.105	0.02	0.00604	0.0130	0.026	0.551	< 0.00004	1.29	0.00003	0.16	0.0109	23.3	< 0.0002	0.00062	0.0003	0.00216	< 0.00003	0.086	0.00003		1.54	1.25	-0.29	-10.6%
12-Oct-10	37	0.007	1.37	0.106	< 0.01	0.0303	0.0138	0.031	0.568	0.00218	0.76	0.00001	14.7	0.0176	43.8	< 0.0002	0.00075	< 0.0001	0.00119	< 0.00003	0.075	0.00001		1.40	2.02	0.62	18.2%
19-Oct-10	38	0.008	0.976	0.0859	< 0.01	0.00025	0.0126	0.027	0.358	0.00047	0.63	0.00002	0.13	0.0076	20.4	< 0.0002	0.00005	< 0.0001	0.00107	< 0.00003	0.074	0.00002	CA14822-OCT10	1.42	1.12	-0.30	-11.7%
26-Oct-10	39	0.007	0.943	0.0740	< 0.01	0.00013	0.0137	0.047	0.251	0.00090	0.70	0.00001	0.30	0.0057	19.1	< 0.0002	0.00009	0.0001	0.00173	0.00003	0.114	< 0.00001	CA11459-OCT10	1.33	1.16	-0.18	-7.2%
02-Nov-10	40	0.006	0.890	0.0630	< 0.01	0.00691	0.0104	0.035	0.217	0.00137	0.71	0.00002	0.16	0.0059	16.5	< 0.0002	0.00010	0.0006	0.000902	< 0.00003	0.076	< 0.00001	CA11315-NOV10	1.25	0.96	-0.29	-13.0%
09-Nov-10	41	0.008	1.34	0.0918	0.01	0.0173	0.0139	0.073	0.307	< 0.00004	2.07	0.00003	0.28	0.0093	24.9	< 0.0002	0.00016	0.0003	0.00411	< 0.00003	0.074	0.00001	CA11435-NOV10	1.04	1.45	0.41	16.5%
16-Nov-10	42	0.006	0.913	0.0571	< 0.01	0.00288	0.0094	0.035	0.188	< 0.00004	0.88	0.00004	0.13	0.0072	17.3	< 0.0002	0.00048	< 0.0001	0.000763	< 0.00003	0.055	0.00001	CA10265-NOV10	1.13	0.91	-0.22	-10.8%
23-Nov-10	43	0.007	0.940	0.0570	0.01	0.00486	0.0105	0.026	0.162	0.00077	0.73	0.00004	0.11	0.0066	17.9	< 0.0002	0.00015	0.0001	0.000753	< 0.00003	0.061	0.00002	CA11701-NOV10	1.13	1.17	0.05	2.1%
30-Nov-10	44	0.005	0.934	0.0482	< 0.01	0.00554	0.0099	< 0.009	0.159	0.00100	0.54	0.00005	0.15	0.0066	17.4	< 0.0002	0.00035	< 0.0001	0.000582	< 0.00003	0.071	0.00002	CA14008-DEC10	0.96	1.00	0.05	2.4%
07-Dec-10	45	0.005	1.040	0.0498	< 0.01	0.00010	0.0093	0.038	0.137	0.00014	0.53	0.00005	0.10	0.0062	16.0	< 0.0002	0.00017	< 0.0001	0.000415	< 0.00003	0.050	< 0.00001	CA14206-DEC10	0.94	0.95	0.01	0.7%
14-Dec-10	46	0.005	0.920	0.0403	< 0.01	0.00915	0.0084	< 0.009	0.124	0.00062	0.42	0.00004	0.12	0.0057	14.1	< 0.0002	0.00029	< 0.0001	0.000470	< 0.00003	0.042	< 0.00001	CA10970-DEC10	0.96	0.83	-0.13	-7.4%
21-Dec-10	47	0.006	1.76	0.128	< 0.01	< 0.00001	0.0044	0.010	0.142	0.00046	0.69	0.00005	0.15	0.0101	20.9	< 0.0002	0.00017	< 0.0001	0.000552	< 0.00003	0.068	< 0.00001	CA10453-DEC10	1.25	1.14	-0.11	-4.5%
28-Dec-10	48	0.005	0.924	0.0399	< 0.01	0.00236	0.0096	0.073	0.098	< 0.00004	0.60	0.00005	0.17	0.0051	18.1	< 0.0002	0.00098	< 0.0001	0.000479	< 0.00003	0.043	0.00001	CA10140-JAN11	1.08	0.93	-0.16	-7.7%
04-Jan-11	49	0.005	0.965	0.0392	< 0.01	< 0.00001	0.0086	0.035	0.077	0.00080	0.59	0.00005	0.11	0.0041	17.6	< 0.0002	0.00004	< 0.0001	0.000354	< 0.00003	0.046	< 0.00001	CA10880-JAN11	1.15	0.92	-0.23	-11.1%
11-Jan-11	50	0.004	0.823	0.0350	< 0.01	0.00107	0.0083	0.018	0.088	0.00052	0.52	0.00006	0.11	0.0047	16.9	< 0.0002	0.00201	< 0.0001	0.000709	< 0.00003	0.039	< 0.00001	CA14437-JAN11	1.02	0.76	-0.26	-14.3%
18-Jan-11	51	0.004	0.732	0.0282	< 0.01	0.00054	0.0063	0.036	0.098	0.00040	0.39	0.00005	0.11	0.0053	14.0	< 0.0002	0.00023	< 0.0001	0.000260	0.00005	0.147	< 0.00001	CA10982-JAN11	0.79	0.66	-0.13	-8.7%
25-Jan-11	52	0.005	0.817	0.0306	< 0.01	0.00036	0.0087	0.038	0.071	0.00020	0.50	0.00005	0.10	0.0042	14.9	< 0.0002	0.00027	< 0.0001	0.0130	< 0.00003	0.039	0.00001	CA11047-JAN11	1.08	0.78	-0.31	-16.5%
01-Feb-11	53	0.003	0.686	0.0260	< 0.01	0.00003	0.0066	0.053	0.074	0.00020	0.41	0.00006	0.09	0.0039	19.9	< 0.0002	0.00032	< 0.0001	0.000181	< 0.00003	0.028	< 0.00001	CA14121-FEB11	0.71	0.58	-0.13	-10.2%
08-Feb-11	54	0.003	0.656	0.0242	< 0.01	0.00119	0.0061	0.028	0.057	0.00013	0.39	0.00004	0.06	0.0038	12.5	< 0.0002	0.00054	0.0001	0.000148	< 0.00003	0.027	< 0.00001	CA14249-FEB11	0.85	0.57	-0.28	-19.6%
15-Feb-11	55	0.004	0.655	0.0236	< 0.01	0.00009	0.0070	0.026	0.064	0.00017	0.41	0.00004	0.10	0.0051	12.6	< 0.0002	0.00016	< 0.0001	0.000313	< 0.00003	0.032	< 0.00001	CA14449-FEB11	0.73	0.63	-0.10	-7.0%
22-Feb-11	56	0.003	0.603	0.0212	< 0.01	0.00131	0.0056	0.046	0.054	0.00027	0.32	0.00005	0.14	0.0040	15.3	< 0.0002	0.00026	< 0.0001	0.000390	< 0.00003	0.026	< 0.00001	CA14656-FEB11	0.79	0.55	-0.24	-17.6%
01-Mar-11	57	0.004	0.635	0.0206	0.01	0.00045	0.0056	0.052	0.062	< 0.00004	0.33	0.00005	0.15	0.0041	12.4	< 0.0002	0.00027	< 0.0001	0.000128	< 0.00003	0.037	< 0.00001	CA14060-MAR11	0.85	0.50	-0.35	-26.1%
08-Mar-11	58	0.003	0.606	0.0203	0.01	0.00060	0.0058	0.020	0.049	< 0.00004	0.30	0.00004	0.16	0.0039	12.3	< 0.0002	0.00025	< 0.0001	0.000203	< 0.00003	0.043	< 0.00001	CA14274-MAR11	0.81	0.52	-0.29	-21.6%
15-Mar-11	59	0.004	0.752	0.0260	0.01	0.00012	0.0076	0.052	0.054	0.00028	0.47	0.00005	0.11	0.0033	14.1	< 0.00002	0.00057	< 0.0001	0.000353	< 0.00003	0.034	< 0.00001	CA14457-MAR11	0.92	0.73	-0.19	-11.4%
22-Mar-11	60	0.003	0.599	0.0203	0.01	0.00080	0.0059	< 0.009	0.044	0.00035	0.34	0.00004	0.04	0.0029	12.4	< 0.0002	0.00025	< 0.0001	0.000141	< 0.00003	0.025	< 0.00001	CA10460-MAR11	0.77	0.55	-0.22	-16.7%
29-Mar-11	61	0.003	0.712	0.0227	< 0.01	< 0.00001	0.0068	0.056	0.043	0.00006	0.37	0.00004	0.09	0.0033	15.4	< 0.0002	0.00023	< 0.0001	0.000153	< 0.00003	0.696	< 0.00001	CA14922-MAR11	0.67	0.60	-0.07	-5.1%
05-Apr-11	62	0.004	0.742	0.0262	< 0.01	0.00960	0.0079	0.020	0.045	0.00024	0.46	0.00005	0.08	0.0029	15.7	< 0.0002	0.00013	< 0.0001	0.000183	< 0.00003	0.030	< 0.00001	CA14224-APR11	0.92	0.68	-0.24	-14.8%
12-Apr-11	63	0.003	0.690	0.0270	< 0.01	0.00004	0.0060	0.012	0.062	< 0.00004	0.35	0.00005	0.09	0.0056	13.2	< 0.0002	0.00006	< 0.0001	0.000105	< 0.00003	0.032	< 0.00001	CA14457-APR11	0.75	0.67	-0.08	-5.7%
19-Apr-11	64	0.004	0.730	0.0246	0.01	0.00044	0.0080	0.027	0.043	0.00056	0.45	0.00005	0.09	0.0030	16.2	< 0.0002	0.00016	< 0.0001	0.00288	< 0.00003	0.067	< 0.00001	CA11358-APR11	0.90	0.71	-0.19	-11.6%
26-Apr-11	65	0.004	0.742	0.0251	0.51	0.00025	0.0082	0.056	0.057	0.00018	0.41	0.00005	0.09	0.0036	16.7	< 0.0002	0.00010	< 0.0001	0.000151	< 0.00003	0.025	< 0.00001	CA14943-APR11	0.96	0.80	-0.16	-9.0%
03-May-11	66	0.003	0.641	0.0208	< 0.01	0.00012	0.0073	0.015	0.048	0.00006	0.36	0.00003	0.08	0.0032	14.8	< 0.0002	< 0.00001	0.0003	0.000097	< 0.00003	0.024	0.00004	CA14148-MAY11	0.85	0.72	-0.13	-8.2%
10-May-11	67	0.003	0.710	0.0206	0.01	0.00017	0.0064	< 0.009	0.059	0.00006	0.32	0.00004	0.08	0.0059	14.1	< 0.0002	0.00009	0.0006	0.000126	< 0.00003	0.031	< 0.00001	CA14441-MAY11	0.88	0.67	-0.21	-13.5%
17-May-11	68	0.004	0.707	0.0215	< 0.01	0.00004	0.0075	0.045	0.050	< 0.00004	0.34	0.00005	0.08	0.0033	15.3	< 0.0002	0.00004	< 0.0001	0.000115	< 0.00003	0.032	< 0.00001	CA14703-MAY11	1.02	0.78	-0.24	-13.4%
24-May-11	69	0.006	1.36	0.0475	0.01	0.00002	0.0136	0.039	0.069	0.00025	2.11	0.00009	0.10	0.0054	30.9	< 0.0002	0.00024	0.0001	0.000230	< 0.00003	0.050	< 0.00001	CA13762-MAY11	1.69	1.62	-0.07	-2.1%
31-May-11	70	0.004	0.709	0.0235	< 0.01	0.00003	0.0098	0.022	0.040	0.00019	0.43	0.00007	0.07	0.0031	16.1	< 0.0002	0.00015	< 0.0001	0.000143	< 0.00003	0.036	0.00002	CA10185-JUN11	1.17	0.89	-0.28	-13.6%
07-Jun-11	71	0.003	0.607	0.0243	0.01	< 0.00001	0.0067	< 0.009	0.044	0.00016	0.43	0.00003	0.12	0.0042	15.1	< 0.00002	0.00014	0.0004	0.000082	< 0.00003	0.029	0.00001	CA14355-JUN11	0.85	0.64	-0.21	-14.0%
14-Jun-11	72	0.003	0.569	0.0196	< 0.01	0.00099	0.0063	< 0.009	0.038	< 0.00004	0.39	0.00004	0.08	0.0028	13.5	< 0.00002	0.00024	< 0.0001	0.000155	< 0.00003	0.027	< 0.00001	CA10349-JUN11	0.69	0.65	-0.04	-3.0%
21-Jun-11	73	0.003	0.604	0.0169	0.01	< 0.00001	0.0066	0.013	0.032	0.00023	0.40	0.00004	0.08	0.0018	14.2	0.00004	0.00010	< 0.0001	0.000088	< 0.00003	0.142	< 0.00001	CA14777-JUN11	0.98	0.68	-0.30	-17.9%
28-Jun-11	74	0.004	0.739	0.0244	0.02	< 0.00001	0.0104	< 0.009	0.044	0.00020	0.40	0.00004	0.09	0.0029	17.7	0.00007	0.00006	0.0001	0.000114	< 0.00003	0.029	< 0.00001	CA15123-JUN11	1.15	0.93	-0.21	-10.1%
05-Jul-11	75	0.003	0.744	0.0236	< 0.01	0.00002	0.0087	< 0.009	0.050	0.00019	0.62	0.00003	0.17	0.0027	18.1	< 0.00002	0.00016	0.0004	0.000098	< 0.00003	0.030	< 0.00001	CA15472-JUL11	1.13	0.90	-0.23	-11.4%

Cell Terminated

HC 2 *CONFIDENTIAL* *DRAFT*

Sample = RRR04250

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L
02-Feb-10	1	500	385	7.30	375	315	#N/A	2.3	16.6	166	-	-	139	0.0484	0.0014	0.0006	0.00688	< 0.00002	< 0.00001	0.011	0.000034	49.1	< 0.0005	0.00321	0.0026	< 0.01	0.00005	0.011	3.88	0.046	< 0.01
09-Feb-10	2	500	500	7.40	312	304	#N/A	2.2	17.8	109	-	-	114	0.0854	0.0085	0.0008	0.00427	< 0.00002	0.00001	0.016	0.000057	38.7	< 0.0005	0.000183	0.0005	< 0.01	< 0.00002	0.012	4.10	0.063	< 0.01
16-Feb-10	3	500	460	7.27	293	231	#N/A	2.5	16.5	110	-	-	92.3	0.105	0.0056	0.0007	0.00348	< 0.00002	< 0.00001	0.014	0.000056	31.7	< 0.0005	0.000102	0.0007	< 0.01	0.00002	0.010	3.21	0.052	< 0.01
23-Feb-10	4	500	445	7.44	333	184	#N/A	2.1	16.6	84	-	-	88.8	0.105	0.0042	0.0006	0.00433	< 0.00002	< 0.00001	0.011	0.000063	31.1	< 0.0005	0.000139	< 0.0005	< 0.01	< 0.00002	0.010	2.72	0.054	< 0.01
02-Mar-10	5	500	455	7.40	337	173	#N/A	1.7	12.7	69	-	-	64.1	0.104	0.0029	0.0004	0.00270	< 0.00002	< 0.00001	0.008	0.000061	22.9	< 0.0005	0.000100	0.0006	< 0.01	0.00005	0.008	1.71	0.043	< 0.01
09-Mar-10	6	500	460	7.30	365	166	#N/A	2.1	14.1	65	-	-	69.2	0.0841	0.0030	0.0005	0.00195	< 0.00002	< 0.00001	0.009	0.000118	25.1	< 0.0005	0.000154	0.0021	< 0.01	0.00019	0.008	1.57	0.068	< 0.01
16-Mar-10	7	500	460	7.21	355	138	#N/A	2.2	13.5	56	< 0.2	< 0.06	68.6	0.1110	0.0028	0.0005	0.00155	< 0.00002	< 0.00001	0.015	0.000093	25.20	< 0.0005	0.000068	< 0.0005	< 0.01	< 0.00002	0.007	1.410	0.061	< 0.01
23-Mar-10	8	500	475	7.24	360	142	#N/A	3.0	13.4	60	< 0.2	< 0.06	60.9	0.0933	0.0023	0.0004	0.00144	< 0.00002	< 0.00001	0.0069	0.000106	22.6	0.0006	0.000052	< 0.0005	< 0.01	< 0.00002	0.007	1.12	0.062	< 0.01
30-Mar-10	9	500	460	7.31	376	146	#N/A	2.3	12.5	67	< 0.2	< 0.06	63.6	0.0783	0.0025	0.0003	0.00339	< 0.00002	< 0.00001	0.007	0.000137	23.70	0.0008	0.000095	0.0006	< 0.01	0.00040	0.006	1.060	0.070	< 0.01
06-Apr-10	10	500	430	7.28	369	168	#N/A	2.3	14.2	71	< 0.2	< 0.06	71.7	0.0965	0.0023	0.0006	0.00162	< 0.00002	< 0.00001	0.004	0.000151	27.1	0.0007	0.000075	0.0010	< 0.01	0.00040	0.007	0.997	0.063	< 0.01
13-Apr-10	11	500	460	7.18	353	121	#N/A	2.8	13.9	43	< 0.2	< 0.06	50.3	0.1010	0.0022	0.0004	0.00165	< 0.00002	< 0.00001	0.006	0.000127	19.10	0.0006	0.000067	0.0007	< 0.01	0.00006	0.004	0.62	0.057	< 0.01
20-Apr-10	12	500	440	7.31	332	140	#N/A	3.0	13.6	47	< 0.2	< 0.06	56.0	0.139	0.0024	0.0005	0.00175	< 0.00002	0.00001	0.006	0.000119	21.3	0.0005	0.000051	0.0006	< 0.01	0.00003	0.004	0.651	0.046	< 0.01
27-Apr-10	13	500	455	7.39	327	125	#N/A	2.2	14.1	42	< 0.2	< 0.06	50.2	0.1070	0.0016	0.0003	0.0013	< 0.00002	< 0.00001	0.004	0.000117	19.20	0.0007	0.000054	0.0018	< 0.01	0.00003	0.003	0.54	0.049	< 0.01
04-May-10	14	500	455	7.27	356	116	#N/A	2.5	13.8	38	< 0.2	0.08	40.0	0.0955	0.0017	0.0005	0.0013	< 0.00002	< 0.00001	0.005	0.000144	15.30	0.0006	0.00005	0.0005	< 0.01	< 0.00002	0.003	0.41	0.046	< 0.01
11-May-10	15	500	455	7.22	333	125	#N/A	2.4	12.4	38	< 0.2	< 0.06	51.4	0.1090	0.0019	0.0003	0.0015	< 0.00002	< 0.00001	0.005	0.000155	19.70	0.0006	0.00005	0.0009	< 0.01	0.00130	0.003	0.51	0.051	< 0.01
18-May-10	16	500	430	7.22	353	126	#N/A	2.7	13.1	40	< 0.2	< 0.06	54.6	0.110	0.0016	0.0009	0.00138	< 0.00002	< 0.00001	0.0051	0.000138	21.0	0.0006	0.000178	0.0009	0.003	< 0.00002	0.003	0.502	0.047	< 0.01
25-May-10	17	500	465	7.11	362	112	#N/A	3.7	13.3	25	< 0.2	< 0.06	45.5	0.095	0.0017	0.0003	0.0021	< 0.00002	< 0.00001	0.0046	0.000160	17.50	< 0.0005	0.00012	0.0017	0.005	0.00089	0.004	0.44	0.049	0.04
01-Jun-10	18	500	435	7.23	347	115	#N/A	2.7	12.3	34	< 0.2	< 0.06	48.7	0.118	0.0014	0.0002	0.0011	< 0.00002	< 0.00001	0.0043	0.000141	18.80	0.0006	0.00015	0.0024	0.004	0.00227	0.003	0.40	0.045	0.02
08-Jun-10	19	500	425	7.09	329	109	#N/A	3.0	12.4	29	< 0.2	< 0.06	47.9	0.084	0.0014	< 0.0002	0.0016	< 0.00002	< 0.00001	0.0044	0.000122	18.60	0.0008	0.00010	0.001	0.002	< 0.00002	0.003	0.36	0.041	< 0.01
15-Jun-10	20	500	435	7.22	332	99	#N/A	3.2	12.6	23	< 0.2	< 0.06	42.0	0.094	0.0014	0.0003	0.0015	< 0.00002	< 0.00001	0.0039	0.000144	16.30	< 0.0005	0.000141	0.001	0.008	0.00010	0.003	0.32	0.043	< 0.01
22-Jun-10	21	500	435	7.30	422	107	#N/A	2.6	11.6																						
29-Jun-10	22	500	430	7.07	325	101	#N/A	2.8	10.5	21	< 0.2	< 0.06	38.9	0.079	0.0012	0.0002	0.0014	< 0.00002	< 0.00001	0.0035	0.000162	15.10	0.0011	0.0001	0.004	0.014	0.00008	0.002	0.311	0.044	< 0.01
06-Jul-10	23	500	465	7.00	354	99	#N/A	2.8	10.5																						
13-Jul-10	24	500	455	7.01	361	97	#N/A	3.1	10.1	17	< 0.2	< 0.06	34.8	0.09	0.0014	0.0004	0.0018	< 0.00002	< 0.00001	0.0035	0.000182	13.50	0.0006	0.0002	0.01	0.004	0.00006	0.002	0.286	0.050	< 0.01
20-Jul-10	25	500	450	7.01	346	88	#N/A	4.4	10.3																						
27-Jul-10	26	500	450	6.90	362	91	#N/A	4.1	9.9	29	< 0.2	< 0.06	41.4	0.08	0.0011	0.0027	0.0010	< 0.00002	< 0.00001	0.0035	0.000166	16.10	< 0.0005	0.0001	0.01	0.009	0.00003	0.002	0.271	0.046	< 0.01
03-Aug-10	27	500	475	7.05	400	86	#N/A	4.0	8.9	24	< 0.2	< 0.06	37.2	0.07	0.0011	0.0004	0.00254	< 0.00002	< 0.00001	0.0086	0.000182	14.50	< 0.0005	0.0002	0.00	0.002	0.00011	0.002	0.254	0.052	< 0.01
10-Aug-10	28	500	450	7.11	354	94	#N/A	4.9	9.7	30	< 0.2	< 0.06	41.20	0.1	0.00	< 0.0002	0.0012	< 0.00002	< 0.00001	0.0139	0.0002	16.10	0.0006	0.0001	< 0.0005	< 0.002	< 0.00002	0.00200	0.252	0.048	< 0.01
17-Aug-10	29	500	450	6.97	377	90	#N/A	4.1	9.7	26	< 0.2	< 0.06	37.4	0.0533	0.0012	0.0003	0.00154	< 0.00002	0.00001	0.0034	0.000184	14.6	< 0.0005	0.000080	0.0009	< 0.002	0.00006	0.002	0.216	0.0374	< 0.01
24-Aug-10	30	500	475	6.95	349	96	#N/A	3.6	11.4	26	< 0.2	< 0.06	41.9	0.0941	0.0012	0.0002	0.00097	< 0.00002	< 0.00001	0.0033	0.000180	16.4	< 0.0005	0.000077	0.0071	< 0.002	0.00008	0.002	0.227	0.0417	< 0.01
31-Aug-10	31	500	460	7.22	392	82	#N/A	6.0	12.3	35	< 0.2	< 0.06	37.5	0.0721	0.0019	0.0008	0.00105	< 0.00002	< 0.00001	0.0030	0.000226	14.6	< 0.0005	0.000242	0.0009	0.005	0.00005	0.002	0.246	0.0402	< 0.01
07-Sep-10	32	500	435	6.89	381	96	#N/A	4.6	9.8	35	< 0.2	< 0.06	37.8	0.0640	0.0010	0.0002	0.00125	< 0.00002	< 0.00001	0.0234	0.000225	14.8	0.0008	0.000065	0.0009	0.01	0.00003	0.002	0.196	0.0234	< 0.01
14-Sep-10	33	500	430	6.73	370	82	#N/A	4.1	9.0	25	< 0.2	< 0.06	36.3	0.0588	0.0010	0.0051	0.00112	< 0.00002	< 0.00001	0.0033	0.000198	14.2	< 0.0005	0.000125	0.0012	0.007	< 0.00002	0.002	0.205	0.0470	< 0.01
21-Sep-10	34	500	475	6.83	346	84	#N/A	3.9	10.0	33	< 0.2	< 0.06	40.5	0.0933	0.0014	< 0.0002	0.00104	< 0.00002	0.00006	0.0036	0.000234	15.8	< 0.0005	0.000143	0.0118	0.007	0.00006	0.002	0.235	0.0511	< 0.01
28-Sep-10	35	500	490	6.77	339	132	#N/A	3.7	9.9	44	< 0.2	< 0.06	53.6	0.0523	0.0016	0.0010	0.00151	< 0.00002	< 0.00001	0.0045	0.000473	21.0	< 0.0005	0.000169	0.0009	< 0.002	0.00018	0.003	0.312	0.0969	< 0.01
05-Oct-10	36	500	445	6.75	336	102	#N/A	4.2	9.3	38	< 0.2	< 0.06	41.4	0.0988	0.0016	< 0.0002	0.00131	< 0.00002	< 0.00001	0.0041	0.000269	16.2	< 0.0005	0.000232	0.0123	< 0.002	0.00016	0.001	0.224	0.0561	0.01
12-Oct-10	37	500	440	6.74	315	93	#N/A	3.9	7.9	30	< 0.2	< 0.06	39.9	0.0524	0.0117	0.0014	0.00109	< 0.00002	< 0.00001	0.0037	0.000307	15.6	< 0.0005	0.000392	0.0053	0.013	0.00040	0.002	0.221	0.0474	< 0.01
19-Oct-10	38	500	445	6.74	311	85	#N/A	4.2	8.3	31	< 0.2	< 0.06	35.0	0.0450	0.0010	< 0.0002	0.00104	< 0.00002	< 0.00001	0.0034	0.000247	13.7	< 0.0005	0.000080	0.0007	0.003	0.00010	0.002	0.173	0.0439	< 0.01
26-Oct-10	39	500	445	6.69	353	84	#N/A	3.6	7.1	29	< 0.2	< 0.06	32.5	0.0444	0.0152	0.0003	0.00092	< 0.00002	< 0.00001	0.0038	0.000215	12.7	0.0007	0.000124	0.0020	< 0.002	0.00028	0.001	0.176	0.0426	< 0.01
02-Nov-10	40	500	455	6.97	355	17	#N/A	3.2	9.0	27	< 0.2	< 0.06	37.5	0.0600	0.0007	< 0.0002	0.00240	< 0.00002	< 0.00001	0.0057	0.000223	14.7	< 0.0005	0.000064	0.0010	0.008	0.00053	0.002	0.202	0.0478	< 0.01
09-Nov-10	41	500	495	6.78	373	99	#N/A	4.8	8.9	42	< 1	< 0.06	52.3	0.05	0.0059	0.0005	0.00137	< 0.00002	< 0.00001	0.0037	0.000498	20.4	< 0.0005	0.0002	0.00	< 0.002	0.00053	0.002	0.30	0.1050	< 0.01
16-Nov-10	42	500	445	7.06	322	83	#N/A	3.9	8.7	26	< 0.2	< 0.06	36.5	0.0392	0.0009	< 0.0002	0.00123	< 0.00002	< 0.00001	0.0288	0.000289	14.3	< 0.0005	0.000083	< 0.0005	< 0.002	0.00068	0.002	0.186	0.0535	< 0.01
23-Nov-10	43	500	445	6.73	287	80	#N/A	3.5	8.5	21	< 0.2	< 0.06	31.7	0.0463	0.0010	0.0003	0.00381	< 0.00002	< 0.00001	0.0030	0.000254	12.4	0.0006	0.000105	0.0011	0.004	0.00007	0.002	0.157	0.0473	< 0.01
30-Nov-10	44	500	440	6.80	317	80	#N/A	4.5	9.4	18	< 0.2	< 0.06	33.1	0.0461	0.0008	< 0.0002	0.00320	< 0.00002	< 0.00001	0.0045	0.000243	13.0	0.0007	0.000093	0.0009	0.005	0.00014	0.002	0.171	0.0441	< 0.01
07-Dec-10	45	500	440	6.71	333	82	#N/A	4.0	8.2	23	< 0.2	< 0.06	40.3	0.0563	0.0008	< 0.0002	0.00092	< 0.00002	< 0.00001	0.0038	0.000245	15.8	0.0005	0.000092	0.0020	0.009	0.00151	0.002	0.181	0.0478	< 0.01
14-Dec-10	46	500	435	6.91	351	81	#N/A	5.0	9.5	27	< 0.2	< 0.06	33.8	0.0502	0.0009	< 0.0002	0.00089	< 0.00002	< 0.00001	0.0070	0.000206	13.3	0.0006	0.000087	0.0009	0.010	0.00005	0.001	0.166	0.0402	< 0.01
21-Dec-10	47	500	455	6.88	373	85	#N/A	5.7	9.5	31	< 0.2	< 0.06	41.5	0.0445	0.0011	0.0007	0.00118	< 0.00002	< 0.00001	0.0031	0.000242	16.3	< 0.0005	0.00146	0.0017	0.014	0.00100	0.002	0.210	0.0481	< 0.01
28-Dec-10	48	500	455	7.04	338	70	#N/A	5.5	10.1	25	< 0.2	< 0.06	34.3	0.0551	0.0011	0.0003	0.00582	< 0.00002	< 0.00001	0.0057	0.000204	13.5	0.0009	0.000214	0.0011	< 0.002	0.00138	0.001	0.178	0.0450	0.01
04-Jan-11	49	500	455	6.95	355	64	#N/A	5.8	8.7	21	< 0.2	< 0.06	28.7	0.0408	0.0007	0.0005	0.00106	< 0.00002	< 0.00001	0.0022	0.000254	11.2	< 0.0005	0.000117	0.0012	< 0.002	0.00149	0.001	0.163	0.0474	< 0.01
11-Jan-11	50	500	455	6.75	375	65	#N/A	4.0	6.9	23	< 0.2	< 0.06	30.1	0.0336	0.0010	< 0.0002	0.00073	< 0.00002	< 0.00001	0.0062	0.000285	11.8	< 0.0005	0.000093	0.0007	0.006	0.00003	0.001	0.166	0.0515	< 0.01
18-Jan-11	51	500	430	6.68	348	85	#N/A	3.6	6.9	28	< 0.2	< 0.06	38.2	0.0421	0.0009	< 0.0002	0.00112	< 0.00002	< 0.00001	0.0021	0.000224	15.0	< 0.0005	0.000076	0.0006	0.014	0.00004	0.001	0.166	0.0423	< 0.01
25-Jan-11	52	500	465	6.73	329	69	#N/A	4.1	7.1	23	< 1	< 0.06	30.5	0.0410	0.0007	0.0003	0.00102	0.00003	< 0.00001	0.0028	0.000227	11.9	< 0.0005	0.000073	0.0010	0.024	0.00052	0.001	0.156	0.0433	< 0.01
01-Feb-11	53	500	435	6.66	330	62	#N/A	3.8	7.9	19	< 0.2	< 0.06	33.5	0.0248	0.0007	0.0004	0.00085	< 0.00002	< 0.00001	0.0024	0.000330	13.1	< 0.0005	0.000122	0.0013	< 0.002	< 0.00002	0.001	0.169	0.0573	< 0.01
08-Feb-11	54	500	430	6.76	350	77	#N/A	3.3	7.2	31	< 0.2	< 0.06	39.4	0.0394	0.0008	< 0.0002	0.00091	< 0.00002	< 0.00001	0.0019	0.000272	15.5	< 0.0005	0.000072	< 0.0005	0.006	< 0.00002	0.001	0.170	0.0429	< 0.01
15-Feb-11	55	500	445	6.74	331	63	#N/A	3.2	6.8	13	< 0.2	< 0.06	27.4	0.0346	0.0006	< 0.0002	0.00084	< 0.00002	< 0.00001	0.0042	0.000226	10.8	< 0.0005	0.000123	< 0.0005	< 0.002	0.00003	0.001	0.132	0.0385	< 0.01
22-Feb-11	56	500	430	6.81	310	64	#N/A	3.7	8.3	24	< 0.2	< 0.06	27.1	0.0427	0.0019	0.0003	0.00075	< 0.00002	< 0.00001	0.0036	0.000193	10.7	0.0006	0.000092	0.0009	0.003	0.00116	0.001	0.126	0.0343	< 0.01
01-Mar-11	57	500	425	6.71	315	61	#N/A	3.2	7.0	25	< 0.2	< 0.06	25.7	0.0418	0.0006	0.0003	0.00073	< 0.00002	< 0.00001	0.0032	0.000243	10.1	< 0.0005	0.000078	0.0010	0.002	0.00116	0.001	0.132	0.0379	0.01
08-Mar-11	58	500	445	6.70	296	61	#N/A	3.6	7.4	23	< 0.2	< 0.06	25.7	0.0341	0.0010	0.0002	0.00304	< 0.00002	< 0.00001	0.0024	0.000306	10.0	< 0.0005	0.000137	0.0009	0.003	0.00104	< 0.001	0.140	0.0420	< 0.01
15-Mar-11	59	500	470	6.72	281	62	#N/A	4.0	7.0	20	< 0.2	< 0.06	25.7	0.0391	0.0006	< 0.0002	0.00069	< 0.00002	< 0.00001	0.0026	0.000227	10.1	< 0.0005	0.000121	0.0012	0.007	0.00099	0.001	0.140	0.0426	< 0.01
22-Mar-11	60	500	440	6.83	281	75	#N/A	4.2	8.6	20	< 0.2	< 0.06	29.5	0.0391	0.0008	< 0.0002	0.00175	< 0.00002	< 0.00001	0.0020	0.000289	11.6	< 0.0005	0.000170	0.0009	0.005	0.00003	0.001	0.148	0.0433	< 0.01
29-Mar-11	61	500	445	7.14	280	69	#N/A	4.6	9.0	18	< 0.2	< 0.06	29.3	0.0417	0.0007	< 0.0002	0.00076	< 0.00002	< 0.00001	0.0018	0.000254	11.5	< 0.0005	0.000094	< 0.0005	< 0.002	0.00004	0.001	0.138	0.0422	< 0.01
05-Apr-11	62	500	460	6.81	232	71	#N/A	4.1	9.2	20	< 0.2	< 0.06	29.6	0.0367	0.0007	< 0.0002	0.00108	< 0.00002	< 0.00001	0.0029	0.000369	11.6	< 0.0005	0.000331	0.0007	0.002	0.00076	0.001	0.152	0.0506	< 0.01
12-Apr-11	63	500	450	6.78	287	74	#N/A	3.5	8.0	21	< 0.2	< 0.06	30.1	0.0411	0.0006	< 0.0002	0.00078	< 0.00002	< 0.00001	0.0021	0.000206	11.8	< 0.0005	0.000062	0.0005	0.020	< 0.00002	0.001	0.165	0.0511	< 0.01
19-Apr-11	64	500	460	7.10	211	76	#N/A	5.8	10.3	19	< 0.2	< 0.06	32.3	0.0444	0.0007	< 0.0002	0.00079	< 0.00002	< 0.00001	0.0024	0.000279	12.7	< 0.0005	0.000115	< 0.0005	0.004	0.00010	0.001	0.160	0.0497	< 0.01
26-Apr-11	65	500	450	6.92	257	84	#N/A	3.6	10.0	23	< 0.2	< 0.06	35.5	0.0873	0.0010	< 0.0002	0.00109	< 0.00002	< 0.00001	0.0018	0.000250	14.0	< 0.0005	0.000088	0.0005	< 0.002	< 0.00002	0.001	0.166	0.0517	< 0.01
03-May-11	66	500	440	6.88	341	89	#N/A	4.7	9.1	23	< 0.2	< 0.06	36.7	0.0600	0.0007	< 0.0002	0.00195	< 0.00002	< 0.00001	0.0034	0.000246	14.5	< 0.0005	0.000147	0.0062	0.006	0.00004	0.001	0.148	0.0464	< 0.01
10-May-11	67	500	430	6.93	361	82	#N/A	3.9	8.8	26	< 0.2	< 0.06	32.7	0.0489	0.0004	0.0005	0.00070	< 0.00002	< 0.00001	0.0038	0.000297	12.9	< 0.0005	0.000115	0.0016	0.031	0.00003	0.001	0.150	0.0427	< 0.01
17-May-11	68	500	435	6.92	312	100	#N/A	3.9	9.3	32	< 0.2	< 0.06	40.1	0.0475	0.0008	0.0002	0.00116	< 0.00002	< 0.00001	0.0019	0.000267	15.8	< 0.0005	0.000102	< 0.0005	< 0.002	0.00002	0.001	0.148	0.0462	< 0.01
24-May-11	69	500	495	6.49	248	128	#N/A	5.8	9.6	39	< 0.2	< 0.06	54.1	0.0355	0.0008	< 0.0002	0.00136	< 0.00002	< 0.00001	0.0070	0.000564	21.2	< 0.0005	0.000236	< 0.0005	0.008	0.00003	0.002	0.246	0.111	0.01
31-May-11	70	500	450	6.49	228	88	#N/A	5.4	6.6	25	< 0.2	< 0.06	29.7	0.0214	0.0009	< 0.0002	0.00075	< 0.00002	< 0.00001	0.0015	0.000249	11.7	< 0.0005	0.000273	0.0114	0.007	0.00009	0.001	0.118	0.0397	< 0.01
07-Jun-11	71	500	440	6.83	302	81	#N/A	3.0	7.2	25	< 0.2	< 0.06	35.0	0.0410	0.0007	< 0.0002	0.00106	< 0.00002	< 0.00001	0.0023	0.000233	13.8	< 0.0005	0.000116	0.0024	0.013	0.00008	< 0.001	0.143	0.0453	0.01
14-Jun-11	72	500	435	6.79	261	64	#N/A	3.6	6.0	16	< 0.2	< 0.06	26.3	0.0300	0.0005	< 0.0002	0.00130	< 0.00002	< 0.00001	0.0026	0.000243	10.3	< 0.0005	0.000081	< 0.0005	0.010	0.00008	< 0.001	0.123	0.0390	< 0.01
21-Jun-11	73	500	450	6.88	276	58	#N/A	3.1	5.8	20	< 0.2	< 0.06	23.8	0.0322	0.0004	< 0.0002	0.00063	< 0.00002	< 0.00001	0.0017	0.000261	9.34	< 0.0005	0.000088	< 0.0005	0.005	0.00016	< 0.001	0.121	0.0393	0.01
28-Jun-11	74	500	445	6.93	223	69	#N/A	4.0	8.1	19	< 0.2	< 0.06	28.4	0.0428	0.0005	0.0008	0.00139	< 0.00002	< 0.00001	0.0027	0.000333	11.2	< 0.0005	0.000097	0.0007	0.012	0.00064	0.001	0.141	0.0485	0.02
05-Jul-11	75	500	455	6.88	281	78	#N/A	4.2	9.2	23	< 0.2	< 0.06	32.1	0.0596	0.0008	< 0.0002	0.00112	< 0.00002	< 0.00001	0.0046	0.000883	12.6	0.0007	0.000127	0.0012	0.011	0.00028	0.001	0.181	0.0477	< 0.01
12-Jul-11	76	500	445	7.12	270	67	#N/A	4.1	8.8	20	< 0.2	< 0.06	31.8	0.0400	0.0007	< 0.0002	0.00072	< 0.00002	< 0.00001	0.0020	0.000272	12.5	< 0.0005	0.000091	< 0.0005	< 0.002	< 0.00002	0.001	0.159	0.0512	0.01
19-Jul-11	77	500	445	7.27	375	63	#N/A	4.3	8.7	20	< 0.2	< 0.06	28.6	0.0380	0.0006	0.0013	0.00106	< 0.00002	< 0.00001	0.0031	0.000442	11.1	0.0025	0.000159	0.0036	< 0.002	0.00041	0.002	0.242	0.0489	0.01
26-Jul-11	78	500	455	7.45	206	66	#N/A	5.2	10.1	21	< 0.2	< 0.06	28.6	0.0320	0.0003	0.0011	0.00076	< 0.00002	< 0.00001	0.0097	0.000314	11.2	< 0.0005	0.000132	0.0020	0.039	< 0.00002	< 0.001	0.177	0.0883	< 0.01

HC 2 *CONFIDENTIAL* *DRAFT*

Sample = RRR04250

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L
02-Aug-11	79	500	465	7.35	242	71	#N/A	4.2	8.9	24	< 0.2	< 0.06	28.5	0.0328	0.0238	0.0030	0.00107	< 0.00002	< 0.00001	0.0021	0.000297	11.2	< 0.0005	0.000104	< 0.0005	< 0.002	0.00006	0.001	0.149	0.0513	0.01
09-Aug-11	80	500	445	7.19	203	67	#N/A	3.3	8.5	18	< 0.2	0.17	26.9	0.0399	0.0006	0.0005	0.00081	< 0.00002	< 0.00001	0.0019	0.000338	10.6	0.0010	0.000324	< 0.0005	0.009	0.00059	< 0.001	0.133	0.0430	< 0.01
16-Aug-11	81	500	455	7.35	263	67	#N/A	6.1	10.1	23	< 0.2	< 0.06	28.0	0.0506	0.0006	< 0.0002	0.00075	< 0.00002	< 0.00001	0.0022	0.000310	11.0	0.0008	0.000351	0.0053	< 0.002	0.00009	< 0.001	0.145	0.0511	< 0.01
23-Aug-11	82	500	460	6.99	151	73	#N/A	5.4	14.4	21	< 0.2	< 0.06	32.8	0.0479	0.0009	0.0021	0.00150	< 0.00002	0.00016	0.0033	0.000322	12.9	0.0007	0.000363	0.0005	0.006	0.00008	0.001	0.164	0.0578	0.01
30-Aug-11	83	500	445	7.27	239	73	#N/A	4.5	9.9	27	< 0.2	0.07	32.7	0.0502	0.0006	< 0.0002	0.00083	< 0.00002	< 0.00001	0.0022	0.0116	12.8	0.0006	0.000121	0.0007	0.008	0.0198	0.001	0.164	0.0510	0.03
06-Sep-11	84	500	450	7.30	243	72	#N/A	4.3	9.0	24	< 0.2	< 0.06	31.6	0.0398	0.0006	< 0.0002	0.00085	< 0.00002	< 0.00001	0.0037	0.000276	12.4	0.0006	0.000093	0.0006	< 0.002	0.00024	0.001	0.156	0.0452	0.02
13-Sep-11	85	500	445	7.28	301	93	#N/A	3.7	8.5	38	< 0.2	< 0.06	39.7	0.0409	0.0009	< 0.0002	0.00175	< 0.00002	< 0.00001	0.0025	0.000380	15.6	0.0020	0.000113	< 0.0005	< 0.002	0.00175	0.001	0.166	0.0498	< 0.01
20-Sep-11	86	500	445	7.48	255	85	#N/A	4.7	10.0	30	< 0.2	< 0.06	35.1	0.0389	0.0006	0.0006	0.00095	< 0.00002	0.00011	0.0022	0.000363	13.8	0.0011	0.000131	0.0018	0.010	0.00007	0.001	0.147	0.0556	0.01
27-Sep-11	87	500	450	7.24	316	74	#N/A	5.3	9.6	23	< 0.2	< 0.06	31.6	0.0307	0.0161	0.0028	0.00131	< 0.00002	< 0.00001	0.0028	0.000303	12.4	0.0006	0.000088	< 0.0005	0.008	0.00009	0.001	0.142	0.0485	< 0.01
04-Oct-11	88	500	450	7.62	205	69	#N/A	4.4	10.7	23	< 0.2	< 0.06	25.3	0.0289	0.0028	0.0008	0.00122	< 0.00002	< 0.00001	0.0026	0.000284	9.94	< 0.0005	0.000108	0.0008	< 0.002	0.00010	< 0.001	0.118	0.0431	< 0.01
11-Oct-11	89	500	460	7.34	255	63	#N/A	5.8	9.0	23	< 0.2	< 0.06	28.4	0.0288	0.0005	< 0.0002	0.00101	< 0.00002	< 0.00001	0.0029	0.000327	11.2	0.0005	0.000101	0.0007	< 0.002	0.00015	< 0.001	0.135	0.0515	< 0.01
18-Oct-11	90	500	440	7.36	195	66	#N/A	4.5	8.8	23	< 0.2	< 0.06	27.5	0.0362	0.0008	0.0011	0.00083	< 0.00002	0.00138	0.0027	0.000999	10.8	0.0006	0.000206	0.0046	< 0.002	0.00069	0.001	0.136	0.0480	< 0.01
25-Oct-11	91	500	455	7.15	292	72	#N/A	3.4	8.0	24	< 0.2	< 0.06	31.2	0.0316	0.0005	0.0002	0.00074	< 0.00002	< 0.00001	0.0027	0.000371	12.2	0.0007	0.000122	0.0006	0.005	0.00003	< 0.001	0.162	0.0606	0.01
01-Nov-11	92	500	470	7.47	189	71	#N/A	4.8	9.6	26	< 0.2	< 0.06	29.7	0.0315	0.0006	0.0090	0.00101	< 0.00002	< 0.00001	0.0022	0.000347	11.7	0.0006	0.000120	< 0.0005	0.003	< 0.00002	< 0.001	0.142	0.0556	0.01
08-Nov-11	93	500	420	7.17	302	63	#N/A	5.0	8.0	20	0.7	< 0.06	27.8	0.0305	0.0005	0.0005	0.00073	< 0.00002	< 0.00001	0.0013	0.000382	10.9	< 0.0005	0.000141	0.0018	< 0.003	0.00012	< 0.001	0.130	0.0507	< 0.01
15-Nov-11	94	500	440	7.37	177	61	#N/A	4.9	8.1	21	< 0.2	< 0.06	25.1	0.0418	0.0003	0.0004	0.00077	< 0.00002	0.00007	0.0027	0.000336	9.85	< 0.0005	0.000113	0.0008	< 0.003	0.00002	< 0.001	0.122	0.0474	< 0.01
22-Nov-11	95	500	450	7.01	278	69	#N/A	5.0	9.3	21	< 0.2	< 0.06	26.8	0.0477	0.0005	0.0004	0.00076	< 0.00002	< 0.00001	0.0011	0.000695	10.5	< 0.0005	0.000104	0.0015	< 0.003	0.00158	0.001	0.142	0.0511	< 0.01
29-Nov-11	96	500	445	7.63	263	69	#N/A	5.6	10.7	21	< 0.2	< 0.06	29.6	0.0542	0.0006	< 0.0002	0.00096	< 0.00002	< 0.00001	0.0024	0.000464	11.6	< 0.0005	0.000127	0.0006	< 0.003	0.00006	0.001	0.136	0.0538	< 0.01
06-Dec-11	97	500	445	7.17	326	65	#N/A	5.0	8.3	21	< 0.2	< 0.06	29.2	0.0423	0.0005	< 0.0002	0.00091	< 0.00002	< 0.00001	0.0010	0.000594	11.5	< 0.0005	0.000144	0.0009	< 0.003	0.00044	< 0.001	0.127	0.0561	< 0.01
13-Dec-11	98	500	455	7.30	188	73	#N/A	4.7	9.5	21	< 0.2	< 0.06	31.8	0.0298	0.0004	< 0.0002	0.00152	< 0.00002	< 0.00001	0.0016	0.000336	12.5	0.0010	0.000110	0.0010	< 0.003	0.00011	< 0.001	0.142	0.0589	0.01
20-Dec-11	99	500	445	7.21	290	73	#N/A	4.7	10.1	25	< 0.2	< 0.06	31.9	0.0511	0.0006	< 0.0002	0.00077	< 0.00002	< 0.00001	0.0014	0.000351	12.6	< 0.0005	0.000105	0.0006	< 0.003	0.00023	< 0.001	0.126	0.0555	< 0.01
27-Dec-11	100	500	455	7.71	247	76	#N/A	5.5	12.6	21	< 0.2	< 0.06	33.5	0.0538	0.0006	0.0014	0.00105	< 0.00002	< 0.00001	0.0023	0.000315	13.2	< 0.0005	0.000114	< 0.0005	< 0.003	< 0.00002	< 0.001	0.140	0.0573	< 0.01
03-Jan-12	101	500	445	7.18	318	78	#N/A	5.5	10.6	27	< 0.2	< 0.06	31.9	0.0704	0.0005	< 0.0002	0.00086	< 0.00002	< 0.00001	0.0022	0.000313	12.6	< 0.0005	0.000115	0.0008	< 0.003	< 0.00002	< 0.001	0.114	0.0513	< 0.01
10-Jan-12	102	500	445	7.47	292	71	#N/A	3.9	11.7	21	< 0.2	< 0.06	29.9	0.0694	0.0009	0.0004	0.00405	< 0.00002	< 0.00001	0.0017	0.000303	11.8	< 0.0005	0.000112	0.0006	< 0.003	0.00003	< 0.001	0.117	0.0540	< 0.01
17-Jan-12	103	500	460	7.09	268	66	#N/A	4.5	9.7	20	< 0.2	< 0.06	30.5	0.0452	0.0006	0.0002	0.00081	< 0.00002	< 0.00001	0.0025	0.000413	12.0	< 0.0005	0.000142	0.0007	< 0.003	0.00003	< 0.001	0.121	0.0596	0.05
24-Jan-12	104	500	480	7.28	460	72	#N/A	4.9	9.6	24	< 0.2	< 0.06	29.9	0.0470	0.0007	0.0003	0.00068	< 0.00002	< 0.00001	0.0018	0.000296	11.8	< 0.0005	0.000109	0.0007	0.006	< 0.00002	0.001	0.115	0.0524	< 0.01
31-Jan-12	105	500	460	6.98	358	58	#N/A	3.2	8.1	14	< 0.2	< 0.06	23.2	0.0398	0.0007	0.0026	0.00120	< 0.00002	< 0.00001	0.0061	0.000446	9.11	< 0.0005	0.000113	0.0006	< 0.003	0.00015	< 0.001	0.098	0.0495	< 0.01
07-Feb-12	106	500	495	7.20	368	82	#N/A	4.8	12.0	30	< 0.2	< 0.06	35.0	0.0315	0.0005	0.0004	0.00093	< 0.00002	< 0.00001	0.0017	0.000552	13.8	< 0.0005	0.000203	0.0007	< 0.003	< 0.00002	< 0.001	0.142	0.0961	< 0.01
14-Feb-12	107	500	440	7.51	373	59	#N/A	5.1	9.6	23	< 0.2	< 0.06	25.7	0.0219	0.0002	0.0004	0.00080	< 0.00002	< 0.00001	0.0022	0.000426	10.1	< 0.0005	0.000106	0.0006	< 0.003	0.00004	< 0.001	0.105	0.0513	< 0.01
21-Feb-12	108	500	445	7.13	381	60	#N/A	3.1	7.4	19	< 0.2	< 0.06	25.5	0.0265	0.0004	0.0004	0.00116	< 0.00002	< 0.00001	0.0074	0.000321	10.0	< 0.0005	0.000100	0.0017	< 0.003	< 0.00002	< 0.001	0.112	0.0517	< 0.01
28-Feb-12	109	500	440	7.12	521	59	#N/A	5.0	7.1	16	< 0.2	< 0.06	24.6	0.0336	0.0004	< 0.0002	0.00149	< 0.00002	< 0.00001	0.0017	0.000427	9.66	< 0.0005	0.000108	0.0009	< 0.003	0.00079	< 0.001	0.110	0.0501	< 0.01
06-Mar-12	110	500	455	7.07	390	68	#N/A	3.2	8.8	22	< 0.2	< 0.06	28.2	0.0476	0.0005	< 0.0002	0.00096	< 0.00002	< 0.00001	0.0022	0.000384	11.1	< 0.0005	0.000117	0.0010	0.003	0.00021	< 0.001	0.130	0.0553	< 0.01
13-Mar-12	111	500	440	6.99	388	63	#N/A	4.7	7.9	22	< 0.2	< 0.06	26.5	0.0345	0.0005	0.0014	0.00208	< 0.00002	< 0.00001	0.0035	0.000343	10.4	< 0.0005	0.000178	0.0013	0.003	0.00008	< 0.001	0.118	0.0491	0.01
20-Mar-12	112	500	450	7.07	366	59	#N/A	5.2	7.4	19	< 0.2	< 0.06	24.5	0.0180	0.0007	0.0020	0.00075	< 0.00002	< 0.00001	0.0018	0.000368	9.64	< 0.0005	0.000128	0.0008	0.007	< 0.00002	< 0.001	0.117	0.0531	< 0.01
27-Mar-12	113	500	460	6.74	394	69	#N/A	4.3	6.2	24	< 0.2	< 0.06	29.0	0.0473	0.0004	0.0025	0.00085	< 0.00002	< 0.00001	0.0017	0.000318	11.4	< 0.0005	0.000098	0.0008	< 0.003	0.00003	< 0.001	0.125	0.0561	< 0.01
03-Apr-12	114	500	450	6.81	379	64	#N/A	4.4	7.7	23	< 0.2	< 0.06	27.5	0.0527	0.0004	< 0.0002	0.00076	< 0.00002	< 0.00001	0.0014	0.000313	10.8	< 0.0005	0.000099	0.0008	< 0.003	< 0.00002	< 0.001	0.118	0.0557	< 0.01
10-Apr-12	115	500	445	7.05	353	70	#N/A	3.2	7.2	25	< 0.2	< 0.06	28.9	0.0362	0.0005	< 0.0002	0.00078	< 0.00002	< 0.00001	0.0017	0.000320	11.4	< 0.0005	0.000123	0.0009	< 0.003	0.00003	< 0.001	0.122	0.0580	0.02
17-Apr-12	116	500	455	7.04	381	63	#N/A	3.9	6.6	24	< 0.2	< 0.06	25.6	0.0455	0.0005	< 0.0002	0.00060	< 0.00002	< 0.00001	0.0019	0.000361	10.1	< 0.0005	0.000120	< 0.0005	< 0.003	< 0.00002	< 0.001	0.105	0.0518	0.01
24-Apr-12	117	500	435	6.69	524	66	#N/A	3.4	6.5	22	< 0.2	< 0.06	27.4	0.0444	0.0005	< 0.0002	0.00089	< 0.00002	< 0.00001	0.0012	0.000363	10.8	< 0.0005	0.000119	0.0010	< 0.003	0.00067	< 0.001	0.113	0.0515	0.02
01-May-12	118	500	450	7.12	361	63	#N/A	5.3	8.0	23	< 0.2	< 0.06	26.6	0.0432	0.0006	< 0.0002	0.00062	< 0.00002	< 0.00001	0.0026	0.000323	10.4	< 0.0005	0.000101	0.0007	< 0.003	0.00009	< 0.001	0.123	0.0533	0.04
08-May-12	119	500	455	6.92	396	65	#N/A	3.9	7.3	19	< 0.2	< 0.06	27.5	0.0275	0.0005	0.0004	0.00084	< 0.00002	< 0.00001	0.0033	0.000336	10.8	< 0.0005	0.000111	0.0015	< 0.003	0.00003	< 0.001	0.126	0.0531	< 0.01
15-May-12	120	500	445	6.74	368	60	#N/A	3.2	5.7	17	< 0.2	< 0.06	24.5	0.0415	0.0004	< 0.0002	0.00074	< 0.00002	< 0.00001	0.0029	0.000237	9.63	< 0.0005	0.000523	0.0020	< 0.003	0.00003	< 0.001	0.108	0.0479	< 0.01
22-May-12	121	500	445	6.66	362	80	#N/A	4.3	5.6	24	< 0.2	< 0.06	32.3	0.0606	0.0003	0.0003	0.00095	< 0.00002	< 0.00001	0.0017	0.000301	12.8	< 0.0005	0.000108	0.0020	< 0.003	0.00003	< 0.001	0.116	0.0466	0.01
29-May-12	122	500	445	6.62	401	67	#N/A	4.0	6.2	20	< 0.2	< 0.06	28.2	0.0499	0.0005	0.0010	0.00077	< 0.00002	< 0.00001	0.0022	0.000296	11.1	< 0.0005	0.000115	0.0006	0.007	< 0.00002	< 0.001	0.118	0.0542	< 0.01
05-Jun-12	123	500	445	6.95	382	61	#N/A	4.1	6.5	19	< 0.2	< 0.06	26.5	0.0462	0.0003	< 0.0002	0.00133	< 0.00002	< 0.00001	0.0029	0.000482	10.4	< 0.0005	0.000125	0.0017	< 0.003	< 0.00002	< 0.001	0.125	0.0533	< 0.01
12-Jun-12	124	500	450	7.06	376	65	#N/A	3.7	6.5	21	< 0.2	< 0.06	28.0	0.0494	0.0004	< 0.0002	0.00076	< 0.00002	< 0.00001	0.0038	0.000303	11.0	< 0.0005	0.000099	0.0006	< 0.003	< 0.00002	< 0.001	0.122	0.0490	0.01
19-Jun-12	125	500	450	6.65	422	92	#N/A	2.7	5.3	27	< 0.2	< 0.06	37.8	0.0456	0.0004	< 0.0002	0.00114	< 0.00002	< 0.00001	0.0025	0.000311	14.9	< 0.0005	0.000138	< 0.0005	< 0.003	< 0.00002	< 0.001	0.120	0.0503	< 0.01
26-Jun-12	126	500	450	7.09	368	73	#N/A	3.4	7.1	25	< 0.2	< 0.06	30.8	0.0551	0.0005	< 0.0002	0.00094	< 0.00002	< 0.00001	0.0033	0.000309	12.1	< 0.0005	0.000061	0.0012	< 0.003	0.00004	< 0.001	0.129	0.0513	< 0.01
03-Jul-12	127	500	440	7.32	424	64	#N/A	6.4	8.7	17	< 0.2	< 0.06	25.8	0.0382	0.0004	< 0.0002	0.00065	< 0.00002	< 0.00001	0.0018	0.000376	10.1	< 0.0005	0.000127	0.0010	< 0.003	0.00009	< 0.001	0.121	0.0537	0.01
10-Jul-12	128	500	440	6.94	346	77	#N/A	3.8	6.2	23	< 0.2	< 0.06	31.3	0.0433	0.0004	0.0007	0.00080	< 0.00002	< 0.00001	0.0022	0.000363	12.3	< 0.0005	0.000136	0.0013	< 0.003	0.00003	< 0.001	0.128	0.0530	0.01
17-Jul-12	129	500	440	6.74	432	61	#N/A	2.6	5.4	18	< 0.2	< 0.06	25.4	0.0487	0.0004	< 0.0002	0.00062	< 0.00002	< 0.00001	0.0022	0.000297	9.99	< 0.0005	0.000113	< 0.0005	< 0.003	< 0.00002	< 0.001	0.119	0.0502	< 0.01
24-Jul-12	130	500	440	6.80	335	63	#N/A	2.2	5.1	16	< 0.2	< 0.06	26.4	0.0398	0.0003	< 0.0002	0.00060	< 0.00002	< 0.00001	0.0015	0.000331	10.4	< 0.0005	0.000108	0.0007	< 0.003	< 0.00002	< 0.001	0.120	0.0499	0.02
31-Jul-12	131	500	450	7.04	379	59	#N/A	2.2	5.3	17	< 0.2	< 0.06	24.2	0.0463	0.0009	0.0023	0.00177	< 0.00002	0.00001	0.0033	0.000321	9.50	< 0.0005	0.000180	0.0006	< 0.003	< 0.00002	< 0.001	0.119	0.0485	< 0.01
07-Aug-12	132	500	440	7.09	370	69	#N/A	2.6	5.3	24	< 0.2	< 0.06	30.3	0.0629	0.0002	0.0006	0.00147	< 0.00002	< 0.00001	0.0030	0.000321	11.9	< 0.0005	0.000541	0.0010	< 0.003	0.00007	< 0.001	0.125	0.0456	< 0.01
14-Aug-12	133	500	435	6.70	328	62	#N/A	2.6	4.9	20	< 0.2	< 0.06	25.1	0.0425	0.0004	0.0002	0.00068	< 0.00002	< 0.00001	0.0023	0.000337	9.87	< 0.0005	0.000129	0.0014	< 0.003	< 0.00002	< 0.001	0.122	0.0507	< 0.01
21-Aug-12	134	500	450	6.84	343	61	#N/A	3.3	5.6	21	< 0.2	< 0.06	25.6	0.0429	0.0010	0.0003	0.00067	< 0.00002	< 0.00001	0.0039	0.000405	10.0	< 0.0005	0.000148	0.0007	< 0.003	< 0.00002	< 0.001	0.158	0.0519	0.01
28-Aug-12	135	500	450	6.71	428	59	#N/A	5.4	5.5	19	< 0.2	< 0.06	24.4	0.0607	0.0013	0.0138	0.00078	< 0.00002	< 0.00001	0.0021	0.000397	9.56	< 0.0005	0.000157	0.0008	0.007	< 0.00002	< 0.001	0.128	0.0548	< 0.01
04-Sep-12	136	500	460	6.91	406	54	#N/A	3.8	6.0	16	< 0.2	< 0.06	23.7	0.0695	0.0004	< 0.0002	0.00084	< 0.00002	< 0.00001	0.0023	0.000338	9.26	< 0.0005	0.000231	0.0007	< 0.003	< 0.00002	< 0.001	0.129	0.0477	0.02
11-Sep-12	137	500	460	6.65	426	56	#N/A	3.0	5.0	17	< 0.2	< 0.06	23.0	0.0264	0.0004	< 0.0002	0.00106	< 0.00002	< 0.00001	0.0020	0.000314	9.00	< 0.0005	0.000120	0.0008	< 0.003	< 0.00002	< 0.001	0.130	0.0467	0.02
18-Sep-12	138	500	490	7.01	386	90	#N/A	2.6	8.4	29	< 0.2	< 0.06	36.1	0.0443	0.0005	< 0.0002	0.00148	< 0.00002	< 0.00001	0.0025	0.000519	14.2	< 0.0005	0.000171	0.0016	< 0.003	0.00133	< 0.001	0.169	0.0862	< 0.01
25-Sep-12	139	500	435	6.80	368	79	#N/A	2.5	6.4	28	< 0.2	< 0.06	32.5	0.0340	0.0004	< 0.0002	0.00078	< 0.00002	< 0.00001	0.0016	0.000430	12.8	< 0.0005	0.000111	0.0005	< 0.003	0.00022	< 0.001	0.101	0.0458	0.01
02-Oct-12	140	500	450	6.87	407	78	#N/A	3.5	6.3	29	< 0.2	< 0.06	32.1	0.0221	0.0004	0.0008	0.00096	< 0.00002	0.00001	0.0033	0.000358	12.7	< 0.0005	0.000227	0.0014	< 0.003	0.00027	< 0.001	0.104	0.0483	< 0.01
09-Oct-12	141	500	445	6.61	415	67	#N/A	4.8	5.1	24	< 0.2	< 0.06	27.0	0.0350	0.0003	< 0.0002	0.00077	< 0.00002	< 0.00001	0.0031	0.000358	10.6	< 0.0005	0.000293	0.0017	< 0.003	< 0.00002	< 0.001	0.101	0.0517	< 0.01
16-Oct-12	142	500	415	7.09	410	53	#N/A	4.8	6.3	18	< 0.2	< 0.06	22.0	0.0263	0.0003	< 0.0002	0.00054	< 0.00002	< 0.00001	0.0025	0.000344	8.64	< 0.0005	0.000117	0.0012	< 0.003	0.00003	< 0.001	0.105	0.0468	< 0.01
23-Oct-12	143	500	455	6.83	381	57	#N/A	3.7	5.5	18	< 0.2	< 0.06	22.5	0.0439	< 0.0002	< 0.0002	0.00069	< 0.00002	< 0.00001	0.0016	0.000378	8.84	< 0.0005	0.000231	0.0013	< 0.003	0.00016	< 0.001	0.112	0.0490	< 0.01
30-Oct-12	144	500	445	6.81	385	51	#N/A	4.1	5.5	15	< 0.2	< 0.06	22.1	0.0299	< 0.0002	0.0003	0.00224	< 0.00002	< 0.00001	0.0041	0.00268	8.63	< 0.0005	0.000186	0.0015	< 0.003	< 0.00002	< 0.001	0.137	0.0527	< 0.01
06-Nov-12	145	500	440	6.55	420	49	#N/A	3.8	4.5	13	< 0.2	< 0.06	22.5	0.0208	0.0004	0.0003	0.00094	< 0.00002	< 0.00001	0.0021	0.000355	8.83	< 0.0005	0.000156	0.0008	< 0.003	< 0.00002	< 0.001	0.108	0.0497	< 0.01
13-Nov-12	146	500	435	6.90	383	51	#N/A	6.1	6.1	17	< 0.2	< 0.06	23.1	0.0196	0.0003	0.0003	0.00067	< 0.00002	< 0.00001	0.0021	0.000375	9.06	< 0.0005	0.000230	0.0007	< 0.003	< 0.00002	< 0.001	0.109	0.0527	0.01
20-Nov-12	147	500	495	7.31	377	93	#N/A	6.0	11.4	24	< 0.2	< 0.06	38.7	0.0318	0.0005	< 0.0002	0.00175	< 0.00002	< 0.00001	0.0029	0.000619	15.2	< 0.0005	0.000249	0.0007	0.025	0.00010	< 0.001	0.162	0.108	< 0.01
27-Nov-12	148	500	510	7.35	360	99	#N/A	4.8	12.3	28	< 0.2	< 0.06	43.2	0.0260	0.0006	0.0003	0.00106	< 0.00002	< 0.00001	0.0023	0.000616	17.1	< 0.0005	0.000317	0.0007	< 0.003	< 0.00002	0.001	0.151	0.112	< 0.01
04-Dec-12	149	500	435	7.23	348	47	#N/A	1.9	5.4	14	< 0.2	< 0.06	22.7	0.0454	0.0003	< 0.0002	0.00065	< 0.00002	< 0.00001	0.0006	0.000322	8.96	0.0006	0.000126	0.0018	< 0.003	0.00048	< 0.001	0.078	0.0449	0.01
11-Dec-12	150	500	480	7.26	348	67	#N/A	2.2	7.3	19	< 0.2	< 0.06	29.9	0.0348	0.0006	0.0002	0.00080	< 0.00002	0.00003	0.0036	0.000363	11.8	< 0.0005	0.000152	0.0008	< 0.003	< 0.00002	< 0.001	0.110	0.0546	< 0.01
18-Dec-12	151	500	475	7.10	336	74	#N/A	2.6	6.8	25	< 0.2	< 0.06	32.4	0.0339	0.0004	< 0.0002	0.00090	< 0.00002	< 0.00001	0.0011	0.000414	12.8	< 0.0005	0.000217	0.0013	< 0.003	< 0.00002	< 0.001	0.091	0.0571	< 0.01
25-Dec-12	152	500	435	7.10	368	64	#N/A	3.4	5.8	20	< 0.2	< 0.06	26.2	0.0350	0.0004	0.0003	0.00077	< 0.00002	< 0.00001	0.0016	0.000348	10.3	< 0.0005	0.000160	0.0007	< 0.003	< 0.00002	< 0.001	0.096	0.0438	< 0.01
01-Jan-13	153	500	480	7.14	430	69	#N/A	2.8	6.6	26	< 0.2	< 0.06	28.0	0.0224	0.0005	< 0.0002	0.00083	< 0.00002	< 0.00001	0.0016	0.000451	11.1	< 0.0005	0.000168	< 0.0005	< 0.003	< 0.00002	< 0.001	0.096	0.0581	< 0.01
08-Jan-13	154	500	440	7.25	359	62	#N/A	3.3	7.2	20	< 0.2	< 0.06	27.0	0.0405	0.0005	0.0010	0.00464	< 0.00002	< 0.00001	0.0016	0.000

HC 2
Sample = RRR04250

Date	Cycle	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
02-Feb-10	1	0.00024	0.0012	< 0.01	12.2	0.00173	0.79	< 0.00001	10.9	0.169	53.0	< 0.0002	0.00047	< 0.0001	0.000019	0.00047	0.002	< 0.00001		3.79	3.56	-0.23	-3.2%
09-Feb-10	2	0.00035	0.0004	< 0.01	10.8	0.00189	0.91	< 0.00001	8.91	0.132	43.8	< 0.0002	< 0.00001	< 0.0001	0.000039	0.00053	0.002	< 0.00001		2.63	2.93	0.31	5.5%
16-Feb-10	3	0.00022	0.0010	< 0.01	7.17	0.00138	0.88	< 0.00001	5.51	0.0976	32.5	< 0.0002	0.00006	0.0002	0.000030	0.00059	0.002	< 0.00001		2.62	2.27	-0.35	-7.2%
23-Feb-10	4	0.00016	0.0003	< 0.01	5.84	0.00096	0.83	< 0.00001	3.55	0.0880	27.8	< 0.0002	0.00003	< 0.0001	0.000042	0.00061	0.003	< 0.00001		2.08	2.08	0.00	-0.1%
02-Mar-10	5	0.00010	0.0003	< 0.01	3.76	0.00051	0.64	< 0.00001	1.96	0.0606	22.7	< 0.0002	0.00014	0.0004	0.000029	0.00054	0.003	0.00002		1.69	1.46	-0.23	-7.2%
09-Mar-10	6	0.00008	0.0006	< 0.01	3.44	0.00045	0.80	< 0.00001	1.32	0.0587	21.5	< 0.0002	0.00041	0.0001	0.000069	0.00052	0.005	0.00037		1.64	1.53	-0.11	-3.4%
16-Mar-10	7	0.00049	0.0005	< 0.01	3.07	0.00039	0.81	< 0.00001	1.14	0.0529	21.00	< 0.0002	0.00001	< 0.0001	0.000130	0.00061	0.003	< 0.00001		1.44	1.50	0.07	2.2%
23-Mar-10	8	0.00020	0.0001	< 0.01	2.46	0.00027	0.84	< 0.00001	0.77	0.0454	18.1	< 0.0002	0.00006	0.0001	0.000016	0.00059	0.003	< 0.00001		1.52	1.32	-0.20	-7.1%
30-Mar-10	9	0.00009	0.0004	< 0.01	2.42	0.00030	0.80	< 0.00001	0.79	0.0482	18.00	< 0.0002	0.00028	0.0002	0.000012	0.00056	0.005	< 0.00001		1.64	1.37	-0.28	-9.3%
06-Apr-10	10	0.00011	< 0.0001	< 0.01	2.56	0.00027	0.91	< 0.00001	0.80	0.0495	21.9	< 0.0002	0.00012	0.0001	0.000111	0.00068	0.005	< 0.00001		1.76	1.53	-0.23	-6.9%
13-Apr-10	11	0.00013	< 0.0001	< 0.01	1.63	0.00023	0.82	< 0.00001	0.54	0.0329	13.50	< 0.0002	0.00031	0.0002	0.000046	0.00058	0.004	0.00001		1.17	1.07	-0.10	-4.7%
20-Apr-10	12	0.00007	0.0004	< 0.01	1.95	0.00030	0.96	< 0.00001	0.53	0.0360	16.4	< 0.0002	0.00018	0.0002	0.000092	0.00089	0.004	0.00002		1.25	1.19	-0.06	-2.5%
27-Apr-10	13	0.00013	0.0001	< 0.01	1.54	0.00023	0.82	< 0.00001	0.46	0.0310	13.50	< 0.0002	0.00022	0.0001	0.000024	0.00065	0.004	< 0.00001		1.16	1.06	-0.10	-4.3%
04-May-10	14	0.00011	< 0.0001	< 0.01	1.43	0.00015	0.83	< 0.00001	0.34	0.0244	10.70	< 0.0002	0.00018	< 0.0001	0.000013	0.00062	0.005	< 0.00001		1.07	0.85	-0.22	-11.4%
11-May-10	15	0.00010	0.0002	0.02	1.57	0.00017	0.96	0.00006	0.39	0.0317	14.50	< 0.0002	0.00023	< 0.0001	0.000027	0.00081	0.004	< 0.00001		1.04	1.08	0.04	2.0%
18-May-10	16	0.00058	0.0002	< 0.009	1.51	0.00018	0.88	< 0.00001	0.43	0.0325	15.2	< 0.0002	0.00018	0.0004	0.000033	0.00074	0.004	< 0.00001		1.09	1.15	0.05	2.3%
25-May-10	17	0.00019	0.0001	< 0.009	1.22	0.00056	0.80	< 0.00001	0.38	0.0262	13.20	< 0.0002	0.00024	0.0005	0.000019	0.00069	0.007	< 0.00001		0.79	0.96	0.17	9.7%
01-Jun-10	18	0.00035	< 0.0001	< 0.009	1.17	0.00014	0.75	0.00001	0.35	0.0288	14.00	< 0.0002	0.00019	0.0003	0.000036	0.00066	0.004	< 0.00001		0.95	1.02	0.06	3.2%
08-Jun-10	19	0.00020	0.0001	0.022	1.13	0.00007	0.74	< 0.00001	0.33	0.0267	13.50	< 0.0002	0.00020	0.0002	0.000009	0.00064	0.004	< 0.00001		0.85	1.00	0.15	8.1%
15-Jun-10	20	0.00019	0.0002	0.02	0.98	0.00020	0.71	0.00006	0.33	0.0233	11.30	< 0.0002	0.00080	0.0003	0.000019	0.00068	0.006	0.00001		0.73	0.88	0.15	9.2%
22-Jun-10	21																						
29-Jun-10	22	0.00021	< 0.0001	< 0.009	0.964	0.00006	0.64	< 0.00001	0.30	0.0208	10.40	< 0.0002	0.00205	0.0002	0.00002	0.0005	0.008	0.00001		0.65	0.82	0.17	11.5%
06-Jul-10	23																						
13-Jul-10	24	0.00037	0.0004	< 0.009	0.830	< 0.00004	0.64	0.00002	0.27	0.0195	11.70	< 0.0002	0.00055	0.0002	0.00026	0.00048	0.009	0.00002		0.56	0.73	0.17	13.5%
20-Jul-10	25																						
27-Jul-10	26	0.00019	< 0.0001	0.013	0.856	0.00015	0.74	< 0.00001	0.28	0.0206	10.8	< 0.0002	0.00035	0.0003	0.00004	0.00052	0.007	< 0.00001		0.80	0.86	0.06	3.5%
03-Aug-10	27	0.00020	0.0003	< 0.009	0.711	< 0.00004	0.61	< 0.00001	0.23	0.0186	9.8	< 0.0002	0.00016	0.0001	0.00002	0.00038	0.007	< 0.00001		0.68	0.77	0.09	6.5%
10-Aug-10	28	0.00018	0.00020	< 0.009	0.770	0.00006	0.63	< 0.00001	0.26	0.02	10.80	< 0.0002	0.00006	0.00010	0.000013	0.00045	0.008	< 0.00001		0.82	0.86	0.04	2.1%
17-Aug-10	29	0.00018	0.0002	< 0.009	0.747	0.00013	0.65	0.00002	0.23	0.0184	13.7	< 0.0002	0.00016	0.0002	0.000054	0.00048	0.007	< 0.00001		0.74	0.78	0.04	2.6%
24-Aug-10	30	0.00011	< 0.0001	< 0.009	0.779	0.00015	0.76	0.00003	0.25	0.0193	11.5	< 0.0002	0.00019	0.0003	0.000020	0.00054	0.008	< 0.00001		0.77	0.87	0.10	6.0%
31-Aug-10	31	0.00044	< 0.0001	< 0.009	0.766	0.00012	0.78	< 0.00001	0.22	0.0167	10.8	< 0.0002	0.00002	0.0002	0.000013	0.00057	0.011	< 0.00001		0.97	0.78	-0.20	-11.2%
07-Sep-10	32	0.00012	0.0006	< 0.009	0.698	< 0.00004	0.71	0.00001	0.22	0.0140	10.7	< 0.0002	0.00023	0.0002	0.000019	0.00058	0.009	< 0.00001		0.92	0.78	-0.14	-8.3%
14-Sep-10	33	0.00478	0.0003	< 0.009	0.684	0.00019	0.67	0.00002	0.23	0.0173	9.6	< 0.0002	0.00011	0.0005	0.000018	0.00049	0.008	0.00002		0.70	0.75	0.05	3.6%
21-Sep-10	34	0.00010	0.0005	0.01	0.787	0.00134	0.77	0.00003	0.49	0.0198	12.7	< 0.0002	0.00015	0.0002	0.000019	0.00043	0.009	< 0.00001		0.89	0.85	-0.04	-2.2%
28-Sep-10	35	0.00053	0.0006	< 0.009	0.836	< 0.00004	1.01	< 0.00001	0.28	0.0265	16.5	< 0.0002	0.00034	< 0.0001	0.000030	0.00046	0.021	< 0.00001		1.11	1.11	-0.01	-0.3%
05-Oct-10	36	0.00264	< 0.0001	0.015	0.699	< 0.00004	0.78	< 0.00001	0.24	0.0197	12.2	< 0.0002	0.00037	0.0002	0.000054	0.00038	0.012	0.00001		0.98	0.86	-0.12	-6.6%
12-Oct-10	37	0.00198	0.0007	< 0.009	0.647	0.00016	0.67	< 0.00001	0.55	0.0191	13.3	< 0.0002	0.00077	0.0003	0.000022	0.00040	0.013	0.00001		0.78	0.84	0.06	3.4%
19-Oct-10	38	0.00019	0.0002	< 0.009	0.600	< 0.00004	0.57	< 0.00001	0.21	0.0158	9.48	< 0.0002	0.00007	0.0001	0.000059	0.00036	0.015	< 0.00001	CA14822-OCT10	0.81	0.72	-0.09	-5.8%
26-Oct-10	39	0.00183	0.0006	< 0.009	0.542	0.00496	0.52	< 0.00001	0.26	0.0147	10.2	< 0.0002	0.00018	0.0002	0.000014	0.00031	0.013	< 0.00001	CA11459-OCT10	0.75	0.67	-0.07	-5.1%
02-Nov-10	40	0.00070	0.0007	< 0.009	0.612	0.00012	0.67	< 0.00001	0.27	0.0170	9.94	< 0.0002	0.00047	0.0004	0.000008	0.00020	0.017	0.00002	CA11315-NOV10	0.74	0.78	0.03	2.3%
09-Nov-10	41	0.0011	0.0008	< 0.009	0.774	0.00006	0.88	< 0.00001	0.33	0.0238	13.9	< 0.0002	0.00050	0.0002	0.00009	0.00036	0.029	< 0.00001	CA11435-NOV10	1.05	1.08	0.02	1.1%
16-Nov-10	42	0.00028	0.0004	< 0.009	0.561	< 0.00004	0.61	< 0.00001	0.20	0.0156	9.63	< 0.0002	0.00062	< 0.0001	0.000023	0.00028	0.016	< 0.00001	CA10265-NOV10	0.71	0.75	0.04	2.5%
23-Nov-10	43	0.0177	< 0.0001	< 0.009	0.530	0.00011	0.57	< 0.00001	0.16	0.0142	7.78	< 0.0002	0.00019	0.0002	0.000478	0.00029	0.014	0.00001	CA11701-NOV10	0.61	0.65	0.04	3.5%
30-Nov-10	44	0.00013	0.0008	< 0.009	0.528	0.00037	0.59	< 0.00001	0.22	0.0146	8.61	< 0.0002	0.00017	0.0003	0.00150	0.00033	0.016	< 0.00001	CA14008-DEC10	0.56	0.69	0.12	9.8%
07-Dec-10	45	0.00073	0.0004	< 0.009	0.537	< 0.00004	0.61	< 0.00001	0.19	0.0148	8.65	< 0.0002	0.00089	0.0003	0.000155	0.00030	0.015	< 0.00001	CA14206-DEC10	0.64	0.83	0.18	12.4%
14-Dec-10	46	0.00059	0.0004	< 0.009	0.554	0.00049	0.58	< 0.00001	0.22	0.0149	8.07	< 0.0002	0.00064	0.0002	0.000098	0.00034	0.009	< 0.00001	CA10970-DEC10	0.75	0.70	-0.05	-3.6%
21-Dec-10	47	0.00023	0.0017	< 0.009	0.592	< 0.00004	0.67	< 0.00001	0.24	0.0171	10.4	< 0.0002	0.00028	0.0002	0.000026	0.00031	0.015	< 0.00001	CA10453-DEC10	0.83	0.86	0.02	1.3%
28-Dec-10	48	0.00037	0.0004	0.043	0.583	0.00046	0.73	< 0.00001	0.26	0.0150	9.69	< 0.0002	0.00030	0.0002	0.000029	0.00037	0.011	0.00001	CA10140-JAN11	0.72	0.71	-0.01	-0.6%
04-Jan-11	49	0.00045	0.0012	0.038	0.458	< 0.00004	0.51	0.00001	0.19	0.0112	7.36	< 0.0002	0.00009	0.0006	0.000029	0.00024	0.018	< 0.00001	CA10880-JAN11	0.61	0.59	-0.02	-1.7%
11-Jan-11	50	0.00013	0.0003	< 0.009	0.468	< 0.00004	0.49	< 0.00001	0.19	0.0125	8.03	< 0.0002	0.00023	0.0003	0.000006	0.00021	0.018	0.00001	CA14437-JAN11	0.62	0.62	0.00	0.4%
18-Jan-11	51	0.00007	< 0.0001	< 0.009	0.547	< 0.00004	0.60	0.00001	0.19	0.0162	10.7	< 0.0002	0.00028	0.0002	0.000005	0.00023	0.015	0.00001	CA10982-JAN11	0.72	0.78	0.06	4.2%
25-Jan-11	52	0.00013	< 0.0001	< 0.009	0.433	< 0.00004	0.48	< 0.00001	0.17	0.0134	8.04	< 0.0002	0.00022	0.0001	0.000027	0.00027	0.018	0.00001	CA11047-JAN11	0.62	0.63	0.00	0.3%
01-Feb-11	53	0.00008	0.0006	0.058	0.492	< 0.00004	0.53	< 0.00001	0.18	0.0142	12.5	< 0.0002	0.00010	0.0002	0.000095	0.00020	0.021	< 0.00001	CA14121-FEB11	0.55	0.69	0.13	10.9%
08-Feb-11	54	0.00039	< 0.0001	0.019	0.494	< 0.00004	0.61	< 0.00001	0.18	0.0165	10.2	< 0.0002	0.00030	0.0001	0.000011	0.00023	0.017	< 0.00001	CA14249-FEB11	0.79	0.81	0.02	1.1%
15-Feb-11	55	0.00048	0.0006	0.040	0.433	< 0.00004	0.52	< 0.00001	0.15	0.0112	6.63	< 0.0002	0.00005	< 0.0001	0.000004	0.00014	0.013	< 0.00001	CA14449-FEB11	0.41	0.57	0.16	16.4%
22-Feb-11	56	0.00175	0.0003	0.026	0.447	< 0.00004	0.51	0.00002	0.18	0.0109	7.53	< 0.0002	0.00050	0.0003	0.000043	0.00022	0.012	0.00017	CA14656-FEB11	0.67	0.56	-0.10	-8.3%
01-Mar-11	57	0.00026	0.0004	0.031	0.379	< 0.00004	0.49	< 0.00001	0.18	0.0101	6.52	< 0.0002	0.00019	0.0003	0.000010	0.00020	0.027	< 0.00001	CA14060-MAR11	0.66	0.53	-0.13	-10.8%
08-Mar-11	58	0.00063	0.0002	0.016	0.406	< 0.00004	0.50	< 0.00001	0.18	0.0105	6.53	< 0.0002	0.00020	0.0002	0.000014	0.00015	0.020	< 0.00001	CA14274-MAR11	0.63	0.53	-0.10	-8.5%
15-Mar-11	59	0.00013	0.0006	< 0.009	0.416	< 0.00004	0.51	< 0.00001	0.18	0.0103	6.08	< 0.00002	0.00043	0.0002	0.000012	0.00018	0.015	< 0.00001	CA14457-MAR11	0.56	0.53	-0.02	-2.1%
22-Mar-11	60	0.00012	0.0004	< 0.009	0.460	0.00018	0.55	< 0.00001	0.15	0.0115	7.65	< 0.0002	0.00030	0.0002	0.000004	0.00018	0.016	< 0.00001	CA10460-MAR11	0.59	0.61	0.02	1.8%
29-Mar-11	61	0.00012	0.0004	< 0.009	0.430	< 0.00004	0.54	0.00001	0.17	0.0111	7.76	< 0.0002	0.00012	0.0002	0.000012	0.00018	0.012	< 0.00001	CA14922-MAR11	0.56	0.60	0.05	4.1%
05-Apr-11	62	0.00023	0.0005	0.049	0.478	0.00015	0.57	< 0.00001	0.18	0.0119	7.72	< 0.0002	0.00015	0.0002	0.000005	0.00016	0.017	< 0.00001	CA14224-APR11	0.60	0.61	0.01	0.9%
12-Apr-11	63	0.00069	< 0.0001	< 0.009	0.467	< 0.00004	0.52	< 0.00001	0.17	0.0136	8.21	< 0.0002	0.00016	0.0002	0.000014	0.00021	0.011	< 0.00001	CA14457-APR11	0.60	0.62	0.03	2.1%
19-Apr-11	64	0.00563	0.0003	0.018	0.462	0.00040	0.57	< 0.00001	0.19	0.0130	8.42	< 0.0002	0.00010	0.0003	0.000015	0.00026	0.029	< 0.00001	CA11358-APR11	0.60	0.67	0.07	5.2%
26-Apr-11	65	0.00012	0.0008	< 0.009	0.514	< 0.00004	0.62	< 0.00001	0.19	0.0137	9.18	< 0.0002	< 0.00001	0.0019	0.000013	0.00022	0.012	0.00004	CA14943-APR11	0.68	0.73	0.05	3.9%
03-May-11	66	0.00017	0.0004	0.018	0.489	< 0.00004	0.60	< 0.00001	0.17	0.0150	9.88	< 0.0002	< 0.00001	0.0002	0.000005	0.00015	0.012	< 0.00001	CA14148-MAY11	0.66	0.76	0.10	6.7%
10-May-11	67	0.00015	0.0007	< 0.009	0.457	0.00009	0.53	< 0.00001	0.17	0.0139	8.95	< 0.0002	0.00006	0.0004	0.000004	0.00008	0.019	< 0.00001	CA14441-MAY11	0.72	0.68	-0.04	-3.0%
17-May-11	68	0.00018	< 0.0001	0.037	0.499	0.00011	0.61	0.00005	0.16	0.0164	11.2	< 0.0002	0.00006	0.0001	0.000015	0.00018	0.014	< 0.00001	CA14703-MAY11	0.85	0.82	-0.03	-2.0%
24-May-11	69	0.00012	< 0.0001	< 0.009	0.668	0.00004	1.59	< 0.00001	0.21	0.0221	15.1	< 0.0002	0.00488	0.0006	0.000014	0.00024	0.027	< 0.00001	CA13762-MAY11	1.01	1.10	0.10	4.7%
31-May-11	70	0.00010	0.0002	< 0.009	0.412	< 0.00004	0.52	0.00001	0.15	0.0121	7.80	< 0.0002	0.00011	0.0001	0.000005	0.00011	0.013	0.00003	CA10185-JUN11	0.65	0.61	-0.04	-3.3%
07-Jun-11	71	0.00009	0.0004	0.026	0.449	0.00011	0.62	< 0.00001	0.24	0.0153	9.89	< 0.00002	0.00016	0.0003	< 0.000001	0.00013	0.013	0.00001	CA14355-JUN11	0.66	0.72	0.06	4.2%
14-Jun-11	72	0.00044	0.0006	< 0.009	0.369	< 0.00004	0.53	< 0.00001	0.18	0.0099	7.07	< 0.00002	0.00031	< 0.0001	0.000007	0.00015	0.014	< 0.00001	CA10349-JUN11	0.45	0.54	0.09	8.9%
21-Jun-11	73	0.00008	< 0.0001	0.010	0.349	< 0.00004	0.45	< 0.00001	0.16	0.0084	6.18	0.00002	0.00028	0.0002	0.000004	0.00013	0.020	< 0.00001	CA14777-JUN11	0.53	0.49	-0.04	-4.1%
28-Jun-11	74	0.00162	0.0003	< 0.009	0.432	0.00013	0.53	< 0.00001	0.17	0.0106	7.09	0.00002	0.00003	< 0.0001	0.000025	0.00015	0.027	0.00001	CA15123-JUN11	0.56	0.59	0.03	2.8%
05-Jul-11	75	0.00043	0.0004	0.015	0.455	0.00004	0.68	< 0.00001	0.25	0.0119	8.35	< 0.00002	0.00022	0.0004	0.000008	0.00019	0.015	< 0.00001	CA15472-JUL11	0.66	0.67	0.00	0.2%
12-Jul-11	76	0.00552	0.0003	< 0.009	0.466	< 0.00004	0.63	< 0.00001	0.17	0.0112	8.06	< 0.00002	0.00010	0.0001	0.000140	0.00016	0.017	< 0.00001	CA15694-JUL11	0.59	0.66	0.06	5.1%
19-Jul-11	77	0.00066	0.0007	0.009	0.410	0.00127	0.51	0.00001	0.20	0.0109	7.46	< 0.00002	0.00242	0.0003	0.000096	0.00423	0.034	0.00005	CA16180-JUL11	0.59	0.59	0.00	0.2%
26-Jul-11	78	0.00033	0.0005	0.029	0.396	0.00015	0.50	< 0.00001	0.25	0.0124	7.16	< 0.00002	0.00004	0.0004	0.000010	0.00011	0.021	< 0.00001	CA11330-JUL11	0.64	0.59	-0.05	-3.7%

HC 2
Sample = RRR04250

Date	Cycle	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
02-Aug-11	79	0.00123	0.0002	< 0.009	0.388	0.00017	0.53	< 0.00001	0.23	0.0111	7.37	< 0.00002	0.00008	0.0001	0.000019	0.00016	0.015	< 0.00001	CA14200-AUG11	0.68	0.59	-0.09	-6.9%
09-Aug-11	80	0.00024	0.0004	< 0.009	0.358	< 0.00004	0.47	< 0.00001	0.19	0.0095	7.39	< 0.00002	< 0.00001	0.0001	0.000021	0.00015	0.023	< 0.00001	CA14411-AUG11	0.55	0.56	0.01	1.1%
16-Aug-11	81	0.00008	0.0009	< 0.009	0.385	0.00011	0.53	< 0.00001	0.15	0.0100	7.80	< 0.00002	0.00010	< 0.0001	0.000016	0.00007	0.021	< 0.00001	CA14675-AUG11	0.68	0.58	-0.10	-8.2%
23-Aug-11	82	0.00284	0.0010	< 0.009	0.446	< 0.00004	0.62	0.00001	0.17	0.0115	8.68	0.00003	0.00012	0.0001	0.000008	0.00017	0.020	< 0.00001	CA10450-AUG11	0.72	0.68	-0.05	-3.5%
30-Aug-11	83	0.00019	0.0006	< 0.009	0.443	0.00038	0.57	0.00002	0.18	0.0115	8.78	0.00003	0.00022	0.0001	0.000010	0.00013	1.81	< 0.00001	CA14264-SEP11	0.76	0.67	-0.09	-6.2%
06-Sep-11	84	0.00059	0.0003	< 0.009	0.416	< 0.00004	0.62	< 0.00001	0.15	0.0102	8.57	< 0.00002	0.00005	0.0002	0.000004	0.00018	0.040	< 0.00001	CA14213-SEP11	0.68	0.65	-0.03	-2.3%
13-Sep-11	85	0.00089	< 0.0001	< 0.009	0.454	< 0.00004	0.55	< 0.00001	0.17	0.0149	11.5	< 0.00002	0.00015	0.0002	0.000019	0.00011	0.034	< 0.00001	CA17321-SEP11	0.96	0.81	-0.15	-8.5%
20-Sep-11	86	0.00115	0.0006	< 0.009	0.427	< 0.00004	0.59	< 0.00001	0.15	0.0122	10.5	< 0.00002	0.00032	0.0002	0.000067	0.00016	0.023	< 0.00001	CA14825-SEP11	0.83	0.72	-0.11	-6.9%
27-Sep-11	87	0.00104	< 0.0001	< 0.009	0.430	< 0.00004	0.46	< 0.00001	0.15	0.0110	9.08	< 0.00002	0.00013	< 0.0001	0.000032	0.00012	0.025	< 0.00001	CA18921-SEP11	0.67	0.65	-0.02	-1.7%
04-Oct-11	88	0.00065	< 0.0001	< 0.009	0.349	< 0.00004	0.42	< 0.00001	0.13	0.0087	7.11	< 0.00002	0.00009	< 0.0001	0.000086	0.00011	0.019	< 0.00001	CA14153-OCT11	0.69	0.52	-0.17	-14.2%
11-Oct-11	89	0.00026	0.0004	< 0.009	0.321	< 0.00004	0.55	< 0.00001	0.12	0.0091	7.80	< 0.00002	0.00003	< 0.0001	< 0.000001	0.00010	0.024	< 0.00001	CA14391-OCT11	0.66	0.58	-0.08	-6.1%
18-Oct-11	90	0.00119	0.0005	< 0.009	0.367	< 0.00004	0.42	< 0.00001	0.13	0.0091	7.78	0.00008	0.00010	0.0001	0.000026	0.00009	0.051	< 0.00001	CA14788-OCT11	0.66	0.57	-0.09	-7.4%
25-Oct-11	91	0.00011	0.0001	< 0.009	0.442	< 0.00004	0.59	< 0.00001	0.16	0.0113	8.59	< 0.00002	0.00011	0.0003	0.000008	0.00011	0.023	0.00001	CA14955-OCT11	0.66	0.64	-0.02	-1.5%
01-Nov-11	92	0.00032	0.0003	< 0.009	0.391	0.00032	0.48	< 0.00001	0.15	0.0102	7.80	< 0.00002	0.00011	0.0002	0.000004	0.00010	0.022	< 0.00001	CA18036-NOV11	0.73	0.61	-0.12	-9.0%
08-Nov-11	93	0.00007	0.0001	< 0.009	0.373	< 0.00004	0.57	< 0.00001	0.14	0.0093	7.42	< 0.00002	0.00004	0.0002	0.000004	0.00018	0.031	< 0.00001	CA18264-NOV11	0.58	0.57	-0.01	-0.6%
15-Nov-11	94	0.00229	0.0005	< 0.009	0.336	0.00042	0.35	< 0.00001	0.11	0.0080	6.51	< 0.00002	0.00003	0.0002	0.000012	0.00020	0.026	< 0.00001	CA18499-NOV11	0.60	0.51	-0.08	-7.6%
22-Nov-11	95	0.00007	0.0004	< 0.009	0.335	0.00052	0.47	< 0.00001	0.04	0.0106	6.71	< 0.00002	0.00005	0.0004	0.000006	0.00023	0.030	< 0.00001	CA18773-NOV11	0.62	0.55	-0.08	-6.6%
29-Nov-11	96	0.00055	0.0006	0.018	0.415	< 0.00004	0.55	< 0.00001	0.13	0.0102	7.71	< 0.00002	0.00002	0.0003	0.000010	0.00031	0.027	< 0.00001	CA12006-NOV11	0.65	0.61	-0.05	-3.6%
06-Dec-11	97	0.00009	0.0002	< 0.009	0.400	0.00011	0.89	0.00005	0.08	0.0091	7.46	< 0.00002	< 0.00001	0.0003	0.000003	0.00024	0.082	0.00001	CA14293-DEC11	0.60	0.60	-0.01	-0.5%
13-Dec-11	98	0.00029	0.0005	0.010	0.401	0.00019	0.46	< 0.00001	0.18	0.0110	8.11	< 0.00002	0.00012	0.0001	0.000104	0.00009	0.021	< 0.00001	CA14475-DEC11	0.63	0.65	0.03	2.0%
20-Dec-11	99	0.00009	0.0004	< 0.009	0.402	0.00039	0.56	< 0.00001	0.12	0.0104	8.82	< 0.00002	< 0.00001	0.0001	0.000003	0.00022	0.030	< 0.00001	CA10397-DEC11	0.72	0.65	-0.07	-5.0%
27-Dec-11	100	0.00127	0.0006	< 0.009	0.406	0.00022	0.50	< 0.00001	0.13	0.0110	9.14	< 0.00002	< 0.00001	0.0003	0.000045	0.00031	0.021	< 0.00001	CA10466-DEC11	0.69	0.69	0.00	-0.3%
03-Jan-12	101	0.00019	0.0007	< 0.009	0.377	< 0.00004	0.48	< 0.00001	0.10	0.0107	8.71	< 0.00002	0.00002	0.0002	0.000051	0.00045	0.020	< 0.00001	CA14133-JAN12	0.78	0.65	-0.12	-8.6%
10-Jan-12	102	0.00026	0.0002	< 0.009	0.364	0.00004	0.50	< 0.00001	0.13	0.0117	7.60	< 0.00002	0.00017	0.0003	0.000008	0.00050	0.021	< 0.00001	CA14430-JAN12	0.67	0.61	-0.06	-4.5%
17-Jan-12	103	0.00051	0.0025	< 0.009	0.357	0.00005	0.44	< 0.00001	0.09	0.0097	7.70	< 0.00002	0.00005	0.0002	0.000007	0.00055	0.030	< 0.00001	CA11226-JAN12	0.61	0.62	0.01	0.8%
24-Jan-12	104	0.00015	0.0003	< 0.009	0.376	0.00021	0.43	< 0.00001	0.11	0.0099	7.89	< 0.00002	0.00002	0.0002	0.000004	0.00032	0.019	< 0.00001	CA10502-JAN12	0.69	0.61	-0.08	-6.1%
31-Jan-12	105	0.00104	0.0002	< 0.009	0.310	0.00005	0.35	< 0.00001	0.12	0.0075	5.78	0.00002	0.00002	0.0002	0.000039	0.00046	0.049	< 0.00001	CA10999-FEB12	0.45	0.48	0.02	2.4%
07-Feb-12	106	0.00014	0.0006	< 0.009	0.380	0.00014	0.52	< 0.00001	0.10	0.0110	8.66	< 0.00002	< 0.00001	0.0001	0.000019	0.00026	0.040	< 0.00001	CA14207-FEB12	0.86	0.71	-0.15	-9.5%
14-Feb-12	107	0.00011	0.0003	< 0.009	0.288	0.00008	0.36	< 0.00001	0.12	0.0082	6.40	< 0.00002	< 0.00001	0.0002	0.000006	0.00009	0.041	< 0.00001	CA14420-FEB12	0.67	0.53	-0.14	-11.4%
21-Feb-12	108	0.00015	0.0004	< 0.009	0.330	0.00014	0.41	< 0.00001	0.13	0.0080	6.59	< 0.00002	0.00002	< 0.0001	0.000012	0.00017	0.024	< 0.00001	CA14754-FEB12	0.54	0.53	-0.01	-1.1%
28-Feb-12	109	0.00023	0.0001	< 0.009	0.316	< 0.00004	0.40	< 0.00001	0.12	0.0068	6.05	< 0.00002	0.00007	0.0002	0.000003	0.00034	0.036	< 0.00001	CA14931-FEB12	0.48	0.51	0.04	3.8%
06-Mar-12	110	0.00015	0.0009	< 0.009	0.367	< 0.00004	0.47	< 0.00001	0.13	0.0089	7.75	< 0.00002	0.00305	0.0006	0.000012	0.00036	0.035	< 0.00001	CA14216-MAR12	0.63	0.59	-0.04	-3.5%
13-Mar-12	111	0.00542	0.0004	0.010	0.338	< 0.00004	0.44	< 0.00001	0.13	0.0085	6.81	< 0.00002	0.00029	< 0.0001	0.000009	0.00008	0.023	< 0.00001	CA14408-MAR12	0.62	0.55	-0.06	-5.4%
20-Mar-12	112	0.00031	< 0.0001	< 0.009	0.331	0.00015	0.39	< 0.00001	0.12	0.0078	6.31	0.00002	0.00015	< 0.0001	0.000024	0.00007	0.032	< 0.00001	CA14687-MAR12	0.54	0.51	-0.03	-3.0%
27-Mar-12	113	0.00009	0.0002	< 0.009	0.313	0.00005	0.40	< 0.00001	0.13	0.0085	7.90	< 0.00002	0.00003	0.0003	0.000006	0.00032	0.022	< 0.00001	CA14874-MAR12	0.62	0.60	-0.02	-1.7%
03-Apr-12	114	0.00007	0.0002	< 0.009	0.350	< 0.00004	0.40	< 0.00001	0.12	0.0086	7.45	< 0.00002	0.00001	0.0001	0.000001	0.00021	0.023	< 0.00001	CA14169-APR12	0.63	0.57	-0.06	-4.8%
10-Apr-12	115	0.00014	0.0003	< 0.009	0.364	0.00005	0.45	< 0.00001	0.12	0.0090	7.75	< 0.00002	0.00002	0.0001	0.000009	0.00026	0.021	< 0.00001	CA11095-APR12	0.67	0.60	-0.06	-4.9%
17-Apr-12	116	0.00012	0.0002	< 0.009	0.294	0.00009	0.39	0.00001	0.08	0.0080	6.75	< 0.00002	0.00002	0.0002	0.000005	0.00031	0.031	< 0.00001	CA14686-APR12	0.63	0.53	-0.10	-8.4%
24-Apr-12	117	0.00203	0.0003	< 0.009	0.350	< 0.00004	0.44	< 0.00001	0.10	0.0085	7.89	0.00002	0.00006	< 0.0001	0.000016	0.00027	0.036	< 0.00001	CA14876-APR12	0.59	0.57	-0.02	-1.4%
01-May-12	118	0.00064	0.0002	< 0.009	0.348	< 0.00004	0.41	< 0.00001	0.10	0.0080	7.07	< 0.00002	0.00002	0.0002	0.000159	0.00036	0.026	< 0.00001	CA14088-MAY12	0.64	0.55	-0.09	-7.2%
08-May-12	119	0.00012	0.0002	< 0.009	0.382	0.00006	0.41	< 0.00001	0.15	0.0083	7.44	< 0.00002	0.00016	< 0.0001	0.000012	0.00019	0.027	< 0.00001	CA14348-MAY12	0.54	0.57	0.03	2.9%
15-May-12	120	0.00050	0.0004	< 0.009	0.330	0.00014	0.38	< 0.00001	0.11	0.0077	6.45	< 0.00002	< 0.00001	0.0001	0.000016	0.00030	0.019	< 0.00001	CA14621-MAY12	0.47	0.51	0.04	4.4%
22-May-12	121	0.00013	0.0004	< 0.009	0.326	< 0.00004	0.36	< 0.00001	0.13	0.0103	9.62	< 0.00002	0.00006	0.0002	0.000078	0.00038	0.025	< 0.00001	CA10508-MAY12	0.61	0.67	0.06	4.8%
29-May-12	122	0.00046	< 0.0001	< 0.009	0.311	0.00010	0.53	< 0.00001	0.09	0.0088	7.73	< 0.00002	0.00036	0.0001	0.000010	0.00034	0.023	< 0.00001	CA15134-MAY12	0.54	0.59	0.05	4.0%
05-Jun-12	123	0.00023	< 0.0001	< 0.009	0.334	0.00006	0.45	< 0.00001	0.13	0.0083	7.53	< 0.00002	0.00001	0.0004	0.000003	0.00042	0.030	< 0.00001	CA15135-JUN12	0.52	0.55	0.03	2.7%
12-Jun-12	124	0.00011	< 0.0001	< 0.009	0.334	< 0.00004	0.42	< 0.00001	0.10	0.0085	7.36	< 0.00002	0.00010	0.0002	0.000004	0.00029	0.026	< 0.00001	CA15174-JUN12	0.57	0.58	0.02	1.3%
19-Jun-12	125	0.00012	0.0003	< 0.009	0.304	0.00010	0.36	< 0.00001	0.10	0.0120	11.0	< 0.00002	0.00005	0.0002	0.000004	0.00037	0.027	< 0.00001	CA15309-JUN12	0.67	0.78	0.11	7.4%
26-Jun-12	126	0.00013	0.0004	< 0.009	0.327	< 0.00004	0.39	< 0.00001	0.13	0.0097	8.77	< 0.00002	0.00010	0.0001	0.000017	0.00033	0.027	0.00001	CA15357-JUN12	0.66	0.64	-0.02	-1.8%
03-Jul-12	127	0.00003	< 0.0001	< 0.009	0.294	0.00007	0.39	< 0.00001	0.10	0.0083	7.29	< 0.00002	0.00064	0.0003	0.000021	0.00026	0.034	< 0.00001	CA15021-JUL12	0.53	0.54	0.01	0.8%
10-Jul-12	128	0.00022	0.0002	< 0.009	0.328	0.00011	0.38	< 0.00001	0.12	0.0097	9.01	< 0.00002	0.00010	0.0001	0.000017	0.00030	0.026	< 0.00001	CA15118-JUL12	0.60	0.65	0.05	3.7%
17-Jul-12	129	0.00003	0.0002	< 0.009	0.312	0.00011	0.35	0.00007	0.09	0.0080	7.26	< 0.00002	< 0.00001	0.0002	< 0.000001	0.00028	0.019	< 0.00001	CA15186-JUL12	0.48	0.53	0.05	4.7%
24-Jul-12	130	0.00011	0.0001	< 0.009	0.290	0.00049	0.47	< 0.00001	0.09	0.0078	7.85	< 0.00002	0.00004	0.0002	< 0.000001	0.00028	0.028	< 0.00001	CA15302-JUL12	0.43	0.55	0.11	11.7%
31-Jul-12	131	0.00024	0.0003	< 0.009	0.283	0.00004	0.38	< 0.00001	0.10	0.0074	6.66	< 0.00002	0.00059	< 0.0001	0.000011	0.00038	0.024	< 0.00001	CA15010-AUG12	0.46	0.51	0.05	4.7%
07-Aug-12	132	0.00027	0.0006	< 0.009	0.303	0.00011	0.42	< 0.00001	0.12	0.0092	8.94	< 0.00002	0.00022	< 0.0001	0.000009	0.00037	0.022	0.00005	CA15071-AUG12	0.61	0.63	0.02	1.8%
14-Aug-12	133	0.00006	0.0002	< 0.009	0.280	0.00014	0.34	< 0.00001	0.10	0.0078	7.24	< 0.00002	0.00025	0.0002	0.000003	0.00030	0.027	< 0.00001	CA15151-AUG12	0.51	0.52	0.01	0.9%
21-Aug-12	134	0.00031	0.0003	< 0.009	0.268	< 0.00004	1.16	< 0.00001	0.11	0.0075	7.56	< 0.00002	0.00028	0.0003	0.000010	0.00028	0.032	< 0.00001	CA15239-AUG12	0.55	0.53	-0.01	-1.3%
28-Aug-12	135	0.00029	0.0003	< 0.009	0.279	< 0.00004	0.35	< 0.00001	0.09	0.0074	6.66	< 0.00002	0.00021	0.0005	0.000010	0.00064	0.033	< 0.00001	CA15348-AUG12	0.51	0.51	0.01	0.6%
04-Sep-12	136	0.00045	0.0003	< 0.009	0.266	< 0.00004	0.34	< 0.00001	0.10	0.0071	6.45	< 0.00002	0.00032	< 0.0001	0.000010	0.00033	0.028	< 0.00001	CA15317-SEP12	0.45	0.50	0.04	4.6%
11-Sep-12	137	0.00026	< 0.0001	0.010	0.290	< 0.00004	0.34	< 0.00001	0.11	0.0078	7.01	< 0.00002	0.00015	0.0003	0.000006	0.00024	0.024	0.00001	CA15045-SEP12	0.45	0.48	0.03	2.9%
18-Sep-12	138	0.00008	< 0.0001	< 0.009	0.342	0.00010	0.56	< 0.00001	0.11	0.0111	10.3	< 0.00002	0.00046	< 0.0001	0.000012	0.00033	0.032	< 0.00001	CA15559-SEP12	0.77	0.75	-0.02	-1.5%
25-Sep-12	139	0.00009	0.0003	< 0.009	0.259	0.00011	0.34	0.00007	0.09	0.0108	9.76	< 0.00002	0.00008	< 0.0001	0.000015	0.00019	0.033	< 0.00001	CA15670-SEP12	0.71	0.67	-0.04	-3.3%
02-Oct-12	140	0.00046	0.0007	< 0.009	0.272	< 0.00004	0.66	< 0.00001	0.09	0.0110	9.66	0.00002	0.00063	0.0001	0.000024	0.00018	0.026	< 0.00001	CA15354-OCT12	0.73	0.66	-0.07	-5.0%
09-Oct-12	141	0.00005	0.0030	0.016	0.263	0.00005	0.32	< 0.00001	0.10	0.0084	7.84	< 0.00002	0.00013	0.0004	0.000017	0.00030	0.031	< 0.00001	CA15450-OCT12	0.60	0.56	-0.04	-3.8%
16-Oct-12	142	0.00010	0.0002	< 0.009	0.256	< 0.00004	0.46	< 0.00001	0.10	0.0067	6.43	< 0.00002	0.00015	< 0.0001	0.000002	0.00014	0.030	< 0.00001	CA15570-OCT12	0.50	0.46	-0.04	-4.4%
23-Oct-12	143	0.00619	0.0016	< 0.009	0.268	0.00006	0.31	< 0.00001	0.10	0.0068	6.29	< 0.00002	0.00013	0.0002	0.000004	0.00022	0.038	< 0.00001	CA15652-OCT12	0.49	0.47	-0.01	-1.4%
30-Oct-12	144	0.00011	0.0003	< 0.009	0.271	0.00013	0.72	< 0.00001	0.11	0.0069	6.34	< 0.00002	0.00006	< 0.0001	0.000018	0.00022	0.031	< 0.00001	CA15744-OCT12	0.42	0.46	0.04	4.7%
06-Nov-12	145	0.00028	0.0003	< 0.009	0.263	< 0.00004	0.32	< 0.00001	0.10	0.0067	5.83	< 0.00002	0.00028	< 0.0001	0.000011	0.00014	0.026	< 0.00001	CA11210-NOV12	0.36	0.47	0.11	13.0%
13-Nov-12	146	0.00011	0.0001	< 0.009	0.273	< 0.00004	0.34	< 0.00001	0.08	0.0066	6.64	< 0.00002	0.00002	< 0.0001	0.000015	0.00015	0.032	< 0.00001	CA15251-NOV12	0.48	0.48	0.00	0.4%
20-Nov-12	147	0.00011	0.0007	< 0.009	0.360	0.00009	0.51	< 0.00001	0.12	0.0116	10.5	< 0.00002	0.00014	0.0001	0.000007	0.00016	0.045	< 0.00001	CA15347-NOV12	0.73	0.80	0.07	4.8%
27-Nov-12	148	0.00019	0.0004	< 0.009	0.388	0.00007	0.75	< 0.00001	0.11	0.0128	11.7	< 0.00002	0.00046	< 0.0001	0.000003	< 0.00003	0.039	< 0.00001	CA15376-NOV12	0.83	0.89	0.06	3.8%
04-Dec-12	149	0.00011	< 0.0001	< 0.009	0.257	< 0.00004	0.37	< 0.00001	0.09	0.0069	6.28	< 0.00002	0.00020	0.0002	0.000005	0.00015	0.022	0.00001	CA15038-DEC12	0.40	0.47	0.07	8.4%
11-Dec-12	150	0.00078	< 0.0001	< 0.009	0.323	0.00006	0.51	< 0.00001	0.08	0.0084	7.42	< 0.00002	0.00019	0.0001	0.000013	0.00049	0.022	< 0.00001	CA15164-JAN13	0.54	0.62	0.08	6.7%
18-Dec-12	151	0.00010	0.0006	< 0.009	0.271	< 0.00004	0.33	0.00001	0.08	0.0109	9.49	< 0.00002	0.00053	0.0002	0.000134	0.00026	0.026	< 0.00001	CA15269-DEC12	0.66	0.67	0.01	0.7%
25-Dec-12	152	0.00069	0.0002	< 0.009	0.242	0.00006	0.23	< 0.00001	0.08	0.0100	7.47	< 0.00002	0.00017	< 0.0001	0.000005	0.00022	0.029	< 0.00001	CA15361-DEC12	0.53	0.54	0.01	0.8%
01-Jan-13	153	0.00146	0.0002	< 0.009	0.258	0.00029	0.36	< 0.00001	0.09	0.0095	8.11	< 0.00002	0.00014	< 0.0001	0.000007	0.00016	0.037	< 0.00001	CA15056-JAN13	0.67	0.58	-0.09	-7.4%
08-Jan-13	154	0.00102	< 0.0001	< 0.009	0.309	0.00012	0.54	< 0.00001	0.09	0.0080	7.01	< 0.00002	0.00025	0.0001	0.000003	0.00021	0.020	0.00033	CA15153-JAN13	0.56	0.56	0.00	0.2%
15-Jan-13	155																						
22-Jan-13	156																						
29-Jan-13	157																						
05-Feb-13	158																						
12-Feb-13	159																						

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Sample = 588142

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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
02-Feb-10	1	500	420	7.61	356	120	#N/A	1.8	21.6	39	-	-	25.9	0.0858	0.0011	0.0042	0.00245	< 0.00002	0.00001	0.028	< 0.000003	8.16	< 0.0005	0.000100	0.0018	< 0.01	0.00009	0.004	1.35	0.026
09-Feb-10	2	500	475	7.55	304	107	#N/A	1.8	21.6	24	-	-	26.2	0.108	0.0020	0.0043	0.00214	< 0.00002	< 0.00001	0.041	< 0.000003	8.07	< 0.0005	0.000033	0.0006	< 0.01	0.00005	0.003	1.48	0.035
16-Feb-10	3	500	460	7.44	290	79	#N/A	2.3	21.2	16	-	-	23.1	0.141	0.0016	0.0030	0.00227	< 0.00002	0.00001	0.036	< 0.000003	7.24	0.0010	0.000010	0.0006	< 0.01	0.00008	0.002	1.21	0.037
23-Feb-10	4	500	510	7.69	323	35	#N/A	1.7	16.8	5	-	-	15.9	0.183	0.0008	0.0017	0.00129	< 0.00002	< 0.00001	0.015	< 0.000003	5.18	< 0.0005	0.000016	< 0.0005	< 0.01	0.00009	0.002	0.731	0.024
02-Mar-10	5	500	435	7.63	313	47	#N/A	1.4	15.5	8	-	-	17.1	0.140	0.0011	0.0018	0.00176	< 0.00002	< 0.00001	0.017	0.000030	5.34	< 0.0005	0.000016	0.0007	< 0.01	0.00010	< 0.001	0.903	0.024
09-Mar-10	6	500	455	7.40	358	42	#N/A	1.9	12.9	6	-	-	17.1	0.0931	0.0009	0.0013	0.00177	< 0.00002	< 0.00001	0.017	< 0.000003	5.58	< 0.0005	0.000013	0.0011	< 0.01	0.00013	< 0.001	0.765	0.042
16-Mar-10	7	500	465	7.30	343	36	#N/A	2.0	13.5	4	< 0.2	< 0.06	18.3	0.1010	0.0007	0.0012	0.00149	< 0.00002	< 0.00001	0.021	< 0.000003	5.87	< 0.0005	0.000009	< 0.0005	< 0.01	0.00008	< 0.001	0.878	0.044
23-Mar-10	8	500	430	7.30	351	38	#N/A	2.9	11.7	7	< 0.2	< 0.06	16.4	0.0959	0.0006	0.0010	0.00145	< 0.00002	< 0.00001	0.0128	< 0.000003	5.4	< 0.0005	0.000012	< 0.0005	< 0.01	0.0001	0.002	0.72	0.036
30-Mar-10	9	500	485	7.43	358	38	#N/A	2.1	12.2	6	< 0.2	< 0.06	17.4	0.0838	0.0009	0.0009	0.00131	< 0.00002	< 0.00001	0.016	< 0.000003	5.70	0.0006	0.000008	0.0006	< 0.01	0.00011	< 0.001	0.760	0.045
06-Apr-10	10	500	435	7.46	343	43	#N/A	2.0	14.7	9	< 0.2	< 0.06	18.2	0.112	0.0009	0.0011	0.00141	< 0.00002	< 0.00001	0.010	< 0.000003	5.90	0.0006	0.000010	0.0007	< 0.01	0.00047	< 0.001	0.842	0.038
13-Apr-10	11	500	435	7.25	339	33	#N/A	2.8	12.1	5	< 0.2	< 0.06	14.5	0.0944	0.0006	0.0007	0.00143	< 0.00002	< 0.00001	0.010	0.000016	4.82	0.0007	0.000014	< 0.0005	< 0.01	0.00008	0.001	0.59	0.039
20-Apr-10	12	500	470	7.46	323	38	#N/A	2.6	12.7	9	< 0.2	< 0.06	15.9	0.102	0.0007	0.0011	0.00144	< 0.00002	0.00001	0.011	< 0.000003	5.33	0.0008	0.000010	0.0006	< 0.01	0.00044	< 0.001	0.642	0.042
27-Apr-10	13	500	455	7.41	327	35	#N/A	1.9	11.1	8	< 0.2	< 0.06	15.2	0.0879	0.0003	0.0007	0.0017	< 0.00002	< 0.00001	0.007	< 0.000003	5.13	0.0006	0.000015	0.0026	< 0.01	0.00015	< 0.001	0.57	0.039
04-May-10	14	500	445	7.27	344	36	#N/A	2.4	10.9	6	< 0.2	< 0.06	15.9	0.0780	0.0005	0.0007	0.0014	< 0.00002	< 0.00001	0.009	< 0.000003	5.35	0.0006	0.00001	< 0.0005	< 0.01	0.00139	< 0.001	0.63	0.040
11-May-10	15	500	460	7.23	332	34	#N/A	2.2	10.9	6	< 0.2	< 0.06	15.3	0.0849	0.0006	0.0009	0.0013	< 0.00002	< 0.00001	0.009	< 0.000003	5.13	0.0007	0.00001	0.0005	< 0.01	0.00007	< 0.001	0.61	0.040
18-May-10	16	500	460	7.29	342	31	#N/A	2.3	11.1	4	< 0.2	< 0.06	14.3	0.0855	0.0007	0.0010	0.00110	< 0.00002	< 0.00001	0.0094	< 0.000003	4.78	0.0006	0.000056	0.0005	< 0.002	0.00005	< 0.001	0.581	0.032
25-May-10	17	500	460	7.21	353	29	#N/A	3.4	11.3	3	< 0.2	< 0.06	12.2	0.079	0.0005	0.0006	0.0014	< 0.00002	< 0.00001	0.0071	< 0.000003	4.19	< 0.0005	0.00002	0.0007	< 0.002	0.00114	< 0.001	0.41	0.034
01-Jun-10	18	500	445	7.30	336	29	#N/A	2.4	11.2	3	< 0.2	< 0.06	13.7	0.104	0.0006	0.0008	0.0009	< 0.00002	< 0.00001	0.0081	< 0.000003	4.63	0.0007	0.00005	0.0009	0.004	0.00011	< 0.001	0.52	0.036
08-Jun-10	19	500	445	7.21	330	28	#N/A	2.5	11.6	<2	< 0.2	< 0.06	13.9	0.073	0.0006	0.0008	0.0010	< 0.00002	< 0.00001	0.0083	< 0.000003	4.71	0.0006	0.00002	0.001	< 0.002	0.00088	< 0.001	0.52	0.035
15-Jun-10	20	500	450	7.36	329	28	#N/A	2.7	12.1	2	< 0.2	< 0.06	13.5	0.085	0.0007	0.0008	0.0012	< 0.00002	< 0.00001	0.0077	< 0.000003	4.56	< 0.0005	0.000022	0.001	0.002	0.00010	< 0.001	0.51	0.035
22-Jun-10	21	500	445	7.46	423	27	#N/A	1.9	11.3																					
29-Jun-10	22	500	440	7.21	316	27	#N/A	2.2	10.8	4	< 0.2	< 0.06	11.5	0.073	0.0005	0.0016	0.0010	< 0.00002	0.00001	0.0065	< 0.000003	3.91	0.0012	0.0000	0.002	0.028	0.00012	< 0.001	0.421	0.035
06-Jul-10	23	500	460	7.09	346	27	#N/A	2.4	9.9																					
13-Jul-10	24	500	450	7.15	348	27	#N/A	2.6	10.8	<2	< 0.2	< 0.06	11.4	0.07	0.0005	0.0013	0.0009	< 0.00002	< 0.00001	0.0056	< 0.000003	3.84	0.0006	0.0000	0.00	0.004	0.00008	< 0.001	0.437	0.035
20-Jul-10	25	500	445	7.41	335	32	#N/A	3.6	13.8																					
27-Jul-10	26	500	455	7.10	351	27	#N/A	2.9	11.5	6	< 0.2	< 0.06	13.9	0.08	0.0004	0.0019	0.0010	< 0.00002	< 0.00001	0.0057	< 0.000003	4.80	0.0005	0.0000	0.01	0.003	0.00006	< 0.001	0.458	0.036
03-Aug-10	27	500	450	7.33	396	26	#N/A	3.2	10.1	4	< 0.2	< 0.06	12.7	0.08	0.0003	0.0006	0.00133	< 0.00002	< 0.00001	0.0083	< 0.000003	4.44	0.0006	0.0001	0.00	< 0.002	0.00008	< 0.001	0.391	0.033
10-Aug-10	28	500	465	7.55	359	23	#N/A	3.8	10.4	4	< 0.2	< 0.06	11.8	0.0552	< 0.0002	0.0008	0.00086	< 0.00002	< 0.00001	0.0098	< 0.000003	4.12	0.0008	0.000009	< 0.0005	0.006	0.00005	< 0.001	0.376	0.0355
17-Aug-10	29	500	435	7.42	385	24	#N/A	2.9	11.3	<2	< 0.2	< 0.06	12.3	0.0721	0.0006	0.0008	0.00071	< 0.00002	< 0.00001	0.0055	< 0.000003	4.30	< 0.0005	< 0.000002	< 0.0005	< 0.002	0.00006	< 0.001	0.378	0.0319
24-Aug-10	30	500	465	7.29	347	28	#N/A	2.8	13.2	2	< 0.2	< 0.06	14.2	0.0959	0.0006	0.0008	0.00095	< 0.00002	< 0.00001	0.0056	< 0.000003	5.03	0.0005	0.000004	0.0006	0.002	0.00011	< 0.001	0.409	0.0368
31-Aug-10	31	500	455	7.70	394	28	#N/A	4.8	14.1	6	< 0.2	< 0.06	14.5	0.0761	0.0009	0.0008	0.00085	< 0.00002	< 0.00001	0.0055	< 0.000003	5.11	0.0005	0.000035	< 0.0005	< 0.002	0.00010	< 0.001	0.416	0.0218
07-Sep-10	32	500	435	7.05	371	25	#N/A	3.3	11.3	4	< 0.2	< 0.06	11.9	0.0647	0.0003	0.0007	0.00073	< 0.00002	< 0.00001	0.0105	< 0.000003	4.26	0.0007	0.000008	0.0007	0.005	0.00079	< 0.001	0.316	0.0146
14-Sep-10	33	500	445	6.99	367	22	#N/A	3.1	10.3	3	< 0.2	< 0.06	11.9	0.0559	0.0005	0.0015	0.00066	< 0.00002	< 0.00001	0.0047	< 0.000003	4.18	0.0005	0.000017	0.0011	0.003	0.00005	< 0.001	0.364	0.0410
21-Sep-10	34	500	455	7.11	340	21	#N/A	2.7	10.8	4	< 0.2	< 0.06	12.3	0.0602	0.0005	0.0010	0.00066	< 0.00002	0.00005	0.0052	< 0.000003	4.36	< 0.0005	0.000018	0.0029	0.002	0.00004	< 0.001	0.354	0.0366
28-Sep-10	35	500	485	7.13	333	34	#N/A	2.7	12.2	10	< 0.2	< 0.06	15.1	0.0498	0.0005	0.0008	0.00082	< 0.00002	< 0.00001	0.0072	< 0.000003	5.39	< 0.0005	0.000022	< 0.0005	< 0.002	0.00005	< 0.001	0.408	0.0420
05-Oct-10	36	500	450	7.12	331	31	#N/A	2.9	12.2	7	< 0.2	< 0.06	14.4	0.0787	0.0007	0.0009	0.00099	< 0.00002	< 0.00001	0.0063	< 0.000003	5.2	< 0.0005	0.000067	0.0047	< 0.002	0.00014	< 0.001	0.379	0.0395
12-Oct-10	37	500	450	7.09	317	24	#N/A	2.8	10.6	5	< 0.2	< 0.06	12.6	0.0597	0.0051	0.0010	0.00071	< 0.00002	< 0.00001	0.0052	0.000020	4.48	< 0.0005	0.000096	0.0028	< 0.002	0.00009	< 0.001	0.340	0.0377
19-Oct-10	38	500	455	7.08	314	26	#N/A	3.3	11.6	5	< 0.2	< 0.06	12.1	0.0590	0.0005	0.0006	0.00782	< 0.00002	< 0.00001	0.0051	0.000007	4.29	< 0.0005	0.000002	< 0.0005	< 0.002	0.00010	< 0.001	0.324	0.0341
26-Oct-10	39	500	450	7.08	356	23	#N/A	2.5	10.3	4	< 0.2	< 0.06	10.5	0.0528	0.0058	0.0006	0.00058	< 0.00002	< 0.00001	0.0054	< 0.000003	3.73	0.0008	0.000015	0.0012	< 0.002	0.00032	< 0.001	0.286	0.0316
02-Nov-10	40	500	460	7.25	364	11	#N/A	2.5	11.1	5	< 0.2	< 0.06	11.7	0.0654	0.0002	0.0007	0.00078	< 0.00002	< 0.00001	0.0062	< 0.000003	4.15	< 0.0005	0.000003	0.0005	0.003	0.00042	< 0.001	0.324	0.0315
09-Nov-10	41	500	495	7.29	375	28	#N/A	2.9	12.8	3	< 0.2	< 0.06	16.5	0.0454	0.0022	0.0008	0.00080	< 0.00002	< 0.00001	0.0056	0.000011	5.91	0.0005	0.000039	0.0009	0.006	0.00041	< 0.001	0.420	0.0459
16-Nov-10	42	500	450	7.46	333	27	#N/A	3.0	11.5	<2	< 0.2	< 0.06	11.9	0.0490	0.0003	0.0006	0.00066	< 0.00002	< 0.00001	0.0122	0.000003	4.25	0.0006	0.000012	0.0017	< 0.002	0.00077	< 0.001	0.312	0.0353
23-Nov-10	43	500	440	7.08	297	28	#N/A	2.7	12.8	4	< 0.2	< 0.06	12.7	0.0589	0.0004	0.0009	0.00073	< 0.00002	< 0.00001	0.0052	0.000003	4.59	0.0007	0.000028	0.0007	< 0.002	0.00029	< 0.001	0.311	0.0365
30-Nov-10	44	500	455	7.20	325	26	#N/A	3.5	13.4	<2	< 0.2	< 0.06	12.9	0.0661	0.0004	0.0007	0.00836	< 0.00002	< 0.00001	0.0047	< 0.000003	4.57	0.0006	< 0.000002	< 0.0005	< 0.002	0.00008	< 0.001	0.366	0.0374
07-Dec-10	45	500	445	7.06	339	24	#N/A	3.2	11.6	<2	< 0.2	< 0.06	13.8	0.136	0.0004	0.0006	0.00090	< 0.00002	< 0.00001	0.0051	0.000010	4.95	0.0010	0.000015	0.0014	< 0.002	0.00285	< 0.001	0.353	0.0379
14-Dec-10	46	500	455	7.28	351	24	#N/A	3.8	12.7	4	< 0.2	< 0.06	11.8	0.0597	0.0004	0.0005	0.00082	< 0.00002	< 0.00001	0.0070	< 0.000003	4.21	0.0008	0.000002	0.0025	< 0.002	0.00010	< 0.001	0.306	0.0327
21-Dec-10	47	500	470	7.35	366	25	#N/A	4.6	12.7	2	< 0.2	< 0.06	16.0	0.0538	0.0006	0.0009	0.00059	< 0.00002	< 0.00001	0.0037	< 0.000003	5.50	< 0.0005	0.000063	0.0007	< 0.002	0.00032	< 0.001	0.549	0.147
28-Dec-10	48	500	460	7.38	335	23	#N/A	4.6	9.6	<2	< 0.2	< 0.06	12.4	0.0605	0.0009	0.0007	0.00203	< 0.00002	< 0.00001	0.0066	< 0.000003	4.45	0.0010	0.000048	0.0022	< 0.002	0.00189	< 0.001	0.317	0.0306
04-Jan-11	49	500	460	7.32	356	21	#N/A	4.7	11.5	3	< 0.2	< 0.06	11.5	0.0557	0.0002	0.0009	0.00096	< 0.00002	< 0.00001	0.0032	0.000058	4.09	0.0005	0.000066	0.0008	0.004	0.00066	< 0.001	0.306	0.0305
11-Jan-11	50	500	430	7.09	377	23	#N/A	3.0	10.1	4	< 0.2	< 0.06	11.8	0.0395	0.0005	0.0005	0.00085	< 0.00002	< 0.00001	0.0067	< 0.000003	4.22	< 0.0005	0.000019	< 0.0005	0.002	0.00011	< 0.001	0.306	0.0375
18-Jan-11	51	500	455	7.10	344	23	#N/A	3.0	10.5	4	< 0.2	< 0.06	12.6	0.0483	0.0004	0.0006	0.00072	< 0.00002	< 0.00001	0.0034	< 0.000003	4.48	< 0.0005	0.000008	< 0.0005	0.004	0.00004	< 0.001	0.330	0.0357
25-Jan-11	52	500	465	7.17	326	22	#N/A	3.3	10.6	4	< 0.2	< 0.06	12.1	0.0521	0.0003	0.0006	0.00069	< 0.00002	< 0.00001	0.0036	< 0.000003	4.32	< 0.0005	0.000011	< 0.0005	0.007	0.00007	< 0.001	0.308	0.0320
01-Feb-11	53	500	495	7.03	336	22	#N/A	3.1	11.2	<2	< 0.2	< 0.06	14.2	0.0388	0.0003	0.0006	0.00059	< 0.00002	< 0.00001	0.0037	< 0.000003	5.06	< 0.0005	0.000013	< 0.0005	< 0.002	0.00006	< 0.001	0.372	0.0441
08-Feb-11	54	500	460	7.15	349	18	#N/A	2.6	10.1	5	< 0.2	< 0.06	11.9	0.0483	0.0003	0.0006	0.00054	< 0.00002	< 0.00001	0.0029	0.000003	4.27	< 0.0005	0.000007	< 0.0005	0.003	0.00003	< 0.001	0.306	0.0317
15-Feb-11	55	500	450	7.10	339	18	#N/A	2.8	9.8	4	< 0.2	< 0.06	10.5	0.0442	0.0002	0.0005	0.00044	< 0.00002	< 0.00001	0.0046	< 0.000003	3.76	< 0.0005	0.000019	< 0.0005	< 0.002	0.00017	< 0.001	0.263	0.0306
22-Feb-11	56	500	445	7.17	317	21	#N/A	3.0	10.2	7	< 0.2	< 0.06	10.5	0.0423	0.0006	0.0007	0.00050	< 0.00002	< 0.00001	0.0043	0.000005	3.79	< 0.0005	0.000020	< 0.0005	< 0.002	0.00005	< 0.001	0.249	0.0267
01-Mar-11	57	500	450	6.96	324	18	#N/A	2.3	9.0	7	< 0.2	< 0.06	9.92	0.0396	0.0004	0.0006	0.00043	< 0.00002	< 0.00001	0.0031	0.000193	3.57	< 0.0005	0.000010	0.0006	< 0.002	0.00121	< 0.001	0.247	0.0280
08-Mar-11	58	500	465	7.03	303	20	#N/A	3.1	9.6	6	< 0.2	< 0.06	9.63	0.0415	0.0006	0.0005	0.00245	< 0.00002	< 0.00001	0.0032	0.000003	3.46	< 0.0005	0.000021	0.0007	< 0.002	0.00101	< 0.001	0.240	0.0282
15-Mar-11	59	500	445	7.10	289	22	#N/A	3.3	9.4	4	< 0.2	< 0.06	10.7	0.0493	< 0.0002	0.0004	0.00071	< 0.00002	< 0.00001	0.0033	0.000006	3.88	< 0.0005	0.000060	0.0008	0.006	0.00077	< 0.001	0.255	0.0298
22-Mar-11	60	500	455	7.24	285	21	#N/A	3.2	10.3	6	< 0.2	< 0.06	10.00	0.0382	0.0003	0.0004	0.00118	< 0.00002	< 0.00001	0.0026	0.000003	3.61	< 0.0005	0.000078	0.0005	< 0.002	0.00004	< 0.001	0.240	0.0287
29-Mar-11	61	500	460	7.31	276	20	#N/A	3.5	11.1	4	< 0.2	< 0.06	11.2	0.0381	0.0003	0.0004	0.00043	< 0.00002	< 0.00001	0.0026	0.000010	4.04	< 0.0005	0.000022	< 0.0005	< 0.002	0.00004	< 0.001	0.265	0.0310
05-Apr-11	62	500	460	7.21	231	22	#N/A	3.3	10.8	5	< 0.2	< 0.06	10.4	0.0375	0.0002	0.0003	0.00050	< 0.00002	< 0.00001	0.0031	0.000012	3.78	< 0.0005	0.000038	< 0.0005	< 0.002	0.00007	< 0.001	0.246	0.0296
12-Apr-11	63	500	450	7.21	278	20	#N/A	2.9	9.6	4	< 0.2	< 0.06	10.0	0.0388	< 0.0002	0.0005	0.00042	< 0.00002	< 0.00001	0.0026	< 0.000003	3.55	< 0.0005	0.000014	< 0.0005	0.005	0.00007	< 0.001	0.264	0.0353
19-Apr-11	64	500	455	7.38	218	22	#N/A	4.7	12.3	5	< 0.2	< 0.06	10.9	0.0450	< 0.0002	0.0002	0.00048	< 0.00002	< 0.00001	0.0028	0.000255	3.91	< 0.0005	0.000019	< 0.0005	< 0.002	0.00065	< 0.001	0.265	0.0306
26-Apr-11	65	500	450	7.29	261	22	#N/A	2.9	9.7	4	< 0.2	< 0.06	11.0	0.0421	0.0003	0.0006	0.00054	< 0.00002	< 0.00001	0.0027	< 0.000003	3.97	< 0.0005	< 0.000002	< 0.0005	< 0.002	0.00002	< 0.001	0.260	0.0266
03-May-11	66	500	445	7.46	339	20	#N/A	3.1	9.9	4	< 0.2	< 0.06	9.9	0.0415	< 0.0002	0.0003	0.00071	< 0.00002	< 0.00001	0.0040	< 0.000003	3.57	< 0.0005	0.000034	0.0013	0.003	0.00004	< 0.001	0.241	0.0273
10-May-11	67	500	455	7.33	365	20	#N/A	3.0	9.5	4	< 0.2	< 0.06	9.72	0.0564	0.0003	< 0.0002	0.00043	< 0.00002	< 0.00001	0.0034	0.000009	3.49	< 0.0005	0.000074	0.0007	0.002	0.00007	0.001	0.246	0.0267
17-May-11	68	500	450	7.44	314	19	#N/A	2.8	9.8	4	< 0.2	< 0.06	9.5	0.0442	0.0002	0.0005	0.00037	< 0.00002	< 0.00001	0.0023	< 0.000003	3.42	< 0.0005	0.000012	< 0.0005	< 0.002	0.00005	< 0.001	0.225	0.0268
24-May-11	69	500	515	7.57	242	23	#N/A	3.9	9.0	4	< 0.2	< 0.06	11.3	0.0308	< 0.0002	0.0004	0.00055	< 0.00002	< 0.00001	0.0067	< 0.000003	4.13	< 0.0005	0.000020	< 0.0005	< 0.002	0.00003	< 0.001	0.234	0.0323
31-May-11	70	500	455	7.43	231	23	#N/A	3.7	10.3	4	< 0.2	< 0.06	9.1	0.0181	0.0003	0.0005	0.00060	< 0.00002	< 0.00001	0.0028	< 0.000003	3.32	< 0.0005	0.000060	0.0032	< 0.002	0.00005	< 0.001	0.207	0.0238
07-Jun-11	71	500	450	7.30	302	19	#N/A	2.3	9.9	3	< 0.2	< 0.06	10.1	0.0459	0.0002	0.0006	0.00070	< 0.00002	< 0.00001	0.0035	0.000003	3.63	< 0.0005	0.000037	0.0009	0.003	0.00007	< 0.001	0.242	0.0246
14-Jun-11	72	500	445	7.54	269	20	#N/A	2.7	9.1	4	< 0.2	< 0.06	9.5	0.0435	< 0.0002	0.0006	0.00057	< 0.00002	< 0.00001	0.0037	0.000009	3.42	< 0.0005	0.000009	< 0.0005	0.005	0.00005	< 0.001	0.227	0.0237
21-Jun-11	73	500	450	7.30	277	21	#N/A	2.4	9.3	3	< 0.2	< 0.06	10.1	0.0371	< 0.0002	0.0004	0.00045	< 0.00002	< 0.00001	0.0023	< 0.000003	3.66	< 0.0005	0.000012	< 0.0005	< 0.002	0.00020	< 0.001	0.238	0.0263
28-Jun-11	74	500	450	7.28	234	22	#N/A	3.0	10.2	4	< 0.2	< 0.06	10.6	0.0397	< 0.0002	0.0004	0.00044	< 0.00002	< 0.00001	0.0035	0.000003	3.83	< 0.0005	0.000016	< 0.0005	0.002	0.00012	< 0.001	0.248	0.0282
05-Jul-11	75	500	455	7.31	287	22	#N/A	3.3	9.9	3	< 0.2	< 0.06	10.9	0.0391	< 0.0002	0.0006	0.00051	< 0.00002	< 0.00001	0.0048	0.000271	3.93	< 0.0005	0.000036	< 0.0005	< 0.002	0.00015	< 0.001	0.256	0.0241
12-Jul-11	76	500	450	7.13	273	21	#N/A	3.9	9.0	3	< 0.2	< 0.06	11.8	0.0379	0.0003	0.0004	0.00048	< 0.00002	< 0.00001	0.0025	0.000009	4.27	< 0.0005	0.000019	< 0.0005	0.002	0.00085	< 0.001	0.286	0.0292
19-Jul-11	77	500	465	7.45	344	20	#N/A	3.7	9.2	2	< 0.2	< 0.06	10.5	0.0325	0.0003	0.0003	0.00054	< 0.00002	0.00004	0.0041	0.000015	3.77	< 0.0005	0.000460	0.0059	0.002	0.00021	< 0.001	0.263	0.0258
26-Jul-11	78	500	455	7.68	220	21	#N/A	4.6	10.3	<2	< 0.2	< 0.06	10.0	0.0387	0.0004	0.0054	0.00042	< 0.00002	< 0.00001	0.0030	< 0.000003	3.58	< 0.0005	0.000013	< 0.0005	0.042	0.00004	< 0.001	0.265	0.0640

HC 3 *CONFIDENTIAL* *DRAFT*

Sample = 588142

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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
02-Aug-11	79	500	455	7.71	240	21	#N/A	3.3	8.9	2	< 0.2	< 0.06	10.7	0.0401	0.0003	0.0009	0.00060	< 0.00002	< 0.00001	0.0029	< 0.000003	3.86	0.0009	0.000013	< 0.0005	< 0.002	0.00009	< 0.001	0.259	0.0272
09-Aug-11	80	500	450	7.45	198	20	#N/A	2.8	10.0	2	< 0.2	< 0.06	9.2	0.0355	< 0.0002	0.0026	0.00049	< 0.00002	< 0.00001	0.0026	< 0.000003	3.32	0.0008	0.000073	< 0.0005	0.003	0.00006	< 0.001	0.226	0.0224
16-Aug-11	81	500	460	7.67	251	22	#N/A	4.8	11.7	2	< 0.2	< 0.06	11.1	0.0379	< 0.0002	0.0005	0.00050	< 0.00002	< 0.00001	0.0026	< 0.000003	4.00	0.0006	0.000020	< 0.0005	< 0.002	0.00004	< 0.001	0.263	0.0236
23-Aug-11	82	500	455	7.52	178	22	#N/A	4.2	10.6	2	< 0.2	< 0.06	11.4	0.0394	0.0003	0.0004	0.00052	< 0.00002	< 0.00001	0.0030	< 0.000003	4.12	0.0005	0.000014	< 0.0005	0.004	0.00008	< 0.001	0.269	0.0255
30-Aug-11	83	500	455	7.55	240	21	#N/A	4.0	10.0	4	< 0.2	< 0.06	10.8	0.0314	< 0.0002	0.0006	0.00143	< 0.00002	< 0.00001	0.0031	0.000017	3.88	0.0010	0.000011	< 0.0005	0.003	0.00006	< 0.001	0.261	0.0245
06-Sep-11	84	500	455	7.68	241	18	#N/A	3.6	9.1	2	< 0.2	< 0.06	9.34	0.0305	0.0002	0.0005	0.00078	< 0.00002	< 0.00001	0.0025	0.000004	3.37	< 0.0005	0.000013	< 0.0005	< 0.002	0.00024	< 0.001	0.226	0.0200
13-Sep-11	85	500	455	7.65	323	17	#N/A	2.9	9.3	2	< 0.2	< 0.06	9.38	0.0315	0.0002	0.0007	0.00117	< 0.00002	< 0.00001	0.0036	0.000007	3.37	0.0016	0.000015	< 0.0005	< 0.002	0.00023	< 0.001	0.235	0.0233
20-Sep-11	86	500	450	7.40	247	20	#N/A	4.1	9.6	2	< 0.2	< 0.06	9.73	0.0292	0.0003	0.0005	0.00061	< 0.00002	< 0.00001	0.0028	0.000016	3.48	0.0013	0.000020	< 0.0005	0.008	0.00056	< 0.001	0.251	0.0272
27-Sep-11	87	500	455	7.45	313	19	#N/A	4.8	10.0	4	< 0.2	< 0.06	9.20	0.0299	0.0005	0.0049	0.00041	< 0.00002	< 0.00001	0.0011	0.000006	3.29	0.0006	0.000036	< 0.0005	0.004	0.00004	< 0.001	0.240	0.0228
04-Oct-11	88	500	460	7.49	251	19	#N/A	4.0	9.6	3	< 0.2	< 0.06	9.12	0.0335	0.0004	0.0005	0.00078	< 0.00002	< 0.00001	0.0034	0.000005	3.26	0.0006	0.000013	0.0009	< 0.002	0.00006	< 0.001	0.235	0.0218
11-Oct-11	89	500	450	7.67	246	18	#N/A	4.6	9.6	4	< 0.2	< 0.06	9.46	0.0300	0.0027	0.0008	0.00061	< 0.00002	< 0.00001	0.0034	< 0.000003	3.42	0.0006	0.000016	< 0.0005	< 0.002	0.00015	< 0.001	0.227	0.0231
18-Oct-11	90	500	450	7.34	244	20	#N/A	3.9	9.3	3	< 0.2	< 0.06	9.77	0.0324	0.0004	0.0007	0.00058	< 0.00002	< 0.00001	0.0031	< 0.000003	3.49	0.0006	0.000007	< 0.0005	< 0.002	0.00006	< 0.001	0.255	0.0223
25-Oct-11	91	500	455	7.19	292	20	#N/A	2.6	7.9	3	< 0.2	< 0.06	10.4	0.0291	< 0.0002	0.0004	0.00036	< 0.00002	< 0.00001	0.0029	0.000007	3.71	0.0008	0.000011	< 0.0005	0.005	0.00010	< 0.001	0.267	0.0253
01-Nov-11	92	500	460	7.36	232	21	#N/A	4.3	9.3	4	< 0.2	< 0.06	9.85	0.0342	< 0.0002	0.0027	0.00040	< 0.00002	< 0.00001	0.0024	< 0.000003	3.53	0.0006	0.000015	< 0.0005	0.005	0.00006	< 0.001	0.255	0.0229
08-Nov-11	93	500	450	7.48	290	20	#N/A	4.4	9.2	2	< 0.2	< 0.06	10.2	0.0279	0.0003	0.0005	0.00041	< 0.00002	< 0.00001	0.0021	0.000013	3.62	< 0.0005	0.000016	0.0007	0.013	0.00011	< 0.001	0.280	0.0257
15-Nov-11	94	500	455	7.27	216	18	#N/A	4.8	8.8	3	< 0.2	< 0.06	9.02	0.0308	< 0.0002	0.0005	0.00029	< 0.00002	< 0.00001	0.0022	< 0.000003	3.21	< 0.0005	0.000011	< 0.0005	< 0.003	0.00006	< 0.001	0.246	0.0236
22-Nov-11	95	500	450	7.51	275	19	#N/A	4.7	10.0	<2	< 0.2	< 0.06	9.11	0.0520	< 0.0002	0.0013	0.00035	< 0.00002	< 0.00001	0.0053	0.000017	3.24	< 0.0005	0.000030	< 0.0005	< 0.003	0.00011	< 0.001	0.248	0.0221
29-Nov-11	96	500	455	7.55	295	19	#N/A	5.2	10.5	3	< 0.2	< 0.06	9.40	0.0497	< 0.0002	0.0007	0.00034	< 0.00002	< 0.00001	0.0029	0.000027	3.34	< 0.0005	0.000016	< 0.0005	< 0.003	0.00007	< 0.001	0.258	0.0246
06-Dec-11	97	500	450	7.35	320	17	#N/A	4.4	8.6	4	< 0.2	< 0.06	8.86	0.0301	< 0.0002	0.0003	0.00284	< 0.00002	< 0.00001	0.0059	0.000009	3.14	< 0.0005	0.000010	< 0.0005	< 0.003	< 0.00002	< 0.001	0.246	0.0238
13-Dec-11	98	500	450	7.22	235	18	#N/A	4.3	8.9	2	< 0.2	< 0.06	9.30	0.0255	< 0.0002	0.0004	0.00070	< 0.00002	< 0.00001	0.0017	0.000008	3.29	0.0009	0.000009	< 0.0005	< 0.003	0.00013	< 0.001	0.267	0.0231
20-Dec-11	99	500	450	7.52	281	17	#N/A	4.0	9.0	2	< 0.2	< 0.06	8.43	0.0381	< 0.0002	0.0003	0.00039	< 0.00002	< 0.00001	0.0020	< 0.000003	3.00	< 0.0005	0.000008	0.0008	< 0.003	0.00007	< 0.001	0.230	0.0203
27-Dec-11	100	500	455	7.82	283	18	#N/A	4.4	10.7	3	< 0.2	< 0.06	8.77	0.0665	< 0.0002	0.0004	0.00043	< 0.00002	< 0.00001	0.0023	< 0.000003	3.11	< 0.0005	0.000007	< 0.0005	< 0.003	0.00007	< 0.001	0.245	0.0206
03-Jan-12	101	500	450	7.46	301	18	#N/A	4.7	11.4	3	< 0.2	< 0.06	8.93	0.0660	< 0.0002	0.0028	0.00064	< 0.00002	< 0.00001	0.0023	< 0.000003	3.17	< 0.0005	0.000020	< 0.0005	< 0.003	0.00003	< 0.001	0.246	0.0195
10-Jan-12	102	500	450	7.29	315	18	#N/A	3.4	10.2	3	< 0.2	< 0.06	8.54	0.0654	0.0002	0.0004	0.00162	< 0.00002	< 0.00001	0.0021	0.000015	3.01	< 0.0005	0.000008	< 0.0005	< 0.003	0.00004	< 0.001	0.247	0.0191
17-Jan-12	103	500	455	7.31	279	19	#N/A	4.1	10.4	3	< 0.2	< 0.06	10.7	0.0428	< 0.0002	0.0003	0.00050	< 0.00002	< 0.00001	0.0046	0.000006	3.82	< 0.0005	0.000013	< 0.0005	< 0.003	0.00007	< 0.001	0.281	0.0246
24-Jan-12	104	500	485	7.29	383	20	#N/A	4.7	11.5	3	< 0.2	< 0.06	9.47	0.0516	0.0002	0.0004	0.00031	< 0.00002	< 0.00001	0.0021	< 0.000003	3.35	< 0.0005	0.000016	< 0.0005	0.006	0.00002	< 0.001	0.270	0.0193
31-Jan-12	105	500	450	7.07	332	18	#N/A	2.9	10.9	2	< 0.2	< 0.06	8.87	0.0483	< 0.0002	0.0008	0.00049	< 0.00002	< 0.00001	0.0033	0.000003	3.15	< 0.0005	0.000012	0.0012	< 0.003	0.00005	< 0.001	0.246	0.0191
07-Feb-12	106	500	495	7.50	345	26	#N/A	4.8	11.8	4	< 0.2	< 0.06	12.6	0.0338	< 0.0002	0.0004	0.00040	< 0.00002	< 0.00001	0.0021	0.000020	4.50	< 0.0005	0.000015	0.0012	< 0.003	0.00004	< 0.001	0.322	0.0320
14-Feb-12	107	500	450	7.48	389	23	#N/A	4.6	11.4	5	< 0.2	< 0.06	12.4	0.0308	< 0.0002	0.0004	0.00038	< 0.00002	< 0.00001	0.0023	0.000135	4.50	< 0.0005	0.000030	0.0013	0.004	0.00006	< 0.001	0.295	0.0204
21-Feb-12	108	500	455	7.11	367	17	#N/A	2.9	8.9	4	< 0.2	< 0.06	8.92	0.0333	< 0.0002	0.0003	0.00098	< 0.00002	< 0.00001	0.0066	0.000010	3.19	< 0.0005	0.000005	0.0006	< 0.003	0.00004	< 0.001	0.231	0.0182
28-Feb-12	109	500	445	7.08	383	21	#N/A	4.6	11.6	3	< 0.2	< 0.06	10.7	0.0530	< 0.0002	0.0003	0.00075	< 0.00002	< 0.00001	0.0018	0.000025	3.81	< 0.0005	0.000009	0.0008	0.004	0.00019	< 0.001	0.294	0.0219
06-Mar-12	110	500	460	7.20	390	20	#N/A	2.9	9.1	2	< 0.2	< 0.06	9.94	0.0608	< 0.0002	0.0003	0.00051	< 0.00002	< 0.00001	0.0021	0.000023	3.52	< 0.0005	0.000019	0.0008	< 0.003	0.00012	< 0.001	0.278	0.0182
13-Mar-12	111	500	445	7.17	373	18	#N/A	4.4	9.8	2	< 0.2	< 0.06	9.46	0.0356	< 0.0002	0.0010	0.00136	< 0.00002	< 0.00001	0.0031	0.000003	3.34	< 0.0005	0.000049	< 0.0005	< 0.003	0.00004	< 0.001	0.271	0.0185
20-Mar-12	112	500	460	7.19	357	18	#N/A	4.8	8.4	3	< 0.2	< 0.06	9.06	0.0259	< 0.0002	0.0009	0.00042	< 0.00002	< 0.00001	0.0019	< 0.000003	3.19	< 0.0005	0.000007	< 0.0005	< 0.003	0.00004	< 0.001	0.266	0.0208
27-Mar-12	113	500	455	7.02	362	19	#N/A	3.6	8.0	3	< 0.2	< 0.06	9.84	0.0607	< 0.0002	0.0024	0.00046	< 0.00002	< 0.00001	0.0018	0.000007	3.49	< 0.0005	< 0.000002	< 0.0005	0.008	0.00005	< 0.001	0.275	0.0183
03-Apr-12	114	500	455	6.97	375	18	#N/A	4.3	7.9	3	< 0.2	< 0.06	9.18	0.0582	< 0.0002	0.0003	0.00046	< 0.00002	< 0.00001	0.0016	0.000054	3.24	< 0.0005	0.000027	0.0009	< 0.003	0.00007	< 0.001	0.266	0.0175
10-Apr-12	115	500	455	7.06	337	20	#N/A	2.4	7.9	4	< 0.2	< 0.06	9.78	0.0390	< 0.0002	0.0003	0.00034	< 0.00002	< 0.00001	0.0023	< 0.000003	3.45	< 0.0005	0.000014	< 0.0005	< 0.003	0.00004	< 0.001	0.284	0.0181
17-Apr-12	116	500	460	7.13	368	21	#N/A	3.8	8.0	5	< 0.2	< 0.06	9.75	0.0406	< 0.0002	< 0.0002	0.00064	< 0.00002	< 0.00001	0.0023	< 0.000003	3.45	< 0.0005	0.000005	0.0011	< 0.003	0.00005	< 0.001	0.280	0.0170
24-Apr-12	117	500	465	7.12	432	19	#N/A	2.8	8.6	2	< 0.2	< 0.06	9.4	0.0477	< 0.0002	0.0009	0.00044	< 0.00002	< 0.00001	0.0018	< 0.000003	3.32	< 0.0005	0.000015	0.0017	0.004	0.00024	< 0.001	0.272	0.0176
01-May-12	118	500	450	7.45	346	19	#N/A	4.6	9.8	4	< 0.2	< 0.06	9.66	0.0422	< 0.0002	0.0002	0.00033	< 0.00002	< 0.00001	0.0018	< 0.000003	3.42	< 0.0005	0.000007	< 0.0005	< 0.003	0.00003	< 0.001	0.273	0.0197
08-May-12	119	500	450	7.15	388	18	#N/A	3.1	8.6	2	< 0.2	< 0.06	8.98	0.0341	< 0.0002	0.0002	0.00040	< 0.00002	< 0.00001	0.0030	< 0.000003	3.17	< 0.0005	0.000008	0.0005	< 0.003	0.00005	< 0.001	0.257	0.0169
15-May-12	120	500	460	7.20	336	18	#N/A	2.7	8.3	3	< 0.2	< 0.06	8.9	0.0455	< 0.0002	< 0.0002	0.00036	< 0.00002	< 0.00001	0.0025	< 0.000003	3.15	< 0.0005	0.000088	0.0008	< 0.003	0.00006	< 0.001	0.260	0.0148
22-May-12	121	500	455	7.13	340	16	#N/A	3.7	8.1	3	< 0.2	< 0.06	8.57	0.0638	< 0.0002	0.0003	0.00028	< 0.00002	< 0.00001	0.0017	< 0.000003	3.03	< 0.0005	0.000018	0.0006	0.003	< 0.00002	< 0.001	0.243	0.0143
29-May-12	122	500	450	7.03	362	15	#N/A	2.9	7.5	2	< 0.2	< 0.06	8.87	0.0456	< 0.0002	0.0005	0.00025	< 0.00002	< 0.00001	0.0023	< 0.000003	3.11	< 0.0005	0.000016	< 0.0005	< 0.003	< 0.00002	< 0.001	0.269	0.0164
05-Jun-12	123	500	455	7.05	381	16	#N/A	3.5	8.3	2	< 0.2	< 0.06	9.16	0.0500	< 0.0002	0.0002	0.00032	< 0.00002	< 0.00001	0.0029	< 0.000003	3.22	< 0.0005	0.000021	0.0008	< 0.003	< 0.00002	< 0.001	0.273	0.0175
12-Jun-12	124	500	450	7.21	364	18	#N/A	3.1	8.5	3	< 0.2	< 0.06	9.71	0.0529	< 0.0002	0.0006	0.00029	< 0.00002	< 0.00001	0.0031	< 0.000003	3.41	< 0.0005	< 0.000002	< 0.0005	< 0.003	0.00002	< 0.001	0.290	0.0169
19-Jun-12	125	500	470	7.13	382	18	#N/A	2.5	7.7	2	< 0.2	< 0.06	9.14	0.0480	< 0.0002	0.0003	0.00028	< 0.00002	< 0.00001	0.0025	< 0.000003	3.20	< 0.0005	0.000014	< 0.0005	< 0.003	< 0.00002	< 0.001	0.277	0.0176
26-Jun-12	126	500	455	7.16	363	20	#N/A	2.9	8.2	4	< 0.2	< 0.06	9.65	0.0587	< 0.0002	< 0.0002	0.00034	< 0.00002	< 0.00001	0.0035	< 0.000003	3.33	< 0.0005	< 0.000002	0.0008	< 0.003	0.00005	< 0.001	0.323	0.0164
03-Jul-12	127	500	455	7.44	392	21	#N/A	5.7	9.9	3	< 0.2	< 0.06	9.92	0.0375	< 0.0002	0.0002	0.00032	< 0.00002	< 0.00001	0.0025	0.000003	3.49	< 0.0005	0.000005	< 0.0005	< 0.003	0.00006	< 0.001	0.295	0.0204
10-Jul-12	128	500	450	7.04	353	21	#N/A	2.8	7.6	5	< 0.2	< 0.06	10.2	0.0449	< 0.0002	0.0008	0.00053	< 0.00002	< 0.00001	0.0021	< 0.000003	3.56	< 0.0005	< 0.000002	0.0014	< 0.003	0.00003	< 0.001	0.316	0.0175
17-Jul-12	129	500	450	7.21	383	19	#N/A	2.1	7.8	3	< 0.2	< 0.06	9.3	0.0507	< 0.0002	< 0.0002	0.00028	< 0.00002	< 0.00001	0.0025	< 0.000003	3.26	< 0.0005	0.000018	< 0.0005	< 0.003	0.00002	< 0.001	0.294	0.0147
24-Jul-12	130	500	455	7.01	333	18	#N/A	2.4	7.1	2	< 0.2	< 0.06	9.4	0.0450	< 0.0002	< 0.0002	0.00035	< 0.00002	< 0.00001	0.0018	< 0.000003	3.16	< 0.0005	0.000006	< 0.0005	< 0.003	< 0.00002	< 0.001	0.378	0.0166
31-Jul-12	131	500	455	7.19	369	17	#N/A	1.9	6.7	4	< 0.2	< 0.06	8.6	0.0488	0.0003	0.0008	0.00043	< 0.00002	< 0.00001	0.0026	< 0.000003	2.99	< 0.0005	0.000018	< 0.0005	< 0.003	0.00003	< 0.001	0.276	0.0145
07-Aug-12	132	500	465	7.32	353	17	#N/A	2.0	8.3	3	< 0.2	< 0.06	9.2	0.0707	0.0007	0.0009	0.00038	< 0.00002	< 0.00001	0.0023	< 0.000003	3.20	0.0017	0.000145	0.0007	1.00	0.00004	< 0.001	0.293	0.0224
14-Aug-12	133	500	445	7.03	309	19	#N/A	1.7	7.0	2	< 0.2	< 0.06	8.7	0.0515	< 0.0002	< 0.0002	0.00027	< 0.00002	< 0.00001	0.0022	0.000004	3.01	< 0.0005	< 0.000002	0.0017	< 0.003	0.00012	< 0.001	0.287	0.0138
21-Aug-12	134	500	465	6.97	331	18	#N/A	3.0	6.9	4	< 0.2	< 0.06	8.7	0.0474	0.0005	0.0006	0.00029	< 0.00002	< 0.00001	0.0030	< 0.000003	3.00	< 0.0005	0.000006	0.0030	< 0.003	0.00011	< 0.001	0.297	0.0154
28-Aug-12	135	500	460	7.21	398	17	#N/A	4.3	7.7	5	< 0.2	< 0.06	8.4	0.0535	0.0003	0.0029	0.00038	< 0.00002	< 0.00001	0.0023	0.000040	2.93	< 0.0005	0.000094	0.0037	0.003	0.00026	< 0.001	0.258	0.0201
04-Sep-12	136	500	480	6.96	405	19	#N/A	3.5	7.4	5	< 0.2	< 0.06	9.8	0.0676	< 0.0002	0.0002	0.00033	< 0.00002	< 0.00001	0.0025	0.000006	3.43	< 0.0005	0.000050	0.0008	< 0.003	0.00003	< 0.001	0.302	0.0174
11-Sep-12	137	500	465	7.06	388	17	#N/A	2.7	6.6	6	< 0.2	< 0.06	8.6	0.0319	< 0.0002	0.0002	0.00047	< 0.00002	< 0.00001	0.0021	0.000005	3.00	< 0.0005	0.000014	< 0.0005	< 0.003	0.00003	< 0.001	0.277	0.0125
18-Sep-12	138	500	510	7.07	374	26	#N/A	2.3	8.5	5	< 0.2	< 0.06	11.6	0.0358	< 0.0002	0.0004	0.00032	< 0.00002	< 0.00001	0.0027	< 0.000003	4.03	< 0.0005	< 0.000002	< 0.0005	< 0.003	0.00017	< 0.001	0.367	0.0223
25-Sep-12	139	500	440	7.00	367	19	#N/A	2.3	6.8	5	< 0.2	< 0.06	9.1	0.0348	< 0.0002	0.0002	0.00044	< 0.00002	< 0.00001	0.0018	0.000025	3.19	< 0.0005	0.000003	< 0.0005	< 0.003	0.00007	< 0.001	0.281	0.0142
02-Oct-12	140	500	460	7.03	401	19	#N/A	2.4	7.3	5	< 0.2	< 0.06	9.5	0.0304	< 0.0002	0.0003	0.00031	< 0.00002	< 0.00001	0.0031	< 0.000003	3.31	< 0.0005	0.000052	0.0006	< 0.003	0.00007	< 0.001	0.293	0.0176
09-Oct-12	141	500	460	7.16	376	20	#N/A	4.0	7.2	4	< 0.2	< 0.06	8.7	0.0374	< 0.0002	0.0005	0.00039	< 0.00002	< 0.00001	0.0025	< 0.000003	3.04	< 0.0005	0.000618	0.0038	< 0.003	0.00003	< 0.001	0.276	0.0177
16-Oct-12	142	500	455	7.53	401	19	#N/A	4.4	8.3	5	< 0.2	< 0.06	9.0	0.0368	< 0.0002	0.0002	0.00020	< 0.00002	< 0.00001	0.0025	< 0.000003	3.11	< 0.0005	0.000004	0.0008	< 0.003	0.00003	< 0.001	0.288	0.0150
23-Oct-12	143	500	465	6.90	375	17	#N/A	3.1	6.9	4	< 0.2	< 0.06	7.9	0.0443	< 0.0002	< 0.0002	0.00027	< 0.00002	< 0.00001	0.0013	0.000048	2.74	< 0.0005	0.000053	0.0006	< 0.003	0.00009	< 0.001	0.251	0.0149
30-Oct-12	144	500	455	6.94	384	18	#N/A	2.9	7.4	5	< 0.2	< 0.06	10.2	0.0341	< 0.0002	0.0002	0.00093	< 0.00002	< 0.00001	0.0036	0.00164	3.25	< 0.0005	0.000007	0.0010	< 0.003	< 0.00002	< 0.001	0.500	0.0196
06-Nov-12	145	500	450	6.96	375	16	#N/A	3.7	7.0	2	< 0.2	< 0.06	9.17	0.0229	< 0.0002	0.0003	0.00092	< 0.00002	< 0.00001	0.0025	0.000006	3.15	< 0.0005	0.000025	< 0.0005	< 0.003	0.00002	< 0.001	0.313	0.0146
13-Nov-12	146	500	450	7.41	382	15	#N/A	5.5	8.1	3	< 0.2	< 0.06	8.6	0.0204	< 0.0002	0.0002	0.00024	< 0.00002	< 0.00001	0.0024	0.000011	2.94	< 0.0005	0.000064	< 0.0005	< 0.003	0.00004	< 0.001	0.301	0.0158
20-Nov-12	147	500	500	7.41	376	21	#N/A	5.2	9.1	3	< 0.2	< 0.06	10.1	0.0221	< 0.0002	< 0.0002	0.00046	< 0.00002	< 0.00001	0.0024	< 0.000003	3.49	< 0.0005	0.000343	0.0012	0.009	< 0.00002	< 0.001	0.328	0.0192
27-Nov-12	148	500	510	7.37	347	21	#N/A	3.8	8.6	5	< 0.2	< 0.06	10.5	0.0190	< 0.0002	0.0004	0.00026	< 0.00002	< 0.00001	0.0021	< 0.000003	3.67	< 0.0005	0.000101	< 0.0005	< 0.003	< 0.00002	< 0.001	0.313	0.0205
04-Dec-12	149	500	470	7.32	342	14	#N/A	1.8	5.7	4	< 0.2	< 0.06	7.5	0.0229	< 0.0002	< 0.0002	0.00023	< 0.00002	< 0.00001	0.0008	0.000011	2.60	< 0.0005	0.000030	< 0.0005	< 0.003	0.00003	< 0.001	0.249	0.0100
11-Dec-12	150	500	470	7.33	340	15	#N/A	2.1	6.9	4	< 0.2	< 0.06	8.81	0.0405	< 0.0002	0.0002	0.00017	< 0.00002	0.00004	0.0025	< 0.000003	3.08	< 0.0005	0.000030	0.0010	< 0.003	0.00002	< 0.001	0.274	0.0088
18-Dec-12	151	500	460	7.33	311	17	#N/A	2.1	7.3	3	< 0.2	< 0.06	7.69	0.0289	< 0.0002	< 0.0002	0.00024	< 0.00002	< 0.00001	0.0009	0.000003	2.64	< 0.0005	0.000021	0.0005	< 0.003	0.00004	< 0.001	0.265	0.0086
25-Dec-12	152	500	450	7.27	358	16	#N/A	2.9	6.9	<2	< 0.2	< 0.06	8.29	0.0303	< 0.0002	0.0003	0.00023	< 0.00002	< 0.00001	0.0012	0.000005	2.81	< 0.0005	0.000008	< 0.0005	< 0.003	0.00003	< 0.001	0.309	0.0094
01-Jan-13	153	500	460	7.42	356	14	#N/A	2.6	7.4	3	< 0.2	< 0.06	7.60	0.0223	< 0.0002	< 0.0002	0.00079	< 0.00002	< 0.00001	0.0011	< 0.000003	2.58	< 0.0005	0.000014	< 0.0005	< 0.003	0.00002	< 0.001	0.278	0.0109
08-Jan-13	154	500	440	7.50	341	16	#N/A	2.5	8.0	<2	< 0.2	< 0.06	7.34	0.0346	< 0.0002	0.0004	0.00196	< 0.00002	< 0.00001	0.0014	0.000003	2.51	< 0.0005	0.000052	< 0.0005	< 0.003	< 0.00002	< 0.001	0.262	0.0063
15-Jan-13	155	500	455																											
22-Jan-13	156	500	455	7.44	328	14	#N/A	3.5	6.8	4																				
29-Jan-13	157	500	460																											
05-Feb-13	158	500	460	7.40	332	15	#N/A	2.6	6.7	5																				
12-Feb-13	159	500	455																											

Apr 20/10 Al, Mo, Cu, Co, and K

HC 3
Sample = 588142

Date	Cycle	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L					
02-Feb-10	1	< 0.01	0.00094	0.0005	< 0.01	7.75	0.00033	0.66	< 0.00001	12.4	0.0692	11.4	< 0.0002	0.00026	< 0.0001	0.000011	0.00024	0.001	0.00002		1.24	1.26	0.01	0.5%
09-Feb-10	2	0.01	0.00116	0.0001	< 0.01	5.62	0.00029	0.63	< 0.00001	7.40	0.0746	8.74	< 0.0002	< 0.00001	< 0.0001	0.000064	0.00015	< 0.001	< 0.00001		0.93	0.99	0.06	3.0%
16-Feb-10	3	< 0.01	0.00061	0.0005	< 0.01	3.76	0.00022	0.68	< 0.00001	3.39	0.0615	5.66	< 0.0002	0.00006	0.0001	0.000042	0.00016	< 0.001	0.00002		0.76	0.70	-0.05	-3.7%
23-Feb-10	4	< 0.01	0.00013	0.0001	< 0.01	1.78	0.00016	0.56	< 0.00001	0.71	0.0369	1.66	< 0.0002	0.00005	< 0.0001	0.000025	0.00017	< 0.001	0.00003		0.44	0.40	-0.05	-5.5%
02-Mar-10	5	< 0.01	0.00017	< 0.0001	< 0.01	1.82	0.00012	0.47	< 0.00001	0.74	0.0453	2.86	< 0.0002	0.00013	< 0.0001	0.000069	0.00017	< 0.001	0.00004		0.48	0.42	-0.06	-6.4%
09-Mar-10	6	< 0.01	0.00015	0.0005	< 0.01	1.19	0.00008	0.44	< 0.00001	0.43	0.0438	2.88	< 0.0002	0.00030	< 0.0001	0.000041	0.00012	< 0.001	0.00004		0.38	0.39	0.01	0.9%
16-Mar-10	7	< 0.01	0.00028	0.0001	< 0.01	1.19	0.00007	0.47	< 0.00001	0.41	0.0418	2.94	< 0.0002	< 0.00001	< 0.0001	0.000055	0.00012	< 0.001	< 0.00001		0.35	0.41	0.06	7.8%
23-Mar-10	8	< 0.01	0.00015	< 0.0001	< 0.01	0.91	0.00005	0.44	< 0.00001	0.26	0.0384	2.7	< 0.0002	0.00006	< 0.0001	0.000037	0.00010	< 0.001	0.00006		0.38	0.36	-0.02	-2.3%
30-Mar-10	9	< 0.01	0.00018	0.0002	< 0.01	0.88	0.00005	0.48	< 0.00001	0.26	0.0377	2.49	< 0.0002	0.00008	< 0.0001	0.000038	0.0001	< 0.001	0.00008		0.37	0.38	0.01	1.6%
06-Apr-10	10	< 0.01	0.00013	< 0.0001	< 0.01	0.96	< 0.00004	0.52	< 0.00001	0.25	0.0419	2.62	< 0.0002	0.00010	< 0.0001	0.000059	0.00013	< 0.001	0.00001		0.48	0.40	-0.08	-9.3%
13-Apr-10	11	< 0.01	0.00010	< 0.0001	< 0.01	0.59	0.00006	0.37	< 0.00001	0.18	0.0322	1.83	< 0.0002	0.00017	0.0001	0.000036	0.00008	< 0.001	< 0.00001		0.35	0.31	-0.03	-5.1%
20-Apr-10	12	< 0.01	0.00007	0.0002	< 0.01	0.614	0.00004	0.39	< 0.00001	0.16	0.0330	2.34	< 0.0002	0.00018	< 0.0001	0.000124	0.00008	< 0.001	0.00003		0.44	0.34	-0.10	-12.8%
27-Apr-10	13	< 0.01	0.00010	< 0.0001	< 0.01	0.52	0.00085	0.35	< 0.00001	0.19	0.0307	2.35	< 0.0002	0.00017	< 0.0001	0.000052	0.00011	< 0.001	0.00006		0.39	0.32	-0.06	-8.9%
04-May-10	14	< 0.01	0.00013	< 0.0001	< 0.01	0.48	0.00007	0.35	< 0.00001	0.15	0.0328	2.22	< 0.0002	0.00022	< 0.0001	0.000042	0.0001	< 0.001	0.00002		0.34	0.34	-0.01	-0.8%
11-May-10	15	< 0.01	0.00009	< 0.0001	0.03	0.52	0.00006	0.41	0.00002	0.09	0.0308	2.33	< 0.0002	0.00034	< 0.0001	0.000036	0.00015	< 0.001	0.00001		0.34	0.32	-0.02	-3.1%
18-May-10	16	< 0.01	0.00052	0.0001	< 0.009	0.507	0.00014	0.39	< 0.00001	0.16	0.0273	1.51	< 0.0002	0.00012	< 0.0001	0.000045	0.00009	< 0.001	0.00002		0.30	0.31	0.00	0.3%
25-May-10	17	0.02	0.00012	< 0.0001	< 0.009	0.34	< 0.00004	0.30	< 0.00001	0.10	0.0218	1.76	< 0.0002	0.00018	< 0.0001	0.000033	0.0001	< 0.002	0.00011		0.29	0.26	-0.03	-6.0%
01-Jun-10	18	0.03	0.00019	< 0.0001	< 0.009	0.40	0.00012	0.34	< 0.00001	0.14	0.0246	1.75	< 0.0002	0.00018	< 0.0001	0.000045	0.00011	0.001	< 0.00001		0.29	0.29	0.00	0.8%
08-Jun-10	19	< 0.01	0.00011	< 0.0001	< 0.009	0.40	< 0.00004	0.33	< 0.00001	0.11	0.0243	1.70	< 0.0002	0.00013	< 0.0001	0.000033	0.00009	0.002	< 0.00001		0.23	0.29	0.06	11.5%
15-Jun-10	20	< 0.01	0.00016	< 0.0001	0.01	0.37	< 0.00004	0.33	0.00003	0.14	0.0236	1.55	< 0.0002	0.00032	< 0.0001	0.000044	0.00011	< 0.001	0.00003		0.28	0.28	0.00	0.3%
22-Jun-10	21																							
29-Jun-10	22	< 0.01	0.00014	< 0.0001	< 0.009	0.340	< 0.00004	0.31	< 0.00001	0.13	0.0149	1.30	< 0.0002	0.00125	< 0.0001	0.00003	0.00007	0.002	0.00002		0.30	0.24	-0.05	-10.0%
06-Jul-10	23																							
13-Jul-10	24	< 0.01	0.00023	0.0002	0.034	0.303	0.00005	0.30	< 0.00001	0.09	0.0214	1.60	< 0.0002	0.00031	< 0.0001	0.00011	0.0001	0.001	0.00013		0.22	0.24	0.02	5.2%
20-Jul-10	25																							
27-Jul-10	26	0.01	0.00009	< 0.0001	< 0.009	0.297	< 0.00004	0.33	< 0.00001	0.11	0.0214	1.4	< 0.0002	0.00087	< 0.0001	0.00004	0.00011	< 0.001	0.00003		0.36	0.29	-0.07	-10.1%
03-Aug-10	27	< 0.01	0.00014	0.0002	< 0.009	0.251	< 0.00004	0.29	< 0.00001	0.07	0.0195	1.6	< 0.0002	0.00015	< 0.0001	0.00004	0.00007	< 0.001	0.00001		0.29	0.26	-0.02	-4.0%
10-Aug-10	28	< 0.01	0.00011	0.0002	< 0.009	0.241	0.00008	0.29	< 0.00001	0.08	0.0175	1.16	< 0.0002	0.00005	< 0.0001	0.000023	0.00011	< 0.001	< 0.00001		0.29	0.25	-0.04	-8.3%
17-Aug-10	29	< 0.01	0.00013	< 0.0001	< 0.009	0.245	< 0.00004	0.31	0.00001	0.07	0.0174	1.65	< 0.0002	0.00011	< 0.0001	0.000041	0.00011	< 0.001	0.00002		0.23	0.25	0.03	6.1%
24-Aug-10	30	< 0.01	0.00005	0.0002	< 0.009	0.257	0.00006	0.37	< 0.00001	0.08	0.0190	1.49	< 0.0002	0.00041	< 0.0001	0.000030	0.00010	< 0.001	0.00004		0.31	0.29	-0.01	-1.9%
31-Aug-10	31	0.02	0.00011	< 0.0001	< 0.009	0.260	< 0.00004	0.35	< 0.00001	0.05	0.0185	1.86	< 0.0002	0.00002	< 0.0001	0.000031	0.00015	< 0.001	0.00002		0.41	0.30	-0.11	-15.5%
07-Sep-10	32	< 0.01	0.00004	0.0002	0.01	0.198	< 0.00004	0.30	< 0.00001	0.06	0.0121	1.12	< 0.0002	0.00009	< 0.0001	0.000025	0.00017	0.001	0.00003		0.31	0.25	-0.06	-11.2%
14-Sep-10	33	< 0.01	0.00179	0.0002	0.012	0.220	< 0.00004	0.30	< 0.00001	0.08	0.0163	1.12	< 0.0002	0.00013	0.0001	0.000029	0.00011	< 0.001	0.00003		0.27	0.25	-0.02	-4.1%
21-Sep-10	34	0.01	0.00001	0.0002	< 0.009	0.216	0.00087	0.27	< 0.00001	0.13	0.0170	1.79	< 0.0002	0.00016	< 0.0001	0.000024	0.00005	0.001	0.00001		0.30	0.26	-0.04	-7.5%
28-Sep-10	35	< 0.01	0.00034	0.0002	< 0.009	0.212	< 0.00004	0.39	< 0.00001	0.08	0.0217	2.14	< 0.0002	0.00034	< 0.0001	0.000061	0.00009	0.002	< 0.00001		0.45	0.31	-0.14	-18.5%
05-Oct-10	36	0.02	0.00149	< 0.0001	0.014	0.230	< 0.00004	0.34	< 0.00001	0.09	0.0194	1.8	< 0.0002	0.00066	< 0.0001	0.000055	0.00007	0.002	0.00002		0.39	0.30	-0.09	-13.3%
12-Oct-10	37	< 0.01	0.00060	0.0003	< 0.009	0.193	< 0.00004	0.28	< 0.00001	0.12	0.0165	2.27	< 0.0002	0.00037	0.0002	0.000021	0.00009	0.001	0.00003		0.32	0.26	-0.05	-9.3%
19-Oct-10	38	0.01	0.00006	< 0.0001	0.011	0.182	< 0.00004	0.26	< 0.00001	0.06	0.0166	1.20	< 0.0002	0.00004	< 0.0001	0.000042	0.00010	0.001	0.00003	CA14822-OCT10	0.34	0.25	-0.09	-15.1%
26-Oct-10	39	< 0.01	0.00042	0.0003	0.022	0.158	0.00328	0.22	< 0.00001	0.10	0.0128	1.43	< 0.0002	0.00007	< 0.0001	0.000037	0.00010	0.002	< 0.00001	CA11459-OCT10	0.29	0.22	-0.07	-14.0%
02-Nov-10	40	< 0.01	0.00010	0.0006	0.017	0.177	< 0.00004	0.26	< 0.00001	0.10	0.0147	1.33	< 0.0002	0.00005	< 0.0001	0.000031	< 0.00003	< 0.001	0.00003	CA11315-NOV10	0.33	0.24	-0.08	-14.6%
09-Nov-10	41	< 0.01	0.00035	0.0003	0.022	0.184	< 0.00004	0.36	< 0.00001	0.11	0.0214	2.13	< 0.0002	0.00025	< 0.0001	0.000091	0.00008	0.002	< 0.00001	CA11435-NOV10	0.32	0.34	0.02	3.0%
16-Nov-10	42	0.02	0.00016	0.0003	< 0.009	0.164	< 0.00004	0.25	< 0.00001	0.06	0.0149	1.40	< 0.0002	0.00027	< 0.0001	0.000053	0.00005	0.003	0.00001	CA10265-NOV10	0.23	0.24	0.01	2.9%
23-Nov-10	43	< 0.01	0.00348	< 0.0001	< 0.009	0.168	< 0.00004	0.27	< 0.00001	0.04	0.0153	0.79	< 0.0002	0.00014	< 0.0001	0.000119	0.00008	0.004	0.00003	CA11701-NOV10	0.34	0.26	-0.08	-13.1%
30-Nov-10	44	< 0.01	0.00059	0.0003	< 0.009	0.195	0.00004	0.32	< 0.00001	0.09	0.0160	1.13	< 0.0002	0.00230	< 0.0001	0.000253	0.00011	0.002	0.00003	CA14008-DEC10	0.27	0.27	0.00	0.0%
07-Dec-10	45	< 0.01	0.00050	0.0002	0.021	0.153	< 0.00004	0.27	< 0.00001	0.06	0.0136	0.93	< 0.0002	0.00066	< 0.0001	0.000108	0.00007	0.002	0.00003	CA14206-DEC10	0.23	0.28	0.05	9.8%
14-Dec-10	46	< 0.01	0.00040	0.0003	< 0.009	0.148	< 0.00004	0.23	< 0.00001	0.08	0.0132	0.94	< 0.0002	0.00086	< 0.0001	0.000152	0.00011	0.001	0.00001	CA10970-DEC10	0.34	0.24	-0.09	-16.3%
21-Dec-10	47	< 0.01	0.00004	0.0005	0.055	0.128	< 0.00004	0.25	< 0.00001	0.08	0.0130	1.68	< 0.0002	0.00015	< 0.0001	0.000045	0.00007	0.010	< 0.00001	CA10453-DEC10	0.30	0.33	0.03	4.9%
28-Dec-10	48	< 0.01	0.00021	0.0002	0.025	0.150	< 0.00004	0.30	< 0.00001	0.09	0.0137	1.33	< 0.0002	0.00033	< 0.0001	0.000027	0.00009	0.003	0.00003	CA10140-JAN11	0.19	0.26	0.06	14.2%
04-Jan-11	49	< 0.01	0.00029	0.0013	0.010	0.117	< 0.00004	0.22	0.00001	0.06	0.0117	1.21	< 0.0002	0.00008	0.0006	0.000066	0.00011	0.005	0.00002	CA10880-JAN11	0.29	0.23	-0.06	-10.8%
11-Jan-11	50	< 0.01	0.00007	0.0002	< 0.009	0.122	< 0.00004	0.19	< 0.00001	0.07	0.0123	1.10	< 0.0002	0.00015	< 0.0001	0.000048	0.00006	0.001	0.00002	CA14437-JAN11	0.28	0.24	-0.04	-8.1%
18-Jan-11	51	< 0.01	0.00006	< 0.0001	0.033	0.132	0.00010	0.24	< 0.00001	0.07	0.0132	1.15	< 0.0002	0.00015	< 0.0001	0.000025	0.00006	< 0.001	0.00005	CA10982-JAN11	0.29	0.26	-0.04	-6.5%
25-Jan-11	52	< 0.01	0.00003	0.0009	< 0.009	0.114	0.00016	0.23	< 0.00001	0.06	0.0130	1.23	< 0.0002	0.00021	< 0.0001	0.000024	0.00008	0.002	0.00003	CA11047-JAN11	0.29	0.25	-0.05	-8.9%
01-Feb-11	53	< 0.01	0.00006	0.0002	0.072	0.156	0.00005	0.26	< 0.00001	0.06	0.0139	1.94	< 0.0002	0.00038	< 0.0001	0.000030	0.00007	0.001	0.00003	CA14121-FEB11	0.22	0.29	0.06	12.6%
08-Feb-11	54	0.04	0.00014	< 0.0001	0.012	0.111	< 0.00004	0.25	< 0.00001	0.04	0.0119	0.99	< 0.0002	0.00038	< 0.0001	0.000027	0.00005	< 0.001	0.00001	CA14249-FEB11	0.31	0.24	-0.06	-11.4%
15-Feb-11	55	< 0.01	0.00027	0.0002	0.030	0.107	< 0.00004	0.21	< 0.00001	0.03	0.0100	0.76	< 0.0002	0.00002	< 0.0001	0.000017	< 0.00003	< 0.001	< 0.00001	CA14449-FEB11	0.28	0.21	-0.07	-13.4%
22-Feb-11	56	< 0.01	0.00026	0.0002	< 0.009	0.112	< 0.00004	0.21	0.00003	0.05	0.0100	1.08	< 0.0002	0.00008	< 0.0001	0.000014	0.00005	< 0.001	0.00006	CA14656-FEB11	0.35	0.21	-0.13	-23.9%
01-Mar-11	57	0.01	0.00006	0.0002	0.031	0.084	< 0.00004	0.20	< 0.00001	0.06	0.0097	0.80	< 0.0002	0.00018	< 0.0001	0.000018	0.00006	0.014	< 0.00001	CA14060-MAR11	0.33	0.20	-0.12	-23.3%
08-Mar-11	58	< 0.01	0.00019	0.0002	< 0.009	0.090	< 0.00004	0.16	< 0.00001	0.05	0.0092	0.70	< 0.0002	0.00027	< 0.0001	0.000021	0.00004	0.003	0.00004	CA14274-MAR11	0.32	0.20	-0.12	-23.4%
15-Mar-11	59	< 0.01	0.00005	0.0006	0.011	0.089	0.00011	0.20	< 0.00001	0.07	0.0099	1.02	< 0.00002	0.00040	< 0.0001	0.000025	0.00005	0.007	0.00004	CA14457-MAR11	0.27	0.22	-0.05	-10.4%
22-Mar-11	60	< 0.01	0.00002	0.0003	0.012	0.082	< 0.00004	0.18	< 0.00001	0.01	0.0092	0.78	< 0.0002	0.00024	< 0.0001	0.000018	< 0.00003	< 0.001	0.00002	CA10460-MAR11	0.33	0.20	-0.13	-24.0%
29-Mar-11	61	< 0.01	0.00004	0.0002	< 0.009	0.092	< 0.00004	0.20	< 0.00001	0.06	0.0097	0.95	< 0.0002	0.00009	< 0.0001	0.000022	0.00004	< 0.001	0.00002	CA14922-MAR11	0.30	0.23	-0.08	-14.4%
05-Apr-11	62	< 0.01	0.00008	0.0002	0.020	0.087	< 0.00004	0.19	< 0.00001	0.04	0.0094	1.12	< 0.0002	0.00032	< 0.0001	0.000018	< 0.00003	0.001	0.00003	CA14224-APR11	0.32	0.21	-0.11	-20.1%
12-Apr-11	63	< 0.01	0.00029	< 0.0001	0.010	0.086	< 0.00004	0.17	< 0.00001	0.05	0.0089	0.90	< 0.0002	0.00017	< 0.0001	0.000050	0.00004	0.001	0.00003	CA14457-APR11	0.28	0.20	-0.07	-15.1%
19-Apr-11	64	< 0.01	0.00137	0.0002	< 0.009	0.082	0.00044	0.19	< 0.00001	0.04	0.0094	1.25	< 0.0002	0.00006	< 0.0001	0.000023	0.00010	0.022	0.00004	CA11358-APR11	0.35	0.22	-0.13	-22.6%
26-Apr-11	65	< 0.01	0.00004	0.0003	< 0.009	0.081	< 0.00004	0.17	< 0.00001	0.05	0.0094	1.23	< 0.0002	0.00004	< 0.0001	0.000015	0.00003	< 0.001	0.00002	CA14943-APR11	0.28	0.22	-0.05	-10.7%
03-May-11	66	0.04	0.00008	0.0002	< 0.009	0.084	< 0.00004	0.16	< 0.00001	0.04	0.0084	0.97	< 0.0002	0.00003	< 0.0001	0.000015	< 0.00003	< 0.001	< 0.00001	CA14148-MAY11	0.28	0.20	-0.08	-16.3%
10-May-11	67	< 0.01	0.00009	0.0009	< 0.009	0.086	0.00008	0.16	< 0.00001	0.05	0.0083	0.96	< 0.0002	0.00010	0.0005	0.000001	0.00016	0.004	< 0.00001	CA14441-MAY11	0.27	0.20	-0.07	-15.8%
17-May-11	68	< 0.01	0.00005	< 0.0001	0.030	0.075	< 0.00004	0.18	0.00001	0.03	0.0074	0.74	< 0.0002	0.00002	< 0.0001	0.000018	< 0.00003	0.002	< 0.00001	CA14703-MAY11	0.28	0.19	-0.09	-18.5%
24-May-11	69	< 0.01	< 0.00001	0.0002	0.016	0.070	< 0.00004	0.74	< 0.00001	0.03	0.0095	1.45	< 0.0002	0.00148	< 0.0001	0.000026	0.00003	0.001	< 0.00001	CA13762-MAY11	0.26	0.23	-0.04	-7.2%
31-May-11	70	< 0.01	0.00004	< 0.0001	< 0.009	0.072	0.00023	0.17	< 0.00001	0.03	0.0077	0.84	< 0.0002	0.00010	< 0.0001	0.000017	< 0.00003	0.004	< 0.00001	CA10185-JUN11	0.29	0.19	-0.10	-21.6%
07-Jun-11	71	0.01	0.00002	< 0.0001	0.018	0.063	< 0.00004	0.23	< 0.00001	0.11	0.0075	0.92	< 0.00002	0.00017	< 0.0001	0.000010	< 0.00003	0.001	0.00002	CA14355-JUN11	0.26	0.21	-0.05	-11.4%
14-Jun-11	72	< 0.01	0.00019	0.0002	< 0.009	0.074	< 0.00004	0.22	< 0.00001	0.07	0.0075	0.86	< 0.00002	0.00021	< 0.0001	0.000019	0.00005	0.001	0.00002	CA10349-JUN11	0.26	0.19	-0.07	-15.3%
21-Jun-11	73	0.01	< 0.00001	< 0.0001	< 0.009	0.060	< 0.00004	0.17	< 0.00001	0.04	0.0074	1.08	< 0.00002	0.00010	< 0.0001	0.000016	0.00003	0.003	< 0.00001	CA14777-JUN11	0.25	0.21	-0.04	-9.4%
28-Jun-11	74	0.02	0.00084	0.0002	< 0.009	0.078	< 0.00004	0.17	< 0.00001	0.05	0.0080	0.99	0.00003	0.00002	0.0002	0.000028	< 0.00003	0.002	< 0.00001	CA15123-JUN11	0.29	0.22	-0.07	-14.2%
05-Jul-11	75	< 0.01	0.00016	0.0002	< 0.009	0.066	< 0.00004	0.20	< 0.00001	0.08	0.0080	1.22	< 0.00002	0.00011	< 0.0001	0.000016	0.00004	0.004	0.00005	CA15472-JUL11	0.26	0.22	-0.04	-8.1%
12-Jul-11	76	0.01	0.00141	0.0001	< 0.009	0.093	0.00006	0.20	< 0.00001	0.18	0.0085	1.20	< 0.00002	0.00009	< 0.0001	0.000037	< 0.00003	0.008	< 0.00001	CA15694-JUL11	0.24	0.25	0.01	1.1%
19-Jul-11	77	< 0.01	0.00008	0.0006	< 0.009	0.075	0.00076	0.16	< 0.00001	0.08	0.0077	1.03	< 0.00002	0.00020	< 0.0001	0.000019	0.00007	0.003	< 0.00001	CA16180-JUL11	0.23	0.22	-0.01	-2.6%
26-Jul-11	78	< 0.01	0.00161	0.0003	< 0.009	0.056	< 0.00004	0.13	< 0.00001	0.04	0.0092	1.03	< 0.00002	< 0.00001	0.0003	0.000015	0.00024	< 0.001	< 0.00001	CA11330-JUL11	0.21	0.20	0.00	-0.5%

HC 3
Sample = 588142

Date	Cycle	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L					
02-Aug-11	79	0.01	0.00029	< 0.0001	< 0.009	0.063	0.00004	0.18	< 0.00001	0.03	0.0076	1.27	< 0.00002	0.00006	< 0.0001	0.000021	0.00004	0.002	0.00002	CA14200-AUG11	0.22	0.22	0.00	-0.6%
09-Aug-11	80	0.02	0.00346	0.0001	< 0.009	0.056	< 0.00004	0.15	< 0.00001	0.04	0.0064	0.98	< 0.00002	0.00002	< 0.0001	0.000049	0.00009	0.002	0.00003	CA14411-AUG11	0.24	0.19	-0.05	-12.5%
16-Aug-11	81	0.01	0.00018	< 0.0001	< 0.009	0.068	< 0.00004	0.17	< 0.00001	0.04	0.0079	1.31	< 0.00002	0.00009	< 0.0001	0.000017	< 0.00003	0.001	< 0.00001	CA14675-AUG11	0.28	0.22	-0.05	-10.3%
23-Aug-11	82	0.02	0.00009	< 0.0001	< 0.009	0.065	< 0.00004	0.18	< 0.00001	0.03	0.0086	1.30	< 0.00002	0.00011	< 0.0001	0.000021	< 0.00003	0.004	< 0.00001	CA10450-AUG11	0.25	0.23	-0.02	-4.8%
30-Aug-11	83	0.01	0.00005	0.0002	< 0.009	0.064	0.00016	0.18	< 0.00001	0.05	0.0073	1.18	< 0.00002	0.00009	< 0.0001	0.000016	< 0.00003	0.003	< 0.00001	CA14264-SEP11	0.28	0.22	-0.06	-12.8%
06-Sep-11	84	< 0.01	0.00167	< 0.0001	< 0.009	0.062	0.00054	0.21	< 0.00001	0.04	0.0057	0.98	< 0.00002	< 0.00001	< 0.0001	0.000040	0.00006	0.004	< 0.00001	CA14213-SEP11	0.22	0.19	-0.03	-8.0%
13-Sep-11	85	0.01	0.00249	< 0.0001	< 0.009	0.058	< 0.00004	0.15	< 0.00001	0.03	0.0061	0.95	< 0.00002	0.00054	< 0.0001	0.000042	< 0.00003	0.006	< 0.00001	CA17321-SEP11	0.23	0.19	-0.04	-8.9%
20-Sep-11	86	0.01	0.00059	0.0002	< 0.009	0.067	0.00010	0.16	< 0.00001	0.03	0.0061	0.99	< 0.00002	0.00044	< 0.0001	0.000022	0.00003	0.003	0.00005	CA14825-SEP11	0.23	0.20	-0.04	-8.2%
27-Sep-11	87	< 0.01	0.00030	0.0002	< 0.009	0.061	< 0.00004	0.11	< 0.00001	0.04	0.0057	0.89	< 0.00002	0.00012	< 0.0001	0.000046	0.00007	0.002	0.00001	CA18921-SEP11	0.28	0.19	-0.10	-20.3%
04-Oct-11	88	< 0.01	0.00007	< 0.0001	< 0.009	0.061	< 0.00004	0.15	< 0.00001	0.04	0.0060	0.87	< 0.00002	0.00009	< 0.0001	0.000022	< 0.00003	0.002	0.00002	CA14153-OCT11	0.25	0.19	-0.07	-15.7%
11-Oct-11	89	< 0.01	0.00021	0.0001	< 0.009	0.044	< 0.00004	0.20	< 0.00001	0.03	0.0051	1.22	< 0.00002	0.00010	< 0.0001	< 0.000001	< 0.00003	0.002	0.00001	CA14391-OCT11	0.27	0.19	-0.08	-17.7%
18-Oct-11	90	< 0.01	0.00018	0.0002	< 0.009	0.062	< 0.00004	0.20	< 0.00001	0.03	0.0086	0.99	< 0.00002	0.00007	< 0.0001	0.000014	< 0.00003	0.001	0.00001	CA14788-OCT11	0.25	0.20	-0.05	-11.4%
25-Oct-11	91	0.01	0.00003	< 0.0001	< 0.009	0.061	< 0.00004	0.22	< 0.00001	0.04	0.0062	1.17	< 0.00002	0.00011	< 0.0001	0.000016	< 0.00003	0.002	0.00002	CA14955-OCT11	0.22	0.21	-0.01	-2.3%
01-Nov-11	92	< 0.01	0.00009	0.0002	< 0.009	0.053	< 0.00004	0.14	< 0.00001	0.05	0.0059	1.07	< 0.00002	0.00007	< 0.0001	0.000015	< 0.00003	0.003	0.00003	CA18036-NOV11	0.27	0.20	-0.07	-14.6%
08-Nov-11	93	< 0.01	0.00002	0.0001	0.010	0.058	0.00013	0.16	< 0.00001	0.04	0.0061	1.01	< 0.00002	0.00005	0.0001	0.000018	0.00013	0.003	< 0.00001	CA18264-NOV11	0.23	0.21	-0.02	-4.5%
15-Nov-11	94	< 0.01	0.00010	0.0001	< 0.009	0.055	< 0.00004	0.07	< 0.00001	0.02	0.0052	0.81	< 0.00002	0.00001	< 0.0001	0.000018	0.00014	0.001	< 0.00001	CA18499-NOV11	0.24	0.18	-0.06	-13.4%
22-Nov-11	95	< 0.01	< 0.00001	0.0002	< 0.009	0.008	0.00017	0.13	< 0.00001	< 0.01	0.0054	0.61	< 0.00002	0.00008	0.0001	0.000020	0.00011	0.004	< 0.00001	CA18773-NOV11	0.20	0.18	-0.02	-4.6%
29-Nov-11	96	0.01	0.00033	0.0003	0.010	0.051	0.00007	0.21	< 0.00001	0.03	0.0059	0.72	< 0.00002	0.00006	0.0001	0.000017	0.00018	0.002	0.00002	CA12006-NOV11	0.27	0.19	-0.08	-17.9%
06-Dec-11	97	< 0.01	0.00005	< 0.0001	< 0.009	0.053	0.00008	0.23	0.00005	< 0.01	0.0049	0.66	< 0.00002	0.00036	< 0.0001	0.000014	0.00017	0.002	0.00001	CA14293-DEC11	0.25	0.18	-0.08	-17.7%
13-Dec-11	98	0.01	0.00009	0.0002	< 0.009	0.046	0.00045	0.11	< 0.00001	0.06	0.0056	0.72	< 0.00002	0.00009	< 0.0001	0.000043	< 0.00003	0.006	0.00003	CA14475-DEC11	0.22	0.19	-0.03	-7.9%
20-Dec-11	99	0.01	0.00002	< 0.0001	< 0.009	0.052	0.00008	0.13	< 0.00001	0.04	0.0048	0.82	< 0.00002	0.00002	< 0.0001	0.000015	0.00013	< 0.001	< 0.00001	CA10397-DEC11	0.22	0.17	-0.05	-13.2%
27-Dec-11	100	< 0.01	0.00029	0.0002	< 0.009	0.038	< 0.00004	0.12	< 0.00001	0.05	0.0047	0.85	< 0.00002	< 0.00001	0.0002	0.000024	0.00031	< 0.001	0.00004	CA10466-DEC11	0.28	0.18	-0.10	-22.1%
03-Jan-12	101	< 0.01	0.00008	0.0002	< 0.009	0.044	< 0.00004	0.10	< 0.00001	0.03	0.0049	0.76	< 0.00002	0.00005	0.0001	0.000034	0.00035	0.002	< 0.00001	CA14133-JAN12	0.29	0.18	-0.11	-23.7%
10-Jan-12	102	< 0.01	0.00009	0.0001	< 0.009	0.046	< 0.00004	0.13	< 0.00001	0.06	0.0051	0.70	< 0.00002	0.00004	0.0003	0.000017	0.00041	0.002	0.00002	CA14430-JAN12	0.27	0.17	-0.09	-21.5%
17-Jan-12	103	< 0.01	0.00010	0.0017	< 0.009	0.047	< 0.00004	0.13	< 0.00001	0.03	0.0054	0.86	< 0.00002	0.00003	0.0002	0.000018	0.00023	0.005	0.00003	CA11226-JAN12	0.27	0.21	-0.06	-11.4%
24-Jan-12	104	< 0.01	0.00004	0.0002	< 0.009	0.054	0.00009	0.13	< 0.00001	0.04	0.0052	0.79	< 0.00002	0.00002	0.0009	0.000016	0.00051	0.001	0.00001	CA10502-JAN12	0.29	0.19	-0.10	-20.3%
31-Jan-12	105	< 0.01	0.00023	< 0.0001	< 0.009	0.050	< 0.00004	0.11	< 0.00001	0.06	0.0046	0.65	0.00003	0.00003	0.0001	0.000023	0.00032	0.003	0.00001	CA10999-FEB12	0.26	0.18	-0.08	-17.2%
07-Feb-12	106	< 0.01	0.00002	0.0002	< 0.009	0.054	0.00008	0.15	< 0.00001	0.03	0.0069	1.38	< 0.00002	0.00001	< 0.0001	0.000036	0.00018	0.002	< 0.00001	CA14207-FEB12	0.32	0.26	-0.06	-11.1%
14-Feb-12	107	< 0.01	0.00003	0.0002	< 0.009	0.061	0.00005	0.15	< 0.00001	0.05	0.0071	1.40	< 0.00002	< 0.00001	< 0.0001	0.000112	0.00003	< 0.001	< 0.00001	CA14420-FEB12	0.33	0.26	-0.07	-12.6%
21-Feb-12	108	< 0.01	0.00009	0.0002	< 0.009	0.041	< 0.00004	0.15	< 0.00001	0.05	0.0050	0.64	< 0.00002	< 0.00001	< 0.0001	0.000018	0.00013	0.002	< 0.00001	CA14754-FEB12	0.26	0.19	-0.08	-16.8%
28-Feb-12	109	< 0.01	0.00003	0.0001	< 0.009	0.053	0.00008	0.16	< 0.00001	0.07	0.0066	0.65	< 0.00002	0.00006	0.0002	0.000015	0.00020	0.005	0.00003	CA14931-FEB12	0.29	0.23	-0.07	-13.1%
06-Mar-12	110	< 0.01	0.00005	0.0002	< 0.009	0.047	< 0.00004	0.17	< 0.00001	0.06	0.0050	0.90	< 0.00002	0.00136	< 0.0001	0.000022	0.00019	0.005	0.00002	CA14216-MAR12	0.22	0.21	-0.01	-3.2%
13-Mar-12	111	< 0.01	0.00183	0.0002	< 0.009	0.040	< 0.00004	0.14	< 0.00001	0.05	0.0051	0.68	< 0.00002	0.00027	< 0.0001	0.000022	0.00004	0.002	0.00003	CA14408-MAR12	0.24	0.20	-0.04	-9.2%
20-Mar-12	112	< 0.01	0.00011	< 0.0001	< 0.009	0.044	0.00008	0.11	< 0.00001	0.04	0.0046	0.80	< 0.00002	0.00012	< 0.0001	0.000019	< 0.00003	< 0.001	0.00007	CA14687-MAR12	0.23	0.19	-0.04	-10.1%
27-Mar-12	113	< 0.01	0.00003	0.0002	< 0.009	0.045	< 0.00004	0.11	< 0.00001	0.05	0.0047	0.95	< 0.00002	0.00007	0.0003	0.000022	0.00033	0.001	0.00002	CA14874-MAR12	0.22	0.21	-0.01	-3.4%
03-Apr-12	114	< 0.01	0.00003	0.0002	< 0.009	0.046	< 0.00004	0.09	0.00001	0.06	0.0045	0.99	< 0.00002	0.00003	< 0.0001	0.000037	0.00017	0.003	0.00002	CA14169-APR12	0.22	0.20	-0.03	-6.2%
10-Apr-12	115	0.05	0.00003	< 0.0001	< 0.009	0.041	< 0.00004	0.11	< 0.00001	0.05	0.0049	1.06	< 0.00002	0.00003	< 0.0001	0.000017	0.00019	0.002	< 0.00001	CA11095-APR12	0.24	0.20	-0.04	-8.1%
17-Apr-12	116	0.04	0.00005	< 0.0001	< 0.009	0.044	< 0.00004	0.12	< 0.00001	0.01	0.0048	1.06	< 0.00002	0.00037	< 0.0001	0.000019	0.00017	0.002	< 0.00001	CA14686-APR12	0.26	0.20	-0.06	-13.2%
24-Apr-12	117	0.03	0.00118	0.0002	< 0.009	0.044	0.00005	0.13	< 0.00001	0.04	0.0048	0.87	< 0.00002	0.00012	< 0.0001	0.000022	0.00021	0.004	< 0.00001	CA14876-APR12	0.21	0.20	-0.02	-3.9%
01-May-12	118	0.02	0.00021	0.0003	< 0.009	0.042	0.00004	0.11	< 0.00001	0.03	0.0047	0.95	< 0.00002	0.00003	0.0001	0.000092	0.00022	0.001	< 0.00001	CA14088-MAY12	0.28	0.20	-0.08	-16.3%
08-May-12	119	< 0.01	0.00003	0.0001	< 0.009	0.046	< 0.00004	0.10	< 0.00001	0.04	0.0043	0.83	< 0.00002	0.00015	< 0.0001	0.000037	0.00013	0.003	< 0.00001	CA14348-MAY12	0.21	0.19	-0.03	-6.3%
15-May-12	120	0.01	0.00010	0.0001	< 0.009	0.039	0.00004	0.11	< 0.00001	0.04	0.0043	0.77	< 0.00002	0.00002	< 0.0001	0.000020	0.00019	0.009	< 0.00001	CA14621-MAY12	0.23	0.19	-0.04	-9.7%
22-May-12	121	0.01	0.00005	0.0001	< 0.009	0.041	< 0.00004	0.11	< 0.00001	0.06	0.0040	0.76	< 0.00002	0.00001	< 0.0001	0.000040	0.00027	0.001	< 0.00001	CA10508-MAY12	0.22	0.18	-0.04	-10.3%
29-May-12	122	< 0.01	0.00011	< 0.0001	< 0.009	0.051	0.00007	0.18	< 0.00001	0.03	0.0040	0.80	< 0.00002	0.00020	< 0.0001	0.000016	0.00031	0.006	0.00002	CA15134-MAY12	0.19	0.19	0.00	-1.2%
05-Jun-12	123	0.02	0.00014	< 0.0001	< 0.009	0.044	< 0.00004	0.15	< 0.00001	0.05	0.0043	0.88	< 0.00002	< 0.00001	< 0.0001	0.000014	0.00022	0.001	< 0.00001	CA15137-JUN12	0.21	0.19	-0.01	-3.6%
12-Jun-12	124	0.01	0.00005	< 0.0001	< 0.009	0.042	< 0.00004	0.12	< 0.00001	0.03	0.0044	0.82	< 0.00002	0.00009	< 0.0001	0.000015	0.00023	0.002	< 0.00001	CA15174-JUN12	0.23	0.20	-0.03	-6.8%
19-Jun-12	125	< 0.01	0.00004	< 0.0001	< 0.009	0.038	0.00030	0.10	< 0.00001	0.02	0.0042	0.91	< 0.00002	0.00004	< 0.0001	0.000017	0.00023	< 0.001	< 0.00001	CA15309-JUN12	0.20	0.19	0.00	-1.2%
26-Jun-12	126	0.01	0.00006	0.0001	< 0.009	0.086	< 0.00004	0.48	0.00001	0.34	0.0056	1.15	< 0.00002	0.00006	0.0002	0.000020	0.00031	0.002	0.00001	CA15357-JUN12	0.25	0.22	-0.03	-6.5%
03-Jul-12	127	0.01	< 0.00001	< 0.0001	< 0.009	0.041	< 0.00004	0.13	< 0.00001	0.02	0.0047	1.18	< 0.00002	0.00018	0.0001	0.000022	0.00023	0.003	< 0.00001	CA15021-JUL12	0.26	0.21	-0.05	-11.8%
10-Jul-12	128	< 0.01	0.00008	< 0.0001	< 0.009	0.045	0.00008	0.11	< 0.00001	0.04	0.0048	1.23	< 0.00002	0.00017	< 0.0001	0.000019	0.00024	0.002	< 0.00001	CA15118-JUL12	0.26	0.21	-0.04	-9.2%
17-Jul-12	129	0.01	< 0.00001	0.0002	< 0.009	0.045	0.00010	0.11	0.00004	0.06	0.0043	1.05	< 0.00002	0.00003	< 0.0001	0.000013	0.00030	0.002	< 0.00001	CA15186-JUL12	0.22	0.20	-0.02	-5.2%
24-Jul-12	130	0.03	0.00008	< 0.0001	< 0.009	0.162	0.00035	0.18	< 0.00001	0.46	0.0052	1.02	< 0.00002	0.00005	0.0001	0.000011	0.00024	0.002	< 0.00001	CA15302-JUL12	0.18	0.22	0.04	9.1%
31-Jul-12	131	< 0.01	0.00008	< 0.0001	< 0.009	0.039	< 0.00004	0.13	< 0.00001	0.02	0.0036	0.94	< 0.00002	0.00021	< 0.0001	0.000016	0.00029	0.001	< 0.00001	CA15010-AUG12	0.22	0.18	-0.04	-9.1%
07-Aug-12	132	< 0.01	0.00012	0.0005	< 0.009	0.037	0.00010	0.19	< 0.00001	0.04	0.0040	0.99	< 0.00002	0.00016	0.0001	0.000017	0.00028	0.002	< 0.00001	CA15071-AUG12	0.23	0.20	-0.03	-7.5%
14-Aug-12	133	< 0.01	0.00002	0.0002	< 0.009	0.032	0.00010	0.09	< 0.00001	0.04	0.0038	1.07	< 0.00002	0.00033	< 0.0001	0.000014	0.00030	0.003	< 0.00001	CA15151-AUG12	0.18	0.18	0.00	0.2%
21-Aug-12	134	0.04	0.00011	< 0.0001	0.009	0.027	< 0.00004	0.51	< 0.00001	0.03	0.0037	1.26	< 0.00002	0.00023	0.0002	0.000012	0.00023	0.004	< 0.00001	CA15239-AUG12	0.22	0.18	-0.04	-9.5%
28-Aug-12	135	< 0.01	0.00049	0.0006	< 0.009	0.034	< 0.00004	0.11	< 0.00001	0.02	0.0036	0.96	< 0.00002	0.00189	< 0.0001	0.000028	0.00038	0.007	0.00002	CA15348-AUG12	0.26	0.18	-0.08	-18.9%
04-Sep-12	136	0.07	0.00011	< 0.0001	< 0.009	0.034	< 0.00004	0.09	< 0.00001	0.02	0.0043	1.29	< 0.00002	0.00018	< 0.0001	0.000015	0.00033	0.002	< 0.00001	CA15317-SEP12	0.25	0.21	-0.04	-9.8%
11-Sep-12	137	0.01	0.00003	0.0001	< 0.009	0.034	< 0.00004	0.13	< 0.00001	0.04	0.0041	1.30	< 0.00002	0.00010	< 0.0001	0.000023	0.00010	< 0.001	0.00002	CA15405-SEP12	0.26	0.18	-0.08	-17.6%
18-Sep-12	138	0.02	< 0.00001	< 0.0001	< 0.009	0.032	0.00005	0.16	< 0.00001	0.04	0.0053	1.74	< 0.00002	0.00026	< 0.0001	0.000026	0.00021	0.006	< 0.00001	CA15559-SEP12	0.27	0.24	-0.03	-6.6%
25-Sep-12	139	< 0.01	0.00007	< 0.0001	< 0.009	0.031	0.00004	0.09	0.00003	0.03	0.0040	1.32	< 0.00002	0.00006	< 0.0001	0.000038	0.00016	0.008	< 0.00001	CA15670-SEP12	0.24	0.19	-0.05	-11.8%
02-Oct-12	140	0.01	0.00015	0.0002	< 0.009	0.045	< 0.00004	0.29	< 0.00001	0.04	0.0041	1.36	< 0.00002	0.00064	< 0.0001	0.000022	0.00016	< 0.001	< 0.00001	CA15354-OCT12	0.25	0.20	-0.05	-12.0%
09-Oct-12	141	0.01	0.00026	0.0096	< 0.009	0.034	< 0.00004	0.09	< 0.00001	0.03	0.0038	1.22	< 0.00002	0.00015	0.0007	0.000025	0.00037	0.001	< 0.00001	CA15450-OCT12	0.23	0.18	-0.04	-10.8%
16-Oct-12	142	< 0.01	0.00003	0.0002	< 0.009	0.033	< 0.00004	0.16	< 0.00001	0.04	0.0038	1.23	< 0.00002	0.00028	< 0.0001	0.000018	0.00018	0.001	< 0.00001	CA15570-OCT12	0.27	0.19	-0.08	-18.1%
23-Oct-12	143	< 0.01	0.00018	0.0005	< 0.009	0.026	< 0.00004	0.09	< 0.00001	0.03	0.0033	0.87	< 0.00002	0.00006	< 0.0001	0.000021	0.00016	0.005	0.00001	CA15652-OCT12	0.22	0.17	-0.06	-14.6%
30-Oct-12	144	< 0.01	0.00007	< 0.0001	< 0.009	0.051	< 0.00004	0.14	< 0.00001	0.12	0.0045	1.66	< 0.00002	0.00006	< 0.0001	0.000023	0.00018	0.003	< 0.00001	CA15744-OCT12	0.25	0.22	-0.04	-8.1%
06-Nov-12	145	< 0.01	0.00007	0.0002	< 0.009	0.036	< 0.00004	0.11	< 0.00001	0.03	0.0038	1.03	< 0.00002	0.00009	< 0.0001	0.000018	0.00011	0.001	< 0.00001	CA11210-NOV12	0.18	0.19	0.01	1.8%
13-Nov-12	146	0.01	0.00004	< 0.0001	< 0.009	0.030	< 0.00004	0.10	< 0.00001	0.02	0.0035	0.98	< 0.00002	< 0.00001	< 0.0001	0.000018	0.00013	0.004	< 0.00001	CA15251-NOV12	0.22	0.18	-0.05	-11.8%
20-Nov-12	147	< 0.01	0.00001	0.0003	< 0.009	0.029	< 0.00004	0.13	< 0.00001	0.03	0.0044	1.31	< 0.00002	0.00014	< 0.0001	0.000021	0.00012	0.001	< 0.00001	CA15347-NOV12	0.24	0.21	-0.04	-8.1%
27-Nov-12	148	< 0.01	0.00004	0.0002	< 0.009	0.026	0.00007	0.18	< 0.00001	0.03	0.0045	1.55	< 0.00002	0.00017	< 0.0001	0.000018	< 0.00003	0.001	< 0.00001	CA15376-NOV12	0.28	0.21	-0.06	-12.7%
04-Dec-12	149	0.01	0.00002	< 0.0001	< 0.009	0.022	< 0.00004	0.08	< 0.00001	0.01	0.0031	1.09	< 0.00002	0.00009	0.0001	0.000022	0.00013	0.002	0.00002	CA15038-DEC12	0.20	0.15	-0.04	-12.0%
11-Dec-12	150	< 0.01	0.00019	< 0.0001	< 0.009	0.029	< 0.00004	0.11	< 0.00001	0.02	0.0031	1.06	< 0.00002	0.00040	0.0002	0.000019	0.00043	0.002	< 0.00001	CA15164-JAN13	0.22	0.18	-0.04	-9.6%
18-Dec-12	151	< 0.01	0.00004	< 0.0001	< 0.009	0.028	< 0.00004	0.07	< 0.00001	0.03	0.0038	0.96	< 0.00002	0.00008	0.0001	0.000030	0.00013	< 0.001	0.00001	CA15269-DEC12	0.21	0.16	-0.05	-13.5%
25-Dec-12	152	< 0.01	0.00018	< 0.0001	0.013	0.025	< 0.00004	0.07	< 0.00001	0.03	0.0037	1.01	< 0.00002	0.00015	< 0.0001	0.000015	0.00007	0.001	0.00002	CA15361-DEC12	0.14	0.17	0.03	10.7%
01-Jan-13	153	0.01	0.00046	< 0.0001	< 0.009	0.023	0.00018	0.07	< 0.00001	0.03	0.0030	0.88	< 0.00002	0.00014	< 0.0001	0.000014	0.00013	< 0.001	< 0.00001	CA15056-JAN13	0.21	0.16	-0.05	-14.5%
08-Jan-13	154	< 0.01	0.00037	< 0.0001	< 0.009	0.037	0.00006	0.14	< 0.00001	0.02	0.0027	0.80	< 0.00002	0.00018	< 0.0001	0.000017	0.00020	< 0.001	0.00001	CA15153-JAN13	0.16	0.15	-0.01	-2.1%
15-Jan-13	155																							
22-Jan-13	156																							
29-Jan-13	157																							
05-Feb-13	158																							
12-Feb-13	159																							

HC 4

Sample = 731259

CONFIDENTIAL ***DRAFT*** ***DRAFT***

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
02-Feb-10	1	500	385	7.99	346	105	#N/A	1.0	29.2	28	-	-	18.5	0.163	0.0013	0.0011	0.00101	< 0.00002	< 0.00001	0.019	< 0.000003	6.50	< 0.0005	0.000069	0.0014	< 0.01	0.00004	0.006	0.540	0.009	< 0.01	0.00122
09-Feb-10	2	500	490	7.85	307	110	#N/A	1.4	28.6	21	-	-	21.5	0.165	0.0063	0.0018	0.00080	< 0.00002	< 0.00001	0.027	< 0.000003	7.47	< 0.0005	0.000019	0.0008	< 0.01	0.00003	0.006	0.703	0.015	< 0.01	0.00148
16-Feb-10	3	500	440	7.59	297	96	#N/A	2.2	27.3	19	-	-	21.7	0.161	0.0045	0.0015	0.00081	< 0.00002	< 0.00001	0.024	< 0.000003	7.58	0.0007	< 0.000002	0.0011	< 0.01	0.00008	0.005	0.662	0.021	< 0.01	0.00106
23-Feb-10	4	500	430	7.83	332	74	#N/A	1.5	25.7	15	-	-	22.8	0.203	0.0033	0.0012	0.00078	< 0.00002	< 0.00001	0.018	< 0.000003	7.92	< 0.0005	0.000025	< 0.0005	< 0.01	0.00018	0.005	0.732	0.019	< 0.01	0.00057
02-Mar-10	5	500	440	7.77	319	69	#N/A	1.2	20.8	13	-	-	18.4	0.172	0.0024	0.0009	0.00203	< 0.00002	< 0.00001	0.013	< 0.000003	6.44	< 0.0005	0.000023	< 0.0005	< 0.01	0.00004	0.003	0.575	0.017	< 0.01	0.00035
09-Mar-10	6	500	445	7.73	350	56	#N/A	1.5	21.6	8	-	-	18.5	0.169	0.0022	0.0007	0.00057	< 0.00002	< 0.00001	0.012	< 0.000003	6.51	< 0.0005	0.000003	< 0.0005	< 0.01	0.00009	0.003	0.552	0.018	< 0.01	0.00017
16-Mar-10	7	500	435	7.59	343	53	#N/A	1.9	20.7	8	< 0.2	< 0.06	22.6	0.2120	0.0022	0.0012	0.00049	< 0.00002	< 0.00001	0.014	< 0.000003	7.91	< 0.0005	0.000004	< 0.0005	< 0.01	0.00003	0.003	0.700	0.019	< 0.01	0.00023
23-Mar-10	8	500	430	7.58	349	60	#N/A	2.3	20.5	13	< 0.2	< 0.06	22.3	0.1830	0.0020	0.0008	0.00060	< 0.00002	< 0.00001	0.0103	< 0.000003	7.8	0.0006	0.000009	< 0.0005	< 0.01	0.00004	0.004	0.67	0.020	< 0.01	0.00017
30-Mar-10	9	500	485	7.66	362	58	#N/A	1.6	17.4	8	< 0.2	< 0.06	22.5	0.1340	0.0019	0.0006	0.00053	< 0.00002	< 0.00001	0.010	< 0.000003	7.96	0.0008	0.000004	0.0007	< 0.01	0.00007	0.003	0.632	0.030	< 0.01	0.00011
06-Apr-10	10	500	435	7.62	350	68	#N/A	1.8	21.2	15	< 0.2	< 0.06	24.8	0.160	0.0017	0.0013	0.00055	< 0.00002	< 0.00001	0.007	< 0.000003	8.70	0.0006	0.000008	0.0006	< 0.01	0.00003	0.003	0.741	0.026	< 0.01	0.00013
13-Apr-10	11	500	450	7.47	343	50	#N/A	2.5	20.8	8	< 0.2	< 0.06	19.6	0.1730	0.0016	0.0005	0.00073	< 0.00002	< 0.00001	0.007	< 0.000003	7.04	0.0006	0.000008	0.0006	< 0.01	0.00004	0.003	0.50	0.025	< 0.01	0.00009
20-Apr-10	12	500	435	7.69	325	62	#N/A	2.2	21.7	11	< 0.2	< 0.06	22.5	0.205	0.0014	0.0010	0.00068	< 0.00002	< 0.00001	0.007	0.000003	8.08	0.0006	0.000008	< 0.0005	< 0.01	0.00009	0.002	0.556	0.024	< 0.01	0.00006
27-Apr-10	13	500	440	7.67	328	53	#N/A	2.3	18.2	8	< 0.2	< 0.06	20.7	0.1880	0.0009	0.0006	0.0009	< 0.00002	< 0.00001	0.005	< 0.000003	7.50	0.0007	0.000068	0.0042	< 0.01	0.00011	0.002	0.48	0.025	< 0.01	0.00010
04-May-10	14	500	435	7.56	351	58	#N/A	2.0	17.7	11	< 0.2	< 0.06	23.7	0.1480	0.0011	0.0005	0.0007	< 0.00002	< 0.00001	0.006	0.000004	8.60	0.0009	0.00001	0.0007	< 0.01	0.00144	0.002	0.55	0.034	< 0.01	0.00011
11-May-10	15	500	450	7.43	345	59	#N/A	2.1	17.0	7	< 0.2	< 0.06	24.4	0.1290	0.0012	0.0008	0.0006	< 0.00002	< 0.00001	0.006	0.000003	8.81	0.0007	< 0.000002	0.0006	< 0.01	0.00136	0.002	0.57	0.037	< 0.01	0.00009
18-May-10	16	500	415	7.50	353	62	#N/A	2.1	17.3	9	< 0.2	< 0.06	24.8	0.144	0.0011	0.0007	0.00062	< 0.00002	< 0.00001	0.0073	0.000003	8.71	< 0.0005	0.000052	0.0011	0.034	0.00003	0.003	0.751	0.117	< 0.01	0.00037
25-May-10	17	500	455	7.52	362	51	#N/A	3.1	21.4	5	< 0.2	< 0.06	20.0	0.205	0.0011	0.0006	0.0006	< 0.00002	< 0.00001	0.0060	< 0.000003	7.25	< 0.0005	0.00001	0.0006	0.003	0.00007	0.002	0.47	0.022	0.01	0.00012
01-Jun-10	18	500	420	7.55	347	53	#N/A	2.1	20.7	8	< 0.2	< 0.06	21.7	0.206	0.0011	0.0006	0.0005	< 0.00002	< 0.00001	0.0062	< 0.000003	7.73	0.0006	0.00003	0.0011	0.004	0.00026	0.002	0.59	0.026	< 0.01	0.00016
08-Jun-10	19	500	410	7.48	339	46	#N/A	2.3	20.6	3	< 0.2	< 0.06	20.3	0.167	0.0009	0.0005	0.0005	< 0.00002	< 0.00001	0.0060	< 0.000003	7.32	0.0012	0.00001	0.001	0.010	0.00004	0.002	0.49	0.028	< 0.01	0.00011
15-Jun-10	20	500	440	7.63	335	43	#N/A	2.2	21.3	4	< 0.2	< 0.06	18.8	0.188	0.001	0.0006	0.0005	< 0.00002	< 0.00001	0.0052	0.000006	6.85	< 0.0005	0.000011	0.001	0.005	0.00008	0.002	0.41	0.024	< 0.01	0.00020
22-Jun-10	21	500	435	7.75	423	46	#N/A	1.5	20.1																							
29-Jun-10	22	500	440	7.53	324	44	#N/A	1.8	17.4	4	< 0.2	< 0.06	17.8	0.184	0.0007	0.0012	0.0004	< 0.00002	< 0.00001	0.0046	< 0.000003	6.48	0.0012	0.0000	0.001	0.010	0.00009	0.001	0.395	0.024	< 0.01	0.00016
06-Jul-10	23	500	475	7.51	351	47	#N/A	2.1	17.9																							
13-Jul-10	24	500	450	7.35	351	46	#N/A	2.5	17.0	<2	< 0.2	< 0.06	17.2	0.109	0.0009	0.0006	0.00052	< 0.00002	< 0.00001	0.0045	< 0.000003	6.19	0.0006	0.000024	0.0015	0.005	0.00009	0.001	0.417	0.0359	< 0.01	0.00026
20-Jul-10	25	500	440	7.47	339	41	#N/A	3.7	17.0																							
27-Jul-10	26	500	450	7.37	352	45	#N/A	2.7	17.6	6	< 0.2	< 0.06	21.5	0.16	0.0006	0.0011	0.0007	< 0.00002	< 0.00001	0.0043	< 0.000003	7.93	0.0005	0.0000	0.00	0.006	0.00006	0.001	0.412	0.030	< 0.01	0.00010
03-Aug-10	27	500	475	7.50	400	41	#N/A	2.9	15.8	3	< 0.2	< 0.06	19.2	0.13	0.0007	< 0.0002	0.00045	< 0.00002	< 0.00001	0.0061	< 0.000003	7.10	< 0.0005	0.0000	0.00	0.003	0.00004	< 0.001	0.360	0.031	< 0.01	0.00029
10-Aug-10	28	500	440	7.57	362	47	#N/A	3.4	16.5	11	< 0.2	< 0.06	21.1	0.1070	0.0003	0.0004	0.00035	< 0.00002	< 0.00001	0.0074	0.000005	7.81	0.0007	0.000008	< 0.0005	< 0.002	0.00004	< 0.001	0.392	0.0341	< 0.01	0.00013
17-Aug-10	29	500	440	7.55	388	43	#N/A	2.8	16.2	<2	< 0.2	< 0.06	19.4	0.147	0.0007	0.0003	0.00057	< 0.00002	< 0.00001	0.0042	0.000155	7.17	< 0.0005	0.000457	0.0058	0.004	0.00411	< 0.001	0.361	0.0340	< 0.01	0.00029
24-Aug-10	30	500	430	7.38	348	46	#N/A	3.3	16.8	4	< 0.2	< 0.06	20.8	0.129	0.0007	0.0009	0.00046	< 0.00002	< 0.00001	0.0042	0.000006	7.70	0.0006	0.000006	0.0006	0.005	0.00007	0.001	0.385	0.0339	< 0.01	0.00006
31-Aug-10	31	500	455	7.76	396	41	#N/A	4.1	23.6	6	< 0.2	< 0.06	20.0	0.157	0.0011	0.0008	0.00032	< 0.00002	< 0.00001	0.0041	< 0.000003	7.39	< 0.0005	0.000022	0.0007	< 0.002	0.00012	0.001	0.368	0.0097	< 0.01	0.00009
07-Sep-10	32	500	430	7.20	379	47	#N/A	3.2	17.4	6	< 0.2	< 0.06	19.4	0.115	0.0005	0.0005	0.00044	< 0.00002	< 0.00001	0.0078	0.000011	7.19	0.0007	0.000010	0.0009	0.006	0.00080	0.001	0.342	0.0117	< 0.01	0.00005
14-Sep-10	33	500	430	7.18	375	38	#N/A	2.8	15.9	5	< 0.2	< 0.06	18.3	0.103	0.0022	0.0006	0.00036	< 0.00002	< 0.00001	0.0033	< 0.000003	6.73	< 0.0005	0.000011	0.0007	0.006	0.00007	< 0.001	0.356	0.0364	< 0.01	0.00093
21-Sep-10	34	500	460	7.37	345	35	#N/A	2.3	16.7	6	< 0.2	< 0.06	18.4	0.107	0.0007	< 0.0002	0.00040	< 0.00002	0.00005	0.0041	0.000003	6.79	< 0.0005	0.000016	0.0015	0.003	0.00002	< 0.001	0.349	0.0347	< 0.01	0.00004
28-Sep-10	35	500	490	7.34	343	45	#N/A	2.2	17.1	8	< 0.2	< 0.06	19.0	0.09	0.0009	0.0007	0.0004	< 0.00002	< 0.00001	0.0053	0.000013	7.08	< 0.0005	0.0001	< 0.0005	< 0.002	0.00011	0.001	0.34	0.032	< 0.01	0.00030
05-Oct-10	36	500	460	7.33	337	52	#N/A	2.5	16.5	11	< 0.2	< 0.06	21.1	0.114	0.0009	0.0006	0.00073	< 0.00002	< 0.00001	0.0046	< 0.000003	7.84	< 0.0005	0.000051	0.0023	< 0.002	0.00011	< 0.001	0.375	0.0336	< 0.01	0.00102
12-Oct-10	37	500	430	7.26	326	47	#N/A	2.6	15.4	10	< 0.2	< 0.06	21.5	0.108	0.0031	0.0007	0.00047	< 0.00002	< 0.00001	0.0043	0.000006	7.97	< 0.0005	0.000048	0.0033	0.002	0.00007	< 0.001	0.392	0.0331	< 0.01	0.00039
19-Oct-10	38	500	435	7.25	326	40	#N/A	3.0	15.7	8	< 0.2	< 0.06	17.0	0.0942	0.0006	< 0.0002	0.00033	< 0.00002	< 0.00001	0.0035	0.000009	6.31	< 0.0005	0.000005	< 0.0005	< 0.002	0.00007	< 0.001	0.291	0.0299	< 0.01	0.00013
26-Oct-10	39	500	445	7.25	359	38	#N/A	2.5	14.8	8	< 0.2	< 0.06	15.6	0.0839	0.0040	0.0003	0.00041	< 0.00002	< 0.00001	0.0039	0.000007	5.79	0.0006	0.000008	0.0008	0.002	0.00010	< 0.001	0.280	0.0290	< 0.01	0.00035
02-Nov-10	40	500	450	7.41	366	13	#N/A	2.2	14.9	7	< 0.2	< 0.06	17.3	0.1010	0.0004	0.0004	0.00045	< 0.00002	< 0.00001	0.0060	< 0.000003	6.43	< 0.0005	< 0.000002	0.0008	0.006	0.00036	0.001	0.300	0.0286	< 0.01	0.00017
09-Nov-10	41	500	500	7.45	383	39	#N/A	2.6	17.6	5	< 0.2	< 0.06	21.7	0.0712	0.0018	0.0003	0.00041	< 0.00002	< 0.00001	0.0046	0.000005	8.09	0.0005	0.000025	< 0.0005	0.004	0.00044	< 0.001	0.370	0.0407	< 0.01	0.00032
16-Nov-10	42	500	450	7.57	337	41	#N/A	2.8	16.2	6	< 0.2	< 0.06	20.2	0.0901	0.0005	< 0.0002	0.00044	< 0.00002	< 0.00001	0.0082	0.000007	7.52	0.0006	0.000015	< 0.0005	< 0.002	0.00053	0.001	0.340	0.0346	< 0.01	0.00026
23-Nov-10	43	500	440	7.19	307	44	#N/A	2.6	16.6	6	< 0.2	< 0.06	18.0	0.0881	0.0006	0.0005	0.00055	< 0.00002	< 0.00001	0.0035	0.000007	6.71	0.0008	0.000033	0.0006	0.002	0.00007	0.001	0.292	0.0309	< 0.01	0.00264
30-Nov-10	44	500	435	7.31	329	41	#N/A	3.0	17.3	3	< 0.2	< 0.06	18.2	0.110	0.0004	< 0.0002	0.00044	< 0.00002	< 0.00001	0.0032	< 0.000003	6.76	0.0006	0.000008	0.0006	0.003	0.00006	0.001	0.314	0.0336	< 0.01	0.00060
07-Dec-10	45	500	425	7.26	349	47	#N/A	3.1	18.0	4	< 0.2	< 0.06	24.6	0.129	0.0006	0.0004	0.00033	< 0.00002	< 0.00001	0.0039	< 0.000003	9.19	0.0006	0.000012	0.0011	< 0.002	0.00213	0.001	0.398	0.0363	< 0.01	0.00058
14-Dec-10	46	500	415	7.33	358	39	#N/A	3.8	17.1	7	< 0.2	< 0.06	17.7	0.107	0.0005	0.0003	0.00055	< 0.00002	< 0.00001	0.0051	0.000006	6.63	0.0007	0.000010	0.0021	< 0.002	0.00016	< 0.001	0.287	0.0322	< 0.01	0.00047
21-Dec-10	47	500	465	7.39	373	41	#N/A	4.5	18.5	4	< 0.2	< 0.06	22.5	0.117	0.0007	0.0006	0.00064	< 0.00002	< 0.00001	0.0032	< 0.000003	8.28	< 0.0005	0.000026	0.0008	< 0.002	0.00011	< 0.001	0.437	0.110	< 0.01	0.00016
28-Dec-10	48	500	450	7.36	341	37	#N/A	5.6	16.0	4	< 0.2	< 0.06	19.0	0.105	0.0007	0.0004	0.00076	< 0.00002	< 0.00001	0.0057	0.000009	7.12	0.0038	0.000022	0.0010	0.003	0.00162	< 0.001	0.299	0.0324	0.01	0.00030
04-Jan-11	49	500	460	7.41	365	36	#N/A	4.6	18.1	5	< 0.2	< 0.06	17.7	0.113	0.0004	0.0007	0.00063	< 0.00002	< 0.00001	0.0027	0.000012	6.67	< 0.0005	0.000061	0.0006	0.003	0.00063	< 0.001	0.263	0.0284	< 0.01	0.00029
11-Jan-11	50	500	450	7.27	384	37	#N/A	2.8	15.2	5	< 0.2	< 0.06	17.1	0.0879	0.0005	0.0004	0.00033	< 0.00002	< 0.00001	0.0056	0.000006	6.42	< 0.0005	0.000014	< 0.0005	0.003	0.00004	< 0.001	0.250	0.0340	< 0.01	0.00018
18-Jan-11	51	500	430	7.27	356	38	#N/A	2.9	14.6	6	< 0.2	< 0.06	19.5	0.0973	0.0005	0.0004	0.00037	< 0.00002	< 0.00001	0.0024	< 0.000003	7.34	< 0.0005	0.000008	< 0.0005	0.007	0.00006	< 0.001	0.293	0.0345	< 0.01	0.00013
25-Jan-11	52	500	440	7.29	335	38	#N/A	3.1	15.8	6	< 0.2	< 0.06	17.6	0.0821	0.0004	0.0004	0.00040	< 0.00002	< 0.00001	0.0033	0.000009	6.60	< 0.0005	0.000195	< 0.0005	0.003	0.00017	< 0.001	0.263	0.0345	< 0.01	0.00015
01-Feb-11	53	500	425	7.16	347	35	#N/A	2.9	14.3	4	< 0.2	< 0.06	16.1	0.0653	0.0004	0.0003	0.00050	< 0.00002	< 0.00001	0.0035	0.000005	6.03	< 0.0005	0.000019	< 0.0005	< 0.002	0.00004	< 0.001	0.249	0.0312	< 0.01	0.00016
08-Feb-11	54	500	435	7.29	355	30	#N/A	2.6	13.5	8	< 0.2	< 0.06	16.7	0.0857	0.0004	0.0004	0.00029	< 0.00002	< 0.00001	0.0025	0.000008	6.27	< 0.0005	0.000012	< 0.0005	0.007	0.00004	< 0.001	0.245	0.0312	< 0.01	0.00019
15-Feb-11	55	500	440	7.26	347	31	#N/A	2.6	13.0	5	< 0.2	< 0.06	15.5	0.0793	0.0003	0.0004	0.00033	< 0.00002	< 0.00001	0.0037	< 0.000003	5.84	< 0.0005	0.000025	< 0.0005	0.003	0.00003	< 0.001	0.218	0.0301	< 0.01	0.00026
22-Feb-11	56	500	430	7.29	330	35	#N/A	2.9	14.4	9	< 0.2	< 0.06	15.9	0.0698	0.0006	0.0005	0.00025	< 0.00002	< 0.00001	0.0036	0.000007	6.02	< 0.0005	0.000015	< 0.0005	0.002	< 0.00002	< 0.001	0.211	0.0281	< 0.01	0.00019
01-Mar-11	57	500	430	7.15	337	33	#N/A	2.3	12.4	10	< 0.2	< 0.06	15.9	0.0680	0.0004	0.0003	0.00024	< 0.00002	< 0.00001	0.0026	0.000004	5.94	< 0.0005	0.000015	0.0008	0.002	0.00153	< 0.001	0.265	0.0263	0.01	0.00014
08-Mar-11	58	500	430	7.15	316	35	#N/A	3.0	13.0	9	< 0.2	< 0.06	16.0	0.0700	0.0006	0.0002	0.00026	< 0.00002	< 0.00001	0.0028	0.000010	6.00	< 0.0005	0.000024	0.0007	< 0.002	0.00085	< 0.001	0.238	0.0288	< 0.01	0.00023
15-Mar-11	59	500	450	7.25	297	36	#N/A	2.9	15.3	8	< 0.2	< 0.06	16.3	0.0772	0.0003	< 0.0002	0.00034	< 0.00002	< 0.00001	0.0031	0.000006	6.21	< 0.0005	0.000044	0.0007	0.004	0.00092	< 0.001	0.206	0.0327	< 0.01	0.00014
22-Mar-11	60	500	435	7.31	300	38	#N/A	3.3	15.1	6	< 0.2	< 0.06	16.4	0.0831	0.0004	0.0002	0.00109	< 0.00002	< 0.00001	0.0024	0.000009	6.21	< 0.0005	0.000053	0.0008	0.003	0.00005	< 0.001	0.217	0.0316	< 0.01	0.00011
29-Mar-11	61	500	435	7.63	284	34	#N/A	3.3	15.3	4	< 0.2	< 0.06	15.6	0.0754	0.0004	0.0002	0.00022	< 0.00002	< 0.00001	0.0022	< 0.000003	5.90	< 0.0005	0.000015	< 0.0005	< 0.002	0.00005	< 0.001	0.211	0.0265	< 0.01	0.00010
05-Apr-11	62	500	465	7.34	239	36	#N/A	3.2	15.9	7	< 0.2	< 0.06	16.5	0.0793	0.0003	0.0003	0.00025	< 0.00002	< 0.00001	0.0029	0.000008	6.27	< 0.0005	0.000019	< 0.0005	< 0.002	0.00015	< 0.001	0.205	0.0319	< 0.01	0.00014
12-Apr-11	63	500	440	7.31	291	37	#N/A	2.6	13.8	6	< 0.2	< 0.06	16.7	0.0791	0.0003	0.0003	0.00023	< 0.00002	< 0.00001	0.0018	0.000004	6.29	< 0.0005	0.000007	0.0005	0.009	0.00003	< 0.001	0.241	0.0354	< 0.01	0.00031
19-Apr-11	64	500	460	7.65	225	36	#N/A	5.0	21.3	5	< 0.2	< 0.06	16.6	0.0870	0.0003	< 0.0002	0.00020	< 0.00002	< 0.00001	0.0024	0.000010	6.33	< 0.0005	0.000025	< 0.0005	< 0.002	0.00197	< 0.001	0.194	0.0319	< 0.01	0.00075
26-Apr-11	65	500	440	7.53	257	39	#N/A	2.6	20.9	5	< 0.2	< 0.06	18.6	0.127	0.0004	0.0004	0.00041	< 0.00002	< 0.00001	0.0023	< 0.000003	7.12	< 0.0005	< 0.000002	< 0.0005	0.003	0.00004	< 0.001	0.211	0.0311	< 0.01	0.00010
03-May-11	66	500	440	7.46	347	36	#N/A	3.1	15.8	6	< 0.2	< 0.06	16.9	0.105	0.0003	< 0.0002	0.00066	< 0.00002	< 0.00001	0.0035	0.000005	6.43	< 0.0005	0.000018	0.0007	0.005	0.00004	< 0.001	0.204	0.0277	< 0.01	0.00013
10-May-11	67	500	425	7.53	369	38	#N/A	2.8	16.6	6	< 0.2	< 0.06	17.0	0.114	< 0.0002	0.0003	0.00033	< 0.00002	< 0.00001	0.0039	0.000020	6.47	< 0.0005	0.000033	0.0015	< 0.002	0.00005	< 0.001	0.205	0.0251	< 0.01	0.00013
17-May-11	68	500	445	7.59	318	35	#N/A	2.5	16.3	4	< 0.2	< 0.06	16.5	0.104	0.0003	0.0004	0.00024	< 0.00002	< 0.00001	0.0020	< 0.000003	6.29	< 0.0005	0.000014	< 0.0005	< 0.002	0.00002	< 0.001	0.187	0.0285	< 0.01	0.00011
24-May-11	69	500	495	7.54	258	38	#N/A	3.9	14.4	5	< 0.2	< 0.06	18.3	0.0728	< 0.0002	< 0.0002	0.00022	< 0.00002	< 0.00001	0.0069	0.000004	6.99	< 0.0005	0.000028	< 0.0005	< 0.002	0.00023	< 0.001	0.197	0.0359	< 0.01	0.00008
31-May-11	70	500	465	7.45	242	42	#N/A	3.7	14.9	7	< 0.2	< 0.06	18.1	0.0590	0.0005	0.0003	0.00027	< 0.00002	0.00002	0.0020	0.000006	6.92	< 0.0005	0.000051	0.0010	0.002	0.00005	< 0.001	0.204	0.0329	< 0.01	0.00013
07-Jun-11	71	500	425	7.51	323	33	#N/A	3.2	13.7	4	< 0.2	< 0.06	15.5	0.0743	0.0003	0.0002	0.00037	< 0.00002	< 0.00001	0.0023	0.000005	5.91	0.0008	0.000023	< 0.0005	0.004	0.00006	< 0.001	0.176	0.0247	0.01	0.00007
14-Jun-11	72	500	435	7.65	274	34	#N/A	2.2	14.8	5	< 0.2	< 0.06	15.3	0.0952	0.0002	0.0004	0.00033	< 0.00002	< 0.00001	0.0023	0.000003	5.86	< 0.0005	0.000015	< 0.0005	0.006	0.00006	< 0.001	0.170	0.0228	< 0.01	0.00021
21-Jun-11	73	500	445	7.60	281	34	#N/A	2.0	15.7	4	< 0.2	< 0.06	15.8	0.0851	< 0.0002	0.0004	0.00030	< 0.00002	< 0.00001	0.0018	< 0.000003	6.04	< 0.0005	0.000018	< 0.0005	< 0.002	0.00024	< 0.001	0.169	0.0261	< 0.01	0.00006
28-Jun-11	74	500	450	7.56	243	39	#N/A	2.9	20.9	6	< 0.2	< 0.06	18.3	0.104	< 0.0002	0.0003	0.00030	< 0.00002	< 0.00001	0.0030	0.000006	6.99	< 0.0005	0.000019	< 0.0005	0.005	0.00006	< 0.001	0.193	0.0354	0.02	0.00060
05-Jul-11	75	500	450	7.47	293	36	#N/A	3.2	16.0	4	< 0.2	< 0.06	17.3	0.129	0.0003	0.0003	0.00031	< 0.00002	< 0.00001	0.0045	0.000141	6.61	< 0.0005	0.000039	0.0006	0.003	0.00012	< 0.001	0.187	0.0223	< 0.01	0.00018
12-Jul-11	76	500	440	7.23	293	35	#N/A	3.4	13.5	5	< 0.2	< 0.06	18.8	0.0927	0.0003	0.0004	0.00024	< 0.00002	< 0.00001	0.0022	0.000003	7.16	< 0.0005	0.000016	< 0.0005	< 0.002

HC 4 *CONFIDENTIAL* *DRAFT* *DRAFT*

Sample = 731259

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
02-Aug-11	79	500	470	7.60	257	34	#N/A	3.9	14.1	2	< 0.2	< 0.06	17.0	0.0717	0.0003	0.0004	0.00024	< 0.00002	< 0.00001	0.0027	0.000004	6.49	0.0005	0.000012	< 0.0005	0.008	0.00005	< 0.001	0.184	0.0269	< 0.01	0.00017
09-Aug-11	80	500	440	7.53	215	33	#N/A	3.0	12.7	4	< 0.2	< 0.06	17.1	0.0729	< 0.0002	0.0009	0.00028	< 0.00002	< 0.00001	0.0022	0.000007	6.53	0.0006	0.000033	< 0.0005	0.006	0.00009	< 0.001	0.185	0.0266	< 0.01	0.00132
16-Aug-11	81	500	450	7.61	260	37	#N/A	5.2	20.7	4	< 0.2	< 0.06	16.1	0.113	0.0003	0.0003	0.00022	< 0.00002	< 0.00001	0.0024	< 0.000003	6.19	0.0006	0.000020	0.0009	0.003	0.00004	< 0.001	0.160	0.0205	< 0.01	0.00018
23-Aug-11	82	500	465	7.55	198	38	#N/A	4.1	15.8	4	< 0.2	< 0.06	19.5	0.0996	0.0004	0.0003	0.00028	< 0.00002	< 0.00001	0.0029	0.000005	7.50	0.0005	0.000012	< 0.0005	0.006	0.00008	< 0.001	0.198	0.0287	0.01	0.00012
30-Aug-11	83	500	440	7.55	251	39	#N/A	4.1	15.6	6	< 0.2	< 0.06	18.3	0.0983	0.0002	0.0003	0.00042	< 0.00002	< 0.00001	0.0025	0.000019	7.00	0.0006	0.000017	< 0.0005	0.004	0.00006	< 0.001	0.194	0.0208	< 0.01	0.00009
06-Sep-11	84	500	440	7.64	263	35	#N/A	3.8	14.9	5	< 0.2	< 0.06	17.0	0.0748	0.0003	0.0003	0.00040	< 0.00002	< 0.00001	0.0022	0.000003	6.52	0.0006	0.000012	< 0.0005	< 0.002	0.00016	< 0.001	0.176	0.0203	< 0.01	0.00077
13-Sep-11	85	500	445	7.61	292	31	#N/A	3.0	13.9	4	< 0.2	< 0.06	15.3	0.0787	0.0003	0.0003	0.00054	< 0.00002	< 0.00001	0.0028	0.000019	5.87	0.0018	0.000015	< 0.0005	< 0.002	0.00023	< 0.001	0.162	0.0222	< 0.01	0.00078
20-Sep-11	86	500	455	7.45	301	34	#N/A	3.7	14.5	4	< 0.2	< 0.06	16.1	0.0755	0.0003	0.0005	0.00070	< 0.00002	< 0.00001	0.0027	0.000009	6.17	0.0018	0.000018	< 0.0005	0.012	0.00016	< 0.001	0.166	0.0319	< 0.01	0.00030
27-Sep-11	87	500	450	7.40	315	34	#N/A	5.1	14.4	5	< 0.2	< 0.06	15.7	0.0749	0.0002	0.0012	0.00062	< 0.00002	< 0.00001	< 0.0002	0.000003	6.03	0.0006	0.000014	< 0.0005	0.006	< 0.00002	< 0.001	0.163	0.0219	< 0.01	0.00011
04-Oct-11	88	500	450	7.50	282	38	#N/A	3.6	16.6	5	< 0.2	< 0.06	17.5	0.107	0.0004	0.0004	0.00036	< 0.00002	< 0.00001	0.0034	0.000003	6.73	< 0.0005	0.000016	< 0.0005	0.003	0.00010	< 0.001	0.167	0.0227	< 0.01	0.00011
11-Oct-11	89	500	445	7.62	255	34	#N/A	4.7	15.2	4	< 0.2	< 0.06	17.3	0.0884	0.0021	0.0004	0.00091	< 0.00002	< 0.00001	0.0034	0.000024	6.67	0.0006	0.000013	0.0016	0.004	0.00012	< 0.001	0.164	0.0214	< 0.01	0.00015
18-Oct-11	90	500	445	7.43	267	35	#N/A	3.8	14.1	4	< 0.2	< 0.06	16.7	0.0914	0.0005	0.0005	0.00069	< 0.00002	< 0.00001	0.0030	0.000003	6.41	0.0007	0.000010	< 0.0005	0.002	0.00009	< 0.001	0.168	0.0238	< 0.01	0.00022
25-Oct-11	91	500	455	7.38	297	36	#N/A	3.0	14.2	4	< 0.2	< 0.06	17.4	0.0923	0.0003	0.0004	0.00023	< 0.00002	< 0.00001	0.0028	0.000006	6.68	< 0.0005	0.000013	< 0.0005	< 0.003	0.00006	< 0.001	0.176	0.0230	0.01	0.00008
01-Nov-11	92	500	460	7.48	255	34	#N/A	4.0	13.6	5	< 0.2	< 0.06	15.7	0.0813	0.0004	0.0017	0.00033	< 0.00002	< 0.00001	0.0024	< 0.000003	6.06	0.0009	0.000019	< 0.0005	0.006	0.00014	< 0.001	0.149	0.0207	< 0.01	0.00010
08-Nov-11	93	500	450	7.43	298	35	#N/A	4.3	13.8	4	< 0.2	< 0.06	17.1	0.0729	0.0004	0.0003	0.00036	< 0.00002	< 0.00001	0.0016	0.000020	6.57	< 0.0005	0.000012	< 0.0005	< 0.003	0.00014	< 0.001	0.169	0.0235	0.01	0.00006
15-Nov-11	94	500	445	7.22	246	34	#N/A	4.5	12.4	4	< 0.2	< 0.06	16.3	0.0696	0.0002	0.0003	0.00023	< 0.00002	< 0.00001	0.0020	< 0.000003	6.28	< 0.0005	0.000016	< 0.0005	< 0.003	0.00004	< 0.001	0.158	0.0238	< 0.01	0.00008
22-Nov-11	95	500	450	7.46	287	38	#N/A	5.1	14.3	5	< 0.2	< 0.06	17.6	0.0870	0.0004	0.0010	0.00019	< 0.00002	< 0.00001	0.0029	0.000016	6.74	< 0.0005	0.000026	0.0006	0.017	0.00003	< 0.001	0.180	0.0230	< 0.01	0.00002
29-Nov-11	96	500	445	7.51	317	33	#N/A	5.0	14.3	3	< 0.2	< 0.06	16.4	0.0990	0.0003	0.0003	0.00031	< 0.00002	< 0.00001	0.0024	0.000015	6.29	< 0.0005	0.000019	< 0.0005	< 0.003	0.00004	< 0.001	0.156	0.0255	0.01	0.00031
06-Dec-11	97	500	445	7.35	326	32	#N/A	4.7	13.2	4	< 0.2	< 0.06	15.9	0.0726	< 0.0002	0.0005	0.00088	< 0.00002	< 0.00001	0.0027	0.000014	6.14	< 0.0005	0.000009	< 0.0005	< 0.003	< 0.00002	< 0.001	0.140	0.0272	0.01	0.00008
13-Dec-11	98	500	440	7.31	260	33	#N/A	3.7	13.9	3	< 0.2	< 0.06	15.7	0.0542	< 0.0002	0.0002	0.00081	< 0.00002	< 0.00001	0.0015	< 0.000003	6.03	0.0009	0.000012	0.0011	0.003	0.00017	< 0.001	0.157	0.0250	0.01	0.00012
20-Dec-11	99	500	435	7.49	295	33	#N/A	4.1	14.3	3	< 0.2	< 0.06	15.7	0.0819	< 0.0002	0.0009	0.00026	< 0.00002	< 0.00001	0.0017	< 0.000003	6.03	< 0.0005	0.000015	0.0005	< 0.003	0.00005	< 0.001	0.150	0.0191	< 0.01	0.00005
27-Dec-11	100	500	455	7.67	303	31	#N/A	4.3	16.3	3	< 0.2	< 0.06	15.8	0.0718	0.0002	0.0004	0.00441	< 0.00002	< 0.00001	0.0024	0.000007	6.05	< 0.0005	0.000012	0.0013	0.008	0.00051	< 0.001	0.159	0.0210	0.01	0.00018
03-Jan-12	101	500	450	7.41	315	32	#N/A	4.3	15.4	4	< 0.2	< 0.06	14.6	0.0937	< 0.0002	0.0008	0.00035	< 0.00002	< 0.00001	0.0020	< 0.000003	5.59	< 0.0005	0.000015	< 0.0005	< 0.003	0.00002	< 0.001	0.143	0.0174	< 0.01	0.00008
10-Jan-12	102	500	435	7.37	330	31	#N/A	3.1	13.9	3	< 0.2	< 0.06	14.3	0.0939	0.0003	< 0.0002	0.00046	< 0.00002	< 0.00001	0.0017	0.000010	5.51	< 0.0005	0.000010	< 0.0005	< 0.003	0.00007	< 0.001	0.136	0.0191	< 0.01	0.00006
17-Jan-12	103	500	470	7.37	296	35	#N/A	4.1	20.4	5	< 0.2	< 0.06	18.8	0.0801	0.0003	0.0003	0.00019	< 0.00002	< 0.00001	0.0034	0.000007	7.25	< 0.0005	0.000012	< 0.0005	< 0.003	0.00003	< 0.001	0.174	0.0320	< 0.01	0.00008
24-Jan-12	104	500	470	7.53	384	35	#N/A	4.8	16.8	5	< 0.2	< 0.06	16.4	0.0909	0.0003	0.0003	0.00019	< 0.00002	< 0.00001	0.0017	0.000005	6.33	< 0.0005	0.000014	< 0.0005	< 0.003	< 0.00002	< 0.001	0.146	0.0212	< 0.01	0.00005
31-Jan-12	105	500	450	7.21	334	33	#N/A	3.8	15.7	3	< 0.2	< 0.06	15.1	0.0804	< 0.0002	0.0011	0.00030	< 0.00002	< 0.00001	0.0026	0.000003	5.83	< 0.0005	0.000013	0.0011	< 0.003	0.00003	< 0.001	0.140	0.0215	< 0.01	0.00014
07-Feb-12	106	500	490	7.21	335	43	#N/A	4.5	20.3	7	< 0.2	< 0.06	20.1	0.0678	0.0002	0.0004	0.00038	< 0.00002	< 0.00001	0.0020	0.000024	7.76	< 0.0005	0.000042	0.0016	< 0.003	0.00005	< 0.001	0.174	0.0407	0.01	0.00008
14-Feb-12	107	500	435	7.34	378	33	#N/A	4.9	14.3	7	< 0.2	< 0.06	16.5	0.0531	< 0.0002	0.0004	0.00024	< 0.00002	< 0.00001	0.0015	0.000006	6.37	< 0.0005	0.000019	0.0012	< 0.003	0.00004	< 0.001	0.144	0.0217	< 0.01	0.00003
21-Feb-12	108	500	440	7.28	374	32	#N/A	2.7	13.5	6	< 0.2	< 0.06	15.2	0.0556	< 0.0002	0.0002	0.00070	< 0.00002	< 0.00001	0.0057	0.000022	5.86	< 0.0005	0.000008	0.0006	< 0.003	< 0.00002	< 0.001	0.138	0.0228	< 0.01	0.00005
28-Feb-12	109	500	435	7.29	403	32	#N/A	4.3	13.9	4	< 0.2	< 0.06	15.2	0.0677	0.0002	0.0002	0.00027	< 0.00002	< 0.00001	0.0016	0.000007	5.84	< 0.0005	0.000006	0.0008	0.003	0.00005	< 0.001	0.138	0.0245	0.01	0.00004
06-Mar-12	110	500	455	7.32	399	33	#N/A	3.1	12.6	4	< 0.2	< 0.06	14.8	0.0760	< 0.0002	< 0.0002	0.00020	< 0.00002	< 0.00001	0.0017	0.000004	5.70	< 0.0005	0.000011	< 0.0005	< 0.003	< 0.00002	< 0.001	0.140	0.0182	< 0.01	0.00006
13-Mar-12	111	500	440	7.19	382	31	#N/A	4.4	12.9	4	< 0.2	< 0.06	14.9	0.0493	< 0.0002	0.0007	0.00072	< 0.00002	< 0.00001	0.0024	0.000004	5.76	< 0.0005	0.000026	< 0.0005	< 0.003	0.00004	< 0.001	0.129	0.0198	0.01	0.00100
20-Mar-12	112	500	455	7.25	363	30	#N/A	4.6	12.3	4	< 0.2	< 0.06	14.2	0.0473	0.0002	0.0006	0.00133	< 0.00002	< 0.00001	0.0017	0.000317	5.49	< 0.0005	0.000019	0.0060	< 0.003	0.00087	< 0.001	0.124	0.0229	< 0.01	0.00007
27-Mar-12	113	500	460	7.17	367	32	#N/A	3.8	13.0	5	< 0.2	< 0.06	15.7	0.0877	< 0.0002	0.0004	0.00017	< 0.00002	< 0.00001	0.0017	0.000006	6.07	< 0.0005	< 0.000002	< 0.0005	0.014	0.00004	< 0.001	0.133	0.0197	< 0.01	0.00002
03-Apr-12	114	500	460	7.13	386	35	#N/A	3.9	13.5	4	< 0.2	< 0.06	16.8	0.0979	< 0.0002	0.0003	0.00027	< 0.00002	< 0.00001	0.0015	< 0.000003	6.40	< 0.0005	0.000010	< 0.0005	< 0.003	0.00004	< 0.001	0.206	0.0194	< 0.01	0.00003
10-Apr-12	115	500	455	7.24	335	33	#N/A	2.5	12.5	4	< 0.2	< 0.06	15.1	0.0779	0.0002	< 0.0002	0.00027	< 0.00002	< 0.00001	0.0018	< 0.000003	5.83	< 0.0005	0.000011	< 0.0005	< 0.003	0.00003	< 0.001	0.127	0.0227	0.04	0.00004
17-Apr-12	116	500	450	7.25	366	33	#N/A	3.6	12.3	4	< 0.2	< 0.06	15.0	0.0894	0.0002	< 0.0002	0.00012	< 0.00002	< 0.00001	0.0018	< 0.000003	5.80	< 0.0005	0.000004	< 0.0005	0.006	0.00002	< 0.001	0.121	0.0197	0.03	0.00006
24-Apr-12	117	500	445	7.36	415	36	#N/A	2.7	12.0	6	< 0.2	< 0.06	16.2	0.0854	0.0003	0.0007	0.00047	< 0.00002	< 0.00001	0.0016	< 0.000003	6.27	< 0.0005	0.000014	0.0006	< 0.003	0.00005	< 0.001	0.137	0.0214	0.02	0.00080
01-May-12	118	500	435	7.46	353	33	#N/A	4.3	14.4	5	< 0.2	< 0.06	16.0	0.0868	0.0002	0.0002	0.00014	< 0.00002	< 0.00001	0.0025	< 0.000003	6.22	< 0.0005	0.000006	< 0.0005	< 0.003	0.00006	< 0.001	0.125	0.0215	0.06	0.00008
08-May-12	119	500	445	7.37	393	35	#N/A	3.0	13.1	3	< 0.2	< 0.06	16.4	0.0730	0.0002	0.0002	0.00015	< 0.00002	< 0.00001	0.0028	< 0.000003	6.34	< 0.0005	0.000008	0.0016	< 0.003	0.00004	< 0.001	0.147	0.0178	< 0.01	0.00004
15-May-12	120	500	435	7.43	329	33	#N/A	2.5	12.0	4	< 0.2	< 0.06	15.0	0.0714	< 0.0002	< 0.0002	0.00021	< 0.00002	< 0.00001	0.0020	< 0.000003	5.80	< 0.0005	0.000020	< 0.0005	< 0.003	0.00003	< 0.001	0.126	0.0176	< 0.01	0.00004
22-May-12	121	500	435	7.22	348	31	#N/A	3.5	11.9	4	< 0.2	< 0.06	14.2	0.0897	< 0.0002	< 0.0002	0.00017	< 0.00002	< 0.00001	0.0016	< 0.000003	5.52	< 0.0005	0.000009	< 0.0005	0.029	< 0.00002	< 0.001	0.114	0.0191	0.01	0.00014
29-May-12	122	500	445	7.22	360	31	#N/A	3.4	12.4	3	< 0.2	< 0.06	15.4	0.0829	0.0002	0.0003	0.00011	< 0.00002	< 0.00001	0.0020	< 0.000003	5.96	< 0.0005	0.000012	0.0011	0.006	< 0.00002	< 0.001	0.129	0.0219	< 0.01	0.00005
05-Jun-12	123	500	435	7.20	387	31	#N/A	3.4	12.4	2	< 0.2	< 0.06	15.8	0.0781	< 0.0002	< 0.0002	0.00021	< 0.00002	< 0.00001	0.0026	0.000049	6.11	< 0.0005	0.000034	0.0028	0.006	< 0.00002	< 0.001	0.131	0.0185	0.02	0.00015
12-Jun-12	124	500	455	7.36	367	33	#N/A	3.0	13.1	5	< 0.2	0.08	15.8	0.0875	0.0002	0.0004	0.00013	< 0.00002	< 0.00001	0.0028	< 0.000003	6.11	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	0.125	0.0211	0.01	0.00005
19-Jun-12	125	500	435	7.28	373	33	#N/A	2.4	12.5	3	< 0.2	< 0.06	15.3	0.0782	< 0.0002	0.0002	0.00015	< 0.00002	< 0.00001	0.0020	< 0.000003	5.94	< 0.0005	0.000009	< 0.0005	< 0.003	< 0.00002	< 0.001	0.123	0.0177	< 0.01	0.00005
26-Jun-12	126	500	440	7.39	353	33	#N/A	2.7	13.0	5	< 0.2	< 0.06	15.5	0.0996	0.0002	< 0.0002	0.00055	< 0.00002	< 0.00001	0.0031	< 0.000003	5.96	< 0.0005	< 0.000002	0.0006	< 0.003	< 0.00002	< 0.001	0.152	0.0155	0.01	0.00008
03-Jul-12	127	500	440	7.40	406	35	#N/A	6.2	14.8	4	< 0.2	< 0.06	16.1	0.0851	0.0002	0.0002	0.00007	< 0.00002	< 0.00001	0.0017	0.000005	6.23	< 0.0005	0.000003	< 0.0005	< 0.003	< 0.00002	< 0.001	0.127	0.0164	0.01	0.00095
10-Jul-12	128	500	430	7.26	337	36	#N/A	3.2	13.2	6	< 0.2	< 0.06	16.6	0.0986	0.0003	< 0.0002	0.00014	< 0.00002	< 0.00001	0.0020	< 0.000003	6.44	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	0.128	0.0164	0.02	0.00006
17-Jul-12	129	500	440	7.41	382	31	#N/A	2.0	12.7	5	< 0.2	< 0.06	14.8	0.0951	0.0003	0.0002	0.00014	< 0.00002	< 0.00001	0.0018	< 0.000003	5.75	< 0.0005	0.000016	< 0.0005	< 0.003	< 0.00002	< 0.001	0.108	0.0123	0.01	< 0.00001
24-Jul-12	130	500	440	7.18	335	33	#N/A	2.7	12.3	6	< 0.2	< 0.06	15.8	0.0870	< 0.0002	0.0004	0.00015	< 0.00002	< 0.00001	0.0014	< 0.000003	6.08	< 0.0005	0.000011	< 0.0005	< 0.003	0.00002	< 0.001	0.160	0.0176	0.02	0.00009
31-Jul-12	131	500	450	7.42	374	33	#N/A	1.9	13.5	4	< 0.2	< 0.06	16.4	0.113	0.0003	0.0005	0.00023	< 0.00002	< 0.00001	0.0023	< 0.000003	6.36	< 0.0005	0.000004	0.0007	0.003	0.00005	< 0.001	0.120	0.0162	< 0.01	0.00007
07-Aug-12	132	500	445	7.52	351	33	#N/A	1.9	12.3	5	< 0.2	< 0.06	16.0	0.115	0.0006	0.0004	0.00016	< 0.00002	< 0.00001	0.0021	< 0.000003	6.20	< 0.0005	0.000018	< 0.0005	< 0.003	0.00002	< 0.001	0.115	0.0113	< 0.01	0.00008
14-Aug-12	133	500	435	7.27	308	33	#N/A	2.3	11.7	3	< 0.2	< 0.06	14.6	0.0795	0.0002	< 0.0002	0.00017	< 0.00002	< 0.00001	0.0021	< 0.000003	5.65	< 0.0005	< 0.000002	0.0015	< 0.003	0.00002	< 0.001	0.115	0.0122	< 0.01	< 0.00001
21-Aug-12	134	500	435	7.20	317	31	#N/A	2.5	11.5	6	< 0.2	< 0.06	14.6	0.0896	0.0006	0.0007	0.00016	< 0.00002	< 0.00001	0.0024	< 0.000003	5.65	< 0.0005	0.000009	< 0.0005	< 0.003	0.00004	< 0.001	0.116	0.0143	0.01	0.00007
28-Aug-12	135	500	445	7.22	406	31	#N/A	4.3	12.1	6	< 0.2	< 0.06	13.6	0.0977	0.0002	0.0006	0.00025	< 0.00002	< 0.00001	0.0023	0.000115	5.28	< 0.0005	0.000052	0.0009	0.005	0.00006	< 0.001	0.107	0.0165	0.02	0.00014
04-Sep-12	136	500	450	7.16	412	31	#N/A	4.0	12.8	6	< 0.2	< 0.06	15.4	0.124	0.0003	< 0.0002	0.00015	< 0.00002	< 0.00001	0.0024	< 0.000003	5.99	< 0.0005	0.000012	< 0.0005	< 0.003	< 0.00002	< 0.001	0.118	0.0159	0.04	0.00004
11-Sep-12	137	500	450	7.30	387	29	#N/A	2.4	12.4	6	< 0.2	< 0.06	14.0	0.0788	0.0002	< 0.0002	0.00023	< 0.00002	< 0.00001	0.0018	0.000010	5.46	< 0.0005	0.000018	0.0007	0.020	0.00006	< 0.001	0.103	0.0137	0.01	0.00005
18-Sep-12	138	500	505	7.29	392	50	#N/A	2.1	14.1	9	0.2	< 0.06	22.0	0.0703	0.0003	0.0004	0.00016	0.00002	< 0.00001	0.0028	< 0.000003	8.53	< 0.0005	0.000012	< 0.0005	< 0.003	0.00009	< 0.001	0.168	0.0323	< 0.01	< 0.00001
25-Sep-12	139	500	460	7.24	378	36	#N/A	2.6	11.8	7	< 0.2	< 0.06	15.8	0.0644	< 0.0002	0.0003	0.00026	< 0.00002	< 0.00001	0.0021	< 0.000003	6.12	< 0.0005	0.000004	< 0.0005	< 0.003	< 0.00002	< 0.001	0.117	0.0154	0.02	0.00004
02-Oct-12	140	500	440	7.22	401	34	#N/A	3.1	12.4	6	< 0.2	< 0.06	15.5	0.0545	0.0002	< 0.0002	0.00013	< 0.00002	0.00002	0.0027	< 0.000003	6.00	< 0.0005	0.000051	0.0005	< 0.003	< 0.00002	< 0.001	0.115	0.0165	< 0.01	0.00007
09-Oct-12	141	500	455	7.29	385	33	#N/A	4.7	12.4	6	< 0.2	< 0.06	14.5	0.0716	< 0.0002	< 0.0002	0.00019	< 0.00002	< 0.00001	0.0025	< 0.000003	5.62	< 0.0005	0.000143	0.0012	< 0.003	< 0.00002	< 0.001	0.110	0.0145	< 0.01	0.00008
16-Oct-12	142	500	430	7.50	409	30	#N/A	4.4	13.4	6	< 0.2	< 0.06	14.3	0.0723	< 0.0002	< 0.0002	0.00011	< 0.00002	< 0.00001	0.0026	0.000003	5.55	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	0.106	0.0132	0.01	0.00003
23-Oct-12	143	500	440	7.12	379	36	#N/A	4.0	13.8	7	< 0.2	< 0.06	15.6	0.0865	< 0.0002	< 0.0002	0.00013	< 0.00002	< 0.00001	0.0012	0.000009	6.06	< 0.0005	0.000178	0.0010	< 0.003	0.00004	< 0.001	0.124	0.0140	< 0.01	0.00022
30-Oct-12	144	500	440	7.14	384	36	#N/A	3.8	13.3	6	< 0.2	< 0.06	17.5	0.0912	< 0.0002	0.0003	0.00013	< 0.00002	< 0.00001	0.0032	0.00129	6.68	< 0.0005	0.000004	0.0007	< 0.003	< 0.00002	< 0.001	0.190	0.0179	< 0.01	0.00009
06-Nov-12	145	500	440	7.26	382	31	#N/A	3.6	12.6	3	< 0.2	< 0.06	16.5	0.0563	0.0002	0.0002	0.00060	< 0.00002	< 0.00001	0.0027	0.000006	6.40	< 0.0005	0.000014	0.0009	< 0.003	0.00005	< 0.001	0.115	0.0168	< 0.01	0.00008
13-Nov-12	146	500	440	7.40	388	32	#N/A	5.4	14.4	5	< 0.2	< 0.06	16.9	0.0642	< 0.0002	0.0002	0.00013	< 0.00002	< 0.00001	0.0023	0.000005	6.54	< 0.0005	0.000047	< 0.0005	< 0.003	< 0.00002	< 0.001	0.126	0.0167	0.01	0.00003
20-Nov-12	147	500	490	7.65	399	43	#N/A	5.9	14.8	6	< 0.2	< 0.06	20.2	0.0641	0.0003	< 0.0002	0.00025	< 0.00002	< 0.00001	0.0036	0.000013	7.85	< 0.0005	0.000094	0.0006	0.006	0.00003	< 0.001	0.146	0.0215	< 0.01	0.00003
27-Nov-12	148	500	500	7.35	376	60	#N/A	4.4	16.6	12	< 0.2	< 0.06	27.7	0.0488	0.0004	0.0003	0.00032	< 0.00002	< 0.00001	0.0036	0.000008	10.7	< 0.0005	0.000062	< 0.0005	0.003	< 0.00002	< 0.001	0.208	0.0415	< 0.01	0.00009
04-Dec-12	149	500	460	7.60	352	42	#N/A	1.9	14.8	8	< 0.2	< 0.06	19.8	0.0873	0.0003	< 0.0002	0.00027	< 0.00002	< 0.00001	0.0016	0.000010	7.68	< 0.0005	0.000021	< 0.0005	< 0.003	< 0.00002	< 0.001	0.138	0.0206	0.01	0.00002
11-Dec-12	150	500	465	7.50	351	42	#N/A	2.1	15.4	8	< 0.2	< 0.06	20.5	0.0710	0.0003	0.0002	0.00021	< 0.00002	< 0.00001	0.0029	0.000029	7.97	< 0.0005	0.000040	0.0015	< 0.003	< 0.00002	< 0.001	0.133	0.0220	< 0.01	0.00009
18-Dec-12	151	500	485	7.41	329	40	#N/A	2.3	13.9	7	< 0.2	< 0.06	18.5	0.0719	0.0003	< 0.0002	0.00045	< 0.00002	< 0.00001	0.0016	0.000007	7.22	< 0.0005	0.000016	<

HC 4
Sample = 731259

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
02-Feb-10	1	0.0005	< 0.01	7.70	0.00008	1.07	< 0.00001	12.1	0.0452	9.57	< 0.0002	0.00023	0.0002	0.000029	0.00052	< 0.001	< 0.00001		1.17	1.09	-0.07	-3.3%
09-Feb-10	2	0.0001	< 0.01	7.12	< 0.00004	1.04	< 0.00001	9.77	0.0525	8.37	< 0.0002	< 0.00001	0.0001	0.000157	0.00041	< 0.001	< 0.00001		1.01	1.04	0.03	1.4%
16-Feb-10	3	0.0004	< 0.01	5.08	0.00004	1.00	< 0.00001	6.95	0.0479	6.85	< 0.0002	0.00007	0.0002	0.000199	0.00038	< 0.001	0.00002		0.94	0.86	-0.08	-4.3%
23-Feb-10	4	0.0002	< 0.01	4.77	0.00007	1.01	< 0.00001	5.35	0.0510	5.77	< 0.0002	0.00006	0.0003	0.000180	0.00043	0.001	0.00002		0.83	0.81	-0.02	-1.0%
02-Mar-10	5	0.0001	< 0.01	3.36	0.00011	0.73	< 0.00001	3.47	0.0404	4.92	< 0.0002	0.00011	0.0008	0.000141	0.00040	< 0.001	0.00003		0.69	0.61	-0.08	-6.3%
09-Mar-10	6	0.0002	< 0.01	2.87	< 0.00004	0.74	< 0.00001	1.88	0.0352	3.38	< 0.0002	0.00026	0.0001	0.000129	0.00032	< 0.001	0.00008		0.60	0.53	-0.07	-6.5%
16-Mar-10	7	0.0001	< 0.01	3.13	< 0.00004	0.81	< 0.00001	1.98	0.0420	4.11	< 0.0002	< 0.00001	< 0.0001	0.000252	0.00036	< 0.001	< 0.00001		0.58	0.62	0.04	3.2%
23-Mar-10	8	< 0.0001	< 0.01	2.78	< 0.00004	0.88	< 0.00001	1.33	0.0418	4.0	< 0.0002	0.00013	0.0002	0.000164	0.00032	< 0.001	0.00003		0.68	0.58	-0.11	-8.4%
30-Mar-10	9	0.0002	< 0.01	2.30	< 0.00004	0.69	< 0.00001	1.10	0.0399	3.69	< 0.0002	0.00011	0.0002	0.000172	0.00028	< 0.001	< 0.00001		0.51	0.56	0.04	3.9%
06-Apr-10	10	< 0.0001	< 0.01	2.68	< 0.00004	0.77	< 0.00001	1.40	0.0485	4.94	< 0.0002	0.00013	< 0.0001	0.000296	0.00030	< 0.001	< 0.00001		0.74	0.62	-0.11	-8.2%
13-Apr-10	11	< 0.0001	< 0.01	1.84	< 0.00004	0.69	< 0.00001	0.81	0.0315	2.31	< 0.0002	0.00027	0.0002	0.000163	0.00027	< 0.001	0.00001		0.58	0.47	-0.11	-10.2%
20-Apr-10	12	0.0001	< 0.01	2.06	< 0.00004	0.78	< 0.00001	0.68	0.0385	3.74	< 0.0002	0.00010	0.0001	0.000219	0.00035	< 0.001	0.00002		0.66	0.53	-0.13	-11.1%
27-Apr-10	13	0.0001	< 0.01	1.65	0.00036	0.68	< 0.00001	0.62	0.0324	2.92	< 0.0002	0.00016	0.0004	0.000189	0.00025	< 0.001	0.00003		0.53	0.48	-0.05	-4.6%
04-May-10	14	< 0.0001	< 0.01	1.63	< 0.00004	0.63	< 0.00001	0.68	0.0377	3.24	< 0.0002	0.00024	0.0001	0.000211	0.00026	< 0.001	< 0.00001		0.58	0.55	-0.04	-3.2%
11-May-10	15	< 0.0001	0.02	1.81	< 0.00004	0.72	0.00005	0.57	0.0390	4.09	< 0.0002	0.00026	< 0.0001	0.000230	0.00031	< 0.001	< 0.00001		0.49	0.56	0.07	6.9%
18-May-10	16	0.0001	< 0.009	2.17	0.00004	0.73	< 0.00001	0.80	0.0484	4.54	< 0.0002	0.00014	0.0001	0.000202	0.00029	< 0.001	< 0.00001		0.53	0.59	0.05	4.8%
25-May-10	17	< 0.0001	< 0.009	1.43	0.00011	0.69	< 0.00001	0.49	0.0285	2.80	< 0.0002	0.00023	0.0002	0.000192	0.00033	0.005	0.00001		0.53	0.46	-0.07	-7.5%
01-Jun-10	18	< 0.0001	< 0.009	1.78	< 0.00004	0.72	< 0.00001	0.58	0.0335	3.29	< 0.0002	0.00011	0.0002	0.000192	0.00036	< 0.001	< 0.00001		0.58	0.50	-0.08	-7.0%
08-Jun-10	19	< 0.0001	0.019	1.53	< 0.00004	0.66	< 0.00001	0.47	0.0279	2.40	< 0.0002	0.00021	0.0001	0.000150	0.0003	< 0.001	< 0.00001		0.47	0.47	-0.01	-1.0%
15-Jun-10	20	0.0001	< 0.009	1.21	< 0.00004	0.67	0.00004	0.39	0.0248	1.86	< 0.0002	0.00034	0.0003	0.000151	0.00036	< 0.001	0.00002		0.51	0.42	-0.09	-9.3%
22-Jun-10	21																					
29-Jun-10	22	< 0.0001	< 0.009	1.140	< 0.00004	0.60	< 0.00001	0.33	0.0171	1.94	< 0.0002	0.00054	0.0002	0.00016	0.00025	< 0.001	0.00002		0.43	0.40	-0.03	-3.8%
06-Jul-10	23																					
13-Jul-10	24	0.0002	0.024	1.06	< 0.00004	0.55	0.00001	0.32	0.0251	2.48	< 0.0002	0.00127	0.0004	0.000213	0.00026	0.001	0.00004		0.34	0.38	0.04	6.2%
20-Jul-10	25																					
27-Jul-10	26	< 0.0001	0.021	0.981	0.00006	0.65	< 0.00001	0.29	0.0257	2.4	< 0.0002	0.00013	0.0003	0.00016	0.00028	< 0.001	0.00001		0.48	0.49	0.01	0.9%
03-Aug-10	27	0.0001	< 0.009	0.801	< 0.00004	0.48	< 0.00001	0.22	0.0221	2.1	< 0.0002	0.00013	0.0001	0.00020	0.00017	< 0.001	< 0.00001		0.38	0.43	0.05	6.3%
10-Aug-10	28	0.0002	< 0.009	0.949	< 0.00004	0.54	< 0.00001	0.26	0.0258	2.84	< 0.0002	0.00003	0.0002	0.000148	0.00026	< 0.001	0.00001		0.56	0.47	-0.09	-8.6%
17-Aug-10	29	0.0002	0.012	0.924	0.00005	0.58	< 0.00001	0.25	0.0231	2.78	< 0.0002	0.00005	0.0001	0.000589	0.00024	0.012	0.00002		0.32	0.44	0.11	15.0%
24-Aug-10	30	0.0002	< 0.009	0.915	< 0.00004	0.58	0.00008	0.26	0.0243	2.91	< 0.0002	0.00019	0.0003	0.000145	0.00025	< 0.001	0.00002		0.42	0.46	0.05	5.2%
31-Aug-10	31	< 0.0001	< 0.009	0.810	< 0.00004	0.65	< 0.00001	0.21	0.0212	2.26	< 0.0002	0.00003	< 0.0001	0.000183	0.00028	< 0.001	< 0.00001		0.60	0.45	-0.15	-14.5%
07-Sep-10	32	0.0002	< 0.009	0.852	< 0.00004	0.57	< 0.00001	0.21	0.0193	2.51	< 0.0002	0.00008	0.0004	0.000146	0.00034	0.002	0.00002		0.47	0.43	-0.04	-4.7%
14-Sep-10	33	0.0002	< 0.009	0.807	< 0.00004	0.54	< 0.00001	0.24	0.0212	2.18	< 0.0002	0.00019	0.0004	0.000139	0.00022	< 0.001	0.00002		0.42	0.41	-0.01	-1.7%
21-Sep-10	34	0.0002	0.012	0.805	0.00073	0.54	0.00002	0.24	0.0206	2.42	< 0.0002	0.00024	0.0001	0.000137	0.00018	< 0.001	0.00002		0.46	0.41	-0.05	-5.5%
28-Sep-10	35	0.0007	< 0.009	0.674	< 0.00004	0.59	< 0.00001	0.20	0.0221	2.7	< 0.0002	0.00023	< 0.0001	0.00025	0.00018	0.002	< 0.00001		0.51	0.42	-0.09	-10.0%
05-Oct-10	36	< 0.0001	< 0.009	0.806	< 0.00004	0.61	< 0.00001	0.22	0.0243	3.47	< 0.0002	0.00098	0.0002	0.000185	0.00020	0.001	0.00003		0.56	0.46	-0.09	-9.1%
12-Oct-10	37	0.0003	< 0.009	0.805	< 0.00004	0.58	< 0.00001	0.26	0.0261	3.68	< 0.0002	0.00055	0.0003	0.000106	0.00026	< 0.001	< 0.00001		0.52	0.47	-0.04	-4.3%
19-Oct-10	38	< 0.0001	< 0.009	0.702	< 0.00004	0.49	< 0.00001	0.19	0.0184	2.10	< 0.0002	0.00006	0.0001	0.000111	0.00022	0.004	0.00001	CA14822-OCT10	0.48	0.38	-0.11	-12.3%
26-Oct-10	39	0.0003	< 0.009	0.611	0.00276	0.43	< 0.00001	0.20	0.0166	2.29	< 0.0002	0.00013	0.0001	0.000113	0.00023	0.002	< 0.00001	CA11459-OCT10	0.46	0.35	-0.12	-14.5%
02-Nov-10	40	0.0004	0.026	0.662	< 0.00004	0.52	< 0.00001	0.23	0.0185	2.32	< 0.0002	0.00004	0.0002	0.000107	0.00005	< 0.001	0.00002	CA11315-NOV10	0.44	0.38	-0.06	-7.2%
09-Nov-10	41	0.0002	0.036	0.655	< 0.00004	0.57	< 0.00001	0.22	0.0238	2.76	< 0.0002	0.00063	0.0002	0.000302	0.00016	0.002	< 0.00001	CA11435-NOV10	0.46	0.47	0.01	1.4%
16-Nov-10	42	0.0002	0.035	0.660	< 0.00004	0.53	< 0.00001	0.19	0.0217	2.97	< 0.0002	0.00018	0.0002	0.000157	0.00016	0.003	< 0.00001	CA10265-NOV10	0.45	0.44	-0.01	-1.2%
23-Nov-10	43	< 0.0001	< 0.009	0.599	< 0.00004	0.48	< 0.00001	0.15	0.0193	2.04	< 0.0002	0.00024	0.0003	0.000200	0.00018	0.002	0.00003	CA11701-NOV10	0.46	0.39	-0.07	-7.8%
30-Nov-10	44	0.0004	< 0.009	0.610	0.00005	0.52	< 0.00001	0.19	0.0185	2.25	< 0.0002	0.00158	0.0003	0.000228	0.00021	0.004	0.00002	CA14008-DEC10	0.41	0.40	-0.01	-1.0%
07-Dec-10	45	0.0002	0.017	0.712	< 0.00004	0.60	< 0.00001	0.20	0.0223	2.56	< 0.0002	0.00041	0.0002	0.000166	0.00023	0.002	0.00003	CA14206-DEC10	0.44	0.53	0.09	9.1%
14-Dec-10	46	0.0004	< 0.009	0.625	0.00023	0.49	< 0.00001	0.20	0.0176	1.79	< 0.0002	0.00065	0.0002	0.000175	0.00022	0.001	0.00001	CA10970-DEC10	0.49	0.39	-0.10	-11.0%
21-Dec-10	47	0.0002	< 0.009	0.600	< 0.00004	0.66	< 0.00001	0.17	0.0180	2.42	< 0.0002	0.00018	0.0002	0.000142	0.00018	0.002	< 0.00001	CA10453-DEC10	0.45	0.48	0.03	3.5%
28-Dec-10	48	0.0001	< 0.009	0.670	< 0.00004	0.58	< 0.00001	0.19	0.0187	2.49	< 0.0002	0.00029	0.0002	0.000103	0.00018	0.003	0.00002	CA10140-JAN11	0.40	0.42	0.01	1.7%
04-Jan-11	49	0.0011	0.012	0.487	0.00004	0.47	0.00001	0.15	0.0155	1.78	< 0.0002	0.00007	0.0008	0.000116	0.00018	0.001	0.00002	CA10880-JAN11	0.47	0.39	-0.08	-9.3%
11-Jan-11	50	0.0002	< 0.009	0.449	< 0.00004	0.41	< 0.00001	0.14	0.0154	1.75	< 0.0002	0.00015	0.0002	0.000091	0.00014	0.002	0.00002	CA14437-JAN11	0.41	0.37	-0.04	-5.2%
18-Jan-11	51	< 0.0001	< 0.009	0.596	0.00006	0.55	< 0.00001	0.17	0.0181	2.21	< 0.0002	0.00028	0.0002	0.000082	0.00017	< 0.001	0.00003	CA10982-JAN11	0.42	0.42	0.01	0.9%
25-Jan-11	52	0.0005	0.018	0.557	0.00007	0.45	< 0.00001	0.16	0.0159	1.94	< 0.0002	0.00021	0.0002	0.000165	0.00019	0.003	< 0.00001	CA11047-JAN11	0.44	0.38	-0.06	-7.3%
01-Feb-11	53	0.0002	0.041	0.486	< 0.00004	0.39	< 0.00001	0.14	0.0152	3.05	< 0.0002	0.00058	0.0002	0.000086	0.00015	0.002	0.00002	CA14121-FEB11	0.37	0.35	-0.02	-3.0%
08-Feb-11	54	< 0.0001	< 0.009	0.471	< 0.00004	0.50	< 0.00001	0.13	0.0150	1.71	< 0.0002	0.00047	0.0003	0.000071	0.00015	0.002	0.00001	CA14249-FEB11	0.44	0.36	-0.08	-9.6%
15-Feb-11	55	0.0003	0.011	0.452	0.00011	0.49	< 0.00001	0.12	0.0136	1.45	< 0.0002	0.00001	0.0001	0.000028	0.00008	< 0.001	0.00002	CA14449-FEB11	0.36	0.33	-0.03	-4.2%
22-Feb-11	56	< 0.0001	0.016	0.449	< 0.00004	0.45	0.00002	0.14	0.0136	1.66	< 0.0002	< 0.00001	0.0002	0.000037	0.00011	< 0.001	< 0.00001	CA14656-FEB11	0.48	0.34	-0.13	-16.2%
01-Mar-11	57	0.0002	0.050	0.446	< 0.00004	0.45	< 0.00001	0.17	0.0149	1.88	< 0.0002	0.00020	0.0003	0.000061	0.00015	0.007	0.00002	CA14060-MAR11	0.46	0.34	-0.11	-13.9%
08-Mar-11	58	< 0.0001	0.032	0.433	0.00032	0.40	< 0.00001	0.15	0.0145	1.90	< 0.0002	0.00026	0.0002	0.000063	0.00012	0.001	0.00002	CA14274-MAR11	0.45	0.34	-0.10	-12.9%
15-Mar-11	59	0.0004	0.038	0.382	< 0.00004	0.45	< 0.00001	0.15	0.0136	1.56	< 0.00002	0.00047	0.0003	0.000067	0.00013	0.002	0.00005	CA14457-MAR11	0.47	0.35	-0.12	-14.6%
22-Mar-11	60	0.0002	< 0.009	0.403	0.00017	0.47	< 0.00001	0.11	0.0143	1.72	< 0.0002	0.00036	0.0001	0.000060	0.00016	< 0.001	< 0.00001	CA10460-MAR11	0.43	0.35	-0.07	-9.6%
29-Mar-11	61	0.0002	0.039	0.406	< 0.00004	0.42	< 0.00001	0.13	0.0133	1.72	< 0.0002	0.00009	0.0002	0.000060	0.00013	< 0.001	0.00004	CA14922-MAR11	0.39	0.34	-0.05	-7.4%
05-Apr-11	62	0.0002	< 0.009	0.399	< 0.00004	0.47	< 0.00001	0.13	0.0138	1.63	< 0.0002	0.00011	0.0001	0.000059	0.00011	0.002	< 0.00001	CA14224-APR11	0.46	0.35	-0.11	-13.4%
12-Apr-11	63	< 0.0001	< 0.009	0.424	< 0.00004	0.43	< 0.00001	0.14	0.0184	1.98	< 0.0002	0.00021	0.0002	0.000067	0.00016	< 0.001	< 0.00001	CA14457-APR11	0.40	0.36	-0.04	-5.5%
19-Apr-11	64	0.0002	0.022	0.376	0.00050	0.45	< 0.00001	0.12	0.0137	1.57	< 0.0002	0.00006	0.0002	0.000061	0.00016	0.006	0.00001	CA11358-APR11	0.53	0.36	-0.17	-19.6%
26-Apr-11	65	0.0005	0.024	0.400	< 0.00004	0.48	< 0.00001	0.13	0.0147	1.76	< 0.0002	0.00005	0.0002	0.000076	0.00015	0.002	0.00001	CA14943-APR11	0.52	0.40	-0.12	-12.9%
03-May-11	66	0.0002	0.011	0.405	0.00017	0.44	< 0.00001	0.13	0.0138	1.86	< 0.0002	< 0.00001	< 0.0001	0.000051	0.00011	< 0.001	< 0.00001	CA14148-MAY11	0.44	0.37	-0.07	-9.3%
10-May-11	67	0.0004	< 0.009	0.406	< 0.00004	0.42	< 0.00001	0.13	0.0141	1.83	< 0.0002	0.00013	0.0003	0.000057	0.00009	0.003	0.00002	CA14441-MAY11	0.46	0.37	-0.09	-10.7%
17-May-11	68	< 0.0001	0.012	0.365	0.00007	0.42	0.00003	0.11	0.0125	1.49	< 0.0002	0.00001	< 0.0001	0.000058	0.00012	0.001	< 0.00001	CA14703-MAY11	0.41	0.35	-0.05	-7.0%
24-May-11	69	< 0.0001	< 0.009	0.345	0.00010	1.00	< 0.00001	0.10	0.0151	2.11	< 0.0002	0.00058	0.0001	0.000105	0.00011	0.002	< 0.00001	CA13762-MAY11	0.39	0.39	-0.01	-0.8%
31-May-11	70	< 0.0001	0.040	0.380	< 0.00004	0.48	< 0.00001	0.12	0.0147	2.19	< 0.0002	0.00019	0.0001	0.000059	0.00007	0.002	0.00002	CA10185-JUN11	0.44	0.38	-0.06	-7.4%
07-Jun-11	71	0.0002	0.016	0.336	< 0.00004	0.44	< 0.00001	0.21	0.0116	1.80	< 0.00002	0.00016	0.0001	0.000033	0.00006	0.003	0.00001	CA14355-JUN11	0.36	0.34	-0.02	-3.2%
14-Jun-11	72	0.0004	< 0.009	0.330	< 0.00004	0.47	< 0.00001	0.15	0.0113	1.50	< 0.00002	0.00025	0.0001	0.000040	0.00013	0.001	< 0.00001	CA10349-JUN11	0.40	0.33	-0.07	-9.2%
21-Jun-11	73	< 0.0001	0.015	0.304	< 0.00004	0.38	< 0.00001	0.12	0.0114	1.44	< 0.00002	0.00011	0.0002	0.000043	0.00010	0.003	< 0.00001	CA14777-JUN11	0.40	0.34	-0.06	-8.1%
28-Jun-11	74	0.0002	< 0.009	0.364	< 0.00004	0.42	< 0.00001	0.13	0.0132	1.66	< 0.00002	0.00009	< 0.0001	0.000052	0.00010	0.002	0.00001	CA15123-JUN11	0.54	0.39	-0.15	-16.2%
05-Jul-11	75	0.0002	< 0.009	0.339	< 0.00004	0.51	< 0.00001	0.16	0.0128	1.73	< 0.00002	0.00053	0.0002	0.000047	0.00013	0.003	< 0.00001	CA15472-JUL11	0.40	0.38	-0.03	-3.5%
12-Jul-11	76	0.0001	< 0.009	0.381	< 0.00004	0.49	< 0.00001	0.13	0.0140	1.94	< 0.00002	0.00011	0.0001	0.000050	0.00010	0.004	< 0.00001	CA15694-JUL11	0.37	0.40	0.03	3.4%
19-Jul-11	77	0.0004	< 0.009	0.316	0.00005	0.38	< 0.00001	0.15	0.0120	1.65	< 0.00002	0.00018	0.0001	0.000047	0.00013	0.003	0.00001	CA16180-JUL11	0.31	0.33	0.02	3.0%
26-Jul-11	78	0.0003	0.014	0.279	< 0.00004	0.32	< 0.00001	0.09	0.0124	1.30	< 0.00002	< 0.00001	0.0003	0.000039	0.00012	< 0.001	< 0.00001	CA11330-JUL11	0.28	0.30	0.02	3.8%

HC 4

Sample = 731259

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
02-Aug-11	79	< 0.0001	< 0.009	0.337	< 0.00004	0.44	< 0.00001	0.11	0.0125	1.87	< 0.00002	0.00004	0.0001	0.000050	0.00010	0.004	< 0.00001	CA14200-AUG11	0.32	0.36	0.04	5.5%
09-Aug-11	80	< 0.0001	< 0.009	0.327	0.00013	0.43	< 0.00001	0.13	0.0129	2.11	< 0.00002	< 0.00001	0.0001	0.000052	0.00012	0.003	< 0.00001	CA14411-AUG11	0.34	0.36	0.03	3.6%
16-Aug-11	81	< 0.0001	< 0.009	0.286	0.00005	0.40	< 0.00001	0.11	0.0113	1.59	< 0.00002	0.00011	0.0001	0.000047	0.00009	0.002	< 0.00001	CA14675-AUG11	0.50	0.35	-0.15	-17.8%
23-Aug-11	82	< 0.0001	< 0.009	0.332	< 0.00004	0.48	< 0.00001	0.13	0.0144	2.21	< 0.00002	0.00008	< 0.0001	0.000060	0.00010	0.002	< 0.00001	CA10450-AUG11	0.40	0.42	0.02	1.9%
30-Aug-11	83	0.0003	< 0.009	0.348	< 0.00004	0.43	< 0.00001	0.14	0.0138	2.26	< 0.00002	0.00009	< 0.0001	0.000052	0.00011	0.002	0.00001	CA14264-SEP11	0.44	0.39	-0.05	-5.6%
06-Sep-11	84	< 0.0001	< 0.009	0.302	0.00020	0.41	< 0.00001	0.12	0.0116	2.08	< 0.00002	0.00001	0.0001	0.000054	0.00014	0.008	0.00001	CA14213-SEP11	0.40	0.36	-0.04	-5.3%
13-Sep-11	85	< 0.0001	< 0.009	0.282	< 0.00004	0.37	< 0.00001	0.11	0.0110	1.75	< 0.00002	0.00020	0.0001	0.000046	0.00006	0.005	0.00001	CA17321-SEP11	0.36	0.33	-0.04	-5.1%
20-Sep-11	86	0.0002	< 0.009	0.290	< 0.00004	0.40	0.00001	0.11	0.0109	1.93	< 0.00002	0.00054	0.0001	0.000040	0.00038	0.005	0.00001	CA14825-SEP11	0.37	0.34	-0.03	-4.5%
27-Sep-11	87	< 0.0001	< 0.009	0.316	0.00014	0.35	< 0.00001	0.11	0.0108	1.88	< 0.00002	< 0.00001	0.0001	0.000020	0.00010	< 0.001	0.00002	CA18921-SEP11	0.39	0.34	-0.06	-7.8%
04-Oct-11	88	< 0.0001	< 0.009	0.322	< 0.00004	0.45	< 0.00001	0.12	0.0116	1.84	< 0.00002	0.00008	0.0002	0.000047	0.00009	0.002	0.00002	CA14153-OCT11	0.44	0.37	-0.06	-7.6%
11-Oct-11	89	0.0002	< 0.009	0.245	0.00016	0.42	0.00002	0.10	0.0113	1.82	< 0.00002	0.00011	0.0001	0.000028	0.00010	0.002	0.00007	CA14391-OCT11	0.39	0.37	-0.02	-2.8%
18-Oct-11	90	0.0002	< 0.009	0.288	< 0.00004	0.37	< 0.00001	0.11	0.0118	1.88	< 0.00002	0.00005	0.0001	0.000031	0.00009	0.005	0.00001	CA14788-OCT11	0.37	0.36	-0.01	-1.3%
25-Oct-11	91	< 0.0001	< 0.009	0.307	< 0.00004	0.48	< 0.00001	0.12	0.0121	1.78	< 0.00002	0.00009	0.0001	0.000048	0.00009	0.002	0.00002	CA14955-OCT11	0.37	0.37	0.00	0.5%
01-Nov-11	92	0.0002	< 0.009	0.252	< 0.00004	0.38	< 0.00001	0.11	0.0106	1.68	< 0.00002	0.00009	0.0002	0.000041	0.00008	0.002	0.00002	CA18036-NOV11	0.38	0.33	-0.04	-5.9%
08-Nov-11	93	< 0.0001	< 0.009	0.269	0.00015	0.38	< 0.00001	0.13	0.0119	2.09	< 0.00002	0.00003	0.0002	0.000039	0.00018	0.004	0.00005	CA18264-NOV11	0.36	0.36	0.00	0.4%
15-Nov-11	94	0.0003	< 0.009	0.250	< 0.00004	0.27	< 0.00001	0.09	0.0113	1.97	< 0.00002	< 0.00001	0.0001	0.000039	0.00017	0.001	0.00002	CA18499-NOV11	0.33	0.34	0.01	2.1%
22-Nov-11	95	0.0003	< 0.009	0.241	0.00041	0.39	< 0.00001	0.03	0.0127	2.15	< 0.00002	0.00007	0.0002	0.000044	0.00022	0.003	< 0.00001	CA18773-NOV11	0.39	0.37	-0.02	-3.0%
29-Nov-11	96	0.0003	0.016	0.257	< 0.00004	0.44	< 0.00001	0.11	0.0117	1.58	< 0.00002	0.00006	0.0003	0.000036	0.00030	0.001	< 0.00001	CA12006-NOV11	0.35	0.35	0.00	0.0%
06-Dec-11	97	< 0.0001	< 0.009	0.237	0.00005	0.43	0.00005	0.05	0.0105	1.55	< 0.00002	0.00012	0.0002	0.000036	0.00027	0.002	< 0.00001	CA14293-DEC11	0.35	0.33	-0.01	-1.9%
13-Dec-11	98	0.0003	0.018	0.249	0.00037	0.33	< 0.00001	0.13	0.0110	1.67	< 0.00002	0.00009	< 0.0001	0.000050	0.00007	0.003	< 0.00001	CA14475-DEC11	0.34	0.33	-0.01	-1.2%
20-Dec-11	99	0.0002	< 0.009	0.254	0.00017	0.37	< 0.00001	0.10	0.0103	1.68	< 0.00002	< 0.00001	< 0.0001	0.000036	0.00014	0.003	0.00001	CA10397-DEC11	0.35	0.33	-0.01	-2.2%
27-Dec-11	100	0.0003	0.034	1.03	< 0.00004	0.34	0.00025	0.15	0.0109	1.60	< 0.00002	< 0.00001	0.0002	0.000053	0.00011	0.003	< 0.00001	CA10466-DEC11	0.39	0.36	-0.03	-4.4%
03-Jan-12	101	0.0005	< 0.009	0.241	< 0.00004	0.33	< 0.00001	0.10	0.0095	1.56	< 0.00002	0.00003	0.0018	0.000042	0.00113	< 0.001	< 0.00001	CA14133-JAN12	0.39	0.31	-0.08	-11.4%
10-Jan-12	102	0.0002	< 0.009	0.222	< 0.00004	0.31	< 0.00001	0.12	0.0092	1.45	< 0.00002	0.00005	0.0003	0.000033	0.00045	0.002	0.00001	CA14430-JAN12	0.34	0.31	-0.03	-5.0%
17-Jan-12	103	0.0009	< 0.009	0.268	< 0.00004	0.38	< 0.00001	0.09	0.0117	1.81	< 0.00002	0.00002	0.0002	0.000048	0.00029	0.003	0.00001	CA11226-JAN12	0.51	0.40	-0.12	-12.7%
24-Jan-12	104	0.0003	< 0.009	0.251	0.00010	0.34	< 0.00001	0.10	0.0103	1.58	< 0.00002	0.00003	0.0001	0.000036	0.00028	0.002	0.00002	CA10502-JAN12	0.44	0.35	-0.09	-11.5%
31-Jan-12	105	< 0.0001	< 0.009	0.231	< 0.00004	0.30	< 0.00001	0.12	0.0095	1.47	< 0.00002	0.00003	0.0003	0.000036	0.00041	0.002	< 0.00001	CA10999-FEB12	0.38	0.32	-0.05	-7.7%
07-Feb-12	106	0.0007	< 0.009	0.269	< 0.00004	0.39	< 0.00001	0.13	0.0135	2.37	< 0.00002	< 0.00001	0.0002	0.000103	0.00030	0.002	< 0.00001	CA14207-FEB12	0.55	0.42	-0.13	-13.4%
14-Feb-12	107	0.0002	< 0.009	0.215	0.00005	0.30	< 0.00001	0.11	0.0111	2.06	< 0.00002	< 0.00001	< 0.0001	0.000068	0.00008	< 0.001	< 0.00001	CA14420-FEB12	0.43	0.35	-0.09	-11.1%
21-Feb-12	108	0.0003	< 0.009	0.222	< 0.00004	0.32	< 0.00001	0.12	0.0096	1.64	< 0.00002	< 0.00001	< 0.0001	0.000031	0.00018	0.002	< 0.00001	CA14754-FEB12	0.39	0.32	-0.07	-10.3%
28-Feb-12	109	0.0002	< 0.009	0.235	< 0.00004	0.32	< 0.00001	0.11	0.0102	1.40	< 0.00002	0.00006	0.0003	0.000033	0.00027	0.002	< 0.00001	CA14931-FEB12	0.36	0.32	-0.04	-5.9%
06-Mar-12	110	0.0002	< 0.009	0.223	0.00005	0.34	< 0.00001	0.11	0.0091	1.57	< 0.00002	0.00060	0.0001	0.000046	0.00023	0.002	< 0.00001	CA14216-MAR12	0.34	0.31	-0.02	-3.3%
13-Mar-12	111	0.0002	< 0.009	0.200	< 0.00004	0.31	< 0.00001	0.12	0.0096	1.56	< 0.00002	0.00025	< 0.0001	0.000034	0.00007	0.001	0.00002	CA14408-MAR12	0.34	0.31	-0.03	-4.1%
20-Mar-12	112	0.0001	0.070	0.966	0.00010	0.28	0.00068	0.19	0.0090	1.38	< 0.00002	< 0.00001	< 0.0001	0.000032	< 0.00003	0.022	< 0.00001	CA14687-MAR12	0.33	0.32	-0.01	-1.1%
27-Mar-12	113	0.0002	< 0.009	0.191	< 0.00004	0.31	< 0.00001	0.12	0.0087	1.54	< 0.00002	0.00004	0.0002	0.000045	0.00042	0.002	0.00001	CA14874-MAR12	0.36	0.33	-0.03	-4.4%
03-Apr-12	114	0.0003	< 0.009	0.231	0.00004	0.32	< 0.00001	0.12	0.0101	1.75	< 0.00002	0.00003	0.0001	0.000040	0.00026	0.004	< 0.00001	CA14169-APR12	0.35	0.36	0.00	0.7%
10-Apr-12	115	< 0.0001	< 0.009	0.206	0.00044	0.31	< 0.00001	0.11	0.0093	1.57	< 0.00002	0.00002	0.0002	0.000032	0.00031	0.003	< 0.00001	CA11095-APR12	0.33	0.32	-0.01	-2.1%
17-Apr-12	116	0.0002	< 0.009	0.189	< 0.00004	0.29	< 0.00001	0.07	0.0088	1.50	< 0.00002	0.00002	0.0002	0.000030	0.00030	0.002	< 0.00001	CA14686-APR12	0.33	0.32	-0.01	-2.0%
24-Apr-12	117	0.0002	< 0.009	0.243	< 0.00004	0.32	< 0.00001	0.11	0.0102	2.11	< 0.00002	0.00008	0.0001	0.000044	0.00028	0.002	< 0.00001	CA14876-APR12	0.37	0.34	-0.02	-3.0%
01-May-12	118	0.0001	< 0.009	0.196	< 0.00004	0.29	< 0.00001	0.09	0.0094	1.52	< 0.00002	0.00003	0.0004	0.000045	0.00036	0.002	< 0.00001	CA14088-MAY12	0.39	0.34	-0.05	-7.1%
08-May-12	119	0.0002	< 0.009	0.271	< 0.00004	0.32	< 0.00001	0.11	0.0099	1.82	< 0.00002	0.00037	0.0001	0.000049	0.00022	0.002	< 0.00001	CA14348-MAY12	0.32	0.35	0.02	3.5%
15-May-12	120	0.0001	< 0.009	0.218	< 0.00004	0.29	< 0.00001	0.11	0.0091	1.74	< 0.00002	< 0.00001	0.0001	0.000041	0.00021	0.002	< 0.00001	CA14621-MAY12	0.32	0.32	-0.01	-0.9%
22-May-12	121	0.0004	< 0.009	0.208	< 0.00004	0.30	< 0.00001	0.10	0.0086	1.61	< 0.00002	0.00002	0.0002	0.000043	0.00039	0.006	< 0.00001	CA10508-MAY12	0.32	0.30	-0.02	-2.6%
29-May-12	122	< 0.0001	< 0.009	0.215	< 0.00004	0.36	< 0.00001	0.09	0.0094	1.63	< 0.00002	0.00021	< 0.0001	0.000032	0.00027	0.002	< 0.00001	CA15134-MAY12	0.31	0.33	0.02	2.4%
05-Jun-12	123	< 0.0001	< 0.009	0.253	< 0.00004	0.35	< 0.00001	0.15	0.0096	1.89	< 0.00002	0.00008	0.0002	0.000044	0.00026	0.002	< 0.00001	CA15137-JUN12	0.29	0.34	0.05	7.5%
12-Jun-12	124	< 0.0001	< 0.009	0.243	0.00005	0.36	< 0.00001	0.10	0.0096	1.64	< 0.00002	0.00008	0.0002	0.000031	0.00030	0.001	< 0.00001	CA15174-JUN12	0.37	0.34	-0.03	-4.3%
19-Jun-12	125	< 0.0001	< 0.009	0.233	0.00022	0.34	< 0.00001	0.10	0.0094	1.78	< 0.00002	0.00007	< 0.0001	0.000034	0.00030	0.002	< 0.00001	CA15309-JUN12	0.31	0.33	0.01	2.1%
26-Jun-12	126	0.0002	< 0.009	0.274	< 0.00004	0.57	< 0.00001	0.32	0.0100	1.67	< 0.00002	0.00016	0.0002	0.000035	0.00043	0.002	< 0.00001	CA15357-JUN12	0.36	0.34	-0.02	-3.1%
03-Jul-12	127	< 0.0001	< 0.009	0.236	< 0.00004	0.37	< 0.00001	0.11	0.0097	1.79	< 0.00002	0.00009	0.0001	0.000035	0.00031	0.001	< 0.00001	CA15021-JUL12	0.38	0.34	-0.04	-5.3%
10-Jul-12	128	0.0001	< 0.009	0.264	< 0.00004	0.38	< 0.00001	0.12	0.0103	1.81	< 0.00002	0.00010	0.0003	0.000035	0.00033	< 0.001	< 0.00001	CA15118-JUL12	0.39	0.35	-0.03	-4.6%
17-Jul-12	129	< 0.0001	< 0.009	0.234	0.00011	0.34	0.00004	0.09	0.0089	1.49	< 0.00002	0.00002	< 0.0001	0.000033	0.00031	< 0.001	< 0.00001	CA15186-JUL12	0.36	0.32	-0.04	-6.2%
24-Jul-12	130	< 0.0001	< 0.009	0.303	0.00027	0.39	< 0.00001	0.32	0.0099	1.70	< 0.00002	0.00007	0.0002	0.000027	0.00034	0.003	< 0.00001	CA15302-JUL12	0.37	0.35	-0.02	-3.1%
31-Jul-12	131	< 0.0001	< 0.009	0.234	< 0.00004	0.39	< 0.00001	0.11	0.0096	1.61	< 0.00002	0.00024	0.0002	0.000036	0.00045	0.004	< 0.00001	CA15010-AUG12	0.35	0.35	0.00	-0.4%
07-Aug-12	132	< 0.0001	< 0.009	0.258	0.00005	0.40	< 0.00001	0.12	0.0098	2.00	< 0.00002	0.00025	0.0002	0.000039	0.00039	0.002	< 0.00001	CA15071-AUG12	0.35	0.34	-0.01	-1.0%
14-Aug-12	133	0.0001	< 0.009	0.234	< 0.00004	0.34	< 0.00001	0.15	0.0092	1.90	< 0.00002	0.00013	0.0001	0.000036	0.00030	0.002	< 0.00001	CA15151-AUG12	0.30	0.31	0.02	2.7%
21-Aug-12	134	0.0002	< 0.009	0.210	< 0.00004	0.56	< 0.00001	0.10	0.0087	1.86	< 0.00002	0.00019	0.0002	0.000032	0.00030	0.001	< 0.00001	CA15239-AUG12	0.36	0.31	-0.04	-6.6%
28-Aug-12	135	0.0005	< 0.009	0.188	< 0.00004	0.29	< 0.00001	0.12	0.0082	1.48	< 0.00002	0.00081	0.0001	0.000033	0.00034	0.012	< 0.00001	CA15348-AUG12	0.37	0.29	-0.07	-11.1%
04-Sep-12	136	< 0.0001	< 0.009	0.204	< 0.00004	0.33	< 0.00001	0.10	0.0091	1.62	< 0.00002	0.00008	0.0002	0.000039	0.00040	< 0.001	< 0.00001	CA15317-SEP12	0.38	0.33	-0.05	-6.9%
11-Sep-12	137	< 0.0001	< 0.009	0.192	< 0.00004	0.35	< 0.00001	0.11	0.0086	1.52	< 0.00002	0.00021	0.0002	0.000036	0.00017	0.003	< 0.00001	CA15405-SEP12	0.37	0.30	-0.07	-11.0%
18-Sep-12	138	< 0.0001	< 0.009	0.229	< 0.00004	0.44	< 0.00001	0.11	0.0142	3.53	< 0.00002	0.00012	< 0.0001	0.000091	0.00020	0.004	< 0.00001	CA15559-SEP12	0.47	0.46	-0.01	-1.3%
25-Sep-12	139	0.0001	< 0.009	0.203	0.00005	0.31	0.00005	0.09	0.0100	2.31	< 0.00002	0.00013	< 0.0001	0.000056	0.00019	< 0.001	< 0.00001	CA15670-SEP12	0.38	0.33	-0.05	-7.1%
02-Oct-12	140	0.0004	< 0.009	0.202	< 0.00004	0.46	< 0.00001	0.10	0.0096	2.14	< 0.00002	0.00009	< 0.0001	0.000042	0.00018	< 0.001	< 0.00001	CA15354-OCT12	0.37	0.32	-0.05	-7.0%
09-Oct-12	141	0.0024	0.009	0.208	< 0.00004	0.31	< 0.00001	0.09	0.0086	1.68	< 0.00002	0.00021	0.0001	0.000048	0.00025	< 0.001	< 0.00001	CA15450-OCT12	0.37	0.31	-0.07	-9.7%
16-Oct-12	142	0.0001	< 0.009	0.186	< 0.00004	0.36	< 0.00001	0.11	0.0083	1.60	< 0.00002	0.00009	< 0.0001	0.000041	0.00021	0.001	< 0.00001	CA15570-OCT12	0.39	0.30	-0.09	-12.8%
23-Oct-12	143	0.0023	< 0.009	0.216	< 0.00004	0.31	0.00002	0.10	0.0094	1.79	< 0.00002	0.00005	0.0002	0.000050	0.00024	0.002	< 0.00001	CA15652-OCT12	0.42	0.33	-0.09	-12.0%
30-Oct-12	144	0.0002	< 0.009	0.225	< 0.00004	0.37	< 0.00001	0.13	0.0106	2.45	< 0.00002	0.00003	< 0.0001	0.000051	0.00028	0.003	< 0.00001	CA15744-OCT12	0.39	0.37	-0.02	-2.7%
06-Nov-12	145	0.0002	< 0.009	0.193	< 0.00004	0.30	< 0.00001	0.10	0.0098	1.95	< 0.00002	0.00029	< 0.0001	0.000042	0.00017	0.001	< 0.00001	CA11210-NOV12	0.31	0.34	0.03	4.5%
13-Nov-12	146	< 0.0001	< 0.009	0.213	< 0.00004	0.36	< 0.00001	0.10	0.0099	2.01	< 0.00002	< 0.00001	< 0.0001	0.000044	0.00018	< 0.001	< 0.00001	CA15251-NOV12	0.39	0.35	-0.04	-5.1%
20-Nov-12	147	0.0002	< 0.009	0.207	< 0.00004	0.39	< 0.00001	0.10	0.0124	2.61	< 0.00002	0.00013	0.0001	0.000090	0.00019	0.003	< 0.00001	CA15347-NOV12	0.42	0.42	0.00	-0.1%
27-Nov-12	148	0.0002	< 0.009	0.263	< 0.00004	0.57	< 0.00001	0.12	0.0186	4.90	< 0.00002	0.00023	< 0.0001	0.000107	< 0.00003	0.002	< 0.00001	CA15376-NOV12	0.58	0.57	-0.01	-1.1%
04-Dec-12	149	< 0.0001	< 0.009	0.212	0.00009	0.38	< 0.00001	0.08	0.0121	2.71	< 0.00002	0.00008	0.0002	0.000069	0.00021	0.001	< 0.00001	CA15038-DEC12	0.46	0.41	-0.05	-5.7%
11-Dec-12	150	< 0.0001	< 0.009	0.230	< 0.00004	0.39	< 0.00001	0.10	0.0117	2.62	< 0.00002	0.00006	< 0.0001	0.000061	0.00021	0.002	< 0.00001	CA15164-JAN13	0.48	0.43	-0.05	-5.4%
18-Dec-12	151	< 0.0001	< 0.009	0.181	0.00008	0.31	< 0.00001	0.09	0.0113	2.71	< 0.00002	0.00013	0.0002	0.000066	0.00021	< 0.001	< 0.00001	CA15269-DEC12	0.42	0.39	-0.04	-4.7%
25-Dec-12	152	< 0.0001	< 0.009	0.150	< 0.00004	0.21	< 0.00001	0.08	0.0098	2.04	< 0.00002	0.00008	< 0.0001	0.000040	0.00009	< 0.001	< 0.00001	CA15361-DEC12	0.29	0.31	0.03	4.3%
01-Jan-13	153	< 0.0001	< 0.009	0.159	0.00011	0.25	< 0.00001	0.08	0.0078	1.59	< 0.00002	0.00013	0.0001	0.000038	0.00016	< 0.001	< 0.00001	CA15056-JAN13	0.35	0.29	-0.06	-9.5%
08-Jan-13	154	< 0.0001	< 0.009	0.174	< 0.00004	0.34	< 0.00001	0.08	0.0081	1.65	< 0.00002	0.00024	0.0002	0.000040	0.00025	0.002	< 0.00001	CA15153-JAN13	0.36	0.32	-0.04	-5.7%
15-Jan-13	155																					
22-Jan-13	156																					
29-Jan-13	157																					
05-Feb-13	158																					
12-Feb-13	159																					

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Sample = Alt 09 13

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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
02-Feb-10	1	500	395	7.59	360	367	#N/A	2.4	31.3	173	-	-	165	0.141	0.0049	0.0007	0.00758	< 0.00002	< 0.00001	0.029	< 0.000003	50.6	< 0.0005	0.000132	0.0033	< 0.01	0.00004	0.008	9.45	0.053
09-Feb-10	2	500	465	7.54	279	354	#N/A	2.4	27.5	118	-	-	146	0.152	0.0037	0.0006	0.00467	< 0.00002	< 0.00001	0.039	< 0.000003	36.6	< 0.0005	0.000059	0.0011	< 0.01	< 0.00002	0.007	13.4	0.065
16-Feb-10	3	500	450	7.55	283	321	#N/A	2.5	29.4	144	-	-	150	0.146	0.0026	0.0006	0.00442	< 0.00002	< 0.00001	0.036	< 0.000003	39.4	< 0.0005	0.000054	0.0012	< 0.01	< 0.00002	0.007	12.5	0.081
23-Feb-10	4	500	450	7.63	344	292	#N/A	2.2	26.2	147	-	-	169	0.114	0.0016	0.0005	0.00401	< 0.00002	< 0.00001	0.026	< 0.000003	45.8	< 0.0005	0.000079	0.0008	< 0.01	< 0.00002	0.007	13.3	0.097
02-Mar-10	5	500	435	7.57	343	311	#N/A	1.7	20.3	154	-	-	136	0.0918	0.0011	0.0004	0.00378	< 0.00002	< 0.00001	0.016	< 0.000003	37.2	< 0.0005	0.000054	0.0008	< 0.01	0.00005	0.005	10.6	0.072
09-Mar-10	6	500	460	7.53	352	267	#N/A	1.9	23.6	105	-	-	129	0.107	0.0010	0.0004	0.00261	< 0.00002	< 0.00001	0.019	< 0.000003	35.2	< 0.0005	0.000051	0.0009	< 0.01	0.00003	0.004	9.92	0.080
16-Mar-10	7	500	435	7.44	357	225	#N/A	2.3	22.0	95	< 0.2	< 0.06	124	0.1260	0.0008	0.0003	0.00215	< 0.00002	< 0.00001	0.018	< 0.000003	33.40	< 0.0005	0.000038	0.0006	< 0.01	< 0.00002	0.004	9.850	0.079
23-Mar-10	8	500	445	7.49	359	226	#N/A	2.8	23.9	112	< 0.2	< 0.06	110	0.1160	0.0008	0.0003	0.00204	< 0.00002	< 0.00001	0.0144	< 0.000003	29.9	< 0.0005	0.000030	0.0007	< 0.01	0.00047	0.005	8.68	0.070
30-Mar-10	9	500	455	7.59	373	211	#N/A	1.9	21.3	95	< 0.2	< 0.06	103	0.0916	0.0008	0.0002	0.00213	< 0.00002	< 0.00001	0.013	< 0.000003	27.80	0.0007	0.000033	0.0008	< 0.01	< 0.00002	0.003	8.180	0.073
06-Apr-10	10	500	435	7.52	360	207	#N/A	2.1	23.3	96	< 0.2	< 0.06	98.6	0.104	0.0007	0.0002	0.00153	< 0.00002	< 0.00001	0.008	0.000003	27.3	0.0007	0.000026	0.0010	< 0.01	0.00035	0.004	7.40	0.066
13-Apr-10	11	500	460	7.35	354	179	#N/A	3.1	22.5	80	< 0.2	< 0.06	80.7	0.1030	0.0007	< 0.0002	0.00143	< 0.00002	< 0.00001	0.011	< 0.000003	22.20	< 0.0005	0.000019	0.0008	< 0.01	0.00037	0.003	6.10	0.065
20-Apr-10	12	500	440	7.57	336	217	#N/A	2.6	24.5	82	< 0.2	< 0.06	97.5	0.116	0.0007	0.0004	0.00184	< 0.00002	< 0.00001	0.011	0.000010	27.5	0.0007	0.000027	0.0010	< 0.01	0.00031	0.003	6.98	0.061
27-Apr-10	13	500	445	7.58	336	184	#N/A	2.8	23.3	72	< 0.2	< 0.06	81.7	0.1080	0.0005	0.0002	0.0015	< 0.00002	< 0.00001	0.008	< 0.000003	22.40	0.0006	0.000023	0.0010	< 0.01	0.00081	0.003	6.26	0.056
04-May-10	14	500	435	7.52	360	188	#N/A	2.4	23.7	69	< 0.2	< 0.06	89.5	0.1060	0.0006	< 0.0002	0.0016	< 0.00002	< 0.00001	0.009	0.000003	24.60	0.0007	0.00002	0.0009	< 0.01	< 0.00002	0.002	6.83	0.068
11-May-10	15	500	440	7.43	356	196	#N/A	2.5	22.9	82	< 0.2	< 0.06	89.6	0.0930	0.0006	0.0003	0.0016	< 0.00002	< 0.00001	0.009	< 0.000003	24.90	0.0007	0.00002	0.0010	< 0.01	0.00184	0.003	6.70	0.066
18-May-10	16	500	425	7.47	353	191	#N/A	2.6	22.8	68	< 0.2	< 0.06	92.7	0.108	0.0006	0.0005	0.00150	< 0.00002	< 0.00001	0.0088	0.000004	25.8	< 0.0005	0.000068	0.0016	0.002	< 0.00002	0.003	6.86	0.055
25-May-10	17	500	450	7.32	378	179	#N/A	3.9	23.6	47	< 0.2	< 0.06	77.2	0.082	0.0005	0.0002	0.0015	< 0.00002	< 0.00001	0.0081	0.000006	22.00	< 0.0005	0.00003	0.0015	< 0.002	0.00112	0.003	5.44	0.057
01-Jun-10	18	500	425	7.50	357	176	#N/A	2.3	22.5	44	< 0.2	< 0.06	78.3	0.092	0.0005	0.0004	0.0013	< 0.00002	< 0.00001	0.0070	< 0.000003	21.80	0.0008	0.00015	0.0019	0.004	0.00025	0.003	5.78	0.052
08-Jun-10	19	500	420	7.39	353	172	#N/A	2.9	22.7	51	< 0.2	< 0.06	84.5	0.093	0.0005	< 0.0002	0.0011	< 0.00002	< 0.00001	0.0080	< 0.000003	24.00	0.0008	0.00002	0.002	< 0.002	0.00122	0.003	5.99	0.058
15-Jun-10	20	500	435	7.46	350	165	#N/A	2.7	21.7	49	< 0.2	< 0.06	75.8	0.084	0.0005	0.0002	0.0017	< 0.00002	< 0.00001	0.0065	0.000003	21.80	0.0005	0.000031	0.001	< 0.002	0.00003	0.002	5.18	0.059
22-Jun-10	21	500	435	7.61	422	172	#N/A	1.9	23.4																					
29-Jun-10	22	500	450	7.32	339	153	#N/A	2.2	18.5	43	< 0.2	< 0.06	66.2	0.069	0.0002	< 0.0002	0.0012	< 0.00002	< 0.00001	0.0061	0.000005	18.50	0.0007	0.0000	0.002	< 0.002	0.00007	0.002	4.900	0.056
06-Jul-10	23	500	470	7.50	361	158	#N/A	2.2	21.3																					
13-Jul-10	24	500	460	7.29	357	158	#N/A	2.6	18.0	40	< 0.2	< 0.06	65.1	0.058	0.0004	0.0003	0.00124	< 0.00002	< 0.00001	0.0058	0.000003	17.30	< 0.0005	0.000034	0.0014	0.003	< 0.00002	0.002	5.290	0.0612
20-Jul-10	25	500	450	7.32	350	154	#N/A	4.4	20.0																					
27-Jul-10	26	500	455	7.23	357	152	#N/A	3.1	21.6	53	< 0.2	< 0.06	73.6	0.06	< 0.0002	0.0005	0.0013	< 0.00002	< 0.00001	0.0050	< 0.000003	20.70	0.0006	0.0000	0.00	< 0.002	< 0.00002	0.002	5.340	0.059
03-Aug-10	27	500	465	7.44	401	154	#N/A	3.2	21.3	47	< 0.2	< 0.06	73.6	0.06	0.0002	< 0.0002	0.00120	< 0.00002	< 0.00001	0.0071	< 0.000003	20.00	0.0005	0.0000	0.00	0.005	0.00005	0.002	5.730	0.068
10-Aug-10	28	500	460	7.46	369	159	#N/A	4.4	22.4	58	< 0.2	< 0.06	74.7	0.0543	< 0.0002	< 0.0002	0.00098	< 0.00002	< 0.00001	0.0080	0.00001	21.00	0.0006	0.000023	0.001	< 0.002	< 0.00002	0.002	5.410	0.0642
17-Aug-10	29	500	440	7.47	386	154	#N/A	3.5	22.2	55	< 0.2	< 0.06	70.9	0.0683	0.0004	0.0002	0.00093	< 0.00002	< 0.00001	0.0056	< 0.000003	19.7	< 0.0005	0.000004	0.0014	< 0.002	0.00003	0.002	5.27	0.0552
24-Aug-10	30	500	425	7.33	356	163	#N/A	3.0	24.0	48	< 0.2	< 0.06	77.8	0.0647	0.0004	0.0003	0.00104	< 0.00002	< 0.00001	0.0054	0.000004	21.8	< 0.0005	0.000023	0.0015	< 0.002	0.00003	0.002	5.65	0.0636
31-Aug-10	31	500	455	7.67	395	129	#N/A	5.3	26.5	53	< 0.2	0.32	62.2	0.0577	0.0006	< 0.0002	0.00088	< 0.00002	< 0.00001	0.0052	< 0.000003	17.3	< 0.0005	0.000026	0.0010	< 0.002	< 0.00002	0.002	4.58	0.0425
07-Sep-10	32	500	440	7.19	386	151	#N/A	3.6	20.7	57	< 0.2	< 0.06	64.3	0.06	< 0.0002	0.0003	0.00085	< 0.00002	< 0.00001	0.0075	0.000014	18.10	0.0008	0.0000	0.00	< 0.002	0.00013	0.002	4.650	0.0339
14-Sep-10	33	500	430	7.12	383	134	#N/A	3.2	18.1	58	< 0.2	< 0.06	64.2	0.0417	0.0028	0.0004	0.00090	< 0.00002	< 0.00001	0.0048	0.000008	18.10	< 0.0005	0.000036	0.0016	0.004	< 0.00002	0.002	4.630	0.0603
21-Sep-10	34	500	435	7.32	354	123	#N/A	2.7	21.0	48	< 0.2	< 0.06	64.2	0.05	0.0003	0.0004	0.00095	< 0.00002	0.00004	0.0059	< 0.000003	18.30	< 0.0005	0.0000	0.00	< 0.002	< 0.00002	0.002	4.520	0.0587
28-Sep-10	35	500	495	7.35	354	183	#N/A	2.4	23.5	63	< 0.2	< 0.06	80.8	0.06	0.0003	0.0002	0.0013	< 0.00002	< 0.00001	0.0068	< 0.000003	22.50	0.0005	0.0001	0.00	< 0.002	0.00004	0.003	5.98	0.072
05-Oct-10	36	500	470	7.25	350	173	#N/A	2.9	20.5	67	< 0.2	< 0.06	73.9	0.0559	0.0005	< 0.0002	0.00160	< 0.00002	< 0.00001	0.0058	0.000004	21.5	< 0.0005	0.000117	0.0018	< 0.002	0.00005	0.002	4.93	0.0597
12-Oct-10	37	500	430	7.21	337	159	#N/A	2.9	17.6	54	< 0.2	< 0.06	75.8	0.060	0.0019	0.0003	0.00098	< 0.00002	< 0.00001	0.0051	0.000007	21.40	< 0.0005	0.000080	0.0024	< 0.002	0.00003	0.002	5.410	0.0598
19-Oct-10	38	500	435	7.23	336	149	#N/A	3.3	21.4	53	< 0.2	< 0.06	65.4	0.0510	0.0003	< 0.0002	0.00459	< 0.00002	< 0.00001	0.0047	0.000005	18.6	< 0.0005	0.000038	0.0012	< 0.002	0.00004	0.002	4.59	0.0584
26-Oct-10	39	500	445	7.19	369	141	#N/A	2.7	17.2	46	< 0.2	< 0.06	58.2	0.0431	0.0022	< 0.0002	0.00087	< 0.00002	< 0.00001	0.0044	< 0.000003	16.20	0.0007	0.000061	0.0019	< 0.002	0.00015	0.002	4.300	0.0499
02-Nov-10	40	500	455	7.36	368	23	#N/A	2.3	20.7	42	< 0.2	< 0.06	63.5	0.0446	< 0.0002	< 0.0002	0.00100	< 0.00002	< 0.00001	0.0065	< 0.000003	18.0	< 0.0005	0.000028	0.0009	0.003	0.00024	0.002	4.53	0.0510
09-Nov-10	41	500	495	7.45	394	129	#N/A	3.0	26.2	64	< 0.2	< 0.06	82.2	0.0422	0.0009	0.0006	0.00118	< 0.00002	< 0.00001	0.0053	< 0.000003	22.8	0.0006	0.000071	0.0020	< 0.002	0.00053	0.002	6.14	0.0827
16-Nov-10	42	500	450	7.52	341	151	#N/A	3.1	22.1	114	< 0.2	< 0.06	70.3	0.0422	0.0002	< 0.0002	0.00109	< 0.00002	< 0.00001	0.0081	0.000005	20.00	0.0006	0.000040	0.0009	< 0.002	0.00035	0.002	4.960	0.0630
23-Nov-10	43	500	450	7.18	320	153	#N/A	3.0	22.1	48	< 0.2	< 0.06	64.3	0.0477	0.0003	0.0002	0.00153	< 0.00002	< 0.00001	0.0041	0.000007	18.1	0.0007	0.000081	0.0012	< 0.002	< 0.00002	0.002	4.66	0.0571
30-Nov-10	44	500	435	7.29	344	148	#N/A	3.7	26.4	43	< 0.2	< 0.06	66.3	0.0571	0.0002	< 0.0002	0.00094	< 0.00002	< 0.00001	0.0038	0.000003	18.7	0.0007	0.000068	0.0012	< 0.002	0.00004	0.002	4.75	0.0581
07-Dec-10	45	500	435	7.28	350	151	#N/A	3.5	24.9	48	< 0.2	< 0.06	79.0	0.0725	0.0003	< 0.0002	0.00294	< 0.00002	< 0.00001	0.0046	0.000004	22.7	0.0008	0.000061	0.0024	0.002	0.00531	0.002	5.40	0.0645
14-Dec-10	46	500	445	7.28	366	145	#N/A	4.6	23.7	49	< 0.2	< 0.06	64.9	0.0585	0.0003	< 0.0002	0.00096	< 0.00002	< 0.00001	0.0053	0.000006	18.1	< 0.0005	0.000067	0.0013	< 0.002	0.00014	0.002	4.75	0.0495
21-Dec-10	47	500	470	7.35	377	137	#N/A	5.5	25.1	47	< 0.2	< 0.06	69.0	0.0515	0.0004	< 0.0002	0.00103	< 0.00002	< 0.00001	0.0038	< 0.000003	19.4	< 0.0005	0.000039	0.0020	< 0.002	0.00004	0.002	4.98	0.146
28-Dec-10	48	500	465	7.43	350	128	#N/A	5.8	22.7	52	< 0.2	< 0.06	65.8	0.0470	0.0004	< 0.0002	0.00118	< 0.00002	< 0.00001	0.0059	0.000005	18.4	0.0009	0.000037	0.0012	< 0.002	0.00092	0.002	4.81	0.0527
04-Jan-11	49	500	460	7.31	374	125	#N/A	4.8	22.4	52	< 0.2	< 0.06	60.3	0.0393	0.0003	< 0.0002	0.00077	< 0.00002	0.00001	0.0030	0.000017	17.0	< 0.0005	0.000033	0.0010	< 0.002	0.00115	0.001	4.33	0.0529
11-Jan-11	50	500	455	7.20	390	130	#N/A	2.9	21.4	50	< 0.2	< 0.06	63.5	0.0342	0.0003	< 0.0002	0.00073	< 0.00002	< 0.00001	0.0058	0.000004	17.8	< 0.0005	0.000033	0.0008	< 0.002	< 0.00002	0.001	4.66	0.0632
18-Jan-11	51	500	435	7.21	361	142	#N/A	3.2	20.3	50	< 0.2	< 0.06	67.7	0.0436	0.0003	< 0.0002	0.00085	< 0.00002	< 0.00001	0.0032	0.000003	19.2	< 0.0005	0.000029	0.0008	0.003	0.00003	0.002	4.77	0.0540
25-Jan-11	52	500	465	7.20	348	136	#N/A	3.6	21.5	52	< 0.2	< 0.06	56.0	0.0377	0.0002	< 0.0002	0.00090	< 0.00002	< 0.00001	0.0038	< 0.000003	16.1	< 0.0005	0.000102	0.0009	0.007	< 0.00002	0.001	3.87	0.0469
01-Feb-11	53	500	435	7.22	357	130	#N/A	3.1	21.6	49	< 0.2	< 0.06	51.5	0.0316	< 0.0002	0.0003	0.00083	< 0.00002	< 0.00001	0.0032	0.000009	14.9	< 0.0005	0.000039	0.0008	< 0.002	0.00003	0.002	3.48	0.0482
08-Feb-11	54	500	425	7.34	365	127	#N/A	2.9	22.4	51	< 0.2	< 0.06	68.6	0.0497	0.0002	< 0.0002	0.00077	< 0.00002	< 0.00001	0.0029	0.000006	19.8	< 0.0005	0.000030	0.0008	0.004	< 0.00002	0.002	4.68	0.0537
15-Feb-11	55	500	445	7.29	357	135	#N/A	2.9	21.5	40	< 0.2	< 0.06	59.2	0.0418	< 0.0002	< 0.0002	0.00078	< 0.00002	< 0.00001	0.0044	0.000007	16.9	< 0.0005	0.000065	0.0017	< 0.002	0.00154	0.002	4.13	0.0517
22-Feb-11	56	500	435	7.32	338	138	#N/A	3.2	21.3	54	< 0.2	< 0.06	62.5	0.0382	0.0005	< 0.0002	0.00078	< 0.00002	< 0.00001	0.0044	0.000008	17.9	0.0006	0.000039	0.0013	< 0.002	0.00074	0.002	4.31	0.0508
01-Mar-11	57	500	435	7.21	349	127	#N/A	3.0	18.0	50	< 0.2	< 0.06	58.7	0.0399	< 0.0002	< 0.0002	0.00066	< 0.00002	< 0.00001	0.0028	0.000010	16.8	< 0.0005	0.000030	0.0015	< 0.002	0.00131	0.001	4.07	0.0494
08-Mar-11	58	500	440	7.18	329	131	#N/A	3.1	18.1	52	< 0.2	< 0.06	56.4	0.0329	0.0004	< 0.0002	0.00067	< 0.00002	< 0.00001	0.0031	0.000014	16.0	< 0.0005	0.000065	0.0012	< 0.002	0.00093	0.001	4.02	0.0500
15-Mar-11	59	500	445	7.27	307	142	#N/A	3.1	21.6	43	< 0.2	< 0.06	61.5	0.0369	< 0.0002	< 0.0002	0.00079	< 0.00002	< 0.00001	0.0033	0.000006	17.5	0.0008	0.000062	0.0015	< 0.002	0.00172	0.001	4.32	0.0538
22-Mar-11	60	500	435	7.27	312	138	#N/A	3.5	20.3	41	< 0.2	< 0.06	57.4	0.0311	0.0002	< 0.0002	0.00074	< 0.00002	< 0.00001	0.0025	0.000008	16.6	< 0.0005	0.000043	0.0011	0.005	< 0.00002	0.001	3.89	0.0502
29-Mar-11	61	500	440	7.58	292	134	#N/A	3.6	22.1	43	< 0.2	< 0.06	64.9	0.0298	< 0.0002	< 0.0002	0.00073	< 0.00002	< 0.00001	0.0027	< 0.000003	18.6	< 0.0005	0.000044	0.0009	0.002	< 0.00002	0.001	4.49	0.0531
05-Apr-11	62	500	455	7.29	252	154	#N/A	4.0	24.3	49	< 0.2	< 0.06	72.8	0.0336	< 0.0002	< 0.0002	0.00085	< 0.00002	< 0.00001	0.0035	0.000006	20.9	< 0.0005	0.000054	0.0012	< 0.002	< 0.00002	0.001	4.98	0.0644
12-Apr-11	63	500	445	7.30	297	136	#N/A	2.9	20.1	46	< 0.2	< 0.06	61.9	0.0338	< 0.0002	0.0002	0.00070	< 0.00002	< 0.00001	0.0022	< 0.000003	17.4	< 0.0005	0.000034	0.0048	0.005	< 0.00002	0.001	4.49	0.0617
19-Apr-11	64	500	450	7.49	239	143	#N/A	5.8	25.7	47	< 0.2	< 0.06	63.6	0.0312	< 0.0002	< 0.0002	0.00075	< 0.00002	< 0.00001	0.0029	0.000010	18.2	< 0.0005	0.000081	0.0008	0.003	0.00008	0.001	4.44	0.0561
26-Apr-11	65	500	435	7.42	268	148	#N/A	3.1	23.1	44	< 0.2	< 0.06	65.4	0.0379	0.0002	< 0.0002	0.00082	< 0.00002	< 0.00001	0.0031	< 0.000003	19.0	< 0.0005	0.000061	0.0007	< 0.002	< 0.00002	0.001	4.35	0.0530
03-May-11	66	500	435	7.41	355	143	#N/A	3.7	22.7	48	< 0.2	< 0.06	63.4	0.0395	< 0.0002	< 0.0002	0.00410	< 0.00002	< 0.00001	0.0041	0.000006	18.3	< 0.0005	0.000048	0.0010	0.002	< 0.00002	0.001	4.32	0.0518
10-May-11	67	500	430	7.44	375	140	#N/A	3.2	23.3	47	< 0.2	< 0.06	59.1	0.0393	< 0.0002	< 0.0002	0.00068	< 0.00002	< 0.00001	0.0043	0.000012	16.9	< 0.0005	0.000075	0.0011	< 0.002	< 0.00002	0.001	4.09	0.0483
17-May-11	68	500	440	7.68	330	138	#N/A	2.7	22.8	42	< 0.2	< 0.06	56.5	0.0369	< 0.0002	< 0.0002	0.00086	< 0.00002	< 0.00001	0.0023	0.000005	16.3	< 0.0005	0.000050	0.0007	< 0.002	< 0.00002	0.001	3.82	0.0463
24-May-11	69	500	500	7.49	267	176	#N/A	4.5	23.0	58	< 0.2	< 0.06	79.6	0.0320	< 0.0002	< 0.0002	0.00092	< 0.00002	< 0.00001	0.0067	0.000005	22.6	< 0.0005	0.000087	0.0011	< 0.002	0.00003	0.002	5.67	0.0781
31-May-11	70	500	455	7.43	255	153	#N/A	4.6	22.1	49	< 0.2	< 0.06	62.6	0.0149	0.0003	< 0.0002	0.00089	< 0.00002	< 0.00001	0.0030	0.000005	18.8	< 0.0005	0.000118	0.0012	< 0.002	0.00003	0.001	3.82	0.0498
07-Jun-11	71	500	440	7.58	334	140	#N/A	3.7	21.5	40	< 0.2	< 0.06	63.5	0.0357	< 0.0002	< 0.0002	0.00091	< 0.00002	< 0.00001	0.0033	0.000012	18.6	< 0.0005	0.000061	0.0014	< 0.002	0.00004	0.001	4.16	0.0517
14-Jun-11	72	500	430	7.54	280	145	#N/A	2.5	20.7	50	< 0.2	< 0.06	60.4	0.0319	< 0.0002	0.0003	0.00101	< 0.00002	< 0.00001	0.0031	0.000009	17.8	< 0.0005	0.000053	0.0008	0.006	0.00004	0.001	3.90	0.0506
21-Jun-11	73	500	455	7.57	292	152	#N/A	2.3	23.1	61	< 0.2	< 0.06	71.9	0.0303	< 0.0002	< 0.0002	0.00081	< 0.00002	< 0.00001	0.0028	0.000008	20.6	< 0.0005	0.000061	0.0008	< 0.002	0.00005	0.001	4.97	0.0679
28-Jun-11	74	500	440	7.53	281	152	#N/A	3.3	24.3	51	< 0.2	< 0.06	68.7	0.0398	< 0.0002	0.0005	0.00093	< 0.00002	< 0.00001	0.0037	0.000013	20.1	< 0.0005	0.000045	0.0009	0.003	0.00002	0.002	4.53	0.0562
05-Jul-11	75	500	460	7.39	306	159	#N/A	3.9	23.5	53	< 0.2	< 0.06	73.1	0.0368	< 0.0002	0.0003	0.00095	< 0.00002	< 0.00001	0.0051	0.000097	21.0	< 0.0005	0.000064	0.0010	< 0.002	0.00005	0.001	5.00	0.0557
12-Jul-11	76	500	445	7.26	309	162	#N/A	4.2	20.8	58	< 0.2	< 0.06	83.1	0.0338	< 0.0002	< 0.0002	0.00083	< 0.00002	< 0.00001	0.0027	0.000003	24.4	< 0.0005	0.000042	0.0007	< 0.002	0.00003	0.001	5.42	0.0625
19-Jul-11	77	500	440	7.37	348	152	#N/A	5.0	20.2	52	< 0.2	< 0.06	72.4	0.0303	0.0002	< 0.0002	0.00139	< 0.00002	0.00001	0.0041	0.000005	21.1	< 0.0005	0.000067	0.0007	< 0.002	0.00005	0.001	4.80	0.0542
26-Jul-11	78	500	455	7.53	259	159	#N/A	5.3	23.0	58	< 0.2	< 0.06	65.9	0.0323	0.0003	0.0009	0.00081	< 0.00002	< 0.00001	0.0032	< 0.000003	18.9	< 0.0005	0.000079	0.0009	0.033	< 0.00002	0.001	4.58	0.0925

HC 5 *CONFIDENTIAL* *DRAFT*

Sample = Alt 09 13

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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
02-Aug-11	79	500	475	7.52	273	164	#N/A	4.8	22.1	59	< 0.2	< 0.06	77.9	0.0272	< 0.0002	< 0.0002	0.00086	< 0.00002	< 0.00001	0.0032	0.000007	22.3	0.0005	0.000051	0.0008	0.006	< 0.00002	0.001	5.40	0.0615
09-Aug-11	80	500	440	7.43	231	146	#N/A	4.0	20.5	48	< 0.2	< 0.06	60.9	0.0304	< 0.0002	0.0003	0.00080	< 0.00002	< 0.00001	0.0026	0.000009	18.0	0.0008	0.000069	0.0007	< 0.002	< 0.00002	0.001	3.86	0.0486
16-Aug-11	81	500	460	7.48	273	162	#N/A	6.3	23.9	54	< 0.2	< 0.06	62.4	0.0310	< 0.0002	< 0.0002	0.00095	< 0.00002	< 0.00001	0.0032	0.000004	18.0	0.0006	0.000056	0.0014	< 0.002	0.00015	0.001	4.26	0.0484
23-Aug-11	82	500	460	7.41	222	167	#N/A	4.6	22.7	56	< 0.2	< 0.06	77.4	0.0413	0.0002	< 0.0002	0.00088	< 0.00002	< 0.00001	0.0034	0.000006	22.4	0.0005	0.000044	0.0009	0.004	0.00003	0.002	5.21	0.0569
30-Aug-11	83	500	450	7.41	271	161	#N/A	5.4	22.1	51	< 0.2	< 0.06	76.8	0.0355	< 0.0002	< 0.0002	0.00103	< 0.00002	< 0.00001	0.0031	0.000027	22.4	0.0007	0.000051	0.0010	0.004	0.00005	0.002	5.08	0.0557
06-Sep-11	84	500	430	7.51	279	153	#N/A	4.7	21.4	60	< 0.2	< 0.06	67.0	0.0284	< 0.0002	< 0.0002	0.00099	< 0.00002	< 0.00001	0.0028	0.000010	19.7	< 0.0005	0.000039	0.0009	< 0.002	0.00031	0.001	4.32	0.0483
13-Sep-11	85	500	460	7.48	323	163	#N/A	4.0	21.2	61	< 0.2	< 0.06	71.1	0.0281	< 0.0002	0.0002	0.00107	< 0.00002	< 0.00001	0.0037	0.000018	20.0	0.0010	0.000055	0.0009	< 0.002	0.00024	0.001	5.16	0.0568
20-Sep-11	86	500	445	7.41	289	152	#N/A	4.6	21.6	53	< 0.2	< 0.06	65.9	0.0255	< 0.0002	0.0003	0.00174	< 0.00002	< 0.00001	0.0032	0.000015	19.3	0.0035	0.000061	0.0023	0.008	0.00006	0.001	4.29	0.0596
27-Sep-11	87	500	455	7.36	319	153	#N/A	5.6	20.4	55	< 0.2	< 0.06	68.2	0.0289	< 0.0002	0.0003	0.00149	< 0.00002	< 0.00001	0.0007	0.000010	19.6	0.0010	0.000042	0.0008	0.004	0.00003	0.001	4.66	0.0555
04-Oct-11	88	500	465	7.45	295	139	#N/A	4.8	20.3	50	< 0.2	< 0.06	61.5	0.0284	0.0045	0.0021	0.00084	< 0.00002	< 0.00001	0.0039	< 0.000003	17.9	0.0006	0.000045	0.0008	< 0.002	0.00014	0.001	4.08	0.0505
11-Oct-11	89	500	465	7.50	267	151	#N/A	6.0	22.5	58	< 0.2	< 0.06	71.0	0.0358	0.0015	0.0002	0.00106	< 0.00002	< 0.00001	0.0037	0.000007	20.5	0.0007	0.000041	0.0012	< 0.002	0.00008	0.001	4.84	0.0582
18-Oct-11	90	500	455	7.36	289	166	#N/A	4.4	20.0	61	< 0.2	< 0.06	69.3	0.0290	0.0003	0.0003	0.00103	< 0.00002	< 0.00001	0.0035	< 0.000003	20.2	0.0006	0.000043	0.0013	0.003	0.00005	0.001	4.59	0.0539
25-Oct-11	91	500	455	7.34	309	151	#N/A	3.2	20.5	54	< 0.2	< 0.06	67.0	0.0304	< 0.0002	< 0.0002	0.00111	< 0.00002	< 0.00001	0.0033	0.000049	19.4	0.0005	0.000046	0.0010	< 0.003	0.00006	0.001	4.51	0.0572
01-Nov-11	92	500	475	7.37	275	143	#N/A	4.5	20.4	52	< 0.2	< 0.06	62.4	0.0262	< 0.0002	0.0007	0.00098	< 0.00002	< 0.00001	0.0030	0.000015	18.2	0.0006	0.000040	0.0009	< 0.003	< 0.00002	0.001	4.14	0.0549
08-Nov-11	93	500	435	7.39	306	148	#N/A	5.2	21.4	49	< 0.2	< 0.06	69.4	0.0291	< 0.0002	0.0002	0.00080	< 0.00002	< 0.00001	0.0022	0.000011	20.3	< 0.0005	0.000055	0.0009	< 0.003	< 0.00002	0.001	4.56	0.0583
15-Nov-11	94	500	445	7.28	266	139	#N/A	5.1	17.4	52	< 0.2	< 0.06	62.3	0.0328	< 0.0002	< 0.0002	0.00073	< 0.00002	< 0.00001	0.0026	0.000006	18.2	< 0.0005	0.000058	0.0012	< 0.003	< 0.00002	0.001	4.08	0.0496
22-Nov-11	95	500	445	7.39	299	144	#N/A	5.5	22.1	50	< 0.2	< 0.06	67.9	0.0411	< 0.0002	0.0006	0.00138	< 0.00002	< 0.00001	0.0026	0.000016	19.9	< 0.0005	0.000047	0.0011	< 0.003	0.00004	0.001	4.43	0.0584
29-Nov-11	96	500	445	7.48	331	134	#N/A	5.6	22.4	46	< 0.2	< 0.06	63.3	0.0431	< 0.0002	0.0003	0.00070	< 0.00002	< 0.00001	0.0031	0.000009	18.7	< 0.0005	0.000055	0.0010	< 0.003	< 0.00002	0.001	4.02	0.0567
06-Dec-11	97	500	445	7.30	334	144	#N/A	5.0	20.8	49	< 0.2	< 0.06	68.1	0.0343	< 0.0002	< 0.0002	0.00100	< 0.00002	< 0.00001	0.0025	0.000010	20.2	< 0.0005	0.000041	0.0009	< 0.003	< 0.00002	0.001	4.32	0.0621
13-Dec-11	98	500	445	7.25	282	139	#N/A	4.6	20.9	49	< 0.2	< 0.06	65.2	0.0219	< 0.0002	< 0.0002	0.00103	< 0.00002	< 0.00001	0.0024	0.000011	19.3	0.0009	0.000045	0.0013	< 0.003	0.00013	0.001	4.13	0.0566
20-Dec-11	99	500	435	7.44	302	131	#N/A	4.8	20.3	47	< 0.2	< 0.06	60.6	0.0302	< 0.0002	0.0003	0.00076	< 0.00002	< 0.00001	0.0022	< 0.000003	17.7	< 0.0005	0.000045	0.0011	< 0.003	0.00003	0.001	4.00	0.0499
27-Dec-11	100	500	460	7.67	318	143	#N/A	5.6	26.4	52	< 0.2	< 0.06	65.6	0.0561	< 0.0002	0.0005	0.00075	< 0.00002	< 0.00001	0.0026	0.000010	19.2	< 0.0005	0.000045	0.0008	< 0.003	< 0.00002	0.001	4.27	0.0520
03-Jan-12	101	500	445	7.34	326	134	#N/A	4.5	23.4	51	< 0.2	< 0.06	58.8	0.0575	< 0.0002	< 0.0002	0.00081	< 0.00002	< 0.00001	0.0026	0.000010	17.5	< 0.0005	0.000054	0.0016	< 0.003	< 0.00002	0.001	3.66	0.0483
10-Jan-12	102	500	445	7.31	337	129	#N/A	3.9	22.6	44	< 0.2	< 0.06	57.7	0.0579	< 0.0002	< 0.0002	0.00182	< 0.00002	< 0.00001	0.0027	0.000018	17.3	< 0.0005	0.000032	0.0011	< 0.003	0.00003	0.001	3.52	0.0523
17-Jan-12	103	500	465	7.31	311	135	#N/A	4.4	24.3	51	< 0.2	< 0.06	67.2	0.0338	< 0.0002	< 0.0002	0.00075	< 0.00002	< 0.00001	0.0041	0.000013	20.0	< 0.0005	0.000042	0.0018	< 0.003	0.00005	0.001	4.16	0.0634
24-Jan-12	104	500	480	7.42	383	129	#N/A	5.2	22.7	45	< 0.2	< 0.06	57.2	0.0398	< 0.0002	0.0002	0.00070	< 0.00002	< 0.00001	0.0022	0.000007	17.0	< 0.0005	0.000048	0.0008	< 0.003	< 0.00002	0.001	3.58	0.0529
31-Jan-12	105	500	455	7.19	322	138	#N/A	3.7	22.1	48	< 0.2	< 0.06	60.5	0.0425	< 0.0002	0.0003	0.00081	< 0.00002	< 0.00001	0.0030	< 0.000003	18.1	0.0006	0.000041	0.0010	< 0.003	< 0.00002	< 0.001	3.72	0.0546
07-Feb-12	106	500	485	7.40	363	170	#N/A	5.0	28.6	60	< 0.2	< 0.06	75.7	0.0324	< 0.0002	< 0.0002	0.00102	< 0.00002	< 0.00001	0.0020	0.000022	22.5	< 0.0005	0.000066	0.0018	< 0.003	0.00004	0.001	4.73	0.0815
14-Feb-12	107	500	435	7.36	397	136	#N/A	5.5	20.2	54	< 0.2	< 0.06	60.5	0.0187	< 0.0002	< 0.0002	0.00078	< 0.00002	< 0.00001	0.0018	0.000013	18.6	< 0.0005	0.000039	0.0009	< 0.003	< 0.00002	0.001	3.42	0.0546
21-Feb-12	108	500	445	7.24	341	132	#N/A	3.2	17.5	46	< 0.2	< 0.06	60.6	0.0282	< 0.0002	< 0.0002	0.00073	< 0.00002	< 0.00001	0.0062	0.000006	18.2	< 0.0005	0.000042	0.0013	< 0.003	< 0.00002	< 0.001	3.68	0.0552
28-Feb-12	109	500	440	7.25	407	135	#N/A	4.7	17.9	47	< 0.2	< 0.06	63.0	0.0320	< 0.0002	< 0.0002	0.00087	< 0.00002	< 0.00001	0.0026	0.000014	18.6	< 0.0005	0.000035	0.0020	< 0.003	< 0.00002	0.001	4.01	0.0591
06-Mar-12	110	500	460	7.29	394	144	#N/A	3.8	20.7	51	< 0.2	0.07	63.8	0.0386	< 0.0002	< 0.0002	0.00190	< 0.00002	< 0.00001	0.0021	0.000011	18.8	< 0.0005	0.000030	0.0009	0.006	< 0.00002	0.001	4.09	0.0577
13-Mar-12	111	500	435	7.17	366	130	#N/A	5.0	16.5	50	< 0.2	< 0.06	59.3	0.0205	< 0.0002	0.0004	0.00108	< 0.00002	< 0.00001	0.0026	0.000009	17.9	< 0.0005	0.000036	0.0011	0.004	< 0.00002	0.001	3.54	0.0523
20-Mar-12	112	500	465	7.23	359	140	#N/A	4.8	20.6	51	< 0.2	< 0.06	63.8	0.0333	< 0.0002	0.0003	0.00075	< 0.00002	< 0.00001	0.0025	0.000012	18.6	< 0.0005	0.000046	0.0014	< 0.003	0.00002	0.001	4.19	0.0608
27-Mar-12	113	500	445	7.23	354	155	#N/A	4.3	23.4	52	< 0.2	< 0.06	70.0	0.0531	< 0.0002	0.0003	0.00077	< 0.00002	< 0.00001	0.0022	0.000022	21.0	< 0.0005	0.000054	0.0025	< 0.003	0.00005	0.001	4.26	0.0604
03-Apr-12	114	500	460	7.18	388	143	#N/A	4.3	22.7	51	< 0.2	< 0.06	64.7	0.0546	< 0.0002	< 0.0002	0.00080	< 0.00002	< 0.00001	0.0022	< 0.000003	19.0	< 0.0005	0.000020	0.0014	< 0.003	< 0.00002	0.001	4.17	0.0580
10-Apr-12	115	500	460	7.33	309	151	#N/A	3.4	23.8	54	< 0.2	< 0.06	67.8	0.0363	< 0.0002	< 0.0002	0.00132	< 0.00002	< 0.00001	0.0025	< 0.000003	20.0	< 0.0005	0.000033	0.0010	< 0.003	< 0.00002	0.001	4.37	0.0660
17-Apr-12	116	500	465	7.22	360	149	#N/A	4.0	21.8	55	< 0.2	< 0.06	66.4	0.0356	< 0.0002	< 0.0002	0.00071	< 0.00002	< 0.00001	0.0026	< 0.000003	19.6	< 0.0005	0.000026	0.0009	< 0.003	< 0.00002	0.001	4.22	0.0630
24-Apr-12	117	500	450	7.39	391	146	#N/A	3.3	21.6	52	< 0.2	< 0.06	64.1	0.0503	< 0.0002	< 0.0002	0.00098	< 0.00002	< 0.00001	0.0027	< 0.000003	19.2	< 0.0005	0.000040	0.0012	0.004	< 0.00002	0.001	3.94	0.0590
01-May-12	118	500	440	7.37	344	140	#N/A	5.3	21.2	51	< 0.2	< 0.06	62.8	0.0487	< 0.0002	< 0.0002	0.00072	< 0.00002	< 0.00001	0.0038	< 0.000003	18.9	< 0.0005	0.000027	0.0010	< 0.003	0.00002	< 0.001	3.83	0.0667
08-May-12	119	500	450	7.37	382	148	#N/A	3.3	22.1	49	< 0.2	< 0.06	66.8	0.0313	< 0.0002	< 0.0002	0.00084	< 0.00002	< 0.00001	0.0037	< 0.000003	19.6	< 0.0005	0.000031	0.0014	< 0.003	< 0.00002	0.001	4.33	0.0710
15-May-12	120	500	450	7.43	290	144	#N/A	3.1	17.9	42	< 0.2	< 0.06	63.7	0.0374	< 0.0002	< 0.0002	0.00075	< 0.00002	< 0.00001	0.0029	< 0.000003	19.1	< 0.0005	0.000029	0.0014	< 0.003	< 0.00002	0.001	3.92	0.0639
22-May-12	121	500	455	7.21	334	148	#N/A	3.7	17.7	47	< 0.2	< 0.06	63.7	0.0625	< 0.0002	< 0.0002	0.00075	< 0.00002	< 0.00001	0.0022	< 0.000003	19.0	< 0.0005	0.000027	0.0006	< 0.003	0.00005	0.001	3.97	0.0657
29-May-12	122	500	490	7.27	335	191	#N/A	3.9	24.4	58	< 0.2	< 0.06	85.2	0.0346	< 0.0002	< 0.0002	0.00088	< 0.00002	< 0.00001	0.0036	< 0.000003	25.2	< 0.0005	0.000050	0.0011	< 0.003	< 0.00002	0.001	5.40	0.112
05-Jun-12	123	500	450	7.17	388	153	#N/A	4.5	20.3	53	< 0.2	< 0.06	70.6	0.0443	< 0.0002	< 0.0002	0.00090	< 0.00002	< 0.00001	0.0038	< 0.000003	21.5	< 0.0005	0.000041	0.0013	< 0.003	< 0.00002	0.001	4.08	0.0748
12-Jun-12	124	500	450	7.31	345	157	#N/A	3.6	21.3	52	< 0.2	< 0.06	70.9	0.0446	< 0.0002	< 0.0002	0.00079	< 0.00002	< 0.00001	0.0039	< 0.000003	21.8	< 0.0005	0.000023	0.0011	< 0.003	< 0.00002	0.001	4.02	0.0734
19-Jun-12	125	500	455	7.29	354	163	#N/A	3.3	17.3	55	< 0.2	< 0.06	71.1	0.0453	< 0.0002	< 0.0002	0.00076	< 0.00002	< 0.00001	0.0036	< 0.000003	21.5	< 0.0005	0.000036	0.0017	< 0.003	< 0.00002	0.001	4.24	0.0726
26-Jun-12	126	500	445	7.35	325	153	#N/A	3.6	17.3	58	< 0.2	< 0.06	70.5	0.0638	< 0.0002	< 0.0002	0.00089	< 0.00002	< 0.00001	0.0037	< 0.000003	21.2	< 0.0005	< 0.000002	0.0016	< 0.003	0.00003	0.001	4.29	0.0664
03-Jul-12	127	500	445	7.27	406	167	#N/A	7.5	22.1	57	< 0.2	< 0.06	74.7	0.0374	< 0.0002	< 0.0002	0.00080	< 0.00002	< 0.00001	0.0029	0.000011	22.3	< 0.0005	0.000029	0.0012	< 0.003	< 0.00002	0.001	4.62	0.0822
10-Jul-12	128	500	435	7.33	310	153	#N/A	3.6	20.2	50	< 0.2	< 0.06	65.5	0.0465	< 0.0002	< 0.0002	0.00087	< 0.00002	< 0.00001	0.0030	0.000004	19.9	< 0.0005	0.000019	0.0012	< 0.003	< 0.00002	0.001	3.81	0.0681
17-Jul-12	129	500	440	7.38	354	150	#N/A	2.5	20.3	51	< 0.2	< 0.06	67.8	0.0495	< 0.0002	< 0.0002	0.00075	< 0.00002	< 0.00001	0.0032	< 0.000003	20.1	< 0.0005	0.000044	0.0008	< 0.003	< 0.00002	0.001	4.27	0.0694
24-Jul-12	130	500	460	7.18	317	163	#N/A	3.0	17.4	57	< 0.2	< 0.06	75.5	0.0495	< 0.0002	0.0004	0.00076	< 0.00002	< 0.00001	0.0030	0.000005	22.2	< 0.0005	0.000034	0.0011	< 0.003	< 0.00002	0.001	4.89	0.0794
31-Jul-12	131	500	445	7.36	345	142	#N/A	2.5	16.3	49	< 0.2	< 0.06	66.2	0.0508	< 0.0002	0.0003	0.00073	< 0.00002	< 0.00001	0.0034	0.000005	19.9	< 0.0005	0.000021	0.0008	< 0.003	< 0.00002	0.001	4.00	0.0685
07-Aug-12	132	500	445	7.43	332	147	#N/A	2.5	16.8	52	< 0.2	< 0.06	67.7	0.0676	0.0004	0.0012	0.00109	< 0.00002	< 0.00001	0.0027	0.000010	20.3	< 0.0005	0.000034	0.0010	< 0.003	< 0.00002	0.001	4.13	0.0671
14-Aug-12	133	500	445	7.23	300	147	#N/A	2.8	15.4	53	< 0.2	< 0.06	63.6	0.0469	< 0.0002	< 0.0002	0.00082	< 0.00002	< 0.00001	0.0031	0.000007	18.5	< 0.0005	0.000012	0.0019	< 0.003	< 0.00002	< 0.001	4.21	0.0688
21-Aug-12	134	500	450	7.17	287	150	#N/A	3.1	14.1	55	< 0.2	< 0.06	67.3	0.0541	0.0004	< 0.0002	0.00072	< 0.00002	< 0.00001	0.0035	0.000009	19.7	< 0.0005	0.000040	0.0010	< 0.003	< 0.00002	0.001	4.43	0.0763
28-Aug-12	135	500	455	7.25	409	145	#N/A	4.9	20.2	50	< 0.2	< 0.06	61.1	0.0512	< 0.0002	0.0003	0.00072	< 0.00002	< 0.00001	0.0039	0.000005	18.3	< 0.0005	0.000029	0.0014	< 0.003	0.00003	< 0.001	3.72	0.0843
04-Sep-12	136	500	460	7.09	417	143	#N/A	4.8	15.8	50	< 0.2	< 0.06	65.4	0.0661	< 0.0002	< 0.0002	0.00075	< 0.00002	< 0.00001	0.0034	0.000004	19.4	< 0.0005	0.000027	0.0010	< 0.003	< 0.00002	0.001	4.11	0.0681
11-Sep-12	137	500	450	7.21	368	129	#N/A	3.3	14.4	42	< 0.2	< 0.06	56.5	0.0269	< 0.0002	< 0.0002	0.00102	< 0.00002	< 0.00001	0.0030	0.000018	16.6	< 0.0005	0.000034	0.0013	0.008	< 0.00002	< 0.001	3.63	0.0565
18-Sep-12	138	500	485	7.29	370	165	#N/A	2.6	20.6	60	< 0.2	< 0.06	73.3	0.0352	< 0.0002	0.0003	0.00088	< 0.00002	< 0.00001	0.0040	0.000076	21.6	< 0.0005	0.000031	0.0008	< 0.003	0.00004	0.001	4.70	0.0881
25-Sep-12	139	500	450	7.19	379	130	#N/A	3.1	15.2	48	< 0.2	< 0.06	57.1	0.0341	< 0.0002	< 0.0002	0.00072	< 0.00002	< 0.00001	0.0032	0.000017	17.3	< 0.0005	0.000025	0.0011	< 0.003	0.00013	< 0.001	3.41	0.0568
02-Oct-12	140	500	440	7.17	408	136	#N/A	3.7	16.2	47	< 0.2	< 0.06	59.0	0.0271	< 0.0002	< 0.0002	0.00076	< 0.00002	< 0.00001	0.0039	0.000004	17.7	< 0.0005	0.000064	0.0017	< 0.003	0.00003	< 0.001	3.60	0.0591
09-Oct-12	141	500	445	7.22	385	129	#N/A	5.3	16.1	47	< 0.2	< 0.06	55.1	0.0343	< 0.0002	< 0.0002	0.00091	< 0.00002	< 0.00001	0.0033	0.000006	16.5	< 0.0005	0.000046	0.0012	< 0.003	< 0.00002	< 0.001	3.36	0.0610
16-Oct-12	142	500	435	7.37	412	125	#N/A	5.1	17.1	48	< 0.2	< 0.06	56.6	0.0322	< 0.0002	< 0.0002	0.00067	< 0.00002	< 0.00001	0.0034	0.000009	16.8	< 0.0005	0.000022	0.0011	0.006	< 0.00002	< 0.001	3.52	0.0563
23-Oct-12	143	500	440	7.16	369	122	#N/A	4.3	16.1	44	< 0.2	< 0.06	52.2	0.0514	< 0.0002	< 0.0002	0.00064	< 0.00002	< 0.00001	0.0021	0.000028	15.9	< 0.0005	0.000118	0.0015	< 0.003	0.00007	< 0.001	3.05	0.0531
30-Oct-12	144	500	440	7.08	382	125	#N/A	4.1	15.4	46	< 0.2	< 0.06	59.0	0.0453	< 0.0002	< 0.0002	0.00075	< 0.00002	< 0.00001	0.0042	0.00107	17.5	< 0.0005	0.000020	0.0013	0.004	< 0.00002	< 0.001	3.70	0.0626
06-Nov-12	145	500	440	7.18	373	117	#N/A	4.2	15.4	38	< 0.2	< 0.06	59.3	0.0204	< 0.0002	0.0005	0.00118	< 0.00002	< 0.00001	0.0036	0.000032	17.9	< 0.0005	0.000053	0.0013	< 0.003	< 0.00002	< 0.001	3.56	0.0597
13-Nov-12	146	500	440	7.29	391	120	#N/A	5.9	17.3	41	< 0.2	< 0.06	57.6	0.0188	< 0.0002	< 0.0002	0.00068	< 0.00002	< 0.00001	0.0031	0.000026	17.1	< 0.0005	0.000059	0.0009	< 0.003	0.00003	< 0.001	3.61	0.0623
20-Nov-12	147	500	495	7.64	389	143	#N/A	7.1	22.9	43	< 0.2	< 0.06	65.7	0.0266	< 0.0002	< 0.0002	0.00112	< 0.00002	< 0.00001	0.0033	0.000004	19.2	< 0.0005	0.000156	0.0014	< 0.003	< 0.00002	< 0.001	4.31	0.0839
27-Nov-12	148	500	505	7.37	366	148	#N/A	5.0	23.2	48	< 0.2	< 0.06	68.0	0.0190	< 0.0002	< 0.0002	0.00104	< 0.00002	< 0.00001	0.0033	0.000013	20.3	< 0.0005	0.000053	0.0010	< 0.003	< 0.00002	0.001	4.20	0.0824
04-Dec-12	149	500	465	7.54	353	126	#N/A	1.8	21.6	47	< 0.2	< 0.06	58.0	0.0270	< 0.0002	< 0.0002	0.00069	< 0.00002	< 0.00001	0.0017	0.000008	17.3	< 0.0005	0.000061	0.0016	< 0.003	< 0.00002	0.001	3.63	0.0497
11-Dec-12	150	500	450	7.47	346	126	#N/A	2.4	22.1	41	< 0.2	< 0.06	54.6	0.0279	< 0.0002	< 0.0002	0.00069	< 0.00002	< 0.00001	0.0028	0.000012	17.2	< 0.0005	0.000063	0.0013	0.004	< 0.00002	< 0.001	2.83	0.0462
18-Dec-12	151	500	495	7.46	323	130	#N/A	2.3	23.4	45	< 0.2	< 0.06	63.7	0.0248	< 0.0002	< 0.0002	0.00096	< 0.00002	< 0.00001	0.0019	0.000011	19.1	< 0.0005	0.000043	0.0010	< 0.003	< 0.00002	0.001	3.92	0.0721
25-Dec-12	152	500	450	7.37	357	111	#N/A	3.5	17.7	36	< 0.2	< 0.06	53.1	0.0298	< 0.0002	< 0.0002	0.00073	< 0.00002	< 0.00001	0.0017	0.000121	15.9	< 0.0005	0.000039	0.0007	< 0.003	< 0.00002	< 0.001	3.23	0.0497
01-Jan-13	153	500	460	7.42	362	117	#N/A	2.7	20.1	43	< 0.2	< 0.06	52.4	0.0249	< 0.0002	< 0.0002	0.00069	< 0.00002	< 0.00001	0.0015	0.000013	15.7	< 0.0005	0.000034	< 0.0005	< 0.003	< 0.00002	< 0.001	3.21	0.0475
08-Jan-13	154	500	450	7.50	331	112	#N/A	3.3	21.1	37	< 0.2	< 0.06	52.3	0.0342	< 0.0002	< 0.0002	0.00135	< 0.00002	< 0.00001	0.0021	0.000006	16.2	< 0.0005	0.000079	0.0009	< 0.003	< 0.00002	< 0.001	2.88	0.0412
15-Jan-13	155	500	455																											
22-Jan-13	156	500	455	7.35	350	111	#N/A	4.5	20.0	42																				
29-Jan-13	157	500	455																											
05-Feb-13	158	500	450	7.42	346	131	#N/A	3.5	16.4	47																				
12-Feb-13	159	500	450																											

Apr 20/10 Al, Mo, Cu, Co, and K repeated due to carryover of solution during ICP analysis.
Jan 15/13 Change in analytical sched

HC 5
Sample = Alt 09 13

Date	Cycle	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L					
02-Feb-10	1	< 0.01	0.00071	0.0020	< 0.01	12.2	0.00101	0.58	0.00003	12.6	0.271	73.4	< 0.0002	0.00047	< 0.0001	0.000042	0.00028	0.001	< 0.00001		4.23	4.16	-0.07	-0.8%
09-Feb-10	2	0.02	0.00078	0.0005	< 0.01	8.49	0.00328	0.58	0.00059	10.3	0.219	73.3	< 0.0002	< 0.00001	< 0.0001	0.000067	0.00037	0.001	0.00001		3.01	3.59	0.59	8.9%
16-Feb-10	3	0.01	0.00059	0.0012	< 0.01	6.24	0.00305	0.65	0.00091	6.11	0.201	70.4	< 0.0002	0.00007	< 0.0001	0.000080	0.00035	< 0.001	0.00001		3.59	3.42	-0.17	-2.4%
23-Feb-10	4	< 0.01	0.00038	0.0005	< 0.01	4.83	0.00248	0.53	< 0.00001	3.75	0.206	52.0	< 0.0002	0.00006	< 0.0001	0.000084	0.00029	< 0.001	< 0.00001		3.59	3.67	0.08	1.1%
02-Mar-10	5	< 0.01	0.00032	0.0004	< 0.01	3.32	0.00171	0.40	< 0.00001	2.19	0.152	48.2	< 0.0002	0.00014	< 0.0001	0.000041	0.00024	< 0.001	0.00015		3.61	2.91	-0.71	-10.8%
09-Mar-10	6	< 0.01	0.00032	0.0005	< 0.01	2.89	0.00111	0.50	< 0.00001	1.46	0.130	39.1	< 0.0002	0.00030	< 0.0001	0.000045	0.00026	< 0.001	0.00001		2.66	2.71	0.05	0.9%
16-Mar-10	7	< 0.01	0.00036	0.0007	< 0.01	2.64	0.00095	0.55	< 0.00001	1.33	0.1120	36.70	< 0.0002	< 0.00001	< 0.0001	0.000040	0.00027	< 0.001	< 0.00001		2.42	2.60	0.18	3.7%
23-Mar-10	8	< 0.01	0.00030	0.0002	< 0.01	2.16	0.00071	0.50	< 0.00001	0.88	0.0975	31.6	< 0.0002	0.00005	< 0.0001	0.000029	0.00024	< 0.001	< 0.00001		2.81	2.30	-0.51	-10.0%
30-Mar-10	9	< 0.01	0.00031	0.0005	< 0.01	1.91	0.00059	0.45	< 0.00001	0.84	0.0891	27.30	< 0.0002	0.00003	< 0.0001	0.000021	0.00023	< 0.001	0.00016		2.40	2.15	-0.26	-5.7%
06-Apr-10	10	< 0.01	0.00029	< 0.0001	< 0.01	1.73	0.00050	0.47	< 0.00001	0.77	0.0821	28.2	< 0.0002	0.00010	< 0.0001	0.000026	0.00021	< 0.001	< 0.00001		2.47	2.05	-0.42	-9.3%
13-Apr-10	11	< 0.01	0.00027	< 0.0001	< 0.01	1.42	0.00044	0.43	< 0.00001	0.66	0.0653	20.90	< 0.0002	0.00026	< 0.0001	0.000030	0.00018	< 0.001	< 0.00001		2.12	1.67	-0.44	-11.7%
20-Apr-10	12	< 0.01	0.00026	0.0002	< 0.01	1.61	0.00051	0.42	< 0.00001	0.60	0.0794	27.6	< 0.0002	0.00017	< 0.0001	0.000039	0.00027	< 0.001	< 0.00001		2.20	2.01	-0.18	-4.4%
27-Apr-10	13	< 0.01	0.00023	0.0002	< 0.01	1.31	0.00050	0.41	< 0.00001	0.55	0.0614	20.90	< 0.0002	0.00022	< 0.0001	0.000017	0.00021	< 0.001	0.00001		1.97	1.69	-0.28	-7.6%
04-May-10	14	< 0.01	0.00029	< 0.0001	< 0.01	1.29	0.00048	0.43	< 0.00001	0.56	0.0648	20.60	< 0.0002	0.00030	< 0.0001	0.000018	0.00021	< 0.001	< 0.00001		1.91	1.85	-0.06	-1.7%
11-May-10	15	< 0.01	0.00028	0.0002	0.01	1.41	0.00044	0.48	0.00004	0.46	0.0659	24.00	< 0.0002	0.00041	< 0.0001	0.000024	0.00023	< 0.001	< 0.00001		2.17	1.85	-0.32	-7.9%
18-May-10	16	< 0.01	0.00055	0.0002	< 0.009	1.42	0.00049	0.49	< 0.00001	0.52	0.0644	24.5	< 0.0002	0.00011	0.0003	0.000017	0.00022	< 0.001	< 0.00001		1.87	1.91	0.04	1.0%
25-May-10	17	< 0.01	0.00027	0.0001	< 0.009	1.06	0.00036	0.39	< 0.00001	0.41	0.0543	21.60	< 0.0002	0.00021	0.0002	0.000020	0.0002	< 0.002	0.00001		1.45	1.59	0.14	4.6%
01-Jun-10	18	0.01	0.00033	< 0.0001	< 0.009	1.07	0.00044	0.39	< 0.00001	0.42	0.0520	21.20	< 0.0002	0.00041	< 0.0001	0.000013	0.0002	0.001	< 0.00001		1.37	1.61	0.24	8.1%
08-Jun-10	19	< 0.01	0.00028	0.0001	0.025	1.17	0.00043	0.43	< 0.00001	0.41	0.0546	23.20	< 0.0002	0.00018	< 0.0001	< 0.000001	0.00018	< 0.001	< 0.00001		1.52	1.74	0.22	6.8%
15-Jun-10	20	< 0.01	0.00031	0.0002	< 0.009	0.94	0.00041	0.36	0.00003	0.37	0.0491	20.00	< 0.0002	0.00030	< 0.0001	0.000011	0.00017	< 0.001	< 0.00001		1.46	1.55	0.10	3.3%
22-Jun-10	21																							
29-Jun-10	22	< 0.01	0.00026	< 0.0001	0.019	0.828	0.00050	0.32	< 0.00001	0.33	0.0303	17.10	< 0.0002	0.00131	< 0.0001	0.00001	0.00009	0.002	< 0.00001		1.27	1.36	0.10	3.7%
06-Jul-10	23																							
13-Jul-10	24	< 0.01	0.00036	0.0004	0.011	0.80	0.00039	0.31	< 0.00001	0.30	0.0412	20.00	< 0.0002	0.00041	0.0002	0.000018	0.00012	< 0.001	0.00002		1.19	1.33	0.14	5.5%
20-Jul-10	25																							
27-Jul-10	26	< 0.01	0.00020	< 0.0001	< 0.009	0.788	0.00036	0.31	< 0.00001	0.28	0.0405	18.4	< 0.0002	0.00015	< 0.0001	0.00001	0.00009	< 0.001	< 0.00001		1.54	1.50	-0.03	-1.1%
03-Aug-10	27	< 0.01	0.00029	0.0003	0.012	0.762	0.00009	0.31	< 0.00001	0.28	0.0395	18.3	< 0.0002	0.00013	< 0.0001	0.00001	0.00007	< 0.001	< 0.00001		1.41	1.50	0.10	3.3%
10-Aug-10	28	0.02	0.00025	0.0003	< 0.009	0.768	0.00030	0.31	< 0.00001	0.26	0.0395	18.60	< 0.0002	0.00003	< 0.0001	0.000005	0.00011	< 0.001	< 0.00001		1.66	1.52	-0.13	-4.2%
17-Aug-10	29	< 0.01	0.00031	0.0002	< 0.009	0.779	0.00032	0.32	0.00001	0.23	0.0363	24.9	< 0.0002	0.00013	0.0002	0.000010	0.00012	< 0.001	< 0.00001		1.59	1.45	-0.14	-4.7%
24-Aug-10	30	< 0.01	0.00025	0.0002	< 0.009	0.774	0.00017	0.35	0.00001	0.27	0.0379	20.4	< 0.0002	0.00010	0.0003	0.000005	0.00011	< 0.001	< 0.00001		1.48	1.58	0.10	3.4%
31-Aug-10	31	< 0.01	0.00022	< 0.0001	< 0.009	0.649	0.00011	0.30	< 0.00001	0.21	0.0305	16.8	< 0.0002	< 0.00001	< 0.0001	0.000003	0.00012	< 0.001	< 0.00001		1.63	1.27	-0.37	-12.7%
07-Sep-10	32	< 0.01	0.00022	0.0002	< 0.009	0.685	< 0.00004	0.31	< 0.00001	0.21	0.0282	17.4	< 0.0002	0.0001	< 0.0001	0.00001	0.00017	0.013	< 0.00001		1.60	1.31	-0.29	-9.9%
14-Sep-10	33	< 0.01	0.00118	0.0003	0.021	0.668	0.00029	0.30	< 0.00001	0.23	0.0322	16.90	< 0.0002	0.00023	< 0.0001	0.000007	0.00009	< 0.001	< 0.00001		1.57	1.31	-0.26	-9.0%
21-Sep-10	34	< 0.01	0.00020	0.0008	< 0.009	0.706	0.00141	0.29	0.00002	0.21	0.0321	17.3	< 0.0002	0.00008	< 0.0001	0.000002	0.00007	< 0.001	< 0.00001		1.42	1.31	-0.11	-3.9%
28-Sep-10	35	< 0.01	0.00049	0.0004	< 0.009	0.795	0.00013	0.38	< 0.00001	0.26	0.0424	22.7	< 0.0002	0.00035	< 0.0001	0.00001	0.00011	0.002	< 0.00001		1.78	1.65	-0.14	-4.0%
05-Oct-10	36	0.01	0.00083	< 0.0001	0.020	0.716	< 0.00004	0.32	< 0.00001	0.23	0.0390	21.2	< 0.0002	0.00044	< 0.0001	0.000010	0.00004	0.001	< 0.00001		1.81	1.51	-0.30	-9.0%
12-Oct-10	37	< 0.01	0.00049	0.0007	< 0.009	0.700	0.00009	0.31	< 0.00001	0.25	0.0369	19.40	< 0.0002	0.00028	< 0.0001	< 0.000001	0.00010	< 0.001	< 0.00001		1.48	1.54	0.06	2.1%
19-Oct-10	38	< 0.01	0.00028	0.0002	< 0.009	0.647	0.00013	0.28	< 0.00001	0.19	0.0304	16.8	< 0.0002	0.00002	< 0.0001	0.000009	0.00009	0.002	< 0.00001	CA14822-OCT10	1.53	1.34	-0.19	-6.8%
26-Oct-10	39	< 0.01	0.00033	0.0008	< 0.009	0.558	0.00255	0.23	< 0.00001	0.18	0.0259	17.00	< 0.0002	0.00002	< 0.0001	0.000003	0.00008	0.003	< 0.00001	CA11459-OCT10	1.30	1.19	-0.11	-4.5%
02-Nov-10	40	< 0.01	0.00028	0.0007	0.047	0.586	0.00028	0.27	< 0.00001	0.21	0.0284	16.2	< 0.0002	0.00005	0.0004	0.000006	< 0.00003	0.001	< 0.00001	CA11315-NOV10	1.29	1.30	0.01	0.5%
09-Nov-10	41	0.01	0.00042	0.0003	0.014	0.747	< 0.00004	0.35	< 0.00001	0.25	0.0390	19.5	< 0.0002	0.00021	< 0.0001	0.0158	0.00008	0.001	< 0.00001	CA11435-NOV10	1.86	1.68	-0.18	-5.0%
16-Nov-10	42	< 0.01	0.00036	0.0005	< 0.009	0.625	< 0.00004	0.29	< 0.00001	0.20	0.0314	17.90	< 0.0002	0.00021	< 0.0001	0.000008	0.00004	0.001	< 0.00001	CA10265-NOV10	2.82	1.44	-1.38	-32.4%
23-Nov-10	43	< 0.01	0.00108	< 0.0001	< 0.009	0.581	0.00010	0.26	< 0.00001	0.16	0.0280	15.8	< 0.0002	0.00012	< 0.0001	0.000039	0.00006	0.002	< 0.00001	CA11701-NOV10	1.44	1.32	-0.13	-4.6%
30-Nov-10	44	< 0.01	0.00065	0.0009	< 0.009	0.617	0.00016	0.30	< 0.00001	0.18	0.0271	16.2	< 0.0002	0.00101	< 0.0001	0.000071	0.00010	0.002	< 0.00001	CA14008-DEC10	1.42	1.36	-0.07	-2.5%
07-Dec-10	45	< 0.01	0.00058	0.0006	0.020	0.652	0.00012	0.31	< 0.00001	0.17	0.0274	16.0	< 0.0002	0.00033	0.0002	0.000033	0.00008	0.003	< 0.00001	CA14206-DEC10	1.50	1.61	0.11	3.7%
14-Dec-10	46	< 0.01	0.00052	0.0005	< 0.009	0.652	0.00021	0.27	< 0.00001	0.18	0.0257	14.4	< 0.0002	0.00031	< 0.0001	0.000018	0.00011	< 0.001	< 0.00001	CA10970-DEC10	1.50	1.33	-0.17	-6.0%
21-Dec-10	47	< 0.01	0.00023	0.0004	0.027	0.584	0.00007	0.39	< 0.00001	0.17	0.0240	17.4	< 0.0002	0.00022	< 0.0001	0.000010	0.00007	0.001	< 0.00001	CA10453-DEC10	1.48	1.41	-0.07	-2.4%
28-Dec-10	48	< 0.01	0.00036	0.0002	0.023	0.660	< 0.00004	0.31	< 0.00001	0.17	0.0270	18.1	< 0.0002	0.00018	< 0.0001	0.000009	0.00006	0.002	< 0.00001	CA10140-JAN11	1.54	1.35	-0.19	-6.6%
04-Jan-11	49	< 0.01	0.00028	0.0004	< 0.009	0.538	< 0.00004	0.25	0.00001	0.14	0.0227	14.5	< 0.0002	0.00011	< 0.0001	0.000014	0.00005	0.002	< 0.00001	CA10880-JAN11	1.53	1.23	-0.30	-10.9%
11-Jan-11	50	< 0.01	0.00031	0.0003	< 0.009	0.541	0.00020	0.24	< 0.00001	0.13	0.0244	16.1	< 0.0002	0.00039	0.0003	0.000003	0.00006	< 0.001	< 0.00001	CA14437-JAN11	1.47	1.30	-0.17	-6.2%
18-Jan-11	51	< 0.01	0.00028	< 0.0001	0.019	0.641	0.00017	0.27	< 0.00001	0.15	0.0252	17.1	< 0.0002	0.00022	< 0.0001	0.000008	0.00006	0.002	0.00001	CA10982-JAN11	1.45	1.38	-0.07	-2.4%
25-Jan-11	52	< 0.01	0.00024	0.0005	< 0.009	0.550	0.00009	0.24	< 0.00001	0.13	0.0218	13.6	< 0.0002	0.00027	< 0.0001	0.000031	0.00006	< 0.001	0.00005	CA11047-JAN11	1.51	1.15	-0.37	-13.8%
01-Feb-11	53	< 0.01	0.00026	0.0005	0.036	0.449	< 0.00004	0.19	< 0.00001	0.11	0.0200	19.1	< 0.0002	0.00049	< 0.0001	0.000035	0.00007	0.003	< 0.00001	CA14121-FEB11	1.45	1.05	-0.40	-16.0%
08-Feb-11	54	< 0.01	0.00033	< 0.0001	< 0.009	0.596	0.00011	0.31	< 0.00001	0.12	0.0246	16.0	< 0.0002	0.00058	0.0002	0.000003	0.00005	0.001	< 0.00001	CA14249-FEB11	1.51	1.40	-0.11	-3.7%
15-Feb-11	55	< 0.01	0.00050	0.0008	0.029	0.529	0.00024	0.26	< 0.00001	0.13	0.0203	14.1	< 0.0002	0.00026	< 0.0001	0.000020	< 0.00003	0.002	< 0.00001	CA14449-FEB11	1.26	1.21	-0.05	-2.2%
22-Feb-11	56	< 0.01	0.00036	0.0001	< 0.009	0.553	0.00010	0.25	0.00002	0.14	0.0213	14.9	< 0.0002	0.00021	< 0.0001	0.000021	0.00005	0.002	0.00001	CA14656-FEB11	1.55	1.27	-0.28	-9.8%
01-Mar-11	57	0.01	0.00023	0.0004	< 0.009	0.451	0.00012	0.22	< 0.00001	0.13	0.0200	14.1	< 0.0002	0.00021	< 0.0001	0.000001	0.00007	0.009	< 0.00001	CA14060-MAR11	1.40	1.20	-0.20	-7.9%
08-Mar-11	58	< 0.01	0.00033	< 0.0001	< 0.009	0.465	0.00004	0.17	< 0.00001	0.12	0.0190	13.4	< 0.0002	0.00025	< 0.0001	0.000007	0.00003	0.005	< 0.00001	CA14274-MAR11	1.45	1.15	-0.29	-11.3%
15-Mar-11	59	< 0.01	0.00025	0.0006	0.012	0.495	0.00004	0.23	< 0.00001	0.14	0.0214	13.8	< 0.00002	0.00051	< 0.0001	0.000006	0.00005	0.009	< 0.00001	CA14457-MAR11	1.33	1.25	-0.07	-2.9%
22-Mar-11	60	0.01	0.00021	0.0001	0.009	0.479	0.00025	0.23	< 0.00001	0.08	0.0200	14.2	< 0.0002	0.00029	< 0.0001	0.000001	0.00004	< 0.001	< 0.00001	CA10460-MAR11	1.26	1.17	-0.09	-3.7%
29-Mar-11	61	< 0.01	0.00023	0.0005	0.042	0.525	0.00011	0.26	< 0.00001	0.13	0.0221	17.0	< 0.0002	0.00010	< 0.0001	0.000003	0.00004	< 0.001	< 0.00001	CA14922-MAR11	1.34	1.32	-0.02	-0.6%
05-Apr-11	62	< 0.01	0.00025	0.0005	0.048	0.578	< 0.00004	0.27	< 0.00001	0.14	0.0256	18.5	< 0.0002	0.00011	< 0.0001	0.000004	0.00005	0.001	< 0.00001	CA14224-APR11	1.51	1.48	-0.03	-0.9%
12-Apr-11	63	0.02	0.00038	< 0.0001	0.020	0.509	< 0.00004	0.23	< 0.00001	0.12	0.0216	15.6	< 0.0002	0.00032	< 0.0001	0.000007	0.00005	0.003	< 0.00001	CA14457-APR11	1.36	1.26	-0.10	-3.8%
19-Apr-11	64	0.01	0.00077	0.0003	0.036	0.498	0.00059	0.23	< 0.00001	0.12	0.0216	16.0	< 0.0002	0.00010	< 0.0001	0.000006	0.00010	0.004	0.00001	CA11358-APR11	1.49	1.30	-0.20	-7.0%
26-Apr-11	65	< 0.01	0.00023	0.0012	0.050	0.501	< 0.00004	0.21	< 0.00001	0.12	0.0220	16.4	< 0.0002	< 0.00001	< 0.0001	< 0.000001	0.00005	< 0.001	< 0.00001	CA14943-APR11	1.38	1.33	-0.05	-1.8%
03-May-11	66	< 0.01	0.00027	0.0004	0.026	0.522	0.00080	0.24	< 0.00001	0.11	0.0211	16.0	< 0.0002	< 0.00001	0.0003	0.000001	< 0.00003	0.002	< 0.00001	CA14148-MAY11	1.45	1.29	-0.16	-5.9%
10-May-11	67	0.02	0.00025	0.0010	< 0.009	0.489	0.00012	0.21	< 0.00001	0.11	0.0188	14.9	< 0.0002	0.00007	0.0007	0.000001	< 0.00003	0.002	< 0.00001	CA14441-MAY11	1.45	1.20	-0.24	-9.1%
17-May-11	68	< 0.01	0.00026	0.0002	0.034	0.478	0.00042	0.19	0.00003	0.10	0.0174	14.5	< 0.0002	0.00003	< 0.0001	0.000012	< 0.00003	0.002	< 0.00001	CA14703-MAY11	1.33	1.15	-0.18	-7.3%
24-May-11	69	0.01	0.00020	< 0.0001	< 0.009	0.608	< 0.00004	0.74	0.00001	0.16	0.0279	20.5	< 0.0002	0.00024	< 0.0001	0.000006	0.00004	0.001	< 0.00001	CA13762-MAY11	1.67	1.62	-0.04	-1.3%
31-May-11	70	< 0.01	0.00026	0.0001	0.011	0.513	0.00030	0.25	0.00001	0.11	0.0208	15.8	< 0.0002	0.00016	< 0.0001	< 0.000001	< 0.00003	0.002	< 0.00001	CA10185-JUN11	1.46	1.27	-0.19	-6.9%
07-Jun-11	71	0.01	0.00023	0.0006	0.058	0.516	0.00012	0.26	< 0.00001	0.16	0.0195	16.8	< 0.00002	0.00016	0.0005	< 0.000001	< 0.00003	0.002	< 0.00001	CA14355-JUN11	1.26	1.30	0.03	1.3%
14-Jun-11	72	< 0.01	0.00033	0.0008	< 0.009	0.448	< 0.00004	0.26	< 0.00001	0.16	0.0184	15.7	< 0.00002	0.00029	< 0.0001	0.000004	0.00004	0.002	< 0.00001	CA10349-JUN11	1.46	1.23	-0.22	-8.3%
21-Jun-11	73	0.01	0.00021	< 0.0001	0.011	0.500	0.00044	0.25	< 0.00001	0.12	0.0220	17.9	< 0.00002	0.00016	< 0.0001	0.000004	0.00004	0.001	< 0.00001	CA14777-JUN11	1.73	1.46	-0.27	-8.5%
28-Jun-11	74	0.01	0.00057	0.0005	< 0.009	0.533	0.00054	0.24	< 0.00001	0.11	0.0210	17.0	< 0.00002	0.00006	0.0001	0.000007	0.00004	0.002	< 0.00001	CA15123-JUN11	1.55	1.40	-0.15	-5.0%
05-Jul-11	75	< 0.01	0.00031	0.0006	0.020	0.533	0.00015	0.26	< 0.00001	0.16	0.0224	18.3	< 0.00002	0.00013	0.0003	0.000003	0.00005	0.002	< 0.00001	CA15472-JUL11	1.57	1.49	-0.09	-2.9%
12-Jul-11	76	0.05	0.00067	0.0004	< 0.009	0.583	0.00023	0.29	< 0.00001	0.12	0.0250	21.2	< 0.00002	0.00010	< 0.0001	0.000006	0.00003	0.002	0.00004	CA15694-JUL11	1.62	1.69	0.07	2.0%
19-Jul-11	77	< 0.01	0.00027	0.0008	< 0.009	0.512	0.00033	0.24	< 0.00001	0.14	0.0220	18.6	< 0.00002	0.00020	< 0.0001	0.000003	0.00006	0.001	< 0.00001	CA16180-JUL11	1.49	1.47	-0.02	-0.5%
26-Jul-11	78	< 0.01	0.00086	0.0010	0.012	0.487	0.00006	0.21	< 0.00001	0.09	0.0223	15.9	< 0.00002	< 0.00001	0.0009	0.000005	< 0.00003	0.001	< 0.00001	CA11330-JUL11	1.67	1.34	-0.32	-10.8%

HC 5
Sample = Alt 09 13

Date	Cycle	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L					
02-Aug-11	79	< 0.01	0.00030	< 0.0001	< 0.009	0.582	0.00018	0.28	< 0.00001	0.10	0.0233	19.7	< 0.00002	0.00004	< 0.0001	0.000003	0.00005	0.001	< 0.00001	CA14200-AUG11	1.67	1.58	-0.09	-2.7%
09-Aug-11	80	< 0.01	0.00096	0.0001	< 0.009	0.428	0.00020	0.21	< 0.00001	0.08	0.0180	15.9	< 0.00002	< 0.00001	< 0.0001	0.000016	0.00005	0.003	< 0.00001	CA14411-AUG11	1.41	1.24	-0.17	-6.6%
16-Aug-11	81	< 0.01	0.00033	0.0001	< 0.009	0.449	0.00037	0.22	< 0.00001	0.09	0.0202	16.9	< 0.00002	0.00010	< 0.0001	0.000003	< 0.00003	0.002	< 0.00001	CA14675-AUG11	1.60	1.27	-0.33	-11.6%
23-Aug-11	82	0.02	0.00031	< 0.0001	< 0.009	0.624	0.00013	0.27	< 0.00001	0.12	0.0212	21.7	< 0.00002	0.00009	< 0.0001	0.000004	< 0.00003	0.004	< 0.00001	CA10450-AUG11	1.62	1.57	-0.05	-1.4%
30-Aug-11	83	< 0.01	0.00029	0.0007	< 0.009	0.546	0.00008	0.25	< 0.00001	0.12	0.0226	20.3	< 0.00002	0.00010	< 0.0001	0.000007	< 0.00003	0.003	< 0.00001	CA14264-SEP11	1.51	1.56	0.06	1.8%
06-Sep-11	84	< 0.01	0.00054	< 0.0001	< 0.009	0.468	0.00034	0.18	< 0.00001	0.10	0.0191	18.2	< 0.00002	< 0.00001	< 0.0001	0.000008	0.00007	0.006	< 0.00001	CA14213-SEP11	1.68	1.36	-0.32	-10.4%
13-Sep-11	85	< 0.01	0.00059	< 0.0001	< 0.009	0.481	0.00015	0.20	< 0.00001	0.09	0.0203	19.3	< 0.00002	0.00010	< 0.0001	0.000010	< 0.00003	0.005	0.00001	CA17321-SEP11	1.70	1.44	-0.25	-8.0%
20-Sep-11	86	0.01	0.00040	< 0.0001	< 0.009	0.463	0.00030	0.22	< 0.00001	0.23	0.0183	18.9	< 0.00002	0.00046	< 0.0001	0.000003	0.00018	0.005	0.00001	CA14825-SEP11	1.54	1.34	-0.19	-6.7%
27-Sep-11	87	< 0.01	0.00033	0.0005	< 0.009	0.498	0.00028	0.16	< 0.00001	0.09	0.0193	19.0	< 0.00002	0.00013	< 0.0001	0.000020	0.00004	0.002	< 0.00001	CA18921-SEP11	1.55	1.38	-0.17	-5.8%
04-Oct-11	88	< 0.01	0.00038	< 0.0001	< 0.009	0.449	< 0.00004	0.20	< 0.00001	0.09	0.0166	16.4	< 0.00002	0.00011	< 0.0001	0.000006	< 0.00003	0.003	< 0.00001	CA14153-OCT11	1.45	1.25	-0.20	-7.4%
11-Oct-11	89	< 0.01	0.00029	0.0006	< 0.009	0.397	0.00006	0.25	< 0.00001	0.09	0.0177	18.9	< 0.00002	0.00004	< 0.0001	< 0.000001	< 0.00003	0.001	< 0.00001	CA14391-OCT11	1.66	1.44	-0.22	-7.0%
18-Oct-11	90	< 0.01	0.00035	0.0003	< 0.009	0.460	0.00007	0.18	< 0.00001	0.09	0.0193	19.4	< 0.00002	0.00002	< 0.0001	< 0.000001	< 0.00003	0.003	< 0.00001	CA14788-OCT11	1.67	1.41	-0.26	-8.6%
25-Oct-11	91	0.01	0.00027	0.0002	< 0.009	0.449	0.00007	0.27	< 0.00001	0.10	0.0186	17.5	< 0.00002	0.00009	< 0.0001	0.000010	< 0.00003	0.005	< 0.00001	CA14955-OCT11	1.53	1.36	-0.17	-6.0%
01-Nov-11	92	< 0.01	0.00025	0.0005	< 0.009	0.428	0.00011	0.21	< 0.00001	0.09	0.0175	15.7	< 0.00002	0.00007	< 0.0001	0.000001	0.00003	0.003	< 0.00001	CA18036-NOV11	1.49	1.27	-0.22	-8.1%
08-Nov-11	93	0.01	0.00025	0.0001	< 0.009	0.456	0.00006	0.22	< 0.00001	0.10	0.0184	17.9	< 0.00002	0.00003	< 0.0001	0.000002	0.00015	0.001	< 0.00001	CA18264-NOV11	1.45	1.41	-0.04	-1.4%
15-Nov-11	94	0.01	0.00025	0.0009	< 0.009	0.400	< 0.00004	0.13	< 0.00001	0.09	0.0160	15.4	< 0.00002	0.00004	0.0001	0.000003	0.00019	0.002	< 0.00001	CA18499-NOV11	1.43	1.26	-0.17	-6.2%
22-Nov-11	95	0.02	0.00018	0.0006	< 0.009	0.393	0.00010	0.21	< 0.00001	< 0.01	0.0180	16.6	< 0.00002	0.00004	< 0.0001	0.000010	0.00015	0.002	< 0.00001	CA18773-NOV11	1.48	1.37	-0.11	-3.8%
29-Nov-11	96	< 0.01	0.00041	0.0009	0.010	0.447	0.00017	0.27	0.00001	0.07	0.0168	15.3	< 0.00002	0.00003	< 0.0001	0.000004	0.00019	< 0.001	< 0.00001	CA12006-NOV11	1.41	1.29	-0.12	-4.5%
06-Dec-11	97	< 0.01	0.00023	< 0.0001	< 0.009	0.441	0.00016	0.29	0.00005	0.04	0.0172	16.8	< 0.00002	0.00002	0.0001	0.000003	0.00019	0.001	< 0.00001	CA14293-DEC11	1.44	1.38	-0.05	-1.9%
13-Dec-11	98	0.09	0.00027	0.0007	0.018	0.403	0.00035	0.20	< 0.00001	0.12	0.0169	15.8	< 0.00002	0.00013	< 0.0001	0.000006	< 0.00003	0.004	< 0.00001	CA14475-DEC11	1.44	1.32	-0.12	-4.2%
20-Dec-11	99	< 0.01	0.00023	0.0007	< 0.009	0.416	0.00042	0.22	< 0.00001	0.08	0.0155	15.3	< 0.00002	< 0.00001	< 0.0001	0.000003	0.00008	< 0.001	< 0.00001	CA10397-DEC11	1.39	1.23	-0.15	-5.9%
27-Dec-11	100	< 0.01	0.00028	0.0009	< 0.009	0.405	0.00012	0.19	< 0.00001	0.08	0.0170	16.5	< 0.00002	0.00001	0.0003	0.000006	0.00027	0.002	< 0.00001	CA10466-DEC11	1.61	1.33	-0.28	-9.5%
03-Jan-12	101	< 0.01	0.00022	0.0009	< 0.009	0.406	0.00004	0.17	< 0.00001	0.08	0.0153	14.6	< 0.00002	0.00001	0.0002	0.000008	0.00035	0.002	< 0.00001	CA14133-JAN12	1.53	1.20	-0.33	-12.3%
10-Jan-12	102	< 0.01	0.00020	0.0002	< 0.009	0.374	0.00009	0.19	< 0.00001	0.11	0.0150	13.9	< 0.00002	0.00007	0.0003	0.000004	0.00047	0.003	< 0.00001	CA14430-JAN12	1.37	1.18	-0.19	-7.6%
17-Jan-12	103	< 0.01	0.00023	0.0006	< 0.009	0.408	0.00015	0.19	< 0.00001	0.06	0.0168	15.6	< 0.00002	0.00020	< 0.0001	0.000006	0.00022	0.004	< 0.00001	CA11226-JAN12	1.55	1.36	-0.19	-6.5%
24-Jan-12	104	< 0.01	0.00019	0.0004	< 0.009	0.382	0.00019	0.18	< 0.00001	0.08	0.0146	13.7	< 0.00002	0.00001	< 0.0001	0.000001	0.00023	0.002	< 0.00001	CA10502-JAN12	1.39	1.16	-0.23	-9.0%
31-Jan-12	105	< 0.01	0.00027	< 0.0001	< 0.009	0.381	0.00010	0.18	0.00001	0.16	0.0152	14.7	< 0.00002	< 0.00001	0.0001	0.000102	0.00038	0.002	< 0.00001	CA10999-FEB12	1.44	1.23	-0.21	-7.8%
07-Feb-12	106	0.01	0.00016	0.0010	< 0.009	0.452	0.00023	0.25	0.00003	0.12	0.0207	18.2	< 0.00002	< 0.00001	< 0.0001	0.000017	0.00023	0.002	< 0.00001	CA14207-FEB12	1.82	1.54	-0.29	-8.5%
14-Feb-12	107	< 0.01	0.00017	0.0006	< 0.009	0.352	0.00014	0.18	< 0.00001	0.09	0.0162	14.7	< 0.00002	< 0.00001	< 0.0001	0.000222	< 0.00003	< 0.001	< 0.00001	CA14420-FEB12	1.53	1.23	-0.30	-11.0%
21-Feb-12	108	0.01	0.00015	0.0006	< 0.009	0.367	0.00006	0.20	< 0.00001	0.11	0.0155	15.1	< 0.00002	< 0.00001	0.0002	0.000005	0.00020	0.002	< 0.00001	CA14754-FEB12	1.31	1.23	-0.08	-3.0%
28-Feb-12	109	< 0.01	0.00020	0.0003	< 0.009	0.401	0.00016	0.21	< 0.00001	0.10	0.0172	15.0	< 0.00002	0.00005	0.0001	< 0.000001	0.00021	0.002	< 0.00001	CA14931-FEB12	1.34	1.28	-0.06	-2.2%
06-Mar-12	110	< 0.01	0.00055	0.0004	< 0.009	0.402	0.00010	0.22	0.00001	0.07	0.0168	16.7	< 0.00002	0.00024	< 0.0001	0.000035	0.00021	0.002	0.00002	CA14216-MAR12	1.48	1.29	-0.18	-6.6%
13-Mar-12	111	0.01	0.00074	0.0003	0.010	0.362	< 0.00004	0.19	< 0.00001	0.11	0.0152	14.7	< 0.00002	0.00029	< 0.0001	0.000002	< 0.00003	0.002	< 0.00001	CA14408-MAR12	1.37	1.20	-0.17	-6.6%
20-Mar-12	112	0.01	0.00023	0.0002	< 0.009	0.401	0.00023	0.20	0.00002	0.09	0.0160	15.7	< 0.00002	< 0.00001	< 0.0001	0.000004	0.00022	0.001	< 0.00001	CA14687-MAR12	1.48	1.29	-0.18	-6.6%
27-Mar-12	113	< 0.01	0.00020	0.0003	< 0.009	0.406	0.00006	0.22	0.00002	0.11	0.0165	17.4	< 0.00002	< 0.00001	0.0002	0.000019	0.00023	0.009	< 0.00001	CA14874-MAR12	1.55	1.42	-0.13	-4.4%
03-Apr-12	114	< 0.01	0.00017	0.0021	< 0.009	0.424	0.00013	0.19	0.00001	0.10	0.0160	15.8	< 0.00002	< 0.00001	0.0004	0.000002	0.00022	0.002	< 0.00001	CA14169-APR12	1.52	1.31	-0.20	-7.1%
10-Apr-12	115	0.09	0.00023	0.0002	< 0.009	0.447	0.00042	0.22	0.00004	0.10	0.0176	17.0	< 0.00002	0.00003	0.0001	0.000007	0.00024	0.003	< 0.00001	CA11095-APR12	1.60	1.38	-0.22	-7.4%
17-Apr-12	116	0.03	0.00021	0.0004	< 0.009	0.414	0.00015	0.21	0.00004	0.06	0.0164	16.5	< 0.00002	0.00002	< 0.0001	0.000007	0.00020	0.001	< 0.00001	CA14686-APR12	1.58	1.34	-0.24	-8.1%
24-Apr-12	117	0.03	0.00075	0.0004	< 0.009	0.422	0.00017	0.21	0.00002	0.09	0.0162	15.9	< 0.00002	0.00005	< 0.0001	0.000035	0.00022	0.002	< 0.00001	CA14876-APR12	1.52	1.30	-0.21	-7.5%
01-May-12	118	0.03	0.00020	0.0005	< 0.009	0.382	0.00016	0.18	0.00003	0.07	0.0156	15.6	< 0.00002	0.00004	< 0.0001	0.000017	0.00023	0.001	< 0.00001	CA14088-MAY12	1.49	1.28	-0.21	-7.5%
08-May-12	119	< 0.01	0.00018	0.0003	< 0.009	0.466	0.00006	0.20	0.00006	0.09	0.0164	17.0	< 0.00002	0.00023	< 0.0001	0.000006	0.00016	0.003	< 0.00001	CA14348-MAY12	1.46	1.36	-0.11	-3.8%
15-May-12	120	0.01	0.00018	0.0003	< 0.009	0.412	0.00007	0.20	0.00006	0.09	0.0162	15.9	< 0.00002	< 0.00001	< 0.0001	0.000011	0.00018	0.002	< 0.00001	CA14621-MAY12	1.23	1.30	0.06	2.5%
22-May-12	121	0.02	0.00019	0.0004	< 0.009	0.401	0.00009	0.19	0.00007	0.08	0.0163	16.6	< 0.00002	0.00002	< 0.0001	0.000008	0.00033	0.002	< 0.00001	CA10508-MAY12	1.33	1.30	-0.03	-1.3%
29-May-12	122	0.02	0.00016	0.0003	< 0.009	0.489	0.00017	0.31	0.00026	0.07	0.0226	22.4	< 0.00002	0.00010	< 0.0001	0.000005	0.00018	0.002	< 0.00001	CA15134-MAY12	1.70	1.73	0.03	0.9%
05-Jun-12	123	0.01	0.00025	< 0.0001	< 0.009	0.410	0.00011	0.23	0.00012	0.10	0.0186	19.3	< 0.00002	0.00003	0.0002	0.000001	0.00028	0.002	< 0.00001	CA15137-JUN12	1.51	1.43	-0.08	-2.7%
12-Jun-12	124	0.01	0.00019	0.0002	< 0.009	0.432	0.00017	0.23	0.00009	0.07	0.0188	17.8	< 0.00002	0.00014	< 0.0001	0.000002	0.00035	0.002	< 0.00001	CA15174-JUN12	1.51	1.44	-0.07	-2.4%
19-Jun-12	125	0.01	0.00020	< 0.0001	< 0.009	0.424	0.00036	0.22	0.00010	0.08	0.0181	18.5	< 0.00002	0.00015	< 0.0001	0.000003	0.00024	0.002	< 0.00001	CA15309-JUN12	1.49	1.44	-0.05	-1.6%
26-Jun-12	126	0.02	0.00022	0.0005	< 0.009	0.467	0.00017	0.38	0.00008	0.25	0.0187	18.4	< 0.00002	0.00010	0.0001	0.000011	0.00033	0.003	< 0.00001	CA15357-JUN12	1.55	1.44	-0.11	-3.7%
03-Jul-12	127	0.02	0.00078	< 0.0001	< 0.009	0.441	0.00014	0.23	0.00017	0.08	0.0193	20.1	< 0.00002	0.00018	0.0003	0.000006	0.00023	0.003	< 0.00001	CA15021-JUL12	1.63	1.51	-0.11	-3.6%
10-Jul-12	128	0.02	0.00019	0.0003	< 0.009	0.369	0.00019	0.18	0.00008	0.09	0.0167	16.3	< 0.00002	0.00010	< 0.0001	0.000002	0.00021	0.001	< 0.00001	CA15118-JUL12	1.45	1.33	-0.12	-4.2%
17-Jul-12	129	0.01	0.00015	0.0003	< 0.009	0.420	0.00065	0.19	0.00016	0.08	0.0171	17.9	< 0.00002	0.00001	0.0003	< 0.000001	0.00024	0.001	< 0.00001	CA15186-JUL12	1.47	1.38	-0.09	-3.2%
24-Jul-12	130	0.02	0.00021	0.0001	< 0.009	0.462	0.00073	0.23	0.00021	0.18	0.0185	20.6	< 0.00002	0.00001	< 0.0001	< 0.000001	0.00023	< 0.001	< 0.00001	CA15302-JUL12	1.54	1.54	0.00	0.1%
31-Jul-12	131	0.02	0.00019	< 0.0001	< 0.009	0.380	0.00008	0.20	0.00013	0.08	0.0164	16.6	< 0.00002	0.00010	< 0.0001	0.000003	0.00032	0.002	< 0.00001	CA15010-AUG12	1.35	1.34	0.00	-0.2%
07-Aug-12	132	0.01	0.00020	0.0002	< 0.009	0.398	0.00014	0.21	0.00016	0.09	0.0170	18.4	< 0.00002	0.00010	< 0.0001	0.000007	0.00033	0.002	< 0.00001	CA15071-AUG12	1.42	1.38	-0.04	-1.5%
14-Aug-12	133	0.02	0.00017	0.0003	< 0.009	0.375	0.00017	0.17	0.00023	0.09	0.0158	17.4	< 0.00002	0.00015	0.0001	0.000003	0.00033	0.003	< 0.00001	CA15151-AUG12	1.41	1.29	-0.12	-4.5%
21-Aug-12	134	0.02	0.00020	0.0003	< 0.009	0.349	0.00010	0.34	0.00036	0.08	0.0163	18.7	< 0.00002	0.00019	0.0001	0.000003	0.00026	0.001	< 0.00001	CA15239-AUG12	1.43	1.37	-0.06	-2.1%
28-Aug-12	135	0.03	0.00030	0.0004	< 0.009	0.321	0.00034	0.19	0.00018	0.08	0.0158	15.9	< 0.00002	0.00046	0.0001	0.000007	0.00032	0.003	< 0.00001	CA15348-AUG12	1.45	1.24	-0.21	-7.7%
04-Sep-12	136	0.03	0.00015	0.0002	< 0.009	0.353	0.00012	0.18	0.00015	0.07	0.0159	17.2	< 0.00002	0.00005	< 0.0001	0.000001	0.00028	< 0.001	< 0.00001	CA15317-SEP12	1.36	1.33	-0.03	-1.1%
11-Sep-12	137	0.04	0.00015	0.0001	< 0.009	0.344	0.00007	0.19	0.00013	0.08	0.0142	15.8	< 0.00002	0.00013	0.0001	< 0.000001	0.00017	0.003	< 0.00001	CA15405-SEP12	1.16	1.14	-0.02	-0.8%
18-Sep-12	138	0.04	0.00010	< 0.0001	< 0.009	0.372	0.00016	0.24	0.00021	0.08	0.0192	19.7	< 0.00002	0.00017	< 0.0001	0.000024	0.00023	0.002	< 0.00001	CA15559-SEP12	1.66	1.48	-0.18	-5.6%
25-Sep-12	139	< 0.01	0.00015	0.0003	< 0.009	0.325	0.00012	0.18	0.00008	0.07	0.0139	15.3	< 0.00002	0.00008	< 0.0001	0.000008	0.00016	0.003	< 0.00001	CA15670-SEP12	1.30	1.16	-0.14	-5.8%
02-Oct-12	140	0.01	0.00018	0.0001	< 0.009	0.356	0.00007	0.25	0.00005	0.07	0.0142	16.0	< 0.00002	0.00017	< 0.0001	0.000005	0.00023	0.001	< 0.00001	CA15354-OCT12	1.30	1.20	-0.11	-4.2%
09-Oct-12	141	< 0.01	0.00016	0.0007	< 0.009	0.330	0.00012	0.18	0.00007	0.07	0.0136	14.4	< 0.00002	0.00009	< 0.0001	0.000006	0.00016	0.001	< 0.00001	CA15450-OCT12	1.30	1.12	-0.18	-7.6%
16-Oct-12	142	< 0.01	0.00017	0.0003	< 0.009	0.323	0.00005	0.21	0.00008	0.08	0.0135	15.2	< 0.00002	0.00024	< 0.0001	0.000002	0.00015	0.002	< 0.00001	CA15570-OCT12	1.34	1.15	-0.20	-7.9%
23-Oct-12	143	< 0.01	0.00028	0.0012	< 0.009	0.280	0.00009	0.15	0.00004	0.07	0.0125	13.2	< 0.00002	0.00005	0.0002	0.000011	0.00021	0.003	< 0.00001	CA15652-OCT12	1.24	1.06	-0.18	-7.7%
30-Oct-12	144	0.01	0.00020	0.0003	< 0.009	0.344	0.00008	0.20	0.00003	0.09	0.0144	16.0	< 0.00002	0.00014	< 0.0001	0.000014	0.00019	0.002	< 0.00001	CA15744-OCT12	1.27	1.20	-0.07	-2.8%
06-Nov-12	145	< 0.01	0.00017	0.0003	< 0.009	0.321	0.00008	0.17	0.00010	0.07	0.0143	14.5	< 0.00002	0.00015	0.0001	0.000002	0.00014	0.001	< 0.00001	CA11210-NOV12	1.10	1.20	0.10	4.4%
13-Nov-12	146	0.02	0.00014	0.0001	< 0.009	0.320	0.00010	0.19	0.00008	0.06	0.0137	15.1	< 0.00002	0.00003	< 0.0001	0.000003	0.00013	0.002	< 0.00001	CA15251-NOV12	1.20	1.17	-0.03	-1.4%
20-Nov-12	147	< 0.01	0.00011	0.0029	< 0.009	0.331	0.00013	0.23	0.00006	0.08	0.0168	16.0	< 0.00002	0.00016	0.0001	0.000010	0.00016	0.001	< 0.00001	CA15347-NOV12	1.35	1.33	-0.02	-0.9%
27-Nov-12	148	< 0.01	0.00013	0.0003	< 0.009	0.375	0.00011	0.26	0.00010	0.08	0.0172	16.7	< 0.00002	0.00014	0.0002	0.000032	< 0.00003	0.001	< 0.00001	CA15376-NOV12	1.46	1.38	-0.09	-3.0%
04-Dec-12	149	0.01	0.00015	< 0.0001	< 0.009	0.357	0.00010	0.19	0.00010	0.06	0.0141	14.7	< 0.00002	0.00015	< 0.0001	0.000010	0.00015	0.002	< 0.00001	CA15038-DEC12	1.41	1.18	-0.23	-9.0%
11-Dec-12	150	< 0.01	0.00023	< 0.0001	< 0.009	0.353	0.00010	0.15	0.00008	0.07	0.0123	12.2	< 0.00002	0.00014	< 0.0001	0.000005	0.00016	0.001	< 0.00001	CA15164-JAN13	1.30	1.11	-0.19	-7.9%
18-Dec-12	151	< 0.01	0.00015	0.0002	< 0.009	0.379	0.00012	0.19	0.00017	0.08	0.0166	15.9	< 0.00002	0.00013	< 0.0001	0.000010	0.00014	< 0.001	< 0.00001	CA15269-DEC12	1.40	1.29	-0.11	-4.1%
25-Dec-12	152	< 0.01	0.00019	0.0002	0.011	0.307	0.00007	0.13	0.00009	0.07	0.0140	12.5	< 0.00002	0.00010	< 0.0001	< 0.000001	0.00003	0.003	< 0.00001	CA15361-DEC12	1.10	1.08	-0.03	-1.3%
01-Jan-13	153	< 0.01	0.00028	0.0002	0.013	0.329	0.00021	0.17	0.00013	0.08	0.0127	13.0	< 0.00002	0.00010	< 0.0001	< 0.000001	0.00014	0.001	0.00015	CA15056-JAN13	1.30	1.06	-0.23	-9.9%
08-Jan-13	154	< 0.01	0.00027	< 0.0001	< 0.009	0.344	0.00009	0.19	0.00009	0.07	0.0121	11.9	< 0.00002	0.00012	< 0.0001	0.000002	0.00018	< 0.001	< 0.00001	CA15153-JAN13	1.19	1.06	-0.13	-5.8%
15-Jan-13	155																							
22-Jan-13	156																							
29-Jan-13	157																							
05-Feb-13	158																							
12-Feb-13	159																							

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Sample = Alt 09 01

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
02-Feb-10	1	500	391	7.55	343	240	#N/A	2.2	27.3	99	-	-	113	0.133	0.0034	0.0006	0.00575	< 0.00002	< 0.00001	0.008	< 0.000003	39.9	< 0.0005	0.000064	0.0025	< 0.01	0.00003	0.008	3.22	0.008	0.01	0.00065
09-Feb-10	2	500	460	7.55	272	322	#N/A	2.3	25.0	125	-	-	140	0.134	0.0093	0.0006	0.00482	< 0.00002	< 0.00001	0.010	< 0.000003	46.7	< 0.0005	0.000056	< 0.0005	< 0.01	< 0.00002	0.007	5.73	0.016	< 0.01	0.00050
16-Feb-10	3	500	410	7.48	275	277	#N/A	2.4	23.1	122	-	-	130	0.136	0.0065	0.0004	0.00415	< 0.00002	< 0.00001	0.009	< 0.000003	41.4	< 0.0005	0.000040	0.0006	< 0.01	< 0.00002	0.007	6.37	0.012	< 0.01	0.00047
23-Feb-10	4	500	455	7.61	333	201	#N/A	2.0	24.0	93	-	-	113	0.102	0.0035	0.0002	0.00288	< 0.00002	< 0.00001	0.007	< 0.000003	39.5	< 0.0005	0.000044	< 0.0005	< 0.01	< 0.00002	0.007	3.49	0.015	< 0.01	0.00022
02-Mar-10	5	500	450	7.60	335	194	#N/A	1.5	17.8	84	-	-	82.8	0.119	0.0024	0.0002	0.00282	< 0.00002	< 0.00001	0.004	< 0.000003	29.1	< 0.0005	0.000035	< 0.0005	< 0.01	0.00006	0.004	2.47	0.007	< 0.01	0.00018
09-Mar-10	6	500	425	7.52	341	176	#N/A	1.9	20.2	69	-	-	81.0	0.0912	0.0021	0.0003	0.00182	< 0.00002	< 0.00001	0.004	< 0.000003	28.5	< 0.0005	0.000026	< 0.0005	< 0.01	< 0.00002	0.004	2.38	0.009	< 0.01	0.00017
16-Mar-10	7	500	455	7.44	349	154	#N/A	2.1	17.5	68	< 0.2	< 0.06	83.7	0.1270	0.0022	< 0.0002	0.00163	< 0.00002	< 0.00001	0.006	< 0.000003	30.00	< 0.0005	0.000029	< 0.0005	< 0.01	0.00010	0.004	2.150	0.007	< 0.01	0.00019
23-Mar-10	8	500	460	7.45	358	168	#N/A	2.8	20.6	74	< 0.2	< 0.06	79.1	0.0946	0.0018	< 0.0002	0.00163	< 0.00002	< 0.00001	0.0035	< 0.000003	28.7	0.0005	0.000018	< 0.0005	< 0.01	0.00044	0.004	1.83	0.009	< 0.01	0.00015
30-Mar-10	9	500	445	7.55	367	161	#N/A	1.8	16.9	64	< 0.2	0.17	75.5	0.0739	0.0019	< 0.0002	0.00154	< 0.00002	< 0.00001	0.004	< 0.000003	27.30	0.0006	0.000018	0.0009	< 0.01	0.00029	0.003	1.770	0.010	< 0.01	0.00013
06-Apr-10	10	500	455	7.52	357	155	#N/A	2.1	20.0	55	< 0.2	< 0.06	73.1	0.0902	0.0017	< 0.0002	0.00129	0.00003	< 0.00001	< 0.002	0.000020	26.9	0.0005	0.000043	0.0016	< 0.01	0.00036	0.003	1.46	0.010	< 0.01	0.00014
13-Apr-10	11	500	470	7.40	350	151	#N/A	2.8	18.0	54	< 0.2	< 0.06	66.6	0.1060	0.0019	< 0.0002	0.00113	< 0.00002	< 0.00001	0.003	< 0.000003	24.50	< 0.0005	0.000011	< 0.0005	< 0.01	< 0.00002	0.003	1.33	0.009	< 0.01	0.00013
20-Apr-10	12	500	450	7.62	335	160	#N/A	2.5	22.0	53	< 0.2	< 0.06	68.8	0.123	0.0019	< 0.0002	0.00124	< 0.00002	< 0.00001	0.003	0.000004	25.4	0.0006	0.000015	0.0006	< 0.01	0.00028	0.003	1.31	0.009	< 0.01	0.00010
27-Apr-10	13	500	465	7.59	332	154	#N/A	2.6	20.1	54	< 0.2	< 0.06	67.1	0.0880	0.0014	< 0.0002	0.0011	< 0.00002	< 0.00001	< 0.002	< 0.000003	24.90	0.0006	0.000012	0.0007	< 0.01	0.00109	0.003	1.21	0.009	< 0.01	0.00009
04-May-10	14	500	445	7.48	356	162	#N/A	2.3	18.1	61	< 0.2	< 0.06	75.5	0.0842	0.0016	< 0.0002	0.0013	< 0.00002	< 0.00001	0.003	0.000005	28.10	0.0005	0.00002	0.0005	< 0.01	0.00143	0.003	1.28	0.012	< 0.01	0.00014
11-May-10	15	500	440	7.41	356	155	#N/A	2.1	17.8	50	< 0.2	< 0.06	68.3	0.0747	0.0015	0.0004	0.0011	< 0.00002	< 0.00001	0.002	0.000012	25.50	0.0008	0.00002	0.0006	< 0.01	0.00178	0.003	1.12	0.012	< 0.01	0.00015
18-May-10	16	500	435	7.44	349	150	#N/A	2.4	17.2	50	< 0.2	< 0.06	70.7	0.0816	0.0014	< 0.0002	0.00113	< 0.00002	< 0.00001	0.0027	0.000004	26.5	< 0.0005	0.000062	0.0007	< 0.002	0.00018	0.003	1.12	0.010	< 0.01	0.00034
25-May-10	17	500	450	7.35	373	142	#N/A	4.0	20.1	34	< 0.2	< 0.06	60.5	0.072	0.0013	< 0.0002	0.0012	< 0.00002	< 0.00001	0.0022	0.000007	22.70	< 0.0005	0.00002	0.0009	< 0.002	0.00090	0.003	0.95	0.010	< 0.01	0.00015
01-Jun-10	18	500	455	7.48	356	148	#N/A	2.2	17.7	47	< 0.2	< 0.06	67.3	0.082	0.0013	0.0003	0.0010	< 0.00002	< 0.00001	0.0024	< 0.000003	25.40	0.0007	0.00003	0.0010	< 0.002	0.00003	0.002	0.96	0.010	0.04	0.00015
08-Jun-10	19	500	500	7.39	357	176	#N/A	3.0	18.5	51	< 0.2	< 0.06	90.9	0.075	0.0015	< 0.0002	0.0012	< 0.00002	< 0.00001	0.0031	< 0.000003	34.20	0.0005	0.00002	< 0.0005	< 0.002	< 0.00002	0.003	1.35	0.016	< 0.01	0.00019
15-Jun-10	20	500	445	7.51	349	143	#N/A	2.4	17.4	37	< 0.2	< 0.06	65.0	0.078	0.0012	< 0.0002	0.0010	< 0.00002	< 0.00001	0.0021	0.000009	24.70	< 0.0005	0.000020	< 0.0005	< 0.002	0.00005	0.002	0.83	0.013	< 0.01	0.00020
22-Jun-10	21	500	440	7.68	425	146	#N/A	1.9	21.9																							
29-Jun-10	22	500	435	7.36	340	127	#N/A	2.0	15.9	31	< 0.2	< 0.06	53.5	0.071	0.0008	0.0002	0.0009	< 0.00002	< 0.00001	0.0022	< 0.000003	20.20	0.0010	0.0000	0.001	< 0.002	0.00010	0.002	0.762	0.010	< 0.01	0.00018
06-Jul-10	23	500	460	7.55	361	137	#N/A	2.0	20.3																							
13-Jul-10	24	500	450	7.30	357	134	#N/A	2.6	15.8	28	< 0.2	< 0.06	52.2	0.059	0.0011	0.0002	0.00079	< 0.00002	< 0.00001	0.0027	0.000004	19.70	< 0.0005	0.000032	0.0009	< 0.002	0.00003	0.002	0.735	0.0105	< 0.01	0.00023
20-Jul-10	25	500	465	7.44	350	136	#N/A	4.1	20.7																							
27-Jul-10	26	500	465	7.28	358	143	#N/A	3.2	18.1	50	< 0.2	< 0.06	69.0	0.08	0.0008	0.0002	0.0009	< 0.00002	< 0.00001	0.0027	< 0.000003	26.40	< 0.0005	0.0000	0.00	< 0.002	< 0.00002	0.002	0.728	0.010	< 0.01	0.00007
03-Aug-10	27	500	470	7.50	404	154	#N/A	3.0	20.1	49	< 0.2	< 0.06	70.2	0.06	0.0008	< 0.0002	0.00160	< 0.00002	< 0.00001	0.0031	0.000006	27.00	< 0.0005	0.0000	0.00	< 0.002	< 0.00002	0.002	0.651	0.011	< 0.01	0.00013
10-Aug-10	28	500	435	7.58	372	157	#N/A	4.1	20.1	67	< 0.2	< 0.06	74.8	0.0573	0.0005	0.0002	0.00167	< 0.00002	< 0.00001	0.0051	0.000005	28.70	0.0006	0.000022	0.0007	< 0.002	< 0.00002	0.002	0.738	0.0110	< 0.01	0.00013
17-Aug-10	29	500	435	7.54	388	132	#N/A	3.0	20.1	48	< 0.2	< 0.06	59.9	0.0746	0.0010	< 0.0002	0.00072	< 0.00002	< 0.00001	0.0031	0.000008	23.0	< 0.0005	< 0.000002	0.0007	< 0.002	0.00002	0.002	0.595	0.0044	< 0.01	0.00015
24-Aug-10	30	500	440	7.44	360	129	#N/A	2.9	21.1	38	< 0.2	< 0.06	60.9	0.0676	0.0009	< 0.0002	0.00082	< 0.00002	< 0.00001	0.0028	0.000006	23.5	0.0005	0.000017	0.0006	< 0.002	0.00004	0.002	0.517	0.0117	< 0.01	0.00006
31-Aug-10	31	500	435	7.72	396	125	#N/A	5.0	23.8	52	< 0.2	0.11	59.4	0.0614	0.0012	< 0.0002	0.00067	< 0.00002	< 0.00001	0.0020	< 0.000003	22.9	< 0.0005	0.000024	0.0010	< 0.002	0.00005	0.002	0.567	< 0.0002	< 0.01	0.00005
07-Sep-10	32	500	420	7.23	385	136	#N/A	3.5	17.4	49	< 0.2	< 0.06	57.9	0.0579	0.0008	< 0.0002	0.00072	< 0.00002	< 0.00001	0.0046	0.000006	22.2	0.0008	0.000027	0.0014	0.002	0.00057	0.002	0.626	< 0.0002	< 0.01	0.00009
14-Sep-10	33	500	415	7.17	381	116	#N/A	3.0	16.5	49	< 0.2	< 0.06	55.4	0.0466	0.0015	< 0.0002	0.00064	< 0.00002	< 0.00001	0.0018	< 0.000003	21.3	< 0.0005	0.000025	0.0016	< 0.002	< 0.00002	0.002	0.567	0.0134	< 0.01	0.00053
21-Sep-10	34	500	425	7.37	354	112	#N/A	2.6	17.9	39	< 0.2	< 0.06	57.7	0.0648	0.0008	< 0.0002	0.00070	< 0.00002	0.00004	0.0021	< 0.000003	22.2	0.0005	0.000025	0.0013	< 0.002	< 0.00002	0.002	0.566	0.0094	< 0.01	0.00003
28-Sep-10	35	500	410	7.47	347	134	#N/A	2.1	22.9	47	< 0.2	< 0.06	57.0	0.1110	0.0012	0.0002	0.00085	< 0.00002	< 0.00001	0.0022	0.000011	21.8	0.0005	0.000038	0.0012	< 0.002	0.00009	0.003	0.617	0.0064	0.02	0.00029
05-Oct-10	36	500	405	7.42	345	148	#N/A	2.7	23.3	49	< 0.2	< 0.06	63.5	0.0879	0.0013	< 0.0002	0.00131	< 0.00002	< 0.00001	0.0027	< 0.000003	24.6	< 0.0005	0.000122	0.0012	< 0.002	0.00005	0.002	0.53	0.0101	< 0.01	0.00052
12-Oct-10	37	500	420	7.34	337	153	#N/A	2.7	20.9	50	< 0.2	< 0.06	72.1	0.0690	0.0021	0.0003	0.00084	< 0.00002	< 0.00001	0.0026	0.000007	28.0	< 0.0005	0.000091	0.0022	< 0.002	0.00020	0.002	0.530	0.0113	0.03	0.00026
19-Oct-10	38	500	425	7.36	340	144	#N/A	2.8	22.5	45	< 0.2	< 0.06	62.0	0.0793	0.0009	< 0.0002	0.00125	< 0.00002	< 0.00001	0.0022	0.000003	24.0	< 0.0005	0.000041	0.0009	0.002	0.00002	0.002	0.482	0.0089	< 0.01	0.00008
26-Oct-10	39	500	425	7.29	370	127	#N/A	2.7	17.7	38	< 0.2	< 0.06	50.5	0.0639	0.0023	< 0.0002	0.00062	< 0.00002	< 0.00001	0.0021	< 0.000003	19.5	0.0008	0.000065	0.0014	< 0.002	0.00047	0.002	0.443	0.0080	< 0.01	0.00012
02-Nov-10	40	500	430	7.49	369	21	#N/A	2.0	22.3	37	< 0.2	< 0.06	56.3	0.0702	0.0008	< 0.0002	0.00077	< 0.00002	< 0.00001	0.0042	0.000003	21.7	< 0.0005	0.000031	0.0007	0.003	0.00027	0.003	0.526	0.0082	< 0.01	0.00010
09-Nov-10	41	500	415	7.51	393	121	#N/A	2.6	21.8	44	< 0.2	< 0.06	61.6	0.0666	0.0012	< 0.0002	0.00071	< 0.00002	< 0.00001	0.0013	< 0.000003	23.9	0.0005	0.000056	0.0006	< 0.002	0.00031	0.002	0.468	0.0092	< 0.01	0.00018
16-Nov-10	42	500	420	7.67	346	159	#N/A	2.8	21.7	36	< 0.2	< 0.06	53.3	0.0620	0.0007	< 0.0002	0.00063	< 0.00002	< 0.00001	0.0049	0.000006	20.7	0.0005	0.000030	0.0005	< 0.002	0.00044	0.002	0.423	0.0085	< 0.01	0.00014
23-Nov-10	43	500	415	7.30	321	123	#N/A	2.8	22.8	32	< 0.2	< 0.06	50.2	0.0890	0.0009	0.0002	0.00063	< 0.00002	< 0.00001	0.0018	0.000007	19.5	0.0008	0.000074	0.0008	< 0.002	0.00022	0.002	0.383	0.0073	< 0.01	0.00063
30-Nov-10	44	500	440	7.41	337	115	#N/A	3.0	24.4	27	< 0.2	0.54	49.0	0.0847	0.0007	< 0.0002	0.00268	< 0.00002	< 0.00001	0.0019	0.000003	19.0	0.0006	0.000058	0.0005	< 0.002	0.00002	0.002	0.365	0.0091	< 0.01	0.00032
07-Dec-10	45	500	430	7.35	349	128	#N/A	3.3	23.3	33	< 0.2	< 0.06	66.7	0.0821	0.0008	< 0.0002	0.00065	< 0.00002	< 0.00001	0.0024	< 0.000003	26.0	0.0007	0.000036	0.0010	< 0.002	0.00166	0.002	0.418	0.0099	< 0.01	0.00027
14-Dec-10	46	500	420	7.40	363	113	#N/A	4.1	21.9	35	< 0.2	< 0.06	48.8	0.0777	0.0009	< 0.0002	0.00064	< 0.00002	< 0.00001	0.0028	0.000008	18.9	< 0.0005	0.000063	0.0007	< 0.002	0.00006	0.002	0.405	0.0078	0.04	0.00023
21-Dec-10	47	500	425	7.47	375	115	#N/A	4.9	22.6	38	< 0.2	< 0.06	52.5	0.0695	0.0008	< 0.0002	0.00070	< 0.00002	< 0.00001	0.0015	0.000004	20.4	< 0.0005	0.000037	0.0009	< 0.002	0.00010	0.002	0.362	< 0.0002	< 0.01	< 0.00001
28-Dec-10	48	500	450	7.50	349	102	#N/A	5.3	21.1	38	< 0.2	< 0.06	50.0	0.0669	0.0009	< 0.0002	0.00077	< 0.00002	< 0.00001	0.0038	0.000010	19.4	0.001	0.000028	0.0009	< 0.002	0.00161	0.002	0.376	0.0069	0.01	0.00013
04-Jan-11	49	500	425	7.42	371	95	#N/A	4.7	21.1	31	< 0.2	< 0.06	45.5	0.0605	0.0008	< 0.0002	0.00054	< 0.00002	< 0.00001	0.0014	0.000020	17.7	0.0006	0.000021	0.0007	< 0.002	0.00052	0.002	0.344	0.0065	< 0.01	0.00008
11-Jan-11	50	500	405	7.36	385	100	#N/A	2.6	21.6	29	< 0.2	< 0.06	46.9	0.0624	0.0008	< 0.0002	0.00056	< 0.00002	0.00001	0.0038	0.000007	18.2	< 0.0005	0.000025	< 0.0005	0.004	0.00002	0.002	0.344	0.0060	< 0.01	0.00009
18-Jan-11	51	500	435	7.34	357	104	#N/A	3.0	21.5	29	< 0.2	< 0.06	50.0	0.0603	0.0007	< 0.0002	0.00052	< 0.00002	< 0.00001	0.0021	0.000007	19.6	< 0.0005	0.000018	< 0.0005	< 0.002	0.00002	0.001	0.243	0.0092	< 0.01	0.00003
25-Jan-11	52	500	415	7.29	345	126	#N/A	3.2	17.7	43	< 0.2	< 0.06	53.9	0.0534	0.0006	0.0002	0.00066	< 0.00002	< 0.00001	0.0021	0.000009	21.0	< 0.0005	0.000051	0.0006	< 0.002	0.00015	0.002	0.342	0.0072	< 0.01	0.00010
01-Feb-11	53	500	425	7.32	357	108	#N/A	2.7	18.0	40	< 0.2	< 0.06	47.6	0.0441	0.0006	< 0.0002	0.00052	< 0.00002	< 0.00001	0.0017	0.000012	18.5	< 0.0005	0.000030	0.0008	< 0.002	0.00003	0.002	0.341	0.0074	< 0.01	0.00006
08-Feb-11	54	500	435	7.36	365	106	#N/A	2.5	15.7	38	< 0.2	< 0.06	52.7	0.0518	0.0006	< 0.0002	0.00052	< 0.00002	< 0.00001	0.0013	0.000013	20.5	< 0.0005	0.000026	< 0.0005	0.006	0.00003	0.002	0.361	0.0083	< 0.01	0.00007
15-Feb-11	55	500	420	7.31	358	123	#N/A	2.8	17.1	35	< 0.2	< 0.06	53.2	0.0606	0.0006	< 0.0002	0.00058	< 0.00002	< 0.00001	0.0033	0.000011	20.9	< 0.0005	0.000065	0.0010	< 0.002	0.00113	0.001	0.252	0.0084	< 0.01	0.00019
22-Feb-11	56	500	425	7.37	338	109	#N/A	3.0	16.4	37	< 0.2	< 0.06	47.7	0.0482	0.0009	< 0.0002	0.00049	< 0.00002	< 0.00001	0.0031	0.000010	18.7	< 0.0005	0.000030	0.0007	< 0.002	0.00099	0.001	0.252	0.0076	< 0.01	0.00010
01-Mar-11	57	500	460	7.28	348	101	#N/A	2.8	17.0	38	< 0.2	< 0.06	47.6	0.0465	0.0005	0.0002	0.00045	< 0.00002	< 0.00001	0.0022	0.000045	18.6	< 0.0005	0.000025	0.0008	< 0.002	0.00148	0.001	0.252	0.0085	0.01	0.00004
08-Mar-11	58	500	425	7.27	329	114	#N/A	3.0	17.3	36	< 0.2	< 0.06	49.5	0.0460	0.0007	< 0.0002	0.00084	< 0.00002	< 0.00001	0.0022	0.000062	19.3	< 0.0005	0.000070	0.0008	< 0.002	0.00161	0.001	0.292	0.0098	< 0.01	0.00011
15-Mar-11	59	500	420	7.32	308	111	#N/A	3.0	20.1	30	< 0.2	< 0.06	47.3	0.0460	0.0005	0.0004	0.00064	< 0.00002	< 0.00001	0.0021	0.000025	18.5	< 0.0005	0.000056	0.0011	0.003	0.00095	0.001	0.250	0.0089	< 0.01	0.00007
22-Mar-11	60	500	415	7.34	314	120	#N/A	3.3	17.7	34	< 0.2	< 0.06	49.3	0.0402	0.0006	< 0.0002	0.00055	< 0.00002	< 0.00001	0.0016	0.000011	19.3	0.0006	0.000043	0.0007	< 0.002	0.00003	0.001	0.289	0.0088	< 0.01	0.00005
29-Mar-11	61	500	485	7.71	292	124	#N/A	3.5	23.3	36	< 0.2	< 0.06	58.2	0.0372	0.0006	< 0.0002	0.00063	< 0.00002	< 0.00001	0.0025	0.000008	22.7	< 0.0005	0.000044	< 0.0005	< 0.002	< 0.00002	0.001	0.350	0.0112	< 0.01	0.00002
05-Apr-11	62	500	435	7.43	252	125	#N/A	3.6	22.4	37	< 0.2	< 0.06	54.9	0.0490	0.0006	< 0.0002	0.00056	< 0.00002	< 0.00001	0.0019	0.000008	21.5	< 0.0005	0.000048	0.0006	< 0.002	0.00009	0.001	0.276	0.0095	< 0.01	0.00007
12-Apr-11	63	500	460	7.42	292	160	#N/A	2.8	24.5	48	< 0.2	< 0.06	70.7	0.0517	0.0008	0.0003	0.00066	< 0.00002	< 0.00001	0.0021	0.000020	27.6	< 0.0005	0.000043	< 0.0005	0.005	0.00003	0.002	0.444	0.0186	< 0.01	0.00024
19-Apr-11	64	500	490	7.67	244	124	#N/A	5.6	26.8	33	< 0.2	< 0.06	53.7	0.0531	0.0006	< 0.0002	0.00052	< 0.00002	< 0.00001	0.0023	0.000012	21.0	< 0.0005	0.000083	< 0.0005	0.002	0.00004	0.002	0.305	0.0109	< 0.01	0.00041
26-Apr-11	65	500	440	7.49	269	107	#N/A	2.6	22.3	27	< 0.2	< 0.06	47.2	0.0532	0.0006	< 0.0002	0.00057	< 0.00002	< 0.00001	0.0018	< 0.000003	18.5	< 0.0005	0.000046	< 0.0005	< 0.002	< 0.00002	0.001	0.257	0.0083	0.01	0.00005
03-May-11	66	500	460	7.57	352	112	#N/A	3.6	20.3	32	< 0.2	< 0.06	48.7	0.0580	0.0006	< 0.0002	0.00066	< 0.00002	< 0.00001	0.0029	< 0.000003	19.1	< 0.0005	0.000039	< 0.0005	0.002	< 0.00002	0.001	0.266	0.0083	< 0.01	0.00009
10-May-11	67	500	450	7.51	375	105	#N/A	3.2	21.6	34	< 0.2	< 0.06	43.7	0.0558	0.0003	< 0.0002	0.00045	< 0.00002	< 0.00001	0.0031	0.000006	17.1	< 0.0005	0.000070	< 0.0005	< 0.002	0.00007	0.001	0.239	0.0079	< 0.01	0.00007
17-May-11	68	500	460	7.80	329	109	#N/A	2.7	21.1	31	< 0.2	< 0.06	45.7	0.0500	0.0006	< 0.0002	0.00055	< 0.00002	< 0.00001	0.0016	0.000005	17.9	< 0.0005	0.000047	< 0.0005	< 0.002	< 0.00002	0.001	0.247	0.0092	< 0.01	0.00007
24-May-11	69	500	520	7.67	264	107	#N/A	3.9	15.7	31	< 0.2	< 0.06	48.0	0.0543	0.0002	< 0.0002	0.00063	< 0.00002	< 0.00001	0.0055	0.000005	18.8	< 0.0005	0.000053	< 0.0005	< 0.002	< 0.00002	0.001	0.255	0.0071	< 0.01	0.00005
31-May-11	70	500	475	7.59	254	114	#N/A	4.0	17.3	31	< 0.2	< 0.06	46.4	0.0215	0.0007	< 0.0002	0.00075	< 0.00002	< 0.00001	0.0011	0.000011	18.2	< 0.0005	0.000105	0.0006	< 0.002	< 0.00002	0.001	0.230	0.0081	< 0.01	0.00008
07-Jun-11	71	500	455	7.72	344	104	#N/A	3.3	16.6	26	< 0.2	< 0.06	46.8	0.0515	0.0006	0.0002	0.00065	< 0.00002	< 0.00001	0.0022	0.000011	18.3	< 0.0005	0.000048	0.0009	< 0.002	0.00005	0.001	0.274	0.0092	0.01	0.00006
14-Jun-11	72	500	455	7.68	284	106	#N/A	2.2	16.1	32	< 0.2	< 0.06	45.8	0.0469	0.0005	< 0.0002	0.00064	< 0.00002	< 0.00001	0.0023	0.000014	18.0	< 0.0005	0.000047	< 0.0005	0.005	0.00004	0.001	0.224	0.0106	< 0.01	0.00015
21-Jun-11	73	500	460	7.62	292	113	#N/A	2.0	21.3	39	< 0.2	< 0.06	51.7	0.0426	0.0004	< 0.0002	0.00048	< 0.00002	< 0.00001	0.0015	0.000010	20.3	< 0.0005	0.000058	< 0.0005	< 0.002	0.00007	0.001	0.260	0.0090	0.01	0.00007
28-Jun-11	74	500	465	7.60	266	119	#N/A	3.0	22.2	37	< 0.2	< 0.06	51.0	0.0586	0.0004	< 0.0002	0.00049	< 0.00002	< 0.00001	0.0024	0.000007	20.0	< 0.0005	0.000036	< 0.0005	< 0.002	< 0.00002	0.002	0.288	0.0097	0.01	0.00038
05-Jul-11	75	500	495	7.49	308	150	#N/A	3.6	24.4	51	< 0.2	< 0.06	68.3	0.0567	0.0007	< 0.0002	0.00069	< 0.00002	< 0.00001	0.0043	0.000071	26.8	< 0.0005	0.000066	0.0007	< 0.002	0.00003	0.002	0.354	0.0131	< 0.01	0.00015
12-Jul-11	76	500	460	7.34	312	124	#N/A	3.8	21.4	40	< 0.2	< 0.06	63.0	0.0571	0.0006	< 0.0002	0.00045	< 0.00002	< 0.00001	0.0016

HC 6 *CONFIDENTIAL* *DRAFT*

Sample = Alt 09 01

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
02-Aug-11	79	500	465	7.72	272	117	#N/A	4.5	21.4	38	< 0.2	< 0.06	56.2	0.0572	0.0005	< 0.0002	0.00044	< 0.00002	< 0.00001	0.0016	0.000006	22.0	0.0007	0.000039	< 0.0005	0.004	0.00002	0.002	0.271	0.0090	0.01	0.00014
09-Aug-11	80	500	465	7.57	234	120	#N/A	3.3	21.2	38	< 0.2	< 0.06	51.8	0.0570	0.0005	0.0002	0.00049	< 0.00002	< 0.00001	0.0017	0.000015	20.3	0.0006	0.000057	< 0.0005	0.004	0.00004	0.002	0.250	0.0095	< 0.01	0.00060
16-Aug-11	81	500	470	7.71	266	115	#N/A	5.3	23.5	39	< 0.2	< 0.06	52.3	0.0579	0.0006	< 0.0002	0.00049	< 0.00002	< 0.00001	0.0017	< 0.000003	20.5	0.0008	0.000039	0.0005	0.005	< 0.00002	0.002	0.245	0.0094	0.01	0.00015
23-Aug-11	82	500	465	7.61	221	112	#N/A	4.5	21.2	32	< 0.2	< 0.06	48.6	0.0599	0.0006	< 0.0002	0.00052	< 0.00002	< 0.00001	0.0019	0.000007	19.1	< 0.0005	0.000030	< 0.0005	0.004	0.00999	0.002	0.228	0.0085	0.02	0.00011
30-Aug-11	83	500	465	7.62	273	120	#N/A	4.6	21.2	42	< 0.2	< 0.06	55.7	0.0561	0.0006	< 0.0002	0.00063	< 0.00002	< 0.00001	0.0024	0.000018	21.9	0.0007	0.000039	< 0.0005	0.003	0.00005	0.002	0.261	0.0098	0.01	0.00010
06-Sep-11	84	500	465	7.71	283	112	#N/A	4.8	20.4	37	< 0.2	< 0.06	46.0	0.0455	0.0006	< 0.0002	0.00057	< 0.00002	< 0.00001	0.0021	0.000016	18.1	< 0.0005	0.000026	< 0.0005	< 0.002	0.00024	0.001	0.198	0.0078	< 0.01	0.00023
13-Sep-11	85	500	465	7.63	360	117	#N/A	3.6	20.2	43	< 0.2	< 0.06	50.8	0.0465	0.0006	< 0.0002	0.00059	< 0.00002	< 0.00001	0.0025	0.000012	19.9	0.0012	0.000041	< 0.0005	< 0.002	0.00023	0.002	0.239	0.0090	< 0.01	0.00020
20-Sep-11	86	500	470	7.51	295	109	#N/A	4.2	20.1	37	< 0.2	< 0.06	47.7	0.0416	0.0006	0.0002	0.00057	< 0.00002	< 0.00001	0.0020	0.000016	18.7	0.0014	0.000043	< 0.0005	0.016	0.00005	0.001	0.230	0.0121	< 0.01	0.00019
27-Sep-11	87	500	465	7.55	312	104	#N/A	5.7	17.6	35	< 0.2	< 0.06	45.9	0.0435	0.0005	< 0.0002	0.00051	< 0.00002	< 0.00001	< 0.0002	0.000016	18.0	0.0007	0.000027	< 0.0005	< 0.002	0.00003	0.001	0.222	0.0098	< 0.01	0.00011
04-Oct-11	88	500	505	7.58	300	126	#N/A	4.5	22.0	46	< 0.2	< 0.06	53.5	0.0460	0.0033	0.0013	0.00075	< 0.00002	< 0.00001	0.0031	0.000010	21.0	0.0006	0.000039	< 0.0005	< 0.002	0.00010	0.002	0.235	0.0120	< 0.01	0.00016
11-Oct-11	89	500	445	7.68	264	107	#N/A	5.4	21.4	38	< 0.2	< 0.06	47.6	0.0461	0.0015	< 0.0002	0.00065	< 0.00002	< 0.00001	0.0021	0.000015	18.7	< 0.0005	0.000028	< 0.0005	0.002	0.00006	0.001	0.190	0.0090	< 0.01	0.00013
18-Oct-11	90	500	450	7.49	292	115	#N/A	4.2	17.5	39	< 0.2	< 0.06	50.7	0.0501	0.0007	0.0003	0.00090	< 0.00002	< 0.00001	0.0022	0.000012	20.0	0.0007	0.000032	< 0.0005	< 0.002	0.00004	0.001	0.194	0.0098	< 0.01	0.00020
25-Oct-11	91	500	430	7.40	310	108	#N/A	3.2	17.5	35	< 0.2	< 0.06	48.3	0.0433	0.0005	< 0.0002	0.00045	< 0.00002	< 0.00001	0.0019	0.000017	19.0	< 0.0005	0.000032	< 0.0005	< 0.003	0.00004	0.001	0.193	0.0097	0.01	0.00007
01-Nov-11	92	500	435	7.49	279	121	#N/A	4.3	17.4	45	< 0.2	< 0.06	52.7	0.0436	0.0004	< 0.0002	0.00045	< 0.00002	< 0.00001	0.0014	0.000009	20.8	0.0005	0.000032	< 0.0005	0.005	< 0.00002	0.001	0.198	0.0091	< 0.01	0.00009
08-Nov-11	93	500	445	7.47	307	133	#N/A	5.0	16.5	44	< 0.2	< 0.06	61.0	0.0419	0.0005	< 0.0002	0.00056	< 0.00002	< 0.00001	0.0010	0.000012	24.1	< 0.0005	0.000049	< 0.0005	< 0.003	< 0.00002	0.001	0.227	0.0113	< 0.01	0.00005
15-Nov-11	94	500	450	7.39	272	121	#N/A	4.9	16.7	42	< 0.2	< 0.06	51.9	0.0458	0.0004	< 0.0002	0.00087	< 0.00002	< 0.00001	0.0016	0.000018	20.5	< 0.0005	0.000051	< 0.0005	< 0.003	0.00002	0.001	0.202	0.0101	< 0.01	0.00006
22-Nov-11	95	500	445	7.54	298	114	#N/A	4.9	22.1	34	< 0.2	< 0.06	52.3	0.0597	0.0005	0.0004	0.00039	< 0.00002	< 0.00001	0.0015	0.000011	20.6	< 0.0005	0.000034	< 0.0005	< 0.003	< 0.00002	0.001	0.214	0.0107	< 0.01	0.00003
29-Nov-11	96	500	435	7.62	332	103	#N/A	5.2	22.1	31	< 0.2	< 0.06	47.4	0.0750	0.0005	0.0002	0.00036	< 0.00002	< 0.00001	0.0017	0.000015	18.7	< 0.0005	0.000045	0.0010	< 0.003	< 0.00002	0.001	0.165	0.0097	0.01	0.00023
06-Dec-11	97	500	450	7.43	332	110	#N/A	5.3	17.2	32	< 0.2	< 0.06	53.9	0.0461	0.0004	< 0.0002	0.00045	< 0.00002	< 0.00001	0.0007	0.000022	21.2	< 0.0005	0.000027	< 0.0005	< 0.003	< 0.00002	0.001	0.200	0.0108	< 0.01	0.00007
13-Dec-11	98	500	445	7.40	286	101	#N/A	4.2	21.2	29	< 0.2	< 0.06	48.8	0.0407	0.0002	< 0.0002	0.00045	< 0.00002	< 0.00001	0.0009	0.000010	19.2	0.0009	0.000027	0.0007	< 0.003	0.00014	0.001	0.188	0.0096	0.01	0.00007
20-Dec-11	99	500	450	7.61	295	97	#N/A	4.4	17.8	31	< 0.2	< 0.06	44.9	0.0511	0.0005	0.0005	0.00067	< 0.00002	< 0.00001	0.0012	0.000021	17.7	< 0.0005	0.000033	< 0.0005	< 0.003	< 0.00002	0.001	0.178	0.0094	< 0.01	0.00005
27-Dec-11	100	500	445	7.61	317	93	#N/A	4.7	22.1	28	< 0.2	< 0.06	44.2	0.0674	0.0005	0.0002	0.00034	< 0.00002	< 0.00001	0.0012	0.000008	17.4	< 0.0005	0.000031	< 0.0005	< 0.003	< 0.00002	0.001	0.170	0.0080	< 0.01	0.00011
03-Jan-12	101	500	440	7.47	313	97	#N/A	4.8	21.5	33	< 0.2	< 0.06	44.8	0.0691	0.0004	< 0.0002	0.00068	< 0.00002	< 0.00001	0.0016	0.000042	17.6	< 0.0005	0.000073	0.0006	< 0.003	0.00122	0.001	0.168	0.0091	< 0.01	0.00007
10-Jan-12	102	500	440	7.45	328	89	#N/A	3.6	20.9	24	< 0.2	< 0.06	40.7	0.0791	0.0005	< 0.0002	0.00059	< 0.00002	< 0.00001	0.0012	0.000009	16.0	< 0.0005	0.000020	0.0005	< 0.003	0.00002	0.001	0.154	0.0079	< 0.01	0.00005
17-Jan-12	103	500	450	7.40	310	91	#N/A	4.3	21.6	28	< 0.2	< 0.06	44.8	0.0470	0.0005	< 0.0002	0.00036	< 0.00002	< 0.00001	0.0024	0.000019	17.7	< 0.0005	0.000026	< 0.0005	< 0.003	< 0.00002	0.001	0.172	0.0104	0.08	0.00007
24-Jan-12	104	500	475	7.52	362	97	#N/A	5.2	21.6	30	< 0.2	< 0.06	42.6	0.0563	0.0005	< 0.0002	0.00040	< 0.00002	< 0.00001	0.0013	0.000010	16.8	< 0.0005	0.000032	< 0.0005	< 0.003	< 0.00002	0.001	0.163	0.0085	< 0.01	0.00006
31-Jan-12	105	500	450	7.31	315	108	#N/A	3.8	21.5	32	< 0.2	< 0.06	46.9	0.0541	0.0004	0.0008	0.00046	< 0.00002	< 0.00001	0.0020	0.000011	18.5	< 0.0005	0.000031	0.0005	< 0.003	< 0.00002	0.001	0.162	0.0087	< 0.01	0.00011
07-Feb-12	106	500	485	7.48	355	145	#N/A	4.4	24.5	51	< 0.2	< 0.06	62.7	0.0443	0.0003	< 0.0002	0.00057	< 0.00002	< 0.00001	0.0016	0.000015	24.7	< 0.0005	0.000053	0.0008	< 0.003	< 0.00002	0.001	0.222	0.0138	0.01	0.00004
14-Feb-12	107	500	440	7.51	387	110	#N/A	5.0	20.2	41	< 0.2	< 0.06	48.4	0.0314	< 0.0002	< 0.0002	0.00036	< 0.00002	< 0.00001	0.0011	0.000015	19.2	< 0.0005	0.000025	0.0006	< 0.003	0.00012	< 0.001	0.144	0.0077	< 0.01	0.00004
21-Feb-12	108	500	460	7.33	359	133	#N/A	2.9	15.4	47	< 0.2	< 0.06	59.3	0.0385	0.0004	< 0.0002	0.00086	< 0.00002	< 0.00001	0.0045	0.000022	23.4	< 0.0005	0.000023	0.0007	< 0.003	< 0.00002	0.001	0.182	0.0086	< 0.01	0.00004
28-Feb-12	109	500	405	7.38	391	122	#N/A	4.8	17.3	39	< 0.2	< 0.06	55.9	0.0485	0.0004	< 0.0002	0.00050	< 0.00002	< 0.00001	0.0012	0.000013	22.1	< 0.0005	0.000026	< 0.0005	< 0.003	< 0.00002	0.001	0.148	0.0094	< 0.01	0.00003
06-Mar-12	110	500	440	7.54	385	87	#N/A	2.9	23.5	33	< 0.2	< 0.06	45.8	0.0550	0.0003	< 0.0002	0.00044	< 0.00002	< 0.00001	0.0012	0.000009	18.1	< 0.0005	0.000019	< 0.0005	< 0.003	0.00002	0.001	0.163	0.0071	< 0.01	0.00005
13-Mar-12	111	500	435	7.26	365	93	#N/A	4.7	15.3	28	< 0.2	< 0.06	43.3	0.0387	0.0004	0.0023	#N/A	< 0.00002	< 0.00001	0.0013	0.000049	17.1	< 0.0005	0.000028	0.0057	#N/A	0.00109	0.001	0.163	0.0080	< 0.01	0.00012
20-Mar-12	112	500	470	7.33	342	98	#N/A	4.6	16.3	32	< 0.2	< 0.06	44.6	0.0419	0.0003	0.0002	0.00050	< 0.00002	< 0.00001	0.0012	0.000053	17.6	< 0.0005	0.000018	0.0015	< 0.003	0.00010	0.001	0.167	0.0087	0.01	0.00007
27-Mar-12	113	500	455	7.22	344	110	#N/A	4.1	15.4	36	< 0.2	< 0.06	48.0	0.0567	0.0003	0.0005	0.00045	< 0.00002	< 0.00001	0.0014	0.000016	18.9	< 0.0005	0.000041	0.0006	< 0.003	0.00003	0.001	0.181	0.0085	< 0.01	0.00005
03-Apr-12	114	500	455	7.17	370	101	#N/A	4.2	15.2	35	< 0.2	< 0.06	44.9	0.0577	0.0003	< 0.0002	0.00040	< 0.00002	< 0.00001	0.0011	< 0.000003	17.7	< 0.0005	0.000009	0.0006	< 0.003	< 0.00002	0.001	0.167	0.0080	< 0.01	0.00003
10-Apr-12	115	500	455	7.28	317	101	#N/A	3.0	15.3	36	< 0.2	< 0.06	43.6	0.0412	0.0004	< 0.0002	0.00042	< 0.00002	< 0.00001	0.0016	0.000017	17.2	< 0.0005	0.000024	0.0006	< 0.003	0.00013	0.001	0.170	0.0082	0.04	0.00007
17-Apr-12	116	500	450	7.21	358	104	#N/A	3.9	14.7	37	< 0.2	< 0.06	44.9	0.0497	0.0004	< 0.0002	0.00030	< 0.00002	< 0.00001	0.0021	< 0.000003	17.7	< 0.0005	0.000016	< 0.0005	< 0.003	< 0.00002	0.001	0.160	0.0075	0.03	0.00006
24-Apr-12	117	500	435	7.35	381	104	#N/A	3.1	14.5	35	< 0.2	< 0.06	45.2	0.0570	0.0004	< 0.0002	0.00043	< 0.00002	< 0.00001	0.0013	< 0.000003	17.9	< 0.0005	0.000023	< 0.0005	< 0.003	< 0.00002	0.001	0.148	0.0073	0.03	0.00042
01-May-12	118	500	435	7.53	328	105	#N/A	5.0	16.1	35	< 0.2	< 0.06	46.6	0.0564	0.0004	< 0.0002	0.00033	< 0.00002	< 0.00001	0.0030	< 0.000003	18.4	< 0.0005	0.000015	< 0.0005	< 0.003	0.00004	< 0.001	0.158	0.0082	0.02	0.00005
08-May-12	119	500	435	7.36	375	104	#N/A	3.4	15.4	31	< 0.2	< 0.06	45.9	0.0375	0.0004	< 0.0002	0.00037	< 0.00002	< 0.00001	0.0024	< 0.000003	18.1	< 0.0005	0.000016	0.0030	< 0.003	0.00008	0.001	0.146	0.0087	< 0.01	0.00003
15-May-12	120	500	425	7.44	301	117	#N/A	3.1	14.0	33	< 0.2	< 0.06	50.0	0.0450	0.0003	< 0.0002	0.00092	< 0.00002	< 0.00001	0.0017	0.000013	19.7	< 0.0005	0.000018	0.0008	< 0.003	0.00004	0.001	0.166	0.0069	< 0.01	0.00004
22-May-12	121	500	440	7.25	327	124	#N/A	3.6	13.4	44	< 0.2	< 0.06	52.5	0.0598	0.0003	< 0.0002	0.00045	< 0.00002	< 0.00001	0.0014	< 0.000003	20.8	< 0.0005	0.000015	< 0.0005	< 0.003	< 0.00002	< 0.001	0.162	0.0075	0.02	0.00005
29-May-12	122	500	435	7.23	328	120	#N/A	3.9	13.7	34	< 0.2	< 0.06	54.7	0.0464	0.0003	< 0.0002	0.00031	< 0.00002	< 0.00001	0.0017	< 0.000003	21.6	< 0.0005	0.000026	< 0.0005	< 0.003	< 0.00002	0.001	0.176	0.0101	< 0.01	0.00003
05-Jun-12	123	500	440	7.22	368	111	#N/A	4.2	14.5	32	< 0.2	< 0.06	49.7	0.0493	0.0003	< 0.0002	0.00046	< 0.00002	< 0.00001	0.0025	< 0.000003	19.6	< 0.0005	0.000026	0.0006	< 0.003	< 0.00002	0.001	0.166	0.0079	0.01	0.00011
12-Jun-12	124	500	440	7.30	354	109	#N/A	3.4	13.4	34	< 0.2	< 0.06	48.7	0.0463	0.0003	< 0.0002	0.00035	< 0.00002	< 0.00001	0.0021	< 0.000003	19.2	< 0.0005	0.000009	< 0.0005	< 0.003	< 0.00002	0.001	0.164	0.0081	0.01	0.00005
19-Jun-12	125	500	450	7.24	369	129	#N/A	3.0	12.7	39	< 0.2	< 0.06	55.8	0.0790	0.0003	< 0.0002	0.00045	< 0.00002	< 0.00001	0.0065	< 0.000003	22.1	< 0.0005	0.000023	< 0.0005	< 0.003	0.00002	0.001	0.166	0.0075	< 0.01	0.00005
26-Jun-12	126	500	445	7.40	336	119	#N/A	3.1	15.1	38	< 0.2	< 0.06	53.4	0.0724	0.0003	< 0.0002	0.00048	< 0.00002	< 0.00001	0.0030	< 0.000003	21.1	< 0.0005	< 0.000002	0.0013	< 0.003	0.00008	0.001	0.193	0.0075	< 0.01	0.00007
03-Jul-12	127	500	450	7.43	379	122	#N/A	7.0	17.2	38	< 0.2	< 0.06	52.9	0.0463	0.0003	< 0.0002	0.00035	< 0.00002	< 0.00001	0.0015	0.000017	20.9	< 0.0005	0.000013	< 0.0005	< 0.003	< 0.00002	0.001	0.184	0.0086	0.01	0.00047
10-Jul-12	128	500	430	7.32	316	119	#N/A	3.3	15.2	39	< 0.2	< 0.06	53.5	0.0507	0.0004	< 0.0002	0.00046	< 0.00002	< 0.00001	0.0016	0.000008	21.1	< 0.0005	0.000011	< 0.0005	< 0.003	< 0.00002	0.001	0.207	0.0094	< 0.01	0.00006
17-Jul-12	129	500	445	7.39	363	107	#N/A	2.3	14.2	32	< 0.2	< 0.06	46.9	0.0511	0.0004	< 0.0002	0.00034	< 0.00002	< 0.00001	0.0020	0.000005	18.5	< 0.0005	0.000037	< 0.0005	< 0.003	< 0.00002	0.001	0.182	0.0064	0.01	< 0.00001
24-Jul-12	130	500	440	7.14	331	112	#N/A	2.8	13.9	35	< 0.2	< 0.06	50.0	0.0472	0.0003	< 0.0002	0.00037	< 0.00002	< 0.00001	0.0012	0.000013	19.7	< 0.0005	0.000013	< 0.0005	< 0.003	< 0.00002	< 0.001	0.177	0.0073	0.02	0.00006
31-Jul-12	131	500	440	7.38	349	99	#N/A	2.1	12.4	30	< 0.2	< 0.06	45.6	0.0521	0.0004	0.0002	0.00033	< 0.00002	< 0.00001	0.0016	0.000015	18.0	< 0.0005	0.000009	< 0.0005	< 0.003	< 0.00002	0.001	0.163	0.0072	< 0.01	0.00005
07-Aug-12	132	500	435	7.48	330	105	#N/A	2.1	14.0	33	< 0.2	< 0.06	47.7	0.0780	0.0006	< 0.0002	0.00045	< 0.00002	< 0.00001	0.0018	0.000005	18.8	< 0.0005	0.000007	0.0009	< 0.003	< 0.00002	0.001	0.155	0.0069	< 0.01	0.00006
14-Aug-12	133	500	430	7.23	282	103	#N/A	2.3	12.6	32	< 0.2	< 0.06	44.3	0.0506	0.0003	< 0.0002	0.00040	< 0.00002	< 0.00001	0.0016	0.000009	17.5	< 0.0005	0.000006	0.0006	< 0.003	< 0.00002	< 0.001	0.175	0.0072	< 0.01	0.00003
21-Aug-12	134	500	450	7.18	283	99	#N/A	3.0	12.3	28	< 0.2	< 0.06	43.8	0.0583	0.0006	0.0002	0.00033	< 0.00002	< 0.00001	0.0021	0.000014	17.3	< 0.0005	0.000023	< 0.0005	< 0.003	< 0.00002	0.001	0.175	0.0083	< 0.01	0.00009
28-Aug-12	135	500	450	7.33	393	96	#N/A	4.8	13.0	28	< 0.2	< 0.06	39.7	0.0686	0.0003	< 0.0002	0.00030	< 0.00002	< 0.00001	0.0017	0.000007	15.7	< 0.0005	0.000014	0.0007	< 0.003	< 0.00002	< 0.001	0.140	0.0075	< 0.01	0.00012
04-Sep-12	136	500	445	7.15	394	100	#N/A	4.5	13.8	27	< 0.2	< 0.06	46.5	0.0653	0.0004	< 0.0002	0.00037	< 0.00002	< 0.00001	0.0018	0.000021	18.3	< 0.0005	0.000014	0.0005	< 0.003	0.00003	0.001	0.191	0.0074	< 0.01	0.00004
11-Sep-12	137	500	460	7.22	371	88	#N/A	3.0	12.4	26	< 0.2	< 0.06	38.6	0.0347	0.0003	< 0.0002	0.00050	< 0.00002	< 0.00001	0.0015	0.000020	15.2	< 0.0005	0.000020	0.0006	0.007	< 0.00002	< 0.001	0.152	0.0062	0.01	0.00005
18-Sep-12	138	500	435	7.28	360	102	#N/A	2.4	13.8	33	< 0.2	< 0.06	43.7	0.0539	0.0003	< 0.0002	0.00030	< 0.00002	< 0.00001	0.0014	0.000015	17.3	< 0.0005	0.000007	< 0.0005	< 0.003	< 0.00002	< 0.001	0.149	0.0072	0.03	0.00002
25-Sep-12	139	500	450	7.23	360	91	#N/A	2.8	13.4	30	< 0.2	< 0.06	40.2	0.0427	0.0003	< 0.0002	0.00049	< 0.00002	< 0.00001	0.0015	0.000008	15.9	< 0.0005	0.000013	< 0.0005	< 0.003	< 0.00002	< 0.001	0.137	0.0068	< 0.01	0.00006
02-Oct-12	140	500	450	7.13	390	104	#N/A	2.6	13.2	32	< 0.2	< 0.06	44.9	0.0317	0.0003	< 0.0002	0.00038	< 0.00002	< 0.00001	0.0025	0.000009	17.7	< 0.0005	0.000055	0.0008	< 0.003	< 0.00002	< 0.001	0.140	0.0068	< 0.01	0.00006
09-Oct-12	141	500	460	7.24	367	97	#N/A	5.1	13.0	36	< 0.2	< 0.06	41.0	0.0402	0.0003	< 0.0002	0.00046	< 0.00002	< 0.00001	0.0020	0.000008	16.2	< 0.0005	0.000014	0.0009	< 0.003	< 0.00002	< 0.001	0.142	0.0067	< 0.01	0.00004
16-Oct-12	142	500	430	7.57	395	104	#N/A	5.3	14.6	38	< 0.2	< 0.06	46.9	0.0312	0.0002	< 0.0002	0.00062	< 0.00002	< 0.00001	0.0018	0.000030	18.5	< 0.0005	0.000009	0.0007	< 0.003	< 0.00002	< 0.001	0.166	0.0080	< 0.01	0.00004
23-Oct-12	143	500	450	7.11	358	100	#N/A	4.1	13.1	37	< 0.2	< 0.06	43.0	0.0621	< 0.0002	< 0.0002	0.00037	< 0.00002	< 0.00001	0.0010	0.000008	17.0	< 0.0005	0.000079	0.0008	0.004	< 0.00002	< 0.001	0.134	0.0066	< 0.01	0.00015
30-Oct-12	144	500	440	7.11	372	106	#N/A	3.8	14.0	39	< 0.2	< 0.06	48.7	0.0386	< 0.0002	< 0.0002	0.00066	< 0.00002	< 0.00001	0.0027	0.00122	19.2	< 0.0005	0.000015	0.0009	< 0.003	< 0.00002	< 0.001	0.159	0.0077	< 0.01	0.00007
06-Nov-12	145	500	445	7.26	366	102	#N/A	3.9	14.2	33	< 0.2	< 0.06	51.3	0.0263	0.0003	0.0002	0.00047	< 0.00002	< 0.00001	0.0025	0.000015	20.3	< 0.0005	0.000029	< 0.0005	< 0.003	< 0.00002	< 0.001	0.158	0.0078	< 0.01	0.00005
13-Nov-12	146	500	440	7.44	375	110	#N/A	5.8	14.9	35	< 0.2	< 0.06	54.7	0.0271	0.0003	< 0.0002	0.00035	< 0.00002	< 0.00001	0.0018	0.000013	21.7	< 0.0005	0.000041	< 0.0005	< 0.003	< 0.00002	< 0.001	0.159	0.0082	0.01	0.00005
20-Nov-12	147	500	480	7.53	376	105	#N/A	6.9	16.6	31	< 0.2	< 0.06	47.4	0.0317	0.0003	< 0.0002	0.00080	< 0.00002	< 0.00001	0.0029	0.000019	18.7	< 0.0005	0.000014	< 0.0005	< 0.003	0.00005	< 0.001	0.163	0.0070	< 0.01	0.00004
27-Nov-12	148	500	500	7.41	353	130	#N/A	4.5	16.3	40	< 0.2	< 0.06	58.9	0.0277	0.0004	< 0.0002	0.00077	< 0.00002	< 0.00001	0.0027	0.000017	23.3	< 0.0005	0.000044	< 0.0005	< 0.003	< 0.00002	0.001	0.198	0.0080	< 0.01	0.00004
04-Dec-12	149	500	475	7.43	338	100	#N/A	2.0	15.8	36	< 0.2	< 0.06	47.6	0.0260	0.0003	< 0.0002	0.00044	< 0.00002	< 0.00001	0.0015	0.000010	18.8	< 0.0005	0.000036	< 0.0005	< 0.003	0.00002	0.001	0.170	0.0074	0.01	0.00004
11-Dec-12	150	500	495	7.46	342	133	#N/A	2.3	17.0	42	< 0.2	< 0.06	55.1	0.0299	0.0005	< 0.0002	0.00057	< 0.00002	< 0.00001	0.0027	0.000022	21.8	< 0.0005	0.000054	< 0.0005	< 0.003	0.00002	0.001	0.164	0.0074	< 0.01	0.00008
18-Dec-12	151	500	495	7.47	311	113	#N/A	2.3	15.7	39	< 0.2	< 0.06	51.1	0.0347	0.0004	< 0.0002	0.00056	< 0.00002	< 0.00001	0.0018	0.000017	20.2	< 0.0005	0.000030	< 0.0005	< 0.003	< 0.00002

HC 6
Sample = Alt 09 01

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
02-Feb-10	1	0.0011	< 0.01	5.46	0.00082	0.51	< 0.00001	7.82	0.143	41.7	< 0.0002	0.00027	< 0.0001	0.000009	0.00045	< 0.001	< 0.00001		2.61	2.74	0.13	2.4%
09-Feb-10	2	0.0003	< 0.01	4.46	0.00099	0.50	< 0.00001	7.33	0.159	46.7	< 0.0002	< 0.00001	< 0.0001	0.000053	0.00048	< 0.001	< 0.00001		3.10	3.23	0.13	2.1%
16-Feb-10	3	0.0011	< 0.01	3.56	0.00119	0.48	< 0.00001	4.97	0.119	41.9	< 0.0002	0.00002	< 0.0001	0.000020	0.00053	< 0.001	< 0.00001		3.00	2.90	-0.11	-1.8%
23-Feb-10	4	0.0003	< 0.01	1.80	0.00056	0.44	< 0.00001	1.76	0.100	32.0	< 0.0002	0.00004	< 0.0001	0.000021	0.00043	< 0.001	< 0.00001		2.42	2.38	-0.04	-0.8%
02-Mar-10	5	0.0003	< 0.01	1.14	0.00043	0.34	< 0.00001	1.00	0.0662	26.0	< 0.0002	0.00019	< 0.0001	0.000017	0.00053	< 0.001	0.00001		2.11	1.73	-0.38	-9.8%
09-Mar-10	6	0.0003	< 0.01	1.02	0.00043	0.34	< 0.00001	0.75	0.0586	22.8	< 0.0002	0.00028	< 0.0001	0.000030	0.00041	< 0.001	< 0.00001		1.84	1.68	-0.17	-4.7%
16-Mar-10	7	0.0006	< 0.01	0.88	0.00038	0.38	< 0.00001	0.67	0.0551	23.50	< 0.0002	0.00003	< 0.0001	0.000015	0.00054	0.002	< 0.00001		1.77	1.73	-0.04	-1.2%
23-Mar-10	8	0.0004	< 0.01	0.74	0.00034	0.36	< 0.00001	0.50	0.0516	22.1	< 0.0002	0.00005	< 0.0001	0.000014	0.00047	< 0.001	< 0.00001		1.95	1.62	-0.33	-9.2%
30-Mar-10	9	0.0004	< 0.01	0.68	0.00032	0.32	< 0.00001	0.50	0.0461	19.50	< 0.0002	0.00019	< 0.0001	0.000025	0.0004	< 0.001	< 0.00001		1.67	1.55	-0.12	-3.9%
06-Apr-10	10	< 0.0001	< 0.01	0.57	0.00024	0.36	0.00008	0.40	0.0427	19.7	< 0.0002	0.00011	< 0.0001	0.000020	0.00043	< 0.001	0.00002		1.55	1.49	-0.05	-1.7%
13-Apr-10	11	< 0.0001	0.01	0.51	0.00033	0.35	< 0.00001	0.37	0.0366	16.80	< 0.0002	0.00012	< 0.0001	0.000021	0.00048	< 0.001	< 0.00001		1.48	1.36	-0.12	-4.3%
20-Apr-10	12	0.0002	< 0.01	0.536	0.00027	0.30	< 0.00001	0.33	0.0370	18.1	< 0.0002	0.00016	< 0.0001	0.000020	0.00058	< 0.001	< 0.00001		1.54	1.40	-0.14	-4.8%
27-Apr-10	13	0.0002	< 0.01	0.45	0.00035	0.33	< 0.00001	0.31	0.0360	16.90	< 0.0002	0.00021	< 0.0001	0.000007	0.00045	< 0.001	< 0.00001		1.53	1.37	-0.16	-5.5%
04-May-10	14	< 0.0001	< 0.01	0.44	0.00034	0.32	< 0.00001	0.30	0.0392	17.40	< 0.0002	0.00020	< 0.0001	0.000009	0.00043	0.001	< 0.00001		1.63	1.53	-0.10	-3.2%
11-May-10	15	0.0002	0.02	0.43	0.00028	0.34	0.00002	0.23	0.0336	17.80	< 0.0002	0.00029	< 0.0001	0.000021	0.00042	< 0.001	< 0.00001		1.40	1.39	-0.01	-0.4%
18-May-10	16	0.0001	< 0.009	0.408	0.00026	0.33	< 0.00001	0.25	0.0330	18.1	< 0.0002	0.00014	0.0002	0.000007	0.00043	< 0.001	< 0.00001		1.39	1.44	0.05	1.8%
25-May-10	17	< 0.0001	< 0.009	0.33	0.00022	0.27	< 0.00001	0.22	0.0274	16.60	< 0.0002	0.00017	0.0001	0.000008	0.00042	< 0.002	< 0.00001		1.11	1.23	0.12	5.0%
01-Jun-10	18	< 0.0001	< 0.009	0.34	0.00021	0.30	< 0.00001	0.22	0.0299	18.00	< 0.0002	0.00019	< 0.0001	0.000008	0.00042	< 0.001	< 0.00001		1.33	1.36	0.03	1.1%
08-Jun-10	19	0.0001	< 0.009	0.41	0.00019	0.40	< 0.00001	0.23	0.0403	25.80	< 0.0002	0.00013	< 0.0001	0.000005	0.00039	< 0.001	< 0.00001		1.43	1.84	0.41	12.4%
15-Jun-10	20	0.0002	< 0.009	0.30	0.00015	0.27	0.00001	0.20	0.0281	17.00	< 0.0002	0.00024	< 0.0001	0.000006	0.00036	< 0.001	< 0.00001		1.12	1.32	0.20	8.1%
22-Jun-10	21																					
29-Jun-10	22	< 0.0001	< 0.009	0.273	0.00016	0.24	< 0.00001	0.18	0.0206	13.20	< 0.0002	0.00148	0.0002	0.00001	0.00028	0.001	0.00003		0.96	1.09	0.12	5.9%
06-Jul-10	23																					
13-Jul-10	24	0.0002	0.029	0.28	0.00011	0.25	< 0.00001	0.17	0.0221	16.40	< 0.0002	0.00040	0.0001	0.000030	0.00031	< 0.001	< 0.00001		0.90	1.06	0.16	8.1%
20-Jul-10	25																					
27-Jul-10	26	< 0.0001	0.012	0.260	< 0.00004	0.28	< 0.00001	0.17	0.0271	17.4	< 0.0002	0.00013	< 0.0001	0.00000	0.00037	< 0.001	< 0.00001		1.40	1.39	-0.01	-0.4%
03-Aug-10	27	0.0003	0.018	0.240	< 0.00004	0.26	< 0.00001	0.14	0.0290	17.7	< 0.0002	0.00012	< 0.0001	0.00000	0.00029	< 0.001	< 0.00001		1.42	1.41	-0.01	-0.3%
10-Aug-10	28	0.0004	< 0.009	0.274	0.00019	0.24	< 0.00001	0.16	0.0293	19.10	< 0.0002	0.00006	< 0.0001	0.000003	0.00033	< 0.001	< 0.00001		1.80	1.51	-0.29	-8.8%
17-Aug-10	29	0.0002	< 0.009	0.250	0.00022	0.27	< 0.00001	0.13	0.0211	20.7	< 0.0002	0.00014	0.0002	0.000006	0.00035	< 0.001	< 0.00001		1.40	1.21	-0.19	-7.4%
24-Aug-10	30	0.0002	< 0.009	0.212	< 0.00004	0.27	< 0.00001	0.13	0.0202	15.5	< 0.0002	0.00014	0.0002	0.000004	0.00034	< 0.001	< 0.00001		1.21	1.23	0.01	0.5%
31-Aug-10	31	< 0.0001	< 0.009	0.220	0.00009	0.26	< 0.00001	0.12	0.0193	16.1	< 0.0002	0.00004	< 0.0001	0.000002	0.00034	0.001	< 0.00001		1.56	1.20	-0.36	-13.0%
07-Sep-10	32	0.0002	< 0.009	0.254	< 0.00004	0.24	< 0.00001	0.12	0.0154	15.7	< 0.0002	0.00005	< 0.0001	0.000003	0.00039	0.001	< 0.00001		1.37	1.17	-0.20	-7.8%
14-Sep-10	33	0.0002	< 0.009	0.238	0.00020	0.24	< 0.00001	0.14	0.0185	14.4	< 0.0002	0.00018	< 0.0001	0.000002	0.00023	< 0.001	< 0.00001		1.35	1.12	-0.23	-9.2%
21-Sep-10	34	0.0006	< 0.009	0.267	0.00079	0.25	< 0.00001	0.13	0.0192	15.4	< 0.0002	0.00018	< 0.0001	< 0.000001	0.00028	0.001	< 0.00001		1.17	1.17	0.00	-0.1%
28-Sep-10	35	0.0002	< 0.009	0.342	0.00006	0.42	< 0.00001	0.15	0.0186	15.0	< 0.0002	0.00033	< 0.0001	0.000006	0.00041	0.001	< 0.00001		1.44	1.15	-0.28	-10.9%
05-Oct-10	36	< 0.0001	< 0.009	0.376	< 0.00004	0.38	< 0.00001	0.16	0.0208	17.2	< 0.0002	0.00039	< 0.0001	0.000002	0.00036	< 0.001	< 0.00001		1.49	1.29	-0.20	-7.2%
12-Oct-10	37	0.0009	< 0.009	0.321	< 0.00004	0.32	< 0.00001	0.16	0.0244	18.2	< 0.0002	0.00046	< 0.0001	0.000001	0.00035	0.001	< 0.00001		1.46	1.46	0.00	-0.1%
19-Oct-10	38	< 0.0001	< 0.009	0.300	0.00010	0.27	< 0.00001	0.12	0.0195	15.6	< 0.0002	0.00008	< 0.0001	0.000006	0.00037	0.002	< 0.00001	CA14822-OCT10	1.39	1.26	-0.13	-4.8%
26-Oct-10	39	0.0009	0.023	0.251	0.00243	0.21	< 0.00001	0.12	0.0157	14.2	< 0.0002	0.00002	< 0.0001	0.000008	0.00033	0.005	< 0.00001	CA11459-OCT10	1.15	1.03	-0.12	-5.4%
02-Nov-10	40	0.0008	< 0.009	0.308	0.00024	0.31	< 0.00001	0.16	0.0183	13.9	< 0.0002	0.00002	0.0003	0.000006	0.00009	0.001	0.00002	CA11315-NOV10	1.22	1.15	-0.07	-2.9%
09-Nov-10	41	0.0003	0.016	0.302	< 0.00004	0.27	< 0.00001	0.15	0.0192	14.7	< 0.0002	0.00087	< 0.0001	0.000158	0.00029	0.001	< 0.00001	CA11435-NOV10	1.35	1.25	-0.10	-3.8%
16-Nov-10	42	0.0004	< 0.009	0.271	< 0.00004	0.27	< 0.00001	0.10	0.0161	12.9	< 0.0002	0.00029	< 0.0001	0.000022	0.00025	0.001	< 0.00001	CA10265-NOV10	1.18	1.09	-0.10	-4.3%
23-Nov-10	43	< 0.0001	< 0.009	0.265	0.00013	0.28	< 0.00001	0.08	0.0149	11.2	< 0.0002	0.00014	< 0.0001	0.000013	0.00037	0.002	< 0.00001	CA11701-NOV10	1.12	1.02	-0.10	-4.5%
30-Nov-10	44	0.0006	< 0.009	0.237	0.00020	0.27	< 0.00001	0.11	0.0144	11.0	< 0.0002	0.00077	< 0.0001	0.000047	0.00037	0.002	< 0.00001	CA14008-DEC10	1.05	1.00	-0.05	-2.6%
07-Dec-10	45	0.0006	< 0.009	0.234	< 0.00004	0.27	< 0.00001	0.10	0.0164	12.9	< 0.0002	0.00029	< 0.0001	0.000021	0.00035	0.003	< 0.00001	CA14206-DEC10	1.15	1.35	0.20	7.9%
14-Dec-10	46	0.0004	< 0.009	0.253	0.00027	0.26	< 0.00001	0.11	0.0141	10.6	< 0.0002	0.00025	< 0.0001	0.000013	0.00034	< 0.001	< 0.00001	CA10970-DEC10	1.17	1.00	-0.17	-7.9%
21-Dec-10	47	0.0007	< 0.009	0.232	< 0.00004	0.26	< 0.00001	0.10	0.0136	11.7	< 0.0002	0.00020	< 0.0001	0.000008	0.00030	< 0.001	< 0.00001	CA10453-DEC10	1.24	1.07	-0.18	-7.7%
28-Dec-10	48	< 0.0001	0.017	0.234	0.00019	0.30	< 0.00001	0.12	0.0148	13.3	< 0.0002	0.00017	< 0.0001	0.000027	0.00027	0.003	< 0.00001	CA10140-JAN11	1.21	1.02	-0.20	-8.8%
04-Jan-11	49	0.0003	< 0.009	0.214	0.00005	0.24	< 0.00001	0.09	0.0116	10.1	< 0.0002	0.00007	< 0.0001	0.000021	0.00029	0.002	< 0.00001	CA10880-JAN11	1.07	0.93	-0.14	-7.0%
11-Jan-11	50	0.0003	< 0.009	0.205	0.00010	0.23	< 0.00001	0.09	0.0127	10.7	< 0.0002	0.00045	0.0002	0.000002	0.00028	0.001	0.00002	CA14437-JAN11	1.04	0.95	-0.08	-4.2%
18-Jan-11	51	< 0.0001	0.024	0.180	< 0.00004	0.27	< 0.00001	0.08	0.0136	11.0	< 0.0002	0.00032	< 0.0001	0.000001	0.00027	< 0.001	0.00001	CA10982-JAN11	1.03	1.01	-0.02	-1.0%
25-Jan-11	52	0.0005	0.030	0.226	< 0.00004	0.26	< 0.00001	0.10	0.0147	12.9	< 0.0002	0.00030	< 0.0001	0.000036	0.00025	0.001	< 0.00001	CA11047-JAN11	1.25	1.09	-0.16	-6.7%
01-Feb-11	53	0.0005	0.036	0.193	0.00014	0.19	< 0.00001	0.08	0.0129	17.1	< 0.0002	0.00046	< 0.0001	0.000007	0.00023	0.002	< 0.00001	CA14121-FEB11	1.19	0.96	-0.23	-10.6%
08-Feb-11	54	< 0.0001	< 0.009	0.200	< 0.00004	0.23	< 0.00001	0.07	0.0146	12.7	< 0.0002	0.00061	< 0.0001	0.000001	0.00023	0.002	< 0.00001	CA14249-FEB11	1.11	1.07	-0.04	-1.8%
15-Feb-11	55	0.0010	< 0.009	0.164	0.00016	0.26	< 0.00001	0.08	0.0140	13.0	< 0.0002	0.00025	0.0003	0.000012	0.00015	< 0.001	0.00003	CA14449-FEB11	1.07	1.08	0.01	0.3%
22-Feb-11	56	< 0.0001	0.024	0.161	0.00006	0.21	0.00001	0.08	0.0124	11.0	< 0.0002	0.00022	< 0.0001	0.000007	0.00022	0.002	< 0.00001	CA14656-FEB11	1.10	0.97	-0.13	-6.4%
01-Mar-11	57	0.0005	0.054	0.131	0.00008	0.21	< 0.00001	0.10	0.0121	11.0	< 0.0002	0.00023	< 0.0001	< 0.000001	0.00023	0.004	< 0.00001	CA14060-MAR11	1.13	0.96	-0.17	-8.1%
08-Mar-11	58	0.0001	0.029	0.152	< 0.00004	0.18	< 0.00001	0.08	0.0128	11.3	< 0.0002	0.00022	< 0.0001	0.000003	0.00017	0.002	< 0.00001	CA14274-MAR11	1.10	1.00	-0.10	-4.6%
15-Mar-11	59	0.0006	< 0.009	0.140	< 0.00004	0.21	< 0.00001	0.09	0.0124	10.1	< 0.00002	0.00024	< 0.0001	0.000004	0.00021	0.003	< 0.00001	CA14457-MAR11	1.03	0.96	-0.07	-3.5%
22-Mar-11	60	< 0.0001	< 0.009	0.154	0.00024	0.21	< 0.00001	0.05	0.0127	11.9	< 0.0002	0.00036	< 0.0001	0.000001	0.00018	< 0.001	< 0.00001	CA10460-MAR11	1.06	1.00	-0.07	-3.2%
29-Mar-11	61	0.0005	0.012	0.165	0.00008	0.29	< 0.00001	0.08	0.0161	14.6	< 0.0002	0.00008	< 0.0001	0.000003	0.00019	< 0.001	< 0.00001	CA14922-MAR11	1.22	1.17	-0.04	-1.8%
05-Apr-11	62	0.0005	0.012	0.155	0.00007	0.23	< 0.00001	0.08	0.0144	13.3	< 0.0002	0.00008	< 0.0001	0.000001	0.00021	0.001	0.00001	CA14224-APR11	1.22	1.11	-0.11	-4.7%
12-Apr-11	63	0.0002	< 0.009	0.214	0.00012	0.31	< 0.00001	0.10	0.0223	18.6	< 0.0002	0.00036	< 0.0001	0.000009	0.00022	0.001	< 0.00001	CA14457-APR11	1.49	1.43	-0.06	-2.1%
19-Apr-11	64	0.0003	0.013	0.159	0.00049	0.27	< 0.00001	0.08	0.0147	12.5	< 0.0002	0.00005	< 0.0001	0.000010	0.00029	0.004	< 0.00001	CA11358-APR11	1.22	1.09	-0.14	-5.9%
26-Apr-11	65	0.0011	0.028	0.149	0.00018	0.18	< 0.00001	0.08	0.0121	11.0	< 0.0002	0.00003	< 0.0001	< 0.000001	0.00021	< 0.001	< 0.00001	CA14943-APR11	1.01	0.96	-0.05	-2.6%
03-May-11	66	0.0004	0.034	0.154	0.00079	0.22	< 0.00001	0.07	0.0126	11.7	< 0.0002	0.00001	0.0002	< 0.000001	0.00020	0.002	< 0.00001	CA14148-MAY11	1.07	0.99	-0.08	-4.1%
10-May-11	67	0.0010	< 0.009	0.140	< 0.00004	0.18	< 0.00001	0.06	0.0111	10.2	< 0.0002	0.00011	0.0005	0.000001	0.00016	0.004	< 0.00001	CA14441-MAY11	1.14	0.89	-0.25	-12.6%
17-May-11	68	< 0.0001	0.031	0.141	0.00018	0.18	0.00002	0.08	0.0113	10.9	< 0.0002	0.00003	< 0.0001	0.000002	0.00018	0.001	< 0.00001	CA14703-MAY11	1.07	0.93	-0.14	-7.1%
24-May-11	69	< 0.0001	0.024	0.149	0.00021	0.60	< 0.00001	0.07	0.0123	11.7	< 0.0002	0.00015	< 0.0001	0.000005	0.00022	0.002	< 0.00001	CA13762-MAY11	0.96	0.97	0.01	0.6%
31-May-11	70	< 0.0001	0.013	0.136	0.00077	0.21	< 0.00001	0.07	0.0119	10.8	< 0.0002	0.00016	< 0.0001	< 0.000001	0.00016	0.002	< 0.00001	CA10185-JUN11	0.99	0.94	-0.06	-2.9%
07-Jun-11	71	0.0006	< 0.009	0.131	0.00016	0.24	< 0.00001	0.16	0.0113	11.5	< 0.00002	0.00014	0.0004	< 0.000001	0.00017	0.004	0.00002	CA14355-JUN11	0.87	0.95	0.08	4.3%
14-Jun-11	72	0.0008	< 0.009	0.121	< 0.00004	0.24	< 0.00001	0.16	0.0111	11.0	< 0.00002	0.00031	< 0.0001	0.000002	0.00019	0.004	0.00001	CA10349-JUN11	0.99	0.93	-0.06	-2.9%
21-Jun-11	73	< 0.0001	0.013	0.129	0.00019	0.21	< 0.00001	0.08	0.0125	12.0	< 0.00002	0.00008	< 0.0001	< 0.000001	0.00017	0.008	< 0.00001	CA14777-JUN11	1.24	1.05	-0.19	-8.4%
28-Jun-11	74	0.0004	< 0.009	0.147	0.00015	0.20	< 0.00001	0.07	0.0122	11.8	< 0.00002	0.00005	< 0.0001	0.000007	0.00020	0.001	< 0.00001	CA15123-JUN11	1.22	1.04	-0.18	-8.0%
05-Jul-11	75	0.0007	0.012	0.165	0.00006	0.33	< 0.00001	0.12	0.0175	17.1	< 0.00002	0.00013	0.0003	< 0.000001	0.00021	0.002	< 0.00001	CA15472-JUL11	1.55	1.38	-0.17	-5.7%
12-Jul-11	76	0.0004	< 0.009	0.164	< 0.00004	0.25	< 0.00001	0.07	0.0150	14.6	< 0.00002	0.00017	< 0.0001	0.000009	0.00020	0.002	< 0.00001	CA15694-JUL11	1.26	1.27	0.01	0.4%
19-Jul-11	77	0.0008	< 0.009	0.146	0.00042	0.26	< 0.00001	0.10	0.0126	12.3	< 0.00002	0.00016	< 0.0001	0.000001	0.00022	0.001	< 0.00001	CA16180-JUL11	1.17	1.07	-0.10	-4.3%
26-Jul-11	78	0.0010	< 0.009	0.132	0.00012	0.18	< 0.00001	0.04	0.0136	10.5	< 0.00002	< 0.00001	0.0009	< 0.000001	0.00016	0.004	< 0.00001	CA11330-JUL11	1.17	0.98	-0.19	-9.0%

HC 6
Sample = Alt 09 01

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
02-Aug-11	79	< 0.0001	< 0.009	0.156	< 0.00004	0.24	< 0.00001	0.06	0.0130	12.9	< 0.00002	0.00005	< 0.0001	0.000002	0.00025	0.002	< 0.00001	CA14200-AUG11	1.22	1.13	-0.09	-3.7%
09-Aug-11	80	< 0.0001	< 0.009	0.134	< 0.00004	0.22	< 0.00001	0.06	0.0124	12.5	< 0.00002	< 0.00001	< 0.0001	0.000010	0.00022	0.002	< 0.00001	CA14411-AUG11	1.22	1.05	-0.17	-7.5%
16-Aug-11	81	0.0001	< 0.009	0.140	0.00019	0.23	< 0.00001	0.07	0.0125	12.7	< 0.00002	0.00012	< 0.0001	0.000002	0.00019	0.002	< 0.00001	CA14675-AUG11	1.28	1.06	-0.23	-9.7%
23-Aug-11	82	< 0.0001	< 0.009	0.127	< 0.00004	0.21	< 0.00001	0.05	0.0120	11.2	< 0.00002	0.00007	< 0.0001	0.000003	0.00021	0.001	< 0.00001	CA10450-AUG11	1.09	0.98	-0.11	-5.1%
30-Aug-11	83	0.0007	0.018	0.146	0.00016	0.25	< 0.00001	0.08	0.0138	15.1	< 0.00002	0.00009	< 0.0001	0.000003	0.00020	0.005	< 0.00001	CA14264-SEP11	1.30	1.13	-0.17	-7.1%
06-Sep-11	84	< 0.0001	< 0.009	0.108	0.00015	0.15	< 0.00001	0.05	0.0108	11.4	< 0.00002	< 0.00001	< 0.0001	0.000008	0.00022	0.007	0.00006	CA14213-SEP11	1.18	0.93	-0.25	-11.8%
13-Sep-11	85	< 0.0001	< 0.009	0.123	0.00005	0.20	< 0.00001	0.06	0.0121	12.7	< 0.00002	0.00011	< 0.0001	0.000001	0.00013	0.002	< 0.00001	CA17321-SEP11	1.30	1.02	-0.28	-11.9%
20-Sep-11	86	< 0.0001	< 0.009	0.124	0.00022	0.19	< 0.00001	0.06	0.0106	12.4	< 0.00002	0.00037	< 0.0001	0.000002	0.00017	0.004	< 0.00001	CA14825-SEP11	1.17	0.96	-0.21	-9.8%
27-Sep-11	87	0.0001	< 0.009	0.127	0.00015	0.14	< 0.00001	0.06	0.0106	11.6	< 0.00002	0.00011	< 0.0001	0.000011	0.00017	0.004	< 0.00001	CA18921-SEP11	1.08	0.93	-0.15	-7.7%
04-Oct-11	88	< 0.0001	< 0.009	0.123	0.00008	0.24	< 0.00001	0.07	0.0127	13.6	< 0.00002	0.00009	< 0.0001	0.000009	0.00017	0.003	< 0.00001	CA14153-OCT11	1.40	1.08	-0.32	-12.9%
11-Oct-11	89	0.0005	< 0.009	0.104	< 0.00004	0.20	< 0.00001	0.05	0.0107	11.6	< 0.00002	0.00003	< 0.0001	< 0.000001	0.00014	0.001	0.00002	CA14391-OCT11	1.22	0.96	-0.26	-12.0%
18-Oct-11	90	0.0003	< 0.009	0.105	< 0.00004	0.16	< 0.00001	0.05	0.0120	12.9	< 0.00002	0.00006	< 0.0001	< 0.000001	0.00015	0.004	< 0.00001	CA14788-OCT11	1.16	1.02	-0.14	-6.3%
25-Oct-11	91	< 0.0001	< 0.009	0.106	< 0.00004	0.22	< 0.00001	0.06	0.0110	11.4	< 0.00002	0.00008	< 0.0001	0.000001	0.00015	0.003	< 0.00001	CA14955-OCT11	1.08	0.97	-0.11	-5.1%
01-Nov-11	92	0.0005	< 0.009	0.112	0.00035	0.19	< 0.00001	0.06	0.0118	12.8	< 0.00002	0.00006	< 0.0001	0.000001	0.00012	0.001	< 0.00001	CA18036-NOV11	1.28	1.06	-0.22	-9.4%
08-Nov-11	93	0.0002	< 0.009	0.112	0.00009	0.19	< 0.00001	0.06	0.0138	15.9	< 0.00002	0.00007	< 0.0001	0.000001	0.00022	0.002	< 0.00001	CA18264-NOV11	1.25	1.23	-0.02	-0.6%
15-Nov-11	94	0.0016	< 0.009	0.101	0.00018	0.10	< 0.00001	0.06	0.0119	12.9	< 0.00002	0.00004	0.0001	0.000004	0.00027	0.002	< 0.00001	CA18499-NOV11	1.21	1.05	-0.16	-7.1%
22-Nov-11	95	0.0006	< 0.009	0.062	0.00019	0.19	< 0.00001	< 0.01	0.0123	11.9	< 0.00002	0.00001	0.0001	0.000002	0.00033	0.001	< 0.00001	CA18773-NOV11	1.15	1.05	-0.10	-4.4%
29-Nov-11	96	0.0009	0.014	0.087	< 0.00004	0.23	< 0.00001	0.04	0.0109	10.4	< 0.00002	0.00006	0.0002	0.000003	0.00043	0.002	< 0.00001	CA12006-NOV11	1.09	0.96	-0.13	-6.3%
06-Dec-11	97	< 0.0001	< 0.009	0.107	0.00024	0.23	0.00002	< 0.01	0.0115	12.4	< 0.00002	< 0.00001	< 0.0001	0.000002	0.00019	0.002	< 0.00001	CA14293-DEC11	1.01	1.08	0.07	3.4%
13-Dec-11	98	0.0006	0.021	0.097	0.00029	0.17	< 0.00001	0.08	0.0108	10.2	< 0.00002	0.00006	< 0.0001	0.000007	0.00014	0.002	< 0.00001	CA14475-DEC11	1.03	0.98	-0.04	-2.2%
20-Dec-11	99	0.0007	< 0.009	0.095	0.00046	0.18	< 0.00001	0.06	0.0096	10.5	< 0.00002	0.00003	< 0.0001	0.000001	0.00026	0.004	< 0.00001	CA10397-DEC11	1.00	0.91	-0.09	-4.8%
27-Dec-11	100	0.0007	0.012	0.093	0.00020	0.16	< 0.00001	0.05	0.0096	10.2	< 0.00002	< 0.00001	0.0003	0.000004	0.00036	0.001	< 0.00001	CA10466-DEC11	1.02	0.89	-0.13	-6.8%
03-Jan-12	101	0.0009	< 0.009	0.100	< 0.00004	0.15	< 0.00001	0.05	0.0100	10.2	< 0.00002	0.00002	0.0002	0.000003	0.00053	0.003	< 0.00001	CA14133-JAN12	1.12	0.90	-0.21	-10.5%
10-Jan-12	102	0.0003	< 0.009	0.084	0.00014	0.15	< 0.00001	0.07	0.0091	8.84	< 0.00002	0.00004	0.0002	0.000003	0.00057	0.002	< 0.00001	CA14430-JAN12	0.92	0.83	-0.09	-5.3%
17-Jan-12	103	0.0004	< 0.009	0.091	0.00017	0.14	< 0.00001	0.04	0.0095	9.51	< 0.00002	0.00003	0.0001	0.000003	0.00033	0.003	< 0.00001	CA11226-JAN12	1.02	0.91	-0.11	-5.7%
24-Jan-12	104	0.0004	< 0.009	0.088	0.00023	0.15	< 0.00001	0.05	0.0093	9.20	< 0.00002	0.00002	< 0.0001	< 0.000001	0.00034	0.002	< 0.00001	CA10502-JAN12	1.06	0.86	-0.19	-10.1%
31-Jan-12	105	< 0.0001	< 0.009	0.080	0.00009	0.15	< 0.00001	0.10	0.0102	10.6	< 0.00002	< 0.00001	0.0002	0.000070	0.00046	0.002	< 0.00001	CA10999-FEB12	1.10	0.95	-0.15	-7.2%
07-Feb-12	106	0.0010	< 0.009	0.103	0.00025	0.21	< 0.00001	0.08	0.0149	15.1	< 0.00002	< 0.00001	0.0002	0.000006	0.00036	0.002	< 0.00001	CA14207-FEB12	1.55	1.26	-0.29	-10.3%
14-Feb-12	107	0.0005	< 0.009	0.078	0.00022	0.14	< 0.00001	0.07	0.0110	11.1	< 0.00002	< 0.00001	< 0.0001	0.000012	0.00014	0.001	< 0.00001	CA14420-FEB12	1.26	0.98	-0.28	-12.5%
21-Feb-12	108	0.0005	< 0.009	0.112	< 0.00004	0.16	< 0.00001	0.07	0.0132	15.5	< 0.00002	< 0.00001	< 0.0001	0.000001	0.00019	0.002	< 0.00001	CA14754-FEB12	1.29	1.19	-0.09	-3.8%
28-Feb-12	109	0.0001	< 0.009	0.085	0.00013	0.16	< 0.00001	0.07	0.0143	13.1	< 0.00002	0.00004	0.0001	0.000001	0.00029	0.002	< 0.00001	CA14931-FEB12	1.16	1.13	-0.03	-1.4%
06-Mar-12	110	0.0004	< 0.009	0.084	0.00022	0.15	< 0.00001	0.07	0.0104	11.3	< 0.00002	0.00014	0.0001	0.000008	0.00030	0.003	< 0.00001	CA14216-MAR12	1.16	0.93	-0.23	-11.0%
13-Mar-12	111	0.0003	#N/A	#N/A	0.00015	0.15	0.00078	#N/A	0.0102	9.82	0.00024	0.00005	< 0.0001	0.000014	0.00010	0.004	< 0.00001	CA14408-MAR12	0.89	#N/A	#N/A	#N/A
20-Mar-12	112	< 0.0001	0.031	0.266	0.00017	0.15	0.00054	0.07	0.0101	9.85	< 0.00002	< 0.00001	< 0.0001	0.000002	0.00018	0.003	< 0.00001	CA14687-MAR12	0.99	0.91	-0.09	-4.5%
27-Mar-12	113	0.0004	< 0.009	0.069	0.00005	0.15	< 0.00001	0.07	0.0101	11.9	< 0.00002	0.00003	0.0007	0.000004	0.00053	0.002	< 0.00001	CA14874-MAR12	1.06	0.97	-0.09	-4.3%
03-Apr-12	114	0.0004	< 0.009	0.078	0.00017	0.14	< 0.00001	0.08	0.0099	10.9	< 0.00002	< 0.00001	0.0008	< 0.000001	0.00038	0.002	< 0.00001	CA14169-APR12	1.03	0.91	-0.12	-6.4%
10-Apr-12	115	0.0002	< 0.009	0.086	0.00008	0.14	< 0.00001	0.07	0.0099	10.5	< 0.00002	0.00004	< 0.0001	0.000003	0.00029	0.002	< 0.00001	CA11095-APR12	1.06	0.88	-0.17	-9.0%
17-Apr-12	116	0.0003	< 0.009	0.066	0.00013	0.15	< 0.00001	0.03	0.0099	10.7	< 0.00002	0.00002	0.0001	0.000001	0.00033	0.001	< 0.00001	CA14686-APR12	1.07	0.90	-0.16	-8.1%
24-Apr-12	117	0.0004	< 0.009	0.083	0.00019	0.14	< 0.00001	0.06	0.0102	11.1	< 0.00002	< 0.00001	< 0.0001	0.000003	0.00025	0.002	< 0.00001	CA14876-APR12	1.02	0.92	-0.10	-5.3%
01-May-12	118	0.0004	0.009	0.073	0.00014	0.13	< 0.00001	0.05	0.0102	11.2	< 0.00002	0.00001	0.0002	0.000008	0.00036	0.001	< 0.00001	CA14088-MAY12	1.05	0.94	-0.11	-5.5%
08-May-12	119	0.0002	< 0.009	0.081	0.00016	0.14	< 0.00001	0.05	0.0102	11.0	< 0.00002	0.00033	< 0.0001	0.000019	0.00022	0.002	< 0.00001	CA14348-MAY12	0.95	0.92	-0.03	-1.6%
15-May-12	120	0.0002	< 0.009	0.079	0.00007	0.15	< 0.00001	0.06	0.0112	12.6	< 0.00002	< 0.00001	0.0002	0.000002	0.00053	0.004	< 0.00001	CA14621-MAY12	0.97	1.01	0.04	1.9%
22-May-12	121	0.0003	< 0.009	0.080	0.00008	0.14	< 0.00001	0.06	0.0118	14.1	< 0.00002	0.00001	< 0.0001	0.000003	0.00033	0.002	< 0.00001	CA10508-MAY12	1.18	1.06	-0.12	-5.4%
29-May-12	122	0.0001	< 0.009	0.071	0.00012	0.18	< 0.00001	0.03	0.0124	14.1	< 0.00002	0.00019	< 0.0001	0.000002	0.00025	0.002	< 0.00001	CA15134-MAY12	0.98	1.10	0.12	5.7%
05-Jun-12	123	< 0.0001	< 0.009	0.076	0.00010	0.15	< 0.00001	0.07	0.0114	13.3	< 0.00002	< 0.00001	< 0.0001	0.000001	0.00031	0.002	< 0.00001	CA15137-JUN12	0.96	1.00	0.05	2.3%
12-Jun-12	124	0.0002	< 0.009	0.082	0.00013	0.15	< 0.00001	0.04	0.0112	11.9	< 0.00002	0.00009	0.0001	0.000001	0.00030	0.002	< 0.00001	CA15174-JUN12	0.98	0.98	0.00	0.2%
19-Jun-12	125	< 0.0001	< 0.009	0.078	0.00022	0.15	< 0.00001	0.04	0.0128	14.3	< 0.00002	0.00013	< 0.0001	0.000002	0.00034	0.002	< 0.00001	CA15309-JUN12	1.07	1.13	0.06	2.9%
26-Jun-12	126	0.0005	< 0.009	0.100	0.00015	0.29	< 0.00001	0.17	0.0126	13.4	< 0.00002	0.00046	0.0001	0.000003	0.00041	0.005	< 0.00001	CA15357-JUN12	1.09	1.09	-0.01	-0.3%
03-Jul-12	127	< 0.0001	< 0.009	0.081	0.00008	0.16	< 0.00001	0.05	0.0120	13.8	< 0.00002	0.00018	0.0002	0.000003	0.00030	0.003	< 0.00001	CA15021-JUL12	1.13	1.07	-0.07	-3.1%
10-Jul-12	128	0.0003	< 0.009	0.092	0.00019	0.18	< 0.00001	0.06	0.0123	13.2	< 0.00002	0.00014	< 0.0001	< 0.000001	0.00032	0.002	< 0.00001	CA15118-JUL12	1.12	1.08	-0.04	-1.7%
17-Jul-12	129	0.0002	< 0.009	0.085	0.00022	0.15	0.00003	0.04	0.0107	12.0	< 0.00002	< 0.00001	0.0002	< 0.000001	0.00032	0.001	< 0.00001	CA15186-JUL12	0.95	0.95	0.00	-0.2%
24-Jul-12	130	< 0.0001	< 0.009	0.093	0.00037	0.18	< 0.00001	0.09	0.0112	13.0	< 0.00002	0.00003	< 0.0001	< 0.000001	0.00029	0.006	< 0.00001	CA15302-JUL12	1.01	1.01	0.00	0.1%
31-Jul-12	131	< 0.0001	< 0.009	0.072	0.00013	0.15	< 0.00001	0.04	0.0101	11.1	< 0.00002	0.00005	< 0.0001	0.000007	0.00038	0.002	< 0.00001	CA15010-AUG12	0.87	0.92	0.05	2.7%
07-Aug-12	132	< 0.0001	< 0.009	0.077	0.00006	0.16	0.00001	0.06	0.0109	12.5	< 0.00002	0.00021	0.0001	0.000003	0.00042	0.002	< 0.00001	CA15071-AUG12	0.97	0.96	0.00	-0.2%
14-Aug-12	133	0.0002	< 0.009	0.072	0.00029	0.12	< 0.00001	0.06	0.0101	11.8	< 0.00002	0.00004	0.0001	0.000002	0.00034	0.003	< 0.00001	CA15151-AUG12	0.92	0.90	-0.02	-1.1%
21-Aug-12	134	0.0003	< 0.009	0.067	0.00013	0.22	< 0.00001	0.05	0.0096	11.6	< 0.00002	0.00023	0.0001	0.000002	0.00030	0.004	< 0.00001	CA15239-AUG12	0.83	0.89	0.06	3.4%
28-Aug-12	135	0.0003	< 0.009	0.059	0.00014	0.12	< 0.00001	0.05	0.0089	10.1	< 0.00002	0.00037	0.0002	0.000002	0.00041	0.002	< 0.00001	CA15348-AUG12	0.84	0.81	-0.04	-2.3%
04-Sep-12	136	0.0002	< 0.009	0.075	0.00018	0.14	< 0.00001	0.05	0.0104	11.7	< 0.00002	0.00009	< 0.0001	0.000021	0.00037	0.002	0.00002	CA15317-SEP12	0.84	0.94	0.10	5.8%
11-Sep-12	137	< 0.0001	< 0.009	0.065	0.00009	0.13	< 0.00001	0.06	0.0089	10.2	< 0.00002	0.00013	< 0.0001	< 0.000001	0.00021	0.002	0.00002	CA15405-SEP12	0.79	0.78	-0.01	-0.6%
18-Sep-12	138	< 0.0001	< 0.009	0.068	0.00013	0.15	< 0.00001	0.04	0.0101	11.2	< 0.00002	0.00015	< 0.0001	0.000003	0.00031	0.002	< 0.00001	CA15559-SEP12	0.96	0.89	-0.08	-4.2%
25-Sep-12	139	0.0003	< 0.009	0.068	0.00016	0.12	0.00003	0.04	0.0091	10.1	< 0.00002	0.00019	< 0.0001	0.000004	0.00020	0.002	< 0.00001	CA15670-SEP12	0.89	0.81	-0.08	-4.7%
02-Oct-12	140	0.0001	< 0.009	0.069	0.00007	0.18	< 0.00001	0.05	0.0100	12.1	< 0.00002	0.00010	< 0.0001	0.000001	0.00018	0.001	< 0.00001	CA15354-OCT12	0.93	0.90	-0.03	-1.6%
09-Oct-12	141	0.0005	0.010	0.061	0.00015	0.13	< 0.00001	0.05	0.0095	10.6	< 0.00002	0.00011	< 0.0001	0.000003	0.00022	0.002	< 0.00001	CA15450-OCT12	1.01	0.83	-0.18	-9.9%
16-Oct-12	142	0.0003	< 0.009	0.067	0.00010	0.15	< 0.00001	0.05	0.0103	12.7	< 0.00002	0.00009	< 0.0001	0.000001	0.00019	0.003	< 0.00001	CA15570-OCT12	1.08	0.94	-0.14	-6.9%
23-Oct-12	143	0.0009	< 0.009	0.062	0.00009	0.13	< 0.00001	0.04	0.0096	11.0	< 0.00002	0.00019	0.0002	0.000018	0.00030	0.002	< 0.00001	CA15652-OCT12	1.03	0.87	-0.16	-8.6%
30-Oct-12	144	0.0003	< 0.009	0.062	0.00010	0.15	< 0.00001	0.05	0.0111	12.9	< 0.00002	0.00010	< 0.0001	0.000012	0.00028	0.003	< 0.00001	CA15744-OCT12	1.09	0.98	-0.11	-5.5%
06-Nov-12	145	0.0002	< 0.009	0.067	0.00008	0.13	< 0.00001	0.05	0.0116	12.4	< 0.00002	0.00009	< 0.0001	0.000003	0.00016	0.001	< 0.00001	CA11210-NOV12	0.97	1.03	0.06	3.1%
13-Nov-12	146	0.0001	< 0.009	0.067	0.00008	0.15	< 0.00001	0.04	0.0121	14.4	< 0.00002	0.00003	< 0.0001	0.000002	0.00020	0.002	< 0.00001	CA15251-NOV12	1.03	1.10	0.08	3.6%
20-Nov-12	147	0.0005	< 0.009	0.063	0.00014	0.18	< 0.00001	0.05	0.0116	11.4	< 0.00002	0.00007	< 0.0001	0.000001	0.00016	0.003	< 0.00001	CA15347-NOV12	0.98	0.95	-0.02	-1.2%
27-Nov-12	148	0.0002	< 0.009	0.069	0.00017	0.23	< 0.00001	0.05	0.0138	14.9	< 0.00002	0.00008	< 0.0001	< 0.000001	< 0.00003	0.002	< 0.00001	CA15376-NOV12	1.16	1.19	0.03	1.2%
04-Dec-12	149	< 0.0001	< 0.009	0.070	< 0.00004	0.15	< 0.00001	0.03	0.0112	12.6	< 0.00002	0.00028	< 0.0001	0.000002	0.00018	0.002	< 0.00001	CA15038-DEC12	1.07	0.96	-0.11	-5.4%
11-Dec-12	150	< 0.0001	< 0.009	0.084	0.00015	0.16	< 0.00001	0.05	0.0122	13.2	< 0.00002	0.00012	< 0.0001	0.000004	0.00022	0.002	< 0.00001	CA15164-JAN13	1.22	1.11	-0.11	-4.6%
18-Dec-12	151	< 0.0001	< 0.009	0.078	< 0.00004	0.14	< 0.00001	0.04	0.0120	13.5	< 0.00002	0.00009	< 0.0001	0.000006	0.00020	0.001	< 0.00001	CA15269-DEC12	1.13	1.03	-0.10	-4.4%
25-Dec-12	152	0.0001	< 0.009	0.040	0.00013	0.09	< 0.00001	0.02	0.0096	9.56	< 0.00002	0.00019	< 0.0001	< 0.000001	0.00012	0.001	< 0.00001	CA15361-DEC12	0.77	0.77	0.01	0.4%
01-Jan-13	153	0.0002	0.011	0.055	0.00021	0.13	< 0.00001	0.06	0.0088	9.59	< 0.00002	0.00010	< 0.0001	0.000001	0.00020	0.001	< 0.00001	CA15056-JAN13	0.93	0.78	-0.14	-8.4%
08-Jan-13	154	< 0.0001	0.010	0.067	0.00012	0.14	< 0.00001	0.04	0.0089	9.09	< 0.00002	0.00033	< 0.0001	0.000004	0.00027	0.002	< 0.00001	CA15153-JAN13	0.82	0.83	0.00	0.1%
15-Jan-13	155																					
22-Jan-13	156																					
29-Jan-13	157																					
05-Feb-13	158																					
12-Feb-13	159																					

HC 7 *CONFIDENTIAL* *DRAFT*

Sample = Alt 09 08

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
02-Feb-10	1	500	410	7.78	336	138	#N/A	1.7	29.3	51	-	-	41.3	0.168	0.0031	0.0033	0.00429	< 0.00002	< 0.00001	0.009	< 0.000003	12.3	< 0.0005	0.000057	0.0020	< 0.01	< 0.00002	0.010	2.60	0.019	< 0.01	0.00037
09-Feb-10	2	500	450	7.69	279	180	#N/A	1.8	25.8	54	-	-	55.6	0.191	0.0041	0.0026	0.00414	< 0.00002	< 0.00001	0.014	< 0.000003	14.0	< 0.0005	0.000027	0.0005	< 0.01	< 0.00002	0.010	5.03	0.038	< 0.01	0.00058
16-Feb-10	3	500	420	7.66	280	203	#N/A	2.1	27.0	71	-	-	69.7	0.202	0.0041	0.0025	0.00507	< 0.00002	< 0.00001	0.015	< 0.000003	15.6	< 0.0005	0.000009	0.0005	< 0.01	< 0.00002	0.013	7.45	0.035	< 0.01	0.00076
23-Feb-10	4	500	440	7.74	337	126	#N/A	1.8	24.4	46	-	-	54.8	0.192	0.0021	0.0014	0.00282	< 0.00002	< 0.00001	0.010	< 0.000003	14.6	< 0.0005	0.000024	< 0.0005	< 0.01	< 0.00002	0.009	4.46	0.037	< 0.01	0.00027
02-Mar-10	5	500	425	7.69	335	128	#N/A	1.3	20.8	39	-	-	47.1	0.159	0.0015	0.0010	0.00245	< 0.00002	< 0.00001	0.007	0.000007	12.7	< 0.0005	0.000018	0.0006	< 0.01	0.00007	0.006	3.75	0.031	< 0.01	0.00021
09-Mar-10	6	500	440	7.62	345	117	#N/A	1.7	21.4	32	-	-	47.5	0.151	0.0014	0.0010	0.00242	< 0.00002	< 0.00001	0.006	< 0.000003	13.1	< 0.0005	0.000012	0.0006	< 0.01	0.00007	0.006	3.63	0.043	< 0.01	0.00020
16-Mar-10	7	500	445	7.56	346	87	#N/A	1.9	21.6	26	< 0.2	< 0.06	43.3	0.1900	0.0011	0.0009	0.00192	< 0.00002	< 0.00001	0.007	< 0.000003	12.10	< 0.0005	0.000010	< 0.0005	< 0.01	< 0.00002	0.005	3.180	0.038	< 0.01	0.00017
23-Mar-10	8	500	450	7.57	352	93	#N/A	2.5	21.2	30	< 0.2	< 0.06	39.5	0.1550	0.0010	0.0008	0.00171	< 0.00002	< 0.00001	0.0051	< 0.000003	11.1	0.0006	0.000009	< 0.0005	< 0.01	0.00035	0.005	2.85	0.040	< 0.01	0.00017
30-Mar-10	9	500	445	7.67	366	93	#N/A	1.6	20.3	26	< 0.2	0.08	40.6	0.1430	0.0011	0.0006	0.00168	< 0.00002	< 0.00001	0.005	< 0.000003	11.30	< 0.0005	0.000009	< 0.0005	< 0.01	0.00002	0.004	2.990	0.044	< 0.01	0.00018
06-Apr-10	10	500	450	7.60	354	97	#N/A	1.8	20.8	25	< 0.2	< 0.06	39.6	0.163	0.0009	0.0009	0.00170	< 0.00002	< 0.00001	< 0.002	0.000004	11.5	< 0.0005	0.000025	0.0022	< 0.01	< 0.00002	0.004	2.64	0.050	0.01	0.00020
13-Apr-10	11	500	445	7.46	347	89	#N/A	2.6	20.8	23	< 0.2	< 0.06	35.7	0.1640	0.0010	0.0006	0.00148	< 0.00002	< 0.00001	0.004	< 0.000003	10.40	0.0006	0.000006	< 0.0005	< 0.01	0.00056	0.004	2.34	0.049	0.01	0.00017
20-Apr-10	12	500	455	7.62	333	94	#N/A	2.5	20.7	28	< 0.2	< 0.06	36.6	0.149	0.0009	0.0008	0.00168	< 0.00002	< 0.00001	0.004	< 0.000003	10.6	0.0007	0.000007	< 0.0005	< 0.01	0.00003	0.003	2.48	0.049	< 0.01	0.00017
27-Apr-10	13	500	445	7.63	330	78	#N/A	2.8	17.8	20	< 0.2	< 0.06	31.1	0.1250	0.0006	0.0006	0.0014	< 0.00002	< 0.00001	0.003	< 0.000003	8.92	0.0008	0.000022	0.0009	< 0.01	0.00103	0.003	2.14	0.042	< 0.01	0.00017
04-May-10	14	500	450	7.53	353	78	#N/A	2.0	18.2	22	< 0.2	< 0.06	33.7	0.1350	0.0007	0.0006	0.0015	< 0.00002	< 0.00001	0.003	< 0.000003	9.76	< 0.0005	0.00000	< 0.0005	< 0.01	0.00002	0.002	2.28	0.051	< 0.01	0.00024
11-May-10	15	500	455	7.42	351	79	#N/A	2.0	16.6	15	< 0.2	< 0.06	32.5	0.1320	0.0007	0.0012	0.0014	< 0.00002	< 0.00001	0.003	0.000006	9.46	0.0005	0.00002	< 0.0005	< 0.01	0.00004	0.002	2.15	0.049	0.01	0.00026
18-May-10	16	500	435	7.47	348	83	#N/A	2.4	17.7	19	< 0.2	< 0.06	35.5	0.140	0.0006	0.0013	0.00155	< 0.00002	< 0.00001	0.0033	< 0.000003	10.4	< 0.0005	0.000058	0.0008	< 0.002	0.00015	0.002	2.29	0.042	< 0.01	0.00059
25-May-10	17	500	405	7.42	371	78	#N/A	3.4	20.5	16	< 0.2	< 0.06	32.2	0.168	0.0006	0.0006	0.0019	< 0.00002	< 0.00001	0.0029	< 0.000003	9.67	< 0.0005	0.00002	0.0010	< 0.002	0.00089	0.003	1.97	0.039	< 0.01	0.00025
01-Jun-10	18	500	430	7.51	353	73	#N/A	2.0	16.7	16	< 0.2	< 0.06	31.4	0.164	0.0005	0.0006	0.0013	< 0.00002	< 0.00001	0.0028	< 0.000003	9.45	0.0006	0.00002	0.0010	< 0.002	0.00144	0.002	1.90	0.040	0.02	0.00020
08-Jun-10	19	500	480	7.45	355	82	#N/A	2.6	20.4	14	< 0.2	< 0.06	37.9	0.104	0.0007	0.0005	0.0016	< 0.00002	< 0.00001	0.0043	< 0.000003	11.60	< 0.0005	0.00000	< 0.0005	< 0.002	< 0.00002	0.002	2.14	0.052	< 0.01	0.00024
15-Jun-10	20	500	440	7.54	349	79	#N/A	2.1	16.8	13	< 0.2	< 0.06	33.8	0.140	0.0006	0.0005	0.0016	< 0.00002	< 0.00001	0.0031	< 0.000003	10.40	< 0.0005	0.000014	< 0.0005	< 0.002	0.00004	0.002	1.87	0.041	< 0.01	0.00033
22-Jun-10	21	500	430	7.69	424	78	#N/A	1.8	17.2																							
29-Jun-10	22	500	440	7.43	339	70	#N/A	1.9	15.4	10	< 0.2	< 0.06	28.2	0.127	0.0003	0.0007	0.0014	< 0.00002	< 0.00001	0.0029	< 0.000003	8.45	0.0011	0.0000	0.0005	0.004	0.00003	0.001	1.710	0.042	< 0.01	0.00036
06-Jul-10	23	500	460	7.46	358	72	#N/A	2.0	18.0																							
13-Jul-10	24	500	450	7.31	354	67	#N/A	2.7	14.1	7	< 0.2	< 0.06	24.8	0.102	0.0005	0.0005	0.00140	< 0.00002	< 0.00001	0.0033	< 0.000003	7.28	0.0007	0.000019	0.0009	0.006	0.00011	0.001	1.610	0.0434	< 0.01	0.00041
20-Jul-10	25	500	450	7.48	346	62	#N/A	3.5	17.4																							
27-Jul-10	26	500	445	7.29	354	64	#N/A	3.0	16.0	14	< 0.2	< 0.06	29.5	0.092	0.0002	0.0004	0.00129	< 0.00002	< 0.00001	0.0026	< 0.000003	9.15	0.0005	0.000007	0.0007	0.003	0.00004	0.001	1.610	0.0475	< 0.01	0.00024
03-Aug-10	27	500	445	7.51	402	61	#N/A	2.8	15.0	13	< 0.2	< 0.06	26.0	0.105	0.0003	0.0003	0.00108	< 0.00002	< 0.00001	0.0026	< 0.000003	7.88	< 0.0005	0.000014	0.0007	0.003	0.00004	0.001	1.530	0.0402	< 0.01	0.00034
10-Aug-10	28	500	445	7.67	373	61	#N/A	3.5	15.6	12	< 0.2	< 0.06	28.1	0.100	< 0.0002	0.0004	0.00131	< 0.00002	< 0.00001	0.0049	< 0.000003	8.59	0.0008	0.000007	< 0.0005	< 0.002	< 0.00002	0.001	1.620	0.0418	< 0.01	0.00030
17-Aug-10	29	500	440	7.64	390	61	#N/A	2.6	16.2	9	< 0.2	< 0.06	27.3	0.124	0.0004	0.0004	0.00109	< 0.00002	< 0.00001	0.0033	< 0.000003	8.51	< 0.0005	< 0.000002	< 0.0005	< 0.002	0.00002	0.001	1.460	0.0367	< 0.01	0.00031
24-Aug-10	30	500	425	7.45	354	62	#N/A	2.9	16.1	12	< 0.2	< 0.06	28.1	0.099	0.0004	0.0006	0.00122	< 0.00002	< 0.00001	0.0030	< 0.000003	8.74	< 0.0005	0.000006	0.0008	0.002	0.00003	0.001	1.530	0.0466	< 0.01	0.00024
31-Aug-10	31	500	415	7.85	398	54	#N/A	4.0	17.9	16	< 0.2	< 0.06	25.6	0.113	0.0006	0.0016	0.00152	< 0.00002	< 0.00001	0.0025	< 0.000003	7.71	0.0006	0.000061	0.0005	0.011	0.00004	0.001	1.540	0.0163	< 0.01	0.00026
07-Sep-10	32	500	435	7.20	375	59	#N/A	3.1	15.0	14	< 0.2	< 0.06	24.0	0.097	0.0002	0.0004	0.00104	< 0.00002	< 0.00001	0.0045	< 0.000003	7.40	0.0008	0.000010	0.0008	0.006	0.00005	0.001	1.360	0.0132	< 0.01	0.00024
14-Sep-10	33	500	435	7.19	370	53	#N/A	2.6	14.5	13	< 0.2	< 0.06	24.7	0.085	0.0007	0.0003	0.00096	< 0.00002	< 0.00001	0.0025	< 0.000003	7.42	< 0.0005	0.000010	0.0011	0.004	< 0.00002	< 0.001	1.500	0.0421	< 0.01	0.00060
21-Sep-10	34	500	435	7.37	341	51	#N/A	2.3	15.9	13	< 0.2	< 0.06	26.0	0.107	0.0003	0.0007	0.00108	< 0.00002	0.00004	0.0030	< 0.000003	7.89	< 0.0005	< 0.000002	< 0.0005	< 0.002	< 0.00002	< 0.001	1.520	0.0379	< 0.01	0.00023
28-Sep-10	35	500	415	7.39	321	61	#N/A	2.1	16.6	21	< 0.2	< 0.06	25.6	0.124	0.0004	0.0005	0.00118	< 0.00002	< 0.00001	0.0028	< 0.000003	7.79	0.0005	0.000017	0.0008	< 0.002	0.00008	0.002	1.480	0.0301	< 0.01	0.00039
05-Oct-10	36	500	420	7.38	317	63	#N/A	2.4	16.3	14	< 0.2	< 0.06	25.7	0.112	0.0005	0.0006	0.00154	< 0.00002	< 0.00001	0.0032	< 0.000003	7.94	< 0.0005	0.000042	0.0009	< 0.002	0.00005	< 0.001	1.41	0.0368	0.01	0.00047
12-Oct-10	37	500	430	7.30	329	59	#N/A	2.5	14.9	14	< 0.2	< 0.06	26.9	0.101	0.0011	0.0005	0.00119	< 0.00002	< 0.00001	0.0029	< 0.000003	8.26	< 0.0005	0.000028	0.0018	< 0.002	< 0.00002	0.001	1.54	0.0380	< 0.01	0.00028
19-Oct-10	38	500	425	7.29	326	63	#N/A	2.4	15.4	16	< 0.2	< 0.06	26.0	0.0894	0.0003	< 0.0002	0.00106	< 0.00002	< 0.00001	0.0026	< 0.000003	8.0	< 0.0005	0.000009	< 0.0005	< 0.002	0.00012	0.001	1.500	0.0374	< 0.01	0.00010
26-Oct-10	39	500	440	7.26	367	59	#N/A	2.5	14.0	13	< 0.2	< 0.06	23.4	0.0842	0.0015	0.0003	0.00096	< 0.00002	< 0.00001	0.0028	< 0.000003	7.13	0.0007	0.000010	0.0010	0.002	0.00018	< 0.001	1.35	0.0341	< 0.01	0.00013
02-Nov-10	40	500	435	7.44	375	15	#N/A	1.9	15.0	13	< 0.2	< 0.06	25.7	0.0998	< 0.0002	0.0003	0.00122	< 0.00002	< 0.00001	0.0044	< 0.000003	8.08	< 0.0005	0.000020	0.0007	0.003	0.00052	0.002	1.33	0.0334	< 0.01	0.00011
09-Nov-10	41	500	430	7.51	376	63	#N/A	2.4	15.7	16	< 0.2	< 0.06	28.2	0.0923	0.0006	0.0006	0.00111	< 0.00002	< 0.00001	0.0018	< 0.000003	8.67	0.0005	0.000024	0.0005	< 0.002	0.00042	< 0.001	1.58	0.0382	0.01	0.00020
16-Nov-10	42	500	420	7.67	347	68	#N/A	2.7	15.6	12	< 0.2	< 0.06	25.0	0.0878	0.0002	< 0.0002	0.00112	< 0.00002	< 0.00001	0.0047	< 0.000003	7.62	0.0006	0.000015	< 0.0005	< 0.002	0.00050	0.001	1.45	0.0372	< 0.01	0.00017
23-Nov-10	43	500	500	7.24	313	66	#N/A	2.5	20.6	12	< 0.2	< 0.06	27.8	0.0825	0.0004	0.0005	0.00138	< 0.00002	< 0.00001	0.0049	< 0.000003	9.26	< 0.0005	0.000037	0.0006	< 0.002	< 0.00002	0.001	1.13	0.0471	< 0.01	0.00021
30-Nov-10	44	500	455	7.32	342	67	#N/A	2.9	16.9	9	< 0.2	0.34	27.7	0.0941	0.0003	< 0.0002	0.00165	< 0.00002	< 0.00001	0.0029	< 0.000003	8.77	< 0.0005	0.000018	< 0.0005	< 0.002	0.00002	0.001	1.41	0.0430	< 0.01	0.00031
07-Dec-10	45	500	420	7.36	347	71	#N/A	2.8	21.6	9	< 0.2	< 0.06	36.8	0.143	0.0003	0.0003	0.00137	< 0.00002	< 0.00001	0.0031	< 0.000003	12.2	0.0007	0.000016	0.0010	0.004	0.00152	0.001	1.55	0.0522	< 0.01	0.00027
14-Dec-10	46	500	435	7.39	352	57	#N/A	3.3	16.5	11	< 0.2	< 0.06	24.2	0.122	0.0003	0.0003	0.00107	< 0.00002	< 0.00001	0.0036	< 0.000003	7.52	0.0005	0.000014	0.0008	< 0.002	0.00008	< 0.001	1.32	0.0326	< 0.01	0.00026
21-Dec-10	47	500	435	7.45	370	55	#N/A	4.6	17.3	10	< 0.2	< 0.06	25.1	0.111	0.0003	0.0004	0.00113	< 0.00002	< 0.00001	0.0022	< 0.000003	8.01	< 0.0005	0.000019	0.0008	< 0.002	0.00003	< 0.001	1.24	0.0264	< 0.01	< 0.00001
28-Dec-10	48	500	440	7.56	343	47	#N/A	5.1	16.8	12	< 0.2	< 0.06	24.3	0.101	0.0004	0.0003	0.00109	< 0.00002	< 0.00001	0.0043	< 0.000003	7.44	0.0006	0.000007	0.0006	0.003	0.00082	< 0.001	1.39	0.0338	< 0.01	0.00012
04-Jan-11	49	500	430	7.42	368	47	#N/A	4.3	16.7	10	< 0.2	< 0.06	22.3	0.0920	0.0003	0.0003	0.00098	< 0.00002	< 0.00001	0.0017	0.000008	6.79	0.0006	0.000008	0.0008	< 0.002	0.00059	< 0.001	1.30	0.0318	< 0.01	0.00006
11-Jan-11	50	500	430	7.28	370	49	#N/A	2.8	14.0	11	< 0.2	< 0.06	22.9	0.0796	0.0003	< 0.0002	0.00094	< 0.00002	< 0.00001	0.0039	< 0.000003	6.98	< 0.0005	0.000010	< 0.0005	0.003	< 0.00002	< 0.001	1.32	0.0402	< 0.01	0.00009
18-Jan-11	51	500	430	7.24	346	52	#N/A	2.7	14.5	11	< 0.2	< 0.06	24.0	0.0853	0.0003	0.0002	0.00118	< 0.00002	< 0.00001	0.0020	< 0.000003	7.46	< 0.0005	0.000049	< 0.0005	0.005	0.00002	< 0.001	1.31	0.0361	< 0.01	0.00005
25-Jan-11	52	500	435	7.31	335	51	#N/A	3.1	14.3	12	< 0.2	< 0.06	20.8	0.0857	0.0002	0.0003	0.00106	< 0.00002	< 0.00001	0.0023	< 0.000003	6.43	< 0.0005	0.000014	< 0.0005	< 0.002	0.00003	< 0.001	1.15	0.0312	< 0.01	0.00006
01-Feb-11	53	500	440	7.25	349	46	#N/A	2.7	14.5	8	< 0.2	< 0.06	21.1	0.0701	0.0002	0.0003	0.00126	< 0.00002	< 0.00001	0.0021	0.000032	6.56	< 0.0005	0.000016	< 0.0005	< 0.002	0.00076	< 0.001	1.14	0.0372	< 0.01	0.00005
08-Feb-11	54	500	425	7.35	357	45	#N/A	2.3	13.9	11	< 0.2	< 0.06	23.9	0.0901	0.0004	0.0003	0.00140	< 0.00002	< 0.00001	0.0021	0.000021	7.52	< 0.0005	0.000024	< 0.0005	< 0.002	0.00002	< 0.001	1.24	0.0374	< 0.01	0.00011
15-Feb-11	55	500	445	7.33	350	47	#N/A	2.6	13.5	5	< 0.2	< 0.06	21.2	0.0834	< 0.0002	< 0.0002	0.00090	< 0.00002	< 0.00001	0.0035	< 0.000003	6.62	0.0006	0.000021	0.0005	0.002	0.00092	< 0.001	1.14	0.0336	< 0.01	0.00018
22-Feb-11	56	500	440	7.35	332	50	#N/A	2.8	14.5	14	< 0.2	< 0.06	22.1	0.0751	0.0003	0.0003	0.00083	< 0.00002	< 0.00001	0.0029	0.000006	6.91	< 0.0005	0.000013	< 0.0005	< 0.002	0.00003	< 0.001	1.18	0.0302	< 0.01	0.00006
01-Mar-11	57	500	430	7.24	344	48	#N/A	2.7	14.5	14	< 0.2	< 0.06	21.7	0.0783	< 0.0002	0.0003	0.00083	< 0.00002	< 0.00001	0.0018	< 0.000003	6.93	< 0.0005	0.000011	0.0009	< 0.002	0.00161	< 0.001	1.05	0.0317	0.01	0.00004
08-Mar-11	58	500	435	7.25	323	51	#N/A	2.9	14.5	12	< 0.2	< 0.06	22.2	0.0750	0.0003	0.0003	0.00097	< 0.00002	< 0.00001	0.0022	0.000013	7.04	< 0.0005	0.000029	0.0007	< 0.002	0.00091	< 0.001	1.11	0.0383	< 0.01	0.00011
15-Mar-11	59	500	455	7.30	300	51	#N/A	2.8	14.8	11	< 0.2	< 0.06	22.0	0.0698	< 0.0002	< 0.0002	0.00108	< 0.00002	< 0.00001	0.0023	< 0.000003	7.15	< 0.0005	0.000036	0.0009	0.002	0.00096	< 0.001	1.01	0.0387	< 0.01	0.00006
22-Mar-11	60	500	415	7.39	309	55	#N/A	2.9	15.2	11	< 0.2	< 0.06	22.1	0.0742	0.0002	< 0.0002	0.00106	< 0.00002	< 0.00001	0.0016	0.000003	6.89	0.0006	0.000016	0.0008	0.004	0.00004	< 0.001	1.20	0.0394	0.01	0.00003
29-Mar-11	61	500	505	7.77	287	60	#N/A	3.1	22.0	11	< 0.2	< 0.06	29.6	0.0546	0.0002	< 0.0002	0.00117	< 0.00002	< 0.00001	0.0031	< 0.000003	9.73	< 0.0005	0.000018	< 0.0005	< 0.002	< 0.00002	< 0.001	1.29	0.0541	0.01	0.00002
05-Apr-11	62	500	435	7.41	249	56	#N/A	3.3	16.1	12	< 0.2	< 0.06	24.2	0.0699	< 0.0002	< 0.0002	0.00099	< 0.00002	< 0.00001	0.0020	< 0.000003	7.76	< 0.0005	0.000018	< 0.0005	0.004	0.00008	< 0.001	1.18	0.0391	< 0.01	0.00009
12-Apr-11	63	500	450	7.44	283	50	#N/A	2.4	16.6	10	< 0.2	< 0.06	22.8	0.0764	< 0.0002	< 0.0002	0.00093	< 0.00002	< 0.00001	0.0020	< 0.000003	7.46	< 0.0005	0.000010	< 0.0005	0.007	< 0.00002	< 0.001	1.02	0.0499	< 0.01	0.00013
19-Apr-11	64	500	440	7.81	242	67	#N/A	4.7	26.5	13	< 0.2	< 0.06	29.1	0.154	< 0.0002	< 0.0002	0.00114	< 0.00002	< 0.00001	0.0019	< 0.000003	9.45	< 0.0005	0.000037	< 0.0005	< 0.002	0.00060	< 0.001	1.33	0.0433	0.01	0.00030
26-Apr-11	65	500	430	7.58	270	57	#N/A	2.3	21.8	10	< 0.2	< 0.06	25.3	0.122	0.0002	0.0002	0.00104	< 0.00002	< 0.00001	0.0015	< 0.000003	8.12	< 0.0005	0.000007	< 0.0005	< 0.002	< 0.00002	< 0.001	1.22	0.0391	0.01	0.00005
03-May-11	66	500	425	7.60	347	53	#N/A	3.0	17.7	10	< 0.2	< 0.06	23.7	0.112	< 0.0002	< 0.0002	0.00104	< 0.00002	< 0.00001	0.0029	< 0.000003	7.73	< 0.0005	0.000017	0.0005	0.003	0.00003	< 0.001	1.07	0.0387	0.01	0.00006
10-May-11	67	500	430	7.57	368	53	#N/A	2.7	16.4	10	< 0.2	< 0.06	22.2	0.101	< 0.0002	0.0002	0.00094	< 0.00002	< 0.00001	0.0032	0.000004	7.19	< 0.0005	0.000030	0.0006	< 0.002	0.00002	< 0.001	1.03	0.0349	< 0.01	0.00004
17-May-11	68	500	440	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	10	< 0.2	< 0.06	20.8	0.110	< 0.0002	0.0003	0.00092	< 0.00002	< 0.00001	0.0017	< 0.000003	6.84	< 0.0005	0.000018	< 0.0005	< 0.002	< 0.00002	< 0.001	0.907	0.0298	< 0.01	0.00003
24-May-11	69	500	500	7.62	264	48	#N/A	3.1	14.9	9	< 0.2	< 0.06	21.6	0.0900	< 0.0002	< 0.0002	0.00088	< 0.00002	< 0.00001	0.0049	< 0.000003	7.20	< 0.0005	0.000022	< 0.0005	< 0.002	0.00003	< 0.001	0.873	0.0337	< 0.01	< 0.00001
31-May-11	70	500	465	7.60	260	54	#N/A	3.7	15.9	9	< 0.2	< 0.06	21.5	0.0593	0.0003	0.0002	0.00093	< 0.00002	< 0.00001	0.0028	< 0.000003	7.14	< 0.0005	0.000041	< 0.0005	< 0.002	< 0.00002	< 0.001	0.885	0.0362	< 0.01	0.00003
07-Jun-11	71	500	445	7.76	348	53	#N/A	3.1	15.8	9	< 0.2	< 0.06	23.9	0.0922	0.0002	0.0003	0.00102	< 0.00002	< 0.00001	0.0022	< 0.000003	7.75	< 0.0005	0.000023	< 0.0005	0.002	0.00003	< 0.001	1.09	0.0336	0.01	0.00001
14-Jun-11	72	500	455	7.70	289	50	#N/A	2.3	15.8	7	< 0.2	< 0.06	21.3	0.0815	0.0003	0.0003	0.00100	< 0.00002	< 0.00001	0.0033	0.000003	7.13	< 0.0005	0.000016	< 0.0005	0.003	0.00003	< 0.001	0.838	0.0343	< 0.01	0.00005
21-Jun-11	73	500	435	7.57	292	58	#N/A	2.1	14.7	15	< 0.2	< 0.06	24.1	0.0734	< 0.0002	0.0002	0.00110	< 0.00002	< 0.00001	0.0012	< 0.000003	7.89	< 0.0005	0.000022	< 0.0005	< 0.002	0.00003	< 0.001	1.07	0.0383	0.01	< 0.00001
28-Jun-11	74	500	445	7.61	268	54	#N/A	2.4	15.8	11	< 0.2	< 0.06	23.4	0.0846	< 0.0002	< 0.0002	0.00104	< 0.00002	< 0.00001	0.0024	< 0.000003	7.61	< 0.0005	0.000018	< 0.0005	< 0.002	< 0.00002	< 0.001	1.06	0.0360	< 0.01	0.00025
05-Jul-11	75	500	505	7.49	303	71	#N/A	3.5	21.4	15	< 0.2	< 0.06	31.6	0.0832	0.0002	0.0004	0.00139	< 0.00002	< 0.00001	0.0052	0.000047	10.3	< 0.0005	0.000044	< 0.0005	< 0.002	< 0.00002	< 0.001	1.43	0.0508	0.01	0.00008
12-Jul-11	76	500	460	7.32	305	54	#N/A	3.5	15.3	9	< 0.2	< 0.06	28.0	0.0841	0.0002

HC 7 *CONFIDENTIAL* *DRAFT*

Sample = Alt 09 08

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output																												
					mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
02-Aug-11	79	500	465	7.72	271	59	#N/A	4.2	15.1	12	< 0.2	< 0.06	26.8	0.0612	0.0002	0.0003	0.00108	< 0.00002	< 0.00001	0.0025	< 0.000003	8.79	0.0006	0.000012	< 0.0005	0.004	< 0.00002	< 0.001	1.18	0.0411	0.01	0.00005
09-Aug-11	80	500	455	7.57	233	51	#N/A	3.1	15.1	10	< 0.2	< 0.06	21.8	0.0711	< 0.0002	0.0002	0.00106	< 0.00002	< 0.00001	0.0017	< 0.000003	7.21	0.0008	0.000025	< 0.0005	0.004	0.00002	< 0.001	0.924	0.0354	< 0.01	0.00042
16-Aug-11	81	500	450	7.68	261	56	#N/A	4.8	16.6	13	< 0.2	< 0.06	21.6	0.0757	< 0.0002	0.0002	0.00100	< 0.00002	< 0.00001	0.0020	< 0.000003	7.20	0.0006	0.000015	< 0.0005	< 0.002	0.00004	< 0.001	0.891	0.0299	< 0.01	0.00008
23-Aug-11	82	500	450	7.54	226	53	#N/A	4.3	14.9	11	< 0.2	< 0.06	24.9	0.0816	0.0002	0.0003	0.00107	< 0.00002	< 0.00001	0.0023	< 0.000003	8.15	0.0007	0.000014	< 0.0005	0.005	0.00012	< 0.001	1.10	0.0368	0.01	0.00006
30-Aug-11	83	500	440	7.67	289	52	#N/A	3.8	15.2	14	< 0.2	< 0.06	24.7	0.0791	< 0.0002	0.0003	0.00095	< 0.00002	< 0.00001	0.0022	0.000006	8.13	0.0006	0.000017	0.0005	0.009	0.00003	< 0.001	1.06	0.0288	0.02	0.00005
06-Sep-11	84	500	450	7.72	313	51	#N/A	3.9	14.5	11	< 0.2	< 0.06	23.0	0.0640	< 0.0002	0.0002	0.00106	< 0.00002	< 0.00001	0.0024	0.000045	7.6	< 0.0005	0.000017	< 0.0005	< 0.002	0.00005	< 0.001	1.000	0.0315	< 0.01	0.00024
13-Sep-11	85	500	460	7.66	324	55	#N/A	3.4	13.6	15	< 0.2	< 0.06	24.8	0.0681	0.0002	< 0.0002	0.00122	< 0.00002	< 0.00001	0.0030	0.000004	8.09	0.0010	0.000019	< 0.0005	< 0.002	0.00026	< 0.001	1.12	0.0369	< 0.01	0.00012
20-Sep-11	86	500	475	7.48	325	57	#N/A	3.9	14.0	13	< 0.2	< 0.06	25.4	0.0637	0.0002	0.0004	0.00127	< 0.00002	< 0.00001	0.0026	< 0.000003	8.28	0.0013	0.000018	0.0015	0.008	0.00004	< 0.001	1.15	0.0447	< 0.01	0.00011
27-Sep-11	87	500	470	7.52	313	53	#N/A	5.1	15.2	12	< 0.2	< 0.06	22.4	0.0694	< 0.0002	< 0.0002	0.00102	< 0.00002	< 0.00001	0.0002	0.000013	7.37	0.0007	0.000012	< 0.0005	0.008	0.00003	< 0.001	0.968	0.0325	< 0.01	0.00008
04-Oct-11	88	500	510	7.49	305	72	#N/A	4.2	14.5	19	< 0.2	< 0.06	28.7	0.0466	0.0018	0.0010	0.00143	< 0.00002	< 0.00001	0.0036	< 0.000003	9.30	< 0.0005	0.000019	< 0.0005	< 0.002	0.00010	< 0.001	1.32	0.0468	0.01	0.00012
11-Oct-11	89	500	485	7.66	264	63	#N/A	5.5	15.9	18	< 0.2	< 0.06	27.8	0.0608	0.0011	0.0003	0.00135	< 0.00002	< 0.00001	0.0033	< 0.000003	9.34	0.0007	0.000015	< 0.0005	0.002	0.00006	< 0.001	1.09	0.0389	< 0.01	0.00005
18-Oct-11	90	500	465	7.53	293	56	#N/A	3.5	15.7	12	< 0.2	< 0.06	24.1	0.0710	0.0005	0.0002	0.00106	< 0.00002	< 0.00001	0.0026	< 0.000003	8.06	0.0006	0.000010	0.0005	< 0.002	0.00007	< 0.001	0.963	0.0354	< 0.01	0.00012
25-Oct-11	91	500	460	7.36	308	54	#N/A	3.2	13.1	12	< 0.2	< 0.06	24.4	0.0596	< 0.0002	0.0003	0.00105	< 0.00002	< 0.00001	0.0023	0.000004	8.10	0.0006	0.000023	< 0.0005	< 0.003	0.00003	< 0.001	1.01	0.0402	0.01	0.00004
01-Nov-11	92	500	475	7.45	284	70	#N/A	4.0	15.0	19	< 0.2	< 0.06	30.9	0.0620	< 0.0002	0.0004	0.00133	< 0.00002	< 0.00001	0.0019	< 0.000003	10.7	< 0.0005	0.000016	< 0.0005	0.003	< 0.00002	< 0.001	1.01	0.0408	< 0.01	0.00005
08-Nov-11	93	500	485	7.51	305	63	#N/A	4.3	15.5	14	< 0.2	< 0.06	29.2	0.0675	< 0.0002	0.0004	0.00182	< 0.00002	< 0.00001	0.0017	0.000010	9.87	< 0.0005	0.000020	< 0.0005	< 0.003	< 0.00002	< 0.001	1.11	0.0437	< 0.01	0.00002
15-Nov-11	94	500	465	7.40	275	60	#N/A	4.3	14.2	16	< 0.2	< 0.06	25.8	0.0662	< 0.0002	< 0.0002	0.00106	< 0.00002	< 0.00001	0.0020	< 0.000003	8.61	< 0.0005	0.000021	< 0.0005	< 0.003	< 0.00002	< 0.001	1.06	0.0372	0.01	0.00002
22-Nov-11	95	500	470	7.54	296	56	#N/A	4.5	16.7	10	< 0.2	< 0.06	25.3	0.0808	< 0.0002	0.0005	0.00110	< 0.00002	< 0.00001	0.0017	0.000003	8.45	< 0.0005	0.000013	0.0006	< 0.003	0.00003	< 0.001	1.02	0.0465	< 0.01	< 0.00001
29-Nov-11	96	500	470	7.61	334	63	#N/A	5.0	16.9	15	< 0.2	< 0.06	28.6	0.0778	< 0.0002	0.0005	0.00129	< 0.00002	< 0.00001	0.0023	< 0.000003	9.49	< 0.0005	0.000021	< 0.0005	< 0.003	< 0.00002	< 0.001	1.19	0.0524	< 0.01	0.00018
06-Dec-11	97	500	465	7.46	328	64	#N/A	4.9	15.3	13	< 0.2	< 0.06	30.4	0.0564	< 0.0002	< 0.0002	0.00149	< 0.00002	< 0.00001	0.0016	0.000006	10.1	< 0.0005	0.000014	< 0.0005	< 0.003	< 0.00002	< 0.001	1.27	0.0609	< 0.01	0.00003
13-Dec-11	98	500	490	7.34	292	72	#N/A	4.1	15.8	16	< 0.2	< 0.06	34.2	0.0455	< 0.0002	0.0002	0.00162	< 0.00002	< 0.00001	0.0017	< 0.000003	11.4	0.0008	0.000020	0.0005	< 0.003	0.00010	< 0.001	1.38	0.0599	0.01	0.00007
20-Dec-11	99	500	475	7.60	295	63	#N/A	4.4	16.5	14	< 0.2	< 0.06	28.6	0.0671	0.0002	0.0003	0.00130	< 0.00002	< 0.00001	0.0016	0.000032	9.64	< 0.0005	0.000020	< 0.0005	< 0.003	0.00008	< 0.001	1.10	0.0463	< 0.01	0.00003
27-Dec-11	100	500	480	7.75	322	61	#N/A	4.7	18.0	14	< 0.2	< 0.06	27.7	0.0825	0.0002	0.0004	0.00116	< 0.00002	< 0.00001	0.0018	< 0.000003	9.28	< 0.0005	0.000014	< 0.0005	< 0.003	< 0.00002	< 0.001	1.10	0.0416	< 0.01	0.00009
03-Jan-12	101	500	490	7.45	317	60	#N/A	4.2	17.0	16	< 0.2	< 0.06	27.0	0.0904	< 0.0002	< 0.0002	0.00121	< 0.00002	< 0.00001	0.0021	< 0.000003	9.05	< 0.0005	0.000023	0.0007	< 0.003	< 0.00002	< 0.001	1.08	0.0384	0.01	0.00006
10-Jan-12	102	500	470	7.51	322	58	#N/A	3.5	17.3	11	< 0.2	< 0.06	25.6	0.0876	0.0002	< 0.0002	0.00122	< 0.00002	< 0.00001	0.0017	0.000005	8.58	< 0.0005	0.000013	0.0005	< 0.003	0.00002	< 0.001	1.01	0.0405	< 0.01	0.00005
17-Jan-12	103	500	480	7.21	298	61	#N/A	4.2	17.1	15	< 0.2	< 0.06	29.8	0.0612	0.0003	0.0006	0.00187	< 0.00002	< 0.00001	0.0027	< 0.000003	10.0	< 0.0005	0.000018	< 0.0005	< 0.003	< 0.00002	< 0.001	1.16	0.0549	< 0.01	0.00008
24-Jan-12	104	500	510	7.52	365	65	#N/A	4.9	20.7	18	< 0.2	< 0.06	27.8	0.0638	< 0.0002	0.0002	0.00118	< 0.00002	< 0.00001	0.0016	< 0.000003	9.35	< 0.0005	0.000018	0.0006	< 0.003	< 0.00002	< 0.001	1.09	0.0467	< 0.01	0.00006
31-Jan-12	105	500	460	7.26	321	62	#N/A	3.5	16.3	14	< 0.2	< 0.06	26.2	0.0665	< 0.0002	0.0003	0.00136	< 0.00002	< 0.00001	0.0021	0.000056	8.84	< 0.0005	0.000019	0.0006	< 0.003	0.00005	< 0.001	1.00	0.0418	< 0.01	0.00011
07-Feb-12	106	500	505	7.49	355	70	#N/A	4.0	17.5	20	< 0.2	< 0.06	30.4	0.0502	< 0.0002	< 0.0002	0.00155	< 0.00002	< 0.00001	0.0015	0.000004	10.1	< 0.0005	0.000021	0.0009	< 0.003	0.00002	< 0.001	1.25	0.0581	< 0.01	0.00008
14-Feb-12	107	500	470	7.53	389	54	#N/A	4.6	15.6	16	< 0.2	< 0.06	25.1	0.0509	< 0.0002	0.0002	0.00110	< 0.00002	< 0.00001	0.0013	0.000027	8.41	< 0.0005	0.000012	< 0.0005	< 0.003	< 0.00002	< 0.001	0.989	0.0358	< 0.01	0.00007
21-Feb-12	108	500	480	7.32	361	55	#N/A	2.6	13.4	12	< 0.2	< 0.06	24.8	0.0494	< 0.0002	0.0002	0.00120	< 0.00002	< 0.00001	0.0043	0.000021	8.32	< 0.0005	0.000009	0.0007	< 0.003	< 0.00002	< 0.001	0.975	0.0457	< 0.01	0.00005
28-Feb-12	109	500	470	7.38	393	58	#N/A	5.0	14.7	13	< 0.2	< 0.06	26.0	0.0589	0.0002	< 0.0002	0.00124	< 0.00002	< 0.00001	0.0015	< 0.000003	8.72	< 0.0005	0.000008	< 0.0005	< 0.003	< 0.00002	< 0.001	1.03	0.0471	< 0.01	0.00006
06-Mar-12	110	500	465	7.21	391	59	#N/A	3.4	14.3	16	< 0.2	< 0.06	25.0	0.0780	< 0.0002	< 0.0002	0.00110	< 0.00002	< 0.00001	0.0018	0.000024	8.31	< 0.0005	0.000013	0.0008	< 0.003	0.00002	< 0.001	1.03	0.0391	< 0.01	0.00008
13-Mar-12	111	500	465	7.28	368	58	#N/A	4.5	13.7	14	< 0.2	< 0.06	26.4	0.0524	< 0.0002	0.0008	0.00139	< 0.00002	0.00001	0.0017	0.000023	8.80	< 0.0005	0.000006	0.0014	0.008	0.00033	< 0.001	1.08	0.0415	< 0.01	0.00013
20-Mar-12	112	500	490	7.31	350	62	#N/A	4.8	14.0	17	< 0.2	< 0.06	27.9	0.0356	< 0.0002	0.0002	0.00148	< 0.00002	< 0.00001	0.0018	0.000005	9.21	< 0.0005	0.000011	< 0.0005	< 0.003	< 0.00002	< 0.001	1.19	0.0533	< 0.01	0.00012
27-Mar-12	113	500	475	7.20	351	60	#N/A	4.0	13.5	15	< 0.2	< 0.06	27.4	0.0711	< 0.0002	0.0009	0.00129	< 0.00002	< 0.00001	0.0014	0.000007	9.16	0.0012	0.000004	0.0005	0.026	0.00003	< 0.001	1.11	0.0459	< 0.01	0.00016
03-Apr-12	114	500	455	7.09	382	52	#N/A	4.1	11.8	15	< 0.2	< 0.06	23.2	0.0742	< 0.0002	< 0.0002	0.00107	< 0.00002	< 0.00001	0.0013	< 0.000003	7.67	< 0.0005	0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	0.975	0.0310	< 0.01	0.00006
10-Apr-12	115	500	485	7.23	326	56	#N/A	3.0	12.0	15	< 0.2	< 0.06	24.1	0.0667	< 0.0002	< 0.0002	0.00119	< 0.00002	< 0.00001	0.0017	< 0.000003	7.98	< 0.0005	0.000014	< 0.0005	< 0.003	< 0.00002	< 0.001	1.02	0.0384	0.04	0.00010
17-Apr-12	116	500	465	7.25	361	57	#N/A	3.7	12.3	16	< 0.2	< 0.06	24.7	0.0617	< 0.0002	< 0.0002	0.00099	< 0.00002	< 0.00001	0.0017	< 0.000003	8.23	< 0.0005	0.000006	< 0.0005	< 0.003	< 0.00002	< 0.001	1.01	0.0387	0.04	0.00010
24-Apr-12	117	500	460	7.31	386	55	#N/A	3.1	12.8	15	< 0.2	< 0.06	23.9	0.0857	< 0.0002	0.0017	0.00167	< 0.00002	< 0.00001	0.0018	< 0.000003	8.01	< 0.0005	0.000013	0.0013	< 0.003	< 0.00002	< 0.001	0.944	0.0368	0.03	0.00054
01-May-12	118	500	470	7.48	341	60	#N/A	4.9	13.4	17	< 0.2	< 0.06	26.4	0.0700	< 0.0002	< 0.0002	0.00115	< 0.00002	< 0.00001	0.0031	< 0.000003	8.76	< 0.0005	0.000010	< 0.0005	< 0.003	0.00008	< 0.001	1.09	0.0443	0.03	0.00008
08-May-12	119	500	455	7.29	382	55	#N/A	3.4	13.5	10	< 0.2	< 0.06	24.2	0.0562	< 0.0002	< 0.0002	0.00117	< 0.00002	< 0.00001	0.0026	< 0.000003	8.09	< 0.0005	0.000009	0.0007	< 0.003	0.00004	< 0.001	0.967	0.0396	< 0.01	0.00006
15-May-12	120	500	440	7.40	312	54	#N/A	2.9	13.0	10	< 0.2	< 0.06	23.3	0.0700	< 0.0002	< 0.0002	0.00108	< 0.00002	< 0.00001	0.0019	< 0.000003	7.75	< 0.0005	0.000009	0.0005	< 0.003	0.00004	< 0.001	0.963	0.0318	0.01	0.00006
22-May-12	121	500	465	7.26	337	55	#N/A	3.4	12.4	11	< 0.2	< 0.06	23.7	0.0864	< 0.0002	< 0.0002	0.00107	< 0.00002	< 0.00001	0.0016	< 0.000003	7.82	< 0.0005	0.000006	0.0009	< 0.003	0.00004	< 0.001	1.01	0.0336	0.02	0.00008
29-May-12	122	500	455	7.22	339	51	#N/A	3.3	11.8	10	< 0.2	< 0.06	23.2	0.0713	< 0.0002	< 0.0002	0.00084	< 0.00002	< 0.00001	0.0021	< 0.000003	7.67	< 0.0005	0.000011	< 0.0005	< 0.003	< 0.00002	< 0.001	0.994	0.0344	< 0.01	0.00006
05-Jun-12	123	500	455	7.19	375	50	#N/A	4.0	12.6	8	< 0.2	< 0.06	23.2	0.0734	< 0.0002	< 0.0002	0.00112	< 0.00002	< 0.00001	0.0027	< 0.000003	7.65	< 0.0005	0.000020	0.0014	0.007	0.00004	< 0.001	0.990	0.0346	0.01	0.00013
12-Jun-12	124	500	450	7.35	354	54	#N/A	3.3	12.4	11	< 0.2	< 0.06	24.4	0.0838	< 0.0002	< 0.0002	0.00104	< 0.00002	< 0.00001	0.0029	< 0.000003	7.96	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	1.11	0.0320	0.01	0.00009
19-Jun-12	125	500	460	7.27	370	54	#N/A	2.6	12.0	9	< 0.2	< 0.06	23.2	0.0760	< 0.0002	< 0.0002	0.00103	< 0.00002	< 0.00001	0.0022	< 0.000003	7.62	< 0.0005	0.000011	< 0.0005	0.004	< 0.00002	< 0.001	1.01	0.0299	< 0.01	0.00012
26-Jun-12	126	500	460	7.34	340	55	#N/A	2.8	13.1	13	< 0.2	< 0.06	24.4	0.0881	< 0.0002	< 0.0002	0.00127	< 0.00002	< 0.00001	0.0034	< 0.000003	7.99	< 0.0005	< 0.000002	0.0129	< 0.003	0.00019	< 0.001	1.09	0.0326	0.01	0.00011
03-Jul-12	127	500	455	7.45	384	58	#N/A	6.2	15.3	12	< 0.2	< 0.06	24.7	0.0710	< 0.0002	< 0.0002	0.00102	< 0.00002	< 0.00001	0.0017	0.000003	8.04	< 0.0005	0.000006	< 0.0005	< 0.003	< 0.00002	< 0.001	1.13	0.0345	0.01	0.00040
10-Jul-12	128	500	440	7.22	323	55	#N/A	3.2	12.1	13	< 0.2	< 0.06	23.7	0.0721	< 0.0002	< 0.0002	0.00101	< 0.00002	< 0.00001	0.0018	< 0.000003	7.66	< 0.0005	< 0.000002	0.0006	< 0.003	< 0.00002	< 0.001	1.11	0.0309	0.02	0.00009
17-Jul-12	129	500	455	7.27	355	53	#N/A	2.2	11.8	12	< 0.2	< 0.06	23.2	0.0727	< 0.0002	< 0.0002	0.00097	< 0.00002	< 0.00001	0.0019	< 0.000003	7.47	< 0.0005	0.000037	< 0.0005	< 0.003	< 0.00002	< 0.001	1.11	0.0264	< 0.01	0.00005
24-Jul-12	130	500	455	7.14	330	55	#N/A	3.0	12.0	11	< 0.2	< 0.06	24.2	0.0732	< 0.0002	0.0005	0.00098	< 0.00002	< 0.00001	0.0014	< 0.000003	7.78	< 0.0005	0.000030	0.0018	< 0.003	< 0.00002	< 0.001	1.16	0.0307	0.02	0.00013
31-Jul-12	131	500	445	7.33	357	49	#N/A	2.0	11.3	11	< 0.2	< 0.06	22.6	0.0718	< 0.0002	0.0003	0.00089	< 0.00002	< 0.00001	0.0016	< 0.000003	7.28	< 0.0005	0.000004	< 0.0005	< 0.003	< 0.00002	< 0.001	1.09	0.0256	0.01	0.00007
07-Aug-12	132	500	445	7.45	333	51	#N/A	2.1	12.1	10	< 0.2	< 0.06	23.3	0.101	0.0003	0.0003	0.00103	< 0.00002	< 0.00001	0.0019	0.000004	7.38	< 0.0005	0.000007	< 0.0005	< 0.003	0.00004	< 0.001	1.18	0.0210	0.01	0.00010
14-Aug-12	133	500	435	7.20	289	50	#N/A	2.5	11.3	11	< 0.2	< 0.06	21.2	0.0714	< 0.0002	< 0.0002	0.00092	< 0.00002	< 0.00001	0.0017	< 0.000003	6.72	< 0.0005	< 0.000002	0.0042	< 0.003	0.00003	< 0.001	1.08	0.0213	< 0.01	0.00007
21-Aug-12	134	500	450	7.10	296	49	#N/A	2.8	11.3	10	< 0.2	< 0.06	21.4	0.0805	0.0004	< 0.0002	0.00084	< 0.00002	< 0.00001	0.0022	0.000003	6.80	< 0.0005	0.000010	< 0.0005	< 0.003	< 0.00002	< 0.001	1.09	0.0288	< 0.01	0.00011
28-Aug-12	135	500	465	7.28	397	51	#N/A	4.6	11.9	10	< 0.2	< 0.06	21.5	0.0698	< 0.0002	< 0.0002	0.00089	< 0.00002	< 0.00001	0.0019	< 0.000003	6.88	< 0.0005	0.000008	< 0.0005	< 0.003	< 0.00002	< 0.001	1.06	0.0351	0.03	0.00013
04-Sep-12	136	500	460	7.17	398	50	#N/A	4.4	12.4	10	< 0.2	< 0.06	23.3	0.0956	< 0.0002	< 0.0002	0.00091	< 0.00002	< 0.00001	0.0020	< 0.000003	7.25	< 0.0005	0.000004	< 0.0005	< 0.003	< 0.00002	< 0.001	1.27	0.0318	< 0.01	0.00008
11-Sep-12	137	500	455	7.22	375	45	#N/A	2.7	11.7	10	< 0.2	< 0.06	20.1	0.0529	< 0.0002	< 0.0002	0.00089	< 0.00002	< 0.00001	0.0017	0.000007	6.12	< 0.0005	0.000016	0.0006	< 0.003	0.00006	< 0.001	1.16	0.0263	0.02	0.00007
18-Sep-12	138	500	440	7.24	370	50	#N/A	2.4	12.0	12	< 0.2	< 0.06	21.8	0.0792	< 0.0002	< 0.0002	0.00087	< 0.00002	< 0.00001	0.0017	< 0.000003	6.95	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	1.07	0.0268	< 0.01	0.00005
25-Sep-12	139	500	445	7.18	368	48	#N/A	2.8	12.1	13	< 0.2	< 0.06	20.7	0.0561	< 0.0002	0.0002	0.00106	< 0.00002	< 0.00001	0.0018	0.000018	6.42	< 0.0005	0.000133	< 0.0005	< 0.003	0.00006	< 0.001	1.14	0.0273	< 0.01	0.00011
02-Oct-12	140	500	451	7.15	394	47	#N/A	3.3	11.9	9	< 0.2	< 0.06	21.1	0.0461	< 0.0002	< 0.0002	0.00085	< 0.00002	< 0.00001	0.0026	< 0.000003	6.46	< 0.0005	0.000046	0.0008	< 0.003	< 0.00002	< 0.001	1.21	0.0273	< 0.01	0.00009
09-Oct-12	141	500	455	7.12	356	50	#N/A	4.5	13.0	11	< 0.2	< 0.06	21.1	0.102	< 0.0002	< 0.0002	0.00101	< 0.00002	< 0.00001	0.0021	< 0.000003	6.69	< 0.0005	0.000004	0.0006	< 0.003	< 0.00002	< 0.001	1.07	0.0306	< 0.01	0.00007
16-Oct-12	142	500	440	7.33	400	48	#N/A	5.0	14.7	11	< 0.2	< 0.06	22.0	0.0632	< 0.0002	< 0.0002	0.00090	< 0.00002	< 0.00001	0.0022	< 0.000003	6.97	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	1.12	0.0299	< 0.01	0.00007
23-Oct-12	143	500	450	7.16	364	47	#N/A	3.7	12.8	11	< 0.2	< 0.06	19.9	0.0755	< 0.0002	< 0.0002	0.00080	< 0.00002	< 0.00001	0.0011	< 0.000003	6.34	< 0.0005	0.000067	0.0006	< 0.003	< 0.00002	< 0.001	0.992	0.0275	< 0.01	0.00016
30-Oct-12	144	500	450	7.15	372	49	#N/A	3.9	14.2	11	< 0.2	< 0.06	22.6	0.0784	< 0.0002	< 0.0002	0.00126	< 0.00002	< 0.00001	0.0026	0.00110	7.23	< 0.0005	< 0.000002	0.0009	< 0.003	< 0.00002	< 0.001	1.10	0.0348	< 0.01	0.00009
06-Nov-12	145	500	475	7.26	371	44	#N/A	3.5	12.3	6	< 0.2	< 0.06	21.7	0.0448	< 0.0002	0.0003	0.00097	< 0.00002	< 0.00001	0.0025	0.000018	6.82	< 0.0005	0.000073	0.0013	< 0.003	< 0.00002	< 0.001	1.13	0.0330	< 0.01	0.00015
13-Nov-12	146	500	440	7.46	376	45	#N/A	5.6	13.0	9	< 0.2	< 0.06	21.8	0.0450	< 0.0002	< 0.0002	0.00094	< 0.00002	< 0.00001	0.0019	0.000010	6.83	< 0.0005	0.000033	< 0.0005	< 0.003	< 0.00002	< 0.001	1.15	0.0322	0.01	0.00007
20-Nov-12	147	500	490	7.51	383	51	#N/A	6.0	16.9	9	< 0.2	< 0.06	22.8	0.0460	0.0002	< 0.0002	0.00122	< 0.00002	< 0.00001	0.0024	< 0.000003	7.31	< 0.0005	0.000038	< 0.0005	< 0.003	< 0.00002	< 0.001	1.11	0.0339	< 0.01	0.00006
27-Nov-12	148	500	500	7.39	363	57	#N/A	4.5	15.7	11	< 0.2	< 0.06	26.2	0.0350	< 0.0002	< 0.0002	0.00123	< 0.00002	< 0.00001	0.0023	0.000006	8.34	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	1.31	0.0506	< 0.01	0.00007
04-Dec-12	149	500	435	7.50	334	42	#N/A	1.9	11.0	10	< 0.2	< 0.06	19.3	0.0520	0.0002	< 0.0002	0.00078	< 0.00002	< 0.00001	0.0008	0.000005	5.74	< 0.0005	0.000017	< 0.0005	< 0.003	< 0.00002	< 0.001	1.20	0.0194	0.03	0.00009
11-Dec-12	150	500	470	7.47	345	42	#N/A	2.0	12.8	10	< 0.2	< 0.06	19.1	0.0461	< 0.0002	< 0.0002	0.00077	< 0.00002	< 0.00001	0.0020	< 0.000003	6.09	< 0.0005	0.000041	0.0009	< 0.003	0.00003	< 0.001	0.948	0.0218	< 0.01	0.00007
18-Dec-12	151	500	480

HC 7
Sample = Alt 09 08

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
02-Feb-10	1	0.0006	< 0.01	11.1	0.00006	1.01	< 0.00001	7.46	0.0762	19.1	< 0.0002	0.00021	0.0002	0.000018	0.00091	< 0.001	< 0.00001		1.65	1.44	-0.21	-6.9%
09-Feb-10	2	0.0002	< 0.01	11.2	0.00040	0.73	< 0.00001	7.31	0.0923	21.0	< 0.0002	< 0.00001	< 0.0001	0.000072	0.00091	< 0.001	< 0.00001		1.64	1.72	0.08	2.2%
16-Feb-10	3	0.0004	< 0.01	11.4	0.00007	0.85	< 0.00001	6.33	0.0956	25.6	< 0.0002	0.00003	< 0.0001	0.000156	0.00102	< 0.001	< 0.00001		2.02	1.96	-0.06	-1.5%
23-Feb-10	4	0.0001	< 0.01	6.09	< 0.00004	0.69	< 0.00001	2.23	0.0770	14.8	< 0.0002	0.00004	< 0.0001	0.000101	0.00082	< 0.001	< 0.00001		1.45	1.35	-0.10	-3.5%
02-Mar-10	5	0.0001	< 0.01	4.48	< 0.00004	0.56	< 0.00001	1.48	0.0629	14.3	< 0.0002	0.00015	< 0.0001	0.000094	0.00070	< 0.001	< 0.00001		1.23	1.12	-0.11	-4.6%
09-Mar-10	6	< 0.0001	< 0.01	4.02	< 0.00004	0.59	< 0.00001	1.04	0.0599	12.5	< 0.0002	0.00038	0.0002	0.000107	0.00069	< 0.001	0.00002		1.09	1.10	0.01	0.3%
16-Mar-10	7	0.0002	< 0.01	3.16	< 0.00004	0.63	< 0.00001	0.81	0.0483	10.20	< 0.0002	< 0.00001	< 0.0001	0.000082	0.00075	< 0.001	< 0.00001		0.97	0.98	0.01	0.4%
23-Mar-10	8	0.0002	< 0.01	2.57	< 0.00004	0.59	< 0.00001	0.66	0.0436	9.3	< 0.0002	0.00005	0.0001	0.000075	0.00067	< 0.001	< 0.00001		1.05	0.88	-0.17	-8.6%
30-Mar-10	9	0.0002	< 0.01	2.54	< 0.00004	0.56	< 0.00001	0.67	0.0424	8.99	< 0.0002	0.00006	0.0002	0.000069	0.00064	< 0.001	< 0.00001		0.95	0.90	-0.04	-2.3%
06-Apr-10	10	< 0.0001	< 0.01	2.21	< 0.00004	0.56	0.00002	0.63	0.0406	9.15	< 0.0002	0.00008	< 0.0001	0.000144	0.00064	< 0.001	0.00001		0.94	0.88	-0.06	-3.4%
13-Apr-10	11	< 0.0001	< 0.01	1.91	< 0.00004	0.55	< 0.00001	0.57	0.0361	7.39	< 0.0002	0.00017	0.0001	0.000088	0.00059	< 0.001	< 0.00001		0.89	0.79	-0.11	-6.5%
20-Apr-10	12	0.0001	< 0.01	2.05	< 0.00004	0.50	< 0.00001	0.48	0.0365	8.44	< 0.0002	0.00014	< 0.0001	0.000100	0.00069	< 0.001	< 0.00001		1.00	1.03	0.03	1.4%
27-Apr-10	13	0.0004	< 0.01	1.65	< 0.00004	0.45	< 0.00001	0.42	0.0290	6.48	< 0.0002	0.00020	< 0.0001	0.000097	0.00054	< 0.001	0.00001		0.77	0.68	-0.09	-6.2%
04-May-10	14	< 0.0001	< 0.01	1.60	< 0.00004	0.48	< 0.00001	0.42	0.0307	6.02	< 0.0002	0.00015	0.0001	0.000074	0.00059	< 0.001	< 0.00001		0.82	0.73	-0.09	-5.6%
11-May-10	15	< 0.0001	0.03	1.65	< 0.00004	0.55	0.00003	0.35	0.0292	6.62	< 0.0002	0.00023	< 0.0001	0.000077	0.00069	< 0.001	0.00001		0.64	0.71	0.06	4.6%
18-May-10	16	< 0.0001	< 0.009	1.67	< 0.00004	0.56	< 0.00001	0.39	0.0312	7.35	< 0.0002	0.00016	0.0001	0.000074	0.00068	< 0.001	< 0.00001		0.75	0.77	0.02	1.2%
25-May-10	17	< 0.0001	< 0.009	1.48	< 0.00004	0.50	< 0.00001	0.36	0.0284	7.24	< 0.0002	0.00054	< 0.0001	0.000062	0.00071	< 0.002	< 0.00001		0.74	0.70	-0.04	-3.1%
01-Jun-10	18	< 0.0001	< 0.009	1.34	< 0.00004	0.48	< 0.00001	0.31	0.0281	6.61	< 0.0002	0.00013	< 0.0001	0.000057	0.00066	< 0.001	< 0.00001		0.67	0.68	0.01	0.6%
08-Jun-10	19	0.0001	0.018	1.29	< 0.00004	0.56	< 0.00001	0.34	0.0363	8.09	< 0.0002	0.00014	< 0.0001	0.000156	0.00054	< 0.001	< 0.00001		0.70	0.80	0.10	6.9%
15-Jun-10	20	0.0001	0.01	1.16	< 0.00004	0.48	0.00006	0.30	0.0300	7.45	< 0.0002	0.00029	< 0.0001	0.000083	0.00065	< 0.001	< 0.00001		0.61	0.72	0.11	8.3%
22-Jun-10	21																					
29-Jun-10	22	< 0.0001	< 0.009	1.080	< 0.00004	0.42	< 0.00001	0.25	0.0236	5.63	< 0.0002	0.00033	< 0.0001	0.00007	0.00049	< 0.001	< 0.00001		0.52	0.60	0.08	7.5%
06-Jul-10	23																					
13-Jul-10	24	0.0002	0.013	0.95	< 0.00004	0.42	< 0.00001	0.26	0.0229	5.74	< 0.0002	0.00259	0.0002	0.000086	0.00052	0.001	0.00002		0.43	0.53	0.10	10.7%
20-Jul-10	25																					
27-Jul-10	26	0.0023	< 0.009	0.94	< 0.00004	0.41	< 0.00001	0.24	0.0243	5.57	< 0.0002	0.00032	< 0.0001	0.000060	0.00047	0.002	0.00001		0.61	0.63	0.02	1.8%
03-Aug-10	27	0.0002	< 0.009	0.84	< 0.00004	0.36	< 0.00001	0.21	0.0200	4.85	< 0.0002	0.00012	0.0001	0.000061	0.00043	< 0.001	< 0.00001		0.57	0.56	-0.01	-0.9%
10-Aug-10	28	0.0002	< 0.009	0.92	< 0.00004	0.42	< 0.00001	0.24	0.0215	5.22	< 0.0002	0.00004	< 0.0001	0.000055	0.00051	< 0.001	< 0.00001		0.56	0.61	0.05	3.9%
17-Aug-10	29	< 0.0001	< 0.009	0.90	< 0.00004	0.45	< 0.00001	0.19	0.0209	7.02	< 0.0002	0.00013	0.0001	0.000064	0.00057	< 0.001	< 0.00001		0.51	0.59	0.08	7.2%
24-Aug-10	30	0.0001	< 0.009	0.82	< 0.00004	0.42	< 0.00001	0.22	0.0207	5.50	< 0.0002	0.00021	0.0001	0.000056	0.00047	< 0.001	< 0.00001		0.57	0.60	0.03	2.6%
31-Aug-10	31	0.0008	< 0.009	0.81	< 0.00004	0.50	< 0.00001	0.26	0.0178	5.24	< 0.0002	0.00002	0.0003	0.000053	0.00055	< 0.001	0.00002		0.69	0.56	-0.14	-10.8%
07-Sep-10	32	0.0002	< 0.009	0.77	< 0.00004	0.41	< 0.00001	0.18	0.0142	4.70	< 0.0002	0.00004	0.0001	0.000051	0.00055	0.002	< 0.00001		0.59	0.52	-0.07	-6.5%
14-Sep-10	33	0.0001	< 0.009	0.78	< 0.00004	0.39	< 0.00001	0.22	0.0181	4.69	< 0.0002	0.00014	< 0.0001	0.000045	0.00038	< 0.001	< 0.00001		0.56	0.53	-0.03	-2.5%
21-Sep-10	34	0.0007	0.017	0.87	0.00029	0.43	< 0.00001	0.19	0.0191	5.13	< 0.0002	0.00009	< 0.0001	0.000043	0.00045	< 0.001	< 0.00001		0.59	0.56	-0.03	-2.3%
28-Sep-10	35	0.0001	< 0.009	1.00	< 0.00004	0.48	< 0.00001	0.23	0.0191	5.05	< 0.0002	0.00040	< 0.0001	0.000044	0.00051	0.001	< 0.00001		0.77	0.56	-0.21	-15.8%
05-Oct-10	36	< 0.0001	0.026	0.987	< 0.00004	0.46	< 0.00001	0.22	0.0191	5.05	< 0.0002	0.00071	< 0.0001	0.000053	0.00047	0.001	0.00001		0.62	0.56	-0.06	-4.9%
12-Oct-10	37	0.0003	< 0.009	0.895	< 0.00004	0.43	< 0.00001	0.22	0.0198	5.21	< 0.0002	0.00041	< 0.0001	0.000033	0.00047	< 0.001	< 0.00001		0.59	0.58	-0.01	-0.5%
19-Oct-10	38	< 0.0001	< 0.009	0.854	< 0.00004	0.38	< 0.00001	0.19	0.0187	5.1	< 0.0002	0.00004	< 0.0001	0.000053	0.00040	0.004	< 0.00001	CA14822-OCT10	0.64	0.56	-0.08	-6.7%
26-Oct-10	39	0.0004	< 0.009	0.721	0.00136	0.32	< 0.00001	0.18	0.0163	5.20	< 0.0002	0.00003	< 0.0001	0.000051	0.00040	0.002	< 0.00001	CA11459-OCT10	0.55	0.50	-0.05	-4.6%
02-Nov-10	40	0.0009	< 0.009	0.776	0.00005	0.39	< 0.00001	0.24	0.0187	5.18	< 0.0002	0.00008	< 0.0001	0.000047	0.00024	0.004	< 0.00001	CA11315-NOV10	0.57	0.55	-0.02	-1.5%
09-Nov-10	41	0.0002	0.017	0.880	< 0.00004	0.40	< 0.00001	0.22	0.0201	5.27	< 0.0002	0.00027	0.0003	0.00545	0.00040	0.004	< 0.00001	CA11435-NOV10	0.65	0.61	-0.04	-3.3%
16-Nov-10	42	0.0002	0.010	0.764	< 0.00004	0.36	< 0.00001	0.18	0.0172	4.73	< 0.0002	0.00026	< 0.0001	0.000050	0.00035	0.001	< 0.00001	CA10265-NOV10	0.56	0.54	-0.03	-2.4%
23-Nov-10	43	< 0.0001	< 0.009	0.682	< 0.00004	0.46	< 0.00001	0.12	0.0216	4.34	< 0.0002	0.00003	< 0.0001	0.000082	0.00036	0.002	< 0.00001	CA11701-NOV10	0.66	0.59	-0.08	-6.0%
30-Nov-10	44	0.0005	< 0.009	0.741	< 0.00004	0.42	< 0.00001	0.18	0.0198	5.37	< 0.0002	0.00026	< 0.0001	0.000084	0.00038	0.003	< 0.00001	CA14008-DEC10	0.53	0.59	0.07	5.9%
07-Dec-10	45	0.0003	0.015	0.866	< 0.00004	0.52	< 0.00001	0.18	0.0223	5.24	< 0.0002	0.00021	< 0.0001	0.000073	0.00051	0.003	< 0.00001	CA14206-DEC10	0.62	0.78	0.16	11.6%
14-Dec-10	46	0.0003	< 0.009	0.770	0.00007	0.39	< 0.00001	0.18	0.0164	4.02	< 0.0002	0.00029	< 0.0001	0.000053	0.00050	< 0.001	< 0.00001	CA10970-DEC10	0.56	0.52	-0.03	-3.1%
21-Dec-10	47	0.0003	< 0.009	0.728	< 0.00004	0.41	< 0.00001	0.18	0.0158	3.96	< 0.0002	0.00015	< 0.0001	0.000046	0.00041	< 0.001	< 0.00001	CA10453-DEC10	0.55	0.54	-0.01	-1.3%
28-Dec-10	48	< 0.0001	0.040	0.788	< 0.00004	0.44	< 0.00001	0.20	0.0162	4.85	< 0.0002	0.00020	< 0.0001	0.000041	0.00041	0.002	< 0.00001	CA10140-JAN11	0.59	0.53	-0.06	-5.4%
04-Jan-11	49	0.0002	< 0.009	0.708	< 0.00004	0.37	< 0.00001	0.16	0.0136	3.73	< 0.0002	0.00007	< 0.0001	0.000045	0.00037	0.002	< 0.00001	CA10880-JAN11	0.54	0.48	-0.06	-6.0%
11-Jan-11	50	0.0001	< 0.009	0.652	< 0.00004	0.32	< 0.00001	0.17	0.0146	3.92	< 0.0002	0.00020	0.0001	0.000032	0.00029	< 0.001	< 0.00001	CA14437-JAN11	0.51	0.49	-0.02	-1.9%
18-Jan-11	51	< 0.0001	< 0.009	0.777	< 0.00004	0.40	< 0.00001	0.17	0.0157	4.39	< 0.0002	0.00024	< 0.0001	0.000035	0.00035	< 0.001	< 0.00001	CA10982-JAN11	0.52	0.52	0.00	-0.2%
25-Jan-11	52	0.0002	0.011	0.676	0.00012	0.33	< 0.00001	0.14	0.0134	3.56	< 0.0002	0.00032	0.0003	0.000042	0.00033	0.003	< 0.00001	CA11047-JAN11	0.54	0.45	-0.09	-8.8%
01-Feb-11	53	0.0003	0.058	0.605	< 0.00004	0.32	< 0.00001	0.13	0.0139	5.27	< 0.0002	0.00039	0.0002	0.000062	0.00026	0.003	< 0.00001	CA14121-FEB11	0.46	0.45	-0.01	-0.7%
08-Feb-11	54	< 0.0001	< 0.009	0.638	< 0.00004	0.39	0.00001	0.13	0.0154	3.96	< 0.0002	0.00058	0.0001	0.000054	0.00033	< 0.001	0.00002	CA14249-FEB11	0.51	0.51	0.00	0.2%
15-Feb-11	55	0.0003	0.042	0.609	< 0.00004	0.37	< 0.00001	0.12	0.0132	3.49	< 0.0002	0.00028	< 0.0001	0.000038	0.00025	0.002	< 0.00001	CA14449-FEB11	0.37	0.45	0.08	9.7%
22-Feb-11	56	< 0.0001	< 0.009	0.634	< 0.00004	0.36	0.00001	0.14	0.0138	3.53	< 0.0002	< 0.00001	< 0.0001	0.000034	0.00027	< 0.001	< 0.00001	CA14656-FEB11	0.58	0.47	-0.11	-10.3%
01-Mar-11	57	0.0002	0.052	0.522	< 0.00004	0.31	< 0.00001	0.13	0.0136	3.44	< 0.0002	0.00019	< 0.0001	0.000029	0.00030	0.001	< 0.00001	CA14060-MAR11	0.58	0.46	-0.12	-11.7%
08-Mar-11	58	0.0001	0.028	0.574	0.00011	0.30	< 0.00001	0.14	0.0141	3.69	< 0.0002	0.00023	< 0.0001	0.000034	0.00026	0.001	< 0.00001	CA14274-MAR11	0.54	0.47	-0.07	-6.8%
15-Mar-11	59	0.0004	0.010	0.564	0.00010	0.34	< 0.00001	0.13	0.0144	3.33	< 0.00002	0.00019	< 0.0001	0.000037	0.00027	0.001	< 0.00001	CA14457-MAR11	0.53	0.47	-0.06	-5.8%
22-Mar-11	60	< 0.0001	< 0.009	0.586	< 0.00004	0.35	< 0.00001	0.11	0.0138	3.79	< 0.0002	0.00046	< 0.0001	0.000031	0.00024	< 0.001	< 0.00001	CA10460-MAR11	0.53	0.47	-0.06	-6.3%
29-Mar-11	61	0.0003	0.017	0.634	< 0.00004	0.49	< 0.00001	0.15	0.0202	5.22	< 0.0002	0.00012	< 0.0001	0.000073	0.00023	< 0.001	< 0.00001	CA14922-MAR11	0.67	0.62	-0.05	-3.7%
05-Apr-11	62	0.0002	0.027	0.613	0.00005	0.36	< 0.00001	0.14	0.0156	4.47	< 0.0002	0.00017	< 0.0001	0.000036	0.00026	0.001	< 0.00001	CA14224-APR11	0.57	0.51	-0.06	-5.3%
12-Apr-11	63	< 0.0001	0.012	0.548	< 0.00004	0.35	< 0.00001	0.13	0.0165	3.69	< 0.0002	0.00011	< 0.0001	0.000035	0.00027	< 0.001	< 0.00001	CA14457-APR11	0.54	0.48	-0.05	-5.4%
19-Apr-11	64	0.0003	0.034	0.755	0.00039	0.47	< 0.00001	0.15	0.0177	4.61	< 0.0002	0.00008	0.0003	0.000047	0.00044	0.002	< 0.00001	CA11358-APR11	0.80	0.62	-0.18	-12.4%
26-Apr-11	65	0.0005	0.013	0.702	< 0.00004	0.44	< 0.00001	0.15	0.0153	3.98	< 0.0002	< 0.00001	< 0.0001	0.000039	0.00035	< 0.001	< 0.00001	CA14943-APR11	0.64	0.54	-0.10	-8.5%
03-May-11	66	0.0002	0.020	0.677	< 0.00004	0.41	< 0.00001	0.14	0.0147	3.78	< 0.0002	0.00004	< 0.0001	0.000028	0.00029	0.003	< 0.00001	CA14148-MAY11	0.56	0.51	-0.05	-4.9%
10-May-11	67	0.0004	< 0.009	0.664	< 0.00004	0.38	< 0.00001	0.13	0.0139	3.64	< 0.0002	0.00011	0.0002	0.000027	0.00023	0.003	< 0.00001	CA14441-MAY11	0.54	0.48	-0.06	-5.9%
17-May-11	68	< 0.0001	0.019	0.597	< 0.00004	0.34	0.00003	0.13	0.0128	3.32	< 0.0002	0.00005	< 0.0001	0.000031	0.00028	0.001	< 0.00001	CA14703-MAY11	#N/A	0.45	#N/A	#N/A
24-May-11	69	< 0.0001	0.020	0.576	< 0.00004	0.60	< 0.00001	0.12	0.0139	3.41	< 0.0002	0.00014	< 0.0001	0.000025	0.00029	0.002	< 0.00001	CA13762-MAY11	0.49	0.46	-0.02	-2.5%
31-May-11	70	< 0.0001	< 0.009	0.562	< 0.00004	0.40	< 0.00001	0.12	0.0141	3.45	< 0.0002	0.00014	< 0.0001	0.000036	0.00022	0.001	< 0.00001	CA10185-JUN11	0.50	0.46	-0.05	-5.1%
07-Jun-11	71	0.0002	< 0.009	0.632	< 0.00004	0.41	< 0.00001	0.19	0.0144	4.25	< 0.00002	0.00020	0.0001	0.000021	0.00024	0.002	< 0.00001	CA14355-JUN11	0.50	0.51	0.01	0.7%
14-Jun-11	72	0.0004	< 0.009	0.505	0.00005	0.44	< 0.00001	0.16	0.0132	3.41	< 0.00002	0.00022	< 0.0001	0.000033	0.00026	0.001	< 0.00001	CA10349-JUN11	0.46	0.45	-0.01	-0.8%
21-Jun-11	73	< 0.0001	< 0.009	0.553	< 0.00004	0.31	< 0.00001	0.11	0.0145	4.54	< 0.00002	0.00022	< 0.0001	0.000031	0.00021	0.001	< 0.00001	CA14777-JUN11	0.61	0.51	-0.10	-8.7%
28-Jun-11	74	0.0002	< 0.009	0.578	< 0.00004	0.35	< 0.00001	0.12	0.0141	3.98	< 0.00002	0.00009	0.0002	0.000036	0.00024	0.001	< 0.00001	CA15123-JUN11	0.55	0.50	-0.05	-4.7%
05-Jul-11	75	0.0003	< 0.009	0.641	< 0.00004	0.54	< 0.00001	0.21	0.0207	6.04	< 0.00002	0.00012	< 0.0001	0.000075	0.00027	0.007	< 0.00001	CA15472-JUL11	0.74	0.67	-0.07	-5.3%
12-Jul-11	76	0.0001	< 0.009	0.597	0.00016	0.47	< 0.00001	0.12	0.0176	4.39	< 0.00002	0.00009	< 0.0001	0.000044	0.00024	0.001	< 0.00001	CA15694-JUL11	0.49	0.59	0.10	8.8%
19-Jul-11	77	0.0004	< 0.009	0.534	0.00015	0.39	< 0.00001	0.15	0.0162	4.45	< 0.00002	0.00014	< 0.0001	0.000037	0.00025	0.001	< 0.00001	CA16180-JUL11	0.55	0.55	0.00	0.1%
26-Jul-11	78	0.0004	0.013	0.469	< 0.00004	0.33	< 0.00001	0.08	0.0157	3.54	< 0.00002	< 0.00001	0.0004	0.000034	0.00023	0.002	< 0.00001	CA11330-JUL11	0.57	0.46	-0.11	-10.4%

HC 7
Sample = Alt 09 08

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
02-Aug-11	79	< 0.0001	< 0.009	0.577	< 0.00004	0.42	< 0.00001	0.11	0.0165	4.95	< 0.00002	0.00003	< 0.0001	0.000046	0.00022	< 0.001	< 0.00001	CA14200-AUG11	0.55	0.56	0.01	0.8%
09-Aug-11	80	< 0.0001	< 0.009	0.442	< 0.00004	0.33	< 0.00001	0.10	0.0136	3.93	< 0.00002	< 0.00001	< 0.0001	0.000039	0.00022	0.002	< 0.00001	CA14411-AUG11	0.51	0.46	-0.05	-5.3%
16-Aug-11	81	< 0.0001	< 0.009	0.459	< 0.00004	0.32	< 0.00001	0.10	0.0130	4.25	< 0.00002	0.00011	< 0.0001	0.000034	0.00020	0.002	< 0.00001	CA14675-AUG11	0.60	0.46	-0.14	-13.7%
23-Aug-11	82	< 0.0001	< 0.009	0.537	< 0.00004	0.38	< 0.00001	0.11	0.0151	4.52	< 0.00002	0.00009	< 0.0001	0.000038	0.00022	0.002	< 0.00001	CA10450-AUG11	0.53	0.52	0.00	-0.1%
30-Aug-11	83	0.0003	< 0.009	0.532	0.00013	0.36	< 0.00001	0.13	0.0158	4.74	< 0.00002	0.00024	0.0002	0.000030	0.00023	0.003	< 0.00001	CA14264-SEP11	0.60	0.52	-0.08	-6.8%
06-Sep-11	84	0.0001	< 0.009	0.479	< 0.00004	0.32	< 0.00001	0.11	0.0137	4.3	< 0.00002	< 0.00001	< 0.0001	0.000070	0.00025	0.003	< 0.00001	CA14213-SEP11	0.52	0.48	-0.03	-3.5%
13-Sep-11	85	< 0.0001	< 0.009	0.482	< 0.00004	0.34	< 0.00001	0.11	0.0150	4.84	< 0.00002	0.00011	< 0.0001	0.000040	0.00019	0.002	< 0.00001	CA17321-SEP11	0.58	0.52	-0.06	-5.7%
20-Sep-11	86	0.0003	< 0.009	0.489	< 0.00004	0.37	< 0.00001	0.11	0.0146	5.36	< 0.00002	0.00045	< 0.0001	0.000042	0.00019	0.003	< 0.00001	CA14825-SEP11	0.55	0.53	-0.02	-1.8%
27-Sep-11	87	< 0.0001	< 0.009	0.481	< 0.00004	0.32	< 0.00001	0.10	0.0135	4.21	< 0.00002	0.00013	< 0.0001	0.000048	0.00022	0.004	< 0.00001	CA18921-SEP11	0.55	0.47	-0.08	-8.0%
04-Oct-11	88	< 0.0001	< 0.009	0.541	< 0.00004	0.38	< 0.00001	0.13	0.0182	6.46	< 0.00002	0.00010	< 0.0001	0.000088	0.00016	0.002	0.00003	CA14153-OCT11	0.69	0.60	-0.09	-6.9%
11-Oct-11	89	0.0003	< 0.009	0.481	< 0.00004	0.41	< 0.00001	0.11	0.0173	5.69	< 0.00002	0.00003	< 0.0001	0.000027	0.00019	< 0.001	0.00007	CA14391-OCT11	0.69	0.58	-0.11	-8.9%
18-Oct-11	90	0.0002	< 0.009	0.465	< 0.00004	0.34	< 0.00001	0.10	0.0148	4.66	< 0.00002	0.00004	< 0.0001	0.000038	0.00019	0.002	< 0.00001	CA14788-OCT11	0.56	0.51	-0.06	-5.4%
25-Oct-11	91	< 0.0001	< 0.009	0.462	< 0.00004	0.38	< 0.00001	0.10	0.0147	4.56	< 0.00002	0.00008	< 0.0001	0.000042	0.00018	0.002	< 0.00001	CA14955-OCT11	0.51	0.51	0.00	-0.1%
01-Nov-11	92	0.0002	< 0.009	0.486	< 0.00004	0.40	< 0.00001	0.09	0.0192	6.52	< 0.00002	0.00006	< 0.0001	0.000048	0.00019	0.001	< 0.00001	CA18036-NOV11	0.70	0.64	-0.06	-4.2%
08-Nov-11	93	0.0001	0.010	0.509	0.00005	0.43	< 0.00001	0.11	0.0178	5.64	< 0.00002	0.00005	0.0001	0.000057	0.00030	0.003	< 0.00001	CA18264-NOV11	0.60	0.61	0.01	0.7%
15-Nov-11	94	0.0004	< 0.009	0.443	< 0.00004	0.27	< 0.00001	0.11	0.0150	5.02	< 0.00002	< 0.00001	0.0001	0.000049	0.00034	< 0.001	< 0.00001	CA18499-NOV11	0.62	0.54	-0.08	-6.7%
22-Nov-11	95	0.0004	< 0.009	0.440	< 0.00004	0.40	< 0.00001	0.01	0.0151	4.18	< 0.00002	0.00003	0.0001	0.000049	0.00032	< 0.001	< 0.00001	CA18773-NOV11	0.54	0.53	-0.02	-1.5%
29-Nov-11	96	0.0005	0.013	0.519	< 0.00004	0.45	< 0.00001	0.09	0.0175	5.38	< 0.00002	0.00004	0.0001	0.000051	0.00034	0.001	< 0.00001	CA12006-NOV11	0.65	0.60	-0.05	-4.3%
06-Dec-11	97	< 0.0001	0.010	0.508	< 0.00004	0.45	0.00004	0.05	0.0176	5.69	< 0.00002	< 0.00001	< 0.0001	0.000055	0.00027	0.002	< 0.00001	CA14293-DEC11	0.58	0.63	0.05	4.5%
13-Dec-11	98	0.0004	0.015	0.523	< 0.00004	0.42	< 0.00001	0.17	0.0208	6.77	< 0.00002	0.00007	< 0.0001	0.000067	0.00015	0.002	< 0.00001	CA14475-DEC11	0.65	0.71	0.06	4.4%
20-Dec-11	99	0.0003	0.010	0.468	0.00029	0.46	< 0.00001	0.11	0.0174	5.64	< 0.00002	< 0.00001	0.0001	0.000052	0.00033	0.005	< 0.00001	CA10397-DEC11	0.62	0.60	-0.03	-2.1%
27-Dec-11	100	0.0004	< 0.009	0.458	0.00009	0.40	< 0.00001	0.11	0.0167	5.66	< 0.00002	< 0.00001	0.0004	0.000055	0.00040	< 0.001	< 0.00001	CA10466-DEC11	0.65	0.58	-0.07	-5.9%
03-Jan-12	101	0.0005	< 0.009	0.474	0.00005	0.39	< 0.00001	0.09	0.0164	5.32	< 0.00002	0.00003	0.0003	0.000053	0.00049	0.001	< 0.00001	CA14133-JAN12	0.67	0.57	-0.11	-8.6%
10-Jan-12	102	0.0001	< 0.009	0.432	< 0.00004	0.36	< 0.00001	0.11	0.0152	4.64	< 0.00002	0.00004	0.0002	0.000051	0.00053	0.002	< 0.00001	CA14430-JAN12	0.58	0.54	-0.04	-3.5%
17-Jan-12	103	0.0002	< 0.009	0.470	< 0.00004	0.38	< 0.00001	0.08	0.0171	5.66	< 0.00002	0.00002	0.0001	0.000057	0.00035	0.002	< 0.00001	CA11226-JAN12	0.65	0.62	-0.04	-3.0%
24-Jan-12	104	0.0002	< 0.009	0.468	0.00005	0.37	< 0.00001	0.09	0.0166	5.32	< 0.00002	0.00004	0.0001	0.000053	0.00032	0.001	< 0.00001	CA10502-JAN12	0.79	0.58	-0.21	-15.1%
31-Jan-12	105	< 0.0001	< 0.009	0.434	< 0.00004	0.35	< 0.00001	0.14	0.0152	4.97	< 0.00002	< 0.00001	0.0001	0.000125	0.00050	0.013	< 0.00001	CA10999-FEB12	0.62	0.55	-0.07	-5.8%
07-Feb-12	106	0.0005	< 0.009	0.496	0.00006	0.37	< 0.00001	0.14	0.0183	5.94	< 0.00002	< 0.00001	0.0001	0.000069	0.00034	0.002	< 0.00001	CA14207-FEB12	0.77	0.63	-0.13	-9.4%
14-Feb-12	107	0.0003	< 0.009	0.399	< 0.00004	0.32	< 0.00001	0.10	0.0151	4.61	< 0.00002	< 0.00001	< 0.0001	0.000058	0.00016	0.003	< 0.00001	CA14420-FEB12	0.64	0.52	-0.12	-10.4%
21-Feb-12	108	0.0004	< 0.009	0.415	< 0.00004	0.32	< 0.00001	0.12	0.0146	4.53	< 0.00002	< 0.00001	< 0.0001	0.000042	0.00018	0.001	< 0.00001	CA14754-FEB12	0.52	0.52	0.00	0.2%
28-Feb-12	109	0.0003	< 0.009	0.433	< 0.00004	0.34	< 0.00001	0.11	0.0147	4.74	< 0.00002	0.00004	0.0002	0.000039	0.00031	0.001	< 0.00001	CA14931-FEB12	0.56	0.54	-0.02	-1.8%
06-Mar-12	110	0.0003	< 0.009	0.434	< 0.00004	0.35	< 0.00001	0.11	0.0145	5.28	< 0.00002	0.00007	0.0002	0.000048	0.00040	0.006	< 0.00001	CA14216-MAR12	0.62	0.53	-0.09	-8.1%
13-Mar-12	111	0.0002	0.037	0.757	< 0.00004	0.36	0.00026	0.15	0.0152	5.00	0.00005	0.00007	< 0.0001	0.000051	0.00012	0.003	< 0.00001	CA14408-MAR12	0.56	0.56	0.00	-0.3%
20-Mar-12	112	< 0.0001	< 0.009	0.462	0.00013	0.34	< 0.00001	0.10	0.0166	5.32	< 0.00002	0.00015	< 0.0001	0.000046	0.00010	< 0.001	< 0.00001	CA14687-MAR12	0.63	0.58	-0.05	-4.4%
27-Mar-12	113	0.0004	< 0.009	0.422	< 0.00004	0.34	< 0.00001	0.17	0.0147	5.23	< 0.00002	0.00002	0.0001	0.000058	0.00033	0.003	< 0.00001	CA14874-MAR12	0.58	0.58	0.00	-0.4%
03-Apr-12	114	0.0002	< 0.009	0.407	< 0.00004	0.26	< 0.00001	0.11	0.0127	4.64	< 0.00002	< 0.00001	< 0.0001	0.000036	0.00023	0.002	< 0.00001	CA14169-APR12	0.55	0.49	-0.06	-5.9%
10-Apr-12	115	0.0001	< 0.009	0.413	0.00008	0.33	< 0.00001	0.11	0.0138	4.80	< 0.00002	0.00004	0.0001	0.000042	0.00036	0.002	< 0.00001	CA11095-APR12	0.55	0.51	-0.04	-4.2%
17-Apr-12	116	0.0002	< 0.009	0.405	< 0.00004	0.30	< 0.00001	0.06	0.0137	4.85	< 0.00002	< 0.00001	< 0.0001	0.000040	0.00026	0.001	< 0.00001	CA14686-APR12	0.58	0.52	-0.06	-5.7%
24-Apr-12	117	0.0004	< 0.009	0.411	< 0.00004	0.30	< 0.00001	0.10	0.0134	4.69	< 0.00002	< 0.00001	< 0.0001	0.000139	0.00039	0.002	< 0.00001	CA14876-APR12	0.57	0.50	-0.07	-6.1%
01-May-12	118	0.0002	< 0.009	0.420	< 0.00004	0.32	< 0.00001	0.08	0.0145	5.27	< 0.00002	0.00009	< 0.0001	0.000041	0.00032	0.002	< 0.00001	CA14088-MAY12	0.62	0.55	-0.07	-5.9%
08-May-12	119	0.0002	< 0.009	0.452	< 0.00004	0.31	< 0.00001	0.09	0.0133	4.55	< 0.00002	0.00044	0.0002	0.000052	0.00032	0.002	< 0.00001	CA14348-MAY12	0.48	0.51	0.03	2.9%
15-May-12	120	0.0002	< 0.009	0.425	< 0.00004	0.29	< 0.00001	0.09	0.0128	4.37	< 0.00002	< 0.00001	< 0.0001	0.000038	0.00032	0.003	< 0.00001	CA14621-MAY12	0.47	0.49	0.02	2.3%
22-May-12	121	0.0002	< 0.009	0.429	< 0.00004	0.33	< 0.00001	0.10	0.0130	4.68	< 0.00002	0.00002	0.0002	0.000036	0.00042	0.002	< 0.00001	CA10508-MAY12	0.48	0.50	0.02	2.3%
29-May-12	122	< 0.0001	< 0.009	0.415	< 0.00004	0.31	< 0.00001	0.07	0.0125	4.33	< 0.00002	0.00012	< 0.0001	0.000032	0.00033	0.001	< 0.00001	CA15134-MAY12	0.44	0.49	0.04	4.8%
05-Jun-12	123	< 0.0001	< 0.009	0.399	< 0.00004	0.32	< 0.00001	0.11	0.0127	4.50	< 0.00002	0.00001	0.0002	0.000025	0.00034	0.003	< 0.00001	CA15137-JUN12	0.42	0.49	0.07	7.8%
12-Jun-12	124	< 0.0001	< 0.009	0.453	0.00007	0.33	< 0.00001	0.09	0.0132	4.60	< 0.00002	0.00006	0.0002	0.000030	0.00037	0.001	< 0.00001	CA15174-JUN12	0.48	0.52	0.04	4.0%
19-Jun-12	125	< 0.0001	< 0.009	0.415	0.00005	0.31	< 0.00001	0.08	0.0124	4.35	< 0.00002	0.00046	< 0.0001	0.000032	0.00037	0.002	< 0.00001	CA15309-JUN12	0.43	0.49	0.06	6.5%
26-Jun-12	126	0.0002	< 0.009	0.443	0.00004	0.43	< 0.00001	0.19	0.0136	4.80	< 0.00002	0.00134	0.0001	0.000032	0.00045	0.006	< 0.00001	CA15357-JUN12	0.53	0.52	-0.01	-1.1%
03-Jul-12	127	< 0.0001	< 0.009	0.435	< 0.00004	0.33	< 0.00001	0.09	0.0136	4.98	< 0.00002	0.00010	0.0001	0.000030	0.00033	0.002	< 0.00001	CA15021-JUL12	0.56	0.52	-0.04	-3.5%
10-Jul-12	128	0.0002	< 0.009	0.394	0.00007	0.27	< 0.00001	0.10	0.0126	4.66	< 0.00002	0.00011	< 0.0001	0.000022	0.00038	0.001	< 0.00001	CA15118-JUL12	0.51	0.50	-0.01	-1.4%
17-Jul-12	129	< 0.0001	< 0.009	0.422	< 0.00004	0.30	0.00003	0.09	0.0123	4.70	< 0.00002	< 0.00001	0.0001	0.000027	0.00034	0.001	0.00002	CA15186-JUL12	0.49	0.49	0.00	0.3%
24-Jul-12	130	< 0.0001	< 0.009	0.434	0.00021	0.31	< 0.00001	0.12	0.0127	4.86	< 0.00002	0.00001	0.0001	0.000027	0.00033	0.001	< 0.00001	CA15302-JUL12	0.47	0.51	0.04	4.1%
31-Jul-12	131	< 0.0001	< 0.009	0.394	< 0.00004	0.28	< 0.00001	0.09	0.0116	4.16	< 0.00002	0.00001	< 0.0001	0.000021	0.00038	0.001	< 0.00001	CA15010-AUG12	0.45	0.48	0.02	2.4%
07-Aug-12	132	< 0.0001	< 0.009	0.429	< 0.00004	0.30	< 0.00001	0.12	0.0117	4.76	< 0.00002	0.00023	0.0001	0.000025	0.00056	0.004	< 0.00001	CA15071-AUG12	0.45	0.49	0.04	4.6%
14-Aug-12	133	0.0001	< 0.009	0.385	< 0.00004	0.27	< 0.00001	0.09	0.0110	4.37	< 0.00002	0.00060	< 0.0001	0.000021	0.00036	0.004	< 0.00001	CA15151-AUG12	0.46	0.45	-0.01	-0.9%
21-Aug-12	134	0.0002	< 0.009	0.344	< 0.00004	0.31	< 0.00001	0.08	0.0110	4.46	< 0.00002	0.00024	0.0001	0.000022	0.00032	0.001	< 0.00001	CA15239-AUG12	0.43	0.45	0.02	2.0%
28-Aug-12	135	< 0.0001	< 0.009	0.354	< 0.00004	0.28	< 0.00001	0.08	0.0114	4.27	< 0.00002	0.00017	< 0.0001	0.000023	0.00029	0.002	< 0.00001	CA15348-AUG12	0.45	0.45	0.01	0.8%
04-Sep-12	136	< 0.0001	< 0.009	0.409	< 0.00004	0.25	< 0.00001	0.09	0.0118	4.38	< 0.00002	0.00006	< 0.0001	0.000024	0.00037	0.001	< 0.00001	CA15317-SEP12	0.46	0.49	0.04	4.0%
11-Sep-12	137	< 0.0001	< 0.009	0.388	< 0.00004	0.24	< 0.00001	0.10	0.0100	4.09	< 0.00002	0.00012	< 0.0001	0.000022	0.00026	0.002	< 0.00001	CA15405-SEP12	0.44	0.42	-0.02	-2.2%
18-Sep-12	138	< 0.0001	< 0.009	0.371	< 0.00004	0.27	< 0.00001	0.08	0.0114	4.21	< 0.00002	0.00012	< 0.0001	0.000024	0.00033	0.002	< 0.00001	CA15559-SEP12	0.49	0.46	-0.03	-3.4%
25-Sep-12	139	0.0006	< 0.009	0.376	< 0.00004	0.24	0.00004	0.08	0.0104	4.17	< 0.00002	0.00007	0.0004	0.000053	0.00036	0.003	< 0.00001	CA15670-SEP12	0.51	0.44	-0.08	-8.2%
02-Oct-12	140	< 0.0001	0.011	0.412	< 0.00004	0.28	< 0.00001	0.08	0.0104	4.11	< 0.00002	0.00005	< 0.0001	0.000021	0.00019	< 0.001	< 0.00001	CA15354-OCT12	0.43	0.44	0.02	1.9%
09-Oct-12	141	0.0004	0.011	0.387	< 0.00004	0.27	< 0.00001	0.08	0.0108	3.91	< 0.00002	0.00011	< 0.0001	0.000031	0.00025	< 0.001	< 0.00001	CA15450-OCT12	0.49	0.45	-0.04	-4.3%
16-Oct-12	142	0.0002	< 0.009	0.377	< 0.00004	0.26	< 0.00001	0.08	0.0107	4.16	< 0.00002	0.00021	< 0.0001	0.000024	0.00028	0.001	< 0.00001	CA15570-OCT12	0.52	0.46	-0.06	-6.1%
23-Oct-12	143	0.0007	0.011	0.341	< 0.00004	0.23	< 0.00001	0.08	0.0098	3.66	< 0.00002	0.00005	0.0001	0.000023	0.00024	< 0.001	< 0.00001	CA15652-OCT12	0.49	0.42	-0.07	-7.2%
30-Oct-12	144	0.0004	< 0.009	0.377	< 0.00004	0.28	< 0.00001	0.08	0.0115	4.11	< 0.00002	0.00007	0.0004	0.000032	0.00044	0.002	< 0.00001	CA15744-OCT12	0.51	0.48	-0.04	-3.7%
06-Nov-12	145	0.0008	< 0.009	0.360	< 0.00004	0.24	< 0.00001	0.08	0.0105	3.76	< 0.00002	0.00018	< 0.0001	0.000020	0.00018	0.001	< 0.00001	CA11210-NOV12	0.37	0.45	0.08	9.9%
13-Nov-12	146	< 0.0001	< 0.009	0.385	< 0.00004	0.25	< 0.00001	0.07	0.0103	4.14	< 0.00002	0.00001	0.0001	0.000019	0.00024	0.003	< 0.00001	CA15251-NOV12	0.45	0.46	0.01	0.9%
20-Nov-12	147	0.0001	< 0.009	0.331	< 0.00004	0.27	0.00002	0.09	0.0119	3.83	< 0.00002	0.00015	0.0001	0.000031	0.00023	< 0.001	< 0.00001	CA15347-NOV12	0.53	0.48	-0.05	-4.9%
27-Nov-12	148	0.0001	< 0.009	0.392	< 0.00004	0.32	< 0.00001	0.09	0.0138	4.57	< 0.00002	0.00009	< 0.0001	0.000031	< 0.00003	< 0.001	< 0.00001	CA15376-NOV12	0.54	0.54	0.00	0.1%
04-Dec-12	149	< 0.0001	< 0.009	0.350	0.00021	0.17	< 0.00001	0.06	0.0088	3.77	< 0.00002	0.00008	< 0.0001	0.000028	0.00021	0.002	< 0.00001	CA15038-DEC12	0.43	0.40	-0.02	-3.0%
11-Dec-12	150	< 0.0001	< 0.009	0.375	< 0.00004	0.20	< 0.00001	0.07	0.0090	2.96	< 0.00002	0.00025	< 0.0001	0.000027	0.00024	< 0.001	< 0.00001	CA15164-JAN13	0.46	0.40	-0.06	-7.2%
18-Dec-12	151	< 0.0001	< 0.009	0.358	0.00016	0.21	< 0.00001	0.07	0.0107	3.82	< 0.00002	0.00027	< 0.0001	0.000034	0.00022	< 0.001	< 0.00001	CA15269-DEC12	0.46	0.43	-0.03	-2.9%
25-Dec-12	152	< 0.0001	0.023	0.368	< 0.00004	0.17	< 0.00001	0.06	0.0118	4.05	< 0.00002	0.00009	< 0.0001	0.000025	0.00008	< 0.001	< 0.00001	CA15361-DEC12	0.43	0.45	0.03	3.1%
01-Jan-13	153	0.0002	< 0.009	0.352	0.00005	0.18	< 0.00001	0.09	0.0088	3.42	< 0.00002	0.00009	< 0.0001	0.000028	0.00020	0.001	< 0.00001	CA15056-JAN13	0.44	0.38	-0.06	-7.5%
08-Jan-13	154	< 0.0001	< 0.009	0.426	< 0.00004	0.23	< 0.00001	0.08	0.0105	3.89	< 0.00002	0.00021	0.0002	0.000036	0.00037	< 0.001	< 0.00001	CA15153-JAN13	0.43	0.46	0.02	2.5%
15-Jan-13	155																					
22-Jan-13	156																					
29-Jan-13	157																					
05-Feb-13	158																					
12-Feb-13	159																					

HC 8 *CONFIDENTIAL* *DRAFT*

Sample = Alt 09 07

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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
02-Feb-10	1	500	415	7.41	343	173	#N/A	2.2	22.9	57	-	-	56.3	0.105	0.0014	0.0031	0.00260	< 0.00002	0.00001	0.012	0.000033	18.6	< 0.0005	0.00122	0.0039	< 0.01	0.00017	0.010	2.37	0.025
09-Feb-10	2	500	445	7.33	298	171	#N/A	2.1	13.5	53	-	-	55.7	0.129	0.0021	0.0022	0.00187	< 0.00002	< 0.00001	0.022	0.000016	18.4	< 0.0005	0.000104	0.0009	< 0.01	0.00022	0.007	2.34	0.022
16-Feb-10	3	500	415	7.38	295	135	#N/A	2.4	15.0	44	-	-	46.1	0.158	0.0018	0.0025	0.00162	< 0.00002	0.00001	0.018	0.000005	15.6	< 0.0005	0.000043	0.0008	< 0.01	0.00016	0.005	1.72	0.013
23-Feb-10	4	500	455	7.44	355	85	#N/A	2.1	12.0	29	-	-	36.8	0.132	0.0013	0.0013	0.00099	< 0.00002	< 0.00001	0.014	< 0.000003	12.9	< 0.0005	0.000037	< 0.0005	< 0.01	0.00006	0.004	1.11	0.013
02-Mar-10	5	500	445	7.35	349	79	#N/A	1.5	9.9	23	-	-	28.7	0.111	0.0010	0.0012	0.00092	< 0.00002	< 0.00001	0.008	< 0.000003	10.2	< 0.0005	0.000030	< 0.0005	< 0.01	0.00005	0.002	0.812	0.011
09-Mar-10	6	500	435	7.30	364	73	#N/A	2.0	9.5	18	-	-	28.8	0.104	0.0008	0.0010	0.00083	< 0.00002	< 0.00001	0.007	< 0.000003	10.4	< 0.0005	0.000017	0.0008	< 0.01	0.00011	0.002	0.718	0.012
16-Mar-10	7	500	435	7.26	358	56	#N/A	2.1	9.7	14	< 0.2	0.11	26.4	0.1410	0.0007	0.0010	0.00072	< 0.00002	< 0.00001	0.008	< 0.000003	9.50	< 0.0005	0.000016	< 0.0005	< 0.01	0.00012	0.002	0.641	0.010
23-Mar-10	8	500	455	7.25	361	66	#N/A	3.0	9.2	21	< 0.2	0.1	26.0	0.0973	0.0008	0.0010	0.00072	< 0.00002	< 0.00001	0.0061	< 0.000003	9.5	< 0.0005	0.000016	0.0006	< 0.01	0.00047	0.002	0.56	0.012
30-Mar-10	9	500	440	7.25	381	68	#N/A	2.2	8.1	26	< 0.2	< 0.06	28.2	0.0811	0.0008	0.0008	0.00083	< 0.00002	< 0.00001	0.005	< 0.000003	10.40	0.0006	0.000019	0.0006	< 0.01	0.00003	0.001	0.559	0.012
06-Apr-10	10	500	460	7.22	366	67	#N/A	2.3	8.6	18	< 0.2	0.07	26.8	0.0940	0.0007	0.0010	0.00063	< 0.00002	< 0.00001	< 0.002	< 0.000003	10.0	0.0006	0.000016	0.0009	< 0.01	0.00032	0.001	0.431	0.012
13-Apr-10	11	500	460	7.13	354	69	#N/A	2.9	9.0	23	< 0.2	0.07	26.7	0.0876	0.0008	0.0008	0.00079	< 0.00002	< 0.00001	0.005	< 0.000003	9.97	< 0.0005	0.000011	< 0.0005	< 0.01	0.00006	0.002	0.45	0.013
20-Apr-10	12	500	445	7.34	340	66	#N/A	2.7	8.7	20	< 0.2	0.06	25.4	0.0958	0.0006	0.0010	0.00073	< 0.00002	< 0.00001	0.004	< 0.000003	9.53	0.0007	0.000011	0.0007	< 0.01	0.00006	0.001	0.388	0.011
27-Apr-10	13	500	455	7.32	340	59	#N/A	2.8	8.3	19	< 0.2	< 0.06	23.1	0.0715	0.0005	0.0008	0.0006	< 0.00002	< 0.00001	0.003	< 0.000003	8.67	0.0006	0.000014	0.0008	< 0.01	0.00079	< 0.001	0.36	0.011
04-May-10	14	500	430	7.16	365	56	#N/A	2.3	8.6	19	< 0.2	< 0.06	23.6	0.0787	0.0005	0.0008	0.0007	< 0.00002	< 0.00001	0.003	< 0.000003	8.88	0.0006	0.00001	0.0006	< 0.01	0.00116	< 0.001	0.33	0.011
11-May-10	15	500	445	7.04	362	58	#N/A	2.0	7.3	14	< 0.2	< 0.06	22.7	0.0783	0.0005	0.0012	0.0007	< 0.00002	< 0.00001	0.003	0.000004	8.61	0.0006	0.00001	< 0.0005	< 0.01	0.00127	< 0.001	0.30	0.010
18-May-10	16	500	420	7.14	359	61	#N/A	2.5	7.7	19	< 0.2	< 0.06	26.0	0.0981	0.0004	0.0011	0.00063	< 0.00002	< 0.00001	0.0033	< 0.000003	9.89	0.0008	0.000154	0.0011	0.002	0.00005	< 0.001	0.312	0.011
25-May-10	17	500	430	7.10	379	57	#N/A	3.9	8.5	10	< 0.2	< 0.06	23.7	0.094	0.0004	0.0009	0.0009	< 0.00002	0.00001	0.0028	< 0.000003	9.03	< 0.0005	0.00002	0.0012	< 0.002	0.00135	< 0.001	0.27	0.011
01-Jun-10	18	500	425	7.14	362	55	#N/A	2.4	7.9	14	< 0.2	< 0.06	22.6	0.077	0.0003	0.0009	0.0006	< 0.00002	< 0.00001	0.0028	< 0.000003	8.61	0.0007	0.00003	0.0015	< 0.002	0.00128	< 0.001	0.27	0.011
08-Jun-10	19	500	490	7.08	362	69	#N/A	2.7	9.0	16	< 0.2	< 0.06	29.7	0.055	0.0006	0.0007	0.0006	< 0.00002	< 0.00001	0.0049	< 0.000003	11.40	< 0.0005	0.00001	0.001	< 0.002	0.00140	< 0.001	0.33	0.015
15-Jun-10	20	500	445	7.23	358	58	#N/A	2.8	7.2	15	< 0.2	< 0.06	24.0	0.076	0.0004	0.0007	0.0007	< 0.00002	< 0.00001	0.0034	< 0.000003	9.22	< 0.0005	0.000017	0.001	< 0.002	0.00004	< 0.001	0.24	0.012
22-Jun-10	21	500	430	7.25	429	55	#N/A	2.3	6.5																					
29-Jun-10	22	500	440	7.11	348	48	#N/A	2.2	5.8	8	< 0.2	< 0.06	18.4	0.056	< 0.0002	0.0005	0.0005	< 0.00002	< 0.00001	0.0025	0.000011	7.03	0.0008	0.0000	0.001	0.002	0.00003	< 0.001	0.210	0.010
06-Jul-10	23	500	450	6.99	366	50	#N/A	2.5	6.1																					
13-Jul-10	24	500	455	6.98	356	48	#N/A	2.7	5.9	8	< 0.2	< 0.06	17.4	0.051	0.0004	0.0008	0.00053	< 0.00002	< 0.00001	0.0028	< 0.000003	6.65	0.0006	0.000020	0.0012	< 0.002	< 0.00002	< 0.001	0.198	0.0105
20-Jul-10	25	500	450	7.22	351	46	#N/A	3.7	7.0																					
27-Jul-10	26	500	500	6.92	360	57	#N/A	3.2	7.5	16	< 0.2	< 0.06	25.5	0.03	0.0003	0.0005	0.0006	< 0.00002	< 0.00001	0.0037	< 0.000003	9.83	< 0.0005	0.000007	0.0008	< 0.002	< 0.00002	< 0.001	0.230	0.011
03-Aug-10	27	500	455	7.20	405	43	#N/A	2.9	5.8	9	< 0.2	< 0.06	17.9	0.04	0.0004	0.0004	0.00046	< 0.00002	< 0.00001	0.0044	0.000005	6.91	< 0.0005	0.0000	0.00	< 0.002	0.00003	< 0.001	0.159	0.009
10-Aug-10	28	500	455	7.41	376	41	#N/A	3.5	6.1	11	< 0.2	< 0.06	17.5	0.0426	< 0.0002	0.0013	0.00046	< 0.00002	< 0.00001	0.0047	< 0.000003	6.76	< 0.0005	0.000011	0.0007	< 0.002	< 0.00002	< 0.001	0.142	0.0074
17-Aug-10	29	500	450	7.35	395	43	#N/A	2.9	6.6	9	< 0.2	< 0.06	18.6	0.0571	0.0004	0.0006	0.00036	< 0.00002	< 0.00001	0.0031	< 0.000003	7.22	< 0.0005	< 0.000002	< 0.0005	< 0.002	0.00003	< 0.001	0.148	0.0009
24-Aug-10	30	500	445	7.10	358	40	#N/A	2.9	5.7	9	< 0.2	< 0.06	17.4	0.0430	0.0003	0.0009	0.00042	< 0.00002	< 0.00001	0.0031	< 0.000003	6.73	< 0.0005	0.000008	< 0.0005	< 0.002	0.00005	< 0.001	0.136	0.0072
31-Aug-10	31	500	470	7.41	399	37	#N/A	4.3	7.2	13	< 0.2	< 0.06	16.4	0.0364	0.0005	0.0004	0.00040	< 0.00002	< 0.00001	0.0025	< 0.000003	6.36	< 0.0005	0.000012	0.0006	< 0.002	0.00003	< 0.001	0.128	< 0.0002
07-Sep-10	32	500	435	6.77	383	39	#N/A	3.3	5.0	14	< 0.2	< 0.06	15.2	0.04	< 0.0002	0.0005	0.00036	< 0.00002	< 0.00001	0.0039	< 0.000003	5.89	0.0007	0.0000	0.00	0.003	0.00073	< 0.001	0.110	< 0.0002
14-Sep-10	33	500	435	6.73	376	33	#N/A	3.1	5.0	12	< 0.2	< 0.06	15.2	0.0335	0.0006	0.0005	0.00032	< 0.00002	< 0.00001	0.0024	< 0.000003	5.85	< 0.0005	0.000016	0.0009	0.002	0.00003	< 0.001	0.140	0.0105
21-Sep-10	34	500	435	6.90	344	31	#N/A	2.7	5.2	12	< 0.2	< 0.06	15.3	0.045	0.0004	0.0154	0.00108	< 0.00002	0.00004	0.0090	0.000006	5.89	< 0.0005	0.000064	0.0011	< 0.002	< 0.00002	< 0.001	0.14	0.0081
28-Sep-10	35	500	415	6.87	329	43	#N/A	2.2	4.9	17	< 0.2	< 0.06	16.5	0.0463	< 0.0002	0.0006	0.00050	< 0.00002	< 0.00001	0.0023	< 0.000003	6.38	< 0.0005	0.000019	0.0006	< 0.002	0.00008	< 0.001	0.142	0.0090
05-Oct-10	36	500	425	6.88	327	44	#N/A	2.9	5.2	14	< 0.2	< 0.06	17.3	0.0372	0.0004	0.0011	0.00072	< 0.00002	< 0.00001	0.0031	< 0.000003	6.68	< 0.0005	0.000045	< 0.0005	< 0.002	0.00005	< 0.001	0.154	0.0113
12-Oct-10	37	500	445	6.78	339	42	#N/A	2.7	4.4	14	< 0.2	< 0.06	17.9	0.0330	0.0009	0.0007	0.00051	< 0.00002	< 0.00001	0.0038	< 0.000003	6.91	< 0.0005	0.000035	0.0070	< 0.002	0.00017	< 0.001	0.162	0.0121
19-Oct-10	38	500	455	6.80	330	41	#N/A	3.1	4.9	13	< 0.2	< 0.06	16.2	0.0287	0.0002	0.0003	0.00299	< 0.00002	< 0.00001	0.0031	< 0.000003	6.27	< 0.0005	0.000016	< 0.0005	< 0.002	0.00003	< 0.001	0.128	0.0116
26-Oct-10	39	500	450	6.77	371	38	#N/A	2.6	4.1	11	< 0.2	< 0.06	14.5	0.0314	0.0010	0.0004	0.00040	< 0.00002	< 0.00001	0.0028	< 0.000003	5.60	0.0008	0.000015	0.0006	< 0.002	0.00011	< 0.001	0.13	0.0112
02-Nov-10	40	500	460	6.92	379	13	#N/A	2.0	4.3	12	< 0.2	< 0.06	16.6	0.0347	< 0.0002	0.0004	0.00056	< 0.00002	< 0.00001	0.0044	< 0.000003	6.43	< 0.0005	0.000013	0.0005	0.002	0.00043	< 0.001	0.139	0.0102
09-Nov-10	41	500	435	6.95	389	39	#N/A	2.9	4.3	12	< 0.2	< 0.06	18.4	0.0248	0.0004	0.0005	0.00049	< 0.00002	< 0.00001	0.0017	< 0.000003	7.10	0.0006	0.000036	0.0006	< 0.002	0.00063	< 0.001	0.162	0.0137
16-Nov-10	42	500	415	7.29	354	43	#N/A	3.1	4.2	11	< 0.2	< 0.06	16.3	0.0203	< 0.0002	0.0003	0.00047	< 0.00002	< 0.00001	0.0047	0.000004	6.28	0.0006	0.000030	0.0009	< 0.002	0.00095	< 0.001	0.15	0.0153
23-Nov-10	43	500	430	6.71	317	37	#N/A	2.2	4.2	10	< 0.2	< 0.06	14.0	0.0196	0.0003	0.0004	0.00046	< 0.00002	< 0.00001	0.0027	< 0.000003	5.41	0.0006	0.000041	0.0007	< 0.002	0.00007	< 0.001	0.114	0.0128
30-Nov-10	44	500	455	6.91	366	37	#N/A	3.2	5.2	5	< 0.2	< 0.06	15.0	0.0240	< 0.0002	0.0002	0.00043	< 0.00002	< 0.00001	0.0027	< 0.000003	5.77	< 0.0005	0.000019	0.0006	< 0.002	0.00003	< 0.001	0.144	0.0128
07-Dec-10	45	500	430	6.82	348	38	#N/A	3.0	4.1	6	< 0.2	< 0.06	18.3	0.0221	< 0.0002	0.0002	0.00067	< 0.00002	< 0.00001	0.0026	< 0.000003	7.06	0.0007	0.000033	0.0013	< 0.002	0.00160	< 0.001	0.161	0.0151
14-Dec-10	46	500	465	7.04	368	41	#N/A	3.9	4.5	12	< 0.2	< 0.06	16.5	0.0215	0.0002	0.0004	0.00042	< 0.00002	< 0.00001	0.0035	< 0.000003	6.37	0.0007	0.000023	0.0007	< 0.002	0.00089	< 0.001	0.140	0.0139
21-Dec-10	47	500	450	7.18	376	40	#N/A	4.6	4.8	11	< 0.2	< 0.06	16.6	0.0202	0.0003	0.0004	0.00041	< 0.00002	< 0.00001	0.0024	0.000007	6.41	0.0006	0.000029	0.0021	< 0.002	0.00047	< 0.001	0.138	0.0017
28-Dec-10	48	500	455	7.34	348	34	#N/A	4.7	5.2	11	< 0.2	< 0.06	16.1	0.0264	0.0003	0.0003	0.00039	< 0.00002	< 0.00001	0.0039	< 0.000003	6.21	0.0009	0.000021	0.0008	< 0.002	0.00236	< 0.001	0.143	0.0135
04-Jan-11	49	500	440	7.21	371	31	#N/A	4.3	4.9	10	< 0.2	< 0.06	13.7	0.0194	< 0.0002	0.0003	0.00035	< 0.00002	< 0.00001	0.0019	0.000005	5.26	< 0.0005	0.000021	0.0007	< 0.002	0.00093	< 0.001	0.14	0.0122
11-Jan-11	50	500	425	6.81	379	36	#N/A	2.8	3.6	11	< 0.2	< 0.06	15.7	0.0186	0.0002	< 0.0002	0.00041	< 0.00002	< 0.00001	0.0037	0.000003	6.06	< 0.0005	0.000030	< 0.0005	0.004	< 0.00002	< 0.001	0.150	0.0160
18-Jan-11	51	500	430	6.68	354	36	#N/A	2.9	3.3	11	< 0.2	< 0.06	15.1	0.0176	< 0.0002	0.0003	0.00040	< 0.00002	< 0.00001	0.0021	< 0.000003	5.79	< 0.0005	0.000031	< 0.0005	0.002	0.00004	< 0.001	0.145	0.0175
25-Jan-11	52	500	430	6.80	340	38	#N/A	3.4	3.5	13	< 0.2	< 0.06	14.5	0.0156	< 0.0002	0.0003	0.00046	< 0.00002	< 0.00001	0.0029	< 0.000003	5.56	< 0.0005	0.000036	< 0.0005	< 0.002	0.00004	< 0.001	0.140	0.0146
01-Feb-11	53	500	435	6.67	352	32	#N/A	3.0	3.4	9	< 0.2	< 0.06	13.9	0.0092	< 0.0002	0.0003	0.00095	< 0.00002	< 0.00001	0.0020	0.000007	5.33	< 0.0005	0.000041	0.0009	< 0.002	< 0.00002	< 0.001	0.146	0.0178
08-Feb-11	54	500	430	6.72	364	30	#N/A	2.5	2.8	13	< 0.2	< 0.06	14.6	0.0139	< 0.0002	0.0003	0.00032	< 0.00002	< 0.00001	0.0016	0.000004	5.60	< 0.0005	0.000034	< 0.0005	0.002	< 0.00002	< 0.001	0.154	0.0178
15-Feb-11	55	500	460	6.71	355	31	#N/A	2.9	2.7	4	< 0.2	< 0.06	13.4	0.0117	< 0.0002	< 0.0002	0.00030	< 0.00002	< 0.00001	0.0032	< 0.000003	5.15	< 0.0005	0.000040	< 0.0005	< 0.002	0.00138	< 0.001	0.140	0.0174
22-Feb-11	56	500	430	6.87	339	37	#N/A	3.1	3.4	16	< 0.2	< 0.06	15.2	0.0123	< 0.0002	0.0003	0.00040	< 0.00002	< 0.00001	0.0031	0.000008	5.87	< 0.0005	0.000047	0.0006	< 0.002	< 0.00002	< 0.001	0.141	0.0196
01-Mar-11	57	500	445	6.59	349	38	#N/A	2.3	2.7	17	< 1	< 0.06	15.2	0.0147	< 0.0002	0.0003	0.00031	< 0.00002	< 0.00001	0.0023	0.000003	5.82	< 0.0005	0.000036	0.0006	< 0.002	0.00113	< 0.001	0.152	0.0205
08-Mar-11	58	500	455	6.68	332	48	#N/A	3.0	3.6	13	< 1	< 0.06	19.3	0.0115	0.0002	< 0.0002	0.00081	< 0.00002	< 0.00001	0.0025	0.000007	7.44	< 0.0005	0.000053	0.0012	0.003	0.00084	< 0.001	0.182	0.0232
15-Mar-11	59	500	455	6.84	309	51	#N/A	3.1	3.3	11	< 0.2	< 0.06	20.3	0.0107	< 0.0002	0.0003	0.00051	< 0.00002	< 0.00001	0.0025	0.000025	7.82	< 0.0005	0.000057	0.0011	< 0.002	0.00079	< 0.001	0.193	0.0246
22-Mar-11	60	500	475	6.94	319	54	#N/A	3.2	3.3	15	< 0.2	< 0.06	20.2	0.0104	< 0.0002	0.0002	0.00087	< 0.00002	< 0.00001	0.0020	0.000007	7.82	< 0.0005	0.000048	0.0012	< 0.002	0.00005	< 0.001	0.169	0.0247
29-Mar-11	61	500	510	7.21	297	70	#N/A	3.6	5.7	21	< 0.2	< 0.06	31.4	0.0133	< 0.0002	0.0003	0.00067	< 0.00002	< 0.00001	0.0030	0.000006	12.1	< 0.0005	0.000047	0.0006	< 0.002	< 0.00002	< 0.001	0.274	0.0335
05-Apr-11	62	500	470	7.03	261	52	#N/A	3.5	4.6	15	< 0.2	< 0.06	20.9	0.0103	< 0.0002	< 0.0002	0.00048	< 0.00002	< 0.00001	0.0024	0.000005	8.09	< 0.0005	0.000043	0.0006	< 0.002	< 0.00002	< 0.001	0.178	0.0228
12-Apr-11	63	500	460	6.89	294	46	#N/A	2.5	3.6	15	< 0.2	< 0.06	18.6	0.0118	< 0.0002	0.0004	0.00041	< 0.00002	< 0.00001	0.0018	0.000004	7.14	< 0.0005	0.000044	0.0005	0.006	0.00003	< 0.001	0.199	0.0307
19-Apr-11	64	500	460	7.21	258	45	#N/A	4.7	4.9	16	< 0.2	< 0.06	18.0	0.0105	< 0.0002	< 0.0002	0.00048	< 0.00002	< 0.00001	0.0019	0.000060	6.90	< 0.0005	0.000061	< 0.0005	< 0.002	0.00088	< 0.001	0.179	0.0270
26-Apr-11	65	500	435	6.94	287	43	#N/A	2.7	2.9	13	< 0.2	< 0.06	17.5	0.0092	< 0.0002	0.0004	0.00041	< 0.00002	< 0.00001	0.0018	< 0.000003	6.70	< 0.0005	0.000043	< 0.0005	< 0.002	< 0.00002	< 0.001	0.181	0.0273
03-May-11	66	500	445	7.20	349	41	#N/A	3.4	3.2	13	< 0.2	< 0.06	16.4	0.0085	< 0.0002	< 0.0002	0.00040	< 0.00002	< 0.00001	0.0033	0.000006	6.28	< 0.0005	0.000061	0.0008	0.002	0.00004	< 0.001	0.177	0.0317
10-May-11	67	500	440	6.97	383	40	#N/A	3.2	2.4	12	< 0.2	< 0.06	15.1	0.0062	< 0.0002	0.0003	0.00043	< 0.00002	< 0.00001	0.0032	0.000004	5.76	< 0.0005	0.000088	0.0007	< 0.002	0.00005	< 0.001	0.183	0.0337
17-May-11	68	500	440	6.46	342	42	#N/A	3.6	1.6	14	< 0.2	< 0.06	14.8	0.0071	< 0.0002	0.0003	0.00051	< 0.00002	< 0.00001	0.0021	0.000015	5.61	< 0.0005	0.000093	< 0.0005	< 0.002	0.00004	< 0.001	0.188	0.0370
24-May-11	69	500	480	7.12	275	35	#N/A	4.2	2.4	10	< 0.2	< 0.06	13.5	0.0072	< 0.0002	< 0.0002	0.00048	< 0.00002	< 0.00001	0.0046	0.000013	5.11	< 0.0005	0.000079	0.0006	< 0.002	0.00004	< 0.001	0.180	0.0348
31-May-11	70	500	450	7.20	277	48	#N/A	4.4	3.0	14	< 0.2	< 0.06	16.5	0.0040	0.0002	0.0002	0.00060	< 0.00002	< 0.00001	0.0019	0.000019	6.18	< 0.0005	0.000184	< 0.0005	< 0.002	0.00004	< 0.001	0.254	0.0638
07-Jun-11	71	500	445	7.30	351	46	#N/A	3.6	2.3	12	< 0.2	< 0.06	18.8	0.0051	< 0.0002	< 0.0002	0.00087	< 0.00002	< 0.00001	0.0027	0.000025	6.98	< 0.0005	0.000179	0.0019	< 0.002	0.00008	< 0.001	0.330	0.0747
14-Jun-11	72	500	435	6.93	292	46	#N/A	2.9	1.5	14	< 0.2	< 0.06	17.8	0.0040	< 0.0002	0.0003	0.00075	< 0.00002	< 0.00001	0.0022	0.000020	6.60	< 0.0005	0.000190	0.0016	0.005	0.00009	< 0.001	0.315	0.0781
21-Jun-11	73	500	435	6.61	295	45	#N/A	2.6	1.9	18	< 0.2	< 0.06	17.9	0.0055	< 0.0002	0.0002	0.00080	< 0.00002	< 0.00001	0.0016	0.000023	6.58	< 0.0005	0.000217	0.0006	< 0.002	0.00013	< 0.001	0.359	0.0861
28-Jun-11	74	500	445	6.68	273	52	#N/A	3.4	2.1	18	< 0.2	< 0.06	20.3	0.0051	< 0.0002	0.0005	0.00093	< 0.00002	< 0.00001	0.0033	0.000030	7.48	< 0.0005	0.000263	0.0006	< 0.002	0.00012	< 0.001	0.399	0.113
05-Jul-11	75	500	495	6.73	320	72	#N/A	4.2	2.3	30	< 0.2	< 0.06	28.6	0.0051	< 0.0002	< 0.0002	0.00132	< 0.00002	< 0.00001	0.0059	0.000081	10.5	< 0.0005	0.000287	0.0014	< 0.002	0.00010	< 0.001	0.584	0.162
12-Jul-11	76	500	445	6.29	324	52	#N/A	4.0	1.7	20	< 0.2	< 0.06	23.3	0.0045	< 0.0002	0.0003	0.00104	< 0.00002	< 0.00001	0.0025	0.000031	8.57	< 0.0005	0.000323	0.0009	< 0.002	0.00017	< 0.001	0.472	0.132
19-Jul-11	77	500	450	6.87	342	48	#N/A	4.4	2.0	18	< 0.2	< 0.06	19.6	0.0088	< 0.0002	< 0.0002	0.00116	< 0.00002	< 0.00001	0.0032	0.000036	7.08	< 0.0005	0.000370	0.0013	< 0.002	0.00091	< 0.001	0.458	0.112
26-Jul-11	78	500	430	7.11	273	48	#N/A	5.1	2.0	18	< 0.2	< 0.06	16.8	0.0164	< 0.0002	0.0005	0.00140	< 0.00002	< 0.00001	0.0024	0.000041	6.01	< 0.0005	0.000545	0.0019	0.034	0.00036	< 0.001	0.427	0.151

HC 8 *CONFIDENTIAL* *DRAFT*

Sample = Alt 09 07

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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
02-Aug-11	79	500	455	6.32	283	51	#N/A	4.8	1.8	18	< 0.2	< 0.06	20.4	0.0131	< 0.0002	0.0002	0.00162	< 0.00002	< 0.00001	0.0026	0.000047	7.22	0.0007	0.000564	0.0012	< 0.002	0.00028	< 0.001	0.579	0.152
09-Aug-11	80	500	450	6.62	263	91	#N/A	4.2	2.2	39	< 0.2	< 0.06	39.3	0.0343	< 0.0002	< 0.0002	0.00218	< 0.00002	< 0.00001	0.0025	0.000072	14.7	0.0006	0.000728	0.0022	0.006	0.00055	< 0.001	0.643	0.173
16-Aug-11	81	500	435	7.04	278	82	#N/A	6.1	3.1	35	< 0.2	< 0.06	32.3	0.0587	< 0.0002	0.0003	0.00237	< 0.00002	< 0.00001	0.0026	0.000054	12.0	0.0008	0.000829	0.0069	0.005	0.00535	< 0.001	0.583	0.162
23-Aug-11	82	500	445	6.65	253	76	#N/A	5.3	2.2	29	< 0.2	< 0.06	31.0	0.0646	< 0.0002	< 0.0002	0.00333	< 0.00002	< 0.00001	0.0030	0.000068	11.2	0.0009	0.001106	0.0035	0.010	0.00066	0.001	0.713	0.218
30-Aug-11	83	500	430	6.56	301	69	#N/A	5.1	1.9	32	< 0.2	< 0.06	27.0	0.109	< 0.0002	0.0002	0.00426	< 0.00002	< 0.00001	0.0032	0.000115	9.54	0.0006	0.001395	0.0053	0.013	0.00920	0.001	0.774	0.247
06-Sep-11	84	500	435	6.18	351	61	#N/A	5.4	1.7	24	< 0.2	< 0.06	21.6	0.169	< 0.0002	< 0.0002	0.00534	< 0.00002	< 0.00001	0.0028	0.000263	7.23	0.0007	0.00165	0.0070	0.014	0.00197	0.001	0.850	0.259
13-Sep-11	85	500	445	5.87	364	66	#N/A	5.4	0.9	29	< 0.2	< 0.06	22.5	0.261	0.0002	< 0.0002	0.00674	0.00003	0.00002	0.0037	0.000147	7.43	0.0017	0.00221	0.0070	0.016	0.00495	0.001	0.946	0.288
20-Sep-11	86	500	455	5.51	363	66	#N/A	5.9	0.7	28	< 0.2	< 0.06	21.0	0.305	< 0.0002	0.0003	0.00750	< 0.00002	< 0.00001	0.0031	0.000135	6.87	0.0022	0.00237	0.0057	0.034	0.00326	0.001	0.925	0.274
27-Sep-11	87	500	445	5.46	409	66	#N/A	7.3	0.7	27	< 0.2	< 0.06	20.4	0.403	< 0.0002	0.0002	0.00852	0.00004	< 0.00001	0.0009	0.000158	6.64	0.0017	0.00284	0.0086	0.031	0.00358	0.002	0.931	0.266
04-Oct-11	88	500	520	5.93	372	51	#N/A	5.5	1.3	21	< 0.2	< 0.06	16.5	0.178	0.0011	0.0005	0.00741	0.00002	< 0.00001	0.0059	0.000108	5.66	0.0008	0.00178	0.0071	0.008	0.00273	0.002	0.575	0.190
11-Oct-11	89	500	445	5.68	354	58	#N/A	8.0	1.1	24	< 0.2	< 0.06	17.7	0.396	0.0009	< 0.0002	0.00800	0.00004	< 0.00001	0.0034	0.000151	6.03	0.0007	0.00276	0.0102	0.019	0.00406	0.002	0.642	0.196
18-Oct-11	90	500	440	5.04	398	68	#N/A	9.2	0.3	28	< 0.2	< 0.06	19.3	0.791	0.0004	< 0.0002	0.0114	0.00003	< 0.00001	0.0034	0.000191	6.45	0.0006	0.00459	0.0184	0.026	0.00505	0.002	0.778	0.220
25-Oct-11	91	500	435	4.99	401	69	#N/A	9.4	0.1	25	< 0.2	< 0.06	18.5	0.916	< 0.0002	0.0002	0.00996	0.00005	< 0.00001	0.0027	0.000181	6.14	0.0005	0.00537	0.0137	0.033	0.00556	0.002	0.776	0.207
01-Nov-11	92	500	440	4.92	384	75	#N/A	11.4	0.2	31	< 0.2	< 0.06	18.6	1.10	< 0.0002	0.0003	0.0111	0.00005	< 0.00001	0.0025	0.000188	6.08	0.0013	0.00670	0.0142	0.040	0.00675	0.003	0.844	0.208
08-Nov-11	93	500	440	4.94	412	73	#N/A	12.3	0.3	28	< 0.2	< 0.06	19.2	1.14	< 0.0002	< 0.0002	0.00875	0.00005	< 0.00001	0.0019	0.000170	6.21	< 0.0005	0.00786	0.0194	0.031	0.00441	0.003	0.892	0.199
15-Nov-11	94	500	440	4.86	396	72	#N/A	12.6	<0.1	29	< 0.2	< 0.06	16.5	1.19	< 0.0002	< 0.0002	0.00837	0.00006	< 0.00001	0.0022	0.000177	5.43	< 0.0005	0.00830	0.0200	0.026	0.00384	0.003	0.720	0.165
22-Nov-11	95	500	445	4.87	410	75	#N/A	14.2	<0.1	26	< 0.2	< 0.06	17.6	1.53	< 0.0002	0.0004	0.00864	0.00006	< 0.00001	0.0021	0.000240	5.63	< 0.0005	0.00971	0.0272	0.033	0.0217	0.003	0.855	0.185
29-Nov-11	96	500	440	4.86	464	73	#N/A	17.0	<0.1	31	< 0.2	< 0.06	16.3	1.54	< 0.0002	< 0.0002	0.00882	0.00006	< 0.00001	0.0026	0.000183	5.24	< 0.0005	0.0111	0.0284	0.029	0.00291	0.004	0.786	0.174
06-Dec-11	97	500	435	4.80	452	70	#N/A	14.0	<0.1	24	< 0.2	< 0.06	15.4	1.43	< 0.0002	0.0002	0.00788	0.00006	< 0.00001	0.0018	0.000200	4.98	< 0.0005	0.0103	0.0296	0.031	0.00533	0.003	0.710	0.172
13-Dec-11	98	500	440	4.95	400	66	#N/A	13.6	0.3	27	< 0.2	< 0.06	15.5	1.38	< 0.0002	0.0002	0.00803	0.00007	< 0.00001	0.0018	0.000184	4.99	0.0011	0.0108	0.0375	0.033	0.00234	0.003	0.735	0.205
20-Dec-11	99	500	435	4.80	401	76	#N/A	15.5	<0.1	29	< 0.2	< 0.06	15.0	1.62	< 0.0002	0.0006	0.00842	0.00004	< 0.00001	0.0019	0.000236	4.84	< 0.0005	0.0119	0.0415	0.031	0.00935	0.004	0.709	0.211
27-Dec-11	100	500	440	4.75	450	78	#N/A	16.6	<0.1	29	< 0.2	< 0.06	15.7	1.74	< 0.0002	0.0008	0.00817	0.00005	< 0.00001	0.0024	0.000261	4.99	< 0.0005	0.0135	0.0468	0.034	0.00273	0.004	0.783	0.246
03-Jan-12	101	500	440	4.64	419	82	#N/A	17.4	<0.1	33	< 0.2	< 0.06	16.6	1.69	< 0.0002	0.0008	0.00814	0.00006	< 0.00001	0.0030	0.000217	5.33	< 0.0005	0.0141	0.0553	0.034	0.00228	0.004	0.802	0.277
10-Jan-12	102	500	445	4.66	422	79	#N/A	14.7	<0.1	25	< 0.2	< 0.06	15.2	1.68	< 0.0002	< 0.0002	0.00784	0.00006	< 0.00001	0.0023	0.000328	4.91	< 0.0005	0.0140	0.0585	0.032	0.00220	0.004	0.712	0.262
17-Jan-12	103	500	440	4.55	428	78	#N/A	15.5	<0.1	30	< 0.2	< 0.06	16.1	1.98	< 0.0002	0.0002	0.00691	0.00007	< 0.00001	0.0033	0.000208	5.37	< 0.0005	0.0141	0.0567	0.036	0.00239	0.004	0.655	0.246
24-Jan-12	104	500	475	4.57	517	84	#N/A	16.3	<0.1	35	< 0.2	< 0.06	14.2	1.91	< 0.0002	0.0002	0.00649	0.00007	< 0.00001	0.0021	0.000194	4.60	< 0.0005	0.014	0.0651	0.039	0.00201	0.004	0.658	0.248
31-Jan-12	105	500	440	4.45	446	83	1.4	16.5	#N/A	31	< 0.2	< 0.06	12.9	1.69	< 0.0002	0.0003	0.00707	0.00007	< 0.00001	0.0025	0.000397	4.21	< 0.0005	0.0131	0.0747	0.037	0.00822	0.004	0.591	0.218
07-Feb-12	106	500	490	4.37	482	129	2.7	23.6	#N/A	56	< 0.2	0.06	25.8	2.93	< 0.0002	< 0.0002	0.0110	0.00009	< 0.00001	0.0032	0.000323	8.73	< 0.0005	0.0216	0.101	0.049	0.00246	0.005	0.959	0.367
14-Feb-12	107	500	435	4.51	533	88	#N/A	19.4	<0.1	33	< 0.2	< 0.06	16.0	2.00	< 0.0002	0.0003	0.00700	0.00006	< 0.00001	0.0015	0.000388	5.46	< 0.0005	0.0127	0.0818	0.035	0.00287	0.004	0.564	0.193
21-Feb-12	108	500	435	4.54	479	89	#N/A	19.0	<0.1	34	< 0.2	< 0.06	15.2	2.39	< 0.0002	0.0002	0.00622	0.00006	< 0.00001	0.0041	0.000328	5.18	< 0.0005	0.0119	0.0881	0.037	0.00171	0.004	0.546	0.197
28-Feb-12	109	500	435	4.42	532	97	2.7	21.8	#N/A	36	< 0.2	< 0.06	15.8	3.18	< 0.0002	< 0.0002	0.00658	0.00008	< 0.00001	0.0024	0.000200	5.40	< 0.0005	0.0138	0.0936	0.054	0.00173	0.004	0.573	0.213
06-Mar-12	110	500	440	4.45	517	101	3.2	26.1	#N/A	39	< 0.2	0.06	14.5	4.89	< 0.0002	< 0.0002	0.00592	0.00009	< 0.00001	0.0018	0.000254	4.88	< 0.0005	0.0139	0.122	0.048	0.00516	0.004	0.559	0.190
13-Mar-12	111	500	435	4.33	529	100	4.7	27.5	#N/A	39	< 0.2	< 0.06	15.3	3.20	< 0.0002	< 0.0002	0.00661	0.00009	< 0.00001	0.0020	0.000202	5.22	< 0.0005	0.0136	0.120	0.047	0.00156	0.004	0.554	0.188
20-Mar-12	112	500	465	4.30	487	123	6.3	34.5	#N/A	48	< 0.2	< 0.06	17.6	3.95	< 0.0002	0.0009	0.00677	0.00012	< 0.00001	0.0026	0.000278	5.92	< 0.0005	0.0185	0.150	0.066	0.00161	0.005	0.694	0.238
27-Mar-12	113	500	450	4.33	487	121	5.4	31.7	#N/A	47	< 0.2	< 0.06	18.6	4.24	< 0.0002	0.0008	0.00675	0.00009	< 0.00001	0.0024	0.000230	6.51	< 0.0005	0.0146	0.128	0.057	0.00423	0.004	0.576	0.206
03-Apr-12	114	500	450	4.22	516	114	6.0	30.0	#N/A	45	< 0.2	< 0.06	16.8	3.23	< 0.0002	< 0.0002	0.00631	0.00008	< 0.00001	0.0021	0.000289	5.85	< 0.0005	0.0143	0.124	0.058	0.00285	0.004	0.533	0.182
10-Apr-12	115	500	450	4.23	468	123	6.4	31.7	#N/A	49	< 0.2	< 0.06	16.5	3.97	< 0.0002	< 0.0002	0.00672	0.00011	< 0.00001	0.0028	0.000291	5.71	< 0.0005	0.0147	0.125	0.077	0.00158	0.004	0.547	0.190
17-Apr-12	116	500	445	4.25	485	122	6.3	31.6	#N/A	49	< 0.2	< 0.06	16.0	4.19	< 0.0002	< 0.0002	0.00557	0.00010	< 0.00001	0.0021	0.000184	5.53	< 0.0005	0.0145	0.112	0.069	0.00149	0.004	0.535	0.185
24-Apr-12	117	500	435	4.25	556	115	6.1	28.5	#N/A	45	< 0.2	< 0.06	15.2	3.37	< 0.0002	< 0.0002	0.00578	0.00008	< 0.00001	0.0018	0.000143	5.29	< 0.0005	0.0130	0.103	0.070	0.00136	0.004	0.486	0.168
01-May-12	118	500	430	4.26	464	125	9.2	37.6	#N/A	58	< 0.2	< 0.06	14.7	3.78	< 0.0002	< 0.0002	0.00450	0.00010	< 0.00001	0.0016	0.000171	4.95	< 0.0005	0.0156	0.116	0.083	0.00193	0.004	0.580	0.206
08-May-12	119	500	430	4.20	507	122	8.6	33.0	#N/A	42	< 0.2	< 0.06	14.0	3.35	< 0.0002	< 0.0002	0.00478	0.00009	< 0.00001	0.0029	0.000172	4.78	< 0.0005	0.0136	0.107	0.094	0.00694	0.004	0.500	0.180
15-May-12	120	500	425	4.13	483	129	9.1	33.1	#N/A	47	< 0.2	< 0.06	14.9	3.95	< 0.0002	< 0.0002	0.00484	0.00010	< 0.00001	0.0022	0.000209	5.08	< 0.0005	0.0139	0.111	0.094	0.00889	0.004	0.529	0.187
22-May-12	121	500	515	4.15	477	155	8.9	34.5	#N/A	55	< 0.2	< 0.06	27.6	4.08	< 0.0002	< 0.0002	0.00484	0.00010	< 0.00001	0.0020	0.000150	10.3	0.0009	0.0134	0.0923	0.083	0.00177	0.004	0.497	0.174
29-May-12	122	500	440	4.10	489	121	8.0	33.0	#N/A	45	< 0.2	< 0.06	13.7	3.80	< 0.0002	< 0.0002	0.00372	0.00009	< 0.00001	0.0025	0.000140	4.76	< 0.0005	0.0123	0.0789	0.082	0.00110	0.003	0.451	0.157
05-Jun-12	123	500	425	4.47	480	109	2.1	26.6	#N/A	39	< 0.2	< 0.06	14.6	3.87	< 0.0002	< 0.0002	0.00482	0.00009	< 0.00001	0.0030	0.000222	5.08	0.0005	0.0117	0.0965	0.092	0.00200	0.003	0.464	0.158
12-Jun-12	124	500	435	4.06	504	149	11.6	39.4	#N/A	51	< 0.2	< 0.06	18.7	4.63	< 0.0002	< 0.0002	0.00530	0.00010	< 0.00001	0.0027	0.000175	6.59	0.0009	0.0150	0.0889	0.143	0.00126	0.004	0.541	0.191
19-Jun-12	125	500	430	3.98	502	174	16.0	53.0	#N/A	59	< 1	0.07	17.0	6.12	< 0.0002	0.0003	0.00459	0.00014	< 0.00001	0.0024	0.000240	5.61	0.0014	0.0201	0.115	0.165	0.00183	0.005	0.734	0.250
26-Jun-12	126	500	435	4.04	495	158	13.8	45.5	#N/A	62	< 0.2	< 0.06	19.1	5.20	< 0.0002	< 0.0002	0.00484	0.00012	< 0.00001	0.0033	0.000207	6.69	0.0012	0.016023	0.0971	0.138	0.00139	0.004	0.588	0.193
03-Jul-12	127	500	430	4.14	540	159	13.0	44.9	#N/A	56	< 1	< 0.06	21.2	4.91	< 0.0002	0.0002	0.00412	0.00010	< 0.00001	0.0016	0.000214	7.58	0.0010	0.0145	0.0748	0.123	0.00118	0.003	0.560	0.185
10-Jul-12	128	500	430	3.97	478	197	19.5	48.4	#N/A	78	< 0.2	0.08	34.6	5.80	< 0.0002	0.0007	0.00500	0.00010	< 0.00001	0.0025	0.000225	12.7	0.0012	0.0162	0.0883	0.139	0.00318	0.004	0.694	0.220
17-Jul-12	129	500	500	4.12	509	184	6.6	24.1	#N/A	69	< 0.2	< 0.06	47.1	2.86	< 0.0002	< 0.0002	0.00504	0.00005	< 0.00001	0.0031	0.000141	18.3	0.0006	0.00890	0.0423	0.065	0.00125	0.002	0.348	0.113
24-Jul-12	130	500	445	4.04	492	177	10.4	38.0	#N/A	67	0.2	0.06	31.9	3.86	< 0.0002	0.0008	0.00485	0.00009	< 0.00001	0.0022	0.000187	11.9	0.0013	0.0136	0.0641	0.102	0.00139	0.003	0.520	0.168
31-Jul-12	131	500	440	4.05	505	130	7.8	27.1	#N/A	44	< 0.2	< 0.06	21.2	2.69	< 0.0002	< 0.0002	0.00374	0.00005	< 0.00001	0.0018	0.000136	7.95	0.0006	0.00877	0.0412	0.082	0.00082	0.002	0.335	0.115
07-Aug-12	132	500	440	4.08	477	136	9.2	31.0	#N/A	49	< 0.2	< 0.06	23.5	2.77	< 0.0002	0.0010	0.00468	0.00006	< 0.00001	0.0026	0.000166	8.75	0.0006	0.00935	0.0490	0.078	0.00414	0.002	0.392	0.127
14-Aug-12	133	500	440	3.94	463	277	15.8	48.6	#N/A	124	< 0.2	0.09	67.4	6.22	< 0.0002	0.0004	0.00518	0.00011	< 0.00001	0.0023	0.000278	25.8	0.0017	0.0175	0.0779	0.162	0.00724	0.004	0.725	0.224
21-Aug-12	134	500	445	4.07	473	160	8.2	32.5	#N/A	55	< 0.2	< 0.06	33.3	3.64	< 0.0002	0.0017	0.00392	0.00007	< 0.00001	0.0025	0.000151	12.7	0.0007	0.00991	0.0410	0.078	0.00101	0.002	0.377	0.123
28-Aug-12	135	500	440	4.14	517	121	7.4	26.1	#N/A	32	< 0.2	< 0.06	20.1	2.14	< 0.0002	< 0.0002	0.00439	0.00003	< 0.00001	0.0110	0.000302	7.72	0.0011	0.00616	0.0328	0.088	0.00093	0.001	0.214	0.0780
04-Sep-12	136	500	435	4.04	526	139	10.3	35.1	#N/A	50	< 0.2	< 0.06	21.0	4.23	< 0.0002	0.0006	0.00368	0.00007	< 0.00001	0.0024	0.000159	7.81	0.0007	0.0103	0.0424	0.087	0.00076	0.002	0.363	0.121
11-Sep-12	137	500	455	4.04	519	146	10.7	35.2	#N/A	50	< 0.2	0.07	19.0	4.66	< 0.0002	< 0.0002	0.00343	0.00007	< 0.00001	0.0020	0.000231	6.89	0.0011	0.0121	0.0648	0.108	0.00279	0.002	0.429	0.139
18-Sep-12	138	500	440	4.10	485	135	7.7	28.1	#N/A	51	< 0.2	0.07	20.9	3.52	< 0.0002	0.0005	0.00407	0.00006	< 0.00001	0.0025	0.000138	7.76	0.0008	0.00835	0.0319	0.080	0.00070	0.002	0.371	0.109
25-Sep-12	139	500	440	4.11	471	133	5.6	24.8	#N/A	50	< 0.2	< 0.06	25.6	2.67	< 0.0002	0.0011	0.00341	0.00005	< 0.00001	0.0026	0.000164	9.66	0.0006	0.00829	0.0471	0.059	0.00142	0.002	0.356	0.104
02-Oct-12	140	500	440	4.23	504	103	4.1	17.9	#N/A	34	< 0.2	< 0.06	20.3	1.47	< 0.0002	0.0004	0.00314	0.00002	< 0.00001	0.0029	0.000091	7.79	< 0.0005	0.00508	0.0234	0.031	0.00080	0.001	0.209	0.0676
09-Oct-12	141	500	440	4.13	479	146	6.0	27.8	#N/A	57	< 0.2	0.06	30.3	2.90	< 0.0002	0.0004	0.00358	0.00005	< 0.00001	0.0025	0.000139	11.6	< 0.0005	0.00735	0.0299	0.044	0.00106	0.002	0.321	0.0993
16-Oct-12	142	500	425	4.15	535	129	4.1	19.5	#N/A	49	< 0.2	< 0.06	30.2	2.21	< 0.0002	< 0.0002	0.00336	0.00003	< 0.00001	0.0025	0.000091	11.7	< 0.0005	0.00584	0.0230	0.034	0.00053	0.001	0.232	0.0726
23-Oct-12	143	500	435	4.17	467	113	3.7	19.9	#N/A	43	< 0.2	< 0.06	22.3	2.17	< 0.0002	< 0.0002	0.00308	< 0.00002	< 0.00001	0.0013	0.000105	8.54	< 0.0005	0.00558	0.0268	0.029	0.00716	0.001	0.239	0.0756
30-Oct-12	144	500	435	4.05	478	130	7.7	28.3	#N/A	52	< 0.2	< 0.06	25.7	3.32	< 0.0002	0.0002	0.00371	0.00006	< 0.00001	0.0032	0.00118	9.64	< 0.0005	0.00888	0.0365	0.048	0.00179	0.002	0.406	0.118
06-Nov-12	145	500	440	4.25	475	84	2.9	16.0	#N/A	26	< 0.2	< 0.06	17.7	1.61	< 0.0002	0.0002	0.00363	0.00003	< 0.00001	0.0029	0.000087	6.75	< 0.0005	0.00510	0.0228	0.020	0.00099	< 0.001	0.197	0.0687
13-Nov-12	146	500	435	4.33	484	75	3.2	19.2	#N/A	22	< 0.2	< 0.06	12.1	1.35	< 0.0002	< 0.0002	0.00418	< 0.00002	< 0.00001	0.0026	0.000068	4.55	< 0.0005	0.00495	0.0181	0.021	0.00131	< 0.001	0.172	0.0617
20-Nov-12	147	500	505	4.41	551	92	4.0	22.6	#N/A	29	< 0.2	< 0.06	13.1	2.14	< 0.0002	0.0003	0.00604	0.00004	< 0.00001	0.0046	0.000110	4.85	0.0007	0.00699	0.0253	0.029	0.00065	0.001	0.229	0.0889
27-Nov-12	148	500	490	4.28	474	144	5.2	24.0	#N/A	55	< 0.2	< 0.06	28.3	2.45	< 0.0002	0.0003	0.00528	0.00003	< 0.00001	0.0037	0.000126	11.0	< 0.0005	0.00811	0.0277	0.060	0.00101	< 0.001	0.227	0.0942
04-Dec-12	149	500	440	4.22	453	101	3.5	20.4	#N/A	39	< 0.2	< 0.06	16.0	2.49	< 0.0002	< 0.0002	0.00321	0.00004	< 0.00001	0.0019	0.000215	6.12	< 0.0005	0.00609	0.0409	0.068	0.00095	< 0.001	0.183	0.0751
11-Dec-12	150	500	450	4.30	450	86	3.0	17.4	#N/A	25	< 0.2	< 0.06	10.1	1.83	< 0.0002	< 0.0002	0.00320	0.00003	< 0.00001	0.0028	0.000135	3.81	< 0.0005	0.00587	0.0298	0.052	0.00045	< 0.001	0.132	0.0597
18-Dec-12	151	500	455	4.24	453	75	3.3	17.1	#N/A	24	< 0.2	< 0.06	8.34	1.86	< 0.0002	< 0.0002	0.00306	0.00003	< 0.00001	0.0018	0.000109	3.12	< 0.0005	0.00524	0.0180	0.053	0.00033	< 0.001	0.131	0.0611
25-Dec-12	152	500	450	4.21	468	86	4.8	21.9	#N/A	29	< 0.2	< 0.06	8.87	2.40	< 0.0002	< 0.0002	0.00281	0.00003	< 0.00001	0.0018	0.000104	3.25	< 0.0005	0.00704	0.0226	0.088	0.00034	< 0.001	0.185	0.0735
01-Jan-13	153	500	470	4.15	509	90	5.4	21.7	#N/A	29	< 0.2	< 0.06	8.33	2.23	< 0.0002	< 0.0002	0.00308	0.00003	< 0.00001	0.0020	0.000132	3.08	0.0005	0.00649	0.0219	0.073	0.00058	< 0.001	0.154	0.0692
08-Jan-13	154	500	455	4.13	468	93	5.8	23.7	#N/A	31	< 0.2	< 0.06	9.17	2.17	< 0.0002	< 0.0002	0.00498	0.00003	< 0.00001	0.0019	0.000303	3.43	< 0.0005	0.00659	0.0219	0.087	0.00063	< 0.001	0.148	0.0654
15-Jan-13	155	500	465	4.09	462	89	4.4	17.6	#N/A	29	< 0.2	< 0.06	7.68	2.04	< 0.0002	< 0.0002	0.00309	< 0.00002	< 0.00001	0.0014	0.000096	2.84	< 0.0005	0.00598	0.0191	0.058	0.00051	< 0.001	0.141	0.0639
22-Jan-13	156	500	460	3.94	466	117	11.0	32.6	#N/A	44	< 0.2	< 0.06	10.5	3.68	< 0.0002	0.0004	0.00374	0.00004	< 0.00001	0.0022	0.000154	3.86	0.0007	0.00918	0.0293	0.204	0.00061	0.001	0.219	0.0931
29-Jan-13	157	500	495	3.82	469	174	12.8	39.1	#N/A	67	< 0.2	0.11	25.3	5.64	< 0.0002	0.0002	0.00585	0.00005	< 0.00001	0.0026	0.000161	9.57	0.0010	0.0126	0.0429	0.600	0.00106	0.001	0.338	0.140
05-Feb-13	158	500	455	3.97	478	123	12.6	33.9	#N/A	47																				
12-Feb-13	159	500	460	3.88	486	145	16.8	44.5	#N/A	54																				

Apr 20/10 Al, Mo,

HC 8
Sample = Alt 09 07

Date	Cycle	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L					
02-Feb-10	1	< 0.01	0.00303	0.0006	< 0.01	8.27	0.00047	1.18	< 0.00001	11.5	0.0760	23.5	< 0.0002	0.00020	0.0001	0.000029	0.00025	0.001	0.00004		1.64	1.83	0.19	5.5%
09-Feb-10	2	< 0.01	0.00363	0.0002	< 0.01	5.91	0.00041	0.91	< 0.00001	7.94	0.0758	19.8	< 0.0002	< 0.00001	< 0.0001	0.000083	0.00020	< 0.001	0.00003		1.37	1.61	0.23	7.8%
16-Feb-10	3	0.03	0.00260	0.0005	< 0.01	4.22	0.00039	0.98	< 0.00001	4.20	0.0580	15.3	< 0.0002	0.00003	< 0.0001	0.000134	0.00029	< 0.001	0.00004		1.22	1.21	-0.01	-0.3%
23-Feb-10	4	< 0.01	0.00101	0.0001	< 0.01	2.28	0.00013	0.84	< 0.00001	1.60	0.0422	10.1	< 0.0002	0.00003	< 0.0001	0.000073	0.00023	< 0.001	0.00001		0.84	0.86	0.02	1.2%
02-Mar-10	5	< 0.01	0.00072	0.0001	< 0.01	1.60	0.00008	0.63	< 0.00001	1.07	0.0315	8.76	< 0.0002	0.00009	< 0.0001	0.000067	0.00021	< 0.001	0.00001		0.68	0.66	-0.01	-1.0%
09-Mar-10	6	< 0.01	0.00055	< 0.0001	< 0.01	1.43	0.00009	0.66	< 0.00001	0.80	0.0307	8.12	< 0.0002	0.00041	0.0001	0.000054	0.00020	< 0.001	0.00002		0.56	0.65	0.09	7.0%
16-Mar-10	7	< 0.01	0.00051	0.0002	< 0.01	1.22	0.00005	0.71	< 0.00001	0.66	0.0250	7.12	< 0.0002	0.00008	< 0.0001	0.000054	0.00021	< 0.001	< 0.00001		0.48	0.59	0.10	9.5%
23-Mar-10	8	< 0.01	0.00043	0.0002	< 0.01	1.04	0.00005	0.66	< 0.00001	0.53	0.0247	6.9	< 0.0002	0.00003	< 0.0001	0.000071	0.00018	< 0.001	< 0.00001		0.62	0.57	-0.05	-4.4%
30-Mar-10	9	< 0.01	0.00044	0.0002	< 0.01	1.05	0.00006	0.59	< 0.00001	0.50	0.0252	7.43	< 0.0002	0.00003	< 0.0001	0.000072	0.00018	< 0.001	< 0.00001		0.70	0.61	-0.09	-6.8%
06-Apr-10	10	0.01	0.00034	< 0.0001	< 0.01	0.78	< 0.00004	0.69	< 0.00001	0.39	0.0230	7.46	< 0.0002	0.00007	< 0.0001	0.000083	0.00019	< 0.001	< 0.00001		0.55	0.57	0.03	2.3%
13-Apr-10	11	< 0.01	0.00042	< 0.0001	< 0.01	0.79	0.00011	0.65	< 0.00001	0.44	0.0228	6.96	< 0.0002	0.00021	0.0001	0.000090	0.00018	< 0.001	< 0.00001		0.66	0.57	-0.09	-6.9%
20-Apr-10	12	< 0.01	0.00037	0.0001	< 0.01	0.766	0.00004	0.57	< 0.00001	0.34	0.0207	7.04	< 0.0002	0.00015	< 0.0001	0.000075	0.00022	0.001	0.00001		0.59	0.54	-0.05	-4.3%
27-Apr-10	13	< 0.01	0.00039	0.0001	< 0.01	0.67	0.00010	0.58	< 0.00001	0.37	0.0181	5.98	< 0.0002	0.00010	< 0.0001	0.000070	0.00017	< 0.001	0.00002		0.56	0.50	-0.07	-6.2%
04-May-10	14	< 0.01	0.00038	< 0.0001	< 0.01	0.61	0.00008	0.59	< 0.00001	0.39	0.0177	5.39	< 0.0002	0.00013	< 0.0001	0.000062	0.0002	< 0.001	< 0.00001		0.57	0.50	-0.06	-6.0%
11-May-10	15	< 0.01	0.00037	< 0.0001	0.02	0.60	0.00005	0.65	0.00002	0.26	0.0170	5.94	< 0.0002	0.00023	< 0.0001	0.000068	0.00026	< 0.001	< 0.00001		0.44	0.48	0.04	4.9%
18-May-10	16	< 0.01	0.00048	< 0.0001	< 0.009	0.602	0.00010	0.67	< 0.00001	0.27	0.0183	6.39	< 0.0002	0.00028	0.0001	0.000051	0.00025	< 0.001	< 0.00001		0.55	0.55	0.00	-0.4%
25-May-10	17	< 0.01	0.00027	< 0.0001	< 0.009	0.51	< 0.00004	0.59	< 0.00001	0.26	0.0164	6.49	< 0.0002	0.00024	< 0.0001	0.000048	0.00024	< 0.002	< 0.00001		0.38	0.50	0.12	13.7%
01-Jun-10	18	0.01	0.00022	< 0.0001	< 0.009	0.47	0.00011	0.55	< 0.00001	0.24	0.0159	5.95	< 0.0002	0.00019	< 0.0001	0.000042	0.00022	< 0.001	< 0.00001		0.45	0.47	0.02	2.7%
08-Jun-10	19	< 0.01	0.00029	< 0.0001	0.016	0.44	0.00004	0.73	< 0.00001	0.23	0.0203	8.18	< 0.0002	0.00012	< 0.0001	0.000124	0.00019	< 0.001	< 0.00001		0.51	0.62	0.10	9.1%
15-Jun-10	20	< 0.01	0.00030	< 0.0001	< 0.009	0.37	< 0.00004	0.55	0.00002	0.23	0.0158	6.47	< 0.0002	0.00031	< 0.0001	0.000058	0.00022	< 0.001	< 0.00001		0.46	0.50	0.04	4.5%
22-Jun-10	21																							
29-Jun-10	22	< 0.01	0.00029	< 0.0001	< 0.009	0.338	< 0.00004	0.49	< 0.00001	0.20	0.0122	4.84	< 0.0002	0.00042	< 0.0001	0.00005	0.00014	0.001	< 0.00001		0.28	0.39	0.10	15.3%
06-Jul-10	23																							
13-Jul-10	24	< 0.01	0.00028	0.0002	0.015	0.34	0.00004	0.52	< 0.00001	0.19	0.0121	5.46	< 0.0002	0.00043	< 0.0001	0.000069	0.00018	< 0.001	0.00004		0.29	0.36	0.08	12.3%
20-Jul-10	25																							
27-Jul-10	26	< 0.01	0.00010	< 0.0001	< 0.009	0.306	< 0.00004	0.70	< 0.00001	0.21	0.0156	6.5	< 0.0002	0.00024	< 0.0001	0.00010	0.00017	< 0.001	< 0.00001		0.48	0.53	0.04	4.2%
03-Aug-10	27	< 0.01	0.00015	0.0002	0.020	0.256	< 0.00004	0.45	< 0.00001	0.16	0.0106	4.5	< 0.0002	0.00013	< 0.0001	0.00006	0.00014	< 0.001	0.00001		0.30	0.37	0.07	10.2%
10-Aug-10	28	< 0.01	0.00010	0.0002	< 0.009	0.242	0.00011	0.50	< 0.00001	0.14	0.0103	4.23	< 0.0002	< 0.00001	< 0.0001	0.000039	0.00018	< 0.001	< 0.00001		0.35	0.36	0.01	1.4%
17-Aug-10	29	< 0.01	0.00014	< 0.0001	< 0.009	0.260	< 0.00004	0.57	< 0.00001	0.16	0.0105	6.45	< 0.0002	0.00012	< 0.0001	0.000050	0.00020	< 0.001	< 0.00001		0.32	0.39	0.07	9.5%
24-Aug-10	30	< 0.01	0.00007	0.0002	< 0.009	0.225	< 0.00004	0.51	< 0.00001	0.16	0.0093	4.57	< 0.0002	0.00007	< 0.0001	0.000041	0.00017	0.003	< 0.00001		0.30	0.36	0.06	8.9%
31-Aug-10	31	< 0.01	0.00005	< 0.0001	< 0.009	0.204	0.00008	0.50	< 0.00001	0.13	0.0081	4.56	< 0.0002	0.00001	< 0.0001	0.000042	0.00017	< 0.001	< 0.00001		0.42	0.34	-0.08	-10.2%
07-Sep-10	32	< 0.01	0.00005	0.0001	< 0.009	0.212	< 0.00004	0.48	< 0.00001	0.14	0.0050	4.1	< 0.0002	0.0001	< 0.0001	0.00003	0.00023	0.001	< 0.00001		0.39	0.31	-0.08	-11.0%
14-Sep-10	33	< 0.01	0.00034	0.0002	< 0.009	0.207	< 0.00004	0.49	< 0.00001	0.17	0.0093	3.99	< 0.0002	0.00052	< 0.0001	0.000032	0.00013	< 0.001	< 0.00001		0.35	0.32	-0.03	-5.1%
21-Sep-10	34	< 0.01	0.01534	0.0007	0.010	0.247	0.00071	0.50	0.00003	0.16	0.0091	4.23	< 0.0002	0.00014	< 0.0001	0.122000	0.00021	0.001	< 0.00001		0.35	0.32	-0.03	-5.1%
28-Sep-10	35	< 0.01	0.00018	< 0.0001	< 0.009	0.243	< 0.00004	0.51	< 0.00001	0.17	0.0097	4.82	< 0.0002	0.00035	< 0.0001	0.000030	0.00018	0.001	< 0.00001		0.45	0.34	-0.11	-13.6%
05-Oct-10	36	< 0.01	0.00031	< 0.0001	< 0.009	0.250	< 0.00004	0.55	< 0.00001	0.18	0.0104	5.02	< 0.0002	0.00070	< 0.0001	0.000022	0.00017	< 0.001	0.00001		0.39	0.36	-0.03	-4.6%
12-Oct-10	37	< 0.01	0.00020	0.0004	< 0.009	0.208	< 0.00004	0.57	< 0.00001	0.18	0.0111	4.78	< 0.0002	0.00069	< 0.0001	0.000015	0.00016	0.003	< 0.00001		0.38	0.37	-0.01	-1.1%
19-Oct-10	38	< 0.01	0.00004	< 0.0001	< 0.009	0.185	0.00005	0.50	< 0.00001	0.14	0.0095	4.40	< 0.0002	0.00005	< 0.0001	0.000026	0.00014	0.002	< 0.00001	CA14822-OCT10	0.37	0.33	-0.03	-4.8%
26-Oct-10	39	< 0.01	0.00006	0.0004	< 0.009	0.170	0.00152	0.40	< 0.00001	0.15	0.0082	4.47	< 0.0002	< 0.00001	< 0.0001	0.000023	0.00015	0.003	< 0.00001	CA11459-OCT10	0.31	0.30	-0.01	-1.6%
02-Nov-10	40	< 0.01	0.00003	0.0006	< 0.009	0.183	< 0.00004	0.54	< 0.00001	0.18	0.0096	4.59	< 0.0002	0.00005	< 0.0001	0.000024	< 0.00003	< 0.001	< 0.00001	CA11315-NOV10	0.34	0.34	0.01	1.4%
09-Nov-10	41	< 0.01	0.00011	0.0003	0.044	0.213	< 0.00004	0.48	< 0.00001	0.20	0.0106	4.95	< 0.0002	0.00026	< 0.0001	0.00221	0.00013	0.001	< 0.00001	CA11435-NOV10	0.34	0.38	0.05	6.4%
16-Nov-10	42	< 0.01	0.00009	0.0002	< 0.009	0.202	< 0.00004	0.44	< 0.00001	0.15	0.0094	4.57	< 0.0002	0.00018	< 0.0001	0.000027	0.00010	0.003	< 0.00001	CA10265-NOV10	0.31	0.34	0.02	3.8%
23-Nov-10	43	< 0.01	0.00017	< 0.0001	< 0.009	0.164	0.00023	0.47	< 0.00001	0.12	0.0081	3.46	< 0.0002	0.00018	< 0.0001	0.000026	0.00013	0.002	< 0.00001	CA11701-NOV10	0.29	0.29	0.00	-0.5%
30-Nov-10	44	< 0.01	0.00021	0.0004	< 0.009	0.164	0.00004	0.49	< 0.00001	0.16	0.0084	4.07	< 0.0002	0.00020	< 0.0001	0.000044	0.00016	0.002	0.00002	CA14008-DEC10	0.21	0.31	0.10	19.6%
07-Dec-10	45	< 0.01	0.00019	0.0002	0.016	0.173	< 0.00004	0.47	< 0.00001	0.15	0.0087	4.18	< 0.0002	0.00025	< 0.0001	0.000036	0.00013	0.003	< 0.00001	CA14206-DEC10	0.21	0.38	0.17	29.2%
14-Dec-10	46	< 0.01	0.00021	0.0004	< 0.009	0.150	0.00008	0.48	< 0.00001	0.14	0.0091	4.21	< 0.0002	0.00023	< 0.0001	0.000038	0.00014	0.003	< 0.00001	CA10970-DEC10	0.34	0.34	0.00	0.0%
21-Dec-10	47	< 0.01	< 0.00001	0.0002	0.018	0.151	< 0.00004	0.48	< 0.00001	0.13	0.0079	4.33	< 0.0002	0.00015	0.0001	0.000029	0.00011	0.002	< 0.00001	CA10453-DEC10	0.32	0.34	0.02	2.5%
28-Dec-10	48	0.01	0.00005	0.0001	0.024	0.161	< 0.00004	0.49	< 0.00001	0.15	0.0089	5.04	< 0.0002	0.00014	< 0.0001	0.000020	0.00013	0.002	< 0.00001	CA10140-JAN11	0.33	0.33	0.00	-0.1%
04-Jan-11	49	< 0.01	0.00002	0.0002	0.026	0.143	< 0.00004	0.45	< 0.00001	0.15	0.0066	3.81	< 0.0002	0.00005	< 0.0001	0.000021	0.00011	0.002	< 0.00001	CA10880-JAN11	0.31	0.28	-0.02	-3.6%
11-Jan-11	50	< 0.01	0.00005	0.0002	< 0.009	0.157	< 0.00004	0.43	< 0.00001	0.15	0.0087	4.43	< 0.0002	0.00029	< 0.0001	0.000018	0.00011	< 0.001	0.00001	CA14437-JAN11	0.30	0.33	0.02	3.7%
18-Jan-11	51	< 0.01	< 0.00001	< 0.0001	0.030	0.162	< 0.00004	0.48	< 0.00001	0.14	0.0084	4.36	< 0.0002	0.00020	< 0.0001	0.000016	0.00010	< 0.001	0.00002	CA10982-JAN11	0.29	0.31	0.02	2.7%
25-Jan-11	52	< 0.01	0.00002	0.0003	< 0.009	0.141	< 0.00004	0.46	< 0.00001	0.16	0.0080	4.04	< 0.0002	0.00033	< 0.0001	0.000022	0.00011	< 0.001	< 0.00001	CA11047-JAN11	0.34	0.30	-0.04	-6.3%
01-Feb-11	53	< 0.01	0.00002	0.0003	0.053	0.139	< 0.00004	0.41	< 0.00001	0.13	0.0077	5.38	< 0.0002	0.00002	< 0.0001	0.000012	0.00009	< 0.001	< 0.00001	CA14121-FEB11	0.25	0.29	0.03	6.0%
08-Feb-11	54	< 0.01	0.00001	< 0.0001	< 0.009	0.136	< 0.00004	0.49	< 0.00001	0.12	0.0079	4.14	< 0.0002	0.00045	< 0.0001	0.000014	0.00008	< 0.001	< 0.00001	CA14249-FEB11	0.33	0.30	-0.03	-4.3%
15-Feb-11	55	< 0.01	0.00012	0.0002	0.027	0.139	< 0.00004	0.47	< 0.00001	0.11	0.0070	3.80	< 0.0002	0.00023	< 0.0001	0.000016	< 0.00003	< 0.001	< 0.00001	CA14449-FEB11	0.14	0.28	0.14	33.7%
22-Feb-11	56	< 0.01	0.00003	< 0.0001	< 0.009	0.145	< 0.00004	0.51	0.00001	0.13	0.0083	4.19	< 0.0002	< 0.00001	< 0.0001	0.000012	0.00008	0.001	< 0.00001	CA14656-FEB11	0.40	0.31	-0.09	-12.2%
01-Mar-11	57	0.01	0.00002	0.0002	< 0.009	0.102	< 0.00004	0.50	< 0.00001	0.13	0.0081	4.38	< 0.0002	0.00019	< 0.0001	0.000014	0.00009	< 0.001	< 0.00001	CA14060-MAR11	0.41	0.31	-0.10	-13.6%
08-Mar-11	58	< 0.01	0.00007	0.0001	0.013	0.126	< 0.00004	0.53	< 0.00001	0.14	0.0103	5.53	< 0.0002	0.00023	0.0001	0.000017	0.00009	0.002	< 0.00001	CA14274-MAR11	0.34	0.40	0.05	7.3%
15-Mar-11	59	< 0.01	0.00004	0.0004	0.024	0.130	< 0.00004	0.58	< 0.00001	0.15	0.0108	5.58	< 0.00002	0.00022	< 0.0001	0.000019	0.00008	0.005	< 0.00001	CA14457-MAR11	0.29	0.42	0.12	17.1%
22-Mar-11	60	< 0.01	< 0.00001	0.0001	< 0.009	0.110	0.00004	0.62	< 0.00001	0.11	0.0109	5.99	< 0.0002	0.00025	< 0.0001	0.000014	0.00008	< 0.001	< 0.00001	CA10460-MAR11	0.38	0.41	0.03	4.2%
29-Mar-11	61	< 0.01	< 0.00001	0.0003	0.025	0.153	< 0.00004	0.83	< 0.00001	0.16	0.0157	9.45	< 0.0002	0.00011	0.0001	0.000034	0.00009	< 0.001	< 0.00001	CA14922-MAR11	0.55	0.64	0.09	7.2%
05-Apr-11	62	< 0.01	0.00004	0.0003	< 0.009	0.130	< 0.00004	0.65	< 0.00001	0.13	0.0111	6.28	< 0.0002	0.00011	< 0.0001	0.000019	0.00008	0.001	< 0.00001	CA14224-APR11	0.40	0.43	0.02	2.8%
12-Apr-11	63	< 0.01	0.00010	< 0.0001	< 0.009	0.125	0.00019	0.63	< 0.00001	0.14	0.0098	5.69	< 0.0002	0.00006	< 0.0001	0.000015	0.00011	0.001	< 0.00001	CA14457-APR11	0.38	0.38	0.00	-0.2%
19-Apr-11	64	< 0.01	0.00021	0.0002	0.038	0.125	0.00041	0.66	< 0.00001	0.14	0.0098	5.36	< 0.0002	0.00009	< 0.0001	0.000016	0.00013	0.008	< 0.00001	CA11358-APR11	0.43	0.37	-0.06	-7.8%
26-Apr-11	65	0.01	< 0.00001	0.0005	0.021	0.134	< 0.00004	0.56	< 0.00001	0.14	0.0096	5.31	< 0.0002	< 0.00001	< 0.0001	0.000009	0.00007	< 0.001	< 0.00001	CA14943-APR11	0.33	0.36	0.03	4.4%
03-May-11	66	< 0.01	0.00003	0.0002	< 0.009	0.127	0.00034	0.64	< 0.00001	0.13	0.0094	5.07	< 0.0002	< 0.00001	< 0.0001	0.000010	0.00004	0.001	< 0.00001	CA14148-MAY11	0.34	0.34	0.00	0.2%
10-May-11	67	< 0.01	0.00001	0.0004	< 0.009	0.134	< 0.00004	0.50	< 0.00001	0.14	0.0088	4.92	< 0.0002	0.00011	0.0002	0.000012	< 0.00003	0.002	< 0.00001	CA14441-MAY11	0.30	0.31	0.01	2.2%
17-May-11	68	< 0.01	0.00002	0.0002	0.034	0.133	< 0.00004	0.53	0.00002	0.15	0.0087	4.71	< 0.0002	0.00013	< 0.0001	0.000015	0.00005	0.004	< 0.00001	CA14703-MAY11	0.32	0.31	-0.02	-2.9%
24-May-11	69	< 0.01	< 0.00001	< 0.0001	< 0.009	0.132	< 0.00004	0.73	< 0.00001	0.13	0.0084	4.19	< 0.0002	0.00012	< 0.0001	0.000013	0.00005	0.002	< 0.00001	CA13762-MAY11	0.26	0.28	0.02	4.1%
31-May-11	70	< 0.01	0.00002	< 0.0001	< 0.009	0.147	0.00018	0.77	< 0.00001	0.16	0.0110	5.24	< 0.0002	0.00013	0.0001	0.000012	< 0.00003	0.002	< 0.00001	CA10185-JUN11	0.35	0.34	-0.01	-1.4%
07-Jun-11	71	0.01	< 0.00001	0.0004	0.016	0.173	0.00010	0.79	< 0.00001	0.23	0.0122	6.37	< 0.00002	0.00017	0.0002	0.000007	< 0.00003	0.003	< 0.00001	CA14355-JUN11	0.30	0.39	0.10	14.1%
14-Jun-11	72	< 0.01	0.00004	0.0006	< 0.009	0.162	0.00021	0.78	< 0.00001	0.22	0.0121	5.89	< 0.00002	0.00016	< 0.0001	0.000019	0.00003	0.003	< 0.00001	CA10349-JUN11	0.32	0.37	0.05	7.4%
21-Jun-11	73	0.01	< 0.00001	0.0002	0.012	0.179	< 0.00004	0.69	< 0.00001	0.18	0.0129	5.87	< 0.00002	0.00012	0.0001	0.000022	< 0.00003	0.004	< 0.00001	CA14777-JUN11	0.41	0.37	-0.04	-5.1%
28-Jun-11	74	0.01	0.00016	0.0005	< 0.009	0.183	< 0.00004	0.91	< 0.00001	0.18	0.0149	6.61	< 0.00002	0.00002	< 0.0001	0.000027	< 0.00003	0.003	< 0.00001	CA15123-JUN11	0.42	0.42	0.01	0.7%
05-Jul-11	75	< 0.01	0.00004	0.0007	< 0.009	0.186	0.00019	1.56	< 0.00001	0.27	0.0208	9.39	< 0.00002	0.00011	0.0002	0.000022	< 0.00003	0.007	< 0.00001	CA15472-JUL11	0.67	0.59	-0.08	-6.0%
12-Jul-11	76	0.01	0.00021	0.0005	< 0.009	0.202	0.00006	1.08	< 0.00001	0.20	0.0175	7.57	< 0.00002	0.00008	0.0001	0.000032	< 0.00003	0.002	< 0.00001	CA15694-JUL11	0.45	0.49	0.03	3.7%
19-Jul-11	77	< 0.01	0.00001	0.0007	0.014	0.190	0.00026	0.82	< 0.00001	0.24	0.0155	6.59	< 0.00002	0.00014	0.0001	0.000037	0.00003	0.003	0.00005	CA16180-JUL11	0.42	0.41	-0.01	-0.7%
26-Jul-11	78	< 0.01	0.00039	0.0009	0.014	0.185	< 0.00004	0.75	< 0.00001	0.16	0.0167	5.43	< 0.00002	< 0.00001	0.0004	0.000053	< 0.00003	0.003	< 0.00001	CA11330-JUL11	0.41	0.35	-0.06	-8.1%

HC 8
Sample = Alt 09 07

Date	Cycle	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L					
02-Aug-11	79	0.01	0.00003	0.0006	< 0.009	0.240	0.00009	1.10	< 0.00001	0.23	0.0179	6.85	< 0.00002	0.00003	< 0.0001	0.000054	< 0.00003	0.003	< 0.00001	CA14200-AUG11	0.41	0.43	0.02	2.3%
09-Aug-11	80	< 0.01	0.00015	0.0008	< 0.009	0.254	< 0.00004	1.11	< 0.00001	0.25	0.0304	13.6	< 0.00002	< 0.00001	0.0001	0.000089	< 0.00003	0.004	< 0.00001	CA14411-AUG11	0.86	0.81	-0.05	-2.7%
16-Aug-11	81	< 0.01	0.00004	0.0009	< 0.009	0.242	< 0.00004	0.89	< 0.00001	0.25	0.0268	11.5	< 0.00002	0.00008	< 0.0001	0.000101	< 0.00003	0.004	< 0.00001	CA14675-AUG11	0.79	0.67	-0.12	-8.3%
23-Aug-11	82	< 0.01	0.00005	0.0012	< 0.009	0.284	< 0.00004	1.15	< 0.00001	0.28	0.0303	10.7	< 0.00002	0.00012	< 0.0001	0.000141	< 0.00003	0.007	< 0.00001	CA10450-AUG11	0.65	0.64	0.00	-0.2%
30-Aug-11	83	0.01	0.00002	0.0018	< 0.009	0.294	< 0.00004	0.98	< 0.00001	0.30	0.0309	9.52	< 0.00002	0.00011	0.0002	0.000185	< 0.00003	0.010	< 0.00001	CA14264-SEP11	0.71	0.58	-0.12	-9.6%
06-Sep-11	84	< 0.01	0.00061	0.0020	< 0.009	0.302	< 0.00004	0.96	< 0.00001	0.30	0.0276	8.25	< 0.00002	0.00004	0.0001	0.000240	< 0.00003	0.023	< 0.00001	CA14213-SEP11	0.53	0.48	-0.05	-5.4%
13-Sep-11	85	< 0.01	0.00004	0.0019	< 0.009	0.327	0.00026	1.21	< 0.00001	0.33	0.0299	8.79	< 0.00002	0.00021	0.0002	0.000278	< 0.00003	0.012	0.00004	CA17321-SEP11	0.62	0.51	-0.11	-9.8%
20-Sep-11	86	< 0.01	0.00009	0.0022	< 0.009	0.340	< 0.00004	1.07	< 0.00001	0.33	0.0281	9.13	< 0.00002	0.00039	< 0.0001	0.000288	< 0.00003	0.011	0.00002	CA14825-SEP11	0.60	0.49	-0.11	-10.3%
27-Sep-11	87	0.01	0.00004	0.0032	< 0.009	0.368	< 0.00004	1.09	< 0.00001	0.37	0.0288	8.84	< 0.00002	0.00015	0.0001	0.000346	< 0.00003	0.014	0.00002	CA18921-SEP11	0.58	0.49	-0.09	-8.4%
04-Oct-11	88	< 0.01	0.00006	0.0020	< 0.009	0.234	< 0.00004	1.32	< 0.00001	0.22	0.0200	6.48	< 0.00002	0.00019	0.0002	0.000180	< 0.00003	0.008	< 0.00001	CA14153-OCT11	0.46	0.37	-0.09	-10.9%
11-Oct-11	89	< 0.01	0.00003	0.0029	< 0.009	0.268	< 0.00004	1.12	< 0.00001	0.25	0.0224	7.28	< 0.00002	0.00006	0.0001	0.000299	< 0.00003	0.013	0.00001	CA14391-OCT11	0.52	0.42	-0.10	-10.6%
18-Oct-11	90	< 0.01	0.00008	0.0042	< 0.009	0.322	0.00009	1.20	< 0.00001	0.31	0.0245	8.99	< 0.00002	0.00004	0.0001	0.000437	< 0.00003	0.020	< 0.00001	CA14788-OCT11	0.59	0.50	-0.09	-7.9%
25-Oct-11	91	0.01	0.00001	0.0041	< 0.009	0.332	0.00008	1.05	< 0.00001	0.34	0.0223	8.62	< 0.00002	0.00009	0.0001	0.000521	< 0.00003	0.019	< 0.00001	CA14955-OCT11	0.52	0.51	-0.01	-0.9%
01-Nov-11	92	0.01	0.00004	0.0047	< 0.009	0.350	0.00017	1.21	< 0.00001	0.35	0.0216	8.91	< 0.00002	0.00013	0.0002	0.000607	< 0.00003	0.023	0.00002	CA18036-NOV11	0.65	0.54	-0.11	-9.3%
08-Nov-11	93	< 0.01	< 0.00001	0.0047	< 0.009	0.356	0.00008	1.10	< 0.00001	0.41	0.0206	9.62	< 0.00002	0.00002	0.0002	0.000563	0.00010	0.024	< 0.00001	CA18264-NOV11	0.59	0.56	-0.03	-2.9%
15-Nov-11	94	< 0.01	< 0.00001	0.0046	< 0.009	0.314	0.00025	0.93	< 0.00001	0.36	0.0164	8.51	< 0.00002	0.00005	0.0004	0.000593	0.00020	0.028	< 0.00001	CA18499-NOV11	0.60	0.51	-0.10	-8.8%
22-Nov-11	95	0.01	< 0.00001	0.0053	< 0.009	0.313	0.00031	1.27	< 0.00001	0.32	0.0172	9.34	< 0.00002	< 0.00001	0.0002	0.000654	0.00008	0.041	< 0.00001	CA18773-NOV11	0.54	0.56	0.02	2.0%
29-Nov-11	96	< 0.01	0.00013	0.0056	< 0.009	0.343	0.00023	1.23	< 0.00001	0.39	0.0162	9.23	< 0.00002	0.00008	0.0005	0.000584	0.00027	0.036	< 0.00001	CA12006-NOV11	0.65	0.54	-0.10	-8.6%
06-Dec-11	97	0.01	0.00001	0.0045	< 0.009	0.308	0.00017	1.07	0.00007	0.34	0.0144	8.87	< 0.00002	< 0.00001	0.0002	0.000625	0.00015	0.037	< 0.00001	CA14293-DEC11	0.50	0.51	0.01	1.0%
13-Dec-11	98	0.01	0.00003	0.0050	0.012	0.308	0.00031	1.30	< 0.00001	0.41	0.0148	8.79	< 0.00002	0.00011	0.0001	0.000607	< 0.00003	0.039	0.00010	CA14475-DEC11	0.57	0.51	-0.06	-5.6%
20-Dec-11	99	< 0.01	< 0.00001	0.0058	< 0.009	0.289	0.00075	1.20	< 0.00001	0.35	0.0141	9.03	0.00002	< 0.00001	0.0002	0.000607	0.00011	0.052	< 0.00001	CA10397-DEC11	0.60	0.53	-0.08	-6.9%
27-Dec-11	100	< 0.01	0.00004	0.0066	< 0.009	0.288	< 0.00004	1.30	< 0.00001	0.39	0.0144	9.53	< 0.00002	< 0.00001	0.0004	0.000674	0.00020	0.050	< 0.00001	CA10466-DEC11	0.60	0.56	-0.05	-4.0%
03-Jan-12	101	< 0.01	0.00001	0.0070	< 0.009	0.303	0.00008	1.30	< 0.00001	0.39	0.0157	10.1	< 0.00002	0.00003	0.0003	0.000669	0.00034	0.049	< 0.00001	CA14133-JAN12	0.69	0.58	-0.11	-8.7%
10-Jan-12	102	< 0.01	< 0.00001	0.0069	< 0.009	0.275	0.00016	1.30	< 0.00001	0.39	0.0146	9.36	< 0.00002	< 0.00001	0.0002	0.000639	0.00036	0.057	< 0.00001	CA14430-JAN12	0.52	0.55	0.02	2.3%
17-Jan-12	103	< 0.01	0.00001	0.0068	< 0.009	0.263	0.00017	1.28	< 0.00001	0.37	0.0146	9.77	< 0.00002	0.00002	0.0003	0.000750	0.00022	0.050	< 0.00001	CA11226-JAN12	0.63	0.60	-0.02	-1.9%
24-Jan-12	104	< 0.01	< 0.00001	0.0066	< 0.009	0.271	0.00022	1.19	< 0.00001	0.40	0.0137	9.68	< 0.00002	0.00004	0.0002	0.000754	0.00023	0.051	< 0.00001	CA10502-JAN12	0.73	0.56	-0.17	-13.1%
31-Jan-12	105	0.01	0.00004	0.0059	< 0.009	0.248	0.00012	1.07	0.00001	0.41	0.0128	9.13	< 0.00002	0.00008	0.0002	0.000832	0.00033	0.085	< 0.00001	CA10999-FEB12	0.65	0.52	-0.13	-10.9%
07-Feb-12	106	< 0.01	< 0.00001	0.0105	< 0.009	0.332	0.00028	3.34	< 0.00001	0.56	0.0238	15.5	< 0.00002	< 0.00001	0.0005	0.001207	0.00020	0.076	< 0.00001	CA14207-FEB12	1.17	0.93	-0.23	-11.0%
14-Feb-12	107	< 0.01	< 0.00001	0.0060	< 0.009	0.224	0.00016	1.07	< 0.00001	0.42	0.0161	10.1	< 0.00002	< 0.00001	0.0001	0.000863	< 0.00003	0.076	< 0.00001	CA14420-FEB12	0.69	0.61	-0.08	-6.2%
21-Feb-12	108	< 0.01	< 0.00001	0.0056	< 0.009	0.238	0.00021	1.14	< 0.00001	0.45	0.0158	10.6	< 0.00002	< 0.00001	0.0001	0.000843	0.00010	0.045	< 0.00001	CA14754-FEB12	0.71	0.64	-0.07	-5.4%
28-Feb-12	109	< 0.01	0.00002	0.0065	< 0.009	0.243	0.00014	1.20	< 0.00001	0.44	0.0171	11.2	< 0.00002	0.00003	0.0003	0.000886	0.00027	0.049	< 0.00001	CA14931-FEB12	0.75	0.75	0.00	-0.2%
06-Mar-12	110	< 0.01	< 0.00001	0.0071	< 0.009	0.251	0.00008	1.38	< 0.00001	0.49	0.0156	12.4	< 0.00002	0.00001	0.0003	0.00108	0.00022	0.054	< 0.00001	CA14216-MAR12	0.81	0.91	0.10	5.6%
13-Mar-12	111	0.01	0.00006	0.0063	< 0.009	0.225	0.00019	1.29	0.00001	0.50	0.0167	11.7	< 0.00002	0.00030	< 0.0001	0.001047	< 0.00003	0.044	< 0.00001	CA14408-MAR12	0.81	0.75	-0.06	-4.1%
20-Mar-12	112	< 0.01	0.00004	0.0086	< 0.009	0.260	0.00020	2.26	< 0.00001	0.60	0.0196	15.0	< 0.00002	0.00016	< 0.0001	0.00124	< 0.00003	0.060	< 0.00001	CA14687-MAR12	1.00	0.89	-0.11	-5.7%
27-Mar-12	113	< 0.01	< 0.00001	0.0071	< 0.009	0.209	0.00013	2.09	< 0.00001	0.56	0.0194	14.6	< 0.00002	< 0.00001	0.0002	0.00132	0.00019	0.048	< 0.00001	CA14874-MAR12	0.98	0.93	-0.04	-2.3%
03-Apr-12	114	< 0.01	< 0.00001	0.0067	< 0.009	0.221	0.00008	2.02	< 0.00001	0.56	0.0185	14.3	< 0.00002	< 0.00001	0.0001	0.00107	0.00011	0.051	< 0.00001	CA14169-APR12	0.94	0.80	-0.14	-8.0%
10-Apr-12	115	0.03	< 0.00001	0.0070	< 0.009	0.211	0.00024	2.22	< 0.00001	0.62	0.0197	14.6	< 0.00002	0.00005	0.0002	0.00108	0.00022	0.042	< 0.00001	CA11095-APR12	1.02	0.88	-0.14	-7.5%
17-Apr-12	116	0.01	< 0.00001	0.0069	< 0.009	0.204	0.00018	1.53	< 0.00001	0.54	0.0189	14.5	< 0.00002	< 0.00001	0.0001	0.00115	0.00015	0.036	< 0.00001	CA14686-APR12	1.02	0.88	-0.14	-7.1%
24-Apr-12	117	0.01	0.00058	0.0060	< 0.009	0.213	0.00015	1.04	< 0.00001	0.53	0.0191	13.2	< 0.00002	< 0.00001	0.0004	0.00121	0.00032	0.033	< 0.00001	CA14876-APR12	0.94	0.78	-0.16	-9.4%
01-May-12	118	< 0.01	< 0.00001	0.0072	< 0.009	0.207	0.00024	1.27	< 0.00001	0.62	0.0190	15.5	< 0.00002	0.00003	0.0002	0.00139	0.00022	0.037	< 0.00001	CA14088-MAY12	1.21	0.82	-0.39	-19.2%
08-May-12	119	< 0.01	< 0.00001	0.0065	< 0.009	0.213	0.00008	1.14	< 0.00001	0.60	0.0185	14.4	< 0.00002	0.00022	< 0.0001	0.00132	0.00013	0.039	< 0.00001	CA14348-MAY12	0.88	0.76	-0.11	-6.8%
15-May-12	120	0.01	< 0.00001	0.0067	< 0.009	0.205	0.00016	1.14	< 0.00001	0.63	0.0210	14.4	< 0.00002	< 0.00001	0.0001	0.00136	0.00016	0.044	< 0.00001	CA14621-MAY12	0.98	0.86	-0.12	-6.5%
22-May-12	121	0.01	< 0.00001	0.0064	< 0.009	0.188	0.00025	1.02	< 0.00001	0.58	0.0342	19.1	< 0.00002	0.00003	0.0001	0.00121	0.00029	0.028	< 0.00001	CA10508-MAY12	1.15	1.12	-0.02	-0.9%
29-May-12	122	0.01	< 0.00001	0.0056	< 0.009	0.178	0.00028	1.41	< 0.00001	0.54	0.0203	13.9	< 0.00002	0.00012	0.0001	0.00116	0.00020	0.025	< 0.00001	CA15134-MAY12	0.94	0.82	-0.12	-6.8%
05-Jun-12	123	0.01	0.00007	0.0053	< 0.009	0.182	0.00016	1.11	< 0.00001	0.62	0.0227	14.8	< 0.00002	< 0.00001	0.0002	0.00126	0.00024	0.025	< 0.00001	CA15137-JUN12	0.81	0.80	-0.01	-0.6%
12-Jun-12	124	0.01	< 0.00001	0.0072	< 0.009	0.230	0.00033	1.86	< 0.00001	0.74	0.0267	17.7	< 0.00002	0.00030	0.0001	0.00130	0.00018	0.029	< 0.00001	CA15174-JUN12	1.06	1.03	-0.03	-1.4%
19-Jun-12	125	< 0.01	< 0.00001	0.0095	< 0.009	0.273	0.00019	1.35	< 0.00001	0.89	0.0266	21.1	< 0.00002	0.00017	0.0001	0.00199	0.00026	0.037	0.00001	CA15309-JUN12	1.23	1.19	-0.03	-1.4%
26-Jun-12	126	0.01	0.00001	0.0078	< 0.009	0.231	0.00039	1.53	< 0.00001	0.88	0.0306	19.1	< 0.00002	0.00006	0.0002	0.00168	0.00031	0.031	< 0.00001	CA15357-JUN12	1.29	1.12	-0.18	-7.3%
03-Jul-12	127	0.01	0.00027	0.0070	< 0.009	0.189	0.00016	1.11	< 0.00001	0.77	0.0347	19.5	< 0.00002	0.00021	0.0003	0.00150	0.00021	0.026	0.00001	CA15021-JUL12	1.17	1.10	-0.07	-3.0%
10-Jul-12	128	0.01	0.00002	0.0081	< 0.009	0.267	0.00027	1.03	< 0.00001	1.01	0.0494	25.1	< 0.00002	0.00012	< 0.0001	0.00161	0.00012	0.028	< 0.00001	CA15118-JUL12	1.63	1.51	-0.11	-3.5%
17-Jul-12	129	< 0.01	< 0.00001	0.0044	< 0.009	0.140	0.00026	1.04	0.00002	0.52	0.0633	24.0	< 0.00002	< 0.00001	0.0004	0.000987	0.00026	0.015	< 0.00001	CA15186-JUL12	1.44	1.37	-0.06	-2.3%
24-Jul-12	130	0.01	0.00001	0.0065	< 0.009	0.183	0.00064	1.50	< 0.00001	0.83	0.0478	22.8	< 0.00002	0.00002	< 0.0001	0.00132	0.00012	0.021	< 0.00001	CA15302-JUL12	1.40	1.21	-0.18	-7.0%
31-Jul-12	131	< 0.01	< 0.00001	0.0041	< 0.009	0.128	0.00013	1.34	< 0.00001	0.62	0.0344	15.2	< 0.00002	0.00004	< 0.0001	0.00104	0.00021	0.014	< 0.00001	CA15010-AUG12	0.92	0.85	-0.06	-3.5%
07-Aug-12	132	0.01	< 0.00001	0.0048	< 0.009	0.139	0.00018	1.05	< 0.00001	0.67	0.0387	16.4	< 0.00002	0.00010	0.0002	0.00116	0.00042	0.024	< 0.00001	CA15071-AUG12	1.02	0.90	-0.12	-6.0%
14-Aug-12	133	< 0.01	< 0.00001	0.0086	< 0.009	0.205	0.00054	1.25	< 0.00001	1.11	0.102	39.7	< 0.00002	0.00013	0.0002	0.00197	0.00020	0.027	< 0.00001	CA15151-AUG12	2.58	2.23	-0.35	-7.3%
21-Aug-12	134	0.01	0.00028	0.0050	< 0.009	0.121	0.00021	1.12	< 0.00001	0.63	0.0526	20.2	< 0.00002	0.00071	0.0002	0.00116	0.00027	0.017	< 0.00001	CA15239-AUG12	1.15	1.20	0.05	2.2%
28-Aug-12	135	< 0.01	0.00271	0.0038	< 0.009	0.089	0.00005	1.23	< 0.00001	0.44	0.0352	12.4	< 0.00002	0.00085	0.0002	0.001014	0.00039	0.024	0.00001	CA15348-AUG12	0.67	0.74	0.08	5.5%
04-Sep-12	136	0.06	0.00041	0.0085	< 0.009	0.118	0.00022	1.04	< 0.00001	0.70	0.0373	16.0	< 0.00002	0.00034	0.0001	0.00130	0.00029	0.017	< 0.00001	CA15317-SEP12	1.04	1.03	-0.02	-0.7%
11-Sep-12	137	0.01	< 0.00001	0.0053	< 0.009	0.131	0.00012	1.26	< 0.00001	0.77	0.0330	18.1	< 0.00002	0.00017	0.0001	0.00165	0.00011	0.018	< 0.00001	CA15405-SEP12	1.04	1.04	0.00	-0.1%
18-Sep-12	138	< 0.01	0.00001	0.0039	< 0.009	0.131	0.00016	0.84	< 0.00001	0.69	0.0371	15.8	< 0.00002	0.00012	< 0.0001	0.00116	0.00026	0.021	< 0.00001	CA15559-SEP12	1.06	0.93	-0.13	-6.5%
25-Sep-12	139	< 0.01	< 0.00001	0.0060	< 0.009	0.120	0.00015	1.03	< 0.00001	0.57	0.0384	16.1	< 0.00002	0.00018	< 0.0001	0.00103	0.00015	0.016	< 0.00001	CA15670-SEP12	1.04	0.92	-0.12	-6.0%
02-Oct-12	140	< 0.01	0.00025	0.0025	< 0.009	0.097	0.00005	1.03	< 0.00001	0.41	0.0311	11.8	< 0.00002	0.00042	0.0001	0.000674	0.00010	0.009	0.00001	CA15354-OCT12	0.71	0.65	-0.05	-4.0%
09-Oct-12	141	< 0.01	< 0.00001	0.0039	< 0.009	0.122	0.00020	1.11	< 0.00001	0.62	0.0504	17.3	< 0.00002	0.00013	0.0001	0.00101	0.00012	0.012	< 0.00001	CA15450-OCT12	1.19	1.04	-0.15	-6.6%
16-Oct-12	142	< 0.01	< 0.00001	0.0029	< 0.009	0.092	0.00009	0.71	< 0.00001	0.50	0.0454	15.7	< 0.00002	0.00010	< 0.0001	0.000741	0.00014	0.009	< 0.00001	CA15570-OCT12	1.02	0.95	-0.07	-3.6%
23-Oct-12	143	< 0.01	0.00007	0.0031	< 0.009	0.085	0.00026	0.75	< 0.00001	0.45	0.0363	12.8	< 0.00002	0.00002	0.0001	0.000705	0.00010	0.013	< 0.00001	CA15652-OCT12	0.90	0.78	-0.11	-6.7%
30-Oct-12	144	< 0.01	0.00002	0.0045	< 0.009	0.119	0.00024	0.74	< 0.00001	0.73	0.0481	17.2	< 0.00002	0.00005	< 0.0001	0.001040	0.00017	0.013	< 0.00001	CA15744-OCT12	1.08	1.02	-0.07	-3.2%
06-Nov-12	145	< 0.01	< 0.00001	0.0025	< 0.009	0.079	0.00017	0.80	< 0.00001	0.44	0.0314	9.63	< 0.00002	0.00005	< 0.0001	0.000612	0.00008	0.009	< 0.00001	CA11210-NOV12	0.54	0.61	0.07	6.3%
13-Nov-12	146	0.01	< 0.00001	0.0022	< 0.009	0.072	0.00015	0.72	< 0.00001	0.42	0.0253	8.64	< 0.00002	< 0.00001	< 0.0001	0.000558	0.00010	0.008	< 0.00001	CA15251-NOV12	0.46	0.46	0.00	0.5%
20-Nov-12	147	< 0.01	< 0.00001	0.0036	< 0.009	0.081	0.00015	2.94	0.00005	0.58	0.0259	10.0	< 0.00002	0.00033	0.0002	0.000686	0.00013	0.018	< 0.00001	CA15347-NOV12	0.60	0.57	-0.03	-2.8%
27-Nov-12	148	< 0.01	0.00014	0.0037	< 0.009	0.078	0.00025	3.52	< 0.00001	0.55	0.0455	16.1	< 0.00002	0.00025	< 0.0001	0.000877	< 0.00003	0.015	< 0.00001	CA15376-NOV12	1.15	0.93	-0.22	-10.5%
04-Dec-12	149	0.01	0.00001	0.0029	< 0.009	0.082	< 0.00004	0.65	< 0.00001	0.52	0.0291	12.8	< 0.00002	0.00016	< 0.0001	0.000865	0.00009	0.014	< 0.00001	CA15038-DEC12	0.81	0.69	-0.12	-8.1%
11-Dec-12	150	< 0.01	< 0.00001	0.0024	< 0.009	0.077	0.00019	1.39	< 0.00001	0.41	0.0176	8.13	< 0.00002	0.00007	0.0001	0.000681	0.00013	0.012	< 0.00001	CA15164-JAN13	0.52	0.48	-0.04	-4.0%
18-Dec-12	151	< 0.01	0.00002	0.0023	< 0.009	0.069	< 0.00004	1.23	0.00003	0.43	0.0169	8.29	< 0.00002	0.00012	0.0001	0.000632	0.00010	0.009	< 0.00001	CA15269-DEC12	0.50	0.46	-0.04	-4.4%
25-Dec-12	152	< 0.01	0.00005	0.0032	< 0.009	0.066	0.00018	1.21	< 0.00001	0.48	0.0199	9.61	< 0.00002	0.00013	< 0.0001	0.000758	< 0.00003	0.009	< 0.00001	CA15361-DEC12	0.60	0.54	-0.07	-5.9%
01-Jan-13	153	< 0.01	0.00007	0.0029	< 0.009	0.060	0.00020	1.55	0.00001	0.57	0.0171	8.82	< 0.00002	0.00012	0.0001	0.000822	0.00013	0.013	< 0.00001	CA15056-JAN13	0.60	0.52	-0.08	-7.5%
08-Jan-13	154	< 0.01	0.00007	0.0028	< 0.009	0.078	0.00018	1.53	< 0.00001	0.50	0.0176	9.04	< 0.00002	0.00014	0.0001	0.000791	0.00019	0.012	< 0.00001	CA15153-JAN13	0.65	0.53	-0.11	-9.8%
15-Jan-13	155	< 0.01	0.00003	0.0028	0.009	0.066	0.00016	1.19	0.00002	0.44	0.0171	8.99	< 0.00002	0.00015	0.0002	0.000759	0.00019	0.008	0.00001	CA15281-JAN13	0.60	0.49	-0.12	-10.5%
22-Jan-13	156	< 0.01	0.00001	0.0041	< 0.009	0.077	0.00016	1.83	0.00003	0.56	0.0228	13.2	< 0.00002	0.00011	0.0006	0.00111	0.00014	0.012	< 0.00001	CA15382-JAN13	0.92	0.78	-0.14	-8.2%
29-Jan-13	157	< 0.01	0.00001	0.0055	< 0.009	0.117	0.00027	5.11	0.00004	1.14	0.0530	24.2	< 0.00002	0.00034	0.0001	0.00142	0.00011	0.016	0.00001	CA15465-JAN13	1.40	1.38	-0.02	-0.7%
05-Feb-13	158																							
12-Feb-13	159																							

HC 9 *CONFIDENTIAL* *DRAFT*

Sample = Alt 09 11

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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
02-Feb-10	1	500	375	7.76	332	93	#N/A	1.5	26.1	22	-	-	20.3	0.215	0.0018	0.0020	0.00102	< 0.00002	0.00002	0.006	0.000019	7.66	< 0.0005	0.000133	0.0027	< 0.01	0.00545	0.002	0.276	0.003
09-Feb-10	2	500	460	7.93	293	96	#N/A	1.2	30.1	25	-	-	27.1	0.215	0.0039	0.0014	0.00070	< 0.00002	0.00002	0.010	0.000040	10.2	< 0.0005	0.000100	0.0012	< 0.01	0.00562	0.002	0.380	0.006
16-Feb-10	3	500	415	7.49	305	119	#N/A	2.1	22.0	33	-	-	31.1	0.208	0.0034	0.0013	0.00090	< 0.00002	0.00002	0.009	0.000036	11.7	< 0.0005	0.000075	0.0010	< 0.01	0.00272	0.002	0.438	0.008
23-Feb-10	4	500	460	7.60	350	78	#N/A	1.8	16.9	24	-	-	28.0	0.178	0.0022	0.0008	0.00067	< 0.00002	0.00001	0.007	0.000009	10.6	< 0.0005	0.000036	0.0006	< 0.01	0.00070	0.002	0.365	0.008
02-Mar-10	5	500	450	7.59	346	79	#N/A	1.4	15.1	19	-	-	25.1	0.179	0.0017	0.0007	0.00073	< 0.00002	0.00001	0.005	0.000005	9.53	< 0.0005	0.000024	0.0006	< 0.01	0.00038	0.001	0.315	0.006
09-Mar-10	6	500	440	7.48	357	75	#N/A	1.9	14.9	20	-	-	27.2	0.151	0.0014	0.0006	0.00062	< 0.00002	< 0.00001	0.004	0.000003	10.4	< 0.0005	0.000016	0.0006	< 0.01	0.00030	0.001	0.330	0.008
16-Mar-10	7	500	455	7.40	360	65	#N/A	2.1	15.5	14	< 0.2	< 0.06	29.0	0.1700	0.0015	0.0018	0.00054	< 0.00002	< 0.00001	0.006	0.000003	11.00	< 0.0005	0.000015	< 0.0005	< 0.01	0.00015	0.002	0.351	0.008
23-Mar-10	8	500	450	7.37	363	67	#N/A	2.7	13.8	19	< 0.2	< 0.06	24.8	0.1280	0.0012	0.0005	0.00060	< 0.00002	< 0.00001	0.0039	< 0.000003	9.5	< 0.0005	0.000009	< 0.0005	< 0.01	0.00048	0.002	0.29	0.008
30-Mar-10	9	500	450	7.43	381	60	#N/A	1.9	11.5	17	< 0.2	0.23	21.4	0.1140	0.0011	0.0003	0.00064	< 0.00002	0.00001	0.003	< 0.000003	8.16	< 0.0005	0.000007	0.0006	< 0.01	0.00013	< 0.001	0.245	0.009
06-Apr-10	10	500	470	7.34	367	57	#N/A	2.1	12.5	14	< 0.2	< 0.06	23.2	0.111	0.0009	0.0004	0.00046	< 0.00002	< 0.00001	< 0.002	0.000004	8.90	0.0006	0.000009	< 0.0005	< 0.01	0.00041	0.001	0.246	0.010
13-Apr-10	11	500	465	7.23	356	55	#N/A	2.8	12.6	14	< 0.2	< 0.06	20.7	0.1190	0.0010	0.0004	0.00044	< 0.00002	< 0.00001	0.003	< 0.000003	7.94	< 0.0005	0.000008	< 0.0005	< 0.01	0.00009	0.001	0.21	0.010
20-Apr-10	12	500	450	7.43	344	56	#N/A	2.5	12.9	11	< 0.2	< 0.06	20.7	0.119	0.0009	0.0005	0.00056	< 0.00002	0.00002	0.003	< 0.000003	7.95	0.0006	0.000008	0.0006	< 0.01	0.00033	0.001	0.212	0.010
27-Apr-10	13	500	460	7.61	339	58	#N/A	2.3	15.1	15	< 0.2	< 0.06	21.9	0.1780	0.0007	0.0006	0.0006	< 0.00002	< 0.00001	0.002	< 0.000003	8.42	< 0.0005	0.000006	0.0006	< 0.01	0.00108	< 0.001	0.22	0.009
04-May-10	14	500	445	7.41	365	56	#N/A	2.1	14.1	12	< 0.2	< 0.06	22.9	0.1390	0.0008	0.0004	0.0006	< 0.00002	< 0.00001	0.003	< 0.000003	8.80	< 0.0005	0.00000	0.0005	< 0.01	0.00130	< 0.001	0.23	0.010
11-May-10	15	500	455	7.27	365	51	#N/A	2.0	12.7	8	< 0.2	< 0.06	20.3	0.1280	0.0008	0.0006	0.0005	< 0.00002	0.00001	0.003	< 0.000003	7.83	0.0008	0.00000	< 0.0005	< 0.01	0.00012	< 0.001	0.19	0.009
18-May-10	16	500	435	7.36	361	49	#N/A	2.3	12.7	10	< 0.2	< 0.06	21.1	0.160	0.0006	0.0005	0.00045	< 0.00002	< 0.00001	0.0026	< 0.000003	8.13	0.0007	0.000101	0.0096	< 0.002	0.00011	< 0.001	0.184	0.008
25-May-10	17	500	435	7.30	381	49	#N/A	3.2	14.7	8	< 0.2	< 0.06	20.6	0.187	0.0007	0.0016	0.0006	< 0.00002	0.00002	0.0025	0.000003	7.97	< 0.0005	0.00002	0.0006	0.004	0.00021	< 0.001	0.18	0.007
01-Jun-10	18	500	435	7.34	364	44	#N/A	2.1	12.2	7	< 0.2	< 0.06	19.0	0.138	0.0005	0.0019	0.0004	< 0.00002	< 0.00001	0.0023	< 0.000003	7.33	0.0005	0.00001	0.0005	0.003	0.00102	< 0.001	0.16	0.009
08-Jun-10	19	500	495	7.26	360	47	#N/A	2.6	14.1	6	< 0.2	< 0.06	20.9	0.080	0.0008	0.0004	0.0004	< 0.00002	< 0.00001	0.0035	< 0.000003	8.07	< 0.0005	0.00000	0.001	< 0.002	0.00136	< 0.001	0.18	0.012
15-Jun-10	20	500	440	7.39	358	43	#N/A	2.6	12.3	5	< 0.2	< 0.06	18.3	0.137	0.0006	0.0004	0.0007	< 0.00002	< 0.00001	0.0026	< 0.000003	7.08	< 0.0005	0.000010	0.001	< 0.002	0.00011	< 0.001	0.15	0.008
22-Jun-10	21	500	430	7.56	431	43	#N/A	1.8	12.1																					
29-Jun-10	22	500	470	7.20	350	38	#N/A	2.1	10.3	4	< 0.2	< 0.06	15.1	0.108	0.0003	0.0006	0.0005	< 0.00002	< 0.00001	0.0029	< 0.000003	5.82	0.0009	0.0000	0.001	0.002	0.00011	< 0.001	0.131	0.008
06-Jul-10	23	500	455	7.16	369	38	#N/A	2.3	9.7																					
13-Jul-10	24	500	445	7.15	357	39	#N/A	2.4	10.8	4	< 0.2	< 0.06	14.3	0.074	0.0005	0.0005	0.00031	< 0.00002	< 0.00001	0.0034	0.000005	5.51	0.0007	0.000018	0.0013	0.002	0.00008	< 0.001	0.134	0.0090
20-Jul-10	25	500	450	7.32	353	38	#N/A	3.4	11.7																					
27-Jul-10	26	500	440	7.10	361	36	#N/A	3.0	9.5	12	< 0.2	< 0.06	16.3	0.08	0.0002	< 0.0002	0.0005	< 0.00002	< 0.00001	0.0030	0.000006	6.31	0.0006	0.000004	0.0005	< 0.002	0.00006	< 0.001	0.125	0.010
03-Aug-10	27	500	455	7.31	405	33	#N/A	2.8	8.9	6	< 0.2	< 0.06	14.0	0.07	0.0005	0.0003	0.00044	< 0.00002	< 0.00001	0.0048	0.000006	5.43	< 0.0005	0.0000	0.00	< 0.002	0.00005	< 0.001	0.106	0.007
10-Aug-10	28	500	465	7.52	380	34	#N/A	3.4	10.3	10	< 0.2	< 0.06	15.3	0.0682	< 0.0002	0.0009	0.00030	< 0.00002	< 0.00001	0.0052	0.000007	5.95	0.0005	0.000008	0.0008	< 0.002	0.00006	< 0.001	0.108	0.0080
17-Aug-10	29	500	460	7.43	395	34	#N/A	2.7	9.8	2	< 0.2	< 0.06	15.0	0.105	0.0004	0.0003	0.00036	< 0.00002	0.00001	0.0032	0.000005	5.83	< 0.0005	< 0.000002	< 0.0005	< 0.002	0.00012	< 0.001	0.103	0.0023
24-Aug-10	30	500	425	7.26	360	33	#N/A	2.8	9.5	3	< 0.2	< 0.06	14.9	0.0898	0.0003	0.0003	0.00045	< 0.00002	< 0.00001	0.0022	0.000006	5.80	< 0.0005	0.000004	0.0009	0.004	0.00013	< 0.001	0.101	0.0086
31-Aug-10	31	500	435	7.69	401	30	#N/A	4.0	11.6	8	< 0.2	< 0.06	13.8	0.0729	0.0005	< 0.0002	0.00031	< 0.00002	< 0.00001	0.0026	< 0.000003	5.40	< 0.0005	0.000007	0.0008	< 0.002	0.00007	< 0.001	0.082	< 0.0002
07-Sep-10	32	500	420	7.06	387	35	#N/A	3.2	10.4	8	< 0.2	< 0.06	14.6	0.1120	< 0.0002	0.0003	0.00034	< 0.00002	< 0.00001	0.0042	0.000006	5.70	0.0007	0.000008	0.0009	0.003	0.00055	< 0.001	0.076	< 0.0002
14-Sep-10	33	500	475	6.97	382	30	#N/A	2.8	9.2	7	< 0.2	< 0.06	14.6	0.0593	0.0007	0.0002	0.00026	< 0.00002	< 0.00001	0.0028	0.000003	5.67	< 0.0005	0.000009	0.0009	0.004	0.00101	< 0.001	0.102	0.0123
21-Sep-10	34	500	420	7.16	350	28	#N/A	2.5	9.6	8	< 0.2	< 0.06	14.2	0.392	0.0004	0.0051	0.00038	0.00004	< 0.00001	0.0032	0.000081	5.54	0.0013	0.000172	0.0839	< 0.002	0.00011	0.002	0.10	0.0083
28-Sep-10	35	500	415	7.26	337	43	#N/A	2.1	12.0	9	< 0.2	< 0.06	17.5	0.1440	0.0003	0.0005	0.00052	< 0.00002	< 0.00001	0.0031	0.000009	6.80	0.0005	0.000015	0.0008	< 0.002	0.00017	< 0.001	0.124	0.0060
05-Oct-10	36	500	425	7.19	333	37	#N/A	2.5	10.7	10	< 0.2	< 0.06	15.0	0.112	0.0004	0.0004	0.00065	< 0.00002	< 0.00001	0.0033	< 0.000003	5.85	< 0.0005	0.000030	0.0010	< 0.002	0.00013	< 0.001	0.105	0.0073
12-Oct-10	37	500	425	7.10	341	31	#N/A	2.4	8.7	7	< 0.2	< 0.06	14.0	0.0899	0.0007	0.0009	0.00049	< 0.00002	< 0.00001	0.0029	< 0.000003	5.43	< 0.0005	0.000023	0.0014	< 0.002	0.00008	< 0.001	0.099	0.0078
19-Oct-10	38	500	435	7.05	339	29	#N/A	2.6	9.6	8	< 0.2	< 0.06	12.8	0.0741	0.0003	< 0.0002	0.00037	< 0.00002	< 0.00001	0.0032	0.000005	5.00	< 0.0005	0.000002	0.0006	< 0.002	0.00008	< 0.001	0.074	0.0081
26-Oct-10	39	500	440	7.03	375	29	#N/A	2.6	8.1	7	< 0.2	< 0.06	11.7	0.0694	0.0008	< 0.0002	0.00025	< 0.00002	< 0.00001	0.0026	< 0.000003	4.55	0.0006	< 0.000002	0.0010	< 0.002	0.00018	< 0.001	0.082	0.0062
02-Nov-10	40	500	445	7.27	382	12	#N/A	1.9	9.2	7	< 0.2	< 0.06	13.8	0.0971	< 0.0002	0.0003	0.00057	< 0.00002	< 0.00001	0.0043	< 0.000003	5.38	< 0.0005	0.000003	0.0009	0.003	0.00027	< 0.001	0.101	0.0060
09-Nov-10	41	500	420	7.35	386	41	#N/A	2.8	10.4	5	< 0.2	< 0.06	13.7	0.102	0.0004	0.0002	0.00032	< 0.00002	< 0.00001	0.0020	0.000006	5.33	< 0.0005	0.000016	0.0006	0.004	0.00058	< 0.001	0.103	0.0058
16-Nov-10	42	500	415	7.50	360	39	#N/A	2.4	11.1	4	< 0.2	< 0.06	13.4	0.0875	0.0002	< 0.0002	0.00042	< 0.00002	< 0.00001	0.0065	0.000009	5.24	0.0006	0.000012	< 0.0005	0.002	0.00026	< 0.001	0.090	0.0084
23-Nov-10	43	500	420	7.05	324	30	#N/A	2.3	10.8	4	< 0.2	< 0.06	12.0	0.0915	0.0003	0.0003	0.00057	< 0.00002	0.00001	0.0028	0.000012	4.69	0.0006	0.000023	0.0007	0.004	0.00009	< 0.001	0.062	0.0067
30-Nov-10	44	500	480	7.13	353	30	#N/A	2.9	11.5	<2	< 0.2	< 0.06	13.0	0.0582	0.0003	0.0002	0.00055	< 0.00002	< 0.00001	0.0028	0.000009	5.07	0.0007	0.000020	0.0006	< 0.002	0.00010	< 0.001	0.083	0.0090
07-Dec-10	45	500	410	7.20	355	43	#N/A	2.8	15.1	3	< 0.2	< 0.06	20.5	0.1000	0.0005	0.0004	0.00034	< 0.00002	< 0.00001	0.0021	< 0.000003	7.99	0.0007	0.000012	0.0010	< 0.002	0.00120	< 0.001	0.120	0.0092
14-Dec-10	46	500	435	7.27	365	30	#N/A	3.3	11.0	5	< 0.2	< 0.06	13.0	0.0998	0.0002	< 0.0002	0.00048	< 0.00002	< 0.00001	0.0033	0.000007	5.07	0.0006	0.000003	0.0011	< 0.002	0.00012	< 0.001	0.078	0.0066
21-Dec-10	47	500	410	7.28	375	27	#N/A	4.0	10.1	6	< 0.2	< 0.06	12.6	0.0902	0.0003	0.0002	0.00044	< 0.00002	< 0.00001	0.0018	0.000054	4.93	< 0.0005	0.000016	0.0008	< 0.002	0.00035	< 0.001	0.066	< 0.0002
28-Dec-10	48	500	420	7.47	353	26	#N/A	4.1	10.6	6	< 0.2	< 0.06	13.4	0.0937	0.0003	< 0.0002	0.00037	< 0.00002	< 0.00001	0.0041	0.000007	5.24	0.0006	0.000004	0.0006	< 0.002	0.00138	< 0.001	0.083	0.0053
04-Jan-11	49	500	480	7.23	376	26	#N/A	4.5	10.6	5	< 0.2	< 0.06	12.4	0.0479	0.0003	< 0.0002	0.00027	< 0.00002	< 0.00001	0.0023	0.000011	4.86	< 0.0005	0.000012	< 0.0005	< 0.002	0.00058	< 0.001	0.074	0.0082
11-Jan-11	50	500	430	7.07	386	28	#N/A	2.6	8.3	5	< 0.2	< 0.06	12.8	0.0683	0.0003	< 0.0002	0.00048	< 0.00002	0.00001	0.0042	0.000009	4.99	< 0.0005	0.000011	< 0.0005	0.006	0.00013	< 0.001	0.080	0.0085
18-Jan-11	51	500	420	7.03	362	28	#N/A	2.5	7.8	7	< 0.2	< 0.06	13.8	0.0720	0.0002	< 0.0002	0.00040	< 0.00002	< 0.00001	0.0021	0.000004	5.39	< 0.0005	0.000025	< 0.0005	0.006	0.00011	< 0.001	0.090	0.0083
25-Jan-11	52	500	430	7.13	344	25	#N/A	3.1	8.6	5	< 0.2	< 0.06	10.6	0.0718	0.0002	0.0003	0.00042	< 0.00002	< 0.00001	0.0023	< 0.000003	4.14	< 0.0005	0.000006	< 0.0005	0.003	0.00009	< 0.001	0.071	0.0038
01-Feb-11	53	500	425	7.00	358	21	#N/A	2.7	8.9	2	< 0.2	< 0.06	10.2	0.0497	0.0147	< 0.0002	0.00037	< 0.00002	< 0.00001	0.0025	0.000077	3.96	< 0.0005	0.000014	< 0.0005	< 0.002	0.00042	< 0.001	0.068	0.0058
08-Feb-11	54	500	435	7.11	368	20	#N/A	2.2	7.7	9	< 0.2	< 0.06	10.7	0.0640	< 0.0002	< 0.0002	0.00024	< 0.00002	< 0.00001	0.0019	0.000011	4.15	< 0.0005	0.000007	< 0.0005	0.003	0.00007	< 0.001	0.070	0.0074
15-Feb-11	55	500	430	7.09	358	22	#N/A	2.6	7.8	2	< 0.2	< 0.06	10.8	0.0612	< 0.0002	< 0.0002	0.00023	< 0.00002	< 0.00001	0.0027	0.000019	4.21	< 0.0005	0.000025	0.0006	< 0.002	0.00027	< 0.001	0.067	0.0071
22-Feb-11	56	500	430	7.16	343	24	#N/A	2.8	8.5	9	< 0.2	< 0.06	10.7	0.0658	0.0003	< 0.0002	0.00029	< 0.00002	< 0.00001	0.0032	0.000009	4.21	0.0005	0.000011	0.0006	0.002	0.00147	< 0.001	0.054	0.0057
01-Mar-11	57	500	415	6.99	352	22	#N/A	2.5	6.9	10	< 0.2	< 0.06	9.86	0.0671	< 0.0002	0.0002	0.00031	< 0.00002	< 0.00001	0.0023	0.000016	3.85	< 0.0005	0.000009	0.0006	< 0.002	0.00116	< 0.001	0.059	0.0055
08-Mar-11	58	500	425	7.00	333	24	#N/A	2.8	7.5	9	< 0.2	< 0.06	10.1	0.0539	0.0002	< 0.0002	0.00024	< 0.00002	< 0.00001	0.0018	0.000011	3.96	< 0.0005	0.000016	0.0007	< 0.002	0.00122	< 0.001	0.064	0.0064
15-Mar-11	59	500	445	7.15	308	23	#N/A	2.7	7.9	7	< 0.2	< 0.06	10.3	0.0615	< 0.0002	< 0.0002	0.00028	< 0.00002	< 0.00001	0.0020	0.000008	4.02	< 0.0005	0.000021	0.0010	0.004	0.00108	< 0.001	0.061	0.0066
22-Mar-11	60	500	445	7.23	317	24	#N/A	2.7	8.1	6	< 0.2	< 0.06	10.2	0.0644	< 0.0002	< 0.0002	0.00030	< 0.00002	< 0.00001	0.0018	0.000011	3.98	< 0.0005	0.000009	0.0008	< 0.002	0.00010	< 0.001	0.054	0.0074
29-Mar-11	61	500	500	7.41	292	29	#N/A	3.1	10.4	5	< 0.2	< 0.06	13.6	0.0313	0.0002	< 0.0002	0.00022	< 0.00002	< 0.00001	0.0020	0.000004	5.32	< 0.0005	0.000016	< 0.0005	< 0.002	0.00003	< 0.001	0.071	0.0102
05-Apr-11	62	500	430	7.24	259	24	#N/A	3.0	8.3	7	< 0.2	< 0.06	10.7	0.0469	< 0.0002	< 0.0002	0.00025	< 0.00002	< 0.00001	0.0019	0.000006	4.17	< 0.0005	0.000020	0.0005	0.004	0.00006	< 0.001	0.055	0.0065
12-Apr-11	63	500	425	7.17	297	24	#N/A	2.4	7.0	7	< 0.2	< 0.06	10.2	0.0531	< 0.0002	0.0002	0.00022	< 0.00002	< 0.00001	0.0019	0.000004	3.97	< 0.0005	0.000012	< 0.0005	0.007	0.00005	< 0.001	0.065	0.0124
19-Apr-11	64	500	440	7.51	250	35	#N/A	4.1	15.2	7	< 0.2	< 0.06	15.2	0.156	< 0.0002	< 0.0002	0.00029	< 0.00002	< 0.00001	0.0017	< 0.000003	5.97	< 0.0005	0.000020	< 0.0005	< 0.002	0.00009	< 0.001	0.081	0.0066
26-Apr-11	65	500	420	7.36	272	29	#N/A	2.2	10.5	5	< 0.2	< 0.06	12.9	0.119	< 0.0002	< 0.0002	0.00059	< 0.00002	0.00001	0.0018	0.000007	5.02	< 0.0005	< 0.000002	< 0.0005	0.004	0.00018	< 0.001	0.080	0.0068
03-May-11	66	500	435	7.41	351	23	#N/A	3.1	9.5	5	< 0.2	< 0.06	10.6	0.0929	0.0005	< 0.0002	0.00049	0.00002	< 0.00001	0.0028	0.000021	4.15	< 0.0005	0.000025	0.0007	0.005	0.00013	< 0.001	0.061	0.0069
10-May-11	67	500	420	7.33	382	24	#N/A	2.7	9.0	5	< 0.2	< 0.06	10.4	0.0965	< 0.0002	0.0002	0.00032	< 0.00002	< 0.00001	0.0032	< 0.000003	4.07	< 0.0005	0.000021	< 0.0005	0.002	0.00013	< 0.001	0.062	0.0062
17-May-11	68	500	420	7.57	333	26	#N/A	2.8	9.6	5	< 0.2	< 0.06	10.5	0.0704	< 0.0002	< 0.0002	0.00028	< 0.00002	< 0.00001	0.0019	0.000007	4.11	< 0.0005	0.000014	< 0.0005	< 0.002	0.00008	< 0.001	0.064	0.0065
24-May-11	69	500	520	7.39	269	22	#N/A	3.3	7.8	5	< 0.2	< 0.06	9.5	0.0755	< 0.0002	< 0.0002	0.00026	< 0.00002	< 0.00001	0.0050	0.000003	3.73	< 0.0005	0.000014	< 0.0005	< 0.002	0.00006	< 0.001	0.056	0.0044
31-May-11	70	500	440	7.44	269	21	#N/A	3.7	8.2	4	< 0.2	< 0.06	8.8	0.0433	< 0.0002	< 0.0002	0.00028	< 0.00002	< 0.00001	0.0021	0.000009	3.46	< 0.0005	0.000022	0.0006	< 0.002	0.00006	< 0.001	0.046	0.0055
07-Jun-11	71	500	430	7.59	354	22	#N/A	2.8	8.0	4	< 0.2	< 0.06	9.9	0.0680	< 0.0002	0.0003	0.00032	< 0.00002	< 0.00001	0.0020	0.000011	3.88	< 0.0005	0.000016	0.0008	0.004	0.00011	< 0.001	0.056	0.0059
14-Jun-11	72	500	420	7.49	296	20	#N/A	2.4	6.8	5	< 0.2	< 0.06	8.8	0.0537	< 0.0002	< 0.0002	0.00038	< 0.00002	< 0.00001	0.0017	0.000009	3.45	< 0.0005	0.000034	< 0.0005	0.006	0.00009	< 0.001	0.051	0.0073
21-Jun-11	73	500	430	7.33	297	22	#N/A	1.9	7.9	4	< 0.2	< 0.06	10.5	0.0696	< 0.0002	0.0002	0.00038	< 0.00002	< 0.00001	0.0012	0.000012	4.12	< 0.0005	0.000014	< 0.0005	< 0.002	0.00013	< 0.001	0.052	0.0051
28-Jun-11	74	500	430	7.45	279	25	#N/A	2.3	10.3	6	< 0.2	< 0.06	11.3	0.0940	< 0.0002	< 0.0002	0.00028	< 0.00002	< 0.00001	0.0025	0.000010	4.43	< 0.0005	0.000015	< 0.0005	0.006	0.00009	< 0.001	0.056	0.0074
05-Jul-11	75	500	485	7.41	306	32	#N/A	3.1	11.7	6	< 0.2	< 0.06	14.1	0.104	0.0002	< 0.0002	0.00032	< 0.00002	< 0.00001	0.0045	0.000032	5.56	< 0.0005	0.000041	< 0.0005	0.003	0.00007	< 0.001	0.059	0.0087
12-Jul-11	76	500	445	7.07	314	26	#N/A	3.5	7.9	5	< 0.2	< 0.06	13.5	0.0717	< 0.0002	< 0.0002	0.00026	< 0.00002	< 0.00001	0.0022	0.000007	5.31	< 0.0005	0.000016	< 0.0005	< 0.002	0.00009	< 0.001	0.059	0.0100
19-Jul-11	77	500	435	7.39	334	24	#N/A	3.7	7.9	4	< 0.2	< 0.06	11.7	0.0728	< 0.0002	< 0.0002	0.00034	< 0.00002	< 0.00001	0.0027	0.000008	4.58	< 0.0005	0.000014	0.0007	0.004	0.00009	< 0.001	0.057	0.0072
26-Jul-11	78	500	430	7.61	268	22	#N/A	4.1	8.8	2	< 0.2	< 0.06	9.00	0.0709	< 0.0002	0.0005	0.00025	< 0.00002	< 0.00001	0.0019	< 0.000003	3.49	< 0.0005	0.000021	< 0.0005	0.034	0.00009	< 0.001	0.069	0.0443

HC 9 *CONFIDENTIAL* *DRAFT*

Sample = Alt 09 11

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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
02-Aug-11	79	500	445	7.68	280	23	#N/A	4.0	8.9	2	< 0.2	< 0.06	10.0	0.0751	< 0.0002	< 0.0002	0.00032	< 0.00002	< 0.00001	0.0017	0.000010	3.93	0.0005	0.000007	< 0.0005	0.005	0.00014	< 0.001	0.050	0.0064
09-Aug-11	80	500	430	7.51	240	23	#N/A	2.7	8.3	3	< 0.2	< 0.06	10.8	0.0700	< 0.0002	< 0.0002	0.00032	< 0.00002	< 0.00001	0.0019	0.000014	4.23	0.0008	0.000019	< 0.0005	0.007	0.00015	< 0.001	0.054	0.0069
16-Aug-11	81	500	435	7.66	259	22	#N/A	5.1	10.5	2	< 0.2	< 0.06	9.9	0.0690	< 0.0002	< 0.0002	0.00030	< 0.00002	< 0.00001	0.0019	0.000004	3.88	0.0007	0.000016	< 0.0005	< 0.002	0.00012	< 0.001	0.052	0.0061
23-Aug-11	82	500	440	7.50	235	23	#N/A	4.1	9.6	4	< 0.2	< 0.06	9.68	0.0837	< 0.0002	< 0.0002	0.00029	< 0.00002	< 0.00001	0.0022	0.000015	3.80	0.0006	0.000016	< 0.0005	0.005	0.00011	< 0.001	0.048	0.0065
30-Aug-11	83	500	425	7.52	270	22	#N/A	3.8	8.5	5	< 0.2	< 0.06	10.2	0.0764	< 0.0002	< 0.0002	0.00030	< 0.00002	< 0.00001	0.0019	0.000023	4.00	0.0011	0.000024	0.0006	0.012	0.00020	< 0.001	0.049	0.0064
06-Sep-11	84	500	430	7.56	283	21	#N/A	3.7	7.4	4	< 0.2	< 0.06	9.43	0.0598	< 0.0002	< 0.0002	0.00036	< 0.00002	< 0.00001	0.0017	0.000013	3.70	< 0.0005	0.000018	0.0005	< 0.002	0.00029	< 0.001	0.044	0.0059
13-Sep-11	85	500	435	7.55	331	20	#N/A	3.4	8.2	4	< 0.2	< 0.06	9.81	0.0594	0.0002	< 0.0002	0.00047	< 0.00002	< 0.00001	0.0021	0.000015	3.85	0.0012	0.000030	< 0.0005	0.002	0.00035	< 0.001	0.047	0.0055
20-Sep-11	86	500	440	7.29	293	21	#N/A	3.9	7.0	4	< 0.2	< 0.06	9.20	0.0525	< 0.0002	0.0004	0.00044	< 0.00002	< 0.00001	0.0023	0.000015	3.61	0.0008	0.000025	0.0007	0.012	0.00014	< 0.001	0.044	0.0063
27-Sep-11	87	500	435	7.41	316	21	#N/A	4.9	8.3	5	< 0.2	< 0.06	8.96	0.0565	< 0.0002	< 0.0002	0.00036	< 0.00002	< 0.00001	< 0.0002	0.000011	3.52	0.0007	0.000027	0.0005	0.003	0.00009	< 0.001	0.040	0.0053
04-Oct-11	88	500	485	7.44	315	29	#N/A	3.8	10.6	5	< 0.2	< 0.06	12.4	0.0630	0.0010	0.0006	0.00067	< 0.00002	< 0.00001	0.0029	0.000010	4.90	0.0007	0.000021	< 0.0005	< 0.002	0.00014	< 0.001	0.048	0.0100
11-Oct-11	89	500	445	7.58	270	23	#N/A	4.8	9.1	5	< 0.2	< 0.06	10.5	0.0834	0.0007	< 0.0002	0.00026	< 0.00002	< 0.00001	0.0030	0.000007	4.15	0.0007	0.000009	< 0.0005	0.003	0.00015	< 0.001	0.039	0.0067
18-Oct-11	90	500	450	7.21	317	22	#N/A	4.2	7.0	5	< 0.2	< 0.06	9.78	0.0854	0.0004	< 0.0002	0.00058	< 0.00002	< 0.00001	0.0024	0.000008	3.86	0.0006	0.000021	0.0009	< 0.002	0.00019	< 0.001	0.038	0.0075
25-Oct-11	91	500	430	7.09	320	22	#N/A	2.9	6.8	4	< 0.2	< 0.06	10.1	0.0643	< 0.0002	< 0.0002	0.00031	< 0.00002	< 0.00001	0.0024	0.000017	3.99	< 0.0005	0.000036	< 0.0005	0.003	0.00010	< 0.001	0.038	0.0076
01-Nov-11	92	500	465	7.18	291	22	#N/A	4.1	6.8	5	< 0.2	< 0.06	9.77	0.0604	< 0.0002	0.0003	0.00030	< 0.00002	< 0.00001	0.0019	0.000011	3.85	< 0.0005	0.000043	< 0.0005	0.004	0.00009	< 0.001	0.038	0.0071
08-Nov-11	93	500	450	7.29	304	21	#N/A	4.5	6.9	5	< 0.2	< 0.06	10.0	0.0577	< 0.0002	< 0.0002	0.00023	< 0.00002	< 0.00001	0.0017	0.000021	3.94	< 0.0005	0.000012	0.0006	< 0.003	0.00024	< 0.001	0.043	0.0073
15-Nov-11	94	500	440	7.06	297	19	#N/A	4.9	6.8	3	< 0.2	< 0.06	8.55	0.0813	< 0.0002	0.0003	0.00024	< 0.00002	< 0.00001	0.0018	0.000007	3.36	< 0.0005	0.000013	0.0007	0.007	0.00011	< 0.001	0.037	0.0078
22-Nov-11	95	500	440	7.32	308	20	#N/A	5.2	7.5	2	< 0.2	< 0.06	9.05	0.0736	< 0.0002	0.0003	0.00021	< 0.00002	< 0.00001	0.0012	0.000023	3.56	< 0.0005	0.000012	0.0007	< 0.003	0.00025	< 0.001	0.039	0.0077
29-Nov-11	96	500	445	7.56	334	20	#N/A	4.8	8.2	4	< 0.2	< 0.06	9.02	0.0770	< 0.0002	0.0003	0.00019	< 0.00002	< 0.00001	0.0019	0.000013	3.55	< 0.0005	0.000069	0.0005	< 0.003	0.00007	< 0.001	0.037	0.0080
06-Dec-11	97	500	445	7.11	337	21	#N/A	4.7	6.7	3	< 0.2	< 0.06	10.3	0.0617	< 0.0002	< 0.0002	0.00024	< 0.00002	< 0.00001	0.0013	0.000017	4.07	< 0.0005	0.000078	< 0.0005	0.006	0.00004	< 0.001	0.038	0.0073
13-Dec-11	98	500	440	7.40	294	34	#N/A	3.3	14.6	3	< 0.2	< 0.06	9.42	0.0491	< 0.0002	< 0.0002	0.00026	< 0.00002	< 0.00001	0.0016	0.000011	3.71	0.0008	0.000009	0.0008	< 0.003	0.00015	< 0.001	0.040	0.0065
20-Dec-11	99	500	435	7.25	305	18	#N/A	4.0	6.3	3	< 0.2	< 0.06	8.21	0.0660	< 0.0002	0.0007	0.00021	< 0.00002	< 0.00001	0.0012	0.000020	3.23	< 0.0005	0.000012	< 0.0005	< 0.003	0.00005	< 0.001	0.034	0.0067
27-Dec-11	100	500	445	7.58	328	18	#N/A	4.5	7.1	2	< 0.2	< 0.06	8.21	0.0713	< 0.0002	< 0.0002	0.00074	< 0.00002	< 0.00001	0.0017	0.000008	3.23	< 0.0005	0.000007	0.0007	0.003	0.00025	< 0.001	0.036	0.0065
03-Jan-12	101	500	450	7.27	302	19	#N/A	4.5	7.8	5	< 0.2	< 0.06	8.58	0.0889	< 0.0002	< 0.0002	0.00029	< 0.00002	< 0.00001	0.0022	0.000019	3.38	< 0.0005	0.000040	0.0005	< 0.003	0.00029	< 0.001	0.036	0.0071
10-Jan-12	102	500	450	7.04	323	19	#N/A	4.2	6.7	4	< 0.2	< 0.06	8.29	0.0910	< 0.0002	< 0.0002	0.00059	< 0.00002	< 0.00001	0.0016	0.000010	3.27	< 0.0005	0.000041	0.0006	< 0.003	0.00010	< 0.001	0.034	0.0063
17-Jan-12	103	500	435	7.14	318	20	#N/A	4.6	7.8	3	< 0.2	< 0.06	9.03	0.0593	< 0.0002	< 0.0002	0.00020	< 0.00002	< 0.00001	0.0022	0.000013	3.56	< 0.0005	0.000083	0.0006	< 0.003	0.00006	< 0.001	0.035	0.0068
24-Jan-12	104	500	475	7.30	363	20	#N/A	4.9	7.7	5	< 0.2	< 0.06	8.56	0.0697	< 0.0002	< 0.0002	0.00022	< 0.00002	< 0.00001	0.0015	0.000009	3.37	< 0.0005	0.000064	0.0006	0.005	0.00004	< 0.001	0.034	0.0062
31-Jan-12	105	500	430	6.94	330	20	#N/A	4.0	7.8	3	< 0.2	< 0.06	8.70	0.0775	< 0.0002	0.0006	0.00030	< 0.00002	< 0.00001	0.0019	0.000012	3.43	< 0.0005	0.000074	0.0014	< 0.003	0.00010	< 0.001	0.034	0.0064
07-Feb-12	106	500	485	7.34	343	26	#N/A	4.4	9.8	6	< 0.2	< 0.06	11.4	0.0577	< 0.0002	0.0002	0.00023	< 0.00002	< 0.00001	0.0016	0.000009	4.51	< 0.0005	0.000129	0.0009	< 0.003	0.00004	< 0.001	0.038	0.0100
14-Feb-12	107	500	435	7.22	389	16	#N/A	5.2	6.0	5	< 0.2	< 0.06	8.64	0.0431	< 0.0002	< 0.0002	0.00021	< 0.00002	< 0.00001	0.0010	0.000008	3.41	< 0.0005	0.000007	0.0008	< 0.003	0.00003	< 0.001	0.032	0.0059
21-Feb-12	108	500	455	6.79	362	20	#N/A	3.4	6.2	6	< 0.2	< 0.06	9.23	0.0541	< 0.0002	< 0.0002	0.00025	< 0.00002	< 0.00001	0.0035	0.000010	3.64	< 0.0005	0.000059	0.0009	< 0.003	0.00005	< 0.001	0.034	0.0066
28-Feb-12	109	500	420	7.07	390	18	#N/A	4.9	6.2	4	< 0.2	< 0.06	8.52	0.0849	< 0.0002	< 0.0002	0.00047	< 0.00002	< 0.00001	0.0012	0.000010	3.36	< 0.0005	0.000080	0.0011	< 0.003	0.00007	< 0.001	0.031	0.0070
06-Mar-12	110	500	440	7.19	371	20	#N/A	2.8	6.6	5	< 0.2	< 0.06	8.38	0.0488	< 0.0002	< 0.0002	0.00021	< 0.00002	0.00001	0.0015	0.000024	3.30	< 0.0005	0.000015	0.0007	0.008	0.00005	< 0.001	0.032	0.0058
13-Mar-12	111	500	445	6.96	382	18	#N/A	4.7	6.5	5	< 0.2	< 0.06	8.40	0.0526	< 0.0002	< 0.0002	0.00030	< 0.00002	< 0.00001	0.0017	0.000014	3.31	< 0.0005	0.000043	0.0012	< 0.003	0.00010	< 0.001	0.032	0.0061
20-Mar-12	112	500	460	6.97	346	19	#N/A	5.3	6.1	4	< 0.2	< 0.06	8.78	0.0320	< 0.0002	< 0.0002	0.00020	< 0.00002	< 0.00001	0.0014	0.000011	3.46	< 0.0005	0.000013	0.0007	< 0.003	0.00003	< 0.001	0.033	0.0066
27-Mar-12	113	500	430	6.80	352	16	#N/A	4.1	5.2	5	< 0.2	< 0.06	8.00	0.0779	< 0.0002	0.0006	0.00018	< 0.00002	< 0.00001	0.0013	0.000013	3.16	< 0.0005	0.000029	0.0008	< 0.003	0.00007	< 0.001	0.027	0.0062
03-Apr-12	114	500	460	6.79	382	21	#N/A	4.4	6.5	5	< 0.2	< 0.06	9.59	0.0910	< 0.0002	< 0.0002	0.00032	< 0.00002	< 0.00001	0.0015	< 0.000003	3.78	< 0.0005	0.000081	0.0014	< 0.003	0.00010	< 0.001	0.035	0.0075
10-Apr-12	115	500	440	6.88	333	20	#N/A	3.1	5.8	4	< 0.2	< 0.06	8.82	0.0916	< 0.0002	< 0.0002	0.00028	< 0.00002	< 0.00001	0.0020	< 0.000003	3.48	< 0.0005	0.000097	0.0012	< 0.003	0.00007	< 0.001	0.030	0.0063
17-Apr-12	116	500	440	6.87	358	19	#N/A	4.4	5.5	4	< 0.2	< 0.06	7.87	0.0993	< 0.0002	< 0.0002	0.00020	< 0.00002	< 0.00001	0.0017	< 0.000003	3.11	< 0.0005	0.000091	0.0011	< 0.003	0.00009	< 0.001	0.027	0.0059
24-Apr-12	117	500	440	6.87	382	20	#N/A	3.5	7.1	5	< 0.2	< 0.06	9.0	0.104	< 0.0002	< 0.0002	0.00028	< 0.00002	< 0.00001	0.0017	< 0.000003	3.55	< 0.0005	0.000106	0.0015	< 0.003	0.00006	< 0.001	0.032	0.0066
01-May-12	118	500	425	7.17	348	18	#N/A	5.2	6.8	4	< 0.2	< 0.06	8.29	0.0915	< 0.0002	< 0.0002	0.00023	< 0.00002	< 0.00001	0.0015	< 0.000003	3.27	< 0.0005	0.000093	0.0010	< 0.003	0.00007	< 0.001	0.028	0.0067
08-May-12	119	500	440	6.86	384	19	#N/A	4.0	6.0	4	< 0.2	< 0.06	8.28	0.0758	< 0.0002	< 0.0002	0.00021	< 0.00002	< 0.00001	0.0026	< 0.000003	3.27	< 0.0005	0.000134	0.0015	< 0.003	0.00011	< 0.001	0.029	0.0063
15-May-12	120	500	405	6.94	325	19	#N/A	3.7	5.5	4	< 0.2	< 0.06	8.3	0.116	< 0.0002	< 0.0002	0.00036	< 0.00002	< 0.00001	0.0020	< 0.000003	3.26	< 0.0005	0.000078	0.0012	0.004	0.00016	< 0.001	0.029	0.0057
22-May-12	121	500	440	6.86	336	17	#N/A	3.5	5.0	4	< 0.2	< 0.06	7.68	0.124	< 0.0002	< 0.0002	0.00047	< 0.00002	< 0.00001	0.0013	< 0.000003	3.03	< 0.0005	0.000093	0.0012	< 0.003	0.00005	< 0.001	0.027	0.0055
29-May-12	122	500	435	6.84	349	18	#N/A	4.2	6.1	3	< 0.2	< 0.06	8.88	0.126	< 0.0002	< 0.0002	0.00024	< 0.00002	< 0.00001	0.0015	< 0.000003	3.51	< 0.0005	0.000076	0.0009	0.010	0.00021	< 0.001	0.028	0.0075
05-Jun-12	123	500	425	6.89	374	20	#N/A	4.7	6.2	3	< 0.2	< 0.06	9.31	0.0966	< 0.0002	< 0.0002	0.00029	< 0.00002	< 0.00001	0.0027	< 0.000003	3.68	< 0.0005	0.000040	0.0010	0.005	0.00012	< 0.001	0.031	0.0075
12-Jun-12	124	500	455	6.96	363	22	#N/A	4.1	6.8	5	< 0.2	< 0.06	9.88	0.117	< 0.0002	0.0002	0.00019	< 0.00002	< 0.00001	0.0021	< 0.000003	3.90	< 0.0005	0.000077	0.0007	< 0.003	0.00005	< 0.001	0.032	0.0071
19-Jun-12	125	500	440	6.81	373	20	#N/A	3.0	5.4	3	< 0.2	< 0.06	8.72	0.0748	< 0.0002	< 0.0002	0.00019	< 0.00002	< 0.00001	0.0020	< 0.000003	3.45	< 0.0005	0.000040	0.0008	0.236	0.00011	< 0.001	0.028	0.0075
26-Jun-12	126	500	440	6.92	343	20	#N/A	3.2	6.4	5	< 0.2	< 0.06	8.63	0.137	< 0.0002	< 0.0002	0.00030	< 0.00002	< 0.00001	0.0019	< 0.000003	3.40	< 0.0005	0.000081	0.0014	< 0.003	0.00009	< 0.001	0.036	0.0064
03-Jul-12	127	500	445	7.24	376	21	#N/A	6.6	7.8	4	< 0.2	< 0.06	8.87	0.0793	< 0.0002	< 0.0002	0.00012	< 0.00002	< 0.00001	0.0015	0.000009	3.51	< 0.0005	0.000011	0.0007	0.004	0.00007	< 0.001	0.028	0.0065
10-Jul-12	128	500	420	6.85	333	20	#N/A	4.1	5.9	6	< 0.2	< 0.06	8.5	0.119	< 0.0002	< 0.0002	0.00018	< 0.00002	< 0.00001	0.0009	0.000006	3.36	< 0.0005	0.000098	0.0014	< 0.003	0.00009	< 0.001	0.026	0.0061
17-Jul-12	129	500	440	6.93	378	19	#N/A	2.5	5.9	5	< 0.2	< 0.06	8.3	0.0916	< 0.0002	< 0.0002	0.00018	< 0.00002	< 0.00001	0.0020	0.000004	3.30	< 0.0005	0.000058	< 0.0005	< 0.003	0.00004	< 0.001	0.026	0.0064
24-Jul-12	130	500	450	6.79	342	20	#N/A	3.0	5.3	4	< 0.2	< 0.06	8.5	0.0817	< 0.0002	< 0.0002	0.00016	< 0.00002	< 0.00001	0.0014	0.000005	3.38	< 0.0005	0.000023	0.0005	< 0.003	0.00002	< 0.001	0.028	0.0060
31-Jul-12	131	500	445	6.86	372	17	#N/A	2.2	5.1	4	< 0.2	< 0.06	7.6	0.107	< 0.0002	< 0.0002	0.00016	< 0.00002	< 0.00001	0.0014	0.000009	3.03	< 0.0005	0.000039	< 0.0005	< 0.003	0.00003	< 0.001	0.020	0.0057
07-Aug-12	132	500	450	7.07	345	18	#N/A	2.3	5.4	5	< 0.2	< 0.06	8.6	0.119	< 0.0002	< 0.0002	0.00020	< 0.00002	< 0.00001	0.0023	0.000004	3.42	< 0.0005	0.000085	0.0007	< 0.003	0.00008	< 0.001	0.023	0.0059
14-Aug-12	133	500	440	6.83	325	21	#N/A	3.1	5.0	5	< 0.2	< 0.06	8.8	0.121	< 0.0002	< 0.0002	0.00026	< 0.00002	< 0.00001	0.0014	0.000009	3.50	< 0.0005	0.000132	0.0011	< 0.003	0.00007	< 0.001	0.026	0.0057
21-Aug-12	134	500	450	6.79	314	17	#N/A	3.1	4.7	5	< 0.2	< 0.06	7.4	0.0720	0.0003	< 0.0002	0.00010	< 0.00002	< 0.00001	0.0017	0.000009	2.92	< 0.0005	0.000006	< 0.0005	< 0.003	0.00002	< 0.001	0.020	0.0059
28-Aug-12	135	500	455	7.03	404	19	#N/A	4.8	5.5	6	< 0.2	< 0.06	8.0	0.0530	< 0.0002	< 0.0002	0.00012	< 0.00002	< 0.00001	0.0018	0.000007	3.18	< 0.0005	< 0.000002	< 0.0005	0.006	0.00002	< 0.001	0.021	0.0067
04-Sep-12	136	500	455	6.78	411	20	#N/A	5.0	5.6	5	< 0.2	< 0.06	9.4	0.0868	< 0.0002	< 0.0002	0.00010	< 0.00002	< 0.00001	0.0017	< 0.000003	3.73	< 0.0005	0.000009	< 0.0005	< 0.003	< 0.00002	< 0.001	0.026	0.0062
11-Sep-12	137	500	460	6.83	372	16	#N/A	3.0	5.9	6	< 0.2	0.08	7.6	0.0506	< 0.0002	< 0.0002	0.00022	< 0.00002	< 0.00001	0.0015	0.000006	2.99	< 0.0005	0.000016	0.0008	< 0.003	0.00004	< 0.001	0.023	0.0055
18-Sep-12	138	500	455	6.80	376	19	#N/A	2.4	5.4	5	< 0.2	< 0.06	7.9	0.104	< 0.0002	< 0.0002	0.00019	< 0.00002	< 0.00001	0.0013	0.000005	3.12	< 0.0005	< 0.000002	< 0.0005	< 0.003	0.00006	< 0.001	0.024	0.0055
25-Sep-12	139	500	450	6.80	361	17	#N/A	3.1	5.2	6	< 0.2	< 0.06	7.2	0.0598	< 0.0002	< 0.0002	0.00018	< 0.00002	< 0.00001	0.0016	0.000006	2.84	< 0.0005	0.000018	< 0.0005	< 0.003	0.00003	< 0.001	0.018	0.0054
02-Oct-12	140	500	460	6.87	398	21	#N/A	3.3	6.0	4	< 0.2	< 0.06	9.0	0.0429	< 0.0002	< 0.0002	0.00015	< 0.00002	< 0.00001	0.0023	0.000005	3.59	< 0.0005	0.000057	0.0006	< 0.003	0.00002	< 0.001	0.021	0.0073
09-Oct-12	141	500	475	6.93	373	21	#N/A	5.0	5.9	4	< 0.2	< 0.06	8.3	0.0622	< 0.0002	< 0.0002	0.00017	< 0.00002	< 0.00001	0.0020	0.000004	3.31	< 0.0005	0.000032	0.0007	< 0.003	< 0.00002	< 0.001	0.019	0.0061
16-Oct-12	142	500	465	7.41	406	22	#N/A	5.1	6.1	7	< 0.2	< 0.06	9.6	0.0539	< 0.0002	< 0.0002	0.00017	< 0.00002	< 0.00001	0.0022	0.000008	3.81	< 0.0005	0.000011	0.0005	< 0.003	< 0.00002	< 0.001	0.023	0.0074
23-Oct-12	143	500	485	6.73	367	30	#N/A	4.3	5.4	10	< 0.2	< 0.06	11.8	0.0769	< 0.0002	< 0.0002	0.00018	< 0.00002	< 0.00001	0.0012	0.000024	4.69	< 0.0005	0.000065	0.0008	< 0.003	0.00009	< 0.001	0.028	0.0090
30-Oct-12	144	500	445	6.74	381	25	#N/A	4.2	5.2	8	< 0.2	< 0.06	10.6	0.0528	< 0.0002	< 0.0002	0.00018	< 0.00002	< 0.00001	0.0024	0.00168	4.22	< 0.0005	0.000010	0.0010	0.005	0.00003	< 0.001	0.026	0.0066
06-Nov-12	145	500	450	6.94	377	20	#N/A	3.7	4.9	3	< 0.2	< 0.06	9.47	0.0426	< 0.0002	< 0.0002	0.00017	< 0.00002	< 0.00001	0.0024	0.000013	3.75	< 0.0005	0.000035	0.0006	< 0.003	0.00003	< 0.001	0.025	0.0059
13-Nov-12	146	500	455	7.26	380	15	#N/A	5.3	6.1	4	< 0.2	< 0.06	7.6	0.0340	< 0.0002	< 0.0002	0.00013	< 0.00002	< 0.00001	0.0020	0.000031	3.03	< 0.0005	0.000028	< 0.0005	< 0.003	0.00013	< 0.001	0.018	0.0061
20-Nov-12	147	500	505	7.58	401	25	#N/A	6.5	8.2	4	< 0.2	< 0.06	11.3	0.0437	< 0.0002	< 0.0002	0.00028	< 0.00002	< 0.00001	0.0024	0.000011	4.50	< 0.0005	0.000074	0.0007	< 0.003	< 0.00002	< 0.001	0.028	0.0101
27-Nov-12	148	500	490	7.16	368	25	#N/A	4.7	8.7	7	< 0.2	< 0.06	11.2	0.0450	< 0.0002	< 0.0002	0.00018	< 0.00002	< 0.00001	0.0020	0.000013	4.42	< 0.0005	0.000004	< 0.0005	< 0.003	< 0.00002	< 0.001	0.027	0.0104
04-Dec-12	149	500	430	6.96	349	14	#N/A	2.3	4.2	5	< 0.2	< 0.06	7.0	0.0633	< 0.0002	< 0.0002	0.00022	< 0.00002	< 0.00001	0.0006	0.000012	2.76	< 0.0005	0.000110	0.0014	< 0.003	0.00007	< 0.001	0.026	0.0054
11-Dec-12	150	500	480	7.11	358	19	#N/A	2.5	7.7	3	< 0.2	< 0.06	8.66	0.0560	< 0.0002	< 0.0002	0.00017	< 0.00002	< 0.00001	0.0018	0.000013	3.44	< 0.0005	0.000071	< 0.0005	0.004	0.00003	< 0.001	0.020	0.0068
18-Dec-12	151	500	485	6.98	336	18	#N/A	2.7	6.1	2	< 0.2	< 0.06	8.28	0.0417	< 0.0002	< 0.0002	0.00014	< 0.00002	< 0.00001	0.0011	0.000013	3.28	< 0.0005	0.000019	< 0.0005	< 0.003	0.00002	< 0.001	0.019	0.0078
25-Dec-12	152	500	460	6.96	380	16	#N/A	3.3	5.5	<2	< 0.2	< 0.06	7.81	0.0543	< 0.0002	< 0.0002	0.00010	< 0.00002	< 0.00001	0.0008	0.000009	3.10	< 0.0005	0.000040	< 0.0005	< 0.003	< 0.00002	< 0.001	0.019	0.0063
01-Jan-13	153	500	430	7.07	374	16	#N/A	3.0	5.2	4	< 0.2	< 0.06	7.22	0.0686	< 0.0002	< 0.0002	0.00017	< 0.00002	< 0.00001	0.0007	0.000006	2.86	< 0.0005	0.000051	< 0.0005	< 0.003	0.00004	< 0.001	0.020	0.0043
08-Jan-13	154	500	450	7.23	345	14	#N/A	3.0	5.7	2	< 0.2	< 0.06	6.18	0.0625	< 0.0002	< 0.0002	0.00041	< 0.00002	< 0.00001	0.0012	0.000012	2.45	< 0.0005	0.000083	< 0.0005	< 0.003	< 0.00002	< 0.001	0.014	0.0042
15-Jan-13	155	500	460																											
22-Jan-13	156	500	470	7.42	339	16	#N/A	3.6	6.5	5																				
29-Jan-13	157	500	455																											
05-Feb-13	158	500	455	7.02	371.1	16	#N/A	3.5	5.3	6																				
12-Feb-13	159	500	460																											

Apr 20/10 Al, Mo, Cu,

HC 9
Sample = Alt 09 11

Date	Cycle	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L					
02-Feb-10	1	< 0.01	0.00065	0.0022	< 0.01	6.65	0.00017	1.78	< 0.00001	10.2	0.0302	7.96	< 0.0002	0.00024	0.0004	0.000010	0.00056	0.003	0.00011		0.98	1.02	0.04	1.9%
09-Feb-10	2	< 0.01	0.00082	0.0019	< 0.01	4.34	0.00025	1.15	0.00003	7.92	0.0392	9.28	< 0.0002	< 0.00001	0.0001	0.000091	0.00039	0.002	0.00003		1.12	1.00	-0.13	-6.0%
16-Feb-10	3	< 0.01	0.00077	0.0018	< 0.01	3.80	0.00026	1.19	0.00002	7.34	0.0453	11.5	< 0.0002	0.00007	0.0001	0.000132	0.00045	0.002	0.00003		1.13	1.04	-0.09	-4.2%
23-Feb-10	4	< 0.01	0.00034	0.0005	< 0.01	2.42	0.00013	1.01	0.00001	3.85	0.0380	7.76	< 0.0002	0.00004	< 0.0001	0.000142	0.00030	< 0.001	0.00002		0.84	0.79	-0.05	-3.1%
02-Mar-10	5	< 0.01	0.00027	0.0003	< 0.01	1.97	0.00011	0.87	0.00002	2.99	0.0321	7.66	< 0.0002	0.00016	0.0002	0.000113	0.00032	< 0.001	0.00002		0.70	0.68	-0.02	-1.1%
09-Mar-10	6	< 0.01	0.00025	0.0002	< 0.01	1.73	0.00007	0.88	0.00001	2.20	0.0345	7.25	< 0.0002	0.00044	0.0002	0.000139	0.00028	< 0.001	0.00002		0.71	0.69	-0.03	-2.0%
16-Mar-10	7	< 0.01	0.00024	0.0003	< 0.01	1.60	0.00034	1.00	< 0.00001	2.18	0.0340	7.15	< 0.0002	0.00002	< 0.0001	0.000142	0.00031	< 0.001	< 0.00001		0.60	0.71	0.11	8.6%
23-Mar-10	8	< 0.01	0.00022	0.0002	< 0.01	1.24	0.00006	0.88	< 0.00001	1.46	0.0296	6.0	< 0.0002	0.00004	0.0002	0.000136	0.00026	< 0.001	0.00003		0.67	0.59	-0.08	-6.3%
30-Mar-10	9	< 0.01	0.00022	0.0002	< 0.01	1.01	0.00006	0.72	< 0.00001	1.20	0.0243	5.02	< 0.0002	0.00025	0.0001	0.000095	0.00027	< 0.001	< 0.00001		0.58	0.51	-0.08	-7.2%
06-Apr-10	10	< 0.01	0.00021	< 0.0001	< 0.01	0.91	< 0.00004	0.84	< 0.00001	1.25	0.0268	5.49	< 0.0002	0.00006	0.0002	0.000111	0.00023	< 0.001	0.00002		0.54	0.54	0.00	0.0%
13-Apr-10	11	< 0.01	0.00022	< 0.0001	< 0.01	0.78	0.00009	0.76	< 0.00001	1.03	0.0234	4.47	< 0.0002	0.00009	0.0001	0.000105	0.00023	< 0.001	0.00001		0.54	0.48	-0.06	-6.3%
20-Apr-10	12	< 0.01	0.00023	0.0001	< 0.01	0.814	< 0.00004	0.73	< 0.00001	0.89	0.0230	4.69	< 0.0002	0.00018	0.0001	0.000113	0.00029	0.001	0.00003		0.49	0.47	-0.01	-1.5%
27-Apr-10	13	< 0.01	0.00024	0.0001	< 0.01	0.78	0.00017	0.86	< 0.00001	0.88	0.0224	4.16	< 0.0002	0.00017	< 0.0001	0.000096	0.00032	< 0.001	0.00001		0.61	0.50	-0.12	-10.6%
04-May-10	14	< 0.01	0.00030	< 0.0001	< 0.01	0.76	0.00008	0.86	< 0.00001	0.87	0.0238	3.89	< 0.0002	0.00018	< 0.0001	0.000104	0.00033	< 0.001	< 0.00001		0.53	0.51	-0.02	-1.7%
11-May-10	15	< 0.01	0.00026	< 0.0001	0.02	0.68	< 0.00004	0.93	0.00004	0.75	0.0215	3.92	< 0.0002	0.00040	0.0001	0.000093	0.00038	< 0.001	0.00002		0.42	0.46	0.04	4.1%
18-May-10	16	< 0.01	0.00036	0.0002	< 0.009	0.632	0.00005	0.88	< 0.00001	0.70	0.0208	3.56	< 0.0002	0.00039	0.0001	0.000080	0.00033	0.001	< 0.00001		0.46	0.47	0.01	0.6%
25-May-10	17	< 0.01	0.00024	< 0.0001	< 0.009	0.57	< 0.00004	0.85	0.00001	0.68	0.0203	3.93	< 0.0002	0.00023	0.0003	0.000095	0.0004	< 0.002	0.00003		0.46	0.46	0.00	-0.5%
01-Jun-10	18	< 0.01	0.00019	< 0.0001	< 0.009	0.48	0.00006	0.75	< 0.00001	0.58	0.0191	3.56	< 0.0002	0.00019	0.0002	0.000083	0.00034	< 0.001	0.00001		0.39	0.42	0.03	3.3%
08-Jun-10	19	< 0.01	0.00020	< 0.0001	0.010	0.46	< 0.00004	0.87	< 0.00001	0.59	0.0210	3.87	< 0.0002	0.00018	0.0001	0.000165	0.00027	< 0.001	< 0.00001		0.41	0.45	0.05	5.4%
15-Jun-10	20	< 0.01	0.00026	0.0001	< 0.009	0.43	< 0.00004	0.73	0.00004	0.56	0.0179	3.57	< 0.0002	0.00085	0.0002	0.000086	0.00033	< 0.001	0.00002		0.35	0.40	0.05	6.9%
22-Jun-10	21																							
29-Jun-10	22	< 0.01	0.00020	< 0.0001	< 0.009	0.364	< 0.00004	0.67	< 0.00001	0.44	0.0147	2.64	< 0.0002	0.00156	0.0001	0.00007	0.00023	0.001	0.00002		0.29	0.33	0.04	6.4%
06-Jul-10	23																							
13-Jul-10	24	< 0.01	0.00025	0.0002	0.013	0.37	< 0.00004	0.69	0.00001	0.44	0.0156	3.13	< 0.0002	0.00042	0.0001	0.000090	0.00029	0.001	0.00006		0.30	0.31	0.01	2.3%
20-Jul-10	25																							
27-Jul-10	26	< 0.01	0.00005	< 0.0001	< 0.009	0.322	< 0.00004	0.64	< 0.00001	0.41	0.0157	3.1	< 0.0002	0.00013	< 0.0001	0.00006	0.00024	0.001	0.00001		0.44	0.36	-0.08	-10.0%
03-Aug-10	27	< 0.01	0.00011	0.0001	< 0.009	0.290	< 0.00004	0.58	0.00001	0.36	0.0130	2.5	< 0.0002	0.00013	< 0.0001	0.00006	0.00021	0.001	0.00001		0.30	0.31	0.01	1.1%
10-Aug-10	28	< 0.01	0.00008	0.0002	< 0.009	0.298	< 0.00004	0.64	< 0.00001	0.35	0.0140	2.59	< 0.0002	< 0.00001	0.0001	0.000047	0.00027	0.002	< 0.00001		0.41	0.34	-0.08	-10.4%
17-Aug-10	29	< 0.01	0.00011	< 0.0001	< 0.009	0.302	< 0.00004	0.66	0.00002	0.37	0.0139	3.89	< 0.0002	0.00010	0.0003	0.000053	0.00026	0.001	0.00001		0.24	0.33	0.10	17.0%
24-Aug-10	30	< 0.01	0.00006	0.0002	< 0.009	0.277	< 0.00004	0.59	0.00002	0.35	0.0132	2.88	< 0.0002	0.00010	0.0003	0.000043	0.00025	0.002	0.00002		0.25	0.33	0.08	13.3%
31-Aug-10	31	< 0.01	0.00004	< 0.0001	< 0.009	0.265	< 0.00004	0.59	< 0.00001	0.32	0.0112	2.69	< 0.0002	0.00002	< 0.0001	0.000044	0.00026	0.001	< 0.00001		0.40	0.31	-0.09	-13.3%
07-Sep-10	32	< 0.01	0.00004	0.0001	0.013	0.278	0.00006	0.66	0.00001	0.33	0.0094	2.52	< 0.0002	0.00002	0.0002	0.000043	0.00033	0.002	0.00003		0.37	0.32	-0.05	-7.2%
14-Sep-10	33	0.04	0.00029	0.0001	< 0.009	0.242	< 0.00004	0.63	< 0.00001	0.34	0.0135	2.60	< 0.0002	0.00013	0.0001	0.000057	0.00019	0.001	0.00002		0.33	0.32	-0.01	-1.7%
21-Sep-10	34	< 0.01	0.00005	0.0042	< 0.009	0.283	< 0.00004	0.68	< 0.00001	0.32	0.0132	2.69	< 0.0002	0.00009	< 0.0001	0.000174	0.00028	0.018	0.00002		0.36	0.35	-0.01	-1.3%
28-Sep-10	35	< 0.01	0.00018	0.0001	< 0.009	0.349	< 0.00004	0.80	0.00001	0.42	0.0159	3.39	< 0.0002	0.00035	0.0001	0.000040	0.00031	0.002	0.00005		0.43	0.39	-0.04	-4.3%
05-Oct-10	36	0.02	0.00029	< 0.0001	0.012	0.321	< 0.00004	0.72	0.00001	0.40	0.0137	2.87	< 0.0002	0.00066	0.0002	0.000031	0.00027	0.002	0.00005		0.42	0.34	-0.08	-10.9%
12-Oct-10	37	< 0.01	0.00015	0.0003	< 0.009	0.261	< 0.00004	0.62	< 0.00001	0.35	0.0131	2.55	< 0.0002	0.00043	0.0002	0.00843	0.00024	0.001	0.00001		0.32	0.31	-0.01	-1.4%
19-Oct-10	38	< 0.01	0.00004	< 0.0001	< 0.009	0.235	< 0.00004	0.60	< 0.00001	0.31	0.0118	2.10	< 0.0002	< 0.00001	< 0.0001	0.000029	0.00022	0.003	< 0.00001	CA14822-OCT10	0.36	0.28	-0.08	-11.8%
26-Oct-10	39	< 0.01	0.00008	0.0003	< 0.009	0.222	0.00129	0.46	< 0.00001	0.29	0.0102	2.46	< 0.0002	< 0.00001	0.0002	0.000026	0.00020	0.003	< 0.00001	CA11459-OCT10	0.31	0.26	-0.05	-8.5%
02-Nov-10	40	< 0.01	0.00006	0.0005	< 0.009	0.280	< 0.00004	0.56	< 0.00001	0.41	0.0124	2.72	< 0.0002	0.00006	0.0002	0.000027	0.00007	0.005	0.00002	CA11315-NOV10	0.33	0.31	-0.02	-2.8%
09-Nov-10	41	< 0.01	0.00011	0.0001	0.019	0.272	< 0.00004	0.56	0.00001	0.39	0.0121	2.17	< 0.0002	0.00023	0.0001	0.000071	0.00021	0.002	0.00001	CA11435-NOV10	0.31	0.31	0.00	-0.3%
16-Nov-10	42	0.01	0.00010	0.0002	< 0.009	0.277	0.00006	0.63	0.00001	0.31	0.0118	1.97	< 0.0002	0.00024	0.0002	0.000031	0.00020	0.005	0.00006	CA10265-NOV10	0.30	0.30	-0.01	-0.9%
23-Nov-10	43	< 0.01	0.00018	< 0.0001	< 0.009	0.217	0.00007	0.56	0.00001	0.28	0.0104	1.39	< 0.0002	0.00014	0.0003	0.000029	0.00022	0.004	0.00002	CA11701-NOV10	0.30	0.27	-0.03	-5.8%
30-Nov-10	44	< 0.01	0.00025	0.0003	< 0.009	0.210	< 0.00004	0.64	< 0.00001	0.32	0.0112	1.94	< 0.0002	0.00022	0.0002	0.000059	0.00020	0.004	0.00001	CA14008-DEC10	0.23	0.29	0.06	11.0%
07-Dec-10	45	< 0.01	0.00018	0.0002	0.014	0.268	< 0.00004	0.93	0.00001	0.42	0.0146	2.48	< 0.0002	0.00017	0.0002	0.000064	0.00029	0.002	0.00004	CA14206-DEC10	0.37	0.44	0.08	9.8%
14-Dec-10	46	< 0.01	0.00019	0.0003	< 0.009	0.210	0.00005	0.53	0.00001	0.32	0.0110	1.78	< 0.0002	0.00036	0.0002	0.000044	0.00024	0.002	0.00007	CA10970-DEC10	0.32	0.29	-0.03	-5.6%
21-Dec-10	47	0.06	< 0.00001	0.0002	< 0.009	0.202	< 0.00004	0.56	0.00001	0.30	0.0094	1.85	< 0.0002	0.00014	0.0002	0.000034	0.00018	0.012	0.00002	CA10453-DEC10	0.33	0.28	-0.05	-7.7%
28-Dec-10	48	< 0.01	0.00004	< 0.0001	0.023	0.218	0.00006	0.60	0.00001	0.32	0.0115	2.56	< 0.0002	0.00011	0.0002	0.000036	0.00021	0.003	0.00001	CA10140-JAN11	0.34	0.30	-0.04	-6.1%
04-Jan-11	49	< 0.01	0.00002	0.0001	0.021	0.170	< 0.00004	0.56	0.00001	0.27	0.0098	1.91	< 0.0002	0.00010	0.0001	0.000043	0.00014	0.003	< 0.00001	CA10880-JAN11	0.32	0.27	-0.05	-7.8%
11-Jan-11	50	< 0.01	0.00006	< 0.0001	< 0.009	0.182	< 0.00004	0.51	< 0.00001	0.29	0.0109	2.20	< 0.0002	0.00037	0.0003	0.000028	0.00015	0.003	0.00003	CA14437-JAN11	0.27	0.28	0.01	1.9%
18-Jan-11	51	< 0.01	0.00002	< 0.0001	0.016	0.229	0.00006	0.61	< 0.00001	0.34	0.0117	2.39	< 0.0002	0.00042	0.0001	0.000026	0.00018	0.003	0.00003	CA10982-JAN11	0.30	0.31	0.00	0.6%
25-Jan-11	52	< 0.01	0.00003	0.0002	0.020	0.190	< 0.00004	0.46	< 0.00001	0.31	0.0086	1.62	< 0.0002	0.00030	0.0002	0.000023	0.00018	0.001	0.00002	CA11047-JAN11	0.28	0.24	-0.04	-7.4%
01-Feb-11	53	< 0.01	0.00983	0.0002	0.061	0.165	0.00010	0.42	0.00014	0.26	0.0084	2.16	< 0.0002	0.00468	0.0123	0.000037	0.00015	0.002	0.0434	CA14121-FEB11	0.22	0.22	0.00	1.0%
08-Feb-11	54	< 0.01	0.00002	< 0.0001	< 0.009	0.158	< 0.00004	0.52	< 0.00001	0.25	0.0091	1.59	< 0.0002	0.00050	0.0001	0.000023	0.00015	0.003	0.00002	CA14249-FEB11	0.34	0.23	-0.11	-18.5%
15-Feb-11	55	< 0.01	0.00010	0.0003	0.036	0.178	< 0.00004	0.53	< 0.00001	0.25	0.0089	1.70	< 0.0002	0.00004	0.0001	0.000020	0.0001	< 0.001	0.00003	CA14449-FEB11	0.20	0.24	0.04	9.1%
22-Feb-11	56	< 0.01	0.00004	< 0.0001	0.035	0.176	< 0.00004	0.52	0.00002	0.27	0.0087	1.63	< 0.0002	0.00020	0.0002	0.000028	0.00015	0.004	0.00002	CA14656-FEB11	0.36	0.24	-0.12	-20.0%
01-Mar-11	57	0.01	0.00003	0.0002	0.025	0.141	< 0.00004	0.47	< 0.00001	0.25	0.0081	1.58	< 0.0002	0.00016	0.0002	0.000016	0.00014	0.003	< 0.00001	CA14060-MAR11	0.35	0.22	-0.13	-22.7%
08-Mar-11	58	< 0.01	0.00007	< 0.0001	0.027	0.157	< 0.00004	0.40	0.00001	0.25	0.0083	1.56	< 0.0002	0.00022	0.0002	0.000019	0.00011	0.002	0.00004	CA14274-MAR11	0.34	0.22	-0.11	-20.1%
15-Mar-11	59	0.03	0.00004	0.0003	0.012	0.157	< 0.00004	0.49	< 0.00001	0.26	0.0084	1.41	< 0.00002	0.00020	0.0002	0.000020	0.00013	0.003	0.00002	CA14457-MAR11	0.30	0.23	-0.08	-14.3%
22-Mar-11	60	< 0.01	< 0.00001	0.0001	< 0.009	0.091	< 0.00004	0.51	< 0.00001	0.26	0.0083	1.50	< 0.0002	0.00022	0.0002	0.000017	0.00013	0.002	< 0.00001	CA10460-MAR11	0.29	0.22	-0.06	-12.4%
29-Mar-11	61	< 0.01	< 0.00001	0.0002	0.028	0.159	< 0.00004	0.63	< 0.00001	0.28	0.0106	2.16	< 0.0002	0.00008	< 0.0001	0.000047	0.00009	0.001	< 0.00001	CA14922-MAR11	0.31	0.29	-0.02	-3.4%
05-Apr-11	62	< 0.01	0.00005	0.0002	0.028	0.155	< 0.00004	0.49	< 0.00001	0.24	0.0085	1.88	< 0.0002	0.00013	0.0003	0.000024	0.00012	0.003	0.00001	CA14224-APR11	0.31	0.23	-0.08	-14.6%
12-Apr-11	63	< 0.01	0.00010	< 0.0001	0.020	0.150	< 0.00004	0.48	< 0.00001	0.24	0.0085	1.77	< 0.0002	0.00013	< 0.0001	0.000019	0.00011	0.002	< 0.00001	CA14457-APR11	0.29	0.22	-0.06	-12.3%
19-Apr-11	64	< 0.01	0.00020	0.0002	< 0.009	0.198	0.00036	0.72	< 0.00001	0.35	0.0109	2.12	< 0.0002	0.00003	0.0003	0.000025	0.00025	0.003	0.00002	CA11358-APR11	0.45	0.34	-0.11	-13.6%
26-Apr-11	65	< 0.01	0.00003	0.0004	< 0.009	0.194	0.00005	0.61	< 0.00001	0.37	0.0099	1.96	< 0.0002	0.00006	0.0004	0.000013	0.00016	0.005	0.00004	CA14943-APR11	0.31	0.29	-0.02	-3.7%
03-May-11	66	0.01	0.00021	0.0001	< 0.009	0.175	0.00006	0.56	0.00002	0.27	0.0084	1.52	< 0.0002	0.00007	0.0003	0.000023	0.00013	0.003	0.00007	CA14148-MAY11	0.29	0.24	-0.06	-10.5%
10-May-11	67	< 0.01	0.00004	0.0003	0.015	0.177	< 0.00004	0.50	< 0.00001	0.29	0.0081	1.69	< 0.0002	0.00014	0.0003	0.000015	0.00009	0.002	0.00003	CA14441-MAY11	0.28	0.24	-0.05	-9.4%
17-May-11	68	< 0.01	0.00004	< 0.0001	0.020	0.169	< 0.00004	0.53	0.00004	0.31	0.0081	1.52	< 0.0002	0.00005	0.0002	0.000017	0.00011	0.003	0.00002	CA14703-MAY11	0.30	0.24	-0.06	-11.4%
24-May-11	69	< 0.01	0.00001	< 0.0001	< 0.009	0.164	< 0.00004	0.67	< 0.00001	0.28	0.0074	1.43	< 0.0002	0.00013	< 0.0001	0.000012	0.00012	0.002	0.00001	CA13762-MAY11	0.26	0.22	-0.05	-9.5%
31-May-11	70	< 0.01	0.00004	< 0.0001	0.042	0.140	< 0.00004	0.52	0.00001	0.24	0.0068	1.22	< 0.0002	0.00015	0.0001	0.000008	0.00010	0.002	< 0.00001	CA10185-JUN11	0.25	0.20	-0.05	-11.8%
07-Jun-11	71	0.01	0.00001	0.0001	< 0.009	0.148	< 0.00004	0.56	< 0.00001	0.32	0.0073	1.66	< 0.00002	0.00015	0.0002	0.000004	0.00009	0.003	0.00001	CA14355-JUN11	0.24	0.22	-0.02	-4.4%
14-Jun-11	72	< 0.01	0.00005	0.0002	< 0.009	0.132	0.00007	0.50	0.00001	0.29	0.0067	1.50	< 0.00002	0.00023	0.0001	0.000013	0.00012	0.002	0.00001	CA10349-JUN11	0.24	0.20	-0.04	-9.5%
21-Jun-11	73	0.01	< 0.00001	< 0.0001	< 0.009	0.142	< 0.00004	0.52	< 0.00001	0.27	0.0078	1.68	< 0.00002	0.00027	0.0003	0.000014	0.00012	0.008	0.00002	CA14777-JUN11	0.24	0.23	-0.01	-1.8%
28-Jun-11	74	0.01	0.00016	0.0002	< 0.009	0.166	0.00010	0.55	< 0.00001	0.28	0.0081	1.56	< 0.00002	0.00004	< 0.0001	0.000017	0.00013	0.003	0.00001	CA15123-JUN11	0.33	0.25	-0.08	-13.6%
05-Jul-11	75	< 0.01	0.00007	0.0002	< 0.009	0.160	< 0.00004	0.81	< 0.00001	0.33	0.0098	1.96	< 0.00002	0.00011	0.0001	0.000029	0.00013	0.005	< 0.00001	CA15472-JUL11	0.36	0.31	-0.05	-6.9%
12-Jul-11	76	0.01	0.00017	< 0.0001	< 0.009	0.172	< 0.00004	0.70	< 0.00001	0.30	0.0099	2.18	< 0.00002	0.00012	0.0002	0.000023	0.00012	0.003	< 0.00001	CA15694-JUL11	0.26	0.30	0.03	6.0%
19-Jul-11	77	< 0.01	0.00003	0.0003	0.022	0.163	< 0.00004	0.57	< 0.00001	0.31	0.0084	1.86	< 0.00002	0.00013	0.0002	0.000017	0.00013	0.002	0.00004	CA16180-JUL11	0.24	0.26	0.02	3.4%
26-Jul-11	78	< 0.01	0.00036	0.0003	0.018	0.128	< 0.00004	0.47	< 0.00001	0.20	0.0087	1.23	< 0.00002	< 0.00001	0.0004	0.000012	0.00008	0.002	< 0.00001	CA11330-JUL11	0.22	0.20	-0.02	-4.3%

HC 9
Sample = Alt 09 11

Date	Cycle	Hg	Mo	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		ug/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L	mg/L					
02-Aug-11	79	< 0.01	0.00005	< 0.0001	< 0.009	0.152	< 0.00004	0.56	0.00001	0.27	0.0071	1.58	< 0.00002	0.00006	0.0002	0.000017	0.00010	0.004	0.00002	CA14200-AUG11	0.22	0.22	0.00	1.1%
09-Aug-11	80	< 0.01	0.00014	< 0.0001	< 0.009	0.148	< 0.00004	0.58	< 0.00001	0.30	0.0080	1.82	< 0.00002	< 0.00001	0.0002	0.000020	0.00011	0.006	0.00002	CA14411-AUG11	0.23	0.24	0.01	2.6%
16-Aug-11	81	0.02	0.00008	< 0.0001	< 0.009	0.149	< 0.00004	0.54	< 0.00001	0.29	0.0071	1.63	< 0.00002	0.00013	0.0001	0.000013	0.00009	0.003	< 0.00001	CA14675-AUG11	0.25	0.22	-0.03	-6.4%
23-Aug-11	82	0.01	0.00006	< 0.0001	< 0.009	0.133	< 0.00004	0.53	< 0.00001	0.28	0.0069	1.48	< 0.00002	0.00009	< 0.0001	0.000019	0.00013	0.004	< 0.00001	CA10450-AUG11	0.28	0.22	-0.06	-11.5%
30-Aug-11	83	0.02	0.00004	0.0002	< 0.009	0.141	0.00005	0.50	0.00001	0.28	0.0072	1.66	< 0.00002	0.00013	0.0001	0.000016	0.00008	0.006	< 0.00001	CA14264-SEP11	0.27	0.23	-0.05	-9.2%
06-Sep-11	84	< 0.01	0.00010	< 0.0001	< 0.009	0.137	< 0.00004	0.41	< 0.00001	0.26	0.0066	1.72	< 0.00002	< 0.00001	0.0002	0.000017	0.00012	0.003	0.00003	CA14213-SEP11	0.23	0.21	-0.02	-5.1%
13-Sep-11	85	< 0.01	0.00007	< 0.0001	< 0.009	0.142	< 0.00004	0.50	< 0.00001	0.28	0.0071	1.65	< 0.00002	0.00011	0.0001	0.000016	0.00008	0.004	0.00002	CA17321-SEP11	0.25	0.22	-0.03	-6.4%
20-Sep-11	86	0.01	0.00010	0.0002	< 0.009	0.133	0.00016	0.48	0.00001	0.25	0.0064	1.73	< 0.00002	0.00037	< 0.0001	0.000016	0.00020	0.004	0.00003	CA14825-SEP11	0.22	0.20	-0.02	-4.4%
27-Sep-11	87	< 0.01	0.00005	< 0.0001	< 0.009	0.127	< 0.00004	0.39	0.00001	0.25	0.0060	1.49	< 0.00002	0.00012	0.0001	0.000021	0.00010	0.004	< 0.00001	CA18921-SEP11	0.27	0.20	-0.07	-15.1%
04-Oct-11	88	< 0.01	0.00010	< 0.0001	< 0.009	0.140	< 0.00004	0.65	< 0.00001	0.30	0.0081	2.01	< 0.00002	0.00019	0.0002	0.000043	0.00010	0.005	< 0.00001	CA14153-OCT11	0.32	0.27	-0.04	-7.6%
11-Oct-11	89	< 0.01	0.00005	0.0002	< 0.009	0.123	< 0.00004	0.54	< 0.00001	0.25	0.0065	1.67	< 0.00002	0.00001	0.0001	< 0.000001	0.00008	0.002	< 0.00001	CA14391-OCT11	0.29	0.23	-0.05	-10.2%
18-Oct-11	90	< 0.01	0.00011	0.0001	< 0.009	0.131	< 0.00004	0.48	< 0.00001	0.24	0.0064	1.65	< 0.00002	0.00005	0.0002	0.000014	0.00008	0.003	0.00003	CA14788-OCT11	0.24	0.22	-0.03	-5.4%
25-Oct-11	91	0.01	0.00004	< 0.0001	< 0.009	0.133	< 0.00004	0.51	0.00001	0.26	0.0069	1.61	< 0.00002	0.00008	0.0001	0.000017	0.00008	0.003	0.00001	CA14955-OCT11	0.22	0.22	0.00	1.0%
01-Nov-11	92	< 0.01	0.00005	0.0001	< 0.009	0.125	0.00020	0.48	< 0.00001	0.24	0.0068	1.62	< 0.00002	0.00007	0.0002	0.000020	0.00007	0.003	< 0.00001	CA18036-NOV11	0.24	0.22	-0.02	-5.4%
08-Nov-11	93	< 0.01	0.00003	0.0001	0.010	0.128	< 0.00004	0.48	< 0.00001	0.30	0.0069	1.69	< 0.00002	0.00002	0.0002	0.000016	0.00018	0.005	< 0.00001	CA18264-NOV11	0.24	0.22	-0.02	-4.3%
15-Nov-11	94	< 0.01	0.00004	0.0003	< 0.009	0.110	< 0.00004	0.36	< 0.00001	0.26	0.0054	1.22	< 0.00002	0.00187	0.0003	0.000015	0.00020	0.005	< 0.00001	CA18499-NOV11	0.20	0.19	0.00	-0.9%
22-Nov-11	95	0.01	< 0.00001	0.0002	< 0.009	0.076	< 0.00004	0.48	0.00001	0.16	0.0060	1.20	< 0.00002	< 0.00001	0.0002	0.000017	0.00016	0.004	< 0.00001	CA18773-NOV11	0.19	0.20	0.01	1.5%
29-Nov-11	96	< 0.01	0.00014	0.0003	< 0.009	0.111	< 0.00004	0.50	< 0.00001	0.23	0.0065	1.37	< 0.00002	0.00006	0.0002	0.000020	0.00028	0.003	< 0.00001	CA12006-NOV11	0.25	0.20	-0.05	-10.1%
06-Dec-11	97	0.01	0.00003	< 0.0001	< 0.009	0.121	0.00005	0.48	0.00006	0.22	0.0063	1.50	< 0.00002	< 0.00001	0.0001	0.000018	0.00020	0.003	< 0.00001	CA14293-DEC11	0.20	0.23	0.03	7.0%
13-Dec-11	98	0.01	0.00007	0.0002	0.014	0.113	0.00029	0.45	0.00001	0.30	0.0062	1.44	< 0.00002	0.00010	0.0002	0.000014	< 0.00003	0.004	< 0.00001	CA14475-DEC11	0.35	0.21	-0.14	-25.6%
20-Dec-11	99	< 0.01	0.00003	0.0001	< 0.009	0.119	0.00058	0.42	< 0.00001	0.23	0.0053	1.30	< 0.00002	< 0.00001	0.0001	0.000010	0.00015	0.004	< 0.00001	CA10397-DEC11	0.19	0.18	0.00	-1.0%
27-Dec-11	100	< 0.01	0.00006	0.0002	< 0.009	0.190	0.00010	0.39	0.00010	0.27	0.0053	1.33	< 0.00002	0.00001	0.0002	0.000015	0.00026	0.002	< 0.00001	CA10466-DEC11	0.18	0.19	0.00	1.2%
03-Jan-12	101	0.03	0.00003	0.0003	< 0.009	0.109	< 0.00004	0.45	< 0.00001	0.26	0.0056	1.37	< 0.00002	0.00008	0.0002	0.000014	0.00038	0.003	< 0.00001	CA14133-JAN12	0.26	0.20	-0.06	-14.2%
10-Jan-12	102	< 0.01	0.00003	0.0001	< 0.009	0.103	< 0.00004	0.43	0.00001	0.26	0.0055	1.33	< 0.00002	0.00007	0.0004	0.000025	0.00043	0.003	< 0.00001	CA14430-JAN12	0.22	0.19	-0.03	-6.8%
17-Jan-12	103	< 0.01	0.00004	0.0002	< 0.009	0.099	< 0.00004	0.43	< 0.00001	0.25	0.0059	1.35	< 0.00002	0.00009	0.0003	0.000020	0.00031	0.002	< 0.00001	CA11226-JAN12	0.22	0.20	-0.02	-4.3%
24-Jan-12	104	< 0.01	0.00003	0.0002	< 0.009	0.106	< 0.00004	0.42	< 0.00001	0.25	0.0056	1.26	< 0.00002	0.00001	< 0.0001	0.000016	0.00026	0.002	< 0.00001	CA10502-JAN12	0.26	0.19	-0.07	-14.6%
31-Jan-12	105	< 0.01	0.00006	< 0.0001	< 0.009	0.110	< 0.00004	0.44	0.00001	0.27	0.0055	1.24	< 0.00002	0.00002	0.0002	0.000058	0.00040	0.003	< 0.00001	CA10999-FEB12	0.22	0.20	-0.02	-5.0%
07-Feb-12	106	< 0.01	0.00003	0.0002	< 0.009	0.109	0.00007	0.53	< 0.00001	0.24	0.0069	1.64	< 0.00002	< 0.00001	0.0002	0.000040	0.00019	0.002	0.00002	CA14207-FEB12	0.32	0.25	-0.07	-12.9%
14-Feb-12	107	< 0.01	0.00002	0.0002	< 0.009	0.092	< 0.00004	0.38	< 0.00001	0.26	0.0055	1.50	< 0.00002	< 0.00001	0.0001	0.000016	0.00006	0.001	< 0.00001	CA14420-FEB12	0.22	0.19	-0.03	-7.8%
21-Feb-12	108	< 0.01	0.00001	0.0002	< 0.009	0.102	< 0.00004	0.41	< 0.00001	0.28	0.0059	1.49	< 0.00002	< 0.00001	0.0002	0.000017	0.00020	0.002	< 0.00001	CA14754-FEB12	0.25	0.21	-0.04	-9.8%
28-Feb-12	109	< 0.01	0.00001	0.0001	< 0.009	0.104	0.00004	0.42	0.00002	0.25	0.0037	1.20	< 0.00002	0.00003	0.0002	0.000015	0.00025	0.003	0.00002	CA14931-FEB12	0.21	0.19	-0.01	-3.4%
06-Mar-12	110	< 0.01	0.00006	0.0002	< 0.009	0.094	< 0.00004	0.46	< 0.00001	0.26	0.0053	1.39	< 0.00002	0.00003	0.0002	0.000021	0.00024	0.004	< 0.00001	CA14216-MAR12	0.24	0.19	-0.05	-11.9%
13-Mar-12	111	< 0.01	0.00006	0.0001	< 0.009	0.094	< 0.00004	0.44	< 0.00001	0.26	0.0053	1.28	< 0.00002	0.00027	< 0.0001	0.000015	0.00005	0.003	0.00002	CA14408-MAR12	0.23	0.19	-0.05	-11.1%
20-Mar-12	112	< 0.01	0.00004	< 0.0001	< 0.009	0.103	0.00008	0.41	< 0.00001	0.26	0.0056	1.39	< 0.00002	0.00008	< 0.0001	0.000018	< 0.00003	0.001	< 0.00001	CA14687-MAR12	0.21	0.19	-0.01	-3.1%
27-Mar-12	113	< 0.01	0.00003	0.0002	< 0.009	0.088	< 0.00004	0.40	< 0.00001	0.23	0.0046	1.23	< 0.00002	< 0.00001	0.0007	0.000022	0.00049	0.002	< 0.00001	CA14874-MAR12	0.21	0.18	-0.03	-6.8%
03-Apr-12	114	< 0.01	0.00001	0.0002	< 0.009	0.107	< 0.00004	0.47	< 0.00001	0.30	0.0058	1.59	< 0.00002	< 0.00001	0.0001	0.000022	0.00025	0.006	< 0.00001	CA14169-APR12	0.23	0.22	-0.02	-3.8%
10-Apr-12	115	0.05	0.00003	0.0001	< 0.009	0.102	< 0.00004	0.48	0.00001	0.28	0.0055	1.41	< 0.00002	0.00002	0.0002	0.000020	0.00027	0.003	< 0.00001	CA11095-APR12	0.20	0.20	0.00	0.3%
17-Apr-12	116	0.05	0.00004	0.0001	< 0.009	0.088	< 0.00004	0.41	0.00001	0.21	0.0048	1.27	< 0.00002	< 0.00001	0.0003	0.000020	0.00026	0.003	< 0.00001	CA14686-APR12	0.19	0.18	-0.01	-3.4%
24-Apr-12	117	0.03	0.00030	0.0002	< 0.009	0.108	< 0.00004	0.47	< 0.00001	0.30	0.0056	1.49	< 0.00002	< 0.00001	0.0002	0.000023	0.00034	0.003	< 0.00001	CA14876-APR12	0.25	0.21	-0.04	-8.6%
01-May-12	118	0.03	0.00002	0.0001	< 0.009	0.094	< 0.00004	0.42	< 0.00001	0.25	0.0050	1.32	< 0.00002	0.00004	0.0002	0.000032	0.00029	0.002	< 0.00001	CA14088-MAY12	0.22	0.19	-0.03	-7.5%
08-May-12	119	< 0.01	0.00002	0.0002	< 0.009	0.106	< 0.00004	0.42	< 0.00001	0.29	0.0051	1.36	< 0.00002	0.00015	0.0001	0.000024	0.00025	0.003	< 0.00001	CA14348-MAY12	0.20	0.19	-0.01	-3.3%
15-May-12	120	0.01	0.00002	0.0003	< 0.009	0.096	0.00004	0.44	< 0.00001	0.29	0.0051	1.34	< 0.00002	< 0.00001	0.0003	0.000022	0.00032	0.006	0.00005	CA14621-MAY12	0.19	0.19	0.00	0.1%
22-May-12	121	0.02	0.00005	0.0004	< 0.009	0.100	< 0.00004	0.42	< 0.00001	0.29	0.0047	1.36	< 0.00002	0.00002	0.0002	0.000024	0.00041	0.004	0.00002	CA10508-MAY12	0.18	0.18	0.00	-0.4%
29-May-12	122	< 0.01	0.00003	< 0.0001	< 0.009	0.111	< 0.00004	0.48	0.00001	0.29	0.0050	1.40	< 0.00002	0.00023	0.0006	0.000021	0.00044	0.003	0.00001	CA15134-MAY12	0.18	0.21	0.02	5.8%
05-Jun-12	123	0.02	0.00011	< 0.0001	< 0.009	0.108	0.00004	0.45	< 0.00001	0.30	0.0057	1.61	< 0.00002	0.00002	0.0005	0.000016	0.00043	0.004	< 0.00001	CA15137-JUN12	0.19	0.21	0.03	6.5%
12-Jun-12	124	0.01	0.00004	0.0001	< 0.009	0.120	0.00016	0.56	< 0.00001	0.33	0.0061	1.56	< 0.00002	0.00003	< 0.0001	0.000027	0.00020	0.003	< 0.00001	CA15174-JUN12	0.24	0.23	-0.01	-2.5%
19-Jun-12	125	< 0.01	0.00011	0.0002	< 0.009	0.107	0.00007	0.51	< 0.00001	0.27	0.0053	1.49	< 0.00002	0.00059	0.0002	0.000010	0.00028	0.006	0.00002	CA15309-JUN12	0.17	0.20	0.03	7.0%
26-Jun-12	126	0.01	0.00005	0.0002	< 0.009	0.119	< 0.00004	0.59	0.00001	0.37	0.0055	1.47	< 0.00002	0.00003	0.0003	0.000028	0.00040	0.003	< 0.00001	CA15357-JUN12	0.23	0.21	-0.02	-5.6%
03-Jul-12	127	0.01	0.00025	< 0.0001	< 0.009	0.116	< 0.00004	0.51	0.00001	0.30	0.0054	1.53	< 0.00002	0.00018	0.0002	0.000017	0.00023	0.003	< 0.00001	CA15021-JUL12	0.24	0.20	-0.04	-8.5%
10-Jul-12	128	0.02	0.00006	0.0001	< 0.009	0.114	0.00005	0.47	< 0.00001	0.30	0.0051	1.46	< 0.00002	0.00041	0.0004	0.000028	0.00035	0.004	< 0.00001	CA15118-JUL12	0.24	0.20	-0.04	-9.9%
17-Jul-12	129	0.01	< 0.00001	< 0.0001	< 0.009	0.102	0.00007	0.47	0.00002	0.29	0.0049	1.34	< 0.00002	< 0.00001	< 0.0001	0.000015	0.00039	0.003	< 0.00001	CA15186-JUL12	0.22	0.19	-0.03	-7.0%
24-Jul-12	130	0.01	0.00003	0.0001	< 0.009	0.111	0.00022	0.49	< 0.00001	0.31	0.0050	1.50	< 0.00002	0.00004	0.0001	0.000011	0.00032	0.002	< 0.00001	CA15302-JUL12	0.19	0.20	0.01	1.8%
31-Jul-12	131	0.01	0.00002	< 0.0001	< 0.009	0.096	< 0.00004	0.47	< 0.00001	0.24	0.0044	1.24	< 0.00002	0.00005	0.0002	0.000017	0.00035	0.003	< 0.00001	CA15010-AUG12	0.19	0.18	-0.01	-2.2%
07-Aug-12	132	0.01	0.00003	0.0001	< 0.009	0.100	0.00009	0.52	< 0.00001	0.26	0.0051	1.58	< 0.00002	0.00010	0.0002	0.000024	0.00034	0.003	0.00034	CA15071-AUG12	0.21	0.20	-0.01	-3.0%
14-Aug-12	133	< 0.01	0.00002	0.0002	< 0.009	0.098	< 0.00004	0.45	< 0.00001	0.30	0.0052	1.84	< 0.00002	0.00011	0.0002	0.000028	0.00031	0.003	< 0.00001	CA15151-AUG12	0.20	0.21	0.00	0.4%
21-Aug-12	134	0.01	0.00005	< 0.0001	< 0.009	0.074	< 0.00004	0.45	< 0.00001	0.21	0.0042	1.42	< 0.00002	0.00011	0.0001	0.000009	0.00027	0.002	< 0.00001	CA15239-AUG12	0.20	0.17	-0.03	-8.5%
28-Aug-12	135	< 0.01	0.00006	< 0.0001	< 0.009	0.086	< 0.00004	0.40	< 0.00001	0.22	0.0047	1.48	< 0.00002	0.00015	< 0.0001	0.000010	0.00030	0.002	< 0.00001	CA15348-AUG12	0.23	0.18	-0.06	-13.7%
04-Sep-12	136	0.06	0.00002	< 0.0001	< 0.009	0.099	< 0.00004	0.46	< 0.00001	0.31	0.0053	1.69	< 0.00002	< 0.00001	< 0.0001	0.000008	0.00019	< 0.001	< 0.00001	CA15317-SEP12	0.22	0.21	0.00	-0.3%
11-Sep-12	137	0.01	0.00002	0.0001	< 0.009	0.094	< 0.00004	0.42	< 0.00001	0.28	0.0044	1.42	< 0.00002	0.00008	0.0001	0.000014	0.00018	0.002	< 0.00001	CA15405-SEP12	0.24	0.17	-0.07	-17.3%
18-Sep-12	138	0.03	< 0.00001	< 0.0001	< 0.009	0.089	0.00004	0.47	0.00001	0.28	0.0048	1.46	< 0.00002	0.00012	0.0002	0.000012	0.00033	0.003	< 0.00001	CA15559-SEP12	0.21	0.18	-0.03	-7.1%
25-Sep-12	139	< 0.01	0.00004	0.0001	< 0.009	0.074	0.00006	0.42	0.00004	0.20	0.0040	1.29	< 0.00002	0.00010	< 0.0001	0.000019	0.00018	0.002	< 0.00001	CA15670-SEP12	0.23	0.16	-0.07	-17.6%
02-Oct-12	140	< 0.01	0.00003	< 0.0001	< 0.009	0.093	< 0.00004	0.51	0.00002	0.23	0.0050	1.86	< 0.00002	0.00003	0.0001	0.000015	0.00019	0.001	< 0.00001	CA15354-OCT12	0.20	0.20	-0.01	-1.4%
09-Oct-12	141	< 0.01	0.00003	0.0003	< 0.009	0.083	< 0.00004	0.41	< 0.00001	0.22	0.0048	1.74	< 0.00002	0.00011	0.0001	0.000028	0.00021	0.002	< 0.00001	CA15450-OCT12	0.20	0.19	-0.02	-3.9%
16-Oct-12	142	< 0.01	0.00002	0.0001	< 0.009	0.083	< 0.00004	0.47	< 0.00001	0.24	0.0055	2.09	< 0.00002	0.00004	< 0.0001	0.000023	0.00018	0.002	0.00002	CA15570-OCT12	0.27	0.21	-0.06	-11.9%
23-Oct-12	143	< 0.01	0.00009	0.0004	< 0.009	0.085	< 0.00004	0.47	< 0.00001	0.26	0.0067	2.77	< 0.00002	0.00005	< 0.0001	0.000030	0.00025	0.002	< 0.00001	CA15652-OCT12	0.32	0.26	-0.06	-9.9%
30-Oct-12	144	< 0.01	0.00007	0.0001	< 0.009	0.085	< 0.00004	0.43	< 0.00001	0.22	0.0062	2.57	< 0.00002	0.00018	< 0.0001	0.00003	0.00017	0.004	< 0.00001	CA15744-OCT12	0.27	0.23	-0.04	-8.1%
06-Nov-12	145	< 0.01	0.00008	0.0003	< 0.009	0.085	< 0.00004	0.41	< 0.00001	0.29	0.0053	1.92	< 0.00002	0.00016	0.0002	0.000019	0.00021	0.002	< 0.00001	CA11210-NOV12	0.16	0.21	0.05	12.8%
13-Nov-12	146	0.01	0.00003	< 0.0001	< 0.009	0.073	< 0.00004	0.46	0.00003	0.21	0.0043	1.31	< 0.00002	0.00002	0.0001	0.000016	0.00014	0.003	< 0.00001	CA15251-NOV12	0.21	0.17	-0.04	-10.2%
20-Nov-12	147	< 0.01	0.00003	0.0004	< 0.009	0.085	0.00005	0.57	0.00003	0.30	0.0063	1.99	< 0.00002	0.00006	0.0001	0.000026	0.00014	0.003	< 0.00001	CA15347-NOV12	0.25	0.25	0.00	0.0%
27-Nov-12	148	< 0.01	0.00005	< 0.0001	< 0.009	0.083	< 0.00004	0.56	< 0.00001	0.28	0.0059	1.98	< 0.00002	0.00009	< 0.0001	0.000032	< 0.00003	0.001	< 0.00001	CA15376-NOV12	0.32	0.24	-0.08	-13.7%
04-Dec-12	149	0.01	0.00003	< 0.0001	0.011	0.061	< 0.00004	0.35	0.00001	0.22	0.0039	1.39	< 0.00002	0.00012	0.0001	0.000028	0.00017	0.003	0.00001	CA15038-DEC12	0.19	0.16	-0.03	-8.4%
11-Dec-12	150	< 0.01	0.00004	< 0.0001	< 0.009	0.074	< 0.00004	0.43	0.00001	0.25	0.0043	1.26	< 0.00002	0.00009	< 0.0001	0.000027	0.00017	0.002	< 0.00001	CA15164-JAN13	0.22	0.19	-0.02	-5.8%
18-Dec-12	151	< 0.01	0.00004	< 0.0001	< 0.009	0.071	< 0.00004	0.40	0.00002	0.24	0.0045	1.38	< 0.00002	0.00008	< 0.0001	0.000024	0.00015	0.002	< 0.00001	CA15269-DEC12	0.16	0.18	0.02	5.5%
25-Dec-12	152	< 0.01	0.00006	< 0.0001	0.023	0.062	< 0.00004	0.33	< 0.00001	0.22	0.0045	1.36	< 0.00002	0.00008	< 0.0001	0.000019	< 0.00003	0.002	< 0.00001	CA15361-DEC12	0.11	0.17	0.06	22.3%
01-Jan-13	153	< 0.01	0.00010	< 0.0001	0.013	0.073	0.00005	0.40	0.00002	0.27	0.0039	1.37	< 0.00002	0.00016	0.0001	0.000022	0.00015	0.002	< 0.00001	CA15056-JAN13	0.19	0.17	-0.02	-6.1%
08-Jan-13	154	< 0.01	0.00006	< 0.0001	0.010	0.071	< 0.00004	0.36	< 0.00001	0.21	0.0030	0.94	< 0.00002	0.00011	< 0.0001	0.000019	0.00021	0.001	< 0.00001	CA15153-JAN13	0.16	0.14	-0.01	-4.8%
15-Jan-13	155																							
22-Jan-13	156																							
29-Jan-13	157																							
05-Feb-13	158																							
12-Feb-13	159																							

HC 10 ***CONFIDENTIAL*** ***DRAFT***

Sample = Alt 09 20

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
02-Feb-10	1	500	410	8.26	319	83	#N/A	0.3	33.3	9	-	-	14.1	0.218	0.0027	0.0036	0.00228	< 0.00002	< 0.00001	0.014	< 0.000003	4.84	< 0.0005	0.000085	0.0015	< 0.01	0.00005	0.010	0.483	0.004	< 0.01	0.00072
09-Feb-10	2	500	450	7.65	312	110	#N/A	1.6	22.2	15	-	-	17.1	0.210	0.0048	0.0046	0.00201	< 0.00002	< 0.00001	0.022	< 0.000003	5.76	< 0.0005	0.000048	0.0007	< 0.01	0.00004	0.013	0.651	0.011	< 0.01	0.00082
16-Feb-10	3	500	410	7.67	309	82	#N/A	1.8	28.8	9	-	-	16.8	0.223	0.0041	0.0047	0.00201	< 0.00002	0.00003	0.019	0.000048	5.64	< 0.0005	0.000068	0.0007	< 0.01	0.00009	0.013	0.655	0.011	< 0.01	0.00082
23-Feb-10	4	500	430	7.84	345	54	#N/A	1.4	26.8	8	-	-	17.1	0.188	0.0026	0.0030	0.00160	< 0.00002	< 0.00001	0.013	< 0.000003	5.81	< 0.0005	0.000022	< 0.0005	< 0.01	0.00003	0.010	0.622	0.014	< 0.01	0.00030
02-Mar-10	5	500	455	7.84	340	54	#N/A	1.0	22.5	5	-	-	15.9	0.195	0.0018	0.0027	0.00177	< 0.00002	< 0.00001	0.010	< 0.000003	5.42	< 0.0005	0.000019	< 0.0005	< 0.01	0.00004	0.008	0.576	0.010	< 0.01	0.00019
09-Mar-10	6	500	420	7.68	344	51	#N/A	1.5	22.5	5	-	-	17.3	0.182	0.0014	0.0023	0.00174	< 0.00002	< 0.00001	0.008	< 0.000003	5.98	< 0.0005	0.000012	0.0005	< 0.01	0.00007	0.008	0.583	0.016	< 0.01	0.00014
16-Mar-10	7	500	445	7.56	354	46	#N/A	1.9	21.6	8	< 0.2	< 0.06	21.0	0.1920	0.0015	0.0021	0.00176	< 0.00002	< 0.00001	0.008	< 0.000003	7.29	< 0.0005	0.000013	< 0.0005	< 0.01	0.00006	0.006	0.676	0.020	< 0.01	0.00021
23-Mar-10	8	500	460	7.58	357	54	#N/A	2.1	20.8	9	< 0.2	< 0.06	20.4	0.1700	0.0013	0.0019	0.00189	< 0.00002	< 0.00001	0.0067	0.000028	7.1	0.0005	0.000011	< 0.0005	< 0.01	0.00039	0.007	0.68	0.016	< 0.01	0.00025
30-Mar-10	9	500	435	7.71	372	50	#N/A	1.4	17.1	9	< 0.2	< 0.06	19.5	0.1600	0.0011	0.0019	0.00158	< 0.00002	< 0.00001	0.005	< 0.000003	6.79	0.0006	0.000011	0.0010	< 0.01	0.00103	0.006	0.609	0.018	< 0.01	0.00022
06-Apr-10	10	500	455	7.63	361	51	#N/A	1.9	22.0	6	< 0.2	< 0.06	20.5	0.166	0.0009	0.0023	0.00189	< 0.00002	< 0.00001	< 0.002	< 0.000003	7.36	< 0.0005	0.000009	0.0005	< 0.01	0.00003	0.005	0.512	0.024	< 0.01	0.00014
13-Apr-10	11	500	445	7.49	354	50	#N/A	2.4	22.0	6	< 0.2	< 0.06	19.6	0.1980	0.0011	0.0019	0.00179	< 0.00002	< 0.00001	0.005	< 0.000003	7.04	< 0.0005	0.000006	< 0.0005	< 0.01	0.00005	0.006	0.49	0.019	< 0.01	0.00014
20-Apr-10	12	500	440	7.73	339	55	#N/A	2.0	22.0	8	< 0.2	< 0.06	20.6	0.219	0.0009	0.0021	0.00212	< 0.00002	< 0.00001	0.005	< 0.000003	7.41	0.0006	0.000006	0.0008	< 0.01	0.00030	0.005	0.511	0.017	< 0.01	0.00011
27-Apr-10	13	500	440	7.68	340	47	#N/A	2.3	21.1	3	< 0.2	< 0.06	17.7	0.1720	0.0007	0.0018	0.0017	< 0.00002	< 0.00001	0.003	< 0.000003	6.37	< 0.0005	0.000007	< 0.0005	< 0.01	0.00007	0.004	0.45	0.019	< 0.01	0.00010
04-May-10	14	500	450	7.57	364	47	#N/A	1.9	20.2	5	< 0.2	< 0.06	19.5	0.1490	0.0008	0.0017	0.0019	< 0.00002	< 0.00001	0.005	< 0.000003	7.06	< 0.0005	0.00001	0.0009	< 0.01	0.00093	0.004	0.45	0.021	< 0.01	0.00012
11-May-10	15	500	440	7.45	360	46	#N/A	2.0	17.3	4	< 0.2	< 0.06	19.5	0.1660	0.0008	0.0019	0.0019	< 0.00002	< 0.00001	0.004	< 0.000003	7.16	0.0006	0.00000	0.0007	< 0.01	0.00188	0.004	0.41	0.023	< 0.01	0.00012
18-May-10	16	500	415	7.52	357	42	#N/A	2.1	17.1	2	< 0.2	< 0.06	18.0	0.202	0.0006	0.0023	0.00178	< 0.00002	< 0.00001	0.0038	0.000007	6.58	0.0008	0.000136	0.0009	0.004	0.00028	0.004	0.382	0.019	< 0.01	0.00059
25-May-10	17	500	425	7.45	376	38	#N/A	2.7	20.6	5	< 0.2	< 0.06	16.3	0.216	0.0006	0.002	0.0017	< 0.00002	< 0.00001	0.0030	< 0.000003	6.01	0.0007	0.00001	0.0008	0.003	0.00135	0.003	0.30	0.023	< 0.01	0.00009
01-Jun-10	18	500	425	7.56	362	36	#N/A	1.9	17.3	2	< 0.2	< 0.06	16.3	0.191	0.0005	0.0025	0.0015	< 0.00002	< 0.00001	0.0035	< 0.000003	6.03	0.0007	0.00001	0.0006	0.005	0.00107	0.003	0.29	0.021	0.01	0.00006
08-Jun-10	19	500	500	7.49	360	42	#N/A	2.3	22.2	1	< 0.2	< 0.06	19.7	0.129	0.0011	0.0016	0.0016	< 0.00002	< 0.00001	0.0059	< 0.000003	7.26	0.0005	< 0.000002	0.001	< 0.002	0.00084	0.003	0.37	0.019	< 0.01	0.00011
15-Jun-10	20	500	460	7.64	354	39	#N/A	2.2	18.1	1	< 0.2	< 0.06	17.0	0.167	0.0007	0.0016	0.0021	< 0.00002	< 0.00001	0.0042	< 0.000003	6.32	< 0.0005	0.000010	0.001	< 0.002	0.00006	0.003	0.29	0.019	< 0.01	0.00015
22-Jun-10	21	500	435	7.70	431	36	#N/A	1.8	20.2																							
29-Jun-10	22	500	450	7.44	348	33	#N/A	1.9	16.3	<2	< 0.2	< 0.06	13.4	0.157	0.0004	0.0017	0.0015	< 0.00002	< 0.00001	0.0035	< 0.000003	4.98	0.0009	0.0000	0.001	< 0.002	0.00006	0.003	0.245	0.019	< 0.01	0.00011
06-Jul-10	23	500	470	7.49	363	37	#N/A	1.8	18.1																							
13-Jul-10	24	500	455	7.42	353	31	#N/A	2.2	16.4	<2	< 0.2	< 0.06	12.2	0.120	0.0006	0.0015	0.00150	< 0.00002	< 0.00001	0.0040	< 0.000003	4.49	0.0005	0.000014	0.0013	0.002	0.00005	0.002	0.237	0.0192	< 0.01	0.00015
20-Jul-10	25	500	450	7.51	347	29	#N/A	3.2	16.5																							
27-Jul-10	26	500	440	7.31	354	29	#N/A	2.9	15.2	5	< 0.2	< 0.06	13.9	0.12	0.0002	0.0012	0.0015	< 0.00002	< 0.00001	0.0034	< 0.000003	5.21	< 0.0005	0.0000	< 0.0005	0.004	0.00002	0.002	0.228	0.018	< 0.01	< 0.00001
03-Aug-10	27	500	455	7.51	405	27	#N/A	2.6	14.1	3	< 0.2	< 0.06	12.9	0.12	0.0005	0.0010	0.00133	< 0.00002	< 0.00001	0.0050	< 0.000003	4.83	< 0.0005	0.0000	< 0.0005	< 0.002	0.00002	0.002	0.199	0.017	< 0.01	0.00008
10-Aug-10	28	500	445	7.64	382	29	#N/A	3.1	16.3	5	< 0.2	< 0.06	13.6	0.1180	< 0.0002	0.0015	0.00139	< 0.00002	< 0.00001	0.0049	< 0.000003	5.12	0.0006	0.000006	< 0.0005	< 0.002	0.00003	0.002	0.197	0.0178	< 0.01	0.00005
17-Aug-10	29	500	445	7.65	396	27	#N/A	2.5	15.7	<2	< 0.2	< 0.06	12.6	0.154	0.0004	0.0013	0.00138	< 0.00002	< 0.00001	0.0031	< 0.000003	4.77	< 0.0005	< 0.000002	< 0.0005	< 0.002	0.00004	0.002	0.179	0.0100	< 0.01	0.00007
24-Aug-10	30	500	440	7.40	354	26	#N/A	2.4	14.6	<2	< 0.2	< 0.06	12.3	0.132	0.0003	0.0018	0.00151	< 0.00002	< 0.00001	0.0030	< 0.000003	4.62	< 0.0005	0.000004	< 0.0005	0.004	0.00005	0.002	0.176	0.0167	< 0.01	0.00002
31-Aug-10	31	500	450	7.68	393	24	#N/A	3.8	17.0	<2	< 0.2	< 0.06	11.6	0.123	0.0005	0.0013	0.00138	< 0.00002	< 0.00001	0.0026	< 0.000003	4.41	< 0.0005	0.000007	0.0006	< 0.002	0.00006	0.002	0.150	< 0.0002	< 0.01	< 0.00001
07-Sep-10	32	500	455	7.22	385	28	#N/A	3.1	16.1	4	< 0.2	< 0.06	12.4	0.120	0.0002	0.0013	0.00140	< 0.00002	< 0.00001	0.0048	< 0.000003	4.71	0.0006	0.000007	0.0010	0.002	0.00006	0.002	0.148	< 0.0002	< 0.01	< 0.00001
14-Sep-10	33	500	465	7.23	378	25	#N/A	2.5	14.9	<2	< 0.2	< 0.06	12.7	0.1150	0.0007	0.0011	0.00136	< 0.00002	< 0.00001	0.0028	< 0.000003	4.81	< 0.0005	0.000010	0.0009	0.007	0.00005	0.001	0.177	0.0213	0.01	0.00022
21-Sep-10	34	500	460	7.39	350	24	#N/A	2.3	16.3	3	< 0.2	< 0.06	13.2	0.137	0.0003	0.0007	0.00160	< 0.00002	0.00004	0.0035	< 0.000003	5.02	< 0.0005	< 0.000002	0.0007	< 0.002	< 0.00002	0.001	0.163	0.0198	< 0.01	0.00008
28-Sep-10	35	500	460	7.43	335	30	#N/A	1.8	17.5	2	< 0.2	< 0.06	14.7	0.1490	0.0004	0.0014	0.00155	< 0.00002	< 0.00001	0.0038	< 0.000003	5.60	< 0.0005	0.000011	0.0005	0.039	0.00006	0.002	0.178	0.0198	< 0.01	0.00012
05-Oct-10	36	500	450	7.42	334	31	#N/A	2.4	16.9	4	< 0.2	< 0.06	13.5	0.136	0.0005	0.0014	0.00178	< 0.00002	< 0.00001	0.0039	< 0.000003	5.13	< 0.0005	0.000026	0.0006	< 0.002	0.00004	0.002	0.173	0.0191	0.01	0.00021
12-Oct-10	37	500	445	7.38	341	27	#N/A	2.2	15.4	4	< 0.2	< 0.06	13.1	0.133	0.0007	0.0013	0.00161	< 0.00002	< 0.00001	0.0034	0.000006	4.97	< 0.0005	0.000022	0.0020	< 0.002	0.00099	0.002	0.177	0.0202	< 0.01	0.00015
19-Oct-10	38	500	455	7.34	336	28	#N/A	2.4	15.6	5	< 0.2	< 0.06	12.4	0.121	0.0003	0.0009	0.00199	< 0.00002	< 0.00001	0.0032	< 0.000003	4.74	< 0.0005	< 0.000002	0.0005	< 0.002	0.00002	0.002	0.150	0.0181	< 0.01	< 0.00001
26-Oct-10	39	500	485	7.34	373	29	#N/A	2.4	16.4	3	< 0.2	< 0.06	12.2	0.0985	0.0008	0.0009	0.00151	< 0.00002	< 0.00001	0.0035	< 0.000003	4.64	0.0006	< 0.000002	0.0010	< 0.002	0.00016	0.001	0.153	0.0185	< 0.01	< 0.00001
02-Nov-10	40	500	490	7.52	385	11	#N/A	1.8	14.7	3	< 0.2	< 0.06	11.1	0.136	< 0.0002	0.0009	0.00160	< 0.00002	< 0.00001	0.0038	< 0.000003	4.20	< 0.0005	< 0.000002	0.0008	0.003	0.00019	0.002	0.150	0.0148	< 0.01	0.00002
09-Nov-10	41	500	425	7.56	384	27	#N/A	2.5	15.6	<2	< 0.2	< 0.06	12.7	0.140	0.0004	0.0008	0.00195	< 0.00002	< 0.00001	0.0020	< 0.000003	4.80	0.0007	0.000016	0.0009	0.006	0.00077	0.002	0.163	0.0184	0.01	0.00007
16-Nov-10	42	500	450	7.70	364	27	#N/A	2.2	16.6	<2	< 0.2	< 0.06	12.3	0.108	0.0003	0.0007	0.00183	< 0.00002	< 0.00001	0.0046	0.000005	4.68	0.0006	0.000011	< 0.0005	< 0.002	0.00064	0.002	0.150	0.0182	0.02	0.00005
23-Nov-10	43	500	420	7.27	323	28	#N/A	2.3	16.0	2	< 0.2	< 0.06	11.6	0.125	0.0004	0.0010	0.00168	< 0.00002	< 0.00001	0.0021	< 0.000003	4.44	0.0008	0.000022	0.0008	< 0.002	0.00003	0.002	0.128	0.0184	< 0.01	0.00014
30-Nov-10	44	500	440	7.34	348	28	#N/A	2.8	17.5	<2	< 0.2	< 0.06	12.7	0.110	0.0003	0.0007	0.00173	< 0.00002	< 0.00001	0.0025	< 0.000003	4.85	0.0006	0.000002	0.0006	< 0.002	0.00009	0.001	0.153	0.0196	< 0.01	0.00015
07-Dec-10	45	500	445	7.43	347	39	#N/A	2.4	23.6	<2	< 0.2	< 0.06	21.3	0.147	0.0005	0.0013	0.00233	< 0.00002	< 0.00001	0.0025	< 0.000003	8.17	0.0007	0.000012	0.0008	< 0.002	0.00191	0.002	0.227	0.0244	< 0.01	0.00013
14-Dec-10	46	500	460	7.37	364	28	#N/A	3.5	16.3	2	< 0.2	< 0.06	12.5	0.122	0.0003	0.0008	0.00158	< 0.00002	< 0.00001	0.0033	< 0.000003	4.77	0.0006	0.000003	0.0012	< 0.002	0.00006	0.001	0.140	0.0177	< 0.01	0.00011
21-Dec-10	47	500	465	7.41	376	27	#N/A	3.8	16.6	2	< 0.2	< 0.06	13.3	0.113	0.0003	0.0008	0.00179	< 0.00002	< 0.00001	0.0020	0.000003	5.12	< 0.0005	0.000013	0.0008	< 0.002	0.00003	0.001	0.132	0.0070	< 0.01	< 0.00001
28-Dec-10	48	500	470	7.43	352	22	#N/A	4.3	16.2	3	< 0.2	< 0.06	11.9	0.110	0.0003	0.0008	0.00151	< 0.00002	< 0.00001	0.0040	< 0.000003	4.55	0.0007	< 0.000002	0.0008	< 0.002	0.00137	0.001	0.130	0.0157	< 0.01	< 0.00001
04-Jan-11	49	500	485	7.38	374	25	#N/A	4.0	16.2	2	< 0.2	< 0.06	12.4	0.0925	0.0003	0.0007	0.00165	< 0.00002	< 0.00001	0.0021	< 0.000003	4.73	0.0005	0.000006	0.0006	< 0.002	0.00116	0.001	0.132	0.0178	< 0.01	< 0.00001
11-Jan-11	50	500	440	7.27	384	25	#N/A	2.5	13.2	3	< 0.2	< 0.06	12.3	0.0911	0.0003	0.0006	0.00160	< 0.00002	< 0.00001	0.0035	< 0.000003	4.69	< 0.0005	0.000009	< 0.0005	0.004	0.00003	0.001	0.144	0.0207	< 0.01	0.00013
18-Jan-11	51	500	470	7.27	357	25	#N/A	2.5	13.7	4	< 0.2	< 0.06	13.3	0.0986	0.0003	0.0008	0.00167	< 0.00002	< 0.00001	0.0025	< 0.000003	5.10	< 0.0005	0.000004	< 0.0005	0.003	0.00002	0.001	0.145	0.0203	< 0.01	< 0.00001
25-Jan-11	52	500	470	7.27	343	25	#N/A	2.8	14.3	2	< 0.2	< 0.06	11.1	0.0887	0.0006	0.0017	0.00195	< 0.00002	< 0.00001	0.0023	< 0.000003	4.24	< 0.0005	0.000011	< 0.0005	< 0.002	0.00004	0.001	0.119	0.0146	< 0.01	0.00001
01-Feb-11	53	500	455	7.24	360	23	#N/A	2.5	14.0	<2	< 0.2	< 0.06	11.7	0.0727	0.0002	0.0007	0.00175	< 0.00002	< 0.00001	0.0020	< 0.000003	4.50	< 0.0005	0.000011	< 0.0005	< 0.002	0.00003	0.001	0.127	0.0183	< 0.01	0.00013
08-Feb-11	54	500	480	7.33	367	21	#N/A	2.0	13.0	7	< 0.2	< 0.06	21.3	0.0912	0.0003	0.0007	0.00178	< 0.00002	< 0.00001	0.0017	0.000003	8.21	< 0.0005	0.000014	0.0005	0.026	0.00005	0.001	0.190	0.0191	< 0.01	0.00069
15-Feb-11	55	500	455	7.28	359	23	#N/A	2.5	12.9	<2	< 0.2	0.10	11.5	0.0836	< 0.0002	0.0006	0.00151	< 0.00002	< 0.00001	0.0030	< 0.000003	4.39	< 0.0005	0.000013	< 0.0005	< 0.002	0.00103	0.001	0.124	0.0174	< 0.01	0.00009
22-Feb-11	56	500	455	7.34	343	24	#N/A	2.6	12.8	7	< 0.2	< 0.06	11.1	0.0734	0.0003	0.0007	0.00131	< 0.00002	< 0.00001	0.0030	< 0.000003	4.27	< 0.0005	0.000010	< 0.0005	< 0.002	< 0.00002	0.001	0.108	0.0163	< 0.01	< 0.00001
01-Mar-11	57	500	455	7.21	352	24	#N/A	2.6	12.5	8	< 0.2	< 0.06	11.6	0.0741	0.0002	0.0007	0.00143	< 0.00002	< 0.00001	0.0020	< 0.000003	4.46	< 0.0005	0.000008	0.0008	< 0.002	0.00132	< 0.001	0.119	0.0175	0.01	0.00001
08-Mar-11	58	500	465	7.24	334	24	#N/A	2.4	12.4	7	< 0.2	< 0.06	11.1	0.0730	0.0004	0.0007	0.00135	< 0.00002	< 0.00001	0.0019	0.000003	4.25	< 0.0005	0.000018	0.0012	< 0.002	0.00104	< 0.001	0.117	0.0172	< 0.01	0.00006
15-Mar-11	59	500	455	7.30	309	25	#N/A	2.7	13.1	7	< 0.2	< 0.06	11.5	0.0743	< 0.0002	0.0005	0.00148	< 0.00002	< 0.00001	0.0022	0.000003	4.41	< 0.0005	0.000019	0.0008	< 0.002	0.00153	< 0.001	0.116	0.0182	< 0.01	0.00003
22-Mar-11	60	500	465	7.39	316	25	#N/A	2.7	13.3	5	< 0.2	< 0.06	10.6	0.0816	0.0002	0.0006	0.00147	< 0.00002	< 0.00001	0.0017	< 0.000003	4.09	< 0.0005	0.000007	0.0006	< 0.002	< 0.00002	< 0.001	0.101	0.0159	< 0.01	< 0.00001
29-Mar-11	61	500	505	7.71	293	27	#N/A	3.0	15.8	4	< 0.2	< 0.06	13.4	0.0525	0.0002	0.0005	0.00154	< 0.00002	< 0.00001	0.0023	< 0.000003	5.13	< 0.0005	0.000019	< 0.0005	< 0.002	0.00003	< 0.001	0.132	0.0164	< 0.01	< 0.00001
05-Apr-11	62	500	460	7.37	263	26	#N/A	2.9	15.0	4	< 0.2	< 0.06	11.5	0.0806	0.0002	0.0006	0.00146	< 0.00002	< 0.00001	0.0019	< 0.000003	4.42	< 0.0005	0.000013	< 0.0005	< 0.002	0.00006	< 0.001	0.104	0.0167	< 0.01	0.00003
12-Apr-11	63	500	475	7.34	291	24	#N/A	2.4	12.7	5	< 0.2	< 0.06	11.3	0.0825	< 0.0002	0.0007	0.00135	< 0.00002	< 0.00001	0.0013	< 0.000003	4.33	< 0.0005	0.000005	0.0005	0.005	< 0.00002	< 0.001	0.120	0.0221	< 0.01	0.00008
19-Apr-11	64	500	465	7.72	251	26	#N/A	4.2	17.4	4	< 0.2	2.44	11.8	0.0996	< 0.0002	0.0007	0.00144	< 0.00002	< 0.00001	0.0015	< 0.000003	4.56	< 0.0005	0.000021	< 0.0005	< 0.002	0.00005	< 0.001	0.107	0.0161	< 0.01	0.00015
26-Apr-11	65	500	425	7.55	268	31	#N/A	2.2	16.6	4	< 0.2	< 0.06	14.2	0.140	< 0.0002	0.0008	0.00189	< 0.00002	< 0.00001	0.0013	< 0.000003	5.48	< 0.0005	< 0.000002	< 0.0005	< 0.002	0.00004	0.001	0.123	0.0175	0.01	0.00002
03-May-11	66	500	445	7.53	352	25	#N/A	2.8	14.8	4	< 0.2	0.29	11.7	0.109	0.0005	0.0004	0.00177	< 0.00002	< 0.00001	0.0030	0.000014	4.50	< 0.0005	0.000027	0.0006	0.004	0.00005	< 0.001	0.100	0.0165	< 0.01	0.00009
10-May-11	67	500	450	7.54	376	26	#N/A	2.4	15.4	3	< 0.2	< 0.06	11.9	0.0983	< 0.0002	0.0009	0.00172	< 0.00002	< 0.00001	0.0018	0.000007	4.60	< 0.0005	0.000028	< 0.0005	< 0.002	0.00004	< 0.001	0.102	0.0178	< 0.01	0.00053
17-May-11	68	500	460	7.69	324	28	#N/A	2.7	15.6	3	< 0.2	< 0.06	11.8	0.111	< 0.0002	0.0007	0.00199	< 0.00002	< 0.00001	0.0018	< 0.000003	4.55	< 0.0005	0.000021	< 0.0005	< 0.002	0.00057	< 0.001	0.096	0.0212	< 0.01	0.00003
24-May-11	69	500	520	7.60	271	24	#N/A	2.9	12.1	3	< 0.2	< 0.06	11.0	0.107	< 0.0002	0.0006	0.00154	< 0.00002	< 0.00001	0.0047	< 0.000003	4.25	< 0.0005	0.000018	< 0.0005	< 0.002	0.00002	< 0.001	0.100	0.0132	< 0.01	0.00001
31-May-11	70	500	480	7.54	271	28	#N/A	3.3	15.2	3	< 0.2	< 0.06	11.2	0.0678	0.0003	0.0007	0.00158	< 0.00002	< 0.00001	0.0013	< 0.000003	4.33	< 0.0005	0.000028	< 0.0005	< 0.002	< 0.00002	< 0.001	0.095	0.0154	< 0.01	0.00003
07-Jun-11	71	500	445	7.89	287	25	#N/A	2.2	15.3	3	< 0.2	< 0.06	11.3	0.109	< 0.0002	0.0006	0.00161	< 0.00002	< 0.00001	0.0020	0.000004	4.38	< 0.0005	0.000010	< 0.0005	< 0.002	0.00004	< 0.001	0.095	0.0151	0.01	< 0.00001
14-Jun-11	72	500	455	7.68	303	24	#N/A	1.9	13.9	3	< 0.2	< 0.06	8.8	0.0537	< 0.0002	< 0.0002	0.00038	< 0.00002	< 0.00001	0.0017	0.000009	3.45	< 0.0005	0.000034	< 0.0005	0.006	0.00009	< 0.001	0.051	0.0073	< 0.01	0.00005
21-Jun-11	73	500	455	7.57	300	23	#N/A	1.8	13.3	2	< 0.2	0.52	10.5	0.0912	< 0.0002	0.0006	0.00147	< 0.00002	< 0.00001	0.0011	< 0.000003	4.04	< 0.0005	0.000010	< 0.0005	< 0.002	0.00007	< 0.001	0.086	0.0138	0.01	< 0.00001
28-Jun-11	74	500	460	7.57	281	24	#N/A	2.0	13.7	4	< 0.2	< 0.06	11.3	0.0928	< 0.0002	0.0005	0.00156	< 0.00002	< 0.00001	0.0022	0.000003	4.37	< 0.0005	0.000012	< 0.0005	< 0.002	< 0.00002	< 0.001	0.093	0.0179	0.01	0.00012
05-Jul-11	75	500	495	7.43	305	27	#N/A	3.1	14.5	2	< 0.2	< 0.06	12.8	0.0854	0.0002	0.0007	0.00173	< 0.00002	< 0.00001	0.0039	0.000027	4.93	0.0005	0.000040	< 0.0005	< 0.002	< 0.00002	0.001	0.113	0.0170	< 0.01	0.00005
12-Jul-11	76	500	455	7.22	313	23	#N/A	3.4	11.8	3	< 0.2	< 0.06	12.4	0.0945	< 0.0002	0.0006	0.00148	< 0.00002	< 0.00001

HC 10 *CONFIDENTIAL* *DRAFT*

Sample = Alt 09 20

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output																												
					mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
02-Aug-11	79	500	470	7.61	283	24	#N/A	3.8	11.5	<2	< 0.2	< 0.06	11.4	0.0632	< 0.0002	0.0005	0.00143	< 0.00002	< 0.00001	0.0021	< 0.000003	4.42	< 0.0005	0.000003	< 0.0005	0.003	0.00003	< 0.001	0.092	0.0150	< 0.01	0.00004
09-Aug-11	80	500	475	7.52	243	24	#N/A	2.8	12.8	1	< 0.2	< 0.06	10.2	0.0881	< 0.0002	0.0005	0.00158	< 0.00002	< 0.00001	0.0020	< 0.000003	3.96	0.0006	0.000013	< 0.0005	0.003	0.00003	< 0.001	0.079	0.0150	< 0.01	0.00013
16-Aug-11	81	500	465	7.63	264	23	#N/A	4.6	14.8	<2	< 0.2	< 0.06	11.1	0.0978	< 0.0002	0.0006	0.00140	< 0.00002	< 0.00001	0.0018	< 0.000003	4.31	< 0.0005	0.000009	< 0.0005	< 0.002	0.00005	< 0.001	0.085	0.0141	0.01	0.00006
23-Aug-11	82	500	465	7.57	238	24	#N/A	4.0	13.5	2	< 0.2	< 0.06	10.8	0.0983	0.0002	0.0007	0.00166	< 0.00002	< 0.00001	0.0022	< 0.000003	4.19	0.0008	0.000010	< 0.0005	0.004	0.00004	< 0.001	0.083	0.0148	0.01	0.00004
30-Aug-11	83	500	465	7.56	283	24	#N/A	3.4	13.0	3	< 0.2	< 0.06	11.5	0.0959	< 0.0002	0.0006	0.00154	< 0.00002	< 0.00001	0.0022	< 0.000003	4.47	0.0007	0.000011	< 0.0005	0.005	0.00005	< 0.001	0.087	0.0143	0.01	0.00004
06-Sep-11	84	500	455	7.62	273	22	#N/A	3.2	12.5	2	< 0.2	< 0.06	9.95	0.0739	< 0.0002	0.0006	0.00150	< 0.00002	< 0.00001	0.0018	0.000006	3.85	< 0.0005	0.000011	< 0.0005	< 0.002	0.00013	< 0.001	0.079	0.0133	0.05	0.00005
13-Sep-11	85	500	450	7.56	347	22	#N/A	2.9	12.2	3	< 0.2	< 0.06	10.8	0.0846	0.0003	0.0005	0.00185	< 0.00002	< 0.00001	0.0025	0.000006	4.20	0.0017	0.000011	< 0.0005	< 0.002	0.00024	< 0.001	0.087	0.0138	< 0.01	0.00011
20-Sep-11	86	500	465	7.43	282	21	#N/A	3.6	11.9	3	< 0.2	< 0.06	10.0	0.0780	< 0.0002	0.0007	0.00169	< 0.00002	< 0.00001	0.0020	< 0.000003	3.88	0.0015	0.000014	< 0.0005	0.008	0.00005	< 0.001	0.078	0.0161	0.01	0.00008
27-Sep-11	87	500	460	7.38	321	23	#N/A	4.8	12.0	3	< 0.2	< 0.06	10.5	0.0828	< 0.0002	0.0004	0.00150	< 0.00002	< 0.00001	< 0.0002	0.000004	4.08	0.0007	0.000011	< 0.0005	0.003	0.00004	< 0.001	0.084	0.0137	< 0.01	0.00004
04-Oct-11	88	500	510	7.46	317	26	#N/A	3.6	14.3	3	< 0.2	< 0.06	12.0	0.0605	0.0006	0.0007	0.00175	< 0.00002	< 0.00001	0.0033	< 0.000003	4.63	< 0.0005	0.000014	< 0.0005	< 0.002	0.00007	0.001	0.098	0.0151	0.01	0.00007
11-Oct-11	89	500	445	7.57	269	20	#N/A	4.4	12.0	3	< 0.2	< 0.06	9.76	0.0814	0.0007	0.0005	0.00129	< 0.00002	< 0.00001	0.0023	< 0.000003	3.78	0.0006	0.000008	< 0.0005	0.020	0.00009	< 0.001	0.076	0.0123	< 0.01	0.00003
18-Oct-11	90	500	445	7.36	312	22	#N/A	3.7	11.4	3	< 0.2	< 0.06	10.3	0.0973	0.0004	0.0005	0.00152	< 0.00002	< 0.00001	0.0024	< 0.000003	4.01	0.0007	0.000008	0.0006	< 0.002	0.00009	< 0.001	0.079	0.0125	< 0.01	0.00009
25-Oct-11	91	500	450	7.30	313	22	#N/A	2.8	10.7	3	< 0.2	< 0.06	10.4	0.0823	< 0.0002	0.0005	0.00147	< 0.00002	< 0.00001	0.0021	0.000009	4.03	0.0006	0.000014	< 0.0005	< 0.003	0.00004	< 0.001	0.077	0.0133	0.01	0.00004
01-Nov-11	92	500	470	7.35	292	21	#N/A	4.0	11.2	3	< 0.2	< 0.06	10.1	0.0827	< 0.0002	0.0008	0.00147	< 0.00002	< 0.00001	0.0018	< 0.000003	3.90	0.0005	0.000018	< 0.0005	0.003	0.00003	< 0.001	0.075	0.0132	< 0.01	0.00004
08-Nov-11	93	500	440	7.44	304	23	#N/A	4.2	11.8	2	< 0.2	< 0.06	10.9	0.0828	< 0.0002	0.0004	0.00137	< 0.00002	< 0.00001	0.0013	< 0.000003	4.24	< 0.0005	0.000009	< 0.0005	< 0.003	0.00002	< 0.001	0.090	0.0142	< 0.01	0.00002
15-Nov-11	94	500	445	7.26	292	21	#N/A	4.6	10.3	<2	< 0.2	< 0.06	9.96	0.0787	< 0.0002	0.0004	0.00122	< 0.00002	< 0.00001	0.0015	< 0.000003	3.85	< 0.0005	0.000011	< 0.0005	< 0.003	< 0.00002	< 0.001	0.085	0.0137	< 0.01	0.00002
22-Nov-11	95	500	440	7.42	306	24	#N/A	4.5	12.3	2	< 0.2	< 0.06	11.1	0.101	< 0.0002	0.0007	0.00146	< 0.00002	< 0.00001	0.0014	< 0.000003	4.31	< 0.0005	0.000008	0.0006	< 0.003	0.00004	< 0.001	0.095	0.0152	0.01	< 0.00001
29-Nov-11	96	500	445	7.36	349	24	#N/A	5.0	11.6	3	< 0.2	< 0.06	11.4	0.0967	< 0.0002	0.0004	0.00166	< 0.00002	< 0.00001	0.0018	0.000005	4.41	< 0.0005	0.000025	< 0.0005	< 0.003	0.00002	< 0.001	0.096	0.0170	< 0.01	0.00014
06-Dec-11	97	500	435	7.34	333	23	#N/A	4.4	11.4	2	< 0.2	< 0.06	11.1	0.0842	< 0.0002	< 0.0002	0.00173	< 0.00002	< 0.00001	0.0009	0.000005	4.29	< 0.0005	0.000024	< 0.0005	< 0.003	< 0.00002	< 0.001	0.084	0.0168	0.01	0.00004
13-Dec-11	98	500	445	7.36	298	27	#N/A	3.7	13.9	2	< 0.2	< 0.06	11.4	0.0659	< 0.0002	0.0004	0.00154	< 0.00002	< 0.00001	0.0011	< 0.000003	4.39	0.0008	0.000006	0.0005	< 0.003	0.00017	< 0.001	0.103	0.0156	0.01	0.00005
20-Dec-11	99	500	440	7.48	301	23	#N/A	3.8	11.5	2	< 0.2	< 0.06	10.2	0.0818	< 0.0002	0.0005	0.00149	< 0.00002	< 0.00001	0.0013	< 0.000003	3.94	< 0.0005	0.000008	< 0.0005	< 0.003	0.00002	< 0.001	0.084	0.0127	0.01	0.00003
27-Dec-11	100	500	435	7.59	334	23	#N/A	4.2	12.6	2	< 0.2	< 0.06	10.7	0.0989	< 0.0002	0.0004	0.00131	< 0.00002	< 0.00001	0.0015	< 0.000003	4.13	< 0.0005	0.000005	< 0.0005	< 0.003	< 0.00002	< 0.001	0.090	0.0131	< 0.01	0.00006
03-Jan-12	101	500	440	7.32	316	23	#N/A	4.0	12.6	3	< 0.2	< 0.06	9.99	0.105	< 0.0002	0.0004	0.00143	< 0.00002	< 0.00001	0.0017	< 0.000003	3.87	< 0.0005	0.000022	0.0006	< 0.003	< 0.00002	< 0.001	0.083	0.0124	< 0.01	0.00004
10-Jan-12	102	500	445	7.30	327	23	#N/A	3.6	12.3	3	< 0.2	< 0.06	10.4	0.107	< 0.0002	0.0004	0.00142	< 0.00002	< 0.00001	0.0015	0.000006	4.01	0.0011	0.000014	0.0007	< 0.003	0.00004	< 0.001	0.085	0.0137	< 0.01	0.00004
17-Jan-12	103	500	440	7.25	323	23	#N/A	4.2	13.1	2	< 0.2	< 0.06	11.0	0.0843	< 0.0002	0.0004	0.00154	< 0.00002	< 0.00001	0.0020	< 0.000003	4.27	< 0.0005	0.000015	0.0006	< 0.003	< 0.00002	< 0.001	0.083	0.0154	< 0.01	0.00004
24-Jan-12	104	500	470	7.43	373	23	#N/A	4.1	12.9	4	< 0.2	< 0.06	10.4	0.0873	< 0.0002	0.0004	0.00134	< 0.00002	< 0.00001	0.0013	< 0.000003	4.01	< 0.0005	0.000014	< 0.0005	< 0.003	< 0.00002	< 0.001	0.084	0.0139	< 0.01	0.00004
31-Jan-12	105	500	445	7.15	325	25	#N/A	3.8	13.6	2	< 0.2	< 0.06	11.2	0.0905	< 0.0002	0.0005	0.00171	< 0.00002	< 0.00001	0.0020	< 0.000003	4.36	< 0.0005	0.000022	0.0007	< 0.003	0.00004	< 0.001	0.090	0.0147	< 0.01	0.00007
07-Feb-12	106	500	495	7.40	361	30	#N/A	3.9	20.3	4	< 0.2	< 0.06	14.0	0.0675	< 0.0002	0.0004	0.00207	< 0.00002	< 0.00001	0.0016	< 0.000003	5.44	< 0.0005	0.000021	0.0005	< 0.003	< 0.00002	< 0.001	0.094	0.0189	< 0.01	0.00004
14-Feb-12	107	500	430	7.28	399	18	#N/A	4.8	11.4	4	< 0.2	< 0.06	10.1	0.0712	< 0.0002	0.0004	0.00130	< 0.00002	< 0.00001	0.0007	0.000003	3.92	< 0.0005	0.000005	0.0005	< 0.003	< 0.00002	< 0.001	0.069	0.0112	< 0.01	0.00004
21-Feb-12	108	500	445	7.12	365	22	#N/A	2.7	10.6	5	< 0.2	< 0.06	10.3	0.0710	< 0.0002	0.0005	0.00148	< 0.00002	< 0.00001	0.0032	< 0.000003	4.01	< 0.0005	0.000009	< 0.0005	< 0.003	0.00002	< 0.001	0.076	0.0126	< 0.01	0.00002
28-Feb-12	109	500	435	7.24	401	23	#N/A	4.6	11.5	3	< 0.2	< 0.06	10.9	0.0810	< 0.0002	0.0005	0.00161	< 0.00002	< 0.00001	0.0012	< 0.000003	4.22	< 0.0005	0.000032	0.0011	< 0.003	< 0.00002	< 0.001	0.081	0.0150	< 0.01	0.00007
06-Mar-12	110	500	430	7.17	386	23	#N/A	3.2	10.9	4	< 0.2	< 0.06	10.4	0.0732	< 0.0002	0.0002	0.00128	< 0.00002	< 0.00001	0.0012	0.000003	4.03	< 0.0005	0.000012	< 0.0005	< 0.003	< 0.00002	< 0.001	0.078	0.0113	< 0.01	0.00005
13-Mar-12	111	500	435	7.18	376	23	#N/A	4.5	11.7	3	< 0.2	< 0.06	10.9	0.0852	< 0.0002	0.0004	0.00215	< 0.00002	< 0.00001	0.0013	< 0.000003	4.23	< 0.0005	0.000027	< 0.0005	< 0.003	0.00004	< 0.001	0.084	0.0125	0.01	0.00010
20-Mar-12	112	500	460	7.16	353	24	#N/A	4.9	11.2	3	< 0.2	< 0.06	11.4	0.0539	< 0.0002	0.0005	0.00148	< 0.00002	< 0.00001	0.0014	0.000006	4.44	< 0.0005	0.000007	0.0005	< 0.003	< 0.00002	< 0.001	0.084	0.0164	0.01	0.00006
27-Mar-12	113	500	455	7.08	357	27	#N/A	3.8	12.3	4	< 0.2	< 0.06	12.8	0.101	< 0.0002	0.0004	0.00150	< 0.00002	< 0.00001	0.0015	0.000005	5.00	< 0.0005	< 0.000002	0.0005	< 0.003	< 0.00002	< 0.001	0.084	0.0157	< 0.01	0.00006
03-Apr-12	114	500	455	7.09	380	24	#N/A	4.0	11.8	3	< 0.2	< 0.06	11.5	0.0930	< 0.0002	0.0004	0.00156	< 0.00002	< 0.00001	0.0014	< 0.000003	4.48	< 0.0005	0.000009	0.0016	< 0.003	0.00005	< 0.001	0.076	0.0150	< 0.01	0.00004
10-Apr-12	115	500	450	7.19	329	25	#N/A	2.9	11.5	3	< 0.2	< 0.06	11.6	0.102	< 0.0002	0.0004	0.00152	< 0.00002	< 0.00001	0.0018	< 0.000003	4.53	< 0.0005	0.000036	0.0006	< 0.003	0.00004	< 0.001	0.079	0.0156	0.05	0.00006
17-Apr-12	116	500	450	7.17	358	25	#N/A	3.7	10.5	3	< 0.2	< 0.06	10.8	0.0977	< 0.0002	0.0004	0.00137	< 0.00002	< 0.00001	0.0016	< 0.000003	4.20	< 0.0005	0.000032	< 0.0005	< 0.003	< 0.00002	< 0.001	0.073	0.0135	0.01	0.00007
24-Apr-12	117	500	430	7.23	388	25	#N/A	3.1	11.6	3	< 0.2	< 0.06	11.6	0.116	< 0.0002	0.0010	0.00185	< 0.00002	< 0.00001	0.0012	< 0.000003	4.54	< 0.0005	0.000024	0.0007	0.004	0.00002	< 0.001	0.075	0.0150	0.02	0.00026
01-May-12	118	500	425	7.37	341	24	#N/A	4.6	13.2	4	< 0.2	< 0.06	11.7	0.0971	< 0.0002	0.0004	0.00152	< 0.00002	< 0.00001	0.0009	< 0.000003	4.57	< 0.0005	0.000027	0.0005	< 0.003	0.00005	< 0.001	0.076	0.0169	0.02	0.00005
08-May-12	119	500	435	7.25	381	25	#N/A	3.4	12.1	4	< 0.2	< 0.06	11.6	0.0922	< 0.0002	0.0003	0.00160	< 0.00002	< 0.00001	0.0029	< 0.000003	4.51	< 0.0005	0.000026	0.0008	< 0.003	0.00006	< 0.001	0.072	0.0151	< 0.01	0.00005
15-May-12	120	500	425	7.26	319	24	#N/A	3.3	11.5	3	< 0.2	< 0.06	11.2	0.107	< 0.0002	0.0002	0.00154	< 0.00002	< 0.00001	0.0016	< 0.000003	4.36	< 0.0005	0.000007	0.0008	< 0.003	< 0.00002	< 0.001	0.069	0.0138	0.01	0.00003
22-May-12	121	500	435	7.19	341	22	#N/A	3.7	11.2	3	< 0.2	< 0.06	10.3	0.137	< 0.0002	0.0003	0.00148	< 0.00002	< 0.00001	0.0012	< 0.000003	4.03	< 0.0005	0.000044	< 0.0005	< 0.003	< 0.00002	< 0.001	0.065	0.0121	0.02	0.00006
29-May-12	122	500	435	7.25	342	27	#N/A	3.4	14.0	3	< 0.2	< 0.06	13.4	0.149	< 0.0002	0.0003	0.00151	< 0.00002	< 0.00001	0.0016	< 0.000003	5.23	< 0.0005	0.000038	0.0009	0.005	0.00002	< 0.001	0.076	0.0154	< 0.01	0.00005
05-Jun-12	123	500	430	7.19	375	24	#N/A	4.1	12.4	2	< 0.2	< 0.06	11.8	0.129	< 0.0002	0.0004	0.00168	< 0.00002	< 0.00001	0.0029	< 0.000003	4.60	< 0.0005	0.000032	0.0008	< 0.003	< 0.00002	< 0.001	0.073	0.0170	0.02	0.00011
12-Jun-12	124	500	425	7.47	355	41	#N/A	3.3	23.6	4	< 0.2	< 0.06	19.8	0.184	0.0002	0.0006	0.00288	< 0.00002	< 0.00001	0.0023	< 0.000003	7.77	< 0.0005	0.000004	< 0.0005	< 0.003	< 0.00002	0.001	0.104	0.0262	0.02	0.00007
19-Jun-12	125	500	440	7.20	370	23	#N/A	2.7	12.1	<2	< 0.2	< 0.06	10.9	0.115	< 0.0002	0.0003	0.00160	< 0.00002	< 0.00001	0.0024	< 0.000003	4.26	< 0.0005	0.000033	< 0.0005	< 0.003	0.00002	< 0.001	0.065	0.0150	< 0.01	0.00003
26-Jun-12	126	500	430	7.28	344	25	#N/A	3.0	12.7	3	< 0.2	< 0.06	12.0	0.154	< 0.0002	0.0003	0.00180	< 0.00002	< 0.00001	0.0027	< 0.000003	4.70	< 0.0005	< 0.000002	0.0015	< 0.003	0.00003	< 0.001	0.076	0.0160	0.01	0.00006
03-Jul-12	127	500	425	7.38	382	24	#N/A	6.1	13.9	5	< 0.2	< 0.06	11.0	0.119	< 0.0002	0.0004	0.00169	< 0.00002	< 0.00001	0.0014	0.000003	4.31	< 0.0005	0.000005	0.0006	< 0.003	< 0.00002	< 0.001	0.066	0.0159	0.01	0.00035
10-Jul-12	128	500	420	7.19	331	24	#N/A	3.6	11.7	6	< 0.2	< 0.06	10.8	0.124	< 0.0002	0.0005	0.00158	< 0.00002	< 0.00001	0.0016	< 0.000003	4.23	< 0.0005	0.000007	0.0008	< 0.003	0.00003	< 0.001	0.068	0.0145	0.02	0.00005
17-Jul-12	129	500	430	7.32	373	25	#N/A	2.0	12.8	4	< 0.2	< 0.06	11.8	0.120	< 0.0002	0.0003	0.00164	< 0.00002	< 0.00001	0.0021	< 0.000003	4.60	< 0.0005	0.000038	< 0.0005	< 0.003	0.00002	< 0.001	0.070	0.0145	< 0.01	< 0.00001
24-Jul-12	130	500	430	7.14	339	23	#N/A	2.8	10.9	4	< 0.2	< 0.06	10.8	0.112	< 0.0002	0.0006	0.00155	< 0.00002	< 0.00001	0.0009	< 0.000003	4.20	< 0.0005	0.000025	0.0005	< 0.003	< 0.00002	< 0.001	0.069	0.0157	0.02	0.00004
31-Jul-12	131	500	445	7.23	355	22	#N/A	2.2	10.8	3	< 0.2	< 0.06	10.8	0.109	< 0.0002	0.0002	0.00148	< 0.00002	< 0.00001	0.0012	0.000003	4.21	< 0.0005	< 0.000002	< 0.0005	0.003	< 0.00002	< 0.001	0.067	0.0146	0.01	0.00002
07-Aug-12	132	500	435	7.43	339	22	#N/A	2.2	11.8	4	< 0.2	< 0.06	10.8	0.144	< 0.0002	0.0005	0.00157	< 0.00002	< 0.00001	0.0014	< 0.000003	4.21	< 0.0005	0.000032	0.0006	< 0.003	0.00004	< 0.001	0.065	0.0125	0.01	0.00003
14-Aug-12	133	500	425	7.15	303	22	#N/A	2.9	11.2	2	< 0.2	< 0.06	9.9	0.121	< 0.0002	0.0003	0.00128	< 0.00002	< 0.00001	0.0013	< 0.000003	3.86	< 0.0005	0.000051	0.0006	< 0.003	< 0.00002	< 0.001	0.065	0.0127	< 0.01	0.00002
21-Aug-12	134	500	445	7.14	307	22	#N/A	3.3	11.3	3	< 0.2	< 0.06	10.4	0.116	0.0003	0.0004	0.00161	< 0.00002	< 0.00001	0.0022	< 0.000003	4.06	< 0.0005	0.000010	< 0.0005	< 0.003	< 0.00002	< 0.001	0.066	0.0161	0.01	0.00005
28-Aug-12	135	500	450	7.22	402	22	#N/A	4.2	11.5	5	< 0.2	< 0.06	10.1	0.102	< 0.0002	0.0003	0.00147	< 0.00002	< 0.00001	0.0022	< 0.000003	3.95	< 0.0005	0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	0.063	0.0161	< 0.01	0.00007
04-Sep-12	136	500	450	7.08	404	22	#N/A	4.6	11.1	4	< 0.2	< 0.06	10.7	0.137	< 0.0002	0.0004	0.00164	< 0.00002	< 0.00001	0.0014	< 0.000003	4.17	< 0.0005	0.000009	0.0006	< 0.003	< 0.00002	< 0.001	0.068	0.0142	0.05	0.00003
11-Sep-12	137	500	445	7.22	375	20	#N/A	2.7	11.2	5	< 0.2	< 0.06	9.9	0.0883	< 0.0002	0.0003	0.00144	< 0.00002	< 0.00001	0.0015	0.000003	3.86	< 0.0005	0.000013	0.0007	< 0.003	< 0.00002	< 0.001	0.066	0.0136	0.02	0.00003
18-Sep-12	138	500	435	7.24	369	23	#N/A	2.5	12.2	4	#N/A	#N/A	10.4	0.149	< 0.0002	0.0005	0.00198	< 0.00002	0.00001	0.0017	0.000246	4.04	< 0.0005	0.000031	0.0026	< 0.003	0.00015	< 0.001	0.064	0.0136	0.03	0.00004
25-Sep-12	139	500	420	7.18	368	22	#N/A	2.7	12.1	5	< 0.2	< 0.06	10.1	0.0980	< 0.0002	0.0002	0.00154	< 0.00002	< 0.00001	0.0012	< 0.000003	3.92	< 0.0005	< 0.000002	< 0.0005	0.004	0.00004	< 0.001	0.065	0.0137	0.02	0.00003
02-Oct-12	140	500	445	7.20	395	20	#N/A	2.8	11.5	4	< 0.2	< 0.06	9.8	0.0863	< 0.0002	0.0003	0.00143	< 0.00002	< 0.00001	0.0020	< 0.000003	3.82	< 0.0005	0.000049	< 0.0005	< 0.003	< 0.00002	< 0.001	0.061	0.0128	< 0.01	0.00003
09-Oct-12	141	500	440	7.22	375	26	#N/A	4.7	14.2	3	< 0.2	< 0.06	11.7	0.116	< 0.0002	0.0003	0.00180	< 0.00002	< 0.00001	0.0015	< 0.000003	4.57	< 0.0005	0.000004	0.0007	< 0.003	< 0.00002	< 0.001	0.071	0.0173	0.01	0.00004
16-Oct-12	142	500	420	7.39	412	22	#N/A	4.9	12.8	4	< 0.2	< 0.06	10.6	0.132	< 0.0002	0.0003	0.00151	< 0.00002	< 0.00001	0.0015	0.000003	4.15	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	0.065	0.0149	< 0.01	0.00003
23-Oct-12	143	500	435	7.19	363	24	#N/A	3.9	12.6	4	< 0.2	< 0.06	10.4	0.119	< 0.0002	< 0.0002	0.00148	< 0.00002	< 0.00001	0.0004	0.000003	4.05	< 0.0005	0.000051	0.0006	< 0.003	< 0.00002	< 0.001	0.062	0.0144	< 0.01	0.00009
30-Oct-12	144	500	445	7.15	377	23	#N/A	3.8	12.8	4	< 0.2	< 0.06	10.9	0.110	< 0.0002	0.0002	0.00157	< 0.00002	< 0.00001	0.0018	0.000421	4.27	< 0.0005	< 0.000002	< 0.0005	0.011	< 0.00002	< 0.001	0.071	0.0163	< 0.01	0.00006
06-Nov-12	145	500	440	7.27	375	21	#N/A	3.7	12.9	2	< 0.2	< 0.06	11.5	0.0874	< 0.0002	0.0004	0.00163	< 0.00002	< 0.00001	0.0019	< 0.000003	4.48	< 0.0005	0.000034	0.0006	< 0.003	< 0.00002	< 0.001	0.068	0.0169	< 0.01	0.00006
13-Nov-12	146	500	430	7.37	380	20	#N/A	4.7	12.6	3	< 0.2	< 0.06	10.7	0.0842	< 0.0002	0.0003	0.00173	< 0.00002	< 0.00001	0.0017	0.000005	4.16	< 0.0005	0.000020	< 0.0005	< 0.003	< 0.00002	< 0.001	0.064	0.0174	0.02	0.00003
20-Nov-12	147	500	495	7.35	396	26	#N/A	6.1	14.8	2	< 0.2	< 0.06	12.8	0.0668	< 0.0002	0.0002	0.00198	< 0.00002	< 0.00001	0.0020	< 0.000003	5.00	< 0.0005	0.000057	0.0006	< 0.003	0.00002	< 0.001	0.073	0.0193	< 0.01	0.00003
27-Nov-12	148	500	500	7.34	366	27	#N/A	4.5	15.8	5	< 0.2	< 0.06	13.3	0.0596	< 0.0002	0.0004	0.00189	< 0.00002	< 0.00001	0.0016	0.000004	5.19	< 0.0005	0.000021	< 0.0005	< 0.003	< 0.00002	< 0.001	0.076	0.0211	< 0.01	0.00003
04-Dec-12	149	500	455	7.36	344	18	#N/A	1.9	10.7	4	< 0.2	< 0.06	9.2	0.0774	< 0.0002	0.0002	0.00137	< 0.00002	< 0.00001	0.0006	0.000005	3.60	< 0.0005	0.000041	0.0007	< 0.003	< 0.00002	< 0.001	0.059	0.0129	0.01	0.00003
11-Dec-12	150	500	480	7.42	353	21	#N/A	2.0	12.8	3	< 0.2	< 0.06	10.9	0.0689	< 0.0002	0.0003	0.00149	< 0.00002	< 0.00001	0.0016	0.000007	4.25	< 0.0005	0.000044	< 0.0005	< 0.003	< 0.00002	< 0.001	0.061	0.0134	0.05	0.00004
18-Dec-12	151	500	490	7.37	330	25	#N/A	2.2	14.6	<2	< 0.2	< 0.06	12.2	0.0653	< 0.0002	< 0.0

HC 10
Sample = Alt 09 20

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
02-Feb-10	1	0.0013	< 0.01	8.35	0.00010	1.80	< 0.00001	10.1	0.0286	4.79	< 0.0002	0.00016	0.0007	0.000007	0.00144	< 0.001	0.00001		0.85	0.93	0.08	4.5%
09-Feb-10	2	0.0013	< 0.01	7.74	0.00020	1.07	< 0.00001	8.36	0.0333	5.41	< 0.0002	< 0.00001	0.0003	0.000041	0.00127	< 0.001	< 0.00001		0.76	0.90	0.15	8.8%
16-Feb-10	3	0.0011	< 0.01	6.80	0.00017	1.13	0.00005	5.58	0.0310	4.42	< 0.0002	0.00029	0.0006	0.000116	0.00143	< 0.001	0.00012		0.76	0.75	-0.01	-0.7%
23-Feb-10	4	0.0004	< 0.01	4.37	< 0.00004	0.89	< 0.00001	2.91	0.0296	2.63	< 0.0002	0.00004	0.0003	0.000059	0.00107	< 0.001	< 0.00001		0.70	0.58	-0.12	-9.6%
02-Mar-10	5	0.0003	< 0.01	3.58	0.00005	0.78	< 0.00001	1.97	0.0261	2.35	< 0.0002	0.00013	0.0003	0.000062	0.00100	< 0.001	< 0.00001		0.55	0.50	-0.06	-5.7%
09-Mar-10	6	0.0002	< 0.01	3.34	< 0.00004	0.79	< 0.00001	1.39	0.0266	2.15	< 0.0002	0.00024	0.0005	0.000076	0.00090	< 0.001	< 0.00001		0.55	0.49	-0.06	-5.8%
16-Mar-10	7	0.0002	< 0.01	2.95	< 0.00004	0.81	< 0.00001	1.30	0.0300	2.72	< 0.0002	0.00002	0.0004	0.000100	0.00077	< 0.001	< 0.00001		0.60	0.55	-0.05	-4.2%
23-Mar-10	8	0.0002	< 0.01	2.64	< 0.00004	0.75	< 0.00001	1.01	0.0304	3.1	< 0.0002	0.00012	0.0003	0.000099	0.00068	0.004	0.00001		0.60	0.52	-0.08	-7.4%
30-Mar-10	9	0.0002	< 0.01	2.41	< 0.00004	0.70	< 0.00001	0.87	0.0276	2.86	< 0.0002	0.00002	0.0003	0.000073	0.00069	< 0.001	< 0.00001		0.53	0.49	-0.04	-4.0%
06-Apr-10	10	< 0.0001	< 0.01	2.19	< 0.00004	0.77	< 0.00001	0.74	0.0279	2.25	< 0.0002	0.00008	0.0003	0.000112	0.00069	< 0.001	0.00001		0.56	0.50	-0.07	-6.3%
13-Apr-10	11	< 0.0001	< 0.01	2.01	< 0.00004	0.73	< 0.00001	0.72	0.0268	2.04	< 0.0002	0.00026	0.0003	0.000116	0.00064	< 0.001	0.00001		0.56	0.47	-0.09	-8.7%
20-Apr-10	12	0.0001	< 0.01	2.13	< 0.00004	0.74	< 0.00001	0.59	0.0284	2.75	< 0.0002	0.00016	0.0003	0.000109	0.00074	< 0.001	< 0.00001		0.61	0.63	0.02	1.6%
27-Apr-10	13	0.0001	< 0.01	1.83	< 0.00004	0.64	< 0.00001	0.56	0.0231	1.99	< 0.0002	0.00008	0.0003	0.000113	0.00057	< 0.001	0.00001		0.48	0.43	-0.06	-6.3%
04-May-10	14	< 0.0001	< 0.01	1.70	< 0.00004	0.66	< 0.00001	0.58	0.0256	1.92	< 0.0002	0.00014	0.0002	0.000118	0.00058	< 0.001	< 0.00001		0.51	0.46	-0.05	-5.2%
11-May-10	15	< 0.0001	0.02	1.70	< 0.00004	0.74	0.00003	0.44	0.0246	2.16	< 0.0002	0.00030	0.0002	0.000096	0.00066	< 0.001	< 0.00001		0.43	0.45	0.02	2.7%
18-May-10	16	< 0.0001	< 0.009	1.77	< 0.00004	0.73	< 0.00001	0.46	0.0217	1.42	< 0.0002	0.00026	0.0002	0.000097	0.00069	< 0.001	0.00002		0.38	0.43	0.04	5.2%
25-May-10	17	< 0.0001	< 0.009	1.50	< 0.00004	0.61	< 0.00001	0.40	0.0180	1.29	< 0.0002	0.00028	0.0002	0.000100	0.00068	< 0.002	< 0.00001		0.52	0.38	-0.14	-15.2%
01-Jun-10	18	< 0.0001	< 0.009	1.42	< 0.00004	0.61	< 0.00001	0.36	0.0187	1.10	< 0.0002	0.00020	0.0003	0.000061	0.00063	< 0.001	< 0.00001		0.39	0.38	-0.01	-1.4%
08-Jun-10	19	< 0.0001	0.022	1.50	< 0.00004	0.78	< 0.00001	0.39	0.0248	1.42	< 0.0002	0.00016	0.0001	0.000170	0.00056	< 0.001	< 0.00001		0.46	0.45	-0.02	-1.8%
15-Jun-10	20	0.0001	0.013	1.26	< 0.00004	0.64	0.00002	0.34	0.0205	1.45	< 0.0002	0.00039	0.0001	0.000099	0.00059	0.001	0.00002		0.38	0.39	0.00	0.4%
22-Jun-10	21																					
29-Jun-10	22	< 0.0001	< 0.009	1.140	< 0.00004	0.54	< 0.00001	0.29	0.0115	0.97	< 0.0002	0.00059	0.0001	0.00007	0.00046	< 0.001	< 0.00001		0.33	0.31	-0.02	-2.5%
06-Jul-10	23																					
13-Jul-10	24	0.0002	< 0.009	1.08	< 0.00004	0.57	< 0.00001	0.29	0.0157	0.84	< 0.0002	0.00110	< 0.0001	0.000090	0.00052	< 0.001	< 0.00001		0.33	0.28	-0.05	-7.3%
20-Jul-10	25																					
27-Jul-10	26	< 0.0001	< 0.009	1.020	0.00081	0.56	< 0.00001	0.29	0.0155	0.9	< 0.0002	0.00008	0.0001	0.00006	0.00048	< 0.001	< 0.00001		0.41	0.33	-0.08	-10.6%
03-Aug-10	27	0.0001	0.013	0.969	< 0.00004	0.51	< 0.00001	0.23	0.0139	0.7	< 0.0002	0.00012	< 0.0001	0.00007	0.00044	< 0.001	< 0.00001		0.34	0.31	-0.04	-5.9%
10-Aug-10	28	0.0001	0.012	1.020	0.00007	0.60	< 0.00001	0.24	0.0145	0.65	< 0.0002	0.00060	0.0001	0.000052	0.00053	< 0.001	< 0.00001		0.43	0.32	-0.11	-14.4%
17-Aug-10	29	< 0.0001	< 0.009	0.979	< 0.00004	0.58	< 0.00001	0.25	0.0130	0.99	< 0.0002	0.00011	0.0002	0.000060	0.00058	< 0.001	< 0.00001		0.31	0.31	-0.01	-1.2%
24-Aug-10	30	0.0002	< 0.009	0.949	< 0.00004	0.52	< 0.00001	0.22	0.0120	0.77	< 0.0002	0.00039	0.0003	0.000052	0.00053	< 0.001	< 0.00001		0.29	0.29	0.00	0.4%
31-Aug-10	31	< 0.0001	< 0.009	0.896	< 0.00004	0.52	< 0.00001	0.19	0.0104	0.67	< 0.0002	0.00003	0.0001	0.000051	0.00057	< 0.001	< 0.00001		0.34	0.28	-0.06	-10.2%
07-Sep-10	32	< 0.0001	0.013	0.925	< 0.00004	0.57	< 0.00001	0.18	0.0089	0.46	< 0.0002	0.00003	0.0001	0.000049	0.00056	0.002	< 0.00001		0.40	0.29	-0.11	-16.2%
14-Sep-10	33	0.0001	< 0.009	0.907	< 0.00004	0.56	< 0.00001	0.20	0.0130	0.60	< 0.0002	0.00018	0.0002	0.000049	0.00048	< 0.001	0.00002		0.30	0.30	0.00	0.2%
21-Sep-10	34	0.0002	< 0.009	1.02	0.00063	0.62	< 0.00001	0.19	0.0132	0.56	< 0.0002	0.00021	< 0.0001	0.000280	0.00050	< 0.001	< 0.00001		0.39	0.31	-0.08	-10.8%
28-Sep-10	35	0.0001	0.012	1.190	< 0.00004	0.76	< 0.00001	0.24	0.0145	0.71	< 0.0002	0.00030	< 0.0001	0.000050	0.00056	0.001	0.00024		0.39	0.35	-0.04	-5.3%
05-Oct-10	36	< 0.0001	0.016	1.14	< 0.00004	0.67	< 0.00001	0.23	0.0132	0.70	< 0.0002	0.00039	0.0002	0.000045	0.00055	< 0.001	< 0.00001		0.42	0.32	-0.10	-13.1%
12-Oct-10	37	0.0003	< 0.009	1.01	< 0.00004	0.61	< 0.00001	0.27	0.0128	0.71	< 0.0002	0.00042	0.0001	0.000161	0.00054	0.002	< 0.00001		0.39	0.31	-0.08	-10.7%
19-Oct-10	38	< 0.0001	< 0.009	0.991	< 0.00004	0.57	< 0.00001	0.19	0.0122	0.54	< 0.0002	0.00001	< 0.0001	0.000038	0.00051	0.002	0.00002	CA14822-OCT10	0.42	0.30	-0.12	-16.9%
26-Oct-10	39	0.0003	< 0.009	0.859	0.00091	0.49	< 0.00001	0.18	0.0115	0.63	< 0.0002	< 0.00001	< 0.0001	0.000047	0.00042	0.002	< 0.00001	CA11459-OCT10	0.39	0.28	-0.11	-15.7%
02-Nov-10	40	0.0005	0.025	0.908	< 0.00004	0.51	< 0.00001	0.24	0.0110	0.69	< 0.0002	0.00065	< 0.0001	0.000037	0.00033	0.003	0.00001	CA11315-NOV10	0.36	0.27	-0.09	-13.6%
09-Nov-10	41	0.0002	0.028	0.964	< 0.00004	0.53	< 0.00001	0.28	0.0122	0.65	< 0.0002	0.00097	0.0004	0.000040	0.00050	0.011	0.00001	CA11435-NOV10	0.31	0.31	-0.01	-1.1%
16-Nov-10	42	0.0002	0.022	0.917	< 0.00004	0.54	< 0.00001	0.16	0.0116	0.54	< 0.0002	0.00018	< 0.0001	0.000042	0.00044	0.002	0.00005	CA10265-NOV10	0.33	0.29	-0.04	-7.0%
23-Nov-10	43	< 0.0001	< 0.009	0.873	< 0.00004	0.48	< 0.00001	0.16	0.0110	0.23	< 0.0002	0.00022	0.0002	0.000042	0.00049	0.002	< 0.00001	CA11701-NOV10	0.36	0.28	-0.09	-13.5%
30-Nov-10	44	0.0003	< 0.009	0.855	< 0.00004	0.51	< 0.00001	0.19	0.0121	0.65	< 0.0002	0.00009	0.0001	0.000056	0.00042	0.003	< 0.00001	CA14008-DEC10	0.35	0.30	-0.05	-8.1%
07-Dec-10	45	0.0002	< 0.009	1.14	< 0.00004	0.82	< 0.00001	0.23	0.0182	0.74	< 0.0002	0.00018	< 0.0001	0.000074	0.00057	0.002	< 0.00001	CA14206-DEC10	0.47	0.48	0.01	1.1%
14-Dec-10	46	0.0003	< 0.009	0.817	0.00014	0.48	< 0.00001	0.18	0.0120	0.54	< 0.0002	0.00025	< 0.0001	0.000048	0.00048	< 0.001	< 0.00001	CA10970-DEC10	0.37	0.29	-0.08	-11.4%
21-Dec-10	47	0.0002	< 0.009	0.843	< 0.00004	0.53	< 0.00001	0.16	0.0112	0.55	< 0.0002	0.00018	0.0002	0.000048	0.00044	< 0.001	< 0.00001	CA10453-DEC10	0.37	0.31	-0.07	-9.7%
28-Dec-10	48	0.0001	0.013	0.818	< 0.00004	0.54	< 0.00001	0.16	0.0114	0.68	< 0.0002	0.00022	< 0.0001	0.000037	0.00043	0.002	< 0.00001	CA10140-JAN11	0.39	0.28	-0.11	-16.4%
04-Jan-11	49	0.0001	0.012	0.834	< 0.00004	0.52	< 0.00001	0.15	0.0109	0.60	< 0.0002	0.00008	< 0.0001	0.000043	0.00038	0.002	< 0.00001	CA10880-JAN11	0.36	0.29	-0.08	-12.3%
11-Jan-11	50	< 0.0001	< 0.009	0.814	< 0.00004	0.42	< 0.00001	0.16	0.0114	0.71	< 0.0002	0.00030	0.0001	0.000806	0.00034	< 0.001	0.00002	CA14437-JAN11	0.33	0.28	-0.04	-6.9%
18-Jan-11	51	< 0.0001	0.028	0.917	< 0.00004	0.61	< 0.00001	0.16	0.0124	0.64	< 0.0002	0.00013	< 0.0001	0.000040	0.00042	< 0.001	< 0.00001	CA10982-JAN11	0.36	0.31	-0.05	-7.4%
25-Jan-11	52	0.0002	0.013	0.790	< 0.00004	0.45	< 0.00001	0.16	0.0103	0.51	< 0.0002	0.00028	< 0.0001	0.000038	0.00039	0.001	< 0.00001	CA11047-JAN11	0.33	0.26	-0.07	-11.8%
01-Feb-11	53	0.0002	0.041	0.751	< 0.00004	0.43	< 0.00001	0.14	0.0112	0.91	< 0.0002	0.00062	0.0002	0.000039	0.00032	0.001	0.00088	CA14121-FEB11	0.28	0.27	-0.01	-2.0%
08-Feb-11	54	< 0.0001	< 0.009	0.774	< 0.00004	0.55	< 0.00001	0.21	0.0138	0.82	< 0.0002	0.00050	< 0.0001	0.000063	0.00036	0.001	< 0.00001	CA14249-FEB11	0.41	0.46	0.06	6.7%
15-Feb-11	55	0.0002	0.025	0.780	0.00014	0.53	< 0.00001	0.12	0.0109	0.60	< 0.0002	0.00021	< 0.0001	0.000038	0.00028	0.002	< 0.00001	CA14449-FEB11	0.26	0.26	0.01	1.0%
22-Feb-11	56	< 0.0001	< 0.009	0.745	0.00006	0.46	0.00001	0.14	0.0109	0.53	< 0.0002	< 0.00001	< 0.0001	0.000017	0.00031	0.001	< 0.00001	CA14656-FEB11	0.40	0.26	-0.15	-22.4%
01-Mar-11	57	0.0002	0.042	0.657	< 0.00004	0.47	< 0.00001	0.16	0.0109	0.61	< 0.0002	0.00046	< 0.0001	0.000034	0.00033	0.007	< 0.00001	CA14060-MAR11	0.42	0.26	-0.15	-22.4%
08-Mar-11	58	< 0.0001	< 0.009	0.680	< 0.00004	0.40	< 0.00001	0.14	0.0104	0.60	< 0.0002	0.00026	0.0001	0.000038	0.00029	0.002	< 0.00001	CA14274-MAR11	0.39	0.25	-0.14	-21.7%
15-Mar-11	59	0.0003	< 0.009	0.730	< 0.00004	0.48	< 0.00001	0.15	0.0108	0.61	< 0.00002	0.00019	< 0.0001	0.000037	0.00034	0.005	< 0.00001	CA14457-MAR11	0.41	0.26	-0.14	-21.5%
22-Mar-11	60	< 0.0001	< 0.009	0.680	0.00005	0.48	< 0.00001	0.09	0.0100	0.51	< 0.0002	0.00017	< 0.0001	0.000029	0.00035	< 0.001	< 0.00001	CA10460-MAR11	0.37	0.24	-0.13	-20.8%
29-Mar-11	61	0.0002	0.030	0.739	< 0.00004	0.56	< 0.00001	0.14	0.0133	0.64	< 0.0002	0.00010	< 0.0001	0.000060	0.00028	< 0.001	< 0.00001	CA14922-MAR11	0.40	0.30	-0.10	-14.7%
05-Apr-11	62	0.0002	0.016	0.705	< 0.00004	0.49	< 0.00001	0.13	0.0111	0.61	< 0.0002	0.00007	< 0.0001	0.000036	0.00036	< 0.001	< 0.00001	CA14224-APR11	0.38	0.26	-0.12	-18.9%
12-Apr-11	63	< 0.0001	0.020	0.724	< 0.00004	0.49	< 0.00001	0.13	0.0129	0.61	< 0.0002	0.00007	< 0.0001	0.000040	0.00035	< 0.001	< 0.00001	CA14457-APR11	0.36	0.26	-0.10	-16.0%
19-Apr-11	64	0.0001	0.022	0.734	0.00031	0.50	< 0.00001	0.22	0.0113	0.65	< 0.0002	0.00007	0.0001	0.000037	0.00045	0.004	< 0.00001	CA11358-APR11	0.43	0.28	-0.16	-22.1%
26-Apr-11	65	0.0004	< 0.009	0.828	< 0.00004	0.50	< 0.00001	0.16	0.0124	0.76	< 0.0002	0.00005	0.0002	0.000040	0.00042	0.002	0.00001	CA14943-APR11	0.41	0.33	-0.09	-11.8%
03-May-11	66	0.0002	0.018	0.718	0.00017	0.48	< 0.00001	0.12	0.0106	0.58	< 0.0002	0.00008	< 0.0001	0.000050	0.00035	0.002	< 0.00001	CA14148-MAY11	0.38	0.27	-0.11	-17.1%
10-May-11	67	0.0001	< 0.009	0.742	0.00005	0.46	0.00003	0.12	0.0107	0.61	< 0.0002	0.00018	0.0001	0.000030	0.00021	< 0.001	< 0.00001	CA14441-MAY11	0.37	0.27	-0.10	-15.2%
17-May-11	68	< 0.0001	< 0.009	0.733	< 0.00004	0.45	0.00002	0.11	0.0103	0.54	< 0.0002	0.00007	0.0001	0.000035	0.00035	0.002	< 0.00001	CA14703-MAY11	0.37	0.27	-0.10	-16.1%
24-May-11	69	< 0.0001	0.010	0.785	< 0.00004	0.65	< 0.00001	0.13	0.0101	0.61	< 0.0002	0.00007	0.0001	0.000033	0.00038	0.001	< 0.00001	CA13762-MAY11	0.30	0.26	-0.05	-8.3%
31-May-11	70	< 0.0001	< 0.009	0.726	< 0.00004	0.58	< 0.00001	0.12	0.0103	0.53	< 0.0002	0.00011	< 0.0001	0.000041	0.00040	< 0.001	< 0.00001	CA10185-JUN11	0.37	0.26	-0.11	-17.9%
07-Jun-11	71	< 0.0001	0.013	0.739	< 0.00004	0.55	< 0.00001	0.19	0.0096	0.58	< 0.00002	0.00014	0.0001	0.000020	0.00035	0.002	< 0.00001	CA14355-JUN11	0.37	0.27	-0.10	-16.2%
14-Jun-11	72	0.0002	< 0.009	0.132	0.00007	0.50	0.00001	0.29	0.0067	1.50	< 0.00002	0.00023	0.0001	0.000013	0.00012	0.002	0.00001	CA10349-JUN11	0.34	0.20	-0.14	-26.4%
21-Jun-11	73	< 0.0001	0.012	0.639	< 0.00004	0.43	< 0.00001	0.13	0.0091	0.58	< 0.00002	0.00011	0.0001	0.000030	0.00033	0.004	< 0.00001	CA14777-JUN11	0.31	0.24	-0.07	-12.1%
28-Jun-11	74	0.0001	< 0.009	0.720	< 0.00004	0.47	< 0.00001	0.12	0.0101	0.57	< 0.00002	0.00001	< 0.0001	0.000034	0.00031	0.001	0.00002	CA15123-JUN11	0.36	0.26	-0.10	-15.9%
05-Jul-11	75	0.0002	< 0.009	0.747	< 0.00004	0.61	< 0.00001	0.18	0.0123	0.67	< 0.00002	0.00011	< 0.0001	0.000041	0.00030	0.005	< 0.00001	CA15472-JUL11	0.33	0.29	-0.04	-6.4%
12-Jul-11	76	< 0.0001	< 0.009	0.725	< 0.00004	0.56	< 0.00001	0.12	0.0112	0.64	< 0.00002	0.00010	< 0.0001	0.000036	0.00034	< 0.001	< 0.00001	CA15694-JUL11	0.30	0.28	-0.02	-2.8%
19-Jul-11	77	0.0002	0.018	0.679	0.00030	0.47	< 0.00001	0.14	0.0105	0.66	< 0.00002	0.00015	< 0.0001	0.000033	0.00032	< 0.001	< 0.00001	CA16180-JUL11	0.24	0.26	0.02	4.6%
26-Jul-11	78	0.0003	0.045	0.584	< 0.00004	0.37	< 0.00001	0.08	0.0114	0.53	< 0.00002	< 0.00001	0.0002	0.000028	0.00031	0.001	< 0.00001	CA11330-JUL11	0.26	0.22	-0.04	-8.2%

HC 10
Sample = Alt 09 20

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
02-Aug-11	79	< 0.0001	< 0.009	0.707	< 0.00004	0.52	< 0.00001	0.11	0.0104	0.63	< 0.00002	0.00006	< 0.0001	0.000036	0.00029	0.003	< 0.00001	CA14200-AUG11	0.23	0.26	0.03	5.7%
09-Aug-11	80	< 0.0001	< 0.009	0.606	< 0.00004	0.46	< 0.00001	0.10	0.0092	0.59	< 0.00002	< 0.00001	< 0.0001	0.000033	0.00033	0.002	< 0.00001	CA14411-AUG11	0.28	0.23	-0.04	-8.4%
16-Aug-11	81	< 0.0001	< 0.009	0.674	0.00013	0.52	< 0.00001	0.12	0.0098	0.64	< 0.00002	0.00009	< 0.0001	0.000029	0.00032	0.001	< 0.00001	CA14675-AUG11	0.30	0.26	-0.04	-7.5%
23-Aug-11	82	< 0.0001	< 0.009	0.642	< 0.00004	0.49	< 0.00001	0.12	0.0098	0.60	< 0.00002	0.00007	< 0.0001	0.000037	0.00032	< 0.001	< 0.00001	CA10450-AUG11	0.31	0.25	-0.06	-11.3%
30-Aug-11	83	0.0002	< 0.009	0.668	0.00009	0.48	< 0.00001	0.12	0.0103	0.72	< 0.00002	0.00009	< 0.0001	0.000033	0.00034	0.002	< 0.00001	CA14264-SEP11	0.32	0.26	-0.06	-10.2%
06-Sep-11	84	< 0.0001	< 0.009	0.613	< 0.00004	0.38	< 0.00001	0.11	0.0089	0.69	< 0.00002	< 0.00001	< 0.0001	0.000031	0.00032	0.003	< 0.00001	CA14213-SEP11	0.29	0.23	-0.06	-12.4%
13-Sep-11	85	< 0.0001	< 0.009	0.648	< 0.00004	0.46	< 0.00001	0.11	0.0100	0.75	< 0.00002	0.00011	< 0.0001	0.000034	0.00031	0.003	< 0.00001	CA17321-SEP11	0.31	0.25	-0.06	-10.6%
20-Sep-11	86	0.0002	< 0.009	0.552	< 0.00004	0.43	< 0.00001	0.15	0.0089	0.64	< 0.00002	0.00030	0.0001	0.000033	0.00032	0.003	< 0.00001	CA14825-SEP11	0.30	0.23	-0.07	-13.3%
27-Sep-11	87	< 0.0001	< 0.009	0.645	0.00006	0.41	< 0.00001	0.11	0.0096	0.81	< 0.00002	0.00011	< 0.0001	0.000038	0.00031	0.002	< 0.00001	CA18921-SEP11	0.30	0.24	-0.06	-11.2%
04-Oct-11	88	< 0.0001	< 0.009	0.684	< 0.00004	0.51	< 0.00001	0.12	0.0111	0.69	< 0.00002	0.00008	< 0.0001	0.000047	0.00025	0.002	< 0.00001	CA14153-OCT11	0.35	0.27	-0.08	-12.9%
11-Oct-11	89	0.0001	< 0.009	0.614	< 0.00004	0.42	< 0.00001	0.10	0.0087	0.74	< 0.00002	0.00003	< 0.0001	< 0.000001	0.00028	0.001	< 0.00001	CA14391-OCT11	0.30	0.22	-0.08	-14.8%
18-Oct-11	90	0.0002	< 0.009	0.634	< 0.00004	0.40	< 0.00001	0.11	0.0091	0.72	< 0.00002	0.00004	< 0.0001	0.000023	0.00030	0.001	< 0.00001	CA14788-OCT11	0.29	0.24	-0.05	-9.9%
25-Oct-11	91	< 0.0001	< 0.009	0.606	< 0.00004	0.43	< 0.00001	0.10	0.0092	0.65	< 0.00002	0.00009	< 0.0001	0.000032	0.00028	0.002	< 0.00001	CA14955-OCT11	0.28	0.24	-0.04	-7.7%
01-Nov-11	92	< 0.0001	< 0.009	0.593	< 0.00004	0.40	< 0.00001	0.09	0.0090	0.69	< 0.00002	0.00008	< 0.0001	0.000026	0.00029	0.002	0.00001	CA18036-NOV11	0.29	0.23	-0.06	-11.1%
08-Nov-11	93	< 0.0001	< 0.009	0.660	0.00014	0.39	< 0.00001	0.12	0.0097	0.87	< 0.00002	0.00007	0.0002	0.000027	0.00037	0.004	< 0.00001	CA18264-NOV11	0.28	0.25	-0.03	-5.1%
15-Nov-11	94	0.0002	< 0.009	0.608	0.00009	0.29	< 0.00001	0.11	0.0087	0.77	< 0.00002	0.00002	0.0002	0.000027	0.00036	0.002	< 0.00001	CA18499-NOV11	0.21	0.23	0.02	5.0%
22-Nov-11	95	0.0002	< 0.009	0.641	< 0.00004	0.40	< 0.00001	0.02	0.0099	0.68	< 0.00002	< 0.00001	0.0002	0.000034	0.00036	< 0.001	< 0.00001	CA18773-NOV11	0.29	0.25	-0.04	-6.6%
29-Nov-11	96	0.0002	0.010	0.679	< 0.00004	0.45	< 0.00001	0.10	0.0104	0.78	< 0.00002	0.00007	0.0001	0.000028	0.00045	< 0.001	< 0.00001	CA12006-NOV11	0.29	0.26	-0.03	-6.0%
06-Dec-11	97	0.0001	0.018	0.632	< 0.00004	0.39	0.00007	0.06	0.0093	0.73	< 0.00002	< 0.00001	0.0005	0.000026	0.00051	0.002	< 0.00001	CA14293-DEC11	0.27	0.25	-0.02	-3.8%
13-Dec-11	98	0.0002	0.011	0.657	0.00023	0.35	< 0.00001	0.13	0.0100	0.86	< 0.00002	0.00008	< 0.0001	0.000028	0.00021	0.002	< 0.00001	CA14475-DEC11	0.32	0.26	-0.06	-10.7%
20-Dec-11	99	< 0.0001	< 0.009	0.593	0.00016	0.36	< 0.00001	0.09	0.0088	0.86	< 0.00002	0.00001	< 0.0001	0.000027	0.00036	0.001	< 0.00001	CA10397-DEC11	0.27	0.23	-0.04	-8.1%
27-Dec-11	100	0.0003	< 0.009	0.632	< 0.00004	0.36	< 0.00001	0.11	0.0093	0.94	< 0.00002	0.00003	0.0001	0.000028	0.00042	< 0.001	< 0.00001	CA10466-DEC11	0.29	0.25	-0.05	-8.9%
03-Jan-12	101	0.0003	< 0.009	0.615	< 0.00004	0.36	< 0.00001	0.09	0.0088	0.85	< 0.00002	0.00003	0.0001	0.000026	0.00056	0.002	< 0.00001	CA14133-JAN12	0.32	0.23	-0.08	-15.4%
10-Jan-12	102	< 0.0001	< 0.009	0.606	< 0.00004	0.35	< 0.00001	0.17	0.0091	0.77	< 0.00002	0.00006	0.0002	0.000027	0.00061	0.004	< 0.00001	CA14430-JAN12	0.31	0.24	-0.07	-12.1%
17-Jan-12	103	0.0002	< 0.009	0.632	< 0.00004	0.36	< 0.00001	0.09	0.0093	0.79	< 0.00002	0.00002	0.0002	0.000029	0.00046	< 0.001	< 0.00001	CA11226-JAN12	0.30	0.25	-0.06	-10.0%
24-Jan-12	104	0.0002	< 0.009	0.630	< 0.00004	0.32	< 0.00001	0.10	0.0089	0.80	< 0.00002	0.00006	< 0.0001	0.000026	0.00046	0.001	< 0.00001	CA10502-JAN12	0.34	0.24	-0.10	-18.1%
31-Jan-12	105	< 0.0001	< 0.009	0.657	< 0.00004	0.35	< 0.00001	0.14	0.0097	0.82	< 0.00002	0.00007	0.0002	0.000055	0.00057	0.002	< 0.00001	CA10999-FEB12	0.31	0.26	-0.06	-9.7%
07-Feb-12	106	0.0002	< 0.009	0.645	0.00008	0.48	< 0.00001	0.10	0.0126	0.77	< 0.00002	< 0.00001	0.0001	0.000041	0.00038	0.001	< 0.00001	CA14207-FEB12	0.49	0.31	-0.18	-22.6%
14-Feb-12	107	0.0002	< 0.009	0.532	< 0.00004	0.32	< 0.00001	0.11	0.0090	0.75	< 0.00002	< 0.00001	< 0.0001	0.000025	0.00026	< 0.001	< 0.00001	CA14420-FEB12	0.31	0.23	-0.08	-15.3%
21-Feb-12	108	0.0002	< 0.009	0.593	< 0.00004	0.33	< 0.00001	0.12	0.0092	0.81	< 0.00002	< 0.00001	< 0.0001	0.000026	0.00030	0.001	< 0.00001	CA14754-FEB12	0.32	0.24	-0.08	-14.5%
28-Feb-12	109	0.0001	< 0.009	0.611	0.00010	0.34	< 0.00001	0.12	0.0093	0.76	< 0.00002	0.00003	0.0001	0.000022	0.00037	0.002	< 0.00001	CA14961-FEB12	0.29	0.25	-0.04	-8.2%
06-Mar-12	110	0.0002	< 0.009	0.629	< 0.00004	0.35	< 0.00001	0.13	0.0088	0.90	< 0.00002	< 0.00001	0.0001	0.000029	0.00042	0.003	< 0.00001	CA14216-MAR12	0.30	0.24	-0.06	-11.6%
13-Mar-12	111	0.0002	< 0.009	0.626	< 0.00004	0.36	< 0.00001	0.12	0.0097	0.86	< 0.00002	0.00029	< 0.0001	0.000026	0.00024	0.001	0.00003	CA14408-MAR12	0.30	0.25	-0.05	-8.4%
20-Mar-12	112	< 0.0001	< 0.009	0.625	0.00007	0.35	< 0.00001	0.10	0.0100	0.83	< 0.00002	0.00013	< 0.0001	0.000025	0.00018	< 0.001	< 0.00001	CA14687-MAR12	0.29	0.26	-0.03	-5.7%
27-Mar-12	113	0.0002	< 0.009	0.604	< 0.00004	0.39	< 0.00001	0.12	0.0101	0.94	< 0.00002	< 0.00001	0.0002	0.000038	0.00049	< 0.001	< 0.00001	CA14874-MAR12	0.33	0.29	-0.04	-6.4%
03-Apr-12	114	0.0001	< 0.009	0.612	< 0.00004	0.34	< 0.00001	0.12	0.0096	0.83	< 0.00002	< 0.00001	< 0.0001	0.000028	0.00040	0.002	< 0.00001	CA14169-APR12	0.30	0.26	-0.04	-6.6%
10-Apr-12	115	0.0001	< 0.009	0.614	< 0.00004	0.36	< 0.00001	0.11	0.0098	0.90	< 0.00002	0.00002	0.0001	0.000028	0.00042	0.001	< 0.00001	CA11095-APR12	0.29	0.27	-0.03	-4.7%
17-Apr-12	116	0.0001	< 0.009	0.572	< 0.00004	0.33	< 0.00001	0.07	0.0089	0.91	< 0.00002	< 0.00001	0.0002	0.000028	0.00042	0.001	0.00002	CA14686-APR12	0.27	0.25	-0.03	-5.2%
24-Apr-12	117	0.0007	< 0.009	0.651	< 0.00004	0.39	< 0.00001	0.11	0.0099	0.97	< 0.00002	< 0.00001	< 0.0001	0.000116	0.00043	0.001	< 0.00001	CA14876-APR12	0.29	0.27	-0.03	-4.7%
01-May-12	118	0.0001	< 0.009	0.629	0.00011	0.38	< 0.00001	0.10	0.0095	0.85	< 0.00002	0.00002	0.0002	0.000029	0.00049	0.001	< 0.00001	CA14088-MAY12	0.35	0.27	-0.08	-13.1%
08-May-12	119	0.0002	< 0.009	0.663	< 0.00004	0.40	< 0.00001	0.12	0.0093	0.78	< 0.00002	0.00049	< 0.0001	0.000032	0.00042	0.001	< 0.00001	CA14348-MAY12	0.33	0.26	-0.06	-10.3%
15-May-12	120	0.0003	< 0.009	0.658	< 0.00004	0.37	< 0.00001	0.11	0.0091	0.74	< 0.00002	< 0.00001	< 0.0001	0.000030	0.00043	0.002	< 0.00001	CA14621-MAY12	0.29	0.26	-0.04	-6.4%
22-May-12	121	0.0002	< 0.009	0.611	< 0.00004	0.38	< 0.00001	0.11	0.0085	0.73	< 0.00002	< 0.00001	0.0002	0.000030	0.00062	0.001	< 0.00001	CA10508-MAY12	0.29	0.24	-0.04	-8.1%
29-May-12	122	0.0002	< 0.009	0.670	< 0.00004	0.43	< 0.00001	0.12	0.0103	0.72	< 0.00002	0.00023	0.0006	0.000031	0.00067	0.001	< 0.00001	CA15134-MAY12	0.34	0.31	-0.04	-5.4%
05-Jun-12	123	< 0.0001	< 0.009	0.625	< 0.00004	0.40	< 0.00001	0.13	0.0094	0.71	< 0.00002	0.00002	0.0002	0.000022	0.00050	0.001	< 0.00001	CA15137-JUN12	0.29	0.27	-0.02	-2.8%
12-Jun-12	124	0.0001	< 0.009	0.979	0.00016	0.76	< 0.00001	0.13	0.0152	0.83	< 0.00002	< 0.00001	< 0.0001	0.000040	0.00059	0.002	< 0.00001	CA15174-JUN12	0.56	0.45	-0.11	-10.6%
19-Jun-12	125	< 0.0001	< 0.009	0.672	0.00008	0.41	< 0.00001	0.09	0.0085	0.57	< 0.00002	< 0.00001	< 0.0001	0.000018	0.00052	< 0.001	< 0.00001	CA15309-JUN12	0.24	0.25	0.01	2.3%
26-Jun-12	126	0.0001	< 0.009	0.724	< 0.00004	0.51	< 0.00001	0.13	0.0095	0.69	< 0.00002	0.00014	0.0002	0.000028	0.00060	0.002	< 0.00001	CA15357-JUN12	0.32	0.28	-0.03	-5.7%
03-Jul-12	127	< 0.0001	< 0.009	0.668	< 0.00004	0.41	< 0.00001	0.10	0.0087	0.63	< 0.00002	0.00015	< 0.0001	0.000036	0.00051	0.002	< 0.00001	CA15021-JUL12	0.38	0.26	-0.13	-19.8%
10-Jul-12	128	< 0.0001	< 0.009	0.670	0.00005	0.38	< 0.00001	0.11	0.0088	0.62	< 0.00002	0.00041	< 0.0001	0.000023	0.00052	0.003	< 0.00001	CA15118-JUL12	0.36	0.25	-0.10	-17.1%
17-Jul-12	129	< 0.0001	< 0.009	0.700	0.00005	0.42	< 0.00001	0.10	0.0094	0.65	< 0.00002	< 0.00001	< 0.0001	0.000024	0.00051	< 0.001	< 0.00001	CA15186-JUL12	0.34	0.27	-0.07	-11.0%
24-Jul-12	130	< 0.0001	< 0.009	0.650	0.00015	0.38	< 0.00001	0.11	0.0085	0.62	< 0.00002	0.00005	0.0001	0.000021	0.00057	0.001	0.00001	CA15302-JUL12	0.30	0.25	-0.05	-9.4%
31-Jul-12	131	< 0.0001	< 0.009	0.638	< 0.00004	0.39	< 0.00001	0.10	0.0084	0.58	< 0.00002	0.00003	< 0.0001	0.000025	0.00057	0.002	< 0.00001	CA15010-AUG12	0.28	0.25	-0.03	-5.4%
07-Aug-12	132	< 0.0001	< 0.009	0.650	< 0.00004	0.45	< 0.00001	0.12	0.0086	0.69	< 0.00002	0.00009	0.0001	0.000025	0.00062	0.002	0.00003	CA15071-AUG12	0.32	0.25	-0.07	-11.5%
14-Aug-12	133	0.0001	< 0.009	0.641	< 0.00004	0.38	< 0.00001	0.11	0.0080	0.67	< 0.00002	0.00006	< 0.0001	0.000023	0.00039	0.002	< 0.00001	CA15151-AUG12	0.26	0.23	-0.03	-6.3%
21-Aug-12	134	0.0001	< 0.009	0.568	< 0.00004	0.40	< 0.00001	0.09	0.0082	0.77	< 0.00002	0.00012	0.0001	0.000022	0.00047	0.001	< 0.00001	CA15239-AUG12	0.29	0.24	-0.05	-9.2%
28-Aug-12	135	< 0.0001	< 0.009	0.576	< 0.00004	0.38	< 0.00001	0.08	0.0079	0.56	< 0.00002	0.00030	0.0003	0.000021	0.00052	0.001	< 0.00001	CA15348-AUG12	0.33	0.23	-0.10	-17.8%
04-Sep-12	136	< 0.0001	< 0.009	0.575	< 0.00004	0.37	< 0.00001	0.11	0.0083	0.60	< 0.00002	0.00006	< 0.0001	0.000035	0.00072	< 0.001	< 0.00001	CA15317-SEP12	0.31	0.25	-0.06	-10.2%
11-Sep-12	137	< 0.0001	< 0.009	0.582	< 0.00004	0.36	< 0.00001	0.11	0.0079	0.59	< 0.00002	0.00016	0.0001	0.000023	0.00043	< 0.001	< 0.00001	CA15405-SEP12	0.33	0.23	-0.10	-18.0%
18-Sep-12	138	< 0.0001	< 0.009	0.607	< 0.00004	0.41	0.00002	0.10	0.0082	0.58	< 0.00002	0.00029	0.0003	0.000040	0.00056	0.022	< 0.00001	CA15559-SEP12	0.33	0.24	-0.08	-14.4%
25-Sep-12	139	0.0001	< 0.009	0.615	0.00007	0.37	0.00003	0.09	0.0078	0.54	< 0.00002	0.00016	< 0.0001	0.000033	0.00037	0.001	< 0.00001	CA15670-SEP12	0.35	0.23	-0.11	-19.6%
02-Oct-12	140	< 0.0001	< 0.009	0.587	< 0.00004	0.40	< 0.00001	0.09	0.0074	0.56	< 0.00002	0.00009	< 0.0001	0.000022	0.00040	< 0.001	< 0.00001	CA15354-OCT12	0.31	0.23	-0.09	-16.4%
09-Oct-12	141	0.0003	< 0.009	0.633	< 0.00004	0.39	< 0.00001	0.10	0.0086	0.57	< 0.00002	0.00012	0.0001	0.000028	0.00042	0.001	< 0.00001	CA15450-OCT12	0.35	0.27	-0.08	-12.6%
16-Oct-12	142	0.0001	< 0.009	0.608	< 0.00004	0.40	< 0.00001	0.10	0.0078	0.58	< 0.00002	0.00006	< 0.0001	0.000023	0.00041	0.002	< 0.00001	CA15570-OCT12	0.34	0.25	-0.09	-15.4%
23-Oct-12	143	0.0004	< 0.009	0.576	< 0.00004	0.34	< 0.00001	0.09	0.0079	0.52	< 0.00002	0.00003	0.0001	0.000026	0.00046	< 0.001	< 0.00001	CA15652-OCT12	0.34	0.24	-0.10	-16.6%
30-Oct-12	144	0.0001	< 0.009	0.626	< 0.00004	0.38	0.00005	0.09	0.0086	0.59	< 0.00002	0.00045	< 0.0001	0.000026	0.00039	< 0.001	< 0.00001	CA15744-OCT12	0.34	0.25	-0.09	-14.7%
06-Nov-12	145	0.0002	< 0.009	0.575	< 0.00004	0.39	< 0.00001	0.09	0.0087	0.54	< 0.00002	0.00016	< 0.0001	0.000026	0.00036	< 0.001	< 0.00001	CA11210-NOV12	0.30	0.26	-0.04	-7.2%
13-Nov-12	146	< 0.0001	< 0.009	0.597	< 0.00004	0.35	0.00001	0.08	0.0078	0.59	< 0.00002	0.00003	0.0001	0.000023	0.00038	< 0.001	< 0.00001	CA15251-NOV12	0.32	0.24	-0.07	-13.1%
20-Nov-12	147	< 0.0001	< 0.009	0.541	< 0.00004	0.44	0.00001	0.10	0.0101	0.52	< 0.00002	0.00014	0.0001	0.000031	0.00034	0.007	< 0.00001	CA15347-NOV12	0.34	0.28	-0.05	-8.8%
27-Nov-12	148	0.0002	< 0.009	0.556	< 0.00004	0.48	< 0.00001	0.09	0.0109	0.61	< 0.00002	0.00011	< 0.0001	0.000046	0.00006	< 0.001	< 0.00001	CA15376-NOV12	0.42	0.29	-0.13	-18.1%
04-Dec-12	149	< 0.0001	< 0.009	0.530	< 0.00004	0.29	< 0.00001	0.06	0.0074	0.45	< 0.00002	0.00009	< 0.0001	0.000029	0.00030	0.001	< 0.00001	CA15038-DEC12	0.30	0.21	-0.09	-17.1%
11-Dec-12	150	< 0.0001	< 0.009	0.601	< 0.00004	0.35	< 0.00001	0.08	0.0082	0.53	< 0.00002	0.00007	< 0.0001	0.000030	0.00037	< 0.001	< 0.00001	CA15164-JAN13	0.32	0.24	-0.07	-13.2%
18-Dec-12	151	< 0.0001	< 0.009	0.560	< 0.00004	0.41	< 0.00001	0.09	0.0109	0.63	< 0.00002	0.00010	< 0.0001	0.000040	0.00035	0.001	< 0.00001	CA15269-DEC12	0.29	0.27	-0.02	-3.5%
25-Dec-12	152	< 0.0001	< 0.009	0.512	< 0.00004	0.26	< 0.00001	0.06	0.0092	0.56	< 0.00002	0.00007	< 0.0001	0.000026	0.00022	0.001	< 0.00001	CA15361-DEC12	0.22	0.22	0.00	0.5%
01-Jan-13	153	< 0.0001	0.011	0.583	< 0.00004	0.35	< 0.00001	0.11	0.0076	0.44	< 0.00002	0.00010	< 0.0001	0.000026	0.00035	0.001	< 0.00001	CA15056-JAN13	0.25	0.22	-0.03	-6.7%
08-Jan-13	154	< 0.0001	0.020	0.584	< 0.00004	0.30	< 0.00001	0.08	0.0062	0.36	< 0.00002	0.00012	0.0001	0.000027	0.00042	< 0.001	< 0.00001	CA15153-JAN13	0.24	0.20	-0.04	-9.5%
15-Jan-13	155																					
22-Jan-13	156																					
29-Jan-13	157																					
05-Feb-13	158																					
12-Feb-13	159																					

HC 11 *CONFIDENTIAL* *DRAFT*

Sample = L032107

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output																												
					mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
01-May-12	1	500	450	7.84	329	97	#N/A	4.0	31.8	14	2.4	0.07	12.2	0.229	0.0031	0.0067	0.00093	< 0.00002	< 0.00001	0.0339	< 0.000003	4.47	< 0.0005	0.000029	0.0010	< 0.003	0.00004	0.002	0.252	0.0042	0.08	0.00074
08-May-12	2	500	430	7.88	358	70	#N/A	1.9	23.2	11	1.8	< 0.06	9.14	0.231	0.0046	0.0112	0.00080	< 0.00002	< 0.00001	0.0323	< 0.000003	3.36	< 0.0005	0.000027	0.0015	0.004	0.00004	0.001	0.182	0.0086	< 0.01	0.00070
15-May-12	3	500	415	7.90	298	64	#N/A	1.8	23.3	7	0.6	< 0.06	8.9	0.378	0.0041	0.0121	0.00120	< 0.00002	< 0.00001	0.0359	< 0.000003	3.27	< 0.0005	0.000020	0.0006	0.007	0.00005	0.001	0.175	0.0075	0.01	0.00037
22-May-12	4	500	470	7.62	334	51	#N/A	2.8	21.5	7	0.3	< 0.06	8.71	0.248	0.0042	0.0089	0.00082	< 0.00002	< 0.00001	0.0279	< 0.000003	3.20	< 0.0005	0.000025	0.0010	< 0.003	0.00004	0.001	0.174	0.0095	0.03	0.00022
29-May-12	5	500	435	7.54	336	45	#N/A	3.1	20.7	4	< 0.2	< 0.06	10.7	0.260	0.0031	0.0073	0.00062	< 0.00002	< 0.00001	0.0244	< 0.000003	3.92	< 0.0005	0.000024	< 0.0005	< 0.003	< 0.00002	0.001	0.219	0.0109	0.01	0.00012
05-Jun-12	6	500	455	7.52	369	42	#N/A	3.4	20.6	4	< 0.2	< 0.06	10.6	0.202	0.0032	0.0059	0.00110	< 0.00002	< 0.00001	0.0235	0.000050	3.88	< 0.0005	0.000023	< 0.0005	0.004	0.00094	0.001	0.233	0.0126	< 0.01	0.00011
12-Jun-12	7	500	440	7.62	348	36	#N/A	2.8	16.6	4	< 0.2	< 0.06	10.1	0.222	0.0025	0.0055	0.00060	< 0.00002	< 0.00001	0.0176	< 0.000003	3.73	< 0.0005	< 0.000002	< 0.0005	< 0.003	0.00002	< 0.001	0.203	0.0109	0.01	0.00008
19-Jun-12	8	500	460	7.40	368	34	#N/A	2.4	16.0	2	< 0.2	< 0.06	10.6	0.150	0.0026	0.0059	0.00057	< 0.00002	< 0.00001	0.0166	< 0.000003	3.85	< 0.0005	0.000040	< 0.0005	0.004	< 0.00002	< 0.001	0.229	0.0132	< 0.01	0.00006
26-Jun-12	9	500	455	7.50	329	33	#N/A	2.5	14.7	5	< 0.2	< 0.06	10.7	0.216	0.0024	0.0057	0.00097	< 0.00002	< 0.00001	0.0162	< 0.000003	3.90	< 0.0005	< 0.000002	0.0005	0.005	0.00005	< 0.001	0.244	0.0149	0.01	0.00007
03-Jul-12	10	500	465	7.54	377	33	#N/A	5.8	16.3	5	< 0.2	< 0.06	11.5	0.155	0.0022	0.0051	0.00064	< 0.00002	< 0.00001	0.0121	< 0.000003	4.20	< 0.0005	0.000008	< 0.0005	< 0.003	0.00002	< 0.001	0.249	0.0167	0.01	0.00018
10-Jul-12	11	500	470	7.35	326	34	#N/A	3.2	14.3	5	< 0.2	< 0.06	11.6	0.176	0.0022	0.0048	0.00073	< 0.00002	< 0.00001	0.0130	< 0.000003	4.23	< 0.0005	0.000010	0.0005	< 0.003	< 0.00002	< 0.001	0.260	0.0130	0.02	0.00005
17-Jul-12	12	500	460	7.45	371	31	#N/A	2.1	12.8	4	< 0.2	< 0.06	11.1	0.163	0.0019	0.0049	0.00065	< 0.00002	< 0.00001	0.0122	< 0.000003	4.02	< 0.0005	0.000031	< 0.0005	< 0.003	< 0.00002	< 0.001	0.250	0.0121	0.02	0.00001
24-Jul-12	13	500	470	7.28	336	32	#N/A	2.6	13.2	5	< 0.2	< 0.06	12.4	0.148	0.0016	0.0044	0.00062	< 0.00002	< 0.00001	0.0096	< 0.000003	4.55	< 0.0005	0.000010	< 0.0005	< 0.003	< 0.00002	< 0.001	0.265	0.0150	< 0.01	0.00004
31-Jul-12	14	500	465	7.40	360	29	#N/A	1.9	12.7	4	< 0.2	< 0.06	11.2	0.141	0.0020	0.0046	0.00059	< 0.00002	< 0.00001	0.0106	< 0.000003	4.08	< 0.0005	0.000017	< 0.0005	< 0.003	< 0.00002	< 0.001	0.253	0.0130	0.01	0.00003
07-Aug-12	15	500	475	7.56	343	30	#N/A	2.0	13.2	4	< 0.2	< 0.06	11.6	0.167	0.0020	0.0049	0.00068	< 0.00002	< 0.00001	0.0121	0.000003	4.20	< 0.0005	0.000019	0.0006	< 0.003	0.00004	< 0.001	0.266	0.0119	0.01	0.00005
14-Aug-12	16	500	475	7.29	304	30	#N/A	2.4	12.2	3	< 0.2	< 0.06	11.5	0.148	0.0016	0.0045	0.00067	< 0.00002	< 0.00001	0.0097	< 0.000003	4.15	< 0.0005	0.000036	0.0006	< 0.003	< 0.00002	< 0.001	0.279	0.0111	< 0.01	0.00004
21-Aug-12	17	500	485	7.23	315	31	#N/A	3.0	12.6	4	< 0.2	< 0.06	12.3	0.147	0.0018	0.0039	0.00060	< 0.00002	< 0.00001	0.0099	< 0.000003	4.49	< 0.0005	0.000014	< 0.0005	< 0.003	0.00002	< 0.001	0.271	0.0147	< 0.01	0.00006
28-Aug-12	18	500	475	7.34	399	31	#N/A	4.4	13.8	5	< 0.2	< 0.06	12.3	0.138	0.0013	0.0032	0.00059	< 0.00002	< 0.00001	0.0081	< 0.000003	4.50	< 0.0005	0.000006	0.0009	< 0.003	0.00004	< 0.001	0.252	0.0153	< 0.01	0.00008
04-Sep-12	19	500	500	7.21	405	24	#N/A	4.2	10.9	4	< 0.2	< 0.06	11.1	0.102	0.0012	0.0023	0.00062	< 0.00002	< 0.00001	0.0073	< 0.000003	4.06	< 0.0005	0.000016	< 0.0005	< 0.003	< 0.00002	< 0.001	0.225	0.0164	< 0.01	0.00002
11-Sep-12	20	500	490	7.26	378	28	#N/A	2.8	11.6	4	< 0.2	< 0.06	12.5	0.0831	0.0014	0.0034	0.00071	< 0.00002	< 0.00001	0.0082	< 0.000003	4.53	< 0.0005	0.000018	< 0.0005	< 0.003	0.00007	< 0.001	0.279	0.0131	0.03	0.00005
18-Sep-12	21	500	485	7.23	376	31																										
25-Sep-12	22	500	470	7.23	370	29	#N/A	2.6	11.7	5	< 0.2	< 0.06	11.9	0.0803	0.0012	0.0030	0.00067	< 0.00002	< 0.00001	0.0069	< 0.000003	4.33	< 0.0005	0.000006	< 0.0005	< 0.003	< 0.00002	< 0.001	0.271	0.0126	< 0.01	0.00004
02-Oct-12	23	500	485	7.15	397	27	#N/A	3.3	11.0	4	< 0.2	< 0.06	11.6	0.0571	0.0011	0.0026	0.00055	< 0.00002	< 0.00001	0.0071	< 0.000003	4.20	< 0.0005	0.000059	< 0.0005	< 0.003	< 0.00002	< 0.001	0.264	0.0133	< 0.01	0.00004
09-Oct-12	24	500	480	7.19	376	26	#N/A	4.5	10.3	3	< 0.2	< 0.06	10.9	0.0694	0.0009	0.0025	0.00058	< 0.00002	< 0.00001	0.0055	< 0.000003	3.95	< 0.0005	0.000003	< 0.0005	< 0.003	< 0.00002	< 0.001	0.243	0.0126	< 0.01	0.00004
16-Oct-12	25	500	500	7.51	407	26	#N/A	5.0	12.0	5	< 0.2	< 0.06	11.4	0.0661	0.0008	0.0025	0.00052	< 0.00002	< 0.00001	0.0061	< 0.000003	4.16	< 0.0005	0.000006	< 0.0005	< 0.003	< 0.00002	< 0.001	0.246	0.0123	< 0.01	0.00003
23-Oct-12	26	500	475	7.10	373	27	#N/A	4.2	10.8	5	< 0.2	< 0.06	10.8	0.0964	0.0008	0.0026	0.00052	< 0.00002	< 0.00001	0.0043	< 0.000003	3.96	< 0.0005	0.000058	0.0006	< 0.003	< 0.00002	< 0.001	0.232	0.0126	< 0.01	0.00009
30-Oct-12	27	500	490	7.14	377	29	#N/A	4.0	12.8	5	< 0.2	< 0.06	13.0	0.0784	0.0009	0.0025	0.00058	< 0.00002	< 0.00001	0.0061	0.000416	4.77	< 0.0005	< 0.000002	< 0.0005	0.009	< 0.00002	< 0.001	0.271	0.0150	< 0.01	0.00006
06-Nov-12	28	500	470	7.28	378	24	#N/A	3.8	10.9	2	< 0.2	< 0.06	12.2	0.0671	0.0009	0.0026	0.00052	< 0.00002	< 0.00001	0.0053	< 0.000003	4.47	< 0.0005	0.000031	< 0.0005	< 0.003	< 0.00002	< 0.001	0.257	0.0146	< 0.01	0.00006
13-Nov-12	29	500	470	7.26	380	22	#N/A	4.2	11.0	4	< 0.2	< 0.06	10.6	0.0563	0.0007	0.0025	0.00051	< 0.00002	< 0.00001	0.0047	0.000003	3.87	< 0.0005	0.000033	< 0.0005	< 0.003	< 0.00002	< 0.001	0.228	0.0130	0.02	0.00003
20-Nov-12	30	500	495	7.68	395	27	#N/A	5.7	13.1	3	< 0.2	< 0.06	12.2	0.0704	0.0008	0.0027	0.00066	< 0.00002	< 0.00001	0.0056	0.000009	4.49	< 0.0005	0.000112	0.0007	< 0.003	0.00002	< 0.001	0.229	0.0157	< 0.01	0.00013
27-Nov-12	31	500	495	7.34	369	26	#N/A	4.2	12.3	5	< 0.2	< 0.06	12.4	0.0660	0.0008	0.0024	0.00055	< 0.00002	< 0.00001	0.0047	0.000003	4.58	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	0.232	0.0149	0.01	0.00003
04-Dec-12	32	500	455	7.37	348	18	#N/A	2.0	8.0	4	< 0.2	< 0.06	8.9	0.0873	0.0006	0.0024	0.00053	< 0.00002	< 0.00001	0.0029	0.000005	3.22	< 0.0005	0.000018	< 0.0005	0.073	0.00003	< 0.001	0.200	0.0129	0.01	0.00003
11-Dec-12	33	500	480	7.47	354	21	#N/A	2.1	10.9	4	< 0.2	< 0.06	10.5	0.0871	0.0008	0.0026	0.00049	< 0.00002	< 0.00001	0.0043	0.000006	3.87	< 0.0005	0.000047	< 0.0005	< 0.003	< 0.00002	< 0.001	0.203	0.0098	< 0.01	0.00005
18-Dec-12	34	500	455	7.42	328	21	#N/A	2.3	9.9	2	< 0.2	< 0.06	10.0	0.101	0.0006	0.0026	0.00050	< 0.00002	< 0.00001	0.0031	< 0.000003	3.67	< 0.0005	0.000008	< 0.0005	< 0.003	0.00003	< 0.001	0.216	0.0095	< 0.01	0.00005
25-Dec-12	35	500	450	7.38	367	18	#N/A	2.7	9.4	<2	< 0.2	< 0.06	9.20	0.0875	0.0006	0.0026	0.00041	< 0.00002	< 0.00001	0.0035	< 0.000003	3.34	< 0.0005	0.000010	0.0006	< 0.003	0.00002	< 0.001	0.213	0.0090	< 0.01	0.00005
01-Jan-13	36	500	440	#N/A	#N/A	#N/A	#N/A	#N/A	#N/A	2	< 0.2	< 0.06	8.39	0.0875	0.0006	0.0026	0.00044	< 0.00002	< 0.00001	0.0033	< 0.000003	3.03	< 0.0005	0.000014	< 0.0005	< 0.003	< 0.00002	< 0.001	0.198	0.0089	0.01	0.00007
08-Jan-13	37	500	445	7.49	355	19	#N/A	2.8	10.1	2	< 0.2	< 0.06	9.07	0.0910	0.0010	0.0024	0.00051	< 0.00002	0.00002	0.0035	< 0.000003	3.32	< 0.0005	0.000062	< 0.0005	< 0.003	0.00002	< 0.001	0.187	0.0085	0.01	0.00004
15-Jan-13	38	500	455	7.12	302	20	#N/A	2.6	9.7	3	< 0.2	< 0.06	8.59	0.0901	0.0008	0.0024	0.00047	< 0.00002	< 0.00001	0.0033	< 0.000003	3.14	< 0.0005	0.000037	0.0006	0.009	< 0.00002	< 0.001	0.179	0.0120	< 0.01	0.00004
22-Jan-13	39	500	460	7.11	343	18	#N/A	3.6	8.5	4	< 0.2	< 0.06	7.71	0.0601	0.0007	0.0016	0.00040	< 0.00002	< 0.00001	0.0036	< 0.000003	2.81	< 0.0005	0.000023	< 0.0005	< 0.003	< 0.00002	< 0.001	0.170	0.0068	< 0.01	0.00002
29-Jan-13	40	500	450	7.30	309	18	#N/A	2.7	7.9	4	< 0.2	< 0.06	9.31	0.0846	0.0005	0.0021	0.00097	< 0.00002	< 0.00001	0.0029	< 0.000003	3.39	< 0.0005	0.000039	0.0007	0.038	0.00003	< 0.001	0.204	0.0084	< 0.01	0.00002
05-Feb-13	41	500	460	7.38	354	20	#N/A	3.2	8.9	5																						
12-Feb-13	42	500	455	7.33	363	17	#N/A	4.6	9.1	5																						

Sept 11/12 Change in analytical schedule.
Sept 25/12 Change in analytical shedule
Jan 1/13 Titrator data low, recheck confirms original result. Titrator data removed

HC 11

Sample = L032107

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
01-May-12	1	0.0006	0.011	1.88	< 0.00004	1.21	< 0.00001	14.4	0.0302	4.95	< 0.00002	0.00014	0.0003	0.000009	0.00097	0.001	0.00001	CA14188-MAY12	1.00	0.95	-0.05	-2.4%
08-May-12	2	0.0005	< 0.009	0.879	< 0.00004	0.72	< 0.00001	10.1	0.0228	3.66	< 0.00002	0.00065	0.0002	0.000034	0.00065	0.001	< 0.00001	CA14348-MAY12	0.74	0.68	-0.06	-4.5%
15-May-12	3	0.0002	< 0.009	0.785	< 0.00004	1.04	< 0.00001	9.34	0.0249	3.18	< 0.00002	0.00022	0.0005	0.000028	0.00091	0.001	0.00006	CA14621-MAY12	0.63	0.66	0.03	2.2%
22-May-12	4	0.0002	< 0.009	0.591	0.00012	0.74	< 0.00001	6.87	0.0232	2.41	< 0.00002	0.00025	0.0002	0.000065	0.00069	0.002	0.00002	CA10508-MAY12	0.58	0.52	-0.06	-5.5%
29-May-12	5	< 0.0001	< 0.009	0.628	< 0.00004	0.79	< 0.00001	5.19	0.0280	2.09	< 0.00002	0.00032	< 0.0001	0.000066	0.00074	0.002	< 0.00001	CA15134-MAY12	0.50	0.49	-0.01	-0.6%
05-Jun-12	6	< 0.0001	< 0.009	0.525	< 0.00004	0.76	< 0.00001	4.57	0.0287	1.83	< 0.00002	0.00026	< 0.0001	0.000107	0.00062	0.004	< 0.00001	CA15135-JUN12	0.50	0.45	-0.04	-4.5%
12-Jun-12	7	< 0.0001	0.009	0.443	0.00004	0.67	< 0.00001	3.49	0.0253	1.40	< 0.00002	0.00019	< 0.0001	0.000067	0.00071	0.001	< 0.00001	CA15174-JUN12	0.42	0.40	-0.02	-2.5%
19-Jun-12	8	< 0.0001	< 0.009	0.426	< 0.00004	0.66	< 0.00001	2.87	0.0266	1.27	< 0.00002	0.00013	< 0.0001	0.000095	0.00060	< 0.001	< 0.00001	CA15309-JUN12	0.36	0.37	0.01	1.0%
26-Jun-12	9	0.0002	< 0.009	0.445	< 0.00004	0.83	< 0.00001	2.64	0.0268	1.34	< 0.00002	0.00010	0.0004	0.000108	0.00082	0.002	0.00004	CA15357-JUN12	0.40	0.37	-0.03	-3.7%
03-Jul-12	10	< 0.0001	< 0.009	0.393	< 0.00004	0.69	< 0.00001	2.08	0.0283	1.24	< 0.00002	0.00038	< 0.0001	0.000108	0.00056	0.002	< 0.00001	CA15021-JUL12	0.43	0.35	-0.08	-10.1%
10-Jul-12	11	0.0001	< 0.009	0.383	0.00006	0.70	< 0.00001	1.94	0.0298	1.25	< 0.00002	0.00016	0.0004	0.000120	0.00094	0.001	< 0.00001	CA15118-JUL12	0.39	0.35	-0.04	-5.4%
17-Jul-12	12	< 0.0001	< 0.009	0.371	< 0.00004	0.67	< 0.00001	1.67	0.0280	1.32	< 0.00002	0.00007	0.0001	0.000118	0.00071	0.001	< 0.00001	CA15186-JUL12	0.34	0.32	-0.02	-2.3%
24-Jul-12	13	< 0.0001	< 0.009	0.353	0.00017	0.71	< 0.00001	1.49	0.0294	1.27	< 0.00002	0.00006	< 0.0001	0.000100	0.00063	< 0.001	0.00018	CA15302-JUL12	0.37	0.34	-0.03	-3.7%
31-Jul-12	14	< 0.0001	< 0.009	0.312	< 0.00004	0.66	< 0.00001	1.38	0.0283	1.17	< 0.00002	0.00011	0.0001	0.000119	0.00078	0.002	< 0.00001	CA15010-AUG12	0.34	0.31	-0.03	-4.2%
07-Aug-12	15	< 0.0001	< 0.009	0.319	< 0.00004	0.74	< 0.00001	1.32	0.0285	1.43	< 0.00002	0.00018	0.0001	0.000130	0.00083	0.005	0.00001	CA15071-AUG12	0.35	0.32	-0.03	-4.3%
14-Aug-12	16	0.0002	< 0.009	0.329	< 0.00004	0.71	< 0.00001	1.18	0.0294	1.47	< 0.00002	0.00017	0.0001	0.000138	0.00073	0.001	< 0.00001	CA15151-AUG12	0.31	0.31	0.00	0.3%
21-Aug-12	17	0.0002	< 0.009	0.275	< 0.00004	0.68	< 0.00001	0.97	0.0287	1.48	< 0.00002	0.00031	0.0002	0.000127	0.00075	0.002	< 0.00001	CA15239-AUG12	0.34	0.31	-0.02	-3.2%
28-Aug-12	18	0.0001	< 0.009	0.249	< 0.00004	0.60	< 0.00001	0.86	0.0278	1.23	< 0.00002	0.00049	0.0002	0.000122	0.00062	0.002	< 0.00001	CA15348-AUG12	0.38	0.31	-0.07	-10.8%
04-Sep-12	19	< 0.0001	< 0.009	0.213	< 0.00004	0.48	< 0.00001	0.69	0.0247	1.15	< 0.00002	0.00006	< 0.0001	0.000121	0.00051	0.002	< 0.00001	CA15317-SEP12	0.30	0.27	-0.03	-5.5%
11-Sep-12	20	0.0001	< 0.009	0.270	< 0.00004	0.64	< 0.00001	0.85	0.0306	1.68	< 0.00002	0.00019	0.0001	0.000171	0.00049	0.001	< 0.00001	CA15405-SEP12	0.31	0.30	-0.01	-1.7%
18-Sep-12	21																					
25-Sep-12	22	0.0001	< 0.009	0.234	0.00005	0.66	0.00005	0.70	0.0289	1.53	< 0.00002	0.00011	< 0.0001	0.000151	0.00043	< 0.001	< 0.00001	CA15672-SEP12	0.34	0.29	-0.05	-8.4%
02-Oct-12	23	< 0.0001	< 0.009	0.233	< 0.00004	0.55	< 0.00001	0.60	0.0276	1.52	< 0.00002	0.00005	< 0.0001	0.000137	0.00043	< 0.001	< 0.00001	CA15354-OCT12	0.30	0.27	-0.03	-5.6%
09-Oct-12	24	0.0002	< 0.009	0.208	< 0.00004	0.50	< 0.00001	0.56	0.0260	1.33	< 0.00002	0.00012	< 0.0001	0.000142	0.00039	< 0.001	< 0.00001	CA15450-OCT12	0.27	0.26	-0.01	-2.3%
16-Oct-12	25	0.0001	< 0.009	0.190	< 0.00004	0.50	< 0.00001	0.55	0.0263	1.33	< 0.00002	0.00008	< 0.0001	0.000122	0.00036	0.002	< 0.00001	CA15570-OCT12	0.34	0.27	-0.08	-13.0%
23-Oct-12	26	0.0006	< 0.009	0.186	< 0.00004	0.49	< 0.00001	0.51	0.0253	1.21	< 0.00002	0.00006	0.0001	0.000116	0.00041	< 0.001	< 0.00001	CA15652-OCT12	0.32	0.26	-0.07	-11.3%
30-Oct-12	27	0.0001	< 0.009	0.207	< 0.00004	0.62	0.00005	0.55	0.0307	1.38	< 0.00002	0.00038	< 0.0001	0.000109	0.00039	0.001	< 0.00001	CA15744-OCT12	0.36	0.30	-0.06	-9.1%
06-Nov-12	28	0.0001	< 0.009	0.193	< 0.00004	0.50	< 0.00001	0.55	0.0275	1.38	< 0.00002	0.00010	< 0.0001	0.000103	0.00030	< 0.001	< 0.00001	CA11210-NOV12	0.26	0.28	0.02	4.2%
13-Nov-12	29	< 0.0001	< 0.009	0.168	< 0.00004	0.46	0.00003	0.44	0.0238	1.26	< 0.00002	0.00002	< 0.0001	0.000079	0.00032	0.001	< 0.00001	CA15251-NOV12	0.30	0.24	-0.06	-10.9%
20-Nov-12	30	0.0002	< 0.009	0.173	< 0.00004	0.54	< 0.00001	0.46	0.0262	1.09	< 0.00002	0.00012	0.0001	0.000107	0.00045	0.002	< 0.00001	CA15354-NOV12	0.32	0.28	-0.05	-7.8%
27-Nov-12	31	0.0001	< 0.009	0.170	< 0.00004	0.53	< 0.00001	0.43	0.0264	1.26	< 0.00002	0.00012	< 0.0001	0.000083	0.00007	0.001	< 0.00001	CA15376-NOV12	0.35	0.28	-0.07	-11.4%
04-Dec-12	32	< 0.0001	< 0.009	0.154	< 0.00004	0.42	< 0.00001	0.39	0.0198	1.07	< 0.00002	0.00009	0.0001	0.000061	0.00033	0.001	< 0.00001	CA15038-DEC12	0.24	0.21	-0.04	-7.8%
11-Dec-12	33	< 0.0001	< 0.009	0.182	< 0.00004	0.46	< 0.00001	0.42	0.0214	0.92	< 0.00002	0.00015	< 0.0001	0.000062	0.00040	< 0.001	< 0.00001	CA15164-JAN13	0.30	0.24	-0.06	-10.6%
18-Dec-12	34	< 0.0001	< 0.009	0.181	< 0.00004	0.42	0.00002	0.43	0.0226	1.14	< 0.00002	0.00010	0.0001	0.000049	0.00040	< 0.001	< 0.00001	CA15269-DEC12	0.24	0.24	0.00	-0.5%
25-Dec-12	35	< 0.0001	0.015	0.150	< 0.00004	0.35	< 0.00001	0.36	0.0227	0.93	< 0.00002	0.00012	< 0.0001	0.000041	0.00024	0.001	< 0.00001	CA15361-DEC12	0.19	0.21	0.03	6.7%
01-Jan-13	36	0.0001	0.012	0.175	< 0.00004	0.41	< 0.00001	0.47	0.0186	0.81	< 0.00002	0.00011	0.0001	0.000042	0.00038	< 0.001	< 0.00001	CA15056-JAN13	#N/A	0.20	#N/A	#N/A
08-Jan-13	37	< 0.0001	< 0.009	0.194	< 0.00004	0.46	0.00005	0.37	0.0187	0.77	< 0.00002	0.00007	0.0002	0.000038	0.00044	< 0.001	< 0.00001	CA15153-JAN13	0.20	0.21	0.01	2.7%
15-Jan-13	38	0.0002	< 0.009	0.157	< 0.00004	0.35	< 0.00001	0.34	0.0182	0.75	< 0.00002	0.00013	0.0001	0.000054	0.00043	0.001	0.00001	CA15281-JAN13	0.19	0.20	0.01	1.9%
22-Jan-13	39	0.0001	< 0.009	0.146	< 0.00004	0.33	0.00002	0.23	0.0166	0.83	< 0.00002	0.00010	0.0001	0.000031	0.00027	0.001	< 0.00001	CA15382-JAN13	0.17	0.18	0.00	1.4%
29-Jan-13	40	0.0002	0.012	0.167	< 0.00004	0.41	0.00001	0.43	0.0201	1.09	< 0.00002	0.00010	0.0002	0.000039	0.00042	0.001	< 0.00001	CA15465-JAN13	0.16	0.22	0.06	16.3%
05-Feb-13	41																					
12-Feb-13	42																					

HC 12 *CONFIDENTIAL* *DRAFT*

Sample = L032174

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
01-May-12	1	500	425	7.63	325	113	#N/A	4.8	28.0	23	3.0	0.08	29.9	0.109	0.0035	0.0015	0.00156	< 0.00002	< 0.00001	0.0236	< 0.000003	10.8	< 0.0005	0.000048	0.0018	< 0.003	0.00005	0.008	0.735	0.0031	< 0.01	0.00088
08-May-12	2	500	455	7.71	357	89	#N/A	2.3	23.4	16	2.0	< 0.06	24.8	0.129	0.0101	0.0016	0.00120	< 0.00002	< 0.00001	0.0365	< 0.000003	8.76	< 0.0005	0.000033	0.0009	0.006	0.00003	0.007	0.722	0.0062	0.01	0.00089
15-May-12	3	500	430	7.73	296	70	#N/A	2.3	21.1	11	0.8	< 0.06	23.4	0.235	0.0066	0.0020	0.00104	< 0.00002	< 0.00001	0.0252	< 0.000003	8.39	< 0.0005	0.000015	< 0.0005	< 0.003	< 0.00002	0.006	0.603	0.0051	0.01	0.00056
22-May-12	4	500	505	7.55	337	62	#N/A	3.5	24.1	8	0.3	< 0.06	23.4	0.161	0.0070	0.0023	0.00096	< 0.00002	< 0.00001	0.0229	< 0.000003	8.40	< 0.0005	0.000019	< 0.0005	< 0.003	< 0.00002	0.005	0.596	0.0058	0.01	0.00039
29-May-12	5	500	490	7.42	341	59	#N/A	3.6	24.1	5	< 0.2	< 0.06	24.8	0.168	0.0069	0.0023	0.00078	< 0.00002	< 0.00001	0.0213	< 0.000003	9.03	< 0.0005	0.000029	< 0.0005	< 0.003	< 0.00002	0.005	0.555	0.0060	0.01	0.00027
05-Jun-12	6	500	495	7.46	374	55	#N/A	3.6	26.6	4	< 0.2	< 0.06	25.2	0.153	0.0058	0.0022	0.00100	< 0.00002	< 0.00001	0.0164	< 0.000003	9.28	< 0.0005	0.000031	< 0.0005	< 0.003	0.00022	0.004	0.502	0.0066	< 0.01	0.00110
12-Jun-12	7	500	510	7.57	354	52	#N/A	3.0	24.8	7	< 0.2	< 0.06	23.4	0.157	0.0045	0.0023	0.00085	< 0.00002	< 0.00001	0.0120	< 0.000003	8.71	< 0.0005	0.000009	< 0.0005	< 0.003	0.00005	0.003	0.408	0.0058	0.01	0.00014
19-Jun-12	8	500	490	7.46	369	48	#N/A	2.8	22.5	3	< 0.2	< 0.06	21.3	0.138	0.0036	0.0024	0.00072	< 0.00002	< 0.00001	0.0094	< 0.000003	7.96	< 0.0005	0.000044	0.0006	< 0.003	0.00004	0.002	0.347	0.0059	< 0.01	0.00010
26-Jun-12	9	500	500	7.58	341	47	#N/A	2.7	23.1	4	< 0.2	< 0.06	22.2	0.165	0.0037	0.0027	0.00080	< 0.00002	< 0.00001	0.0099	< 0.000003	8.32	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	0.002	0.338	0.0057	0.01	0.00011
03-Jul-12	10	500	490	7.51	379	48	#N/A	6.3	25.9	6	< 0.2	< 0.06	21.7	0.147	0.0036	0.0041	0.00082	< 0.00002	< 0.00001	0.0079	0.000005	8.16	< 0.0005	0.000016	< 0.0005	< 0.003	0.00003	0.002	0.308	0.0061	0.01	0.00026
10-Jul-12	11	500	505	7.45	330	47	#N/A	3.3	21.7	7	< 0.2	< 0.06	20.6	0.163	0.0035	0.0024	0.00081	< 0.00002	< 0.00001	0.0086	< 0.000003	7.78	< 0.0005	0.000011	< 0.0005	< 0.003	< 0.00002	0.002	0.281	0.0051	0.01	0.00008
17-Jul-12	12	500	500	7.55	369	44	#N/A	2.1	21.6	6	< 0.2	< 0.06	20.2	0.166	0.0035	0.0028	0.00076	< 0.00002	< 0.00001	0.0078	< 0.000003	7.67	< 0.0005	0.000045	< 0.0005	< 0.003	< 0.00002	0.002	0.264	0.0048	0.01	0.00006
24-Jul-12	13	500	500	7.37	333	44	#N/A	2.6	20.3	6	< 0.2	< 0.06	20.4	0.157	0.0028	0.0027	0.00066	< 0.00002	< 0.00001	0.0061	< 0.000003	7.76	< 0.0005	0.000012	< 0.0005	< 0.003	< 0.00002	0.001	0.253	0.0052	< 0.01	0.00008
31-Jul-12	14	500	490	7.51	358	41	#N/A	2.0	17.3	5	< 0.2	< 0.06	19.1	0.169	0.0029	0.0029	0.00071	< 0.00002	< 0.00001	0.0064	< 0.000003	7.28	< 0.0005	0.000009	< 0.0005	< 0.003	< 0.00002	0.002	0.219	0.0048	< 0.01	0.00006
07-Aug-12	15	500	505	7.63	348	43	#N/A	2.1	20.6	6	< 0.2	< 0.06	20.2	0.199	0.0034	0.0036	0.00088	< 0.00002	< 0.00001	0.0071	0.000003	7.70	< 0.0005	0.000026	0.0007	0.009	0.00004	0.002	0.236	0.0051	0.01	0.00014
14-Aug-12	16	500	500	7.41	306	47	#N/A	2.8	17.3	4	0.5	< 0.06	20.4	0.177	0.0025	0.0028	0.00079	< 0.00002	< 0.00001	0.0060	< 0.000003	7.78	< 0.0005	0.000030	0.0025	< 0.003	0.00002	0.002	0.228	0.0051	< 0.01	0.00011
21-Aug-12	17	500	500	7.33	320	46	#N/A	3.3	16.2	6	0.4	< 0.06	20.8	0.176	0.0029	0.0024	0.00075	< 0.00002	< 0.00001	0.0063	< 0.000003	7.98	< 0.0005	0.000022	< 0.0005	0.008	0.00002	0.002	0.221	0.0054	< 0.01	0.00016
28-Aug-12	18	500	495	7.42	398	47	#N/A	4.6	21.5	7	0.4	< 0.06	20.0	0.171	0.0024	0.0022	0.00076	< 0.00002	0.00002	0.0052	< 0.000003	7.70	< 0.0005	0.000027	0.0017	< 0.003	0.00005	0.002	0.197	0.0055	0.01	0.00018
04-Sep-12	19	500	500	7.16	410	40	#N/A	4.2	14.6	6	0.4	< 0.06	18.4	0.139	0.0019	0.0018	0.00071	< 0.00002	< 0.00001	0.0046	< 0.000003	7.10	< 0.0005	0.000020	< 0.0005	< 0.003	< 0.00002	0.001	0.174	0.0053	< 0.01	0.00014
11-Sep-12	20	500	480	7.41	376	39	#N/A	2.6	15.1	7	0.4	< 0.06	17.8	0.154	0.0016	0.0023	0.00076	< 0.00002	< 0.00001	0.0042	< 0.000003	6.87	< 0.0005	0.000022	0.0008	< 0.003	0.00005	0.001	0.154	0.0042	0.01	0.00015
18-Sep-12	21	500	470	7.35	375	39																										
25-Sep-12	22	500	485	7.43	373	40	#N/A	2.4	17.3	7	< 0.2	< 0.06	18.1	0.146	0.0016	0.0024	0.00084	< 0.00002	< 0.00001	0.0045	< 0.000003	6.99	< 0.0005	0.000017	< 0.0005	< 0.003	0.00006	0.001	0.148	0.0040	< 0.01	0.00016
02-Oct-12	23	500	480	7.27	401	38	#N/A	3.0	13.9	4	< 0.2	< 0.06	16.5	0.111	0.0014	0.0018	0.00063	< 0.00002	< 0.00001	0.0043	< 0.000003	6.39	< 0.0005	0.000063	< 0.0005	< 0.003	< 0.00002	0.001	0.140	0.0045	0.01	0.00012
09-Oct-12	24	500	475	7.27	384	40	#N/A	4.6	14.1	5	< 0.2	< 0.06	17.3	0.136	0.0012	0.0019	0.00078	< 0.00002	< 0.00001	0.0035	< 0.000003	6.71	< 0.0005	0.000010	< 0.0005	< 0.003	< 0.00002	0.001	0.143	0.0040	< 0.01	0.00015
16-Oct-12	25	500	480	7.55	410	36	#N/A	4.8	14.0	7	< 0.2	< 0.06	16.1	0.141	0.0010	0.0017	0.00057	< 0.00002	< 0.00001	0.0036	< 0.000003	6.26	< 0.0005	0.000010	< 0.0005	< 0.003	< 0.00002	< 0.001	0.123	0.0032	< 0.01	0.00012
23-Oct-12	26	500	480	7.18	375	38	#N/A	4.1	14.4	7	< 0.2	< 0.06	16.4	0.158	0.0011	0.0017	0.00059	< 0.00002	< 0.00001	0.0025	< 0.000003	6.35	< 0.0005	0.000048	< 0.0005	0.004	< 0.00002	0.001	0.121	0.0035	< 0.01	0.00017
30-Oct-12	27	500	475	7.31	379	41	#N/A	3.9	16.8	7	< 0.2	< 0.06	18.5	0.150	0.0012	0.0020	0.00081	< 0.00002	< 0.00001	0.0038	0.000398	7.18	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	0.001	0.128	0.0046	< 0.01	0.00013
06-Nov-12	28	500	470	7.43	381	34	#N/A	3.4	14.7	3	< 0.2	< 0.06	17.1	0.137	0.0011	0.0020	0.00068	< 0.00002	< 0.00001	0.0036	< 0.000003	6.67	< 0.0005	0.000034	< 0.0005	< 0.003	0.00003	< 0.001	0.112	0.0040	< 0.01	0.00013
13-Nov-12	29	500	465	7.53	378	31	#N/A	4.4	14.0	4	< 0.2	< 0.06	15.1	0.112	0.0010	0.0017	0.00060	< 0.00002	< 0.00001	0.0034	< 0.000003	5.87	< 0.0005	0.000035	< 0.0005	< 0.003	0.00003	< 0.001	0.101	0.0037	0.01	0.00011
20-Nov-12	30	500	500	7.71	398	36	#N/A	5.5	16.3	6	0.2	< 0.06	16.4	0.116	0.0012	0.0019	0.00078	< 0.00002	< 0.00001	0.0040	< 0.000003	6.38	< 0.0005	0.000116	0.0007	< 0.003	0.00003	< 0.001	0.109	0.0044	< 0.01	0.00015
27-Nov-12	31	500	500	7.42	374	39	#N/A	4.6	16.1	5	0.2	< 0.06	18.7	0.123	0.0012	0.0017	0.00068	< 0.00002	< 0.00001	0.0037	0.000003	7.32	< 0.0005	0.000011	< 0.0005	< 0.003	< 0.00002	< 0.001	0.116	0.0049	< 0.01	0.00010
04-Dec-12	32	500	450	7.56	350	31	#N/A	1.7	13.3	5	< 0.2	< 0.06	14.9	0.136	0.0012	0.0023	0.00054	< 0.00002	< 0.00001	0.0022	< 0.000003	5.83	< 0.0005	0.000051	0.0010	< 0.003	< 0.00002	< 0.001	0.092	0.0042	0.01	0.00010
11-Dec-12	33	500	510	7.58	358	33	#N/A	2.1	15.6	5	< 0.2	< 0.06	15.9	0.119	0.0017	0.0017	0.00061	< 0.00002	< 0.00001	0.0039	0.000006	6.23	< 0.0005	0.000045	< 0.0005	< 0.003	< 0.00002	< 0.001	0.085	0.0029	< 0.01	0.00007
18-Dec-12	34	500	495	7.51	333	34	#N/A	2.2	15.3	3	< 0.2	< 0.06	16.4	0.124	0.0014	0.0015	0.00065	< 0.00002	< 0.00001	0.0026	< 0.000003	6.42	< 0.0005	0.000012	< 0.0005	< 0.003	< 0.00002	< 0.001	0.090	0.0043	< 0.01	0.00007
25-Dec-12	35	500	485	7.46	368	30	#N/A	2.5	14.1	2	< 0.2	< 0.06	14.3	0.121	0.0010	0.0017	0.00057	< 0.00002	< 0.00001	0.0025	< 0.000003	5.58	< 0.0005	0.000021	< 0.0005	< 0.003	0.00002	< 0.001	0.085	0.0042	< 0.01	0.00006
01-Jan-13	36	500	500	7.43	365	31	#N/A	2.5	15.3	3	< 0.2	< 0.06	13.6	0.113	0.0012	0.0014	0.00056	< 0.00002	< 0.00001	0.0024	< 0.000003	5.32	< 0.0005	0.000023	< 0.0005	< 0.003	< 0.00002	< 0.001	0.073	0.0043	< 0.01	0.00007
08-Jan-13	37	500	495	7.61	342	32	#N/A	2.7	16.0	2	< 0.2	< 0.06	14.9	0.115	0.0015	0.0013	0.00073	< 0.00002	0.00001	0.0028	0.000004	5.83	< 0.0005	0.000067	< 0.0005	< 0.003	< 0.00002	< 0.001	0.072	0.0037	< 0.01	0.00005
15-Jan-13	38	500	515	7.54	288	35	#N/A	2.5	15.9	4	< 0.2	< 0.06	15.2	0.106	0.0013	0.0012	0.00064	< 0.00002	< 0.00001	0.0024	< 0.000003	5.93	< 0.0005	0.000026	0.0006	0.647	< 0.00002	< 0.001	0.088	0.0365	< 0.01	0.00005
22-Jan-13	39	500	510	7.36	356	34	#N/A	3.4	15.2	5	< 0.2	< 0.06	15.8	0.0966	0.0012	0.0012	0.00069	< 0.00002	< 0.00001	0.0031	0.000009	6.18	< 0.0005	0.000020	< 0.0005	< 0.003	< 0.00002	< 0.001	0.090	0.0045	< 0.01	0.00003
29-Jan-13	40	500	490	7.50	326	32	#N/A	2.5	13.1	6	< 0.2	< 0.06	15.1	0.0988	0.0009	0.0013	0.00082	< 0.00002	< 0.00001	0.0023	< 0.000003	5.90	< 0.0005	0.000015	< 0.0005	0.019	< 0.00002	< 0.001	0.084	0.0037	< 0.01	0.00004
05-Feb-13	41	500	490	7.46	356	35	#N/A	2.9	13.3	8																						
12-Feb-13	42	500	500	7.42	374	32	#N/A	4.1	13.4	7																						

Sept 11/12 Change in analytical schedule.
Sept 25/12 Change in analytical shedule

HC 12

Sample = L032174

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
01-May-12	1	0.0003	< 0.009	6.16	< 0.00004	1.16	< 0.00001	7.39	0.0632	8.05	< 0.00002	0.00029	0.0002	0.000017	0.00065	0.002	0.00001	CA14188-MAY12	1.13	1.10	-0.03	-1.3%
08-May-12	2	0.0004	< 0.009	3.68	< 0.00004	0.86	< 0.00001	4.84	0.0505	6.04	< 0.00002	0.00051	0.0001	0.000095	0.00056	0.001	0.00001	CA14348-MAY12	0.86	0.83	-0.03	-1.8%
15-May-12	3	0.0003	< 0.009	2.73	< 0.00004	1.02	< 0.00001	2.89	0.0456	4.53	< 0.00002	0.00019	0.0002	0.000058	0.00077	< 0.001	< 0.00001	CA14621-MAY12	0.67	0.70	0.02	1.7%
22-May-12	4	0.0002	< 0.009	1.91	0.00004	0.88	< 0.00001	1.72	0.0426	3.33	< 0.00002	0.00023	0.0002	0.000172	0.00068	0.001	0.00002	CA10508-MAY12	0.66	0.62	-0.04	-3.2%
29-May-12	5	< 0.0001	< 0.009	1.73	0.00007	1.01	< 0.00001	1.28	0.0422	3.02	< 0.00002	0.00023	0.0002	0.000265	0.00077	0.001	< 0.00001	CA15134-MAY12	0.59	0.62	0.04	2.9%
05-Jun-12	6	< 0.0001	< 0.009	1.44	< 0.00004	0.95	< 0.00001	0.99	0.0421	2.62	< 0.00002	0.00009	0.0001	0.000324	0.00067	0.006	< 0.00001	CA15135-JUN12	0.62	0.61	-0.01	-0.7%
12-Jun-12	7	0.0002	< 0.009	1.18	0.00009	0.92	< 0.00001	0.75	0.0362	2.00	< 0.00002	0.00036	0.0004	0.000298	0.00087	0.003	< 0.00001	CA15174-JUN12	0.64	0.55	-0.09	-7.5%
19-Jun-12	8	0.0002	< 0.009	0.973	0.00006	0.83	< 0.00001	0.58	0.0317	1.82	< 0.00002	0.00023	< 0.0001	0.000354	0.00077	0.002	< 0.00001	CA15309-JUN12	0.51	0.49	-0.02	-1.8%
26-Jun-12	9	0.0002	< 0.009	1.02	< 0.00004	0.97	< 0.00001	0.57	0.0324	1.90	< 0.00002	0.00003	0.0002	0.000433	0.00084	0.002	0.00001	CA15357-JUN12	0.55	0.52	-0.03	-2.8%
03-Jul-12	10	< 0.0001	< 0.009	0.909	< 0.00004	0.88	< 0.00001	0.51	0.0306	1.77	< 0.00002	0.00017	0.0001	0.000606	0.00073	0.002	< 0.00001	CA15021-JUL12	0.64	0.50	-0.15	-12.8%
10-Jul-12	11	0.0001	< 0.009	0.884	< 0.00004	0.89	< 0.00001	0.50	0.0296	1.79	< 0.00002	0.00011	0.0002	0.000419	0.00083	0.001	< 0.00001	CA15118-JUL12	0.58	0.48	-0.10	-9.7%
17-Jul-12	12	< 0.0001	< 0.009	0.862	< 0.00004	0.89	< 0.00001	0.43	0.0287	1.93	< 0.00002	0.00003	0.0001	0.000473	0.00089	0.002	< 0.00001	CA15186-JUL12	0.56	0.47	-0.09	-8.9%
24-Jul-12	13	< 0.0001	< 0.009	0.801	0.00015	0.88	< 0.00001	0.42	0.0273	1.99	< 0.00002	0.00010	0.0001	0.000386	0.00079	0.003	0.00004	CA15302-JUL12	0.53	0.47	-0.06	-6.5%
31-Jul-12	14	< 0.0001	< 0.009	0.738	< 0.00004	0.84	< 0.00001	0.38	0.0258	1.74	< 0.00002	0.00005	< 0.0001	0.000364	0.00097	0.002	< 0.00001	CA15010-AUG12	0.45	0.44	-0.01	-1.3%
07-Aug-12	15	< 0.0001	< 0.009	0.846	< 0.00004	1.00	< 0.00001	0.39	0.0269	2.29	< 0.00002	0.00024	0.0002	0.000390	0.00107	0.003	0.00001	CA15071-AUG12	0.54	0.47	-0.07	-7.0%
14-Aug-12	16	0.0001	< 0.009	0.813	< 0.00004	0.90	< 0.00001	0.34	0.0271	2.29	< 0.00002	0.00035	0.0002	0.000356	0.00083	0.003	< 0.00001	CA15151-AUG12	0.43	0.46	0.04	4.0%
21-Aug-12	17	0.0002	< 0.009	0.725	< 0.00004	0.86	< 0.00001	0.31	0.0266	2.54	< 0.00002	0.00016	0.0002	0.000363	0.00070	< 0.001	< 0.00001	CA15239-AUG12	0.45	0.47	0.02	2.4%
28-Aug-12	18	0.0001	< 0.009	0.700	0.00004	0.77	< 0.00001	0.28	0.0255	2.16	< 0.00002	0.00035	0.0002	0.000344	0.00077	0.003	< 0.00001	CA15348-AUG12	0.58	0.45	-0.12	-12.0%
04-Sep-12	19	< 0.0001	< 0.009	0.622	< 0.00004	0.59	< 0.00001	0.25	0.0225	2.10	< 0.00002	0.00009	0.0001	0.000292	0.00060	< 0.001	< 0.00001	CA15317-SEP12	0.42	0.41	0.00	-0.4%
11-Sep-12	20	< 0.0001	< 0.009	0.628	< 0.00004	0.71	< 0.00001	0.25	0.0215	2.22	< 0.00002	0.00015	0.0002	0.000235	0.00062	0.002	< 0.00001	CA15405-SEP12	0.45	0.40	-0.05	-5.5%
18-Sep-12	21																					
25-Sep-12	22	0.0001	< 0.009	0.591	0.00005	0.74	0.00002	0.22	0.0211	2.12	< 0.00002	0.00010	0.0001	0.000234	0.00064	0.002	< 0.00001	CA15672-SEP12	0.49	0.40	-0.09	-9.9%
02-Oct-12	23	< 0.0001	< 0.009	0.540	< 0.00004	0.59	< 0.00001	0.20	0.0201	2.23	< 0.00002	0.00006	0.0001	0.000193	0.00049	< 0.001	< 0.00001	CA15354-OCT12	0.36	0.37	0.00	0.7%
09-Oct-12	24	0.0003	< 0.009	0.557	< 0.00004	0.59	< 0.00001	0.21	0.0209	2.38	< 0.00002	0.00010	0.0001	0.000201	0.00053	< 0.001	< 0.00001	CA15450-OCT12	0.39	0.39	0.00	0.1%
16-Oct-12	25	0.0001	< 0.009	0.484	< 0.00004	0.55	< 0.00001	0.18	0.0186	2.21	< 0.00002	0.00010	< 0.0001	0.000173	0.00053	< 0.001	< 0.00001	CA15570-OCT12	0.42	0.36	-0.07	-8.3%
23-Oct-12	26	0.0003	< 0.009	0.486	< 0.00004	0.57	< 0.00001	0.18	0.0193	2.02	< 0.00002	0.00011	0.0001	0.000186	0.00054	< 0.001	< 0.00001	CA15652-OCT12	0.43	0.37	-0.07	-8.5%
30-Oct-12	27	0.0002	< 0.009	0.525	< 0.00004	0.69	0.00001	0.19	0.0217	2.19	< 0.00002	0.00010	0.0001	0.000153	0.00059	0.002	< 0.00001	CA15744-OCT12	0.48	0.41	-0.07	-8.3%
06-Nov-12	28	0.0001	< 0.009	0.457	< 0.00004	0.59	< 0.00001	0.18	0.0193	1.95	< 0.00002	0.00009	0.0001	0.000127	0.00045	< 0.001	< 0.00001	CA11210-NOV12	0.36	0.38	0.02	3.0%
13-Nov-12	29	< 0.0001	< 0.009	0.428	< 0.00004	0.53	0.00001	0.15	0.0167	1.75	< 0.00002	0.00002	0.0003	0.000122	0.00050	0.001	< 0.00001	CA15251-NOV12	0.36	0.33	-0.03	-4.5%
20-Nov-12	30	< 0.0001	< 0.009	0.448	< 0.00004	0.59	< 0.00001	0.18	0.0177	1.57	< 0.00002	0.00013	0.0001	0.000157	0.00051	0.002	< 0.00001	CA15354-NOV12	0.45	0.36	-0.09	-11.1%
27-Nov-12	31	0.0001	< 0.009	0.506	< 0.00004	0.72	< 0.00001	0.17	0.0192	1.91	< 0.00002	0.00010	< 0.0001	0.000166	0.00017	< 0.001	< 0.00001	CA15376-NOV12	0.43	0.41	-0.02	-2.0%
04-Dec-12	32	0.0002	< 0.009	0.520	< 0.00004	0.50	< 0.00001	0.12	0.0168	1.78	< 0.00002	0.00011	0.0001	0.000141	0.00044	< 0.001	< 0.00001	CA15038-DEC12	0.37	0.33	-0.04	-5.3%
11-Dec-12	33	< 0.0001	< 0.009	0.544	< 0.00004	0.57	< 0.00001	0.16	0.0156	1.30	< 0.00002	0.00007	< 0.0001	0.000165	0.00050	< 0.001	< 0.00001	CA15164-JAN13	0.42	0.35	-0.06	-8.1%
18-Dec-12	34	< 0.0001	< 0.009	0.491	< 0.00004	0.52	0.00005	0.16	0.0174	1.72	< 0.00002	0.00011	0.0001	0.000141	0.00047	< 0.001	< 0.00001	CA15269-DEC12	0.37	0.36	-0.01	-0.8%
25-Dec-12	35	< 0.0001	< 0.009	0.419	< 0.00004	0.40	< 0.00001	0.14	0.0166	1.42	< 0.00002	0.00012	< 0.0001	0.000104	0.00032	0.001	< 0.00001	CA15361-DEC12	0.32	0.32	-0.01	-1.2%
01-Jan-13	36	0.0001	< 0.009	0.453	< 0.00004	0.47	< 0.00001	0.16	0.0137	1.12	< 0.00002	0.00016	< 0.0001	0.000118	0.00042	< 0.001	< 0.00001	CA15056-JAN13	0.37	0.30	-0.06	-9.6%
08-Jan-13	37	< 0.0001	< 0.009	0.490	< 0.00004	0.49	0.00002	0.14	0.0137	1.12	< 0.00002	0.00010	< 0.0001	0.000125	0.00049	< 0.001	< 0.00001	CA15153-JAN13	0.36	0.33	-0.03	-4.8%
15-Jan-13	38	0.0002	0.015	0.462	< 0.00004	0.45	< 0.00001	0.15	0.0152	1.52	< 0.00002	0.00018	0.0001	0.000128	0.00050	< 0.001	< 0.00001	CA15281-JAN13	0.40	0.33	-0.07	-9.2%
22-Jan-13	39	0.0002	< 0.009	0.469	< 0.00004	0.47	< 0.00001	0.07	0.0160	1.74	< 0.00002	0.00005	< 0.0001	0.000135	0.00043	< 0.001	< 0.00001	CA15382-JAN13	0.41	0.34	-0.06	-8.6%
29-Jan-13	40	< 0.0001	< 0.009	0.433	< 0.00004	0.45	< 0.00001	0.17	0.0154	1.84	< 0.00002	0.00011	< 0.0001	0.000106	0.00045	< 0.001	< 0.00001	CA15465-JAN13	0.39	0.33	-0.06	-7.7%
05-Feb-13	41																					
12-Feb-13	42																					

HC 13 *CONFIDENTIAL* *DRAFT*

Sample = L032154

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
01-May-12	1	445	350	7.86	310	86	#N/A	4.4	29.3	12	3.0	0.06	17.9	0.222	0.0022	0.0020	0.00051	< 0.00002	< 0.00001	0.0346	< 0.000003	6.55	< 0.0005	0.000076	0.0028	0.004	0.00006	0.002	0.369	0.0019	0.06	0.00141
08-May-12	2	500	460	7.71	345	64	#N/A	2.7	23.5	5	1.9	< 0.06	13.9	0.163	0.0048	0.0030	0.00043	< 0.00002	< 0.00001	0.0420	< 0.000003	5.12	< 0.0005	0.000052	0.0031	< 0.003	0.00007	0.001	0.278	0.0044	< 0.01	0.00171
15-May-12	3	445	405	7.68	296	57	#N/A	2.6	22.7	6	0.9	< 0.06	13.8	0.211	0.0044	0.0030	0.00037	< 0.00002	< 0.00001	0.0423	< 0.000003	5.10	< 0.0005	0.000036	0.0012	< 0.003	0.00004	0.001	0.266	0.0051	0.02	0.00129
22-May-12	4	500	465	7.58	333	49	#N/A	3.1	21.0	5	0.4	< 0.06	14.2	0.219	0.0030	0.0022	0.00028	< 0.00002	< 0.00001	0.0276	< 0.000003	5.22	< 0.0005	0.000026	0.0007	< 0.003	< 0.00002	0.001	0.272	0.0043	0.01	0.00073
29-May-12	5	445	390	7.43	338	43	#N/A	3.6	17.1	4	< 0.2	< 0.06	14.1	0.213	0.0025	0.0018	0.00027	< 0.00002	< 0.00001	0.0261	< 0.000003	5.22	< 0.0005	0.000037	0.0009	0.004	0.00003	0.001	0.255	0.0053	0.01	0.00043
05-Jun-12	6	500	455	7.40	368	38	#N/A	3.3	15.0	4	< 0.2	< 0.06	13.1	0.173	0.0024	0.0014	0.00079	< 0.00002	< 0.00001	0.0243	< 0.000003	4.83	< 0.0005	0.000045	0.0009	0.004	0.00016	0.001	0.255	0.0057	0.01	0.00111
12-Jun-12	7	445	390	7.54	349	37	#N/A	2.8	14.4	6	< 0.2	< 0.06	12.4	0.201	0.0022	0.0014	0.00043	< 0.00002	< 0.00001	0.0208	< 0.000003	4.56	< 0.0005	0.000052	0.0010	0.011	0.00016	0.001	0.252	0.0056	0.14	0.00025
19-Jun-12	8	445	405	7.40	366	34	#N/A	2.4	14.2	3	< 0.2	< 0.06	12.3	0.123	0.0021	0.0014	0.00020	< 0.00002	< 0.00001	0.0180	< 0.000003	4.50	< 0.0005	0.000063	0.0006	< 0.003	0.00005	0.001	0.247	0.0051	< 0.01	0.00016
26-Jun-12	9	445	410	7.49	340	35	#N/A	2.7	14.8	5	< 0.2	< 0.06	13.5	0.188	0.0022	0.0015	0.00047	< 0.00002	< 0.00001	0.0191	< 0.000003	4.95	0.0041	0.000048	0.0011	0.222	0.00017	0.001	0.271	0.0092	0.01	0.00067
03-Jul-12	10	445	475	7.51	373	31	#N/A	5.9	14.6	4	< 0.2	< 0.06	12.3	0.120	0.0016	0.0012	0.00017	< 0.00002	< 0.00001	0.0134	0.000005	4.54	< 0.0005	0.000024	0.0008	< 0.003	0.00007	< 0.001	0.229	0.0058	0.01	0.00024
10-Jul-12	11	445	435	7.51	326	39	#N/A	3.2	17.2	6	< 0.2	< 0.06	15.1	0.159	0.0025	0.0011	0.00026	< 0.00002	< 0.00001	0.0166	< 0.000003	5.58	< 0.0005	0.000017	0.0011	0.005	0.00008	0.001	0.293	0.0043	0.01	0.00013
17-Jul-12	12	445	405	7.51	367	35	#N/A	1.8	14.1	4	< 0.2	< 0.06	14.4	0.160	0.0019	0.0013	0.00023	< 0.00002	< 0.00001	0.0141	< 0.000003	5.30	< 0.0005	0.000052	< 0.0005	< 0.003	0.00003	0.001	0.275	0.0040	0.01	0.00010
24-Jul-12	13	445	410	7.41	331	32	#N/A	2.5	12.5	5	< 0.2	< 0.06	13.5	0.115	0.0016	0.0011	0.00023	< 0.00002	< 0.00001	0.0119	0.000006	4.95	< 0.0005	0.000035	0.0006	< 0.003	0.00003	< 0.001	0.263	0.0053	< 0.01	0.00011
31-Jul-12	14	445	425	7.35	357	27	#N/A	1.8	10.9	4	< 0.2	< 0.06	11.4	0.120	0.0014	0.0010	0.00024	< 0.00002	< 0.00001	0.0100	0.000009	4.20	< 0.0005	0.000022	0.0165	< 0.003	0.00022	< 0.001	0.222	0.0043	0.02	0.00007
07-Aug-12	15	500	465	7.35	357	27	#N/A	1.8	10.9	4	< 0.2	< 0.06	10.3	0.125	0.0015	0.0010	0.00027	< 0.00002	< 0.00001	0.0108	< 0.000003	3.79	< 0.0005	0.000030	0.0014	< 0.003	0.00020	< 0.001	0.206	0.0041	0.01	0.00010
14-Aug-12	16	445	405	7.26	302	27	#N/A	2.3	10.8	4	< 0.2	< 0.06	11.0	0.110	0.0014	0.0011	0.00027	< 0.00002	< 0.00001	0.0109	0.000006	4.05	< 0.0005	0.000029	0.0006	< 0.003	0.00004	< 0.001	0.226	0.0038	0.04	0.00009
21-Aug-12	17	445	410	7.18	317	26	#N/A	3.3	9.6	4	< 0.2	< 0.06	10.6	0.130	0.0018	0.0009	0.00044	< 0.00002	< 0.00001	0.0114	0.000012	3.89	< 0.0005	0.000045	0.0010	0.004	0.00008	< 0.001	0.212	0.0047	0.03	0.00012
28-Aug-12	18	445	420	7.31	396	28	#N/A	4.2	11.9	5	< 0.2	< 0.06	11.1	0.0920	0.0017	0.0008	0.00026	< 0.00002	< 0.00001	0.0101	0.000008	4.08	< 0.0005	0.000045	0.0007	< 0.003	0.00005	< 0.001	0.216	0.0049	0.03	0.00011
04-Sep-12	19	445	420	7.17	407	24	#N/A	4.3	10.3	5	< 0.2	< 0.06	10.9	0.0932	0.0017	0.0006	0.00020	< 0.00002	< 0.00001	0.0092	0.000009	4.01	< 0.0005	0.000039	0.0006	< 0.003	< 0.00002	< 0.001	0.213	0.0039	0.09	0.00008
11-Sep-12	20	445	435	7.20	378	29	#N/A	2.6	11.6	6	< 0.2	< 0.06	11.4	0.0556	0.0015	0.0009	0.00025	< 0.00002	< 0.00001	0.0093	0.000010	4.17	< 0.0005	0.000036	< 0.0005	< 0.003	< 0.00002	< 0.001	0.227	0.0034	0.01	0.00006
18-Sep-12	21	445	430	7.21	405	24																										
25-Sep-12	22	445	435	7.18	374	27	#N/A	2.6	11.0	6	< 0.2	< 0.06	11.4	0.0557	0.0014	0.0008	0.00027	< 0.00002	< 0.00001	0.0083	0.000013	4.18	< 0.0005	0.000048	0.0006	< 0.003	0.00006	< 0.001	0.232	0.0037	< 0.01	0.00007
02-Oct-12	23	445	440	7.10	399	26	#N/A	3.2	10.3	3	< 0.2	< 0.06	11.2	0.0389	0.0014	0.0007	0.00022	< 0.00002	< 0.00001	0.0084	0.000010	4.11	< 0.0005	0.000083	0.0010	< 0.003	0.00004	< 0.001	0.228	0.0042	< 0.01	0.00007
09-Oct-12	24	445	445	7.05	384	25	#N/A	4.7	8.9	4	< 0.2	< 0.06	10.2	0.0499	0.0011	0.0013	0.00026	< 0.00002	< 0.00001	0.0063	0.000010	3.75	< 0.0005	0.000026	0.0007	< 0.003	< 0.00002	< 0.001	0.210	0.0031	< 0.01	0.00008
16-Oct-12	25	445	500	7.46	413	22	#N/A	4.5	9.5	6	< 0.2	< 0.06	9.9	0.0440	0.0009	0.0006	0.00025	< 0.00002	< 0.00001	0.0064	0.000011	3.64	< 0.0005	0.000025	0.0007	< 0.003	< 0.00002	< 0.001	0.205	0.0030	< 0.01	0.00006
23-Oct-12	26	445	445	7.05	378	29	#N/A	3.4	10.8	5	< 0.2	< 0.06	12.0	0.0680	0.0010	0.0005	0.00022	< 0.00002	< 0.00001	0.0056	0.000016	4.41	< 0.0005	0.000065	0.0008	< 0.003	0.00005	< 0.001	0.232	0.0031	< 0.01	0.00013
30-Oct-12	27	445	430	7.04	381	30	#N/A	4.0	11.1	7	< 0.2	< 0.06	13.3	0.0496	0.0012	0.0005	0.00069	< 0.00002	< 0.00001	0.0072	0.000400	4.90	< 0.0005	0.000017	< 0.0005	< 0.003	< 0.00002	< 0.001	0.266	0.0042	0.01	0.00015
06-Nov-12	28	445	430	7.31	380	27	#N/A	3.4	11.1	3	< 0.2	< 0.06	13.2	0.0534	0.0011	0.0008	0.00025	< 0.00002	< 0.00001	0.0067	0.000016	4.88	< 0.0005	0.000039	< 0.0005	< 0.003	0.00003	< 0.001	0.235	0.0037	< 0.01	0.00013
13-Nov-12	29	445	430	7.41	384	25	#N/A	4.5	10.2	3	< 0.2	< 0.06	12.5	0.0382	0.0009	0.0006	0.00022	< 0.00002	< 0.00001	0.0058	0.000022	4.63	< 0.0005	0.000051	< 0.0005	< 0.003	0.00003	< 0.001	0.229	0.0041	0.02	0.00010
20-Nov-12	30	445	500	7.69	396	29	#N/A	5.8	11.7	5	< 0.2	< 0.06	12.6	0.0467	0.0009	0.0008	0.00030	< 0.00002	< 0.00001	0.0055	0.000011	4.65	< 0.0005	0.000139	0.0006	< 0.003	0.00004	< 0.001	0.229	0.0036	< 0.01	0.00013
27-Nov-12	31	445	440	7.28	377	33	#N/A	4.7	12.9	6	< 0.2	< 0.06	14.1	0.0450	0.0011	0.0006	0.00026	< 0.00002	< 0.00001	0.0058	0.000018	5.23	< 0.0005	0.000015	< 0.0005	< 0.003	0.00003	< 0.001	0.259	0.0037	< 0.01	0.00011
04-Dec-12	32	445	385	7.33	347	26	#N/A	1.8	7.8	7	< 0.2	< 0.06	11.7	0.0617	0.0007	0.0006	0.00022	< 0.00002	< 0.00001	0.0036	0.000009	4.29	< 0.0005	0.000045	0.0009	< 0.003	0.00006	< 0.001	0.233	0.0029	0.01	0.00014
11-Dec-12	33	445	410	7.37	361	21	#N/A	2.1	8.9	5	< 0.2	< 0.06	10.4	0.0571	0.0010	0.0006	0.00019	< 0.00002	< 0.00001	0.0050	0.000010	3.88	< 0.0005	0.000065	0.0007	< 0.003	0.00006	< 0.001	0.182	0.0022	< 0.01	0.00010
18-Dec-12	34	445	395	7.29	333	24	#N/A	2.1	7.8	3	< 0.2	< 0.06	10.5	0.0680	0.0007	0.0005	0.00028	< 0.00002	< 0.00001	0.0036	0.000010	3.87	< 0.0005	0.000033	0.0007	< 0.003	0.00008	< 0.001	0.199	0.0022	< 0.01	0.00014
25-Dec-12	35	445	410	7.35	368	21	#N/A	2.7	9.3	2	< 0.2	< 0.06	10.4	0.0627	0.0007	0.0006	0.00021	< 0.00002	< 0.00001	0.0042	0.000006	3.83	< 0.0005	0.000033	< 0.0005	< 0.003	0.00007	< 0.001	0.197	0.0029	< 0.01	0.00009
01-Jan-13	36	445	400	7.35	354	20	#N/A	2.5	7.7	3	< 0.2	< 0.06	8.63	0.0562	0.0007	0.0005	0.00027	< 0.00002	< 0.00001	0.0035	0.000009	3.19	< 0.0005	0.000031	< 0.0005	< 0.003	0.00007	< 0.001	0.162	0.0025	< 0.01	0.00012
08-Jan-13	37	445	405	7.54	342	23	#N/A	2.7	9.3	2	< 0.2	< 0.06	10.7	0.0689	0.0009	0.0006	0.00042	< 0.00002	0.00002	0.0036	0.000014	4.03	< 0.0005	0.000072	0.0005	< 0.003	0.00007	< 0.001	0.167	0.0024	< 0.01	0.00007
15-Jan-13	38	445	410	7.34	289	22	#N/A	2.7	8.6	5	< 0.2	< 0.06	9.10	0.0512	0.0009	0.0005	0.00017	< 0.00002	< 0.00001	0.0035	0.000005	3.37	< 0.0005	0.000023	< 0.0005	0.481	< 0.00002	< 0.001	0.166	0.0266	< 0.01	0.00010
22-Jan-13	39	445	410	7.28	356	22	#N/A	3.2	9.2	4	< 0.2	< 0.06	9.59	0.0569	0.0007	0.0006	0.00024	< 0.00002	< 0.00001	0.0039	0.000051	3.56	< 0.0005	0.000031	< 0.0005	< 0.003	0.00005	< 0.001	0.172	0.0029	< 0.01	0.00010
29-Jan-13	40	445	400	7.35	327	22	#N/A	2.6	7.1	5	< 0.2	< 0.06	10.9	0.0507	0.0005	0.0006	0.00019	< 0.00002	< 0.00001	0.0027	0.000008	4.06	< 0.0005	0.000025	0.0005	0.015	0.00005	< 0.001	0.199	0.0024	< 0.01	0.00012
05-Feb-13	41	445	400	7.39	351	22	#N/A	3.1	7.2	7																						
12-Feb-13	42	445	400	7.51	364	21	#N/A	4.0	8.4	6																						

Sept 11/12 Change in analytical schedule.
Sept 25/12 Change in analytical shedule

HC 13

Sample = L032154

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
01-May-12	1	0.0003	< 0.009	2.85	< 0.00004	1.06	< 0.00001	9.12	0.0554	3.56	< 0.00002	0.00060	0.0003	0.000045	0.00090	0.003	0.00013	CA14188-MAY12	0.92	0.86	-0.06	-3.5%
08-May-12	2	0.0004	< 0.009	1.50	< 0.00004	0.67	< 0.00001	6.26	0.0407	2.95	< 0.00002	0.00054	0.0002	0.000209	0.00043	0.002	0.00008	CA14348-MAY12	0.63	0.62	-0.01	-0.7%
15-May-12	3	0.0003	< 0.009	1.30	< 0.00004	0.84	< 0.00001	5.17	0.0404	2.56	< 0.00002	0.00027	0.0002	0.000288	0.00066	0.002	0.00015	CA14621-MAY12	0.60	0.57	-0.03	-2.8%
22-May-12	4	0.0001	< 0.009	1.08	0.00038	0.75	< 0.00001	3.67	0.0426	2.15	< 0.00002	0.00023	0.0001	0.000296	0.00060	< 0.001	0.00003	CA10508-MAY12	0.53	0.50	-0.03	-3.0%
29-May-12	5	0.0001	< 0.009	1.03	0.00008	0.77	< 0.00001	2.84	0.0401	1.96	< 0.00002	0.00036	0.0002	0.000280	0.00081	0.002	0.00003	CA15134-MAY12	0.43	0.46	0.04	4.2%
05-Jun-12	6	< 0.0001	< 0.009	0.829	< 0.00004	0.66	< 0.00001	2.53	0.0391	2.15	< 0.00002	0.00015	0.0004	0.000307	0.00048	0.003	0.00002	CA15135-JUN12	0.38	0.42	0.04	4.7%
12-Jun-12	7	< 0.0001	< 0.009	0.805	0.00067	0.76	< 0.00001	2.05	0.0374	1.81	< 0.00002	0.00037	0.0005	0.000239	0.00061	0.003	0.00004	CA15174-JUN12	0.41	0.39	-0.03	-3.3%
19-Jun-12	8	0.0001	< 0.009	0.664	0.00006	0.62	< 0.00001	1.50	0.0371	1.50	< 0.00002	0.00018	0.0001	0.000310	0.00062	0.002	< 0.00001	CA15309-JUN12	0.35	0.35	0.00	0.2%
26-Jun-12	9	0.0020	< 0.009	0.688	< 0.00004	0.80	< 0.00001	1.44	0.0400	1.73	< 0.00002	0.00024	0.0007	0.000335	0.00063	0.005	0.00006	CA15357-JUN12	0.40	0.38	-0.02	-2.9%
03-Jul-12	10	< 0.0001	< 0.009	0.542	< 0.00004	0.58	< 0.00001	1.05	0.0364	1.39	< 0.00002	0.00058	0.0001	0.000277	0.00046	0.005	0.00001	CA15021-JUL12	0.38	0.32	-0.05	-7.5%
10-Jul-12	11	0.0001	< 0.009	0.602	< 0.00004	0.73	< 0.00001	1.11	0.0471	1.53	< 0.00002	0.00063	0.0004	0.000508	0.00067	0.005	0.00002	CA15118-JUL12	0.47	0.39	-0.08	-9.1%
17-Jul-12	12	< 0.0001	< 0.009	0.575	0.00005	0.66	< 0.00001	1.01	0.0448	1.81	< 0.00002	0.00005	0.0001	0.000319	0.00051	0.002	< 0.00001	CA15186-JUL12	0.37	0.37	0.00	0.3%
24-Jul-12	13	< 0.0001	0.051	0.514	0.00013	0.65	< 0.00001	1.01	0.0417	1.78	< 0.00002	0.00011	0.0002	0.000269	0.00048	0.002	< 0.00001	CA15302-JUL12	0.35	0.34	-0.01	-1.6%
31-Jul-12	14	< 0.0001	< 0.009	0.441	< 0.00004	0.56	< 0.00001	0.75	0.0359	1.27	< 0.00002	0.00295	0.0002	0.000198	0.00058	0.013	0.00006	CA15010-AUG12	0.30	0.29	-0.01	-2.0%
07-Aug-12	15	0.0001	< 0.009	0.410	< 0.00004	0.58	< 0.00001	0.65	0.0319	1.34	< 0.00002	0.00196	0.0003	0.000184	0.00058	0.005	0.00002	CA15071-AUG12	0.30	0.26	-0.04	-6.8%
14-Aug-12	16	0.0001	< 0.009	0.419	< 0.00004	0.58	< 0.00001	0.66	0.0351	1.53	< 0.00002	0.00018	0.0002	0.000211	0.00044	0.002	0.00001	CA15151-AUG12	0.30	0.28	-0.02	-4.0%
21-Aug-12	17	0.0002	< 0.009	0.354	< 0.00004	0.53	< 0.00001	0.58	0.0329	1.51	< 0.00002	0.00029	0.0006	0.000213	0.00063	0.004	0.00001	CA15239-AUG12	0.28	0.26	-0.01	-2.1%
28-Aug-12	18	0.0001	< 0.009	0.339	< 0.00004	0.52	< 0.00001	0.52	0.0344	1.34	< 0.00002	0.00021	0.0002	0.000247	0.00048	0.004	< 0.00001	CA15348-AUG12	0.34	0.27	-0.08	-12.5%
04-Sep-12	19	< 0.0001	< 0.009	0.307	< 0.00004	0.47	< 0.00001	0.47	0.0331	1.38	< 0.00002	0.00013	0.0003	0.000319	0.00056	0.003	< 0.00001	CA15317-SEP12	0.31	0.26	-0.05	-8.9%
11-Sep-12	20	< 0.0001	< 0.009	0.360	< 0.00004	0.57	< 0.00001	0.50	0.0350	1.62	< 0.00002	0.00005	< 0.0001	0.000246	0.00026	0.002	< 0.00001	CA15405-SEP12	0.36	0.27	-0.09	-14.2%
18-Sep-12	21																					
25-Sep-12	22	0.0002	< 0.009	0.321	< 0.00004	0.56	0.00002	0.45	0.0350	1.57	< 0.00002	0.00008	0.0001	0.000313	0.00031	0.008	0.00002	CA15672-SEP12	0.35	0.26	-0.08	-13.2%
02-Oct-12	23	< 0.0001	< 0.009	0.304	< 0.00004	0.48	< 0.00001	0.39	0.0341	1.66	< 0.00002	0.00005	< 0.0001	0.000306	0.00027	0.003	< 0.00001	CA15354-OCT12	0.27	0.26	-0.01	-2.2%
09-Oct-12	24	0.0003	< 0.009	0.278	< 0.00004	0.44	< 0.00001	0.36	0.0317	1.47	< 0.00002	0.00013	0.0002	0.000282	0.00032	0.008	< 0.00001	CA15450-OCT12	0.26	0.24	-0.03	-5.1%
16-Oct-12	25	0.0001	< 0.009	0.252	< 0.00004	0.43	< 0.00001	0.34	0.0306	1.86	< 0.00002	0.00008	< 0.0001	0.000269	0.00026	0.004	< 0.00001	CA15570-OCT12	0.31	0.23	-0.09	-16.1%
23-Oct-12	26	0.0003	< 0.009	0.263	< 0.00004	0.51	< 0.00001	0.36	0.0366	1.57	< 0.00002	0.00008	< 0.0001	0.000308	0.00028	0.005	< 0.00001	CA15652-OCT12	0.32	0.27	-0.05	-8.2%
30-Oct-12	27	0.0001	< 0.009	0.302	< 0.00004	0.58	0.00001	0.40	0.0420	1.96	< 0.00002	0.00012	< 0.0001	0.000276	0.00027	0.004	< 0.00001	CA15744-OCT12	0.37	0.30	-0.07	-10.3%
06-Nov-12	28	0.0001	< 0.009	0.266	< 0.00004	0.51	< 0.00001	0.37	0.0375	1.70	< 0.00002	0.00012	< 0.0001	0.000264	0.00022	0.003	< 0.00001	CA11210-NOV12	0.28	0.29	0.01	1.7%
13-Nov-12	29	< 0.0001	< 0.009	0.235	< 0.00004	0.47	0.00001	0.32	0.0356	1.86	< 0.00002	0.00057	0.0002	0.000213	0.00024	0.005	< 0.00001	CA15251-NOV12	0.27	0.28	0.01	1.9%
20-Nov-12	30	0.0001	< 0.009	0.226	< 0.00004	0.47	< 0.00001	0.33	0.0365	1.66	< 0.00002	0.00018	0.0002	0.000248	0.00027	0.005	< 0.00001	CA15354-NOV12	0.34	0.28	-0.06	-9.5%
27-Nov-12	31	0.0003	< 0.009	0.261	< 0.00004	0.55	< 0.00001	0.33	0.0402	1.87	< 0.00002	0.00009	0.0003	0.000289	0.00006	0.003	< 0.00001	CA15376-NOV12	0.38	0.31	-0.07	-10.4%
04-Dec-12	32	< 0.0001	< 0.009	0.216	< 0.00004	0.34	< 0.00001	0.33	0.0358	2.24	< 0.00002	0.00014	0.0001	0.000163	0.00025	0.002	< 0.00001	CA15038-DEC12	0.30	0.26	-0.04	-7.2%
11-Dec-12	33	< 0.0001	< 0.009	0.237	< 0.00004	0.43	< 0.00001	0.30	0.0282	1.33	< 0.00002	0.00021	0.0001	0.000158	0.00029	0.002	< 0.00001	CA15164-JAN13	0.28	0.24	-0.05	-8.8%
18-Dec-12	34	0.0002	< 0.009	0.226	< 0.00004	0.34	0.00006	0.30	0.0324	1.77	< 0.00002	0.00014	0.0003	0.000116	0.00026	0.002	0.00001	CA15269-DEC12	0.22	0.24	0.02	4.2%
25-Dec-12	35	< 0.0001	0.010	0.197	< 0.00004	0.36	< 0.00001	0.24	0.0335	1.24	< 0.00002	0.00013	0.0001	0.000140	0.00014	0.002	< 0.00001	CA15361-DEC12	0.23	0.23	0.00	0.8%
01-Jan-13	36	0.0004	< 0.009	0.192	< 0.00004	0.37	< 0.00001	0.31	0.0263	1.30	< 0.00002	0.00015	0.0006	0.000128	0.00031	0.003	< 0.00001	CA15056-JAN13	0.22	0.20	-0.02	-4.5%
08-Jan-13	37	< 0.0001	0.009	0.227	< 0.00004	0.43	0.00002	0.25	0.0299	1.39	< 0.00002	0.00011	0.0004	0.000129	0.00038	0.002	0.00001	CA15153-JAN13	0.23	0.24	0.01	2.6%
15-Jan-13	38	< 0.0001	0.019	0.201	< 0.00004	0.34	< 0.00001	0.24	0.0260	1.28	< 0.00002	0.00006	0.0001	0.000121	0.00020	0.001	< 0.00001	CA15281-JAN13	0.28	0.20	-0.07	-14.8%
22-Jan-13	39	0.0001	< 0.009	0.190	< 0.00004	0.33	0.00001	0.17	0.0283	1.33	< 0.00002	0.00007	< 0.0001	0.000127	0.00025	0.003	< 0.00001	CA15382-JAN13	0.27	0.21	-0.05	-11.4%
29-Jan-13	40	0.0001	0.024	0.222	< 0.00004	0.34	< 0.00001	0.34	0.0312	1.88	< 0.00002	0.00015	0.0002	0.000087	0.00037	0.002	< 0.00001	CA15465-JAN13	0.25	0.25	0.00	0.2%
05-Feb-13	41																					
12-Feb-13	42																					

HC 14 *CONFIDENTIAL* *DRAFT*

Sample = L032135

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
01-May-12	1	500	395	7.77	314	72	#N/A	4.7	27.0	8	1.7	0.06	22.3	0.177	0.0026	0.0086	0.00151	< 0.00002	< 0.00001	0.0192	< 0.000003	6.78	< 0.0005	0.000071	0.0015	0.004	< 0.00002	0.002	1.30	0.0157	0.01	0.00288
08-May-12	2	500	475	7.61	353	56	#N/A	2.8	21.6	5	1.0	< 0.06	18.2	0.143	0.0038	0.0087	0.00142	< 0.00002	< 0.00001	0.0217	< 0.000003	5.30	< 0.0005	0.000049	0.0010	0.004	0.00003	0.001	1.20	0.0186	< 0.01	0.00381
15-May-12	3	500	465	7.64	301	51	#N/A	2.7	21.4	5	0.4	< 0.06	18.6	0.300	0.0027	0.0127	0.00189	< 0.00002	< 0.00001	0.0190	< 0.000003	5.51	< 0.0005	0.000027	0.0005	0.007	< 0.00002	0.002	1.18	0.0229	0.01	0.00253
22-May-12	4	500	455	7.46	334	35	#N/A	3.3	14.8	4	< 0.2	< 0.06	13.7	0.201	0.0022	0.0094	0.00111	< 0.00002	< 0.00001	0.0136	< 0.000003	3.95	< 0.0005	0.000013	< 0.0005	< 0.003	< 0.00002	0.001	0.941	0.0171	0.02	0.00129
29-May-12	5	500	450	7.38	340	30	#N/A	3.5	15.1	3	< 0.2	< 0.06	13.9	0.173	0.0022	0.0054	0.00088	< 0.00002	< 0.00001	0.0140	< 0.000003	4.09	< 0.0005	0.000018	< 0.0005	< 0.003	< 0.00002	0.001	0.904	0.0241	0.01	0.00071
05-Jun-12	6	500	450	7.41	370	32	#N/A	3.6	15.9	2	< 0.2	< 0.06	14.3	0.172	0.0024	0.0043	0.00122	< 0.00002	< 0.00001	0.0150	< 0.000003	4.09	< 0.0005	0.000021	< 0.0005	0.004	0.00006	0.001	1.000	0.0200	0.01	0.00107
12-Jun-12	7	500	430	7.53	352	29	#N/A	2.6	15.1	4	< 0.2	< 0.06	13.7	0.197	0.0020	0.0040	0.00113	< 0.00002	< 0.00001	0.0118	< 0.000003	3.86	< 0.0005	0.000003	< 0.0005	0.004	< 0.00002	< 0.001	0.980	0.0187	0.01	0.00033
19-Jun-12	8	500	435	7.40	367	27	#N/A	2.4	13.7	2	< 0.2	< 0.06	12.1	0.127	0.0017	0.0035	0.00084	< 0.00002	< 0.00001	0.0098	< 0.000003	3.43	< 0.0005	0.000039	< 0.0005	0.003	0.00002	< 0.001	0.866	0.0178	< 0.01	0.00028
26-Jun-12	9	500	445	7.52	337	26	#N/A	2.7	14.9	4	< 0.2	< 0.06	12.5	0.218	0.0016	0.0031	0.00140	< 0.00002	< 0.00001	0.0105	< 0.000003	3.60	< 0.0005	< 0.000002	< 0.0005	0.008	< 0.00002	< 0.001	0.846	0.0207	0.01	0.00029
03-Jul-12	10	500	455	7.43	377	26	#N/A	5.9	14.6	3	< 0.2	< 0.06	11.8	0.127	0.0016	0.0038	0.00081	< 0.00002	< 0.00001	0.0086	< 0.000003	3.36	< 0.0005	0.000013	< 0.0005	< 0.003	< 0.00002	< 0.001	0.820	0.0215	0.01	0.00035
10-Jul-12	11	500	440	7.30	332	25	#N/A	3.3	12.6	3	< 0.2	< 0.06	10.9	0.137	0.0016	0.0023	0.00120	< 0.00002	< 0.00001	0.0095	< 0.000003	3.00	< 0.0005	0.000010	< 0.0005	0.004	< 0.00002	< 0.001	0.820	0.0163	0.02	0.00027
17-Jul-12	12	500	445	7.51	366	26	#N/A	1.9	13.4	3	< 0.2	< 0.06	12.4	0.153	0.0016	0.0025	0.00078	< 0.00002	< 0.00001	0.0088	< 0.000003	3.52	< 0.0005	0.000039	< 0.0005	< 0.003	< 0.00002	< 0.001	0.865	0.0141	< 0.01	0.00021
24-Jul-12	13	500	440	7.22	333	24	#N/A	2.4	11.9	4	< 0.2	< 0.06	11.5	0.129	0.0013	0.0021	0.00084	< 0.00002	< 0.00001	0.0077	< 0.000003	3.20	< 0.0005	0.000017	< 0.0005	< 0.003	< 0.00002	< 0.001	0.840	0.0188	0.01	0.00021
31-Jul-12	14	500	440	7.32	363	23	#N/A	1.9	10.9	2	< 0.2	< 0.06	11.0	0.113	0.0015	0.0020	0.00074	< 0.00002	< 0.00001	0.0077	< 0.000003	3.00	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	0.843	0.0168	< 0.01	0.00017
07-Aug-12	15	500	445	7.45	349	21	#N/A	2.2	11.5	2	< 0.2	< 0.06	10.7	0.139	0.0016	0.0022	0.00089	< 0.00002	< 0.00001	0.0089	< 0.000003	2.95	< 0.0005	0.000009	< 0.0005	0.004	< 0.00002	< 0.001	0.814	0.0160	0.01	0.00019
14-Aug-12	16	500	450	7.24	303	22	#N/A	2.5	11.2	2	< 0.2	< 0.06	10.4	0.0920	0.0011	0.0015	0.00069	< 0.00002	< 0.00001	0.0063	< 0.000003	2.83	< 0.0005	0.000002	0.0005	< 0.003	< 0.00002	< 0.001	0.811	0.0151	< 0.01	0.00014
21-Aug-12	17	500	450	7.16	319	20	#N/A	3.2	10.2	3	< 0.2	< 0.06	10.1	0.104	0.0014	0.0016	0.00062	< 0.00002	< 0.00001	0.0073	< 0.000003	2.78	< 0.0005	0.000013	< 0.0005	< 0.003	< 0.00002	< 0.001	0.768	0.0183	< 0.01	0.00016
28-Aug-12	18	500	450	7.32	396	21	#N/A	4.2	11.8	5	< 0.2	< 0.06	10.3	0.0906	0.0013	0.0013	0.00068	< 0.00002	< 0.00001	0.0065	< 0.000003	2.82	< 0.0005	0.000012	< 0.0005	0.006	< 0.00002	< 0.001	0.793	0.0208	0.03	0.00017
04-Sep-12	19	500	445	7.21	406	19	#N/A	4.1	10.6	4	< 0.2	< 0.06	10.1	0.0676	0.0017	0.0009	0.00066	< 0.00002	< 0.00001	0.0066	< 0.000003	2.83	< 0.0005	0.000008	< 0.0005	< 0.003	< 0.00002	< 0.001	0.734	0.0179	< 0.01	0.00012
11-Sep-12	20	500	485	6.92	395	18	#N/A	2.6	10.0	<2	< 0.2	< 0.06	9.9	0.0526	0.0014	0.0013	0.00073	< 0.00002	< 0.00001	0.0061	< 0.000003	2.80	< 0.0005	0.000018	0.0005	< 0.003	< 0.00002	< 0.001	0.711	0.0140	0.02	0.00013
18-Sep-12	21	500	480	7.17	376	21																										
25-Sep-12	22	500	480	7.20	373	20	#N/A	2.1	11.8	4	< 0.2	< 0.06	10.0	0.0442	0.0012	0.0010	0.00064	< 0.00002	< 0.00001	0.0054	< 0.000003	2.80	< 0.0005	0.000004	< 0.0005	< 0.003	< 0.00002	< 0.001	0.723	0.0143	< 0.01	0.00011
02-Oct-12	23	500	485	7.10	398	18	#N/A	3.6	11.1	2	< 0.2	< 0.06	9.7	0.0450	0.0012	0.0010	0.00065	< 0.00002	< 0.00001	0.0057	< 0.000003	2.68	< 0.0005	0.000061	0.0006	< 0.003	< 0.00002	< 0.001	0.718	0.0138	< 0.01	0.00009
09-Oct-12	24	500	480	7.17	381	20	#N/A	4.2	11.3	2	< 0.2	< 0.06	9.6	0.0392	0.0011	0.0009	0.00073	< 0.00002	< 0.00001	0.0048	< 0.000003	2.69	< 0.0005	0.000004	< 0.0005	< 0.003	< 0.00002	< 0.001	0.699	0.0128	< 0.01	0.00011
16-Oct-12	25	500	495	7.45	413	18	#N/A	4.5	11.1	4	< 0.2	< 0.06	9.4	0.0404	0.0009	0.0009	0.00057	< 0.00002	< 0.00001	0.0050	< 0.000003	2.66	< 0.0005	0.000007	< 0.0005	< 0.003	< 0.00002	< 0.001	0.670	0.0110	< 0.01	0.00008
23-Oct-12	26	500	485	7.05	375	20	#N/A	3.4	11.1	5	< 0.2	< 0.06	9.5	0.0717	0.0009	0.0008	0.00057	< 0.00002	< 0.00001	0.0035	< 0.000003	2.69	< 0.0005	0.000046	0.0007	< 0.003	< 0.00002	< 0.001	0.671	0.0102	< 0.01	0.00013
30-Oct-12	27	500	475	7.07	381	21	#N/A	3.7	12.9	3	< 0.2	0.08	11.1	0.0416	0.0009	0.0008	0.00075	< 0.00002	< 0.00001	0.0048	0.000375	3.17	< 0.0005	< 0.000002	0.0005	0.003	< 0.00002	< 0.001	0.779	0.0153	< 0.01	0.00009
06-Nov-12	28	500	470	7.27	378	16	#N/A	3.3	10.1	<2	< 0.2	< 0.06	9.42	0.0340	0.0009	0.0011	0.00055	< 0.00002	< 0.00001	0.0043	0.000015	2.68	< 0.0005	0.000034	0.0005	< 0.003	0.00002	< 0.001	0.664	0.0122	< 0.01	0.00008
13-Nov-12	29	500	475	7.44	382	15	#N/A	4.5	10.2	4	< 0.2	< 0.06	9.1	0.0266	0.0008	0.0008	0.00053	< 0.00002	< 0.00001	0.0042	0.000009	2.56	< 0.0005	0.000034	< 0.0005	< 0.003	0.00004	< 0.001	0.649	0.0116	0.01	0.00007
20-Nov-12	30	500	500	7.79	390	23	#N/A	5.2	13.8	3	< 0.2	< 0.06	10.0	0.0321	0.0009	0.0009	0.00062	< 0.00002	< 0.00001	0.0038	0.000004	2.92	< 0.0005	0.000127	0.0008	< 0.003	0.00003	< 0.001	0.664	0.0136	< 0.01	0.00008
27-Nov-12	31	500	500	7.07	350	20	#N/A	4.4	12.9	4	< 0.2	< 0.06	9.9	0.0322	0.0008	0.0008	0.00061	< 0.00002	< 0.00001	0.0043	0.000003	2.89	< 0.0005	0.000006	< 0.0005	< 0.003	< 0.00002	< 0.001	0.642	0.0121	< 0.01	0.00006
04-Dec-12	32	500	450	7.37	345	12	#N/A	1.7	7.8	3	< 0.2	< 0.06	7.0	0.0463	0.0006	0.0008	0.00048	< 0.00002	< 0.00001	0.0025	< 0.000003	1.86	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	0.560	0.0070	0.01	0.00006
11-Dec-12	33	500	475	7.35	360	15	#N/A	2.2	9.9	3	< 0.2	< 0.06	8.33	0.0385	0.0011	0.0008	0.00050	< 0.00002	0.00002	0.0037	< 0.000003	2.39	< 0.0005	0.000049	0.0011	< 0.003	0.00004	< 0.001	0.573	0.0080	< 0.01	0.00005
18-Dec-12	34	500	455	7.36	332	17	#N/A	2.0	10.0	<2	< 0.2	< 0.06	8.61	0.0558	0.0008	0.0008	0.00052	< 0.00002	< 0.00001	0.0028	< 0.000003	2.39	< 0.0005	0.000018	< 0.0005	< 0.003	< 0.00002	< 0.001	0.644	0.0085	< 0.01	0.00008
25-Dec-12	35	500	445	7.33	369	15	#N/A	2.7	9.2	<2	< 0.2	< 0.06	8.85	0.0516	0.0006	0.0009	0.00053	< 0.00002	< 0.00001	0.0030	0.000004	2.30	< 0.0005	0.000010	< 0.0005	< 0.003	< 0.00002	< 0.001	0.757	0.0083	< 0.01	0.00009
01-Jan-13	36	500	465	7.40	353	14	#N/A	2.5	9.5	<2	< 0.2	< 0.06	7.66	0.0444	0.0007	0.0008	0.00047	< 0.00002	< 0.00001	0.0028	< 0.000003	2.05	< 0.0005	0.000016	< 0.0005	< 0.003	< 0.00002	< 0.001	0.619	0.0082	0.01	0.00008
08-Jan-13	37	500	430	7.56	343	17	#N/A	2.6	10.2	<2	< 0.2	< 0.06	8.31	0.0592	0.0009	0.0008	0.00067	< 0.00002	< 0.00001	0.0031	0.000003	2.22	< 0.0005	0.000062	< 0.0005	< 0.003	< 0.00002	< 0.001	0.670	0.0067	< 0.01	0.00006
15-Jan-13	38	500	455	7.17	280	17	#N/A	2.9	10.1	3	< 0.2	< 0.06	8.16	0.0504	0.0008	0.0008	0.00093	< 0.00002	< 0.00001	0.0029	0.000006	2.21	< 0.0005	0.000024	0.0005	0.109	< 0.00002	< 0.001	0.641	0.0143	< 0.01	0.00007
22-Jan-13	39	500	455	7.27	356	15	#N/A	3.2	9.4	4	< 0.2	< 0.06	7.73	0.0364	0.0007	0.0007	0.00049	< 0.00002	< 0.00001	0.0030	0.000003	2.08	< 0.0005	0.000009	< 0.0005	< 0.003	< 0.00002	< 0.001	0.614	0.0096	< 0.01	0.00005
29-Jan-13	40	500	455	7.41	330	13	#N/A	2.4	7.9	3	< 0.2	< 0.06	7.12	0.0445	0.0005	0.0007	0.00043	< 0.00002	< 0.00001	0.0021	< 0.000003	1.92	< 0.0005	0.000010	0.0005	0.009	< 0.00002	< 0.001	0.564	0.0069	< 0.01	0.00005
05-Feb-13	41	500	455	7.35	354	14	#N/A	2.9	9.0	3																						
12-Feb-13	42	500	460	7.42	368	13	#N/A	3.8	9.0	4																						

Sept 11/12 Change in analytical schedule.
Sept 25/12 Change in analytical shedule

HC 14

Sample = L032135

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
01-May-12	1	0.0002	< 0.009	5.64	< 0.00004	0.81	< 0.00001	2.65	0.0358	2.68	< 0.00002	0.00040	0.0001	0.000098	0.00056	0.003	0.00017	CA14188-MAY12	0.76	0.72	-0.03	-2.3%
08-May-12	2	0.0003	< 0.009	3.52	< 0.00004	0.56	< 0.00001	1.70	0.0282	2.59	< 0.00002	0.00050	0.0001	0.000267	0.00037	0.002	0.00006	CA14348-MAY12	0.56	0.54	-0.02	-2.0%
15-May-12	3	0.0002	< 0.009	2.89	< 0.00004	0.85	< 0.00001	1.19	0.0283	2.02	< 0.00002	0.00022	0.0004	0.000229	0.00047	0.001	0.00024	CA14621-MAY12	0.54	0.53	-0.01	-1.2%
22-May-12	4	0.0001	< 0.009	2.04	< 0.00004	0.58	< 0.00001	0.70	0.0200	1.36	< 0.00002	0.00021	0.0002	0.000171	0.00047	0.001	0.00004	CA10508-MAY12	0.38	0.38	0.00	0.0%
29-May-12	5	< 0.0001	< 0.009	1.55	< 0.00004	0.53	< 0.00001	0.40	0.0191	0.89	< 0.00002	0.00036	< 0.0001	0.000179	0.00039	< 0.001	< 0.00001	CA15134-MAY12	0.37	0.35	-0.01	-1.4%
05-Jun-12	6	< 0.0001	< 0.009	1.48	< 0.00004	0.54	< 0.00001	0.35	0.0201	0.96	< 0.00002	0.00018	0.0001	0.000221	0.00040	0.002	0.00003	CA15135-JUN12	0.36	0.36	0.00	-0.3%
12-Jun-12	7	< 0.0001	< 0.009	1.38	0.00008	0.57	< 0.00001	0.27	0.0180	0.75	< 0.00002	0.00014	0.0002	0.000127	0.00043	0.003	0.00004	CA15174-JUN12	0.38	0.34	-0.04	-5.9%
19-Jun-12	8	< 0.0001	< 0.009	1.01	< 0.00004	0.47	< 0.00001	0.20	0.0157	0.66	< 0.00002	0.00014	< 0.0001	0.000133	0.00047	< 0.001	0.00002	CA15309-JUN12	0.32	0.29	-0.02	-4.1%
26-Jun-12	9	< 0.0001	< 0.009	0.919	< 0.00004	0.58	< 0.00001	0.17	0.0159	0.61	< 0.00002	0.00016	0.0004	0.000146	0.00049	0.001	0.00012	CA15357-JUN12	0.38	0.30	-0.08	-11.2%
03-Jul-12	10	< 0.0001	< 0.009	0.760	< 0.00004	0.42	< 0.00001	0.15	0.0146	0.57	< 0.00002	0.00018	< 0.0001	0.000155	0.00047	0.001	< 0.00001	CA15021-JUL12	0.36	0.28	-0.08	-12.7%
10-Jul-12	11	0.0002	< 0.009	0.793	0.00005	0.39	< 0.00001	0.16	0.0131	0.82	< 0.00002	0.00017	0.0004	0.000135	0.00055	< 0.001	0.00003	CA15118-JUL12	0.31	0.26	-0.05	-9.6%
17-Jul-12	12	< 0.0001	< 0.009	0.673	< 0.00004	0.44	< 0.00001	0.14	0.0150	0.66	< 0.00002	0.00012	0.0001	0.000121	0.00042	0.001	< 0.00001	CA15186-JUL12	0.33	0.29	-0.04	-7.1%
24-Jul-12	13	< 0.0001	< 0.009	0.626	0.00015	0.41	< 0.00001	0.12	0.0134	0.68	< 0.00002	0.00011	0.0004	0.000095	0.00053	< 0.001	< 0.00001	CA15302-JUL12	0.32	0.26	-0.06	-9.6%
31-Jul-12	14	< 0.0001	< 0.009	0.553	< 0.00004	0.37	< 0.00001	0.13	0.0127	0.61	< 0.00002	0.00012	0.0001	0.000096	0.00049	0.001	< 0.00001	CA15010-AUG12	0.26	0.25	-0.01	-1.5%
07-Aug-12	15	< 0.0001	< 0.009	0.575	< 0.00004	0.43	< 0.00001	0.11	0.0121	0.65	< 0.00002	0.00020	0.0001	0.000093	0.00044	0.002	0.00003	CA15071-AUG12	0.27	0.25	-0.02	-4.3%
14-Aug-12	16	< 0.0001	< 0.009	0.544	0.00013	0.37	< 0.00001	0.10	0.0116	0.70	< 0.00002	0.00015	0.0001	0.000076	0.00026	0.001	0.00002	CA15151-AUG12	0.27	0.24	-0.03	-6.0%
21-Aug-12	17	0.0001	< 0.009	0.390	< 0.00004	0.34	< 0.00001	0.08	0.0108	0.66	< 0.00002	0.00016	0.0002	0.000073	0.00037	< 0.001	0.00001	CA15239-AUG12	0.27	0.23	-0.04	-8.1%
28-Aug-12	18	< 0.0001	< 0.009	0.396	< 0.00004	0.30	< 0.00001	0.07	0.0107	0.56	< 0.00002	0.00026	0.0001	0.000085	0.00044	0.001	0.00002	CA15348-AUG12	0.34	0.23	-0.11	-19.4%
04-Sep-12	19	< 0.0001	< 0.009	0.293	< 0.00004	0.26	< 0.00001	0.07	0.0109	0.48	< 0.00002	0.00009	< 0.0001	0.000108	0.00026	0.001	< 0.00001	CA15317-SEP12	0.30	0.22	-0.08	-14.7%
11-Sep-12	20	< 0.0001	< 0.009	0.327	< 0.00004	0.30	< 0.00001	0.07	0.0111	0.57	< 0.00002	0.00018	0.0001	0.000126	0.00021	0.001	< 0.00001	CA15405-SEP12	0.20	0.22	0.02	3.7%
18-Sep-12	21																					
25-Sep-12	22	< 0.0001	< 0.009	0.274	0.00004	0.29	0.00001	0.06	0.0112	0.52	< 0.00002	0.00013	< 0.0001	0.000116	0.00017	0.001	< 0.00001	CA15672-SEP12	0.24	0.21	-0.02	-4.9%
02-Oct-12	23	< 0.0001	< 0.009	0.267	< 0.00004	0.28	< 0.00001	0.05	0.0109	0.50	< 0.00002	0.00004	< 0.0001	0.000103	0.00016	< 0.001	< 0.00001	CA15354-OCT12	0.22	0.21	-0.01	-3.4%
09-Oct-12	24	0.0002	< 0.009	0.242	< 0.00004	0.24	< 0.00001	0.05	0.0107	0.50	< 0.00002	0.00013	< 0.0001	0.000119	0.00021	< 0.001	< 0.00001	CA15450-OCT12	0.23	0.20	-0.02	-4.9%
16-Oct-12	25	0.0001	< 0.009	0.216	< 0.00004	0.24	< 0.00001	0.05	0.0103	0.49	< 0.00002	0.00010	< 0.0001	0.000110	0.00018	0.003	< 0.00001	CA15570-OCT12	0.22	0.20	-0.02	-5.0%
23-Oct-12	26	0.0003	< 0.009	0.216	< 0.00004	0.25	< 0.00001	0.05	0.0104	0.46	< 0.00002	0.00020	< 0.0001	0.000110	0.00037	0.001	< 0.00001	CA15652-OCT12	0.22	0.21	-0.02	-3.8%
30-Oct-12	27	< 0.0001	< 0.009	0.232	< 0.00004	0.29	< 0.00001	0.05	0.0122	0.51	< 0.00002	0.00015	< 0.0001	0.000096	0.00017	0.001	< 0.00001	CA15744-OCT12	0.26	0.24	-0.02	-4.6%
06-Nov-12	28	0.0002	< 0.009	0.182	< 0.00004	0.22	< 0.00001	0.05	0.0098	0.46	< 0.00002	0.00011	< 0.0001	0.000078	0.00013	< 0.001	< 0.00001	CA11210-NOV12	0.20	0.20	0.00	-0.8%
13-Nov-12	29	< 0.0001	< 0.009	0.169	< 0.00004	0.21	< 0.00001	0.03	0.0094	0.44	< 0.00002	0.00001	< 0.0001	0.000074	0.00012	0.001	< 0.00001	CA15251-NOV12	0.20	0.19	-0.02	-3.8%
20-Nov-12	30	< 0.0001	< 0.009	0.154	< 0.00004	0.25	< 0.00001	0.06	0.0104	0.37	< 0.00002	0.00017	< 0.0001	0.000086	0.00015	0.002	0.00002	CA15354-NOV12	0.28	0.21	-0.06	-13.3%
27-Nov-12	31	0.0001	< 0.009	0.151	< 0.00004	0.22	< 0.00001	0.04	0.0099	0.39	< 0.00002	0.00011	< 0.0001	0.000088	< 0.00003	0.003	< 0.00001	CA15376-NOV12	0.26	0.21	-0.05	-11.2%
04-Dec-12	32	< 0.0001	< 0.009	0.155	0.00008	0.18	< 0.00001	0.02	0.0066	0.39	< 0.00002	0.00007	0.0001	0.000065	0.00018	< 0.001	0.00002	CA15038-DEC12	0.16	0.15	-0.01	-2.0%
11-Dec-12	33	< 0.0001	< 0.009	0.150	< 0.00004	0.19	0.00002	0.05	0.0078	0.37	< 0.00002	0.00022	< 0.0001	0.000076	0.00016	0.001	< 0.00001	CA15164-JAN13	0.20	0.18	-0.02	-5.7%
18-Dec-12	34	0.0002	< 0.009	0.166	0.00008	0.18	< 0.00001	0.05	0.0082	0.46	< 0.00002	0.00015	0.0001	0.000066	0.00017	0.001	0.00003	CA15269-DEC12	0.20	0.18	-0.02	-4.0%
25-Dec-12	35	< 0.0001	0.011	0.151	< 0.00004	0.16	< 0.00001	0.04	0.0087	0.49	< 0.00002	0.00014	< 0.0001	0.000050	0.00004	0.001	0.00001	CA15361-DEC12	0.18	0.19	0.01	1.5%
01-Jan-13	36	0.0002	< 0.009	0.141	< 0.00004	0.15	< 0.00001	0.06	0.0069	0.34	< 0.00002	0.00009	< 0.0001	0.000050	0.00013	< 0.001	0.00003	CA15056-JAN13	0.19	0.16	-0.03	-7.4%
08-Jan-13	37	< 0.0001	0.010	0.176	< 0.00004	0.20	< 0.00001	0.04	0.0068	0.41	< 0.00002	0.00013	0.0002	0.000043	0.00024	0.002	0.00005	CA15153-JAN13	0.20	0.18	-0.03	-6.8%
15-Jan-13	38	0.0002	0.017	0.148	< 0.00004	0.18	< 0.00001	0.04	0.0072	0.42	< 0.00002	0.00018	< 0.0001	0.000049	0.00015	0.001	0.00002	CA15281-JAN13	0.20	0.17	-0.03	-7.3%
22-Jan-13	39	0.0001	< 0.009	0.133	< 0.00004	0.15	< 0.00001	0.04	0.0068	0.39	< 0.00002	0.00009	< 0.0001	0.000043	0.00018	< 0.001	0.00003	CA15382-JAN13	0.19	0.16	-0.02	-6.7%
29-Jan-13	40	< 0.0001	< 0.009	0.121	< 0.00004	0.13	< 0.00001	0.06	0.0059	0.38	< 0.00002	0.00017	0.0002	0.000038	0.00022	0.001	< 0.00001	CA15465-JAN13	0.16	0.15	0.00	-1.5%
05-Feb-13	41																					
12-Feb-13	42																					

HC 15 *CONFIDENTIAL* *DRAFT*

Sample = L032201

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
01-May-12	1	500	420	7.97	311	220	#N/A	4.7	48.6	54	3.8	0.07	17.3	0.144	0.0012	0.0019	0.0312	< 0.00002	< 0.00001	0.0214	< 0.000003	5.26	< 0.0005	0.000085	0.0034	0.007	0.00027	< 0.001	1.01	0.0011	0.04	0.00436
08-May-12	2	500	460	8.28	327	166	#N/A	0.9	35.0	36	2.6	< 0.06	15.1	0.164	0.0009	0.0012	0.0124	< 0.00002	< 0.00001	0.0230	< 0.000003	4.77	< 0.0005	0.000056	0.0034	0.011	0.00003	0.001	0.786	0.0035	0.01	0.00436
15-May-12	3	500	415	8.07	285	155	#N/A	1.6	33.7	34	1.2	< 0.06	16.2	0.234	0.0008	0.0017	0.01351	< 0.00002	< 0.00001	0.0218	< 0.000003	5.13	< 0.0005	0.000057	0.0019	0.018	0.00005	0.001	0.824	0.0042	0.01	0.00306
22-May-12	4	500	450	7.83	329	110	#N/A	2.6	30.1	22	0.3	< 0.06	15.1	0.185	0.0007	0.0012	0.01012	< 0.00002	< 0.00001	0.0152	< 0.000003	4.91	< 0.0005	0.000042	0.0010	0.012	< 0.00002	0.001	0.679	0.0066	0.02	0.00186
29-May-12	5	500	450	7.71	340	89	#N/A	3.0	28.1	14	< 0.2	< 0.06	18.0	0.148	0.0006	0.0010	0.0105	< 0.00002	< 0.00001	0.0136	< 0.000003	5.96	< 0.0005	0.000036	0.0007	0.011	< 0.00002	0.001	0.756	0.0096	0.01	0.00099
05-Jun-12	6	500	450	7.56	373	82	#N/A	3.3	26.0	14	< 0.2	< 0.06	16.5	0.126	0.0006	0.0008	0.00976	< 0.00002	< 0.00001	0.0121	< 0.000003	5.39	< 0.0005	0.000039	0.0007	0.008	< 0.00002	0.001	0.735	0.0110	0.02	0.00109
12-Jun-12	7	500	435	7.66	349	76	#N/A	2.7	24.2	15	< 0.2	< 0.06	17.2	0.0960	0.0006	0.0020	0.0104	< 0.00002	< 0.00001	0.0097	< 0.000003	5.62	< 0.0005	0.000012	0.0006	< 0.003	< 0.00002	0.001	0.780	0.0103	0.02	0.00055
19-Jun-12	8	500	440	7.53	372	66	#N/A	2.5	22.5	11	< 0.2	< 0.06	16.1	0.0828	0.0005	0.0011	0.00929	< 0.00002	< 0.00001	0.0083	< 0.000003	5.22	< 0.0005	0.000052	0.0005	< 0.003	0.00002	< 0.001	0.751	0.0111	< 0.01	0.00044
26-Jun-12	9	500	440	7.64	341	61	#N/A	2.6	20.9	12	< 0.2	< 0.06	17.5	0.104	0.0004	0.0008	0.00985	< 0.00002	< 0.00001	0.0085	< 0.000003	5.58	< 0.0005	< 0.000002	0.0012	0.011	0.00013	0.001	0.864	0.0122	0.02	0.00045
03-Jul-12	10	500	440	7.63	374	73	#N/A	6.4	26.5	12	< 0.2	< 0.06	22.9	0.129	0.0006	0.0009	0.0143	< 0.00002	< 0.00001	0.0068	< 0.000003	7.15	< 0.0005	0.000024	0.0084	0.005	0.00009	0.001	1.23	0.0080	0.01	0.00048
10-Jul-12	11	500	445	7.53	335	66	#N/A	3.1	22.8	11	< 0.2	< 0.06	22.6	0.109	0.0006	0.0006	0.0134	< 0.00002	< 0.00001	0.0067	< 0.000003	7.17	< 0.0005	0.000024	0.0007	0.007	< 0.00002	0.001	1.15	0.0107	0.02	0.00037
17-Jul-12	12	500	460	7.64	369	63	#N/A	2.0	21.7	10	< 0.2	< 0.06	24.1	0.0927	0.0005	0.0008	0.0125	< 0.00002	< 0.00001	0.0065	< 0.000003	7.62	< 0.0005	0.000065	< 0.0005	0.003	< 0.00002	0.001	1.24	0.0100	< 0.01	0.00037
24-Jul-12	13	500	445	7.34	332	61	#N/A	2.4	16.5	12	< 0.2	< 0.06	24.7	0.0931	0.0004	0.0007	0.0120	< 0.00002	< 0.00001	0.0053	< 0.000003	7.71	< 0.0005	0.000033	0.0006	0.006	< 0.00002	0.001	1.33	0.0105	0.01	0.00041
31-Jul-12	14	500	450	7.52	359	59	#N/A	2.0	20.0	9	< 0.2	< 0.06	24.4	0.101	0.0005	0.0009	0.0127	< 0.00002	< 0.00001	0.0054	< 0.000003	7.59	< 0.0005	0.000023	0.0006	0.004	< 0.00002	0.002	1.32	0.0094	< 0.01	0.00034
07-Aug-12	15	500	445	7.62	351	55	#N/A	2.2	20.4	8	< 0.2	< 0.06	24.3	0.113	0.0006	0.0008	0.0132	< 0.00002	< 0.00001	0.0054	< 0.000003	7.54	< 0.0005	0.000021	0.0010	< 0.003	0.00006	0.002	1.34	0.0088	0.01	0.00037
14-Aug-12	16	500	445	7.39	312	56	#N/A	2.5	16.7	9	< 0.2	< 0.06	23.5	0.0896	0.0004	0.0007	0.0125	< 0.00002	< 0.00001	0.0052	< 0.000003	7.29	< 0.0005	0.000015	0.0013	< 0.003	< 0.00002	0.001	1.29	0.0093	< 0.01	0.00037
21-Aug-12	17	500	450	7.29	329	53	#N/A	3.1	17.0	9	< 0.2	< 0.06	23.2	0.0945	0.0006	0.0005	0.0108	< 0.00002	< 0.00001	0.0051	< 0.000003	7.32	< 0.0005	0.000028	0.0005	0.003	0.00003	0.001	1.20	0.0114	0.02	0.00039
28-Aug-12	18	500	460	7.35	402	55	#N/A	4.3	17.6	11	< 0.2	< 0.06	23.2	0.0493	0.0005	0.0007	0.0112	< 0.00002	< 0.00001	0.0048	< 0.000003	7.30	< 0.0005	0.000033	0.0007	0.004	< 0.00002	0.001	1.21	0.0115	0.01	0.00037
04-Sep-12	19	500	460	7.23	408	43	#N/A	4.0	16.5	6	< 0.2	< 0.06	20.7	0.0864	0.0005	0.0004	0.0111	< 0.00002	< 0.00001	0.0039	< 0.000003	6.55	< 0.0005	0.000014	< 0.0005	< 0.003	< 0.00002	0.001	1.06	0.0094	0.02	0.00025
11-Sep-12	20	500	440	7.39	376	48	#N/A	2.7	17.1	9	< 0.2	< 0.06	22.7	0.0626	0.0005	0.0009	0.0138	< 0.00002	< 0.00001	0.0039	< 0.000003	7.02	< 0.0005	0.000030	0.0006	< 0.003	< 0.00002	0.001	1.26	0.0077	< 0.01	0.00027
18-Sep-12	21	500	430	7.41	375	44																										
25-Sep-12	22	500	435	7.45	374	42	#N/A	2.3	21.0	6	< 0.2	< 0.06	18.8	0.0627	0.0005	0.0007	0.0131	< 0.00002	< 0.00001	0.0036	< 0.000003	5.89	< 0.0005	0.000013	0.0005	< 0.003	< 0.00002	0.001	0.993	0.0083	< 0.01	0.00030
02-Oct-12	23	500	435	7.38	365	43	#N/A	3.1	21.9	3	< 0.2	< 0.06	19.9	0.0515	0.0007	0.0008	0.0137	< 0.00002	< 0.00001	0.0042	< 0.000003	6.13	< 0.0005	0.000070	0.0007	< 0.003	< 0.00002	0.001	1.11	0.0092	< 0.01	0.00029
09-Oct-12	24	500	440	7.33	384	40	#N/A	4.4	21.0	4	< 0.2	< 0.06	18.0	0.0598	0.0006	0.0015	0.0141	< 0.00002	< 0.00001	0.0033	< 0.000003	5.63	< 0.0005	0.000025	0.0007	< 0.003	< 0.00002	0.001	0.968	0.0090	< 0.01	0.00024
16-Oct-12	25	500	440	7.67	408	44	#N/A	3.9	25.2	5	< 0.2	< 0.06	21.8	0.110	0.0006	0.0009	0.0170	< 0.00002	< 0.00001	0.0034	< 0.000003	6.83	< 0.0005	0.000016	0.0006	0.003	< 0.00002	0.001	1.15	0.0076	< 0.01	0.00024
23-Oct-12	26	500	440	7.32	378	42	#N/A	3.8	22.6	5	< 0.2	< 0.06	19.2	0.0857	0.0005	0.0005	0.0156	< 0.00002	< 0.00001	0.0020	< 0.000003	6.04	< 0.0005	0.000053	0.0007	< 0.003	< 0.00002	< 0.001	0.987	0.0083	0.01	0.00024
30-Oct-12	27	500	430	7.36	381	41	#N/A	3.3	23.2	3	< 0.2	< 0.06	20.5	0.0662	0.0005	0.0008	0.01686	< 0.00002	< 0.00001	0.0033	0.000373	6.51	< 0.0005	0.000002	0.0008	0.005	< 0.00002	0.001	1.04	0.0099	0.01	0.00021
06-Nov-12	28	500	435	7.57	380	39	#N/A	2.6	23.0	2	< 0.2	< 0.06	21.7	0.0500	0.0007	0.0011	0.0171	< 0.00002	< 0.00001	0.0036	0.000004	6.91	< 0.0005	0.000034	0.0008	< 0.003	< 0.00002	< 0.001	1.07	0.0099	< 0.01	0.00022
13-Nov-12	29	500	430	7.53	386	37	#N/A	4.6	23.0	2	< 0.2	< 0.06	20.0	0.0425	0.0006	0.0009	0.0167	< 0.00002	< 0.00001	0.0029	< 0.000003	6.36	< 0.0005	0.000025	< 0.0005	< 0.003	< 0.00002	< 0.001	1.00	0.0100	0.01	0.00017
20-Nov-12	30	500	495	7.83	381	40	#N/A	5.9	22.9	4	< 0.2	< 0.06	19.3	0.0464	0.0006	0.0009	0.0204	< 0.00002	< 0.00001	0.0023	< 0.000003	6.30	< 0.0005	0.000120	0.0007	< 0.003	< 0.00002	< 0.001	0.866	0.0084	0.01	0.00018
27-Nov-12	31	500	495	7.55	366	43	#N/A	4.2	23.5	5	< 0.2	< 0.06	20.4	0.0487	0.0005	0.0008	0.0213	< 0.00002	< 0.00001	0.0029	< 0.000003	6.59	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	0.949	0.0073	< 0.01	0.00016
04-Dec-12	32	500	460	7.81	349	43	#N/A	1.5	21.5	6	< 0.2	< 0.06	21.3	0.0627	0.0006	0.0008	0.0215	< 0.00002	< 0.00001	0.0017	0.000004	6.72	< 0.0005	0.000012	0.0009	0.005	< 0.00002	< 0.001	1.10	0.0065	0.01	0.00022
11-Dec-12	33	500	480	7.67	361	42	#N/A	1.8	22.8	5	< 0.2	< 0.06	19.6	0.0517	0.0008	0.0008	0.0214	< 0.00002	0.00002	0.0022	< 0.000003	6.41	< 0.0005	0.000066	0.0010	< 0.003	0.00002	0.001	0.883	0.0057	< 0.01	0.00017
18-Dec-12	34	500	460	7.56	340	38	#N/A	2.0	21.9	3	< 0.2	< 0.06	20.7	0.0537	0.0005	0.0007	0.0212	< 0.00002	< 0.00001	0.0014	< 0.000003	6.68	< 0.0005	0.000022	0.0005	< 0.003	< 0.00002	< 0.001	0.985	0.0071	< 0.01	0.00018
25-Dec-12	35	500	450	7.49	374	37	#N/A	2.8	17.1	4	< 0.2	< 0.06	18.9	0.0477	0.0004	0.0007	0.0189	< 0.00002	< 0.00001	0.0016	0.000008	5.92	< 0.0005	0.000026	0.0005	0.005	< 0.00002	< 0.001	1.01	0.0065	< 0.01	0.00021
01-Jan-13	36	500	455	7.57	363	38	#N/A	2.5	20.0	4	< 0.2	< 0.06	18.0	0.0532	0.0005	0.0008	0.0191	< 0.00002	< 0.00001	0.0014	< 0.000003	5.75	< 0.0005	0.000033	< 0.0005	0.005	< 0.00002	< 0.001	0.887	0.0067	< 0.01	0.00019
08-Jan-13	37	500	440	7.65	347	38	#N/A	2.6	17.7	3	< 0.2	< 0.06	17.9	0.0591	0.0005	0.0008	0.0177	< 0.00002	< 0.00001	0.0017	< 0.000003	5.85	< 0.0005	0.000085	0.0007	0.006	< 0.00002	< 0.001	0.811	0.0048	< 0.01	0.00016
15-Jan-13	38	500	455	7.70	293	40	#N/A	2.3	20.8	5	< 0.2	< 0.06	18.6	0.0485	0.0004	0.0007	0.0195	< 0.00002	< 0.00001	0.0015	0.000003	5.93	< 0.0005	0.000038	0.0009	0.005	< 0.00002	< 0.001	0.928	0.0060	< 0.01	0.00017
22-Jan-13	39	500	450	7.43	362	37	#N/A	3.2	17.2	7	< 0.2	< 0.06	17.2	0.0548	0.0004	0.0009	0.0175	< 0.00002	< 0.00001	0.0015	0.000003	5.54	< 0.0005	0.000028	< 0.0005	0.007	< 0.00002	< 0.001	0.827	0.0056	< 0.01	0.00019
29-Jan-13	40	500	460	7.52	340	37	#N/A	2.5	16.0	6	< 0.2	< 0.06	18.6	0.0412	0.0003	0.0007	0.0160	< 0.00002	< 0.00001	0.0011	< 0.000003	5.95	< 0.0005	0.000024	0.0006	0.004	< 0.00002	< 0.001	0.897	0.0057	< 0.01	0.00022
05-Feb-13	41	500	450	7.57	354	39	#N/A	2.8	16.3	7																						
12-Feb-13	42	500	450	7.54	374	38	#N/A	4.0	16.7	5																						

Sept 11/12 Change in analytical schedule.
Sept 25/12 Change in analytical shedule

HC 15

Sample = L032201

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
01-May-12	1	0.0004	0.010	3.66	0.00155	0.88	< 0.00001	35.7	0.139	17.3	< 0.00002	0.00014	0.0005	0.000181	0.00477	0.001	0.00006	CA14188-MAY12	2.21	2.02	-0.19	-4.5%
08-May-12	2	0.0002	< 0.009	2.57	0.00095	0.63	< 0.00001	24.8	0.111	13.5	< 0.00002	0.00068	0.0004	0.000025	0.00334	0.002	0.00002	CA14348-MAY12	1.52	1.47	-0.05	-1.6%
15-May-12	3	0.0003	< 0.009	2.57	0.00064	0.82	< 0.00001	22.3	0.132	12.5	< 0.00002	0.00062	0.0013	0.000036	0.00400	0.001	0.00006	CA14621-MAY12	1.42	1.39	-0.02	-0.8%
22-May-12	4	0.0002	< 0.009	1.91	0.00062	0.66	0.00001	14.8	0.0965	8.17	< 0.00002	0.00060	0.0013	0.000032	0.00306	0.001	0.00004	CA10508-MAY12	1.07	1.02	-0.05	-2.3%
29-May-12	5	< 0.0001	< 0.009	1.67	0.00035	0.60	< 0.00001	9.68	0.114	5.96	< 0.00002	0.00059	0.0006	0.000019	0.00238	0.002	0.00002	CA15134-MAY12	0.85	0.85	-0.01	-0.4%
05-Jun-12	6	< 0.0001	< 0.009	1.63	0.00015	0.52	< 0.00001	9.24	0.105	6.07	< 0.00002	0.00043	0.0005	0.000027	0.00195	0.002	0.00001	CA15135-JUN12	0.81	0.79	-0.02	-1.1%
12-Jun-12	7	< 0.0001	< 0.009	1.59	0.00014	0.48	< 0.00001	7.53	0.113	5.39	< 0.00002	0.00032	< 0.0001	0.000017	0.00185	0.001	< 0.00001	CA15174-JUN12	0.80	0.73	-0.07	-4.4%
19-Jun-12	8	< 0.0001	< 0.009	1.39	0.00013	0.42	< 0.00001	5.39	0.104	4.27	< 0.00002	0.00023	0.0002	0.000013	0.00164	0.001	< 0.00001	CA15309-JUN12	0.68	0.61	-0.07	-5.7%
26-Jun-12	9	0.0001	< 0.009	1.40	0.00012	0.50	< 0.00001	4.32	0.113	4.12	< 0.00002	0.00095	0.0007	0.000021	0.00168	0.004	0.00002	CA15357-JUN12	0.67	0.59	-0.08	-6.1%
03-Jul-12	10	0.0001	< 0.009	1.57	0.00010	0.63	< 0.00001	3.61	0.161	4.49	< 0.00002	0.00064	0.0008	0.000016	0.00194	0.004	0.00001	CA15021-JUL12	0.78	0.68	-0.10	-7.2%
10-Jul-12	11	0.0001	< 0.009	1.32	0.00021	0.52	< 0.00001	2.57	0.152	3.85	< 0.00002	0.00051	0.0004	0.000013	0.00157	0.003	0.00002	CA15118-JUL12	0.69	0.62	-0.07	-5.4%
17-Jul-12	12	0.0001	< 0.009	1.24	0.00011	0.55	< 0.00001	1.94	0.167	4.20	< 0.00002	0.00018	0.0004	0.000016	0.00150	0.002	< 0.00001	CA15186-JUL12	0.64	0.61	-0.03	-2.2%
24-Jul-12	13	< 0.0001	< 0.009	1.17	0.00026	0.56	< 0.00001	1.61	0.172	4.71	< 0.00002	0.00015	0.0004	0.000022	0.00134	< 0.001	< 0.00001	CA15302-JUL12	0.58	0.61	0.03	2.5%
31-Jul-12	14	< 0.0001	< 0.009	1.04	0.00012	0.54	< 0.00001	1.17	0.175	3.76	< 0.00002	0.00017	0.0003	0.000011	0.00172	0.001	< 0.00001	CA15010-AUG12	0.59	0.58	-0.01	-0.5%
07-Aug-12	15	< 0.0001	< 0.009	0.933	0.00013	0.61	< 0.00001	0.90	0.171	3.91	< 0.00002	0.00091	0.0003	0.000016	0.00162	0.002	< 0.00001	CA15071-AUG12	0.57	0.57	-0.01	-0.6%
14-Aug-12	16	0.0001	< 0.009	0.811	0.00011	0.52	< 0.00001	0.71	0.164	3.98	< 0.00002	0.00037	0.0003	0.000014	0.00136	0.002	< 0.00001	CA15151-AUG12	0.52	0.54	0.01	1.4%
21-Aug-12	17	0.0002	< 0.009	0.631	0.00006	0.47	< 0.00001	0.54	0.152	3.55	< 0.00002	0.00019	0.0003	0.000013	0.00126	< 0.001	< 0.00001	CA15239-AUG12	0.53	0.52	-0.01	-0.8%
28-Aug-12	18	< 0.0001	< 0.009	0.636	0.00006	0.47	< 0.00001	0.49	0.156	3.48	< 0.00002	0.00016	0.0002	0.000037	0.00095	< 0.001	< 0.00001	CA15348-AUG12	0.58	0.51	-0.07	-6.3%
04-Sep-12	19	< 0.0001	< 0.009	0.454	0.00006	0.40	< 0.00001	0.34	0.142	2.31	< 0.00002	0.00012	0.0002	0.000015	0.00106	0.001	< 0.00001	CA15317-SEP12	0.45	0.45	0.00	0.0%
11-Sep-12	20	< 0.0001	< 0.009	0.592	0.00009	0.51	< 0.00001	0.37	0.162	3.42	< 0.00002	0.00019	0.0001	0.000014	0.00104	< 0.001	< 0.00001	CA15405-SEP12	0.53	0.50	-0.03	-3.1%
18-Sep-12	21																					
25-Sep-12	22	0.0001	< 0.009	0.445	0.00010	0.47	0.00002	0.28	0.129	1.99	< 0.00002	0.00027	0.0002	0.000013	0.00122	0.002	< 0.00001	CA15672-SEP12	0.55	0.41	-0.13	-14.1%
02-Oct-12	23	< 0.0001	< 0.009	0.486	0.00005	0.56	< 0.00001	0.27	0.135	1.91	< 0.00002	0.00010	0.0001	0.000012	0.00107	< 0.001	< 0.00001	CA15354-OCT12	0.50	0.43	-0.07	-7.5%
09-Oct-12	24	0.0005	< 0.009	0.414	0.00007	0.51	< 0.00001	0.24	0.118	1.66	< 0.00002	0.00033	0.0002	0.000027	0.00105	< 0.001	< 0.00001	CA15450-OCT12	0.50	0.39	-0.11	-12.5%
16-Oct-12	25	0.0002	< 0.009	0.434	0.00008	0.62	< 0.00001	0.23	0.140	1.39	< 0.00002	0.00018	0.0004	0.000010	0.00135	0.002	< 0.00001	CA15570-OCT12	0.61	0.47	-0.14	-12.5%
23-Oct-12	26	0.0003	< 0.009	0.352	0.00007	0.56	< 0.00001	0.18	0.123	1.21	< 0.00002	0.00014	0.0004	0.000011	0.00120	0.001	< 0.00001	CA15652-OCT12	0.56	0.41	-0.14	-14.8%
30-Oct-12	27	0.0003	< 0.009	0.336	0.00007	0.65	< 0.00001	0.19	0.131	1.35	< 0.00002	0.00032	0.0003	0.000015	0.00130	< 0.001	< 0.00001	CA15744-OCT12	0.53	0.44	-0.09	-9.1%
06-Nov-12	28	0.0004	< 0.009	0.335	0.00008	0.64	< 0.00001	0.20	0.136	1.19	< 0.00002	0.00026	0.0003	0.000010	0.00117	< 0.001	< 0.00001	CA11210-NOV12	0.50	0.46	-0.04	-4.2%
13-Nov-12	29	< 0.0001	< 0.009	0.297	0.00006	0.81	< 0.00001	0.16	0.124	0.97	< 0.00002	0.00020	0.0001	0.000010	0.00107	0.001	< 0.00001	CA15251-NOV12	0.50	0.42	-0.08	-8.6%
20-Nov-12	30	< 0.0001	< 0.009	0.202	0.00008	0.57	0.00002	0.14	0.124	1.05	< 0.00002	0.00015	0.0003	0.000009	0.00126	0.001	< 0.00001	CA15354-NOV12	0.54	0.41	-0.13	-14.3%
27-Nov-12	31	0.0002	< 0.009	0.202	0.00012	0.58	< 0.00001	0.13	0.140	1.35	< 0.00002	0.00012	0.0001	0.000012	0.00094	< 0.001	< 0.00001	CA15376-NOV12	0.57	0.43	-0.15	-14.6%
04-Dec-12	32	< 0.0001	< 0.009	0.230	0.00005	0.53	< 0.00001	0.14	0.142	1.92	< 0.00002	0.00017	0.0005	0.000017	0.00145	0.001	0.00002	CA15038-DEC12	0.55	0.45	-0.11	-10.5%
11-Dec-12	33	< 0.0001	0.009	0.200	0.00010	0.48	0.00003	0.13	0.123	1.37	< 0.00002	0.00015	0.0002	0.000016	0.00135	< 0.001	< 0.00001	CA15164-JAN13	0.56	0.41	-0.15	-15.1%
18-Dec-12	34	0.0001	< 0.009	0.193	< 0.00004	0.45	0.00002	0.13	0.140	1.69	< 0.00002	0.00010	0.0002	0.000014	0.00123	< 0.001	< 0.00001	CA15269-DEC12	0.50	0.43	-0.07	-7.0%
25-Dec-12	35	< 0.0001	< 0.009	0.152	0.00007	0.36	< 0.00001	0.12	0.145	1.76	< 0.00002	0.00011	0.0003	0.000013	0.00096	0.001	< 0.00001	CA15361-DEC12	0.43	0.40	-0.03	-3.5%
01-Jan-13	36	< 0.0001	< 0.009	0.147	0.00006	0.43	0.00003	0.14	0.120	1.60	< 0.00002	0.00015	0.0005	0.000014	0.00111	0.001	< 0.00001	CA15056-JAN13	0.48	0.38	-0.10	-12.1%
08-Jan-13	37	< 0.0001	< 0.009	0.151	0.00007	0.42	0.00002	0.11	0.114	1.50	< 0.00002	0.00014	0.0003	0.000014	0.00123	< 0.001	< 0.00001	CA15153-JAN13	0.42	0.38	-0.04	-5.0%
15-Jan-13	38	0.0002	< 0.009	0.164	0.00008	0.41	0.00001	0.12	0.124	1.75	< 0.00002	0.00011	0.0004	0.000023	0.00104	< 0.001	< 0.00001	CA15281-JAN13	0.52	0.39	-0.13	-14.2%
22-Jan-13	39	0.0002	< 0.009	0.121	0.00007	0.36	0.00002	0.04	0.112	1.56	< 0.00002	0.00011	0.0003	0.000017	0.00114	< 0.001	< 0.00001	CA15382-JAN13	0.49	0.36	-0.13	-15.5%
29-Jan-13	40	0.0001	< 0.009	0.138	< 0.00004	0.34	< 0.00001	0.14	0.120	1.86	< 0.00002	0.00012	0.0003	0.000016	0.00101	< 0.001	< 0.00001	CA15465-JAN13	0.44	0.39	-0.06	-6.7%
05-Feb-13	41																					
12-Feb-13	42																					

HC 16 *CONFIDENTIAL* *DRAFT*

Sample = L032044

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
01-May-12	1	500	415	7.67	315	129	#N/A	5.0	30.2	34	1.5	0.10	43.6	0.129	0.0041	0.0005	0.00246	< 0.00002	< 0.00001	0.0114	< 0.000003	14.5	< 0.0005	0.000060	0.0018	< 0.003	0.00008	0.003	1.79	0.0287	0.02	0.00040
08-May-12	2	500	465	7.79	341	116	#N/A	2.5	25.3	30	0.8	0.08	39.3	0.153	0.0107	0.0005	0.00158	< 0.00002	< 0.00001	0.0152	< 0.000003	12.1	< 0.0005	0.000031	0.0009	< 0.003	< 0.00002	0.003	2.21	0.0427	< 0.01	0.00039
15-May-12	3	500	440	7.67	284	105	#N/A	2.9	24.6	24	0.3	0.08	39.9	0.224	0.0070	0.0005	0.00160	< 0.00002	< 0.00001	0.0115	< 0.000003	12.6	< 0.0005	0.000018	< 0.0005	< 0.003	< 0.00002	0.004	2.03	0.0482	0.01	0.00020
22-May-12	4	500	455	7.58	328	83	#N/A	3.0	24.2	17	< 0.2	< 0.06	34.5	0.203	0.0050	0.0005	0.00131	< 0.00002	< 0.00001	0.0077	< 0.000003	11.2	< 0.0005	0.000020	< 0.0005	< 0.003	< 0.00002	0.003	1.61	0.0592	0.03	0.00015
29-May-12	5	500	450	7.48	328	75	#N/A	3.0	21.8	13	< 0.2	0.06	32.3	0.190	0.0042	0.0003	0.00095	< 0.00002	< 0.00001	0.0076	< 0.000003	10.3	< 0.0005	0.000022	< 0.0005	< 0.003	< 0.00002	0.003	1.62	0.0576	0.01	0.00010
05-Jun-12	6	500	500	7.54	369	63	#N/A	3.3	25.9	7	< 0.2	< 0.06	27.7	0.185	0.0036	0.0003	0.00185	< 0.00002	< 0.00001	0.0063	< 0.000003	9.38	< 0.0005	0.000023	0.0005	0.003	< 0.00002	0.003	1.04	0.0652	0.02	0.00036
12-Jun-12	7	500	445	7.64	338	58	#N/A	2.8	22.8	9	< 0.2	< 0.06	31.1	0.316	0.0029	0.0003	0.00110	< 0.00002	< 0.00001	0.0190	< 0.000003	10.5	< 0.0005	0.000004	< 0.0005	0.006	0.00009	0.002	1.17	0.0543	0.01	0.00007
19-Jun-12	8	500	495	7.58	357	54	#N/A	2.3	23.1	6	< 0.2	< 0.06	24.0	0.151	0.0025	0.0004	0.00084	< 0.00002	< 0.00001	0.0041	< 0.000003	8.23	< 0.0005	0.000049	< 0.0005	< 0.003	< 0.00002	0.002	0.828	0.0664	< 0.01	0.00004
26-Jun-12	9	500	460	7.67	331	55	#N/A	2.6	22.1	8	< 0.2	< 0.06	25.1	0.189	0.0025	0.0002	0.00088	< 0.00002	< 0.00001	0.0042	< 0.000003	8.47	< 0.0005	< 0.000002	0.0045	0.003	0.00004	0.002	0.969	0.0624	0.05	0.00006
03-Jul-12	10	500	450	7.61	363	50	#N/A	6.2	24.0	5	< 0.2	< 0.06	22.0	0.169	0.0023	0.0005	0.00066	< 0.00002	< 0.00001	0.0032	< 0.000003	7.18	< 0.0005	0.000013	0.0006	< 0.003	< 0.00002	0.002	0.983	0.0471	0.01	0.00012
10-Jul-12	11	500	490	7.49	324	56	#N/A	3.4	21.3	9	< 0.2	< 0.06	24.6	0.169	0.0028	0.0004	0.00077	< 0.00002	< 0.00001	0.0045	< 0.000003	8.28	< 0.0005	0.000016	0.0007	< 0.003	0.00004	0.002	0.946	0.0522	< 0.01	0.00005
17-Jul-12	12	500	455	7.66	345	54	#N/A	1.7	17.6	7	< 0.2	< 0.06	24.6	0.175	0.0019	0.0013	0.00077	< 0.00002	< 0.00001	0.0031	< 0.000003	8.30	< 0.0005	0.000049	0.0074	< 0.003	0.00020	0.004	0.951	0.0488	0.01	0.00002
24-Jul-12	13	500	455	7.47	317	52	#N/A	2.4	20.9	9	< 0.2	< 0.06	22.8	0.179	0.0017	< 0.0002	0.00069	< 0.00002	< 0.00001	0.0029	< 0.000003	7.87	< 0.0005	0.000010	< 0.0005	< 0.003	< 0.00002	0.002	0.778	0.0563	< 0.01	0.00002
31-Jul-12	14	500	450	7.55	335	48	#N/A	2.0	17.6	7	< 0.2	< 0.06	22.5	0.178	0.0018	< 0.0002	0.00074	< 0.00002	< 0.00001	0.0032	< 0.000003	7.58	< 0.0005	0.000006	< 0.0005	< 0.003	< 0.00002	0.002	0.868	0.0512	< 0.01	0.00002
07-Aug-12	15	500	455	7.71	328	47	#N/A	2.1	20.4	6	< 0.2	< 0.06	22.7	0.189	0.0018	0.0002	0.00101	< 0.00002	< 0.00001	0.0033	< 0.000003	7.63	< 0.0005	0.000012	0.0007	< 0.003	0.00003	0.002	0.879	0.0485	0.06	0.00003
14-Aug-12	16	500	445	7.51	302	47	#N/A	2.5	17.8	5	< 0.2	< 0.06	20.8	0.193	0.0015	0.0002	0.00072	< 0.00002	< 0.00001	0.0032	< 0.000003	7.02	< 0.0005	0.000005	0.0006	< 0.003	< 0.00002	0.002	0.796	0.0433	< 0.01	0.00003
21-Aug-12	17	500	455	7.41	315	50	#N/A	2.9	17.9	6	< 0.2	< 0.06	23.3	0.192	0.0017	< 0.0002	0.00071	< 0.00002	< 0.00001	0.0031	< 0.000003	8.08	< 0.0005	0.000020	0.0007	< 0.003	< 0.00002	0.002	0.749	0.0590	0.01	0.00003
28-Aug-12	18	500	455	7.44	398	52	#N/A	4.1	20.7	6	< 0.2	< 0.06	23.2	0.184	0.0014	< 0.0002	0.00072	< 0.00002	< 0.00001	0.0030	< 0.000003	7.96	< 0.0005	0.000015	0.0053	< 0.003	0.00007	0.002	0.806	0.0572	< 0.01	0.00005
04-Sep-12	19	500	450	7.28	405	50	#N/A	4.1	15.9	8	< 0.2	< 0.06	23.9	0.144	0.0016	< 0.0002	0.00067	< 0.00002	< 0.00001	0.0029	< 0.000003	8.13	< 0.0005	0.000014	0.0012	< 0.003	< 0.00002	0.002	0.869	0.0584	< 0.01	0.00003
11-Sep-12	20	500	490	7.46	366	56	#N/A	2.3	17.2	11	< 0.2	< 0.06	24.4	0.127	0.0017	< 0.0002	0.00082	< 0.00002	< 0.00001	0.0031	< 0.000003	8.28	< 0.0005	0.000024	0.0008	< 0.003	0.00003	0.002	0.901	0.0510	< 0.01	0.00005
18-Sep-12	21	500	450	7.58	358	50																										
25-Sep-12	22	500	450	7.55	360	40	#N/A	2.3	20.7	5	< 0.2	< 0.06	19.1	0.134	0.0010	< 0.0002	0.00064	< 0.00002	< 0.00001	0.0021	< 0.000003	6.62	< 0.0005	0.000006	< 0.0005	< 0.003	0.00003	0.001	0.634	0.0450	0.02	0.00002
02-Oct-12	23	500	450	7.45	380	37	#N/A	2.8	20.3	4	< 0.2	< 0.06	17.8	0.114	0.0010	< 0.0002	0.00053	< 0.00002	< 0.00001	0.0026	< 0.000003	6.22	< 0.0005	0.000060	< 0.0005	< 0.003	< 0.00002	0.001	0.546	0.0459	< 0.01	0.00002
09-Oct-12	24	500	475	7.47	376	45	#N/A	4.5	21.3	5	< 0.2	< 0.06	19.8	0.121	0.0010	< 0.0002	0.00064	< 0.00002	< 0.00001	0.0025	< 0.000003	6.99	< 0.0005	0.000032	0.0007	< 0.003	< 0.00002	0.001	0.565	0.0608	< 0.01	0.00008
16-Oct-12	25	500	450	7.67	393	36	#N/A	4.4	16.8	6	< 0.2	< 0.06	17.6	0.139	0.0007	< 0.0002	0.00047	< 0.00002	< 0.00001	0.0022	< 0.000003	6.16	< 0.0005	0.000006	0.0006	0.005	< 0.00002	< 0.001	0.540	0.0459	< 0.01	0.00003
23-Oct-12	26	500	450	7.35	366	37	#N/A	3.8	17.4	5	< 0.2	< 0.06	16.7	0.149	0.0007	< 0.0002	0.00048	< 0.00002	< 0.00001	0.0009	< 0.000003	5.86	< 0.0005	0.000043	0.0006	< 0.003	< 0.00002	< 0.001	0.504	0.0397	< 0.01	0.00005
30-Oct-12	27	500	450	7.42	368	39	#N/A	3.3	20.7	4	< 0.2	< 0.06	19.2	0.152	0.0007	< 0.0002	0.00052	< 0.00002	< 0.00001	0.0024	0.000353	6.83	< 0.0005	< 0.000002	< 0.0005	0.004	< 0.00002	0.001	0.529	0.0528	< 0.01	0.00002
06-Nov-12	28	500	450	7.56	359	33	#N/A	2.5	17.6	2	< 0.2	< 0.06	17.9	0.123	0.0008	0.0004	0.00054	< 0.00002	< 0.00001	0.0023	< 0.000003	6.43	< 0.0005	0.000017	< 0.0005	< 0.003	< 0.00002	< 0.001	0.458	0.0471	< 0.01	0.00008
13-Nov-12	29	500	450	7.52	376	31	#N/A	4.5	20.1	3	< 0.2	< 0.06	16.9	0.103	0.0006	< 0.0002	0.00051	< 0.00002	< 0.00001	0.0022	< 0.000003	6.03	< 0.0005	0.000018	< 0.0005	< 0.003	< 0.00002	< 0.001	0.444	0.0483	0.02	0.00002
20-Nov-12	30	500	495	7.55	363	40	#N/A	5.9	21.1	4	< 0.2	< 0.06	19.6	0.104	0.0009	0.0002	0.00070	< 0.00002	< 0.00001	0.0017	< 0.000003	7.07	< 0.0005	0.000123	0.0006	< 0.003	< 0.00002	< 0.001	0.461	0.0541	0.02	0.00003
27-Nov-12	31	500	505	7.54	366	43	#N/A	3.9	20.1	7	< 0.2	< 0.06	20.9	0.0953	0.0010	< 0.0002	0.00060	< 0.00002	< 0.00001	0.0019	< 0.000003	7.45	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	0.560	0.0537	< 0.01	0.00002
04-Dec-12	32	500	455	7.62	349	36	#N/A	1.6	13.9	7	< 0.2	< 0.06	17.5	0.0995	0.0008	< 0.0002	0.00068	< 0.00002	< 0.00001	0.0008	0.000003	6.04	< 0.0005	< 0.000002	0.0006	< 0.003	0.00003	< 0.001	0.587	0.0361	0.01	0.00002
11-Dec-12	33	500	480	7.60	355	38	#N/A	1.8	15.6	5	0.2	< 0.06	17.8	0.108	0.0012	< 0.0002	0.00058	< 0.00002	0.00001	0.0014	0.000004	6.34	< 0.0005	0.000046	< 0.0005	< 0.003	< 0.00002	< 0.001	0.468	0.0354	< 0.01	< 0.00001
18-Dec-12	34	500	465	7.55	335	42	#N/A	2.2	14.1	7	< 0.2	< 0.06	19.9	0.111	0.0009	< 0.0002	0.00067	< 0.00002	< 0.00001	0.0010	0.000026	7.03	< 0.0005	0.000151	0.0064	< 0.003	< 0.00002	0.001	0.578	0.0430	< 0.01	0.00010
25-Dec-12	35	500	450	7.49	362	41	#N/A	2.7	13.3	8	< 0.2	< 0.06	20.3	0.0980	0.0007	< 0.0002	0.00056	< 0.00002	< 0.00001	0.0007	< 0.000003	6.96	< 0.0005	0.000019	< 0.0005	< 0.003	< 0.00002	< 0.001	0.712	0.0347	< 0.01	0.00005
01-Jan-13	36	500	450	7.59	355	41	#N/A	2.4	15.0	7	< 0.2	< 0.06	18.0	0.108	0.0008	< 0.0002	0.00052	< 0.00002	< 0.00001	0.0013	< 0.000003	6.30	< 0.0005	0.000020	< 0.0005	< 0.003	< 0.00002	< 0.001	0.551	0.0318	0.01	0.00004
08-Jan-13	37	500	445	7.69	333	38	#N/A	2.6	15.5	8	< 0.2	< 0.06	17.8	0.111	0.0009	< 0.0002	0.00055	< 0.00002	< 0.00001	0.0010	< 0.000003	6.36	< 0.0005	0.000067	0.0005	< 0.003	< 0.00002	< 0.001	0.465	0.0278	< 0.01	0.00002
15-Jan-13	38	500	455	7.61	294	46	#N/A	2.5	15.4	8	< 0.2	< 0.06	20.3	0.0909	0.0007	< 0.0002	0.00056	< 0.00002	< 0.00001	0.0009	< 0.000003	7.16	< 0.0005	0.000016	0.0005	< 0.003	< 0.00002	< 0.001	0.575	0.0416	< 0.01	0.00003
22-Jan-13	39	500	455	7.44	360	48	#N/A	3.1	13.7	14	< 0.2	< 0.06	21.7	0.105	0.0007	< 0.0002	0.00058	< 0.00002	< 0.00001	0.0010	0.000003	7.65	< 0.0005	0.000020	< 0.0005	< 0.003	< 0.00002	0.001	0.625	0.0436	< 0.01	0.00003
29-Jan-13	40	500	460	7.58	337	48	#N/A	2.5	13.7	11	< 0.2	< 0.06	24.5	0.102	0.0006	0.0002	0.00066	< 0.00002	< 0.00001	0.0006	< 0.000003	8.74	< 0.0005	0.000021	0.0006	0.005	< 0.00002	< 0.001	0.657	0.0461	< 0.01	0.00004
05-Feb-13	41	500	465	7.54	317	47	#N/A	2.8	13.2	12																						
12-Feb-13	42	500	455	7.56	371	44	#N/A	4.3	13.8	10																						

Sept 11/12 Change in analytical schedule.
Sept 25/12 Change in analytical shedule

HC 16

Sample = L032044

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
01-May-12	1	0.0003	< 0.009	3.12	< 0.00004	0.45	< 0.00001	6.43	0.0948	11.4	< 0.00002	0.00066	0.0001	0.000043	0.00078	0.002	0.00002	CA14188-MAY12	1.36	1.25	-0.11	-4.3%
08-May-12	2	0.0003	< 0.009	1.85	0.00013	0.45	< 0.00001	4.87	0.0843	10.9	< 0.00002	0.00083	< 0.0001	0.000016	0.00074	0.001	< 0.00001	CA14348-MAY12	1.16	1.07	-0.09	-4.2%
15-May-12	3	0.0002	< 0.009	1.44	0.00011	0.57	< 0.00001	2.75	0.0856	9.24	< 0.00002	0.00060	< 0.0001	0.000013	0.00103	< 0.001	< 0.00001	CA14621-MAY12	1.00	0.98	-0.02	-1.2%
22-May-12	4	0.0001	< 0.009	0.934	0.00010	0.53	< 0.00001	1.53	0.0655	6.71	< 0.00002	0.00083	0.0002	0.000018	0.00107	< 0.001	< 0.00001	CA10508-MAY12	0.84	0.81	-0.03	-1.8%
29-May-12	5	< 0.0001	< 0.009	0.862	0.00005	0.52	< 0.00001	1.16	0.0580	6.21	< 0.00002	0.00066	< 0.0001	0.000010	0.00099	< 0.001	< 0.00001	CA15134-MAY12	0.71	0.74	0.04	2.5%
05-Jun-12	6	< 0.0001	< 0.009	0.582	0.00006	0.49	< 0.00001	0.69	0.0453	3.82	< 0.00002	0.00057	0.0001	0.000011	0.00098	0.001	< 0.00001	CA15135-JUN12	0.66	0.62	-0.04	-3.2%
12-Jun-12	7	< 0.0001	< 0.009	0.569	0.00019	0.50	< 0.00001	0.66	0.0441	3.63	< 0.00002	0.00052	0.0001	0.000008	0.00111	0.001	< 0.00001	CA15174-JUN12	0.64	0.70	0.06	4.3%
19-Jun-12	8	0.0001	< 0.009	0.444	0.00011	0.46	< 0.00001	0.46	0.0359	2.65	< 0.00002	0.00040	0.0001	0.000003	0.00093	0.001	< 0.00001	CA15309-JUN12	0.59	0.53	-0.06	-5.2%
26-Jun-12	9	0.0002	< 0.009	0.485	< 0.00004	0.52	< 0.00001	0.51	0.0371	3.43	< 0.00002	0.00052	0.0002	0.000010	0.00112	0.003	< 0.00001	CA15357-JUN12	0.61	0.56	-0.05	-4.1%
03-Jul-12	10	< 0.0001	< 0.009	0.459	< 0.00004	0.43	< 0.00001	0.47	0.0310	2.78	< 0.00002	0.00045	< 0.0001	0.000015	0.00098	0.002	< 0.00001	CA15021-JUL12	0.58	0.49	-0.09	-8.6%
10-Jul-12	11	0.0001	< 0.009	0.402	0.00013	0.49	< 0.00001	0.47	0.0364	3.17	< 0.00002	0.00056	< 0.0001	0.000015	0.00113	0.002	< 0.00001	CA15118-JUL12	0.61	0.54	-0.07	-6.1%
17-Jul-12	12	0.0016	< 0.009	0.440	0.00009	0.49	< 0.00001	0.41	0.0347	3.79	< 0.00002	0.00022	0.0004	0.000004	0.00113	0.001	< 0.00001	CA15186-JUL12	0.50	0.54	0.05	4.4%
24-Jul-12	13	< 0.0001	< 0.009	0.358	0.00018	0.45	< 0.00001	0.34	0.0301	2.96	< 0.00002	0.00023	0.0001	0.000004	0.00103	0.001	< 0.00001	CA15302-JUL12	0.61	0.50	-0.10	-9.3%
31-Jul-12	14	< 0.0001	< 0.009	0.355	0.00005	0.45	< 0.00001	0.35	0.0290	2.71	< 0.00002	0.00014	< 0.0001	0.000006	0.00125	0.002	< 0.00001	CA15010-AUG12	0.50	0.50	0.00	-0.2%
07-Aug-12	15	< 0.0001	< 0.009	0.385	0.00007	0.49	< 0.00001	0.35	0.0291	3.03	< 0.00002	0.00046	< 0.0001	0.000010	0.00121	0.002	< 0.00001	CA15071-AUG12	0.53	0.50	-0.03	-3.1%
14-Aug-12	16	0.0002	< 0.009	0.368	< 0.00004	0.44	< 0.00001	0.30	0.0259	2.62	< 0.00002	0.00019	0.0001	0.000008	0.00106	0.001	< 0.00001	CA15151-AUG12	0.46	0.46	0.00	0.1%
21-Aug-12	17	0.0002	< 0.009	0.297	0.00008	0.44	< 0.00001	0.27	0.0281	3.32	< 0.00002	0.00025	0.0001	0.000011	0.00099	0.002	< 0.00001	CA15239-AUG12	0.48	0.51	0.03	2.6%
28-Aug-12	18	0.0001	< 0.009	0.320	< 0.00004	0.41	< 0.00001	0.28	0.0279	3.25	< 0.00002	0.00048	< 0.0001	0.000016	0.00100	0.004	< 0.00001	CA15348-AUG12	0.54	0.51	-0.03	-3.1%
04-Sep-12	19	< 0.0001	< 0.009	0.264	0.00007	0.35	< 0.00001	0.28	0.0295	3.52	< 0.00002	0.00034	< 0.0001	0.000017	0.00082	< 0.001	< 0.00001	CA15317-SEP12	0.49	0.51	0.03	3.0%
11-Sep-12	20	< 0.0001	< 0.009	0.297	0.00007	0.45	< 0.00001	0.29	0.0315	4.04	< 0.00002	0.00015	0.0001	0.000028	0.00087	0.002	< 0.00001	CA15405-SEP12	0.57	0.52	-0.05	-4.4%
18-Sep-12	21																					
25-Sep-12	22	0.0001	< 0.009	0.262	0.00013	0.38	0.00001	0.20	0.0213	1.75	< 0.00002	0.00019	< 0.0001	0.000005	0.00074	< 0.001	< 0.00001	CA15672-SEP12	0.52	0.41	-0.10	-11.1%
02-Oct-12	23	< 0.0001	< 0.009	0.252	< 0.00004	0.38	< 0.00001	0.16	0.0191	1.46	< 0.00002	0.00013	< 0.0001	0.000005	0.00072	< 0.001	< 0.00001	CA15354-OCT12	0.49	0.38	-0.11	-12.0%
09-Oct-12	24	0.0007	< 0.009	0.235	0.00007	0.34	< 0.00001	0.19	0.0213	2.16	< 0.00002	0.00020	< 0.0001	0.000016	0.00072	< 0.001	< 0.00001	CA15450-OCT12	0.53	0.43	-0.10	-10.9%
16-Oct-12	25	0.0001	< 0.009	0.210	< 0.00004	0.32	< 0.00001	0.18	0.0178	1.86	< 0.00002	0.00051	< 0.0001	0.000008	0.00074	0.001	< 0.00001	CA15570-OCT12	0.46	0.38	-0.08	-9.3%
23-Oct-12	26	0.0004	< 0.009	0.230	0.00007	0.31	< 0.00001	0.15	0.0177	1.22	< 0.00002	0.00014	< 0.0001	0.000013	0.00061	< 0.001	< 0.00001	CA15652-OCT12	0.45	0.36	-0.09	-10.6%
30-Oct-12	27	0.0002	< 0.009	0.251	< 0.00004	0.40	< 0.00001	0.16	0.0198	1.60	< 0.00002	0.00018	< 0.0001	0.000011	0.00077	< 0.001	< 0.00001	CA15744-OCT12	0.50	0.42	-0.08	-8.8%
06-Nov-12	28	< 0.0001	< 0.009	0.208	0.00006	0.32	< 0.00001	0.14	0.0178	1.28	< 0.00002	0.00036	< 0.0001	0.000005	0.00064	< 0.001	< 0.00001	CA11210-NOV12	0.39	0.39	-0.01	-1.1%
13-Nov-12	29	< 0.0001	< 0.009	0.197	0.00005	0.37	< 0.00001	0.12	0.0162	1.22	< 0.00002	0.00015	< 0.0001	0.000011	0.00060	0.001	< 0.00001	CA15251-NOV12	0.46	0.36	-0.10	-12.5%
20-Nov-12	30	< 0.0001	< 0.009	0.203	0.00004	0.37	0.00001	0.16	0.0202	1.76	< 0.00002	0.00017	0.0001	0.000011	0.00068	< 0.001	< 0.00001	CA15354-NOV12	0.51	0.42	-0.09	-9.6%
27-Nov-12	31	0.0002	< 0.009	0.220	0.00009	0.35	< 0.00001	0.17	0.0222	2.33	< 0.00002	0.00014	< 0.0001	0.000012	0.00036	< 0.001	< 0.00001	CA15376-NOV12	0.55	0.44	-0.10	-10.4%
04-Dec-12	32	< 0.0001	< 0.009	0.226	< 0.00004	0.27	< 0.00001	0.14	0.0179	2.32	< 0.00002	0.00009	< 0.0001	0.000012	0.00064	0.001	< 0.00001	CA15038-DEC12	0.42	0.37	-0.05	-6.2%
11-Dec-12	33	< 0.0001	< 0.009	0.212	0.00005	0.31	0.00002	0.15	0.0167	2.02	< 0.00002	0.00010	< 0.0001	0.000015	0.00073	< 0.001	< 0.00001	CA15164-JAN13	0.42	0.38	-0.03	-4.4%
18-Dec-12	34	0.0018	< 0.009	0.222	< 0.00004	0.27	0.00003	0.16	0.0204	3.15	< 0.00002	0.00017	< 0.0001	0.000026	0.00068	0.001	< 0.00001	CA15269-DEC12	0.43	0.43	0.00	-0.4%
25-Dec-12	35	< 0.0001	0.014	0.203	< 0.00004	0.23	< 0.00001	0.15	0.0216	3.42	< 0.00002	0.00008	< 0.0001	0.000011	0.00045	< 0.001	< 0.00001	CA15361-DEC12	0.43	0.43	0.00	-0.2%
01-Jan-13	36	0.0001	< 0.009	0.204	0.00005	0.27	0.00003	0.17	0.0175	2.78	< 0.00002	0.00012	< 0.0001	0.000010	0.00062	0.001	< 0.00001	CA15056-JAN13	0.45	0.39	-0.06	-7.1%
08-Jan-13	37	< 0.0001	< 0.009	0.209	0.00005	0.27	0.00002	0.14	0.0157	2.29	< 0.00002	0.00009	< 0.0001	0.000009	0.00068	< 0.001	< 0.00001	CA15153-JAN13	0.48	0.38	-0.10	-11.3%
15-Jan-13	38	0.0001	< 0.009	0.222	0.00005	0.25	< 0.00001	0.15	0.0192	3.42	< 0.00002	0.00012	< 0.0001	0.000019	0.00056	< 0.001	< 0.00001	CA15281-JAN13	0.47	0.43	-0.05	-5.0%
22-Jan-13	39	0.0002	< 0.009	0.231	< 0.00004	0.26	< 0.00001	0.08	0.0203	4.02	< 0.00002	0.00010	< 0.0001	0.000016	0.00057	< 0.001	< 0.00001	CA15382-JAN13	0.56	0.46	-0.11	-10.6%
29-Jan-13	40	0.0002	0.011	0.232	< 0.00004	0.24	< 0.00001	0.20	0.0219	4.55	< 0.00002	0.00018	0.0001	0.000012	0.00060	< 0.001	< 0.00001	CA15465-JAN13	0.50	0.52	0.02	1.5%
05-Feb-13	41																					
12-Feb-13	42																					

HC 17 *CONFIDENTIAL* *DRAFT*

Sample = L032104

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
01-May-12	1	470	395	7.74	314	154	#N/A	5.1	29.7	41	1.7	0.07	42.3	0.153	0.0010	0.0004	0.00451	< 0.00002	< 0.00001	0.0173	< 0.000003	14.8	< 0.0005	0.000058	0.0014	0.008	0.00003	0.014	1.30	0.0193	0.06	0.00048
08-May-12	2	500	500	7.69	342	125	#N/A	2.6	25.2	28	1.4	0.06	34.8	0.124	0.0007	0.0004	0.00357	< 0.00002	< 0.00001	0.0195	< 0.000003	12.2	< 0.0005	0.000052	0.0043	0.003	0.00006	0.010	1.04	0.0403	< 0.01	0.00036
15-May-12	3	470	400	7.59	269	134	#N/A	2.8	23.0	33	0.7	0.06	40.4	0.188	0.0006	0.0003	0.00439	< 0.00002	< 0.00001	0.0167	< 0.000003	14.1	< 0.0005	0.000050	0.0011	0.005	0.00002	0.013	1.26	0.0348	0.04	0.00041
22-May-12	4	500	430	7.52	312	94	#N/A	3.1	17.8	22	0.3	< 0.06	32.5	0.185	0.0004	0.0004	0.00339	< 0.00002	< 0.00001	0.0108	< 0.000003	11.6	< 0.0005	0.000035	< 0.0005	0.004	< 0.00002	0.010	0.842	0.0315	0.03	0.00032
29-May-12	5	470	395	7.40	313	81	#N/A	2.9	17.5	16	< 0.2	< 0.06	29.7	0.166	0.0004	0.0003	0.00273	< 0.00002	< 0.00001	0.0095	< 0.000003	10.6	< 0.0005	0.000044	0.0009	0.007	< 0.00002	0.010	0.788	0.0337	0.01	0.00025
05-Jun-12	6	470	460	7.38	360	74	#N/A	3.6	23.5	11	< 0.2	< 0.06	29.8	0.156	0.0003	0.0003	0.00381	< 0.00002	< 0.00001	0.0082	< 0.000003	11.0	< 0.0005	0.000049	0.0006	0.006	< 0.00002	0.008	0.548	0.0439	0.01	0.00033
12-Jun-12	7	470	415	7.54	333	72	#N/A	2.8	20.4	12	0.3	< 0.06	28.9	0.167	0.0003	0.0004	0.00386	< 0.00002	< 0.00001	0.0067	< 0.000003	10.6	< 0.0005	0.000027	< 0.0005	0.004	< 0.00002	0.008	0.563	0.0433	0.01	0.00011
19-Jun-12	8	470	445	7.52	346	69	#N/A	2.5	21.1	12	0.2	< 0.06	27.7	0.126	0.0002	0.0003	0.00351	< 0.00002	< 0.00001	0.0056	< 0.000003	10.3	< 0.0005	0.000074	< 0.0005	0.012	< 0.00002	0.007	0.475	0.0491	< 0.01	0.00010
26-Jun-12	9	470	425	7.60	318	70	#N/A	2.5	17.6	13	< 0.2	< 0.06	27.7	0.166	< 0.0002	0.0003	0.00389	< 0.00002	< 0.00001	0.0056	< 0.000003	10.2	< 0.0005	0.000007	0.0006	0.013	< 0.00002	0.008	0.533	0.0426	0.02	0.00010
03-Jul-12	10	470	440	7.51	357	58	#N/A	6.0	20.2	10	< 0.2	< 0.06	22.5	0.129	< 0.0002	0.0003	0.00289	< 0.00002	< 0.00001	0.0038	< 0.000003	8.31	< 0.0005	0.000029	0.0008	< 0.003	0.00003	0.006	0.431	0.0353	0.01	0.00022
10-Jul-12	11	470	410	7.38	295	62	#N/A	3.6	16.5	10	< 0.2	< 0.06	24.3	0.152	0.0002	< 0.0002	0.00340	< 0.00002	< 0.00001	0.0045	0.000009	9.00	< 0.0005	0.000021	0.0006	< 0.003	< 0.00002	0.006	0.451	0.0338	0.02	0.00007
17-Jul-12	12	470	420	7.53	336	59	#N/A	1.9	16.7	9	< 0.2	< 0.06	24.8	0.136	< 0.0002	0.0005	0.00323	< 0.00002	< 0.00001	0.0044	0.000007	9.28	< 0.0005	0.000073	< 0.0005	< 0.003	< 0.00002	0.006	0.387	0.0368	0.01	0.00004
24-Jul-12	13	470	430	7.34	310	59	#N/A	2.4	15.3	10	< 0.2	< 0.06	24.4	0.132	< 0.0002	0.0002	0.00315	< 0.00002	< 0.00001	0.0042	0.000012	9.16	< 0.0005	0.000044	0.0006	< 0.003	< 0.00002	0.005	0.368	0.0399	0.01	0.00005
31-Jul-12	14	470	415	7.43	324	50	#N/A	2.1	14.7	8	< 0.2	< 0.06	21.5	0.133	< 0.0002	0.0003	0.00264	< 0.00002	< 0.00001	0.0035	0.000013	8.02	< 0.0005	0.000030	< 0.0005	0.004	< 0.00002	0.005	0.357	0.0303	< 0.01	0.00004
07-Aug-12	15	500	475	7.59	318	62	#N/A	2.2	15.5	12	< 0.2	< 0.06	26.4	0.147	0.0002	0.0003	0.00328	< 0.00002	< 0.00001	0.0047	0.000012	9.93	< 0.0005	0.000033	0.0019	< 0.003	0.00002	0.006	0.398	0.0388	0.02	0.00006
14-Aug-12	16	470	405	7.34	287	65	#N/A	2.5	14.6	13	< 0.2	< 0.06	26.4	0.114	< 0.0002	< 0.0002	0.00233	< 0.00002	< 0.00001	0.0031	0.000016	9.85	< 0.0005	0.000016	0.0005	0.014	< 0.00002	0.005	0.438	0.0331	< 0.01	0.00004
21-Aug-12	17	470	415	7.33	288	63	#N/A	3.1	15.1	14	< 0.2	< 0.06	26.7	0.152	0.0003	< 0.0002	0.00328	< 0.00002	< 0.00001	0.0037	0.000024	10.2	< 0.0005	0.000042	0.0009	0.006	< 0.00002	0.006	0.322	0.0395	0.04	0.00005
28-Aug-12	18	470	430	7.44	388	63	#N/A	4.2	21.2	10	< 0.2	< 0.06	26.1	0.136	< 0.0002	0.0002	0.00327	< 0.00002	< 0.00001	0.0036	0.000018	9.95	< 0.0005	0.000035	0.0012	0.004	0.00004	0.005	0.296	0.0482	0.02	0.00005
04-Sep-12	19	470	435	7.14	398	57	#N/A	4.6	12.9	12	< 0.2	< 0.06	24.9	0.0989	< 0.0002	< 0.0002	0.00273	< 0.00002	< 0.00001	0.0034	0.000018	9.43	< 0.0005	0.000046	< 0.0005	< 0.003	< 0.00002	0.005	0.332	0.0484	0.05	0.00004
11-Sep-12	20	470	415	7.39	350	64	#N/A	2.5	13.9	14	< 0.2	< 0.06	27.7	0.0973	< 0.0002	0.0002	0.00327	< 0.00002	< 0.00001	0.0030	0.000020	10.5	< 0.0005	0.000036	< 0.0005	0.003	< 0.00002	0.005	0.353	0.0367	0.02	0.00004
18-Sep-12	21	470	410	7.34	346	53																										
25-Sep-12	22	470	420	7.40	344	51	#N/A	2.6	15.8	9	< 0.2	< 0.06	21.5	0.107	< 0.0002	0.0005	0.00501	< 0.00002	< 0.00001	0.0036	0.000104	8.21	< 0.0005	0.000068	0.0005	< 0.003	0.00033	0.005	0.246	0.0328	< 0.01	0.00004
02-Oct-12	23	470	415	7.34	373	44	#N/A	3.0	14.7	6	< 0.2	< 0.06	18.6	0.0908	< 0.0002	0.0002	0.00207	< 0.00002	< 0.00001	0.0030	0.000016	7.10	< 0.0005	0.000081	0.0008	< 0.003	< 0.00002	0.004	0.217	0.0291	< 0.01	0.00002
09-Oct-12	24	470	460	7.34	366	46	#N/A	4.4	16.1	7	< 0.2	< 0.06	20.0	0.0939	< 0.0002	0.0005	0.00272	< 0.00002	< 0.00001	0.0026	0.000023	7.72	< 0.0005	0.000027	0.0006	< 0.003	< 0.00002	0.003	0.168	0.0424	< 0.01	0.00002
16-Oct-12	25	470	445	7.59	384	39	#N/A	4.4	14.2	6	< 0.2	< 0.06	17.5	0.0861	< 0.0002	0.0002	0.00220	< 0.00002	< 0.00001	0.0023	0.000015	6.69	< 0.0005	0.000021	< 0.0005	< 0.003	< 0.00002	0.003	0.184	0.0294	0.01	0.00002
23-Oct-12	26	470	415	7.24	350	45	#N/A	3.7	14.9	10	< 0.2	< 0.06	18.3	0.119	< 0.0002	< 0.0002	0.00224	< 0.00002	< 0.00001	0.0013	0.000018	7.02	< 0.0005	0.000052	0.0006	< 0.003	< 0.00002	0.004	0.184	0.0297	0.01	0.00006
30-Oct-12	27	470	430	7.29	357	49	#N/A	3.6	17.2	7	< 0.2	< 0.06	21.9	0.102	< 0.0002	< 0.0002	0.00260	< 0.00002	< 0.00001	0.0029	0.000346	8.46	< 0.0005	0.000015	0.0006	0.010	< 0.00002	0.004	0.197	0.0422	0.01	0.00003
06-Nov-12	28	470	415	7.49	344	42	#N/A	2.6	15.8	5	< 0.2	< 0.06	21.1	0.0885	< 0.0002	0.0004	0.00234	< 0.00002	< 0.00001	0.0026	0.000023	8.14	< 0.0005	0.000033	< 0.0005	< 0.003	< 0.00002	0.004	0.198	0.0344	< 0.01	0.00003
13-Nov-12	29	470	410	7.51	363	36	#N/A	4.7	15.3	3	< 0.2	< 0.06	17.8	0.0707	< 0.0002	0.0002	0.00217	< 0.00002	< 0.00001	0.0021	0.000026	6.83	< 0.0005	0.000036	< 0.0005	< 0.003	< 0.00002	0.003	0.171	0.0341	0.02	0.00002
20-Nov-12	30	470	450	7.70	372	53	#N/A	6.2	15.6	10	< 0.2	< 0.06	23.5	0.0723	< 0.0002	0.0004	0.00264	< 0.00002	< 0.00001	0.0017	0.000020	9.05	< 0.0005	0.000139	0.0006	< 0.003	0.00006	0.003	0.220	0.0465	< 0.01	0.00003
27-Nov-12	31	470	465	7.37	367	62	#N/A	4.2	14.0	16	< 0.2	< 0.06	25.4	0.0620	< 0.0002	0.0003	0.00273	< 0.00002	< 0.00001	0.0020	0.000038	9.74	< 0.0005	0.000055	0.0005	< 0.003	< 0.00002	0.004	0.252	0.0527	< 0.01	0.00002
04-Dec-12	32	470	465	7.47	346	64	#N/A	2.1	12.3	18	< 0.2	< 0.06	29.2	0.0600	< 0.0002	< 0.0002	0.00270	< 0.00002	< 0.00001	0.0013	0.000041	11.2	< 0.0005	0.000057	0.0006	< 0.003	< 0.00002	0.004	0.280	0.0577	0.01	0.00003
11-Dec-12	33	470	470	7.45	353	76	#N/A	2.0	14.0	20	< 0.2	< 0.06	30.7	0.0648	0.0002	< 0.0002	0.00316	< 0.00002	0.00001	0.0019	0.000051	11.8	< 0.0005	0.000112	< 0.0005	< 0.003	< 0.00002	0.005	0.272	0.0542	< 0.01	0.00001
18-Dec-12	34	470	430	7.39	329	61	#N/A	2.4	12.2	17	< 0.2	< 0.06	26.8	0.0751	< 0.0002	< 0.0002	0.00287	< 0.00002	< 0.00001	0.0013	0.000045	10.3	< 0.0005	0.000048	0.0005	< 0.003	< 0.00002	0.004	0.262	0.0438	< 0.01	0.00004
25-Dec-12	35	470	420	7.36	354	61	#N/A	3.0	11.0	18	< 0.2	< 0.06	26.3	0.0636	< 0.0002	0.0002	0.00258	< 0.00002	< 0.00001	0.0011	0.000040	10.1	< 0.0005	0.000050	< 0.0005	< 0.003	< 0.00002	0.004	0.282	0.0363	< 0.01	0.00004
01-Jan-13	36	470	455	7.50	343	56	#N/A	2.5	14.0	16	< 0.2	< 0.06	22.6	0.0741	< 0.0002	< 0.0002	0.00233	< 0.00002	< 0.00001	0.0012	0.000031	8.74	< 0.0005	0.000050	< 0.0005	< 0.003	< 0.00002	0.003	0.194	0.0294	< 0.01	0.00003
08-Jan-13	37	470	425	7.54	326	55	#N/A	2.8	12.7	12	< 0.2	< 0.06	23.2	0.0751	< 0.0002	< 0.0002	0.00230	< 0.00002	< 0.00001	0.0015	0.000038	8.95	< 0.0005	0.000085	0.0006	< 0.003	0.00003	0.004	0.198	0.0311	< 0.01	0.00003
15-Jan-13	38	470	420	7.43	293	59	#N/A	2.6	12.5	16	< 0.2	< 0.06	24.5	0.0657	0.0003	0.0002	0.00288	< 0.00002	< 0.00001	0.0011	0.000023	9.44	< 0.0005	0.000034	< 0.0005	0.013	< 0.00002	0.003	0.228	0.0391	< 0.01	0.00003
22-Jan-13	39	470	430	7.39	347	58	#N/A	3.5	11.9	17	< 0.2	< 0.06	24.2	0.0691	< 0.0002	0.0002	0.00271	< 0.00002	< 0.00001	0.0014	0.000043	9.30	< 0.0005	0.000048	< 0.0005	< 0.003	< 0.00002	0.004	0.227	0.0379	< 0.01	0.00002
29-Jan-13	40	470	425	7.46	326	63	#N/A	2.5	10.7	20	< 0.2	< 0.06	29.4	0.0653	< 0.0002	0.0002	0.00251	< 0.00002	< 0.00001	0.0011	0.000044	11.3	< 0.0005	0.000057	0.0009	0.004	0.00002	0.003	0.257	0.0419	< 0.01	0.00005
05-Feb-13	41	470	430	7.39	341	63	#N/A	3.1	10.3	18																						
12-Feb-13	42	470	425	7.47	366	65	#N/A	4.7	11.8	20																						

Sept 11/12 Change in analytical schedule.
Sept 25/12 Change in analytical shedule

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Sample = L032104

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
01-May-12	1	0.0004	< 0.009	6.09	< 0.00004	0.52	< 0.00001	9.72	0.0810	15.6	< 0.00002	0.00043	0.0003	0.000006	0.00108	0.002	< 0.00001	CA14188-MAY12	1.50	1.44	-0.06	-1.9%
08-May-12	2	0.0004	< 0.009	3.77	0.00006	0.47	< 0.00001	7.31	0.0627	14.5	< 0.00002	0.00085	< 0.0001	0.000012	0.00083	0.003	< 0.00001	CA14348-MAY12	1.13	1.13	-0.01	-0.2%
15-May-12	3	0.0002	< 0.009	4.00	0.00011	0.59	< 0.00001	5.76	0.0800	16.8	< 0.00002	0.00053	0.0002	0.000014	0.00110	0.002	< 0.00001	CA14621-MAY12	1.17	1.18	0.01	0.6%
22-May-12	4	0.0003	< 0.009	2.75	0.00057	0.52	< 0.00001	2.75	0.0567	11.6	< 0.00002	0.00051	0.0003	0.000007	0.00117	0.006	< 0.00001	CA10508-MAY12	0.82	0.86	0.04	2.3%
29-May-12	5	< 0.0001	< 0.009	2.47	0.00024	0.50	0.00002	1.94	0.0483	9.52	< 0.00002	0.00058	0.0002	0.000005	0.00111	0.002	< 0.00001	CA15134-MAY12	0.68	0.76	0.08	5.4%
05-Jun-12	6	< 0.0001	< 0.009	2.01	< 0.00004	0.54	< 0.00001	1.33	0.0441	6.89	< 0.00002	0.00045	0.0003	0.000008	0.00109	0.001	< 0.00001	CA15135-JUN12	0.70	0.72	0.02	1.7%
12-Jun-12	7	0.0002	< 0.009	1.87	0.00019	0.51	< 0.00001	1.22	0.0421	7.06	< 0.00002	0.00033	0.0001	0.000005	0.00110	0.003	< 0.00001	CA15174-JUN12	0.66	0.70	0.04	2.9%
19-Jun-12	8	0.0003	< 0.009	1.64	0.00009	0.50	< 0.00001	0.94	0.0376	6.25	< 0.00002	0.00028	0.0001	0.000001	0.00105	0.002	< 0.00001	CA15309-JUN12	0.67	0.65	-0.02	-1.4%
26-Jun-12	9	0.0002	< 0.009	1.65	0.00009	0.55	0.00001	0.94	0.0389	7.55	< 0.00002	0.00035	0.0005	0.000010	0.00130	0.003	0.00001	CA15357-JUN12	0.62	0.66	0.03	2.6%
03-Jul-12	10	< 0.0001	< 0.009	1.35	< 0.00004	0.42	0.00006	0.67	0.0297	6.42	< 0.00002	0.00052	0.0002	0.000264	0.00090	0.003	< 0.00001	CA15021-JUL12	0.61	0.53	-0.08	-7.2%
10-Jul-12	11	0.0002	< 0.009	1.43	0.00010	0.44	0.00004	0.69	0.0321	5.85	< 0.00002	0.00025	0.0002	0.000003	0.00109	0.002	< 0.00001	CA15118-JUL12	0.54	0.57	0.03	3.0%
17-Jul-12	12	0.0025	< 0.009	1.39	0.00010	0.49	0.00004	0.59	0.0318	7.38	< 0.00002	0.00020	0.0003	0.000001	0.00116	0.002	< 0.00001	CA15186-JUL12	0.52	0.57	0.05	4.7%
24-Jul-12	13	< 0.0001	< 0.009	1.26	0.00024	0.45	0.00004	0.55	0.0296	6.15	< 0.00002	0.00021	0.0003	0.000008	0.00101	0.002	< 0.00001	CA15302-JUL12	0.51	0.56	0.05	4.4%
31-Jul-12	14	< 0.0001	< 0.009	1.15	< 0.00004	0.42	0.00006	0.47	0.0268	5.89	< 0.00002	0.00011	< 0.0001	0.000001	0.00116	0.002	< 0.00001	CA15010-AUG12	0.46	0.50	0.04	3.8%
07-Aug-12	15	0.0002	< 0.009	1.27	< 0.00004	0.52	< 0.00001	0.55	0.0331	6.63	< 0.00002	0.00029	0.0003	0.000009	0.00146	0.003	< 0.00001	CA15071-AUG12	0.56	0.60	0.04	3.8%
14-Aug-12	16	0.0002	< 0.009	1.38	0.00007	0.48	< 0.00001	0.46	0.0326	6.28	< 0.00002	0.00014	< 0.0001	0.000006	0.00081	0.004	< 0.00001	CA15151-AUG12	0.56	0.60	0.04	3.0%
21-Aug-12	17	0.0003	< 0.009	1.12	< 0.00004	0.44	0.00003	0.35	0.0303	6.08	< 0.00002	0.00031	0.0003	0.000006	0.00103	0.002	< 0.00001	CA15239-AUG12	0.59	0.60	0.00	0.3%
28-Aug-12	18	0.0002	< 0.009	1.15	0.00008	0.46	0.00001	0.33	0.0283	5.04	< 0.00002	0.00051	0.0001	0.000008	0.00092	0.004	< 0.00001	CA15348-AUG12	0.63	0.58	-0.05	-4.1%
04-Sep-12	19	< 0.0001	< 0.009	0.956	< 0.00004	0.35	< 0.00001	0.34	0.0285	5.43	< 0.00002	0.00009	< 0.0001	0.000006	0.00069	0.002	< 0.00001	CA15317-SEP12	0.51	0.55	0.04	4.1%
11-Sep-12	20	< 0.0001	< 0.009	1.16	< 0.00004	0.41	0.00001	0.35	0.0312	7.27	< 0.00002	0.00025	0.0001	0.000010	0.00082	0.002	< 0.00001	CA15405-SEP12	0.57	0.61	0.04	3.5%
18-Sep-12	21																					
25-Sep-12	22	0.0009	< 0.009	0.987	0.00012	0.41	0.00001	0.25	0.0221	4.12	< 0.00002	0.00107	< 0.0001	0.000017	0.00081	0.003	< 0.00001	CA15672-SEP12	0.50	0.48	-0.02	-2.4%
02-Oct-12	23	0.0001	< 0.009	0.912	< 0.00004	0.35	0.00001	0.20	0.0186	3.42	< 0.00002	0.00017	< 0.0001	0.000007	0.00070	0.002	< 0.00001	CA15354-OCT12	0.42	0.42	0.00	-0.4%
09-Oct-12	24	0.0003	< 0.009	0.825	< 0.00004	0.34	< 0.00001	0.17	0.0180	3.28	< 0.00002	0.00038	< 0.0001	0.000013	0.00068	0.002	< 0.00001	CA15450-OCT12	0.47	0.44	-0.03	-3.0%
16-Oct-12	25	0.0001	< 0.009	0.782	< 0.00004	0.28	< 0.00001	0.20	0.0162	3.08	< 0.00002	0.00014	0.0001	0.000002	0.00059	0.002	< 0.00001	CA15570-OCT12	0.41	0.39	-0.02	-2.5%
23-Oct-12	26	0.0003	< 0.009	0.851	< 0.00004	0.32	< 0.00001	0.17	0.0170	3.13	< 0.00002	0.00021	0.0002	0.000005	0.00071	0.001	< 0.00001	CA15652-OCT12	0.51	0.41	-0.10	-10.7%
30-Oct-12	27	0.0002	< 0.009	0.927	< 0.00004	0.42	0.00001	0.18	0.0205	3.99	< 0.00002	0.00057	< 0.0001	0.000011	0.00074	0.002	< 0.00001	CA15744-OCT12	0.49	0.48	-0.01	-0.6%
06-Nov-12	28	0.0001	< 0.009	0.888	< 0.00004	0.37	0.00002	0.19	0.0188	3.68	< 0.00002	0.00028	< 0.0001	0.000003	0.00063	0.002	< 0.00001	CA11210-NOV12	0.42	0.46	0.04	5.0%
13-Nov-12	29	< 0.0001	< 0.009	0.777	< 0.00004	0.39	0.00003	0.14	0.0153	2.99	< 0.00002	0.00033	0.0002	0.000005	0.00062	0.003	< 0.00001	CA15251-NOV12	0.37	0.39	0.02	3.0%
20-Nov-12	30	0.0001	< 0.009	0.917	< 0.00004	0.40	0.00002	0.21	0.0222	4.34	< 0.00002	0.00019	0.0001	0.000006	0.00064	0.002	< 0.00001	CA15354-NOV12	0.52	0.51	-0.01	-0.7%
27-Nov-12	31	< 0.0001	< 0.009	0.928	0.00004	0.38	< 0.00001	0.20	0.0250	5.20	< 0.00002	0.00012	< 0.0001	0.000003	0.00029	0.003	< 0.00001	CA15376-NOV12	0.61	0.55	-0.06	-5.5%
04-Dec-12	32	< 0.0001	< 0.009	1.01	< 0.00004	0.38	< 0.00001	0.18	0.0288	6.70	< 0.00002	0.00018	< 0.0001	0.000010	0.00057	0.003	< 0.00001	CA15038-DEC12	0.62	0.63	0.00	0.4%
11-Dec-12	33	0.0001	< 0.009	1.08	0.00004	0.40	0.00003	0.20	0.0283	6.75	< 0.00002	0.00006	< 0.0001	0.000012	0.00061	0.004	< 0.00001	CA15164-JAN13	0.70	0.66	-0.04	-3.0%
18-Dec-12	34	0.0004	< 0.009	0.968	< 0.00004	0.32	0.00003	0.20	0.0256	6.44	< 0.00002	0.00009	0.0003	0.000007	0.00071	0.002	< 0.00001	CA15269-DEC12	0.60	0.58	-0.02	-1.6%
25-Dec-12	35	< 0.0001	< 0.009	0.889	< 0.00004	0.23	< 0.00001	0.16	0.0269	6.42	< 0.00002	0.00010	< 0.0001	0.000002	0.00041	0.003	< 0.00001	CA15361-DEC12	0.60	0.57	-0.03	-2.6%
01-Jan-13	36	0.0001	0.009	0.753	< 0.00004	0.32	0.00002	0.15	0.0210	4.94	< 0.00002	0.00012	< 0.0001	0.000003	0.00064	0.003	< 0.00001	CA15056-JAN13	0.61	0.49	-0.13	-11.5%
08-Jan-13	37	< 0.0001	< 0.009	0.891	0.00006	0.31	0.00001	0.16	0.0195	4.80	< 0.00002	0.00028	< 0.0001	0.000004	0.00065	0.003	< 0.00001	CA15153-JAN13	0.50	0.50	0.00	-0.2%
15-Jan-13	38	0.0002	0.011	0.895	< 0.00004	0.29	< 0.00001	0.16	0.0215	5.75	< 0.00002	0.00012	0.0001	0.000003	0.00055	0.002	< 0.00001	CA15281-JAN13	0.58	0.53	-0.06	-5.0%
22-Jan-13	39	0.0003	< 0.009	0.856	< 0.00004	0.27	< 0.00001	0.09	0.0208	5.80	< 0.00002	0.00009	< 0.0001	0.000002	0.00058	0.003	< 0.00001	CA15382-JAN13	0.59	0.52	-0.07	-6.6%
29-Jan-13	40	0.0002	< 0.009	0.926	< 0.00004	0.28	< 0.00001	0.21	0.0246	7.27	< 0.00002	0.00030	0.0002	0.000003	0.00062	0.004	< 0.00001	CA15465-JAN13	0.63	0.63	0.00	-0.2%
05-Feb-13	41																					
12-Feb-13	42																					

HC 18 *CONFIDENTIAL* *DRAFT*

Sample = L032148

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
01-May-12	1	445	360	7.72	310	143	#N/A	5.9	32.3	32	3.8	< 0.06	50.2	0.115	0.0009	0.0011	0.0128	< 0.00002	< 0.00001	0.0244	< 0.000003	13.6	< 0.0005	0.000065	0.0038	0.005	0.00015	< 0.001	3.94	0.0048	0.02	0.00223
08-May-12	2	500	475	7.98	332	115	#N/A	1.8	27.1	24	3.1	< 0.06	40.0	0.112	0.0007	0.0009	0.00644	< 0.00002	< 0.00001	0.0262	< 0.000003	10.5	< 0.0005	0.000036	0.0022	0.007	< 0.00002	0.001	3.38	0.0081	0.01	0.00217
15-May-12	3	445	395	7.83	278	104	#N/A	2.1	26.4	21	1.4	0.06	39.0	0.142	0.0006	0.0009	0.00785	< 0.00002	< 0.00001	0.0201	< 0.000003	10.4	< 0.0005	0.000030	0.0019	0.003	0.00003	0.002	3.19	0.0096	0.01	0.00138
22-May-12	4	500	450	7.75	300	66	#N/A	2.7	24.5	8	0.3	< 0.06	27.6	0.137	0.0004	0.0007	0.00521	< 0.00002	< 0.00001	0.0107	< 0.000003	7.82	< 0.0005	0.000020	0.0010	< 0.003	< 0.00002	0.001	1.96	0.0097	0.03	0.00057
29-May-12	5	445	405	7.65	304	61	#N/A	2.5	25.3	7	< 0.2	< 0.06	27.5	0.137	0.0004	0.0007	0.00517	< 0.00002	< 0.00001	0.0105	< 0.000003	8.10	< 0.0005	0.000024	0.0014	0.005	< 0.00002	0.001	1.76	0.0121	0.01	0.00042
05-Jun-12	6	445	405	7.60	351	56	#N/A	3.2	24.5	5	< 0.2	< 0.06	25.6	0.115	0.0004	0.0006	0.00544	< 0.00002	< 0.00001	0.0089	< 0.000003	7.56	< 0.0005	0.000029	0.0013	< 0.003	< 0.00002	0.001	1.64	0.0141	0.01	0.00065
12-Jun-12	7	445	405	7.68	328	53	#N/A	2.9	24.3	5	0.3	< 0.06	24.7	0.118	0.0004	0.0008	0.00510	< 0.00002	< 0.00001	0.0072	< 0.000003	7.38	< 0.0005	0.000011	0.0007	0.004	< 0.00002	< 0.001	1.53	0.0157	0.03	0.00027
19-Jun-12	8	445	400	7.66	339	51	#N/A	2.0	22.9	5	< 0.2	< 0.06	23.4	0.112	0.0004	0.0007	0.00451	< 0.00002	< 0.00001	0.0071	< 0.000003	6.97	< 0.0005	0.000045	0.0010	< 0.003	< 0.00002	< 0.001	1.45	0.0159	< 0.01	0.00021
26-Jun-12	9	445	435	7.92	307	49	#N/A	2.1	26.5	5	< 0.2	< 0.06	23.8	0.113	0.0003	0.0006	0.00508	< 0.00002	< 0.00001	0.0056	< 0.000003	7.67	< 0.0005	< 0.000002	0.0011	0.004	0.00004	< 0.001	1.14	0.0176	0.02	0.00018
03-Jul-12	10	445	460	7.65	344	45	#N/A	6.1	23.5	4	< 0.2	< 0.06	20.9	0.0870	0.0003	0.0006	0.00422	< 0.00002	< 0.00001	0.0040	< 0.000003	6.53	< 0.0005	0.000013	0.0009	< 0.003	< 0.00002	< 0.001	1.13	0.0164	0.01	0.00023
10-Jul-12	11	445	420	7.53	293	50	#N/A	3.1	23.8	6	< 0.2	< 0.06	22.8	0.109	0.0004	0.0005	0.00458	< 0.00002	< 0.00001	0.0049	< 0.000003	7.21	< 0.0005	0.000013	0.0011	0.006	0.00004	< 0.001	1.17	0.0167	0.02	0.00016
17-Jul-12	12	445	400	7.73	333	46	#N/A	1.4	21.9	5	< 0.2	< 0.06	22.3	0.0998	0.0003	0.0006	0.00458	< 0.00002	< 0.00001	0.0045	< 0.000003	6.91	< 0.0005	0.000059	0.0006	< 0.003	< 0.00002	< 0.001	1.22	0.0172	< 0.01	0.00016
24-Jul-12	13	445	400	7.50	312	48	#N/A	2.0	22.7	6	< 0.2	< 0.06	22.4	0.0923	0.0002	0.0007	0.00429	< 0.00002	< 0.00001	0.0035	< 0.000003	7.06	< 0.0005	0.000025	0.0008	< 0.003	< 0.00002	< 0.001	1.16	0.0199	0.02	0.00017
31-Jul-12	14	445	400	7.68	320	47	#N/A	1.7	21.7	5	< 0.2	< 0.06	23.1	0.118	0.0003	0.0005	0.00446	< 0.00002	< 0.00001	0.0035	< 0.000003	7.29	< 0.0005	0.000010	0.0008	< 0.003	< 0.00002	< 0.001	1.20	0.0158	< 0.01	0.00015
07-Aug-12	15	445	440	7.76	310	46	#N/A	2.0	23.4	4	< 0.2	< 0.06	23.1	0.135	0.0004	0.0007	0.00439	< 0.00002	< 0.00001	0.0053	< 0.000003	7.32	< 0.0005	0.000026	0.0012	0.004	0.00004	< 0.001	1.18	0.0167	0.01	0.00016
14-Aug-12	16	445	395	7.56	265	47	#N/A	2.2	22.4	4	< 0.2	< 0.06	22.0	0.114	0.0003	0.0008	0.00411	< 0.00002	< 0.00001	0.0039	< 0.000003	6.87	< 0.0005	0.000015	0.0010	< 0.003	< 0.00002	< 0.001	1.19	0.0181	< 0.01	0.00016
21-Aug-12	17	445	405	7.48	273	47	#N/A	2.5	21.6	5	< 0.2	< 0.06	21.9	0.154	0.0005	0.0005	0.00372	< 0.00002	0.00003	0.0035	< 0.000003	6.97	< 0.0005	0.000027	0.0016	0.005	0.00003	< 0.001	1.09	0.0203	0.04	0.00017
28-Aug-12	18	445	400	7.46	378	48	#N/A	4.2	23.9	4	< 0.2	< 0.06	21.6	0.0993	0.0003	0.0006	0.00356	< 0.00002	< 0.00001	0.0032	< 0.000003	6.92	< 0.0005	0.000020	0.0012	< 0.003	0.00003	< 0.001	1.05	0.0218	< 0.01	0.00015
04-Sep-12	19	445	410	7.37	382	41	#N/A	3.9	21.1	5	< 0.2	< 0.06	20.6	0.0926	0.0003	0.0005	0.00379	< 0.00002	< 0.00001	0.0035	< 0.000003	6.78	< 0.0005	0.000019	0.0005	< 0.003	< 0.00002	< 0.001	0.900	0.0168	0.09	0.00014
11-Sep-12	20	445	400	7.60	343	40	#N/A	2.2	21.1	6	< 0.2	< 0.06	20.4	0.0661	0.0003	0.0007	0.00367	< 0.00002	< 0.00001	0.0028	< 0.000003	6.56	< 0.0005	0.000022	0.0006	< 0.003	< 0.00002	< 0.001	0.969	0.0151	0.01	0.00009
18-Sep-12	21	445	400	7.65	338	43																										
25-Sep-12	22	445	390	7.56	340	40	#N/A	2.3	23.4	5	< 0.2	< 0.06	19.4	0.0739	0.0002	0.0005	0.00343	< 0.00002	< 0.00001	0.0022	< 0.000003	6.36	< 0.0005	0.000011	0.0006	< 0.003	0.00003	< 0.001	0.856	0.0180	0.03	0.00010
02-Oct-12	23	445	390	7.60	363	38	#N/A	2.6	23.1	3	< 0.2	< 0.06	18.4	0.0564	0.0003	0.0006	0.00331	< 0.00002	< 0.00001	0.0026	< 0.000003	5.96	< 0.0005	0.000074	0.0008	< 0.003	< 0.00002	< 0.001	0.850	0.0179	< 0.01	0.00010
09-Oct-12	24	445	415	7.49	350	35	#N/A	4.0	21.5	4	< 0.2	< 0.06	17.0	0.0640	0.0002	0.0005	0.00324	< 0.00002	< 0.00001	0.0025	< 0.000003	5.73	< 0.0005	0.000010	0.0279	0.044	0.00052	< 0.001	0.645	0.0177	0.01	0.00011
16-Oct-12	25	445	455	7.70	379	34	#N/A	4.4	21.8	5	< 0.2	< 0.06	16.9	0.0621	< 0.0002	0.0004	0.00279	< 0.00002	< 0.00001	0.0024	< 0.000003	5.64	< 0.0005	0.000008	0.0005	< 0.003	< 0.00002	< 0.001	0.692	0.0163	< 0.01	0.00008
23-Oct-12	26	445	400	7.40	335	39	#N/A	3.9	21.8	5	< 0.2	< 0.06	18.1	0.0674	< 0.0002	0.0004	0.00326	< 0.00002	< 0.00001	0.0013	< 0.000003	5.99	< 0.0005	0.000045	0.0008	0.003	< 0.00002	< 0.001	0.768	0.0155	0.01	0.00012
30-Oct-12	27	445	390	7.46	346	37	#N/A	3.3	22.4	3	< 0.2	< 0.06	18.6	0.0660	< 0.0002	0.0004	0.00346	< 0.00002	< 0.00001	0.0024	0.000322	6.06	< 0.0005	< 0.000002	0.0006	< 0.003	< 0.00002	< 0.001	0.838	0.0162	0.01	0.00012
06-Nov-12	28	445	395	7.68	335	32	#N/A	2.3	21.3	2	< 0.2	< 0.06	17.7	0.0506	0.0002	0.0006	0.00317	< 0.00002	< 0.00001	0.0024	< 0.000003	5.83	< 0.0005	0.000020	0.0007	< 0.003	< 0.00002	< 0.001	0.748	0.0155	< 0.01	0.00011
13-Nov-12	29	445	395	7.59	350	32	#N/A	4.5	21.4	5	< 0.2	< 0.06	17.9	0.0472	< 0.0002	0.0005	0.00312	< 0.00002	< 0.00001	0.0021	< 0.000003	5.99	< 0.0005	0.000029	< 0.0005	< 0.003	< 0.00002	< 0.001	0.712	0.0191	< 0.01	0.00008
20-Nov-12	30	445	420	7.74	375	38	#N/A	5.2	24.3	3	< 0.2	< 0.06	20.1	0.0479	0.0003	0.0007	0.00425	< 0.00002	< 0.00001	0.0014	< 0.000003	6.91	< 0.0005	0.000123	0.0008	< 0.003	< 0.00002	< 0.001	0.697	0.0177	< 0.01	0.00014
27-Nov-12	31	445	450	7.47	348	39	#N/A	4.3	24.2	4	< 0.2	< 0.06	19.8	0.0407	0.0002	0.0005	0.00369	< 0.00002	< 0.00001	0.0014	< 0.000003	6.73	< 0.0005	< 0.000002	< 0.0005	< 0.003	< 0.00002	< 0.001	0.720	0.0161	< 0.01	0.00010
04-Dec-12	32	445	445	7.79	335	34	#N/A	1.4	22.0	4	< 0.2	< 0.06	18.0	0.0426	0.0003	0.0005	0.00393	< 0.00002	< 0.00001	0.0009	< 0.000003	6.10	< 0.0005	< 0.000002	0.0005	< 0.003	< 0.00002	< 0.001	0.685	0.0127	0.01	0.00013
11-Dec-12	33	445	425	7.70	343	36	#N/A	1.7	21.6	4	< 0.2	< 0.06	18.8	0.0548	0.0004	0.0007	0.00403	< 0.00002	< 0.00001	0.0013	< 0.000003	6.37	< 0.0005	0.000055	0.0007	< 0.003	< 0.00002	< 0.001	0.709	0.0106	< 0.01	0.00020
18-Dec-12	34	445	400	7.60	315	33	#N/A	1.9	16.8	3	< 0.2	< 0.06	16.8	0.0620	0.0002	0.0006	0.00359	< 0.00002	< 0.00001	0.0008	< 0.000003	5.63	< 0.0005	0.000016	0.0006	0.003	0.00003	< 0.001	0.653	0.0107	< 0.01	0.00026
25-Dec-12	35	445	375	7.55	349	34	#N/A	2.6	16.7	3	< 0.2	< 0.06	18.1	0.0535	0.0002	0.0007	0.00363	< 0.00002	< 0.00001	0.0010	< 0.000003	5.75	< 0.0005	0.000024	0.0007	< 0.003	< 0.00002	< 0.001	0.902	0.0109	< 0.01	0.00033
01-Jan-13	36	445	405	7.64	338	31	#N/A	2.3	16.8	3	< 0.2	< 0.06	13.9	0.0521	0.0003	0.0006	0.00319	< 0.00002	< 0.00001	0.0007	< 0.000003	4.66	< 0.0005	0.000025	< 0.0005	0.005	0.00003	< 0.001	0.558	0.0111	< 0.01	0.00023
08-Jan-13	37	445	395	7.72	322	33	#N/A	2.5	16.6	2	< 0.2	< 0.06	16.8	0.0621	0.0003	0.0006	0.00344	< 0.00002	< 0.00001	0.0012	0.000009	5.66	< 0.0005	0.000067	0.0011	0.005	0.00002	< 0.001	0.651	0.0087	< 0.01	0.00024
15-Jan-13	38	445	440	7.81	280	38	#N/A	2.2	22.1	4	< 0.2	< 0.06	17.8	0.0437	0.0003	0.0006	0.00435	< 0.00002	< 0.00001	0.0011	< 0.000003	6.05	< 0.0005	0.000023	0.0006	0.018	< 0.00002	< 0.001	0.655	0.0121	< 0.01	0.00022
22-Jan-13	39	445	405	7.58	337	33	#N/A	3.0	16.7	4	< 0.2	< 0.06	15.6	0.0617	0.0002	0.0007	0.00349	< 0.00002	< 0.00001	0.0009	< 0.000003	5.31	< 0.0005	0.000024	< 0.0005	0.006	0.00003	< 0.001	0.578	0.0105	< 0.01	0.00020
29-Jan-13	40	445	400	7.68	315	31	#N/A	2.1	15.1	5	< 0.2	< 0.06	16.0	0.0567	< 0.0002	0.0006	0.00299	< 0.00002	< 0.00001	0.0006	< 0.000003	5.41	< 0.0005	0.000028	0.0009	0.004	< 0.00002	< 0.001	0.612	0.0103	< 0.01	0.00019
05-Feb-13	41	445	410	7.63	340	31	#N/A	2.7	14.3	5																						
12-Feb-13	42	445	380	7.67	355	32	#N/A	4.0	16.5	4																						

Sept 11/12 Change in analytical schedule.
Sept 25/12 Change in analytical shedule

HC 18

Sample = L032148

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
01-May-12	1	0.0004	< 0.009	3.28	0.00031	0.81	< 0.00001	5.94	0.279	10.7	< 0.00002	0.00040	0.0007	0.000018	0.00178	0.002	0.00018	CA14188-MAY12	1.42	1.37	-0.05	-1.7%
08-May-12	2	0.0004	< 0.009	2.38	0.00045	0.67	< 0.00001	4.24	0.228	8.62	< 0.00002	0.00078	0.0001	0.000018	0.00149	0.002	0.00007	CA14348-MAY12	1.13	1.07	-0.06	-2.6%
15-May-12	3	0.0002	< 0.009	2.00	0.00029	0.81	< 0.00001	3.08	0.227	7.65	< 0.00002	0.00051	0.0005	0.000020	0.00181	0.002	0.00004	CA14621-MAY12	1.01	0.99	-0.01	-0.6%
22-May-12	4	0.0001	< 0.009	1.12	0.00020	0.64	< 0.00001	1.36	0.139	3.74	< 0.00002	0.00048	0.0004	0.000018	0.00156	0.001	0.00003	CA10508-MAY12	0.67	0.66	-0.01	-0.4%
29-May-12	5	< 0.0001	< 0.009	0.941	0.00020	0.66	< 0.00001	0.89	0.127	2.86	< 0.00002	0.00071	0.0003	0.000016	0.00162	0.003	0.00002	CA15134-MAY12	0.65	0.63	-0.02	-1.5%
05-Jun-12	6	< 0.0001	< 0.009	0.750	0.00006	0.62	< 0.00001	0.73	0.117	2.71	< 0.00002	0.00035	0.0002	0.000016	0.00154	0.002	< 0.00001	CA15135-JUN12	0.59	0.58	-0.01	-1.1%
12-Jun-12	7	0.0002	< 0.009	0.625	0.00009	0.60	< 0.00001	0.56	0.105	2.20	< 0.00002	0.00024	0.0003	0.000015	0.00150	0.002	0.00001	CA15174-JUN12	0.59	0.55	-0.04	-3.4%
19-Jun-12	8	0.0001	< 0.009	0.511	0.00014	0.57	< 0.00001	0.44	0.0938	2.08	< 0.00002	0.00024	0.0004	0.000013	0.00163	0.001	< 0.00001	CA15309-JUN12	0.56	0.52	-0.05	-4.3%
26-Jun-12	9	0.0002	< 0.009	0.407	< 0.00004	0.60	< 0.00001	0.32	0.0856	1.46	< 0.00002	0.00045	0.0003	0.000020	0.00162	0.002	< 0.00001	CA15357-JUN12	0.63	0.52	-0.12	-10.1%
03-Jul-12	10	< 0.0001	< 0.009	0.364	< 0.00004	0.47	< 0.00001	0.31	0.0808	1.80	< 0.00002	0.00019	0.0001	0.000035	0.00116	0.001	0.00001	CA15021-JUL12	0.55	0.45	-0.10	-9.8%
10-Jul-12	11	< 0.0001	< 0.009	0.356	0.00010	0.58	< 0.00001	0.31	0.0833	1.79	< 0.00002	0.00046	0.0002	0.000022	0.00145	0.006	< 0.00001	CA15118-JUL12	0.60	0.49	-0.11	-9.8%
17-Jul-12	12	0.0026	< 0.009	0.353	0.00011	0.56	< 0.00001	0.29	0.0813	2.06	< 0.00002	0.00016	0.0005	0.000016	0.00158	0.002	< 0.00001	CA15186-JUL12	0.54	0.48	-0.06	-5.9%
24-Jul-12	13	< 0.0001	< 0.009	0.310	0.00015	0.53	< 0.00001	0.26	0.0791	1.95	< 0.00002	0.00013	0.0002	0.000015	0.00126	0.001	< 0.00001	CA15302-JUL12	0.58	0.48	-0.10	-9.4%
31-Jul-12	14	< 0.0001	< 0.009	0.264	< 0.00004	0.53	< 0.00001	0.26	0.0863	1.83	< 0.00002	0.00013	0.0004	0.000022	0.00166	0.001	< 0.00001	CA15010-AUG12	0.54	0.50	-0.04	-3.9%
07-Aug-12	15	0.0001	< 0.009	0.266	< 0.00004	0.61	< 0.00001	0.24	0.0810	1.97	< 0.00002	0.00034	0.0006	0.000018	0.00174	0.002	0.00001	CA15071-AUG12	0.55	0.50	-0.05	-5.1%
14-Aug-12	16	0.0002	< 0.009	0.276	< 0.00004	0.57	< 0.00001	0.25	0.0787	2.08	< 0.00002	0.00014	0.0002	0.000021	0.00146	0.001	< 0.00001	CA15151-AUG12	0.53	0.47	-0.06	-5.7%
21-Aug-12	17	0.0002	< 0.009	0.214	< 0.00004	0.50	< 0.00001	0.22	0.0726	1.88	< 0.00002	0.00050	0.0003	0.000021	0.00149	0.002	0.00002	CA15239-AUG12	0.54	0.47	-0.06	-6.4%
28-Aug-12	18	0.0001	< 0.009	0.202	< 0.00004	0.48	< 0.00001	0.18	0.0696	1.58	< 0.00002	0.00049	0.0001	0.000046	0.00117	0.002	< 0.00001	CA15348-AUG12	0.56	0.46	-0.10	-10.1%
04-Sep-12	19	< 0.0001	< 0.009	0.156	< 0.00004	0.40	< 0.00001	0.16	0.0708	1.47	< 0.00002	0.00014	0.0001	0.000029	0.00095	< 0.001	< 0.00001	CA15317-SEP12	0.53	0.44	-0.09	-9.4%
11-Sep-12	20	< 0.0001	< 0.009	0.219	< 0.00004	0.50	< 0.00001	0.17	0.0697	1.60	< 0.00002	0.00005	< 0.0001	0.000013	0.00089	< 0.001	< 0.00001	CA15405-SEP12	0.55	0.43	-0.12	-11.9%
18-Sep-12	21																					
25-Sep-12	22	0.0001	< 0.009	0.192	0.00007	0.46	< 0.00001	0.15	0.0592	1.03	< 0.00002	0.00013	0.0001	0.000040	0.00103	0.002	< 0.00001	CA15672-SEP12	0.57	0.41	-0.16	-16.6%
02-Oct-12	23	< 0.0001	< 0.009	0.223	< 0.00004	0.47	< 0.00001	0.14	0.0551	0.97	< 0.00002	0.00005	< 0.0001	0.000028	0.00097	< 0.001	< 0.00001	CA115354-OCT12	0.53	0.39	-0.14	-15.1%
09-Oct-12	24	0.0002	< 0.009	0.162	0.00007	0.41	< 0.00001	0.12	0.0487	0.81	< 0.00002	0.00778	0.0001	0.000028	0.00092	0.015	< 0.00001	CA15450-OCT12	0.51	0.36	-0.16	-18.0%
16-Oct-12	25	0.0001	< 0.009	0.160	< 0.00004	0.37	< 0.00001	0.14	0.0460	1.05	< 0.00002	0.00011	< 0.0001	0.000026	0.00084	0.001	< 0.00001	CA15570-OCT12	0.54	0.36	-0.18	-20.4%
23-Oct-12	26	0.0002	< 0.009	0.181	0.00007	0.46	< 0.00001	0.13	0.0539	0.92	< 0.00002	0.00018	0.0001	0.000031	0.00098	< 0.001	< 0.00001	CA15652-OCT12	0.54	0.38	-0.16	-17.2%
30-Oct-12	27	0.0002	< 0.009	0.200	< 0.00004	0.51	< 0.00001	0.13	0.0569	0.84	< 0.00002	0.00017	< 0.0001	0.000040	0.00098	0.001	< 0.00001	CA15744-OCT12	0.51	0.39	-0.12	-13.2%
06-Nov-12	28	0.0001	< 0.009	0.170	0.00005	0.49	< 0.00001	0.12	0.0506	0.72	< 0.00002	0.00026	< 0.0001	0.000030	0.00085	0.002	< 0.00001	CA11210-NOV12	0.47	0.37	-0.10	-11.8%
13-Nov-12	29	< 0.0001	< 0.009	0.159	0.00005	0.53	< 0.00001	0.11	0.0477	0.68	< 0.00002	0.00010	0.0002	0.000028	0.00088	0.001	< 0.00001	CA15251-NOV12	0.53	0.37	-0.16	-17.5%
20-Nov-12	30	< 0.0001	< 0.009	0.136	< 0.00004	0.56	0.00002	0.11	0.0584	0.82	< 0.00002	0.00024	0.0002	0.000031	0.00101	< 0.001	< 0.00001	CA115354-NOV12	0.55	0.42	-0.13	-13.5%
27-Nov-12	31	0.0002	< 0.009	0.130	< 0.00004	0.52	< 0.00001	0.11	0.0610	0.96	< 0.00002	0.00009	< 0.0001	0.000049	0.00057	< 0.001	< 0.00001	CA15376-NOV23	0.57	0.41	-0.16	-16.2%
04-Dec-12	32	< 0.0001	< 0.009	0.129	< 0.00004	0.47	< 0.00001	0.08	0.0608	0.98	< 0.00002	0.00008	0.0002	0.000047	0.00095	< 0.001	< 0.00001	CA15038-DEC12	0.52	0.37	-0.15	-16.6%
11-Dec-12	33	< 0.0001	< 0.009	0.145	0.00004	0.52	0.00002	0.11	0.0591	1.05	< 0.00002	0.00010	0.0002	0.000043	0.00123	< 0.001	< 0.00001	CA15164-JAN13	0.52	0.39	-0.12	-13.6%
18-Dec-12	34	0.0001	< 0.009	0.120	0.00004	0.37	0.00002	0.10	0.0504	1.18	< 0.00002	0.00013	0.0004	0.000032	0.00110	< 0.001	0.00001	CA15269-DEC12	0.40	0.35	-0.05	-6.4%
25-Dec-12	35	< 0.0001	< 0.009	0.128	0.00004	0.37	< 0.00001	0.11	0.0626	1.48	< 0.00002	0.00008	0.0002	0.000030	0.00091	< 0.001	< 0.00001	CA15361-DEC12	0.40	0.38	-0.02	-2.5%
01-Jan-13	36	< 0.0001	< 0.009	0.087	< 0.00004	0.34	0.00002	0.11	0.0398	0.91	< 0.00002	0.00018	0.0004	0.000029	0.00095	< 0.001	< 0.00001	CA15056-JAN13	0.40	0.29	-0.11	-15.3%
08-Jan-13	37	< 0.0001	< 0.009	0.129	< 0.00004	0.43	0.00002	0.11	0.0483	1.17	< 0.00002	0.00030	0.0003	0.000038	0.00111	0.001	0.00066	CA15153-JAN13	0.37	0.35	-0.02	-3.0%
15-Jan-13	38	0.0001	< 0.009	0.102	< 0.00004	0.41	< 0.00001	0.09	0.0559	1.23	< 0.00002	0.00010	< 0.0001	0.000044	0.00094	< 0.001	< 0.00001	CA15281-JAN13	0.53	0.37	-0.16	-17.5%
22-Jan-13	39	0.0002	< 0.009	0.086	< 0.00004	0.36	0.00001	0.02	0.0462	1.20	< 0.00002	0.00015	0.0003	0.000031	0.00099	0.001	< 0.00001	CA15382-JAN13	0.42	0.32	-0.09	-12.5%
29-Jan-13	40	0.0003	< 0.009	0.087	< 0.00004	0.31	< 0.00001	0.12	0.0441	1.22	< 0.00002	0.00026	0.0004	0.000026	0.00095	< 0.001	< 0.00001	CA15465-JAN13	0.41	0.34	-0.07	-9.5%
05-Feb-13	41																					
12-Feb-13	42																					

HC 19 *CONFIDENTIAL* *DRAFT*

Sample = L032097

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
01-May-12	1	500	415	7.74	307	125	#N/A	5.1	26.9	33	1.8	< 0.06	36.0	0.137	0.0011	0.0013	0.00173	< 0.00002	0.00002	0.0161	< 0.000003	12.3	< 0.0005	0.000151	0.0047	0.004	0.00009	0.004	1.26	0.0213	0.04	0.00142
08-May-12	2	500	460	7.80	339	105	#N/A	2.2	17.3	28	1.3	< 0.06	31.6	0.117	0.0014	0.0010	0.00149	< 0.00002	0.00002	0.0187	< 0.000003	10.6	< 0.0005	0.000095	0.0025	< 0.003	0.00003	0.004	1.24	0.0297	0.01	0.00161
15-May-12	3	500	475	7.74	285	88	#N/A	2.3	22.9	17	0.5	< 0.06	30.7	0.136	0.0015	0.0008	0.00133	< 0.00002	< 0.00001	0.0170	< 0.000003	10.3	< 0.0005	0.000067	0.0014	< 0.003	0.00002	0.004	1.19	0.0322	< 0.01	0.00137
22-May-12	4	500	450	7.57	315	65	#N/A	2.9	16.2	13	0.2	< 0.06	23.3	0.167	0.0010	0.0008	0.00090	< 0.00002	0.00001	0.0097	< 0.000003	7.91	< 0.0005	0.000048	0.0007	< 0.003	0.00003	0.002	0.854	0.0248	0.02	0.00088
29-May-12	5	500	440	7.48	316	54	#N/A	2.8	15.2	10	0.3	< 0.06	21.4	0.166	0.0009	0.0005	0.00075	< 0.00002	0.00001	0.0089	< 0.000003	7.34	< 0.0005	0.000051	0.0009	0.008	0.00006	0.002	0.747	0.0266	0.01	0.00059
05-Jun-12	6	500	445	7.50	355	50	#N/A	3.4	16.4	7	< 0.2	< 0.06	20.7	0.156	0.0008	0.0006	0.00083	< 0.00002	< 0.00001	0.0071	< 0.000003	7.11	< 0.0005	0.000051	0.0008	0.006	0.00002	0.002	0.710	0.0272	< 0.01	0.00068
12-Jun-12	7	500	480	7.60	335	48	#N/A	2.9	21.2	5	< 0.2	< 0.06	21.3	0.122	0.0010	0.0004	0.00072	< 0.00002	< 0.00001	0.0070	< 0.000003	7.46	< 0.0005	0.000028	< 0.0005	< 0.003	< 0.00002	0.002	0.647	0.0285	0.02	0.00036
19-Jun-12	8	500	450	7.51	351	41	#N/A	2.1	15.0	6	< 0.2	< 0.06	17.9	0.131	0.0007	0.0005	0.00057	< 0.00002	< 0.00001	0.0048	< 0.000003	6.26	< 0.0005	0.000064	0.0008	< 0.003	0.00002	0.001	0.538	0.0241	< 0.01	0.00028
26-Jun-12	9	500	445	7.26	333	41	#N/A	3.5	12.3	7	< 0.2	< 0.06	17.2	0.156	0.0006	0.0005	0.00065	< 0.00002	0.00001	0.0048	< 0.000003	6.06	< 0.0005	0.000004	0.0007	< 0.003	< 0.00002	0.001	0.510	0.0226	0.02	0.00031
03-Jul-12	10	500	435	7.52	358	39	#N/A	6.0	15.7	8	< 0.2	< 0.06	16.9	0.131	0.0006	0.0005	0.00062	< 0.00002	0.00001	0.0038	< 0.000003	5.99	< 0.0005	0.000030	0.0011	< 0.003	0.00007	< 0.001	0.482	0.0245	0.01	0.00030
10-Jul-12	11	500	470	7.45	308	44	#N/A	3.2	15.9	7	< 0.2	< 0.06	19.2	0.138	0.0008	0.0003	0.00061	< 0.00002	< 0.00001	0.0046	< 0.000003	6.84	< 0.0005	0.000026	0.0007	< 0.003	< 0.00002	< 0.001	0.507	0.0280	0.01	0.00026
17-Jul-12	12	500	455	7.60	347	40	#N/A	1.4	14.2	5	< 0.2	< 0.06	18.3	0.141	0.0006	0.0004	0.00067	< 0.00002	< 0.00001	0.0040	< 0.000003	6.59	< 0.0005	0.000071	< 0.0005	< 0.003	< 0.00002	< 0.001	0.446	0.0240	< 0.01	0.00019
24-Jul-12	13	500	440	7.36	322	39	#N/A	2.1	12.9	6	< 0.2	< 0.06	16.7	0.143	0.0004	0.0008	0.00051	< 0.00002	< 0.00001	0.0030	< 0.000003	5.95	< 0.0005	0.000049	0.0006	< 0.003	< 0.00002	< 0.001	0.436	0.0217	0.01	0.00019
31-Jul-12	14	500	450	7.46	334	37	#N/A	1.9	12.6	7	< 0.2	< 0.06	17.3	0.135	0.0005	0.0006	0.00055	< 0.00002	< 0.00001	0.0036	< 0.000003	6.24	< 0.0005	0.000032	0.0005	< 0.003	< 0.00002	< 0.001	0.427	0.0230	< 0.01	0.00019
07-Aug-12	15	500	465	7.53	324	38	#N/A	2.1	13.6	6	< 0.2	< 0.06	18.0	0.157	0.0006	0.0004	0.00064	< 0.00002	0.00001	0.0047	< 0.000003	6.48	< 0.0005	0.000028	0.0006	< 0.003	0.00003	< 0.001	0.434	0.0231	< 0.01	0.00024
14-Aug-12	16	500	460	7.41	278	40	#N/A	2.3	13.4	6	< 0.2	< 0.06	17.0	0.145	0.0005	0.0004	0.00070	< 0.00002	< 0.00001	0.0034	< 0.000003	6.11	< 0.0005	0.000036	0.0007	< 0.003	< 0.00002	< 0.001	0.415	0.0223	< 0.01	0.00022
21-Aug-12	17	500	455	7.37	286	38	#N/A	2.9	12.6	6	< 0.2	< 0.06	16.9	0.146	0.0006	0.0003	0.00046	< 0.00002	0.00001	0.0031	< 0.000003	6.16	< 0.0005	0.000032	0.0006	< 0.003	< 0.00002	< 0.001	0.379	0.0248	0.01	0.00024
28-Aug-12	18	500	470	7.27	380	40	#N/A	5.1	14.3	6	< 0.2	< 0.06	17.1	0.134	0.0005	0.0006	0.00049	< 0.00002	< 0.00001	0.0031	< 0.000003	6.22	< 0.0005	0.000035	0.0009	< 0.003	0.00002	< 0.001	0.371	0.0257	< 0.01	0.00023
04-Sep-12	19	500	465	7.17	391	35	#N/A	3.7	12.7	6	< 0.2	< 0.06	16.8	0.113	0.0005	0.0002	0.00043	< 0.00002	< 0.00001	0.0030	< 0.000003	6.19	< 0.0005	0.000028	< 0.0005	< 0.003	< 0.00002	< 0.001	0.319	0.0279	< 0.01	0.00019
11-Sep-12	20	500	450	7.41	360	38	#N/A	2.1	13.3	8	< 0.2	< 0.06	17.4	0.106	0.0004	0.0003	0.00058	< 0.00002	< 0.00001	0.0026	< 0.000003	6.44	< 0.0005	0.000033	0.0011	< 0.003	< 0.00002	< 0.001	0.306	0.0218	0.04	0.00016
18-Sep-12	21	500	440	7.40	351	37																										
25-Sep-12	22	500	445	7.41	349	33	#N/A	2.4	15.3	5	< 0.2	< 0.06	15.0	0.114	0.0003	0.0002	0.00045	< 0.00002	< 0.00001	0.0023	< 0.000003	5.62	< 0.0005	0.000015	0.0008	< 0.003	< 0.00002	< 0.001	0.247	0.0224	< 0.01	0.00011
02-Oct-12	23	500	440	7.41	372	30	#N/A	2.6	13.5	4	< 0.2	< 0.06	13.9	0.101	0.0004	0.0003	0.00041	< 0.00002	0.00001	0.0027	< 0.000003	5.10	< 0.0005	0.000082	0.0010	< 0.003	0.00003	< 0.001	0.274	0.0203	< 0.01	0.00013
09-Oct-12	24	500	445	7.38	363	29	#N/A	4.0	14.4	3	< 0.2	< 0.06	13.2	0.113	0.0003	0.0002	0.00041	< 0.00002	< 0.00001	0.0022	< 0.000003	4.88	< 0.0005	0.000011	0.0012	< 0.003	< 0.00002	< 0.001	0.246	0.0222	< 0.01	0.00010
16-Oct-12	25	500	460	7.54	389	28	#N/A	5.0	15.2	5	< 0.2	< 0.06	13.5	0.110	0.0002	0.0003	0.00057	< 0.00002	< 0.00001	0.0023	< 0.000003	5.09	< 0.0005	0.000020	0.0009	< 0.003	< 0.00002	< 0.001	0.188	0.0247	< 0.01	0.00008
23-Oct-12	26	500	460	7.31	352	31	#N/A	3.9	14.8	6	< 0.2	< 0.06	13.7	0.111	0.0002	< 0.0002	0.00036	< 0.00002	< 0.00001	0.0011	< 0.000003	5.16	< 0.0005	0.000078	0.0009	< 0.003	< 0.00002	< 0.001	0.191	0.0233	< 0.01	0.00011
30-Oct-12	27	500	455	7.32	356	30	#N/A	3.7	15.8	3	< 0.2	< 0.06	14.3	0.115	0.0002	< 0.0002	0.00064	< 0.00002	< 0.00001	0.0025	0.000315	5.39	< 0.0005	< 0.000002	0.0006	< 0.003	< 0.00002	< 0.001	0.203	0.0263	0.02	0.00007
06-Nov-12	28	500	455	7.55	346	25	#N/A	2.5	13.8	2	< 0.2	< 0.06	13.5	0.0956	0.0003	0.0005	0.00054	< 0.00002	< 0.00001	0.0024	< 0.000003	5.11	< 0.0005	0.000028	0.0005	< 0.003	< 0.00002	< 0.001	0.184	0.0231	< 0.01	0.00008
13-Nov-12	29	500	475	7.56	359	25	#N/A	4.4	14.0	3	< 0.2	< 0.06	13.5	0.0748	0.0002	< 0.0002	0.00035	< 0.00002	< 0.00001	0.0024	< 0.000003	5.14	< 0.0005	0.000034	< 0.0005	< 0.003	< 0.00002	< 0.001	0.168	0.0300	< 0.01	0.00008
20-Nov-12	30	500	500	7.78	375	32	#N/A	5.3	14.5	3	< 0.2	< 0.06	15.4	0.0732	0.0005	0.0005	0.00052	< 0.00002	< 0.00001	0.0019	< 0.000003	5.82	< 0.0005	0.000140	0.0007	< 0.003	< 0.00002	< 0.001	0.214	0.0269	< 0.01	0.00012
27-Nov-12	31	500	505	7.45	362	30	#N/A	4.1	14.1	5	< 0.2	< 0.06	15.0	0.0658	0.0005	0.0002	0.00064	< 0.00002	< 0.00001	0.0017	< 0.000003	5.66	< 0.0005	0.000004	< 0.0005	< 0.003	< 0.00002	< 0.001	0.212	0.0227	< 0.01	0.00010
04-Dec-12	32	500	445	7.53	341	23	#N/A	1.4	9.8	5	< 0.2	< 0.06	11.8	0.0966	0.0002	0.0002	0.00049	< 0.00002	0.00002	0.0007	0.000003	4.39	< 0.0005	0.000032	0.0007	< 0.003	0.00003	< 0.001	0.203	0.0157	0.01	0.00010
11-Dec-12	33	500	495	7.54	356	30	#N/A	1.6	12.7	4	< 0.2	< 0.06	14.6	0.0757	0.0005	0.0002	0.00040	< 0.00002	0.00001	0.0016	< 0.000003	5.56	< 0.0005	0.000055	< 0.0005	< 0.003	< 0.00002	< 0.001	0.180	0.0187	< 0.01	0.00009
18-Dec-12	34	500	485	7.45	332	30	#N/A	2.0	12.6	3	< 0.2	< 0.06	14.0	0.0799	0.0003	< 0.0002	0.00064	< 0.00002	< 0.00001	0.0009	< 0.000003	5.33	< 0.0005	0.000012	< 0.0005	< 0.003	< 0.00002	< 0.001	0.173	0.0207	< 0.01	0.00011
25-Dec-12	35	500	465	7.47	358	28	#N/A	2.4	11.0	2	< 0.2	< 0.06	13.6	0.0742	0.0002	0.0002	0.00035	< 0.00002	< 0.00001	0.0009	< 0.000003	5.17	< 0.0005	0.000029	< 0.0005	< 0.003	< 0.00002	< 0.001	0.175	0.0199	< 0.01	0.00009
01-Jan-13	36	500	490	7.49	354	30	#N/A	2.4	12.2	4	< 0.2	< 0.06	13.3	0.0680	0.0003	< 0.0002	0.00060	< 0.00002	< 0.00001	0.0008	< 0.000003	5.05	< 0.0005	0.000028	< 0.0005	< 0.003	< 0.00002	< 0.001	0.165	0.0218	< 0.01	0.00012
08-Jan-13	37	500	480	7.61	336	33	#N/A	2.5	12.8	4	< 0.2	< 0.06	15.2	0.0808	0.0004	< 0.0002	0.00057	< 0.00002	0.00001	0.0011	< 0.000003	5.83	< 0.0005	0.000077	< 0.0005	< 0.003	< 0.00002	< 0.001	0.167	0.0202	< 0.01	0.00011
15-Jan-13	38	500	470	7.61	291	33	#N/A	2.0	11.8	6	< 0.2	< 0.06	14.0	0.0742	0.0003	0.0002	0.00066	< 0.00002	< 0.00001	0.0007	< 0.000003	5.34	< 0.0005	0.000019	< 0.0005	< 0.003	< 0.00002	< 0.001	0.166	0.0216	< 0.01	0.00010
22-Jan-13	39	500	485	7.43	353	31	#N/A	3.0	11.8	6	< 0.2	< 0.06	14.1	0.0878	0.0003	0.0003	0.00037	< 0.00002	< 0.00001	0.0010	0.000012	5.36	< 0.0005	0.000021	< 0.0005	0.004	< 0.00002	< 0.001	0.164	0.0224	< 0.01	0.00012
29-Jan-13	40	500	480	7.55	332	28	#N/A	2.1	10.5	7	< 0.2	< 0.06	14.8	0.0781	< 0.0002	0.0002	0.00075	< 0.00002	< 0.00001	0.0008	< 0.000003	5.66	< 0.0005	0.000025	0.0006	< 0.003	< 0.00002	< 0.001	0.164	0.0206	< 0.01	0.00009
05-Feb-13	41	500	490	7.45	349	33	#N/A	3.1	10.9	7																						
12-Feb-13	42	500	485	7.57	363	27	#N/A	4.3	11.6	6																						

Sept 11/12 Change in analytical schedule.
Sept 25/12 Change in analytical shedule

HC 19

Sample = L032097

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
01-May-12	1	0.0003	< 0.009	3.77	0.00028	0.86	0.00001	7.80	0.0852	11.2	< 0.00002	0.00045	0.0002	0.000063	0.00056	0.004	0.00013	CA14188-MAY12	1.28	1.17	-0.10	-4.3%
08-May-12	2	0.0003	< 0.009	2.17	0.00034	0.65	< 0.00001	5.40	0.0793	9.68	< 0.00002	0.00131	0.0002	0.000236	0.00041	0.002	0.00008	CA14348-MAY12	0.97	0.94	-0.03	-1.5%
15-May-12	3	0.0002	< 0.009	1.71	0.00023	0.87	< 0.00001	3.45	0.0726	6.72	< 0.00002	0.00053	< 0.0001	0.000406	0.00045	0.001	0.00004	CA14621-MAY12	0.83	0.82	0.00	-0.1%
22-May-12	4	0.0001	< 0.009	1.18	0.00034	0.69	< 0.00001	2.12	0.0525	5.06	< 0.00002	0.00370	0.0004	0.000221	0.00067	0.001	0.00002	CA10508-MAY12	0.60	0.61	0.01	0.7%
29-May-12	5	< 0.0001	< 0.009	1.01	0.00016	0.69	< 0.00001	1.46	0.0445	3.94	< 0.00002	0.00116	0.0002	0.000190	0.00051	0.002	0.00004	CA15134-MAy12	0.52	0.54	0.02	1.7%
05-Jun-12	6	< 0.0001	< 0.009	0.835	0.00012	0.64	< 0.00001	1.21	0.0421	3.44	< 0.00002	0.00043	0.0003	0.000204	0.00056	0.001	0.00004	CA15135-JUN12	0.47	0.51	0.03	3.2%
12-Jun-12	7	0.0001	< 0.009	0.648	0.00010	0.69	< 0.00001	0.85	0.0413	2.42	< 0.00002	0.00058	< 0.0001	0.000327	0.00042	0.002	0.00001	CA15174-JUN12	0.53	0.49	-0.03	-3.2%
19-Jun-12	8	0.0001	< 0.009	0.539	0.00006	0.60	< 0.00001	0.69	0.0335	2.30	< 0.00002	0.00033	0.0001	0.000226	0.00055	0.002	< 0.00001	CA15309-JUN12	0.42	0.42	-0.01	-1.0%
26-Jun-12	9	0.0001	< 0.009	0.504	0.00040	0.65	< 0.00001	0.63	0.0315	2.22	< 0.00002	0.00035	0.0002	0.000243	0.00066	0.001	0.00001	CA15357-JUN12	0.39	0.40	0.01	1.4%
03-Jul-12	10	< 0.0001	< 0.009	0.463	< 0.00004	0.60	< 0.00001	0.54	0.0304	2.21	< 0.00002	0.00093	0.0002	0.000279	0.00053	0.003	0.00001	CA15021-JUL12	0.48	0.39	-0.09	-10.3%
10-Jul-12	11	< 0.0001	< 0.009	0.449	0.00015	0.63	< 0.00001	0.54	0.0329	2.28	< 0.00002	0.00025	< 0.0001	0.000370	0.00053	0.001	< 0.00001	CA15118-JUL12	0.46	0.44	-0.03	-3.1%
17-Jul-12	12	0.0025	< 0.009	0.424	0.00011	0.67	< 0.00001	0.46	0.0307	2.37	< 0.00002	0.00029	0.0001	0.000257	0.00053	0.001	0.00002	CA15186-JUL12	0.39	0.41	0.03	3.2%
24-Jul-12	13	< 0.0001	< 0.009	0.379	0.00020	0.57	< 0.00001	0.43	0.0277	2.33	< 0.00002	0.00014	0.0001	0.000198	0.00055	< 0.001	< 0.00001	CA15302-JUL12	0.38	0.38	0.00	-0.5%
31-Jul-12	14	< 0.0001	< 0.009	0.320	0.00006	0.57	< 0.00001	0.43	0.0274	2.09	< 0.00002	0.00013	< 0.0001	0.000236	0.00068	0.002	< 0.00001	CA15010-AUG12	0.40	0.39	-0.01	-1.0%
07-Aug-12	15	0.0003	< 0.009	0.347	0.00006	0.68	< 0.00001	0.39	0.0280	2.49	< 0.00002	0.00017	0.0011	0.000275	0.00096	0.002	0.00002	CA15071-AUG12	0.40	0.40	0.01	0.8%
14-Aug-12	16	0.0001	< 0.009	0.329	< 0.00004	0.61	< 0.00001	0.36	0.0266	2.70	< 0.00002	0.00018	0.0001	0.000257	0.00060	0.001	0.00002	CA15151-AUG12	0.39	0.38	-0.01	-1.7%
21-Aug-12	17	0.0001	< 0.009	0.268	0.00008	0.55	< 0.00001	0.31	0.0247	2.34	< 0.00002	0.00020	0.0002	0.000275	0.00049	0.001	< 0.00001	CA15239-AUG12	0.38	0.38	0.00	0.0%
28-Aug-12	18	0.0001	< 0.009	0.270	< 0.00004	0.55	< 0.00001	0.29	0.0247	2.12	< 0.00002	0.00025	0.0001	0.000374	0.00051	0.002	< 0.00001	CA15348-AUG12	0.41	0.38	-0.03	-4.3%
04-Sep-12	19	< 0.0001	< 0.009	0.218	< 0.00004	0.45	< 0.00001	0.26	0.0230	2.20	< 0.00002	0.00013	0.0001	0.000399	0.00047	< 0.001	< 0.00001	CA15317-SEP12	0.38	0.37	-0.01	-1.7%
11-Sep-12	20	0.0002	< 0.009	0.261	< 0.00004	0.55	< 0.00001	0.27	0.0254	2.68	< 0.00002	0.00039	0.0003	0.000263	0.00048	0.001	0.00003	CA15405-SEP12	0.43	0.38	-0.05	-6.6%
18-Sep-12	21																					
25-Sep-12	22	0.0001	< 0.009	0.262	0.00014	0.53	0.00002	0.25	0.0203	1.52	< 0.00002	0.00016	< 0.0001	0.000223	0.00047	< 0.001	< 0.00001	CA15672-SEP12	0.41	0.33	-0.08	-10.5%
02-Oct-12	23	0.0002	< 0.009	0.280	< 0.00004	0.52	< 0.00001	0.26	0.0182	1.44	< 0.00002	0.00008	< 0.0001	0.000228	0.00043	< 0.001	< 0.00001	CA15354-OCT12	0.35	0.31	-0.05	-7.0%
09-Oct-12	24	0.0002	< 0.009	0.255	0.00009	0.47	< 0.00001	0.25	0.0168	1.07	< 0.00002	0.00029	0.0003	0.000212	0.00051	0.001	< 0.00001	CA15450-OCT12	0.35	0.29	-0.06	-8.7%
16-Oct-12	25	0.0001	< 0.009	0.198	< 0.00004	0.44	< 0.00001	0.20	0.0160	1.09	< 0.00002	0.00038	< 0.0001	0.000212	0.00038	0.001	0.00002	CA15570-OCT12	0.41	0.30	-0.11	-15.8%
23-Oct-12	26	0.0006	< 0.009	0.210	< 0.00004	0.50	< 0.00001	0.19	0.0171	0.96	< 0.00002	0.00011	0.0002	0.000207	0.00034	< 0.001	0.00001	CA15652-OCT12	0.42	0.30	-0.12	-16.7%
30-Oct-12	27	0.0001	< 0.009	0.210	0.00006	0.54	< 0.00001	0.20	0.0186	0.99	< 0.00002	0.00015	< 0.0001	0.000181	0.00043	< 0.001	< 0.00001	CA15744-OCT12	0.38	0.31	-0.07	-9.4%
06-Nov-12	28	< 0.0001	< 0.009	0.188	0.00007	0.48	< 0.00001	0.19	0.0166	0.93	< 0.00002	0.00020	< 0.0001	0.000162	0.00035	0.001	< 0.00001	CA11210-NOV12	0.32	0.30	-0.02	-3.6%
13-Nov-12	29	< 0.0001	< 0.009	0.159	< 0.00004	0.41	< 0.00001	0.16	0.0153	1.04	< 0.00002	0.00006	< 0.0001	0.000197	0.00031	< 0.001	< 0.00001	CA15251-NOV12	0.34	0.29	-0.05	-8.0%
20-Nov-12	30	0.0002	< 0.009	0.177	0.00005	0.52	0.00001	0.21	0.0187	1.30	< 0.00002	0.00015	0.0002	0.000334	0.00039	< 0.001	< 0.00001	CA15354-NOV12	0.35	0.33	-0.02	-3.2%
27-Nov-12	31	< 0.0001	< 0.009	0.165	0.00008	0.49	0.00001	0.20	0.0188	1.38	< 0.00002	0.00011	< 0.0001	0.000351	0.00031	< 0.001	< 0.00001	CA15376-NOV12	0.39	0.32	-0.06	-9.1%
04-Dec-12	32	< 0.0001	< 0.009	0.146	0.00040	0.35	< 0.00001	0.14	0.0144	1.49	< 0.00002	0.00018	0.0001	0.000209	0.00038	0.001	< 0.00001	CA15038-DEC12	0.30	0.26	-0.04	-7.6%
11-Dec-12	33	0.0001	< 0.009	0.156	0.00004	0.46	0.00002	0.17	0.0163	1.53	< 0.00002	0.00012	0.0002	0.000299	0.00042	0.001	< 0.00001	CA15164-JAN13	0.34	0.31	-0.02	-3.8%
18-Dec-12	34	< 0.0001	< 0.009	0.142	0.00035	0.37	0.00001	0.15	0.0165	1.81	< 0.00002	0.00023	< 0.0001	0.000259	0.00031	< 0.001	< 0.00001	CA15269-DEC12	0.31	0.30	-0.01	-2.3%
25-Dec-12	35	< 0.0001	0.014	0.124	< 0.00004	0.30	< 0.00001	0.14	0.0174	1.85	< 0.00002	0.00024	< 0.0001	0.000185	0.00019	0.001	< 0.00001	CA15361-DEC12	0.26	0.29	0.03	5.4%
01-Jan-13	36	0.0001	< 0.009	0.129	< 0.00004	0.38	0.00002	0.17	0.0155	1.80	< 0.00002	0.00025	0.0001	0.000240	0.00031	< 0.001	< 0.00001	CA15056-JAN13	0.33	0.28	-0.04	-6.8%
08-Jan-13	37	< 0.0001	< 0.009	0.132	0.00005	0.41	0.00001	0.15	0.0158	1.97	< 0.00002	0.00015	< 0.0001	0.000219	0.00036	0.001	< 0.00001	CA15153-JAN13	0.34	0.32	-0.01	-2.2%
15-Jan-13	38	0.0001	< 0.009	0.132	< 0.00004	0.36	< 0.00001	0.13	0.0157	2.03	< 0.00002	0.00014	< 0.0001	0.000201	0.00030	< 0.001	< 0.00001	CA15281-JAN13	0.36	0.30	-0.06	-9.6%
22-Jan-13	39	0.0002	< 0.009	0.133	< 0.00004	0.37	< 0.00001	0.06	0.0150	2.04	< 0.00002	0.00016	< 0.0001	0.000216	0.00035	0.002	< 0.00001	CA15382-JAN13	0.36	0.30	-0.06	-9.6%
29-Jan-13	40	0.0002	< 0.009	0.129	< 0.00004	0.36	< 0.00001	0.18	0.0160	2.13	< 0.00002	0.00013	< 0.0001	0.000158	0.00036	< 0.001	< 0.00001	CA15465-JAN13	0.36	0.32	-0.04	-5.7%
05-Feb-13	41																					
12-Feb-13	42																					

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Sample = L032066

Date	Cycle	Volume mL		pH	ORP	Cond.	Acidity (pH 4.5)	Acidity (pH 8.3)	Alkalinity	Sulphate	Cl	F	Hardness CaCO3	Al	Sb	As	Ba	Be	Bi	B	Cd	Ca	Cr	Co	Cu	Fe	Pb	Li	Mg	Mn	Hg	Mo
		Input	Output		mV	umhos/cm	mgCaCO3/L	mgCaCO3/L	mgCaCO3/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	ug/L	mg/L
01-May-12	1	490	425	7.78	308	124	#N/A	5.0	33.0	20	4.5	0.07	27.3	0.157	0.0026	0.0077	0.00154	< 0.00002	< 0.00001	0.0264	< 0.000003	8.60	< 0.0005	0.000054	0.0013	0.008	0.00008	0.002	1.41	0.0050	0.01	0.00130
08-May-12	2	500	460	8.00	332	97	#N/A	1.8	25.6	18	2.4	< 0.06	28.1	0.167	0.0041	0.0085	0.00130	< 0.00002	< 0.00001	0.0264	< 0.000003	8.68	< 0.0005	0.000039	0.0010	< 0.003	< 0.00002	0.002	1.56	0.0128	< 0.01	0.00138
15-May-12	3	490	470	7.93	285	82	#N/A	2.1	27.6	13	0.6	< 0.06	28.8	0.217	0.0047	0.0112	0.00132	< 0.00002	< 0.00001	0.0324	< 0.000003	8.89	< 0.0005	0.000031	0.0006	< 0.003	< 0.00002	0.002	1.60	0.0139	< 0.01	0.00092
22-May-12	4	500	440	7.72	320	78	#N/A	2.8	24.8	14	0.3	< 0.06	28.9	0.268	0.0033	0.0078	0.00130	< 0.00002	< 0.00001	0.0203	< 0.000003	9.00	< 0.0005	0.000026	< 0.0005	< 0.003	< 0.00002	0.002	1.56	0.0106	0.03	0.00066
29-May-12	5	490	440	7.70	320	65	#N/A	2.4	24.1	10	< 0.2	< 0.06	26.9	0.256	0.0031	0.0065	0.00089	< 0.00002	< 0.00001	0.0215	< 0.000003	8.50	< 0.0005	0.000033	< 0.0005	< 0.003	< 0.00002	0.002	1.37	0.0138	0.01	0.00038
05-Jun-12	6	490	445	7.60	362	60	#N/A	3.3	26.3	6	< 0.2	< 0.06	26.1	0.197	0.0030	0.0054	0.00127	< 0.00002	< 0.00001	0.0195	< 0.000003	8.31	< 0.0005	0.000045	0.0006	< 0.003	0.00004	0.002	1.30	0.0179	0.01	0.00047
12-Jun-12	7	490	470	7.71	341	53	#N/A	2.9	24.8	7	< 0.2	< 0.06	25.2	0.194	0.0032	0.0057	0.00089	< 0.00002	< 0.00001	0.0181	< 0.000003	8.21	< 0.0005	0.000022	< 0.0005	< 0.003	< 0.00002	0.001	1.14	0.0160	0.01	0.00020
19-Jun-12	8	490	440	7.64	354	52	#N/A	2.1	22.7	7	< 0.2	< 0.06	23.4	0.154	0.0023	0.0052	0.00081	< 0.00002	< 0.00001	0.0133	< 0.000003	7.66	< 0.0005	0.000058	0.0024	0.003	< 0.00002	0.001	1.03	0.0197	< 0.01	0.00016
26-Jun-12	9	490	440	7.76	331	50	#N/A	2.3	22.4	7	< 0.2	< 0.06	23.2	0.197	0.0022	0.0057	0.00088	< 0.00002	< 0.00001	0.0131	< 0.000003	7.66	< 0.0005	< 0.000002	< 0.0005	< 0.003	0.00002	< 0.001	0.991	0.0188	0.02	0.00017
03-Jul-12	10	490	445	7.66	359	51	#N/A	6.0	26.0	7	< 0.2	< 0.06	22.9	0.211	0.0022	0.0056	0.00071	< 0.00002	< 0.00001	0.0106	0.000004	7.52	< 0.0005	0.000019	< 0.0005	< 0.003	< 0.00002	< 0.001	1.00	0.0132	< 0.01	0.00019
10-Jul-12	11	490	445	7.55	303	50	#N/A	3.3	22.7	7	< 0.2	< 0.06	22.3	0.209	0.0020	0.0045	0.00100	< 0.00002	< 0.00001	0.0115	< 0.000003	7.50	< 0.0005	0.000016	< 0.0005	< 0.003	< 0.00002	< 0.001	0.877	0.0157	0.01	0.00013
17-Jul-12	12	490	450	7.73	347	48	#N/A	1.6	22.2	5	< 0.2	< 0.06	22.9	0.169	0.0021	0.0047	0.00099	< 0.00002	< 0.00001	0.0105	0.000003	7.70	< 0.0005	0.000080	< 0.0005	0.014	0.00016	< 0.001	0.887	0.0176	0.01	0.00019
24-Jul-12	13	490	435	7.55	322	47	#N/A	2.0	20.7	7	< 0.2	< 0.06	21.7	0.160	0.0017	0.0044	0.00071	< 0.00002	< 0.00001	0.0088	< 0.000003	7.42	< 0.0005	0.000035	< 0.0005	< 0.003	< 0.00002	< 0.001	0.783	0.0216	0.01	0.00011
31-Jul-12	14	490	450	7.63	338	45	#N/A	1.9	20.7	5	< 0.2	< 0.06	21.9	0.166	0.0020	0.0041	0.00082	< 0.00002	< 0.00001	0.0096	< 0.000003	7.50	< 0.0005	0.000043	< 0.0005	0.007	0.00003	< 0.001	0.778	0.0207	< 0.01	0.00008
07-Aug-12	15	500	450	7.75	330	44	#N/A	1.8	21.7	3	< 0.2	< 0.06	23.4	0.203	0.0020	0.0046	0.00082	< 0.00002	< 0.00001	0.0161	< 0.000003	8.11	< 0.0005	0.000027	< 0.0005	< 0.003	0.00005	< 0.001	0.765	0.0208	0.01	0.00008
14-Aug-12	16	490	460	7.60	287	46	#N/A	2.3	21.5	4	< 0.2	< 0.06	21.1	0.135	0.0014	0.0034	0.00065	< 0.00002	< 0.00001	0.0067	< 0.000003	7.32	< 0.0005	0.000023	< 0.0005	< 0.003	< 0.00002	< 0.001	0.700	0.0174	< 0.01	0.00007
21-Aug-12	17	490	460	7.50	298	45	#N/A	2.7	21.1	5	< 0.2	< 0.06	21.4	0.151	0.0018	0.0036	0.00065	< 0.00002	< 0.00001	0.0077	< 0.000003	7.46	< 0.0005	0.000041	0.0005	0.004	< 0.00002	< 0.001	0.674	0.0235	0.04	0.00011
28-Aug-12	18	490	460	7.35	382	48	#N/A	4.4	22.5	5	< 0.2	< 0.06	20.5	0.138	0.0016	0.0033	0.00079	< 0.00002	< 0.00001	0.0074	< 0.000003	7.16	< 0.0005	0.000034	0.0008	0.007	0.00007	< 0.001	0.635	0.0216	< 0.01	0.00013
04-Sep-12	19	490	470	7.31	375	39	#N/A	3.7	16.8	5	< 0.2	< 0.06	19.6	0.122	0.0013	0.0026	0.00058	< 0.00002	< 0.00001	0.0063	< 0.000003	6.96	< 0.0005	0.000032	< 0.0005	< 0.003	< 0.00002	< 0.001	0.552	0.0208	0.01	0.00008
11-Sep-12	20	490	435	7.54	358	46	#N/A	2.2	20.2	8	< 0.2	< 0.06	21.2	0.104	0.0016	0.0037	0.00082	< 0.00002	< 0.00001	0.0068	< 0.000003	7.23	< 0.0005	0.000031	0.0010	< 0.003	< 0.00002	< 0.001	0.768	0.0173	0.01	0.00014
18-Sep-12	21	490	445	7.54	339	42																										
25-Sep-12	22	490	430	7.53	353	40	#N/A	2.4	21.8	5	< 0.2	< 0.06	19.0	0.110	0.0018	0.0038	0.00062	< 0.00002	< 0.00001	0.0071	< 0.000003	6.55	< 0.0005	0.000020	0.0006	< 0.003	0.00002	< 0.001	0.656	0.0169	< 0.01	0.00009
02-Oct-12	23	490	440	7.57	376	39	#N/A	2.5	21.6	4	< 0.2	< 0.06	18.2	0.0830	0.0015	0.0036	0.00058	< 0.00002	< 0.00001	0.0066	< 0.000003	6.34	< 0.0005	0.000080	0.0007	< 0.003	< 0.00002	< 0.001	0.574	0.0190	< 0.01	0.00006
09-Oct-12	24	490	440	7.48	365	39	#N/A	4.1	22.5	3	< 0.2	< 0.06	18.0	0.103	0.0018	0.0040	0.00077	< 0.00002	< 0.00001	0.0064	< 0.000003	6.24	< 0.0005	0.000012	0.0008	< 0.003	< 0.00002	< 0.001	0.597	0.0186	< 0.01	0.00008
16-Oct-12	25	490	450	7.63	392	35	#N/A	4.1	21.1	5	< 0.2	< 0.06	16.9	0.110	0.0014	0.0033	0.00050	< 0.00002	< 0.00001	0.0058	< 0.000003	5.89	< 0.0005	0.000020	< 0.0005	0.004	< 0.00002	< 0.001	0.524	0.0179	< 0.01	0.00012
23-Oct-12	26	490	435	7.39	355	37	#N/A	3.4	21.2	5	< 0.2	< 0.06	16.8	0.131	0.0010	0.0031	0.00048	< 0.00002	< 0.00001	0.0042	0.000006	5.99	< 0.0005	0.000076	0.0008	< 0.003	< 0.00002	< 0.001	0.458	0.0171	< 0.01	0.00009
30-Oct-12	27	490	450	7.44	361	40	#N/A	4.0	23.5	4	< 0.2	< 0.06	20.1	0.107	0.0011	0.0035	0.00058	< 0.00002	< 0.00001	0.0053	0.000319	7.27	< 0.0005	0.000012	0.0005	0.008	< 0.00002	< 0.001	0.483	0.0234	0.01	0.00005
06-Nov-12	28	490	460	7.68	352	34	#N/A	2.4	21.9	2	< 0.2	< 0.06	19.1	0.0888	0.0012	0.0037	0.00061	< 0.00002	< 0.00001	0.0061	0.000003	6.95	< 0.0005	0.000054	0.0006	< 0.003	< 0.00002	< 0.001	0.413	0.0215	< 0.01	0.00006
13-Nov-12	29	490	465	7.56	370	34	#N/A	4.3	21.4	3	< 0.2	< 0.06	18.3	0.0708	0.0010	0.0029	0.00052	< 0.00002	< 0.00001	0.0051	< 0.000003	6.68	< 0.0005	0.000059	< 0.0005	< 0.003	< 0.00002	< 0.001	0.395	0.0236	< 0.01	0.00006
20-Nov-12	30	490	485	7.86	375	39	#N/A	5.5	22.0	3	< 0.2	< 0.06	19.2	0.0896	0.0014	0.0035	0.00060	< 0.00002	< 0.00001	0.0048	< 0.000003	6.92	< 0.0005	0.000135	0.0009	< 0.003	0.00003	< 0.001	0.460	0.0132	< 0.01	0.00007
27-Nov-12	31	490	490	7.59	364	38	#N/A	4.2	21.8	5	< 0.2	< 0.06	17.4	0.0667	0.0014	0.0028	0.00053	< 0.00002	< 0.00001	0.0045	< 0.000003	6.27	< 0.0005	0.000085	< 0.0005	< 0.003	< 0.00002	< 0.001	0.424	0.0155	< 0.01	0.00006
04-Dec-12	32	490	440	7.65	344	30	#N/A	1.5	16.7	5	< 0.2	< 0.06	15.0	0.0838	0.0011	0.0029	0.00051	< 0.00002	< 0.00001	0.0028	0.000005	5.26	< 0.0005	0.000034	0.0009	< 0.003	< 0.00002	< 0.001	0.455	0.0121	0.01	0.00007
11-Dec-12	33	490	465	7.65	356	32	#N/A	1.7	16.7	4	< 0.2	< 0.06	17.1	0.0679	0.0015	0.0030	0.00047	< 0.00002	< 0.00001	0.0041	0.000004	6.20	< 0.0005	0.000074	0.0006	0.004	0.00002	< 0.001	0.384	0.0143	< 0.01	0.00005
18-Dec-12	34	490	430	7.53	331	30	#N/A	2.0	15.3	2	< 0.2	< 0.06	15.0	0.0782	0.0010	0.0026	0.00046	< 0.00002	< 0.00001	0.0032	0.000003	5.38	< 0.0005	0.000017	< 0.0005	< 0.003	< 0.00002	< 0.001	0.381	0.0117	< 0.01	0.00007
25-Dec-12	35	490	455	7.51	361	30	#N/A	2.6	14.7	<2	< 0.2	< 0.06	15.3	0.0610	0.0011	0.0027	0.00043	< 0.00002	< 0.00001	0.0038	< 0.000003	5.40	< 0.0005	0.000045	0.0007	< 0.003	0.00004	< 0.001	0.432	0.0132	< 0.01	0.00008
01-Jan-13	36	490	460	7.59	354	29	#N/A	2.4	15.0	3	< 0.2	< 0.06	13.5	0.0610	0.0011	0.0027	0.00048	< 0.00002	< 0.00001	0.0029	< 0.000003	4.82	< 0.0005	0.000039	< 0.0005	< 0.003	< 0.00002	< 0.001	0.364	0.0119	< 0.01	0.00006
08-Jan-13	37	490	430	7.69	334	31	#N/A	2.6	15.3	3	< 0.2	< 0.06	15.5	0.0718	0.0013	0.0026	0.00052	< 0.00002	< 0.00001	0.0033	0.000006	5.56	< 0.0005	0.000081	0.0005	< 0.003	< 0.00002	< 0.001	0.383	0.0097	< 0.01	0.00006
15-Jan-13	38	490	440	7.87	290	33	#N/A	1.9	15.7	4	< 0.2	< 0.06	15.0	0.0669	0.0012	0.0025	0.00058	< 0.00002	< 0.00001	0.0029	< 0.000003	5.38	< 0.0005	0.000028	< 0.0005	< 0.003	< 0.00002	< 0.001	0.390	0.0093	< 0.01	0.00005
22-Jan-13	39	490	465	7.50	350	32	#N/A	2.7	15.8	5	< 0.2	< 0.06	15.6	0.0633	0.0012	0.0024	0.00054	< 0.00002	< 0.00001	0.0034	0.000005	5.65	< 0.0005	0.000032	< 0.0005	0.003	< 0.00002	< 0.001	0.369	0.0126	< 0.01	0.00005
29-Jan-13	40	490	475	7.63	334	32	#N/A	2.1	14.8	5	< 0.2	< 0.06	15.3	0.0652	0.0010	0.0023	0.00047	< 0.00002	< 0.00001	0.0026	< 0.000003	5.58	< 0.0005	0.000036	0.0006	< 0.003	< 0.00002	< 0.001	0.345	0.0114	< 0.01	0.00005
05-Feb-13	41	490	455	7.56	351	32	#N/A	2.7	13.8	5																						
12-Feb-13	42	490	440	7.63	366	29	#N/A	3.7	13.6	5																						

Sept 11/12 Change in analytical schedule.
Sept 25/12 Change in analytical shedule

HC 20

Sample = L032066

Date	Cycle	Ni	P	K	Se	Si	Ag	Na	Sr	S	Tl	Sn	Ti	U	V	Zn	Zr	SGS File #	Major Anions	Major Cations	Diff	Diff %
		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					
01-May-12	1	0.0003	< 0.009	4.31	0.00183	0.77	< 0.00001	9.37	0.0770	6.31	< 0.00002	0.00035	0.0001	0.000013	0.00073	0.002	0.00002	CA14188-MAY12	1.21	1.09	-0.12	-5.2%
08-May-12	2	0.0003	< 0.009	2.69	0.00117	0.62	< 0.00001	5.80	0.0828	6.79	< 0.00002	0.00109	< 0.0001	0.000033	0.00057	0.001	0.00002	CA14348-MAY12	0.95	0.91	-0.04	-2.4%
15-May-12	3	< 0.0001	< 0.009	2.20	0.00090	0.77	< 0.00001	3.20	0.0862	5.08	< 0.00002	0.00041	< 0.0001	0.000052	0.00068	0.001	0.00002	CA14621-MAY12	0.84	0.81	-0.03	-2.1%
22-May-12	4	0.0002	< 0.009	1.78	0.00086	0.73	< 0.00001	2.35	0.0884	5.51	< 0.00002	0.00068	0.0002	0.000051	0.00086	0.001	< 0.00001	CA10508-MAY12	0.80	0.76	-0.03	-2.1%
29-May-12	5	< 0.0001	< 0.009	1.51	0.00026	0.72	< 0.00001	1.40	0.0747	3.83	< 0.00002	0.00061	< 0.0001	0.000040	0.00076	0.001	0.00002	CA15134-MAY12	0.69	0.67	-0.02	-1.3%
05-Jun-12	6	< 0.0001	< 0.009	1.21	0.00050	0.63	< 0.00001	0.99	0.0711	3.24	< 0.00002	0.00045	0.0002	0.000044	0.00067	0.002	< 0.00001	CA15135-JUN12	0.65	0.62	-0.03	-2.0%
12-Jun-12	7	0.0002	< 0.009	0.999	0.00034	0.65	< 0.00001	0.63	0.0667	2.33	< 0.00002	0.00042	< 0.0001	0.000040	0.00062	< 0.001	< 0.00001	CA15174-JUN 12	0.64	0.58	-0.06	-4.7%
19-Jun-12	8	0.0002	< 0.009	0.843	0.00050	0.56	< 0.00001	0.52	0.0570	2.53	< 0.00002	0.00040	< 0.0001	0.000038	0.00069	0.003	< 0.00001	CA15309-JUN12	0.60	0.53	-0.07	-5.9%
26-Jun-12	9	0.0002	< 0.009	0.806	0.00039	0.61	< 0.00001	0.45	0.0555	2.23	< 0.00002	0.00025	0.0001	0.000041	0.00074	0.002	0.00003	CA15357-JUN12	0.59	0.53	-0.06	-5.6%
03-Jul-12	10	< 0.0001	< 0.009	0.774	0.00052	0.63	< 0.00001	0.40	0.0563	2.08	< 0.00002	0.00030	0.0001	0.000064	0.00065	0.004	< 0.00001	CA15021-JUL12	0.67	0.52	-0.14	-12.1%
10-Jul-12	11	0.0001	< 0.009	0.640	0.00051	0.57	< 0.00001	0.34	0.0514	1.78	< 0.00002	0.00023	< 0.0001	0.000039	0.00066	0.001	< 0.00001	CA15118-JUL12	0.60	0.51	-0.09	-8.6%
17-Jul-12	12	< 0.0001	< 0.009	0.623	0.00055	0.57	< 0.00001	0.32	0.0513	2.15	< 0.00002	0.00016	0.0004	0.000042	0.00065	0.002	0.00021	CA15186-JUL12	0.55	0.51	-0.04	-3.6%
24-Jul-12	13	< 0.0001	< 0.009	0.534	0.00064	0.50	< 0.00001	0.28	0.0455	2.03	< 0.00002	0.00014	< 0.0001	0.000031	0.00066	< 0.001	0.00003	CA15302-JUL12	0.56	0.48	-0.08	-7.4%
31-Jul-12	14	< 0.0001	< 0.009	0.512	0.00048	0.55	< 0.00001	0.24	0.0457	1.71	< 0.00002	0.00015	< 0.0001	0.000035	0.00073	0.001	< 0.00001	CA15010-AUG12	0.52	0.48	-0.03	-3.4%
07-Aug-12	15	0.0002	< 0.009	0.488	0.00038	0.56	< 0.00001	0.22	0.0452	1.96	< 0.00002	0.00017	0.0004	0.000044	0.00067	0.002	< 0.00001	CA15071-AUG12	0.50	0.52	0.02	2.1%
14-Aug-12	16	0.0001	< 0.009	0.518	0.00067	0.52	< 0.00001	0.20	0.0443	2.06	< 0.00002	0.00011	< 0.0001	0.000042	0.00050	0.002	0.00002	CA15151-AUG12	0.51	0.46	-0.05	-5.2%
21-Aug-12	17	0.0002	< 0.009	0.384	0.00083	0.45	< 0.00001	0.17	0.0404	1.92	< 0.00002	0.00027	0.0002	0.000044	0.00061	0.001	< 0.00001	CA15239-AUG12	0.53	0.46	-0.06	-6.2%
28-Aug-12	18	0.0002	< 0.009	0.375	0.00066	0.43	< 0.00001	0.15	0.0392	1.77	< 0.00002	0.00040	0.0002	0.000096	0.00055	0.001	0.00003	CA15348-AUG12	0.55	0.44	-0.11	-11.0%
04-Sep-12	19	< 0.0001	< 0.009	0.301	0.00059	0.31	< 0.00001	0.13	0.0358	1.61	< 0.00002	0.00010	< 0.0001	0.000049	0.00045	< 0.001	< 0.00001	CA15317-SEP12	0.44	0.42	-0.02	-2.2%
11-Sep-12	20	< 0.0001	< 0.009	0.453	0.00117	0.44	< 0.00001	0.22	0.0447	2.72	< 0.00002	0.00016	< 0.0001	0.000058	0.00043	< 0.001	< 0.00001	CA15405-SEP12	0.57	0.46	-0.11	-10.8%
18-Sep-12	21																					
25-Sep-12	22	0.0002	< 0.009	0.422	0.00056	0.45	0.00001	0.23	0.0359	1.38	< 0.00002	0.00010	< 0.0001	0.000041	0.00045	< 0.001	< 0.00001	CA15672-SEP12	0.54	0.42	-0.12	-12.9%
02-Oct-12	23	< 0.0001	< 0.009	0.363	0.00038	0.42	< 0.00001	0.19	0.0323	1.20	< 0.00002	0.00002	< 0.0001	0.000037	0.00028	< 0.001	< 0.00001	CA15354-OCT12	0.52	0.39	-0.12	-13.5%
09-Oct-12	24	0.0002	< 0.009	0.371	0.00042	0.40	< 0.00001	0.21	0.0326	1.06	< 0.00002	0.00016	0.0001	0.000048	0.00041	< 0.001	0.00001	CA15450-OCT12	0.51	0.39	-0.12	-13.2%
16-Oct-12	25	0.0001	< 0.009	0.327	0.00032	0.37	< 0.00001	0.19	0.0289	0.87	< 0.00002	0.00022	< 0.0001	0.000037	0.00038	0.001	0.00002	CA15570-OCT12	0.53	0.37	-0.16	-17.6%
23-Oct-12	26	0.0008	< 0.009	0.270	0.00028	0.36	< 0.00001	0.15	0.0282	0.83	< 0.00002	0.00014	0.0005	0.000040	0.00049	< 0.001	< 0.00001	CA15652-OCT12	0.53	0.37	-0.16	-18.0%
30-Oct-12	27	0.0001	< 0.009	0.278	0.00022	0.44	< 0.00001	0.15	0.0336	0.99	< 0.00002	0.00031	< 0.0001	0.000034	0.00040	< 0.001	0.00001	CA15744-OCT12	0.55	0.43	-0.12	-12.5%
06-Nov-12	28	0.0001	< 0.009	0.219	0.00024	0.39	< 0.00001	0.14	0.0298	0.84	< 0.00002	0.00036	< 0.0001	0.000036	0.00034	< 0.001	< 0.00001	CA11210-NOV12	0.48	0.40	-0.08	-8.6%
13-Nov-12	29	< 0.0001	< 0.009	0.189	0.00021	0.33	< 0.00001	0.11	0.0277	0.97	< 0.00002	0.00007	< 0.0001	0.000042	0.00032	< 0.001	< 0.00001	CA15251-NOV12	0.49	0.39	-0.10	-11.9%
20-Nov-12	30	< 0.0001	< 0.009	0.213	0.00028	0.38	< 0.00001	0.13	0.0333	1.10	< 0.00002	0.00012	< 0.0001	0.000055	0.00034	0.001	0.00002	CA15354-NOV12	0.50	0.41	-0.10	-10.6%
27-Nov-12	31	< 0.0001	< 0.009	0.191	0.00036	0.33	< 0.00001	0.11	0.0304	1.06	< 0.00002	0.00009	< 0.0001	0.000047	0.00029	< 0.001	< 0.00001	CA15376-NOV12	0.54	0.37	-0.17	-19.1%
04-Dec-12	32	< 0.0001	< 0.009	0.212	0.00019	0.25	< 0.00001	0.09	0.0252	1.29	< 0.00002	0.00015	0.0002	0.000042	0.00032	< 0.001	0.00002	CA15038-DEC12	0.44	0.32	-0.12	-15.6%
11-Dec-12	33	< 0.0001	< 0.009	0.209	0.00036	0.31	< 0.00001	0.10	0.0265	1.10	< 0.00002	0.00017	0.0002	0.000040	0.00040	0.001	0.00001	CA15164-JAN13	0.42	0.36	-0.06	-7.3%
18-Dec-12	34	0.0001	< 0.009	0.193	0.00036	0.24	< 0.00001	0.09	0.0254	1.31	< 0.00002	0.00014	< 0.0001	0.000032	0.00032	< 0.001	0.00002	CA15269-DEC12	0.35	0.32	-0.03	-4.4%
25-Dec-12	35	< 0.0001	0.015	0.160	0.00032	0.20	< 0.00001	0.09	0.0281	1.33	< 0.00002	0.00011	< 0.0001	0.000035	0.00016	< 0.001	< 0.00001	CA15361-DEC12	0.29	0.32	0.03	4.5%
01-Jan-13	36	0.0001	< 0.009	0.152	0.00032	0.23	< 0.00001	0.10	0.0219	1.09	< 0.00002	0.00007	< 0.0001	0.000032	0.00029	< 0.001	0.00003	CA15056-JAN13	0.30	0.29	-0.01	-2.2%
08-Jan-13	37	< 0.0001	< 0.009	0.179	0.00031	0.24	< 0.00001	0.09	0.0232	1.30	< 0.00002	0.00017	< 0.0001	0.000030	0.00038	0.001	0.00002	CA15153-JAN13	0.31	0.33	0.02	3.2%
15-Jan-13	38	0.0002	0.018	0.166	0.00033	0.22	< 0.00001	0.07	0.0243	1.38	< 0.00002	0.00020	0.0002	0.000032	0.00032	< 0.001	0.00003	CA15281-JAN13	0.31	0.32	0.00	0.5%
22-Jan-13	39	0.0002	< 0.009	0.146	0.00035	0.24	< 0.00001	< 0.01	0.0251	1.36	< 0.00002	0.00014	< 0.0001	0.000036	0.00034	< 0.001	< 0.00001	CA15382-JAN13	0.32	0.32	0.01	1.3%
29-Jan-13	40	0.0001	< 0.009	0.131	0.00031	0.20	< 0.00001	0.09	0.0241	1.37	< 0.00002	0.00016	0.0001	0.000037	0.00031	0.001	0.00002	CA15465-JAN13	0.30	0.32	0.03	4.4%
05-Feb-13	41																					
12-Feb-13	42																					

SGS

Test Specimen

Sample	Weight (g)
ODM Master Comp A	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	0	1	2	3	4	5	6	7	8	9	10
LIMS		10343-APR12	10344-APR12	10345-APR12	10053-MAY12	10077-MAY12	10130-MAY12	11139-MAY12	10340-MAY12	10011-JUN12	10066-JUN12	10108-JUN12
Hum Cell Leachate Vol	mLs	392	1001	951	942	878	942	848	922	921	937	936
pH	units	7.93	7.95	7.90	8.10	7.92	7.51	7.59	7.52	7.23	7.35	*7.28
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	32	73	53	20	15	13	12	10	15	10	9
Conductivity	µS/cm	125	645	158	47	36	54	34	38	54	43	46
SO_4	mg/L	42	250	35	2.4	2.7	7.9	4.0	7.1	7.8	8.6	9.8
Hg	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	---	---	---	---	< 0.0001
Ag	mg/L	< 0.00001	0.00005	< 0.00001	< 0.00001	< 0.00001	< 0.00001	---	---	---	---	< 0.00001
Al	mg/L	0.07	0.06	0.06	0.06	0.05	0.04	---	---	---	---	0.04
As	mg/L	0.0010	0.0032	0.0021	0.0009	0.0007	0.0004	---	---	---	---	0.0004
Ba	mg/L	0.00086	0.00564	0.00148	0.00038	0.00025	0.00034	---	---	---	---	0.00040
Be	mg/L	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	---	---	---	---	< 0.00002
B	mg/L	0.0018	0.0317	0.0150	0.0011	0.0007	0.0017	---	---	---	---	0.0009
Bi	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	---	---	---	---	< 0.00001
Ca	mg/L	19.7	105	30.2	6.31	5.82	7.39	---	---	---	---	6.61
Cd	mg/L	< 0.000003	0.000105	< 0.000003	< 0.000003	< 0.000003	< 0.000003	---	---	---	---	< 0.000003
Co	mg/L	0.000365	0.00205	0.000176	0.000021	0.000016	0.000020	---	---	---	---	0.000061
Cr	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	---	---	---	---	< 0.0005
Cu	mg/L	< 0.0005	0.0011	< 0.0005	< 0.0005	< 0.0005	< 0.0005	---	---	---	---	0.0005
Fe	mg/L	0.004	0.022	< 0.003	0.011	0.005	0.004	---	---	---	---	0.007
K	mg/L	1.87	9.56	4.01	0.556	0.512	0.655	---	---	---	---	0.573
Li	mg/L	< 0.001	0.007	0.004	< 0.001	< 0.001	< 0.001	---	---	---	---	< 0.001
Mg	mg/L	0.699	6.87	2.13	0.211	0.179	0.332	---	---	---	---	0.376
Mn	mg/L	0.0222	0.136	0.0613	0.0391	0.0430	0.0615	---	---	---	---	0.0566
Mo	mg/L	0.00032	0.00714	0.00357	0.00019	0.00012	0.00039	---	---	---	---	0.00038
Na	mg/L	2.30	14.1	1.56	0.11	0.07	0.12	---	---	---	---	0.13
Ni	mg/L	< 0.0001	0.0014	0.0004	0.0002	0.0001	0.0001	---	---	---	---	0.0028
P	mg/L	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	---	---	---	---	< 0.009
Pb	mg/L	0.00022	0.00102	0.00013	0.00054	0.00032	0.00027	---	---	---	---	0.00037
Sb	mg/L	0.0018	0.0137	0.0123	0.0012	0.0008	0.0009	---	---	---	---	0.0005
Se	mg/L	< 0.001	0.001	< 0.001	< 0.001	< 0.001	< 0.001	---	---	---	---	< 0.001
Si	mg/L	0.16	2.43	1.76	0.26	0.22	0.21	---	---	---	---	0.19
Sn	mg/L	0.00121	0.00274	0.00060	0.00060	0.00031	0.00017	---	---	---	---	0.00010
Sr	mg/L	0.0490	0.301	0.0782	0.0106	0.0090	0.0133	---	---	---	---	0.0135
Ti	mg/L	< 0.0001	< 0.0001	< 0.0001	0.0002	0.0001	< 0.0001	---	---	---	---	0.0001
Tl	mg/L	< 0.00002	0.00003	< 0.00002	< 0.00002	< 0.00002	< 0.00002	---	---	---	---	0.00003
Th	mg/L	< 0.000004	< 0.000004	< 0.000004	< 0.000004	< 0.000004	< 0.000004	---	---	---	---	< 0.000004
U	mg/L	0.000214	0.00158	0.000398	0.000015	0.000009	0.000027	---	---	---	---	0.000091
V	mg/L	< 0.00003	0.00008	0.00010	0.00005	0.00005	< 0.00003	---	---	---	---	< 0.00003
W	mg/L	< 0.01	0.00020	< 0.01	< 0.01	< 0.01	< 0.00003	---	---	---	---	< 0.01
Y	mg/L	0.000001	0.000006	0.000003	0.000003	0.000002	0.000001	---	---	---	---	< 0.000001
Zn	mg/L	< 0.002	0.008	0.004	0.018	< 0.002	< 0.002	---	---	---	---	< 0.002

**Reassay LIMS 13001-JUL12*

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
ODM Master Comp A	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	11	12	13	14	15	16	17	18	19	20	21
LIMS		10150-JUN12	10020-JUL12	10059-JUL12	10098-JUL12	10137-JUL12	11065-JUL12	10039-AUG12	10082-AUG12	10202-AUG12	10411-AUG12	10020-SEP12
Hum Cell Leachate Vol	mLs	926	926	919	934	925	916	929	918	920	926	992
pH	units	7.31	7.05	6.87	7.29	7.35	7.11	7.23	7.24	7.20	7.13	7.08
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	9	8	8	7	7	7	7	6	7	6	6
Conductivity	µS/cm	49	51	53	58	46	45	51	50	53	40	36
SO_4	mg/L	12	11	12	13	11	8.6	13	11	11	9.3	5.8
Hg	mg/L	---	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---
Ag	mg/L	---	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Al	mg/L	---	---	---	---	0.03	---	---	---	---	< 0.01	---
As	mg/L	---	---	---	---	0.0002	---	---	---	---	0.0004	---
Ba	mg/L	---	---	---	---	0.00036	---	---	---	---	0.00040	---
Be	mg/L	---	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---
B	mg/L	---	---	---	---	0.0010	---	---	---	---	0.0005	---
Bi	mg/L	---	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Ca	mg/L	---	---	---	---	6.63	---	---	---	---	5.76	---
Cd	mg/L	---	---	---	---	0.000043	---	---	---	---	0.000048	---
Co	mg/L	---	---	---	---	0.000073	---	---	---	---	0.000049	---
Cr	mg/L	---	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Cu	mg/L	---	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Fe	mg/L	---	---	---	---	0.006	---	---	---	---	0.009	---
K	mg/L	---	---	---	---	0.535	---	---	---	---	0.480	---
Li	mg/L	---	---	---	---	< 0.001	---	---	---	---	< 0.001	---
Mg	mg/L	---	---	---	---	0.452	---	---	---	---	0.454	---
Mn	mg/L	---	---	---	---	0.0564	---	---	---	---	0.0459	---
Mo	mg/L	---	---	---	---	0.00088	---	---	---	---	0.00017	---
Na	mg/L	---	---	---	---	0.13	---	---	---	---	0.12	---
Ni	mg/L	---	---	---	---	< 0.0001	---	---	---	---	0.0001	---
P	mg/L	---	---	---	---	< 0.009	---	---	---	---	< 0.009	---
Pb	mg/L	---	---	---	---	0.00032	---	---	---	---	0.00059	---
Sb	mg/L	---	---	---	---	0.0005	---	---	---	---	0.0006	---
Se	mg/L	---	---	---	---	< 0.001	---	---	---	---	< 0.001	---
Si	mg/L	---	---	---	---	0.16	---	---	---	---	0.17	---
Sn	mg/L	---	---	---	---	0.00018	---	---	---	---	0.00034	---
Sr	mg/L	---	---	---	---	0.0146	---	---	---	---	0.0126	---
Ti	mg/L	---	---	---	---	< 0.0001	---	---	---	---	0.0001	---
Tl	mg/L	---	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---
Th	mg/L	---	---	---	---	< 0.000004	---	---	---	---	< 0.000004	---
U	mg/L	---	---	---	---	0.000026	---	---	---	---	0.000030	---
V	mg/L	---	---	---	---	< 0.00003	---	---	---	---	< 0.00003	---
W	mg/L	---	---	---	---	< 0.01	---	---	---	---	< 0.01	---
Y	mg/L	---	---	---	---	< 0.000001	---	---	---	---	0.000006	---
Zn	mg/L	---	---	---	---	< 0.002	---	---	---	---	0.005	---

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Test Specimen

Sample	Weight (g)
ODM Master Comp A	1000

NOTE: the week 29 DI water addition to the humidity cell test was collected prematurely
(not allowed to sit for the standard 1 hr contact period)

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	22	23	24	25	26	27	28	29	30	31	32
LIMS		10064-SEP12	10107-SEP12	10151-SEP12	10006-OCT12	10047-OCT12	10091-OCT12	10221-OCT12	11192-OCT12	10006-NOV12	10048-NOV12	11038-NOV12
Hum Cell Leachate Vol	mLs	915	910	943	935	937	946	917	948	937	941	959
pH	units	7.04	7.32	7.46	7.15	6.97	7.08	7.06	7.45	7.15	7.13	7.06
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	6	6	12	7	6	5	5	7	15	6	6
Conductivity	µS/cm	47	50	57	57	43	42	54	32	50	47	50
SO_4	mg/L	9.9	11	13	11	8.6	10	13	4.5	11	13	14
Hg	mg/L	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---	---
Ag	mg/L	---	---	---	< 0.00001	---	---	---	---	0.00001	---	---
Al	mg/L	---	---	---	< 0.01	---	---	---	---	0.04	---	---
As	mg/L	---	---	---	0.0002	---	---	---	---	< 0.0002	---	---
Ba	mg/L	---	---	---	0.00042	---	---	---	---	0.00045	---	---
Be	mg/L	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---	---
B	mg/L	---	---	---	0.0005	---	---	---	---	0.0016	---	---
Bi	mg/L	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---	---
Ca	mg/L	---	---	---	5.97	---	---	---	---	7.21	---	---
Cd	mg/L	---	---	---	0.000060	---	---	---	---	0.000088	---	---
Co	mg/L	---	---	---	0.000034	---	---	---	---	0.000016	---	---
Cr	mg/L	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---	---
Cu	mg/L	---	---	---	0.0006	---	---	---	---	< 0.0005	---	---
Fe	mg/L	---	---	---	< 0.003	---	---	---	---	< 0.003	---	---
K	mg/L	---	---	---	0.550	---	---	---	---	0.485	---	---
Li	mg/L	---	---	---	< 0.001	---	---	---	---	< 0.001	---	---
Mg	mg/L	---	---	---	0.631	---	---	---	---	0.728	---	---
Mn	mg/L	---	---	---	0.0364	---	---	---	---	0.0521	---	---
Mo	mg/L	---	---	---	0.00018	---	---	---	---	0.00019	---	---
Na	mg/L	---	---	---	0.17	---	---	---	---	0.17	---	---
Ni	mg/L	---	---	---	0.0001	---	---	---	---	< 0.0001	---	---
P	mg/L	---	---	---	< 0.009	---	---	---	---	< 0.009	---	---
Pb	mg/L	---	---	---	0.00024	---	---	---	---	0.00033	---	---
Sb	mg/L	---	---	---	0.0007	---	---	---	---	0.0003	---	---
Se	mg/L	---	---	---	< 0.001	---	---	---	---	< 0.001	---	---
Si	mg/L	---	---	---	0.16	---	---	---	---	0.17	---	---
Sn	mg/L	---	---	---	0.00042	---	---	---	---	0.00038	---	---
Sr	mg/L	---	---	---	0.0159	---	---	---	---	0.0175	---	---
Ti	mg/L	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---	---
Tl	mg/L	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---	---
Th	mg/L	---	---	---	< 0.000004	---	---	---	---	< 0.000004	---	---
U	mg/L	---	---	---	0.000056	---	---	---	---	0.000006	---	---
V	mg/L	---	---	---	< 0.00003	---	---	---	---	< 0.00003	---	---
W	mg/L	---	---	---	< 0.01	---	---	---	---	< 0.01	---	---
Y	mg/L	---	---	---	< 0.000001	---	---	---	---	0.000005	---	---
Zn	mg/L	---	---	---	0.004	---	---	---	---	0.040	---	---

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
ODM Master Comp A	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	33	34	35	36	37	38	39	40
LIMS		11147-NOV12	10007-DEC12	10050-DEC12	10092-DEC12	11089-DEC12	11175-DEC12	10029-JAN13	10073-JAN13
Hum Cell Leachate Vol	mLs	957	987	964	946	956	939	971	937
pH	units	7.38	7.08	6.96	6.89	7.11	6.96	6.99	6.77
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	7	11	5	7	7	6	6	6
Conductivity	µS/cm	54	60	58	55	43	49	58	52
SO_4	mg/L	13	15	16	14	11	12	15	12
Hg	mg/L	---	---	0.00001	---	---	---	---	< 0.00001
Ag	mg/L	---	---	< 0.00001	---	---	---	---	< 0.00001
Al	mg/L	---	---	0.02	---	---	---	---	< 0.01
As	mg/L	---	---	< 0.0002	---	---	---	---	< 0.0002
Ba	mg/L	---	---	0.00058	---	---	---	---	0.00058
Be	mg/L	---	---	< 0.00002	---	---	---	---	< 0.00002
B	mg/L	---	---	0.0006	---	---	---	---	0.0007
Bi	mg/L	---	---	< 0.00001	---	---	---	---	< 0.00001
Ca	mg/L	---	---	7.33	---	---	---	---	5.97
Cd	mg/L	---	---	0.000147	---	---	---	---	0.000113
Co	mg/L	---	---	0.000028	---	---	---	---	0.000017
Cr	mg/L	---	---	< 0.0005	---	---	---	---	< 0.0005
Cu	mg/L	---	---	< 0.0005	---	---	---	---	< 0.0005
Fe	mg/L	---	---	0.004	---	---	---	---	0.008
K	mg/L	---	---	0.550	---	---	---	---	0.445
Li	mg/L	---	---	< 0.001	---	---	---	---	< 0.001
Mg	mg/L	---	---	0.878	---	---	---	---	0.669
Mn	mg/L	---	---	0.0544	---	---	---	---	0.0392
Mo	mg/L	---	---	0.00023	---	---	---	---	0.00021
Na	mg/L	---	---	0.20	---	---	---	---	0.15
Ni	mg/L	---	---	< 0.0001	---	---	---	---	< 0.0001
P	mg/L	---	---	< 0.009	---	---	---	---	< 0.009
Pb	mg/L	---	---	0.00031	---	---	---	---	0.00033
Sb	mg/L	---	---	0.0006	---	---	---	---	0.0005
Se	mg/L	---	---	< 0.001	---	---	---	---	< 0.001
Si	mg/L	---	---	0.18	---	---	---	---	0.17
Sn	mg/L	---	---	0.00032	---	---	---	---	0.00022
Sr	mg/L	---	---	0.0194	---	---	---	---	0.0155
Ti	mg/L	---	---	< 0.0001	---	---	---	---	< 0.0001
Tl	mg/L	---	---	< 0.00002	---	---	---	---	< 0.00002
Th	mg/L	---	---	< 0.000004	---	---	---	---	< 0.000004
U	mg/L	---	---	0.000025	---	---	---	---	0.000027
V	mg/L	---	---	< 0.00003	---	---	---	---	< 0.00003
W	mg/L	---	---	< 0.01	---	---	---	---	< 0.01
Y	mg/L	---	---	0.000001	---	---	---	---	< 0.000001
Zn	mg/L	---	---	0.011	---	---	---	---	0.006

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
ODM Master Comp A	1000

Summary of ABA Test Data

Parameter	Units	LIMS: 11363-MAR12 +10260-JUN12
Sulphur (S)	%	2.29
Sulphide ($S^{=}$)	%	1.61
Modifed Sobek NP	t $CaCO_3$/1000 t	41.2
Siderite Corrected NP	t $CaCO_3$/1000 t	114

Leachate Paremeters Measured | ***Acid Generation*** [1] | ***Acid Neutralization*** [1]

Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µmhos/cm	SO_4 mg/L	SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly $S^{=}$ Depletion %	Cumulative $S^{=}$ Depletion %	Cumulative S Depletion %	NP Consumption $CaCO_3$, g/t/wk	Cumulative Mod Sobek NP Depl %	Cumulative Siderite Corrected NP Depl %
0	392	7.93	<2	32	125	42	16.5	16.46	0.03	0.03	0.02	17.15	0.04	0.02
1	1001	7.95	<2	73	645	250	250.3	266.71	0.52	0.55	0.39	260.68	0.67	0.24
2	951	7.90	<2	53	158	35	33.3	300.00	0.07	0.62	0.44	34.67	0.76	0.27
3	942	8.10	<2	20	47	2.4	2.3	302.26	0.005	0.63	0.44	2.36	0.76	0.28
4	878	7.92	<2	15	36	2.7	2.4	304.63	0.005	0.63	0.44	2.47	0.77	0.28
5	942	7.51	<2	13	54	7.9	7.4	312.07	0.02	0.65	0.45	7.75	0.79	0.29
6	848	7.59	<2	12	34	4.0	3.4	315.46	0.01	0.65	0.46	3.53	0.80	0.29
7	922	7.52	<2	10	38	7.1	6.5	322.01	0.01	0.67	0.47	6.82	0.81	0.29
8	921	7.23	<2	15	54	7.8	7.2	329.19	0.01	0.68	0.48	7.48	0.83	0.30
9	937	7.35	<2	10	43	8.6	8.1	337.25	0.02	0.70	0.49	8.39	0.85	0.31
10	936	7.28	<2	9	46	9.8	9.2	346.43	0.02	0.72	0.50	9.56	0.88	0.32
11	926	7.31	<2	9	49	12	11.1	357.54	0.02	0.74	0.52	11.58	0.90	0.33
12	926	7.05	<2	8	51	11	10.2	367.72	0.02	0.76	0.54	10.61	0.93	0.34
13	919	6.87	<2	8	53	12	11.0	378.75	0.02	0.78	0.55	11.49	0.96	0.35
14	934	7.29	<2	7	58	13	12.1	390.89	0.03	0.81	0.57	12.65	0.99	0.36
15	925	7.35	<2	7	46	11	10.2	401.07	0.02	0.83	0.58	10.60	1.01	0.37
16	916	7.11	<2	7	45	8.6	7.9	408.95	0.02	0.85	0.60	8.21	1.03	0.37
17	929	7.23	<2	7	51	13	12.1	421.02	0.03	0.87	0.61	12.58	1.06	0.38
18	918	7.24	<2	6	50	11	10.1	431.12	0.02	0.89	0.63	10.52	1.09	0.39
19	920	7.20	<2	7	53	11	10.1	441.24	0.02	0.91	0.64	10.54	1.12	0.40
20	926	7.13	<2	6	40	9.3	8.6	449.85	0.02	0.93	0.65	8.97	1.14	0.41

** Initial Week 0 leachate may included soluble sulphate, and may not indicate oxidation of sulphide in the sample material has occurred.*

[1] *Calculated values*

Summary - Weeks 0 to 20

Maximum Value	8.10	2	73	645	250	250.3	-	0.52	-	-	261	-	-
Minimum Value	6.87	<2	6	34	2.4	2.3	-	0.005	-	-	2.4	-	-
Average Value	7.32	2	16	85	23	21.4	-	0.04	-	-	22.31	-	-

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
ODM Master Comp A	1000

Changes to Head Sample after 20 Weeks [1]

Parameter	Units	LIMS: 11363-MAR12 +10260-JUN12
Sulphide ($S^{=}$) Remaining	%	1.60
NP Remaining	t $CaCO_3$/1000 t	40.7
CO_3 NP Remaining	t $CaCO_3$/1000 t	113.5

	Leachate Paremeters Measured						*Acid Generation* [1]					*Acid Neutralization* [1]		
Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µmhos/cm	SO_4 mg/L	SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly S= Depletion %	Cumulative S= Depletion %	Cumulative S Depletion %	NP Consumption $CaCO_3$, g/t/wk	Cumulative Mod Sobek NP Depl %	Cumulative Siderite Corrected NP Depl %
21	992	7.08	<2	6	36	5.8	5.8	455.61	0.01	0.94	0.66	5.99	1.15	0.42
22	915	7.04	<2	6	47	9.9	9.1	464.66	0.02	0.96	0.68	9.44	1.17	0.42
23	910	7.32	<2	6	50	11	10.0	474.67	0.02	0.98	0.69	10.43	1.20	0.43
24	943	7.46	<2	12	57	13	12.3	486.93	0.03	1.01	0.71	12.77	1.23	0.44
25	935	7.15	<2	7	57	11	10.3	497.22	0.02	1.03	0.72	10.71	1.26	0.45
26	937	6.97	<2	6	43	8.6	8.1	505.28	0.02	1.05	0.74	8.39	1.28	0.46
27	946	7.08	<2	5	42	10	9.5	514.74	0.02	1.07	0.75	9.85	1.30	0.47
28	917	7.06	<2	5	54	13	11.9	526.66	0.02	1.09	0.77	12.42	1.33	0.48
29	948	7.45	<2	7	32	4.5	4.3	530.92	0.01	1.10	0.77	4.44	1.34	0.49
30	937	7.15	<2	15	50	11	10.3	541.23	0.02	1.12	0.79	10.74	1.37	0.49
31	941	7.13	<2	6	47	13	12.2	553.46	0.03	1.15	0.81	12.74	1.40	0.51
32	959	7.06	<2	6	50	14	13.4	566.89	0.03	1.17	0.83	13.99	1.43	0.52
33	957	7.38	<2	7	54	13	12.4	579.33	0.03	1.20	0.84	12.96	1.46	0.53
34	987	7.08	<2	11	60	15	14.8	594.14	0.03	1.23	0.86	15.42	1.50	0.54
35	964	6.96	<2	5	58	16	15.4	609.56	0.03	1.26	0.89	16.07	1.54	0.56
36	946	6.89	<2	7	55	14	13.2	622.80	0.03	1.29	0.91	13.80	1.57	0.57
37	956	7.11	<2	7	43	11	10.5	633.32	0.02	1.31	0.92	10.95	1.60	0.58
38	939	6.96	<2	6	49	12	11.3	644.59	0.02	1.33	0.94	11.74	1.63	0.59
39	971	6.99	<2	6	58	15	14.6	659.15	0.03	1.36	0.96	15.17	1.67	0.60
40	937	6.77	<2	6	52	12	11.2	670.40	0.02	1.39	0.98	11.71	1.69	0.61

[1] *Calculated values*

Summary - Weeks 0 to 40

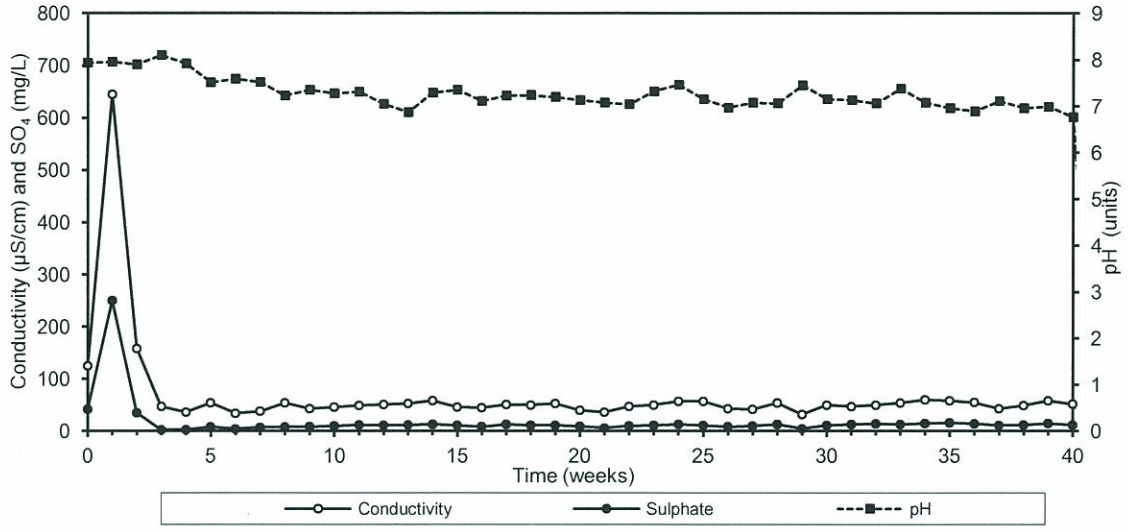
Maximum Value	8.10	2	73	645	250	250.25	-	0.03	-	-	261	-	-
Minimum Value	6.77	<2	5	32	2.4	2.26	-	0.005	-	-	2.4	-	-
Average Value	7.18	2	12	68	18	16.35	-	0.03	-	-	17.03	-	-

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

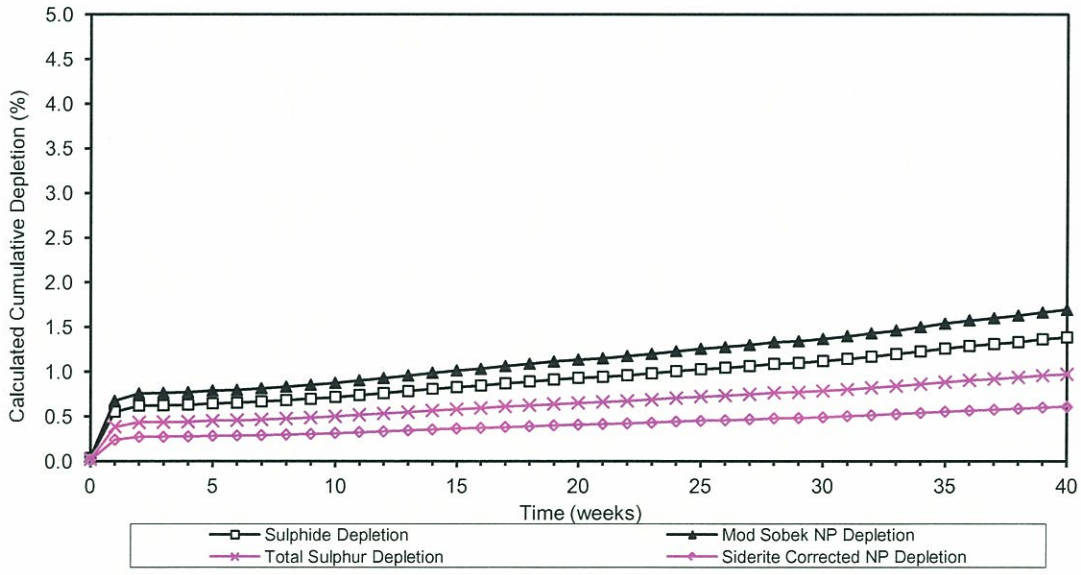
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Conductivity, Sulphate, and pH in Weekly Humidity Cell Leachate - ODM Master Comp A



Cumulative Sulphide and NP Depletion ODM Master Comp A



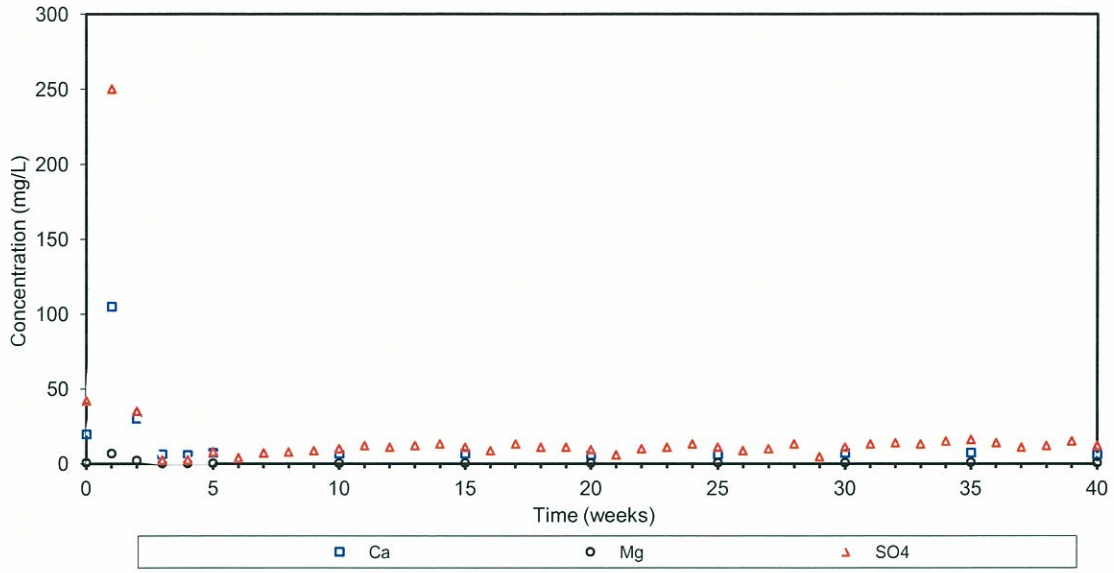
Note: NP depletion calculated based on sulphate assay.
Note [2]: x-axis reduced to 5% for ease of viewing

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

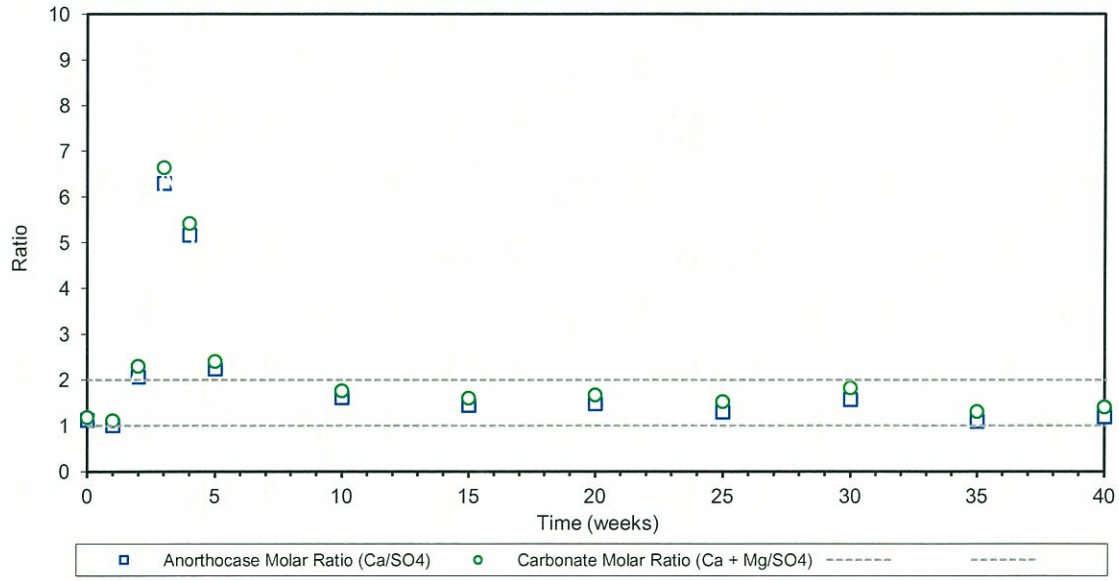
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate ODM Master Comp A



Carbonate (Ca + Mg/SO_4) and Anorthoclase (Ca/SO_4) Molar Ratios ODM Master Comp A

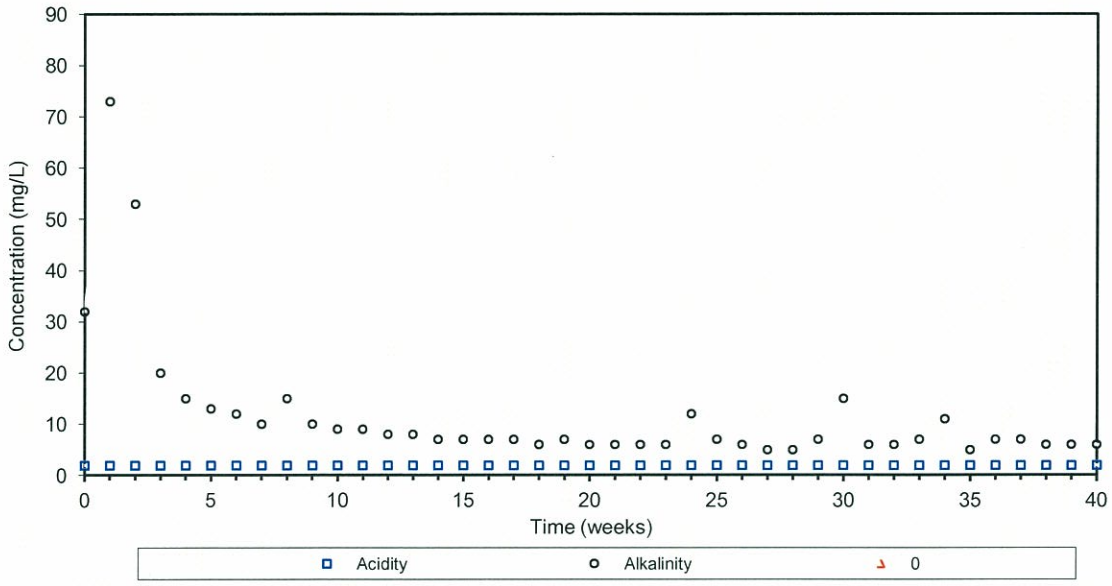


This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate ODM Master Comp A



Note: Acidity and alkalinity have detection limit of 2 mg/L.

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
ODM Master Comp B	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	0	1	2	3	4	5	6	7	8	9	10
LIMS		10343-APR12	10344-APR12	10345-APR12	10053-MAY12	10077-MAY12	10130-MAY12	11139-MAY12	10340-MAY12	10011-JUN12	10066-JUN12	10108-JUN12
Hum Cell Leachate Vol	mLs	426	1005	940	931	901	908	868	873	955	906	930
pH	units	8.00	7.81	7.72	7.48	7.73	7.58	7.44	7.46	7.19	7.15	7.28
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	35	57	36	16	14	11	11	9	28	9	8
Conductivity	µS/cm	165	627	111	41	33	44	35	43	88	39	42
SO_4	mg/L	26	230	22	2.1	2.9	5.7	4.5	8.8	26	7.0	8.8
Hg	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	---	---	---	---	< 0.0001
Ag	mg/L	< 0.00001	0.00003	< 0.00001	< 0.00001	< 0.00001	< 0.00001	---	---	---	---	< 0.00001
Al	mg/L	0.09	0.05	0.03	0.04	0.05	0.05	---	---	---	---	0.04
As	mg/L	0.0011	0.0041	0.0012	0.0005	0.0005	0.0003	---	---	---	---	0.0002
Ba	mg/L	0.00048	0.00540	0.00089	0.00023	0.00023	0.00027	---	---	---	---	0.00033
Be	mg/L	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	---	---	---	---	< 0.00002
B	mg/L	0.0013	0.0306	0.0091	0.0006	0.0007	0.0012	---	---	---	---	0.0006
Bi	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	---	---	---	---	< 0.00001
Ca	mg/L	14.4	100	18.9	5.17	5.30	5.86	---	---	---	---	5.92
Cd	mg/L	< 0.000003	0.000079	< 0.000003	< 0.000003	< 0.000003	< 0.000003	---	---	---	---	< 0.000003
Co	mg/L	0.000214	0.00198	0.000129	0.000013	0.000014	0.000014	---	---	---	---	0.000042
Cr	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	---	---	---	---	< 0.0005
Cu	mg/L	< 0.0005	0.0008	< 0.0005	< 0.0005	< 0.0005	< 0.0005	---	---	---	---	0.0005
Fe	mg/L	< 0.003	0.020	0.004	0.006	0.006	0.005	---	---	---	---	0.005
K	mg/L	1.44	9.57	2.14	0.391	0.473	0.517	---	---	---	---	0.478
Li	mg/L	< 0.001	0.007	0.002	< 0.001	< 0.001	< 0.001	---	---	---	---	< 0.001
Mg	mg/L	0.465	6.58	1.28	0.146	0.160	0.235	---	---	---	---	0.333
Mn	mg/L	0.0153	0.126	0.0627	0.0387	0.0386	0.0541	---	---	---	---	0.0510
Mo	mg/L	0.00021	0.00756	0.00202	0.00018	0.00021	0.00042	---	---	---	---	0.00033
Na	mg/L	1.64	13.6	0.83	0.07	0.08	0.11	---	---	---	---	0.11
Ni	mg/L	< 0.0001	0.0012	0.0003	< 0.0001	< 0.0001	< 0.0001	---	---	---	---	0.0013
P	mg/L	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	---	---	---	---	< 0.009
Pb	mg/L	0.00022	0.00055	0.00029	0.00030	0.00031	0.00030	---	---	---	---	0.00025
Sb	mg/L	0.0013	0.0137	0.0065	0.0006	0.0007	0.0006	---	---	---	---	0.0004
Se	mg/L	< 0.001	0.003	0.001	< 0.001	< 0.001	< 0.001	---	---	---	---	< 0.001
Si	mg/L	0.16	2.44	0.92	0.15	0.17	0.15	---	---	---	---	0.14
Sn	mg/L	0.00113	0.00094	0.00027	0.00015	0.00094	0.00011	---	---	---	---	0.00012
Sr	mg/L	0.0316	0.287	0.0477	0.0079	0.0080	0.0099	---	---	---	---	0.0120
Ti	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001	0.0002	< 0.0001	---	---	---	---	< 0.0001
Tl	mg/L	< 0.00002	0.00003	< 0.00002	< 0.00002	< 0.00002	< 0.00002	---	---	---	---	< 0.00002
Th	mg/L	< 0.000004	< 0.000004	< 0.000004	< 0.000004	< 0.000004	0.000004	---	---	---	---	< 0.000004
U	mg/L	0.000035	0.00148	0.000276	0.000019	0.000023	0.000011	---	---	---	---	0.000009
V	mg/L	< 0.00003	0.00012	0.00006	0.00004	0.00004	< 0.00003	---	---	---	---	< 0.00003
W	mg/L	< 0.01	0.00021	< 0.01	< 0.01	< 0.01	< 0.00003	---	---	---	---	< 0.01
Y	mg/L	0.000001	0.000006	0.000004	< 0.000001	0.000002	0.000003	---	---	---	---	0.000004
Zn	mg/L	< 0.002	0.007	0.003	< 0.002	< 0.002	< 0.002	---	---	---	---	< 0.002

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
ODM Master Comp B	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	11	12	13	14	15	16	17	18	19	20	21
LIMS		10150-JUN12	10020-JUL12	10059-JUL12	10098-JUL12	10137-JUL12	11065-JUL12	10039-AUG12	10082-AUG12	10202-AUG12	10411-AUG12	10020-SEP12
Hum Cell Leachate Vol	mLs	927	912	922	927	925	918	910	904	927	927	979
pH	units	7.13	7.01	6.98	7.22	7.36	*7.27	7.53	7.14	7.22	**7.05	6.98
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	8	8	8	7	6	8	7	7	6	6	5
Conductivity	µS/cm	39	46	50	48	39	46	47	48	51	47	52
SO_4	mg/L	8.3	9.6	10	12	11	8.9	10	11	9.8	11	11
Hg	mg/L	---	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---
Ag	mg/L	---	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Al	mg/L	---	---	---	---	0.03	---	---	---	---	< 0.01	---
As	mg/L	---	---	---	---	0.0004	---	---	---	---	< 0.0002	---
Ba	mg/L	---	---	---	---	0.00033	---	---	---	---	0.00036	---
Be	mg/L	---	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---
B	mg/L	---	---	---	---	0.0007	---	---	---	---	0.0005	---
Bi	mg/L	---	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Ca	mg/L	---	---	---	---	6.06	---	---	---	---	6.35	---
Cd	mg/L	---	---	---	---	0.000027	---	---	---	---	0.000042	---
Co	mg/L	---	---	---	---	0.000083	---	---	---	---	0.000044	---
Cr	mg/L	---	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Cu	mg/L	---	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Fe	mg/L	---	---	---	---	0.007	---	---	---	---	0.003	---
K	mg/L	---	---	---	---	0.468	---	---	---	---	0.541	---
Li	mg/L	---	---	---	---	< 0.001	---	---	---	---	< 0.001	---
Mg	mg/L	---	---	---	---	0.331	---	---	---	---	0.564	---
Mn	mg/L	---	---	---	---	0.0514	---	---	---	---	0.0400	---
Mo	mg/L	---	---	---	---	0.00056	---	---	---	---	0.00028	---
Na	mg/L	---	---	---	---	0.11	---	---	---	---	0.15	---
Ni	mg/L	---	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---
P	mg/L	---	---	---	---	< 0.009	---	---	---	---	< 0.009	---
Pb	mg/L	---	---	---	---	0.00036	---	---	---	---	0.00028	---
Sb	mg/L	---	---	---	---	0.0003	---	---	---	---	0.0005	---
Se	mg/L	---	---	---	---	< 0.001	---	---	---	---	< 0.001	---
Si	mg/L	---	---	---	---	0.13	---	---	---	---	0.15	---
Sn	mg/L	---	---	---	---	0.00024	---	---	---	---	0.00025	---
Sr	mg/L	---	---	---	---	0.0127	---	---	---	---	0.0151	---
Ti	mg/L	---	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---
Tl	mg/L	---	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---
Th	mg/L	---	---	---	---	< 0.000004	---	---	---	---	< 0.000004	---
U	mg/L	---	---	---	---	0.000031	---	---	---	---	0.000011	---
V	mg/L	---	---	---	---	< 0.00003	---	---	---	---	< 0.00003	---
W	mg/L	---	---	---	---	< 0.01	---	---	---	---	< 0.01	---
Y	mg/L	---	---	---	---	0.000002	---	---	---	---	0.000001	---
Zn	mg/L	---	---	---	---	< 0.002	---	---	---	---	0.002	---

**Reassay LIMS 14805-AUG12*

***Reassay LIMS 14247-SEP12*

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
ODM Master Comp B	1000

NOTE: the week 29 DI water addition to the humidity cell test was collected prematurely
(not allowed to sit for the standard 1 hr contact period)

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	22	23	24	25	26	27	28	29	30	31	32
LIMS		10064-SEP12	10107-SEP12	10151-SEP12	10006-OCT12	10047-OCT12	10091-OCT12	10221-OCT12	11192-OCT12	10006-NOV12	10048-NOV12	11038-NOV12
Hum Cell Leachate Vol	mLs	934	922	954	926	920	948	927	937	933	942	955
pH	units	6.93	7.02	6.89	7.01	7.01	7.04	6.91	6.64	6.95	6.79	6.75
Acidity	mg/L as $CaCO_3$	< 2	< 2	<2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	6	6	10	6	4	4	5	2	5	6	6
Conductivity	µS/cm	35	47	50	44	31	35	51	19	46	47	26
SO_4	mg/L	8.4	16	11	11	7.0	9.4	12	3.8	12	13	1.7
Hg	mg/L	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---	---
Ag	mg/L	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---	---
Al	mg/L	---	---	---	0.02	---	---	---	---	0.02	---	---
As	mg/L	---	---	---	0.0002	---	---	---	---	< 0.0002	---	---
Ba	mg/L	---	---	---	0.00034	---	---	---	---	0.00045	---	---
Be	mg/L	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---	---
B	mg/L	---	---	---	0.0005	---	---	---	---	0.0017	---	---
Bi	mg/L	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---	---
Ca	mg/L	---	---	---	5.80	---	---	---	---	6.24	---	---
Cd	mg/L	---	---	---	0.000056	---	---	---	---	0.000080	---	---
Co	mg/L	---	---	---	0.000020	---	---	---	---	0.000013	---	---
Cr	mg/L	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---	---
Cu	mg/L	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---	---
Fe	mg/L	---	---	---	< 0.003	---	---	---	---	< 0.003	---	---
K	mg/L	---	---	---	0.566	---	---	---	---	0.498	---	---
Li	mg/L	---	---	---	< 0.001	---	---	---	---	< 0.001	---	---
Mg	mg/L	---	---	---	0.594	---	---	---	---	0.761	---	---
Mn	mg/L	---	---	---	0.0411	---	---	---	---	0.0346	---	---
Mo	mg/L	---	---	---	0.00024	---	---	---	---	0.00028	---	---
Na	mg/L	---	---	---	0.17	---	---	---	---	0.22	---	---
Ni	mg/L	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---	---
P	mg/L	---	---	---	< 0.009	---	---	---	---	< 0.009	---	---
Pb	mg/L	---	---	---	0.00033	---	---	---	---	0.00024	---	---
Sb	mg/L	---	---	---	0.0007	---	---	---	---	0.0003	---	---
Se	mg/L	---	---	---	< 0.001	---	---	---	---	< 0.001	---	---
Si	mg/L	---	---	---	0.19	---	---	---	---	0.15	---	---
Sn	mg/L	---	---	---	0.00028	---	---	---	---	0.00032	---	---
Sr	mg/L	---	---	---	0.0147	---	---	---	---	0.0174	---	---
Ti	mg/L	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---	---
Tl	mg/L	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---	---
Th	mg/L	---	---	---	< 0.000004	---	---	---	---	< 0.000004	---	---
U	mg/L	---	---	---	0.000034	---	---	---	---	0.000007	---	---
V	mg/L	---	---	---	< 0.00003	---	---	---	---	< 0.00003	---	---
W	mg/L	---	---	---	< 0.01	---	---	---	---	< 0.01	---	---
Y	mg/L	---	---	---	< 0.000001	---	---	---	---	0.000001	---	---
Zn	mg/L	---	---	---	0.003	---	---	---	---	0.006	---	---

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
ODM Master Comp B	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	33	34	35	36	37	38	39	40
LIMS		11147-NOV12	10007-DEC12	10050-DEC12	10092-DEC12	11089-DEC12	11175-DEC12	10029-JAN13	10073-JAN13
Hum Cell Leachate Vol	mLs	946	995	959	947	906	956	964	843
pH	units	6.93	7.08	6.78	6.93	7.24	7.05	7.02	6.74
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	6	7	4	4	6	7	6	6
Conductivity	µS/cm	48	74	54	51	44	53	61	52
SO_4	mg/L	12	20	13	13	11	14	17	12
Hg	mg/L	---	---	0.00001	---	---	---	---	< 0.00001
Ag	mg/L	---	---	< 0.00001	---	---	---	---	< 0.00001
Al	mg/L	---	---	0.01	---	---	---	---	< 0.01
As	mg/L	---	---	< 0.0002	---	---	---	---	0.0003
Ba	mg/L	---	---	0.00045	---	---	---	---	0.00051
Be	mg/L	---	---	< 0.00002	---	---	---	---	< 0.00002
B	mg/L	---	---	0.0005	---	---	---	---	0.0007
Bi	mg/L	---	---	< 0.00001	---	---	---	---	< 0.00001
Ca	mg/L	---	---	5.46	---	---	---	---	5.87
Cd	mg/L	---	---	0.000096	---	---	---	---	0.000116
Co	mg/L	---	---	0.000034	---	---	---	---	0.000059
Cr	mg/L	---	---	< 0.0005	---	---	---	---	< 0.0005
Cu	mg/L	---	---	< 0.0005	---	---	---	---	< 0.0005
Fe	mg/L	---	---	0.003	---	---	---	---	0.008
K	mg/L	---	---	0.486	---	---	---	---	0.447
Li	mg/L	---	---	< 0.001	---	---	---	---	< 0.001
Mg	mg/L	---	---	0.662	---	---	---	---	0.659
Mn	mg/L	---	---	0.0340	---	---	---	---	0.0380
Mo	mg/L	---	---	0.00024	---	---	---	---	0.00029
Na	mg/L	---	---	0.17	---	---	---	---	0.16
Ni	mg/L	---	---	< 0.0001	---	---	---	---	< 0.0001
P	mg/L	---	---	< 0.009	---	---	---	---	< 0.009
Pb	mg/L	---	---	0.00022	---	---	---	---	0.00024
Sb	mg/L	---	---	0.0004	---	---	---	---	0.0006
Se	mg/L	---	---	< 0.001	---	---	---	---	< 0.001
Si	mg/L	---	---	0.15	---	---	---	---	0.14
Sn	mg/L	---	---	0.00027	---	---	---	---	0.00026
Sr	mg/L	---	---	0.0146	---	---	---	---	0.0162
Ti	mg/L	---	---	< 0.0001	---	---	---	---	< 0.0001
Tl	mg/L	---	---	< 0.00002	---	---	---	---	< 0.00002
Th	mg/L	---	---	< 0.000004	---	---	---	---	< 0.000004
U	mg/L	---	---	0.000017	---	---	---	---	0.000023
V	mg/L	---	---	< 0.00003	---	---	---	---	< 0.00003
W	mg/L	---	---	< 0.01	---	---	---	---	< 0.01
Y	mg/L	---	---	0.000002	---	---	---	---	< 0.000001
Zn	mg/L	---	---	0.007	---	---	---	---	0.006

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
ODM Master Comp B	1000

Summary of ABA Test Data

Parameter	Units	LIMS: 11363-MAR12 +10260-JUN12
Sulphur (S)	%	2.24
Sulphide ($S^{=}$)	%	1.46
Modifed Sobek NP	t $CaCO_3$/1000 t	41.5
Siderite Corrected NP	t $CaCO_3$/1000 t	111

Leachate Paremeters Measured							***Acid Generation*** [1]					***Acid Neutralization*** [1]		
Weekly Leach No.	**Volume Collected** mL	**pH** units	**Acidity** $CaCO_3$ eq. mg/L	**Alkalinity** $CaCO_3$ eq. mg/L	**Conductivity** µmhos/cm	**SO_4** mg/L	**SO_4 Production Rate** g/t/wk	**Cumulative SO_4 Production** g/t	**Weekly $S^{=}$ Depletion** %	**Cumulative $S^{=}$ Depletion** %	**Cumulative S Depletion** %	**NP Consumption** $CaCO_3$, g/t/wk	**Cumulative Mod Sobek NP Depl** %	**Cumulative Siderite Corrected NP Depl** %
0	426	8.00	<2	35	165	26	11.1	11.08	0.03	0.03	0.02	11.54	0.03	0.01
1	1005	7.81	<2	57	627	230	231.2	242.23	0.53	0.55	0.36	240.78	0.61	0.23
2	940	7.72	<2	36	111	22	20.7	262.91	0.05	0.60	0.39	21.54	0.66	0.25
3	931	7.48	<2	16	41	2.1	2.0	264.86	0.004	0.60	0.39	2.04	0.66	0.25
4	901	7.73	<2	14	33	2.9	2.6	267.47	0.01	0.61	0.40	2.72	0.67	0.25
5	908	7.58	<2	11	44	5.7	5.2	272.65	0.01	0.62	0.41	5.39	0.68	0.26
6	868	7.44	<2	11	35	4.5	3.9	276.56	0.01	0.63	0.41	4.07	0.69	0.26
7	873	7.46	<2	9	43	8.8	7.7	284.24	0.02	0.65	0.42	8.00	0.71	0.27
8	955	7.19	<2	28	88	26	24.8	309.07	0.06	0.71	0.46	25.86	0.78	0.29
9	906	7.15	<2	9	39	7.0	6.3	315.41	0.01	0.72	0.47	6.61	0.79	0.30
10	930	7.28	<2	8	42	8.8	8.2	323.59	0.02	0.74	0.48	8.53	0.81	0.30
11	927	7.13	<2	8	39	8.3	7.7	331.29	0.02	0.76	0.49	8.01	0.83	0.31
12	912	7.01	<2	8	46	9.6	8.8	340.04	0.02	0.78	0.51	9.12	0.85	0.32
13	922	6.98	<2	8	50	10	9.2	349.26	0.02	0.80	0.52	9.60	0.88	0.33
14	927	7.22	<2	7	48	12	11.1	360.39	0.03	0.82	0.54	11.59	0.90	0.34
15	925	7.36	<2	6	39	11	10.2	370.56	0.02	0.85	0.55	10.60	0.93	0.35
16	918	7.27	<2	8	46	8.9	8.2	378.73	0.02	0.86	0.56	8.51	0.95	0.36
17	910	7.53	<2	7	47	10	9.1	387.83	0.02	0.89	0.58	9.48	0.97	0.36
18	904	7.14	<2	7	48	11	9.9	397.78	0.02	0.91	0.59	10.36	1.00	0.37
19	927	7.22	<2	6	51	9.8	9.1	406.86	0.02	0.93	0.61	9.46	1.02	0.38
20	927	7.05	<2	6	47	11	10.2	417.06	0.02	0.95	0.62	10.62	1.05	0.39

** Initial Week 0 leachate may included soluble sulphate, and may not indicate oxidation of sulphide in the sample material has occurred.*

[1] *Calculated values*

Summary - Weeks 0 to 20														
Maximum Value	8.00	2	57	627	230	231.2	-	0.53	-	-	241	-	-
Minimum Value	6.98	<2	6	33	2.1	2.0	-	0.004	-	-	2.0	-	-
Average Value	7.29	2	15	82	21	19.9	-	0.05	-	-	20.69	-	-

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TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
ODM Master Comp B	1000

Changes to Head Sample after 20 Weeks [1]

Parameter	Units	LIMS: 11363-MAR12 +10260-JUN12
Sulphide ($S^{=}$) Remaining	%	1.45
NP Remaining	t $CaCO_3$/1000 t	41.1
CO_3 NP Remaining	t $CaCO_3$/1000 t	111

	Leachate Paremeters Measured						*Acid Generation* [1]					*Acid Neutralization* [1]		
Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µmhos/cm	SO_4 mg/L	SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly S= Depletion %	Cumulative S= Depletion %	Cumulative S Depletion %	NP Consumption $CaCO_3$, g/t/wk	Cumulative Mod Sobek NP Depl %	Cumulative Siderite Corrected NP Depl %
21	979	6.98	<2	5	52	11	10.8	427.83	0.02	0.98	0.64	11.22	1.07	0.40
22	934	6.93	<2	6	35	8.4	7.8	435.67	0.02	0.99	0.65	8.17	1.09	0.41
23	922	7.02	<2	6	47	16	14.8	450.42	0.03	1.03	0.67	15.37	1.13	0.42
24	954	6.89	<2	10	50	11	10.5	460.92	0.02	1.05	0.69	10.93	1.16	0.43
25	926	7.01	<2	6	44	11	10.2	471.10	0.02	1.08	0.70	10.61	1.18	0.44
26	920	7.01	<2	4	31	7.0	6.4	477.54	0.01	1.09	0.71	6.71	1.20	0.45
27	948	7.04	<2	4	35	9.4	8.9	486.46	0.02	1.11	0.72	9.28	1.22	0.46
28	927	6.91	<2	5	51	12	11.1	497.58	0.03	1.14	0.74	11.59	1.25	0.47
29	937	6.64	<2	2	19	3.8	3.6	501.14	0.01	1.14	0.75	3.71	1.26	0.47
30	933	6.95	<2	5	46	12	11.2	512.34	0.03	1.17	0.76	11.66	1.29	0.48
31	942	6.79	<2	6	47	13	12.2	524.58	0.03	1.20	0.78	12.76	1.32	0.49
32	955	6.75	<2	6	26	1.7	1.6	526.21	0.00	1.20	0.78	1.69	1.32	0.49
33	946	6.93	<2	6	48	12	11.4	537.56	0.03	1.23	0.80	11.83	1.35	0.50
34	995	7.08	<2	7	74	20	19.9	557.46	0.05	1.27	0.83	20.73	1.40	0.52
35	959	6.78	<2	4	54	13	12.5	569.93	0.03	1.30	0.85	12.99	1.43	0.53
36	947	6.93	<2	4	51	13	12.3	582.24	0.03	1.33	0.87	12.82	1.46	0.55
37	906	7.24	<2	6	44	11	10.0	592.20	0.02	1.35	0.88	10.38	1.49	0.56
38	956	7.05	<2	7	53	14	13.4	605.59	0.03	1.38	0.90	13.94	1.52	0.57
39	964	7.02	<2	6	61	17	16.4	621.97	0.04	1.42	0.93	17.07	1.56	0.58
40	843	6.74	<2	6	52	12	10.1	632.09	0.02	1.44	0.94	10.54	1.59	0.59

[1] *Calculated values*

Summary - Weeks 0 to 40

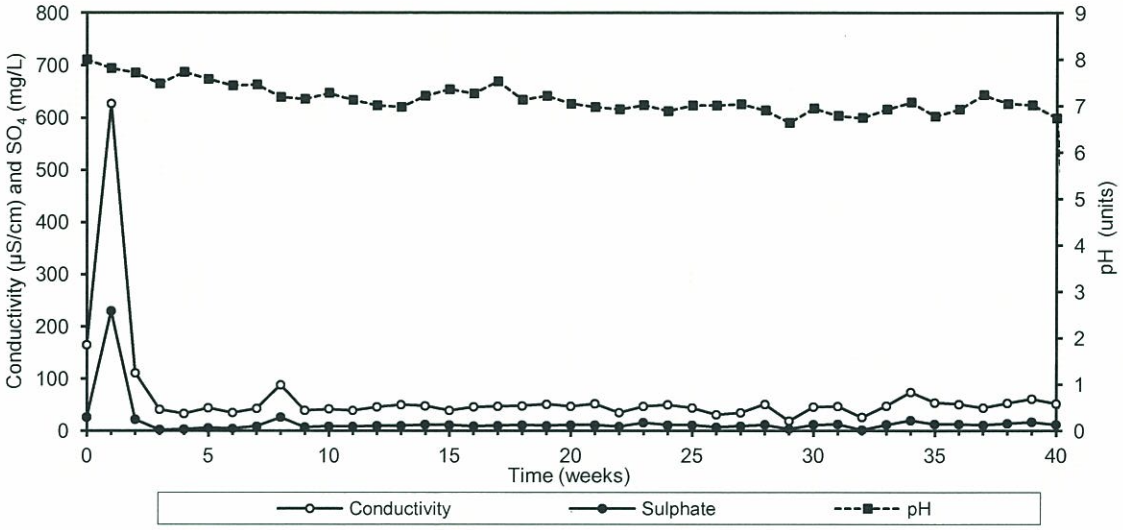
Maximum Value	8.00	2	57	627	230	231.15	-	0.05	-	-	241	-	-
Minimum Value	6.64	<2	2	19	1.7	1.62	-	0.004	-	-	1.7	-	-
Average Value	7.07	2	10	65	16	15.42	-	0.04	-	-	16.06	-	-

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

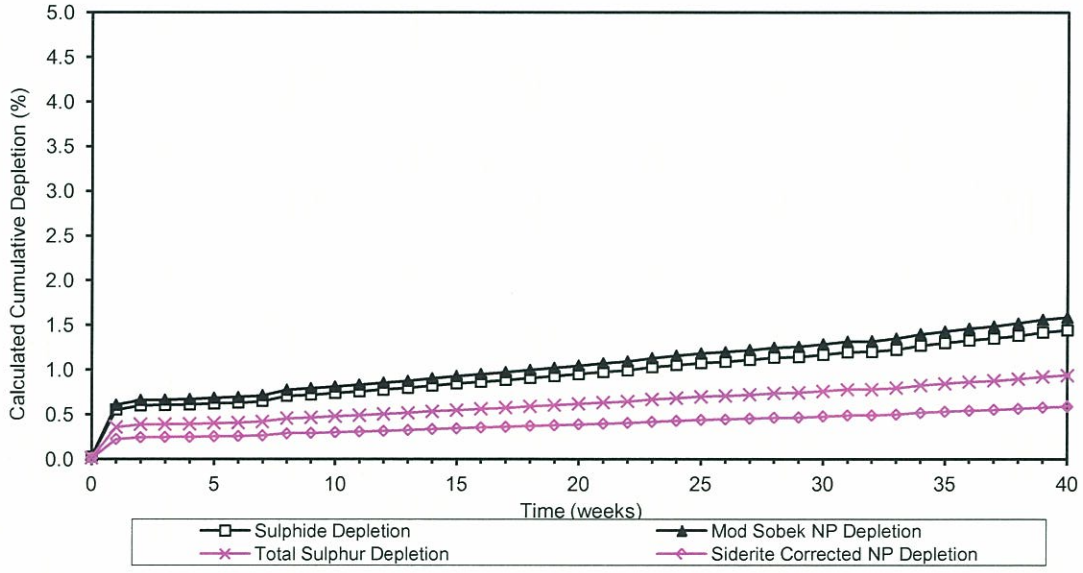
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Conductivity, Sulphate, and pH in Weekly Humidity Cell Leachate - ODM Master Comp B



Cumulative Sulphide and NP Depletion ODM Master Comp B



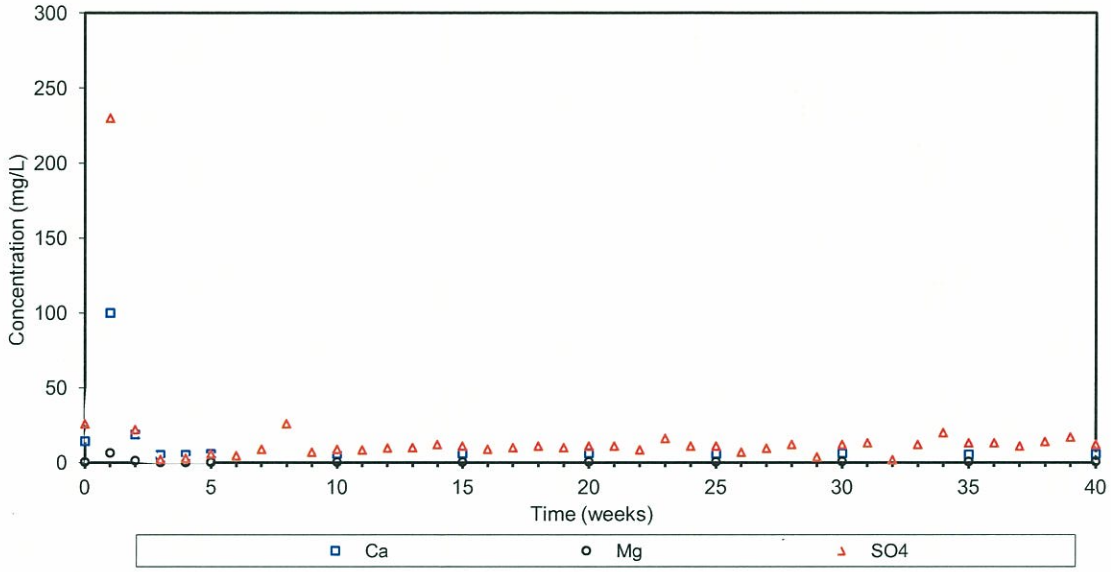
Note: NP depletion calculated based on sulphate assay.
Note [2]: x-axis reduced to 5% for ease of viewing

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

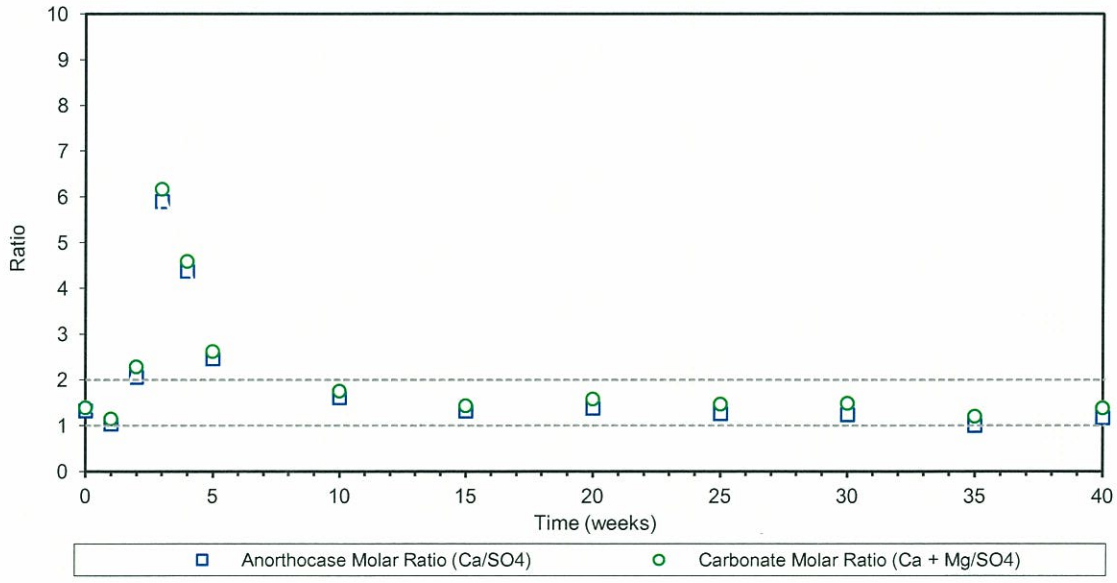
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate ODM Master Comp B



Carbonate (Ca + Mg/SO $_4$) and Anorthoclase (Ca/SO $_4$) Molar Ratios ODM Master Comp B

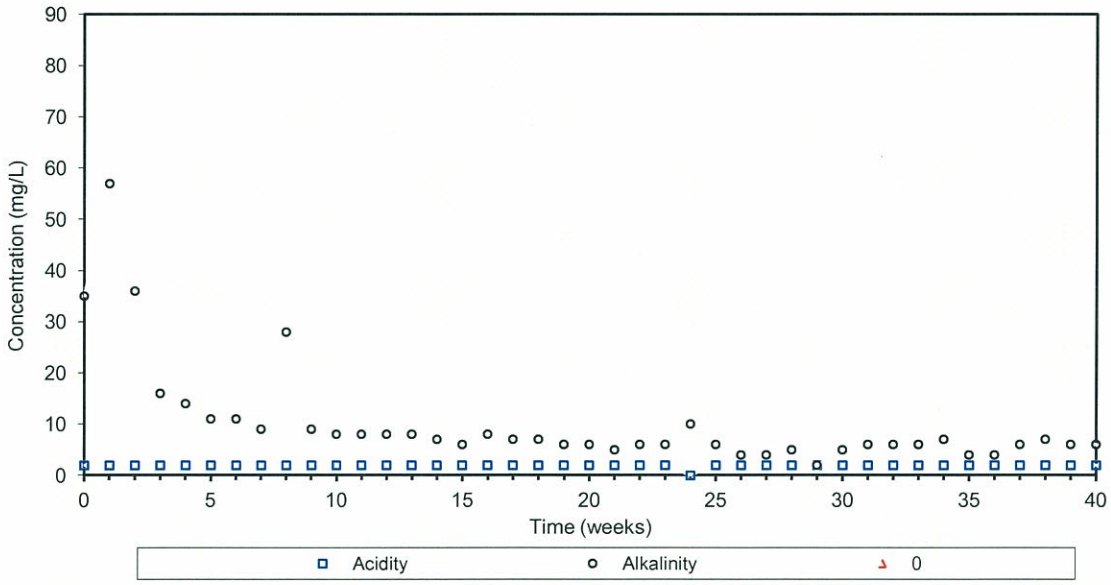


This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate ODM Master Comp B



Note: Acidity and alkalinity have detection limit of 2 mg/L.

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

SGS

Test Specimen

Sample	Weight (g)
ROM Sample A	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	0	1	2	3	4	5	6	7	8	9	10
LIMS		10112-MAY12	10113-MAY12	10132-MAY12	11119-MAY12	10342-MAY12	10013-JUN12	10044-JUN12	10086-JUN12	10128-JUN12	10001-JUL12	10042-JUL12
Hum Cell Leachate Vol	mLs	499	993	998	992	929	925	913	930	937	928	953
pH	units	7.73	7.80	8.03	7.62	7.64	7.39	7.59	7.33	7.07	6.92	6.95
Alkalinity	mg/L as $CaCO_3$	35	74	49	22	9	11	12	8	8	12	8
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Conductivity	µS/cm	711	679	194	75	42	53	57	63	72	74	83
SO_4	mg/L	260	270	40	12	7.3	11	14	17	20	19	23
Hg	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	---	---	---	---	< 0.0001
Al	mg/L	0.0644	0.0325	0.124	0.0332	0.0350	0.0375	---	---	---	---	0.0200
As	mg/L	0.0007	0.0012	0.0004	0.0004	< 0.0002	< 0.0002	---	---	---	---	0.0003
Ag	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	---	---	---	---	< 0.00001
Ba	mg/L	0.0089	0.0116	0.0028	0.0011	0.0007	0.0006	---	---	---	---	0.0011
Be	mg/L	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	---	---	---	---	< 0.00002
B	mg/L	0.0079	0.0180	0.0076	0.0023	0.0013	0.0012	---	---	---	---	0.0030
Bi	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	---	---	---	---	< 0.00001
Ca	mg/L	88.0	105	27.0	10.6	6.10	7.12	---	---	---	---	9.33
Cd	mg/L	0.00026	0.00050	0.00006	< 0.000003	< 0.000003	< 0.000003	---	---	---	---	0.000029
Co	mg/L	0.00060	0.00075	0.00016	0.00006	0.00004	0.00003	---	---	---	---	0.000051
Cr	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	---	---	---	---	< 0.0005
Cu	mg/L	0.0012	0.0022	0.0006	< 0.0005	< 0.0005	< 0.0005	---	---	---	---	< 0.0005
Fe	mg/L	0.004	< 0.003	< 0.003	0.011	0.008	0.005	---	---	---	---	0.004
K	mg/L	7.50	11.6	3.87	1.37	0.810	0.880	---	---	---	---	1.07
Li	mg/L	0.005	0.009	0.003	0.001	< 0.001	< 0.001	---	---	---	---	< 0.001
Mg	mg/L	13.9	17.5	4.04	1.23	0.600	0.845	---	---	---	---	1.73
Mn	mg/L	0.221	0.306	0.110	0.0672	0.0518	0.0458	---	---	---	---	0.0482
Mo	mg/L	0.00391	0.00656	0.00268	0.00066	0.00023	0.00022	---	---	---	---	0.00025
Na	mg/L	8.28	9.28	1.26	0.29	0.12	0.15	---	---	---	---	0.23
Ni	mg/L	0.0008	0.0009	0.0005	0.0002	0.0002	0.0001	---	---	---	---	< 0.0001
P	mg/L	0.010	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	---	---	---	---	< 0.009
Pb	mg/L	0.0004	0.0012	0.0002	0.0001	0.0002	0.0001	---	---	---	---	0.00007
Sb	mg/L	0.0049	0.0103	0.0057	0.0017	0.0007	0.0006	---	---	---	---	0.0007
Si	mg/L	0.91	2.39	1.16	0.41	0.19	0.18	---	---	---	---	0.21
Se	mg/L	0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	---	---	---	---	< 0.001
Sn	mg/L	0.00324	0.00165	0.00035	0.00008	0.00007	0.00021	---	---	---	---	0.00006
Sr	mg/L	0.343	0.401	0.0915	0.0293	0.0137	0.0170	---	---	---	---	0.0281
Th	mg/L	< 0.000004	< 0.000004	0.000010	< 0.000004	0.000005	0.000007	---	---	---	---	< 0.000004
Ti	mg/L	< 0.0001	< 0.0001	< 0.0001	0.0001	< 0.0001	< 0.0001	---	---	---	---	< 0.0001
Tl	mg/L	< 0.00002	0.00003	< 0.00002	< 0.00002	< 0.00002	< 0.00002	---	---	---	---	< 0.00002
U	mg/L	0.000335	0.000561	0.000161	0.000027	0.000012	0.000017	---	---	---	---	0.000020
V	mg/L	0.00005	0.00005	< 0.00003	0.00004	0.00005	< 0.00003	---	---	---	---	< 0.00003
W	mg/L	< 0.00003	0.00011	0.00008	< 0.00003	< 0.00003	< 0.00003	---	---	---	---	< 0.00003
Y	mg/L	0.00001	0.00003	0.00001	< 0.000001	0.000002	0.000002	---	---	---	---	0.000002
Zn	mg/L	0.010	0.038	0.007	0.007	0.006	0.004	---	---	---	---	0.004

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Test Specimen

Sample	Weight (g)
ROM Sample A	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	11	12	13	14	15	16	17	18	19	20	21
LIMS		10081-JUL12	10120-JUL12	11048-JUL12	10019-AUG12	10062-AUG12	10182-AUG12	10391-AUG12	10001-SEP12	10045-SEP12	10088-SEP12	10132-SEP12
Hum Cell Leachate Vol	mLs	926	926	920	834	910	930	884	896	912	911	935
pH	units	7.35	7.30	7.06	7.26	*7.08	7.25	7.53	7.26	7.01	7.34	7.08
Alkalinity	mg/L as $CaCO_3$	9	8	8	7	7	6	9	7	6	7	5
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Conductivity	µS/cm	78	67	73	76	79	79	18	71	74	77	76
SO_4	mg/L	22	19	19	24	22	20	1.5	18	20	20	22
Hg	mg/L	---	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---
Al	mg/L	---	---	---	---	0.0196	---	---	---	---	0.0149	---
As	mg/L	---	---	---	---	< 0.0002	---	---	---	---	< 0.0002	---
Ag	mg/L	---	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Ba	mg/L	---	---	---	---	0.0009	---	---	---	---	0.00077	---
Be	mg/L	---	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---
B	mg/L	---	---	---	---	0.0057	---	---	---	---	0.0020	---
Bi	mg/L	---	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Ca	mg/L	---	---	---	---	9.13	---	---	---	---	7.80	---
Cd	mg/L	---	---	---	---	0.00005	---	---	---	---	0.000039	---
Co	mg/L	---	---	---	---	0.00006	---	---	---	---	< 0.000002	---
Cr	mg/L	---	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Cu	mg/L	---	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Fe	mg/L	---	---	---	---	< 0.003	---	---	---	---	< 0.003	---
K	mg/L	---	---	---	---	0.978	---	---	---	---	0.786	---
Li	mg/L	---	---	---	---	< 0.001	---	---	---	---	< 0.001	---
Mg	mg/L	---	---	---	---	1.87	---	---	---	---	1.75	---
Mn	mg/L	---	---	---	---	0.0438	---	---	---	---	0.0366	---
Mo	mg/L	---	---	---	---	0.00024	---	---	---	---	0.00020	---
Na	mg/L	---	---	---	---	0.23	---	---	---	---	0.19	---
Ni	mg/L	---	---	---	---	0.0001	---	---	---	---	< 0.0001	---
P	mg/L	---	---	---	---	< 0.009	---	---	---	---	< 0.009	---
Pb	mg/L	---	---	---	---	0.0001	---	---	---	---	0.0001	---
Sb	mg/L	---	---	---	---	0.0006	---	---	---	---	0.0003	---
Si	mg/L	---	---	---	---	0.18	---	---	---	---	0.15	---
Se	mg/L	---	---	---	---	< 0.001	---	---	---	---	< 0.001	---
Sn	mg/L	---	---	---	---	0.00020	---	---	---	---	0.00005	---
Sr	mg/L	---	---	---	---	0.0268	---	---	---	---	0.0235	---
Th	mg/L	---	---	---	---	< 0.000004	---	---	---	---	< 0.000004	---
Ti	mg/L	---	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---
Tl	mg/L	---	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---
U	mg/L	---	---	---	---	0.000065	---	---	---	---	0.000026	---
V	mg/L	---	---	---	---	0.00004	---	---	---	---	< 0.00003	---
W	mg/L	---	---	---	---	0.00009	---	---	---	---	< 0.00003	---
Y	mg/L	---	---	---	---	0.000002	---	---	---	---	< 0.000001	---
Zn	mg/L	---	---	---	---	0.006	---	---	---	---	0.004	---

**Reassay LIMS 10500-AUG12*

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
ROM Sample A	1000

NOTE: the week 26 DI water addition to the humidity cell test was collected prematurely (not allowed to sit for the standard 1 hr contact period)

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	22	23	24	25	26	27	28	29	30	31	32
LIMS		10011-OCT12	10052-OCT12	10096-OCT12	10207-OCT12	11178-OCT12	10011-NOV12	10054-NOV12	11031-NOV12	11140-NOV12	10000-DEC12	10043-DEC12
Hum Cell Leachate Vol	mLs	914	926	933	923	896	912	914	927	919	912	908
pH	units	7.36	7.21	7.04	6.92	6.72	6.91	6.88	7.28	6.88	7.08	6.82
Alkalinity	mg/L as $CaCO_3$	4	7	7	6	4	6	16	6	7	7	6
Acidity	mg/L as $CaCO_3$	< 2	< 2	2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Conductivity	µS/cm	66	57	55	67	20	68	66	66	61	62	63
SO_4	mg/L	19	16	16	19	2.7	20	20	20	16	16	17
Hg	mg/L	---	---	---	< 0.0001	---	---	---	---	0.00003	---	---
Al	mg/L	---	---	---	0.0164	---	---	---	---	0.0227	---	---
As	mg/L	---	---	---	< 0.0002	---	---	---	---	0.0003	---	---
Ag	mg/L	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---	---
Ba	mg/L	---	---	---	0.00081	---	---	---	---	0.00062	---	---
Be	mg/L	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---	---
B	mg/L	---	---	---	0.0012	---	---	---	---	0.0029	---	---
Bi	mg/L	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---	---
Ca	mg/L	---	---	---	7.57	---	---	---	---	7.38	---	---
Cd	mg/L	---	---	---	0.000052	---	---	---	---	0.000052	---	---
Co	mg/L	---	---	---	0.000015	---	---	---	---	0.000117	---	---
Cr	mg/L	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---	---
Cu	mg/L	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---	---
Fe	mg/L	---	---	---	< 0.003	---	---	---	---	< 0.003	---	---
K	mg/L	---	---	---	0.762	---	---	---	---	0.620	---	---
Li	mg/L	---	---	---	< 0.001	---	---	---	---	< 0.001	---	---
Mg	mg/L	---	---	---	1.70	---	---	---	---	1.52	---	---
Mn	mg/L	---	---	---	0.0456	---	---	---	---	0.0543	---	---
Mo	mg/L	---	---	---	0.00025	---	---	---	---	0.00024	---	---
Na	mg/L	---	---	---	0.17	---	---	---	---	0.16	---	---
Ni	mg/L	---	---	---	< 0.0001	---	---	---	---	0.0001	---	---
P	mg/L	---	---	---	< 0.009	---	---	---	---	< 0.009	---	---
Pb	mg/L	---	---	---	0.00005	---	---	---	---	0.0001	---	---
Sb	mg/L	---	---	---	0.0007	---	---	---	---	0.0004	---	---
Si	mg/L	---	---	---	0.18	---	---	---	---	0.12	---	---
Se	mg/L	---	---	---	< 0.001	---	---	---	---	< 0.001	---	---
Sn	mg/L	---	---	---	0.00003	---	---	---	---	0.00002	---	---
Sr	mg/L	---	---	---	0.0216	---	---	---	---	0.0188	---	---
Th	mg/L	---	---	---	< 0.000004	---	---	---	---	< 0.000004	---	---
Ti	mg/L	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---	---
Tl	mg/L	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---	---
U	mg/L	---	---	---	0.000074	---	---	---	---	0.000009	---	---
V	mg/L	---	---	---	< 0.00003	---	---	---	---	< 0.00003	---	---
W	mg/L	---	---	---	< 0.00003	---	---	---	---	0.00006	---	---
Y	mg/L	---	---	---	< 0.000001	---	---	---	---	0.000004	---	---
Zn	mg/L	---	---	---	0.003	---	---	---	---	0.002	---	---

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
ROM Sample A	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	33	34	35	36	37	38	39	40	41
LIMS		10085-DEC12	11082-DEC12	11168-DEC12	10022-JAN13	10066-JAN13	10110-JAN13	10224-JAN13	10000-FEB13	10043-FEB13
Hum Cell Leachate Vol	mLs	901	934	900	947	921	917	921	958	944
pH	units	7.01	7.26	6.96	6.88	6.73	6.73	6.89	7.10	6.89
Alkalinity	mg/L as $CaCO_3$	7	6	8	5	6	5	5	6	6
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Conductivity	µS/cm	62	59	59	57	67	55	52	61	54
SO_4	mg/L	16	17	13	15	16	14	14	16	13
Hg	mg/L	---	---	0.00001	---	---	---	---	< 0.00001	---
Al	mg/L	---	---	0.0173	---	---	---	---	0.0107	---
As	mg/L	---	---	< 0.0002	---	---	---	---	< 0.0002	---
Ag	mg/L	---	---	< 0.00001	---	---	---	---	0.00002	---
Ba	mg/L	---	---	0.00053	---	---	---	---	0.00063	---
Be	mg/L	---	---	< 0.00002	---	---	---	---	< 0.00002	---
B	mg/L	---	---	0.0007	---	---	---	---	0.0017	---
Bi	mg/L	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Ca	mg/L	---	---	5.52	---	---	---	---	6.13	---
Cd	mg/L	---	---	0.000051	---	---	---	---	0.000049	---
Co	mg/L	---	---	0.000020	---	---	---	---	0.000012	---
Cr	mg/L	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Cu	mg/L	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Fe	mg/L	---	---	< 0.003	---	---	---	---	< 0.003	---
K	mg/L	---	---	0.628	---	---	---	---	0.540	---
Li	mg/L	---	---	< 0.001	---	---	---	---	< 0.001	---
Mg	mg/L	---	---	1.22	---	---	---	---	1.56	---
Mn	mg/L	---	---	0.0388	---	---	---	---	0.03554	---
Mo	mg/L	---	---	0.00030	---	---	---	---	0.00025	---
Na	mg/L	---	---	0.12	---	---	---	---	0.13	---
Ni	mg/L	---	---	< 0.0001	---	---	---	---	< 0.0001	---
P	mg/L	---	---	< 0.009	---	---	---	---	< 0.009	---
Pb	mg/L	---	---	0.0001	---	---	---	---	0.0001	---
Sb	mg/L	---	---	0.0004	---	---	---	---	0.0004	---
Si	mg/L	---	---	0.19	---	---	---	---	0.13	---
Se	mg/L	---	---	< 0.001	---	---	---	---	< 0.001	---
Sn	mg/L	---	---	0.00007	---	---	---	---	< 0.00001	---
Sr	mg/L	---	---	0.0142	---	---	---	---	0.0171	---
Th	mg/L	---	---	< 0.000004	---	---	---	---	< 0.000004	---
Ti	mg/L	---	---	< 0.0001	---	---	---	---	< 0.0001	---
Tl	mg/L	---	---	< 0.00002	---	---	---	---	< 0.00002	---
U	mg/L	---	---	0.000068	---	---	---	---	0.000068	---
V	mg/L	---	---	0.00004	---	---	---	---	< 0.00003	---
W	mg/L	---	---	0.00006	---	---	---	---	< 0.00003	---
Y	mg/L	---	---	0.000002	---	---	---	---	0.000001	---
Zn	mg/L	---	---	0.002	---	---	---	---	0.004	---

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
ROM Sample A	1000

Summary of ABA Test Data

Parameter	Units	LIMS: 10467-APR12 + 10260-JUN12
Sulphur (S)	%	2.24
Sulphide ($S^{=}$)	%	1.69
Modifed Sobek NP	t $CaCO_3$/1000 t	46.4
Siderite Corrected NP	t $CaCO_3$/1000 t	178

Leachate Paremeters Measured | ***Acid Generation*** [1] | ***Acid Neutralization*** [1]

Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µmhos/cm	SO_4 mg/L	SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly $S^{=}$ Depletion %	Cumulative $S^{=}$ Depletion %	Cumulative S Depletion %	NP Consumption $CaCO_3$, g/t/wk	Cumulative Mod Sobek NP Depl %	Cumulative Siderite Corrected NP Depl %
0	499	7.73	<2	35	711	260	129.7	129.74	0.26	0.26	0.19	135.15	0.29	0.08
1	993	7.80	<2	74	679	270	268.1	397.85	0.53	0.78	0.59	279.28	0.89	0.23
2	998	8.03	<2	49	194	40	39.9	437.77	0.08	0.86	0.65	41.58	0.98	0.26
3	992	7.62	<2	22	75	12	11.9	449.67	0.02	0.89	0.67	12.40	1.01	0.26
4	929	7.64	<2	9	42	7.3	6.8	456.46	0.01	0.90	0.68	7.06	1.02	0.27
5	925	7.39	<2	11	53	11	10.2	466.63	0.02	0.92	0.69	10.60	1.05	0.27
6	913	7.59	<2	12	57	14	12.8	479.41	0.03	0.95	0.71	13.31	1.08	0.28
7	930	7.33	<2	8	63	17	15.8	495.22	0.03	0.98	0.74	16.47	1.11	0.29
8	937	7.07	<2	8	72	20	18.7	513.96	0.04	1.01	0.76	19.52	1.15	0.30
9	928	6.92	<2	12	74	19	17.6	531.59	0.03	1.05	0.79	18.37	1.19	0.31
10	953	6.95	<2	8	83	23	21.9	553.51	0.04	1.09	0.82	22.83	1.24	0.32
11	926	7.35	<2	9	78	22	20.4	573.89	0.04	1.13	0.85	21.22	1.29	0.34
12	926	7.30	<2	8	67	19	17.6	591.48	0.03	1.17	0.88	18.33	1.33	0.35
13	920	7.06	<2	8	73	19	17.5	608.96	0.03	1.20	0.91	18.21	1.37	0.36
14	834	7.26	<2	7	76	24	20.0	628.98	0.04	1.24	0.94	20.85	1.41	0.37
15	910	7.08	<2	7	79	22	20.0	649.00	0.04	1.28	0.97	20.85	1.46	0.38
16	930	7.25	<2	6	79	20	18.6	667.60	0.04	1.32	0.99	19.38	1.50	0.39
17	884	7.53	<2	9	18	1.5	1.3	668.92	0.00	1.32	1.00	1.38	1.50	0.39
18	896	7.26	<2	7	71	18	16.1	685.05	0.03	1.35	1.02	16.80	1.54	0.40
19	912	7.01	<2	6	74	20	18.2	703.29	0.04	1.39	1.05	19.00	1.58	0.41
20	911	7.34	<2	7	77	20	18.2	721.51	0.04	1.42	1.07	18.98	1.62	0.42

** Initial Week 0 leachate may included soluble sulphate, and may not indicate oxidation of sulphide in the sample material has occurred.*

[1] Calculated values

Summary - Weeks 0 to 20

Maximum Value	8.03	2	74	711	270	268.1	-	0.53	-	-	279	-	-
Minimum Value	6.92	<2	6	18	1.5	1.3	-	0.00	-	-	1.4	-	-
Average Value	7.27	2	15	133	42	77.8	-	0.15	-	-	81.01	-	-

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
ROM Sample A	1000

Changes to Head Sample after 20 Weeks [1]

Parameter	Units	LIMS: 10467-APR12 + 10260-JUN12
Sulphide ($S^{=}$) Remaining	%	1.67
NP Remaining	t $CaCO_3$/1000 t	45.6
CO_3 NP Remaining	t $CaCO_3$/1000 t	177.2

	Leachate Paremeters Measured						*Acid Generation* [1]					*Acid Neutralization* [1]		
Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µmhos/cm	SO_4 mg/L	SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly S= Depletion %	Cumulative S= Depletion %	Cumulative S Depletion %	NP Consumption $CaCO_3$, g/t/wk	Cumulative Mod Sobek NP Depl %	Cumulative Siderite Corrected NP Depl %
21	935	7.08	<2	5	76	22	20.6	742.08	0.04	1.46	1.10	21.43	1.67	0.43
22	914	7.36	<2	4	66	19	17.4	759.45	0.03	1.50	1.13	18.09	1.70	0.44
23	926	7.21	<2	7	57	16	14.8	774.26	0.03	1.53	1.15	15.43	1.74	0.45
24	933	7.04	2	7	55	16	14.9	789.19	0.03	1.56	1.17	15.55	1.77	0.46
25	923	6.92	<2	6	67	19	17.5	806.73	0.03	1.59	1.20	18.27	1.81	0.47
26	896	6.72	<2	4	20	2.7	2.4	809.15	0.00	1.60	1.20	2.52	1.82	0.47
27	912	6.91	<2	6	68	20	18.2	827.39	0.04	1.63	1.23	19.00	1.86	0.48
28	914	6.88	<2	16	66	20	18.3	845.67	0.04	1.67	1.26	19.04	1.90	0.49
29	927	7.28	<2	6	66	20	18.5	864.21	0.04	1.70	1.29	19.31	1.94	0.51
30	919	6.88	<2	7	61	16	14.7	878.91	0.03	1.73	1.31	15.32	1.97	0.51
31	912	7.08	<2	7	62	16	14.6	893.50	0.03	1.76	1.33	15.20	2.01	0.52
32	908	6.82	<2	6	63	17	15.4	908.94	0.03	1.79	1.35	16.08	2.04	0.53
33	901	7.01	<2	7	62	16	14.4	923.35	0.03	1.82	1.37	15.02	2.07	0.54
34	934	7.26	<2	6	59	17	15.9	939.23	0.03	1.85	1.40	16.54	2.11	0.55
35	900	6.96	<2	8	59	13	11.7	950.93	0.02	1.88	1.42	12.19	2.13	0.56
36	947	6.88	<2	5	57	15	14.2	965.14	0.03	1.90	1.44	14.80	2.17	0.56
37	921	6.73	<2	6	67	16	14.7	979.87	0.03	1.93	1.46	15.35	2.20	0.57
38	917	6.73	<2	5	55	14	12.8	992.71	0.03	1.96	1.48	13.37	2.23	0.58
39	921	6.89	<2	5	52	14	12.9	1005.60	0.03	1.98	1.50	13.43	2.26	0.59
40	958	7.10	<2	6	61	16	15.3	1020.93	0.03	2.01	1.52	15.97	2.29	0.60

[1] *Calculated values*

Summary - Weeks 0 to 40

Maximum Value	8.03	2	74	711	270	268.11	-	0.04	-	-	279	-	-
Minimum Value	6.72	<2	4	18	1.5	1.33	-	0.00	-	-	1.4	-	-
Average Value	7.09	2	11	97	29	24.90	-	0.05	-	-	25.94	-	-

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
ROM Sample A	1000

Changes to Head Sample after 40 Weeks [1]

Parameter	Units	LIMS: 10467-APR12 + 10260-JUN12
Sulphide ($S^{=}$) Remaining	%	1.66
NP Remaining	t $CaCO_3$/1000 t	45.3
CO_3 NP Remaining	t $CaCO_3$/1000 t	176.9

Leachate Paremeters Measured							*Acid Generation* [1]					*Acid Neutralization* [1]		
Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µS/cm	SO_4 mg/L	SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly S= Depletion %	Cumulative S= Depletion %	Cumulative S Depletion %	NP Consumption $CaCO_3$, g/t/wk	Cumulative Mod Sobek NP Depl %	Cumulative Siderite Corrected NP Depl %
41	944	6.89	<2	6	54	13	12.3	1033.20	0.02	2.04	1.54	12.78	2.32	0.60
Summary - Weeks 0 to 60														
Maximum Value		8.03	2	74	711	270	268.11	-	0.04	-	-	279.28	-	-
Minimum Value		6.72	<2	4	18	1.5	1.33	-	0.00	-	-	1.38	-	-
Average Value		7.08	2	11	96	29	24.60	-	0.05	-	-	25.63	-	-

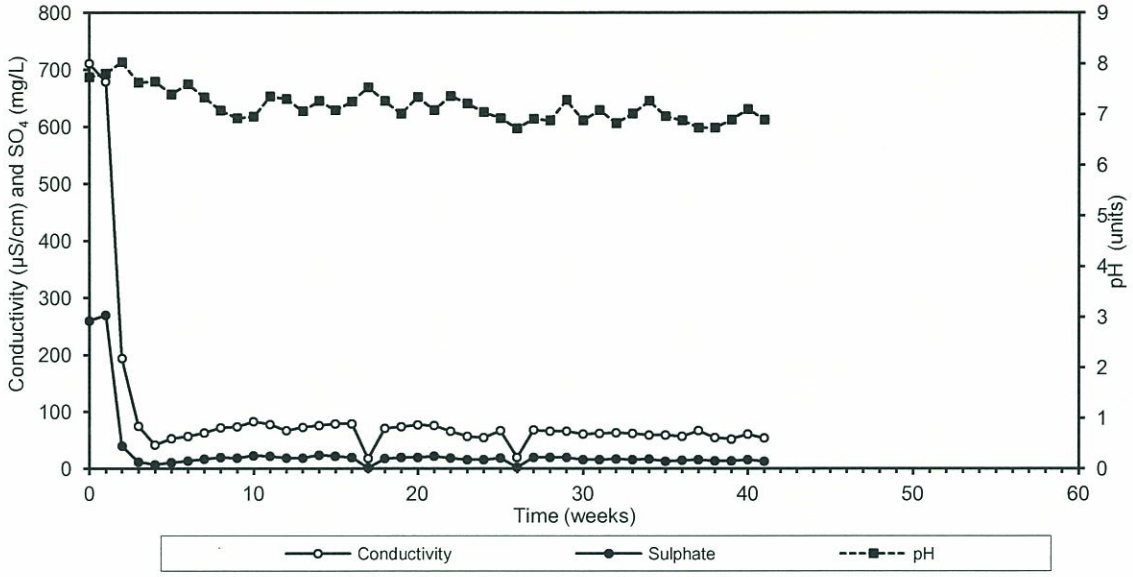
[1] *Calculated values*

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

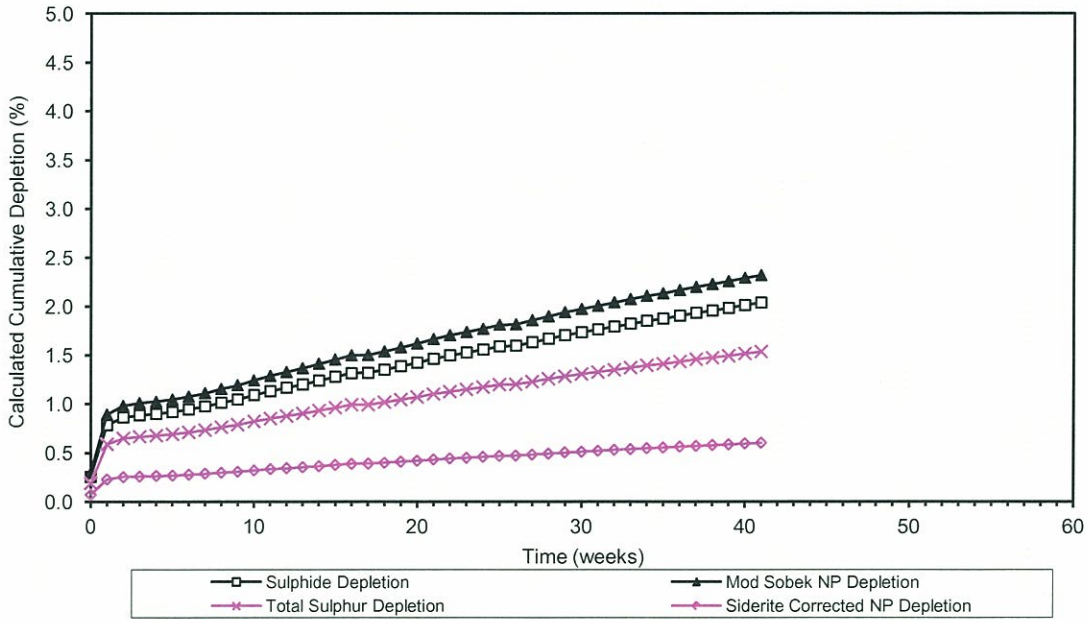
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Conductivity, Sulphate, and pH in Weekly Humidity Cell Leachate - ROM Sample A



Cumulative Sulphide and NP Depletion ROM Sample A



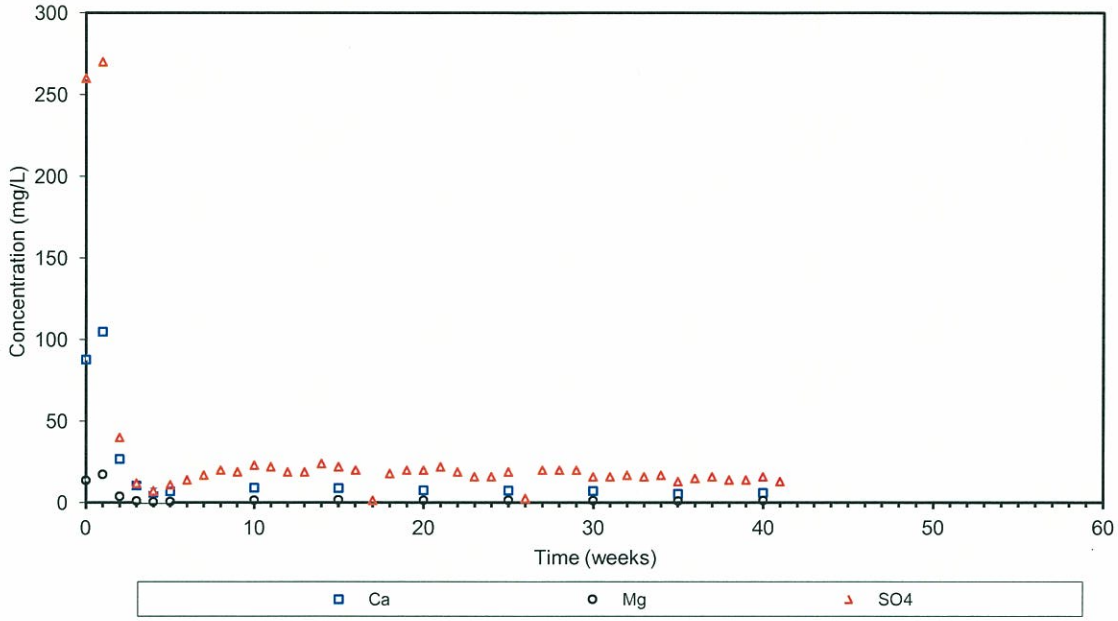
Note: NP depletion calculated based on sulphate assay.
Note [2]: x-axis reduced to 5% for ease of viewing

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

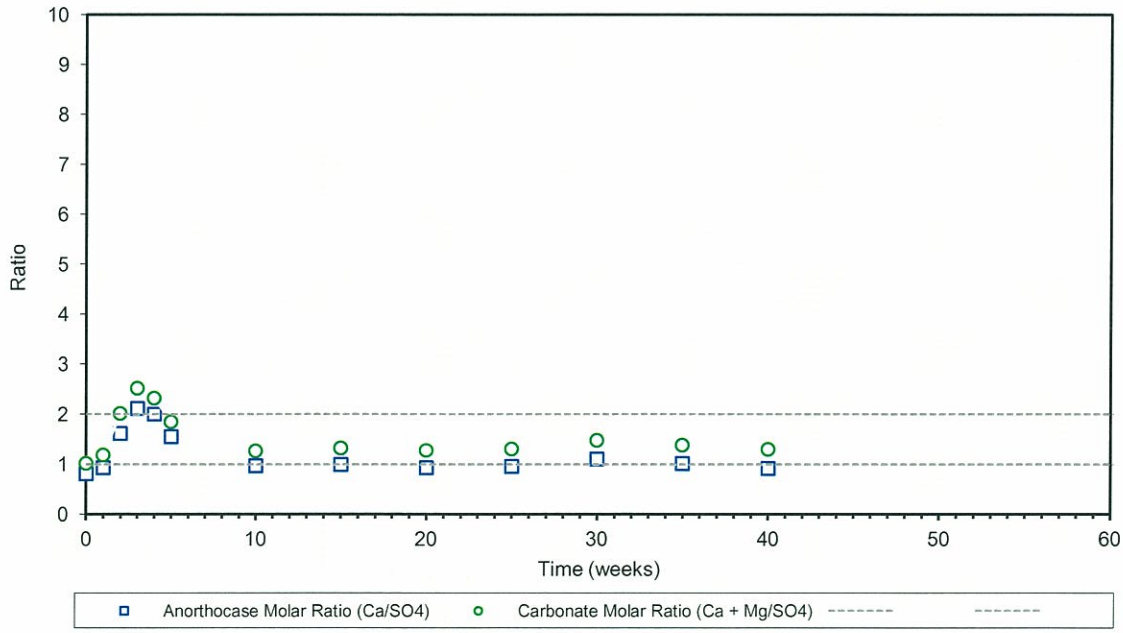
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate ROM Sample A



Carbonate (Ca + Mg/SO_4) and Anorthoclase (Ca/SO_4) Molar Ratios ROM Sample A

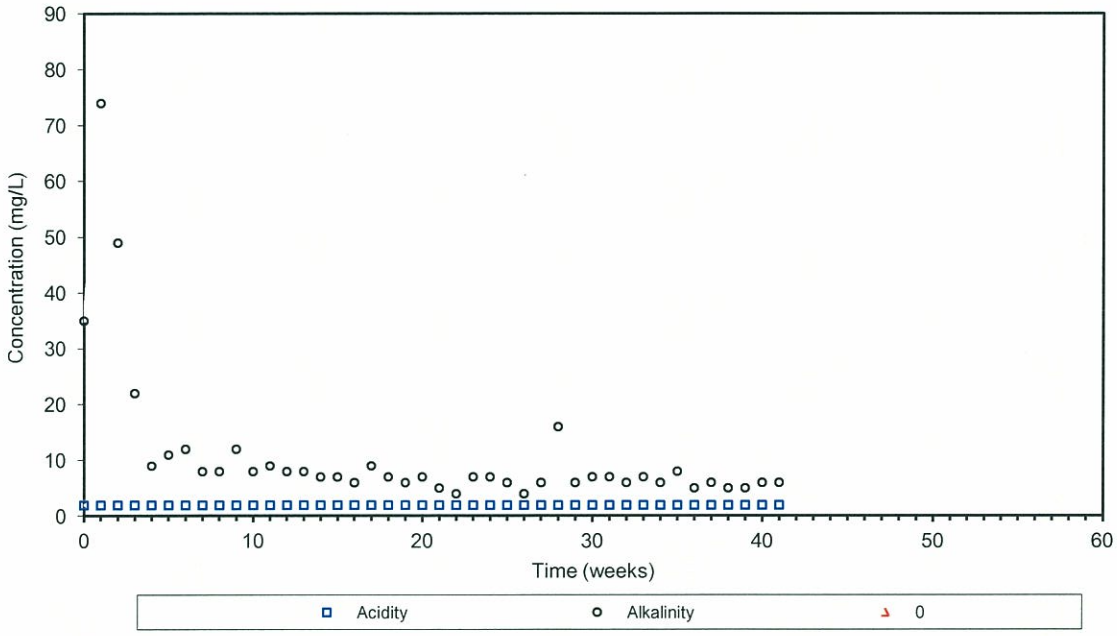


This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate ROM Sample A



Note: Acidity and alkalinity have detection limit of 2 mg/L.

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

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Test Specimen

Sample	Weight (g)
ROM Sample B	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	0	1	2	3	4	5	6	7	8	9	10
LIMS		10112-MAY12	10113-MAY12	10132-MAY12	11119-MAY12	10342-MAY12	10013-JUN12	10044-JUN12	10086-JUN12	10128-JUN12	10001-JUL12	10042-JUL12
Hum Cell Leachate Vol	mLs	510	1003	1002	993	935	924	926	944	944	944	967
pH	units	7.66	7.77	7.98	7.70	7.56	7.56	7.17	7.13	6.67	7.10	7.07
Alkalinity	mg/L as $CaCO_3$	29	80	49	33	17	16	9	9	8	8	8
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Conductivity	µS/cm	702	707	200	124	56	54	50	56	58	63	69
SO_4	mg/L	230	280	44	26	*10	7.2	10	13	15	16	19
Hg	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	---	---	---	---	< 0.0001
Al	mg/L	0.0699	0.0369	0.0378	0.0448	0.0418	0.0478	---	---	---	---	0.0176
As	mg/L	0.0007	0.0013	0.0005	0.0005	0.0002	0.0002	---	---	---	---	< 0.0002
Ag	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	---	---	---	---	< 0.00001
Ba	mg/L	0.0081	0.0121	0.0027	0.0017	0.0007	0.0005	---	---	---	---	0.0007
Be	mg/L	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	---	---	---	---	< 0.00002
B	mg/L	0.0073	0.0197	0.0073	0.0040	0.0015	0.0010	---	---	---	---	0.0026
Bi	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	---	---	---	---	< 0.00001
Ca	mg/L	82.1	111	28.1	17.3	8.62	6.16	---	---	---	---	8.12
Cd	mg/L	0.00049	0.00020	0.00001	< 0.000003	< 0.000003	< 0.000003	---	---	---	---	0.000026
Co	mg/L	0.00052	0.00066	0.00012	0.00008	0.00004	0.00002	---	---	---	---	0.000035
Cr	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	---	---	---	---	< 0.0005
Cu	mg/L	0.0010	0.0013	< 0.0005	< 0.0005	< 0.0005	< 0.0005	---	---	---	---	< 0.0005
Fe	mg/L	0.004	< 0.003	0.003	0.005	0.011	0.007	---	---	---	---	0.003
K	mg/L	6.81	12.7	4.08	2.45	0.979	0.756	---	---	---	---	0.973
Li	mg/L	0.005	0.010	0.003	0.002	< 0.001	< 0.001	---	---	---	---	< 0.001
Mg	mg/L	12.3	18.3	4.14	2.46	0.962	0.605	---	---	---	---	1.48
Mn	mg/L	0.194	0.304	0.0826	0.0705	0.0659	0.0369	---	---	---	---	0.0440
Mo	mg/L	0.00377	0.00797	0.00281	0.00106	0.00026	0.00015	---	---	---	---	0.00021
Na	mg/L	7.43	9.92	1.18	0.47	0.14	0.10	---	---	---	---	0.19
Ni	mg/L	0.0007	0.0009	0.0004	0.0003	0.0002	< 0.0001	---	---	---	---	< 0.0001
P	mg/L	0.012	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	---	---	---	---	< 0.009
Pb	mg/L	0.0004	0.0003	0.0001	0.0001	0.0002	0.0001	---	---	---	---	0.00006
Sb	mg/L	0.0045	0.0117	0.0064	0.0033	0.0008	0.0005	---	---	---	---	0.0007
Si	mg/L	0.80	2.73	1.24	0.75	0.26	0.17	---	---	---	---	0.19
Se	mg/L	0.001	0.002	< 0.001	< 0.001	< 0.001	< 0.001	---	---	---	---	< 0.001
Sn	mg/L	0.00952	0.00280	0.00057	0.00014	0.00011	0.00011	---	---	---	---	< 0.00001
Sr	mg/L	0.304	0.422	0.0926	0.0559	0.0219	0.0135	---	---	---	---	0.0244
Th	mg/L	< 0.000004	< 0.000004	< 0.000004	< 0.000004	< 0.000004	< 0.000004	---	---	---	---	< 0.000004
Ti	mg/L	< 0.0001	< 0.0001	< 0.0001	0.0002	< 0.0001	< 0.0001	---	---	---	---	< 0.0001
Tl	mg/L	< 0.00002	0.00003	< 0.00002	< 0.00002	< 0.00002	< 0.00002	---	---	---	---	< 0.00002
U	mg/L	0.000355	0.000542	0.000114	0.000107	0.000019	0.000008	---	---	---	---	0.000019
V	mg/L	0.00005	0.00006	< 0.00003	0.00006	0.00003	< 0.00003	---	---	---	---	< 0.00003
W	mg/L	< 0.00003	0.00014	0.00010	< 0.00003	< 0.00003	< 0.00003	---	---	---	---	< 0.00003
Y	mg/L	0.00001	0.00001	0.00001	0.000001	0.000003	0.000002	---	---	---	---	< 0.000001
Zn	mg/L	0.009	0.016	0.005	0.004	0.002	0.001	---	---	---	---	0.002

**Reassay LIMS 10309-JUN12*

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

SGS

Test Specimen

Sample	Weight (g)
ROM Sample B	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	11	12	13	14	15	16	17	18	19	20	21
LIMS		10081-JUL12	10120-JUL12	11048-JUL12	10019-AUG12	10062-AUG12	10182-AUG12	10391-AUG12	10001-SEP12	10045-SEP12	10088-SEP12	10132-SEP12
Hum Cell Leachate Vol	mLs	939	930	936	931	926	934	910	906	916	935	950
pH	units	7.19	7.01	*7.12	7.05	**7.09	7.10	7.08	7.06	7.15	7.15	7.17
Alkalinity	mg/L as $CaCO_3$	7	7	6	7	6	7	10	9	4	7	5
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	<2	< 2	< 2	< 2	< 2
Conductivity	µS/cm	69	58	60	64	67	70	73	86	57	59	58
SO_4	mg/L	19	15	16	18	19	18	19	22	14	12	27
Hg	mg/L	---	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---
Al	mg/L	---	---	---	---	0.0194	---	---	---	---	0.0174	---
As	mg/L	---	---	---	---	< 0.0002	---	---	---	---	< 0.0002	---
Ag	mg/L	---	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Ba	mg/L	---	---	---	---	0.0007	---	---	---	---	0.00055	---
Be	mg/L	---	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---
B	mg/L	---	---	---	---	0.0046	---	---	---	---	0.0014	---
Bi	mg/L	---	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Ca	mg/L	---	---	---	---	7.69	---	---	---	---	6.13	---
Cd	mg/L	---	---	---	---	0.00003	---	---	---	---	0.000030	---
Co	mg/L	---	---	---	---	0.00004	---	---	---	---	< 0.000002	---
Cr	mg/L	---	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Cu	mg/L	---	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Fe	mg/L	---	---	---	---	< 0.003	---	---	---	---	< 0.003	---
K	mg/L	---	---	---	---	0.830	---	---	---	---	0.604	---
Li	mg/L	---	---	---	---	< 0.001	---	---	---	---	< 0.001	---
Mg	mg/L	---	---	---	---	1.48	---	---	---	---	1.14	---
Mn	mg/L	---	---	---	---	0.0385	---	---	---	---	0.0395	---
Mo	mg/L	---	---	---	---	0.00016	---	---	---	---	0.00014	---
Na	mg/L	---	---	---	---	0.17	---	---	---	---	0.13	---
Ni	mg/L	---	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---
P	mg/L	---	---	---	---	< 0.009	---	---	---	---	< 0.009	---
Pb	mg/L	---	---	---	---	0.0001	---	---	---	---	0.0001	---
Sb	mg/L	---	---	---	---	0.0005	---	---	---	---	0.0003	---
Si	mg/L	---	---	---	---	0.16	---	---	---	---	0.14	---
Se	mg/L	---	---	---	---	< 0.001	---	---	---	---	< 0.001	---
Sn	mg/L	---	---	---	---	0.00009	---	---	---	---	< 0.00001	---
Sr	mg/L	---	---	---	---	0.0221	---	---	---	---	0.0169	---
Th	mg/L	---	---	---	---	< 0.000004	---	---	---	---	< 0.000004	---
Ti	mg/L	---	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---
Tl	mg/L	---	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---
U	mg/L	---	---	---	---	0.000013	---	---	---	---	0.000017	---
V	mg/L	---	---	---	---	< 0.00003	---	---	---	---	< 0.00003	---
W	mg/L	---	---	---	---	0.00003	---	---	---	---	< 0.00003	---
Y	mg/L	---	---	---	---	< 0.000001	---	---	---	---	< 0.000001	---
Zn	mg/L	---	---	---	---	0.002	---	---	---	---	0.003	---

**Reassay LIMS 10498-AUG12 **Reassay LIMS 10500-AUG12*

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
ROM Sample B	1000

NOTE: the week 26 DI water addition to the humidity cell test was collected prematurely (not allowed to sit for the standard 1 hr contact period)

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	22	23	24	25	26	27	28	29	30	31	32
LIMS		10011-OCT12	10052-OCT12	10096-OCT12	10207-OCT12	11178-OCT12	10011-NOV12	10054-NOV12	11031-NOV12	11140-NOV12	10000-DEC12	10043-DEC12
Hum Cell Leachate Vol	mLs	925	953	946	935	906	924	919	943	920	935	922
pH	units	7.52	7.20	7.31	7.24	6.86	7.05	6.74	7.19	7.00	7.21	7.12
Alkalinity	mg/L as $CaCO_3$	5	9	5	9	4	6	11	7	10	10	13
Acidity	mg/L as $CaCO_3$	< 2	< 2	2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Conductivity	µS/cm	55	103	55	68	23	63	74	77	124	97	126
SO_4	mg/L	15	34	16	19	3.5	17	22	21	42	28	35
Hg	mg/L	---	---	---	< 0.0001	---	---	---	---	0.00002	---	---
Al	mg/L	---	---	---	0.0198	---	---	---	---	0.0313	---	---
As	mg/L	---	---	---	0.0005	---	---	---	---	0.0005	---	---
Ag	mg/L	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---	---
Ba	mg/L	---	---	---	0.00073	---	---	---	---	0.00175	---	---
Be	mg/L	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---	---
B	mg/L	---	---	---	0.0011	---	---	---	---	0.0026	---	---
Bi	mg/L	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---	---
Ca	mg/L	---	---	---	7.58	---	---	---	---	14.6	---	---
Cd	mg/L	---	---	---	0.000039	---	---	---	---	0.000061	---	---
Co	mg/L	---	---	---	0.000026	---	---	---	---	0.000132	---	---
Cr	mg/L	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---	---
Cu	mg/L	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---	---
Fe	mg/L	---	---	---	< 0.003	---	---	---	---	< 0.003	---	---
K	mg/L	---	---	---	0.773	---	---	---	---	1.34	---	---
Li	mg/L	---	---	---	< 0.001	---	---	---	---	0.001	---	---
Mg	mg/L	---	---	---	1.66	---	---	---	---	3.94	---	---
Mn	mg/L	---	---	---	0.0442	---	---	---	---	0.0549	---	---
Mo	mg/L	---	---	---	0.00023	---	---	---	---	0.00062	---	---
Na	mg/L	---	---	---	0.17	---	---	---	---	0.39	---	---
Ni	mg/L	---	---	---	< 0.0001	---	---	---	---	0.0001	---	---
P	mg/L	---	---	---	< 0.009	---	---	---	---	< 0.009	---	---
Pb	mg/L	---	---	---	0.00009	---	---	---	---	0.0001	---	---
Sb	mg/L	---	---	---	0.0007	---	---	---	---	0.0008	---	---
Si	mg/L	---	---	---	0.19	---	---	---	---	0.29	---	---
Se	mg/L	---	---	---	< 0.001	---	---	---	---	< 0.001	---	---
Sn	mg/L	---	---	---	0.00004	---	---	---	---	0.00004	---	---
Sr	mg/L	---	---	---	0.0218	---	---	---	---	0.0440	---	---
Th	mg/L	---	---	---	< 0.000004	---	---	---	---	< 0.000004	---	---
Ti	mg/L	---	---	---	0.0002	---	---	---	---	< 0.0001	---	---
Tl	mg/L	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---	---
U	mg/L	---	---	---	0.000054	---	---	---	---	0.000036	---	---
V	mg/L	---	---	---	< 0.00003	---	---	---	---	0.00004	---	---
W	mg/L	---	---	---	< 0.00003	---	---	---	---	0.00005	---	---
Y	mg/L	---	---	---	< 0.000001	---	---	---	---	0.000002	---	---
Zn	mg/L	---	---	---	0.002	---	---	---	---	0.003	---	---

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
ROM Sample B	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	33	34	35	36	37	38	39	40	41
LIMS		10085-DEC12	11082-DEC12	11168-DEC12	10022-JAN13	10066-JAN13	10110-JAN13	10224-JAN13	10000-FEB13	10043-FEB13
Hum Cell Leachate Vol	mLs	928	931	930	959	931	919	943	986	960
pH	units	7.30	7.56	7.16	7.31	7.00	7.37	7.30	7.24	7.51
Alkalinity	mg/L as $CaCO_3$	16	17	13	29	25	25	23	50	27
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Conductivity	µS/cm	158	130	94	153	77	134	110	190	78
SO_4	mg/L	45	37	21	30	15	25	20	36	7.8
Hg	mg/L	---	---	0.00001	---	---	---	---	< 0.00001	---
Al	mg/L	---	---	0.0282	---	---	---	---	0.0359	---
As	mg/L	---	---	< 0.0002	---	---	---	---	0.0003	---
Ag	mg/L	---	---	< 0.00001	---	---	---	---	0.00004	---
Ba	mg/L	---	---	0.00103	---	---	---	---	0.00325	---
Be	mg/L	---	---	< 0.00002	---	---	---	---	< 0.00002	---
B	mg/L	---	---	0.0012	---	---	---	---	0.0049	---
Bi	mg/L	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Ca	mg/L	---	---	9.29	---	---	---	---	24.3	---
Cd	mg/L	---	---	0.000051	---	---	---	---	0.000138	---
Co	mg/L	---	---	0.000028	---	---	---	---	0.000056	---
Cr	mg/L	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Cu	mg/L	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Fe	mg/L	---	---	< 0.003	---	---	---	---	< 0.003	---
K	mg/L	---	---	1.12	---	---	---	---	2.96	---
Li	mg/L	---	---	< 0.001	---	---	---	---	0.004	---
Mg	mg/L	---	---	1.94	---	---	---	---	5.45	---
Mn	mg/L	---	---	0.0399	---	---	---	---	0.122	---
Mo	mg/L	---	---	0.00043	---	---	---	---	0.00103	---
Na	mg/L	---	---	0.18	---	---	---	---	0.48	---
Ni	mg/L	---	---	0.0002	---	---	---	---	0.0002	---
P	mg/L	---	---	< 0.009	---	---	---	---	< 0.009	---
Pb	mg/L	---	---	0.0002	---	---	---	---	0.00004	---
Sb	mg/L	---	---	0.0009	---	---	---	---	0.0032	---
Si	mg/L	---	---	0.41	---	---	---	---	1.36	---
Se	mg/L	---	---	< 0.001	---	---	---	---	< 0.001	---
Sn	mg/L	---	---	0.00010	---	---	---	---	0.00022	---
Sr	mg/L	---	---	0.0261	---	---	---	---	0.0711	---
Th	mg/L	---	---	< 0.000004	---	---	---	---	< 0.000004	---
Ti	mg/L	---	---	< 0.0001	---	---	---	---	< 0.0001	---
Tl	mg/L	---	---	< 0.00002	---	---	---	---	< 0.00002	---
U	mg/L	---	---	0.000035	---	---	---	---	0.000096	---
V	mg/L	---	---	0.00004	---	---	---	---	0.00003	---
W	mg/L	---	---	0.00005	---	---	---	---	0.00005	---
Y	mg/L	---	---	0.000002	---	---	---	---	0.000006	---
Zn	mg/L	---	---	0.005	---	---	---	---	0.010	---

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TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
ROM Sample B	1000

Summary of ABA Test Data

Parameter	Units	LIMS: 10467-APR12 + 10260-JUN12
Sulphur (S)	%	2.19
Sulphide ($S^{=}$)	%	1.95
Modifed Sobek NP	t $CaCO_3$/1000 t	45.3
Siderite Corrected NP	t $CaCO_3$/1000 t	186

Leachate Paremeters Measured							*Acid Generation*[1]					*Acid Neutralization*[1]		
Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µmhos/cm	SO_4 mg/L	SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly $S^{=}$ Depletion %	Cumulative $S^{=}$ Depletion %	Cumulative S Depletion %	NP Consumption $CaCO_3$, g/t/wk	Cumulative Mod Sobek NP Depl %	Cumulative Siderite Corrected NP Depl %
0	510	7.66	<2	29	702	230	117.3	117.30	0.20	0.20	0.18	122.19	0.27	0.07
1	1003	7.77	<2	80	707	280	280.8	398.14	0.48	0.68	0.61	292.54	0.92	0.22
2	1002	7.98	<2	49	200	44	44.1	442.23	0.08	0.76	0.67	45.93	1.02	0.25
3	993	7.70	<2	33	124	26	25.8	468.05	0.04	0.80	0.71	26.89	1.08	0.26
4	935	7.56	<2	17	56	10	9.4	477.40	0.02	0.82	0.73	9.74	1.10	0.27
5	924	7.56	<2	16	54	7.2	6.7	484.05	0.01	0.83	0.74	6.93	1.11	0.27
6	926	7.17	<2	9	50	10	9.3	493.31	0.02	0.84	0.75	9.65	1.13	0.28
7	944	7.13	<2	9	56	13	12.3	505.58	0.02	0.86	0.77	12.78	1.16	0.28
8	944	6.67	<2	8	58	15	14.2	519.74	0.02	0.89	0.79	14.75	1.20	0.29
9	944	7.10	<2	8	63	16	15.1	534.84	0.03	0.91	0.81	15.73	1.23	0.30
10	967	7.07	<2	8	69	19	18.4	553.22	0.03	0.95	0.84	19.14	1.27	0.31
11	939	7.19	<2	7	69	19	17.8	571.06	0.03	0.98	0.87	18.58	1.31	0.32
12	930	7.01	<2	7	58	15	14.0	585.01	0.02	1.00	0.89	14.53	1.35	0.33
13	936	7.12	<2	6	60	16	15.0	599.98	0.03	1.03	0.91	15.60	1.38	0.34
14	931	7.05	<2	7	64	18	16.8	616.74	0.03	1.05	0.94	17.46	1.42	0.35
15	926	7.09	<2	6	67	19	17.6	634.34	0.03	1.08	0.97	18.33	1.46	0.36
16	934	7.10	<2	7	70	18	16.8	651.15	0.03	1.11	0.99	17.51	1.50	0.36
17	910	7.08	<2	10	73	19	17.3	668.44	0.03	1.14	1.02	18.01	1.54	0.37
18	906	7.06	<2	9	86	22	19.9	688.37	0.03	1.18	1.05	20.76	1.58	0.39
19	916	7.15	<2	4	57	14	12.8	701.19	0.02	1.20	1.07	13.36	1.61	0.39
20	935	7.15	<2	7	59	12	11.2	712.41	0.02	1.22	1.08	11.69	1.64	0.40
Summary - Weeks 0 to 20														
Maximum Value		7.98	2	80	707	280	280.8	-	0.48	-	-	293	-	-
Minimum Value		6.67	<2	4	50	7.2	6.7	-	0.01	-	-	6.9	-	-
Average Value		7.16	2	16	133	40	33.9	-	0.06	-	-	35.34	-	-

** Initial Week 0 leachate may included soluble sulphate, and may not indicate oxidation of sulphide in the sample material has occurred.*

[1] *Calculated values*

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
ROM Sample B	1000

Changes to Head Sample after 20 Weeks [1]

Parameter	Units	LIMS: 10467-APR12 + 10260-JUN12
Sulphide ($S^{=}$) Remaining	%	1.93
NP Remaining	t $CaCO_3$/1000 t	44.6
CO_3 NP Remaining	t $CaCO_3$/1000 t	185.3

Leachate Paremeters Measured | *Acid Generation* [1] | *Acid Neutralization* [1]

Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µmhos/cm	SO_4 mg/L	SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly S= Depletion %	Cumulative S= Depletion %	Cumulative S Depletion %	NP Consumption $CaCO_3$, g/t/wk	Cumulative Mod Sobek NP Depl %	Cumulative Siderite Corrected NP Depl %
21	950	7.17	<2	5	58	27	25.7	738.06	0.04	1.26	1.12	26.72	1.70	0.41
22	925	7.52	<2	5	55	15	13.9	751.94	0.02	1.29	1.14	14.45	1.73	0.42
23	953	7.20	<2	9	103	34	32.4	784.34	0.06	1.34	1.19	33.75	1.80	0.44
24	946	7.31	2	5	55	16	15.1	799.48	0.03	1.37	1.22	15.77	1.84	0.45
25	935	7.24	<2	9	68	19	17.8	817.24	0.03	1.40	1.24	18.51	1.88	0.46
26	906	6.86	<2	4	23	3.5	3.2	820.41	0.01	1.40	1.25	3.30	1.89	0.46
27	924	7.05	<2	6	63	17	15.7	836.12	0.03	1.43	1.27	16.36	1.92	0.47
28	919	6.74	<2	11	74	22	20.2	856.34	0.03	1.46	1.30	21.06	1.97	0.48
29	943	7.19	<2	7	77	21	19.8	876.14	0.03	1.50	1.33	20.63	2.01	0.49
30	920	7.00	<2	10	124	42	38.6	914.78	0.07	1.56	1.39	40.25	2.10	0.51
31	935	7.21	<2	10	97	28	26.2	940.96	0.04	1.61	1.43	27.27	2.16	0.53
32	922	7.12	<2	13	126	35	32.3	973.23	0.06	1.66	1.48	33.61	2.24	0.55
33	928	7.30	<2	16	158	45	41.8	1014.99	0.07	1.74	1.54	43.50	2.33	0.57
34	931	7.56	<2	17	130	37	34.4	1049.44	0.06	1.79	1.60	35.88	2.41	0.59
35	930	7.16	<2	13	94	21	19.5	1068.97	0.03	1.83	1.63	20.34	2.46	0.60
36	959	7.31	<2	29	153	30	28.8	1097.74	0.05	1.88	1.67	29.97	2.52	0.61
37	931	7.00	<2	25	77	15	14.0	1111.70	0.02	1.90	1.69	14.55	2.56	0.62
38	919	7.37	<2	25	134	25	23.0	1134.68	0.04	1.94	1.73	23.93	2.61	0.64
39	943	7.30	<2	23	110	20	18.9	1153.54	0.03	1.97	1.76	19.65	2.65	0.65
40	986	7.24	<2	50	190	36	35.5	1189.04	0.06	2.03	1.81	36.98	2.73	0.67

[1] *Calculated values*

Summary - Weeks 0 to 40

Maximum Value	7.98	2	80	707	280	280.84	-	0.07	-	-	293	-	-
Minimum Value	6.67	<2	4	23	3.5	3.17	-	0.01	-	-	3.3	-	-
Average Value	7.16	2	15	116	33	29.00	-	0.05	-	-	30.21	-	-

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TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
ROM Sample B	1000

Changes to Head Sample after 40 Weeks [1]

Parameter	Units	LIMS: 10467-APR12 + 10260-JUN12
Sulphide ($S^{=}$) Remaining	%	1.91
NP Remaining	t $CaCO_3$/1000 t	44.1
CO_3 NP Remaining	t $CaCO_3$/1000 t	184.8

Leachate Paremeters Measured | ***Acid Generation*** [1] | ***Acid Neutralization*** [1]

Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µS/cm	SO_4 mg/L	SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly S= Depletion %	Cumulative S= Depletion %	Cumulative S Depletion %	NP Consumption $CaCO_3$, g/t/wk	Cumulative Mod Sobek NP Depl %	Cumulative Siderite Corrected NP Depl %
41	960	7.51	<2	27	78	7.8	7.5	1196.52	0.01	2.05	1.82	7.80	2.75	0.67
Summary - Weeks 0 to 60														
Maximum Value		7.98	2	80	707	280	280.84	-	0.07	-	-	292.54	-	-
Minimum Value		6.67	<2	4	23	3.5	3.17	-	0.01	-	-	3.30	-	-
Average Value		7.16	2	16	115	32	28.49	-	0.05	-	-	29.68	-	-

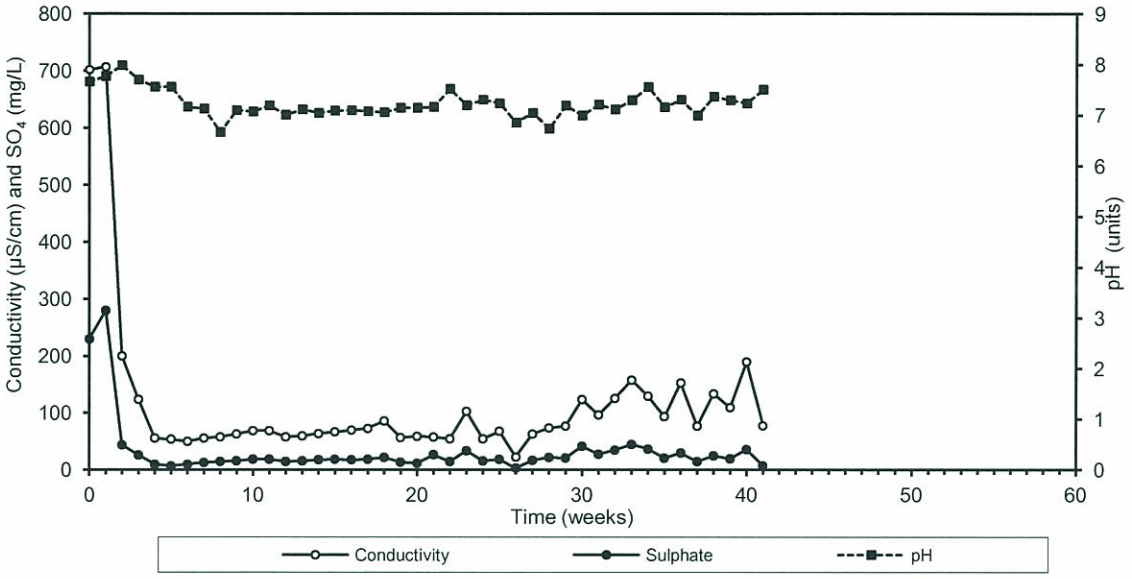
[1] *Calculated values*

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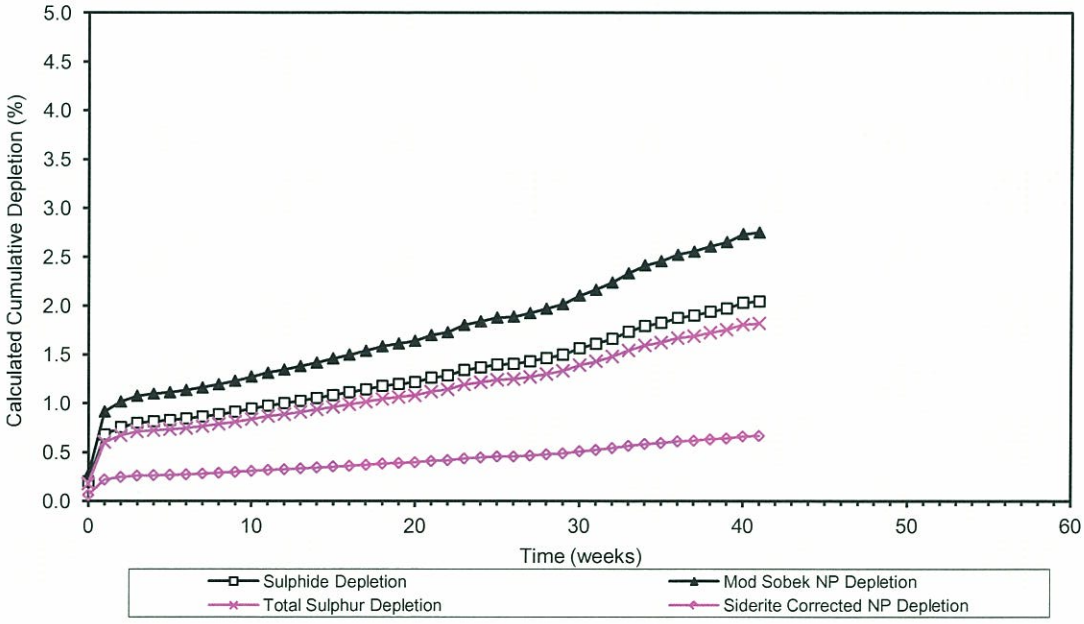
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Conductivity, Sulphate, and pH in Weekly Humidity Cell Leachate - ROM Sample B



Cumulative Sulphide and NP Depletion ROM Sample B



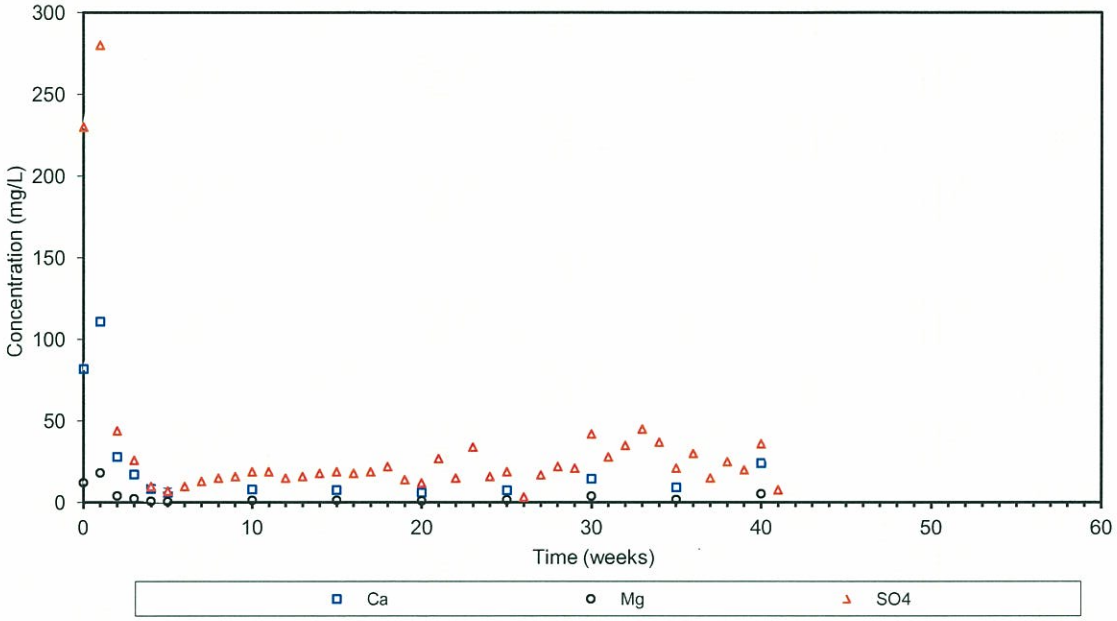
Note: NP depletion calculated based on sulphate assay.
Note [2]: x-axis reduced to 5% for ease of viewing

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

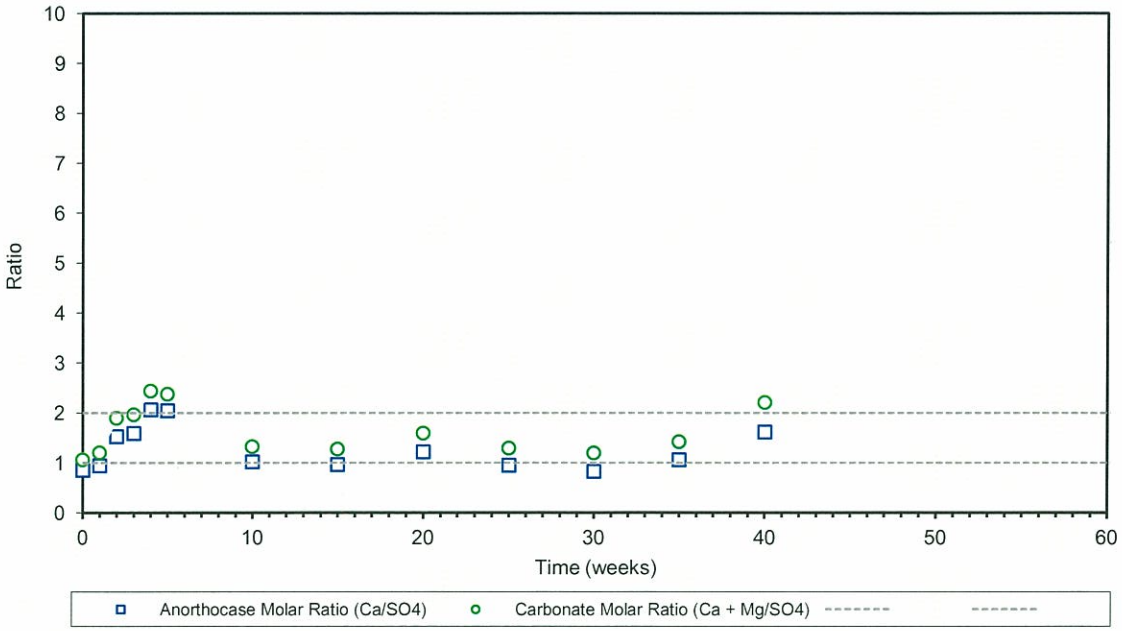
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate ROM Sample B



Carbonate (Ca + Mg/SO_4) and Anorthoclase (Ca/SO_4) Molar Ratios ROM Sample B

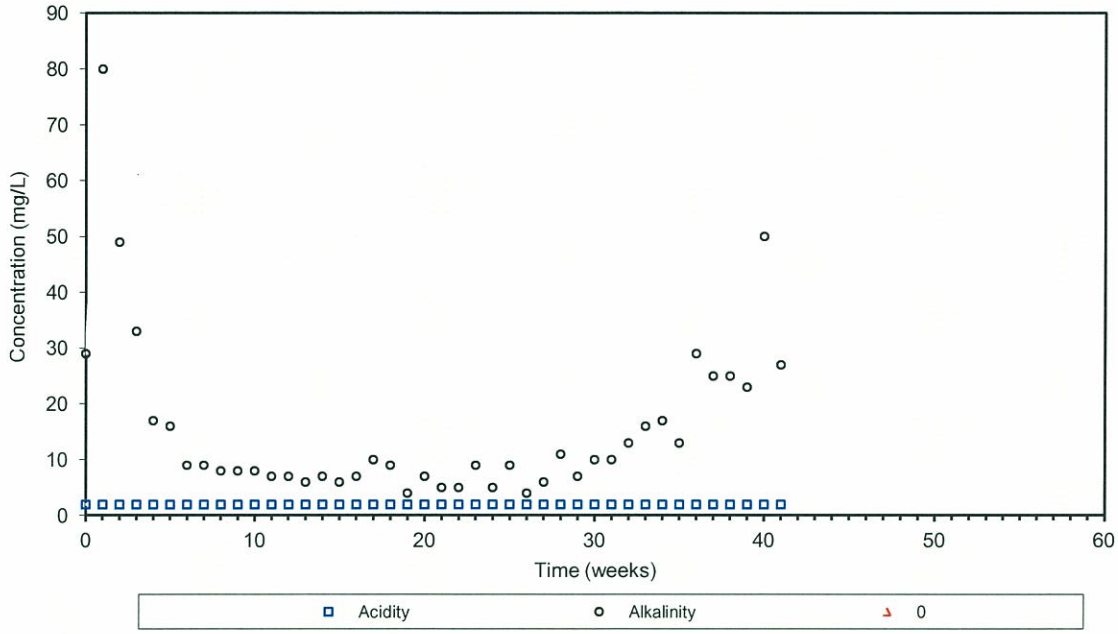


This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate ROM Sample B



Note: Acidity and alkalinity have detection limit of 2 mg/L.

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
Starter Pit Sample A	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	0	1	2	3	4	5	6	7	8	9	10
LIMS		10555-MAY12	10154-JUN12	10067-JUN12	10109-JUN12	10151-JUN12	10021-JUL12	10060-JUL12	10099-JUL12	10138-JUL12	11066-JUL12	10040-AUG12
Hum Cell Leachate Vol	mLs	975	935	929	949	971	921	934	937	923	921	934
pH	units	7.61	7.42	7.58	7.11	6.81	7.03	7.19	7.36	6.84	6.90	7.17
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	14	10	7	5	5	9	8	8	7	8	6
Conductivity	µS/cm	96	54	44	53	64	57	68	71	65	61	72
SO_4	mg/L	25	8.2	10	14	20	13	19	19	16	15	20
Hg	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	---	---	---	---	< 0.0001
Ag	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	---	---	---	---	< 0.00001
Al	mg/L	0.05	0.03	0.04	0.03	< 0.01	0.05	---	---	---	---	0.01
As	mg/L	0.0008	0.0004	< 0.0002	0.0002	< 0.0002	0.0002	---	---	---	---	< 0.0002
Ba	mg/L	0.00162	0.00031	0.00028	0.00048	0.00040	0.00044	---	---	---	---	0.00042
Be	mg/L	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	---	---	---	---	< 0.00002
B	mg/L	0.0028	0.0011	0.0006	0.0008	0.0013	0.0007	---	---	---	---	0.0177
Bi	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	---	---	---	---	< 0.00001
Ca	mg/L	11.6	5.82	6.09	6.23	7.70	7.93	---	---	---	---	8.48
Cd	mg/L	< 0.000003	< 0.000003	< 0.000003	< 0.000003	< 0.000003	< 0.000003	---	---	---	---	0.000046
Co	mg/L	0.000142	0.000039	0.000028	0.000058	0.000042	0.000025	---	---	---	---	0.000035
Cr	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	---	---	---	---	< 0.0005
Cu	mg/L	< 0.0005	< 0.0005	0.0006	0.0006	< 0.0005	0.0007	---	---	---	---	< 0.0005
Fe	mg/L	0.009	0.008	0.008	0.006	0.004	0.009	---	---	---	---	0.004
K	mg/L	1.87	0.772	0.834	0.901	1.08	0.778	---	---	---	---	0.909
Li	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	---	---	---	---	< 0.001
Mg	mg/L	0.915	0.367	0.490	0.631	0.954	0.618	---	---	---	---	1.26
Mn	mg/L	0.0489	0.0404	0.0398	0.0355	0.0352	0.0460	---	---	---	---	0.0431
Mo	mg/L	0.00227	0.00055	0.00040	0.00045	0.00048	0.00024	---	---	---	---	0.00056
Na	mg/L	3.02	0.78	0.72	0.78	0.96	0.57	---	---	---	---	0.67
Ni	mg/L	0.0003	0.0014	< 0.0001	0.0009	< 0.0001	0.0001	---	---	---	---	0.0002
P	mg/L	< 0.009	< 0.009	0.009	< 0.009	< 0.009	< 0.009	---	---	---	---	< 0.009
Pb	mg/L	0.00036	0.00035	0.00033	0.00025	0.00023	0.00042	---	---	---	---	0.00025
Sb	mg/L	0.0034	0.0008	0.0007	0.0007	0.0010	0.0007	---	---	---	---	0.0007
Se	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	---	---	---	---	< 0.001
Si	mg/L	0.26	0.11	0.11	0.10	0.13	0.13	---	---	---	---	0.14
Sn	mg/L	0.00102	0.00106	0.00044	0.00020	0.00011	0.00014	---	---	---	---	0.00022
Sr	mg/L	0.0282	0.0105	0.0120	0.0152	0.0201	0.0166	---	---	---	---	0.0217
Ti	mg/L	0.0002	< 0.0001	< 0.0001	0.0001	< 0.0001	0.0001	---	---	---	---	0.0002
Tl	mg/L	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	---	---	---	---	< 0.00002
Th	mg/L	< 0.000004	0.000007	< 0.000004	< 0.000004	< 0.000004	< 0.000004	---	---	---	---	< 0.000004
U	mg/L	0.000037	0.000023	0.000018	0.000002	0.000009	0.000004	---	---	---	---	0.000038
V	mg/L	0.00003	< 0.00003	< 0.00003	< 0.00003	< 0.00003	0.00003	---	---	---	---	0.00007
W	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	---	---	---	---	< 0.01
Y	mg/L	0.000003	0.000005	0.000002	< 0.000001	0.000003	0.000002	---	---	---	---	< 0.000001
Zn	mg/L	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	< 0.002	---	---	---	---	0.002

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Test Specimen

Sample	Weight (g)
Starter Pit Sample A	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	11	12	13	14	15	16	17	18	19	20	21
LIMS		10083-AUG12	10203-AUG12	10412-AUG12	10021-SEP12	10065-SEP12	10108-SEP12	10152-SEP12	10007-OCT12	10048-OCT12	10092-OCT12	10222-OCT12
Hum Cell Leachate Vol	mLs	919	938	925	994	942	937	947	931	947	945	942
pH	units	7.13	7.06	7.29	7.10	7.08	6.98	6.73	7.17	6.80	7.16	7.19
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	5	5	5	8	6	5	8	5	7	5	6
Conductivity	µS/cm	63	68	59	82	54	62	76	71	66	59	71
SO_4	mg/L	17	17	16	22	14	18	24	19	17	17	22
Hg	mg/L	---	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---
Ag	mg/L	---	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Al	mg/L	---	---	---	---	< 0.01	---	---	---	---	< 0.01	---
As	mg/L	---	---	---	---	< 0.0002	---	---	---	---	0.0002	---
Ba	mg/L	---	---	---	---	0.00056	---	---	---	---	0.00037	---
Be	mg/L	---	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---
B	mg/L	---	---	---	---	0.0007	---	---	---	---	0.0010	---
Bi	mg/L	---	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Ca	mg/L	---	---	---	---	6.36	---	---	---	---	6.68	---
Cd	mg/L	---	---	---	---	0.000067	---	---	---	---	0.000082	---
Co	mg/L	---	---	---	---	0.000041	---	---	---	---	0.000029	---
Cr	mg/L	---	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Cu	mg/L	---	---	---	---	< 0.0005	---	---	---	---	0.0005	---
Fe	mg/L	---	---	---	---	< 0.003	---	---	---	---	0.003	---
K	mg/L	---	---	---	---	0.714	---	---	---	---	0.647	---
Li	mg/L	---	---	---	---	< 0.001	---	---	---	---	< 0.001	---
Mg	mg/L	---	---	---	---	1.03	---	---	---	---	1.20	---
Mn	mg/L	---	---	---	---	0.0315	---	---	---	---	0.0375	---
Mo	mg/L	---	---	---	---	0.00036	---	---	---	---	0.00042	---
Na	mg/L	---	---	---	---	0.40	---	---	---	---	0.33	---
Ni	mg/L	---	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---
P	mg/L	---	---	---	---	< 0.009	---	---	---	---	< 0.009	---
Pb	mg/L	---	---	---	---	0.00024	---	---	---	---	0.00031	---
Sb	mg/L	---	---	---	---	0.0002	---	---	---	---	0.0004	---
Se	mg/L	---	---	---	---	< 0.001	---	---	---	---	< 0.001	---
Si	mg/L	---	---	---	---	0.10	---	---	---	---	0.13	---
Sn	mg/L	---	---	---	---	0.00021	---	---	---	---	0.00021	---
Sr	mg/L	---	---	---	---	0.0166	---	---	---	---	0.0167	---
Ti	mg/L	---	---	---	---	< 0.0001	---	---	---	---	0.0001	---
Tl	mg/L	---	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---
Th	mg/L	---	---	---	---	< 0.000004	---	---	---	---	< 0.000004	---
U	mg/L	---	---	---	---	0.000011	---	---	---	---	0.000004	---
V	mg/L	---	---	---	---	< 0.00003	---	---	---	---	< 0.00003	---
W	mg/L	---	---	---	---	< 0.01	---	---	---	---	< 0.01	---
Y	mg/L	---	---	---	---	0.000002	---	---	---	---	< 0.000001	---
Zn	mg/L	---	---	---	---	0.005	---	---	---	---	0.004	---

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
Starter Pit Sample A	1000

NOTE: the week 22 DI water addition to the humidity cell test was collected prematurely (not allowed to sit for the standard 1 hr contact period)

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	22	23	24	25	26	27	28	29	30
LIMS		11193-OCT12	10007-NOV12	10049-NOV12	11039-NOV12	11148-NOV12	10008-DEC12	10051-DEC12	10093-DEC12	11090-DEC12
Hum Cell Leachate Vol	mLs	946	946	947	963	968	996	971	966	969
pH	units	7.04	6.83	6.81	7.11	6.77	7.07	6.84	6.92	7.07
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	4	5	6	10	5	8	5	6	6
Conductivity	µS/cm	39	67	65	67	56	76	71	66	48
SO_4	mg/L	8.5	19	20	19	17	22	20	18	13
Hg	mg/L	---	---	---	< 0.0001	---	---	---	---	< 0.00001
Ag	mg/L	---	---	---	0.00002	---	---	---	---	0.00004
Al	mg/L	---	---	---	0.03	---	---	---	---	< 0.01
As	mg/L	---	---	---	0.0002	---	---	---	---	< 0.0002
Ba	mg/L	---	---	---	0.00083	---	---	---	---	0.00258
Be	mg/L	---	---	---	< 0.00002	---	---	---	---	< 0.00002
B	mg/L	---	---	---	0.0006	---	---	---	---	0.0060
Bi	mg/L	---	---	---	< 0.00001	---	---	---	---	< 0.00001
Ca	mg/L	---	---	---	8.20	---	---	---	---	5.55
Cd	mg/L	---	---	---	0.000162	---	---	---	---	0.000142
Co	mg/L	---	---	---	0.000029	---	---	---	---	0.000058
Cr	mg/L	---	---	---	< 0.0005	---	---	---	---	< 0.0005
Cu	mg/L	---	---	---	< 0.0005	---	---	---	---	< 0.0005
Fe	mg/L	---	---	---	< 0.003	---	---	---	---	< 0.003
K	mg/L	---	---	---	0.690	---	---	---	---	0.398
Li	mg/L	---	---	---	< 0.001	---	---	---	---	< 0.001
Mg	mg/L	---	---	---	1.37	---	---	---	---	0.841
Mn	mg/L	---	---	---	0.0511	---	---	---	---	0.0360
Mo	mg/L	---	---	---	0.00051	---	---	---	---	0.00035
Na	mg/L	---	---	---	0.33	---	---	---	---	0.19
Ni	mg/L	---	---	---	< 0.0001	---	---	---	---	< 0.0001
P	mg/L	---	---	---	< 0.009	---	---	---	---	< 0.009
Pb	mg/L	---	---	---	0.00030	---	---	---	---	0.00022
Sb	mg/L	---	---	---	0.0007	---	---	---	---	0.0004
Se	mg/L	---	---	---	< 0.001	---	---	---	---	< 0.001
Si	mg/L	---	---	---	0.15	---	---	---	---	0.07
Sn	mg/L	---	---	---	0.00019	---	---	---	---	0.00018
Sr	mg/L	---	---	---	0.0203	---	---	---	---	0.0136
Ti	mg/L	---	---	---	< 0.0001	---	---	---	---	< 0.0001
Tl	mg/L	---	---	---	< 0.00002	---	---	---	---	< 0.00002
Th	mg/L	---	---	---	< 0.000004	---	---	---	---	< 0.000004
U	mg/L	---	---	---	0.000047	---	---	---	---	0.000005
V	mg/L	---	---	---	< 0.00003	---	---	---	---	< 0.00003
W	mg/L	---	---	---	< 0.01	---	---	---	---	< 0.01
Y	mg/L	---	---	---	0.000001	---	---	---	---	< 0.000001
Zn	mg/L	---	---	---	0.005	---	---	---	---	0.008

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
Starter Pit Sample A	1000

Summary of ABA Test Data

Parameter	Units	LIMS: 10459-MAY12 + 10260-JUN12
Sulphur (S)	%	2.15
Sulphide ($S^{=}$)	%	1.80
Modifed Sobek NP	t $CaCO_3$/1000 t	44.2
Siderite Corrected NP	t $CaCO_3$/1000 t	111

Leachate Paremeters Measured | ***Acid Generation*** [1] | ***Acid Neutralization*** [1]

Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µmhos/cm	SO_4 mg/L	SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly $S^{=}$ Depletion %	Cumulative $S^{=}$ Depletion %	Cumulative S Depletion %	NP Consumption $CaCO_3$, g/t/wk	Cumulative Mod Sobek NP Depl %	Cumulative Siderite Corrected NP Depl %
0	975	7.61	<2	14	96	25	24.4	24.38	0.05	0.05	0.04	25.39	0.06	0.02
1	935	7.42	<2	10	54	8.2	7.7	32.04	0.01	0.06	0.05	7.99	0.08	0.03
2	929	7.58	<2	7	44	10	9.3	41.33	0.02	0.08	0.06	9.68	0.10	0.04
3	949	7.11	<2	5	53	14	13.3	54.62	0.02	0.10	0.08	13.84	0.13	0.05
4	971	6.81	<2	5	64	20	19.4	74.04	0.04	0.14	0.11	20.23	0.17	0.07
5	921	7.03	<2	9	57	13	12.0	86.01	0.02	0.16	0.13	12.47	0.20	0.08
6	934	7.19	<2	8	68	19	17.7	103.76	0.03	0.19	0.16	18.49	0.24	0.10
7	937	7.36	<2	8	71	19	17.8	121.56	0.03	0.23	0.19	18.54	0.29	0.11
8	923	6.84	<2	7	65	16	14.8	136.33	0.03	0.25	0.21	15.38	0.32	0.13
9	921	6.90	<2	8	61	15	13.8	150.14	0.03	0.28	0.23	14.39	0.35	0.14
10	934	7.17	<2	6	72	20	18.7	168.82	0.03	0.31	0.26	19.46	0.40	0.16
11	919	7.13	<2	5	63	17	15.6	184.45	0.03	0.34	0.29	16.27	0.43	0.17
12	938	7.06	<2	5	68	17	15.9	200.39	0.03	0.37	0.31	16.61	0.47	0.19
13	925	7.29	<2	5	59	16	14.8	215.19	0.03	0.40	0.33	15.42	0.51	0.20
14	994	7.10	<2	8	82	22	21.9	237.06	0.04	0.44	0.37	22.78	0.56	0.22
15	942	7.08	<2	6	54	14	13.2	250.25	0.02	0.46	0.39	13.74	0.59	0.23
16	937	6.98	<2	5	62	18	16.9	267.11	0.03	0.49	0.41	17.57	0.63	0.25
17	947	6.73	<2	8	76	24	22.7	289.84	0.04	0.54	0.45	23.68	0.68	0.27
18	931	7.17	<2	5	71	19	17.7	307.53	0.03	0.57	0.48	18.43	0.72	0.29
19	947	6.80	<2	7	66	17	16.1	323.63	0.03	0.60	0.50	16.77	0.76	0.30
20	945	7.16	<2	5	59	17	16.1	339.70	0.03	0.63	0.53	16.73	0.80	0.32

** Initial Week 0 leachate may included soluble sulphate, and may not indicate oxidation of sulphide in the sample material has occurred.*

[1] *Calculated values*

Summary - Weeks 0 to 20

Maximum Value	7.61	2	14	96	25	24.4	-	0.05	-	-	25	-	-
Minimum Value	6.73	<2	5	44	8.2	7.7	-	0.01	-	-	8.0	-	-
Average Value	7.06	2	7	65	17	16.2	-	0.03	-	-	16.85	-	-

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TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
Starter Pit Sample A	1000

Changes to Head Sample after 20 Weeks [1]

Parameter	Units	LIMS: 10459-MAY12 + 10260-JUN12
Sulphide ($S^{=}$) Remaining	%	1.79
NP Remaining	t $CaCO_3$/1000 t	43.8
CO_3 NP Remaining	t $CaCO_3$/1000 t	110.6

Leachate Paremeters Measured							***Acid Generation*** [1]		***Total S and SO***			***Acid Neutralization*** [1]		
Weekly Leach No.	**Volume Collected** mL	**pH** units	**Acidity** $CaCO_3$ eq. mg/L	**Alkalinity** $CaCO_3$ eq. mg/L	**Conductivity** µmhos/cm	**SO_4** mg/L	**SO_4 Production Rate** g/t/wk	**Cumulative SO_4 Production** g/t	**Weekly S= Depletion** %	**Cumulative S= Depletion** %	**Cumulative S Depletion** %	**NP Consumption** $CaCO_3$, g/t/wk	**Cumulative Mod Sobek NP Depl** %	**Cumulative Siderite Corrected NP Depl** %
21	942	7.19	<2	6	71	22	20.7	360.42	0.04	0.67	0.56	21.59	0.85	0.34
22	946	7.04	<2	4	39	8.5	8.0	368.46	0.01	0.68	0.57	8.38	0.87	0.35
23	946	6.83	<2	5	67	19	18.0	386.43	0.03	0.72	0.60	18.72	0.91	0.36
24	947	6.81	<2	6	65	20	18.9	405.37	0.04	0.75	0.63	19.73	0.96	0.38
25	963	7.11	<2	10	67	19	18.3	423.67	0.03	0.78	0.66	19.06	1.00	0.40
26	968	6.77	<2	5	56	17	16.5	440.13	0.03	0.82	0.68	17.14	1.04	0.41
27	996	7.07	<2	8	76	22	21.9	462.04	0.04	0.86	0.72	22.83	1.09	0.43
28	971	6.84	<2	5	71	20	19.4	481.46	0.04	0.89	0.75	20.23	1.13	0.45
29	966	6.92	<2	6	66	18	17.4	498.85	0.03	0.92	0.77	18.11	1.18	0.47
30	969	7.07	<2	6	48	13	12.6	511.44	0.02	0.95	0.79	13.12	1.21	0.48
Summary - Weeks 0 to 40														
Maximum Value		7.61	2	14	96	25	24.38	-	0.04	-	-	25	-	-
Minimum Value		6.73	<2	4	39	8.2	7.67	-	0.01	-	-	8.0	-	-
Average Value		7.02	2	7	64	17	16.50	-	0.03	-	-	17.19	-	-

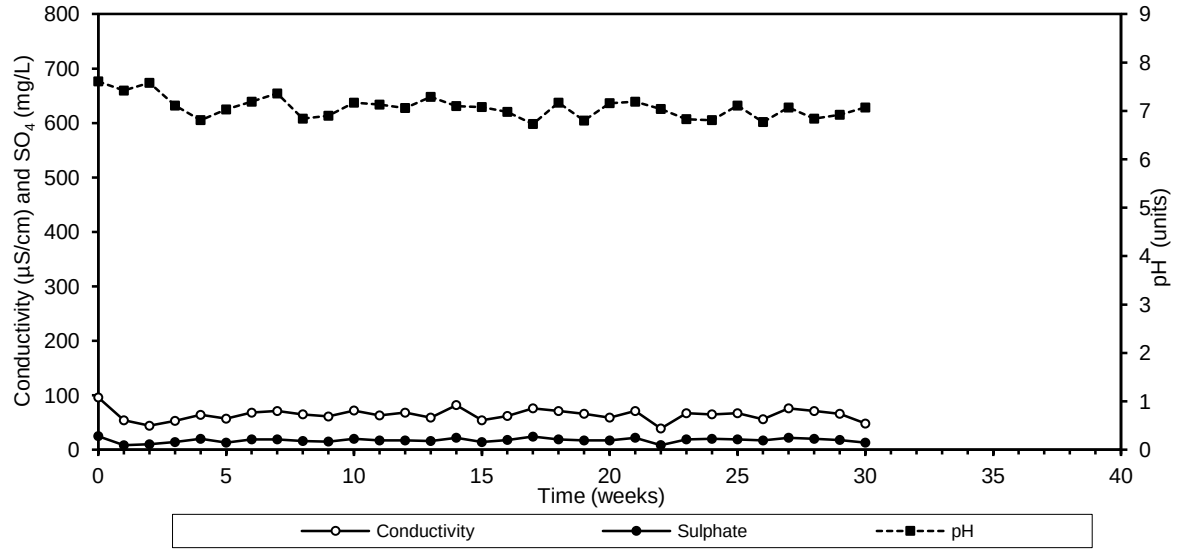
[1] *Calculated values*

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

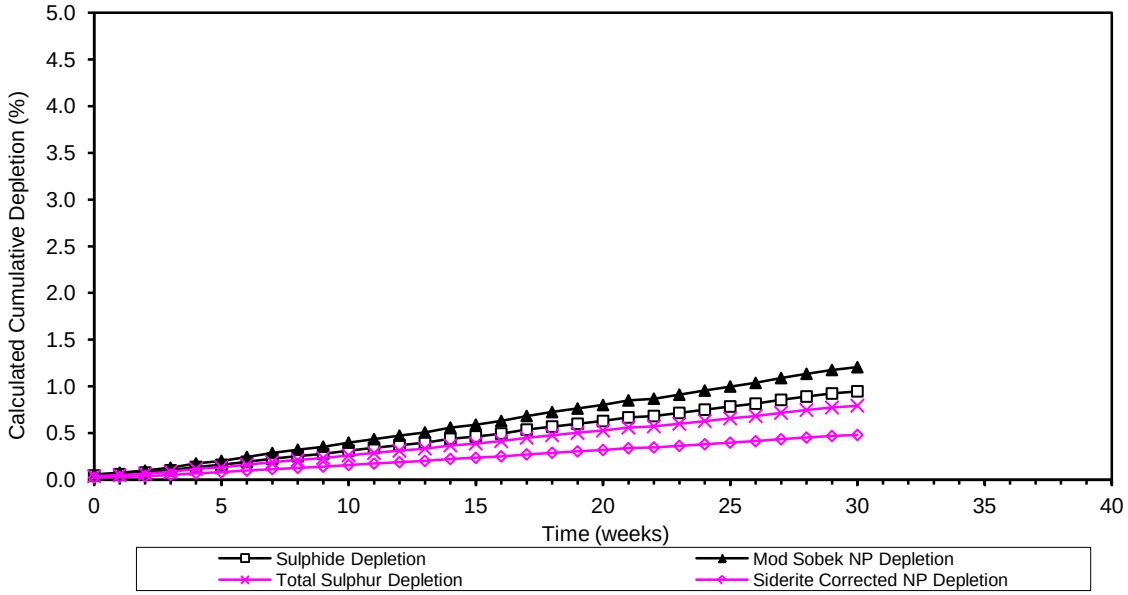
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Conductivity, Sulphate, and pH in Weekly Humidity Cell Leachate - Starter Pit Sample A



Cumulative Sulphide and NP Depletion Starter Pit Sample A



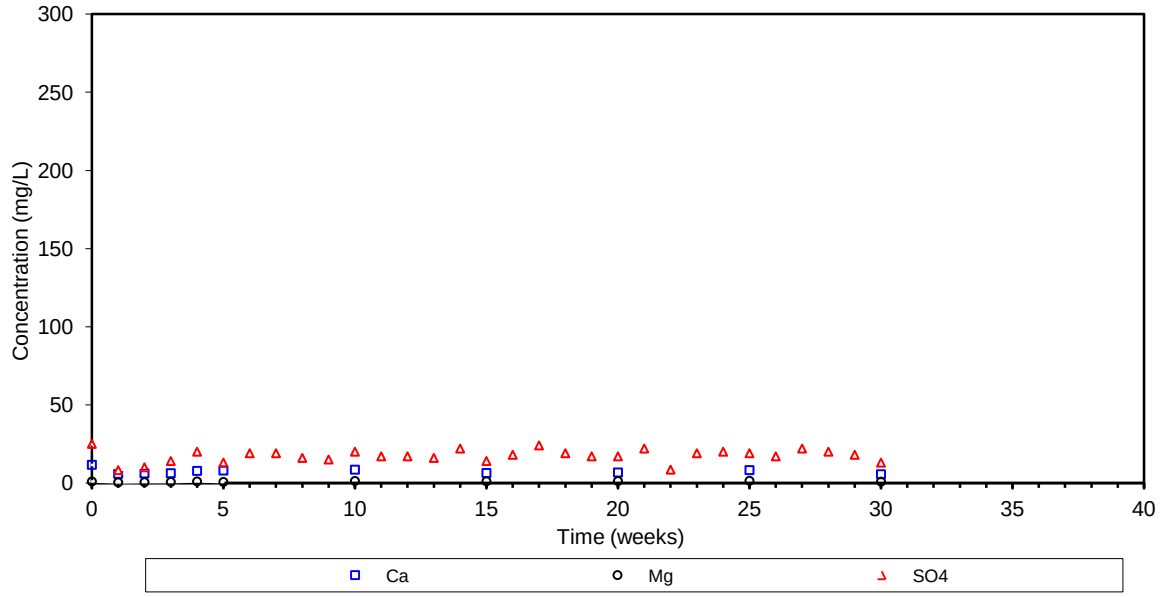
Note: NP depletion calculated based on sulphate assay.
Note[2]: x-axis reduced to 5% for ease of viewing

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

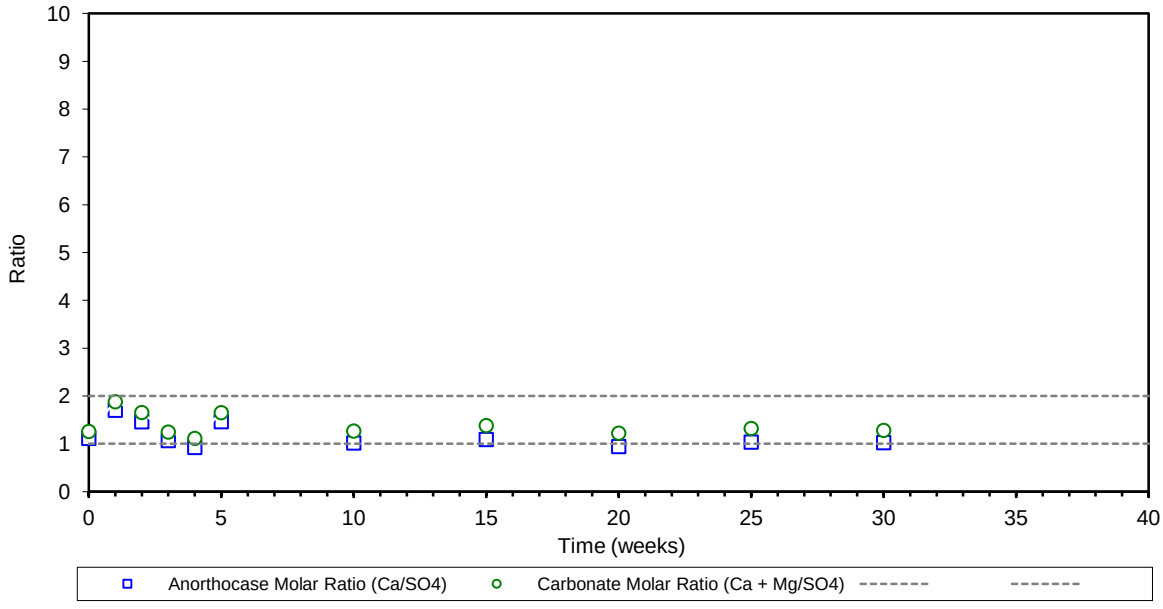
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate Starter Pit Sample A



Carbonate (Ca + Mg/SO $_4$) and Anorthoclase (Ca/SO $_4$) Molar Ratios Starter Pit Sample A

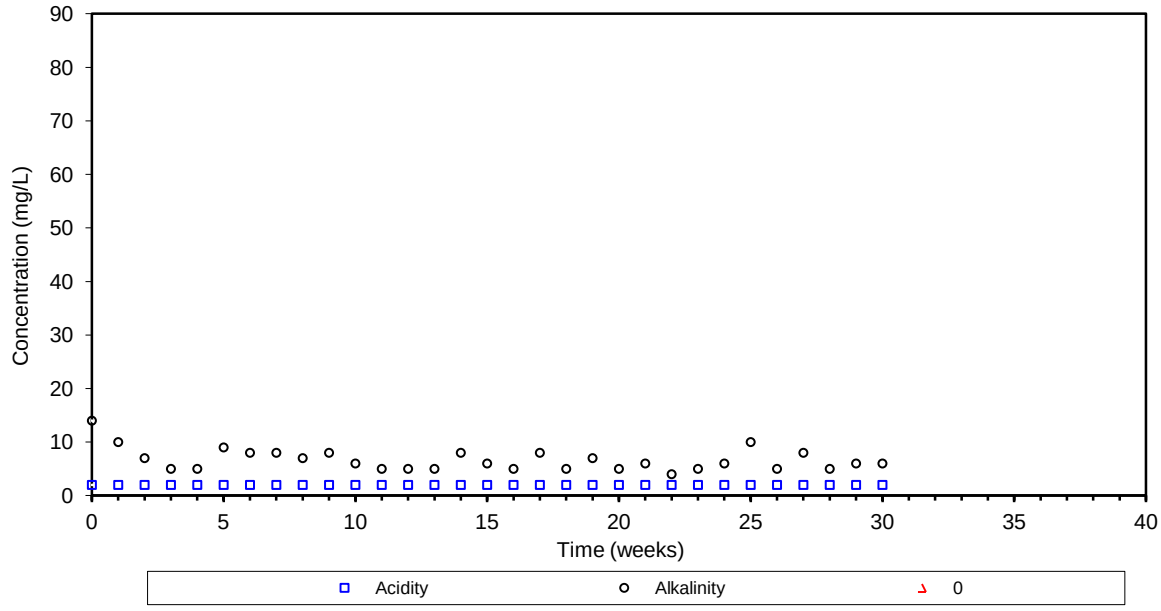


This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate Starter Pit Sample A



Note: Acidity and alkalinity have detection limit of 2 mg/L.

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
Starter Pit Sample B	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	0	1	2	3	4	5	6	7	8	9	10
LIMS		10555-MAY12	10154-JUN12	10067-JUN12	10109-JUN12	10151-JUN12	10021-JUL12	10060-JUL12	10099-JUL12	10138-JUL12	11066-JUL12	10040-AUG12
Hum Cell Leachate Vol	mLs	964	912	950	964	941	937	936	936	935	922	929
pH	units	7.72	7.50	7.22	7.08	7.04	6.99	6.97	7.34	7.53	*7.04	7.13
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	32	17	8	7	6	6	6	7	6	5	6
Conductivity	µS/cm	273	47	39	47	46	52	99	64	53	53	61
SO_4	mg/L	86	3.8	7.6	11	12	13	18	17	14	14	17
Hg	mg/L	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	< 0.0001	---	---	---	---	< 0.0001
Ag	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	---	---	---	---	< 0.00001
Al	mg/L	0.06	0.05	0.04	0.04	0.02	0.03	---	---	---	---	< 0.01
As	mg/L	0.0014	0.0006	< 0.0002	0.0003	0.0002	< 0.0002	---	---	---	---	< 0.0002
Ba	mg/L	0.00209	0.00030	0.00037	0.00039	0.00035	0.00041	---	---	---	---	0.00038
Be	mg/L	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	---	---	---	---	< 0.00002
B	mg/L	0.0111	0.0009	0.0006	0.0008	0.0012	0.0007	---	---	---	---	0.0072
Bi	mg/L	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	< 0.00001	---	---	---	---	< 0.00001
Ca	mg/L	30.5	5.37	5.81	6.11	6.15	7.04	---	---	---	---	7.45
Cd	mg/L	< 0.000003	< 0.000003	< 0.000003	< 0.000003	< 0.000003	< 0.000003	---	---	---	---	0.000051
Co	mg/L	0.000358	0.000026	0.000025	0.000057	0.000296	0.000022	---	---	---	---	0.000041
Cr	mg/L	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	---	---	---	---	< 0.0005
Cu	mg/L	0.0011	0.0005	< 0.0005	< 0.0005	< 0.0005	< 0.0005	---	---	---	---	< 0.0005
Fe	mg/L	0.007	0.011	0.007	0.005	0.006	0.010	---	---	---	---	0.004
K	mg/L	5.91	0.545	0.697	0.728	0.789	0.773	---	---	---	---	0.751
Li	mg/L	0.002	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	---	---	---	---	< 0.001
Mg	mg/L	3.44	0.238	0.429	0.575	0.682	0.778	---	---	---	---	1.04
Mn	mg/L	0.0532	0.0382	0.0453	0.0483	0.0380	0.0435	---	---	---	---	0.0418
Mo	mg/L	0.00898	0.00029	0.00032	0.00036	0.00073	0.00023	---	---	---	---	0.00038
Na	mg/L	10.5	0.21	0.22	0.25	0.26	0.28	---	---	---	---	0.26
Ni	mg/L	0.0007	< 0.0001	< 0.0001	0.0007	0.0003	0.0001	---	---	---	---	0.0001
P	mg/L	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	---	---	---	---	< 0.009
Pb	mg/L	0.00034	0.00051	0.00038	0.00027	0.00038	0.00034	---	---	---	---	0.00022
Sb	mg/L	0.0145	0.0008	0.0009	0.0007	0.0009	0.0007	---	---	---	---	0.0007
Se	mg/L	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	---	---	---	---	< 0.001
Si	mg/L	0.88	0.14	0.14	0.13	0.14	0.13	---	---	---	---	0.13
Sn	mg/L	0.00712	0.00362	0.00150	0.00064	0.00031	0.00021	---	---	---	---	0.00016
Sr	mg/L	0.0941	0.0080	0.0104	0.0128	0.0138	0.0160	---	---	---	---	0.0178
Ti	mg/L	0.0002	< 0.0001	< 0.0001	0.0001	< 0.0001	< 0.0001	---	---	---	---	0.0001
Tl	mg/L	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	< 0.00002	---	---	---	---	< 0.00002
Th	mg/L	< 0.000004	0.000006	< 0.000004	< 0.000004	< 0.000004	< 0.000004	---	---	---	---	< 0.000004
U	mg/L	0.000205	0.000017	0.000041	0.000004	0.000007	0.000005	---	---	---	---	0.000008
V	mg/L	0.00005	0.00003	< 0.00003	< 0.00003	< 0.00003	< 0.00003	---	---	---	---	0.00005
W	mg/L	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	---	---	---	---	< 0.01
Y	mg/L	0.000006	0.000003	0.000003	< 0.000001	0.000003	0.000004	---	---	---	---	0.000001
Zn	mg/L	0.002	< 0.002	< 0.002	< 0.002	< 0.002	0.003	---	---	---	---	0.004

**Reassay LIMS 10499-AUG12*

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
Starter Pit Sample B	1000

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	11	12	13	14	15	16	17	18	19	20	21
LIMS		10083-AUG12	10203-AUG12	10412-AUG12	10021-SEP12	10065-SEP12	10108-SEP12	10152-SEP12	10007-OCT12	10048-OCT12	10092-OCT12	10222-OCT12
Hum Cell Leachate Vol	mLs	924	928	934	983	909	930	938	943	945	948	943
pH	units	7.22	7.19	*6.95	7.17	7.13	7.07	6.85	6.98	7.05	7.11	7.15
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	6	6	7	9	7	6	7	4	7	6	6
Conductivity	µS/cm	61	67	62	92	77	66	77	71	60	64	70
SO_4	mg/L	16	17	17	29	22	20	23	18	15	18	20
Hg	mg/L	---	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---
Ag	mg/L	---	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Al	mg/L	---	---	---	---	0.01	---	---	---	---	< 0.01	---
As	mg/L	---	---	---	---	< 0.0002	---	---	---	---	0.0002	---
Ba	mg/L	---	---	---	---	0.00086	---	---	---	---	0.00042	---
Be	mg/L	---	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---
B	mg/L	---	---	---	---	0.0009	---	---	---	---	0.0009	---
Bi	mg/L	---	---	---	---	< 0.00001	---	---	---	---	< 0.00001	---
Ca	mg/L	---	---	---	---	10.1	---	---	---	---	7.50	---
Cd	mg/L	---	---	---	---	0.000102	---	---	---	---	0.000108	---
Co	mg/L	---	---	---	---	0.000047	---	---	---	---	0.000029	---
Cr	mg/L	---	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Cu	mg/L	---	---	---	---	< 0.0005	---	---	---	---	< 0.0005	---
Fe	mg/L	---	---	---	---	0.004	---	---	---	---	0.004	---
K	mg/L	---	---	---	---	0.945	---	---	---	---	0.601	---
Li	mg/L	---	---	---	---	< 0.001	---	---	---	---	< 0.001	---
Mg	mg/L	---	---	---	---	1.47	---	---	---	---	1.10	---
Mn	mg/L	---	---	---	---	0.0573	---	---	---	---	0.0491	---
Mo	mg/L	---	---	---	---	0.00052	---	---	---	---	0.00040	---
Na	mg/L	---	---	---	---	0.31	---	---	---	---	0.19	---
Ni	mg/L	---	---	---	---	0.0001	---	---	---	---	< 0.0001	---
P	mg/L	---	---	---	---	< 0.009	---	---	---	---	< 0.009	---
Pb	mg/L	---	---	---	---	0.00028	---	---	---	---	0.00031	---
Sb	mg/L	---	---	---	---	0.0003	---	---	---	---	0.0005	---
Se	mg/L	---	---	---	---	< 0.001	---	---	---	---	< 0.001	---
Si	mg/L	---	---	---	---	0.16	---	---	---	---	0.13	---
Sn	mg/L	---	---	---	---	0.00019	---	---	---	---	0.00014	---
Sr	mg/L	---	---	---	---	0.0244	---	---	---	---	0.0176	---
Ti	mg/L	---	---	---	---	< 0.0001	---	---	---	---	< 0.0001	---
Tl	mg/L	---	---	---	---	< 0.00002	---	---	---	---	< 0.00002	---
Th	mg/L	---	---	---	---	0.000009	---	---	---	---	< 0.000004	---
U	mg/L	---	---	---	---	0.000009	---	---	---	---	0.000005	---
V	mg/L	---	---	---	---	< 0.00003	---	---	---	---	< 0.00003	---
W	mg/L	---	---	---	---	< 0.01	---	---	---	---	< 0.01	---
Y	mg/L	---	---	---	---	0.000001	---	---	---	---	< 0.000001	---
Zn	mg/L	---	---	---	---	0.005	---	---	---	---	0.004	---

**Reassay LIMS 14248-SEP12*

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

Test Specimen

Sample	Weight (g)
Starter Pit Sample B	1000

NOTE: the week 22 DI water addition to the humidity cell test was collected prematurely (not allowed to sit for the standard 1 hr contact period)

Analysis of Weekly Humidity Cell Leachate

Parameter	Units	22	23	24	25	26	27	28	29	30
LIMS		11193-OCT12	10007-NOV12	10049-NOV12	11039-NOV12	11148-NOV12	10008-DEC12	10051-DEC12	10093-DEC12	11090-DEC12
Hum Cell Leachate Vol	mLs	956	944	945	958	955	980	970	961	960
pH	units	6.89	6.99	6.83	7.15	6.84	6.95	6.95	6.87	7.17
Acidity	mg/L as $CaCO_3$	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Alkalinity	mg/L as $CaCO_3$	3	4	7	7	5	7	6	6	8
Conductivity	µS/cm	42	62	69	72	63	92	72	65	56
SO_4	mg/L	11	17	20	23	19	28	23	18	18
Hg	mg/L	---	---	---	< 0.0001	---	---	---	---	< 0.00001
Ag	mg/L	---	---	---	0.00001	---	---	---	---	0.00003
Al	mg/L	---	---	---	0.01	---	---	---	---	< 0.01
As	mg/L	---	---	---	< 0.0002	---	---	---	---	< 0.0002
Ba	mg/L	---	---	---	0.00062	---	---	---	---	0.00043
Be	mg/L	---	---	---	< 0.00002	---	---	---	---	< 0.00002
B	mg/L	---	---	---	0.0006	---	---	---	---	0.0013
Bi	mg/L	---	---	---	< 0.00001	---	---	---	---	< 0.00001
Ca	mg/L	---	---	---	9.46	---	---	---	---	6.19
Cd	mg/L	---	---	---	0.000176	---	---	---	---	0.000165
Co	mg/L	---	---	---	0.000026	---	---	---	---	0.000059
Cr	mg/L	---	---	---	< 0.0005	---	---	---	---	< 0.0005
Cu	mg/L	---	---	---	< 0.0005	---	---	---	---	< 0.0005
Fe	mg/L	---	---	---	< 0.003	---	---	---	---	< 0.003
K	mg/L	---	---	---	0.698	---	---	---	---	0.407
Li	mg/L	---	---	---	< 0.001	---	---	---	---	< 0.001
Mg	mg/L	---	---	---	1.42	---	---	---	---	0.954
Mn	mg/L	---	---	---	0.0546	---	---	---	---	0.0435
Mo	mg/L	---	---	---	0.00056	---	---	---	---	0.00041
Na	mg/L	---	---	---	0.24	---	---	---	---	0.15
Ni	mg/L	---	---	---	< 0.0001	---	---	---	---	< 0.0001
P	mg/L	---	---	---	< 0.009	---	---	---	---	< 0.009
Pb	mg/L	---	---	---	0.00106	---	---	---	---	0.00026
Sb	mg/L	---	---	---	0.0007	---	---	---	---	0.0004
Se	mg/L	---	---	---	< 0.001	---	---	---	---	< 0.001
Si	mg/L	---	---	---	0.15	---	---	---	---	0.09
Sn	mg/L	---	---	---	0.00015	---	---	---	---	0.00023
Sr	mg/L	---	---	---	0.0233	---	---	---	---	0.0150
Ti	mg/L	---	---	---	< 0.0001	---	---	---	---	< 0.0001
Tl	mg/L	---	---	---	< 0.00002	---	---	---	---	< 0.00002
Th	mg/L	---	---	---	< 0.000004	---	---	---	---	< 0.000004
U	mg/L	---	---	---	0.000005	---	---	---	---	0.000051
V	mg/L	---	---	---	< 0.00003	---	---	---	---	< 0.00003
W	mg/L	---	---	---	< 0.01	---	---	---	---	< 0.01
Y	mg/L	---	---	---	0.000003	---	---	---	---	< 0.000001
Zn	mg/L	---	---	---	0.007	---	---	---	---	0.006

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TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
Starter Pit Sample B	1000

Summary of ABA Test Data

Parameter	Units	LIMS: 10459-MAY12 + 10260-JUN12
Sulphur (S)	%	2.10
Sulphide ($S^{=}$)	%	1.71
Modifed Sobek NP	t $CaCO_3$/1000 t	44.0
Siderite Corrected NP	t $CaCO_3$/1000 t	107

Leachate Paremeters Measured | ***Acid Generation*** [1] | ***Acid Neutralization*** [1]

Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µmhos/cm	SO_4 mg/L	SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly $S^{=}$ Depletion %	Cumulative $S^{=}$ Depletion %	Cumulative S Depletion %	NP Consumption $CaCO_3$, g/t/wk	Cumulative Mod Sobek NP Depl %	Cumulative Siderite Corrected NP Depl %
0	964	7.72	<2	32	273	86	82.9	82.90	0.16	0.16	0.13	86.36	0.20	0.08
1	912	7.50	<2	17	47	3.8	3.5	86.37	0.01	0.17	0.14	3.61	0.20	0.08
2	950	7.22	<2	8	39	7.6	7.2	93.59	0.01	0.18	0.15	7.52	0.22	0.09
3	964	7.08	<2	7	47	11	10.6	104.19	0.02	0.20	0.17	11.05	0.25	0.10
4	941	7.04	<2	6	46	12	11.3	115.49	0.02	0.23	0.18	11.76	0.27	0.11
5	937	6.99	<2	6	52	13	12.2	127.67	0.02	0.25	0.20	12.69	0.30	0.12
6	936	6.97	<2	6	99	18	16.8	144.51	0.03	0.28	0.23	17.55	0.34	0.14
7	936	7.34	<2	7	64	17	15.9	160.43	0.03	0.31	0.25	16.58	0.38	0.16
8	935	7.53	<2	6	53	14	13.1	173.52	0.03	0.34	0.28	13.64	0.41	0.17
9	922	7.04	<2	5	53	14	12.9	186.42	0.03	0.36	0.30	13.45	0.44	0.18
10	929	7.13	<2	6	61	17	15.8	202.22	0.03	0.39	0.32	16.45	0.48	0.20
11	924	7.22	<2	6	61	16	14.8	217.00	0.03	0.42	0.34	15.40	0.51	0.21
12	928	7.19	<2	6	67	17	15.8	232.78	0.03	0.45	0.37	16.43	0.55	0.23
13	934	6.95	<2	7	62	17	15.9	248.66	0.03	0.48	0.39	16.54	0.59	0.24
14	983	7.17	<2	9	92	29	28.5	277.16	0.06	0.54	0.44	29.69	0.66	0.27
15	909	7.13	<2	7	77	22	20.0	297.16	0.04	0.58	0.47	20.83	0.70	0.29
16	930	7.07	<2	6	66	20	18.6	315.76	0.04	0.62	0.50	19.38	0.75	0.31
17	938	6.85	<2	7	77	23	21.6	337.33	0.04	0.66	0.54	22.47	0.80	0.33
18	943	6.98	<2	4	71	18	17.0	354.31	0.03	0.69	0.56	17.68	0.84	0.34
19	945	7.05	<2	7	60	15	14.2	368.48	0.03	0.72	0.58	14.77	0.87	0.36
20	948	7.11	<2	6	64	18	17.1	385.55	0.03	0.75	0.61	17.78	0.91	0.38

** Initial Week 0 leachate may included soluble sulphate, and may not indicate oxidation of sulphide in the sample material has occurred.*

[1] *Calculated values*

Summary - Weeks 0 to 20

Maximum Value	7.72	2	32	273	86	82.9	-	0.16	-	-	86	-	-
Minimum Value	6.85	<2	4	39	3.8	3.5	-	0.01	-	-	3.6	-	-
Average Value	7.11	2	8	73	19	18.4	-	0.04	-	-	19.12	-	-

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TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Test Specimen

Sample	Weight (g)
Starter Pit Sample B	1000

Changes to Head Sample after 20 Weeks [1]

Parameter	Units	LIMS: 10459-MAY12 + 10260-JUN12
Sulphide ($S^{=}$) Remaining	%	1.70
NP Remaining	t $CaCO_3$/1000 t	43.6
CO_3 NP Remaining	t $CaCO_3$/1000 t	106.6

Leachate Paremeters Measured | ***Acid Generation*** [1] | ***Total S and SO*** | ***Acid Neutralization*** [1]

Weekly Leach No.	Volume Collected mL	pH units	Acidity $CaCO_3$ eq. mg/L	Alkalinity $CaCO_3$ eq. mg/L	Conductivity µmhos/cm	SO_4 mg/L	SO_4 Production Rate g/t/wk	Cumulative SO_4 Production g/t	Weekly S= Depletion %	Cumulative S= Depletion %	Cumulative S Depletion %	NP Consumption $CaCO_3$, g/t/wk	Cumulative Mod Sobek NP Depl %	Cumulative Siderite Corrected NP Depl %
21	943	7.15	<2	6	70	20	18.9	404.41	0.04	0.79	0.64	19.65	0.96	0.39
22	956	6.89	<2	3	42	11	10.5	414.92	0.02	0.81	0.66	10.95	0.98	0.40
23	944	6.99	<2	4	62	17	16.0	430.97	0.03	0.84	0.68	16.72	1.02	0.42
24	945	6.83	<2	7	69	20	18.9	449.87	0.04	0.88	0.71	19.69	1.07	0.44
25	958	7.15	<2	7	72	23	22.0	471.91	0.04	0.92	0.75	22.95	1.12	0.46
26	955	6.84	<2	5	63	19	18.1	490.05	0.04	0.96	0.78	18.90	1.16	0.48
27	980	6.95	<2	7	92	28	27.4	517.49	0.05	1.01	0.82	28.58	1.23	0.50
28	970	6.95	<2	6	72	23	22.3	539.80	0.04	1.05	0.86	23.24	1.28	0.53
29	961	6.87	<2	6	65	18	17.3	557.10	0.03	1.09	0.88	18.02	1.32	0.54
30	960	7.17	<2	8	56	18	17.3	574.38	0.03	1.12	0.91	18.00	1.36	0.56

[1] *Calculated values*

Summary - Weeks 0 to 40

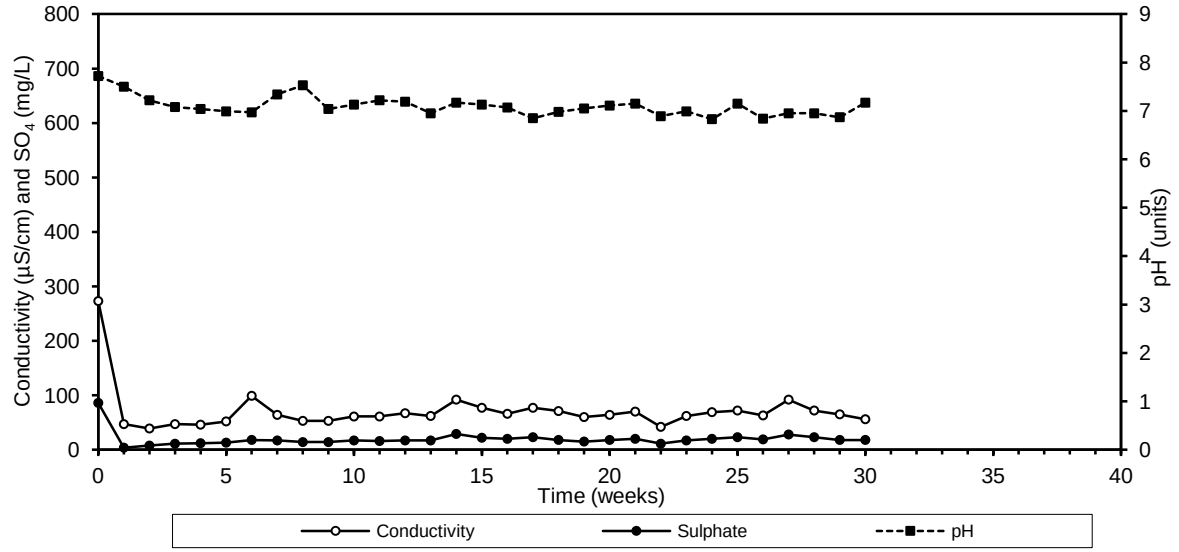
Maximum Value	7.72	2	32	273	86	82.90	-	0.05	-	-	86	-	-
Minimum Value	6.83	<2	3	39	3.8	3.47	-	0.01	-	-	3.6	-	-
Average Value	7.06	2	7	71	20	18.53	-	0.04	-	-	19.30	-	-

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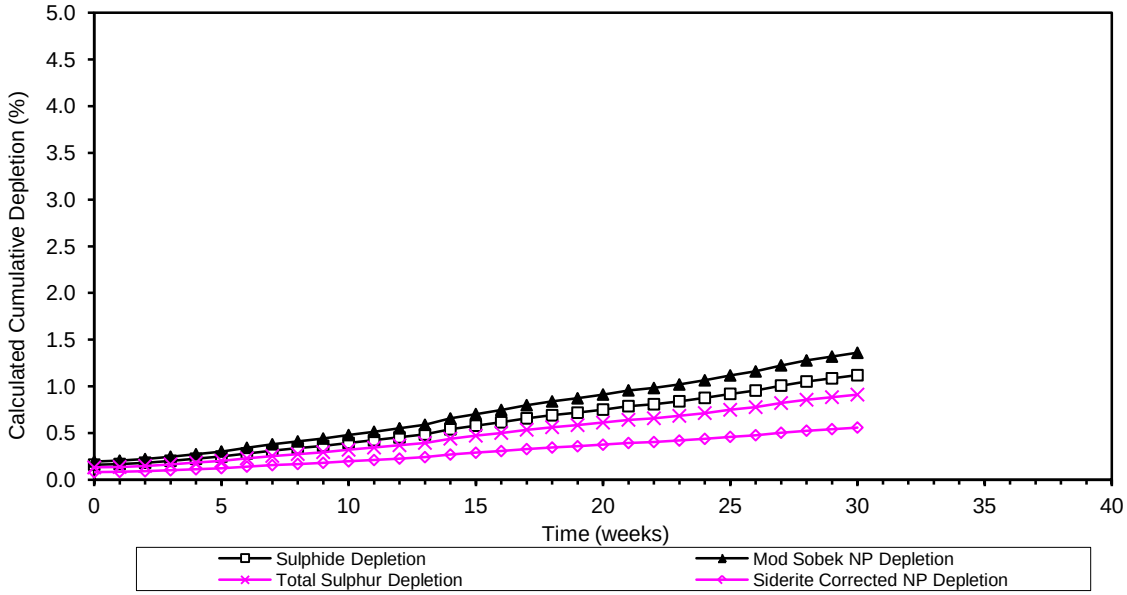
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Conductivity, Sulphate, and pH in Weekly Humidity Cell Leachate - Starter Pit Sample B



Cumulative Sulphide and NP Depletion Starter Pit Sample B



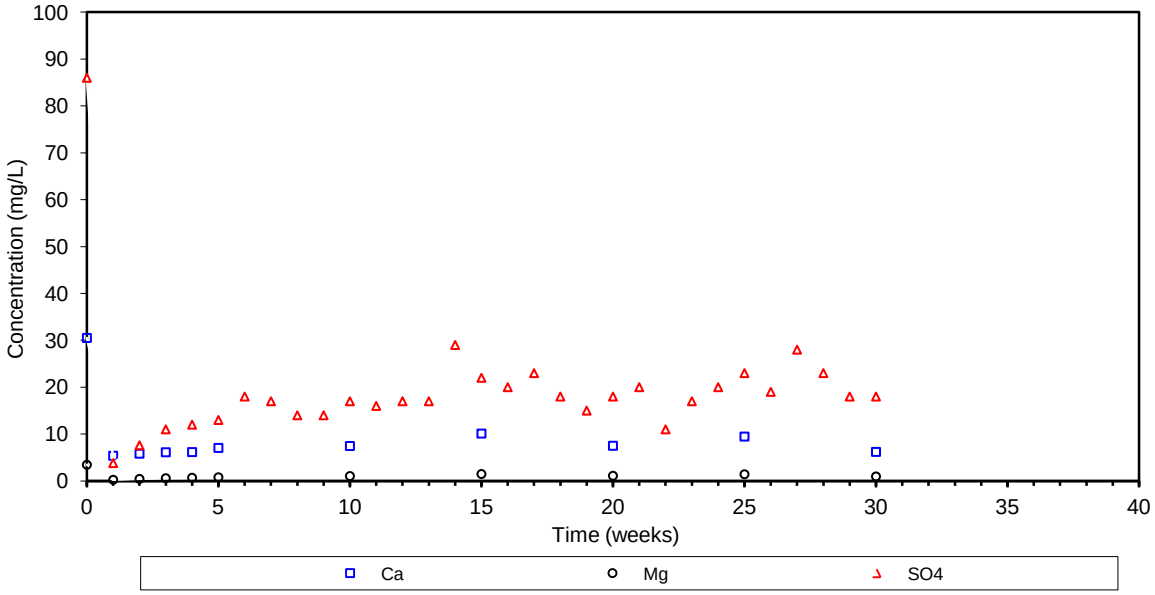
Note: NP depletion calculated based on sulphate assay.
Note[2]: x-axis reduced to 5% for ease of viewing

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

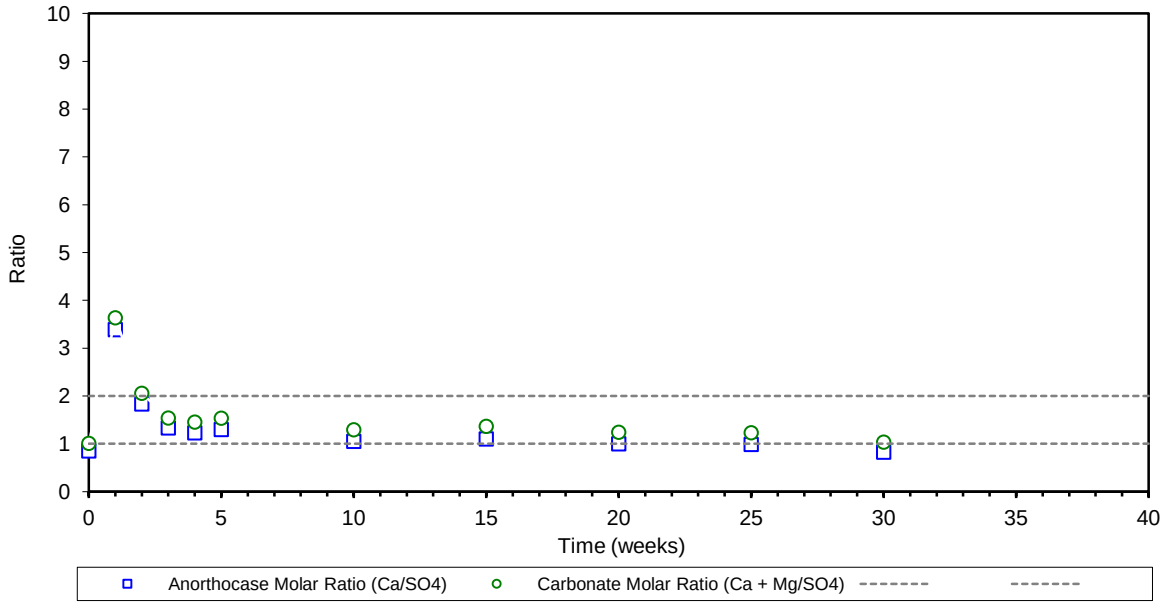
TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate Starter Pit Sample B



Carbonate (Ca + Mg/SO 4) and Anorthoclase (Ca/SO 4) Molar Ratios Starter Pit Sample B

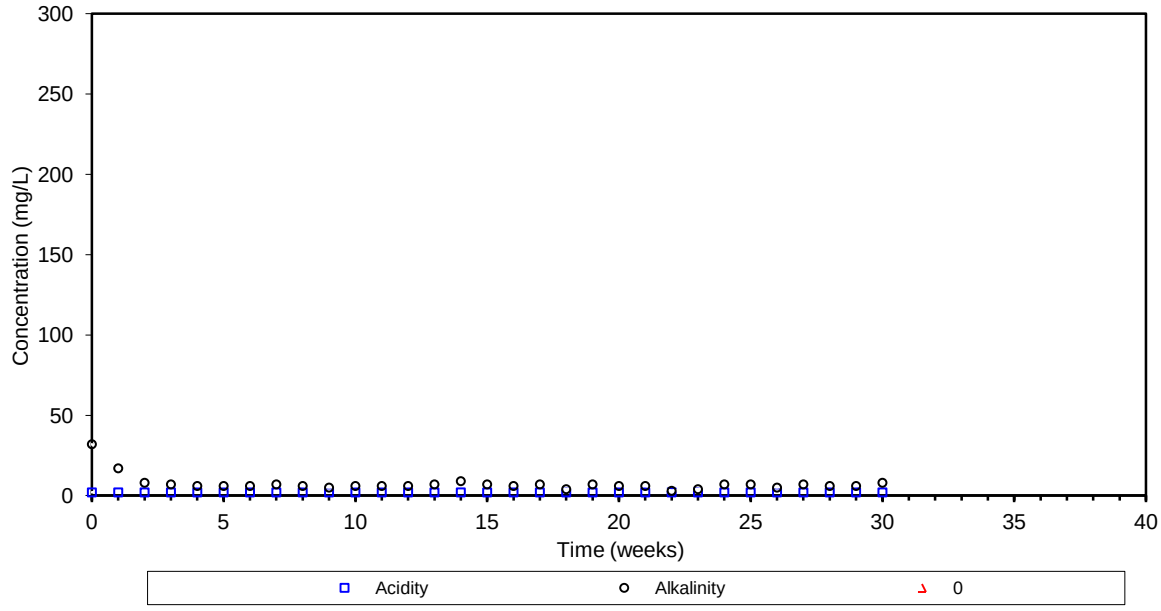


This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

TEST REPORT

Humidity Cell Test (ASTM D 5744-96)

Selected Parameters in Weekly Humidity Cell Leachate Starter Pit Sample B



Note: Acidity and alkalinity have detection limit of 2 mg/L.

This report refers to the samples as-received. SGS Minerals Services is not responsible for any use of this data beyond the result of this test method.

FIELD CELLS

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 18-OCT-11
Report Date: 28-OCT-11 13:38 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1073042

Project P.O. #: NOT SUBMITTED
Job Reference:
C of C Numbers:
Legal Site Desc:

Karen Rutledge
Account Manager

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1073042-1 WATER 17-OCT-11 09:50 FC-1	L1073042-2 WATER 17-OCT-11 10:15 FC-2	L1073042-3 WATER 17-OCT-11 10:22 FC-3	L1073042-4 WATER 17-OCT-11 10:28 FC-4	L1073042-5 WATER 17-OCT-11 10:37 FC-5
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	267	218	293	218	304
	pH (pH)	7.91	7.95	7.92	7.94	8.00
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	2.4	2.4	2.2	2.0	2.2
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	68.7	77.7	92.4	77.0	87.0
	Chloride (Cl) (mg/L)	9.12	3.71	8.90	4.72	8.43
	Fluoride (mg/L)	0.266	0.137	0.140	0.070	0.182
	Sulphate (SO4) (mg/L)	48.7	25.1	40.7	23.9	52.1
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0138	0.0248	0.0169	0.0287	0.0243
	Antimony (Sb)-Dissolved (mg/L)	0.00178	0.00197	0.00150	0.00173	0.00229
	Arsenic (As)-Dissolved (mg/L)	0.0018	0.0025	0.0016	0.0019	0.0025
	Barium (Ba)-Dissolved (mg/L)	0.011	<0.010	<0.010	<0.010	<0.010
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Boron (B)-Dissolved (mg/L)	0.168	0.134	0.160	0.097	0.182
	Cadmium (Cd)-Dissolved (mg/L)	<0.000090	<0.000090	<0.000090	<0.000090	<0.000090
	Calcium (Ca)-Dissolved (mg/L)	29.5	25.6	32.7	27.0	37.2
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	0.00060	<0.00050	<0.00050
	Copper (Cu)-Dissolved (mg/L)	0.0056	0.0053	0.0083	0.0050	0.0072
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Magnesium (Mg)-Dissolved (mg/L)	11.5	9.28	12.7	9.52	15.0
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	0.0041	0.0016	0.0033
	Mercury (Hg)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Molybdenum (Mo)-Dissolved (mg/L)	0.0680	0.0389	0.0613	0.0361	0.0652
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Potassium (K)-Dissolved (mg/L)	6.0	5.0	5.8	3.7	7.0
	Selenium (Se)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Dissolved (mg/L)	5.24	4.24	9.28	2.66	3.84
	Strontium (Sr)-Dissolved (mg/L)	0.0867	0.0771	0.115	0.0726	0.103
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
	Tin (Sn)-Dissolved (mg/L)	0.0022	0.0025	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1073042-6 WATER 17-OCT-11 10:47 FC-6	L1073042-7 WATER 17-OCT-11 11:03 FC-7	L1073042-8 WATER 17-OCT-11 10:05 FC-8	L1073042-9 WATER 17-OCT-11 09:50 TRAVEL BLANK	
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	227	281	279	<3.0	
	pH (pH)	7.91	7.90	7.89	5.85	
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	2.2	2.2	2.2	<2.0	
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	79.0	74.9	69.3	<5.0	
	Chloride (Cl) (mg/L)	6.79	8.46	11.8	<0.10	
	Fluoride (mg/L)	0.086	0.160	0.167	<0.030	
	Sulphate (SO4) (mg/L)	24.9	51.0	48.4	<0.30	
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0186	0.0156	0.0140	<0.0050	
	Antimony (Sb)-Dissolved (mg/L)	0.00115	0.00214	0.00193	<0.00060	
	Arsenic (As)-Dissolved (mg/L)	0.0022	0.0107	0.0020	<0.0010	
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	0.012	<0.010	
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Boron (B)-Dissolved (mg/L)	0.098	0.155	0.174	<0.050	
	Cadmium (Cd)-Dissolved (mg/L)	<0.000090	<0.000090	<0.000090	<0.000090	
	Calcium (Ca)-Dissolved (mg/L)	26.5	34.1	30.9	<0.50	
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	0.0055	<0.0010	<0.0010	
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Copper (Cu)-Dissolved (mg/L)	0.0051	0.0112	0.0063	<0.0010	
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
	Magnesium (Mg)-Dissolved (mg/L)	11.3	12.6	11.7	<0.020	
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	0.0021	0.0019	<0.0010	
	Mercury (Hg)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
	Molybdenum (Mo)-Dissolved (mg/L)	0.0336	0.0609	0.0672	<0.0010	
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Potassium (K)-Dissolved (mg/L)	3.7	6.3	9.1	<1.0	
	Selenium (Se)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
	Sodium (Na)-Dissolved (mg/L)	3.50	3.61	5.50	<0.50	
	Strontium (Sr)-Dissolved (mg/L)	0.0708	0.0963	0.0875	<0.0010	
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	0.0023	<0.0010	
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1073042-1 WATER 17-OCT-11 09:50 FC-1	L1073042-2 WATER 17-OCT-11 10:15 FC-2	L1073042-3 WATER 17-OCT-11 10:22 FC-3	L1073042-4 WATER 17-OCT-11 10:28 FC-4	L1073042-5 WATER 17-OCT-11 10:37 FC-5
Sample ID / **Description** / **Sampled Date** / **Sampled Time** / **Client ID**						
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	0.0075	0.0050	0.0082	0.0040	0.0069
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1073042-6	L1073042-7	L1073042-8	L1073042-9	
	Description	WATER	WATER	WATER	WATER	
	Sampled Date	17-OCT-11	17-OCT-11	17-OCT-11	17-OCT-11	
	Sampled Time	10:47	11:03	10:05	09:50	
	Client ID	FC-6	FC-7	FC-8	TRAVEL BLANK	
Grouping	**Analyte**					
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Zinc (Zn)-Dissolved (mg/L)	0.0052	0.0144	0.0111	<0.0030	
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1073042-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1073042-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Iron (Fe)-Dissolved	MS-B	L1073042-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1073042-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1073042-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Potassium (K)-Dissolved	MS-B	L1073042-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1073042-1, -2, -3, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
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**
ACIDITY-TB	Water	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
ALK-TOT-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-TB	Water	Chloride (Cl)	APHA 4110 B-Ion Chromatography
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-TB	Water	Fluoride (F)	APHA 4110 B-Ion Chromatography
HG-D-CVAF-TB	Water	Dissolved Mercury in Water by CVAFS	EPA 245.7
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3120 B-ICPMS
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-TB	Water	Sulphate (SO4)	APHA 4110 B-Ion Chromatography

** 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
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
N/A - Result not available. Refer to qualifier code and definition for explanation.

Test results reported relate only to the samples as received by the laboratory.
UNLESS OTHERWISE STATED, ALL SAMPLES WERE RECEIVED IN ACCEPTABLE CONDITION.
Analytical results in unsigned test reports with the DRAFT watermark are subject to change, pending final QC review.

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page ___ of ___

R		**Report Format / Distribution**	**Service Requested** (Rush for routine analysis subject to availability)
Company:	Rainy River Resources LTD	☐ Standard ☐ Other (specify):	⊘ Regular (Default)
Contact:	Alyson Bisson	☒ PDF ☐ Excel ☐ Digital ☐ Fax	○ Priority (Specify Date Required → --) Surcharges apply
Address:	5967 Highway11/17	Email 1: abisson@rainyriverresources.com	○ Emergency (1 Business Day) - 100% Surcharge
	PO Box 5, Emo Ontario P0W 1E0	Email 2:	○ For Emergency < 1 Day, ASAP or Weekend - Contact ALS
Phone:	807-482-2501 Fax: 807-276-0858		**Analysis Request**
Invoice To	Same as Report ? Yes No	**Client / Project Information**	Please indicate below Filtered, Preserved or both (F, P, F/P)

THE QUESTIONS BELOW MUST BE ANSWERED FOR WATER SAMPLES (circle Yes or No)

Are any samples taken from a regulated DW System? Yes (No)

If yes, an authorized Drinking Water COC MUST be used for this submission.

Is the water sampled intended to be potable for human consumption? Yes (No)

Job #:

PO / AFE:

LSD:

Quote #:

Lab Work Order # (lab use only)		ALS Contact:	Sampler:

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	pH, Conductivity	Total Alkalinity, Acidity	Anions (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury							Number of Containers
FC-1	→	OCT 7/11	9:50	water	✓	✓	✓	✓	✓							2
FC-2	→		10:15	"	✓	✓	✓	✓	✓							2
FC-3	→		10:22	"	✓	✓	✓	✓	✓							2
FC-4	→		10:25	"	✓	✓	✓	✓	✓							2
FC-5	→		10:37	"	✓	✓	✓	✓	✓							2
FC-6	→		10:47	"	✓	✓	✓	✓	✓							2
FC-7	→		11:03	"	✓	✓	✓	✓	✓							2
FC-8	→	↓	10:05	"	✓	✓	✓	✓	✓							2

Special Instructions / Regulations / Hazardous Details

Reg 153 Table 1 2 3 TCLP MISA PWQO OTHER (please specify):
Circle one - Note drinking water samples MUST USE DW Chain of Custody

COOLER BOTTLES TO BE RECHARGED AND SHIPPED TO THE CLIENT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.

By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date:	Time:	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
0204g v.1 Analytical 11-March-11 TS Page 1 of 1	OCT 7/11	4:00 pm		10/07/11	11:00	4.4 °C		18 Oct 11	11 05	

3.4-5.4

TYFM014 26-Mar-10

Sample Integrity Form

This report summarizes some deficiencies found in your recent submission, and the actions that will be taken unless you contact us to make specific instructions.

Date Received:	Client:
18 Oct 11	Rainy River Resources
Completed by (initial)	Submission ID: L# or Other Identifying Mark
JCAMES	

	Deficiency Found:	Without further instruction, We WILL:
	Samples under Regulation not circled yes or no	Proceed with samples as not from a regulated drinking water system and not intended for human consumption
	Chain of Custody Questions Not Answered or Not on the Chain of Custody	Proceed with samples as not from a regulated drinking water system but intended for human consumption
	Analyses requested not completed on Chain of Custody	Proceed to follow information on the chain of custody unless you specify otherwise
	Sample was received with a temperature higher then 20°C (Microbiology)	Proceed to follow information on the bottle(s) unless you specify otherwise
	COC information is incomplete or illegible	Proceed with analysis - Results may be qualified
	COC not signed and dated by client	Preserve and proceed with analysis
	Regulated Sample Type(s) not indicated on the Chain of Custody	Proceed with the samples as regulated unless specified otherwise
	Sample Description not clearly indicated on Chain of Custody	Advise you resample for deficient sample(s)
	COC information does not match bottle label	Proceed with analysis of (remaining) sample(s)
	Analysis Required not listed or clearly specified	Proceed with regular testing from previous submissions unless you specify otherwise
	No COC accompanying the submission	**Further Comments/Specifics:**
	Sample Bottle labeling issue (label is missing, blank, or doesn't match COC	• Travel Blank included in shipment with same bottles as the rest of the water
	Wrong Sample Bottle used	
	Sample received after analytical hold time has been exceeded	
	Filter and Preserve at Lab	
	Sample bottle found broken when received	
	Sample received with headspace	
	Insufficient number of bottles or sample volume provided	
	Sample Received Unpreserved	
✓	Bottles in shipment but not listed on chain of custody	
	Sample < Freezing Point (contains ice crystals or frozen)	
	Bottles listed on chain of custody but missing in shipment	

← If Checked HERE, you NEED to contact the laboratory for further discussion

For more information or to contact the laboratory: Login CSS 800-668-9878

ADDRESS 1081 Barton Street, Thunder Bay, Ontario, Canada P7B 5N3 PHONE +1 807 623 6463 FAX +1 807 623 7598

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RIGHT SOLUTIONS

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 01-NOV-11
Report Date: 21-NOV-11 15:13 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1079262

Project P.O. #: NOT SUBMITTED
Job Reference:
C of C Numbers: L1079262
Legal Site Desc:

Karen Rutledge
Account Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1079262-1 WATER 31-OCT-11 10:25 FC-1	L1079262-2 WATER 31-OCT-11 10:30 FC-2	L1079262-3 WATER 31-OCT-11 10:41 FC-3	L1079262-4 WATER 31-OCT-11 10:46 FC-4	L1079262-5 WATER 31-OCT-11 10:52 FC-5
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	247	264	289	202	265
	pH (pH)	8.02	8.03	7.99	7.93	7.96
Anions and Nutrients	Acidity (as CaCO3) (mg/L)		2.2	2.0	2.0	2.2
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	84.9	91.3	92.6	74.9	84.0
	Chloride (Cl) (mg/L)	5.50	4.61	7.31	3.19	4.86
	Fluoride (mg/L)	0.127	0.111	0.199	0.125	0.163
	Sulphate (SO4) (mg/L)	25.9	29.2	35.7	16.2	35.4
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	0.0091	0.0088
	Antimony (Sb)-Dissolved (mg/L)	0.00214	0.00235	0.00114	0.00152	0.00203
	Arsenic (As)-Dissolved (mg/L)	0.0015	0.0017	0.0014	0.0012	0.0018
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Boron (B)-Dissolved (mg/L)	0.074	0.108	0.109	0.059	0.098
	Cadmium (Cd)-Dissolved (mg/L)	<0.000090	<0.000090	<0.000090	<0.000090	<0.000090
	Calcium (Ca)-Dissolved (mg/L)	22.5	27.6	29.7	23.5	28.2
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	0.00053	<0.00050	<0.00050	<0.00050
	Copper (Cu)-Dissolved (mg/L)	0.0038	0.0053	0.0049	0.0031	0.0053
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Magnesium (Mg)-Dissolved (mg/L)	10.9	10.2	12.2	8.79	11.4
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	0.0013
	Mercury (Hg)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Molybdenum (Mo)-Dissolved (mg/L)	0.0284	0.0367	0.0461	0.0220	0.0346
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Potassium (K)-Dissolved (mg/L)	3.4	4.5	4.7	2.8	4.7
	Selenium (Se)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Dissolved (mg/L)	6.20	6.11	8.08	2.50	3.78
	Strontium (Sr)-Dissolved (mg/L)	0.0619	0.0847	0.0983	0.0585	0.0813
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
	Tin (Sn)-Dissolved (mg/L)	0.0033	0.0015	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1079262-6	L1079262-7	L1079262-8	L1079262-9	
Description	WATER	WATER	WATER	WATER	
Sampled Date	31-OCT-11	31-OCT-11	31-OCT-11	31-OCT-11	
Sampled Time	10:58	11:06	10:36		
Client ID	FC-6	FC-7	FC-8	TRAVEL BLANK	
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (EC) (uS/cm)	187	239	265	<3.0	
pH (pH)	7.82	7.89	8.04	5.40	
Anions and Nutrients Acidity (as CaCO3) (mg/L)	2.4	2.0	2.0	<2.0	
Alkalinity, Total (as CaCO3) (mg/L CaCO3)	66.7	72.3	91.8	<5.0	
Chloride (Cl) (mg/L)	4.25	4.26	4.60	<0.10	
Fluoride (mg/L)	<0.030	0.123	0.154	<0.030	
Sulphate (SO4) (mg/L)	16.4	34.7	29.3	<0.30	
Dissolved Metals Aluminum (Al)-Dissolved (mg/L)	0.0068	0.0064	<0.0050	<0.0050	
Antimony (Sb)-Dissolved (mg/L)	0.00094	0.00176	0.00236	<0.00060	
Arsenic (As)-Dissolved (mg/L)	0.0014	0.0125	0.0016	<0.0010	
Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	
Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Boron (B)-Dissolved (mg/L)	0.052	0.076	0.112	<0.050	
Cadmium (Cd)-Dissolved (mg/L)	<0.000090	<0.000090	<0.000090	<0.000090	
Calcium (Ca)-Dissolved (mg/L)	18.4	24.8	27.1	<0.50	
Chromium (Cr)-Dissolved (mg/L)	<0.0010	0.0043	<0.0010	<0.0010	
Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	0.00050	<0.00050	
Copper (Cu)-Dissolved (mg/L)	0.0031	0.0113	0.0051	<0.0010	
Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	
Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
Magnesium (Mg)-Dissolved (mg/L)	7.99	9.81	10.8	<0.020	
Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Mercury (Hg)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
Molybdenum (Mo)-Dissolved (mg/L)	0.0157	0.0296	0.0368	<0.0010	
Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Potassium (K)-Dissolved (mg/L)	2.4	3.9	4.6	<1.0	
Selenium (Se)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
Sodium (Na)-Dissolved (mg/L)	4.16	3.44	6.29	<0.50	
Strontium (Sr)-Dissolved (mg/L)	0.0510	0.0758	0.0866	<0.0010	
Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	0.0015	<0.0010	
Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1079262-1	L1079262-2	L1079262-3	L1079262-4	L1079262-5
Description	WATER	WATER	WATER	WATER	WATER
Sampled Date	31-OCT-11	31-OCT-11	31-OCT-11	31-OCT-11	31-OCT-11
Sampled Time	10:25	10:30	10:41	10:46	10:52
Client ID	FC-1	FC-2	FC-3	FC-4	FC-5
Grouping / **Analyte**					
WATER					
Dissolved Metals Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc (Zn)-Dissolved (mg/L)	0.0057	0.0054	0.0064	0.0042	0.0055
Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1079262-6	L1079262-7	L1079262-8	L1079262-9	
Description	WATER	WATER	WATER	WATER	
Sampled Date	31-OCT-11	31-OCT-11	31-OCT-11	31-OCT-11	
Sampled Time	10:58	11:06	10:36		
Client ID	FC-6	FC-7	FC-8	TRAVEL BLANK	
Grouping / **Analyte**					
WATER					
Dissolved Metals					
Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Zinc (Zn)-Dissolved (mg/L)	0.0049	0.0143	0.0056	<0.0030	
Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
SFPL	Sample was Filtered and Preserved at the laboratory - Dissolved Metals & Mercury

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1079262-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1079262-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Cobalt (Co)-Dissolved	MS-B	L1079262-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Copper (Cu)-Dissolved	MS-B	L1079262-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1079262-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1079262-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Molybdenum (Mo)-Dissolved	MS-B	L1079262-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Nickel (Ni)-Dissolved	MS-B	L1079262-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Potassium (K)-Dissolved	MS-B	L1079262-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1079262-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1079262-1, -2, -3, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
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**
ACIDITY-TB	Water	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
ALK-TOT-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-TB	Water	Chloride (Cl)	APHA 4110 B-Ion Chromatography
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-TB	Water	Fluoride (F)	APHA 4110 B-Ion Chromatography
HG-D-CVAF-TB	Water	Dissolved Mercury in Water by CVAFS	EPA 245.7
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3120 B-ICPMS
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-TB	Water	Sulphate (SO4)	APHA 4110 B-Ion Chromatography

** 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
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA

Chain of Custody Numbers:

L1079262

Reference Information

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

AL:
Envi

L10792262-COFC

Chain of Custody / Analytical Request Form

Canada Toll Free: 1 800 668 9878

www.alsglobal.com

COC # _____

Page ____ of ____

Repo.		Report Format / Distribution	Service Requested (Rush for routine analysis subject to availability)
Company:	Rainy River Resources LTD	☐ Standard ☐ Other (specify):	☑ Regular (Default)
Contact:	Alyson Bisson	☑ PDF ☐ Excel ☐ Digital ☐ Fax	○ Priority (Specify Date Required → →) Surcharges apply
Address:	5967 Highway11/17	Email 1: abisson@rainyriverresources.com	○ Emergency (1 Business Day) - 100% Surcharge
	PO Box 5, Emo Ontario P0W 1E0	Email 2: Steve.Miller@amec.com	○ For Emergency < 1 Day, ASAP or Weekend - Contact ALS
Phone:	807-482-2501 Fax: 807-276-0858		Analysis Request
Invoice To	Same as Report ? Yes No	Client / Project Information	Please indicate below Filtered, Preserved or both (F, P, F/P)
THE QUESTIONS BELOW MUST BE ANSWERED FOR WATER SAMPLES (circle Yes or No)		Job #:	
Are any samples taken from a regulated DW System?	Yes (No)	PO / AFE:	
If yes, an authorized Drinking Water COC MUST be used for this submission.		LSD:	
Is the water sampled intended to be potable for human consumption?	Yes (No)		
		Quote #:	
Lab Work Order # (lab use only)		ALS Contact:	Sampler:

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	pH, Conductivity	Total Alkalinity, Acidity	Anions (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury								Number of Containers
1	FC 1	OCT 3/11	10:25	Water	✓	✓	✓	✓	✓								2
2	FC 2		10:30		✓	✓	✓	✓	✓	✓							2
3	FC-3		10:41		✓	✓	✓	✓	✓								2
4	FC-4		10:46		✓	✓	✓	✓	✓								2
5	FC-5		10:52		✓	✓	✓	✓	✓								2
6	FC-6		10:58		✓	✓	✓	✓	✓								2
7	FC-7		11:06		✓	✓	✓	✓	✓								2
8	FC-8		10:36	✓	✓	✓	✓	✓	✓								2
	FC-1 Insufficient amount to fill																
	Sample Loop.																

Special Instructions / Regulations / Hazardous Details

Reg 153 Table 1 2 3 TCLP MISA PWQO OTHER (please specify)
Circle one - Note drinking water samples MUST USE DW Chain of Custody

COOLER BOTTLES TO BE RECHARGED AND SHIPPED TO THE CLIENT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.
By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date:	Time:	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
	OCT 3/11	3:30pm	KUM	NOV 1/11	11:18	7 °C	KUM	NOV 1/11	11:22	

8.1, 5.9

L1079262-COFC

Sample Integrity Form

This report summarizes some deficiencies found in your recent submission, and the actions that will be taken unless you contact us to make specific instructions.

Date Received:	Client:
Nov 11/1	Rainy River
Completed by (Initial)	**Submission ID: L# or Other Identifying Mark**
KLM	L1079262

1	Deficiency Found:	Without further instruction, We WILL:	2
	Samples under Regulation not circled yes or no	Proceed with samples as not from a regulated drinking water system and not intended for human consumption	
	Chain of Custody Questions Not Answered or Not on the Chain of Custody	Proceed with samples as not from a regulated drinking water system but intended for human consumption	
	Analyses requested not completed on Chain of Custody	Proceed to follow information on the chain of custody unless you specify otherwise	
	Sample was received with a temperature higher then 20°C (Microbiology)	Proceed to follow information on the bottle(s) unless you specify otherwise	X
	COC information is incomplete or illegible	Proceed with analysis - Results may be qualified	
	COC not signed and dated by client	Preserve and proceed with analysis	
	Regulated Sample Type(s) not indicated on the Chain of Custody	Proceed with the samples as regulated unless specified otherwise	
	Sample Description not clearly indicated on Chain of Custody	Advise you resample for deficient sample(s)	
	COC information does not match bottle label	Proceed with analysis of (remaining) sample(s)	
	Analysis Required not listed or clearly specified	Proceed with regular testing from previous submissions unless you specify otherwise	
	No COC accompanying the submission	**Further Comments/Specifics:**	
	Sample Bottle labeling issue (label is missing, blank, or doesn't match COC	-FC-1 only filled a 250mL pet ½ full *we will try to run for ref tests*	
	Wrong Sample Bottle used		
	Sample received after analytical hold time has been exceeded		
X	Filter and Preserve at Lab	-Dissolved Metals + Mercury	
	Sample bottle found broken when received		
	Sample received with headspace		
X	Insufficient number of bottles or sample volume provided		
	Sample Received Unpreserved		
X	Bottles in shipment but not listed on chain of custody	-received "Travel Blank" not on COC - we will run unless otherwise specified	
	Sample < Freezing Point (contains ice crystals or frozen)		
	Bottles listed on chain of custody but missing in shipment		
	← If Checked HERE, you NEED to contact the laboratory for further discussion		

For more information or to contact the laboratory: Login CSS 800-668-9878

ADDRESS 1081 Barton Street, Thunder Bay, Ontario, Canada P7B 5N3 PHONE +1 807 623 6463 FAX +1 807 623 7598
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RIGHT SOLUTIONS RIGHT PARTNER

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 27-MAR-12
Report Date: 30-MAR-12 15:11 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1128147

Project P.O. #: NOT SUBMITTED
Job Reference:
C of C Numbers:
Legal Site Desc:

Karen Rutledge
Account Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1128147-1 WATER 26-MAR-12 12:05 FC-1	L1128147-2 WATER 26-MAR-12 12:17 FC-2	L1128147-3 WATER 26-MAR-12 12:29 FC-3	L1128147-4 WATER 26-MAR-12 12:43 FC-4	L1128147-5 WATER 26-MAR-12 12:52 FC-5
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	125	156	157	130	144
	pH (pH)	7.57	7.79	7.68	7.67	7.62
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	5.2	2.4	7.8	2.4	5.0
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	40.9	54.4	50.7	52.5	47.6
	Chloride (Cl) (mg/L)	3.12	3.29	4.58	1.73	2.63
	Fluoride (F) (mg/L)	0.058	0.061	0.051	<0.030	0.061
	Sulfate (SO4) (mg/L)	10.4	12.4	14.1	5.51	13.6
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0233	0.0169	0.0150	0.0222	0.0185
	Antimony (Sb)-Dissolved (mg/L)	0.00182	0.00209	0.00122	0.00196	0.00181
	Arsenic (As)-Dissolved (mg/L)	0.0012	0.0019	0.0014	0.0012	0.0018
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Cadmium (Cd)-Dissolved (mg/L)	0.000028	0.000023	0.000021	0.000032	0.000027
	Calcium (Ca)-Dissolved (mg/L)	12.2	14.6	14.6	16.0	16.3
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Copper (Cu)-Dissolved (mg/L)	0.0027	0.0033	0.0035	0.0022	0.0037
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Magnesium (Mg)-Dissolved (mg/L)	3.73	5.38	5.11	4.12	4.62
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	0.0024
	Mercury (Hg)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Molybdenum (Mo)-Dissolved (mg/L)	0.0102	0.0153	0.0152	0.0051	0.0102
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Potassium (K)-Dissolved (mg/L)	1.99	3.00	2.70	1.89	2.52
	Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Dissolved (mg/L)	5.11	6.02	7.34	2.38	3.10
	Strontium (Sr)-Dissolved (mg/L)	0.0359	0.0549	0.0464	0.0378	0.0467
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1128147-6	L1128147-7	L1128147-8		
	Description	WATER	WATER	WATER		
	Sampled Date	26-MAR-12	26-MAR-12	26-MAR-12		
	Sampled Time	13:10	12:10	12:05		
	Client ID	FC-7	FC-8	TRAVEL BLANK		
Grouping	**Analyte**					
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	147	126	<3.0		
	pH (pH)	7.53	7.58	5.63		
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	2.6	2.6	<2.0		
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	44.7	40.4	<5.0		
	Chloride (Cl) (mg/L)	1.68	3.06	<0.10		
	Fluoride (F) (mg/L)	0.044	0.055	<0.030		
	Sulfate (SO4) (mg/L)	16.9	10.3	<0.30		
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0224	0.0234	<0.0050		
	Antimony (Sb)-Dissolved (mg/L)	0.00144	0.00185	<0.00060		
	Arsenic (As)-Dissolved (mg/L)	0.0021	0.0012	<0.0010		
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010		
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050		
	Cadmium (Cd)-Dissolved (mg/L)	0.000040	0.000024	<0.000017		
	Calcium (Ca)-Dissolved (mg/L)	16.5	12.3	<0.20		
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050		
	Copper (Cu)-Dissolved (mg/L)	0.0019	0.0027	<0.0010		
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020		
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050		
	Magnesium (Mg)-Dissolved (mg/L)	4.65	3.72	<0.020		
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Mercury (Hg)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010		
	Molybdenum (Mo)-Dissolved (mg/L)	0.0081	0.0107	<0.0010		
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020		
	Potassium (K)-Dissolved (mg/L)	2.04	1.99	<0.50		
	Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010		
	Sodium (Na)-Dissolved (mg/L)	2.08	5.12	<0.10		
	Strontium (Sr)-Dissolved (mg/L)	0.0561	0.0367	<0.0010		
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030		
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020		
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010		

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1128147-1	L1128147-2	L1128147-3	L1128147-4	L1128147-5
Description	WATER	WATER	WATER	WATER	WATER
Sampled Date	26-MAR-12	26-MAR-12	26-MAR-12	26-MAR-12	26-MAR-12
Sampled Time	12:05	12:17	12:29	12:43	12:52
Client ID	FC-1	FC-2	FC-3	FC-4	FC-5
Grouping / **Analyte**					
WATER					
Dissolved Metals Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	0.0031	<0.0030	0.0042
Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1128147-6	L1128147-7	L1128147-8		
	Description	WATER	WATER	WATER		
	Sampled Date	26-MAR-12	26-MAR-12	26-MAR-12		
	Sampled Time	13:10	12:10	12:05		
	Client ID	FC-7	FC-8	TRAVEL BLANK		
Grouping	**Analyte**					
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050		
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Zinc (Zn)-Dissolved (mg/L)	0.0037	<0.0030	<0.0030		
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1128147-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Boron (B)-Dissolved	MS-B	L1128147-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1128147-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Cobalt (Co)-Dissolved	MS-B	L1128147-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Copper (Cu)-Dissolved	MS-B	L1128147-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1128147-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1128147-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Potassium (K)-Dissolved	MS-B	L1128147-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1128147-1, -2, -3, -4, -5, -6, -7, -8
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1128147-1, -2, -3, -4, -5, -6, -7, -8

Qualifiers for Individual Parameters Listed:

Qualifier	Description
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**
ACIDITY-TB	Water	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-TOT-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
HG-D-CVAF-TB	Water	Dissolved Mercury in Water by CVAFS	EPA 245.7
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3030B/EPA 6020A
This analysis involves filtration (APHA 3030B) and analysis by inductively coupled plasma - mass spectrometry (EPA Method 6020A).			
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			

** 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
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA

Chain of Custody Numbers:

Reference Information

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

ALS Laboratory
ANALYTICAL CHEMISTRY & TESTING SER

Environmental Division

L11128147-COFC

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

L1128147

COC # _____

Page ___ of ___

Report To		Report Format / Distribution	Service Requested (Rush for routine analysis subject to availability)
Company:	Rainy River Resources LTD	☐ Standard ☐ Other (specify):	○ Regular (Default)
Contact:	Alyson Bisson	☑ PDF ☑ Excel ☑ Digital ☐ Fax	○ Priority (Specify Date Required → →) Surcharges apply
Address:	5967 Highway11/17	Email 1: abisson@rainyriverresources.com	○ Emergency (1 Business Day) - 100% Surcharge
	PO Box 5, Emo Ontario P0W 1E0	Email 2:	○ For Emergency < 1 Day, ASAP or Weekend - Contact ALS
Phone:	807-482-2501 Fax: 807-276-0858		
Invoice To	Same as Report ? Yes No	Client / Project Information	Analysis Request

THE QUESTIONS BELOW MUST BE ANSWERED FOR WATER SAMPLES (circle Yes or No)
Are any samples taken from a regulated DW System? Yes (No)
If yes, an authorized Drinking Water COC MUST be used for this submission.
Is the water sampled intended to be potable for human consumption? Yes (No)

Job #:
PO / AFE:
LSD:
Quote #:

Please indicate below Filtered, Preserved or both (F, P, F/P)

Lab Work Order # (lab use only)		ALS Contact:	Sampler:

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	pH, Conductivity	Total Alkalinity, Acidity	Anions (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury	Number of Containers
1	FC-1	Mar26/12	12:05	water	✓	✓	✓	✓	✓	2
2	FC-2	↓	12:17	↓						2
3	FC-3		12:29				↓			2
4	FC-4		12:43							2
5	FC-5		12:52							2
6	FC-7		13:10							2
7	FC-8	↓	12:10	↓			↓			2
8										2

Special Instructions / Regulations / Hazardous Details

Reg 153 Table 1 2 3 TCLP MISA PWQO OTHER (please specify):
Circle one - Note drinking water samples MUST USE DW Chain of Custody

COOLER BOTTLES TO BE RECHARGED AND SHIPPED TO THE CLIENT * please recharge + ship

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.
By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date:	Time:	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations: Yes / No ? If Yes add SIF
	Mar26/12	4:00	KLM	Mar. 27/12	11:50	4.7°C		27-MAR-12	12:15	

TYFM014 26-Mar-10

L1128147-COFC

Sample Integrity Form

This report summarizes some deficiencies found in your recent submission, and the actions that will be taken unless you contact us to make specific instructions.

Date Received:	Client:
27-MAR-12	RAINY RIVER RESOURCES
Completed by (initial)	Submission ID: L# or Other Identifying Mark
HH	

1	Deficiency Found:	Without further instruction, We WILL:	2
	Samples under Regulation not circled yes or no	Proceed with samples as not from a regulated drinking water system and not intended for human consumption	
	Chain of Custody Questions Not Answered or Not on the Chain of Custody	Proceed with samples as not from a regulated drinking water system but intended for human consumption	
	Analyses requested not completed on Chain of Custody	Proceed to follow information on the chain of custody unless you specify otherwise	
	Sample was received with a temperature higher then 20°C (Microbiology)	Proceed to follow information on the bottle(s) unless you specify otherwise	
X	COC information is incomplete or illegible	Proceed with analysis - Results may be qualified	✓
	COC not signed and dated by client	Preserve and proceed with analysis	✓
	Regulated Sample Type(s) not indicated on the Chain of Custody	Proceed with the samples as regulated unless specified otherwise	
	Sample Description not clearly indicated on Chain of Custody	Advise you resample for deficient sample(s)	
	COC information does not match bottle label	Proceed with analysis of (remaining) sample(s)	
	Analysis Required not listed or clearly specified	Proceed with regular testing from previous submissions unless you specify otherwise	
	No COC accompanying the submission	**Further Comments/Specifics:**	
	Sample Bottle labeling issue (label is missing, blank, or doesn't match COC	METALS - F&P @ LAB MERCURY POURED OFF INTO GLASS 125mL. MERCURY & METALS SUBMITTED TOGETHER IN 250mL POLY UNPRESERVED. SAMPLE #8 SAMPLE ID OMITTED FROM COC - BOTTLE READS ~~FIELD~~ TRAVEL BLANK.	
X	Wrong Sample Bottle used		
	Sample received after analytical hold time has been exceeded		
X	Filter and Preserve at Lab		
	Sample bottle found broken when received		
	Sample received with headspace		
	Insufficient number of bottles or sample volume provided		
	Sample Received Unpreserved		
	Bottles in shipment but not listed on chain of custody		
	Sample < Freezing Point (contains ice crystals or frozen)		
	Bottles listed on chain of custody but missing in shipment		
	← **If Checked HERE, you NEED to contact the laboratory for further discussion**		

For more information or to contact the laboratory: Login CSS 800-668-9878

ADDRESS 1081 Barton Street, Thunder Bay, Ontario, Canada P7B 5N3 PHONE +1 807 623 6463 FAX +1 807 623 7598
ALS CANADA LIMITED Part of the ALS Laboratory Group A Campbell Brothers Limited Company

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 24-APR-12
Report Date: 02-MAY-12 08:45 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1138255

Project P.O. #: NOT SUBMITTED
Job Reference:
C of C Numbers:
Legal Site Desc:

Karen Rutledge
Account Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1138255-1	L1138255-2	L1138255-3	L1138255-4	L1138255-5
Description	WATER	WATER	WATER	WATER	WATER
Sampled Date	23-APR-12	23-APR-12	23-APR-12	23-APR-12	23-APR-12
Sampled Time					
Client ID	FC-1	FC-2	FC-3	FC-4	FC-5
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (EC) (uS/cm)	109	132	104	106	125
pH (pH)	7.72	7.90	7.68	7.74	7.75
Anions and Nutrients Acidity (as CaCO3) (mg/L)	2.6	2.2	2.2	2.2	2.4
Alkalinity, Total (as CaCO3) (mg/L CaCO3)	36.1	51.9	35.8	42.7	44.5
Chloride (Cl) (mg/L)	1.71	1.34	1.65	0.59	1.08
Fluoride (F) (mg/L)	0.036	0.041	0.032	<0.030	0.037
Sulfate (SO4) (mg/L)	7.49	6.10	6.65	3.70	8.80
Dissolved Metals Aluminum (Al)-Dissolved (mg/L)	0.0136	0.0124	0.0128	0.0147	0.0131
Antimony (Sb)-Dissolved (mg/L)	0.00162	0.00167	0.00073	0.00132	0.00141
Arsenic (As)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	0.0012
Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Cadmium (Cd)-Dissolved (mg/L)	0.000045	0.000045	0.000031	0.000023	0.000037
Calcium (Ca)-Dissolved (mg/L)	11.1	15.7	10.5	14.1	15.7
Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper (Cu)-Dissolved (mg/L)	0.0017	0.0018	0.0019	0.0011	0.0025
Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Magnesium (Mg)-Dissolved (mg/L)	2.97	3.69	2.84	2.71	3.48
Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum (Mo)-Dissolved (mg/L)	0.0067	0.0075	0.0055	0.0024	0.0057
Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Potassium (K)-Dissolved (mg/L)	1.16	1.39	1.07	0.99	1.43
Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Dissolved (mg/L)	3.58	3.77	3.60	1.34	1.93
Strontium (Sr)-Dissolved (mg/L)	0.0355	0.0584	0.0315	0.0301	0.0446
Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1138255-6	L1138255-7	L1138255-8	L1138255-9	
Description	WATER	WATER	WATER	WATER	
Sampled Date	23-APR-12	23-APR-12	23-APR-12	23-APR-12	
Sampled Time					
Client ID	FC-6	FC-7	FC-8	TRIP BLANK	
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (EC) (uS/cm)	97.2	101	131	<3.0	
pH (pH)	7.66	7.62	7.90	5.45	
Anions and Nutrients Acidity (as CaCO3) (mg/L)	2.2	2.2	2.0	<2.0	
Alkalinity, Total (as CaCO3) (mg/L CaCO3)	33.3	32.3	51.4	<5.0	
Chloride (Cl) (mg/L)	1.34	0.46	1.34	<0.10	
Fluoride (F) (mg/L)	<0.030	<0.030	0.041	<0.030	
Sulfate (SO4) (mg/L)	5.72	9.30	6.09	<0.30	
Dissolved Metals Aluminum (Al)-Dissolved (mg/L)	0.0163	0.0131	0.0130	<0.0050	
Antimony (Sb)-Dissolved (mg/L)	0.00073	0.00085	0.00169	<0.00060	
Arsenic (As)-Dissolved (mg/L)	0.0013	0.0013	<0.0010	<0.0010	
Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	
Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
Cadmium (Cd)-Dissolved (mg/L)	0.000021	0.000023	0.000046	<0.000017	
Calcium (Ca)-Dissolved (mg/L)	10.5	12.4	15.5	<0.20	
Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
Copper (Cu)-Dissolved (mg/L)	0.0016	0.0011	0.0019	<0.0010	
Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	
Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
Magnesium (Mg)-Dissolved (mg/L)	2.88	2.86	3.66	<0.020	
Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
Molybdenum (Mo)-Dissolved (mg/L)	0.0032	0.0032	0.0075	<0.0010	
Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Potassium (K)-Dissolved (mg/L)	0.98	0.93	1.39	<0.50	
Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
Sodium (Na)-Dissolved (mg/L)	2.44	0.94	3.79	<0.10	
Strontium (Sr)-Dissolved (mg/L)	0.0353	0.0438	0.0582	<0.0010	
Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1138255-1	L1138255-2	L1138255-3	L1138255-4	L1138255-5
Description	WATER	WATER	WATER	WATER	WATER
Sampled Date	23-APR-12	23-APR-12	23-APR-12	23-APR-12	23-APR-12
Sampled Time					
Client ID	FC-1	FC-2	FC-3	FC-4	FC-5
Grouping **Analyte**					
WATER					
Dissolved Metals Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	<0.0030	<0.0030	0.0034
Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1138255-6	L1138255-7	L1138255-8	L1138255-9	
	Description	WATER	WATER	WATER	WATER	
	Sampled Date	23-APR-12	23-APR-12	23-APR-12	23-APR-12	
	Sampled Time					
	Client ID	FC-6	FC-7	FC-8	TRIP BLANK	
Grouping	**Analyte**					
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	0.0032	<0.0030	
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
SFPL	Sample was Filtered and Preserved at the laboratory - Dissolved metals

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Sulfate (SO4)	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Potassium (K)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Iron (Fe)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Potassium (K)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1138255-1, -2, -3, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
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**
ACIDITY-TB	Water	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-TOT-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
HG-D-CVAF-TB	Water	Dissolved Mercury in Water by CVAFS	EPA 245.7
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3030B/EPA 6020A
This analysis involves filtration (APHA 3030B) and analysis by inductively coupled plasma - mass spectrometry (EPA Method 6020A).			
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			

** 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
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA

Chain of Custody Numbers:

Reference Information

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

ALS Laboratory Gr
ANALYTICAL CHEMISTRY & TESTING SERVICES

Environmental Division

L1138255-COFC

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

COC # L1138255

Page ___ of ___

Report To		Report Format / Distribution	Service Requested (Rush for routine analysis subject to availability)
Company:	Rainy River Resources LTD	☐ Standard ☐ Other (specify):	☑ Regular (Default)
Contact:	Alyson Bisson	☑ PDF ☑ Excel ☑ Digital ☐ Fax	○ Priority (Specify Date Required → →) Surcharges apply
Address:	5967 Highway11/17	Email 1: abisson@rainyriverresources.com	○ Emergency (1 Business Day) - 100% Surcharge
	PO Box 5, Emo Ontario P0W 1E0	Email 2:	○ For Emergency < 1 Day, ASAP or Weekend - Contact ALS
Phone:	807-482-2501 Fax: 807-276-0858		
Invoice To	Same as Report ? Yes No	Client / Project Information	Analysis Request

THE QUESTIONS BELOW MUST BE ANSWERED FOR WATER SAMPLES (circle Yes or No)
Are any samples taken from a regulated DW System? Yes (No)
If yes, an authorized Drinking Water COC MUST be used for this submission.
Is the water sampled intended to be potable for human consumption? Yes (No)

Job #:
PO / AFE:
LSD:
Quote #:

Lab Work Order # (lab use only):
ALS Contact:
Sampler:

Please indicate below Filtered, Preserved or both (F, P, F/P)

Sample #	Sample Identification (This description will appear on the report)	Date (dd-mmm-yy)	Time (hh:mm)	Sample Type	pH, Conductivity	Total Alkalinity, Acidity	Anions (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury	Number of Containers
1	FC-1	Apr23/12		water						2
2	FC-2	↓		↓						2
3	FC-3									2
4	FC-4									2
5	FC-5									2
6	FC-6									2
7	FC-7									2
8	FC-8									2
QTB		↓		↓						2

Special Instructions / Regulations / Hazardous Details

Reg 153 Table 1 2 3 TCLP MISA PWQO OTHER (please specify):
Circle one - Note drinking water samples MUST USE DW Chain of Custody

COOLER BOTTLES TO BE RECHARGED AND SHIPPED TO THE CLIENT

Failure to complete all portions of this form may delay analysis. Please fill in this form LEGIBLY.
By the use of this form the user acknowledges and agrees with the Terms and Conditions as specified on the back page of the white - report copy.

SHIPMENT RELEASE (client use)			SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)			
Released by:	Date:	Time:	Received by:	Date:	Time:	Temperature:	Verified by:	Date:	Time:	Observations Yes / No? If Yes add SIF
EFM0204g v.1 Analytical 11-March-11 TS Page 1 of 1	Apr25/12	4:00pm	IB	24-APR-12	13:00	6.8 °C	IB	24-APR-12	8:00	

TYFM014 26-Mar-10

7.6 °C

SEE SIF.

L1138255-COFC

Sample Integrity Form

This report summarizes some deficiencies found in your recent submission, and the actions that will be taken unless you contact us to make specific instructions.

Date Received:	Client:
24-APR-12	Rainy River Resources LTD.
Completed by (initial)	**Submission ID: L# or Other Identifying Mark**
VB	L1138255

1	Deficiency Found:	Without further instruction, We WILL:	2
	Samples under Regulation not circled yes or no	Proceed with samples as not from a regulated drinking water system and not intended for human consumption	
	Chain of Custody Questions Not Answered or Not on the Chain of Custody	Proceed with samples as not from a regulated drinking water system but intended for human consumption	
	Analyses requested not completed on Chain of Custody	Proceed to follow information on the chain of custody unless you specify otherwise	
	Sample was received with a temperature higher then 20°C (Microbiology)	Proceed to follow information on the bottle(s) unless you specify otherwise	
	COC information is incomplete or illegible	Proceed with analysis - Results may be qualified	
	COC not signed and dated by client	Preserve and proceed with analysis	
	Regulated Sample Type(s) not indicated on the Chain of Custody	Proceed with the samples as regulated unless specified otherwise	
	Sample Description not clearly indicated on Chain of Custody	Advise you resample for deficient sample(s)	
	COC information does not match bottle label	Proceed with analysis of (remaining) sample(s)	
	Analysis Required not listed or clearly specified	Proceed with regular testing from previous submissions unless you specify otherwise	
	No COC accompanying the submission	**Further Comments/Specifics:** No tests indicated. Will proceed with all tests. Trip blank submitted but not on the COC. Will proceed with. trip blank. Dis. met & Dis. Hg - filter & preserve @ lab. No sample time on COC or sample bottles. Will proceed with sample time as 00:00.	
	Sample Bottle labeling issue (label is missing, blank, or doesn't match COC		
	Wrong Sample Bottle used		
	Sample received after analytical hold time has been exceeded		
	Filter and Preserve at Lab		
	Sample bottle found broken when received		
	Sample received with headspace		
	Insufficient number of bottles or sample volume provided		
	Sample Received Unpreserved		
	Bottles in shipment but not listed on chain of custody		
	Sample < Freezing Point (contains ice crystals or frozen)		
	Bottles listed on chain of custody but missing in shipment		
	← **If Checked HERE, you NEED to contact the laboratory for further discussion**		

For more information or to contact the laboratory: Login CSS 800-668-9878

ADDRESS 1081 Barton Street, Thunder Bay, Ontario, Canada P7B 5N3 PHONE +1 807 623 6463 FAX +1 807 623 7598
ALS CANADA LIMITED Part of the ALS Laboratory Group A Campbell Brothers Limited Company

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 18-MAY-12
Report Date: 30-MAY-12 07:32 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1149338

Project P.O. #: NOT SUBMITTED
Job Reference: FIELD CELLS
C of C Numbers:
Legal Site Desc:

Karen Rutledge
Account Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1149338-1	L1149338-2	L1149338-3	L1149338-4	L1149338-5
	Description	WATER	WATER	WATER	WATER	WATER
	Sampled Date	17-MAY-12	17-MAY-12	17-MAY-12	17-MAY-12	17-MAY-12
	Sampled Time	13:39	13:49	13:55	14:02	14:12
	Client ID	FC1	FC2	FC3	FC4	FC5
Grouping	**Analyte**					
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	142	157	135	132	103
	pH (pH)	7.95	8.04	7.91	7.94	7.81
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	3.6	3.0	2.6	2.4	2.2
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	47.9	60.6	49.1	50.5	37.6
	Chloride (Cl) (mg/L)	1.32	1.11	1.49	0.64	0.49
	Fluoride (F) (mg/L)	0.035	0.035	0.032	<0.030	<0.030
	Sulfate (SO4) (mg/L)	9.23	7.13	8.02	5.20	5.37
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0251	0.0148	0.0133	0.0177	0.0176
	Antimony (Sb)-Dissolved (mg/L)	0.00190	0.00182	0.00087	0.00154	0.00120
	Arsenic (As)-Dissolved (mg/L)	0.0010	<0.0010	<0.0010	0.0010	0.0015
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Cadmium (Cd)-Dissolved (mg/L)	0.000057	0.000048	0.000040	0.000034	0.000032
	Calcium (Ca)-Dissolved (mg/L)	15.2	19.1	15.0	17.5	12.7
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Copper (Cu)-Dissolved (mg/L)	0.0026	0.0018	0.0021	0.0015	0.0026
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Magnesium (Mg)-Dissolved (mg/L)	4.32	5.10	4.63	3.88	3.09
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Mercury (Hg)-Dissolved (mg/L)	<0.0002 DLIS	<0.00010	<0.00010	<0.00010	<0.00010
	Molybdenum (Mo)-Dissolved (mg/L)	0.0067	0.0080	0.0066	0.0035	0.0036
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Potassium (K)-Dissolved (mg/L)	1.31	1.64	1.37	1.22	1.10
	Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Dissolved (mg/L)	3.79	3.64	3.62	1.42	1.04
	Strontium (Sr)-Dissolved (mg/L)	0.0470	0.0701	0.0417	0.0348	0.0318
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1149338-6	L1149338-7	L1149338-8	L1149338-9	
Description	WATER	WATER	WATER	BLANK	
Sampled Date	17-MAY-12	17-MAY-12	17-MAY-12	17-MAY-12	
Sampled Time	14:19	14:25	14:05	13:39	
Client ID	FC6	FC7	FC8	TRAVEL BLANK	
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (EC) (uS/cm)	123	165	133	<3.0	
pH (pH)	7.89	8.06	7.97	5.57	
Anions and Nutrients Acidity (as CaCO3) (mg/L)	3.4	3.2	2.6	<2.0	
Alkalinity, Total (as CaCO3) (mg/L CaCO3)	42.5	59.8	52.9	<5.0	
Chloride (Cl) (mg/L)	1.09	0.59	0.63	<0.10	
Fluoride (F) (mg/L)	<0.030	0.030	<0.030	<0.030	
Sulfate (SO4) (mg/L)	7.34	12.5	5.16	<0.30	
Dissolved Metals Aluminum (Al)-Dissolved (mg/L)	0.0163	0.0155	0.0173	<0.0050	
Antimony (Sb)-Dissolved (mg/L)	0.00083	0.00120	0.00147	<0.00060	
Arsenic (As)-Dissolved (mg/L)	0.0013	0.0014	<0.0010	<0.0010	
Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	
Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
Cadmium (Cd)-Dissolved (mg/L)	0.000026	0.000035	0.000027	<0.000017	
Calcium (Ca)-Dissolved (mg/L)	13.6	20.8	17.0	<0.20	
Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
Copper (Cu)-Dissolved (mg/L)	0.0017	0.0013	0.0014	<0.0010	
Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	
Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
Magnesium (Mg)-Dissolved (mg/L)	4.11	5.94	3.81	<0.020	
Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Mercury (Hg)-Dissolved (mg/L)	<0.00010	<0.00010	<0.0002 DLIS	<0.0002 DLIS	
Molybdenum (Mo)-Dissolved (mg/L)	0.0041	0.0063	0.0033	<0.0010	
Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Potassium (K)-Dissolved (mg/L)	1.20	1.37	1.19	<0.50	
Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
Sodium (Na)-Dissolved (mg/L)	2.43	1.14	1.40	<0.10	
Strontium (Sr)-Dissolved (mg/L)	0.0436	0.0681	0.0337	<0.0010	
Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1149338-1 WATER 17-MAY-12 13:39 FC1	L1149338-2 WATER 17-MAY-12 13:49 FC2	L1149338-3 WATER 17-MAY-12 13:55 FC3	L1149338-4 WATER 17-MAY-12 14:02 FC4	L1149338-5 WATER 17-MAY-12 14:12 FC5
Sample ID / Description / Sampled Date / Sampled Time / Client ID						
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	0.0032	<0.0030	<0.0030	<0.0030
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1149338-6	L1149338-7	L1149338-8	L1149338-9	
	Description	WATER	WATER	WATER	BLANK	
	Sampled Date	17-MAY-12	17-MAY-12	17-MAY-12	17-MAY-12	
	Sampled Time	14:19	14:25	14:05	13:39	
	Client ID	FC6	FC7	FC8	TRAVEL BLANK	
Grouping	**Analyte**					
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	0.0031	<0.0030	<0.0030	
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
SFPL	Sample was Filtered and Preserved at the laboratory - HG-D
SFPL	Sample was Filtered and Preserved at the laboratory - MET-D

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Method Blank	pH	A	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Comments: MB			
Matrix Spike	Sulfate (SO4)	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Potassium (K)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1149338-1, -2, -3, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
A	Method Blank exceeds ALS DQO. Refer to narrative comments for further information.
DLIS	Detection Limit Adjusted: Insufficient Sample
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**
ACIDITY-TB	Water	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-TOT-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
HG-DIS-PWQO-WT	Water	Mercury, Dissolved (to Ont. PWQO)	SW846 7470A
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3030B/EPA 6020A
This analysis involves filtration (APHA 3030B) and analysis by inductively coupled plasma - mass spectrometry (EPA Method 6020A).			
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			

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

Reference Information

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
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

ALS Environmental

1114938-COFC

5N3 Canada PHONE +1 807 623 6463 FAX +1 807 623 7598
Brothers Limited Company www.alsglobal.com

i1149338 Page ___ of ___

Company:	Rainyt River Resources		
Contact:			
Address:	5967 Highway 11/17 P.O.Box 5 Emo P0W 1E0		
Phone:	807-482-2501	Fax:	807-276-0858
Email:			
Project:		PO:	
Quote #			
Invoice To:		Same as Report:	☑ Yes ☐ No
Company:	Project: Field Cells		
Contact:			
Address:			
Email:			
Account Manager	Karen R.	Sampler:	

atory Information

- ☐ O. Reg 153 (O. Reg 511 Amend) Table: ___
- Record of Site Condition ☐ Yes ☐ No
- PWQO ☑ MISA ☑ MMER ☑ CCME ☑
- Guideline Required:
- TCLP Regulation 558 ☐ Other:

Service Requested

- ☐ Regular TAT (7 Days)
- ☐ Priority TAT 50% Surcharge (3-5 Days)
- ☐ Emergency TAT 100% Surcharge (1-2 Days)
- Specify Date Required:

All TAT quoted material is in business days which exclude statutory holidays and weekends. Samples received past 3:00pm or Saturday/Sunday begin the next day.

Both questions below must answered for water samples

- Are any samples taken from a regulated DW System? ☐ Yes ☑ No
- If yes, an authorized DW COC must be used.
- Is the water sampled intended for human consumption? ☐ Yes ☑ No

Analysis Request

Please indicate below Filtered, Preserved or both (F, P, F/P)

Sample #	Sample Identification (This description will appear on the report)	Date	Time	Sample Type	pH, Conductivity	Total Alsklinitym Acidity	Anioins (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury	Number of Containers
FC1	FC1	May 17/2012	1:39pm	WATER	x	x	x	x	x	3
FC2	FC2	May 17/2012	1:49pm	water	x	x	x	x	x	3
FC3	FC3	May 17/2012	1:55pm	water	x	x	x	x	x	3
FC4	FC4	May 17/2012	2:02pm	water	x	x	x	x	x	3
FC5	FC5	May 17/2012	2:12pm	water	x	x	x	x	x	3
FC6	FC6	May 17/2012	2:19pm	water	x	x	x	x	x	3
FC7	FC7	May 17/2012	2:25pm	water	x	x	x	x	x	3
FC8	FC8	May 17/2012	2:05pm	water	x	x	x	x	x	3
	Travel Blank				x	x	x	x	x	
	Please RECHARGE and send back									

bottle order submitted - KF

SHIPMENT RELEASE (client use)

Released by:	Date & Time	Received by:	Date & Time	Temp	Cooling Initiated	Verified by:	Date & Time	Observations:
	May 17/12	KF	may 18-12/10:55	11.3	☑ Yes ☐ No	KF	may 18/12/11:00	Yes / ~~No~~ If Yes add SIF

4:00

Failure to complete all portions of this form may delay analysis. **TAT may vary dependant on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs. Any known or suspected hazards relating to a sample must be noted on the chain of custody in the comments section. By use of the form the user acknowledges and agrees with the Terms and Conditions as specified on the back page.

1114938-COFC

LS Environmental (Thunder Bay)

Sample Integrity Form

This report summarizes some deficiencies found in your recent submission, and the actions that will be taken unless you contact us to make specific instructions.

Date Received: 18-MAY-12	Client: RAINY RIVER RESOURCES
Completed by (initial): [illegible]	Submission ID: L# or Other Identifying Mark: FIELD CELLS

1	Deficiency Found:
	No COC accompanying the submission
	COC information is incomplete or illegible
	Analysis requested not listed or clearly specified
X	Applicable regulation not indicated
	Regulated sample type not indicated
	COC not signed/dated by client
	COC information does not match bottle labels
	Bottle labels missing or blank
	Sample received unpreserved or incorrectly preserved
✓	Sample received unfiltered
	Sample received with headspace
	Sample received after analytical hold time has been exceeded
	Bottles listed on COC but not received
	Bottles received but not listed on COC
✓	Insufficient number of bottles or sample volume
	Wrong sample bottle used
	Bottle found broken when received
	Sample received with temperature below freezing point, containing ice crystals, or frozen
	Microbiology sample received with temperature above 20°C
	Other deficiency (see comments)
	← ***If Checked HERE, you NEED to contact the laboratory for further discussion***

Without further instruction, we WILL:	2
Proceed with regular testing from previous submissions, unless specified otherwise	
Proceed with samples as regulated	
Proceed with samples as not regulated and not intended for consumption	✓
Proceed with samples as not regulated and intended for consumption	
Proceed with information from COC	
Proceed with information from bottles	
Proceed with analysis - results may be qualified	
Preserve and/or filter at lab and proceed with analysis	✓
Advise you resample for deficient samples	
Hold samples without analysis pending further information - please contact the lab.	

Further Comments/Specifics:

- Dissolved metals
- Dissolved mercury Filter and preserve @ lab.
- FC1 recieved low volume (approx. 100ml)
- Dissolved mercury bottle recieved empty

CoC INDICATES MISA REGULATION - PROCEEDING AS NON-MISA.

For more information please contact the laboratory.

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 05-JUN-12
Report Date: 21-JUN-12 13:43 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1156982

Project P.O. #: NOT SUBMITTED
Job Reference: FIELD CELLS
C of C Numbers:
Legal Site Desc:

Karen Rutledge
Account Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1156982-1	L1156982-2	L1156982-3	L1156982-4	L1156982-5
	Description	WATER	WATER	WATER	WATER	WATER
	Sampled Date	04-JUN-12	04-JUN-12	04-JUN-12	04-JUN-12	04-JUN-12
	Sampled Time	11:28	11:34	11:39	11:43	11:49
	Client ID	FC1	FC2	FC3	FC4	FC5
Grouping	**Analyte**					
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	96.6	125	117	118	115
	pH (pH)	7.69	7.81	7.70	7.74	7.71
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	2.8	2.6	2.0	2.2	2.4
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	33.5	49.2	41.9	47.7	44.9
	Chloride (Cl) (mg/L)	0.82	0.35	1.17	0.53	0.57
	Fluoride (F) (mg/L)	<0.030	<0.030	<0.030	<0.030	<0.030
	Sulfate (SO4) (mg/L)	6.71	2.96	7.32	4.50	6.64
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0131	0.0139	0.0111	0.0157	0.0151
	Antimony (Sb)-Dissolved (mg/L)	0.00130	0.00156	0.00070	0.00128	0.00127
	Arsenic (As)-Dissolved (mg/L)	0.0010	<0.0010	<0.0010	0.0011	0.0016
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Cadmium (Cd)-Dissolved (mg/L)	0.000042	0.000044	0.000043	0.000031	0.000039
	Calcium (Ca)-Dissolved (mg/L)	10.7	14.9	13.4	16.3	15.2
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Copper (Cu)-Dissolved (mg/L)	0.0026	0.0021	0.0026	0.0020	0.0031
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Magnesium (Mg)-Dissolved (mg/L)	3.13	4.28	4.15	3.82	3.95
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Mercury (Hg)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Molybdenum (Mo)-Dissolved (mg/L)	0.0052	0.0066	0.0067	0.0034	0.0053
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Potassium (K)-Dissolved (mg/L)	0.94	1.28	1.16	1.15	1.23
	Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Dissolved (mg/L)	2.59	2.82	3.19	1.05	1.13
	Strontium (Sr)-Dissolved (mg/L)	0.0332	0.0589	0.0385	0.0316	0.0387
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1156982-6 WATER 04-JUN-12 11:55 FC6	L1156982-8 WATER 04-JUN-12 11:58 FC7	L1156982-9 WATER 04-JUN-12 12:05 FC8	L1156982-10 WATER 04-JUN-12 11:28 TRAVEL BLANK	
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	108	136	137	<3.0	
	pH (pH)	7.67	7.78	7.77	5.57	
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	2.0	2.0	2.2	<2.0	
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	39.4	49.4	49.4	<5.0	
	Chloride (Cl) (mg/L)	0.82	0.60	0.61	<0.10	
	Fluoride (F) (mg/L)	<0.030	0.030	<0.030	<0.030	
	Sulfate (SO4) (mg/L)	6.79	11.4	11.6	<0.30	
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0149	0.0148	0.0152	<0.0050	
	Antimony (Sb)-Dissolved (mg/L)	0.00080	0.00124	0.00122	<0.00060	
	Arsenic (As)-Dissolved (mg/L)	0.0016	0.0019	0.0019	<0.0010	
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
	Cadmium (Cd)-Dissolved (mg/L)	0.000028	0.000031	0.000031	<0.000017	
	Calcium (Ca)-Dissolved (mg/L)	12.6	17.3	17.4	<0.20	
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Copper (Cu)-Dissolved (mg/L)	0.0031	0.0041	0.0023	<0.0010	
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
	Magnesium (Mg)-Dissolved (mg/L)	3.89	5.04	5.20	<0.020	
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Mercury (Hg)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
	Molybdenum (Mo)-Dissolved (mg/L)	0.0042	0.0060	0.0059	<0.0010	
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Potassium (K)-Dissolved (mg/L)	1.15	1.31	1.31	<0.50	
	Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
	Sodium (Na)-Dissolved (mg/L)	1.97	1.07	1.10	<0.10	
	Strontium (Sr)-Dissolved (mg/L)	0.0439	0.0623	0.0630	<0.0010	
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1156982-1	L1156982-2	L1156982-3	L1156982-4	L1156982-5
Description	WATER	WATER	WATER	WATER	WATER
Sampled Date	04-JUN-12	04-JUN-12	04-JUN-12	04-JUN-12	04-JUN-12
Sampled Time	11:28	11:34	11:39	11:43	11:49
Client ID	FC1	FC2	FC3	FC4	FC5
Grouping / **Analyte**					
WATER					
Dissolved Metals Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	0.0036	<0.0030	<0.0030
Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1156982-6	L1156982-8	L1156982-9	L1156982-10	
Description	WATER	WATER	WATER	WATER	
Sampled Date	04-JUN-12	04-JUN-12	04-JUN-12	04-JUN-12	
Sampled Time	11:55	11:58	12:05	11:28	
Client ID	FC6	FC7	FC8	TRAVEL BLANK	
Grouping / Analyte					
WATER					
Dissolved Metals					
Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Zinc (Zn)-Dissolved (mg/L)	<0.0030	0.0084	0.0056	<0.0030	
Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
SFPL	Sample was Filtered and Preserved at the laboratory - HG and Dissolved Metals

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1156982-1, -10, -2, -3, -4, -5, -6, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1156982-1, -10, -2, -3, -4, -5, -6, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1156982-1, -10, -2, -3, -4, -5, -6, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1156982-1, -10, -2, -3, -4, -5, -6, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1156982-1, -10, -2, -3, -4, -5, -6, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1156982-1, -10, -2, -3, -4, -5, -6, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1156982-1, -10, -2, -3, -4, -5, -6, -8, -9
Matrix Spike	Potassium (K)-Dissolved	MS-B	L1156982-1, -10, -2, -3, -4, -5, -6, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1156982-1, -10, -2, -3, -4, -5, -6, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1156982-1, -10, -2, -3, -4, -5, -6, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
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**
ACIDITY-TB	Water	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-TOT-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
HG-DIS-WT	Water	Mercury (Hg)-Dissolved	SW846 7470A
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3030B/EPA 6020A
This analysis involves filtration (APHA 3030B) and analysis by inductively coupled plasma - mass spectrometry (EPA Method 6020A).			
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			

** 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
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

Reference Information

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

ALS Environmental

L11156982-COFC

PHONE +1 807 623 6463 FAX +1 807 623 7598
Company www.alsglobal.com

L1156982

Page ___ of ___

Company:	Rainy River Resources Ltd.				
Contact:					
Address:	5967 Highway 11/17 P.O.Box 5 Emo P0W 1E0				
Phone:	807-482-2501	Fax:	807-276-0858		
Email:					
Project:		PO:			
Quote #					
Invoice To:		Same as Report:	☑ Yes ☐ No		
Company:	Project: Field Cells				
Contact:					
Address:					
Email:					
Account Manager	Karen R.	Sampler:			

...ormation

- ☐ O Reg 153 (O Reg 511 Amend) Table:
- Record of Site Condition ☐ Yes ☐ No
- PWQO ☐ MISA ☐ MMER ☐ CCME ☐
- Guideline Required:
- TCLP Regulation 558 ☐ Other:

Service Requested

- ☐ Regular TAT (7 Days)
- ☐ Priority TAT 50% Surcharge (3-5 Days)
- ☐ Emergency TAT 100% Surcharge (1-2 Days)
- Specify Date Required:

All TAT quoted material is in business days which exclude statutory holidays and weekends. Samples received past 3:00pm or Saturday/Sunday begin the next day.

Both questions below must answered for water samples

- Are any samples taken from a regulated DW System? ☐ Yes ☑ No
- If yes, an authorized DW COC must be used.
- Is the water sampled intended for human consumption? ☐ Yes ☑ No

Analysis Request

Please indicate below Filtered, Preserved or both (F, P, F/P)

Sample #	Sample Identification (This description will appear on the report)	Date	Time	Sample Type	pH, Conductivity	Total Alkalinity, Acidity	Anions (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury	Number of Containers
~~FC1~~ 1	FC1	June 4/12	11:28	water	x	x	x	x	x	3
~~FC2~~ 2	FC2	June 4/12	11:34	water	x	x	x	x	x	3
3	FC3	June 4/12	11:39	water	x	x	x	x	x	3
4	FC4	June 4/12	11:43	water	x	x	x	x	x	3
5	FC5	June 4/12	11:49	water	x	x	x	x	x	3
6	FC6	June 4/12	11:55	water	x	x	x	x	x	3
7	FC7	June 4/12	11:58	water	x	x	x	x	x	3
8	FC8	June 4/12	12:05	water	x	x	x	x	x	3
	Travel Blank	~~June 4/12~~			x	x	x	x	x	3
	Please RECHARGE and send back									

Special Instructions / Comments

Please RECHARGE cooler and send back to above address. Given To Logistics Kim

SHIPMENT RELEASE (client use)		SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)		
Released by	Date & Time	Received by:	Date & Time	Temp	Cooling Initiated	Verified by:	Date & Time	Observations: Yes / No ? If Yes add SIF
	June 4/12 4:30 pm	Kim	June 5/12 10:40	14.6	☑ Yes ☐ No	Kim	June 5/12 11:15	

Failure to complete all portions of this form may delay analysis. **TAT may vary dependant on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs. Any known or suspected hazards relating to a sample must be noted on the chain of custody in the comments section. By use of the form the user acknowledges and agrees with the Terms and Conditions as specified on the back page.

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 13-JUN-12
Report Date: 28-JUN-12 12:23 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1161692

Project P.O. #: NOT SUBMITTED
Job Reference: FIELD CELLS
C of C Numbers:
Legal Site Desc:

Karen Rutledge
Account Manager

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ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1161692-1	L1161692-2	L1161692-3	L1161692-4	L1161692-5
Description	WATER	WATER	WATER	WATER	WATER
Sampled Date	12-JUN-12	12-JUN-12	12-JUN-12	12-JUN-12	12-JUN-12
Sampled Time	11:03	11:09	11:15	11:22	11:26
Client ID	FC-1	FC-2	FC-3	FC-4	FC-5
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (EC) (uS/cm)	122	139	164	128	158
pH (pH)	7.67	7.83	7.70	7.78	7.82
Anions and Nutrients Alkalinity, Total (as CaCO3) (mg/L CaCO3)	39.9	53.6	53.2	49.0	60.2
Chloride (Cl) (mg/L)	0.88	0.91	1.48	0.60	0.95
Fluoride (F) (mg/L)	0.034	0.033	0.040	<0.030	0.041
Sulfate (SO4) (mg/L)	8.89	6.87	10.6	5.04	8.55
Dissolved Metals Aluminum (Al)-Dissolved (mg/L)	0.0268	0.0258	0.0210	0.0284	0.0231
Antimony (Sb)-Dissolved (mg/L)	0.00159	0.00171	0.00095	0.00136	0.00155
Arsenic (As)-Dissolved (mg/L)	0.0015	0.0014	0.0021	0.0014	0.0023
Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Cadmium (Cd)-Dissolved (mg/L)	0.000052	0.000048	0.000054	0.000035	0.000056
Calcium (Ca)-Dissolved (mg/L)	13.1	15.5	16.8	16.7	19.2
Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper (Cu)-Dissolved (mg/L)	0.0031	0.0023	0.0102	0.0023	0.0060
Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Magnesium (Mg)-Dissolved (mg/L)	4.39	5.02	5.65	4.12	5.68
Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Mercury (Hg)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum (Mo)-Dissolved (mg/L)	0.0072	0.0073	0.0080	0.0037	0.0068
Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Potassium (K)-Dissolved (mg/L)	1.42	1.68	1.98	1.37	1.97
Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Dissolved (mg/L)	2.91	3.03	4.40	1.10	1.61
Strontium (Sr)-Dissolved (mg/L)	0.0420	0.0602	0.0534	0.0345	0.0521
Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1161692-6	L1161692-7	L1161692-8	L1161692-9	
Description	WATER	WATER	WATER	WATER	
Sampled Date	12-JUN-12	12-JUN-12	12-JUN-12	12-JUN-12	
Sampled Time	11:29	11:37	11:32		
Client ID	FC-6	FC-7	FC-8	TRAVEL BLANK	
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (EC) (uS/cm)	129	172	129	<3.0	
pH (pH)	7.75	7.86	7.75	5.59	
Anions and Nutrients Alkalinity, Total (as CaCO3) (mg/L CaCO3)	45.6	58.0	44.6	<5.0	
Chloride (Cl) (mg/L)	0.94	0.88	0.94	<0.10	
Fluoride (F) (mg/L)	0.031	0.040	<0.030	<0.030	
Sulfate (SO4) (mg/L)	8.03	15.5	8.06	<0.30	
Dissolved Metals Aluminum (Al)-Dissolved (mg/L)	0.0262	0.0277	0.0254	<0.0050	
Antimony (Sb)-Dissolved (mg/L)	0.00092	0.00164	0.00092	<0.00060	
Arsenic (As)-Dissolved (mg/L)	0.0018	0.0030	0.0018	<0.0010	
Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	
Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
Cadmium (Cd)-Dissolved (mg/L)	0.000035	0.000047	0.000034	<0.000017	
Calcium (Ca)-Dissolved (mg/L)	14.6	20.4	14.4	<0.20	
Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
Copper (Cu)-Dissolved (mg/L)	0.0033	0.0026	0.0031	<0.0010	
Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	
Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
Magnesium (Mg)-Dissolved (mg/L)	4.90	6.72	4.83	<0.020	
Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Mercury (Hg)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
Molybdenum (Mo)-Dissolved (mg/L)	0.0051	0.0086	0.0049	<0.0010	
Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Potassium (K)-Dissolved (mg/L)	1.51	1.99	1.49	<0.50	
Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
Sodium (Na)-Dissolved (mg/L)	2.25	1.52	2.25	<0.10	
Strontium (Sr)-Dissolved (mg/L)	0.0508	0.0802	0.0503	<0.0010	
Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	
Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1161692-1 WATER 12-JUN-12 11:03 FC-1	L1161692-2 WATER 12-JUN-12 11:09 FC-2	L1161692-3 WATER 12-JUN-12 11:15 FC-3	L1161692-4 WATER 12-JUN-12 11:22 FC-4	L1161692-5 WATER 12-JUN-12 11:26 FC-5
Sample ID / Description / Sampled Date / Sampled Time / Client ID						
WATER						
Dissolved Metals	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	0.0074	0.0053	0.0053
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1161692-6 WATER 12-JUN-12 11:29 FC-6	L1161692-7 WATER 12-JUN-12 11:37 FC-7	L1161692-8 WATER 12-JUN-12 11:32 FC-8	L1161692-9 WATER 12-JUN-12 TRAVEL BLANK	
Sample ID / **Description** / **Sampled Date** / **Sampled Time** / **Client ID**						
WATER						
Dissolved Metals	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Zinc (Zn)-Dissolved (mg/L)	0.0068	0.0086	0.0068	<0.0030	
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
SFPL	Sample was Filtered and Preserved at the laboratory - dis metal, dis hg

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Potassium (K)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Potassium (K)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Boron (B)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Potassium (K)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Uranium (U)-Dissolved	MS-B	L1161692-1, -2, -3, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
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-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
HG-DIS-PWQO-WT	Water	Mercury, Dissolved (to Ont. PWQO)	SW846 7470A
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3030B/EPA 6020A
This analysis involves filtration (APHA 3030B) and analysis by inductively coupled plasma - mass spectrometry (EPA Method 6020A).			
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			

** 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
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA
WT	ALS ENVIRONMENTAL - WATERLOO, ONTARIO, CANADA

Chain of Custody Numbers:

Reference Information

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

ALS Environmental



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hers Limited Company www.alsglobal.com

L1161692

Page ___ of ___

Company:	Rainy River Resources Ltd.			ry Information	Both questions below must answered for water samples
Contact:				O. Reg 153 (O. Reg 511/Amend) Table:	Are any samples taken from a regulated DW System? ☐ Yes ☑ No
Address:	5967 Highway 11/17 P.O.Box 5 Emo P0W 1E0			Record of Site Condition ☐ Yes ☐ No	If yes, an authorized DW COC must be used.
				RWQO ☐ MISA ☐ MMER ☐ CCME ☐	Is the water sampled intended for human consumption? ☐ Yes ☑ No
Phone:	807-482-2501	Fax:	807-276-0858	Guideline Required:	
Email:				TCLP Regulation 558 ☐ Other:	Analysis Request
Project:		PO:		Service Requested	Please indicate below Filtered, Preserved or both (F, P, F/P)
Quote #				☑ Regular TAT (7 Days)	
Invoice To:		Same as Report:	☑ Yes ☐ No	☐ Priority TAT 50% Surcharge (3-5 Days)	
Company:	Project: Field Cells			☐ Emergency TAT 100% Surcharge (1-2 Days)	
Contact:				Specify Date Required:	
Address:				All TAT quoted material is in business days which exclude statutory holidays and weekends. Samples received past 3:00pm or Saturday/Sunday begin the next day.	
Email:					
Account Manager	Karen R.	Sampler:			

Sample #	Sample Identification (This description will appear on the report)	Date	Time	Sample Type	pH, Conductivity	Total Alkalinity, Acidity	Anions (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury	Number of Containers
1	FC1	June 12, 2012	11:03	water	x	x	x	x	x	3
2	FC2	June 12, 2012	11:09	water	x	x	x	x	x	3
3	FC3	June 12, 2012	11:15	water	x	x	x	x	x	3
4	FC4	June 12, 2012	11:22	water	x	x	x	x	x	3
5	FC5	June 12, 2012	11:26	water	x	x	x	x	x	3
6	FC6	June 12, 2012	11:29	water	x	x	x	x	x	3
7	FC7	June 12, 2012	11:37	water	x	x	x	x	x	3
8	FC8	June 12, 2012	11:32	water	x	x	x	x	x	3
9	Travel Blank				x	x	x	x	x	3
	Please RECHARGE and send back									

Special Instructions / Comments

Please RECHARGE cooler and send back to above address.

SHIPMENT RELEASE (client use)		SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)		
Released by:	Date & Time	Received by:	Date & Time	Temp	Cooling Initiated	Verified by:	Date & Time	Observations:
	June 12/12 4:00		13/06/12 1:30	10.6	☐ Yes ☐ No		13/06/12 1:35	Yes / No ? If Yes add SIF

**Failure to complete all portions of this form may delay analysis. **TAT may vary dependant on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs. Any known or suspected hazards relating to a sample must be noted on the chain of custody in the comments section. By use of the form the user acknowledges and agrees with the Terms and Conditions as specified on the back page.

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 26-JUN-12
Report Date: 06-JUL-12 15:43 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1167915

Project P.O. #: NOT SUBMITTED
Job Reference: FIELD CELLS
C of C Numbers: L1167915
Legal Site Desc:

Karen Rutledge
Account Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1167915-1 WATER 25-JUN-12 11:19 FC1	L1167915-2 WATER 25-JUN-12 11:24 FC2	L1167915-3 WATER 25-JUN-12 11:30 FC3	L1167915-4 WATER 25-JUN-12 11:33 FC4	L1167915-5 WATER 25-JUN-12 11:38 FC5
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	68.5	89.2	96.4	94.2	98.3
	pH (pH)	7.51	7.67	7.54	7.65	7.66
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	2.0	2.8	2.8	2.4	3.2
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	24.7	35.3	32.2	37.4	37.9
	Chloride (Cl) (mg/L)	0.53	0.39	0.72	0.38	0.47
	Fluoride (F) (mg/L)	<0.030	<0.030	<0.030	<0.030	<0.030
	Sulfate (SO4) (mg/L)	4.02	3.75	5.17	3.29	4.75
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0258	0.0254	0.0144	0.0257	0.0220
	Antimony (Sb)-Dissolved (mg/L)	0.00083	0.00109	0.00063	0.00099	0.00102
	Arsenic (As)-Dissolved (mg/L)	0.0012	0.0012	0.0014	0.0013	0.0021
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Cadmium (Cd)-Dissolved (mg/L)	0.000027	0.000042	0.000028	0.000020	0.000027
	Calcium (Ca)-Dissolved (mg/L)	7.18	9.50	10.0	12.4	12.0
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Copper (Cu)-Dissolved (mg/L)	0.0015	0.0014	0.0038	0.0014	0.0033
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Magnesium (Mg)-Dissolved (mg/L)	2.45	3.11	3.49	2.95	3.46
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Molybdenum (Mo)-Dissolved (mg/L)	0.0028	0.0036	0.0044	0.0021	0.0034
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Potassium (K)-Dissolved (mg/L)	1.02	0.97	1.10	0.92	1.14
	Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Dissolved (mg/L)	1.44	1.71	2.57	0.82	0.93
	Strontium (Sr)-Dissolved (mg/L)	0.0211	0.0358	0.0295	0.0243	0.0322
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1167915-6	L1167915-7	L1167915-8	L1167915-9	
Description	WATER	WATER	WATER	BLANK	
Sampled Date	25-JUN-12	25-JUN-12	25-JUN-12	25-JUN-12	
Sampled Time	11:44	11:47	11:27	11:19	
Client ID	FC6	FC7	FC8	TRAVEL BLANK	
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (EC) (uS/cm)	81.0	117	89.2	<3.0	
pH (pH)	7.57	7.71	7.69	5.53	
Anions and Nutrients Acidity (as CaCO3) (mg/L)	2.2	2.0	2.2	<2.0	
Alkalinity, Total (as CaCO3) (mg/L CaCO3)	29.7	42.6	34.7	<5.0	
Chloride (Cl) (mg/L)	0.49	0.44	0.39	<0.10	
Fluoride (F) (mg/L)	<0.030	<0.030	<0.030	<0.030	
Sulfate (SO4) (mg/L)	4.56	9.15	3.75	<0.30	
Dissolved Metals Aluminum (Al)-Dissolved (mg/L)	0.0244	0.0293	0.0266	<0.0050	
Antimony (Sb)-Dissolved (mg/L)	0.00062	0.00118	0.00108	<0.00060	
Arsenic (As)-Dissolved (mg/L)	0.0016	0.0025	0.0012	<0.0010	
Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	
Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
Cadmium (Cd)-Dissolved (mg/L)	<0.000017	0.000030	0.000041	<0.000017	
Calcium (Ca)-Dissolved (mg/L)	8.88	14.7	10.4	<0.20	
Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
Copper (Cu)-Dissolved (mg/L)	0.0020	0.0017	0.0016	<0.0010	
Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	
Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
Magnesium (Mg)-Dissolved (mg/L)	3.06	5.05	3.46	<0.020	
Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
Molybdenum (Mo)-Dissolved (mg/L)	0.0027	0.0039	0.0036	<0.0010	
Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Potassium (K)-Dissolved (mg/L)	0.96	1.42	1.00	<0.50	
Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
Sodium (Na)-Dissolved (mg/L)	1.38	0.97	1.87	<0.10	
Strontium (Sr)-Dissolved (mg/L)	0.0307	0.0527	0.0378	<0.0010	
Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1167915-1 WATER 25-JUN-12 11:19 FC1	L1167915-2 WATER 25-JUN-12 11:24 FC2	L1167915-3 WATER 25-JUN-12 11:30 FC3	L1167915-4 WATER 25-JUN-12 11:33 FC4	L1167915-5 WATER 25-JUN-12 11:38 FC5
Sample ID / Description / Sampled Date / Sampled Time / Client ID						
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	0.0041	<0.0030	0.0039	<0.0030	<0.0030
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1167915-6	L1167915-7	L1167915-8	L1167915-9	
	Description	WATER	WATER	WATER	BLANK	
	Sampled Date	25-JUN-12	25-JUN-12	25-JUN-12	25-JUN-12	
	Sampled Time	11:44	11:47	11:27	11:19	
	Client ID	FC6	FC7	FC8	TRAVEL BLANK	
Grouping	**Analyte**					
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	0.0040	<0.0030	<0.0030	
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Sulfate (SO4)	MS-B	L1167915-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1167915-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1167915-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1167915-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1167915-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1167915-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1167915-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1167915-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1167915-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1167915-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1167915-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1167915-1, -2, -3, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
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**
ACIDITY-TB	Water	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-TOT-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
HG-D-CVAF-TB	Water	Dissolved Mercury in Water by CVAFS	EPA 245.7
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3030B/EPA 6020A
This analysis involves filtration (APHA 3030B) and analysis by inductively coupled plasma - mass spectrometry (EPA Method 6020A).			
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			

** 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
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA

Chain of Custody Numbers:

L1167915

Reference Information

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

ALS Environmental

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d Company www.alsglobal.com

L1167915

Page ___ of ___

L1167915-COFC

Company:	Rainy River Resources Ltd.
Contact:	
Address:	5967 Highway 11/17 P.O.Box 5 Emo P0W 1E0
Phone:	807-482-2501 Fax: 807-276-0858
Email:	
Project:	PO:
Quote #	
Invoice To:	Same as Report: ☑ Yes ☐ No
Company:	Project: Field Cells
Contact:	
Address:	
Email:	
Account Manager	Karen R. Sampler:

rmation

O. Reg 153 (O. Reg 511 Amend) Table ___

Record of Site Condition ☐ Yes ☐ No

PWQO ☐ MISA ☐ MMER ☐ CCME ☐

Guideline Required:

TCLP Regulation 558 ☐ Other:

Service Requested

☐ Regular TAT (7 Days)

☐ Priority TAT 50% Surcharge (3-5 Days)

☐ Emergency TAT 100% Surcharge (1-2 Days)

Specify Date Required:

All TAT quoted material is in business days which exclude statutory holidays and weekends. Samples received past 3:00pm or Saturday/Sunday begin the next day.

Both questions below must answered for water samples

Are any samples taken from a regulated DW System? ☐ Yes ☑ No

If yes, an authorized DW COC must be used.

Is the water sampled intended for human consumption? ☐ Yes ☑ No

Analysis Request

Please indicate below Filtered, Preserved or both (F, P, F/P)

Sample #	Sample Identification (This description will appear on the report)	Date	Time	Sample Type	pH, Conductivity	Total Alkalinity, Acidity	Anions (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury	Number of Containers
FC1	FC1	June 25/12	11:19	water	x	x	x	x	x	3
FC2	FC2	June 25/12	11:24	water	x	x	x	x	x	3
FC3	FC3	June 25/12	11:30	water	x	x	x	x	x	3
FC4	FC4	June 25/12	11:33	water	x	x	x	x	x	3
FC5	FC5	June 25/12	11:38	water	x	x	x	x	x	3
FC6	FC6	June 25/12	11:44	water	x	x	x	x	x	3
F7	FC7	June 25/12	11:47	water	x	x	x	x	x	3
FC8	FC8	June 25/12	11:27	water	x	x	x	x	x	3
	Travel Blank				x	x	x	x	x	
	Please RECHARGE and send back									

Please RECHARGE cooler and send back to above address.

SHIPMENT RELEASE (client use)

Released by:	Date & Time	Received by:	Date & Time	Temp	Cooling Initiated	Verified by:	Date & Time	Observations: Yes / No ? If Yes add SIF
	4:00 pm June 25/12	Kim	June 26/12 10:50	12.6	☑ Yes ☐ No	Kim	June 26/12 11:45	

***Failure to complete all portions of this form may delay analysis.* **TAT may vary dependant on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs. Any known or suspected hazards relating to a sample must be noted on the chain of custody in the comments section. By use of the form the user acknowledges and agrees with the Terms and Conditions as specified on the back page.

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 17-JUL-12
Report Date: 26-JUL-12 08:06 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1179166

Project P.O. #: NOT SUBMITTED
Job Reference: FIELD CELLS
C of C Numbers:
Legal Site Desc:

Karen Rutledge
Account Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1179166-2 WATER 16-JUL-12 10:45 FC2	L1179166-3 WATER 16-JUL-12 10:57 FC3	L1179166-4 WATER 16-JUL-12 11:03 FC4	L1179166-5 WATER 16-JUL-12 11:03 FC5	L1179166-6 WATER 16-JUL-12 11:09 FC6
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	127	127	148	128	118
	pH (pH)	7.83	7.73	7.91	7.77	7.75
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	4.4	3.0	2.0	2.0	2.0
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	48.6	42.2	59.7	48.7	40.8
	Chloride (Cl) (mg/L)	0.72	0.96	0.66	0.66	0.76
	Fluoride (F) (mg/L)	<0.030	<0.030	<0.030	<0.030	<0.030
	Sulfate (SO4) (mg/L)	7.09	8.70	7.35	7.72	8.99
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0269	0.0171	0.0253	0.0249	0.0245
	Antimony (Sb)-Dissolved (mg/L)	0.00168	0.00086	0.00165	0.00133	0.00090
	Arsenic (As)-Dissolved (mg/L)	0.0016	0.0019	0.0018	0.0028	0.0043
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Cadmium (Cd)-Dissolved (mg/L)	0.000042	0.000045	0.000031	0.000034	0.000027
	Calcium (Ca)-Dissolved (mg/L)	16.3	14.0	21.8	16.9	13.9
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Copper (Cu)-Dissolved (mg/L)	0.0032	0.0045	0.0025	0.0044	0.0040
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Magnesium (Mg)-Dissolved (mg/L)	4.84	4.53	5.18	4.63	4.41
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Molybdenum (Mo)-Dissolved (mg/L)	0.0066	0.0064	0.0047	0.0052	0.0045
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Potassium (K)-Dissolved (mg/L)	1.54	1.26	1.44	1.42	1.32
	Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Dissolved (mg/L)	2.98	3.17	1.38	1.26	2.10
	Strontium (Sr)-Dissolved (mg/L)	0.0579	0.0381	0.0402	0.0411	0.0470
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
	Tin (Sn)-Dissolved (mg/L)	0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1179166-7	L1179166-8	L1179166-9		
Description	WATER	WATER	WATER		
Sampled Date	16-JUL-12	16-JUL-12	16-JUL-12		
Sampled Time	11:12	10:51	10:37		
Client ID	FC7	FC8	TRAVEL BLANK		
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (EC) (uS/cm)	117	128	<3.0		
pH (pH)	7.72	7.76	5.80		
Anions and Nutrients Acidity (as CaCO3) (mg/L)	2.0	2.0	<2.0		
Alkalinity, Total (as CaCO3) (mg/L CaCO3)	41.3	42.1	<5.0		
Chloride (Cl) (mg/L)	0.41	0.96	<0.10		
Fluoride (F) (mg/L)	<0.030	<0.030	<0.030		
Sulfate (SO4) (mg/L)	9.45	8.71	<0.30		
Dissolved Metals Aluminum (Al)-Dissolved (mg/L)	0.0238	0.0180	<0.0050		
Antimony (Sb)-Dissolved (mg/L)	0.00117	0.00088	<0.00060		
Arsenic (As)-Dissolved (mg/L)	0.0028	0.0019	<0.0010		
Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010		
Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050		
Cadmium (Cd)-Dissolved (mg/L)	0.000036	0.000045	<0.000017		
Calcium (Ca)-Dissolved (mg/L)	14.9	14.6	<0.20		
Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050		
Copper (Cu)-Dissolved (mg/L)	0.0022	0.0048	<0.0010		
Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020		
Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050		
Magnesium (Mg)-Dissolved (mg/L)	4.75	5.00	<0.020		
Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010		
Molybdenum (Mo)-Dissolved (mg/L)	0.0044	0.0065	<0.0010		
Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020		
Potassium (K)-Dissolved (mg/L)	1.26	1.33	<0.50		
Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010		
Sodium (Na)-Dissolved (mg/L)	0.80	3.37	<0.10		
Strontium (Sr)-Dissolved (mg/L)	0.0519	0.0405	<0.0010		
Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030		
Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020		
Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010		

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1179166-2 WATER 16-JUL-12 10:45 FC2	L1179166-3 WATER 16-JUL-12 10:57 FC3	L1179166-4 WATER 16-JUL-12 11:03 FC4	L1179166-5 WATER 16-JUL-12 11:03 FC5	L1179166-6 WATER 16-JUL-12 11:09 FC6
Sample ID / Description / Sampled Date / Sampled Time / Client ID						
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	0.0036	0.0031	<0.0030	0.0050
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1179166-7	L1179166-8	L1179166-9		
	Description	WATER	WATER	WATER		
	Sampled Date	16-JUL-12	16-JUL-12	16-JUL-12		
	Sampled Time	11:12	10:51	10:37		
	Client ID	FC7	FC8	TRAVEL BLANK		
Grouping	**Analyte**					
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050		
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Zinc (Zn)-Dissolved (mg/L)	0.0057	0.0041	<0.0030		
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
SFPL	Sample was Filtered and Preserved at the laboratory - Dissolved metals, dissolved mercury

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1179166-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1179166-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1179166-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1179166-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1179166-2, -3, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
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**
ACIDITY-TB	Water	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-TOT-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
HG-D-CVAF-TB	Water	Dissolved Mercury in Water by CVAFS	EPA 245.7
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3030B/EPA 6020A
This analysis involves filtration (APHA 3030B) and analysis by inductively coupled plasma - mass spectrometry (EPA Method 6020A).			
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			

** 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
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA

Chain of Custody Numbers:

Reference Information

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

ALS Environmental

Canada PHONE +1 807 623 6463 FAX +1 807 623 7598
hers Limited Company www.alsglobal.com

L11791660-COFC

L 1179166.

Page ___ of ___

				ry Information	Both questions below must answered for water samples
Company:	Rainy River Resources Ltd.			O. Reg 153 (O. Reg 511 Amend) Table:____	Are any samples taken from a regulated DW System? ☐ Yes ☑ No
Contact:				Record of Site Condition ☐ Yes ☐ No	If yes, an authorized DW COC must be used.
Address:	5967 Highway 11/17 P.O.Box 5 Emo P0W 1E0			PWQO ☐ MISA ☐ MMER ☐ CCME ☐	Is the water sampled intended for human consumption? ☐ Yes ☑ No
Phone:	807-482-2501	Fax:	807-276-0858	Guideline Required:	
Email:				TCLP Regulation 558 ☐ Other:	Analysis Request
Project:		PO:		Service Requested	Please Indicate below Filtered, Preserved or both (F, P, F/P)
Quote #				☐ Regular TAT (7 Days)	
Invoice To:		Same as Report:	☑ Yes ☐ No	☐ Priority TAT 50% Surcharge (3-5 Days)	
Company:	Project: Field Cells			☐ Emergency TAT 100% Surcharge (1-2 Days)	
Contact:				Specify Date Required:	
Address:				All TAT quoted material is in business days which exclude statutory holidays and weekends. Samples received past 3:00pm or Saturday/Sunday begin the next day.	
Email:					
Account Manager	Karen R.	Sampler:			

Sample #	Sample Identification (This description will appear on the report)	Date	Time	Sample Type	pH, Conductivity	Total Alkalinity, Acidity	Anions (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury	Number of Containers
FC1	FC1				x	x	x	x	x	3
FC2	FC2	July 16/12	10:37	Water	x	x	x	x	x	3
FC3	FC3	July 16/12	10:45	Water	x	x	x	x	x	3
FC4	FC4	July 16/12	10:57	Water	x	x	x	x	x	3
FC5	FC5	July 16/12	11:03	Water	x	x	x	x	x	3
FC6	FC6	July 16/12	11:09	Water	x	x	x	x	x	3
FC7	FC7	July 16/12	11:12	water	x	x	x	x	x	3
FC8	FC8	July 16/12	10:51	water	x	x	x	x	x	3
	Travel Blank				x	x	x	x	x	3
	Please RECHARGE and send back									

Special Instructions/Comments

Please RECHARGE cooler and send back to above address.

SHIPMENT RELEASE (client use)		SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)		
Released by:	Date & Time	Received by:	Date & Time	Temp	Cooling Initiated	Verified by:	Date & Time	Observations: Yes / No ? If Yes add SIF
	July 16/12 4:00 pm	WB	17-JUL-12 10:00	10.2	☐ Yes ☐ No	WS	10:00 17-JUL-12	

Failure to complete all portions of this form may delay analysis. **TAT may vary dependant on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs. Any known or suspected hazards relating to a sample must be noted on the chain of custody in the comments section. By use of the form the user acknowledges and agrees with the Terms and Conditions as specified on the back page.

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 02-AUG-12
Report Date: 10-AUG-12 10:25 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1188256

Project P.O. #:	NOT SUBMITTED
Job Reference:	FIELD CELLS
C of C Numbers:	L1188256
Legal Site Desc:	

Karen Rutledge
Account Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1188256-1 WATER 01-AUG-12 10:15 FC1	L1188256-2 WATER 01-AUG-12 10:23 FC2	L1188256-3 WATER 01-AUG-12 10:27 FC3	L1188256-4 WATER 01-AUG-12 10:32 FC4	L1188256-5 WATER 01-AUG-12 10:37 FC5
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	45.8	72.8	86.3	99.9	109
	pH (pH)	7.17	7.46	7.43	7.58	7.46
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	2.0	2.2	2.0	2.0	2.0
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	14.3	26.8	26.9	34.1	32.1
	Chloride (Cl) (mg/L)	0.36	0.39	0.74	0.68	1.20
	Fluoride (F) (mg/L)	<0.030	<0.030	<0.030	<0.030	<0.030
	Sulfate (SO4) (mg/L)	3.88	4.40	7.66	8.43	13.2
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0192	0.0327	0.0248	0.0363	0.0327
	Antimony (Sb)-Dissolved (mg/L)	0.00064	0.00101	0.00072	0.00141	0.00113
	Arsenic (As)-Dissolved (mg/L)	0.0013	0.0012	0.0015	0.0020	0.0024
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Cadmium (Cd)-Dissolved (mg/L)	0.000082	0.000035	0.000031	0.000030	0.000043
	Calcium (Ca)-Dissolved (mg/L)	4.16	7.92	8.75	12.3	12.7
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Copper (Cu)-Dissolved (mg/L)	0.0024	0.0018	0.0030	0.0021	0.0037
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Magnesium (Mg)-Dissolved (mg/L)	1.35	2.42	2.94	3.14	3.60
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Molybdenum (Mo)-Dissolved (mg/L)	0.0018	0.0034	0.0049	0.0044	0.0074
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Potassium (K)-Dissolved (mg/L)	0.69	0.82	0.85	1.04	1.16
	Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Dissolved (mg/L)	1.35	1.92	2.72	1.74	1.94
	Strontium (Sr)-Dissolved (mg/L)	0.0141	0.0330	0.0281	0.0275	0.0372
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1188256-6	L1188256-7	L1188256-8	L1188256-9	
Description	WATER	WATER	WATER	BLANK	
Sampled Date	01-AUG-12	01-AUG-12	01-AUG-12	01-AUG-12	
Sampled Time	10:42	10:57	10:20	10:57	
Client ID	FC6	FC7	FC8	TRAVEL BLANK	
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (EC) (uS/cm)	91.4	85.5	45.3	<3.0	
pH (pH)	7.43	7.46	7.17	5.55	
Anions and Nutrients Acidity (as CaCO3) (mg/L)	2.0	2.0	2.0	<2.0	
Alkalinity, Total (as CaCO3) (mg/L CaCO3)	27.1	28.5	14.8	<5.0	
Chloride (Cl) (mg/L)	0.92	0.38	0.36	<0.10	
Fluoride (F) (mg/L)	<0.030	<0.030	<0.030	<0.030	
Sulfate (SO4) (mg/L)	10.0	8.33	3.90	<0.30	
Dissolved Metals Aluminum (Al)-Dissolved (mg/L)	0.0333	0.0440	0.0195	<0.0050	
Antimony (Sb)-Dissolved (mg/L)	0.00085	0.00077	0.00065	<0.00060	
Arsenic (As)-Dissolved (mg/L)	0.0018	0.0025	0.0012	<0.0010	
Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	
Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
Cadmium (Cd)-Dissolved (mg/L)	0.000028	0.000030	0.000074	<0.000017	
Calcium (Ca)-Dissolved (mg/L)	10.2	9.97	4.26	<0.20	
Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
Copper (Cu)-Dissolved (mg/L)	0.0024	0.0017	0.0024	<0.0010	
Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	
Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
Magnesium (Mg)-Dissolved (mg/L)	3.26	3.13	1.39	<0.020	
Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
Molybdenum (Mo)-Dissolved (mg/L)	0.0038	0.0032	0.0019	<0.0010	
Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Potassium (K)-Dissolved (mg/L)	1.02	0.91	0.69	<0.50	
Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
Sodium (Na)-Dissolved (mg/L)	2.14	0.75	1.43	<0.10	
Strontium (Sr)-Dissolved (mg/L)	0.0412	0.0412	0.0140	<0.0010	
Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1188256-1 WATER 01-AUG-12 10:15 FC1	L1188256-2 WATER 01-AUG-12 10:23 FC2	L1188256-3 WATER 01-AUG-12 10:27 FC3	L1188256-4 WATER 01-AUG-12 10:32 FC4	L1188256-5 WATER 01-AUG-12 10:37 FC5
Sample ID / Description / Sampled Date / Sampled Time / Client ID						
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1188256-6	L1188256-7	L1188256-8	L1188256-9	
	Description	WATER	WATER	WATER	BLANK	
	Sampled Date	01-AUG-12	01-AUG-12	01-AUG-12	01-AUG-12	
	Sampled Time	10:42	10:57	10:20	10:57	
	Client ID	FC6	FC7	FC8	TRAVEL BLANK	
Grouping	**Analyte**					
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	0.0036	<0.0030	<0.0030	
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
SFPL	Sample was Filtered and Preserved at the laboratory - Dissolved Metals and Mercury

Test Method References:

ALS Test Code	Matrix	Test Description	Method Reference**
ACIDITY-TB	Water	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-TOT-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
HG-D-CVAF-TB	Water	Dissolved Mercury in Water by CVAFS	EPA 245.7
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3030B/EPA 6020A
This analysis involves filtration (APHA 3030B) and analysis by inductively coupled plasma - mass spectrometry (EPA Method 6020A).			
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			

** 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
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA

Chain of Custody Numbers:

L1188256

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

ALS Environmen

1188256-COFC

tario P7B 5N3 Canada PHONE +1 807 623 6463 FAX +1 807 623 7598
Campbell Brothers Limited Company www.alsglobal.com

L1188256

Company:	Rainy River Resou		
Contact:			
Address:	5967 Highway 11/17 P.O.Box 5 Emo P0W 1E0		
Phone:	807-482-2501	Fax:	807-276-0858
Email:			
Project:		PO:	
Quote #			
Invoice To:		Same as Report: ☑ Yes ☐ No	
Company:	Project: Field Cells		
Contact:			
Address:			
Email:			
Account Manager	Karen R.	Sampler:	

Regulatory Information

- ☐ O. Reg 153 (O. Reg 511 Amend) Table:
- Record of Site Condition ☐ Yes ☐ No
- PWQO ☐ MISA ☐ MMER ☐ CCME ☐
- Guideline Required:
- TCLP Regulation 558 ☐ Other:

Service Requested

- ☐ Regular TAT (7 Days)
- ☐ Priority TAT 50% Surcharge (3-5 Days)
- ☐ Emergency TAT 100% Surcharge (1-2 Days)
- Specify Date Required:

All TAT quoted material is in business days which exclude statutory holidays and weekends. Samples received past 3:00pm or Saturday/Sunday begin the next day.

Both questions below must answered for water samples

- Are any samples taken from a regulated DW System? ☐ Yes ☑ No
- If yes, an authorized DW COC must be used.
- Is the water sampled intended for human consumption? ☐ Yes ☑ No

Analysis Request

Please indicate below Filtered, Preserved or both (F, P, F/P)

Sample #	Sample Identification (This description will appear on the report)	Date	Time	Sample Type	pH, Conductivity	Total Alkalinity, Acidity	Anions (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury	Number of Containers
FC1	FC1	Aug. 1/2012	10:15	Water	x	x	x	x	x	3
FC2	FC2	Aug 1/2012	10:23	Water	x	x	x	x	x	3
FC3	FC3	Aug. 1/2012	10:27	Water	x	x	x	x	x	3
FC4	FC4	Aug. 1/2012	10:32	Water	x	x	x	x	x	3
FC5	FC5	Aug. 1/2012	10:37	Water	x	x	x	x	x	3
FC6	FC6	Aug. 1/2012	10:42	Water	x	x	x	x	x	3
FC7	FC7	Aug. 1/2012	10:57	Water	x	x	x	x	x	3
FC8	FC8	Aug. 1/2012	10:20	Water	x	x	x	x	x	3
	Travel Blank				x	x	x	x	x	3
	Please RECHARGE and send back									

Special Instructions / Comments

Please RECHARGE cooler and send back to above address.

SHIPMENT RELEASE (client use)		SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)		
Released by:	Date & Time	Received by:	Date & Time	Temp	Cooling Initiated	Verified by:	Date & Time	Observations: Yes / No ? If Yes add SIF
	Aug/12 4:00		10:15 02-Aug-12	18.2	☐ Yes ☐ No		10:15 02-Aug-12	

Failure to complete all portions of this form may delay analysis. **TAT may vary dependant on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs. Any known or suspected hazards relating to a sample must be noted on the chain of custody in the comments section. By use of the form the user acknowledges and agrees with the Terms and Conditions as specified on the back page.

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 14-AUG-12
Report Date: 21-AUG-12 13:21 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1193026

Project P.O. #: NOT SUBMITTED
Job Reference: FIELD CELLS
C of C Numbers:
Legal Site Desc:

Karen Rutledge
Account Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1193026-1	L1193026-2	L1193026-3	L1193026-4	L1193026-5
Description	WATER	WATER	WATER	WATER	WATER
Sampled Date	13-AUG-12	13-AUG-12	13-AUG-12	13-AUG-12	13-AUG-12
Sampled Time	11:00	11:06	11:11	11:17	11:22
Client ID	FC1	FC2	FC3	FC4	FC5
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (EC) (uS/cm)	66.3	74.7	68.1	72.7	82.3
pH (pH)	7.50	7.61	7.45	7.59	7.56
Anions and Nutrients Acidity (as CaCO3) (mg/L)	2.0	2.0	2.0	2.0	2.2
Alkalinity, Total (as CaCO3) (mg/L CaCO3)	21.9	30.1	23.1	28.3	29.2
Chloride (Cl) (mg/L)	0.44	0.31	0.49	0.33	0.65
Fluoride (F) (mg/L)	<0.030	<0.030	<0.030	<0.030	<0.030
Sulfate (SO4) (mg/L)	4.87	3.36	5.26	4.01	7.14
Dissolved Metals Aluminum (Al)-Dissolved (mg/L)	0.0287	0.0349	0.0220	0.0319	0.0299
Antimony (Sb)-Dissolved (mg/L)	0.00083	0.00082	<0.00060	0.00083	0.00080
Arsenic (As)-Dissolved (mg/L)	0.0016	0.0013	0.0017	0.0017	0.0027
Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Cadmium (Cd)-Dissolved (mg/L)	0.000024	0.000025	0.000025	<0.000017	0.000026
Calcium (Ca)-Dissolved (mg/L)	7.22	8.59	7.19	9.40	9.88
Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper (Cu)-Dissolved (mg/L)	0.0021	0.0018	0.0027	0.0015	0.0028
Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Magnesium (Mg)-Dissolved (mg/L)	2.34	2.70	2.38	2.31	2.76
Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum (Mo)-Dissolved (mg/L)	0.0024	0.0027	0.0028	0.0023	0.0043
Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Potassium (K)-Dissolved (mg/L)	0.82	0.76	0.76	0.74	0.97
Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Dissolved (mg/L)	1.53	1.60	2.06	0.90	1.21
Strontium (Sr)-Dissolved (mg/L)	0.0203	0.0313	0.0210	0.0190	0.0265
Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1193026-6	L1193026-7	L1193026-8	L1193026-9	
	Description	WATER	WATER	WATER	WATER	
	Sampled Date	13-AUG-12	13-AUG-12	13-AUG-12	13-AUG-12	
	Sampled Time	11:26	11:31	11:36	11:00	
	Client ID	FC6	FC7	FC8	TRAVEL BLANK	
Grouping	**Analyte**					
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	69.3	75.7	76.2	<3.0	
	pH (pH)	7.47	7.55	7.58	5.54	
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	2.0	2.0	2.0	<2.0	
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	23.7	26.5	26.7	<5.0	
	Chloride (Cl) (mg/L)	0.58	0.30	0.30	<0.10	
	Fluoride (F) (mg/L)	<0.030	<0.030	<0.030	<0.030	
	Sulfate (SO4) (mg/L)	5.66	6.69	6.71	<0.30	
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0266	0.0342	0.0344	<0.0050	
	Antimony (Sb)-Dissolved (mg/L)	<0.00060	<0.00060	0.00060	<0.00060	
	Arsenic (As)-Dissolved (mg/L)	0.0020	0.0024	0.0024	<0.0010	
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
	Cadmium (Cd)-Dissolved (mg/L)	0.000018	0.000020	0.000017	<0.000017	
	Calcium (Ca)-Dissolved (mg/L)	7.76	9.18	9.18	<0.20	
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
	Copper (Cu)-Dissolved (mg/L)	0.0022	0.0013	0.0013	<0.0010	
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
	Magnesium (Mg)-Dissolved (mg/L)	2.51	2.80	2.86	<0.020	
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
	Molybdenum (Mo)-Dissolved (mg/L)	0.0023	0.0023	0.0022	<0.0010	
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Potassium (K)-Dissolved (mg/L)	0.81	0.72	0.73	<0.50	
	Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
	Sodium (Na)-Dissolved (mg/L)	1.34	0.55	0.55	<0.10	
	Strontium (Sr)-Dissolved (mg/L)	0.0276	0.0338	0.0342	<0.0010	
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1193026-1 WATER 13-AUG-12 11:00 FC1	L1193026-2 WATER 13-AUG-12 11:06 FC2	L1193026-3 WATER 13-AUG-12 11:11 FC3	L1193026-4 WATER 13-AUG-12 11:17 FC4	L1193026-5 WATER 13-AUG-12 11:22 FC5
Sample ID / **Description** / **Sampled Date** / **Sampled Time** / **Client ID**						
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1193026-6	L1193026-7	L1193026-8	L1193026-9	
	Description	WATER	WATER	WATER	WATER	
	Sampled Date	13-AUG-12	13-AUG-12	13-AUG-12	13-AUG-12	
	Sampled Time	11:26	11:31	11:36	11:00	
	Client ID	FC6	FC7	FC8	TRAVEL BLANK	
Grouping	**Analyte**					
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	<0.0030	<0.0030	
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
SFPL	Sample was Filtered and Preserved at the laboratory - Dissolve metals, dissolved mercury

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Method Blank	pH	A	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Comments: mb			
Method Blank	pH	A	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Comments: mb			
Matrix Spike	Sulfate (SO4)	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Boron (B)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1193026-1, -2, -3, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
A	Method Blank exceeds ALS DQO. Refer to narrative comments for further information.
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**
ACIDITY-TB	Water	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-TOT-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
HG-D-CVAF-TB	Water	Dissolved Mercury in Water by CVAFS	EPA 245.7
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3030B/EPA 6020A
This analysis involves filtration (APHA 3030B) and analysis by inductively coupled plasma - mass spectrometry (EPA Method 6020A).			
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			

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

Reference Information

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
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

ALS Environmental

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Limited Company www.alsglobal.com

1193026-COFC

L1193026

Page ___ of ___

Company:	Rainy River Resources Ltd.			Information	
Contact:				☐ O. Reg 153 (O. Reg 511 Amend) Table:	Both questions below must answered for water samples
Address:	5967 Highway 11/17 P.O.Box 5 Emo P0W 1E0			Record of Site Condition ☐ Yes ☐ No	Are any samples taken from a regulated DW System? ☐ Yes ☑ No
				PWQO ☐ MISA ☐ MMER ☐ CCME ☐	If yes, an authorized DW COC must be used.
Phone:	807-482-2501	Fax:	807-276-0858	Guideline Required:	Is the water sampled intended for human consumption? ☐ Yes ☑ No
Email:				TCLP Regulation 558 ☐ Other:	
Project:		PO:		Service Requested	Analysis Request
Quote #				☐ Regular TAT (7 Days)	Please indicate below Filtered, Preserved or both (F, P, F/P)
Invoice To:		Same as Report: ☑ Yes ☐ No		☐ Priority TAT 50% Surcharge (3-5 Days)	
Company:	Project: Field Cells			☐ Emergency TAT 100% Surcharge (1-2 Days)	
Contact:				Specify Date Required:	
Address:				All TAT quoted material is in business days which exclude statutory holidays and weekends. Samples received past 3:00pm or Saturday/Sunday begin the next day.	
Email:					
Account Manager	Karen R.	Sampler:			

Sample #	Sample Identification (This description will appear on the report)	Date	Time	Sample Type	pH, Conductivity	Total Alkalinity, Acidity	Anions (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury	Number of Containers
	FC1	Aug 13/12	11:00	water	x	x	x	x	x	3
	FC2		11:06		x	x	x	x	x	3
	FC3		11:11		x	x	x	x	x	3
	FC4		11:17		x	x	x	x	x	3
	FC5		11:22		x	x	x	x	x	3
	FC6		11:26		x	x	x	x	x	3
	FC7		11:31		x	x	x	x	x	3
	FC8	↓	11:36	↓	x	x	x	x	x	3
	Travel Blank				x	x	x	x	x	
	Please RECHARGE and send back									

Special Instructions / Comments

Please RECHARGE cooler and send back to above address.

SHIPMENT RELEASE (client use)		SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)		
Released by:	Date & Time	Received by:	Date & Time	Temp	Cooling Initiated	Verified by:	Date & Time	Observations: Yes / No ? If Yes add SIF
	Aug 13/12 1:30 pm	VB	14-AUG-12 08:30	15.1	☐ Yes ☐ No	VB	14-AUG-12 08:30	

Failure to complete all portions of this form may delay analysis. **TAT may vary dependant on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs. Any known or suspected hazards relating to a sample must be noted on the chain of custody in the comments section. By use of the form the user acknowledges and agrees with the Terms and Conditions as specified on the back page.

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 29-AUG-12
Report Date: 12-SEP-12 15:01 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1201429

Project P.O. #: NOT SUBMITTED
Job Reference: FIELD CELLS
C of C Numbers:
Legal Site Desc:

Karen Rutledge
Account Manager

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1201429-1	L1201429-2	L1201429-3	L1201429-4	L1201429-5
Description	WATER	WATER	WATER	WATER	WATER
Sampled Date	28-AUG-12	28-AUG-12	28-AUG-12	28-AUG-12	28-AUG-12
Sampled Time	11:35	11:44	11:48	11:53	12:01
Client ID	FC1	FC2	FC3	FC4	FC5
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (EC) (uS/cm)	102	102	107	103	113
pH (pH)	7.59	7.74	7.70	7.66	7.70
Anions and Nutrients Acidity (as CaCO3) (mg/L)	2.0	2.4	2.0	2.2	2.2
Alkalinity, Total (as CaCO3) (mg/L CaCO3)	32.5	41.5	39.4	41.0	46.1
Chloride (Cl) (mg/L)	0.95	0.36	0.51	0.35	0.37
Fluoride (F) (mg/L)	<0.030	<0.030	<0.030	<0.030	<0.030
Sulfate (SO4) (mg/L)	7.92	4.53	7.07	5.35	6.21
Dissolved Metals Aluminum (Al)-Dissolved (mg/L)	0.0282	0.0278	0.0239	0.0294	0.0258
Antimony (Sb)-Dissolved (mg/L)	0.00109	0.00094	0.00063	0.00112	0.00098
Arsenic (As)-Dissolved (mg/L)	0.0017	0.0012	0.0014	0.0018	0.0023
Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Cadmium (Cd)-Dissolved (mg/L)	0.000336	0.000032	0.000028	0.000022	0.000023
Calcium (Ca)-Dissolved (mg/L)	10.7	11.7	11.9	13.1	14.1
Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Copper (Cu)-Dissolved (mg/L)	0.0030	0.0015	0.0022	0.0016	0.0023
Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
Magnesium (Mg)-Dissolved (mg/L)	3.61	3.71	4.08	3.15	4.02
Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
Molybdenum (Mo)-Dissolved (mg/L)	0.0033	0.0034	0.0038	0.0030	0.0034
Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Potassium (K)-Dissolved (mg/L)	1.16	0.77	0.81	0.86	1.00
Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Sodium (Na)-Dissolved (mg/L)	2.19	1.60	1.87	0.93	0.83
Strontium (Sr)-Dissolved (mg/L)	0.0280	0.0410	0.0303	0.0239	0.0334
Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1201429-6	L1201429-7	L1201429-8	L1201429-9	
Description	WATER	WATER	WATER	WATER	
Sampled Date	28-AUG-12	28-AUG-12	28-AUG-12	28-AUG-12	
Sampled Time	12:06	12:09	11:58	12:09	
Client ID	FC6	FC7	FC8	TRAVEL BLANK	
Grouping / **Analyte**					
WATER					
Physical Tests Conductivity (EC) (uS/cm)	102	110	103	<3.0	
pH (pH)	7.61	7.65	7.66	5.63	
Anions and Nutrients Acidity (as CaCO3) (mg/L)	2.0	2.0	2.0	<2.0	
Alkalinity, Total (as CaCO3) (mg/L CaCO3)	38.3	41.2	41.1	<5.0	
Chloride (Cl) (mg/L)	0.54	0.30	0.37	<0.10	
Fluoride (F) (mg/L)	<0.030	<0.030	<0.030	<0.030	
Sulfate (SO4) (mg/L)	6.91	7.86	5.34	<0.30	
Dissolved Metals Aluminum (Al)-Dissolved (mg/L)	0.0265	0.0304	0.0297	<0.0050	
Antimony (Sb)-Dissolved (mg/L)	0.00061	0.00077	0.00114	<0.00060	
Arsenic (As)-Dissolved (mg/L)	0.0018	0.0019	0.0018	<0.0010	
Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	
Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
Cadmium (Cd)-Dissolved (mg/L)	0.000031	0.000034	0.000023	<0.000017	
Calcium (Ca)-Dissolved (mg/L)	11.6	13.3	12.9	<0.20	
Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	
Copper (Cu)-Dissolved (mg/L)	0.0021	0.0014	0.0016	<0.0010	
Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	
Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	
Magnesium (Mg)-Dissolved (mg/L)	3.85	4.12	3.15	<0.020	
Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	
Molybdenum (Mo)-Dissolved (mg/L)	0.0027	0.0027	0.0030	<0.0010	
Nickel (Ni)-Dissolved (mg/L)	<0.0020	0.0079	<0.0020	<0.0020	
Potassium (K)-Dissolved (mg/L)	0.93	0.80	0.86	<0.50	
Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	
Sodium (Na)-Dissolved (mg/L)	1.25	0.55	0.94	<0.10	
Strontium (Sr)-Dissolved (mg/L)	0.0372	0.0447	0.0238	<0.0010	
Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	
Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	
Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Sample ID	L1201429-1	L1201429-2	L1201429-3	L1201429-4	L1201429-5
Description	WATER	WATER	WATER	WATER	WATER
Sampled Date	28-AUG-12	28-AUG-12	28-AUG-12	28-AUG-12	28-AUG-12
Sampled Time	11:35	11:44	11:48	11:53	12:01
Client ID	FC1	FC2	FC3	FC4	FC5
Grouping / **Analyte**					
WATER					
Dissolved Metals Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Zinc (Zn)-Dissolved (mg/L)	0.0061	<0.0030	<0.0030	<0.0030	<0.0030
Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1201429-6	L1201429-7	L1201429-8	L1201429-9	
	Description	WATER	WATER	WATER	WATER	
	Sampled Date	28-AUG-12	28-AUG-12	28-AUG-12	28-AUG-12	
	Sampled Time	12:06	12:09	11:58	12:09	
	Client ID	FC6	FC7	FC8	TRAVEL BLANK	
Grouping	**Analyte**					
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	
	Zinc (Zn)-Dissolved (mg/L)	0.0039	0.0031	<0.0030	<0.0030	
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
SFPL	Sample was Filtered and Preserved at the laboratory - Dissolved metals and mercury

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Sulfate (SO4)	MS-B	L1201429-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1201429-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1201429-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1201429-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1201429-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1201429-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1201429-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1201429-1, -2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1201429-1, -2, -3, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
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**
ACIDITY-TB	Water	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-TOT-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
HG-D-CVAF-TB	Water	Dissolved Mercury in Water by CVAFS	EPA 245.7
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3030B/EPA 6020A
This analysis involves filtration (APHA 3030B) and analysis by inductively coupled plasma - mass spectrometry (EPA Method 6020A).			
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			

** 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
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA

Chain of Custody Numbers:

Reference Information

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

ALS Environmental

L1201429-COFC

15N3 Canada PHONE +1 807 623 6463 FAX +1 807 623 7598
Brothers Limited Company www.alsglobal.com

1201429

Page __ of __

Company:	Rainy River Resources L			Regulatory Information	Both questions below must answered for water samples
Contact:				O. Reg 153 (O. Reg 511 Amend) Table:____	Are any samples taken from a regulated DW System? ☐ Yes ☑ No
Address:	5967 Highway 11/17 P.O.Box 5 Emo P0W 1E0			Record of Site Condition ☐ Yes ☐ No	If yes, an authorized DW COC must be used.
				PWQO ☐ MISA ☐ MMER ☐ CCME ☐	Is the water sampled intended for human consumption? ☐ Yes ☑ No
Phone:	807-482-2501	Fax:	807-276-0858	Guideline Required:	
Email:				TCLP Regulation 558 ☐ Other:	Analysis Request
Project:		PO:		Service Requested	Please indicate below Filtered, Preserved or both (F, P, F/P)
Quote #				☐ Regular TAT (7 Days)	
Invoice To:		Same as Report: ☑ Yes ☐ No		☐ Priority TAT 50% Surcharge (3-5 Days)	
Company:	Project: Field Cells			☐ Emergency TAT 100% Surcharge (1-2 Days)	
Contact:				Specify Date Required:	
Address:				All TAT quoted material is in business days which exclude statutory holidays and weekends. Samples received past 3:00pm or Saturday/Sunday begin the next day.	
Email:					
Account Manager	Karen R.	Sampler:			

Sample #	Sample Identification (This description will appear on the report)	Date	Time	Sample Type	pH, Conductivity	Total Alkalinity, Acidity	Anions (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury	Number of Containers
	FC1	Aug 28/12	11:35	water	x	x	x	x	x	
	FC2		11:44		x	x	x	x	x	
	FC3		11:48		x	x	x	x	x	
	FC4		11:53		x	x	x	x	x	
	FC5		12:01		x	x	x	x	x	
	FC6		12:06		x	x	x	x	x	
	FC7		12:09		x	x	x	x	x	
	FC8		11:58		x	x	x	x	x	
	Travel Blank				x	x	x	x	x	
	Please RECHARGE and send back									

Special Instructions / Comments

Please RECHARGE cooler and send back to above address.

Kim Aug. 29/12

SHIPMENT RELEASE (client use)		SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)		
Released by:	Date & Time	Received by:	Date & Time	Temp	Cooling Initiated	Verified by:	Date & Time	Observations: Yes / No ? If Yes add SIF
	Aug 28/12 4:00pm	Kim	Aug. 29/12 11:45	12.7	☐ Yes ☐ No	Kim	Aug. 29/12 12:05	

Failure to complete all portions of this form may delay analysis. TAT may vary dependant on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs. Any known or suspected hazards relating to a sample must be noted on the chain of custody in the comments section. By use of the form the user acknowledges and agrees with the Terms and Conditions as specified on the back page.

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 17-OCT-12
Report Date: 30-OCT-12 14:47 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1225544

Project P.O. #: NOT SUBMITTED
Job Reference: FIELD CELLS
C of C Numbers:
Legal Site Desc:

Tricia Sampson
Account Manager Supervisor

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1225544-2	L1225544-3	L1225544-4	L1225544-5	L1225544-6
	Description	WATER	WATER	WATER	WATER	WATER
	Sampled Date	16-OCT-12	16-OCT-12	16-OCT-12	16-OCT-12	16-OCT-12
	Sampled Time	12:52	13:06	13:18	13:26	13:35
	Client ID	FC2	FC3	FC4	FC5	FC6
Grouping	**Analyte**					
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	77.1	65.5	75.6	99.6	92.4
	pH (pH)	7.49	7.36	7.53	7.62	7.53
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	2.2	2.2	2.2	2.0	<2.0
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	30.8	23.6	30.9	37.9	31.3
	Chloride (Cl) (mg/L)	0.29	0.35	0.25	0.46	0.83
	Fluoride (F) (mg/L)	<0.030	<0.030	<0.030	<0.030	<0.030
	Sulfate (SO4) (mg/L)	3.49	4.73	2.99	6.04	7.74
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0075	0.0063	0.0070	0.0078	0.0079
	Antimony (Sb)-Dissolved (mg/L)	<0.00060	<0.00060	<0.00060	<0.00060	<0.00060
	Arsenic (As)-Dissolved (mg/L)	<0.0010	<0.0010	0.0010	0.0014	0.0010
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Cadmium (Cd)-Dissolved (mg/L)	0.000024	<0.000017	<0.000017	0.000018	<0.000017
	Calcium (Ca)-Dissolved (mg/L)	8.56	6.86	9.77	11.7	9.83
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Copper (Cu)-Dissolved (mg/L)	0.0013	0.0015	0.0011	0.0018	0.0019
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Magnesium (Mg)-Dissolved (mg/L)	2.81	2.34	2.41	3.62	3.42
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Molybdenum (Mo)-Dissolved (mg/L)	0.0019	0.0018	0.0013	0.0026	0.0021
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Potassium (K)-Dissolved (mg/L)	0.51	<0.50	<0.50	0.60	0.60
	Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Dissolved (mg/L)	1.19	1.40	0.47	0.74	1.57
	Strontium (Sr)-Dissolved (mg/L)	0.0305	0.0174	0.0153	0.0260	0.0310
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030	<0.00030	<0.00030
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1225544-7	L1225544-8	L1225544-9		
	Description	WATER	WATER	BLANK		
	Sampled Date	16-OCT-12	16-OCT-12	16-OCT-12		
	Sampled Time	13:43	12:59	12:52		
	Client ID	FC7	FC8	TRAVEL BLANK		
Grouping	**Analyte**					
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	105	76.3	<3.0		
	pH (pH)	7.67	7.52	5.83		
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	2.0	2.4	<2.0		
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	38.9	31.0	<5.0		
	Chloride (Cl) (mg/L)	0.35	0.29	<0.10		
	Fluoride (F) (mg/L)	<0.030	<0.030	<0.030		
	Sulfate (SO4) (mg/L)	7.55	3.50	<0.30		
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0098	0.0072	<0.0050		
	Antimony (Sb)-Dissolved (mg/L)	<0.00060	<0.00060	<0.00060		
	Arsenic (As)-Dissolved (mg/L)	0.0014	<0.0010	<0.0010		
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010		
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050		
	Cadmium (Cd)-Dissolved (mg/L)	0.000020	0.000036	<0.000017		
	Calcium (Ca)-Dissolved (mg/L)	12.6	8.57	<0.20		
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050		
	Copper (Cu)-Dissolved (mg/L)	0.0012	0.0012	<0.0010		
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020		
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050		
	Magnesium (Mg)-Dissolved (mg/L)	4.36	2.82	<0.020		
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010		
	Molybdenum (Mo)-Dissolved (mg/L)	0.0022	0.0019	<0.0010		
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020		
	Potassium (K)-Dissolved (mg/L)	0.59	0.52	<0.50		
	Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010		
	Sodium (Na)-Dissolved (mg/L)	0.58	1.21	<0.10		
	Strontium (Sr)-Dissolved (mg/L)	0.0382	0.0288	<0.0010		
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030		
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020		
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010		

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1225544-2	L1225544-3	L1225544-4	L1225544-5	L1225544-6
	Description	WATER	WATER	WATER	WATER	WATER
	Sampled Date	16-OCT-12	16-OCT-12	16-OCT-12	16-OCT-12	16-OCT-12
	Sampled Time	12:52	13:06	13:18	13:26	13:35
	Client ID	FC2	FC3	FC4	FC5	FC6
Grouping	**Analyte**					
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1225544-7	L1225544-8	L1225544-9		
	Description	WATER	WATER	BLANK		
	Sampled Date	16-OCT-12	16-OCT-12	16-OCT-12		
	Sampled Time	13:43	12:59	12:52		
	Client ID	FC7	FC8	TRAVEL BLANK		
Grouping	**Analyte**					
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050		
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	<0.0030		
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
SFPL	Sample was Filtered and Preserved at the laboratory - Dissolve metals, Dissolved mercury

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1225544-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1225544-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1225544-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Boron (B)-Dissolved	MS-B	L1225544-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1225544-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1225544-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1225544-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1225544-2, -3, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
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**
ACIDITY-TB	Water	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-TOT-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
HG-D-CVAF-TB	Water	Dissolved Mercury in Water by CVAFS	EPA 245.7
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3030B/EPA 6020A
This analysis involves filtration (APHA 3030B) and analysis by inductively coupled plasma - mass spectrometry (EPA Method 6020A).			
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			

** 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
TB	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA

Chain of Custody Numbers:

Reference Information

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

TRRFC

ADDRE
ALS CA

L1225544-COFC

+1 807 623 6463 FAX +1 807 623 7598
ny www.alsglobal.com

L1225544

Page __ of __

ALS Environmental

Company:	Rainy River Resources Ltd.			on	
Contact:				☐ O. Reg 153 (O. Reg 511 Amend) Table:____	
Address:	5967 Highway 11/17 P.O.Box 5 Emo P0W 1E0			Record of Site Condition ☐ Yes ☐ No	
				PWQO ☐ MISA ☐ MMER ☐ CCME ☐	
Phone:	807-482-2501	Fax:	807-276-0858	Guideline Required:	
Email:				TCLP Regulation 558 ☐ Other:	
Project:		PO:		Service Requested	
Quote #				☐ Regular TAT (7 Days)	
Invoice To:		Same as Report:	☑ Yes ☐ No	☐ Priority TAT 50% Surcharge (3-5 Days)	
Company:	Project: Field Cells			☐ Emergency TAT 100% Surcharge (1-2 Days)	
Contact:				Specify Date Required:	
Address:				All TAT quoted material is in business days which exclude statutory holidays and weekends. Samples received past 3:00pm or Saturday/Sunday begin the next day.	
Email:					
Account Manager	Karen R.	Sampler:			

Both questions below must answered for water samples

Are any samples taken from a regulated DW System? ☐ Yes ☑ No

If yes, an authorized DW COC must be used.

Is the water sampled intended for human consumption? ☐ Yes ☑ No

Analysis Request

Please indicate below Filtered, Preserved or both (F, P, F/P)

Sample #	Sample Identification (This description will appear on the report)	Date	Time	Sample Type	pH, Conductivity	Total Alkalinity, Acidity	Anions (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury								Number of Containers
~~TRR~~	FC1 ~~NO~~ water	Oct 16/12	—	water	x	x	x	x	x								
2	FC2		12:52		x	x	x	x	x								
3	FC3		1:06		x	x	x	x	x								
4	FC4		1:18		x	x	x	x	x								
5	FC5		1:26		x	x	x	x	x								
6	FC6		1:35		x	x	x	x	x								
7	FC7		1:43		x	x	x	x	x								
8	FC8		12:59		x	x	x	x	x								
9	Travel Blank		—		x	x	x	x	x								
10																	
	Please RECHARGE and send back																

Special Instructions / Comments

Please RECHARGE cooler and send back to above address. 18-OCT-12.

SHIPMENT RELEASE (client use)		SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)		
Released by:	Date & Time	Received by:	Date & Time	Temp	Cooling Initiated	Verified by:	Date & Time	Observations: Yes / No ? If Yes add SIF
	Oct 16/12 4:00	KM	Oct 17/12 12:10	9.4	☐ Yes ☐ No	KM	Oct 17/12 1:20	

Failure to complete all portions of this form may delay analysis. **TAT may vary dependant on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs. Any known or suspected hazards relating to a sample must be noted on the chain of custody in the comments section. By use of the form the user acknowledges and agrees with the Terms and Conditions as specified on the back page.

RAINY RIVER RESOURCES LTD
ATTN: Alyson Bisson
5967 Highway 11/17
P.O. Box 5
Emo ON P0W 1E0

Date Received: 06-NOV-12
Report Date: 19-NOV-12 13:10 (MT)
Version: FINAL

Client Phone: 807-482-2501

Certificate of Analysis

Lab Work Order #: L1233618

Project P.O. #: NOT SUBMITTED
Job Reference: FIELD CELLS
C of C Numbers:
Legal Site Desc:

Tricia Sampson
Account Manager Supervisor

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

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1233618-2	L1233618-3	L1233618-4	L1233618-5	L1233618-6
	Description	WATER	WATER	WATER	WATER	WATER
	Sampled Date	05-NOV-12	05-NOV-12	05-NOV-12	05-NOV-12	05-NOV-12
	Sampled Time	09:42	09:50	10:12	10:24	10:31
	Client ID	FC2	FC3	FC4	FC5	FC6
Grouping	**Analyte**					
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	82.2	63.9	93.0	57.9	99.6
	pH (pH)	7.57	7.37	7.66	7.42	7.55
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	2.6	2.4	2.2	2.0	2.4
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	31.0	20.9	36.9	23.3	30.8
	Chloride (Cl) (mg/L)	0.47	0.53	0.47	0.26	1.24
	Fluoride (F) (mg/L)	<0.030	<0.030	<0.030	<0.030	<0.030
	Sulfate (SO4) (mg/L)	5.72	6.78	5.33	3.50	11.6
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0063	0.0062	0.0130	0.0063	0.0078
	Antimony (Sb)-Dissolved (mg/L)	0.00085	<0.00060	0.00092	<0.00060	0.00075
	Arsenic (As)-Dissolved (mg/L)	<0.0010	<0.0010	0.0058	<0.0010	0.0067
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Cadmium (Cd)-Dissolved (mg/L)	0.000071	<0.000017	0.000094	<0.000017	<0.000017
	Calcium (Ca)-Dissolved (mg/L)	9.18	6.33	12.6	7.62	10.6
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	0.0011
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
	Copper (Cu)-Dissolved (mg/L)	0.0012	0.0013	0.0058	0.0013	0.0033
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020	<0.020	<0.020
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050	<0.050	<0.050
	Magnesium (Mg)-Dissolved (mg/L)	2.75	1.92	2.63	1.68	3.27
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010	<0.000010	<0.000010
	Molybdenum (Mo)-Dissolved (mg/L)	0.0027	0.0023	0.0018	<0.0010	0.0026
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Potassium (K)-Dissolved (mg/L)	<0.50	<0.50	0.55	<0.50	0.53
	Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
	Sodium (Na)-Dissolved (mg/L)	2.39	2.34	1.30	0.71	2.58
	Strontium (Sr)-Dissolved (mg/L)	0.0347	0.0170	0.0200	0.0168	0.0362
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	0.00048	<0.00030	<0.00030
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010	<0.010	<0.010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1233618-7	L1233618-8	L1233618-9		
	Description	WATER	WATER	BLANK		
	Sampled Date	05-NOV-12	05-NOV-12	05-NOV-12		
	Sampled Time	10:44	10:03	09:42		
	Client ID	FC7	FC8	TRAVEL BLANK		
Grouping	**Analyte**					
WATER						
Physical Tests	Conductivity (EC) (uS/cm)	92.5	64.1	<3.0		
	pH (pH)	7.56	7.38	5.66		
Anions and Nutrients	Acidity (as CaCO3) (mg/L)	2.0	2.6	<2.0		
	Alkalinity, Total (as CaCO3) (mg/L CaCO3)	30.5	21.2	<5.0		
	Chloride (Cl) (mg/L)	0.59	0.59	<0.10		
	Fluoride (F) (mg/L)	<0.030	<0.030	<0.030		
	Sulfate (SO4) (mg/L)	11.1	6.87	<0.30		
Dissolved Metals	Aluminum (Al)-Dissolved (mg/L)	0.0086	0.0058	<0.0050		
	Antimony (Sb)-Dissolved (mg/L)	<0.00060	<0.00060	<0.00060		
	Arsenic (As)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Barium (Ba)-Dissolved (mg/L)	<0.010	<0.010	<0.010		
	Beryllium (Be)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Bismuth (Bi)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Boron (B)-Dissolved (mg/L)	<0.050	<0.050	<0.050		
	Cadmium (Cd)-Dissolved (mg/L)	0.000021	0.000018	<0.000017		
	Calcium (Ca)-Dissolved (mg/L)	11.1	6.42	<0.20		
	Chromium (Cr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Cobalt (Co)-Dissolved (mg/L)	<0.00050	<0.00050	<0.00050		
	Copper (Cu)-Dissolved (mg/L)	<0.0010	0.0014	<0.0010		
	Iron (Fe)-Dissolved (mg/L)	<0.020	<0.020	<0.020		
	Lead (Pb)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Lithium (Li)-Dissolved (mg/L)	<0.050	<0.050	<0.050		
	Magnesium (Mg)-Dissolved (mg/L)	3.37	1.95	<0.020		
	Manganese (Mn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Mercury (Hg)-Dissolved (mg/L)	<0.000010	<0.000010	<0.000010		
	Molybdenum (Mo)-Dissolved (mg/L)	0.0018	0.0023	<0.0010		
	Nickel (Ni)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020		
	Potassium (K)-Dissolved (mg/L)	<0.50	<0.50	<0.50		
	Selenium (Se)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Silver (Ag)-Dissolved (mg/L)	<0.00010	<0.00010	<0.00010		
	Sodium (Na)-Dissolved (mg/L)	1.11	2.40	<0.10		
	Strontium (Sr)-Dissolved (mg/L)	0.0389	0.0176	<0.0010		
	Tellurium (Te)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Thallium (Tl)-Dissolved (mg/L)	<0.00030	<0.00030	<0.00030		
	Tin (Sn)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Titanium (Ti)-Dissolved (mg/L)	<0.0020	<0.0020	<0.0020		
	Tungsten (W)-Dissolved (mg/L)	<0.010	<0.010	<0.010		

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

Grouping	Analyte	L1233618-2 WATER 05-NOV-12 09:42 FC2	L1233618-3 WATER 05-NOV-12 09:50 FC3	L1233618-4 WATER 05-NOV-12 10:12 FC4	L1233618-5 WATER 05-NOV-12 10:24 FC5	L1233618-6 WATER 05-NOV-12 10:31 FC6
Sample ID						
Description						
Sampled Date						
Sampled Time						
Client ID						
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	0.0055	<0.0030	<0.0030
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

ALS ENVIRONMENTAL ANALYTICAL REPORT

	Sample ID	L1233618-7	L1233618-8	L1233618-9		
	Description	WATER	WATER	BLANK		
	Sampled Date	05-NOV-12	05-NOV-12	05-NOV-12		
	Sampled Time	10:44	10:03	09:42		
	Client ID	FC7	FC8	TRAVEL BLANK		
Grouping	**Analyte**					
WATER						
Dissolved Metals	Uranium (U)-Dissolved (mg/L)	<0.0050	<0.0050	<0.0050		
	Vanadium (V)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		
	Zinc (Zn)-Dissolved (mg/L)	<0.0030	<0.0030	<0.0030		
	Zirconium (Zr)-Dissolved (mg/L)	<0.0010	<0.0010	<0.0010		

* Please refer to the Reference Information section for an explanation of any qualifiers detected.

Reference Information

Qualifiers for Sample Submission Listed:

Qualifier	Description
SFPL	Sample was Filtered and Preserved at the laboratory - dis. metals, dis. Hg

QC Samples with Qualifiers & Comments:

QC Type Description	Parameter	Qualifier	Applies to Sample Number(s)
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Potassium (K)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Barium (Ba)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Boron (B)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Calcium (Ca)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Magnesium (Mg)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Manganese (Mn)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Potassium (K)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Sodium (Na)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Strontium (Sr)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9
Matrix Spike	Uranium (U)-Dissolved	MS-B	L1233618-2, -3, -4, -5, -6, -7, -8, -9

Qualifiers for Individual Parameters Listed:

Qualifier	Description
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**
ACIDITY-TB	Water	Acidity (as CaCO3)	APHA 2310 B-POTENTIOMETRIC TITRATION
Aqueous matrices are analyzed by potentiometry. Acidity reported includes acidity caused by hydrolyzable metals present in the sample.			
ALK-TOT-CAP-TB	Water	Alkalinity, Total (as CaCO3)	APHA 2320 B-Auto-Pot. Titration
CL-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
EC-CAP-TB	Water	Conductivity (EC)	APHA 2510 B-ELECTRODE
F-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			
HG-D-CVAF-TB	Water	Dissolved Mercury in Water by CVAFS	EPA 245.7
MET-D-MS-TB	Water	Dissolved Metals by ICPMS	APHA 3030B/EPA 6020A
This analysis involves filtration (APHA 3030B) and analysis by inductively coupled plasma - mass spectrometry (EPA Method 6020A).			
PH-CAP-TB	Water	pH	APHA 4500-H-ELECTRODE
SO4-IC-TB	Water	Anions by Ion Chromatography	EPA 300.1 (modified)
Anions in aqueous matrices are analyzed using ion chromatography with conductivity and/or UV absorbance detectors.			

** 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
	ALS ENVIRONMENTAL - THUNDER BAY, ONTARIO, CANADA

Reference Information

TB

Chain of Custody Numbers:

GLOSSARY OF REPORT TERMS

Surrogate - A compound that is similar in behaviour to target analyte(s), but that does not occur naturally in environmental samples. For applicable tests, surrogates are added to samples prior to analysis as a check on recovery.
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 of sample.
mg/L - milligrams per litre.
< - Less than.
D.L. - The reported Detection Limit, also known as the Limit of Reporting (LOR).
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.

ALS Environmental

L1233618-COFC

Canada [illegible] +1 807 623 6463 FAX +1 807 623 7598
ers Limited Company www.alsglobal.com

L1233618

Page ___ of ___

Company:	Rainy River Resources Ltd.			y Information	
Contact:				☐ O. Reg 153 (O. Reg 511 Amend) Table:	
Address:	5967 Highway 11/17 P.O.Box 5 Emo P0W 1E0			Record of Site Condition ☐ Yes ☐ No	
				PWQO ☐ MISA ☐ MMER ☐ CCME ☐	
Phone:	807-482-2501	Fax:	807-276-0858	Guideline Required:	
Email:				TCLP Regulation 558 ☐ Other:	
Project:		PO:		Service Requested	
Quote #				☐ Regular TAT (7 Days)	
Invoice To:		Same as Report:	☑ Yes ☐ No	☐ Priority TAT 50% Surcharge (3-5 Days)	
Company:	Project: Field Cells			☐ Emergency TAT 100% Surcharge (1-2 Days)	
Contact:				Specify Date Required:	
Address:				All TAT quoted material is in business days which exclude statutory holidays and weekends. Samples received past 3:00pm or Saturday/Sunday begin the next day.	
Email:					
Account Manager	Karen R.	Sampler:			

Both questions below must answered for water samples

Are any samples taken from a regulated DW System? ☐ Yes ☑ No

If yes, an authorized DW COC must be used.

Is the water sampled intended for human consumption? ☐ Yes ☑ No

Analysis Request

Please indicate below Filtered, Preserved or both (F, P, F/P)

Sample #	Sample Identification (This description will appear on the report)	Date	Time	Sample Type	pH, Conductivity	Total Alkalinity, Acidity	Anions (Cl, SO4, F)	Dissolved Metals	Dissolved Mercury	Number of Containers
	FC1	NOV 5/12		Water	x	x	x	x	x	
2	FC2		9:42		x	x	x	x	x	3
3	FC3		9:50		x	x	x	x	x	3
4	FC4		10:12		x	x	x	x	x	3
5	FC5		10:24		x	x	x	x	x	3
6	FC6		10:31		x	x	x	x	x	3
7	FC7		10:44		x	x	x	x	x	3
9	FC8		10:03		x	x	x	x	x	3
4	Travel Blank	↓		↓	x	x	x	x	x	
	Please RECHARGE and send back									

Special Instructions / Comments

Please RECHARGE cooler and send back to above address. → LAST SAMPLE FOR THE YEAR. Please do not recharge & send back

SHIPMENT RELEASE (client use)		SHIPMENT RECEPTION (lab use only)				SHIPMENT VERIFICATION (lab use only)		
Released by:	Date & Time	Received by:	Date & Time	Temp	Cooling Initiated	Verified by:	Date & Time	Observations: Yes / No ? If Yes add SIF
	NOV 5/12 4:00pm	LB	06-NOV-12 09:15	5.8	☐ Yes ☐ No	CB	06-NOV-12 09:15	

Failure to complete all portions of this form may delay analysis. **TAT may vary dependant on complexity of analysis and lab workload at time of submission. Please contact the lab to confirm TATs. Any known or suspected hazards relating to a sample must be noted on the chain of custody in the comments section. By use of the form the user acknowledges and agrees with the Terms and Conditions as specified on the back page.