Stibnite Gold Project Phase 1 Humidity Cell Termination Testwork Report

Report Prepared for

MIDAS GOLD

Report Prepared by

srk consulting

SRK Consulting (U.S.), Inc.
SRK Project 200900.06
Final: July 2018

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Final: July 2018

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List of Abbreviations/Acronyms

ABA	Acid Base Accounting
AP	Acid Generating Potential
ARDML	Acid Rock Drainage and Metal Leaching
ASTM	American Society for Testing and Materials
BLM	Bureau of Land Management
HCT	Humidity Cell Test
INAP	International Network for Acid Prevention
kg $CaCO_3$ eq/ton	Kilograms of calcium carbonate equivalents per ton
m	Meters
mg/kg	Milligrams per kilogram
Midas Gold	Midas Gold Idaho, Inc.
NAG	Net Acid Generation
NNP	Net Neutralization Potential
Non-PAG	Not Potentially Acid Generating
NP	Neutralizing Potential
NPR	Neutralizing Potential Ratio
PAG	Potentially Acid Generating
SEM	Scanning Electron Microscopy
SODA	Spent Ore Disposal Area
SRK	SRK Consulting
s.u.	Standard Units (pH)
TDS	Total Dissolved Solids
US EPA	United States Environmental Protection Agency
USFS	United States Forest Service
XRD	X-Ray Diffraction

1 Introduction

Midas Gold Idaho, Inc. (Midas Gold) is currently conducting a geochemical characterization study for the Stibnite Gold Project (the Project) in central Idaho. The primary purpose of the study is to develop geochemical characterization data that will ultimately form part of the planning and impact assessment for the Project. Geochemical testing of mine waste materials provides a basis for assessment of the potential for acid rock drainage and metal leaching (ARDML), prediction of contact water quality (i.e., surface water and groundwater that comes into contact with development rock, pit walls, or tailings), and evaluation of options for design, construction, and closure of the mine facilities. This work was designed to support the next phase of the Project's potential advancement, including environmental assessment and permitting.

To support this assessment, humidity cell testing (HCT) is being conducted on representative materials to assess the long-term sulfide weathering and metal leaching rates. Two phases of humidity cell testing have been undertaken as part of the geochemical characterization study, including:

- **Phase 1** – humidity cell testing was initiated on 17 samples in 2014, including 14 development rock samples and three spent ore samples from the Spent Ore Disposal Area (SODA). The development rock and spent ore humidity cells were operated for 144 weeks and 116 weeks, respectively, before being terminated with approval from the United States Forest Service (USFS). Cell HC-5 (representing schist from the West End deposit) was continued to week 184 before being terminated with approval. Following completion of the humidity cell testwork, the samples were submitted for termination testing including Acid Base Accounting (ABA), Net Acid Generation (NAG) testing and mineralogical analysis.
- **Phase 2** - Since the Phase 1 HCTs were selected and initiated, the estimated proportions/masses of individual lithologies that will be extracted by the project has been refined and a second phase ('Phase 2') of kinetic testing was initiated on eight samples in 2017. These samples have been selected to address data gaps in the granite, intrusive, carbonate, breccia and gouge materials. The Phase 2 humidity cell testwork is ongoing and laboratory data (pH, EC, sulfate, iron, alkalinity) are available through week 35, week 51 or week 18.

The draft results of the Phase 1 humidity cell testwork were presented in the 'Stibnite Gold Project baseline Geochemical Characterization Report' (SRK, 2017). This report presents the final results of the Phase 1 humidity cell testwork and termination testing. The results of the Phase 2 program available to date are provided in a supplemental technical report, along with recommendations for continuation/termination (SRK, 2018).

2 Background

The goal of the kinetic testing (i.e., HCTs) is primarily to provide reaction rate data to support predictions of leachate chemistry that would likely develop during meteoric rinsing of development rock dump facilities and pit walls, and also to assess the potential for materials to develop acidic conditions with prolonged weathering. The HCT results are being used to develop source terms for chemical leaching of geologic materials in the future development rock storage facilities (DRSFs) and in the final pit walls as part of the Proposed Action Site Wide Water Chemistry (SWWC) modeling currently underway (SRK, *in progress*). The HCT results are used to define a rate of leaching from the material (in mg/kg/week) and this is scaled to the field conditions from the laboratory test based on ratio of rock in cell to rock in field, water/solid ratio, temperature and average grain size. From this, an initial solution chemistry (in mg/L) is generated that can then be utilized to represent a particular rock type in the predictive calculations.

Ultimately, kinetic testing can provide the following information relevant to the overall objectives of the geochemical characterization program:

- Types of sulfide minerals reacting;
- Oxidation rates of sulfide minerals under varying pH conditions;
- Indication of the reactivity of acid buffering including types of minerals capable of buffering under varying pH conditions, rates of depletion, and overall availability of buffering minerals;
- Indication of rates of release of trace elements;
- Relationships between bulk characteristics and release rates;
- Indication of long term acidic or neutralizing or inert geochemical behavior;
- Load released by initial contact water; and
- Calibration of static tests to weathering rates.

The United States Bureau of Land Management (BLM) guidance on Rock Characterization Resources and Water Analysis Guidance for Mining Activities (BLM, 2008) considers development rock to be non-acid generating without kinetic testing if there is 300 percent excess neutralizing capacity (i.e., Neutralization Potential Ratio, NPR> 3) and the Net Neutralization Potential (NNP) is greater than 20 kilograms of calcium carbonate equivalents per ton (kg CaCO3 eq/ton). According to the BLM guidance (2008) samples that do not meet these criteria require kinetic testing to define the acid generating potential. These criteria are consistent with guidelines presented in Appendix C of the EPA and Hardrock Mining Source Book for Industry in the Northwest and Alaska (EPA, 2003), which state that kinetic testing is required on samples with an NPR between 1 and 3 that show uncertain acid generating behavior from static testwork. Based on Acid Base Accounting (ABA) results from the Phase 1 HCT program, the majority of the Hangar Flats and Yellow Pine samples do not meet the BLM criteria and demonstrate an uncertain potential for acid generation and further testing is recommended based on the BLM and EPA criteria.

3 Phase 1 HCT Methods

3.1 Development Rock Sample Selection

A sub-set of 14 development rock samples from the static test database were selected for kinetic testing and are summarized in Table 1. The steps taken to select samples for Phase 1 kinetic testing included:

- Identification of the main material types that require characterization (i.e., those comprising greater than two percent of future development rock and/or future pit walls);
- Selection of two samples per material type including one that represents the median/mean sulfide sulfur content and one that represents the 95th percentile sulfide content; and
- Where more than one sample could be selected, the sample with the lowest neutralization potential (NP) was selected in order to characterize the effect of net acid generation.

In general, arsenic concentrations correlate with sulfide content for most material types (Appendix A). Therefore, samples selected to represent the 95th percentile of sulfide sulfur concentrations also generally contained arsenic concentrations within the 95th percentile or greater. Likewise, samples selected to represent the median or mean sulfide sulfur content also represent median or mean arsenic concentrations.

Development rock/pit wall material types for the Stibnite Gold Project were defined based on the primary lithological unit or rock type. The number of kinetic test samples selected for each material type is based on the relative importance or mass of the lithological unit with respect to the total mass in the deposit. Because an estimate of tonnage for each material type was not available at the time of the Phase 1 sample selection, the main material types for the project were identified based on the frequency of occurrence of the material types within the exploration drill hole database. Material types comprising greater than two percent of future development rock and/or future pit walls were selected for humidity cell testing.

The Yellow Pine and Hangar Flats deposits are geologically similar and are dominated by intrusive bodies that are mostly comprised of quartz monzonite and alaskite. These material types also show a range of acid generation potential from the static testing. Therefore, two samples representative of each of these material types were selected for kinetic testing. Diorite and rhyolite are less common within the Hangar Flats and Yellow Pine deposits and are consistently non-acid generating based on the static test results. Therefore, only one sample of each of these material types was selected for kinetic testing to characterize the observed variability. For the diorite and rhyolite material types, samples with sulfide sulfur content and arsenic concentrations in the 95th percentile were selected for kinetic testing. Metamorphosed sedimentary rocks (i.e., quartzite and dolomite) would comprise a minor portion of development rock from the Hangar Flats and Yellow Pine deposits. Therefore, samples of these material types from the Hangar Flats and Yellow Pine deposits have not been selected for kinetic testing.

The West End deposit is hosted in metamorphosed sedimentary rocks and as a result the main lithologies that would be encountered include calc-silicate and to a lesser extent schist, quartzite and dolomite. Because calc-silicate is the main material type identified for the West End deposit, two samples of this material type were selected for kinetic testing. At the time of sample selection, quartzite and dolomite were considered less common within the deposit and are consistently non-acid generating based on the static test results. Therefore, only one sample of each of these material types was selected for kinetic testing to characterize the observed variability. For the quartzite and dolomite material types, samples with sulfide sulfur content and arsenic concentrations in the 95th percentile were selected for kinetic testing. The schist samples show a range in acid generation potential; therefore, two samples of this material were selected to capture the variability in sulfide sulfur content and neutralization potential. Quartz monzonite and alaskite, as well as other igneous lithologies, comprise a minor portion of development rock from the West End deposit. Therefore, samples of these material types from the West End deposit were not selected for kinetic testing.

Material types that comprise an insignificant proportion (i.e., less than 2%) of the geologic materials that will be encountered during mining include gouge and breccia. Samples of these material types were not selected for kinetic testing since they are less likely to have a considerable influence on the geochemical nature of the development rock storage facilities and pit walls.

3.2 Spent Ore Sample Selection

Three samples were selected from the SODA dataset for kinetic testing; one that represents the median/mean sulfide sulfur content; one that represents the 95th percentile sulfide content; and one with lower sulfide content (25th percentile) and an uncertain potential for acid generation based on the BLM criteria. In most cases, arsenic concentrations correlate with sulfide content, therefore, the samples selected to represent the 95th percentile of sulfide sulfur concentrations also contained arsenic concentrations within the 95th percentile. Likewise, the sample selected to represent the median or mean sulfide sulfur content also represents median or mean arsenic concentrations.

All but four of the SODA samples submitted for static testwork were classified as acid neutralizing based on the BLM criteria, therefore further testing of the SODA material to define the potential for acid development according to the BLM guidance is not warranted. However, samples of SODA material were submitted for kinetic testing to assess metal and metalloid leaching rates. The changes in these reaction rates through the course of the test can be used to estimate the magnitude of constituents that would be mobilized from the material under long-term weathering and oxidation conditions.

The SODA humidity cells were run for a total of 116 weeks before being terminated with approval from the USFS.

Table 1: Samples Selected for Phase 1 HCT Program

Cell	Sample Name	Mine Area	Material Type
1	HC-1 -MGI-09-09 (43.6-49.7)	Hangar Flats	Alaskite
12	HC-12- MGI-11-60 (157-165.5)	Yellow Pine	
14	HC-14- MGI-11-64 (56.5-63.4)	Yellow Pine	Quartz Monzonite-Alaskite
10	HC-10-MGI-10-51 (240.8-248.6)	Hangar Flats	
2	HC-2-MGI-10-22 (21.6-25.9)	Hangar Flats	Quartz Monzonite
3	HC-3-MGI-10-23 (41.2-46)	Hangar Flats	
11	HC-11-MGI-11-60 (44.8-48.0)	Yellow Pine	Diorite
4	HC-4-MGI-10-36 (67.1-78.0)	West End	Quartzite
13	HC-13- MGI-11-62 (248.1-253.9)	Yellow Pine	Rhyolite
7	HC-7-MGI-10-48 (82.9-86.3)	West End	Calc-Silicate
6	HC-6-MGI-10-48 (45.7-50.3)	West End	
5	HC-5-MGI-10-41 (21.3-31.1)	West End	Schist
9	HC-9-MGI-10-50 (76.2-82.3)	West End	
8	HC-8-MGI-10-48 (221.3-227.4)	West End	Carbonate
15	HC-15- MGI-13-S09 (0.00-0.93)	SODA	Spent Ore
16	HC-16- MGI-13-S31 (4.65-5.57)	SODA	
17	HC-17- MGI-13-S41 (0.56-0.93)	SODA	

3.3 Test Methods

Laboratory kinetic testing used for this project consists of the standard humidity cell test procedure designed to simulate water-rock interactions in order to predict the rate of sulfide mineral oxidation and therefore acid generation and metals mobility (ASTM D5744 - 13e1) (ASTM, 2013). Under ASTM methodology, the test is carried out on crushed material sized to pass a 6.3mm (0.25 inch) Tyler screen. The test follows a seven-day cycle during which air that is humidified slightly above room temperature is introduced at the bottom of the column for three days of each cycle followed by three days of dry air. On the seventh day, the sample is rinsed with distilled water and the extracted solution is filtered to 0.45µm and collected for analysis. Key parameters including; pH, alkalinity, acidity, electrical conductivity, iron and sulfate are measured on a weekly basis by McClelland Laboratories to provide intermediate reference points between full analyses conducted less frequently at WetLab. Major and trace element chemistry were measured on a weekly basis at WetLab for the first four weeks of the test after which the frequency of analysis was reduced to every fourth week.

The main objectives of the kinetic test program were to provide a prediction of acid generation potential of the samples and predict the rate of leaching of constituents under the accelerated test conditions. Geochemical reactions and reaction rates monitored throughout the testing include sulfide oxidation, depletion of neutralization potential, and mineral dissolution (INAP, 2014). The HCTs were executed until the majority of the mineral reactions that can be predicted from mineralogy or static testing have been observed. This endpoint was assessed by monitoring the release rates of key constituents such as pH, sulfate, acidity, alkalinity and iron as well as dissolved metals and metalloids. It is common practice to terminate cells when the release rates for these leachate parameters become relatively constant with time and there is no substantial change in the calculated release rate (INAP, 2014). A quantitative method was recently used to define stable conditions in the Phase 2 HCT assessment. As such, this quantitative method was not applied to the Phase 1 HCT program, which was conducted between 2014 and 2017. Furthermore, the ASTM methodology and Global Acid Rock Drainage (GARD) Guide (INAP, 2014) do not require that a quantitative method is used to support HCT termination.

The results of the HCT testing are presented below. The SODA cells were run for 116 weeks before being terminated with approval from the USFS. The majority of development rock humidity cells (thirteen out of fourteen) were run for 144 weeks before being terminated. Cell 5 was continued for an additional 40 weeks until stable effluent chemistry was achieved, and the cell was terminated with approval at week 184.

3.3.1 Termination Testing

Upon termination, the residual (i.e., post-leach) material from the Phase 1 cells was submitted for ABA, NAG testing and multi-element assay. A comparison of this data to the initial (i.e., pre-leach) sample allow for an assessment of the geochemical properties of the samples and interpreted along with the evolution of the leachate during the HCT.

Seven samples of post-leach development rock HCT material were also submitted for optical microscopy, XRD and SEM analysis to investigate the speciation of sulfide minerals in the development rock samples, and assess and their textural controls on acid generation and metal release. The mineralogical assessment was undertaken by Petrolab, UK (Appendix B) using the following methods:

- Optical microscopy (both transmitted and reflected light) – a petrographic assessment was carried out using a Nikon research polarizing microscope. Digital photomicrographs were taken using a high resolution digital camera attached to the trinocular head of the microscope;
- Scanning Electron Microscopy – polished thin sections were carbon coated to a thickness of 30 nm. Each section was analyzed using a ZEISS EVO MA 25 SEM fitted with a Bruker xFlash 6l60 x-ray detector for energy dispersive x-ray spectroscopy (EDX) analysis. Phase/mineral data were reported as weight percent (wt%), with mass values being derived from measurement of particle/grain areas and an assumed phase density. No correction for stereological error was carried out; and
- X-Ray Diffraction – powdered samples were analyzed by X-Ray Mineral Services Ltd, UK using a PANalytical X'Pert3 Powder Diffractometer between 2° and 60° 2Ө (theta) with a step size of 0.05°/sec using x-ray radiation from a copper anode at 35kV, 30mA. Siroquant software (Rietveld analysis for Windows based computers) was used for quantification of the phases identified in a sample.

For the purposes of thin section preparation, the samples were sieved using a 2mm sieve. For each sample both the +2mm and -2mm size fractions were mounted on a single slide and prepared into polished thin sections. The thin sections were prepared using yellow epoxy resin to aid in the visualization of cracks and pore space within the samples.

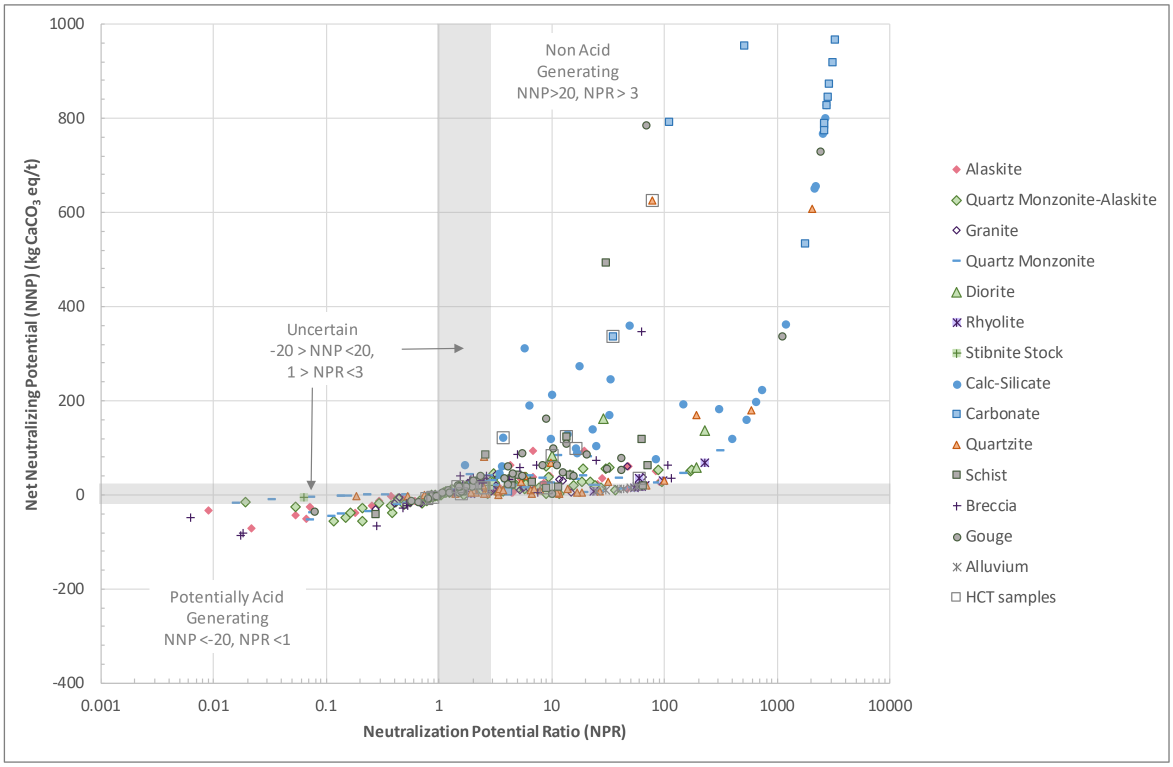

Figure 1: Scatter Plot of NNP vs. NPR for the Stibnite Phase 1 development rock humidity cells

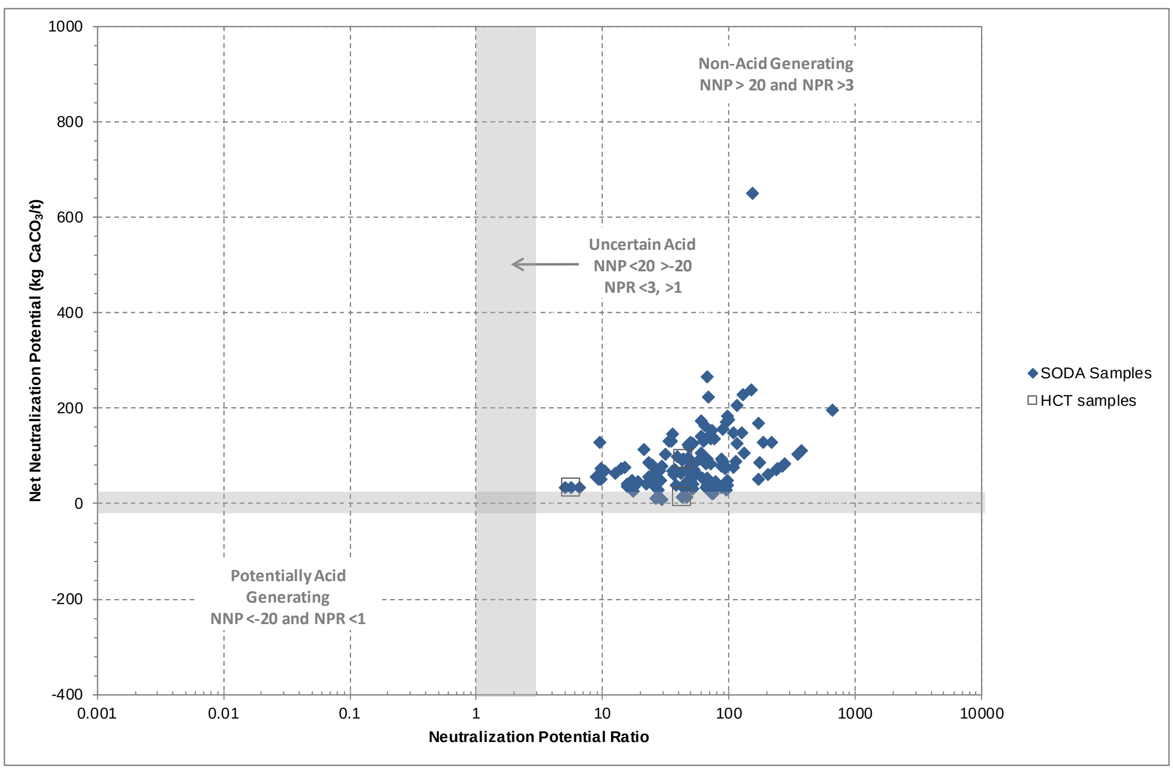

Figure 2: Scatter Plot of NNP vs. NPR for the Stibnite Phase 1 SODA humidity cells

Table 2: Summary of Stibnite Phase 1 Humidity Cell Tests

Cell	Mine Area	Material Type	Pyritic Sulfur (wt%)	NP (kg $CaCO_3$ eq/t)	NNP (kg $CaCO_3$ eq/t)	NPR	Arsenic (mg/kg)	NAG pH (s.u.)	Final NAG value (kg H_2SO_4 eq/t)	Sample Selection Rational
1	HF	Alaskite	1.2	56	18	1.5	530	7.9	0	95th percentile sulfide sulfur, average arsenic
12	YP		0.18	8.9	3.3	1.6	1,100	7.5	0	Median sulfide sulfur, 95th percentile arsenic, low NP
14	YP	Quartz Monzonite - Alaskite	1.3	37	-5	0.89	6,500	2.9	16	95th percentile sulfide sulfur and arsenic
10	HF		0.36	27	16	2.4	1,700	7.6	0	Median sulfide sulfur, average arsenic, low NP
2	HF	Quartz Monzonite	0.32	25	15	2.5	1,700	7.3	0	Median sulfide sulfur, average arsenic
3	HF		1.2	30	-9	0.77	8,700	2.8	18	95th percentile sulfide sulfur, maximum arsenic
11	YP	Diorite	0.29	92	82	10	210	9.6	0	95th percentile sulfide sulfur and arsenic
4	WE	Quartzite	0.26	633	625	78	471	7.9	0	95th percentile sulfide sulfur, average arsenic
13	HF	Rhyolite	0.02	36	35	59	12	9.1	0	95th percentile sulfide sulfur, average arsenic
6	WE	Calc-silicate	0.2	100	98	17	75	7.8	0	Median sulfide sulfur and arsenic
7	WE		1.4	170	122	3.7	2,200	8.3	0	95th percentile sulfide sulfur and arsenic
8	WE	Carbonate	0.32	350	340	35	1,200	8	0	95th percentile sulfide sulfur, maximum arsenic
5	WE	Schist	0.06	17	15	8.8	75	4.5	0	Median sulfide sulfur, low NP
9	WE		0.32	124	120	13	570	7.6	0	95th percentile sulfide sulfur, maximum arsenic
15	SODA	Spent Ore	<0.01	13	13	43	943	--	--	25th percentile sulfide sulfur
16	SODA		0.23	40	33	5.6	3,330	--	--	95th percentile sulfide sulfur, 95th percentile arsenic
17	SODA		0.07	95	93	43	1,030	--	--	Median sulfide sulfur and arsenic

ABA Criteria	PAG	NNP < -20 or NPR < 1
	Uncertain	NP between -20 and +20 or NPR between 1 and 3
	Non-PAG	NNP > 20 or NPR > 3
NAG Criteria	PAG	NAG > 10
	Low to Moderate PAG	NAG between 0 and 10
	Non-PAG	NAG <1

4 Phase 1 HCT Results

The Phase 1 HCT results are described in the following sections. Time-series plots for key parameters are provided in Appendix A.

4.1 Development Rock Cells

All 14 of the development rock HCTs produced circum-neutral to moderately alkaline pH leachates (pH 6.5 to 9) throughout the humidity cell testwork program. None of the cells produced acidic leachates. Furthermore, the effluent pH was stable for the majority of cells, indicating no onset of acid generation. This is in spite of a bias towards higher sulfide content materials.

The leachates from most cells show elevated electrical conductivity (EC) during the first five weeks of testing, which corresponds to an initial flush of sulfate from the cells. However, iron release was below analytical reporting limits for 12 out of the 14 samples, indicating that the initial flush in sulfate concentrations is not related to pyrite oxidation but rather to the flushing of readily-soluble sulfate salts from the material surface. If pyrite oxidation was occurring at a rate greater than neutralizing reactions, it would be expected that effluent iron and sulfate concentrations would increase along with a corresponding drop in pH and increase in effluent metal concentrations.

Metal release from the HCTs was generally low throughout the testwork period, for all cells. The Ficklin plot presented in Appendix A shows that leachates from all cells can be classified as near-neutral, low-metal waters based on effluent pH greater than 5.5 s.u. and Ficklin metal concentrations less than 1 mg/L. None of the cells are classified as acid, high-metal waters based on Ficklin metal concentrations.

Results from the Phase 1 HCT program were compared to the strictest potential applicable water quality criteria for the Project (HDR, 2016; 2017). This comparison was used purely to provide a frame of reference for the geochemistry testwork results (i.e., to identify potential constituents of concern) and the water quality criteria are not considered directly applicable to the assessment of laboratory HCT data. Despite the generally circum-neutral pH of the HCT leachates, a few constituents are mobile under the neutral to alkaline pH conditions including arsenic, antimony and aluminum, which were consistently leached at concentrations above the water quality criteria under circum-neutral conditions.

Manganese, selenium and sulfate are also occasionally elevated above the water quality criteria for some samples, and copper and lead are sporadically elevated above their respective water quality criteria. Mercury and thallium are also above their respective water quality criteria; however, both these constituents were consistently below laboratory detection and the exceedences relate to the detection limit being higher than the strictest regulatory criteria. Mercury test methods with lower reporting limits (e.g. EPA 1631) are not considered appropriate for humidity cells in a lab environment, because the tests are not carried out in a class-100 clean room. However, investigations are currently being conducted to determine whether defensible analysis of low-level mercury can be achieved in the laboratory conducting the Phase 2 HCTs, which are currently underway. To assist with this process, the US EPA document on '*Guidance for Implementation and Use of EPA Method 1631 for the Determination of Low-Level Mercury*' (EPA, 2001) is being used to guide appropriate techniques that can be used with Method 1631. For thallium, the laboratory detection limit varied throughout the test and was occasionally higher than the strictest regulatory criteria; however, thallium was consistently below laboratory detection throughout the test. The remaining constituents were below the most stringent surface water quality criteria. Many parameters are at or near analytical reporting limits in the leachates including beryllium, bismuth, chromium, cobalt, gallium, lead, lithium, phosphorous, scandium, tin, titanium, vanadium and zinc.

Silver and thallium are also below reporting limits for all cells except a few sporadic exceedances for Cell 4 (quartzite). The consumption of NP in the humidity cells was calculated from the effluent sulfate and alkalinity concentrations (c.f. Morin and Hutt, 1997). The consumption/depletion of NP was slow in all of the cells, with samples still having over 80% of the initial NP remaining when the cells were terminated at week 144 or 184. This indicates that significant buffering is still available and/or that acid generation is limited or occurs at a slow rate despite sulfide sulfur contents up to 1.4 wt%.

It is noted that increases in effluent arsenic concentration were observed around week 100 for 11 of the 14 development rock humidity cells (Figure B6). These spikes are uncharacteristic of the geochemical trends observed within the humidity cell program and require further consideration. Typically, the spikes relate only to arsenic and have no coinciding spike in sulfate or antimony. These spikes were typically not observed in samples with low arsenic release rates (<0.01 mg/kg/week) and likely reflect artefacts of instrument calibration at the upper end of the determined calibration concentration range for arsenic. As such they need to be interpreted with some caution. This interpretation is supported by the observation that most cells show a simultaneous increase in concentration and also the fact that other constituents do not show a similar increase. Furthermore, effluent sulfate concentrations in the cells around week 100 are stable or declining, indicating that the trends are not related to sulfide oxidation reactions. Continuation of the cells beyond week 100 demonstrated that effluent arsenic concentrations returned to relatively stable conditions around week 120. Occasional spikes are also observed for copper, lead, selenium, thallium and zinc; however, these spikes are typically only observed for a single isolated week and likely reflect dissolution or element release from the material and spikes are typically close to analytical reporting limits. These trends do not influence interpretation or calculation of a source term as the source term is based on the average steady-state release rate and not just peak values. To summarize, the difference in calculated arsenic release rate varies by less than 5% for the majority of cells depending on whether or not the week 100 data are included in the calculation. This is because the release rate approach averages the release of an element over the test duration and incorporates peak and trough values. A description of the source term calculations are included in the Proposed Action Site Wide Water Chemistry (SWWC) modeling report (SRK, *in progress*).

The specific geochemical behavior for each material type is described below.

4.1.1 Quartz Monzonite – Alaskite (Cells 10 and 14)

The two samples of quartz monzonite-alaskite maintained neutral conditions throughout the testwork, with an effluent pH of between 6.9 and 8.5 s.u. Despite these circum-neutral conditions, arsenic was released from both cells at concentrations above applicable surface water quality criteria throughout the duration of the humidity cell test. In addition, antimony release was elevated above water quality criterion throughout the entire 144 weeks of testing for Cell 14, and was elevated during the first 96 weeks of testing for Cell 10. Release of arsenic and antimony was particularly high from Cell 14, which had effluent concentrations up to 0.52 mg/L antimony and 5.2 mg/L arsenic. Cell 14 also showed the highest effluent arsenic concentrations of the 14 development rock cells. Although concentrations declined throughout the test, concentrations of both arsenic and antimony remained above the water quality criteria when the cell was terminated at week 144.

Although Cell 10 was predicted to have an uncertain potential for acid generation from the ABA testwork, the cells remained neutral and showed no indication of acid generation when they were terminated at week 144. The HCT behavior for Cell 14 was inconsistent with the predictions based on the ABA and NAG testwork, which indicated that the material would be acid generating; however, this cell showed no evidence net acid generation during the 144 weeks of testing and still had greater than 88% of the original NP remaining when the cell was terminated.

4.1.2 Quartz Monzonite (Cells 2 and 3)

The two samples of quartz monzonite maintained neutral conditions throughout the humidity cell testwork with effluent pH between 7.1 and 8.3 s.u. For Cell 3, effluent antimony and arsenic concentrations were consistently elevated above water quality criteria, with antimony concentrations up to 0.29 mg/L and arsenic concentrations as high as 3.4 mg/L. Although antimony and arsenic concentrations generally decreased during the test, they remained above the water quality criteria when the cell was terminated at week 144. Similar constituent release is seen for Cell 2, which showed effluent arsenic concentrations that were continuously elevated above water quality criteria throughout 144 weeks of testing, and effluent antimony concentrations that were elevated above the respective standard until around week 100. Cell 2 also showed effluent aluminum concentrations that were elevated above Idaho water quality standards throughout the humidity cell testwork period.

Cell 2 was predicted to have an uncertain potential for acid generation from the ABA testwork. The cell showed no evidence of net acid generation and still had greater than 92% of the original NP remaining when it was terminated at week 144. Although Cell 3 was predicted to be PAG from the ABA and NAG testwork, it also showed no net acid generation and had greater than 92% of the original NP remaining when the cell was terminated. The behavior of these cells indicates that either sulfide oxidation is not occurring, or that neutralizing potential is sufficient to prevent the development of net acid conditions in the cells.

4.1.3 Alaskite (Cells 1 and 12)

The two samples of alaskite showed neutral to slightly alkaline conditions throughout the HCT testwork, with effluent pH between 7.0 and 8.2 s.u. Metal release from the alaskite material was generally low; however, arsenic and antimony were released at concentrations above water quality criteria under the neutral pH conditions. Cell 12 in particular showed elevated arsenic release, with concentrations up to 2.2 mg/L (equivalent to a release rate of 1.07 mg/kg/week).

The alaskite samples showed an uncertain potential for acid generation from the ABA test, and were predicted to be non-acid generating from the NAG testwork results. The HCT results are consistent with the NAG test predictions, with no net acid generation in the cells. Both cells had greater than 78% of the original NP remaining when they were terminated at week 144.

4.1.4 Rhyolite (Cell 13)

The one sample of rhyolite maintained slightly alkaline pH conditions throughout the humidity cell testwork, with an effluent pH of between 7.3 and 9 s.u. This is consistent with the low sulfide content and static test predictions. The majority of the metals and metalloids were less than analytical reporting limits in the effluent; however, antimony was elevated above water quality criterion for the initial 50 weeks of testing. This cell had greater than 86% of its original NP remaining when it was terminated at week 144.

4.1.5 Diorite (Cell 11)

The one sample of diorite maintained neutral pH conditions throughout the humidity cell testwork, with an effluent pH of between 7.3 and 8.4 s.u.; however, antimony was seen to be mobilized under these circum-neutral conditions and was consistently elevated above the water quality criterion throughout the 144 week testwork period. Effluent concentrations of manganese and selenium were also elevated during the initial 5 weeks of testing. The behavior of this cell during the humidity cell test was consistent with static testwork predictions and the cell had greater than 86% of its original NP remaining when it was terminated at week 144.

4.1.6 Quartzite (Cell 4)

The one sample of quartzite produced neutral to slightly alkaline conditions throughout the HCT testwork, with effluent pH between 7.2 and 8.8 s.u. The majority of metals and metalloids were less than analytical reporting limits in the effluent; however, arsenic and antimony were mobilized under the neutral to alkaline conditions. Effluent arsenic concentrations for Cell 4 were above the water quality criterion throughout the 144 week testwork period, with effluent concentrations up to 0.2 mg/L. Effluent antimony concentrations from Cell 4 were above the water quality criterion between weeks zero and 100, and selenium and thallium were above the respective water quality standard during the initial 4 weeks of testing. This cell had greater than 99% of the original NP remaining when it was terminated at week 144 and results are consistent with ABA/NAG predictions.

4.1.7 Calc-Silicate (Cells 6 and 7)

The two samples of calc-silicate material maintained neutral conditions (pH 7 – 8.2) throughout the 144 week HCT program, which is consistent with the static testwork predictions and high neutralizing potential of these samples. However, both arsenic and antimony were mobilized under these circum-neutral conditions. Cell 7, in particular, showed elevated arsenic and antimony release, with effluent concentrations of up to 1.9 mg/L and 0.15 mg/L, respectively. Both cells had greater than 96% of the original NP remaining when they were terminated at week 144.

4.1.8 Schist (Cells 5 and 9)

The two samples of schist showed neutral conditions during the HCT, with effluent pH between 6.7 and 8 s.u. This is consistent with static testwork predictions. Many parameters were below analytical reporting limits in the effluent from Cell 5; however, both antimony and arsenic were consistently released at concentrations above the water quality criteria from Cell 9. Cell 9 was terminated at week 144 when effluent chemistry had stabilized; however, Cell 5 was continued until 184, as variable effluent concentrations of alkalinity, magnesium, calcium, aluminum and iron indicated potential changes in carbonate dissolution. Cells 5 and 9 had greater than 85% of their original NP remaining when they were terminated at weeks 144 and 184, respectively.

4.1.9 Carbonate (Cells 8)

The one sample of carbonate showed neutral to slightly alkaline conditions throughout the 144 weeks of HCT testing, with effluent pH between 7.2 and 8.7 s.u. This is consistent with the static testwork predictions and high neutralizing potential of the carbonate material. However, both arsenic and antimony were consistently released at concentrations greater than water quality criteria throughout the test. Aluminum was also elevated above its respective water quality criterion approximately 20% of the time. The cell has greater than 99% of the original NP remaining when it was terminated at week 144.

4.2 Spent Ore Cells

All three of the SODA HCTs produced circum-neutral to moderately alkaline pH leachates (pH 7 to 8.5) throughout the 116 weeks of humidity cell testing. As predicted by the ABA data, the effluent pH was stable for all three cells throughout the testwork period.

Despite the generally circum-neutral pH of the SODA HCT leachates, a few constituents were mobile under the neutral to alkaline pH conditions. In particular, arsenic and antimony were consistently leached at concentrations above the most stringent water quality criteria from all three cells. Effluent alkalinity as also high for all three cells, with concentrations ranging from 27 to 99 mg/L. For the sample with the highest sulfide content, aluminum, iron, manganese, mercury, selenium, silver and sulfate were flushed from the cell during the first five weeks of the test, and concentrations of these constituents were above the most stringent water quality criteria for these parameters. However, by about week 12 all constituents except arsenic and antimony were below the water quality criteria and many parameters were at or near analytical reporting limits. For the other two samples (representing the median/mean sulfide sulfur content and lower sulfide content), all constituents were below the water quality criteria throughout the duration of the test with the exception of alkalinity, arsenic and antimony.

There was a slight depletion of neutralizing potential (NP) in the SODA HCT cells over the course of the testwork period. The consumption of NP was slow and all three of the cells still had over 80% of the initial NP remaining when they were terminated. This indicates that significant buffering was still available and/or that acid generation is limited.

4.3 Comparison of Static and Phase 1 Kinetic Testwork Results

A comparison of the static test results with the corresponding HCT results provides an indication of the effectiveness of the static tests in predicting longer term behavior. As shown in Table 3 the results of the HCT tests confirm the ABA prediction for non-PAG samples, including all of the HCTs representing lithologies from the West End pit and samples of the alaskite and rhyolite from the Yellow Pine Pit. Samples of alaskite, quartz monzonite and quartz monzonite-alaskite from the Yellow Pine and Hangar Flats pits that showed an uncertain potential for acid generation from the ABA test also maintained neutral conditions in the HCT. The two cells of quartz monzonite and quartz monzonite and quartz monzonite-alaskite from the Hangar Flats and Yellow Pine pit that were predicted to be potentially acid generating from the ABA and NAG testwork also maintained neutral conditions in the HCT despite sulfide sulfur concentrations greater than 1 wt%.

A comparison between the HCT results and the acid generation prediction from the NAG results shows the NAG test over predicts the potential for acid generation. The two samples predicted to be acid generating from the NAG test did not develop acidic conditions in the HCT.

Based on the available kinetic testing results, the ABA and NAG tests over-predict the net acid generating potential of the quartz monzonite and alaskite materials. The kinetic tests indicate that weathering kinetics are slow and there is a significant lag time to acid generation based on slow reactivity of the sulfide minerals and presence of reactive neutralizing phases.

Table 3: Comparison of Static and Kinetic Tests

Cell	Sample Name	Mine Area	Rock Type	Pyritic Sulfur (wt%)	NNP (kg $CaCO_3$ eq/t)	NPR	AP Defined by ABA	NAG pH (s.u.)	NAG (kg H_2SO_4 eq/t)	AP Defined by NAG	Final HCT pH (s.u.)	Final HCT Conditions
1	HC-1 -MGI-09-09 (43.6-49.7)	HF	Alaskite	1.2	18	1.5	Uncertain	7.91	0	Non-PAG	7.95	Non-Acid
12	HC-12- MGI-11-60 (157-165.5)	YP		0.18	3.3	1.6	Uncertain	7.48	0	Non-PAG	7.71	Non-Acid
14	HC-14- MGI-11-64 (56.5-63.4)	YP	Quartz Monzonite - Alaskite	1.3	-5	0.89	PAG	2.91	15.8	PAG	7.76	Non-Acid
10	HC-10-MGI-10-51 (240.8-248.6)	HF		0.36	16	2.4	Uncertain	7.64	0	Non-PAG	7.98	Non-Acid
2	HC-2-MGI-10-22 (21.6-25.9)	HF	Quartz Monzonite	0.32	15	2.5	Uncertain	7.29	0	Non-PAG	8.00	Non-Acid
3	HC-3-MGI-10-23 (41.2-46)	HF		1.2	-9	0.77	PAG	2.78	17.6	PAG	7.78	Non-Acid
11	HC-11-MGI-11-60 (44.8-48.0)	YP	Dioite	0.29	82	10	Non-PAG	9.59	0	Non-PAG	8.25	Non-Acid
4	HC-4-MGI-10-36 (67.1-78.0)	WE	Quartzite	0.26	625	78	Non-PAG	7.91	0	Non-PAG	8.68	Non-Acid
13	HC-13- MGI-11-62 (248.1-253.9)	YP	Rhyolite	0.02	35	59	Non-PAG	9.07	0	Non-PAG	8.25	Non-Acid
7	HC-7-MGI-10-48 (82.9-86.3)	WE	Calc-silicate	1.4	120	3.7	Non-PAG	8.28	0	Non-PAG	7.74	Non-Acid
6	HC-6-MGI-10-48 (45.7-50.3)	WE		0.2	98	17	Non-PAG	7.76	0	Non-PAG	8.04	Non-Acid
5	HC-5-MGI-10-41 (21.3-31.1)	WE	Schist	0.06	15	8.8	Non-PAG	4.5	0	Non-PAG	7.75	Non-Acid
9	HC-9-MGI-10-50 (76.2-82.3)	WE		0.32	120	13	Non-PAG	7.64	0	Non-PAG	8.22	Non-Acid
8	HC-8-MGI-10-48 (221.3-227.4)	WE	Carbonate	0.32	340	35	Non-PAG	7.95	0	Non-PAG	7.96	Non-Acid
15	HC-15- MGI-13-S09 (0.00-0.93)	-	Spent Ore	<0.01	12.5	43	Non-PAG	-	-	-	7.91	Non-Acid
16	HC-16- MGI-13-S31 (4.65-5.57)	-		0.23	32.9	5.6	Non-PAG	-	-	-	7.80	Non-Acid
17	HC-17- MGI-13-S41 (0.56-0.93)	-		0.07	93.2	43	Non-PAG	-	-	-	8.03	Non-Acid

ABA Criteria	PAG	NNP<-20 or NPR<1
	Uncertain	NP between -20 and +20 or NPR between 1 and 3
	Non-PAG	NNP>20 or NPR >3
NAG Criteria	PAG	NAG > 10
	Low Capacity	NAG between 0 and 10
	Non-PAG	NAG <1

4.4 Phase 1 Termination Testwork Results

The samples underwent geochemical characterization both before and after the humidity cell testwork. This included ABA and NAG testing and multi-element assay on both the initial (i.e., pre-leach) sample and the residual (i.e., post-leach) HCT material to allow the geochemical properties of the samples to be determined and interpreted along with the evolution of the leachate during the HCT. A comparison of the termination (i.e. post-leach) data to the initial (i.e., pre-leach) data allow for an assessment of the geochemical properties of the samples and is interpreted along with the evolution of the leachate during the HCT.

Mineralogical analysis was also undertaken on even samples of post-leach material to assist in interpretation of the HCT results, in particular to assess why several of the samples that were predicted to be acid generating by the static testwork did not develop acidic conditions in the HCT. Post-HCT mineralogical analysis included optical microscopy, SEM and XRD analysis.

The results of the termination testwork results are detailed in the following sections.

4.4.1 Acid Base Accounting

The pre-and post-leach ABA results for the development rock and SODA samples are summarized in Table 4. This shows that typically less than 15% of the original sulfide content was oxidized during the humidity cell testwork. The generally low amount of sulfide oxidation reflects the slow weathering rates of the Stibnite Gold Project materials. The only exceptions include Cells 4 (Quartzite) and 8 (Carbonate), in which 73% and 38% of the original sulfide content was oxidized, respectively.

The post-leach HCT results also demonstrate that there has been loss of inorganic carbon (i.e., neutralization potential) from the samples during the humidity cell test, due to consumption of neutralizing minerals through dissolution reactions. In all cases, however, less than 15% of the initial NP was consumed during the test, indicating that significant acid neutralizing potential still exists in the samples. This is consistent with the calculated consumption of NP during the humidity cell test, which demonstrates that the majority of cells still had greater than 85% neutralizing potential remaining when they were terminated.

The paste pH for most samples did not change significantly between the initial and residual samples, with typically less than 0.5 pH unit difference between the initial and residue paste pH. This likely reflects the slow weathering kinetics of materials associated with the Stibnite Gold Project, with limited acid sulfate salts having developed in the cells during the humidity cell testwork.

4.4.2 Net Acid Generation Testing

The pre- and post-leach NAG results for the development rock and SODA samples are summarized in Table 5. This demonstrates there has been generally little change in NAG pH and NAG value between the pre- and post-HCT leached material. The main exception is Cell 14 (Quartz Monzonite-Alaskite), for which the initial sample produced an acidic NAG pH (2.91 s.u.) and a NAG value of 15.8 kg H_2SO_4 eq/t, but the residue samples was characterized by a neutral NAG pH (7.04 s.u.) and a NAG value of zero. This sample maintained neutral conditions (pH 7.1 to 8.1) in the HCT, and did not show significant consumption of either sulfide or NP. As such, the difference in NAG behavior may relate to sample representativity, which is a function of sample splitting and preparation methods.

4.4.3 Multi Element Analysis

The head and residue assays for the HCT samples are summarized in Table 6 to Table 10, which show the amount of leaching during the humidity cell test for key parameters relating to ML/ARD. For the majority of parameters, typically less than 5% of the original (head) assay was leached/mobilized during the 144/184 weeks of testing. The main exceptions were cadmium, molybdenum and selenium, which showed higher mobilization (typically around 33%, 30% and 14%, respectively). This is primarily a function of the low initial concentrations of these constituents in the initial solid.

In general, the magnitude of constituent mobilization during the humidity cell test was a function of the initial concentrations in the solid, i.e. samples with higher initial concentrations in the solid showed greater levels of release during the humidity cell test (Figure 3 and Figure 4).

Table 4: Pre- and Post-HCT ABA Results for the Phase 1 Humidity Cells

Cell	Sample ID	Mine Area	Material Type	Paste pH (s.u.)		Pyritic sulfur (wt%)			Inorganic carbon (wt%)		
				Initial	Residual	Initial	Residual	% oxidized during HCT	Initial*	Residual	% consumed during HCT
1	HC-1 -MGI-09-09 (43.6-49.7)	HF	Alaskite	7.38	8	1.2	1.17	3%	0.69	0.66	4%
12	HC-12- MGI-11-60 (157-165.5)	YP	Alaskite	8.6	8.8	0.18	0.2	-	0.17	0.15	10%
14	HC-14- MGI-11-64 (56.5-63.4)	YP	Quartz Monzonite -Alaskite	7.99	8.3	1.3	1.07	18%	0.47	0.44	7%
10	HC-10-MGI-10-51 (240.8-248.6)	HF	Quartz Monzonite -Alaskite	8.68	8.6	0.36	0.35	3%	0.33	0.3	10%
2	HC-2-MGI-10-22 (21.6-25.9)	HF	Quartz Monzonite	8.66	8.5	0.32	0.28	13%	0.35	0.32	6%
3	HC-3-MGI-10-23 (41.2-46)	HF	Quartz Monzonite	8.06	8	1.2	1.1	8%	0.41	0.39	5%
11	HC-11-MGI-11-60 (44.8-48.0)	YP	Diorite	7.72	8.4	0.29	0.28	3%	1.48	1.43	4%
4	HC-4-MGI-10-36 (67.1-78.0)	WE	Quartzite	8.7	8.6	0.26	0.07	73%	8.09	8	1%
13	HC-13- MGI-11-62 (248.1-253.9)	YP	Rhyolite	8.85	8.4	0.02	0.02	0%	0.43	0.38	13%
7	HC-7-MGI-10-48 (82.9-86.3)	WE	Calc-silicate	8	8.6	1.4	1.25	11%	2.08	2.03	2%
6	HC-6-MGI-10-48 (45.7-50.3)	WE	Calc-silicate	8.2	8	0.2	0.23	-	1.39	1.34	3%
5	HC-5-MGI-10-41 (21.3-31.1)	WE	Schist	7.81	7.8	0.06	0.05	17%	0.47	0.44	6%
9	HC-9-MGI-10-50 (76.2-82.3)	WE	Schist	8.14	8.4	0.32	0.39	-	1.14	1.06	6%
8	HC-8-MGI-10-48 (221.3-227.4)	WE	Carbonate	8.51	8.2	0.32	0.2	38%	4.23	4.16	1%
15	HC-15- MGI-13-S09 (0.00-0.93)	-	Spent Ore	-	8.1	0.01	0.01	0%	0.21	0.19	13%
16	HC-16- MGI-13-S31 (4.65-5.57)	-	Spent Ore	-	8.2	0.23	0.2	13%	0.52	0.48	7%
17	HC-17- MGI-13-S41 (0.56-0.93)	-	Spent Ore	-	8.2	0.07	0.06	14%	1.2	1.15	4%

* Reconstituted head assay for inorganic carbon calculated from residue carbon plus cumulative alkalinity release during the HCT

Table 5: Pre- and Post-HCT NAG Results for the Phase 1 Humidity Cells

Cell	Sample ID	Mine Area	Material Type	NAG pH (s.u.)		Total NAG (kg H_2SO_4 eq/t)	
				Initial	Residual	Initial	Residual
1	HC-1 -MGI-09-09 (43.6-49.7)	HF	Alaskite	7.91	7.65	0	0
12	HC-12- MGI-11-60 (157-165.5)	YP		7.48	6.84	0	0
14	HC-14- MGI-11-64 (56.5-63.4)	YP	Quartz Monzonite -Alaskite	2.91	7.04	15.8	0
10	HC-10-MGI-10-51 (240.8-248.6)	HF		7.64	7.05	0	0
2	HC-2-MGI-10-22 (21.6-25.9)	HF	Quartz Monzonite	7.29	6.75	0	0
3	HC-3-MGI-10-23 (41.2-46)	HF		2.78	2.58	17.6	17.6
11	HC-11-MGI-11-60 (44.8-48.0)	YP	Diorite	9.59	7.95	0	0
4	HC-4-MGI-10-36 (67.1-78.0)	WE	Quartzite	7.91	7.47	0	0
13	HC-13- MGI-11-62 (248.1-253.9)	YP	Rhyolite	9.07	7.9	0	0
7	HC-7-MGI-10-48 (82.9-86.3)	WE	Calc-silicate	8.28	7.7	0	0
6	HC-6-MGI-10-48 (45.7-50.3)	WE		7.76	7.3	0	0
5	HC-5-MGI-10-41 (21.3-31.1)	WE	Schist	4.5	4.73	0	0
9	HC-9-MGI-10-50 (76.2-82.3)	WE		7.64	6.67	0	0
8	HC-8-MGI-10-48 (221.3-227.4)	WE	Carbonate	7.95	7.19	0	0
15	HC-15- MGI-13-S09 (0.00-0.93)	-	Spent Ore	--	6.82	--	0
16	HC-16- MGI-13-S31 (4.65-5.57)	-		--	7.18	--	0
17	HC-17- MGI-13-S41 (0.56-0.93)	-		--	8.02	--	0

Table 6: Pre- and Post-HCT Multi-Element Results for the Phase 1 Humidity Cells (Aluminum, Arsenic and Cadmium)

Cell	Sample ID	Mine Area	Material Type	Aluminum				Arsenic				Cadmium			
				Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT	Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT	Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT
1	HC-1 -MGI-09-09 (43.6-49.7)	YP	Alaskite	76,003	76,000	3.28	0.004%	593	582	10.8	2%	<0.03	<0.02	0.012	38%
12	HC-12- MGI-11-60 (157-165.5)	YP		72,805	72,800	4.84	0.007%	922	883	39.5	4%	<0.03	<0.02	0.011	36%
14	HC-14- MGI-11-64 (56.5-63.4)	HF	Quartz Monzonite-Alaskite	80,903	80,900	3.30	0.004%	5,899	5,800	99.4	2%	<0.03	<0.02	0.012	38%
10	HC-10-MGI-10-51 (240.8-248.6)	HF		78,007	78,000	6.50	0.008%	1,542	1,515	27.0	2%	<0.03	<0.02	0.012	38%
2	HC-2-MGI-10-22 (21.6-25.9)	HF	Quartz Monzonite	81,006	81,000	5.98	0.007%	1,790	1,770	19.6	1%	<0.03	<0.02	0.011	36%
3	HC-3-MGI-10-23 (41.2-46)	YP		76,303	76,300	3.10	0.004%	9,787	9,680	107	1%	<0.03	<0.02	0.011	36%
11	HC-11-MGI-11-60 (44.8-48.0)	WE	Diorite	82,703	82,700	2.93	0.004%	192	192	0.29	0.2%	0.10	0.09	0.011	11%
4	HC-4-MGI-10-36 (67.1-78.0)	YP	Quartzite	22,603	22,600	2.89	0.013%	533	525	7.59	1%	<0.03	<0.02	0.011	35%
13	HC-13- MGI-11-62 (248.1-253.9)	WE	Rhyolite	76,506	76,500	6.03	0.008%	12	12	0.28	2%	0.07	0.06	0.012	17%
7	HC-7-MGI-10-48 (82.9-86.3)	WE	Calc-silicate	76,203	76,200	3.26	0.004%	2,196	2,150	45.6	2%	<0.03	<0.02	0.012	37%
6	HC-6-MGI-10-48 (45.7-50.3)	WE		79,503	79,500	3.16	0.004%	63	61.7	0.81	1%	<0.03	<0.02	0.012	37%
5	HC-5-MGI-10-41 (21.3-31.1)	WE	Schist	95,605	95,600	4.83	0.005%	79	78.9	0.40	1%	<0.03	<0.02	0.015	42%
9	HC-9-MGI-10-50 (76.2-82.3)	WE		104,503	104,500	3.27	0.003%	634	619	14.8	2%	<0.03	<0.02	0.013	39%
8	HC-8-MGI-10-48 (221.3-227.4)	-	Carbonate	54,003	54,000	3.21	0.006%	983	934	48.6	5%	<0.03	<0.02	0.012	37%
15	HC-15- MGI-13-S09 (0.00-0.93)	-	Spent Ore	78,503	78,500	2.63	0.003%	951	922	28.6	3%	<0.03	0.02	0.009	30%
16	HC-16- MGI-13-S31 (4.65-5.57)	-		68,303	68,300	2.60	0.004%	3,308	3,060	248	7%	<0.03	0.02	0.009	30%
17	HC-17- MGI-13-S41 (0.56-0.93)			69,603	69,600	2.73	0.004%	1,174	1,150	23.6	2%	<0.03	<0.02	0.009	32%

Table 7: Pre- and Post-HCT Multi-Element Results for the Phase 1 Humidity Cells (Copper, Iron and Mercury)

Cell	Sample ID	Mine Area	Material Type	Copper				Iron				Mercury			
				Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT	Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT	Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT
1	HC-1 -MGI-09-09 (43.6-49.7)	YP	Alaskite	14.8	14.5	0.27	2%	19,601	19,600	1.33	0.007%	1.05	1.04	0.007	0.7%
12	HC-12- MGI-11-60 (157-165.5)	YP		3.10	2.90	0.20	7%	4,601	4,600	1.34	0.029%	0.23	0.23	0.006	3%
14	HC-14- MGI-11-64 (56.5-63.4)	HF	Quartz Monzonite-Alaskite	6.33	6.10	0.23	4%	22,201	22,200	1.21	0.005%	0.65	0.64	0.008	1%
10	HC-10-MGI-10-51 (240.8-248.6)	HF		5.51	5.30	0.21	4%	13,501	13,500	1.05	0.008%	0.86	0.85	0.007	0.8%
2	HC-2-MGI-10-22 (21.6-25.9)	HF	Quartz Monzonite	11.1	10.9	0.23	2%	24,201	24,200	1.06	0.004%	2.84	2.83	0.007	0.2%
3	HC-3-MGI-10-23 (41.2-46)	YP		9.44	9.20	0.24	3%	21,501	21,500	1.11	0.005%	6.91	6.90	0.006	0.1%
11	HC-11-MGI-11-60 (44.8-48.0)	WE	Diorite	19.3	19.0	0.27	1%	51,001	51,000	1.35	0.003%	2.12	2.11	0.006	0.3%
4	HC-4-MGI-10-36 (67.1-78.0)	YP	Quartzite	53.5	53.1	0.42	1%	22,801	22,800	0.99	0.004%	3.55	3.54	0.007	0.2%
13	HC-13- MGI-11-62 (248.1-253.9)	WE	Rhyolite	11.1	10.9	0.23	2%	18,802	18,800	1.83	0.010%	0.44	0.43	0.007	2%
7	HC-7-MGI-10-48 (82.9-86.3)	WE	Calc-silicate	26.2	25.9	0.27	1%	26,901	26,900	1.21	0.005%	3.34	3.33	0.007	0.2%
6	HC-6-MGI-10-48 (45.7-50.3)	WE		12.1	11.8	0.26	2%	37,902	37,900	1.82	0.005%	0.31	0.30	0.007	2%
5	HC-5-MGI-10-41 (21.3-31.1)	WE	Schist	26.3	25.9	0.41	2%	46,903	46,900	3.12	0.007%	0.63	0.62	0.009	1%
9	HC-9-MGI-10-50 (76.2-82.3)	WE		47.8	47.5	0.29	1%	54,801	54,800	1.16	0.002%	0.46	0.45	0.007	2%
8	HC-8-MGI-10-48 (221.3-227.4)	-	Carbonate	14.1	13.9	0.24	2%	16,401	16,400	1.15	0.007%	1.10	1.10	0.006	0.6%
15	HC-15- MGI-13-S09 (0.00-0.93)	-	Spent Ore	16.2	16.0	0.19	1%	24,501	24,500	1.21	0.005%	1.21	1.21	0.006	0.5%
16	HC-16- MGI-13-S31 (4.65-5.57)	-		15.3	15.1	0.17	1%	24,303	24,300	3.46	0.014%	2.35	2.34	0.010	0.4%
17	HC-17- MGI-13-S41 (0.56-0.93)			13.3	13.1	0.21	2%	32,601	32,600	1.22	0.004%	1.79	1.78	0.006	0.3%

Table 8: Pre- and Post-HCT Multi-Element Results for the Phase 1 Humidity Cells (Manganese, Molybdenum and Nickel)

Cell	Sample ID	Mine Area	Material Type	Manganese				Molybdenum				Nickel			
				Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT	Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT	Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT
1	HC-1 -MGI-09-09 (43.6-49.7)	YP	Alaskite	290	288	1.53	0.5%	3.60	2.59	1.01	28%	3.67	3.00	0.67	18%
12	HC-12- MGI-11-60 (157-165.5)	YP		191	188	2.67	1.4%	2.56	1.60	0.96	37%	2.74	2.10	0.64	23%
14	HC-14- MGI-11-64 (56.5-63.4)	HF	Quartz Monzonite-Alaskite	305	303	2.42	0.8%	3.62	2.51	1.11	31%	5.80	5.10	0.70	12%
10	HC-10-MGI-10-51 (240.8-248.6)	HF		239	237	1.72	0.7%	2.76	1.70	1.06	38%	5.97	5.30	0.67	11%
2	HC-2-MGI-10-22 (21.6-25.9)	HF	Quartz Monzonite	445	444	0.80	0.2%	2.52	1.58	0.94	37%	4.63	4.00	0.63	14%
3	HC-3-MGI-10-23 (41.2-46)	YP		367	366	1.46	0.4%	3.44	2.47	0.97	28%	3.95	3.30	0.65	16%
11	HC-11-MGI-11-60 (44.8-48.0)	WE	Diorite	723	722	1.02	0.1%	2.36	1.26	1.10	47%	38.5	37.9	0.63	2%
4	HC-4-MGI-10-36 (67.1-78.0)	YP	Quartzite	3,010	3,010	0.38	0.01%	6.35	5.43	0.92	15%	24.1	23.5	0.64	3%
13	HC-13- MGI-11-62 (248.1-253.9)	WE	Rhyolite	380	379	0.62	0.2%	3.21	2.12	1.09	34%	3.40	2.70	0.70	20%
7	HC-7-MGI-10-48 (82.9-86.3)	WE	Calc-silicate	397	396	0.77	0.2%	2.77	1.65	1.12	40%	39.5	38.8	0.70	2%
6	HC-6-MGI-10-48 (45.7-50.3)	WE		456	456	0.34	0.1%	3.28	2.18	1.10	33%	45.8	45.1	0.67	1%
5	HC-5-MGI-10-41 (21.3-31.1)	WE	Schist	291	289	1.77	0.6%	1.94	0.52	1.42	73%	58.5	57.5	0.98	2%
9	HC-9-MGI-10-50 (76.2-82.3)	WE		466	466	0.50	0.1%	3.58	2.42	1.16	32%	70.0	69.3	0.74	1%
8	HC-8-MGI-10-48 (221.3-227.4)	-	Carbonate	373	373	0.33	0.1%	18.0	17.0	1.04	6%	9.15	8.50	0.65	7%
15	HC-15- MGI-13-S09 (0.00-0.93)	-	Spent Ore	347	347	0.30	0.1%	3.49	2.54	0.95	27%	25.0	24.4	0.57	2%
16	HC-16- MGI-13-S31 (4.65-5.57)	-		209	209	0.34	0.2%	3.87	2.80	1.07	28%	24.4	23.8	0.56	2%
17	HC-17- MGI-13-S41 (0.56-0.93)			416	416	0.32	0.1%	5.25	4.13	1.12	21%	36.8	36.2	0.57	2%

Table 9: Pre- and Post-HCT Multi-Element Results for the Phase 1 Humidity Cells (Lead, Sulfur and Antimony)

Cell	Sample ID	Mine Area	Material Type	Lead				Sulfur				Antimony			
				Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT	Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% of original concentration mobilised during HCT	Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT
1	HC-1 -MGI-09-09 (43.6-49.7)	YP	Alaskite	6.55	6.50	0.05	0.8%	17,366	16,700	1,994	4%	33.6	30.1	3.50	10%
12	HC-12- MGI-11-60 (157-165.5)	YP		12.7	12.7	0.05	0.4%	2,890	2,800	268	3%	14.3	12.7	1.66	12%
14	HC-14- MGI-11-64 (56.5-63.4)	HF	Quartz Monzonite-Alaskite	9.05	9.00	0.05	0.6%	17,110	16,500	1,828	4%	47.7	43.2	4.53	9%
10	HC-10-MGI-10-51 (240.8-248.6)	HF		10.2	10.1	0.05	0.5%	5,043	4,900	429	3%	19.2	17.8	1.44	8%
2	HC-2-MGI-10-22 (21.6-25.9)	HF	Quartz Monzonite	8.06	8.00	0.06	0.8%	4,377	4,300	231	2%	24.6	22.7	1.86	8%
3	HC-3-MGI-10-23 (41.2-46)	YP		7.56	7.50	0.06	0.8%	16,803	16,500	906	2%	85.7	80.5	5.20	6%
11	HC-11-MGI-11-60 (44.8-48.0)	WE	Diorite	12.8	12.7	0.06	0.5%	4,396	4,000	1,186	9%	186	183	3.46	2%
4	HC-4-MGI-10-36 (67.1-78.0)	YP	Quartzite	3.45	3.40	0.05	1.4%	4,958	4,800	474	3%	68.2	67.5	0.72	1%
13	HC-13- MGI-11-62 (248.1-253.9)	WE	Rhyolite	18.1	18.0	0.06	0.4%	433	400	100	8%	24.1	23.4	0.75	3%
7	HC-7-MGI-10-48 (82.9-86.3)	WE	Calc-silicate	14.6	14.5	0.08	0.5%	17,641	17,100	1,619	3%	49.1	46.7	2.43	5%
6	HC-6-MGI-10-48 (45.7-50.3)	WE		3.57	3.50	0.07	1.9%	3,591	3,500	272	3%	30.6	30.0	0.56	2%
5	HC-5-MGI-10-41 (21.3-31.1)	WE	Schist	1.38	1.30	0.08	6.0%	1,813	1,500	313	17%	9.0	8.8	0.16	2%
9	HC-9-MGI-10-50 (76.2-82.3)	WE		7.55	7.50	0.05	0.7%	5,358	5,200	474	3%	37.4	33.4	3.97	11%
8	HC-8-MGI-10-48 (221.3-227.4)	-	Carbonate	5.66	5.60	0.06	1.1%	5,879	5,600	835	5%	22.3	20.4	1.86	8%
15	HC-15- MGI-13-S09 (0.00-0.93)	-	Spent Ore	9.04	9.00	0.04	0.5%	328	300	85	9%	72.1	70.8	1.30	2%
16	HC-16- MGI-13-S31 (4.65-5.57)	-		7.34	7.30	0.04	0.6%	3,913	3,400	1,537	13%	332	248	83.8	25%
17	HC-17- MGI-13-S41 (0.56-0.93)			4.25	4.20	0.05	1.1%	1,279	1,200	237	6%	76.8	74.8	1.96	3%

Table 10: Pre- and Post-HCT Multi-Element Results for the Phase 1 Humidity Cells (Selenium, Thallium and Zinc)

Cell	Sample ID	Mine Area	Material Type	Selenium				Thallium				Zinc			
				Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT	Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT	Head assay (mg/kg)	Residue assay (mg/kg)	Cum. release during HCT (mg/kg)	% mobilized during HCT
1	HC-1 -MGI-09-09 (43.6-49.7)	YP	Alaskite	1.2	<1	0.19	16%	0.82	0.78	0.04	5%	40	39	0.86	2%
12	HC-12- MGI-11-60 (157-165.5)	YP		1.2	<1	0.18	15%	1.57	1.53	0.04	2%	9	8	0.72	8%
14	HC-14- MGI-11-64 (56.5-63.4)	HF	Quartz Monzonite-Alaskite	1.2	1	0.21	17%	2.12	2.08	0.04	2%	51	50	0.74	1%
10	HC-10-MGI-10-51 (240.8-248.6)	HF		1.2	1	0.19	16%	1.27	1.23	0.04	3%	30	29	0.74	2%
2	HC-2-MGI-10-22 (21.6-25.9)	HF	Quartz Monzonite	1.2	1	0.18	15%	2.07	2.03	0.04	2%	56	55	0.73	1%
3	HC-3-MGI-10-23 (41.2-46)	YP		1.2	<1	0.19	16%	5.00	4.97	0.03	1%	46	45	0.76	2%
11	HC-11-MGI-11-60 (44.8-48.0)	WE	Diorite	1.2	<1	0.18	15%	0.85	0.81	0.04	4%	100	99	0.72	1%
4	HC-4-MGI-10-36 (67.1-78.0)	YP	Quartzite	1.2	1	0.18	15%	0.72	0.68	0.04	6%	21	20	0.66	3%
13	HC-13- MGI-11-62 (248.1-253.9)	WE	Rhyolite	1.2	<1	0.20	17%	1.07	1.03	0.04	4%	57	56	0.74	1%
7	HC-7-MGI-10-48 (82.9-86.3)	WE	Calc-silicate	1.2	1	0.19	16%	3.53	3.49	0.04	1%	38	37	0.82	2%
6	HC-6-MGI-10-48 (45.7-50.3)	WE		1.2	1	0.18	16%	0.79	0.75	0.04	5%	17	16	0.73	4%
5	HC-5-MGI-10-41 (21.3-31.1)	WE	Schist	1.2	1	0.24	19%	0.66	0.61	0.05	8%	28	27	0.97	3%
9	HC-9-MGI-10-50 (76.2-82.3)	WE		1.2	<1	0.19	16%	0.77	0.73	0.04	5%	71	70	0.76	1%
8	HC-8-MGI-10-48 (221.3-227.4)	-	Carbonate	1.2	1	0.18	15%	1.43	1.39	0.04	3%	21	20	0.86	4%
15	HC-15- MGI-13-S09 (0.00-0.93)	-	Spent Ore	8.1	8	0.14	2%	0.88	0.85	0.03	3%	31	30	0.63	2%
16	HC-16- MGI-13-S31 (4.65-5.57)	-		3.2	3	0.16	5%	1.49	1.46	0.03	2%	21	20	0.62	3%
17	HC-17- MGI-13-S41 (0.56-0.93)			2.2	2	0.18	8%	1.13	1.10	0.03	2%	22	21	0.68	3%

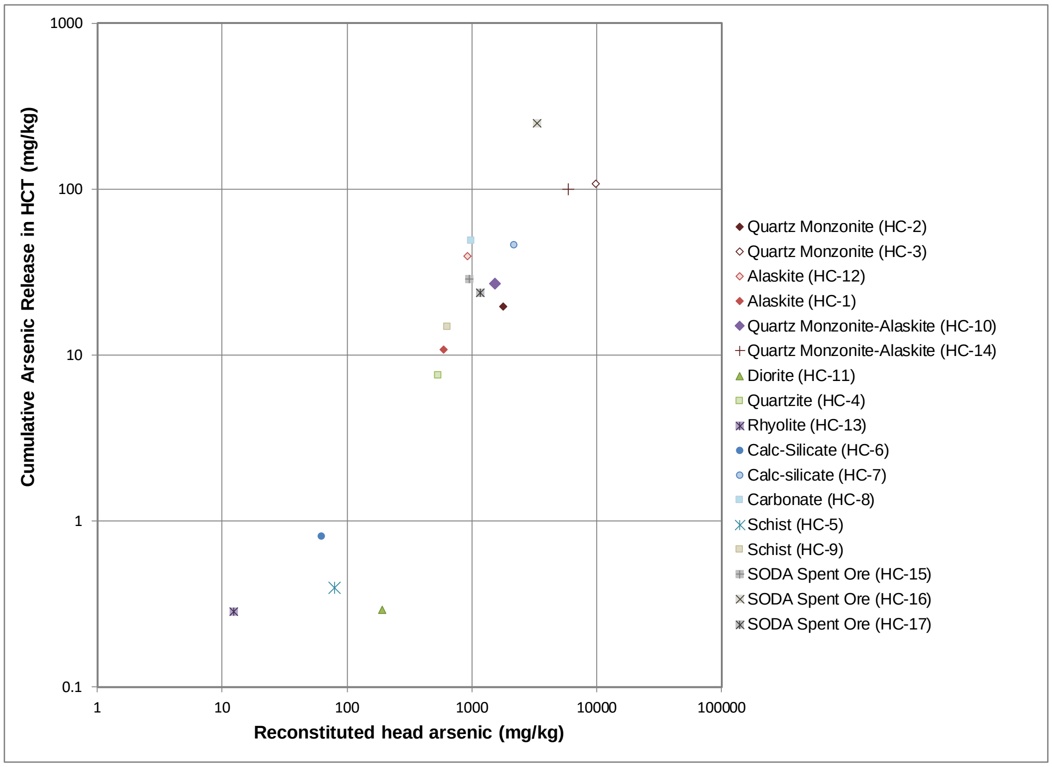

Figure 3: Scatter Plot of Total Arsenic vs. HCT Arsenic Release for the Phase 1 Humidity Cells

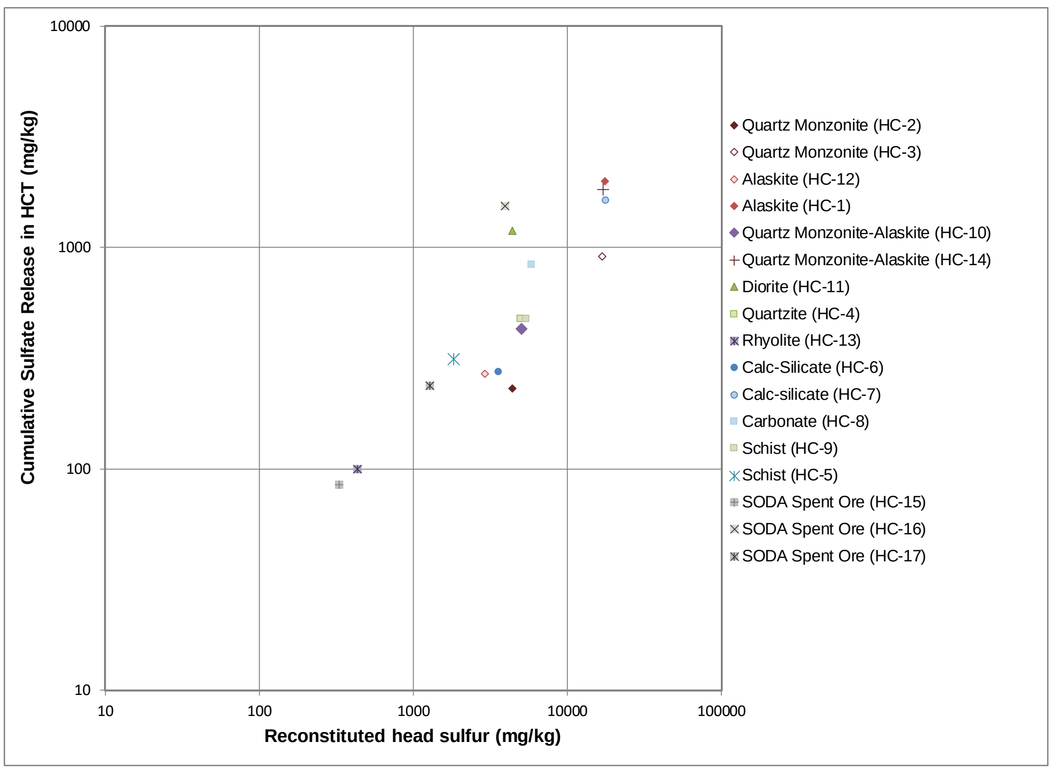

Figure 4: Scatter Plot of Total Sulfur vs. HCT Sulfate Release for the Phase 1 Humidity Cells

4.4.4 Mineralogical Analysis

Seven samples of post-leach development rock material were submitted to Petrolab (UK) for mineralogical analysis, including optical microscopy, SEM and XRD. The primary purpose of the mineralogical assessment was to determine the mineralogical controls on acid generation and metal(loid) release. The samples selected are summarized in Table 11, including the rationale for selection. The results are summarized in Table 12and the full mineralogy report is provided in Appendix B.

From the optical microscopy study, the samples primarily comprise quartz, microcline, albite and illite, with minor (2-10%) muscovite, biotite, calcite and ferroan dolomite, and trace (<2%) pyrite, arsenopyrite, chlorite, goethite and goethite. Trace chalcopyrite and pyrrhotite were also observed in Cell 7 (representing Calc-Silicate material from the West End deposit).

The pyrite is typically coarser-grained than the arsenopyrite, generally present at grain sizes from 300 µm to 500 µm. Arsenopyrite is finer-grained and generally present in the size range from 50 µm to 150µm. The pyrite and arsenopyrite are closely associated with one another, often with the arsenopyrite forming fine-grained rims around the pyrite.

From the optical microscopy study, sulfides within the post-leach HCT samples were found to be variably encapsulated within muscovite and quartz (Figure 5). Encapsulation rates were generally high in the coarse (+2mm) size fraction, but sulfides showed minor to moderate liberation in the fine (-2mm) size fraction. Despite the slightly greater sulfide liberation in the -2mm size fraction, the majority of exposed sulfide grains within the post-leach HCT samples show very little evidence for oxidation. This is supported by the circum-neutral effluent pH and generally low iron and sulfate concentrations in the HCT leachates. In some instances, the low levels of reactivity may relate to the euhedral habit of the sulfides, which increases the mineral stability and results in slow reaction rates.

The post-leach HCT samples all contain measurable carbonate (between 1 and 67% calcite plus dolomite by volume), which supports the fact that the HCTs still had significant NP remaining when the cells were terminated. Furthermore, mineral quantification records an excess of carbonate minerals compared to sulfide minerals. This, coupled with significant rates of sulfide encapsulation likely explains the neutral effluent chemistry in the HCTs. Despite the circum-neutral effluent chemistry, arsenic was released at elevated concentrations from several of the humidity cells. From the mineralogy study, arsenical pyrite and arsenopyrite were identified as the likely sources of arsenic release.

SEM analysis indicates that much of the dolomite is ferroan (i.e., iron-bearing), with some iron contents close to the ankerite/ferroan dolomite compositional space. This will result in a slightly reduced neutralizing potential in the samples.

Table 11: Post-Leach Phase 1 HCT Samples Selected for Mineralogy

Cell	Mine Area	Rock Type	Pyritic Sulfur (%)	NNP (kg $CaCO_3$ eq/t)	NPR	NAG pH (s.u.)	NAG (kg H_2SO_4 eq/t)	Rationale
1	HF	Alaskite	1.2	18	1.5	7.91	0	High sulfide content, but uncertain acid generating behaviour from ABA. Sample remained neutral in HCT.
12	YP		0.18	3	1.6	7.48	0	High rate of NP consumption.
14	YP	Quartz Monzonite - Alaskite	1.3	-5	0.9	2.91	15.8	Highest total sulfur and highest sulfate release during HCT.
3	HF	Quartz Monzonite	1.2	-9	0.8	2.78	17.6	Predicted to be PAG from static testwork. Lowest NPR, highest NAG value. Highest arsenic release.
4	WE	Quartzite	0.26	625	78.2	7.91	0	Highest NP.
5	WE	Schist	0.06	15	8.8	4.5	0	Highest iron release during HCT
7	WE	Calc-silicate	1.4	122	3.7	8.28	0	Highest sulfide content, but also high NP.

Table 12: Development Rock/Ore Post-Leach Phase 1 HCT Mineralogy Summary

Target minerals		Sample details and relative mineral abundance[1]							Typical composition
		MGI-09-09 (143-163) HC-1	MGI-10-23 (135-151) HC-3	MGI-10-36 (220-256) HC-4	MGI-10-48 (272-283) HC-7	MGI-10-51 (790-815.5) HC-10	MGI-11-60 (513-543) HC-12	MGI-11-64 (185.5-208) HC-14	
Sulfide minerals	Pyrite	⊡	□	□	□	□	□	⊡	FeS_2
	Arsenopyrite	□	□	□	□	□	□	□	FeAsS
	Stibnite								Sb_2S_3
	Chalcopyrite				□				$CuFeS_2$
	Pyrrhotite				□				$Fe_{1-x}S$
Secondary As- and Sb-bearing minerals	Schneiderhöhnite / Scorodite								$Fe_4As_5O_{13}$ / $FeAsO_4.2H_2O$
	Amorphous Fe-arsenates		□						See footnotes[2]
Gangue minerals		**MGI-09-09 (143-163) HC-1**	**MGI-10-23 (135-151) HC-3**	**MGI-10-36 (220-256) HC-4**	**MGI-10-48 (272-283) HC-7**	**MGI-10-51 (790-815.5) HC-10**	**MGI-11-60 (513-543) HC-12**	**MGI-11-64 (185.5-208) HC-14**	**Typical Composition**
Bulk silicate minerals	Quartz	■	■	■	■	■	■	■	SiO_2
	Microcline	■	■	⊡	■	■	■	■	$KAlSi_3O_8$
	Albite	■				■	■	■	$Na(AlSi_3O_8)$
Clay / mica minerals	Illite	■	■	⊡	■	⊡	⊡	■	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$
	Muscovite	⊡	⊡	⊡	⊡	⊡	⊡	⊡	$KAl_2(Si_3Al)O_{10}(OH)_2$
	Chlorite		□	□	⊡				$Mg_5Al(AlSi_3O_{10})(OH)_8$
	Kaolinite			□	□				$Al_2Si_2O_5(OH)_4$
	Biotite					⊡			$KMg_3(Si_3Al)O_{10}(OH)_2$
Carbonate minerals	Ferroan Dolomite	⊡	⊡	■	■	□			$Ca(Mg,Fe)(CO_3)_2$
	Calcite	⊡		□		□	□	□	$CaCO_3$
	Siderite		□						$FeCO_3$
Accessory phases	Goethite[3]	□	□	□	□	□	□	□	FeOOH
	Accessory Minerals	□	□	□	□	□	□	□	See footnotes[4]

1. Relative phase abundance: ■ major (>=10%), ⊡ minor (>=2<10%), □ trace (<2%). Quantification of the differing mineralogical phases for each sample are provided in the sample descriptions that follow this table.

2. Amorphous Fe-arsenates contain variable and inconsistent As:Fe ratios, along with frequent ancillary elemental content. The dominant elemental content is iron, arsenic and oxygen often with arsenic and iron at similar wt% proportions. Other elements sometimes present at concentrations between 1-6 wt% included phosphorous, calcium and antimony.

3. Goethite sometimes contained minor amounts of arsenic detectable by SEM analysis. This is likely to be arsenic content adsorbed to the surface of the mineral.

4. Accessory minerals were observed during SEM analysis and refer to discrete rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, barite, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases

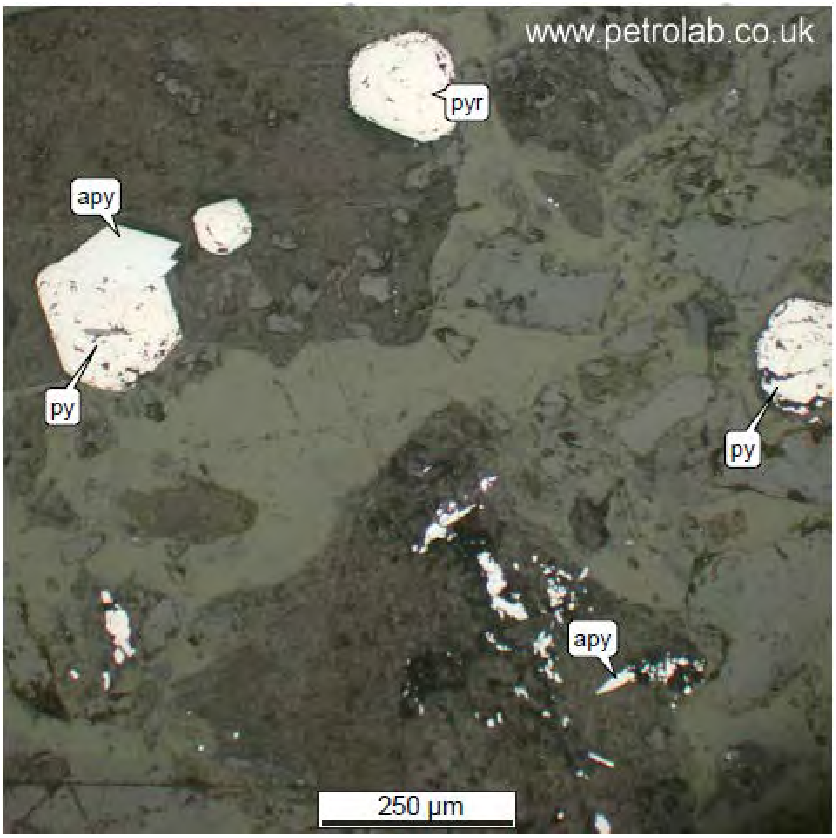

Figure 5: Photomicrograph of Post-Leach HC-3

Sample shows pyrite (py) in partially encapsulated and liberated textural developments. Associated with the pyrite is arsenopyrite (apy) with a generally higher degree of encapsulation

5 Summary

A first phase of kinetic testwork has been undertaken as part of ARDML assessment for Stibnite project, and has included the testing of 14 samples of development rock and three samples of spent ore from the SODA to determine the long-term leaching behavior of these materials. The cells were operated for a minimum of 116 weeks and a maximum of 184 weeks and have now been terminated with approval from the USFS.

All cells produced circum-neutral to moderately alkaline pH leachates (pH 6.5 to 9) throughout the course of the humidity cell testwork and effluent pH was generally stable, indicating no onset of acid generation.

Metal release from the HCTs was generally low throughout the testwork period, however a few constituents are mobile under the neutral to alkaline pH conditions. In particular arsenic, antimony and aluminum were consistently leached at concentrations above the water quality criteria. In addition, manganese, selenium and sulfate are also occasionally elevated above the water quality criteria for some samples, and copper and lead are sporadically elevated above their respective water quality criteria.

The termination testwork results support the geochemical behavior observed during the humidity cell testwork, with the generally low amount of sulfide oxidation reflecting the slow weathering rates of the Stibnite materials. In all cases less than 15% of the original neutralizing potential was consumed during the test, indicating that significant acid buffering/neutralizing potential still exists in the samples.

The Phase 2 humidity cell testwork is ongoing. Laboratory data (pH, EC, sulfate, iron, alkalinity) are available through week 53 (HC-18, HC-19 and HC-20), week 51 (HC-21, HC-22, HC-23 and HC-24) or week 18 (HC-25) and Profile II leachate analysis results are available through week 48/44/12. The results of the Phase 2 program to date have been provided in a supplemental technical report (SRK, 2018).

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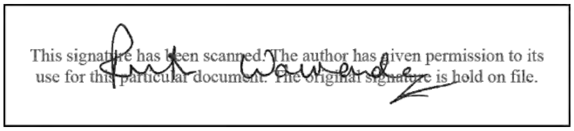
Prepared by



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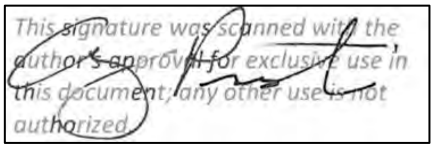
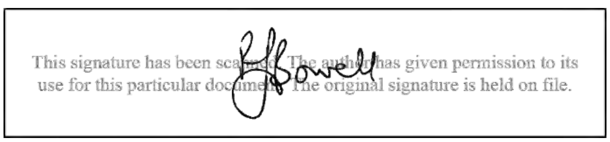
Senior Consultant (Geochemistry)



Amy Prestia, MSc, P.G.
Principal Consultant (Geochemistry)

Reviewed by



Eur. Geol. Rob Bowell PhD, CChem, CGeol
Corporate Consultant (Geochemistry)

All data used as source material plus the text, tables, figures, and attachments of this document have been reviewed and prepared in accordance with generally accepted professional engineering and environmental practices.

Appendix A
Scatter Plots of Sulfide Sulfur vs. Arsenic

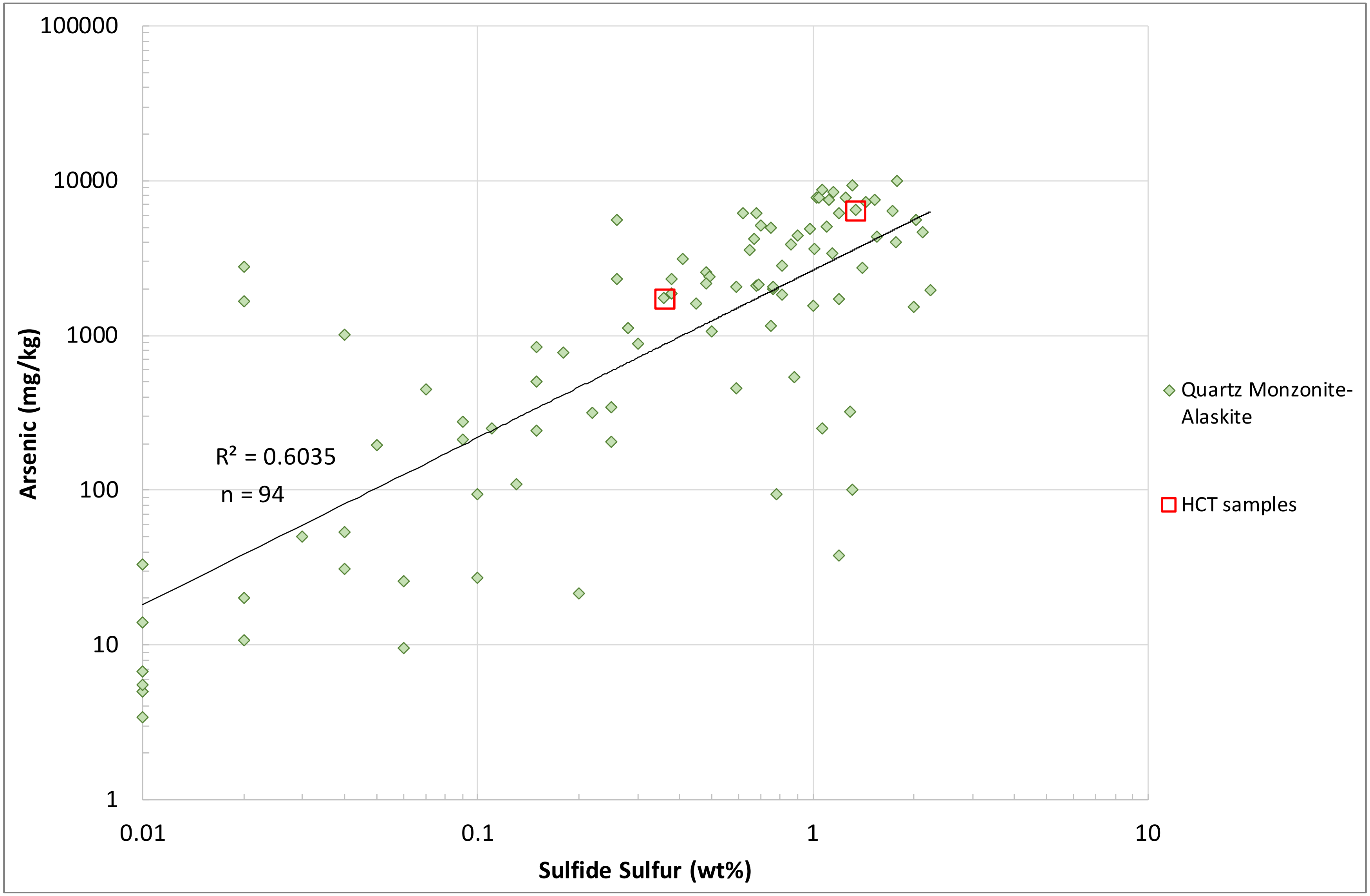


Figure A1: Scatter Plot of Sulfide Sulfur vs. Arsenic: Quartz Monzonite-Alaskite

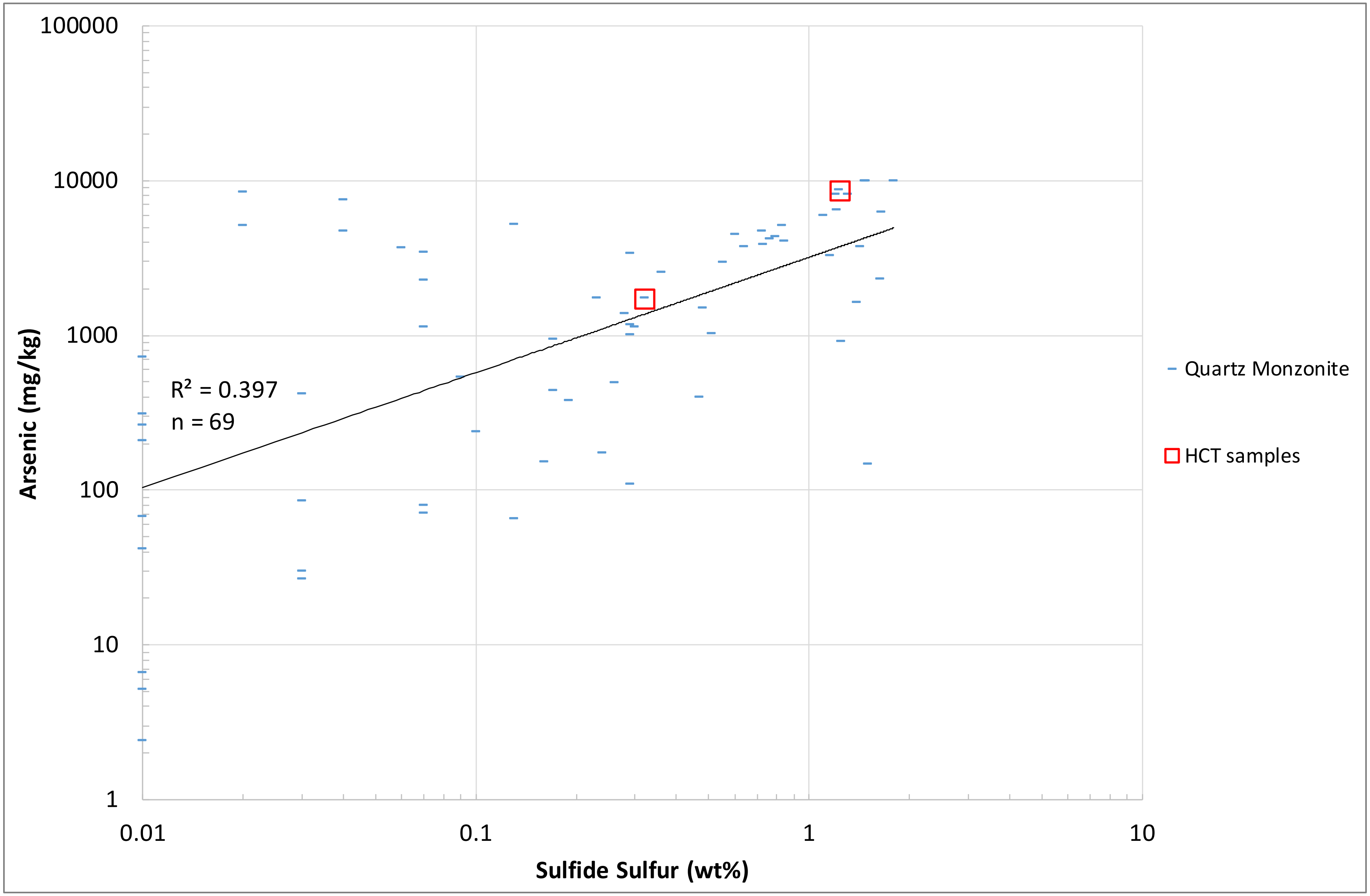


Figure A2: Scatter Plot of Sulfide Sulfur vs. Arsenic: Quartz Monzonite

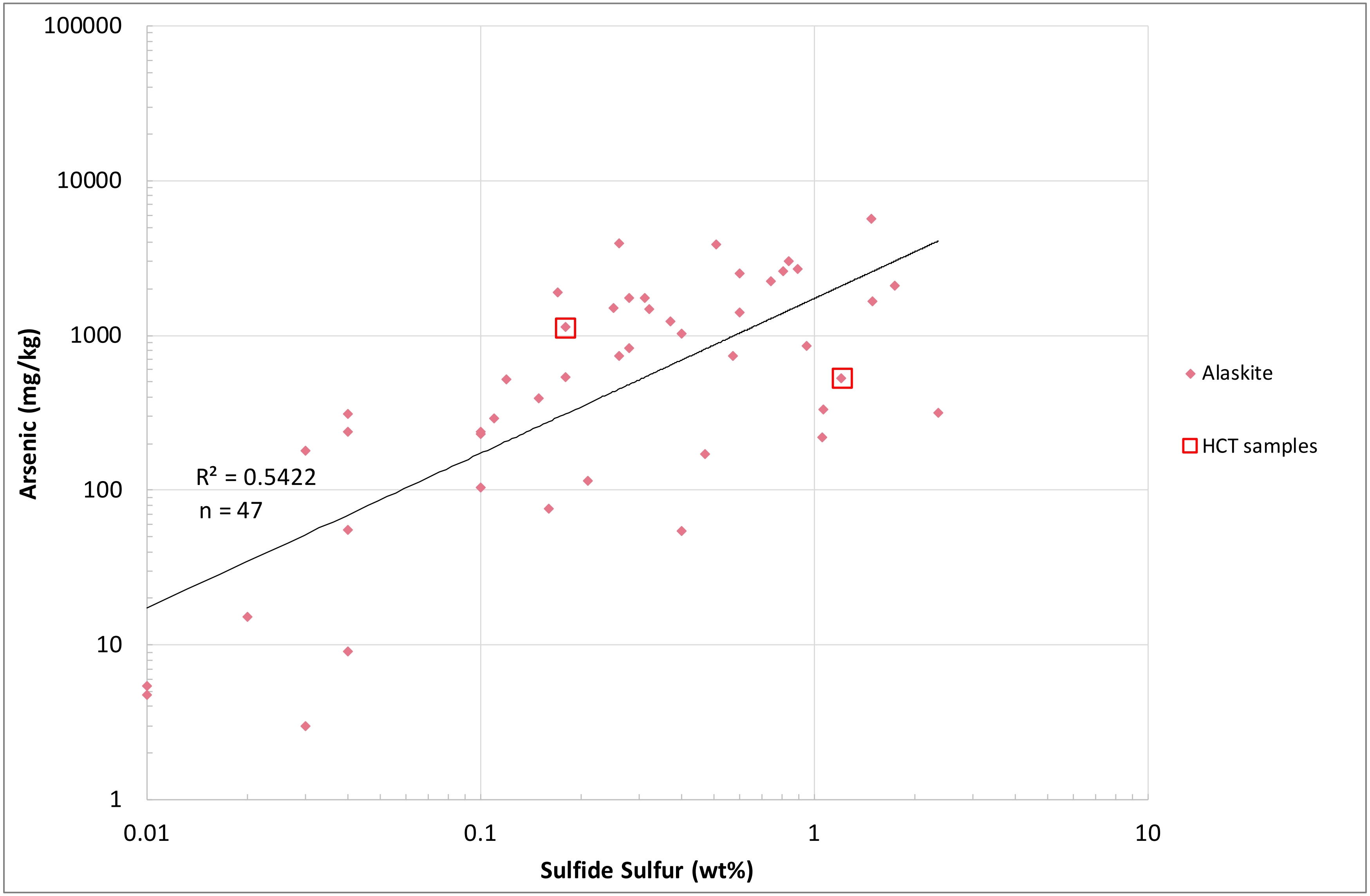


Figure A3: Scatter Plot of Sulfide Sulfur vs. Arsenic: Alaskite

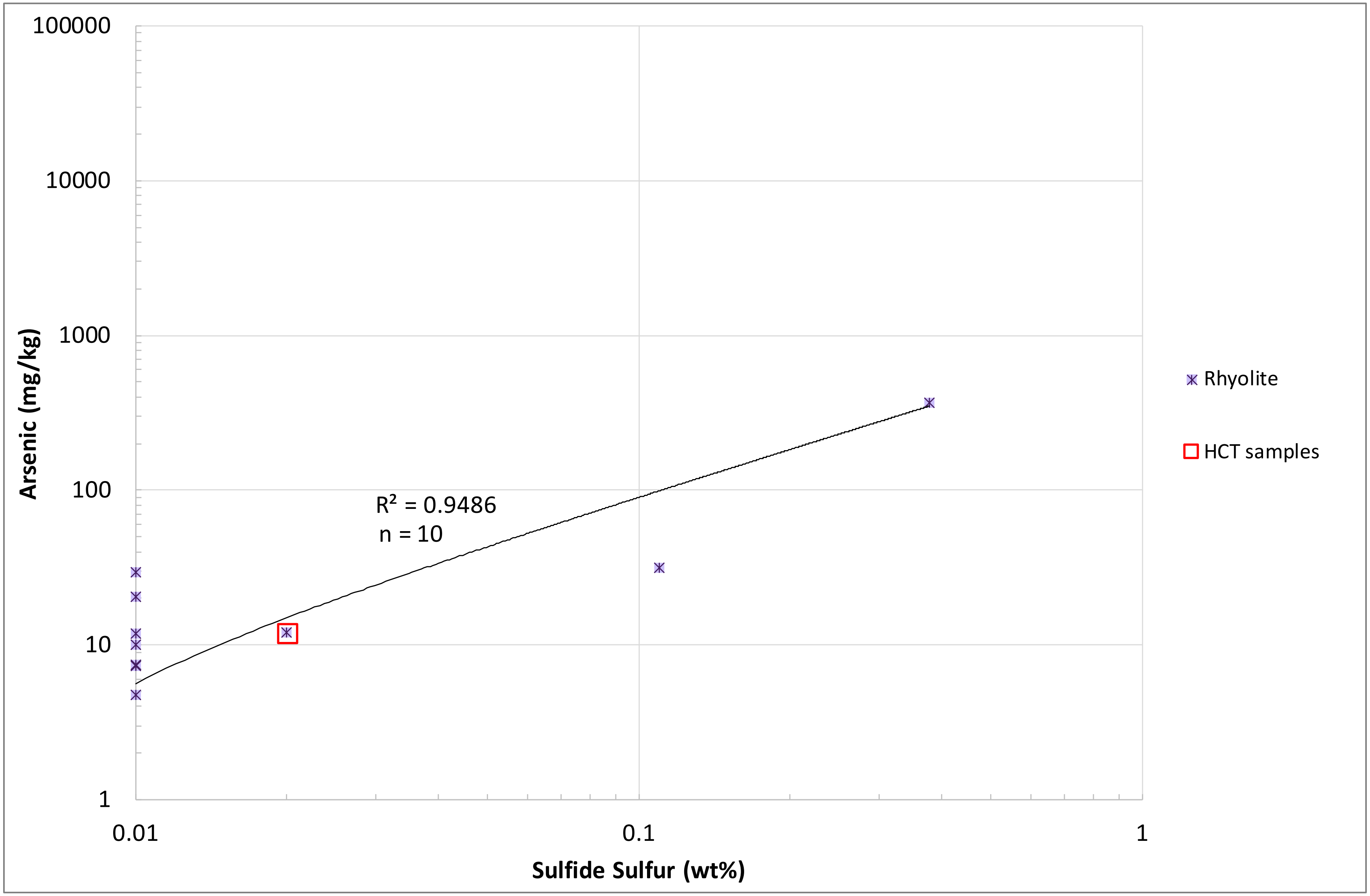


Figure A4: Scatter Plot of Sulfide Sulfur vs. Arsenic: Rhyolite

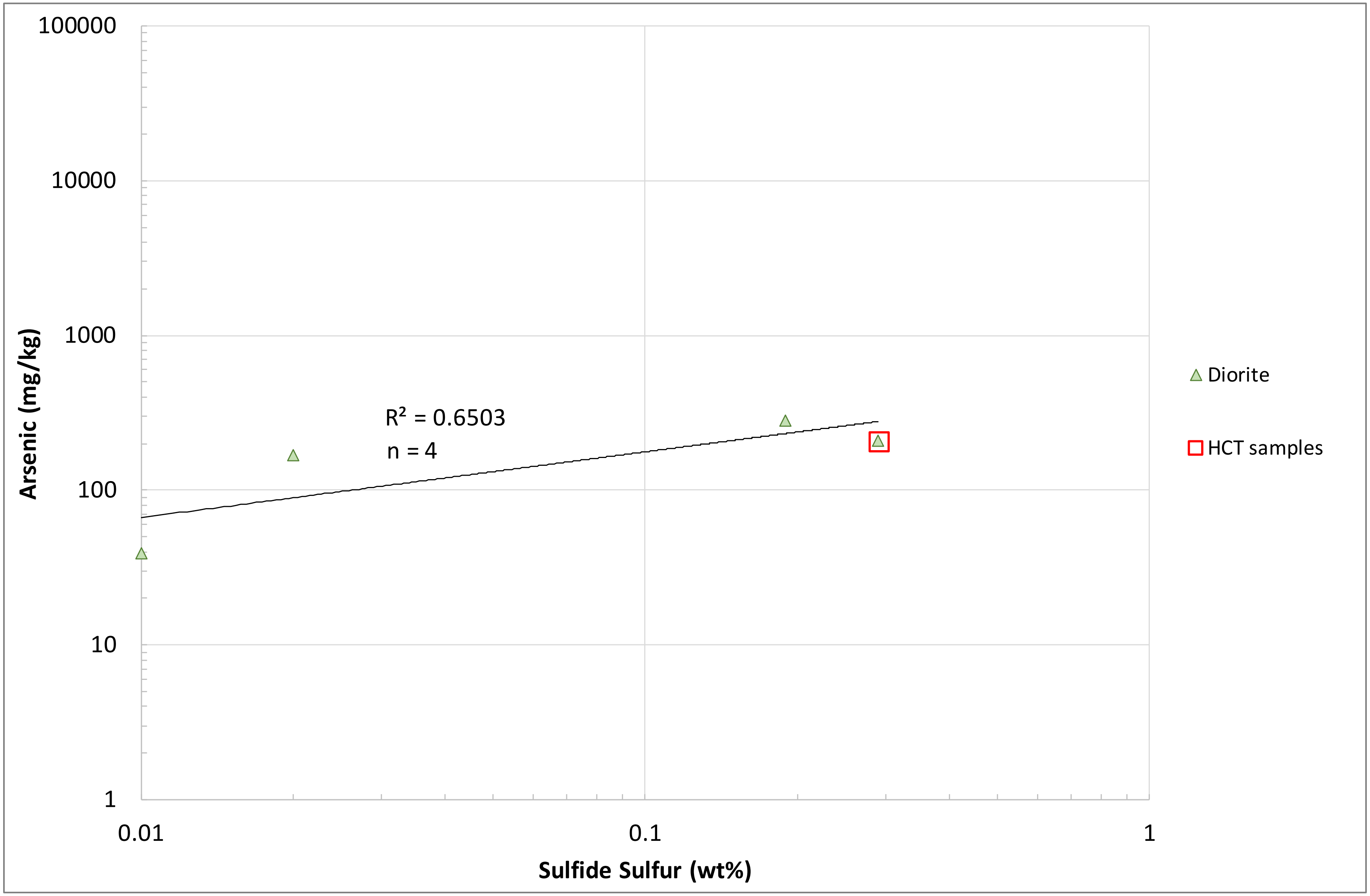


Figure A5: Scatter Plot of Sulfide Sulfur vs. Arsenic: Diorite

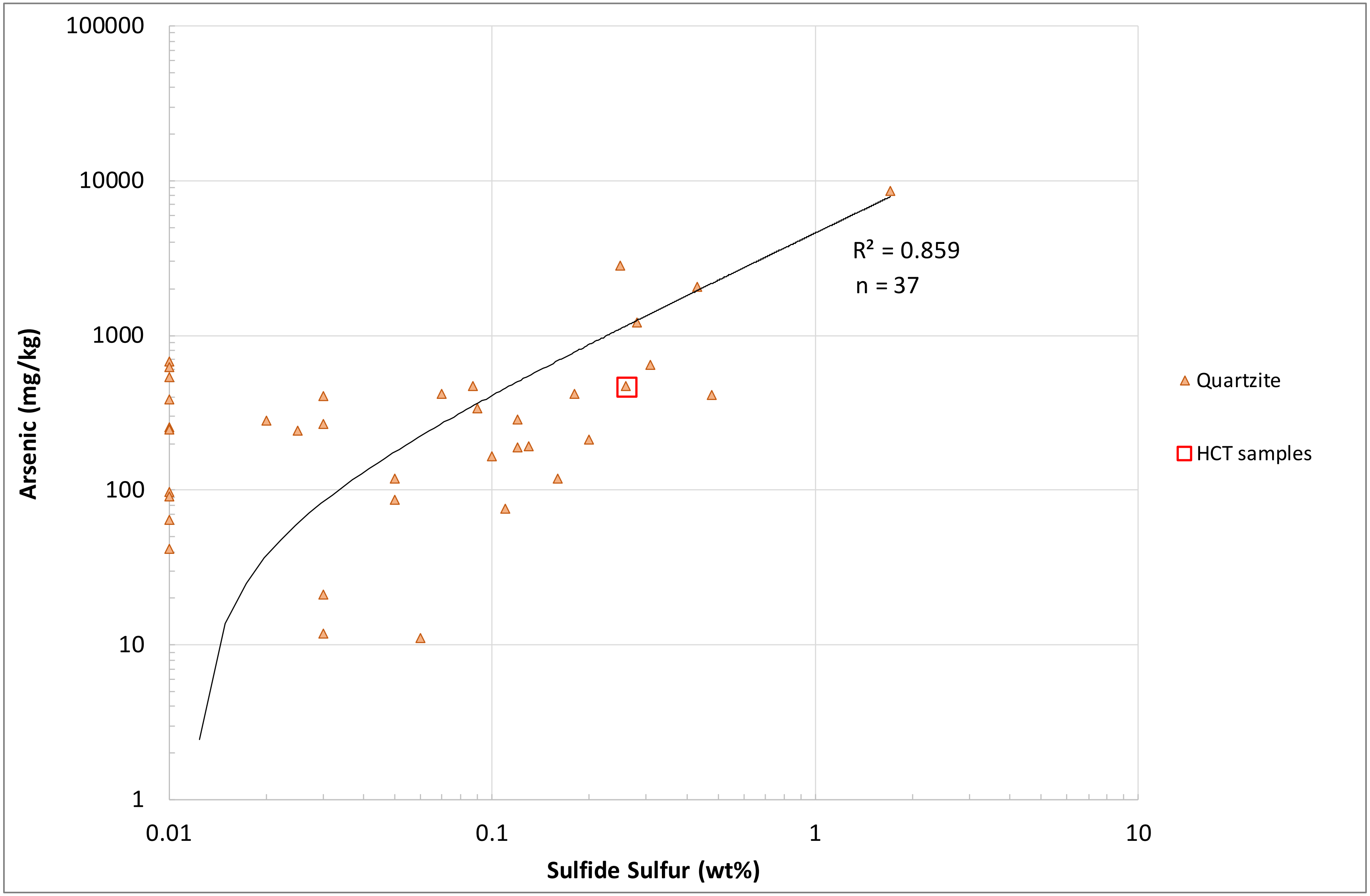


Figure A6: Scatter Plot of Sulfide Sulfur vs. Arsenic: Quartzite

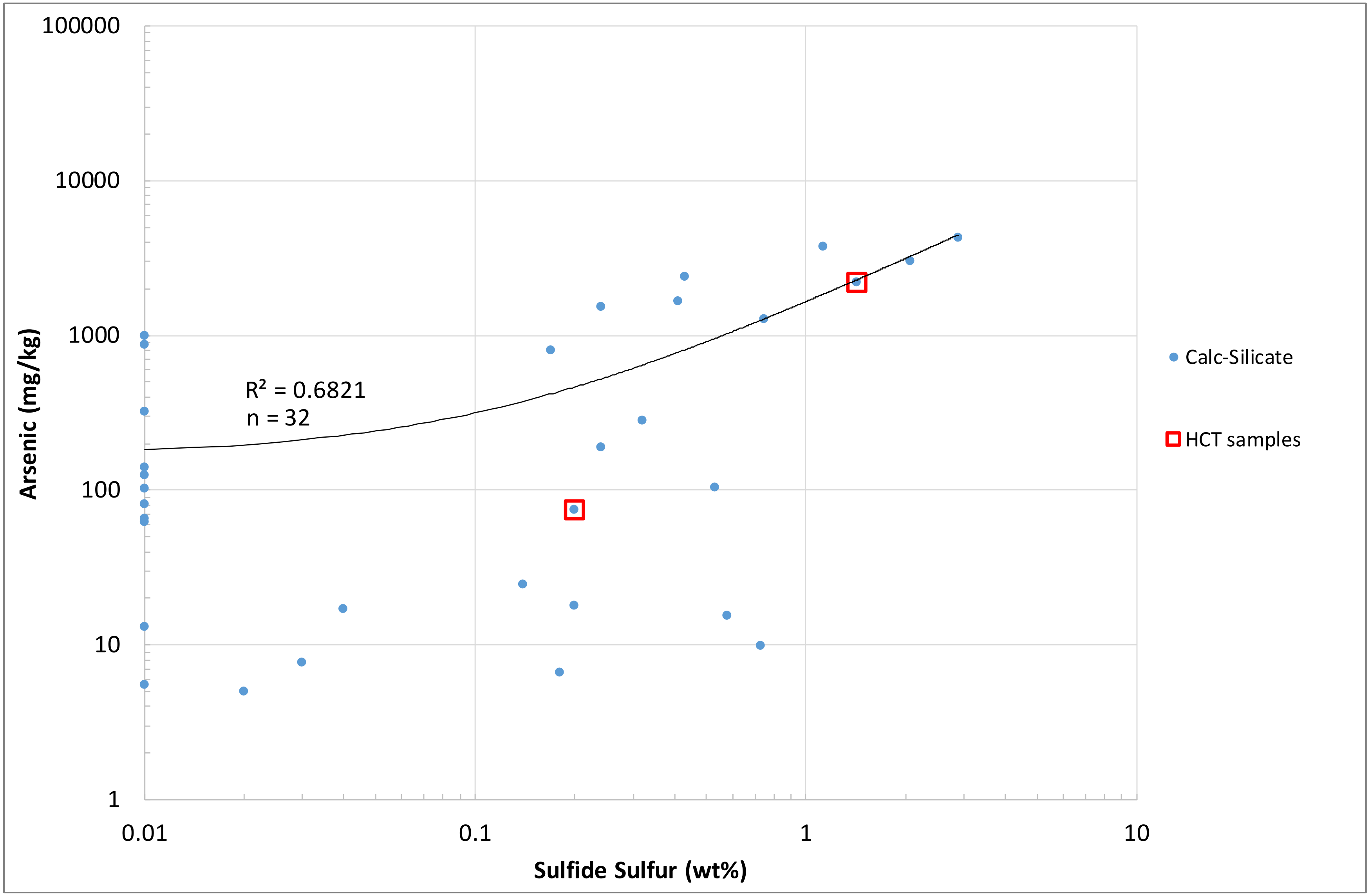


Figure A7: Scatter Plot of Sulfide Sulfur vs. Arsenic: Calc-Silicate

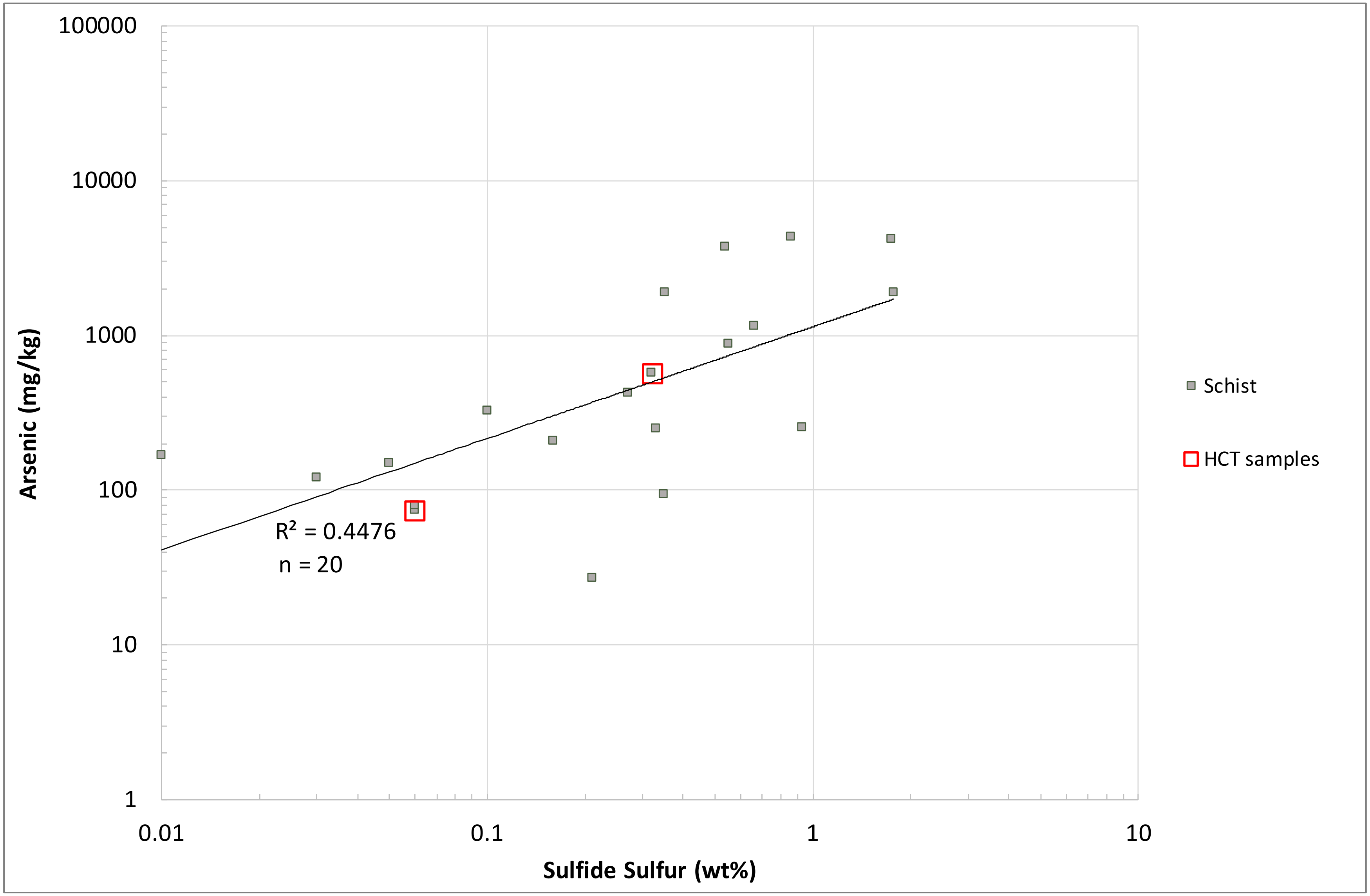


Figure A8: **Scatter Plot of Sulfide Sulfur vs. Arsenic: Schist**

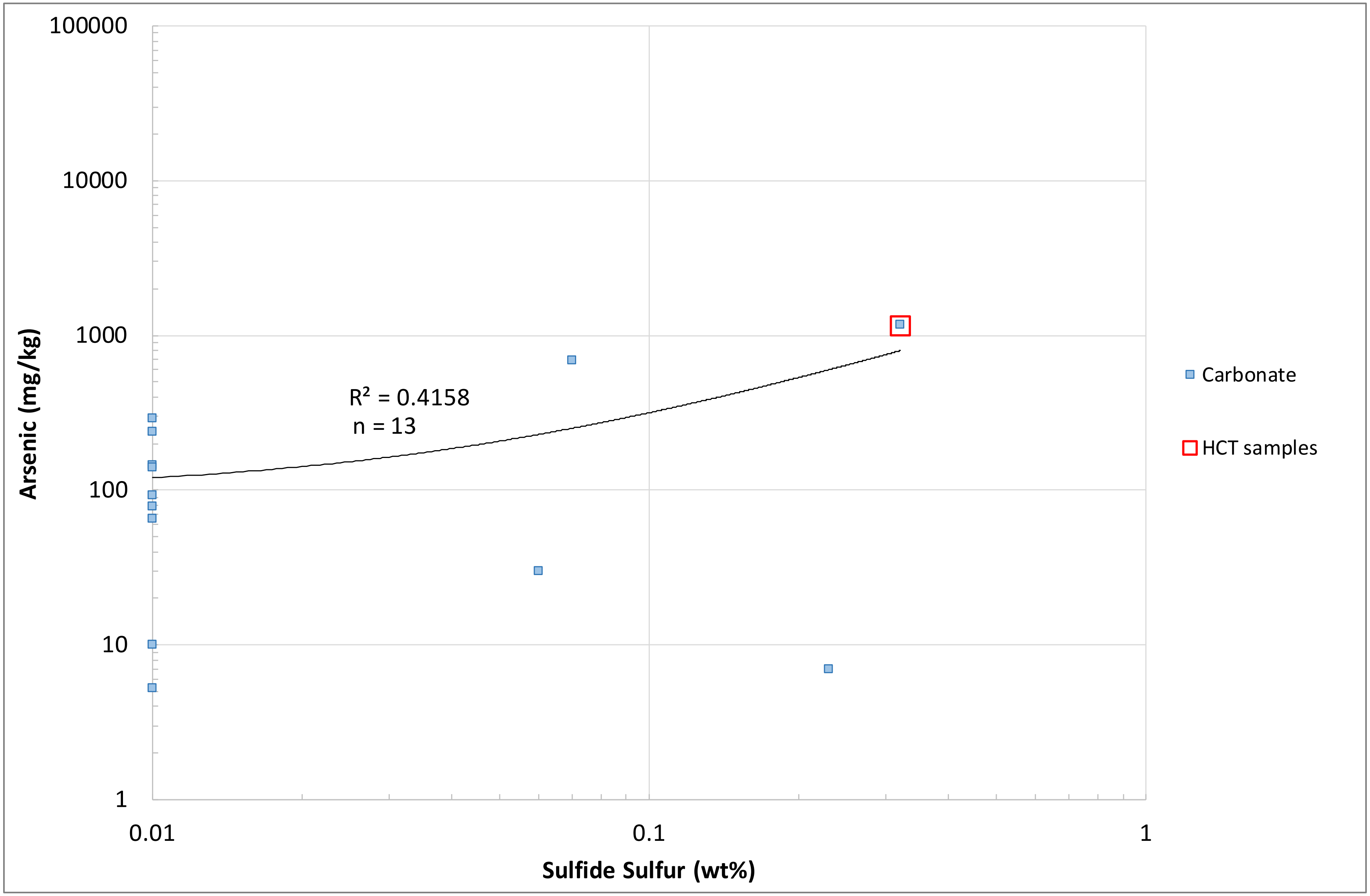


Figure A9: Scatter Plot of Sulfide Sulfur vs. Arsenic: Carbonate

Appendix B

Phase 1 HCT Time-Series Plots

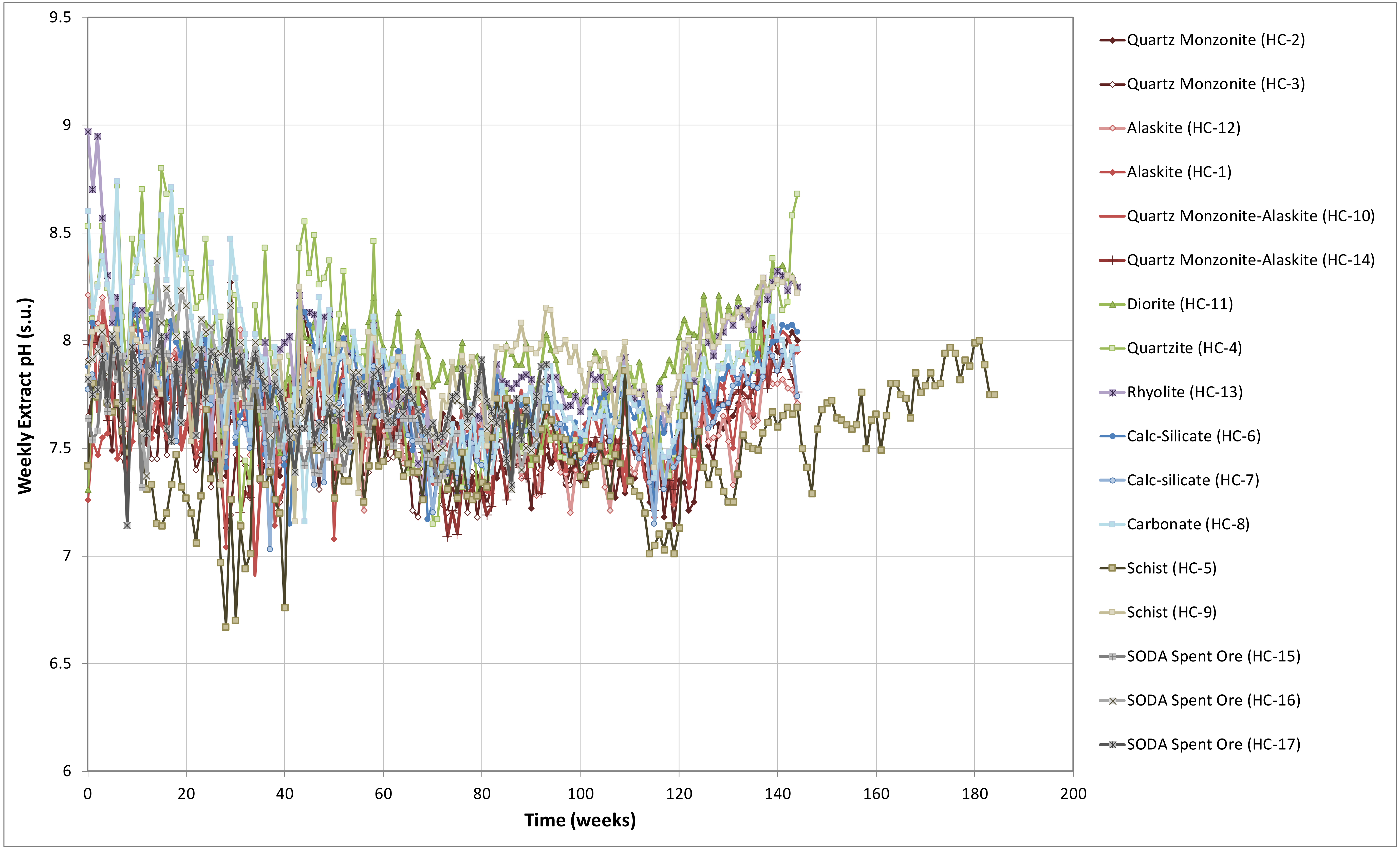


Figure B10: Phase 1 HCT Effluent pH

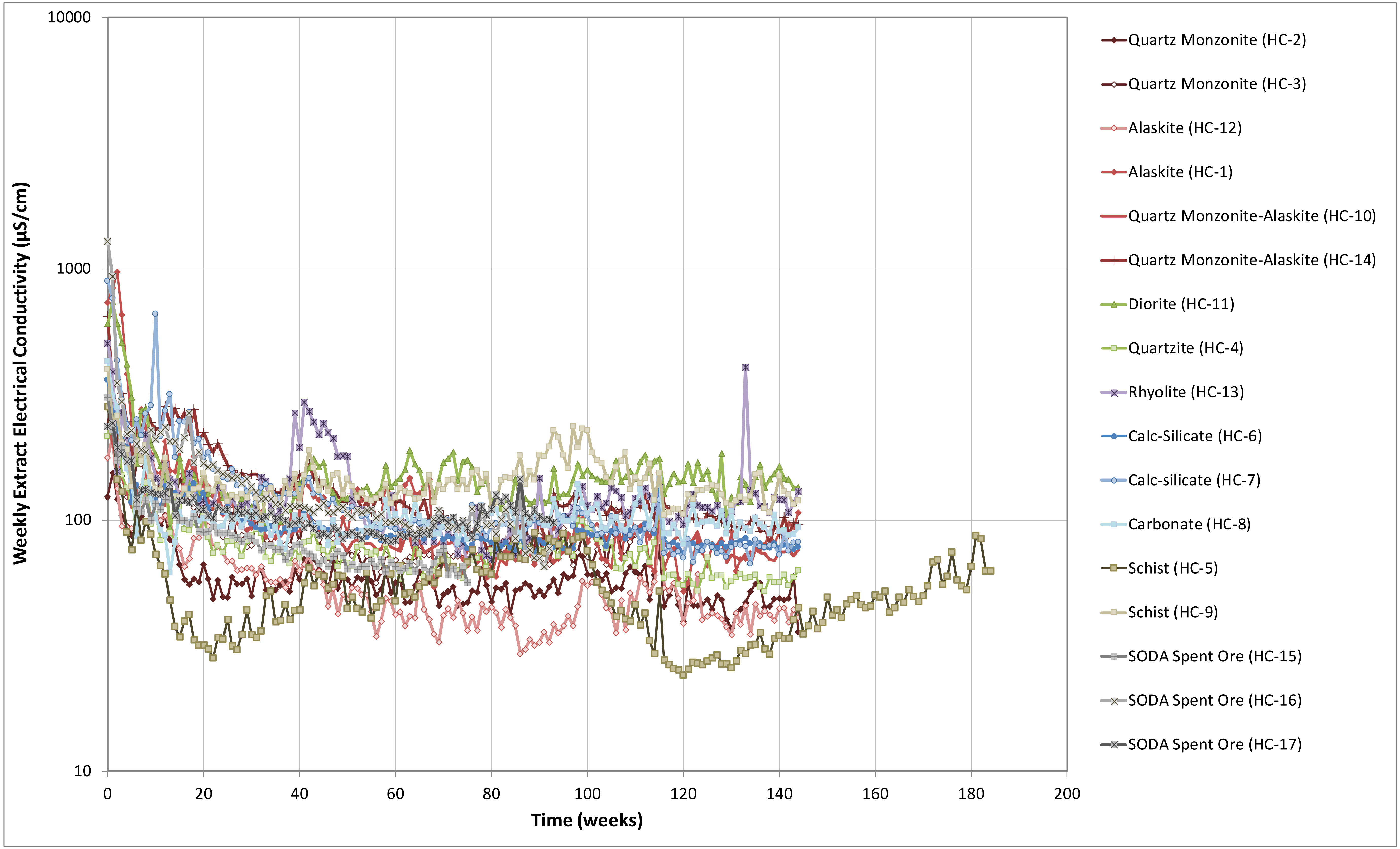


Figure B11: Phase 1 HCT Effluent Electrical Conductivity

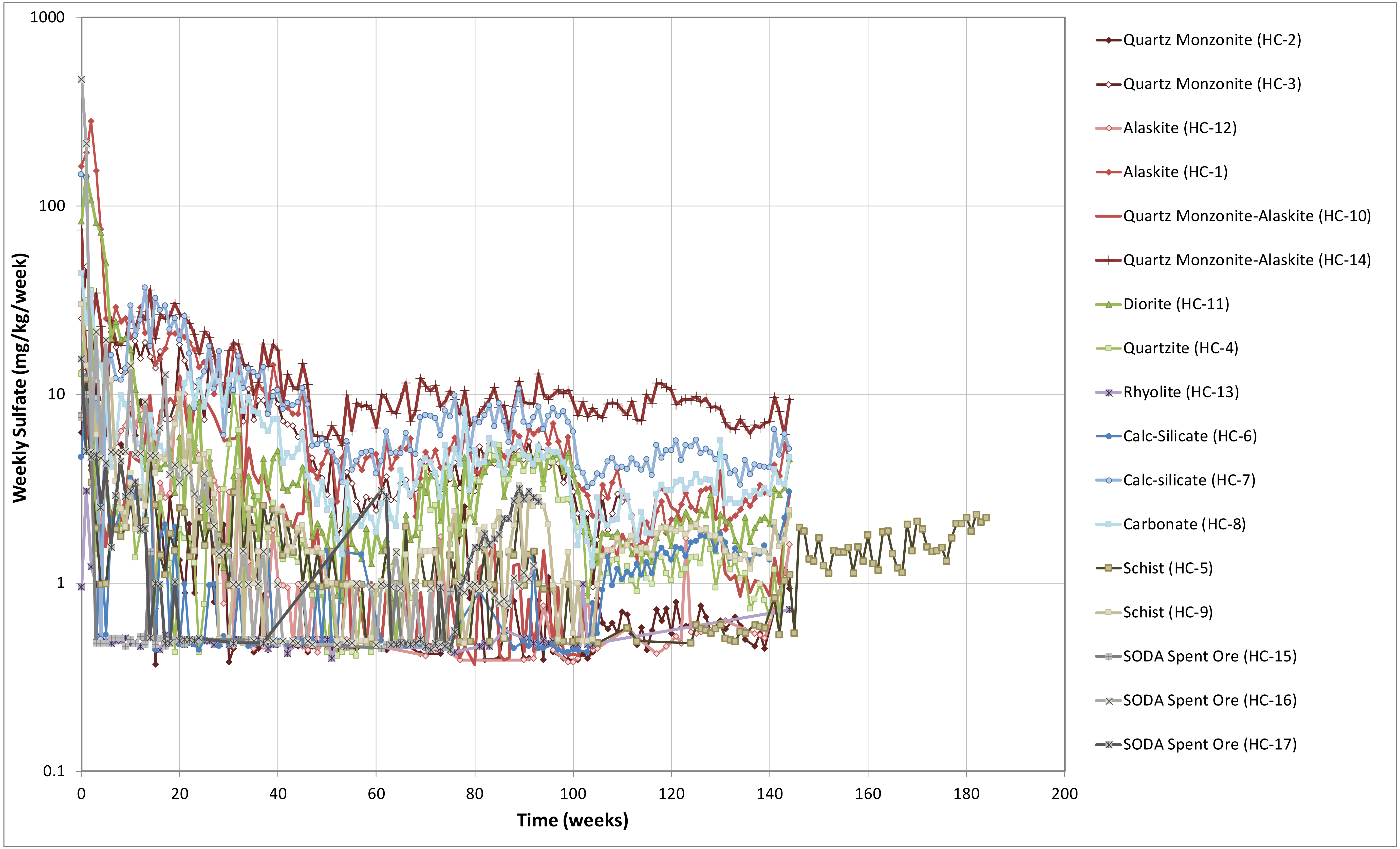


Figure B12: Phase 1 HCT Effluent Sulfate

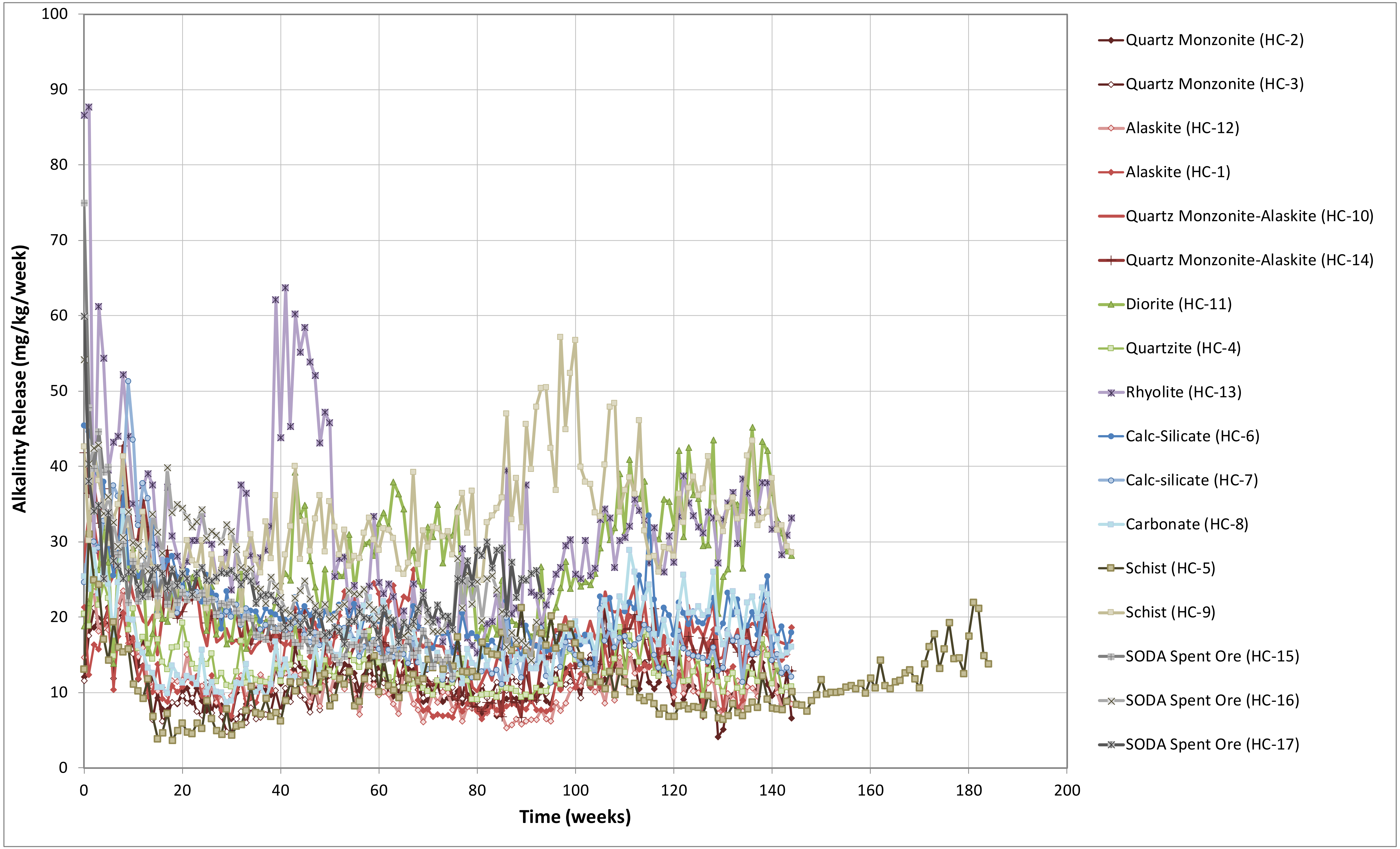


Figure B13: Phase 1 HCT Effluent Alkalinity

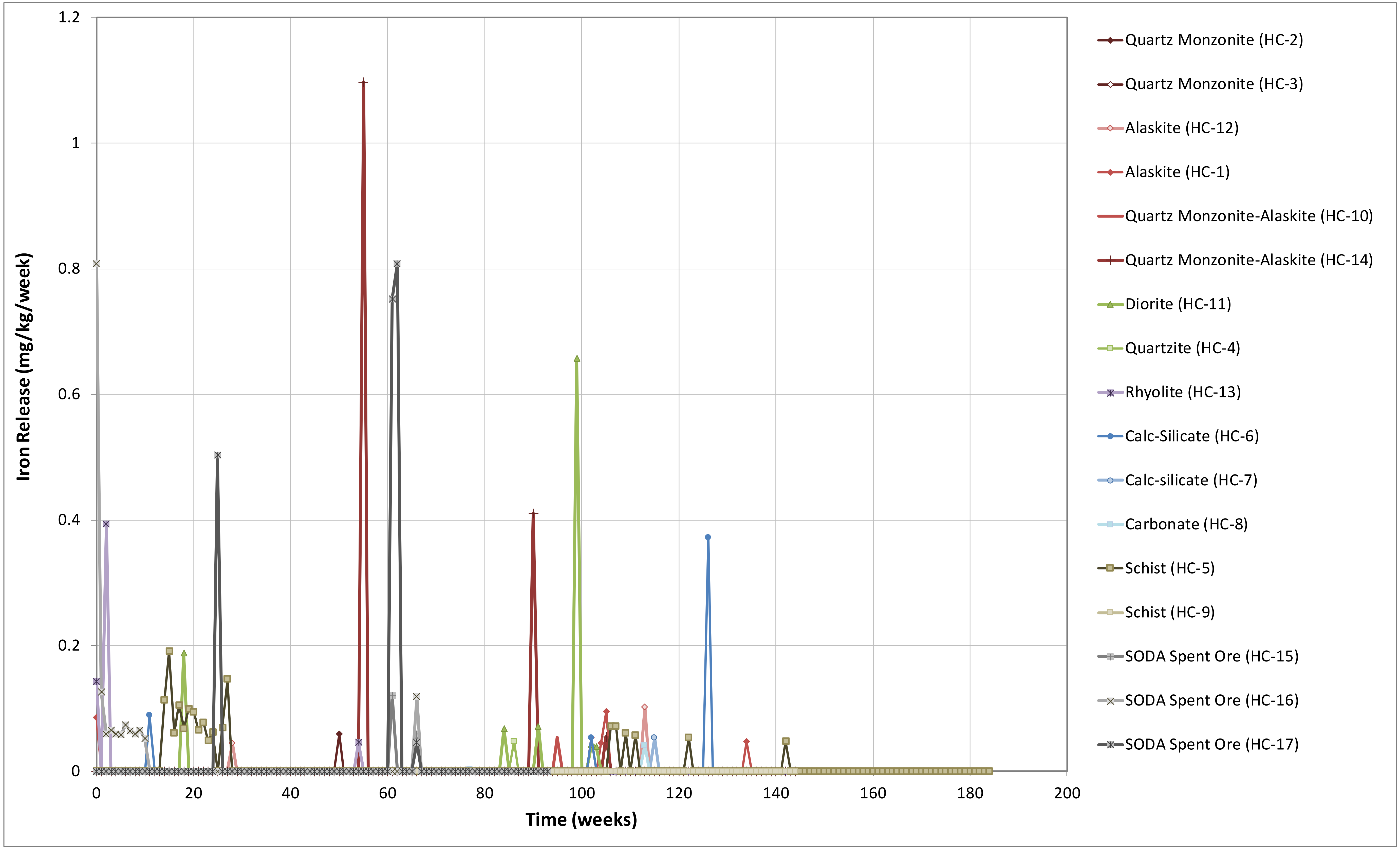


Figure B14: Phase 1 HCT Effluent Iron

Figure B15: **Phase 1 HCT Arsenic**

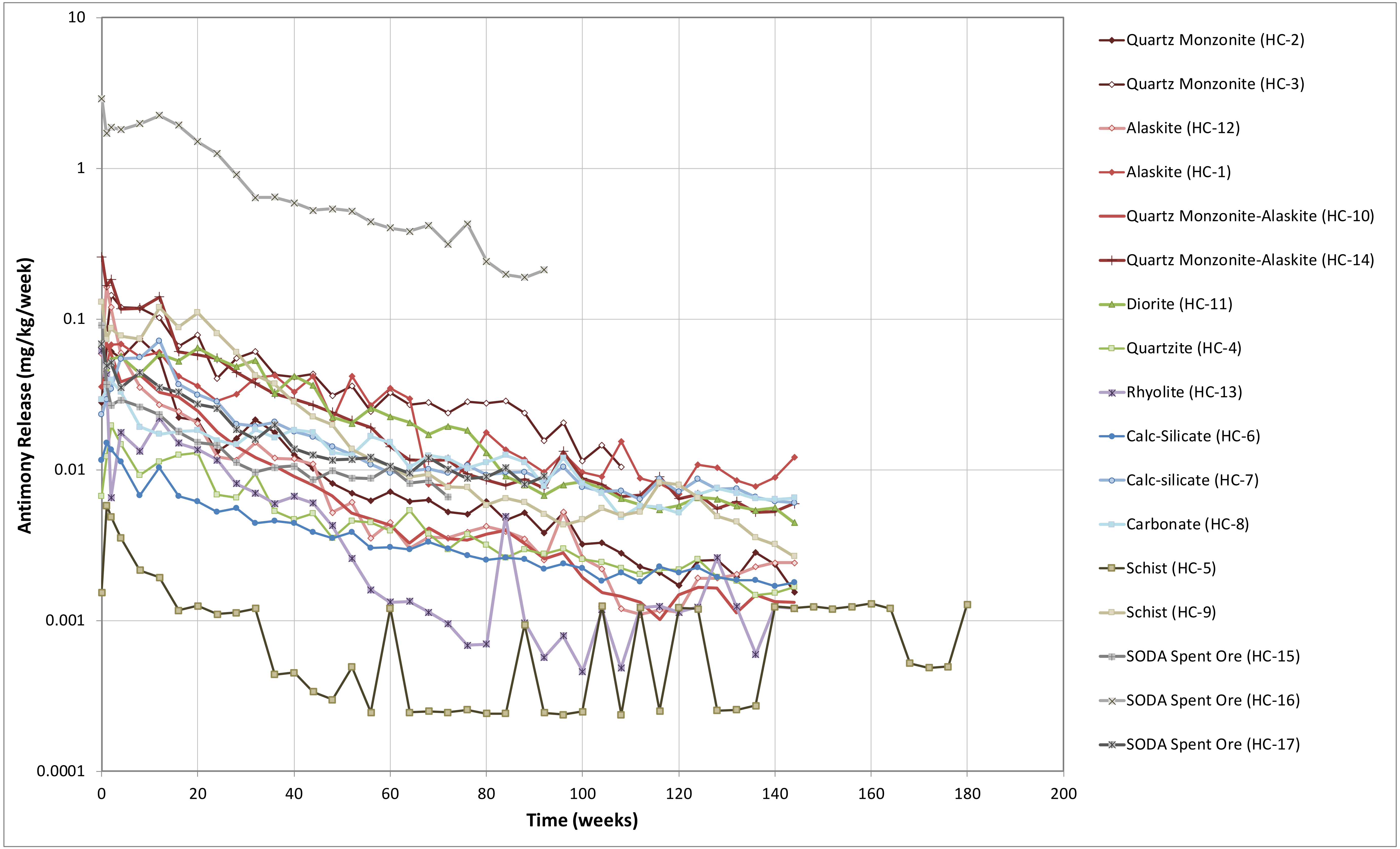


Figure B16: Phase 1 HCT Effluent Antimony

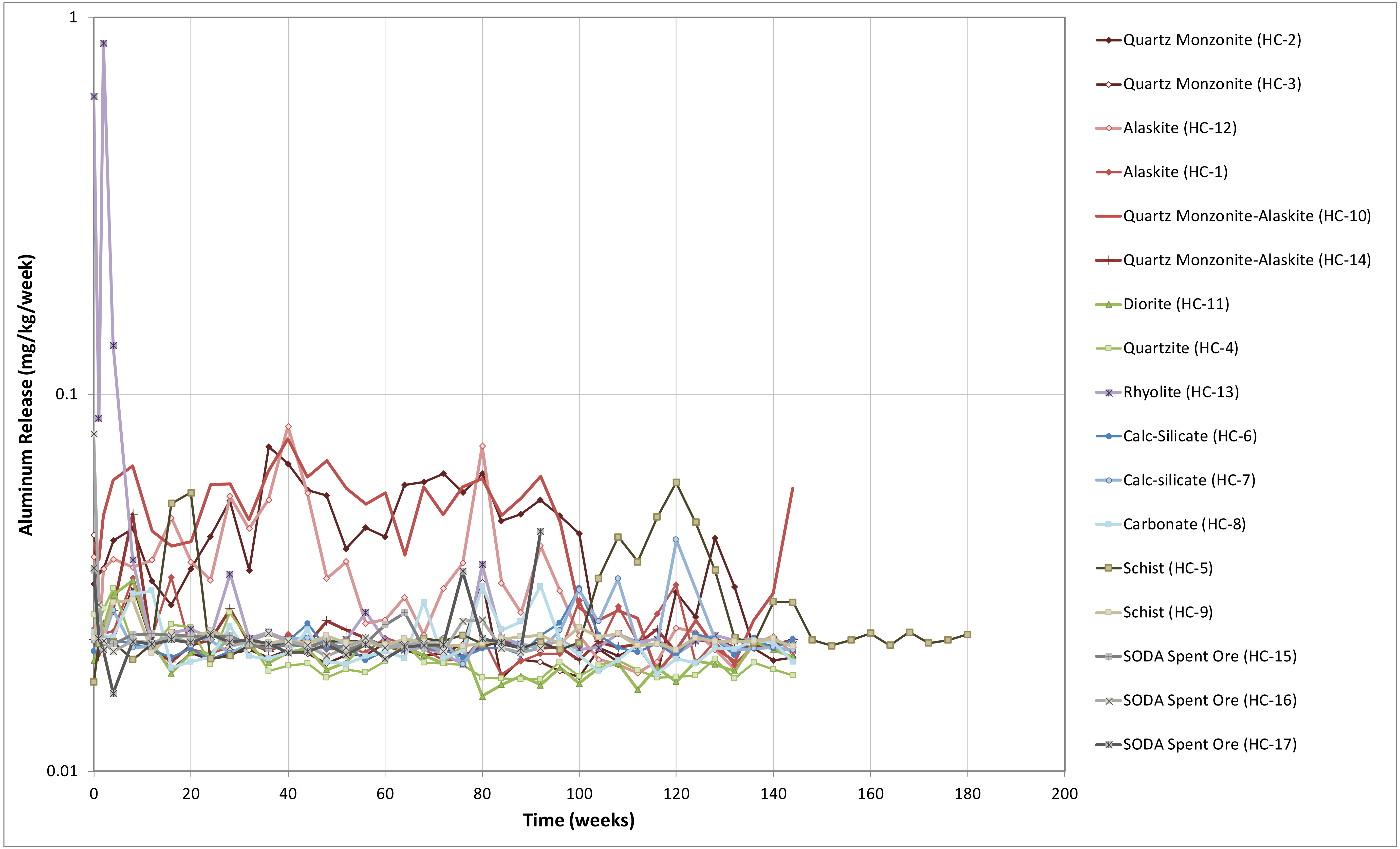


Figure B17: Phase 1 HCT Effluent Aluminum

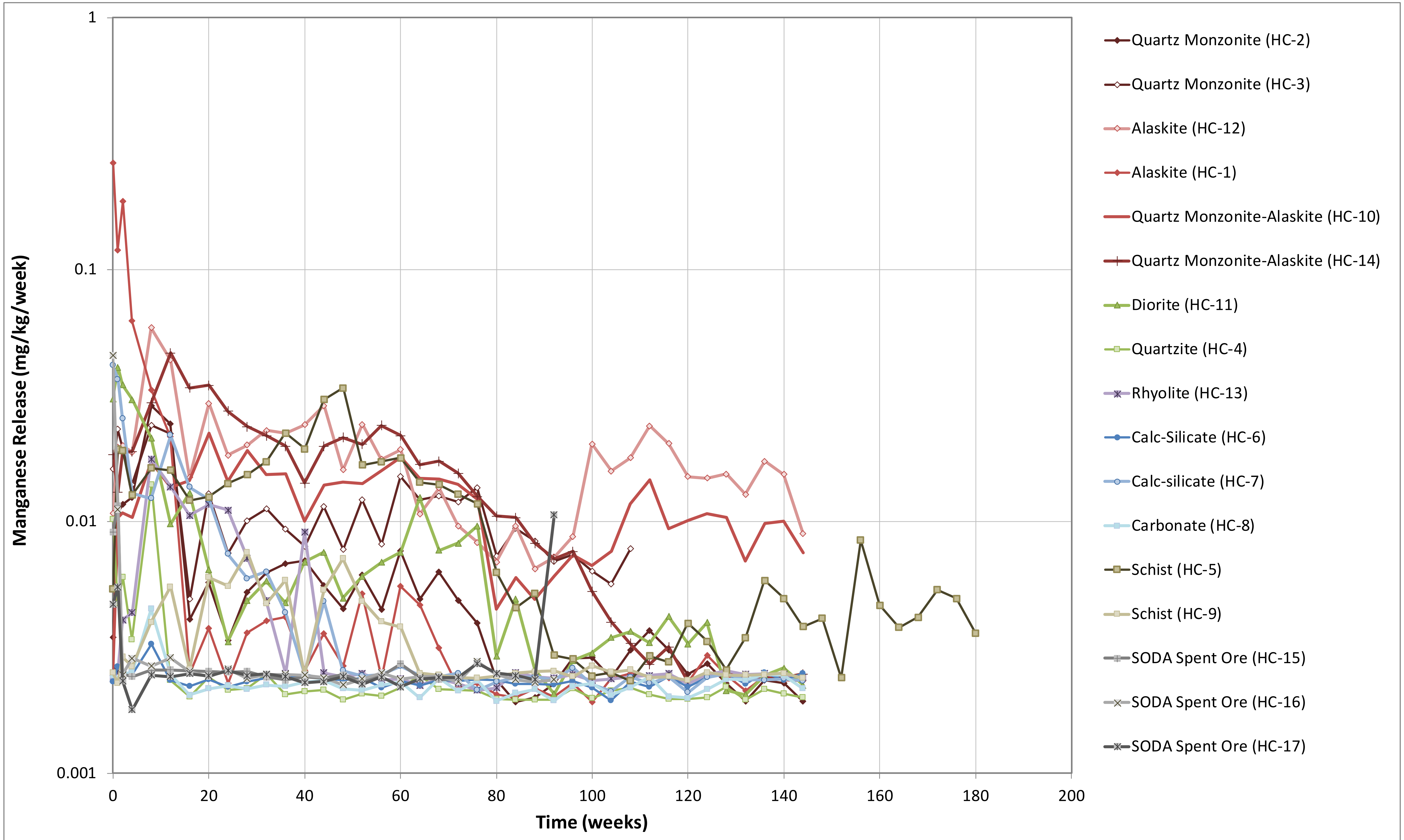


Figure B18: Phase 1 HCT Effluent Manganese

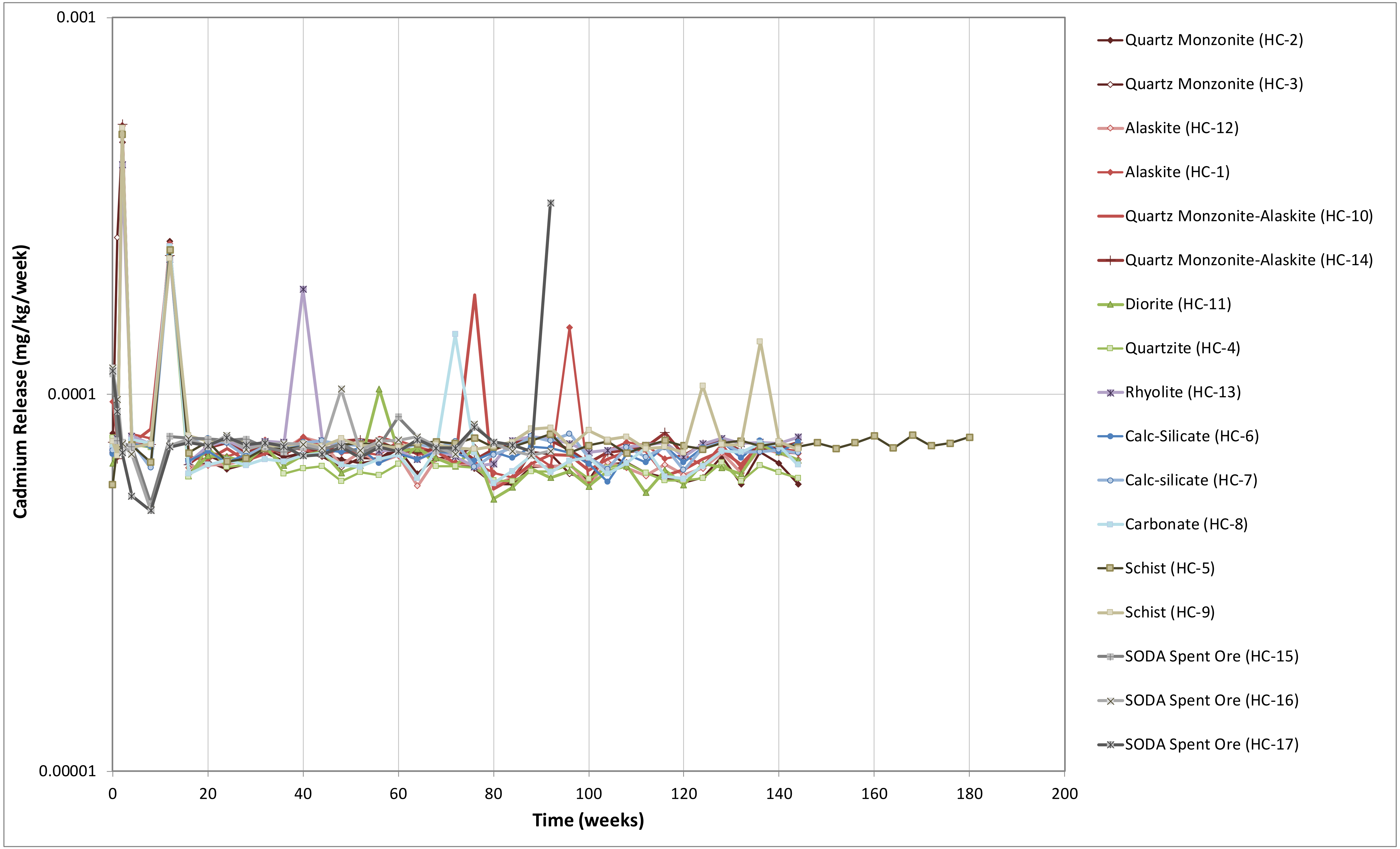


Figure B19: Phase 1 HCT Effluent Cadmium

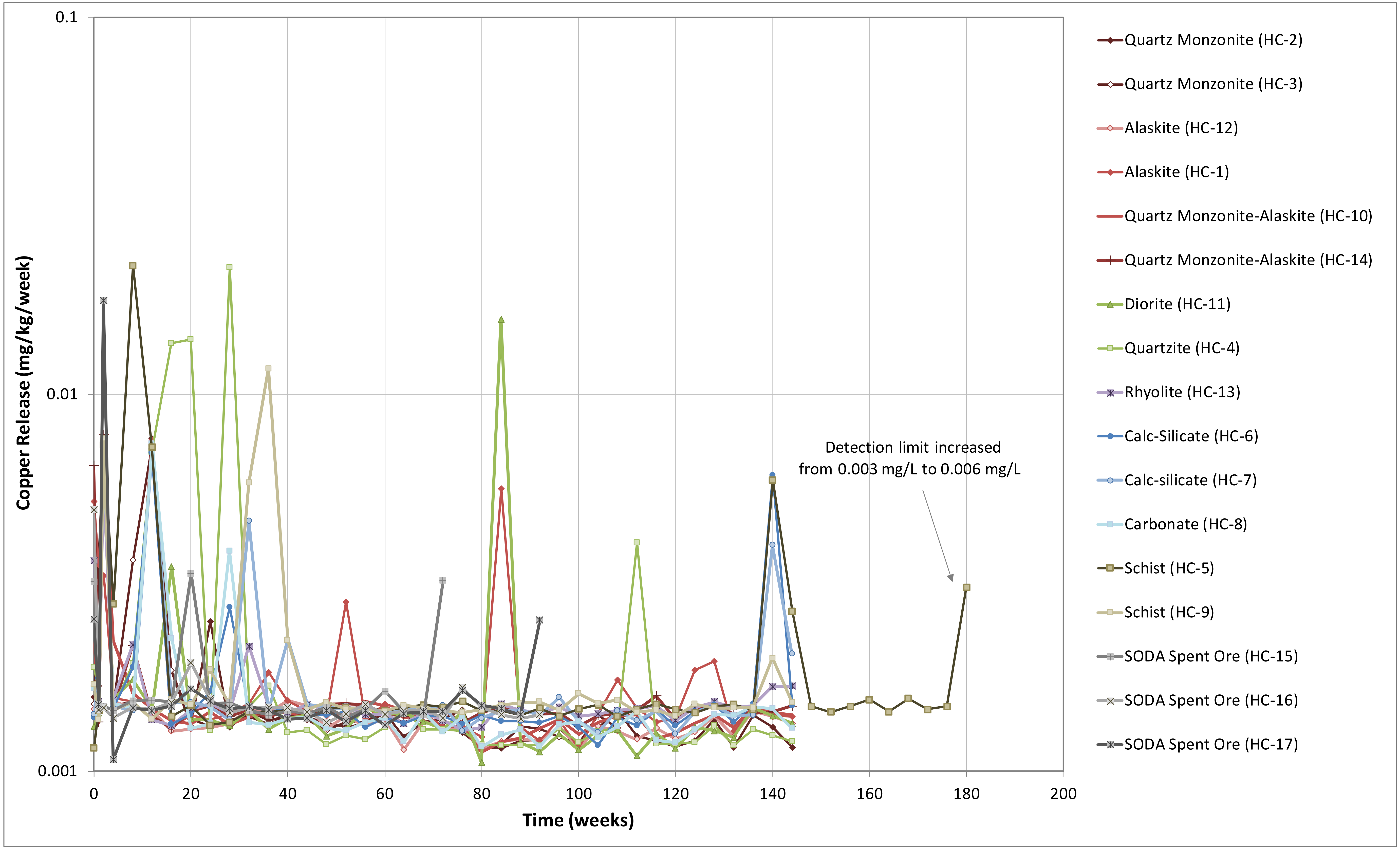


Figure B20: Phase 1 HCT Copper

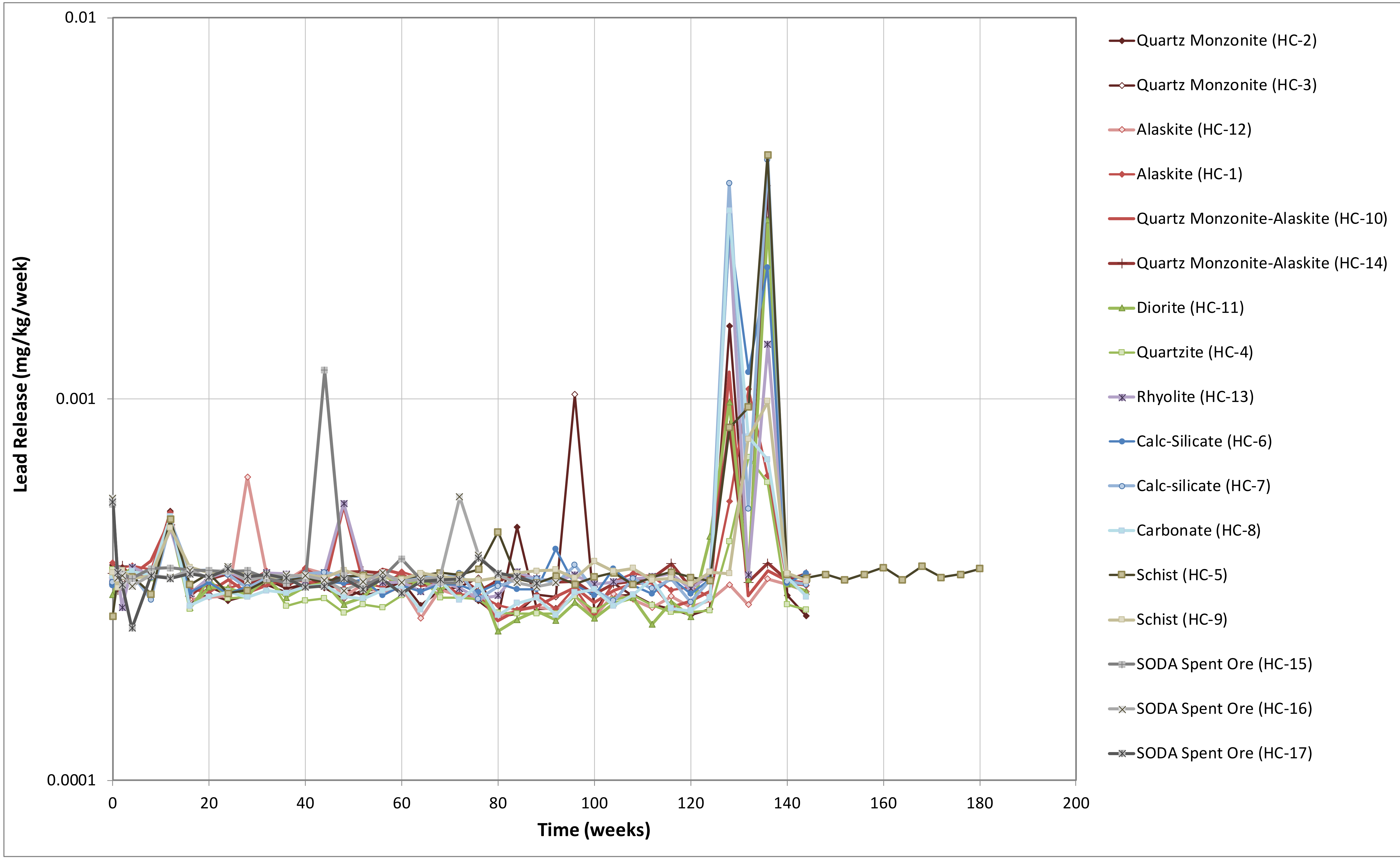


Figure B21: **Phase 1 HCT Lead**

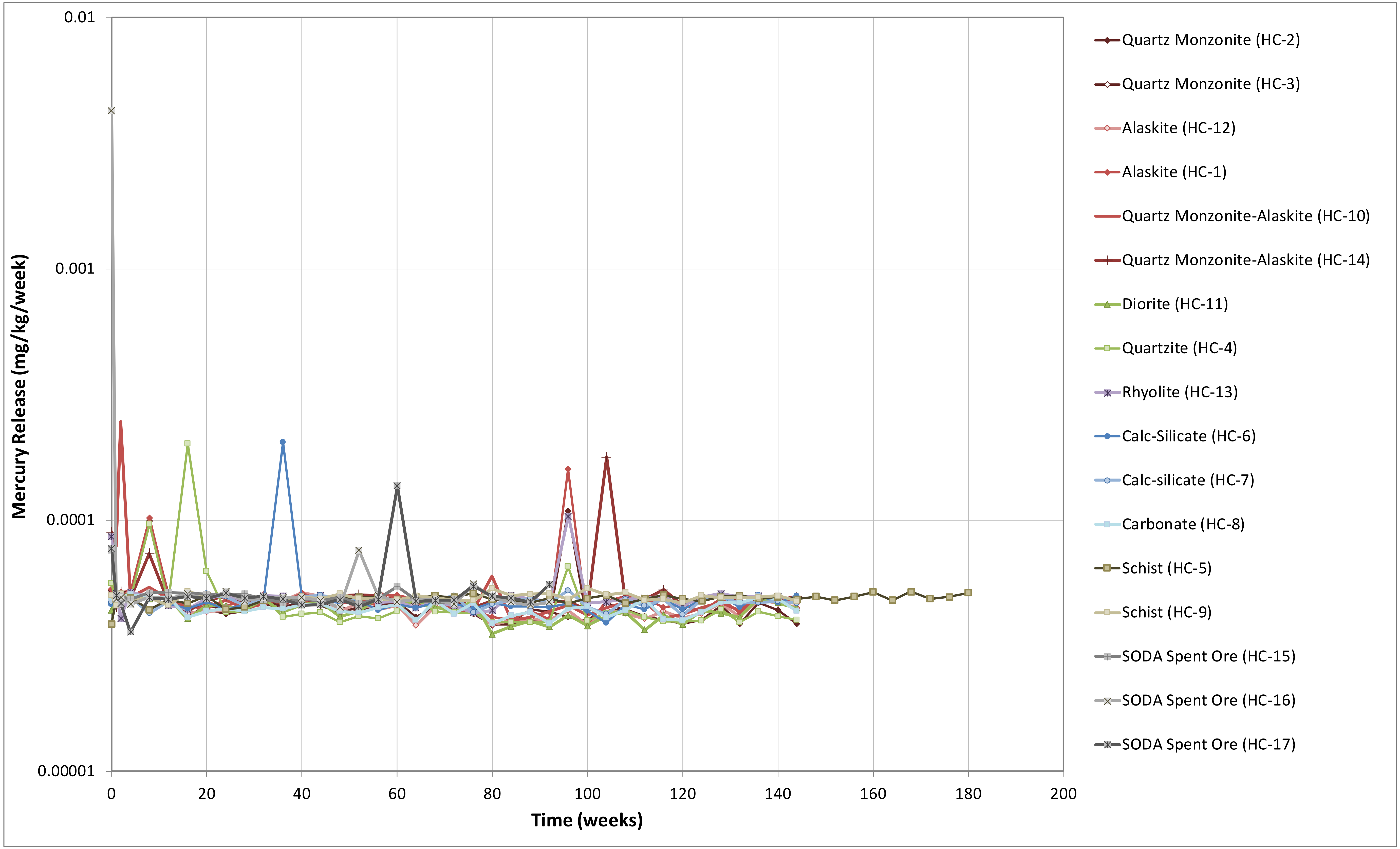


Figure B22: Phase 1 HCT Mercury

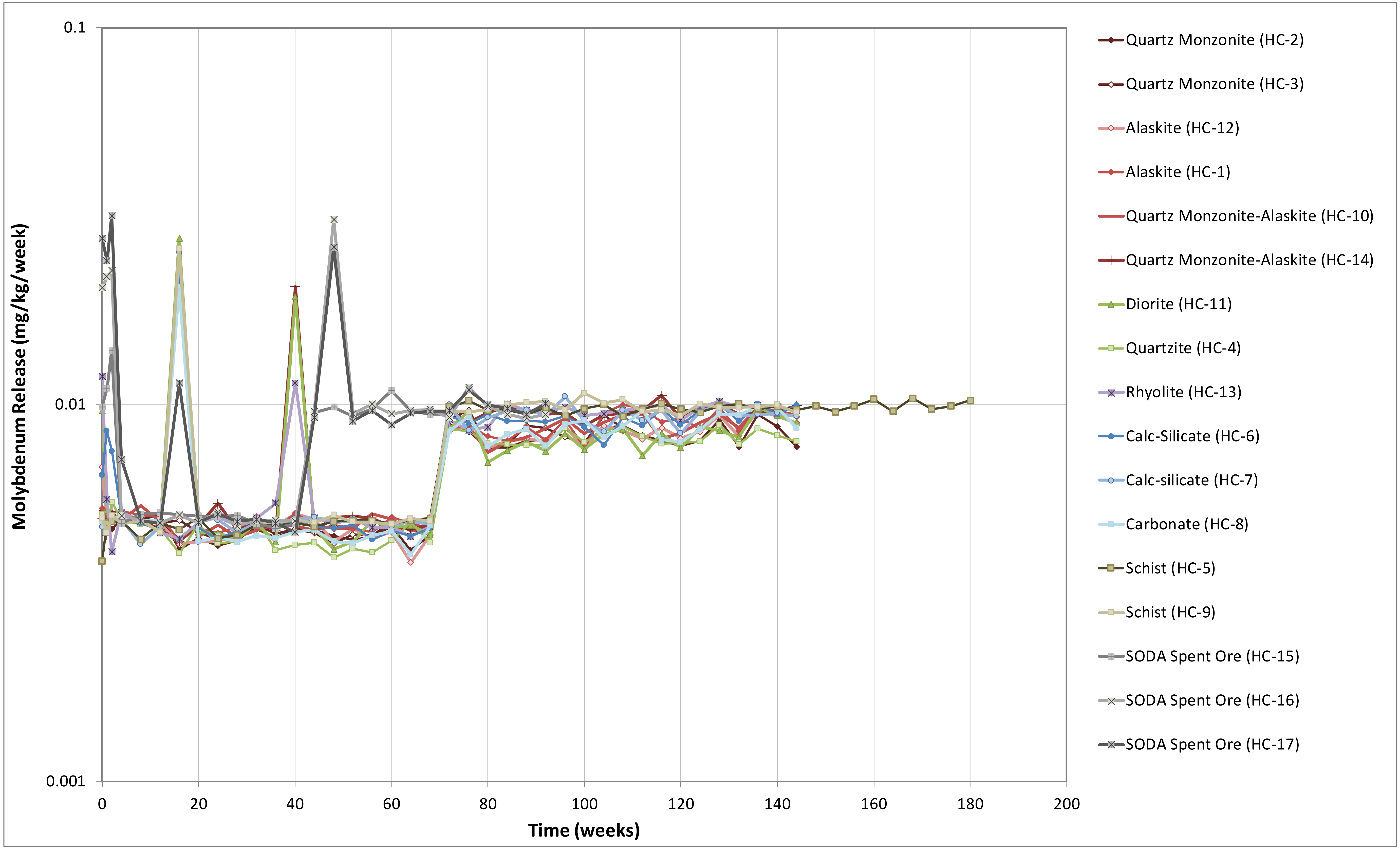


Figure B23: Phase 1 HCT Molybdenum

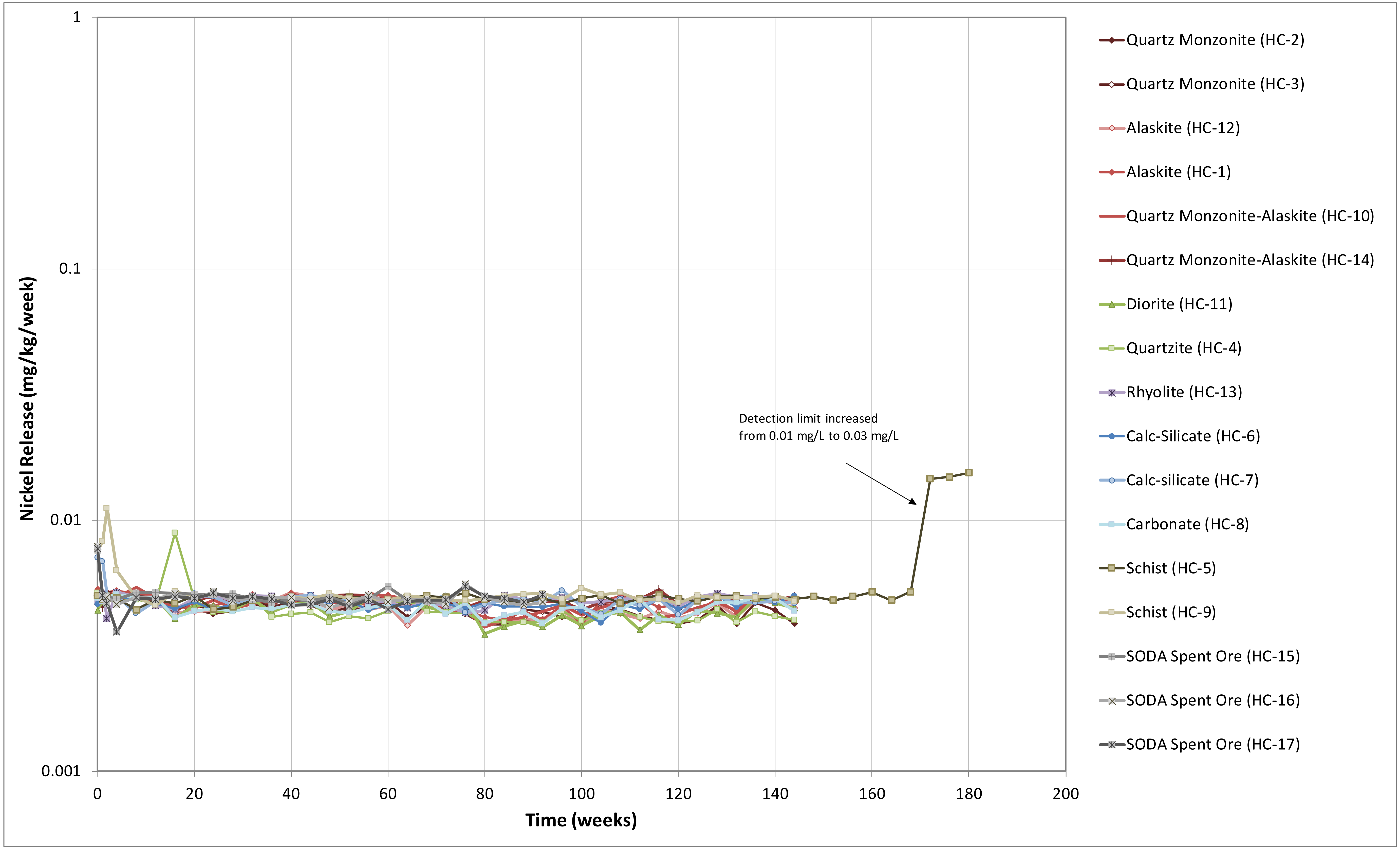


Figure B24: **Phase 1 HCT Nickel**

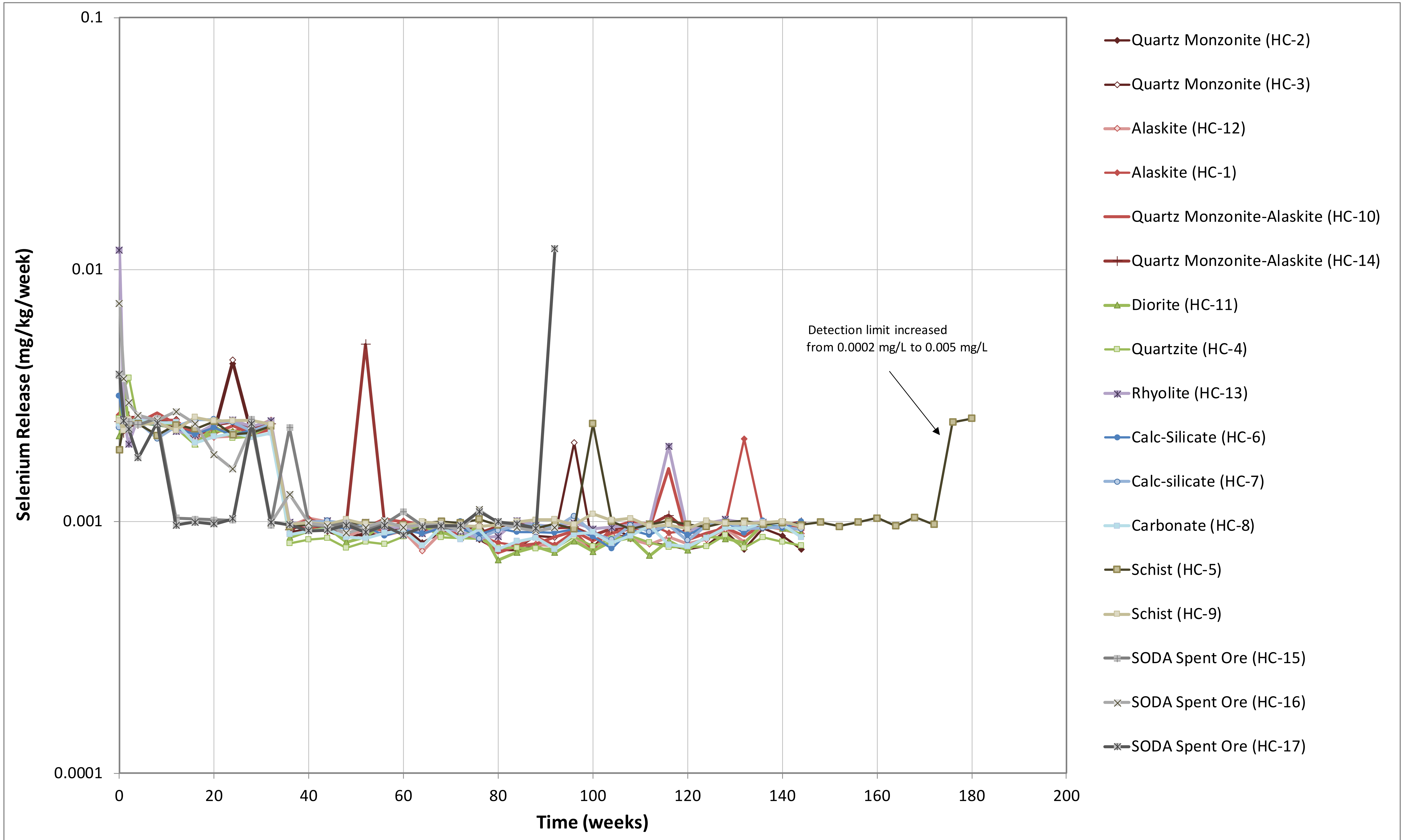


Figure B25: Phase 1 HCT Selenium

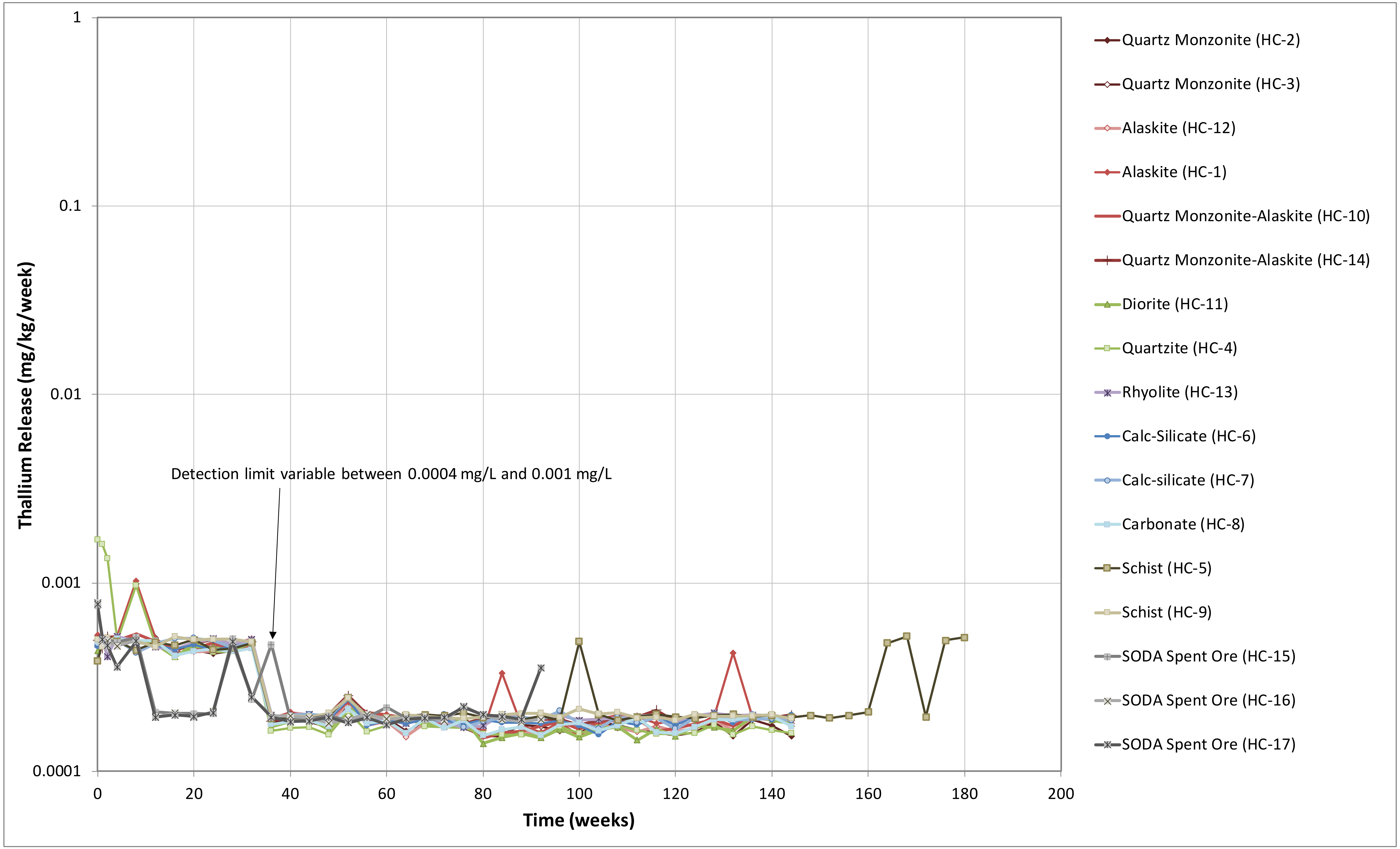


Figure B26: Phase 1 HCT Thallium

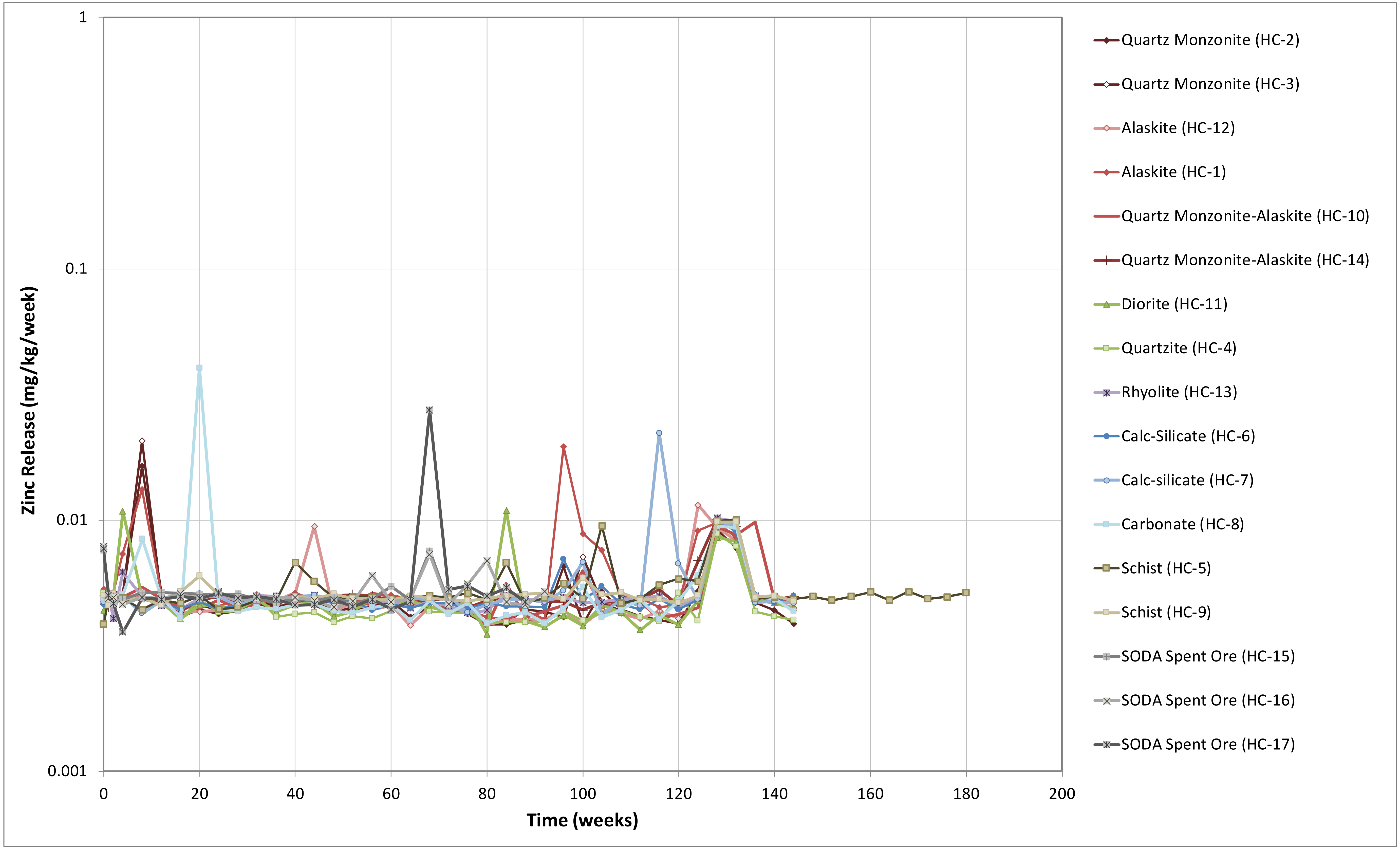


Figure B27: Phase 1 HCT Zinc

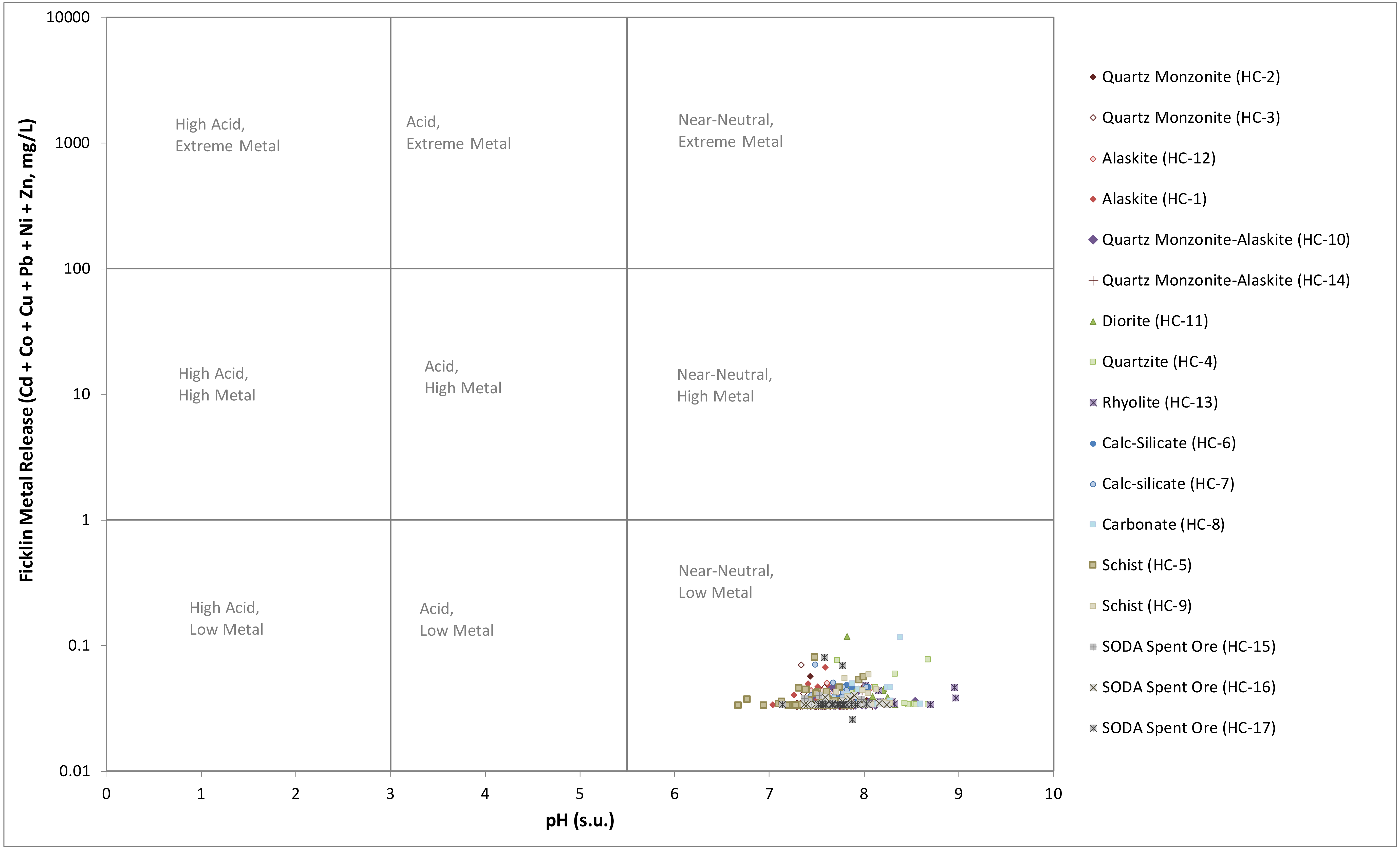


Figure B28: Phase 1 HCT Ficklin Plot

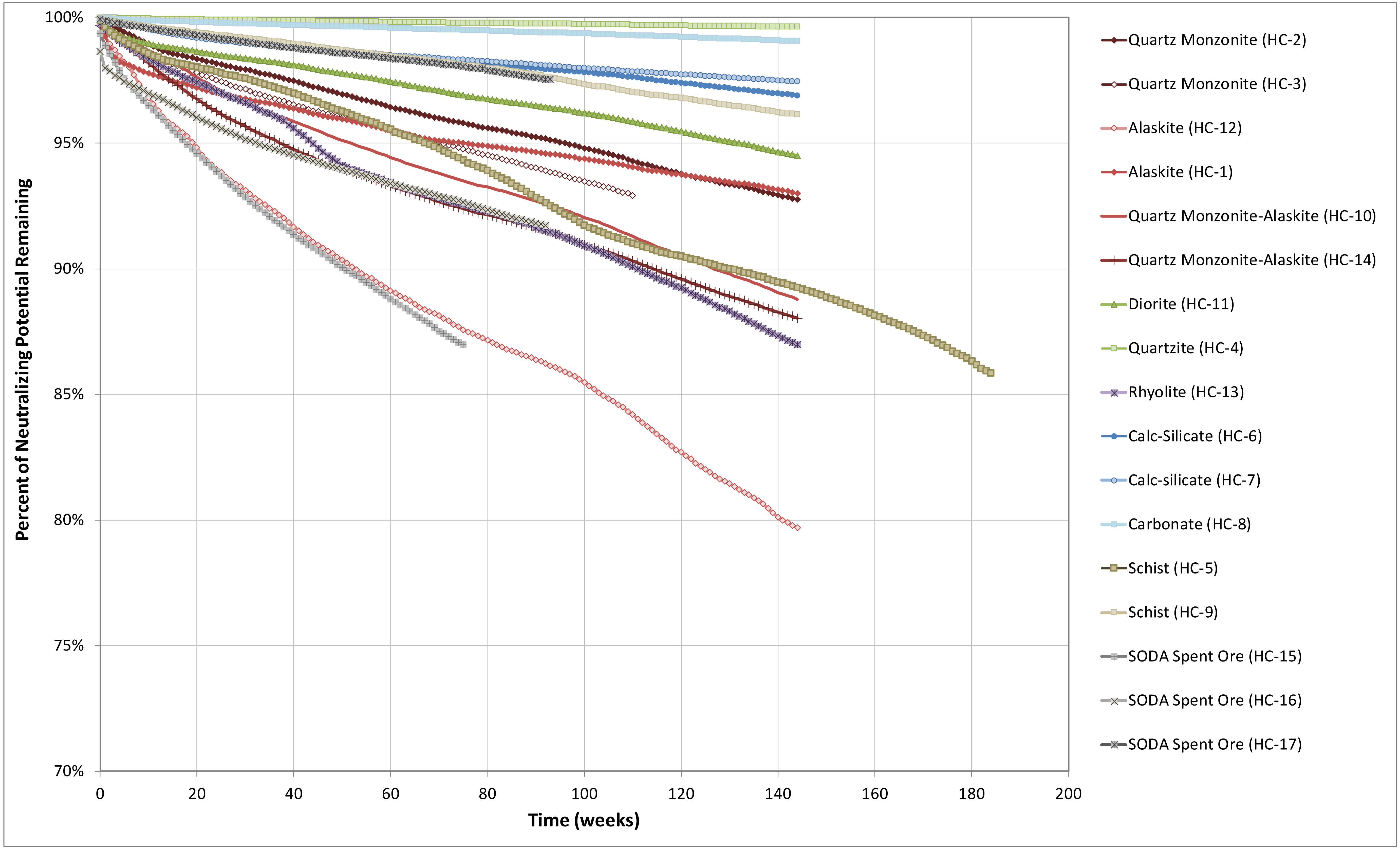
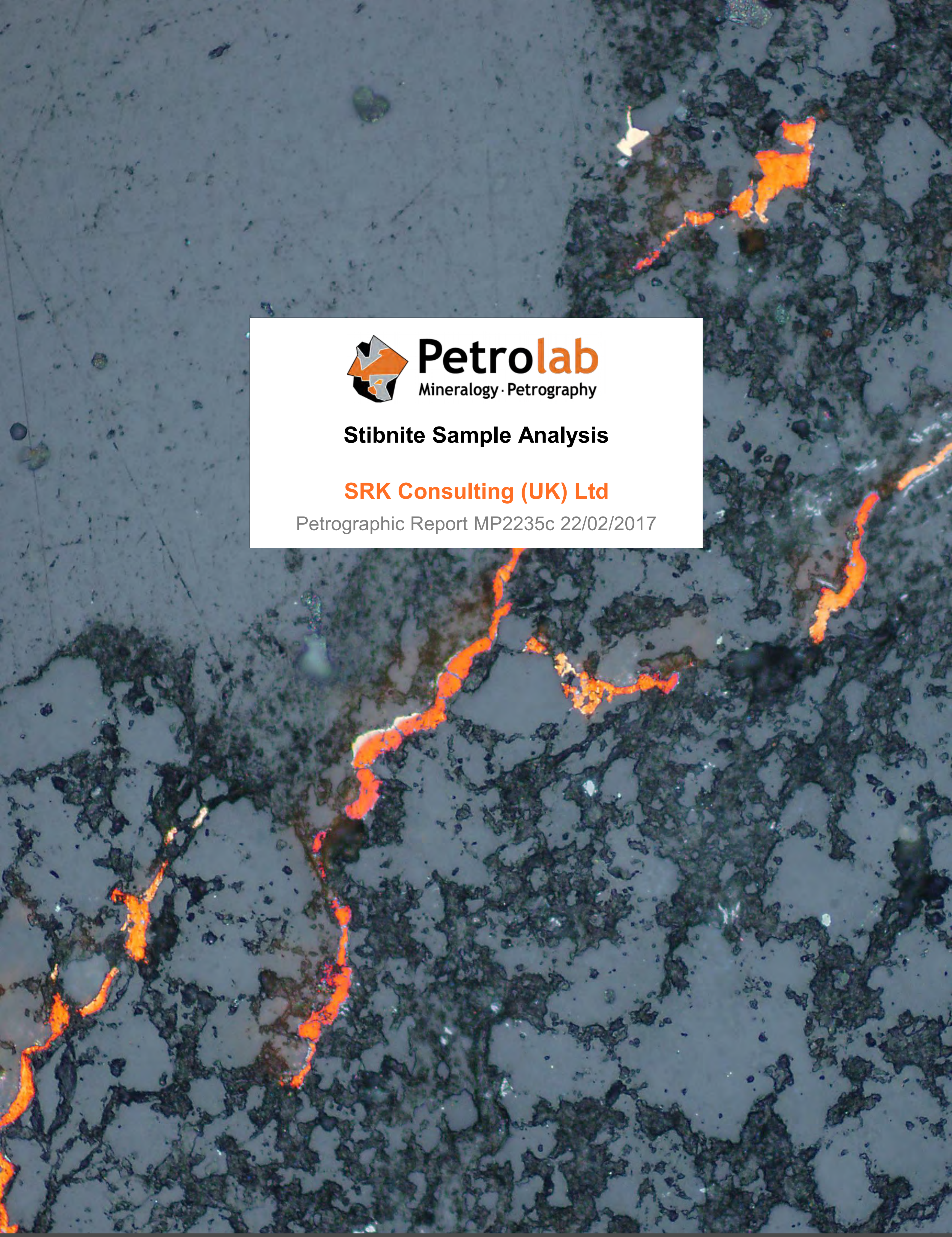


Figure B29: Phase 1 HCT Neutralizing Potential Remaining

Appendix C

Phase 1 HCT and Bradley Dump Mineralogy Report



Petrolab
Mineralogy · Petrography

Stibnite Sample Analysis

SRK Consulting (UK) Ltd

Petrographic Report MP2235c 22/02/2017

Petrolab Ltd | www.petrolab.co.uk
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Registered in England & Wales · Company No. 4777735

Contents

Report identification			
Client	SRK Consulting (UK) Ltd		
Report title	Stibnite Sample Analysis		
Analysis required	Petrographic investigation, XRD analysis and SEM analysis of HCT residues and WRD grab samples.		
Client order ref.	UKPO21890	**Client contact**	Ruth Warrender
Report ID (issue date)	MP2235c 22/02/2017	**Issue note**	Finalised Version
	MP2235b 09/02/2016		Report Revised Draft Issue
	MP2235a 22/12/2016		Report Client Draft Issue
Prepared by	C Brough PhD CGeol	**Checked by**	J Fletcher BSc MSc

Limitations
This report relates only to those samples submitted and specimens examined and to any materials properly represented by those samples and specimens. This report is issued to the Client named above for the benefit of the Client for the purposes for which it was prepared. It does not confer or purport to confer on any third party any benefit or right pursuant to the Contracts (Rights of Third Parties) Act 1999.

Scope

This is a mineralogical report for SRK Consulting (UK) Ltd to investigate 17 samples from an ongoing geochemical assessment program. The 17 samples consist of 8 post-leach humidity cell test (HCT) samples and 9 waste rock dump (WRD) grab samples. The samples were selected to investigate the speciation of sulfide minerals and their textural controls. In addition, mineralogical investigation was to pay particular attention to the presence of any As-bearing and Sb-bearing minerals and their textural development.

This report relates only to the samples examined (and any materials properly represented by those samples). It presents the findings of a mineralogical investigation by optical microscopy on thin sections and polished blocks prepared from selected sub-samples. The results of supplementary SEM and XRD analyses are included and considered.

List of samples

Samples received			
Report no.	**Sample reference**	**Mass (g)**	**Type**
1	MGI-09-09 (143-163) HC-1	249	Post-leach HCT
2	MGI-10-23 (135-151) HC-3	258	Post-leach HCT
3	MGI-10-36 (220-256) HC-4	256	Post-leach HCT
4	MGI-10-48 (272-283) HC-7	246	Post-leach HCT
5	MGI-10-51 (790-815.5) HC-10	252	Post-leach HCT
6	MGI-11-60 (513-543) HC-12	257	Post-leach HCT
7	MGI-11-64 (185.5-208) HC-14	264	Post-leach HCT
8	MGI-13-S31 (15.24-18.29) HC-16	246	Post-leach HCT
9	D253919	1013	WRD grab sample
10	D253917	1398	WRD grab sample
11	D253923	287	WRD grab sample
12	D253833	1080	WRD grab sample
13	D253892	1569	WRD grab sample
14	D253906	734	WRD grab sample
15	D253944	1600	WRD grab sample
16	D253840	599	WRD grab sample
17	D253856	840	WRD grab sample

Methods of investigation

A detailed mineralogical investigation was requested, with special reference to arsenic and antimony bearing minerals present within the HCT residue and WRD grab samples.

Samples were sieved using a 2 mm sieve. For each sample the resultant +2mm and -2mm size fractions were mounted on a single slide and prepared into polished thin sections. All thin sections were prepared using yellow epoxy resin to aid in the visualisation of cracks and pore space within the samples. The sections were examined by conventional transmitted and reflected light polarising microscopy using a Nikon research polarising microscope. Digital photomicrographs were taken using a high resolution digital camera attached to the trinocular head of the microscope.

Qualitative mineralogical analysis using a scanning electron microscope was requested. Polished thin sections were carbon coated to a thickness of 30 nm. Each section was analysed using a ZEISS EVO MA 25 scanning electron microscope (SEM)[1] fitted with a Bruker xFlash 6|60 x-ray detector for energy-dispersive X-ray spectroscopy (EDX) analysis.

Reporting of phase / mineral data is in terms of weight percent. However, all data acquired is from 2D sections of 3D particles. Mass values are derived from measurement of particle / grain areas, with no correction for stereological error, and an assumed phase density.

Representative (riffle split) sub-samples were sent to an independent specialist laboratory for whole rock and clay XRD analysis. The results are considered in this report and reproduced in Appendix 1.

Mineralogy results

The mineralogy of all 17 submitted samples are summarized in Table 1. A detailed mineralogical description of each sample received (which includes annotated photomicrographs), based on a high-power microscopical examination of prepared thin-sections, follows the summary table.

1 SEM system located at Petrolab Ltd, Redruth, UK.

Table 1: Summary table of mineral observed by XRD analysis, petrography and by SEM[1,2]

Target minerals		Sample details and relative mineral abundance[1]																	Typical composition
		MGI-09-09 (143-163) HC-1	MGI-10-23 (135-151) HC-3	MGI-10-36 (220-256) HC-4	MGI-10-48 (272-283) HC-7	MGI-10-51 (790-815.5) HC-10	MGI-11-60 (513-543) HC-12	MGI-11-64 (185.5-208) HC-14	MGI-13-S31 (15.24-18.29) HC-16	D253919	D253917	D253923	D253833	D253892	D253906	D253944	D253840	D253856	
Sulfide minerals	Pyrite	⊡	□	□	□	□	□	⊡	□	□	□	□	□	□	□	□	□		FeS_2
	Arsenopyrite	□	□	□	□	□	□	□	□	□	□	□	□		□			□	FeAsS
	Stibnite								□	□	□	□		□					Sb_2S_3
	Chalcopyrite				□														$CuFeS_2$
	Pyrrhotite				□														$Fe_{1-x}S$
Secondary As- and Sb-bearing minerals	Schneiderhöhnite / Scorodite								□										$Fe_4As_5O_{13}$ / $FeAsO_4.2H_2O$
	Amorphous Fe-arsenates		□						□	□	□		□		□		□		See footnotes[2]
	Arseniosiderite											□							$Ca_2Fe_3O_2(AsO4)_3.3H_2O$
	Schafarzikite									□			□		□	□			$FeSb_2O_4$
	Senarmontite									□			□				□		Sb_2O_3
	Cervantite									□							□		FeOOH

Gangue minerals		MGI-09-09 (143-163) HC-1	MGI-10-23 (135-151) HC-3	MGI-10-36 (220-256) HC-4	MGI-10-48 (272-283) HC-7	MGI-10-51 (790-815.5) HC-10	MGI-11-60 (513-543) HC-12	MGI-11-64 (185.5-208) HC-14	MGI-13-S31 (15.24-18.29) HC-16	D253919	D253917	D253923	D253833	D253892	D253906	D253944	D253840	D253856	Typical Composition
Bulk silicate minerals	Quartz	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	SiO_2
	Microcline	■	■	⊡	■	■	■	■	■	■	■	■	■	■	■	■	■	■	$KAlSi_3O_8$
	Albite	■				■	■	■	□	□	⊡	□	■	■	■	■	■	■	$Na(AlSi_3O_8)$
Clay / mica minerals	Illite	■	■	⊡	■	⊡	⊡	■	■	■	■	■	⊡	⊡	⊡	⊡	⊡	■	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$
	Muscovite	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡	⊡		$KAl_2(Si_3Al)O_{10}(OH)_2$
	Chlorite		□	□	⊡					⊡	□	□	⊡	⊡				□	$Mg_5Al(AlSi_3O_{10})(OH)_8$
	Kaolinite			□	□				⊡										$Al_2Si_2O_5(OH)_4$
	Biotite					⊡			⊡		⊡	⊡	⊡	⊡	⊡	⊡	⊡		$KMg_3(Si_3Al)O_{10}(OH)_2$
Ultramafic minerals	Amphibole												□						$Ca_2(Fe_4Al)(Si_7Al)O_{22}(OH)_2$
	Pyroxene												□				□		$CaMgSi_2O_6$
Carbonate minerals	Ferroan Dolomite	⊡	⊡	■	■	□			⊡										$Ca(Mg,Fe)(CO_3)_2$
	Calcite	⊡		□		□	□	□	□	□	□	□							$CaCO_3$
	Siderite		□																$FeCO_3$
Accessory phases	Goethite[3]	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	FeOOH
	Hematite													□		□	□	□	Fe_2O_3
	Magnetite													□		□	□	□	Fe_3O_4
	Jarosite												□				□		$KFe_3(SO_4)_2(OH)_6$
	Gypsum										□								$CaSO_4$
	Accessory Minerals	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	See footnotes[4]

1. Relative phase abundance : ■ major (>=10%), ⊡ minor (>=2<10%), □ trace (<2%). Quantification of the differing mineralogical phases for each sample are provided in the sample descriptions that follow this table.
2. Amorphous Fe-arsenates contain variable and inconsistent As:Fe ratios, along with frequent ancillary elemental content. The dominant elemental content is Fe, As and O often with As and Fe at similar wt% proportions. Other elements sometimes present at concentrations between 1-6 wt% included phosphorous, calcium and antimony.
3. Goethite sometimes contained minor amounts of As detectable by SEM analysis. This is likely to be As content adsorbed to the surface of the mineral.
4. Accessory minerals were observed during SEM analysis and refer to discrete rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.

1) Sample MGI-09-09 (143-163) HC-1

Sample as received

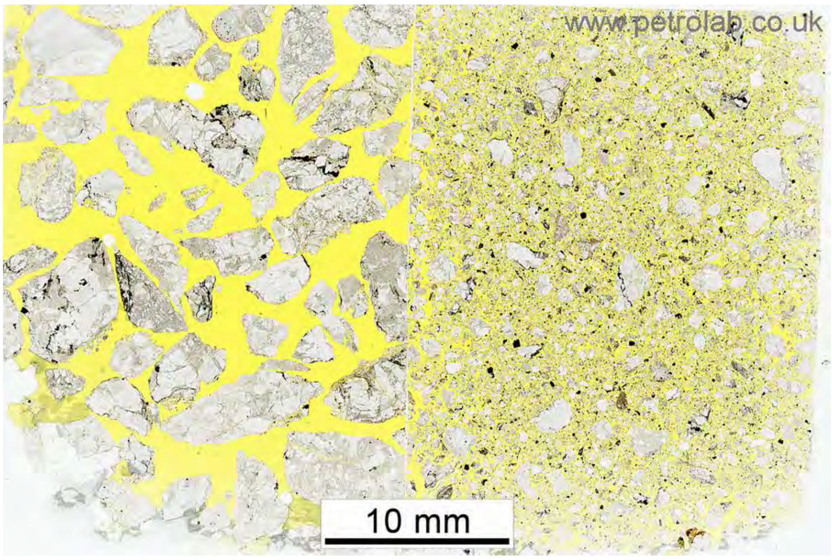
Sample MGI-09-09 (143-163) HC-1		
Petrolab ID	Date received	Type · condition · properties
#6474	16/11/2016	Metallurgical test · 249 g

A Sample MGI-09-09 (143-163) HC-1

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B Sample MGI-09-09 (143-163) HC-1

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample MGI-09-09 (143-163) HC-1		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	43.0% | 42.2%
Illite / Muscovite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	19.5% | 19.8%
Microcline	$KAlSi_3O_8$ | sg~2.56	17.6% | 16.7%
Albite	$NaAlSi_3O_8$ | sg~2.62	13.3% | 12.9%
Dolomite	$CaMg(CO_3)_2$ | sg~2.84	2.4% | 2.5%
Calcite	$CaCO_3$ | sg~2.70	2.2% | 2.2%
Pyrite	FeS_2 | sg~5.01	2.0% | 3.7%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample MGI-09-09 (143-163) HC-1				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	100 µm	2000 µm	500 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. Grain size can be coarse in the received sample though is generally less than 1 mm			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the albite and alkali feldspar minerals. It is generally very fine-grained and the level of alteration is moderate. The sample shows evidence for brecciation and illite forms part of the interstitial veins caused by this brecciation, often associated with calcite and dolomite.			
Microcline	20 µm	500 µm	200 µm	Generally anhedral
Description	This alkali feldspar is associated with the albite and the quartz as part oft he original igneous texture. Alteration is slightly more pervasive in the alkali feldspar than the albite, with the formation of fine-white mica (illite) as the common breakdown product.			
Albite	50 µm	600 µm	300 µm	Subhedral to euhedral
Description	Albite forms generally subhedral grains, though occasionally with euhedral habits. Albite is generally less altered than the alkali feldspar grains present within the slide with well developed and visible twinning. Nevertheless, alteration is present with the formation of fine-mica as the predominant alteration product.			
Muscovite	10 µm	200 µm	100 µm	Anhedral
Description	Muscovite is generally present as isolated grains interstitial to quartz and feldspar. It shows a frequent association with areas of intense hydrothermal alteration and with pyrite.			

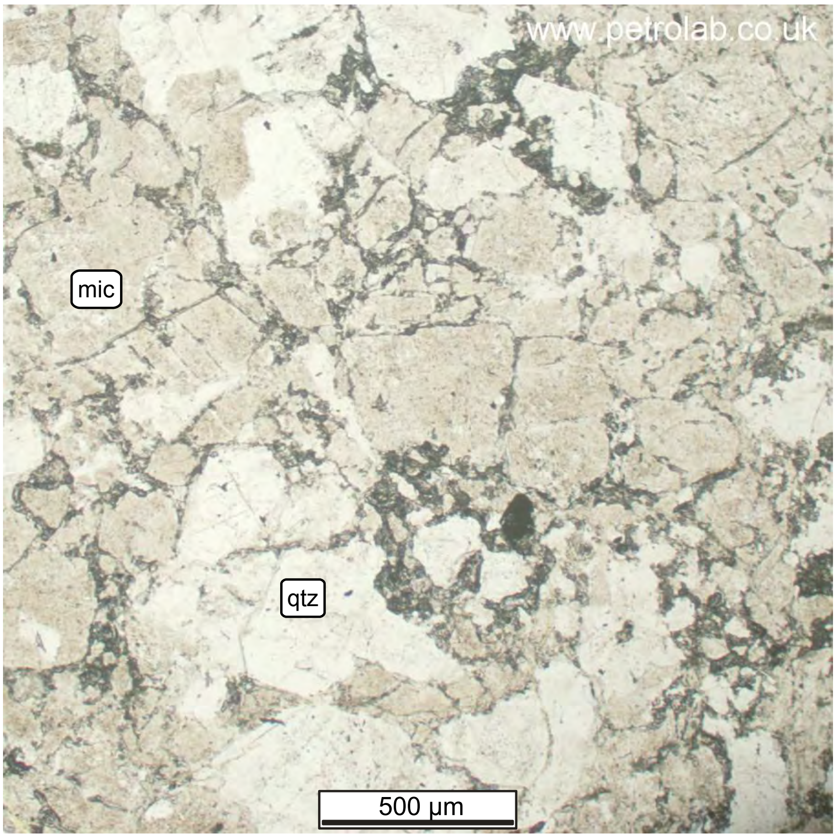
1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite and illite have strongly overlapping XRD traces so their quantification is reported as a combined total

Sample MGI-09-09 (143-163) HC-1				
Dolomite	10 µm	300 µm	10 µm	Subhedral to anhedral
Description	Dolomite, along with calcite, occurs in two distinct developments. These are (i) as minerals interstitial to quartz and feldspar, occasionally forming massive composite developments, or (ii) as thin veins and veinlets cross-cutting the host quartz and feldspar grains. When developed as veins and veinlets there is a strong association with illite.			
Calcite	10 µm	300 µm	100 µm	Subhedral to anhedral
Description	Calcite occurs in two distinct developments. These are (i) as minerals interstitial to quartz and feldspar, occasionally forming massive composite developments, or (ii) as thin veins and veinlets cross-cutting the host quartz and feldspar grains. When developed as veins and veinlets there is a strong association with illite.			
Pyrite	5 µm	350 µm	100 µm	Euhedral to subhedral
Description	Pyrite is present throughout the sample as euhedral and subhedral grains. It is generally observed within the calcite-dolomite-illite veins and veinlets caused by the brecciation. Within the coarser fraction (+2 mm) the pyrite is often encapsulated but in the finer fraction (-2 mm) the pyrite is frequently well liberated and very fine-grained. Nevertheless, there is very little evidence for oxidation of the pyrite in-situ with nearly all exposed grains remaining in pristine condition.			
Goethite	5 µm	50 µm	10 µm	Anhedral
Description	Goethite is a trace phase thinly disseminated in the sample. There is some occasional association with pyrite though it tends to be present as fine occasionally inclusions rather than as evidence for pervasive in-situ oxidation.			
Arsenopyrite	10 µm	100 µm	50 µm	Euhedral
Description	Arsenopyrite is a trace phase generally observed as euhedral grains that are highly encapsulated. They are frequently associated with muscovite.			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample MGI-09-09 (143-163) HC-1
• The sample is a moderately altered Monzo-Granite. Alteration of the feldspar grains has been moderate and occasionally pervasive with the formation of fine white mica (illite) as the common alteration product. Hydrothermal alteration is generally slightly more pervasive in the alkali feldspar rather than the albite. The extent of hydrothermal alteration has led to the formation of net-textured veins and veinlets generally containing calcite, dolomite, pyrite, muscovite and illite. Sulfide mineralisation is particularly associated with muscovite. Pyrite is generally encapsulated within the coarser minerals (+2 mm) but partially or well liberated in the fine-fraction (-2 mm). Nevertheless, there is very little evidence for in-situ oxidation of the pyrite with nearly all exposed grains remaining unreacted.

Photomicrographs



C

Sample MGI-09-09 (143-163) HC-1

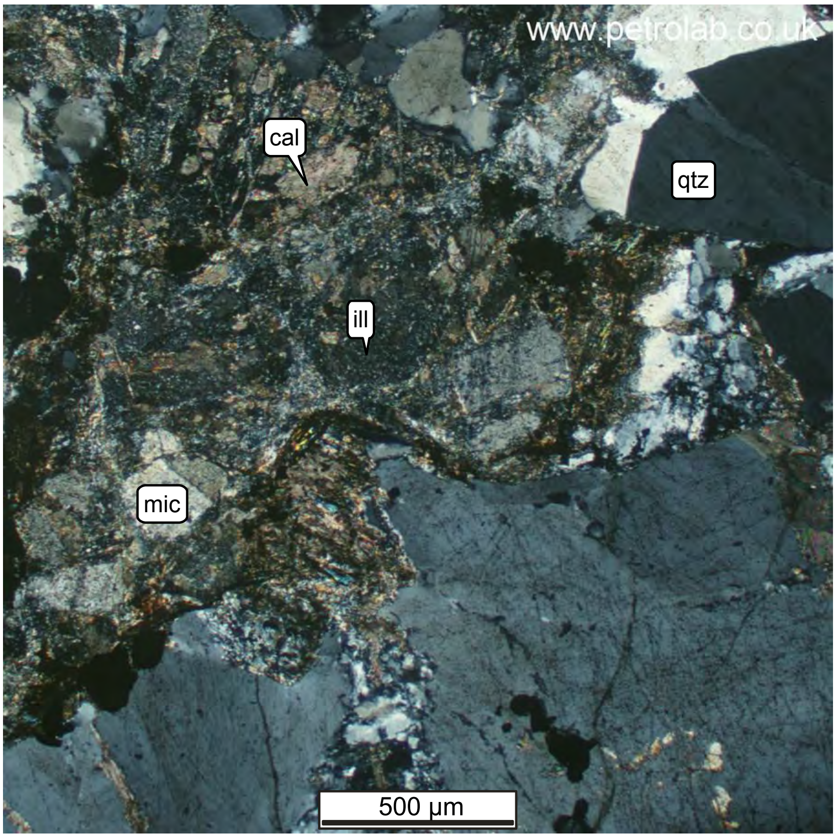
Photomicrograph showing strongly intergrown quartz (qtz) and microcline. The microcline shows moderate to pervasive alteration to fine white mica (illite).

Image C

Nikon Microphot-FXA petrological microscope

Plane polarised transmitted light

x50



D

Sample MGI-09-09 (143-163) HC-1

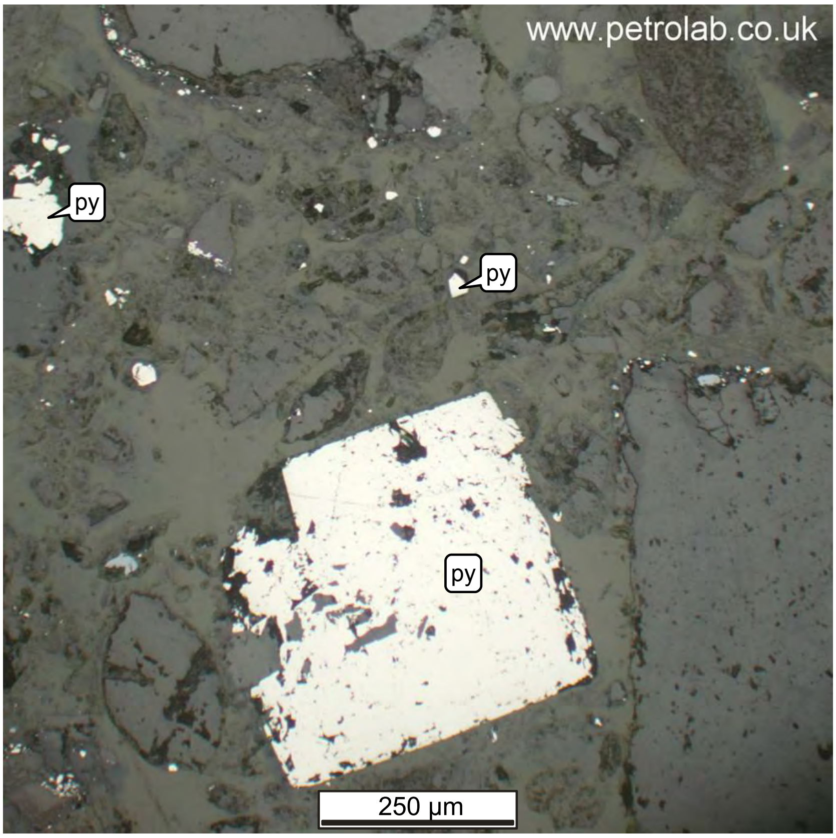
Photomicrograph showing intergrown textures coarse-grained quartz (qtz) and microcline (mic) associated with highly hydrothermally altered feldspar now containing illite (ill) and calcite (cal).

Image D

Nikon Microphot-FXA petrological microscope

Cross polarised transmitted light

x50

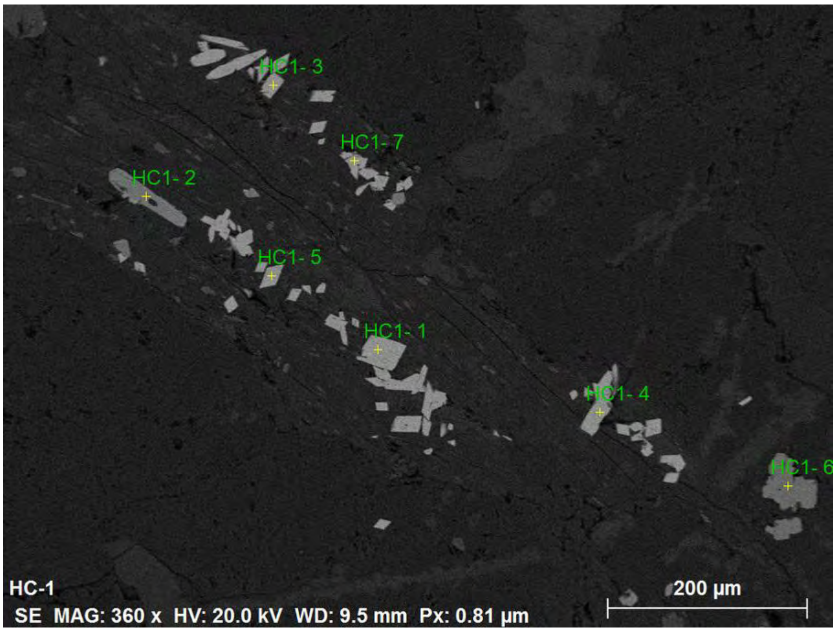


E

Sample MGI-09-09 (143-163) HC-1

Photomicrograph showing liberated medium- and fine-grained pyrite from the -2mm size fraction.

Image E
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100

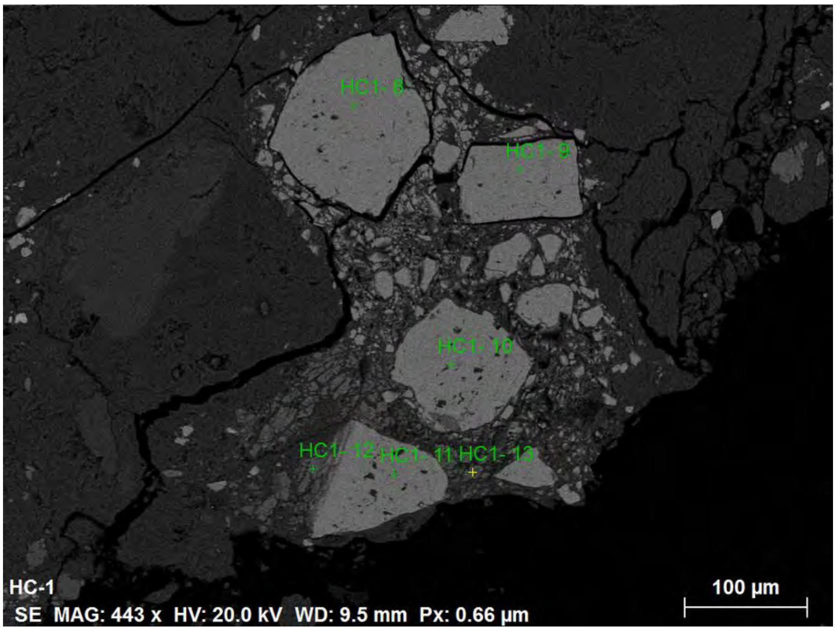


F

Sample MGI-09-09 (143-163) HC-1

Back scatter electron image showing encapsulated euhedral grains of arsenopyrite (HC1-1,3,4,5 & 7), zircon (HC1-2) and pyrite (HC1-6) in muscovite and quartz. Antimony is observed in arsenopyrite grains HC1-1,5 & 7.

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
x500



G **Sample MGI-09-09 (143-163) HC-1**

Back scatter electron image of medium-grained and largely unaltered pyrite (HC1-8,9,10,11). Towards the rim of the particle there is the apparent formation of some alteration products dominated by rutile and fine-grained Fe-Ti products (HC1-12,13).

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
x500

2) Sample MGI-10-23 (135-151) HC-3

Sample as received

Sample MGI-10-23 (135-151) HC-3		
Petrolab ID	Date received	Type · condition · properties
#6471	16/11/2016	Metallurgical test · 258 g

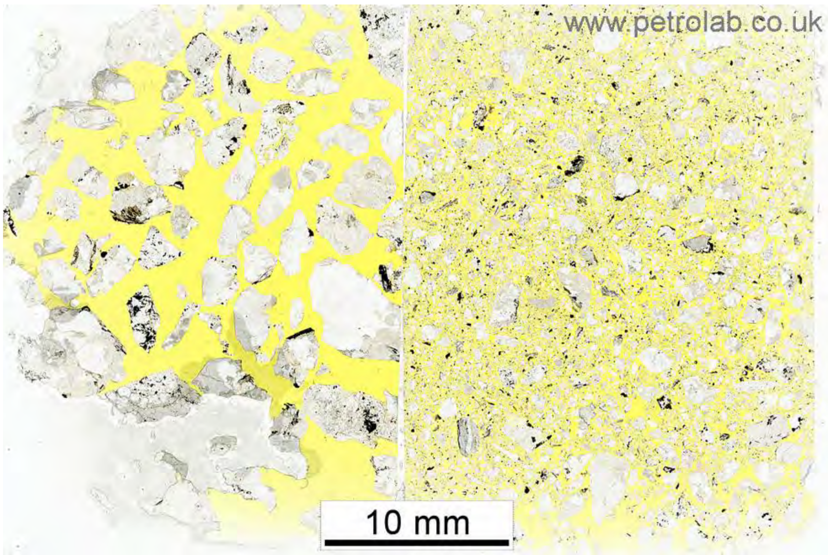
A

Sample MGI-10-23 (135-151) HC-3

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B

Sample MGI-10-23 (135-151) HC-3

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample MGI-10-23 (135-151) HC-3		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	41.8% | 41.3%
Illite / Muscovite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	21.4% | 22.0%
Microcline	$KAlSi_3O_8$ | sg~2.56	31.8% | 30.4%
(Ferroan) Dolomite	$CaMg(CO_3)_2$ | sg~2.84	3.6% | 3.8%
Pyrite	FeS_2 | sg~5.01	1.2% | 2.2%
Siderite	$Fe{+}{+}CO_3$ | sg~3.96	0.2% | 0.3%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Fe-Arsenates / AIA	(Fe,As,O,H) +/- Ca,P,Sb	<0.1% | <0.1%
Chlorite group (clinochlore)	$(Mg,Fe{+}{+})_5Al(Si_3Al)O_{10}(OH)_8$ | sg~2.65	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample MGI-10-23 (135-151) HC-3				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	100 µm	2000 µm	500 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. Grain size can be coarse in the received sample though is generally less than 1 mm			
Illite	5 µm	250 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the alkali feldspar minerals. It is generally very fine-grained and the level of alteration is moderate. The sample shows evidence for brecciation and illite forms part of the interstitial veins caused by this brecciation, often associated with dolomite. In places, the white mica is far coarser-grained and would more appropriately be termed muscovite.			
Microcline	20 µm	500 µm	200 µm	Generally anhedral
Description	The alkali feldspar is associated with the quartz as part of he original igneous texture. Alteration is often pervasive in the alkali feldspar, with the formation of fine-white mica (illite) as the common breakdown product.			
(Ferroan) Dolomite	10 µm	300 µm	10 µm	Subhedral to anhedral
Description	Dolomite occurs in two distinct developments. These are (i) as minerals interstitial to quartz and feldspar, occasionally forming massive composite developments, or (ii) as thin veins and veinlets cross-cutting the host quartz and feldspar grains. When developed as veins and veinlets there is a strong association with illite and muscovite.			
Muscovite	10 µm	200 µm	100 µm	Anhedral
Description	Muscovite is generally present as isolated grains interstitial to quartz and feldspar. It also shows a frequent association with areas of intense hydrothermal alteration and, in this instance, with pyrite.			

1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite and illite have strongly overlapping XRD traces so their quantification is reported as a combined total

Sample MGI-10-23 (135-151) HC-3				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Pyrite	5 µm	300 µm	100 µm	Euhedral to subhedral
Description	Pyrite is present throughout the sample as euhedral and subhedral grains. It is generally observed within the dolomite-illite-muscovite veins and veinlets caused by the brecciation. It has a strong association with arsenopyrite which often forms rims around the pyrite grains, or associated fine-grained euhedral grains. Within the coarser fraction (+2 mm) the pyrite is often encapsulated but in the finer fraction (-2 mm) the pyrite is frequently well liberated and fine-grained. There is evidence for in-situ oxidation with formation of goethite at the expense of pyrite. However, there is also significant unreacted pyrite, particularly the euhedral pyrite which remains generally pristine. Analysis of the pyrite under SEM reveals substantial arsenic contents of between 1 and 11 wt%.			
Siderite	-	-	-	Anhedral
Description	Siderite was detected by XRD analysis alone and has not been observed through petrographic or SEM analysis. It is likely associated with the dolomite in the dolomite-illite-muscovite veins.			
Arsenopyrite	10 µm	150 µm	80 µm	Euhedral to subhedral
Description	Arsenopyrite has formed in close association with pyrite, either as fine euhedral grains or as very fine rims around the pyrite grains. The very fine-grain size of the arsenopyrite means that encapsulation is common, particularly in the coarser (+2 mm) fraction. Nevertheless, the close association with pyrite, especially in the finer (-2 mm) fraction means that arsenopyrite is often liberated.			
Amorphous Fe-arsenates	-	-	-	Amorphous
Description	The amorphous Fe-arsenates observed in this sample are very fine-grained and associated with fine interlocking arsenopyrite and iron-oxides. The As:S ratio increases markedly for some of the analyses suggesting the formation of an iron-arsenate phase as opposed to simply a mixed spectral analysis of arsenopyrite and goethite. The formation appears to be in-situ, occurring during the HCT as the arsenopyrite nearest the edge of the particle breaks down.			
Chlorite group (clinochlore)	5 µm	50 µm	10 µm	Anhedral
Description	Chlorite is associated with illite and muscovite in the brecciated veins and veinlets. It is also present as part of the fine-grained alteration products of the breakdown of alkali feldspar.			
Goethite	5 µm	50 µm	10 µm	Anhedral
Description	Goethite is a trace phase thinly disseminated in the sample. It is most commonly associated with pyrite where there is evidence for in-situ oxidation, particularly along crystallographic axes. It is likely that some of this goethitic oxidation has formed from the breakdown of arsenopyrite as well as pyrite.			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

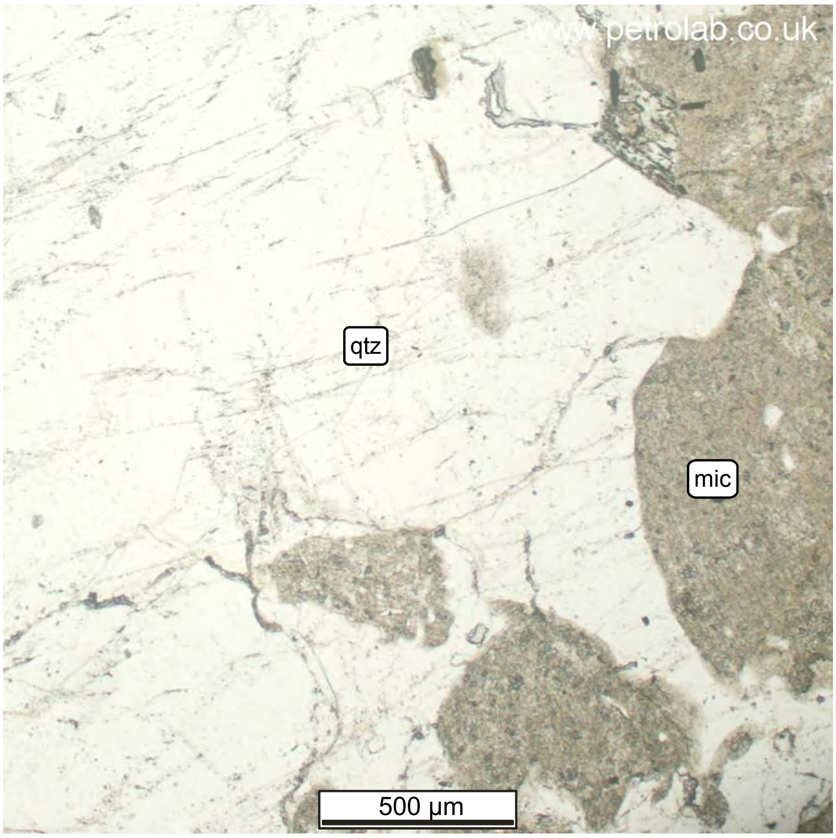
Sample MGI-10-23 (135-151) HC-3

- The sample is a moderately altered Alkali Feldspar Granite. Alteration of the alkali feldspar grains has been moderate and occasionally pervasive with the formation of fine white mica (illite) as the common alteration product along with occasional chlorite. Hydrothermal alteration has led to the formation of weak net-textured veins and veinlets generally containing dolomite, pyrite, arsenopyrite and illite. Sulfide mineralisation is concentrated in the hydrothermally brecciated zones, particularly in association with muscovite. Sulfide mineralisation is generally encapsulated within the coarser minerals (+2 mm) but partially or well liberated in the fine-fraction (-2 mm). There is evidence for in-situ oxidation of the pyrite with the formation of crystallographically controlled goethite. Nevertheless, significant pyrite, particularly euhedral pyrite remained unreacted. The arsenic contents of the pyrite ranged between 1 and 11 wt% though with the majority between

Sample MGI-10-23 (135-151) HC-3

1 and 3 wt%. The SEM investigation also observed trace amounts of Fe-arsenate that appeared to be forming on the edge of an arsenopyrite-bearing particle and may represent the product of in-situ oxidation during the HCT.

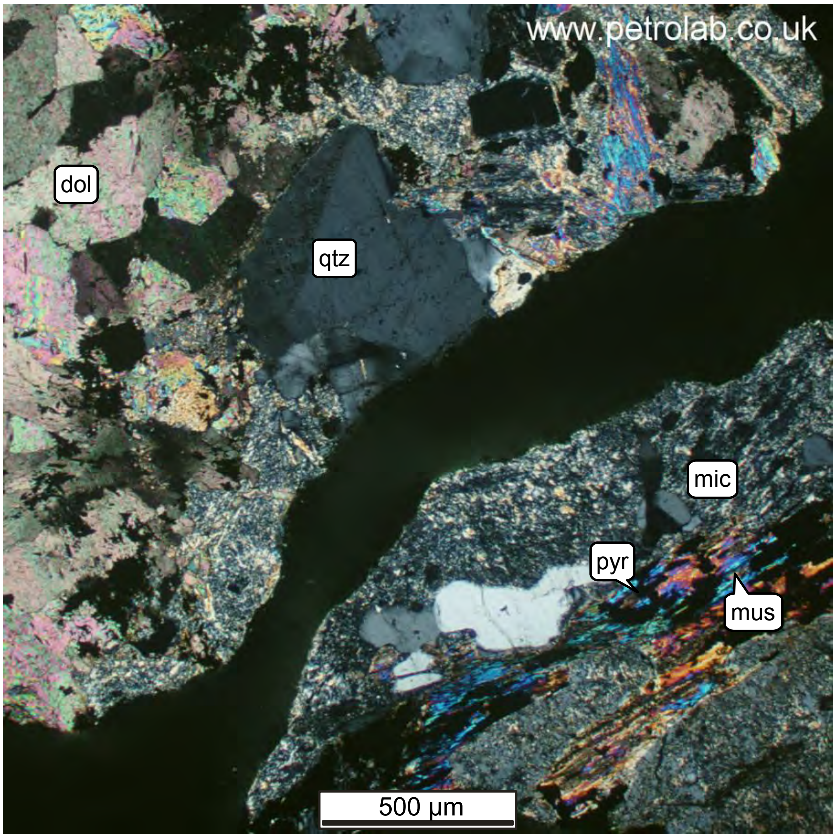
Photomicrographs



C **Sample MGI-10-23 (135-151) HC-3**

Photomicrograph showing coarse-grained quartz (qtz) adjacent to highly altered microcline (mic). The principal alteration product is illite.

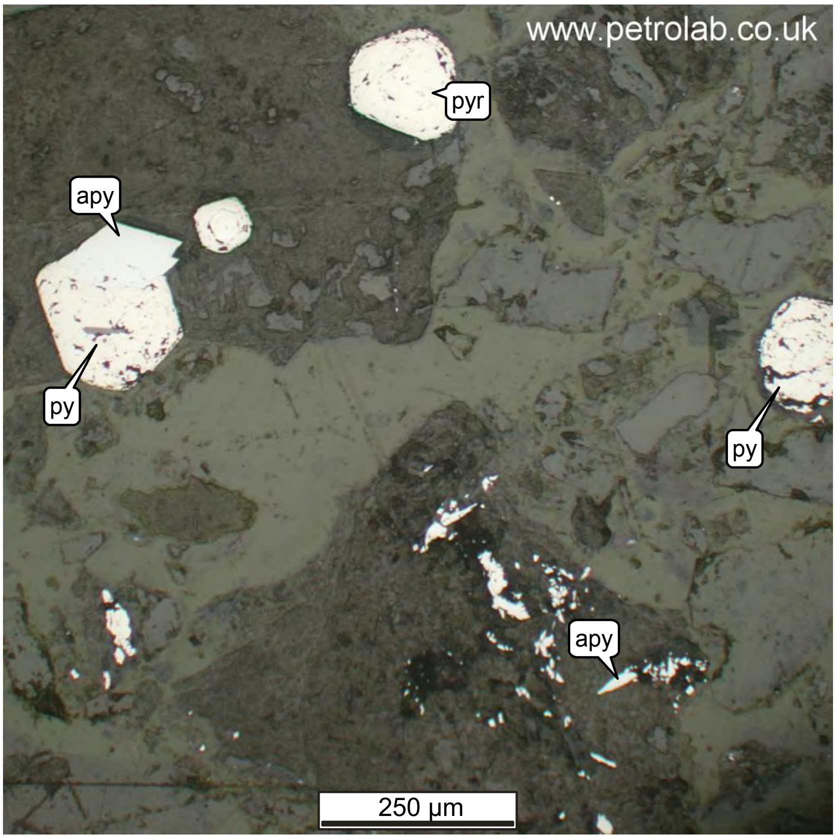
Image C
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



D **Sample MGI-10-23 (135-151) HC-3**

Photomicrograph of two particles showing intergrown quartz (qtz), dolomite (dol), heavily altered microcline (mic), muscovite (mus) and pyrite (pyr).

Image D
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50



E

Sample MGI-10-23 (135-151) HC-3

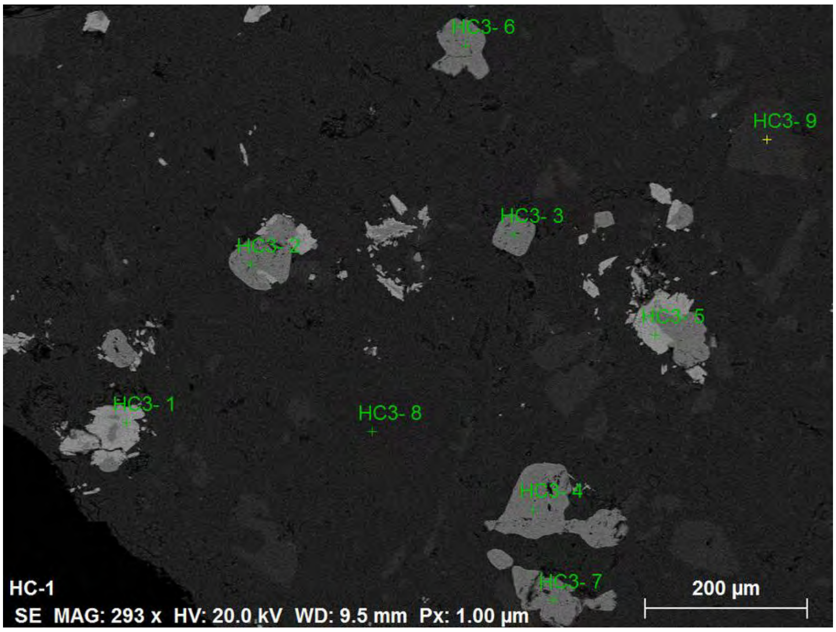
Photomicrograph showing pyrite in partially encapsulated textural developments and in liberated textural developments (pyr). Associated with the pyrite is arsenopyrite (apy) with a generally higher degree of encapsulation.

Image E

Nikon Microphot-FXA petrological microscope

Plane polarised reflected light

x100



F

Sample MGI-10-23 (135-151) HC-3

Back scatter electron image showing fine-grained particles of arsenopyrite (HC3-1) and arsenical pyrite (HC3-2,3,4,5,6,7) included within a larger particle dominated by quartz (HC3-8). There are also inclusions of microcline (HC3-9). As contents of the arsenical pyrite are between 1 and 3 wt%.

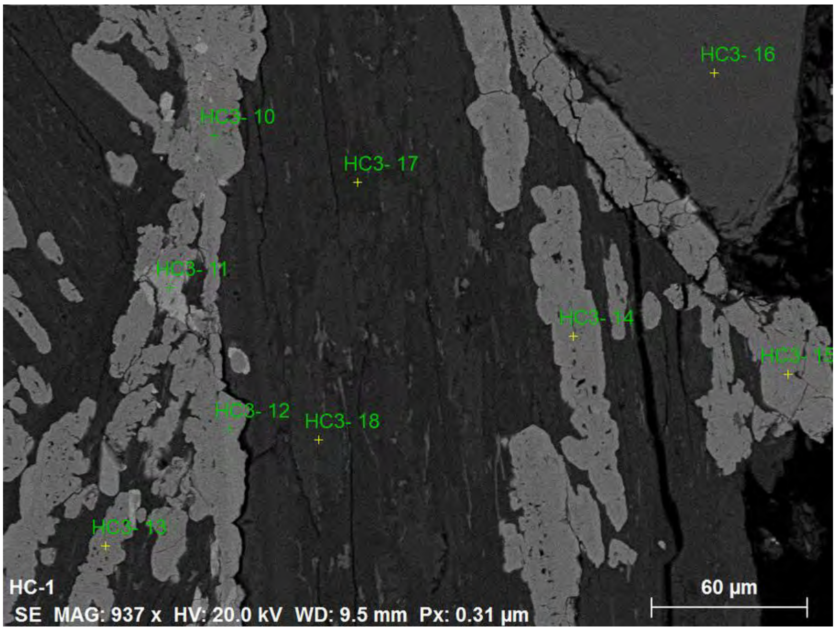
Image F

ZEISS EVO MA-25 SEM

Backscatter electron (BSE) mode

x200

G	Sample MGI-10-23 (135-151) HC-3



Back scatter electron image showing grains of arsenical pyrite (HC3-10,12,13,14,15) and arsenopyrite (HC3-11) associated with muscovite (HC3-17) and ferroan dolomite (HC3-18). There is also a grain of fluorapatite (HC3-16). The As content of the arsenical pyrite ranges from 1 to 11 wt %.

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
x800

3) Sample MGI-10-36 (220-256) HC-4

Sample as received

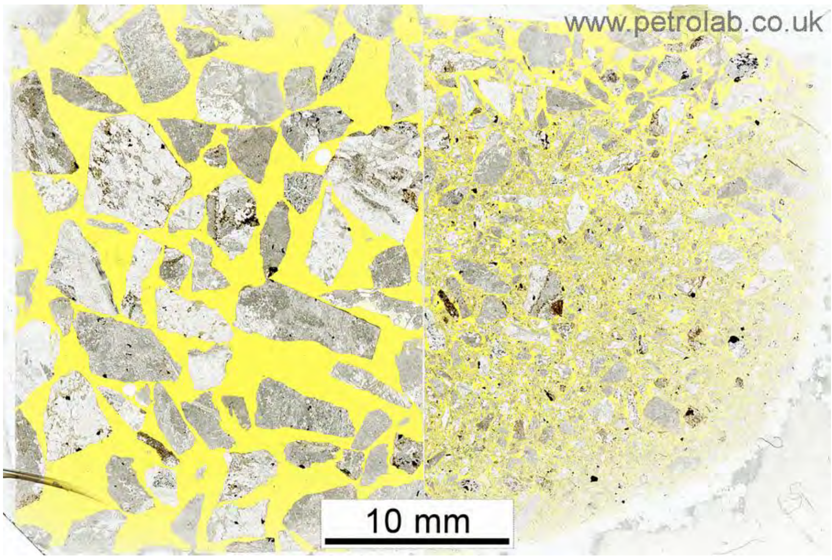
Sample MGI-10-36 (220-256) HC-4		
Petrolab ID	Date received	Type · condition · properties
#6469	16/11/2016	Metallurgical test · 256 g

A Sample MGI-10-36 (220-256) HC-4

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B Sample MGI-10-36 (220-256) HC-4

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample MGI-10-36 (220-256) HC-4		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
(Ferroan) Dolomite	$CaMg(CO_3)_2$ | sg~2.84	66.4% | 67.8%
Quartz	SiO_2 | sg~2.65	18.3% | 17.4%
Illite / Muscovite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	7.0% | 6.9%
Microcline	$KAlSi_3O_8$ | sg~2.56	5.1% | 4.7%
Chlorite group (clinochlore)	(Mg,Fe++)5Al(Si3Al)O10(OH)8 | sg~2.65	1.5% | 1.4%
Kaolinite	Al2Si2O5(OH)4 | sg~2.60	1.2% | 1.1%
Calcite	CaCO3 | sg~2.70	0.6% | 0.6%
Pyrite	FeS2 | sg~5.01	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample MGI-10-36 (220-256) HC-4				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Dolomite	10 µm	300 µm	150 µm	Subhedral to anhedral
Description	Dolomite is the dominant mineral within the sample and consists of euhedral to anhedral, fine-grained to massive developments that make up the majority of most particles. Associated with the carbonaceous particles are some granitic remnants, with a generally diffuse boundary between them. SEM analysis of the dolomite suggests significant Fe content.			
Quartz	10 µm	600 µm	200 µm	Subhedral
Description	Quartz is a minor mineral in this sample being associated with granitic lithic fragments and in coarse quartz-calcite veinstones. It generally forms subhedral to anhedral grains with occasionally undulose extinction.			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the feldspar minerals. It is generally very fine-grained and the level of alteration is moderate. Illite also forms part of quartz-calcite veins that are occasionally observed within the sample. In places, the white mica is far coarser-grained and would more appropriately be termed muscovite.			
Microcline	20 µm	300 µm	100 µm	Generally anhedral
Description	This alkali feldspar is associated with the albite and quartz as part of the original igneous texture observed in lithic fragments. Alteration is usually minor to moderate in the alkali feldspar, with the formation of fine-white mica (illite) as the common breakdown product.			
Muscovite	10 µm	200 µm	100 µm	Anhedral
Description	Muscovite is generally present as isolated grains interstitial to quartz and feldspar. It shows a frequent association with areas of intense hydrothermal alteration and with pyrite.			

1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite and illite have strongly overlapping XRD traces so their quantification is reported as a combined total

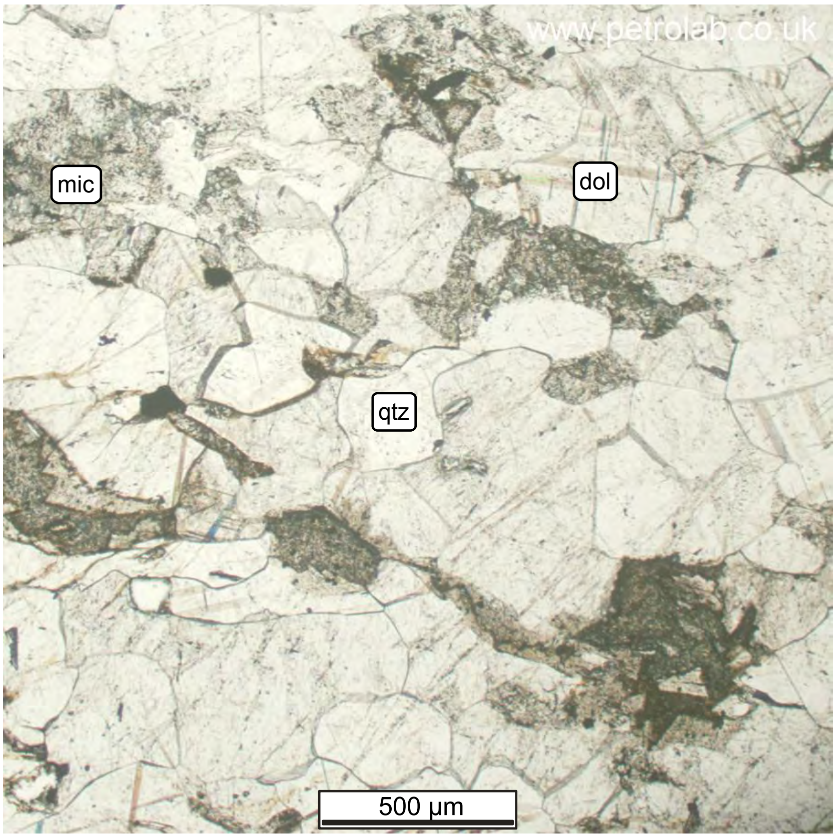
Sample MGI-10-36 (220-256) HC-4				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Chlorite group (clinochlore)	5 µm	50 µm	10 µm	Anhedral
Description	Chlorite is associated with illite and muscovite in the brecciated veins and veinlets. It is also present as part of the fine-grained alteration products of the breakdown of alkali feldspar.			
Kaolinite	5 µm	50 µm	10 µm	Anhedral
Description	Kaolinite, along with illite and chlorite forms part of the fine-grained matrix of alteration minerals, usually forming from the breakdown of the feldspar minerals.			
Calcite	-	-	-	-
Description	Calcite was observed by XRD analysis and not specifically observed by petrographic investigation. It is a trace phase most likely closely associated with dolomite throughout.			
Pyrite	5 µm	300 µm	100 µm	Euhedral to anhedral
Description	Pyrite is a trace mineral, present throughout the sample as euhedral to anhedral grains. It is generally observed within the dolomite-illite-muscovite veins and with the massive dolomite dominant particles. Within the coarser fraction (+2 mm) the pyrite is often encapsulated but in the finer fraction (-2 mm) the pyrite is frequently well liberated and fine-grained. There is frequent evidence for in-situ oxidation with formation of goethite at the expense of pyrite. There is also some unreacted pyrite, particularly the more euhedral or heavily encapsulated pyrite. The arsenic content of the pyrite is roughly 1 wt%.			
Goethite	5 µm	50 µm	10 µm	Anhedral
Description	Goethite is a trace phase thinly disseminated in the sample. It is most commonly associated with pyrite where there is evidence for in-situ oxidation, particularly along crystallographic axes. Occasionally goethitic rims are also observed.			
Arsenopyrite	10 µm	50 µm	20 µm	Euhedral
Description	Arsenopyrite is a trace phase generally observed as euhedral grains that are highly encapsulated. All arsenopyrite appears to be largely unreacted.			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample MGI-10-36 (220-256) HC-4

- The sample is a dolomite dominant hydrothermal alteration of pre-existing granitic material. Particles generally consist of fine-grained to massive ferroan dolomite with moderate amounts of remnant granitic particles and quartz-feldspar-dolomite developments. Pyrite mineralisation is associated with both the massive dolomite and with the quartz-feldspar-dolomite veinstones. Sulfide mineralisation is generally encapsulated within the coarser minerals (+2 mm) but partially or well liberated in the fine-fraction (-2 mm). There is frequent evidence for in-situ oxidation of the pyrite with the formation of crystallographically controlled goethite and occasional goethitic rims. Nevertheless, significant pyrite, particularly the euhedral pyrite remains unreacted. Arsenic content of the pyrite grains ranges between 0.5 wt% and 4.5 wt%.

Photomicrographs



C

Sample MGI-10-36 (220-256) HC-4

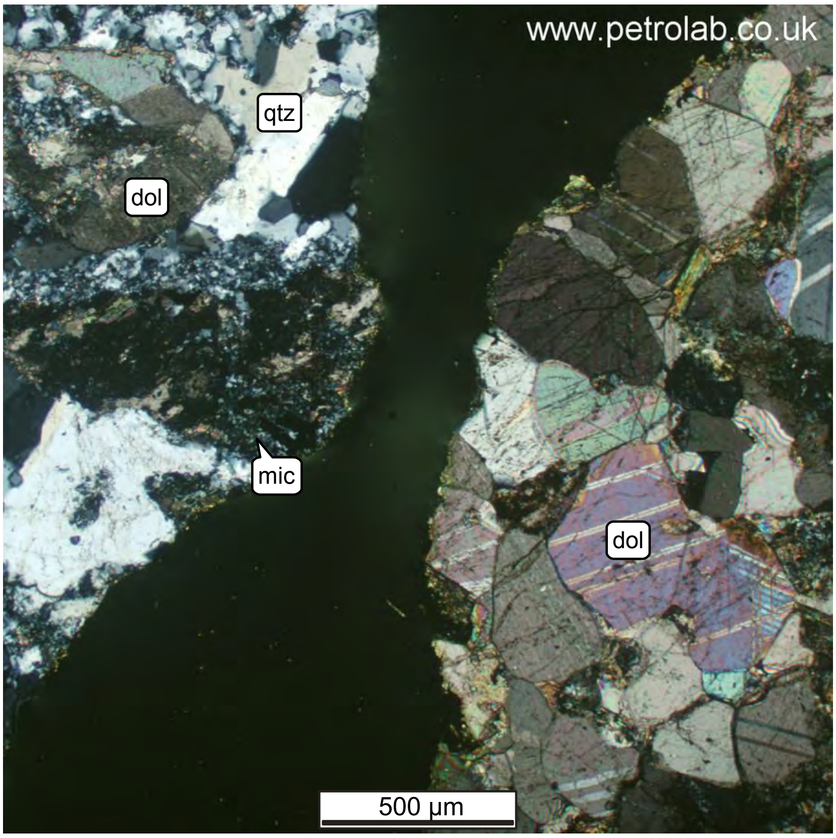
Photomicrograph showing intergrown dolomite (dol), quartz (qtz) and heavily altered microcline (mic). The principal alteration product of the microcline is illite.

Image C

Nikon Microphot-FXA petrological microscope

Plane polarised transmitted light

x50



D

Sample MGI-10-36 (220-256) HC-4

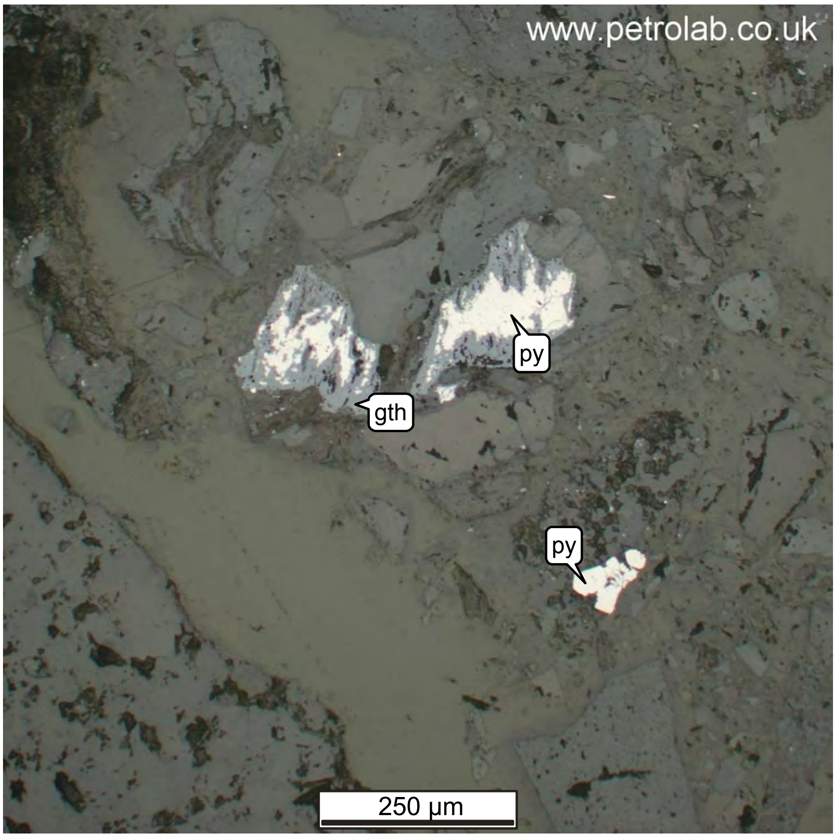
Photomicrograph showing particles containing intergrown textures of quartz (qtz), dolomite (dol), and heavily altered microcline (mic)

Image D

Nikon Microphot-FXA petrological microscope

Cross polarised transmitted light

x50



E

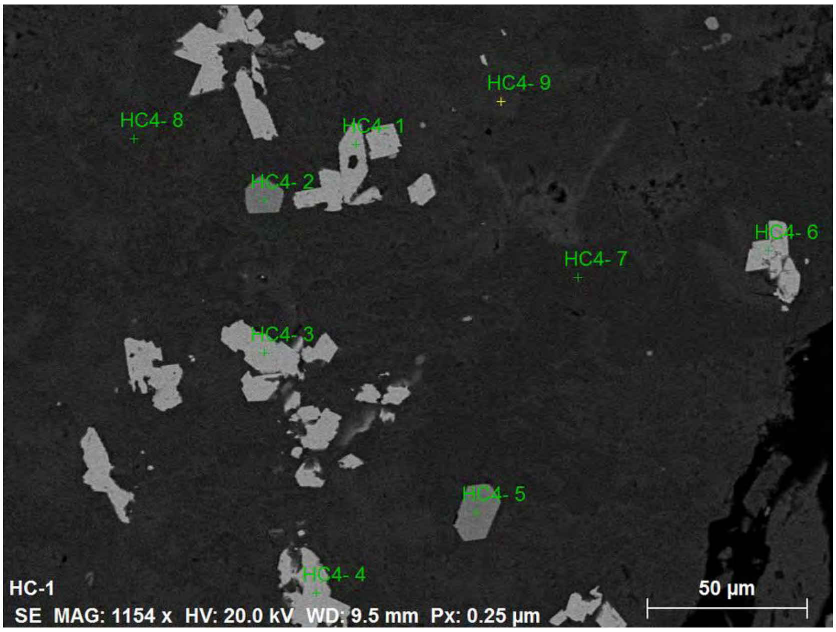
Sample MGI-10-36 (220-256) HC-4

Photomicrograph from the fine fraction (-2mm) showing altered and unaltered pyrite (pyr). The principal alteration product is goethite (gth).

Image E
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100

F

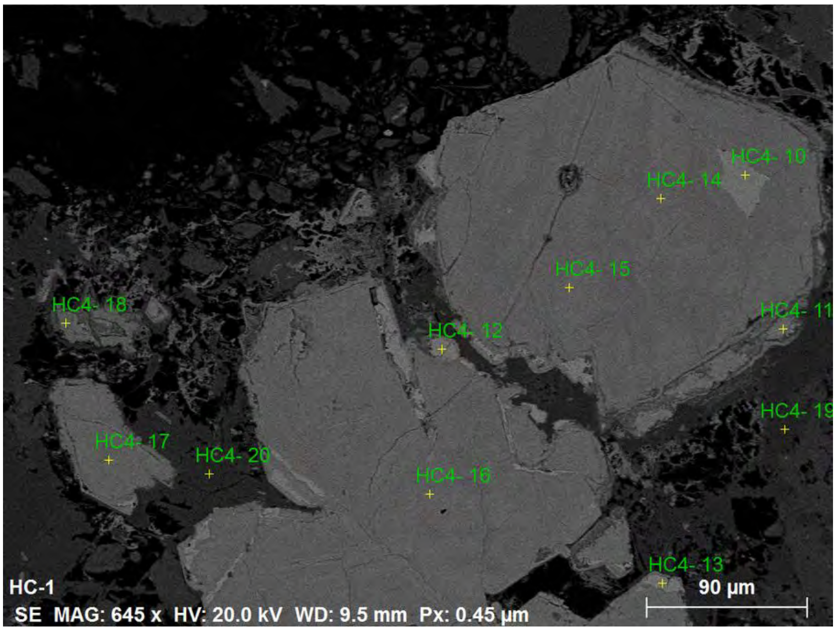
Sample MGI-10-36 (220-256) HC-4



Back scatter electron image showing fine-grained euhedral grains of arsenopyrite (HC4-1,3,4,6), arsenical pyrite (HC4-2,5) encapsulated within a larger particle dominated by quartz (HC4-7). Also encapsulated with the quartz is ferroan dolomite (HC4-8) and muscovite (HC4-9). The arsenic content of the arsenical pyrite is about 1 wt%.

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
x1200

G **Sample MGI-10-36 (220-256) HC-4**



Back scatter electron image showing pervasively altered pyrite (HC4-10) and arsenical pyrite (HC4-12 & 13) now pervasively altered to goethite (HC4-11,14,15,16,17). Adjacent to this are grains of calcite (HC4-19) and ferroan dolomite (HC4-20). The arsenical pyrite and goethite contain As contents between 0.5 wt% and 4.5 wt%.

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
x800

4) Sample MGI-10-48 (272-283) HC-7

Sample as received

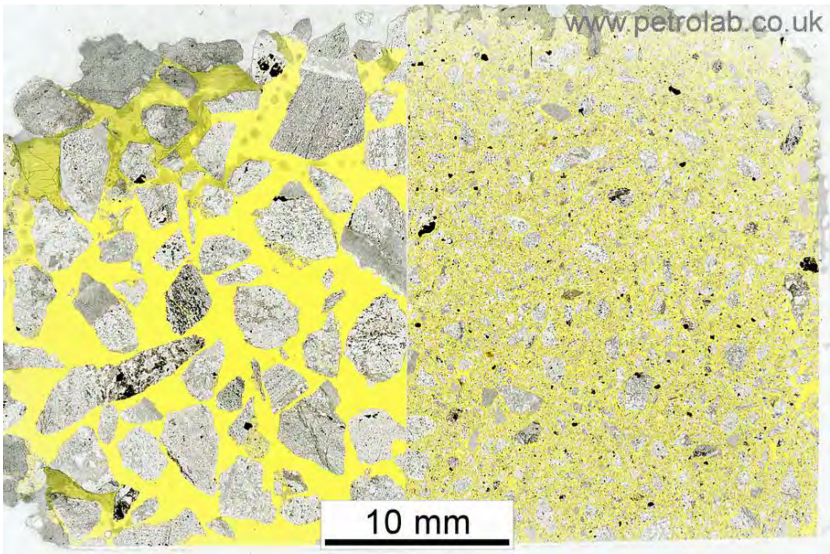
Sample MGI-10-48 (272-283) HC-7		
Petrolab ID	Date received	Type · condition · properties
#6472	16/11/2016	Metallurgical test · 246 g

A Sample MGI-10-48 (272-283) HC-7

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B Sample MGI-10-48 (272-283) HC-7

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample MGI-10-48 (272-283) HC-7		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	31.6% | 30.7%
Illite / Muscovite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	23.2% | 23.4%
Microcline	$KAlSi_3O_8$ | sg~2.56	21.6% | 20.3%
(Ferroan) Dolomite	$CaMg(CO_3)_2$ | sg~2.84	15.6% | 16.2%
Chlorite group (clinochlore)	$(Mg,Fe{+}{+})_5Al(Si_3Al)O_{10}(OH)_8$ | sg~2.65	5.7% | 5.5%
Pyrite	FeS_2 | sg~5.01	1.8% | 3.3%
Kaolinite	$Al_2Si_2O_5(OH)_4$ | sg~2.60	0.6% | 0.6%
Pyrrhotite	$Fe_{(1-x)}S$ (x=0-0.17) | sg~4.61	<0.1% | <0.1%
Chalcopyrite	$CuFeS_2$ | sg~4.19	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample MGI-10-48 (272-283) HC-7				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	10 µm	300 µm	150 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. It is generally finer-grained than other granitic samples from this sample suite.			
Illite	5 µm	250 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the alkali feldspar minerals. It is generally very fine-grained and the level of alteration is moderate to pervasive. The sample shows evidence for hydrothermal brecciation and illite forms part of the interstitial veins caused by this brecciation, often associated with dolomite.			
Microcline	10 µm	300 µm	150 µm	Generally anhedral
Description	This alkali feldspar is associated with the quartz as part of the original igneous texture. Alteration is usually pervasive in the alkali feldspar, with the formation of fine-white mica (illite) as the common breakdown product.			
Dolomite	10 µm	300 µm	10 µm	Subhedral to anhedral
Description	Dolomite occurs in two distinct developments. These are (i) as minerals interstitial to quartz and feldspar, occasionally forming massive composite developments, or (ii) as thin veins and veinlets cross-cutting the host quartz and feldspar grains. When developed as veins and veinlets there is a strong association with illite and muscovite.			
Chlorite group (clinochlore)	5 µm	50 µm	10 µm	Anhedral
Description	Chlorite is associated with illite and muscovite in the brecciated veins and veinlets. It is also present as part of the fine-grained alteration products of the breakdown of alkali feldspar.			

1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite and illite have strongly overlapping XRD traces so their quantification is reported as a combined total

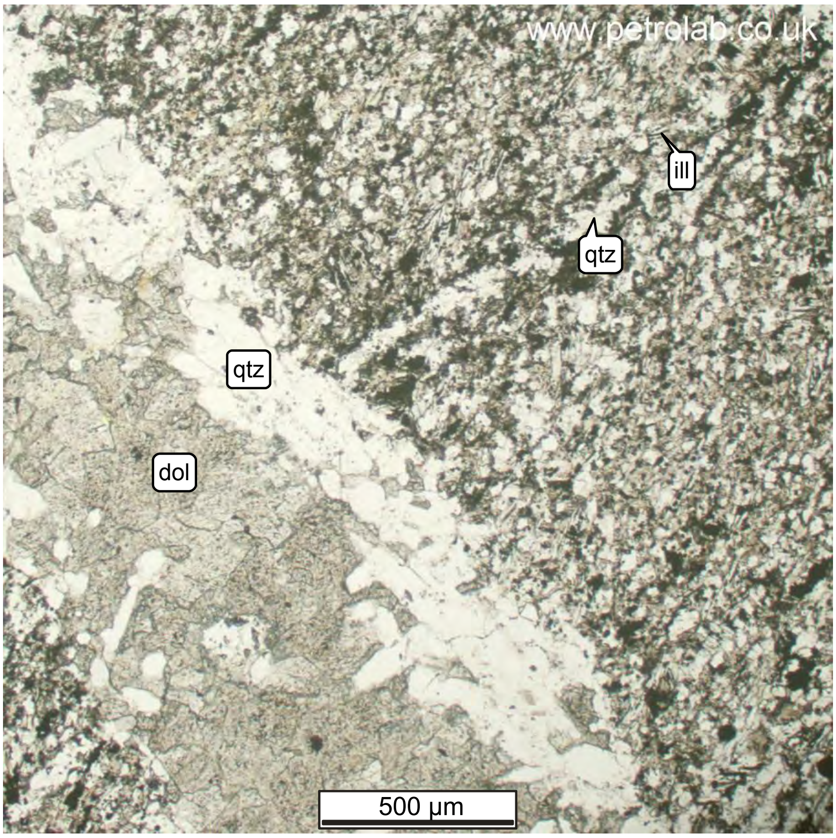
Sample MGI-10-48 (272-283) HC-7				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Muscovite	10 µm	200 µm	100 µm	Anhedral
Description	Muscovite is generally present as isolated grains interstitial to quartz and feldspar. It shows a frequent association with areas of intense hydrothermal alteration and with pyrite.			
Pyrite	5 µm	200 µm	50 µm	Euhedral to anhedral
Description	Pyrite is present throughout the sample, normally as euhedral grains but also as anhedral and occasional skeletal grains. It is generally observed within the dolomite-illite-muscovite veins and veinlets caused by the brecciation. Within the coarser fraction (+2 mm) the pyrite is usually encapsulated but in the finer fraction (-2 mm) the pyrite is frequently well liberated and fine-grained. Nevertheless, there is only occasional evidence for in-situ oxidation of pyrite. In general the pyrite remains unreacted across the fine and coarse fraction. The pyrite content contains arsenic contents of around 2 wt%.			
Kaolinite	5 µm	50 µm	10 µm	Anhedral
Description	Kaolinite is a rare alteration product, associated with illite and chlorite and generally forming from the breakdown of the feldspar grains.			
Pyrrhotite	10 µm	40 µm	20 µm	Anhedral
Description	Pyrrhotite is a trace presence only observed as rare inclusions within pyrite. It shows no evidence of oxidation.			
Chalcopyrite	10 µm	40 µm	20 µm	Anhedral
Description	Chalcopyrite is a trace presence only observed as rare inclusions within pyrite. It shows no evidence of oxidation.			
Goethite	5 µm	50 µm	10 µm	Anhedral
Description	Goethite is rarely observed in the sample but is occasionally present as a breakdown product of pyrite.			
Arsenopyrite	10 µm	50 µm	20 µm	Euhedral
Description	Arsenopyrite is a trace phase generally observed as euhedral grains that are highly encapsulated. It is frequently observed rimming the pyrite grains.			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample MGI-10-48 (272-283) HC-7

- The sample is a strongly hydrothermally altered Alkali Feldspar Granite. Alteration of the alkali feldspar grains has been moderate and occasionally pervasive with the formation of fine white mica (illite) as the common alteration product along with occasional kaolinite and chlorite. Hydrothermal alteration has led to the formation of net-textured veins and veinlets generally dominated by dolomite and illite. Sulfide mineralisation is concentrated in the these net-textured zones, in association with muscovite and illite. Sulfide mineralisation is generally encapsulated within the coarser minerals (+2 mm) but partially or well liberated in the fine-fraction (-2 mm). Despite the formation of anhedral and even skeletal pyrite in places there is only occasional evidence for in-situ oxidation of pyrite. In general the pyrite remains unreacted across the fine and coarse fraction.

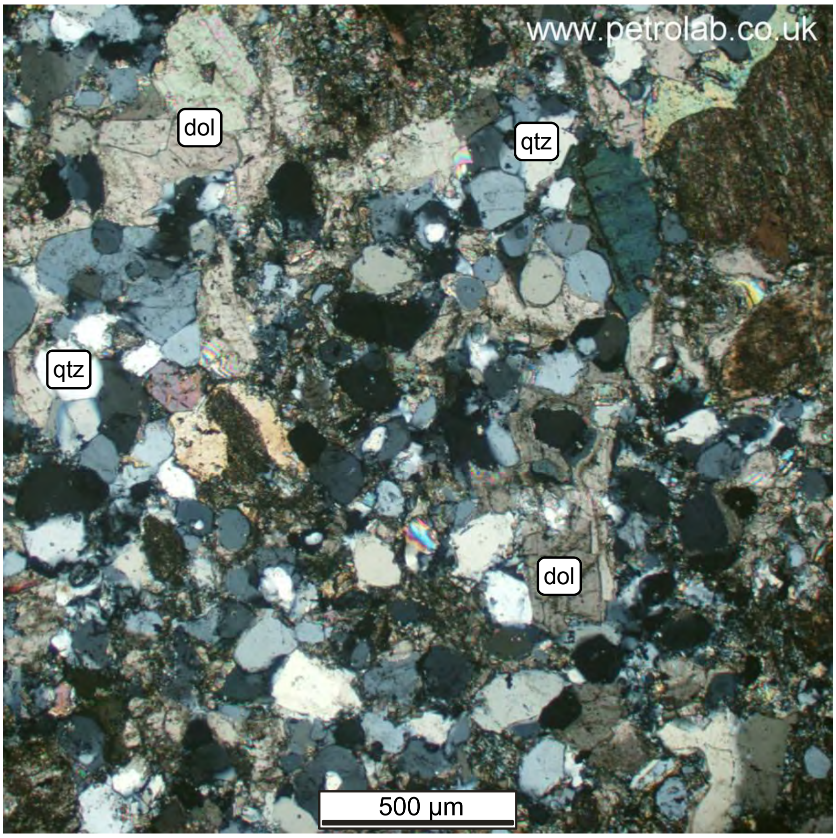
Photomicrographs



C **Sample MGI-10-48 (272-283) HC-7**

Photomicrograph showing a dolomite (dol) and quartz (qtz) vein cutting through a groundmass that predominantly consists of fine quartz and heavily altered feldspar that is now mainly illite.

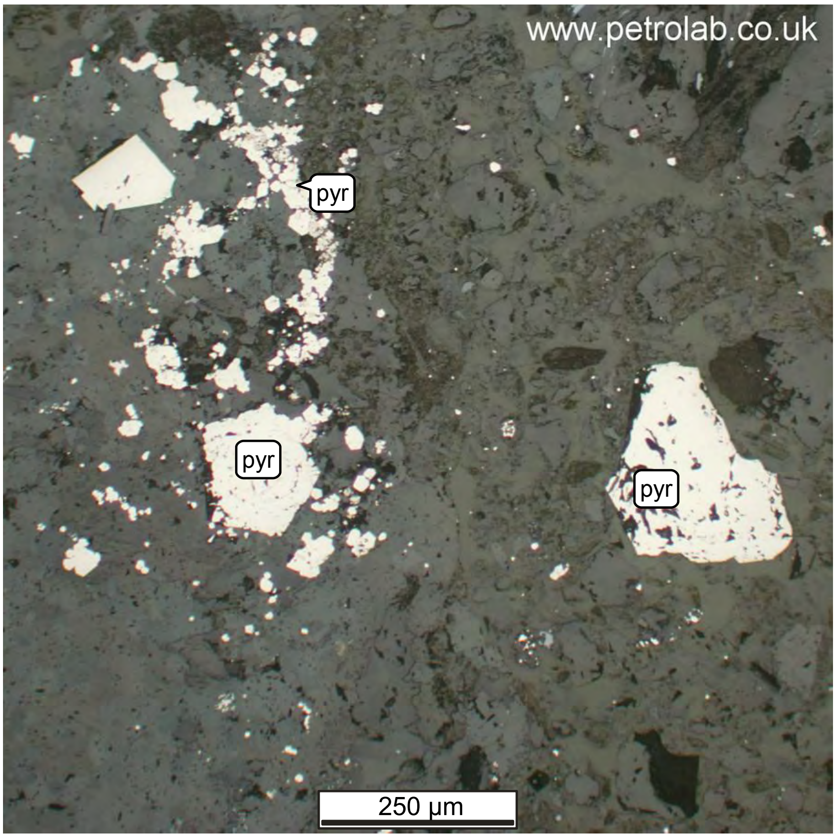
Image C
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



D **Sample MGI-10-48 (272-283) HC-7**

Photomicrograph showing intergrown groundmass consisting of medium-grained quartz (qtz) and dolomite (dol).

Image D
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50

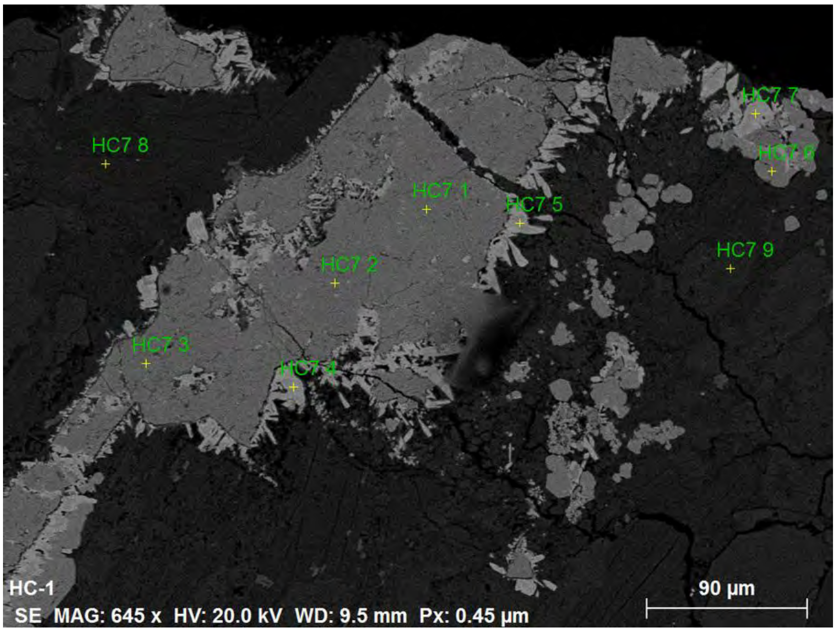


E

Sample MGI-10-48 (272-283) HC-7

Photomicrograph showing euhedral and subhedral, fine-grained and medium-grained, liberated and encapsulated pyrite (pyr). All pyrite is largely unreacted in this field-of-view.

Image E
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100



F

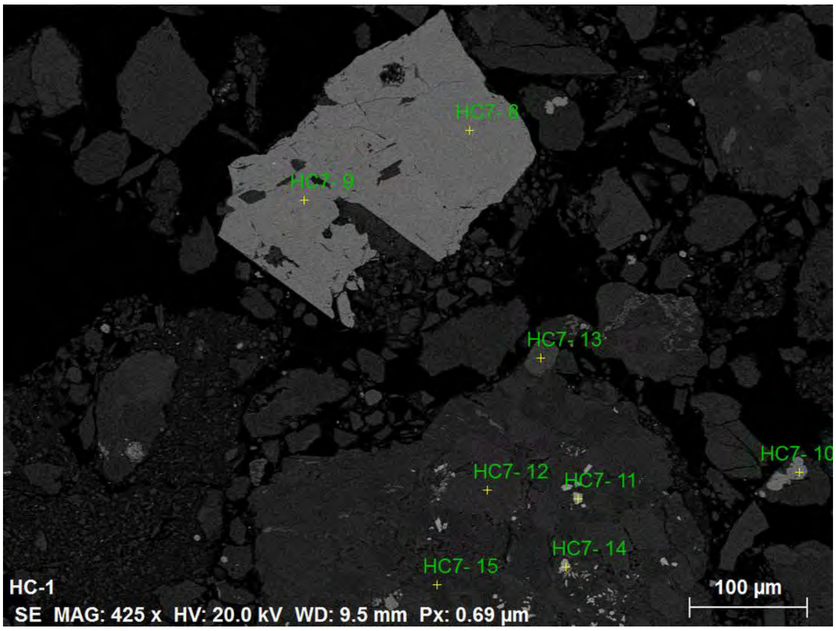
Sample MGI-10-48 (272-283) HC-7

Back scatter electron image showing anhedral pyrite and arsenical pyrite (HC7-1,2,3 & 6) rimmed by arsenopyrite (HC7-4,5 & 7). Associated with this are some grains of muscovite (HC7-8) and ferroan dolomite (HC7-9).

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
x800

G

Sample MGI-10-48 (272-283) HC-7



Back scatter electron image showing liberated pyrite (HC7-8,10) and arsenical pyrite (HC7-9). In the coarser particle to the bottom of the field of view is fine-grained arsenopyrite (HC711,14) and fluorapatite (HC&-13) hosted in microcline (HC7-12) and quartz (HC7-15). The arsenical pyrite contains arsenic contents of 2 wt%.

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
x500

5) Sample MGI-10-51 (790-815.5) HC-10

Sample as received

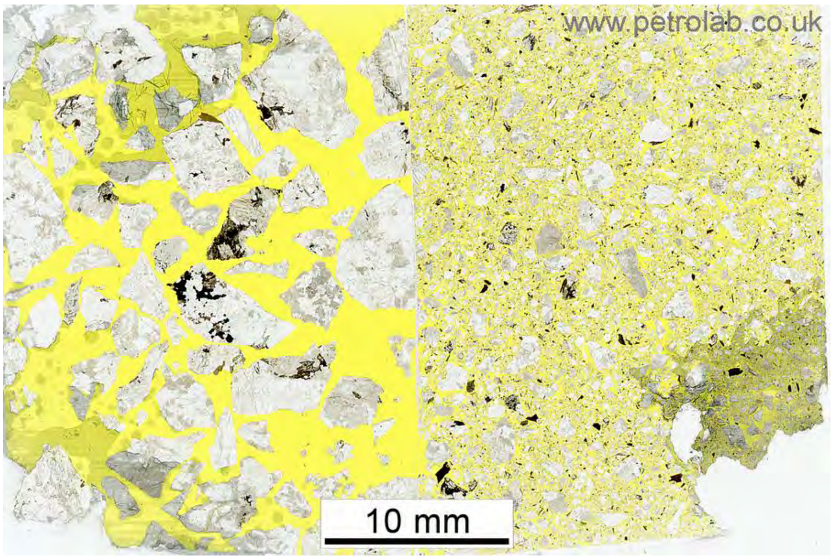
Sample MGI-10-51 (790-815.5) HC-10		
Petrolab ID	**Date received**	**Type · condition · properties**
#6470	16/11/2016	Metallurgical test · 252 g

A Sample MGI-10-51 (790-815.5) HC-10

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B Sample MGI-10-51 (790-815.5) HC-10

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample MGI-10-51 (790-815.5) HC-10		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	35.8% | 36.1%
Albite	$NaAlSi_3O_8$ | sg~2.62	34.2% | 34.1%
Microcline	$KAlSi_3O_8$ | sg~2.56	21.8% | 21.2%
Illite / Muscovite / Biotite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	6.9% | 7.2%
Calcite	$CaCO_3$ | sg~2.70	1.3% | 1.3%
Pyrite	FeS_2 | sg~5.01	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
(Ferroan) Dolomite	$CaMg(CO_3)_2$ | sg~2.84	<0.1% | <0.1%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample MGI-10-51 (790-815.5) HC-10				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	200 µm	3000 µm	1000 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. Grain size is generally coarse and may be coarser still in the original uncrushed sample.			
Albite	100 µm	3000 µm	1000 µm	Subhedral to euhedral
Description	Albite forms generally subhedral grains, though occasionally with euhedral habits. Albite is generally less altered than the alkali feldspar grains present within the slide with well developed and visible twinning. Nevertheless, alteration is present with the formation of fine-mica as the predominant alteration product. The albite is also coarse-grained, and may be coarser still in the uncrushed sample.			
Microcline	100 µm	3000 µm	1000 µm	Generally anhedral
Description	This alkali feldspar is associated with the albite and the quartz as part of the original igneous texture. Alteration is slightly more pervasive in the alkali feldspar than the albite, with the formation of fine-white mica (illite) as the common breakdown product. The grain size is generally coarse and may be coarser still in the original uncrushed sample.			
Biotite group	50 µm	600 µm	300 µm	Subhedral
Description	Biotite is a minor medium-grained phase that forms part of the granitic development of the host rock. It is generally located interstitial to the quartz and feldspar grains.			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the albite and alkali feldspar minerals. It is generally very fine-grained and the level of alteration is moderate. The sample shows weak evidence for veining, but where present the illite often forms part of these interstitial veins.			

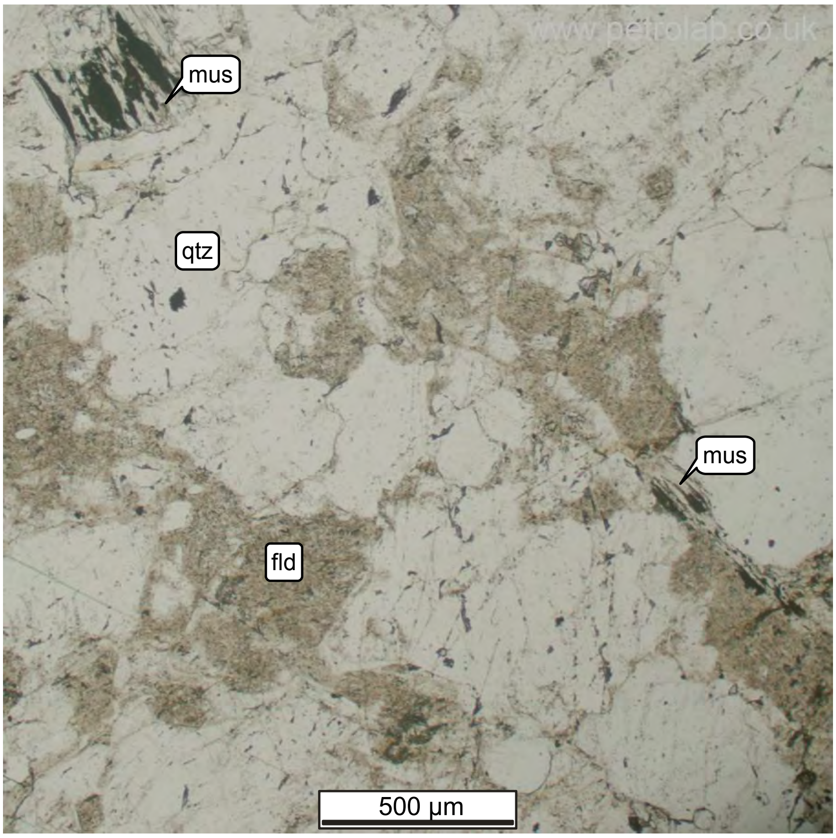
1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite, biotite and illite have strongly overlapping XRD traces so their quantification is reported as a combined total

Sample MGI-10-51 (790-815.5) HC-10				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Muscovite	10 µm	200 µm	100 µm	Anhedral
Description	Muscovite is generally present as isolated grains interstitial to quartz and feldspar. It shows a frequent association with areas of intense hydrothermal alteration and with pyrite.			
Calcite	10 µm	150 µm	80 µm	Subhedral to anhedral
Description	Calcite is a minor phase generally only occurring as thin veins and veinlets cross-cutting the host quartz and feldspar grains.			
Pyrite	5 µm	250 µm	50 µm	Euhedral to subhedral
Description	Pyrite is a trace phase, present as euhedral to subhedral grains. It is generally observed within the illite dominant veins that are a trace component of the sample. Encapsulation is generally high in both the coarser fraction (+2 mm) and the finer fraction (-2 mm) though there are well liberated and very fine-grained pyrite grains in the -2 mm fraction. The exposed pyrite shows very little evidence for in-situ oxidation and nearly all exposed grains remain unreacted.			
Goethite	5 µm	50 µm	10 µm	Anhedral
Description	Goethite is a trace phase thinly disseminated in the sample. There is some occasional association with pyrite though it tends to be present as fine occasional inclusions rather than as evidence for in-situ oxidation.			
Calcite	10 µm	150 µm	80 µm	Subhedral to anhedral
Description	Dolomite is a trace phase generally only occurring as thin veins and veinlets cross-cutting the host quartz and feldspar grains. From SEM analysis it contains appreciable Fe content.			
Arsenopyrite	10 µm	100 µm	50 µm	Euhedral
Description	Arsenopyrite is a trace phase generally observed as euhedral grains that are highly encapsulated. It is strongly associated with pyrite grains, often as partial rims.			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample MGI-10-51 (790-815.5) HC-10
• The sample is a moderately altered Monzo-Granite. Hydrothermal alteration of the feldspar grains has been moderate and occasionally pervasive with the formation of fine white mica (illite) as the common alteration product. Alteration is generally slightly more pervasive in the alkali feldspar rather than the albite. There is only weak veining apparent in the sample with the occasional formation of calcite and/or illite-muscovite dominant veins. Sulfide mineralisation is concentrated in these vein systems, particularly associated with muscovite. Encapsulation is generally high in both the coarser fraction (+2 mm) and the finer fraction (-2 mm) though there are well liberated and very fine-grained pyrite grains in the fine fraction. The exposed pyrite shows very little evidence for in-situ oxidation and nearly all exposed grains remain unreacted. The arsenic content of the pyrite grains is between 1 and 3 wt%.

Photomicrographs



C

Sample MGI-10-51 (790-815.5) HC-10

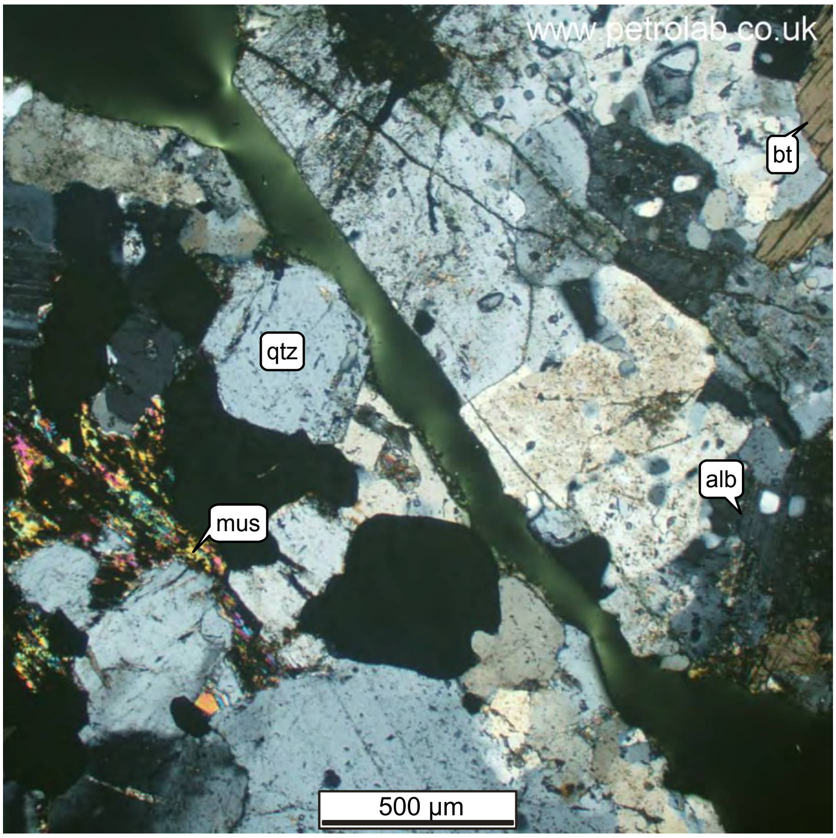
Photomicrograph showing medium- to coarse-grained intergrown quartz (qtz) and heavily altered feldspar grains (fld). The feldspar includes microcline and albite. Interstitial to this fabric is some muscovite (mus) and opaque pyrite.

Image C

Nikon Microphot-FXA petrological microscope

Plane polarised transmitted light

x50



D

Sample MGI-10-51 (790-815.5) HC-10

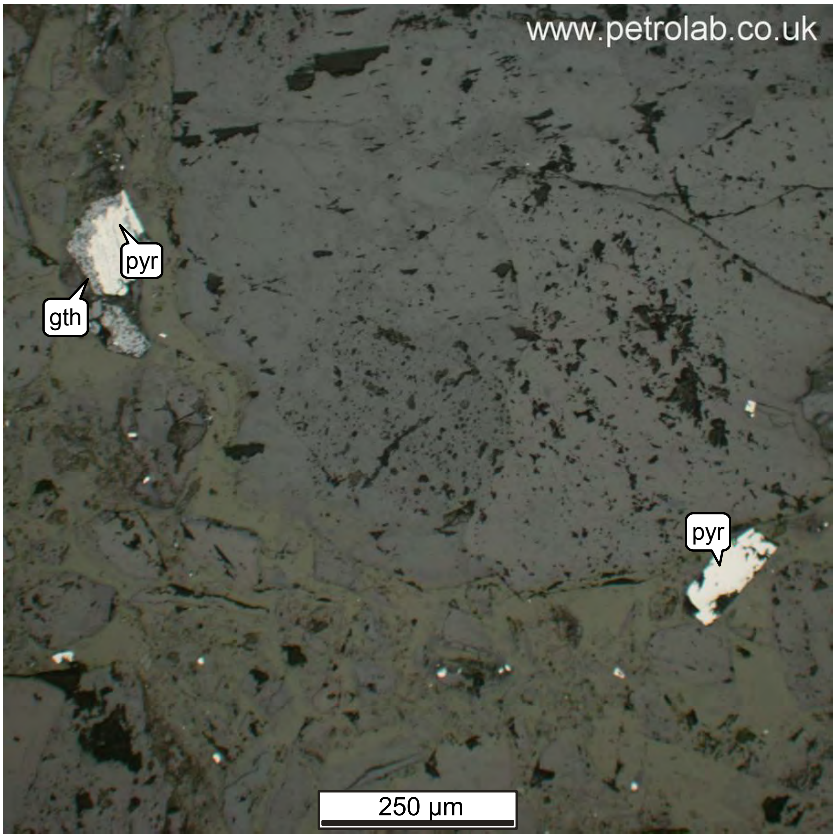
Photomicrograph showing composite particles containing intergrown quartz (qtz), albite (alb), biotite (bt) and muscovite (mus). Intergrown with the muscovite is opaque pyrite.

Image D

Nikon Microphot-FXA petrological microscope

Cross polarised transmitted light

x50

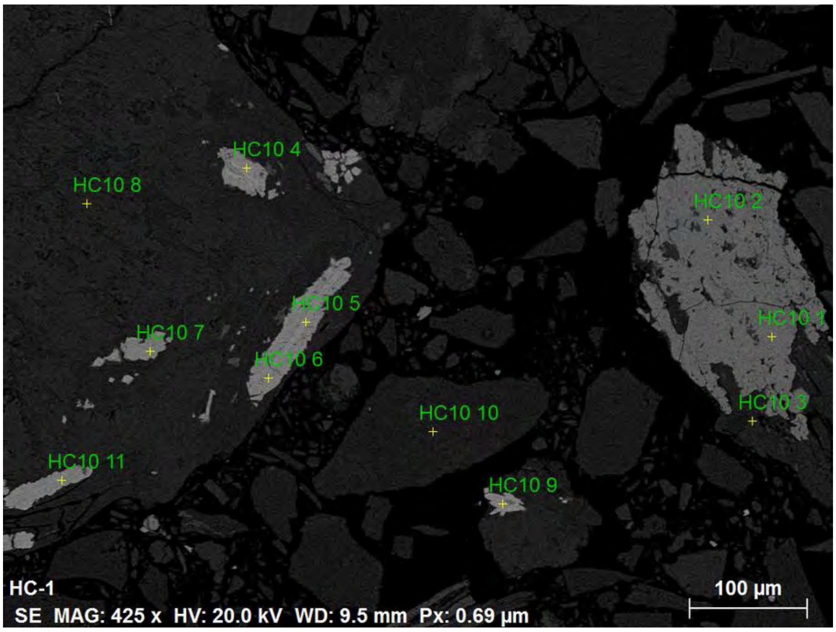


E

Sample MGI-10-51 (790-815.5) HC-10

Photomicrograph showing liberated and variably altered pyrite (pyr) from the -2mm size fraction. Where altered the principal product is goethite (gth).

Image E
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100



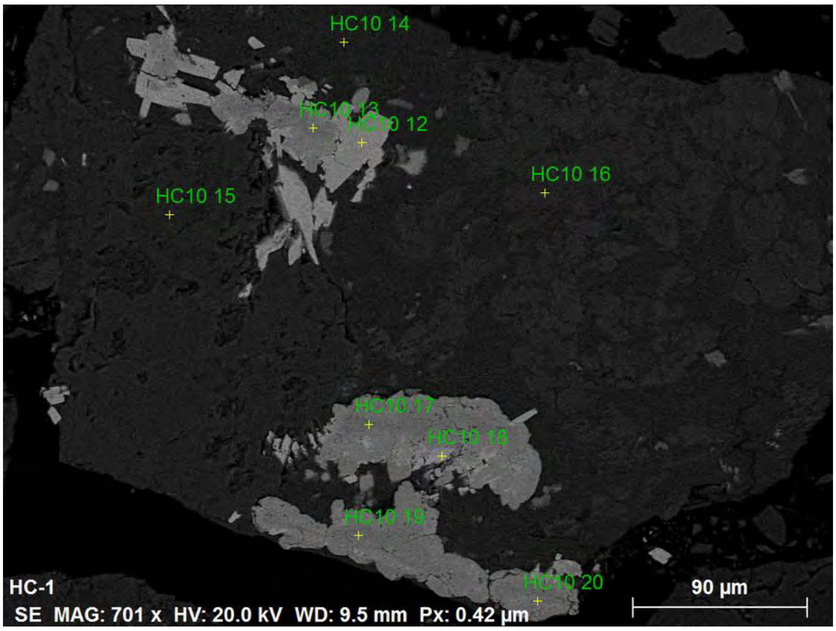
F

Sample MGI-10-51 (790-815.5) HC-10

Back scatter electron image showing liberated arsenical pyrite (HC10-1,2,3) and largely encapsulated grains of arsenopyrite (HC10-4,5,6 & 7). The arsenopyrite is hosted in a coarse grain of microcline (HC10-8,10). HC10-9 is a mixed spectra of arsenopyrite and pyrite. The arsenical pyrite contains As contents of between 1 & 3 wt%.

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
x500

G **Sample MGI-10-51 (790-815.5) HC-10**



Back scatter electron image showing arsenical pyrite (HC10-13,17,19,20) partially rimmed by arsenopyrite (HC10-12,18). These are encapsulated or partially included in a composite particle containing microcline (HC10-14, HC10-15 and ferroan dolomite (HC10-16). The As content of the arsenical pyrite goes from 4 to 5 wt%.

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
x800

6) Sample MGI-11-60 (513-543) HC-12

Sample as received

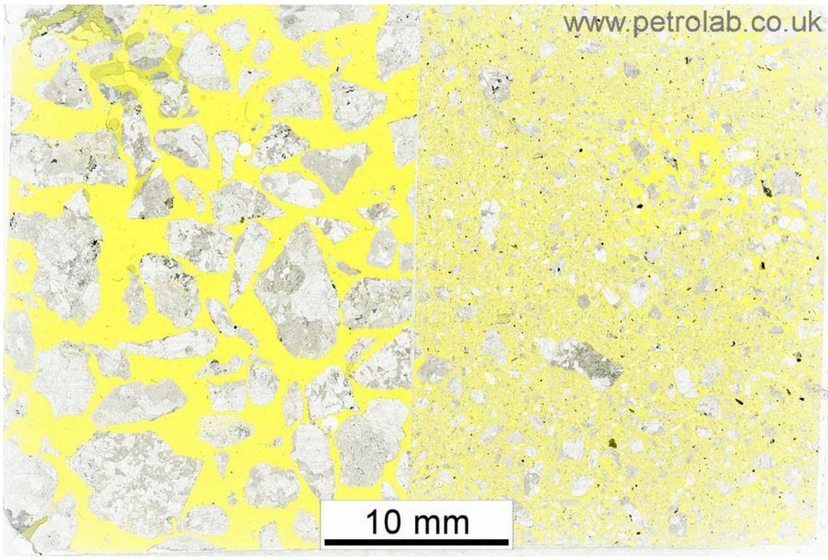
Sample MGI-11-60 (513-543) HC-12		
Petrolab ID	Date received	Type · condition · properties
#6473	16/11/2016	Metallurgical test · 257 g

A Sample MGI-11-60 (513-543) HC-12

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B Sample MGI-11-60 (513-543) HC-12

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample MGI-11-60 (513-543) HC-12		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	40.7% | 41.2%
Microcline	$KAlSi_3O_8$ | sg~2.56	37.2% | 36.3%
Albite	$NaAlSi_3O_8$ | sg~2.62	10.8% | 10.8%
Illite / Muscovite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	9.0% | 9.4%
Calcite	$CaCO_3$ | sg~2.70	2.2% | 2.3%
Pyrite	FeS_2 | sg~5.01	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample MGI-11-60 (513-543) HC-12				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	100 µm	2000 µm	1000 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. Grain size is generally coarse and may be coarser still in the original uncrushed sample.			
Microcline	100 µm	1500 µm	800 µm	Generally anhedral
Description	The alkali feldspar is associated with the albite and the quartz as part of the original igneous texture. Alteration is slightly more pervasive in the alkali feldspar than the albite, with the formation of fine-white mica (illite) as the common breakdown product.			
Albite	50 µm	1000 µm	400 µm	Subhedral to euhedral
Description	Albite forms generally subhedral grains, though occasionally with euhedral habits. Albite is generally less altered than the alkali feldspar grains present within the slide with well developed and visible twinning. Nevertheless, alteration is present with the formation of fine-mica as the predominant alteration product.			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the albite and alkali feldspar minerals. It is generally very fine-grained and the level of alteration is moderate. The sample shows weak veining and generally moderate hydrothermal alteration. Illite is common constituent of both the veins and the hydrothermal alteration.			
Muscovite	10 µm	500 µm	200 µm	Anhedral
Description	Muscovite is a minor constituent of the sample forming part of the interstitial minerals associated with illite and calcite particularly. It is also present as part of the hydrothermal alteration and displays a strong association with pyrite in this case.			
Calcite	10 µm	800 µm	200 µm	Subhedral to anhedral

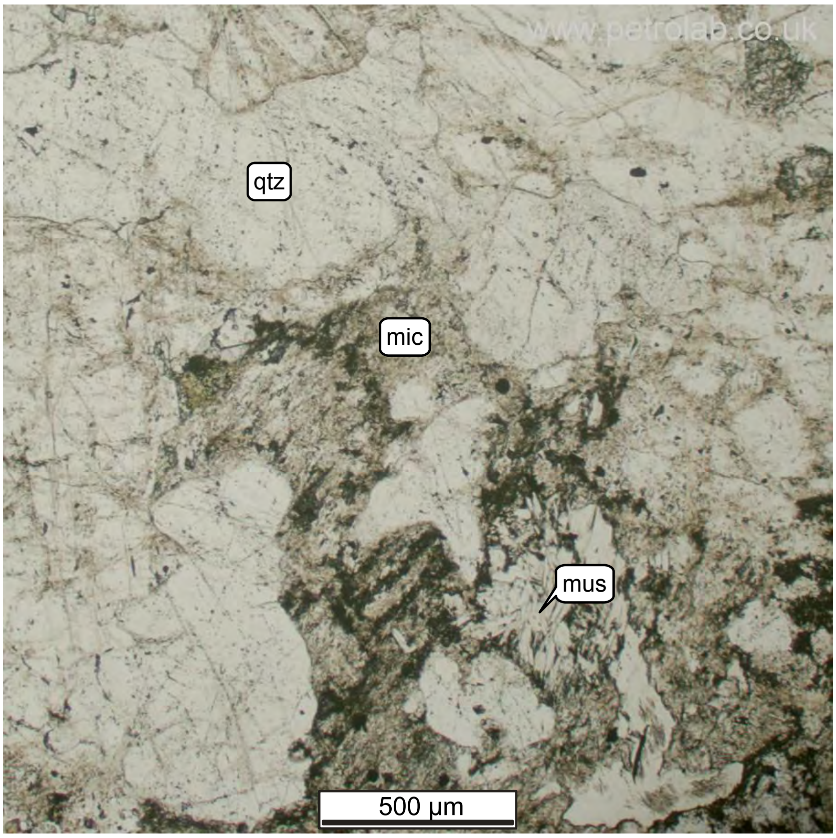
1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite, illite have strongly overlapping XRD traces so their quantification is reported as a combined total

Sample MGI-11-60 (513-543) HC-12				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Description	Calcite is a minor phase generally only occurring as thin veins and veinlets cross-cutting the host quartz and feldspar grains. There is a strong association with illite and pyrite in these veinlets. There are coarser patches within the sample, but generally the calcite is fine-grained.			
Pyrite	5 µm	120 µm	50 µm	Euhedral to subhedral
Description	Pyrite is a trace phase, present as euhedral to subhedral grains. It is generally observed within the illite dominant veins that are a trace component of the sample. Encapsulation is generally very high in both the coarser fraction (+2 mm) and the finer fraction (-2 mm) though there are well liberated and very fine-grained pyrite grains in the -2 mm fraction. The exposed pyrite shows very little evidence for in-situ oxidation and nearly all exposed grains remain unreacted.			
Goethite	5 µm	50 µm	10 µm	Anhedral
Description	Goethite is a trace phase thinly disseminated in the sample. There is some occasional association with pyrite though it tends to be present as fine occasional inclusions rather than as evidence for in-situ oxidation. Only a handful of goethite grains appear to be forming through direct oxidation of pyrite.			
Arsenopyrite	10 µm	100 µm	50 µm	Euhedral
Description	Arsenopyrite is a trace phase generally observed as euhedral grains that are highly encapsulated. It is strongly associated with pyrite grains, often as partial rims.			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample MGI-11-60 (513-543) HC-12
• The sample is a moderately altered Syeno-Granite. Alteration of the feldspar grains has been moderate and occasionally pervasive with the formation of fine white mica (illite) as the common alteration product. Alteration is generally slightly more pervasive in the alkali feldspar rather than the albite. There is only weak veining apparent in the sample with the occasional formation of calcite and/or illite dominant veins. Sulfide mineralisation is concentrated in these diffuse vein systems, particularly with muscovite. Encapsulation is generally high in both the coarser fraction (+2 mm) and the finer fraction (-2 mm) though there are some well liberated and very fine-grained pyrite grains in the fine fraction. The exposed pyrite shows very little evidence for in-situ oxidation and nearly all exposed grains remain unreacted. The arsenic content of the pyrite was measured at 1 to 3 wt%

Photomicrographs



C

Sample MGI-11-60 (513-543) HC-12

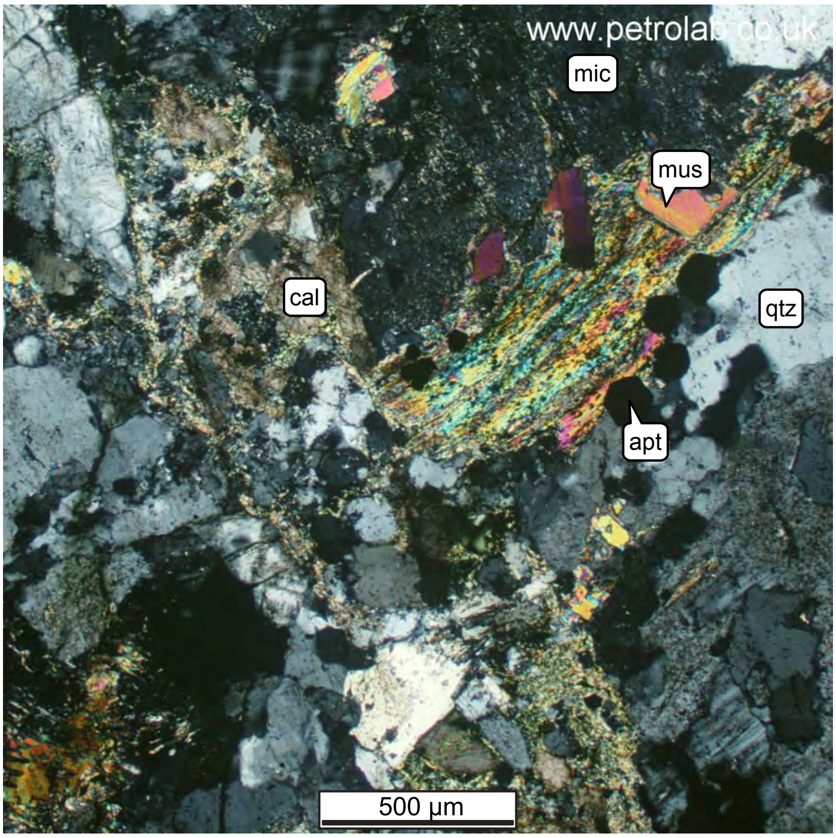
Photomicrograph showing intergrown textures of quartz (qtz), microcline (mic) and some interstitial muscovite (mus). The microcline is heavily altered to illite.

Image C

Nikon Microphot-FXA petrological microscope

Plane polarised transmitted light

x50



D

Sample MGI-11-60 (513-543) HC-12

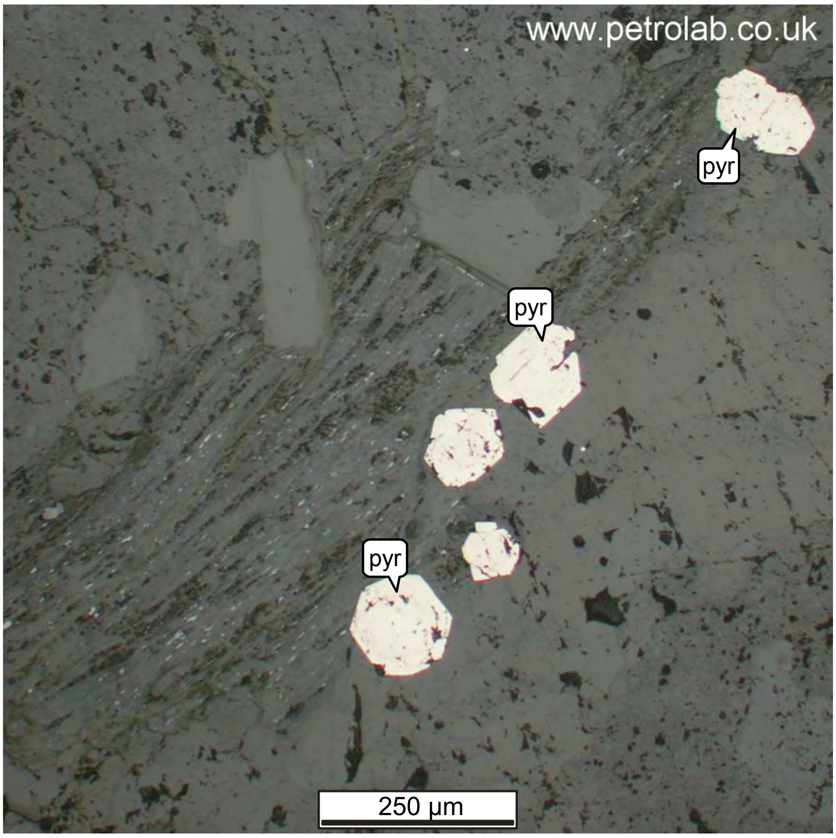
Photomicrograph showing closely intergrown texture of quartz (qtz), heavily altered microcline (mic), muscovite (mus) and calcite (cal). There are some scattered grains of euhedral apatite (apt) and some pyrite grains associated with the muscovite.

Image D

Nikon Microphot-FXA petrological microscope

Cross polarised transmitted light

x50

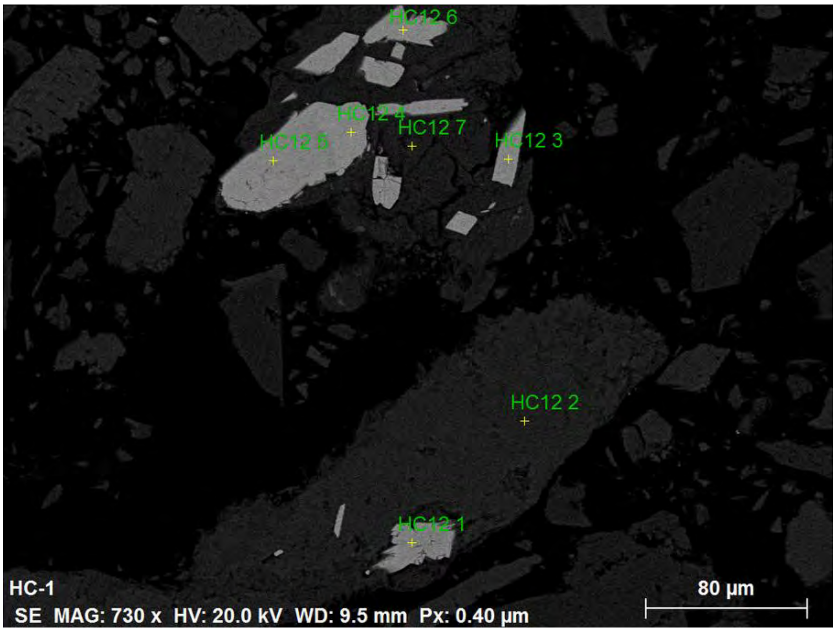


E

Sample MGI-11-60 (513-543) HC-12

Photomicrograph showing encapsulated, euhedral, and unreacted pyrite (pyr).

Image E
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100



F

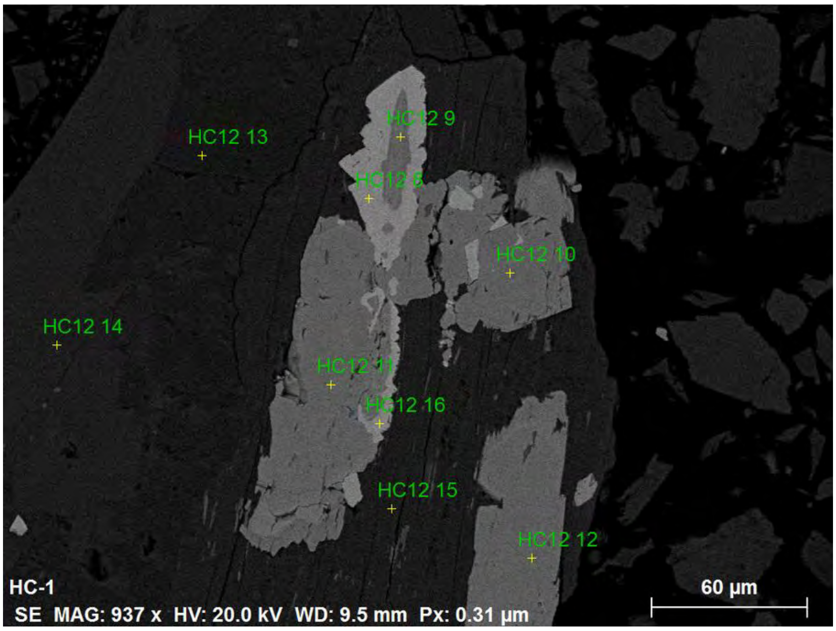
Sample MGI-11-60 (513-543) HC-12

Back scatter electron image showing scattered grains of arsenopyrite (HC12-1,3,4,5 & 6) associated with microcline (HC12-2) and muscovite (HC12-7). Some of the arsenopyrite contains traces of antimony (up to 0.5 wt%).

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
x800

G

Sample MGI-11-60 (513-543)
HC-12



Back scatter electron image showing arsenopyrite (HC12-8 & 16) rimming arsenical pyrite (HC12-9,10,11 & 12). These are partially encapsulated in a composite particle containing albite (HC12-13) and muscovite (HC12-14 & 15). The arsenical pyrite contains between 1 & 3 wt% As.

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

7) Sample MGI-11-64 (185.5-208) HC-14

Sample as received

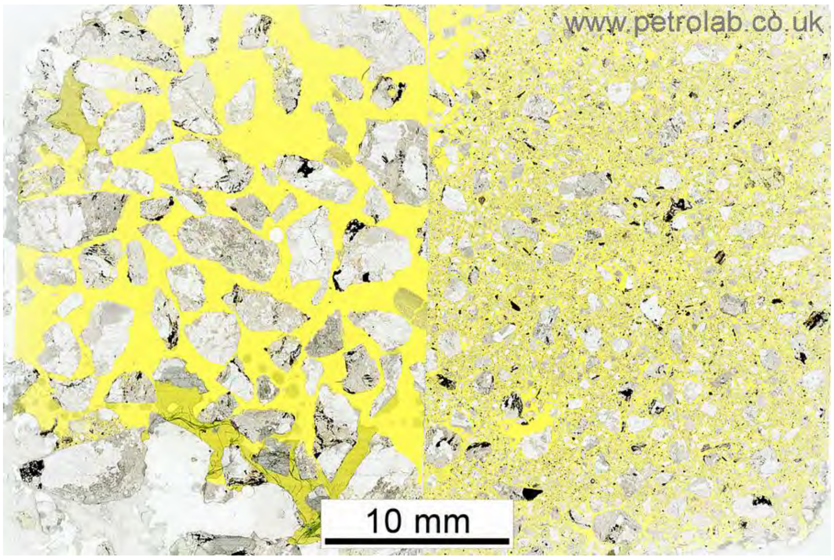
Sample MGI-11-64 (185.5-208) HC-14		
Petrolab ID	**Date received**	**Type · condition · properties**
#6467	16/11/2016	Metallurgical test · 264 g

A **Sample MGI-11-64 (185.5-208) HC-14**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B **Sample MGI-11-64 (185.5-208) HC-14**

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample MGI-11-64 (185.5-208) HC-14		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	37.7% | 37.1%
Microcline	$KAlSi_3O_8$ | sg~2.56	28.8% | 27.4%
Albite	$NaAlSi_3O_8$ | sg~2.62	12.4% | 12.1%
Illite / Muscovite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	17.9% | 18.3%
Pyrite	FeS_2 | sg~5.01	2.0% | 3.7%
Calcite	$CaCO_3$ | sg~2.70	1.4% | 1.4%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample MGI-11-64 (185.5-208) HC-14				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	100 µm	1800 µm	800 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. Grain size is generally coarse and may be coarser still in the original uncrushed sample.			
Microcline	100 µm	1500 µm	800 µm	Generally anhedral
Description	This alkali feldspar is associated with the albite and the quartz as part of the original igneous texture. Alteration is pervasive with the formation of fine-white mica (illite) as the common breakdown product. Because of the level of alteration and the degree of fluid infiltration it is difficult to estimate the grain-size distribution.			
Albite	10 µm	600 µm	200 µm	Subhedral to anhedral
Description	Albite forms generally anhedral grains, with occasional subhedral examples. Alteration is pervasive with only rare examples of well preserved and visible twinning. The principal alteration product is the formation of fine-mica. Given the extent of alteration, grain size estimations are very rough.			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the albite and alkali feldspar minerals. It is generally very fine-grained and the level of alteration is moderate to pervasive. The sample shows evidence for weak veining and fluid infiltration, with illite as a common component of both the veins and alteration products.			
Muscovite	10 µm	500 µm	200 µm	Anhedral
Description	Muscovite is a minor constituent of the sample forming part of the interstitial minerals. It is also related to the formation of illite through the infiltration of fluids that have altered the sample. Muscovite that has formed as part of the infiltration event displays a strong association with pyrite.			

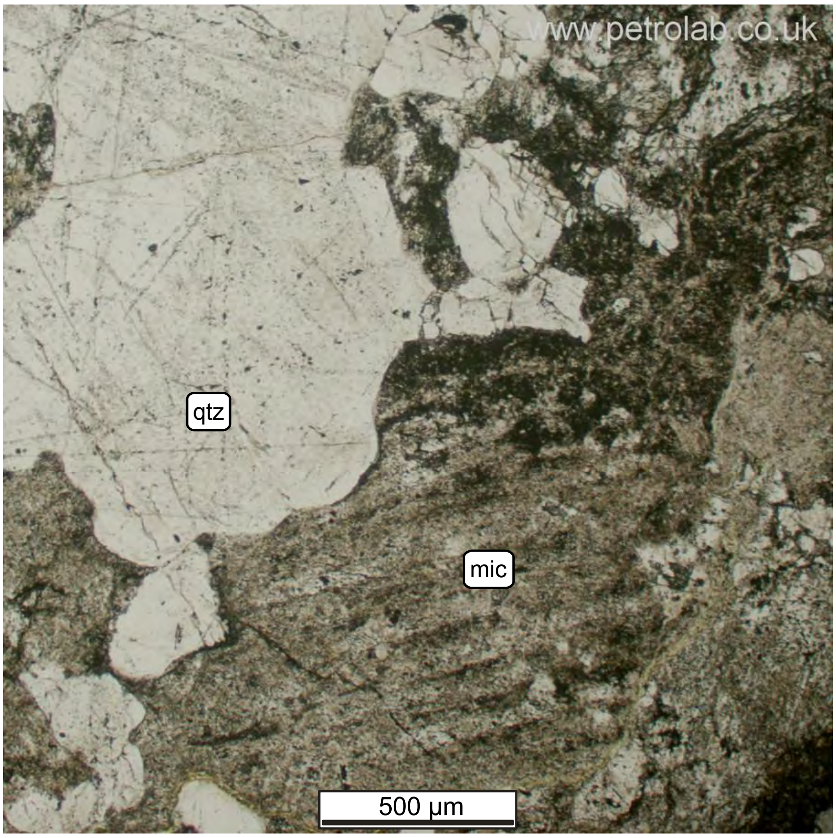
1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite, illite have strongly overlapping XRD traces so their quantification is reported as a combined total

Sample MGI-11-64 (185.5-208) HC-14				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Pyrite	5 µm	250 µm	100 µm	Euhedral to anhedral
Description	Pyrite is a minor phase, present as euhedral to anhedral grains. It is generally observed closely associated with muscovite as part of the strongly altered regions of the sample. Encapsulation is generally moderate in the coarser fraction (+2 mm) and the finer fraction (-2 mm) with well liberated examples, particularly in the fine fraction. There is abundant evidence for in-situ oxidation of pyrite with goethite in particular forming along crystallographically controlled axes. This is observed in both exposed and partially encapsulated grains. There are some exposed but unreacted pyrite grains, though these tend to be the more euhedral to equigranular grains. Arsenic content of the pyrite generally varies between 1 & 3 wt%.			
Calcite	10 µm	800 µm	200 µm	Subhedral to anhedral
Description	Calcite is a trace phase generally only occurring as thin veins and veinlets cross-cutting the host quartz and feldspar grains. There is a strong association with illite in these veinlets. There are coarser patches within the sample, but generally the calcite is fine-grained.			
Arsenopyrite	10 µm	300 µm	50 µm	Euhedral
Description	Arsenopyrite is a trace phase generally observed as euhedral grains that are highly encapsulated. It is strongly associated with pyrite grains, often as partial or complete rims. Occasionally there are examples of massive arsenopyrite finely intergrown with pyrite.			
Goethite	5 µm	50 µm	10 µm	Anhedral
Description	Goethite is a trace phase thinly disseminated in the sample. It is frequently associated with pyrite where it has formed through in-situ oxidation.			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample MGI-11-64 (185.5-208) HC-14
• The sample is a heavily altered Syeno-Granite. Alteration of the alkali feldspar grains has been moderate and frequently pervasive with the formation of fine white mica (illite) as the common alteration product. Alteration has been through infiltrating hydrothermal fluids along with occasional veins and veinlets. In areas of heavy alteration coarse muscovite and pyrite have formed in close association. Sulfide mineralisation is only moderately encapsulated within the coarser minerals (+2 mm) and frequently well liberated in the fine-fraction (-2 mm). There is common evidence for in-situ oxidation of the pyrite with the formation of crystallographically controlled goethite. Arsenopyrite is closely associated with the pyrite which itself contains arsenic contents of between 1 and 3 wt%. There remains significant unreacted liberated pyrite, particularly the more euhedral to blocky grains.

Photomicrographs

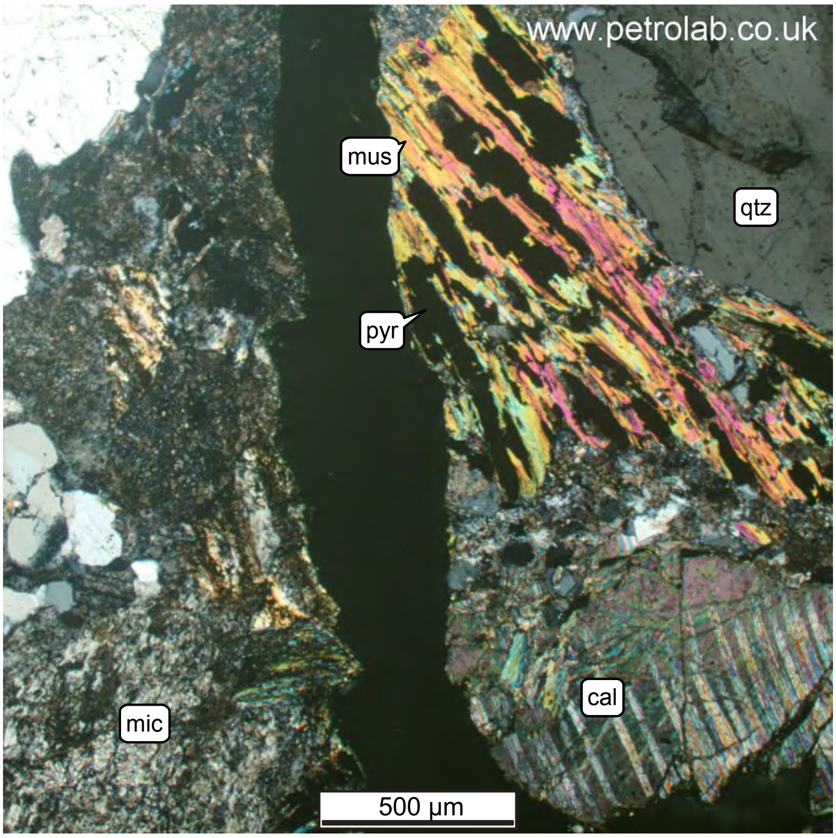


C

Sample MGI-11-64 (185.5-208) HC-14

Photomicrograph showing coarse-grained and intergrown quartz (qtz) and microcline (mic). The microcline is heavily altered to predominantly fine-grained illite.

Image C
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50

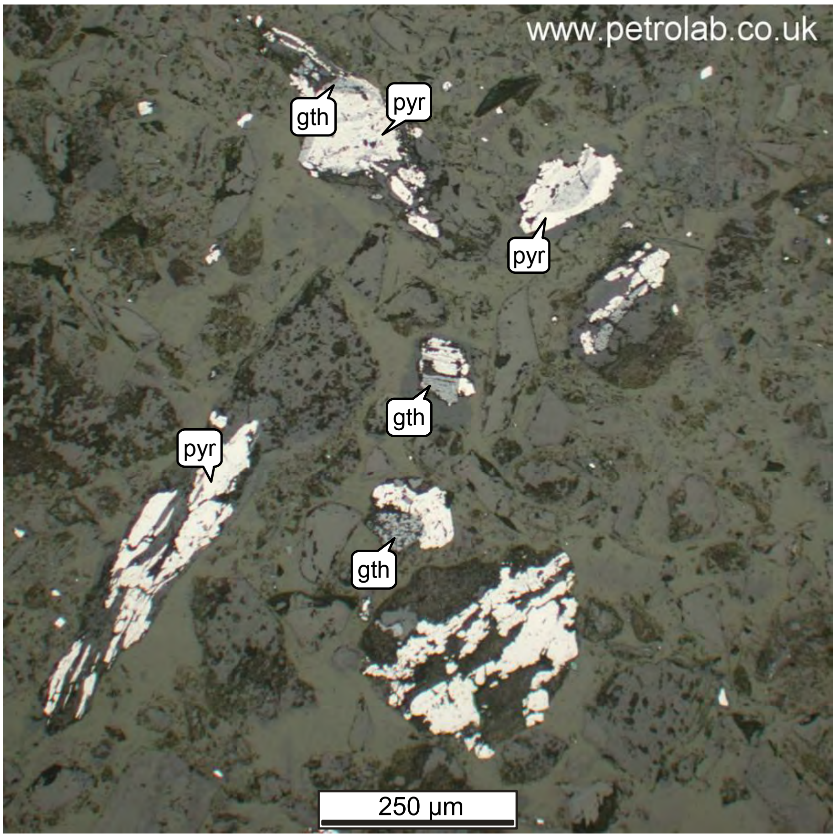


D

Sample MGI-11-64 (185.5-208) HC-14

Photomicrograph showing particles of intergrown quartz (qtz), calcite (cal), heavily altered microcline (mic), muscovite (mus) and pyrite (pyr). There is a close association between the pyrite and the muscovite which were probably introduced during the same hydrothermal alteration event

Image D
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50



E

Sample MGI-11-64 (185.5-208)
HC-14

Photomicrograph showing variably altered pyrite (pyr) from the -2mm size fraction. Where alteration has commenced there is the initial formation of goethite (gth). Much of the pyrite, though exposed, is unreacted.

Image E

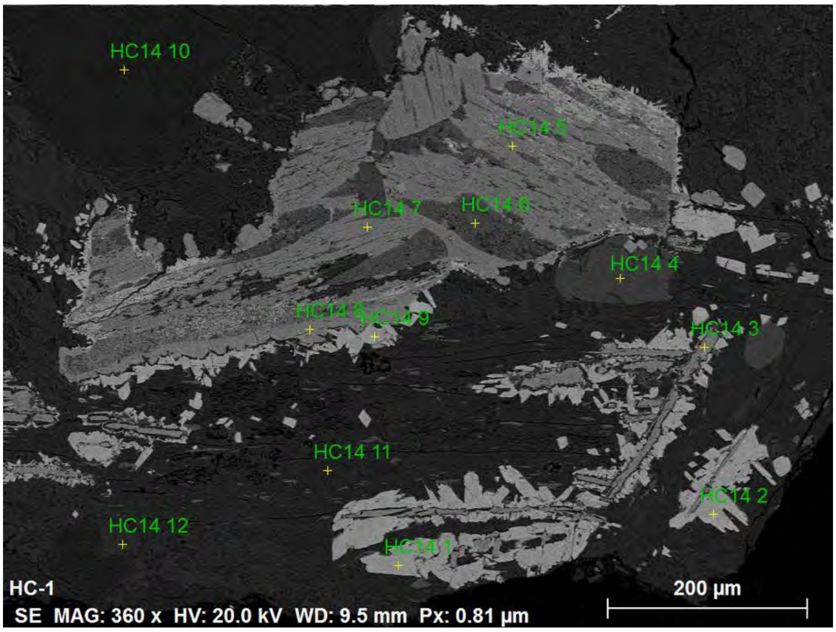
Nikon Microphot-FXA petrological microscope

Plane polarised reflected light

x100

F

Sample MGI-11-64 (185.5-208)
HC-14



Back scatter image showing fine-grained arsenopyrite (HC14-1,2 & 9) rimming heavily altered arsenical pyrite (HC14-3,5,7 & 8). This altered pyrite is associated with apatite (HC14-4), rutile (HC14-6), quartz (HC14-10), muscovite (HC14-11) and microcline (HC14-12). The arsenical pyrite contains thin interleaved goethite and As contents of ~1 wt%.

Image F

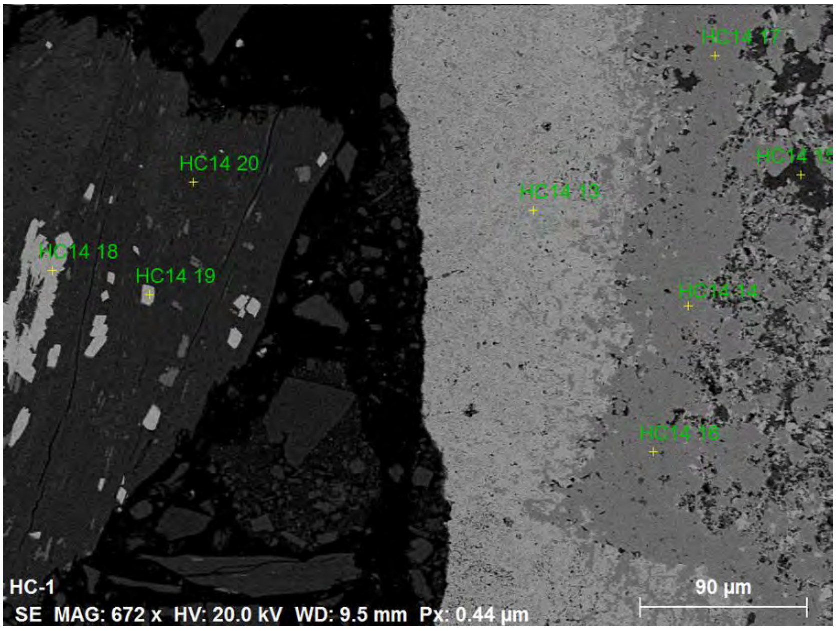
ZEISS EVO MA-25 SEM

Backscatter electron (BSE) mode

Scale shown

G

Sample MGI-11-64 (185.5-208) HC-14



Back scatter image showing differing textural developments of arsenopyrite (HC14-13,18 & 19) associated with arsenical pyrite (HC14-14,16 & 17), muscovite (HC14-15 & 20). The arsenical pyrite contains As contents of between 1 & 2 wt%.

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
x800

8) Sample MGI-13-S31 (15.24-18.29) HC-16

Sample as received

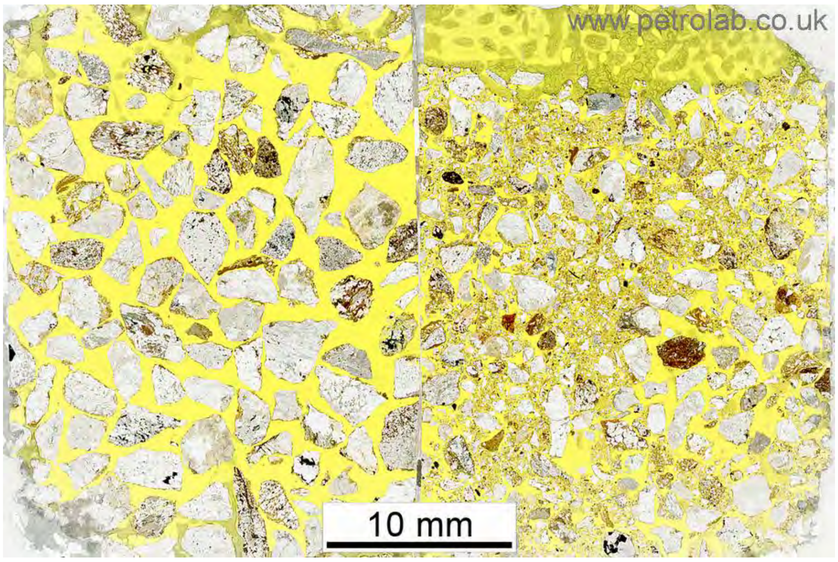
Sample MGI-13-S31 (15.24-18.29) HC-16		
Petrolab ID	Date received	Type · condition · properties
#6468	16/11/2016	Metallurgical test · 246 g

A Sample MGI-13-S31 (15.24-18.29) HC-16

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B Sample MGI-13-S31 (15.24-18.29) HC-16

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample MGI-13-S31 (15.24-18.29) HC-16		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	53.4% | 53.3%
Microcline	$KAlSi_3O_8$ | sg~2.56	21.2% | 20.5%
Illite / Muscovite / Biotite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	15.9% | 16.5%
Kaolinite	$Al_2Si_2O_5(OH)_4$ | sg~2.60	4.1% | 4.0%
(Ferroan) Dolomite	$CaMg(CO_3)_2$ | sg~2.84	3.8% | 4.1%
Calcite	$CaCO_3$ | sg~2.70	1.6% | 1.6%
Albite	$NaAlSi_3O_8$ | sg~2.62	<0.1% | <0.1%
Pyrite	FeS_2 | sg~5.01	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Schneiderhöhnite / Scorodite	$Fe_4As_5O_{13}$ / $FeAsO_4.2H_2O$ | sg~4.30 / 3.20	<0.1% | <0.1%
Amorphous Fe-arsenates	(Fe,As,O,H) +/- Ca,P,Sb	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample MGI-13-S31 (15.24-18.29) HC-16				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	50 µm	1500 µm	400 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. It is generally finer-grained than many of the other granitic samples from this sample suite.			
Microcline	10 µm	800 µm	300 µm	Generally anhedral
Description	The alkali feldspar is associated with the quartz as part of the original igneous texture. Alteration is usually pervasive in the alkali feldspar, with the formation of fine-white mica (illite) as the common breakdown product.			
Illite	5 µm	250 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the alkali feldspar minerals. It is generally very fine-grained and the level of alteration is moderate. The sample shows evidence for hydrothermal alteration and illite forms part of the heavily altered feldspar grains and occasional veins caused by this alteration.			
Muscovite	50 µm	300 µm	150 µm	Anhedral
Description	Muscovite forms a minor interstitial phase usually associated with biotite, and mica rich particles within the sample. They show very little signs of alteration. It is also present as part of the hydrothermal alteration and in these instances is often associated with pyrite.			
Kaolinite	5 µm	50 µm	10 µm	Anhedral
Description	Kaolinite is a rare alteration product, associated with illite and generally forming from the breakdown of the feldspar grains.			

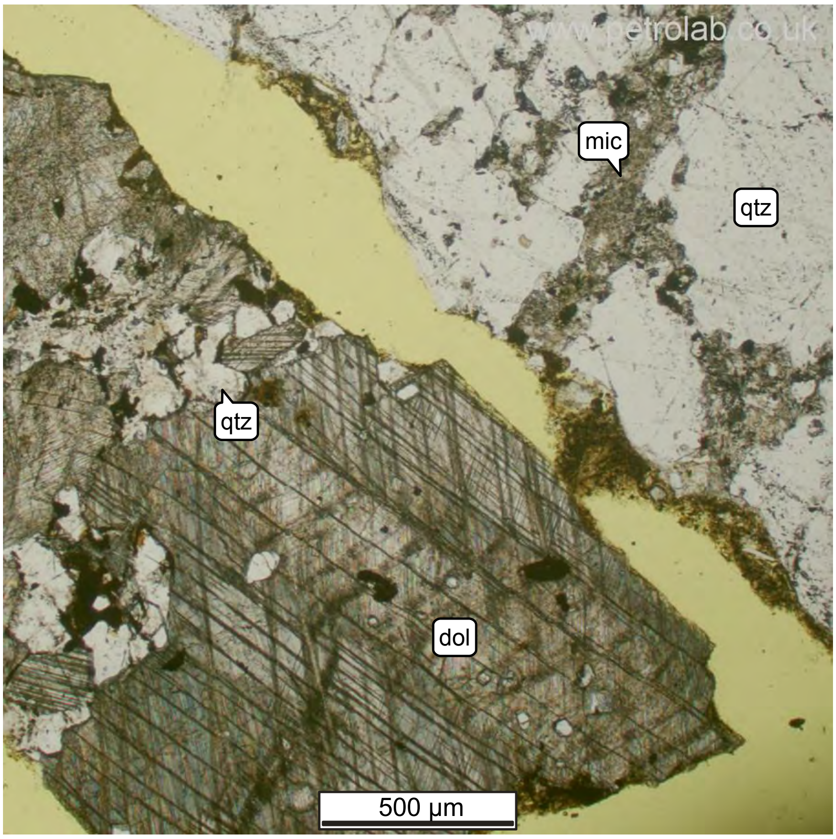
1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite, illite and biotite have strongly overlapping XRD traces so their quantification is reported as a combined total.

Sample MGI-13-S31 (15.24-18.29) HC-16				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
(Ferroan) Dolomite	10 µm	300 µm	10 µm	Subhedral to anhedral
Description	Dolomite occurs in two distinct developments. These are (i) as minerals interstitial to quartz and feldspar, occasionally forming massive composite developments, or (ii) as thin veins and veinlets cross-cutting the host quartz and feldspar grains. When developed as veins and veinlets there is a strong association with illite and muscovite.			
Calcite	5 µm	800 µm	200 µm	Anhedral to subhedral
Description	Calcite is closely associated with dolomite and generally present within the sample as very fine-grained cross-cutting veins, or as massive composite developments.			
Albite	-	-	-	-
Description	Albite is a trace phase within this sample, only observed by XRD analysis and not explicitly observed during the petrographic investigation.			
Biotite group	50 µm	300 µm	150 µm	Anhedral
Description	Biotite forms a minor interstitial phase usually associated with muscovite, and mica rich particles within the sample. They show very little signs of alteration.			
Pyrite	5 µm	200 µm	50 µm	Euhedral to anhedral
Description	Pyrite is a trace mineral within the sample, normally as euhedral grains but also as anhedral and occasional skeletal grains. It is generally observed within the illite-muscovite veins and veinlets caused by the hydrothermal alteration. Encapsulation is generally high in both the coarse (+2 mm) and the fine (-2 mm) fraction, though with a little more liberation in the fine fraction. In general the pyrite remains unreacted across the fine and coarse fraction, with only a few examples of in-situ oxidation. From SEM analysis the arsenic content of the pyrite grains reach up to 12 wt% but is generally around 1 to 3 wt%.			
Goethite	5 µm	50 µm	10 µm	Anhedral
Description	Goethite is rarely observed in the sample but is occasionally present as a breakdown product of pyrite.			
Arsenopyrite	10 µm	150 µm	50 µm	Euhedral
Description	Arsenopyrite is a trace phase generally observed as euhedral grains that are highly encapsulated. It is strongly associated with pyrite grains, often as partial or complete rims. Occasionally there are examples of massive arsenopyrite finely intergrown with pyrite.			
Schneiderhöhnite / Scorodite	5 µm	1000 µm	500 µm	Anhedral
Description	This phase is medium-grained, lying interstitial to microcline and cross-cutting a particle within the -2mm size fraction. From the textural associations this has not formed in-situ during the HCT but represents an original phase. The As:Fe ratio is consistent (~1.57) across 10 separate analysis points. This value lies closer to the value for schneiderhöhnite (1.68) than scorodite (1.34) but with absolute As and Fe values that are slightly low for schneiderhöhnite. The exact speciation of this phase is therefore uncertain without ancillary analysis such as μ-XRD or EPMA.			
Amorphous Fe arsenates	-	-	-	Amorphous
Description	The amorphous Fe-arsenates observed in this sample are fine-grained and associated with small grains of quartz and microcline. The As:Fe ratio is variable and there are small amounts of phosphorous present (~1-2 wt%).			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample MGI-13-S31 (15.24-18.29) HC-16
• The sample is a moderately altered Alkali Feldspar Granite. Hydrothermal alteration has led to the moderate to pervasive formation of illite after alkali feldspar. There is only weak veining apparent in the sample with the occasional formation of calcite and ferroan dolomite dominant veins. Sulfide mineralisation is concentrated in regions of the most intense alteration, and in frequent association with muscovite. Encapsulation is generally high in both the coarser fraction (+2 mm) and the finer fraction (-2 mm) though there are well liberated and very fine-grained pyrite grains in the fine (-2 mm) fraction. The arsenical pyrite contains up to 12 wt% arsenic, but is generally around 1 to 3 wt%. The exposed pyrite shows very little evidence for in-situ oxidation and nearly all exposed grains remain unreacted. Fe-arsenates are present in two forms. There is a crystalline phase present in a cross-cutting texture. The exact speciation is uncertain as the As:Fe ratio doesn't exactly match an IMA recognised mineral species. The closest match in terms of As:Fe ratio is schneiderhöhnite though the absolute values are a little low. There is also some amorphous iron arsenate present in the groundmass, also in the fine fraction. Neither phasase looks to have formed during the HCT.

Photomicrographs



C **Sample MGI-13-S31 (15.24-18.29) HC-16**

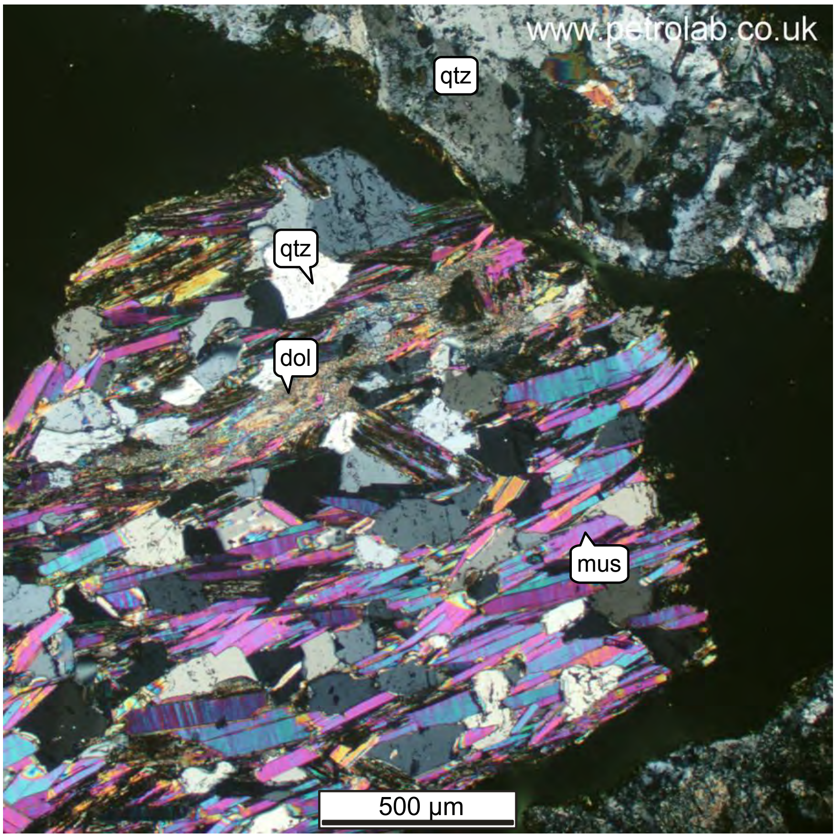
Photomicrograph showing a particle of predominantly dolomite (dol) and quartz (qtz), adjacent to a particle of predominantly quartz (qtz) and heavily altered microcline (mic).

Image C

Nikon Microphot-FXA petrological microscope

Plane polarised transmitted light

x50



D

Sample MGI-13-S31 (15.24-18.29) HC-16

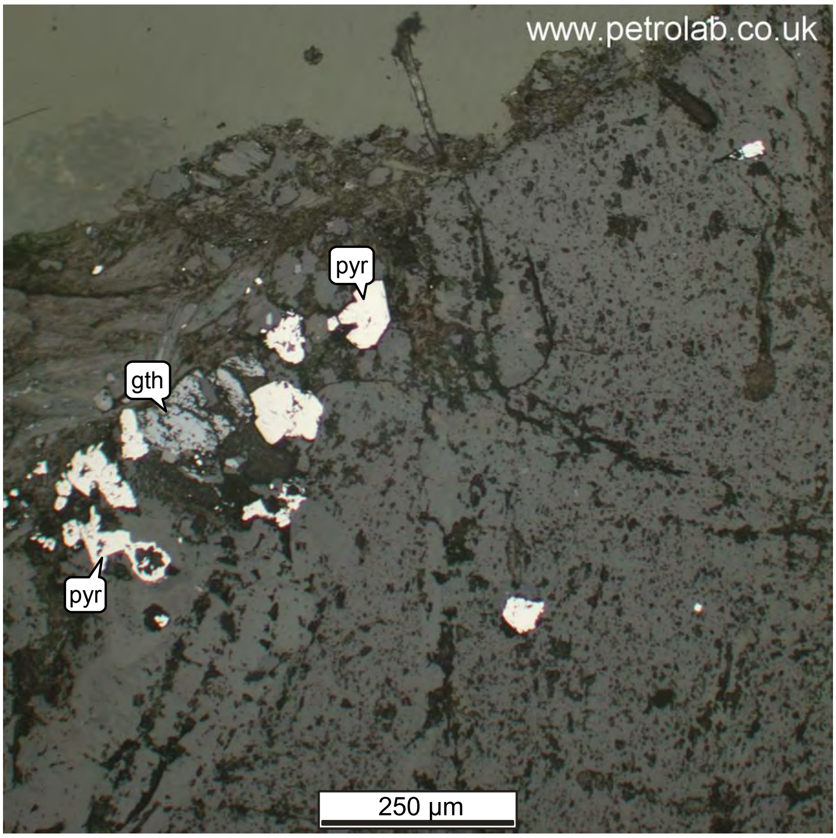
Photomicrograph showing a particle consisting of muscovite (mus), quartz (qtz) and a thin vein of dolomite (dol). There is an adjacent particle predominantly consisting of quartz (qtz).

Image D

Nikon Microphot-FXA petrological microscope

Cross polarised transmitted light

x50



E

Sample MGI-13-S31 (15.24-18.29) HC-16

Photomicrograph showing fine-grained and partially liberated pyrite (pyr) grains associated with goethite (gth). It is not clear from this texture that the goethite represents in-situ oxidation.

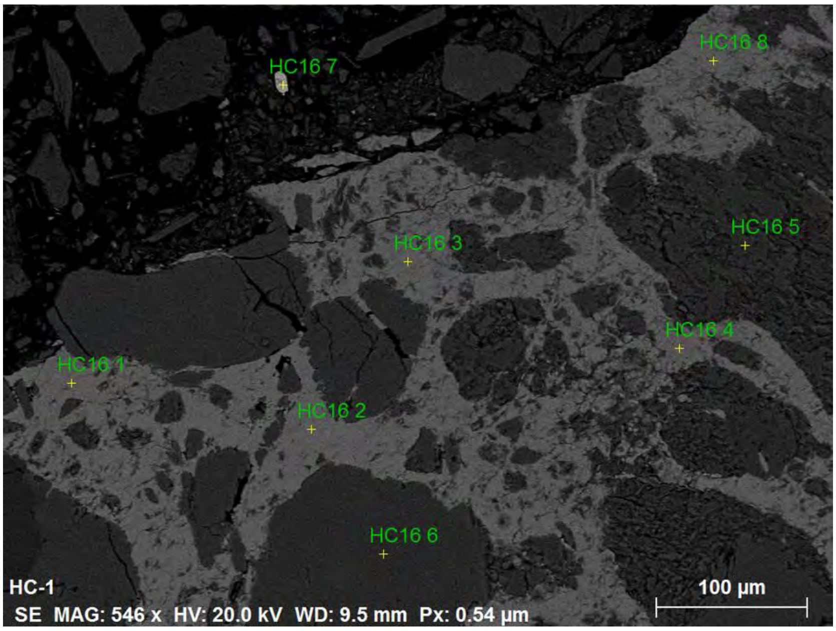
Image E

Nikon Microphot-FXA petrological microscope

Plane polarised reflected light

x100

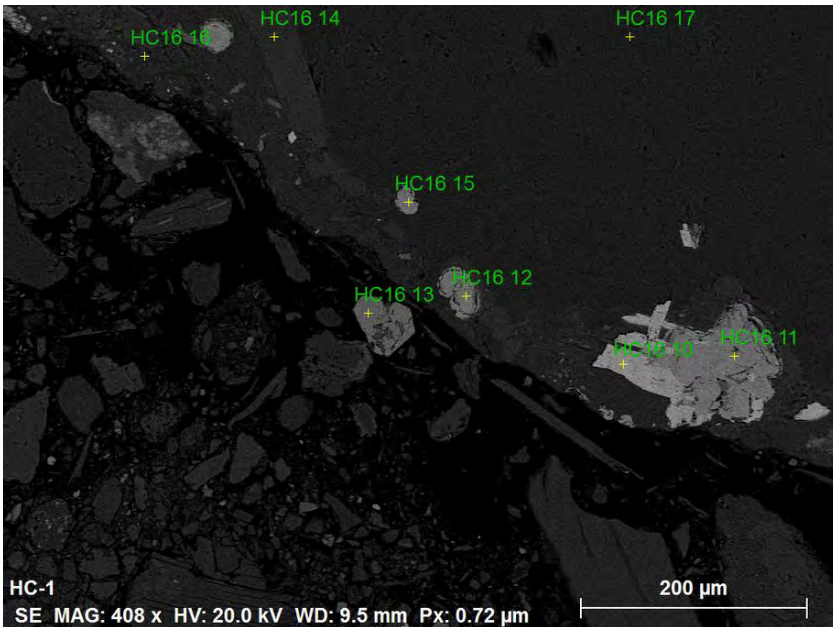
F	Sample MGI-13-S31 (15.24-18.29) HC-16



Back scatter image showing medium-grained anhedral schneiderhöhnite / scorodite (HC16-1,2,3,4 & 8) hosted interstitial to microcline (HC16-5 & 6). There is also a small grain of liberated arsenopyrite just above the particle.

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
x500

G	Sample MGI-13-S31 (15.24-18.29) HC-16



Back scatter image of fine-grained arsenopyrite (HC16-10), arsenical pyrite (HC16-11,12 & 15) largely encapsulated within a composite particle containing microcline (HC16-14), muscovite (HC16-16) and quartz (HC16-17). HC16-13 is a grain of hematite containing about 3 wt% arsenic. The arsenical pyrite contains up to 12 wt% arsenic.

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

9) Sample D253919

Sample as received

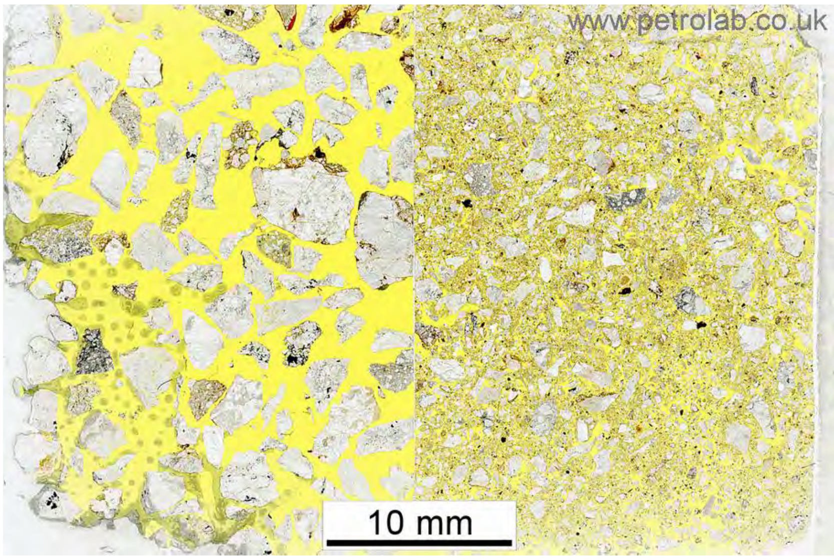
Sample D253919		
Petrolab ID	**Date received**	**Type · condition · properties**
#6475	16/11/2016	Metallurgical test · 1013 g

A **Sample D253919**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B **Sample D253919**

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample D253919		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	46.3% | 46.4%
Microcline	$KAlSi_3O_8$ | sg~2.56	34.7% | 33.6%
Illite / Muscovite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	13.1% | 13.6%
Chlorite group (clinochlore)	$(Mg,Fe{+}{+})_5Al(Si_3Al)O_{10}(OH)_8$ | sg~2.65	5.4% | 5.4%
Pyrite	FeS_2 | sg~5.01	0.5% | 0.9%
Albite	$NaAlSi_3O_8$ | sg~2.62	<0.1% | <0.1%
Calcite	$CaCO_3$ | sg~2.71	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Amorphous Fe arsenates	(Fe,As,O,H) +/- Ca,P,Sb	<0.1% | <0.1%
Stibnite	Sb_2S_3 | sg~4.60	<0.1% | <0.1%
Schafarzikite	$FeSb_2O_4$ | sg~4.30	<0.1% | <0.1%
Cervantite	Sb_2O_4 | sg~6.64	<0.1% | <0.1%
Senarmontite	Sb_3O_4 | sg~5.50	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample D253919				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	50 µm	2000 µm	400 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. There is evidence for a mild brecciation event, probably caused by infiltrating hydrothermal fluids that has resulted in significant grain-size reduction in places. Coarse-grained quartz remains in several of the particles.			
Microcline	10 µm	800 µm	300 µm	Generally anhedral
Description	This alkali feldspar is associated with the quartz as part of the original igneous texture. Alteration is usually pervasive in the alkali feldspar, with the formation of fine-white mica (illite) as the common breakdown product.			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the alkali feldspar minerals. The sample shows evidence for hydrothermal alteration and illite forms part of the heavily altered feldspar grains and occasional veins caused by this alteration.			
Chlorite group (clinochlore)	5 µm	50 µm	20 µm	Anhedral
Description	Chlorite is associated with illite and muscovite as part of the hydrothermal alteration that overprints much of the alkali feldspar grains.			

1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite, illite have strongly overlapping XRD traces so their quantification is reported as a combined total

Sample D253919				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Muscovite	50 µm	300 µm	150 µm	Anhedral
Description	Muscovite forms a trace interstitial phase usually associated with illite, and particularly with pyrite. It was most likely introduced as part of the hydrothermal alteration.			
Pyrite	5 µm	160 µm	50 µm	Euhedral to anhedral
Description	Pyrite is a trace mineral within the sample, normally as euhedral grains but also as anhedral and occasional skeletal grains. It is generally observed in areas of more intense alteration associated with the formation of muscovite. Encapsulation is generally high in both the coarse (+2 mm) and the fine (-2 mm) fraction, though with a little more liberation in the fine fraction. In general the pyrite remains unreacted across the fine and coarse fraction, with only a few examples of in-situ oxidation.			
Albite	-	-	-	-
Description	Albite is a trace phase within this sample, only detected by XRD analysis and not explicitly observed during the petrographic investigation.			
Calcite	5 µm	100 µm	50 µm	Anhedral
Description	Calcite is a trace phase occasionally observed in cross-cutting veinlets that reach up to 100 µm. This was not analysed under SEM conditions and undetected by XRD. It may therefore compositionally be dolomite or ferroan dolomite.			
Goethite	5 µm	100 µm	10 µm	Anhedral
Description	Goethite is a trace mineral but observed thinly disseminated through the sample as discrete phases. It is occasionally present as a breakdown product of pyrite. There is also the formation of fine-grained iron-oxy-hydroxide products as partial rims. SEM analysis of this iron-oxy hydroxide rims reveals they contain between 7-14 wt% arsenic and 3-4 wt% antimony.			
Arsenopyrite	10 µm	150 µm	50 µm	Euhedral
Description	Arsenopyrite is a trace phase generally observed as euhedral grains that are highly encapsulated. It is strongly associated with pyrite grains, often as partial or complete rims. Occasionally there are examples of massive arsenopyrite finely intergrown with pyrite.			
Amorphous Fe arsenates	-	-	-	Amorphous
Description	The amorphous Fe-arsenates observed in this sample are fine-grained. The As:Fe ratio is variable and there are small amounts of phosphorous present.			
Stibnite	50 µm	1000 µm	400 µm	Anhedral to subhedral
Description	Stibnite is observed as medium-grained partially altered and partially liberated minerals. The principal alteration products are Pb-O minerals which are forming in two distinct stages, first senarmontite and then subsequently to cervantite.			
Schafarzikite	10 µm	50 µm	25 µm	Anhedral
Description	Schafarzikite is a Sb-bearing alteration product that is occasionally observed. It is likely that it represents the alteration product formed from the complete weathering of previously *in-situ* pyrite, arsenopyrite and stibnite.			
Cervantite	10 µm	100 µm	50 µm	
Description	Cervantite is the second stage of alteration from stibnite, forming via prior alteration to senarmontite and then subsequent formation. It is generally fine-grained but forms in the interstitial space on the edges of weathered particles.			
Senarmontite	10 µm	50 µm	25 µm	
Description	Senarmontite is the first alteration product of stibnite forming finer-grained Sb-O phases typically observed around the edges of stibnite and the occasional edge of particles.			

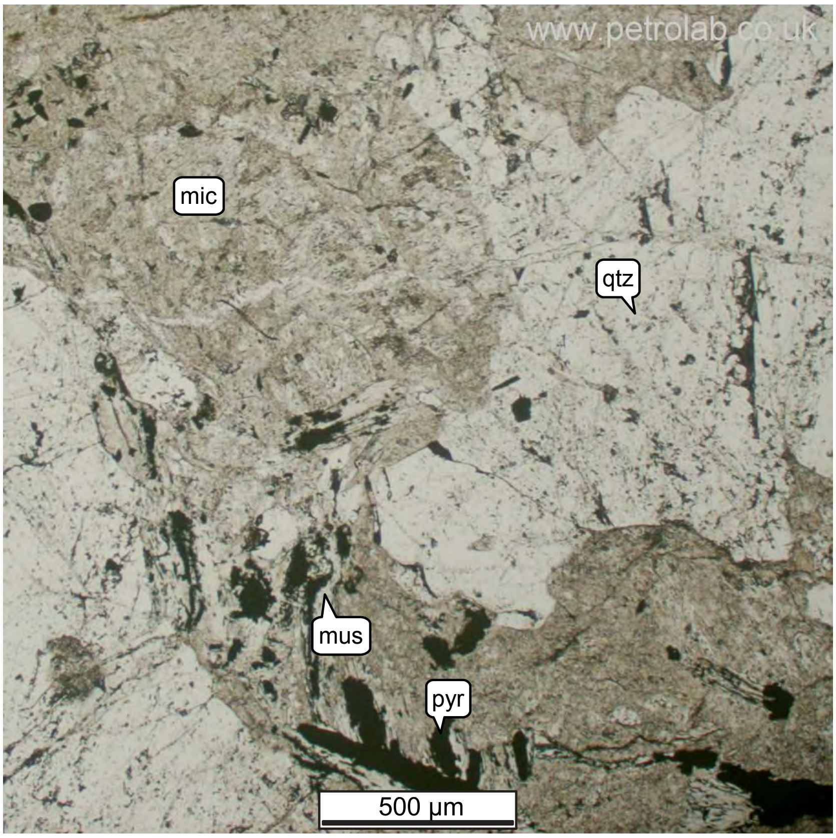
Sample D253919				
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample D253919

- The sample represents altered alkali feldspar Granite. Hydrothermal alteration has led to the moderate to pervasive formation of illite after alkali feldspar. There is only weak veining apparent in the sample. Sulfide mineralisation is concentrated in regions of the most intense alteration, and in particular association with muscovite. Encapsulation is generally high in both the coarser fraction (+2 mm) and the finer fraction (-2 mm) though there are well liberated and very fine-grained pyrite grains in the -2 mm fraction. The exposed pyrite shows occasional evidence for *in-situ* oxidation but nearly all exposed grains remain largely unreacted. There is the formation of secondary phases along the edges of some particles with the formation of Sb—bearing phases from partially reacted stibnite and Fe-oxides formation which when analysed on the SEM contain arsenic contents of 7-14 wt% and antimony contents of 3-7 wt%.

Photomicrographs



C **Sample D253919**

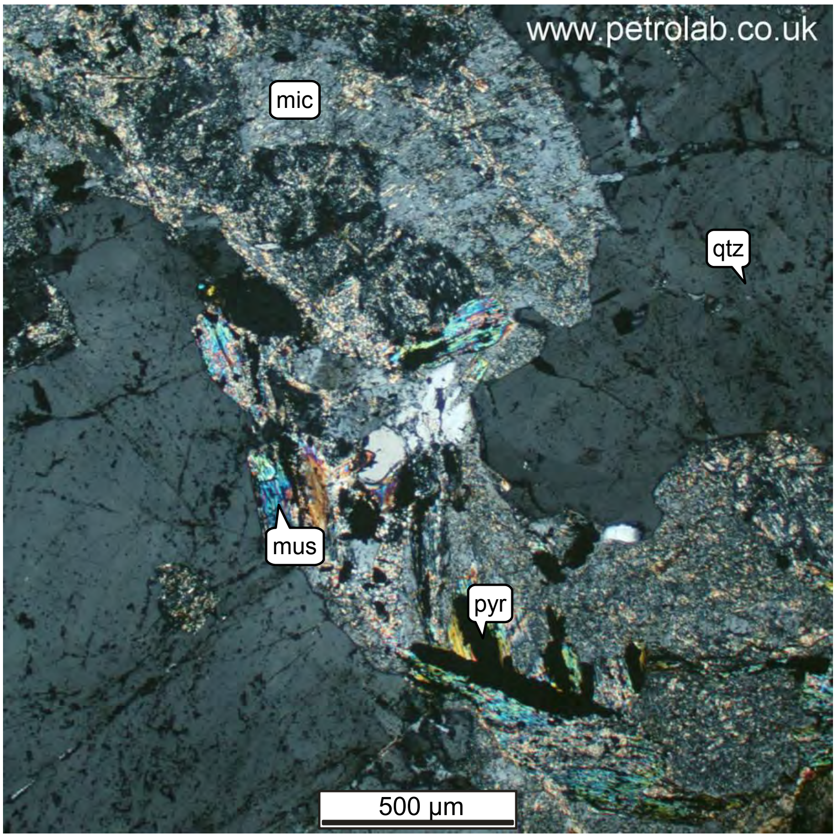
Photomicrograph showing coarse-grained quartz (qtz) intergrown with coarse-grained microcline (mic). The microcline is moderately altered to fine-grained illite. Muscovite (mus) associated with pyrite (pyr) are interstitial minerals to these grains.

Image C

Nikon Microphot-FXA petrological microscope

Plane polarised transmitted light

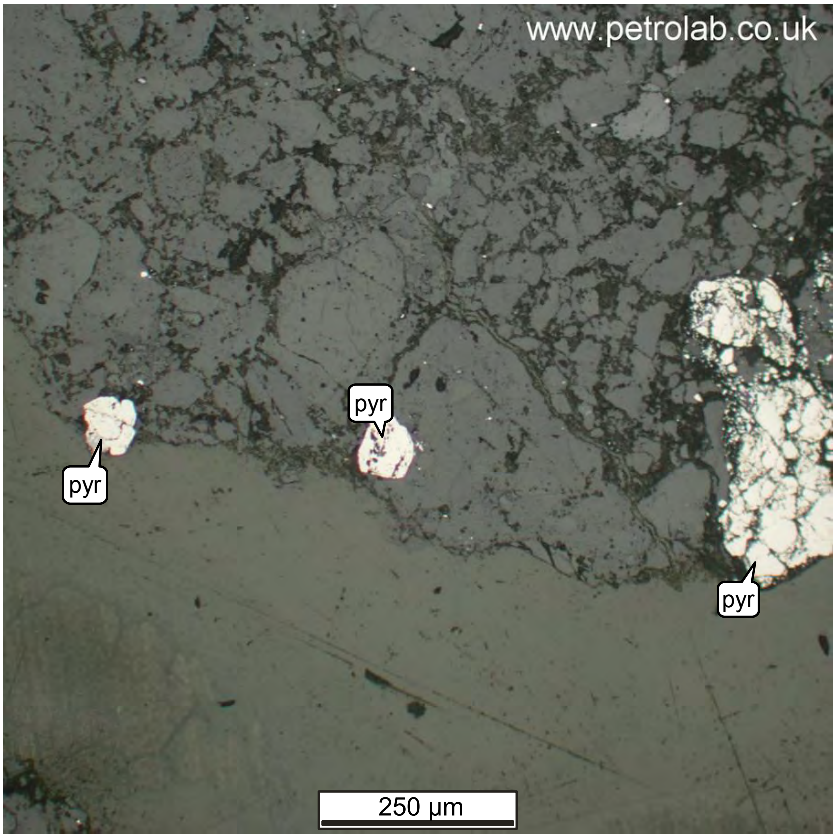
x50



D **Sample D253919**

Photomicrograph showing coarse-grained quartz (qtz) intergrown with coarse-grained microcline (mic). The microcline is moderately altered to fine-grained illite which shows higher interference colours. Muscovite (mus) associated with pyrite (pyr) are interstitial minerals to these grains.

Image D
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50

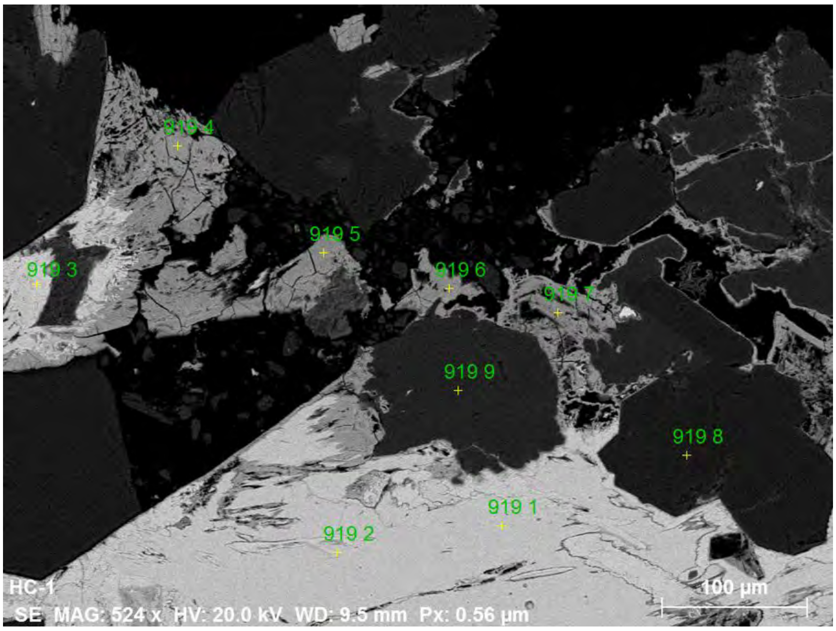


E **Sample D253919**

Photomicrograph showing grains of pyrite on the edge of a particle from the -2mm fraction. Despite being partially exposed there is no evidence of reaction products forming.

Image E
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100

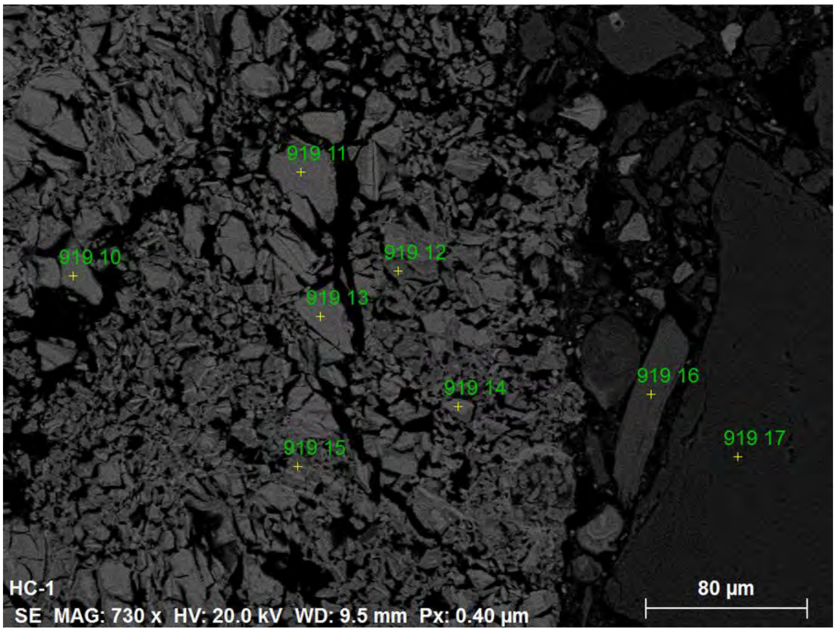
F **Sample D253919**



Back scatter image showing coarse-grained stibnite (919-1 & 2) altering through several stages to senarmontite (919-3) and cervantite (919-4,5,6 & 7). These alteration products lie interstitial to quartz (919-8 and microcline (919-9).

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

G **Sample D253919**



Back scatter image showing secondary iron-arsenates (919-10,11,12,13,14,15) that are precipitating on the edge of a quartz particle (919-17). These iron-arsenates contain 7-14 wt% As along with 3-7 wt% Sb. Spectra 919-16 is an isolated particle of biotite.

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

10) Sample D253917

Sample as received

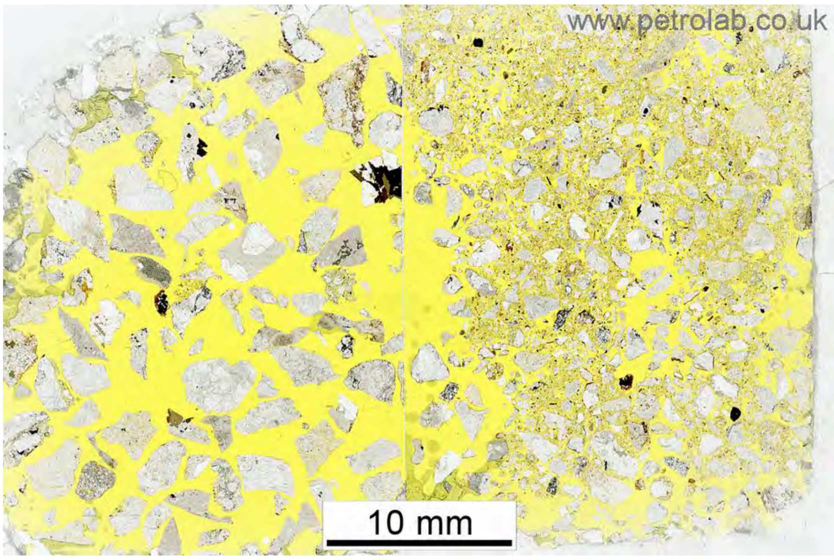
Sample D253917		
Petrolab ID	**Date received**	**Type · condition · properties**
#6476	16/11/2016	Metallurgical test · 1398 g

A **Sample D253917**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B **Sample D253917**

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample D253917		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	52.4% | 52.3%
Microcline	$KAlSi_3O_8$ | sg~2.56	30.6% | 29.5%
Albite	$NaAlSi_3O_8$ | sg~2.62	4.8% | 4.7%
Illite / Muscovite / Biotite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	11.5% | 11.9%
Pyrite	FeS_2 | sg~5.01	0.8% | 1.5%
Chlorite group (clinochlore)	$(Mg,Fe{++})_5Al(Si_3Al)O_{10}(OH)_8$ | sg~2.65	<0.1% | <0.1%
Calcite	$CaCO_3$ | sg~2.71	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Gypsum	$CaSO_4{\cdot}2(H_2O)$ | sg~2.30	<0.1% | <0.1%
Stibnite	Sb_2S_3 | sg~4.60	<0.1% | <0.1%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Amorphous Fe arsenates	(Fe,As,O,H) +/- Ca,P,Sb	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample D253917				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	100 µm	1800 µm	400 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. Grain size is highly variable with coarse minerals but also examples of very fine quartz that appears to be the production of hydrothermal alteration that has greatly reduced the grain size.			
Microcline	100 µm	1500 µm	800 µm	Generally anhedral
Description	The alkali feldspar is associated with the albite and the quartz as part of the original igneous texture. Alteration is pervasive with the formation of fine-white mica (illite) as the common breakdown product. Because of the level of alteration and the degree of fluid infiltration it is difficult to estimate the grain-size distribution.			
Albite	10 µm	800 µm	200 µm	Subhedral to anhedral
Description	Albite is a minor phase and generally anhedral grains. Alteration is minor to pervasive with occasional examples of well preserved and visible twinning. Where altered, the principal alteration product is the formation of fine-mica. Given the extent of alteration, grain size estimations are very rough.			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the albite and alkali feldspar minerals. It is generally very fine-grained and the level of alteration is moderate to pervasive. The sample shows evidence for weak veining and hydrothermal infiltration, with illite as a common component of both the veins and alteration products.			

1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite, illite have strongly overlapping XRD traces so their quantification is reported as a combined total

Sample D253917				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Biotite group	10 µm	600 µm	200 µm	Anhedral
Description	Biotite forms in composite masses, observed in a few particles. It is also generally present as isolated grains interstitial to quartz and alkali feldspar. It shows very little evidence for alteration.			
Muscovite	10 µm	250 µm	80 µm	Anhedral
Description	Muscovite forms a trace interstitial phase usually associated with illite, and particularly with pyrite. It was most likely introduced as part of the hydrothermal alteration.			
Chlorite group (clinochlore)	5 µm	50 µm	20 µm	Anhedral
Description	Chlorite is a trace phase associated with illite as part of the hydrothermal alteration that overprints much of the alkali feldspar grains.			
Calcite	5 µm	100 µm	30 µm	Anhedral
Description	Calcite is a trace phase occasionally observed in cross-cutting veinlets that reach up to 100 µm. This was not analysed under SEM conditions and undetected by XRD. It may therefore compositionally be dolomite or ferroan dolomite.			
Pyrite	5 µm	250 µm	100 µm	Euhedral to anhedral
Description	Pyrite is a trace phase, present as euhedral to anhedral grains. It is generally observed closely associated with muscovite as part of the strongly hydrothermally altered regions of the sample. Encapsulation is generally moderate in the coarser fraction (+2 mm) and the finer fraction (-2 mm), but with some well liberated examples. There is evidence for in-situ oxidation of pyrite with goethite in particular forming along crystallographically controlled axes. However, it is more common for pyrite to show no reaction.			
Goethite	5 µm	50 µm	10 µm	Anhedral
Description	Goethite is a trace phase thinly disseminated in the sample. Occasionally it is associated with pyrite where it has formed through in-situ oxidation. It is also present as occasional weakly formed rims around some of the particles. The iron-oxy hydroxide formed in this instance may be metastable and more akin to ferrihydrite.			
Gypsum	-	-	-	-
Description	Gypsum was a trace phase only detected by XRD analysis and at levels below quantification. It was not observed during petrographic analysis.			
Stibnite	10 µm	50 µm	30 µm	Subhedral
Description	Stibnite is a fine-grained phase observed in this sample only rarely as inclusions within larger particles.			
Arsenopyrite	10 µm	50 µm	30 µm	Euhedral
Description	Arsenopyrite is very fine-grained and generally euhedral in this sample. Where present it frequently shows close proximal association with pyrite, occasionally as partial rims. Most arsenopyrite is unaltered but some grains are showing some minor breakdown and this is probably related to resultant the formation of amorphous Fe arsenate.			
Amorphous Fe arsenates	-	-	-	Amorphous
Description	The amorphous Fe-arsenates observed in this sample are fine-grained and observed forming discontinuous coatings around the edge of some of the particles. They are likely formed from the gradual breakdown of pyrite and arsenopyrite present as inclusions within these particles. The As:Fe ratio is variable (from 0.8 to 1.1) and there are small amounts of calcium present (1 – 3 wt%).			

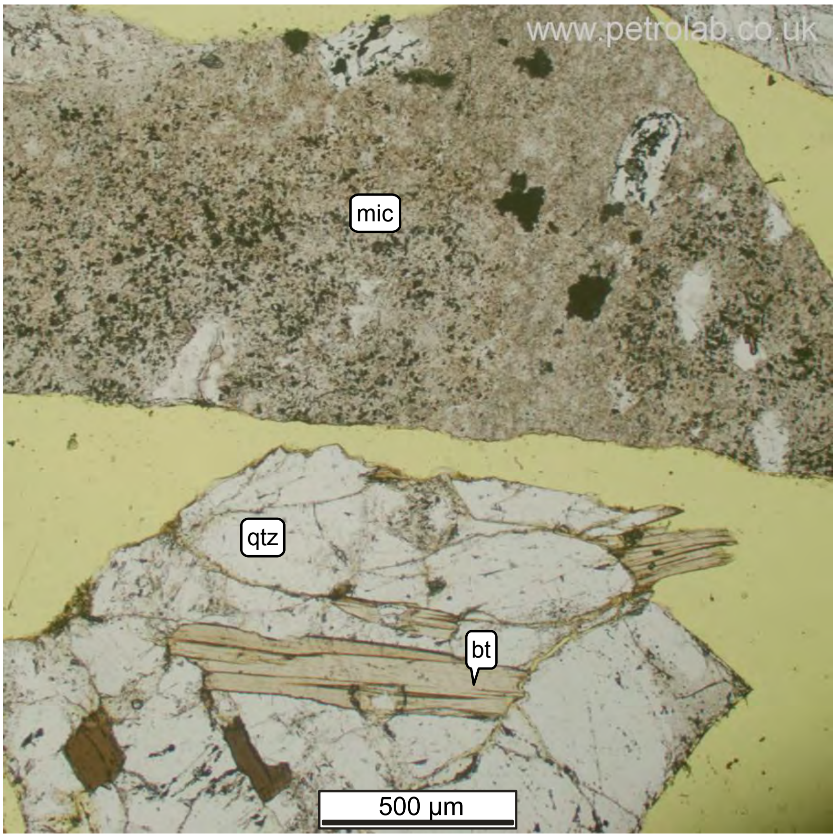
Sample D253917				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample D253917

- The sample represents altered alkali feldspar Granite. Hydrothermal alteration has led to the moderate to pervasive formation of illite after alkali feldspar. There is only weak veining apparent in the sample. Sulfide mineralisation is concentrated in regions of the most intense alteration, and in particular association with muscovite. Encapsulation is generally high in both the coarser fraction (+2 mm) and the finer fraction (-2 mm) though there are well liberated and very fine-grained pyrite grains in the -2 mm fraction. The exposed pyrite shows occasional evidence for in-situ oxidation but most grains remain largely unreacted. Around some of the particles there is the formation of a thin discontinuous amorphous Fe arsenate crust. This is the likely resultant product of the arsenopyrite and pyrite breakdown that has occurred.

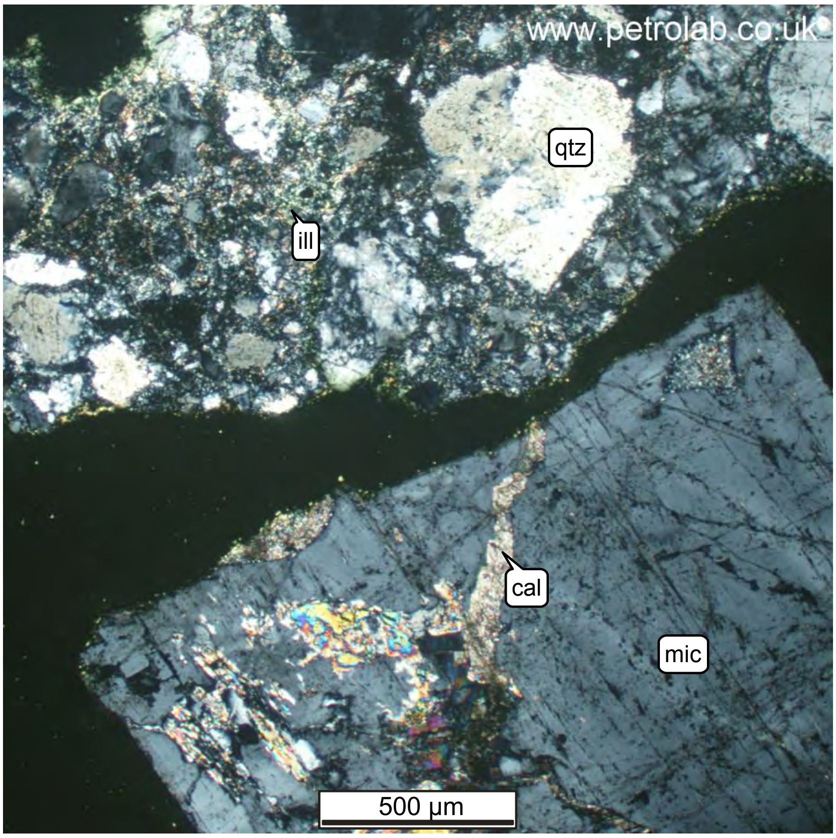
Photomicrographs



C **Sample D253917**

Photomicrograph showing two distinctive particles. The lower particle consists of quartz (qtz) and biotite (bt) whilst the top particle predominantly consists of heavily altered microcline (mic). Illite is the main alteration product.

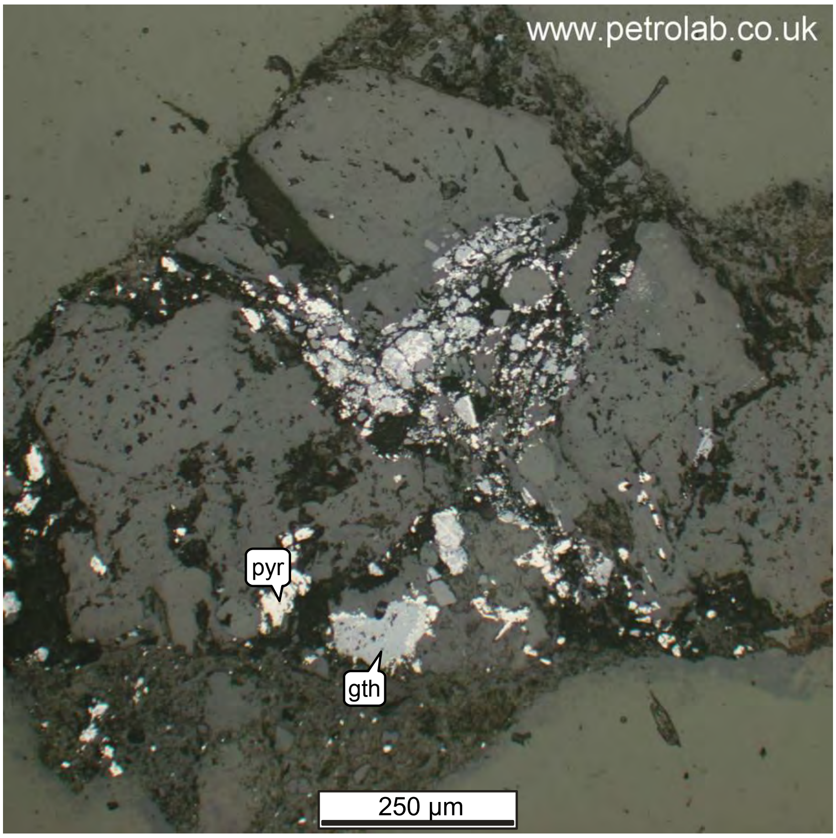
Image C
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



D **Sample D253917**

Photomicrograph showing two distinctive particles. The lower particle consists of very coarse-grained microcline (mic) that is largely unaltered with a thin vein of calcite (cal) and some muscovite. The top grain consists of quartz that has been moderately brecciated and infiltrated by fine micaceous minerals such as illite.

Image D
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50

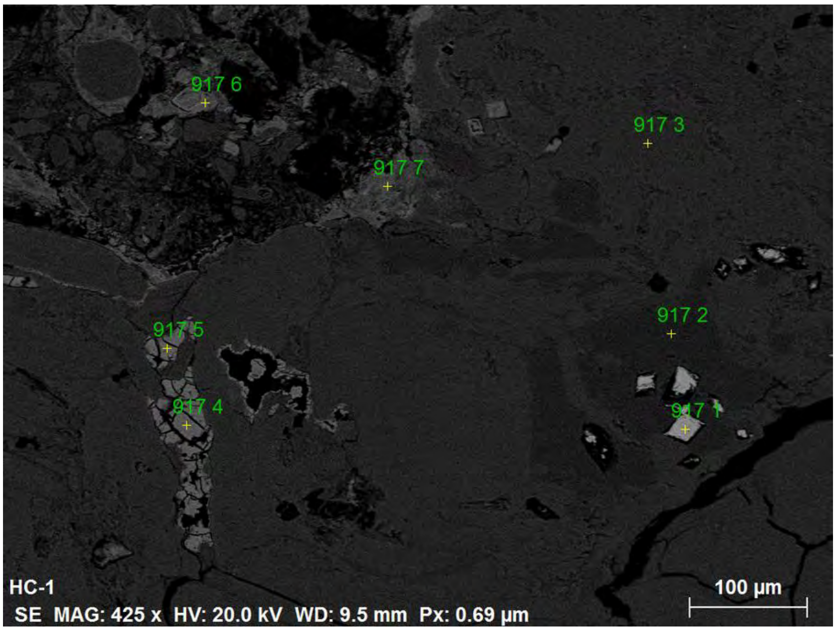


E **Sample D253917**

Photomicrograph showing moderately altered pyrite (pyr) with the partial to pervasive formation of goethite rims. Infiltration of fluid within the particle appears to have been along internal fractures.

Image E
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100

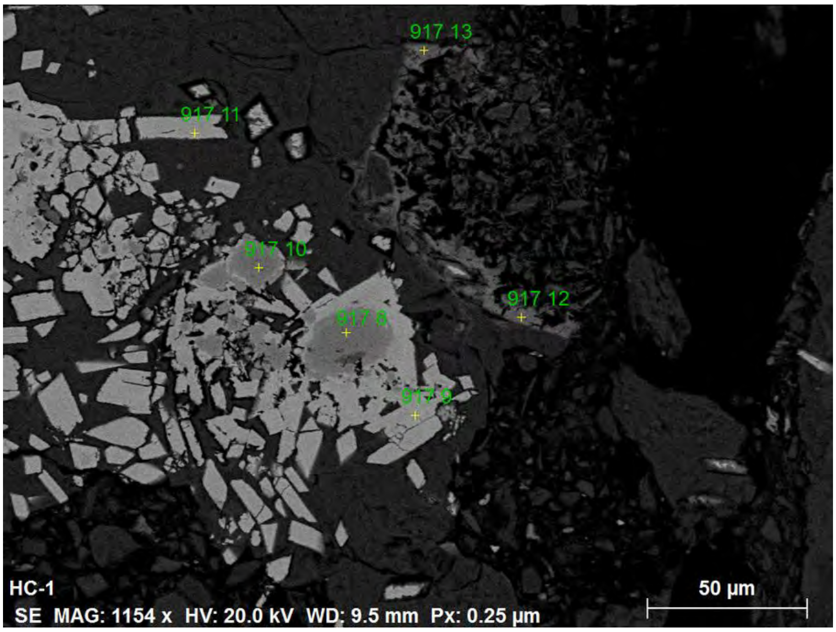
F **Sample D253917**



Back scatter image showing the precipitation of amorphous Fe arsenate (917-4,5,6 & 7) on the edge of a composite particle containing arsenopyrite (917-1), quartz (917-2) and microcline (917-3).

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

G **Sample D253917**



Back scatter image showing arsenical pyrite (917-8 & 10) partially rimmed by arsenopyrite (917-9 & 11). The arsenopyrite is beginning to breakdown on the edge of the particle. Consequently, on the edge of the composite particle some amorphous Fe arsenate (917-12 & 13) is beginning to crystallize.

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

11) Sample D253923

Sample as received

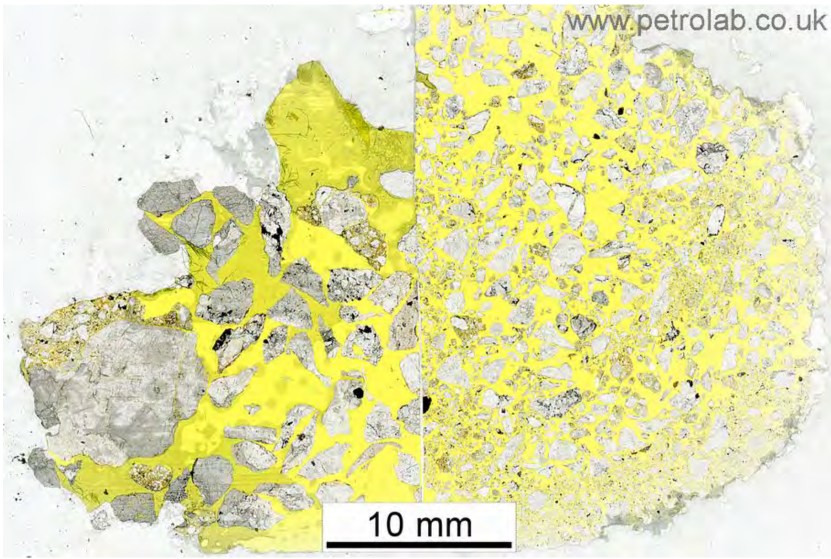
Sample D253923		
Petrolab ID	**Date received**	**Type · condition · properties**
#6477	16/11/2016	Metallurgical test · 287 g

A **Sample D253923**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B **Sample D253923**

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample D253923		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	47.3% | 47.1%
Microcline	$KAlSi_3O_8$ | sg~2.56	34.5% | 33.2%
Illite / Muscovite / Biotite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	16.9% | 17.5%
Pyrite	FeS_2 | sg~5.01	1.2% | 2.3%
Chlorite group (clinochlore)	$(Mg,Fe{+}{+})_5Al(Si_3Al)O_{10}(OH)_8$ | sg~2.65	<0.1% | <0.1%
Albite	$NaAlSi_3O_8$ | sg~2.62	<0.1% | <0.1%
Calcite	$CaCO_3$ | sg~2.7	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Stibnite	Sb_2S_3 | sg~4.63	<0.1% | <0.1%
Arseniosiderite	$Ca_2Fe_3O_2(AsO_4)_3.3H_2O$	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample D253923				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	50 µm	1000 µm	250 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. There is evidence for a mild brecciation event, probably caused by infiltrating hydrothermal fluids that has resulted in significant grain-size reduction in places. Coarse-grained quartz remains in several of the particles.			
Microcline	10 µm	800 µm	300 µm	Generally anhedral
Description	This alkali feldspar is associated with the quartz as part of the original igneous texture. Alteration is usually pervasive in the alkali feldspar, with the formation of fine-white mica (illite) as the common breakdown product.			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the alkali feldspar minerals. The sample shows evidence for hydrothermal alteration and illite forms part of the heavily altered feldspar grains and occasional veins caused by this alteration.			
Biotite group	10 µm	200 µm	50 µm	Anhedral
Description	Biotite is a trace phase occasionally observed in the sample. It is generally unaltered.			

1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite, illite and biotite have strongly overlapping XRD traces so their quantification is reported as a combined total

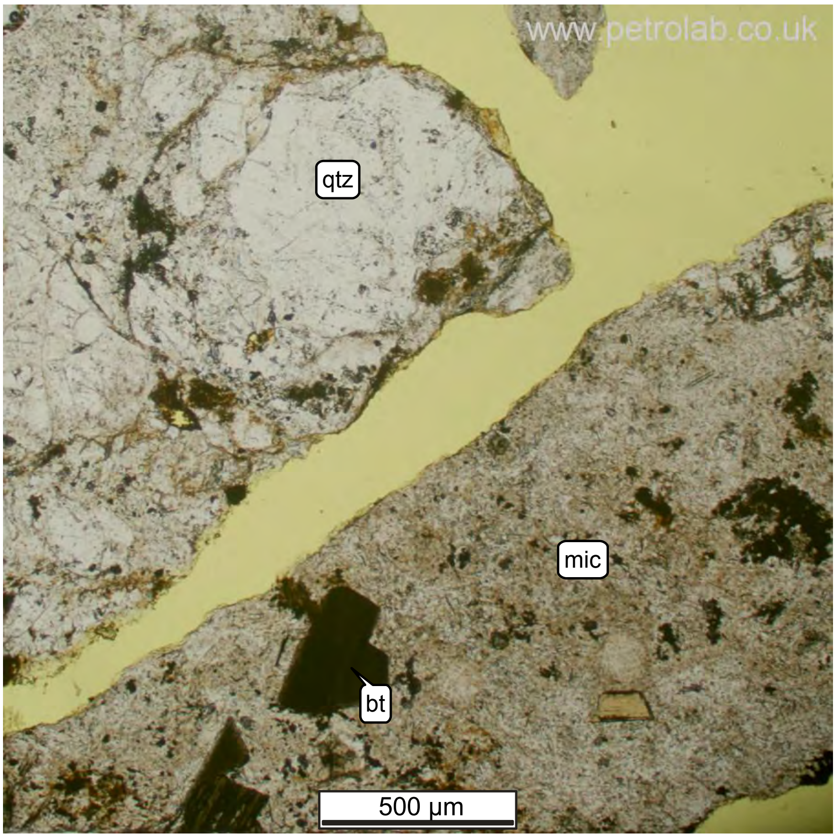
Sample D253923				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Pyrite	5 µm	160 µm	50 µm	Euhedral to anhedral
Description	Pyrite is a trace mineral within the sample, normally as euhedral grains but also as anhedral and occasional skeletal grains. It is generally observed in areas of more intense alteration associated with the formation of muscovite. Encapsulation is generally high in both the coarse (+2 mm) and the fine (-2 mm) fraction, though with a little more liberation in the fine fraction. In general the pyrite remains unreacted across the fine and coarse fraction, with only a few examples of in-situ oxidation. The arsenic content of these grains is roughly 3 wt%.			
Chlorite group (clinochlore)	5 µm	50 µm	20 µm	Anhedral
Description	Chlorite is associated with illite and muscovite as part of the hydrothermal alteration that overprints much of the alkali feldspar grains.			
Calcite	10 µm	80 µm	40 µm	Anhedral
Description	Calcite is present as a trace phase in cross-cutting narrow veinlets. This was not analysed under SEM conditions and undetected by XRD. It may therefore be dolomite or ferroan dolomite.			
Albite	10 µm	400 µm	200 µm	Anhedral
Description	Albite is a trace phase within this sample, not detected by XRD but observed in a few places during petrographic analysis. It generally shows minor alteration with some well preserved twinning evident.			
Muscovite	50 µm	300 µm	150 µm	Anhedral
Description	Muscovite forms a trace interstitial phase usually associated with illite, and particularly with pyrite. It was most likely introduced as part of the hydrothermal alteration.			
Goethite	5 µm	100 µm	10 µm	Anhedral
Description	Goethite is a trace mineral but observed thinly disseminated through the sample as discrete phases. It is occasionally present as a breakdown product of pyrite. There is also the formation of thin metastable iron-oxy hydroxides around some of the particles. These may be predominantly ferrihydrite.			
Arsenopyrite	5 µm	100 µm	30 µm	Euhedral
Description	Arsenopyrite generally forms very fine-grained euhedral grains that are thinly disseminated through the sample. There is a strong association with pyrite where it has formed as rims around the edges of the pyrite grains. It is generally unaltered, but has locally shown some weathering forming arseniosiderite as the immediate product.			
Stibnite	10 µm	150 µm	50 µm	Anhedral to subhedral
Description	Stibnite is observed as fine-grained unaltered and generally encapsulated minerals.			
Arseniosiderite	5 µm	40 µm	20 µm	Anhedral
Description	Arseniosiderite is forming as very fine-grained alteration products interstitial to arsenopyrite and calcite. Exact speciation is slightly uncertain due to the fine-grained nature and potential spectral overlap between calcite and the Fe-arsenate phase. However the Ca content was reliably around ~10-11 wt% which is consistent with arseniosiderite as the mineral phase.			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample D253923

- The sample represents altered alkali feldspar Granite. Hydrothermal alteration has led to the moderate to pervasive formation of illite after alkali feldspar. There is only weak veining apparent in the sample. Sulfide mineralisation is concentrated in regions of the most intense alteration, and in particular association with muscovite. Sulfide encapsulation is generally high in both the coarser fraction (+2 mm) and the finer fraction (-2 mm) though there are well liberated and very fine-grained pyrite grains in the -2 mm fraction. The exposed pyrite shows occasional evidence for in-situ oxidation but most grains remain largely unreacted. Arsenopyrite is also present though generally euhedral, very fine-grained and unreacted. Several particles contain thin iron-oxy hydroxide coatings which appear to be metastable formations, possibly ferrihydrite. There has also been some crystallization of very fine-grained arseniosiderite interstitial to arsenopyrite and calcite.

Photomicrographs



C **Sample D253923**

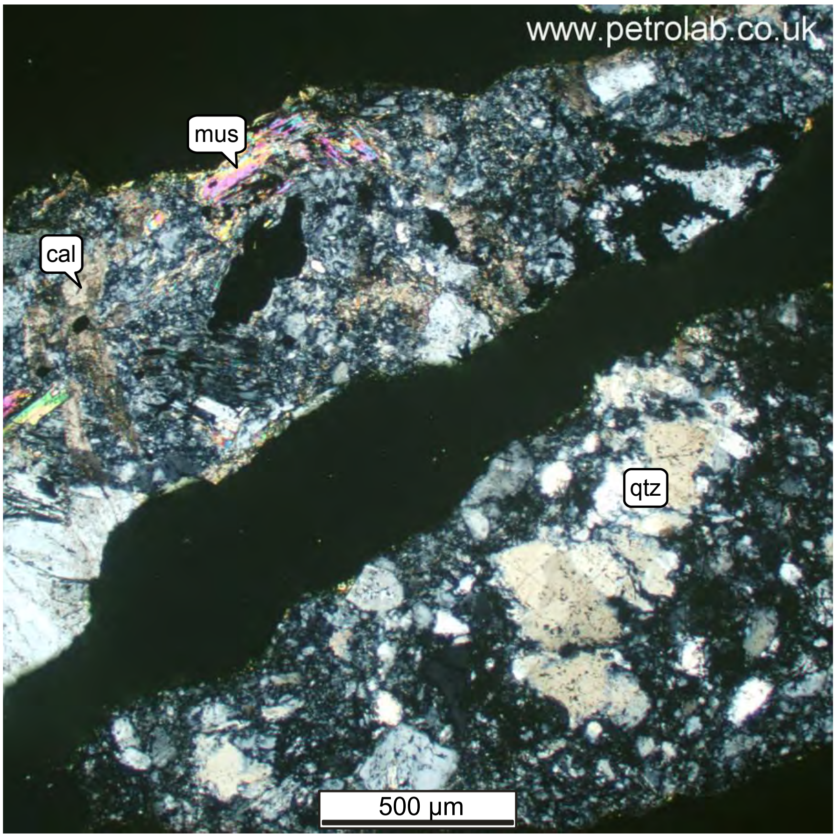
Photomicrograph showing particles that predominantly consist of quartz (qtz) to the top and a particle that consists of heavily altered microcline (mic) with inclusions of biotite (bt) to the bottom. There is some fine-grained Fe-oxy hydroxide alteration products on the top particle.

Image C

Nikon Microphot-FXA petrological microscope

Plane polarised transmitted light

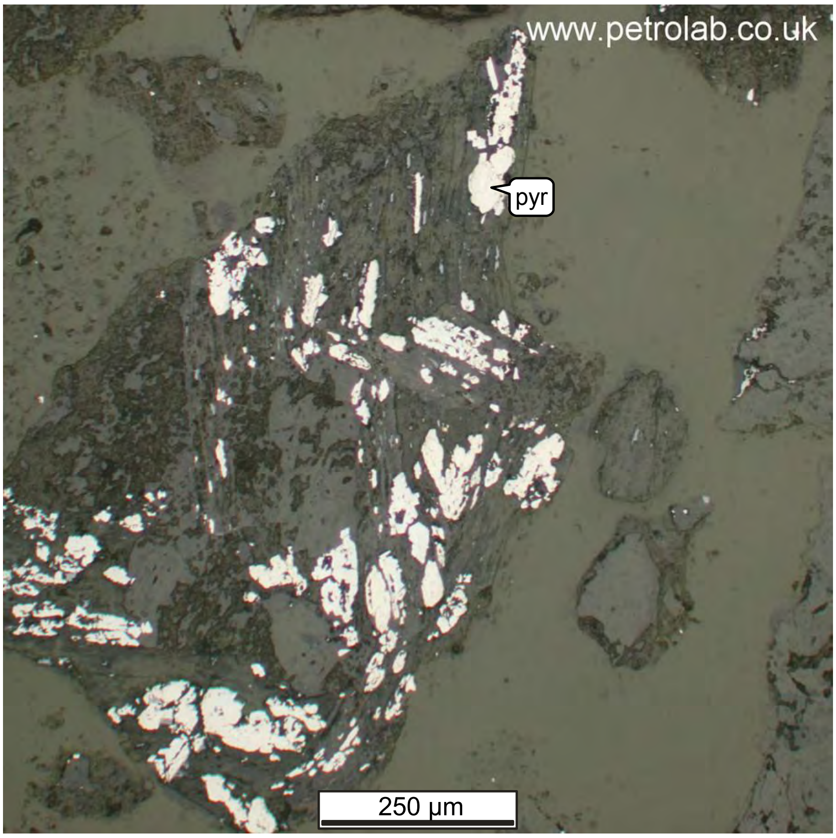
x50



D **Sample D253923**

Photomicrograph showing two particles that consist of medium-grained partially brecciated quartz (qtz). Within the top particle is some fine-grained calcite (cal) and muscovite (mus). The muscovite is often associated with pyrite.

Image D
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50

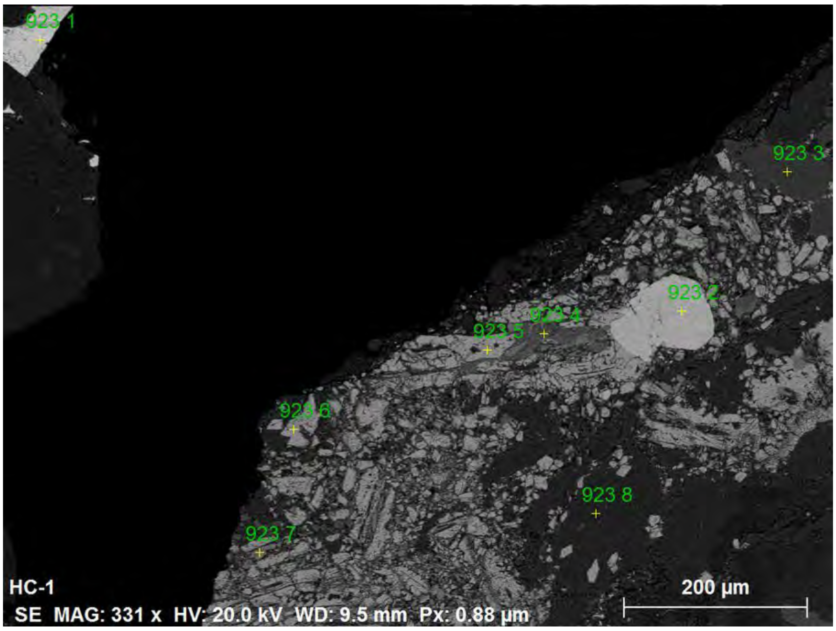


E **Sample D253923**

Photomicrograph showing pyrite (pyr) closely intergrown with muscovite from a particle in the -2mm size fraction. In this particular image the pyrite is largely unreacted.

Image E
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100

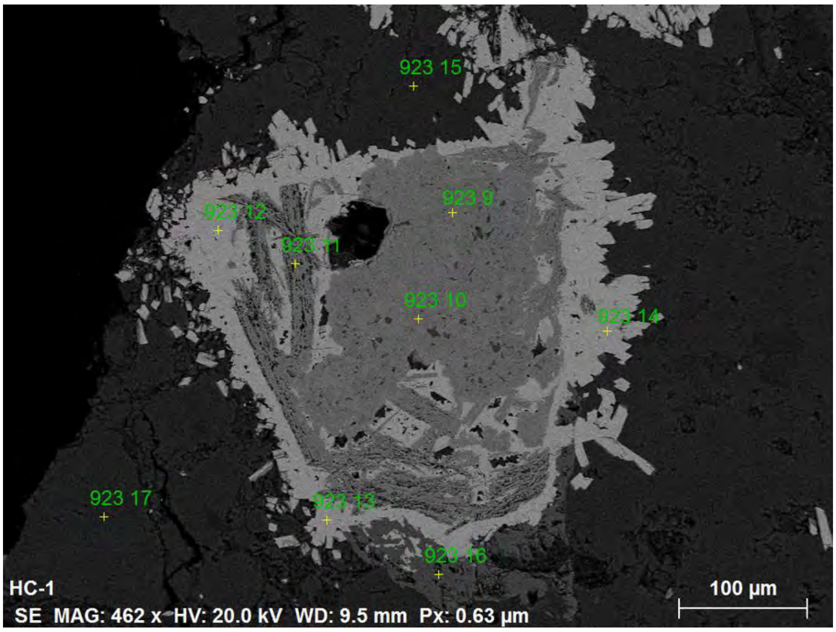
F **Sample D253923**



Back scatter image showing an isolated grain of stibnite (923-1) to the top left and a composite particle to the bottom right containing monazite (923-2), fluorapatite (923-3), arseniosiderite (923-4), arsenopyrite (923-5 & 6), arsenical pyrite (923-7) and microcline (923-8). The arsenical pyrite contains ~3 wt% As.

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

G **Sample D253923**



Back scatter image showing arsenical pyrite (923-9,10 & 11) rimmed by arsenopyrite (923-12,13 & 14) in a composite particle also containing microcline (923-15 & 17) and rutile (923-16).

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

12) Sample D253833

Sample as received

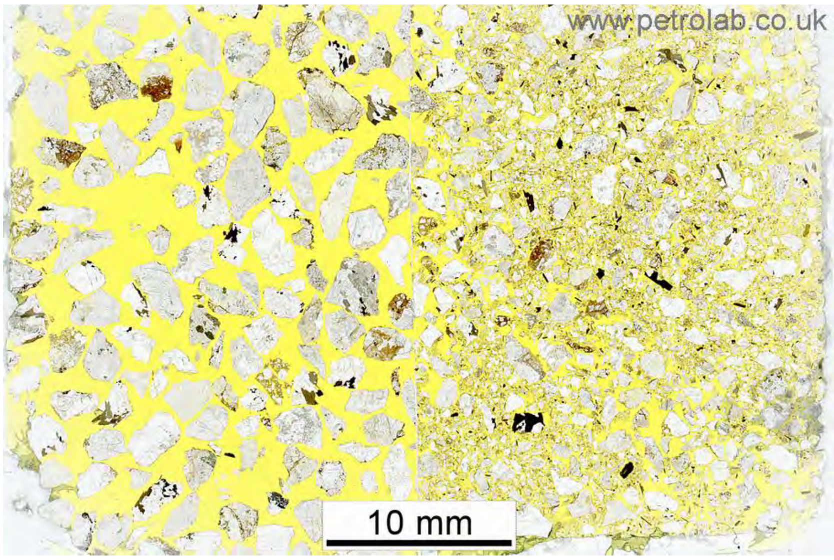
Sample D253833		
Petrolab ID	**Date received**	**Type · condition · properties**
#6478	16/11/2016	Metallurgical test · 1080 g

A **Sample D253833**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B **Sample D253833**

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample D253833		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	45.6% | 45.9%
Microcline	$KAlSi_3O_8$ | sg~2.56	23.0% | 22.4%
Albite	$NaAlSi_3O_8$ | sg~2.62	19.5% | 19.4%
Illite / Biotite / Muscovite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	6.7% | 7.0%
Chlorite group (clinochlore)	$(Mg,Fe{+}{+})_5Al(Si_3Al)O_{10}(OH)_8$ | sg~2.65	5.2% | 5.2%
Amphibole group	$(Na,K,Ca)(Li,Na,Mg,Fe)_2(Mg,Fe,Al)_5((Si,Al,Ti)_8O_{22})(OH,F,Cl,O)_2$	<0.1% | <0.1%
Pyroxene group	$CaMg(Si,Al)_2O_6$ | sg~3.40	<0.1% | <0.1%
Pyrite	FeS_2 | sg~5.01	<0.1% | <0.1%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Senarmontite	Sb_2O_3 | sg~5.50	<0.1% | <0.1%
Schafarzikite	$FeSb_2O_4$ | sg~4.30	<0.1% | <0.1%
Amorphous Fe arsenates	(Fe,As,O,H) +/- Ca,P,Sb	<0.1% | <0.1%
Jarosite	$KFe_3(SO_4)_2(OH)_6$ | sg~3.25	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample D253833				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	10 µm	2000 µm	600 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. There is evidence for a mild brecciation event, probably caused by infiltrating hydrothermal fluids that has resulted in significant grain-size reduction in places. Coarse-grained quartz remains in several of the particles.			
Microcline	10 µm	800 µm	300 µm	Generally anhedral
Description	This alkali feldspar is associated with the quartz as part of the original igneous texture. Alteration is usually pervasive in the alkali feldspar, with the formation of fine-white mica (illite) as the common breakdown product.			
Albite	10 µm	800 µm	300 µm	Anhedral
Description	Albite is closely associated with alkali feldspar and quartz as the main fabric of the particles. It generally shows minor alteration with some well preserved twinning evident.			
Chlorite group (clinochlore)	5 µm	400 µm	20 µm	Anhedral
Description	Chlorite is associated with illite and muscovite as part of the hydrothermal alteration that overprints much of the alkali feldspar grains. Occasionally there are coarse-grained isolated chlorite grains.			

1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite, illite have strongly overlapping XRD traces so their quantification is reported as a combined total

Sample D253833				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Biotite group	10 µm	500 µm	100 µm	Anhedral
Description	Biotite is a minor phase, usually forming in composite books. Occasionally it is observed as isolated grains. It is generally unaltered.			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the albite and alkali feldspar minerals. The sample shows evidence for hydrothermal alteration and illite forms part of the heavily altered feldspar grains and occasional veins caused by this alteration.			
Amphibole group	10 µm	400 µm	100 µm	Euhedral
Description	Amphibole is a rare phase but tends to form medium-grained euhedral particles with little evidence for alteration.			
Pyroxene group	10 µm	100 µm	60 µm	Euhedral
Description	Along with the amphibole grains, pyroxene is a rare phase but where presents tends to form euhedral grains with little signs of alteration.			
Pyrite	5 µm	80 µm	40 µm	Euhedral to anhedral
Description	Pyrite is a rare trace mineral within the sample, normally as euhedral grains but also as anhedral and occasionally skeletal grains. It is observed in areas of more intense alteration associated with the formation of muscovite. Encapsulation is generally high across both size fractions. Despite the high encapsulation reaction appears to have been taken to completion in a few particles with the presence of perimorphs. Unreacted pyrite grains are also present.			
Arsenopyrite	5 µm	80 µm	30 µm	Euhedral
Description	Arsenopyrite generally forms very fine-grained euhedral grains that are thinly disseminated through the sample. There is a strong association with pyrite. It is generally unreacted where observed but there are also regions of the sample where alteration appears to be complete and perimorphs are all that remain.			
Goethite	5 µm	100 µm	10 µm	Anhedral
Description	Goethite is a trace mineral but observed thinly disseminated through the sample as discrete phases. It is occasionally present as a breakdown product of pyrite. There is also the formation of thin metastable iron-oxy hydroxides around some of the particles. These may be predominantly ferrihydrite.			
Muscovite	10 µm	100 µm	50 µm	Anhedral
Description	Muscovite is a trace phase sometimes associated with biotite but generally present as rare isolated grains.			
Senarmontite	10 µm	50 µm	25 µm	Anhedral
Description	Senarmontite is forming around perimorphs of stibnite (no longer observed), arsenopyrite and pyrite. It is very fine-grained and forming thin coatings around the edge of particles. It's formation is likely to be linked to the formation of schafarzikite (see below).			
Schafarzikite	10 µm	50 µm	25 µm	Anhedral
Description	Schafarzikite is another Sb-bearing alteration product that is observed around the edge of several particles. It is likely that it represents the alteration product formed from the complete weathering of previously in-situ pyrite, arsenopyrite and stibnite.			
Amorphous Fe arsenates	-	-	-	Amorphous
Description	Amorphous Fe arsenates are rarely observed as a composite mass associated with silicate gangue. There were small concentrations of phosphorous detected during SEM analysis.			

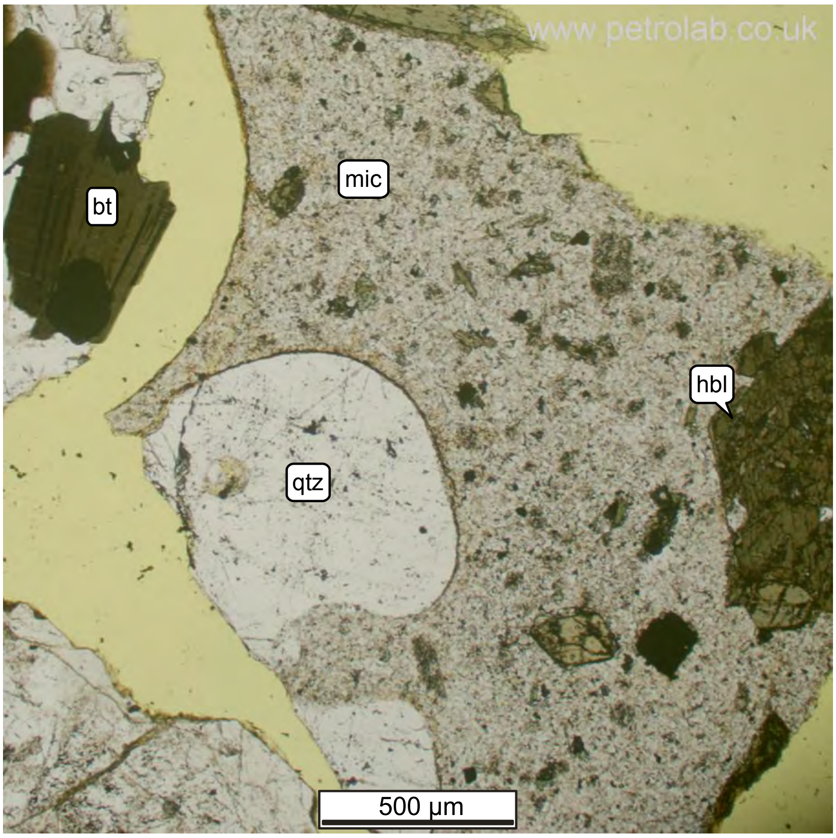
Sample D253833				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Jarosite	10 µm	60 µm	25 µm	Anhedral
Description	Jarosite occurs as rare veinlets cross-cutting particles coarser particles. It contains minor amounts of As and Sb (1 – 4 wt%).			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample D253833

- The sample is a moderately altered Monzo-Granite. Hydrothermal alteration of the feldspar grains has been moderate and occasionally pervasive with the formation of fine white mica (illite) as the common alteration product. Alteration is generally slightly more pervasive in the alkali feldspar rather than the albite. Sulfide mineralisation is strongly associated with this hydrothermal alteration. Encapsulation is generally high across both size fractions though there are some well liberated and very fine-grained pyrite grains in the -2 mm fraction. In general the highly encapsulated pyrite and arsenopyrite remains unreacted, with only a few examples of in-situ oxidation. However, on the edge of some of the particles are fine-grained growths of secondary Sb-bearing minerals (senarmontite and schafarzikite) that have formed around perimorphs. Being perimorphs the original mineral present is uncertain but is assumed to be pyrite, arsenopyrite and stibnite. Stibnite is no longer observed within the sample. Also rarely observed were amorphous Fe arsenate and jarosite.

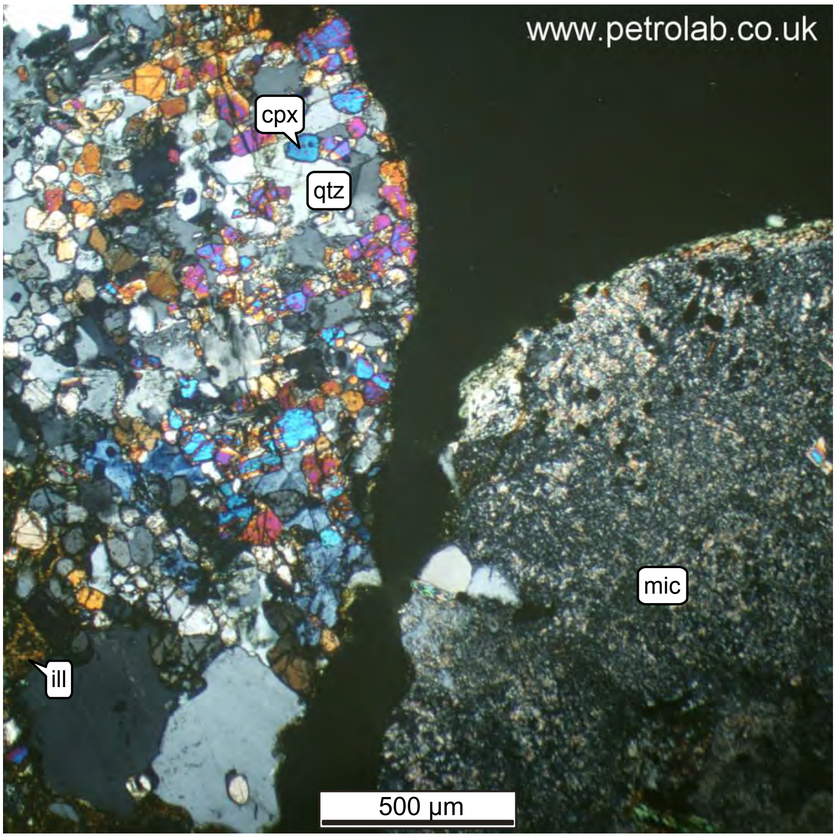
Photomicrographs



C **Sample D253833**

Photomicrograph showing closely intergrown quartz (qtz), heavily altered microcline (mic), biotite (bt) and hornblende (hbl).

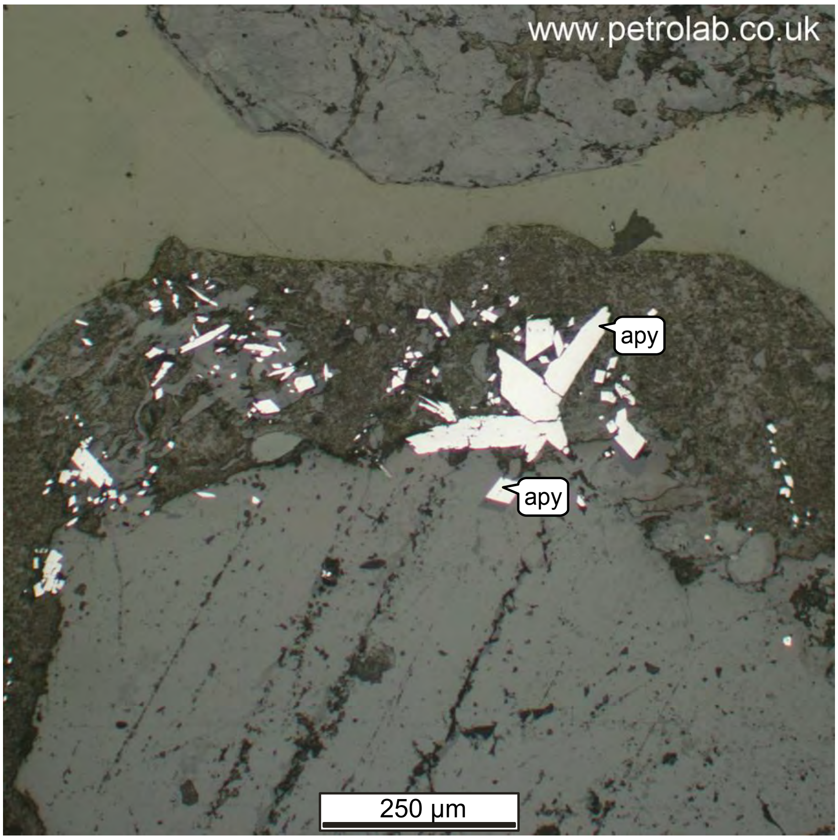
Image C
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



D **Sample D253833**

Photomicrograph showing a particle containing quartz (qtz), clinopyroxene (cpx) and illite (ill) adjacent to a particle mainly consisting of heavily altered microcline (mic).

Image D
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50

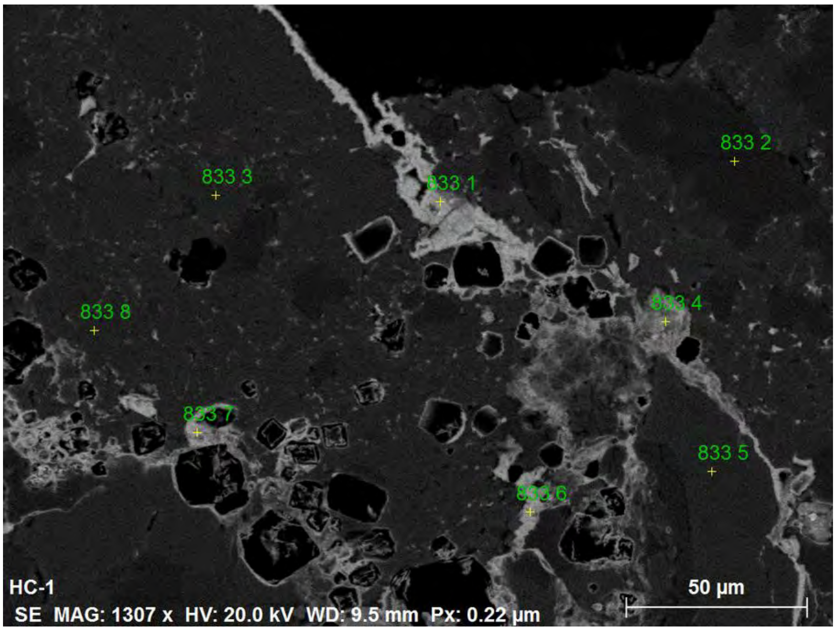


E **Sample D253833**

Photomicrograph showing fine-grained and euhedral grains of arsenopyrite (apy). The arsenopyrite has a high degree of encapsulation.

Image E
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100

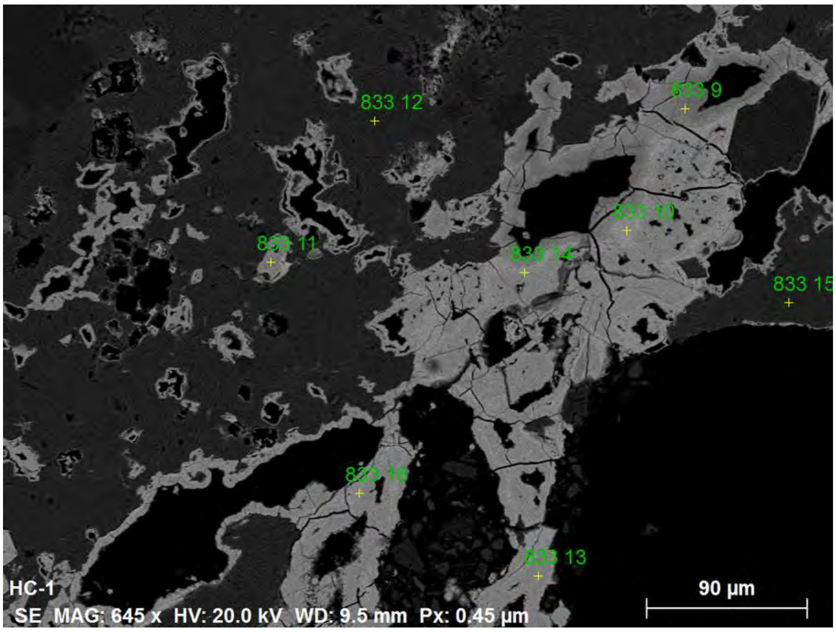
F **Sample D253833**



Back scatter image showing perimorphs of pyrite, stibnite and arsenopyrite now dissolved with the re-crystallization of veinlets of senarmontite (833-1,4,6 & 7) hosted in a groundmass of quartz (833-2) and microcline (833-3,5 & 8)

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

G **Sample D253833**



Back scatter image showing the secondary Sb-bearing mineral schafarzikite (833-9,10,11,13,14 & 16) on the edge of a coarser microcline (833-12 & 15).

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

13) Sample D253892

Sample as received

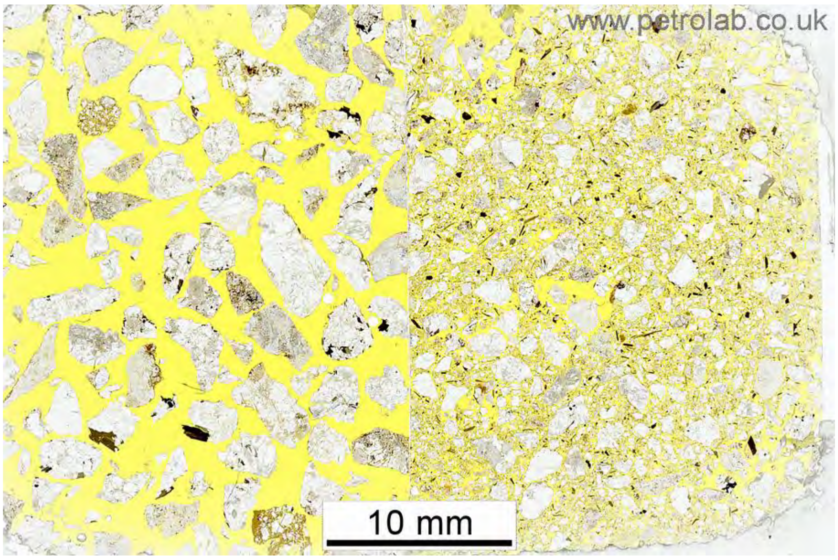
Sample D253892		
Petrolab ID	Date received	Type · condition · properties
#6479	16/11/2016	Metallurgical test · 1569 g

A Sample D253892

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B Sample D253892

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample D253892		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	43.5% | 43.7%
Albite	$NaAlSi_3O_8$ | sg~2.62	29.1% | 28.9%
Microcline	$KAlSi_3O_8$ | sg~2.56	16.0% | 15.5%
Illite / Biotite / Muscovite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	9.0% | 9.4%
Chlorite group (clinochlore)	$(Mg,Fe{+}{+})_5Al(Si_3Al)O_{10}(OH)_8$ | sg~2.65	2.4% | 2.4%
Hematite	Fe_2O_3 | sg~5.30	<0.1% | <0.1%
Pyrite	FeS_2 | sg~5.01	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Magnetite	$Fe{+}{+}Fe{+}{+}{+}_2O_4$ | sg~5.15	<0.1% | <0.1%
Stibnite	Sb_2S_3 | sg~4.60	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample D253892				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	10 µm	2000 µm	600 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. There is evidence for a mild brecciation event, probably caused by infiltrating hydrothermal fluids that has resulted in significant grain-size reduction in places. Coarse-grained quartz remains in several of the particles.			
Albite	10 µm	600 µm	300 µm	Anhedral
Description	Albite is closely associated with alkali feldspar and quartz as the main fabric of the particles. It generally shows minor alteration with some well preserved twinning evident. The albite is generally finer-grained than the alkali feldspar.			
Microcline	10 µm	1600 µm	500 µm	Generally anhedral
Description	This alkali feldspar is associated with the quartz as part of the original igneous texture. Alteration is moderate to pervasive in the alkali feldspar, with the formation of fine-white mica (illite) as the common breakdown product.			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the albite and alkali feldspar minerals. The sample shows evidence for hydrothermal alteration and illite forms part of the heavily altered feldspar grains and occasional veins caused by this alteration.			
Biotite group	10 µm	800 µm	200 µm	Anhedral
Description	Biotite is a minor phase, usually forming as rare isolated grains interstitial to quartz, albite and alkali feldspar. It is generally unaltered.			
Chlorite group (clinochlore)	5 µm	50 µm	20 µm	Anhedral
Description	Chlorite is associated with illite and muscovite as part of the hydrothermal alteration that overprints much of the feldspar grains.			

1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite, illite and biotite have strongly overlapping XRD traces so their quantification is reported as a combined total.

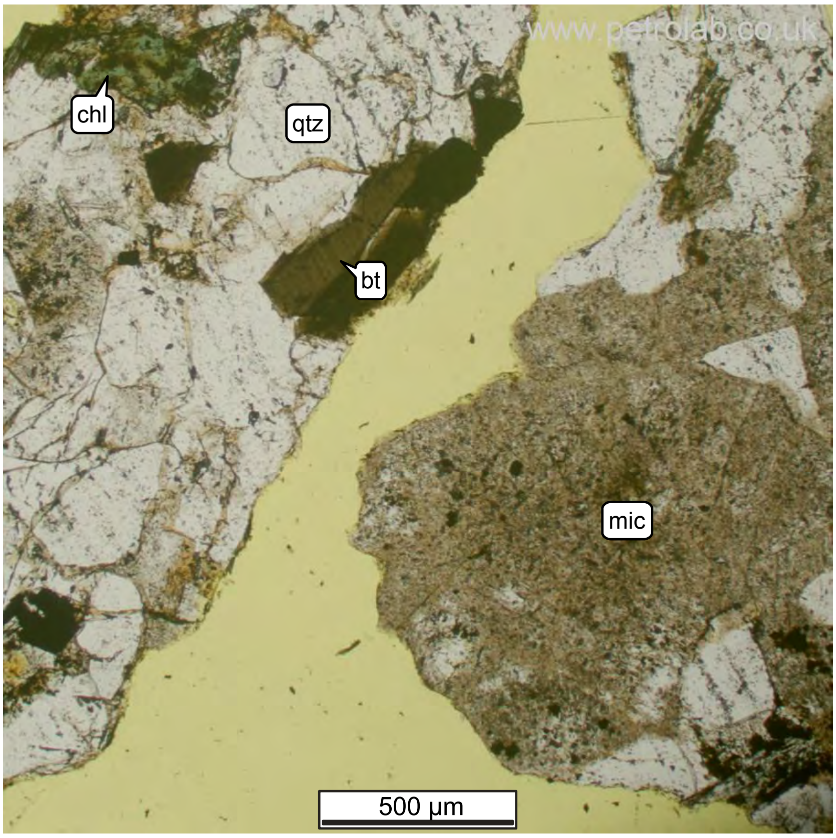
Sample D253892				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Hematite	10 µm	100 µm	40 µm	Anhedral
Description	Hematite is a trace phase thinly disseminated through the sample. It is generally associated with goethite and magnetite.			
Pyrite	5 µm	40 µm	20 µm	Subhedral to anhedral
Description	Pyrite is a rare very fine-grained trace mineral within the sample, normally as subhedral grains but also as anhedral and occasionally skeletal grains. Encapsulation is generally high across both size fractions, but there is nevertheless evidence for in-situ oxidation.			
Goethite	5 µm	100 µm	10 µm	Anhedral
Description	Goethite is a minor mineral observed thinly disseminated through the sample as discrete phases. Some of the goethite grains have the appearance as complete pseudomorphic replacements of previous pyrite grains, particularly in the fully liberated particles. It is also present in association with hematite and magnetite and occasionally present as a breakdown product alongside remaining pyrite. Finally, there is also the formation of thin metastable iron-oxy hydroxides around some of the particles. These may be predominantly ferrihydrite.			
Muscovite	10 µm	300 µm	100 µm	Anhedral
Description	Muscovite is a trace phase usually forming as rare isolated grains interstitial to quartz, albite and alkali feldspar. It is also occasionally associated with areas of hydrothermal alteration.			
Magnetite	5 µm	100 µm	40 µm	Anhedral
Description	Magnetite is a trace phase, generally anhedral, but occasionally subhedral, that is thinly disseminated through the sample. It shows a close association with hematite and goethite where observed.			
Stibnite	10 µm	150 µm	50 µm	Anhedral to subhedral
Description	Stibnite is observed as fine-grained unaltered and generally encapsulated minerals. The low abundance and high encapsulation explains the lack of secondary Sb-bearing minerals.			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample D253892

- The sample is a moderately altered Monzo-Granite. Hydrothermal alteration of the feldspar grains has been moderate with the formation of fine white mica (illite) as the common alteration product. Alteration is generally slightly more pervasive in the alkali feldspar rather than the albite. There are only ultra-trace amounts of pyrite remaining with a very high degree of encapsulation across both size fractions. Nevertheless, there is still evidence for in-situ oxidation of those pyrite grains. Furthermore, some of the goethite present in the groundmass may be completed pseudomorphic replacement or alteration of pre-existing pyrite that has since reacted out. SEM analysis of this goethite failed to detect any arsenic or antimony present as solid solution. There was also some stibnite observed during SEM analysis though these showed no signs of reaction and there were no secondary Sb-bearing minerals observed.

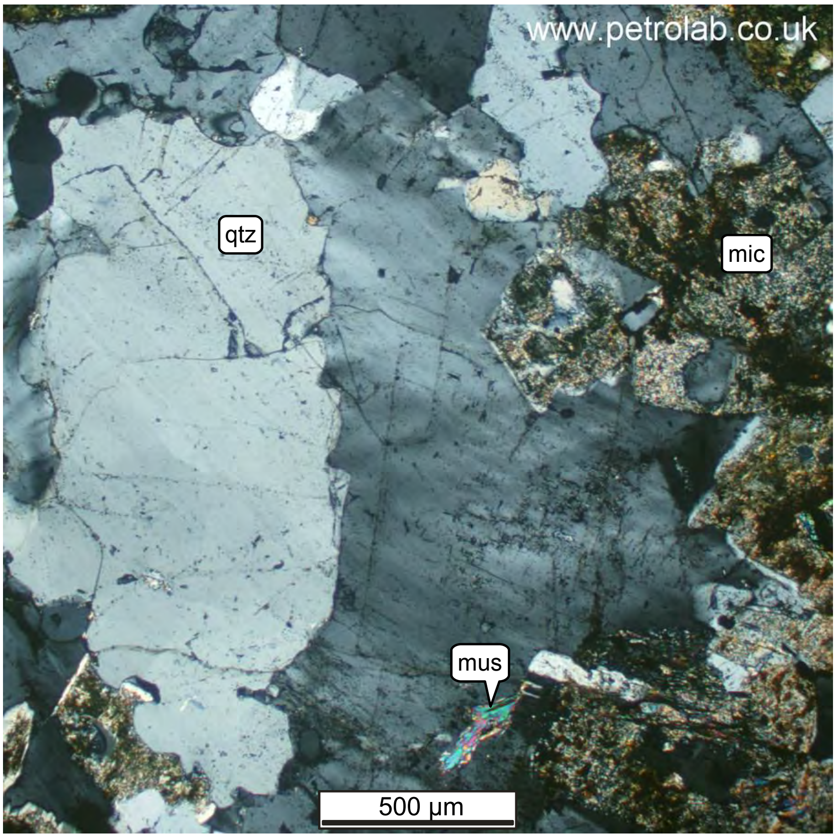
Photomicrographs



C **Sample D253892**

Photomicrograph showing two adjacent particles consisting of quartz (qtz) with variably intergrown and heavily altered microcline (mic). Associated with the particle on the left is chlorite (chl) and biotite (bt).

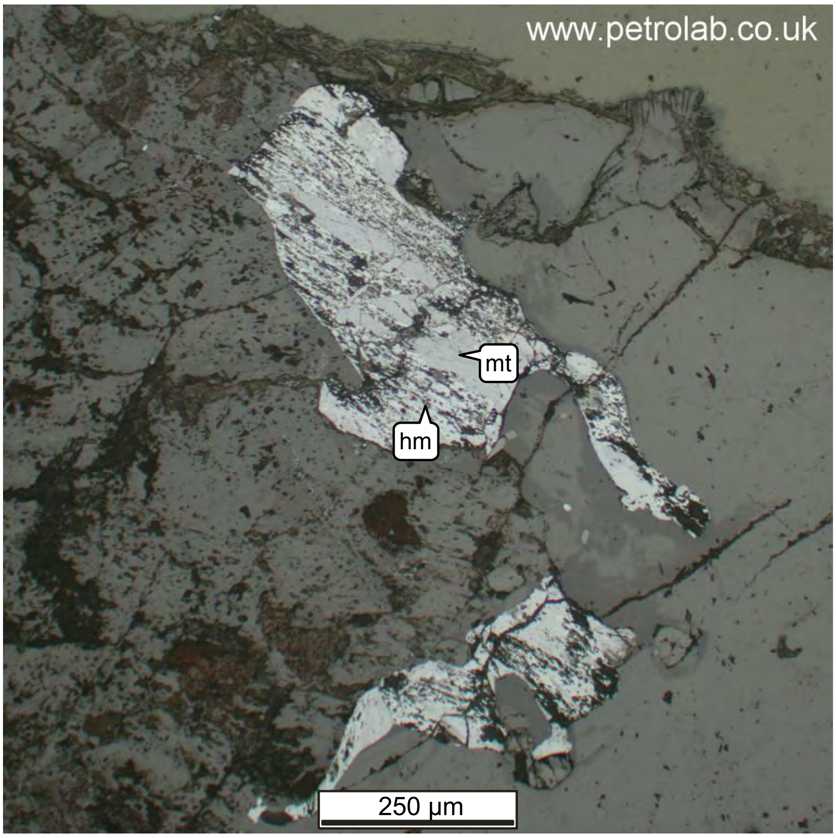
Image C
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



D **Sample D253892**

Photomicrograph showing coarsely intergrown quartz (qtz) and heavily altered microcline (mic). Also present in the field of view is some minor interstitial muscovite (mus).

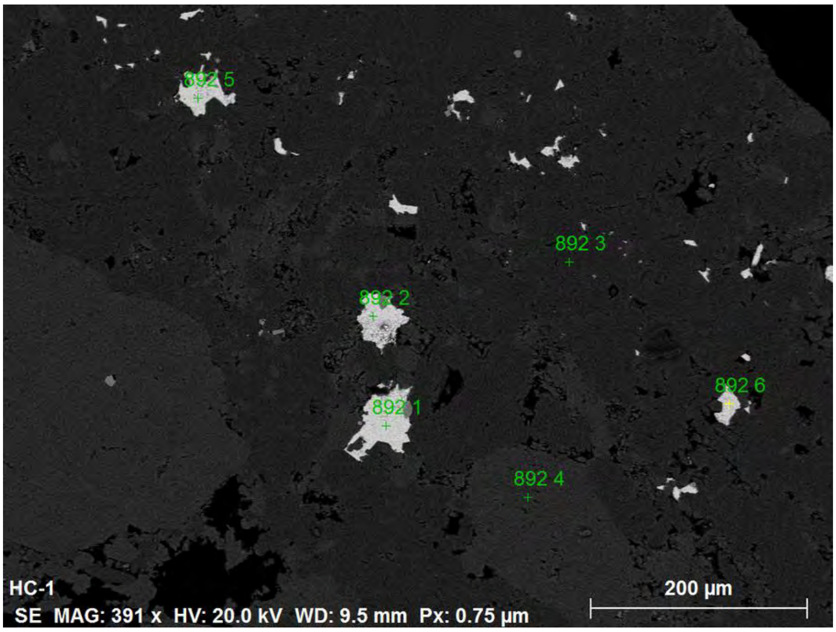
Image D
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50



E **Sample D253892**

Photomicrograph showing medium-grained particles of magnetite (mt) altering to hematite (hm).

Image E
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100

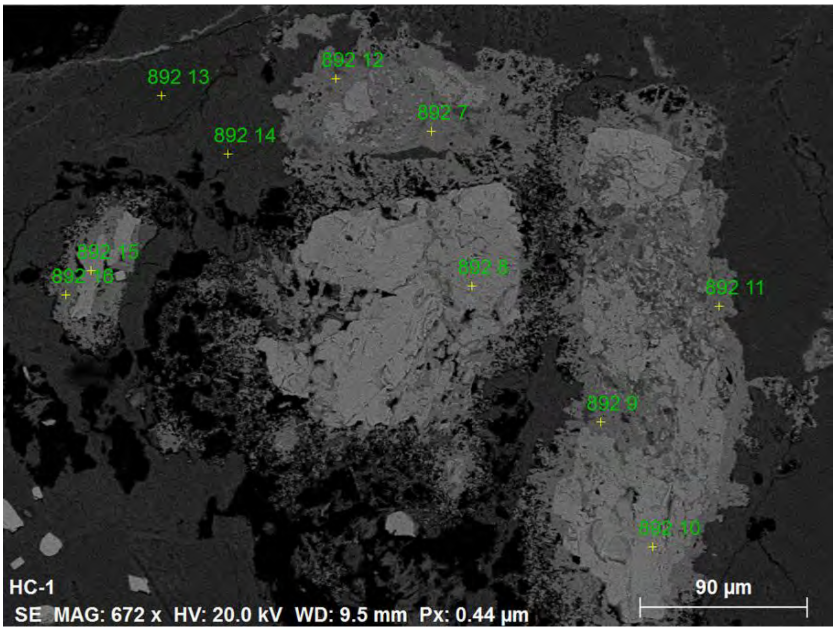


F **Sample D253892**

Back scatter image showing encapsulated grains of stibnite (892-1,2,5 & 6) hosted in composite particle containing quartz (892-3) and microcline (892-4).

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

G **Sample D253892**



Back scatter image showing typical alteration from magnetite (892-8,10 & 15) to goethite (892-7,9,11,12 & 16). Also in association are grains of albite (892-13) and muscovite (892-14). No arsenic or antimony was detected in the goethite.

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

14) Sample D253906

Sample as received

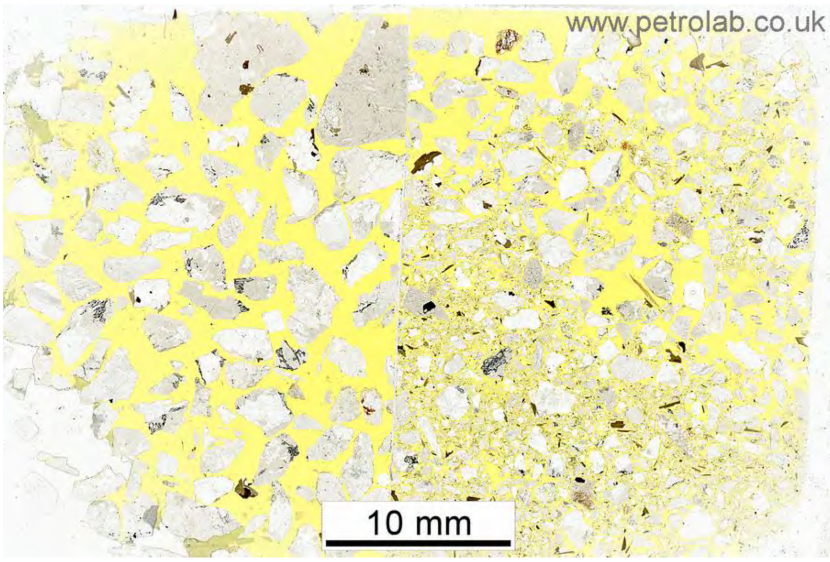
Sample D253906		
Petrolab ID	**Date received**	**Type · condition · properties**
#6480	16/11/2016	Metallurgical test · 734 g

A **Sample D253906**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B **Sample D253906**

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample D253906		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	44.5% | 44.6%
Alkali feldspar	$KAlSi_3O_8$ | sg~2.56	30.1% | 29.1%
Albite	$NaAlSi_3O_8$ | sg~2.62	13.0% | 12.9%
Illite / Muscovite / Biotite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	11.8% | 12.3%
Pyrite	FeS_2 | sg~5.01	0.6% | 1.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Schafarzikite	$FeSb_2O_4$ | sg~4.30	<0.1% | <0.1%
Amorphous Fe arsenates	(Fe,As,O,H) +/- Ca,P,Sb	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample D253906				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	100 µm	1800 µm	400 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. Grain size is highly variable with coarse minerals but also examples of very fine quartz that appears to be the product of hydrothermal alteration that has greatly reduced the grain size.			
Microcline	100 µm	1500 µm	800 µm	Generally anhedral
Description	This alkali feldspar is associated with the albite and the quartz as part of the original igneous texture. Alteration is pervasive with the formation of fine-white mica (illite) as the common breakdown product. Because of the level of alteration and the degree of fluid infiltration it is difficult to estimate the grain-size distribution.			
Albite	10 µm	800 µm	300 µm	Subhedral to anhedral
Description	Albite forms generally anhedral grains. Alteration is minor to pervasive with occasional examples of well preserved and visible twinning. Where altered, the principal alteration product is the formation of fine-mica. Given the extent of alteration, grain size estimations are very rough.			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the albite and alkali feldspar minerals. It is generally very fine-grained and the level of alteration is moderate to pervasive. The sample shows evidence for weak veining and hydrothermal infiltration, with illite as a common component of both the veins and alteration products.			
Biotite group	50 µm	800 µm	300 µm	Anhedral
Description	Biotite is generally present as isolated grains interstitial to quartz and alkali feldspar. It shows very little evidence for alteration.			

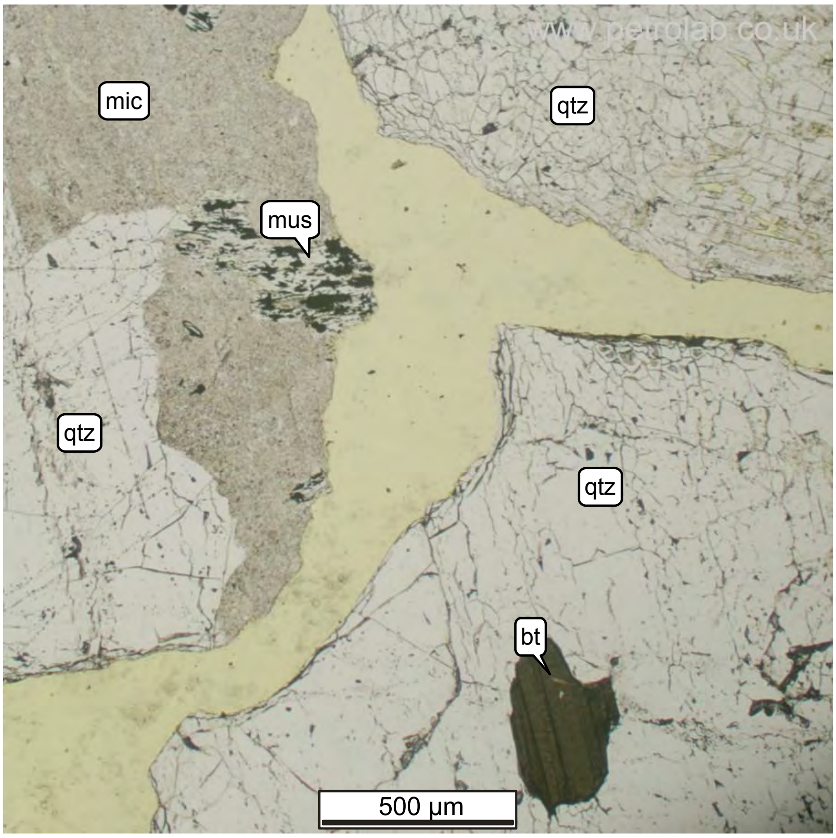
1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite, illite and biotite have strongly overlapping XRD traces so their quantification is reported as a combined total.

Sample D253906				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Pyrite	5 µm	100 µm	50 µm	Euhedral to anhedral
Description	Pyrite is a trace phase, present as euhedral to anhedral grains. It is generally observed closely associated with muscovite as part of the strongly hydrothermally altered regions of the sample. Encapsulation is generally moderate in the coarser fraction (+2 mm) with greater liberation in the finer fraction (-2 mm). There is frequent evidence for in-situ oxidation of pyrite with goethite in particular forming along crystallographically controlled axes. However, unreacted pyrite is also commonly observed.			
Goethite	5 µm	50 µm	10 µm	Anhedral
Description	Goethite is a trace phase thinly disseminated in the sample. It is generally associated with pyrite where it has formed through in-situ oxidation. It is also present as occasional weakly formed rims around some of the particles. The iron-oxy hydroxide formed in this instance may be metastable and more akin to ferrihydrite.			
Arsenopyrite	10 µm	50 µm	30 µm	Euhedral
Description	Arsenopyrite is very fine-grained and generally euhedral in this sample. Where present it frequently shows close proximal association with pyrite, occasionally as partial rims.			
Muscovite	10 µm	300 µm	150 µm	Anhedral
Description	Muscovite forms a trace interstitial phase usually associated with illite, and particularly with pyrite. It was most likely introduced as part of the hydrothermal alteration.			
Schafarzikite	10 µm	40 µm	20 µm	Anhedral
Description	Schafarzikite is a Sb-bearing alteration product that is observed in trace amounts as inclusions within amorphous Fe arsenate rims.			
Amorphous Fe arsenates	-	-	-	-
Description	Amorphous Fe arsenates form as fine discontinuous coatings on some of the particles, or intergrown with other phases such as microcline, schafarzikite and pyrite. There is some trace phosphorous detected during SEM analysis (~1 wt%).			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample D253906
• The sample is a moderately altered Syeno-Granite. Hydrothermal alteration of the feldspar grains has been moderate with the formation of fine white mica (illite) as the common alteration product. Alteration is generally slightly more pervasive in the alkali feldspar rather than the albite. Sulfide mineralisation includes arsenopyrite and pyrite, closely associated with the areas of the most intense hydrothermal alteration. Sulfide encapsulation is generally moderate in the coarse (+2 mm) size fraction with greater liberation in the fine size fraction. There is frequent evidence for in-situ oxidation of pyrite with goethite in particular forming along crystallographically controlled axes. However, unreacted pyrite is also commonly observed. SEM analysis confirms that the pyrite is arsenic-bearing with concentrations up to 9 wt%. In addition amorphous Fe arsenates have formed rare crusts around some of the particles reaching up to 120 µm thick.

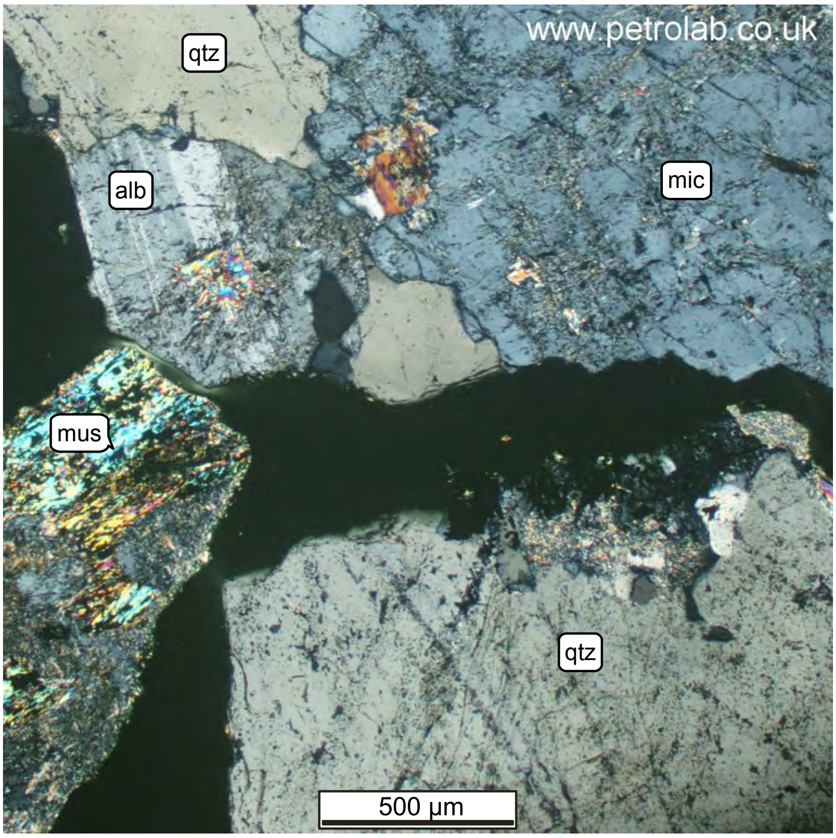
Photomicrographs



C **Sample D253906**

Photomicrograph showing particles of cross-grained quartz (qtz) alongside altered microcline (mic). Interstitial to these are some muscovite (mus) and biotite (bt).

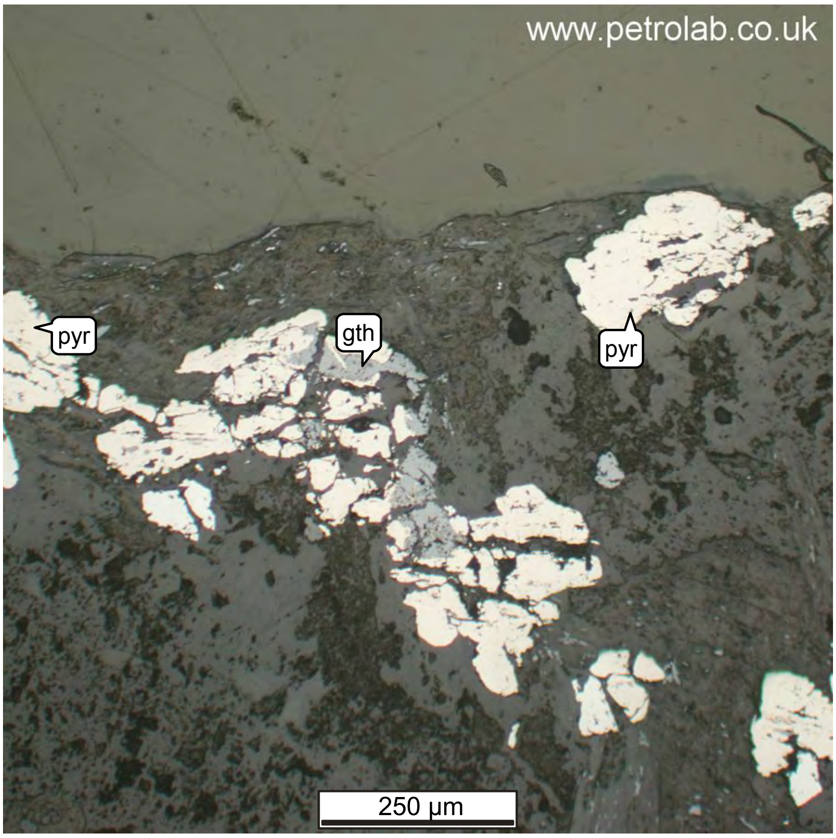
Image C
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



D **Sample D253906**

Photomicrograph showing particles containing coarse-grained quartz (qtz), partially altered microcline (mic) and albite (alb). There is some interstitial muscovite (mus) as well.

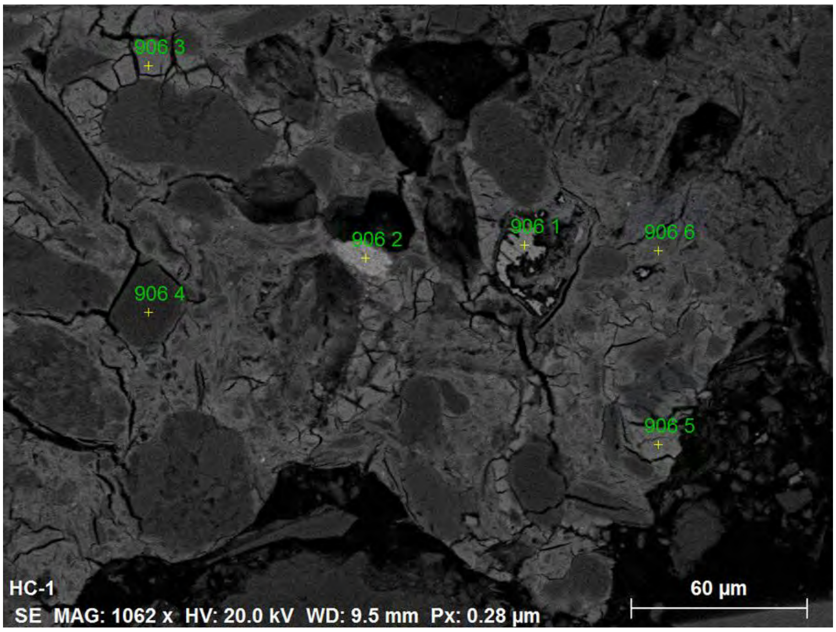
Image D
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50



E **Sample D253906**

Photomicrograph showing largely unaltered and generally encapsulated grains of pyrite (pyr). There is some included rutile with the pyrite and minor goethite (gth) formation.

Image E
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100

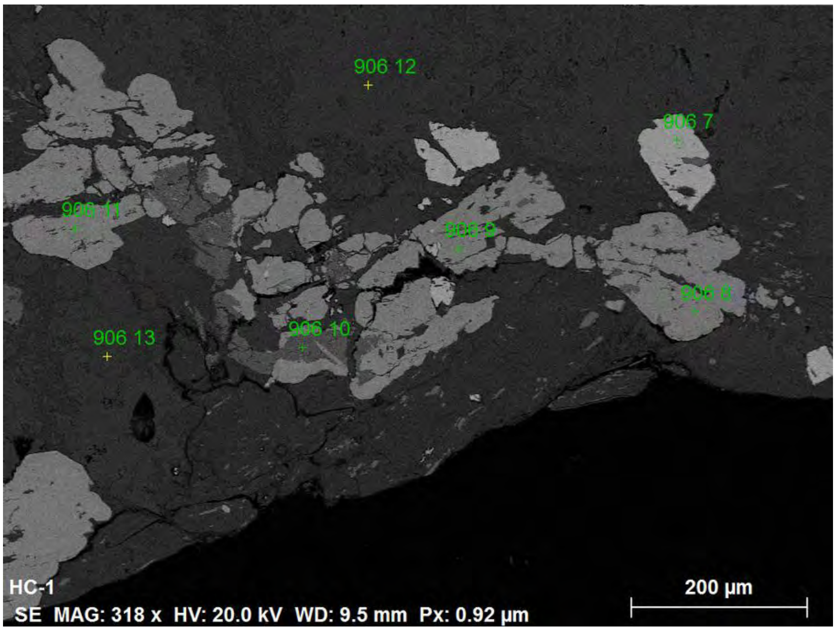


F **Sample D253906**

Back scatter image showing small remnants of arsenical pyrite (906-1) and schafarzikite (906-2) surrounded by amorphous Fe arsenates (906-3,5 & 6). The amorphous Fe arsenates are also enveloping quartz (906-4).

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

G **Sample D253906**



Back scatter image showing grains of arsenopyrite (906-7) and arsenical pyrite (906-8,9 & 11) hosted within a composite particle also containing rutile (906-10) and microcline (906-12 & 13). The arsenical pyrite contains 8-9 wt% As.

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

15) Sample D253944

Sample as received

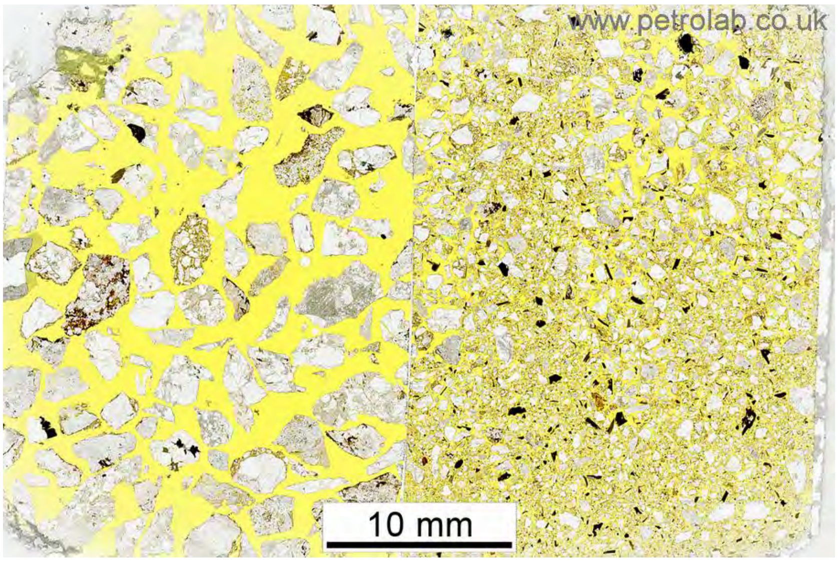
Sample D253944		
Petrolab ID	**Date received**	**Type · condition · properties**
#6481	16/11/2016	Metallurgical test · 1600 g

A **Sample D253944**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B **Sample D253944**

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample D253944		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	41.6% | 41.8%
Albite	$NaAlSi_3O_8$ | sg~2.62	31.7% | 31.5%
Microcline	$KAlSi_3O_8$ | sg~2.56	17.4% | 16.9%
Illite / Muscovite / Biotite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	9.4% | 9.8%
Pyrite	FeS_2 | sg~5.01	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Hematite	Fe_2O_3 | sg~5.30	<0.1% | <0.1%
Magnetite	$Fe{+}{+}Fe{+}{+}{+}_2O_4$ | sg~5.15	<0.1% | <0.1%
Schafarzikite	$FeSb_2O_4$ | sg~4.30	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample D253944				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	100 µm	1400 µm	400 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. Grain size is highly variable with coarse minerals but also examples of very fine quartz that appears to be the production of hydrothermal alteration that has greatly reduced the grain size.			
Albite	10 µm	1000 µm	400 µm	Subhedral to anhedral
Description	Albite forms generally anhedral grains. Alteration is minor to pervasive with occasional examples of well preserved and visible twinning. Where altered, the principal alteration product is the formation of fine-mica. Given the extent of alteration, grain size estimations are very rough.			
Microcline	100 µm	2000 µm	800 µm	Generally anhedral
Description	This alkali feldspar is associated with the albite and the quartz as part of the original igneous texture. Alteration is variable, ranging from minor to pervasive, with the formation of fine-white mica (illite) as the common breakdown product.			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the albite and alkali feldspar minerals. It is generally very fine-grained and the level of alteration is moderate to pervasive. The sample shows evidence for weak veining and hydrothermal infiltration, with illite as a common component of both the veins and alteration products.			
Biotite group	50 µm	400 µm	200 µm	Anhedral
Description	Biotite is generally present as isolated grains interstitial to quartz and alkali feldspar. It shows very little evidence for alteration.			

1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite, illite and biotite have strongly overlapping XRD traces so their quantification is reported as a combined total.

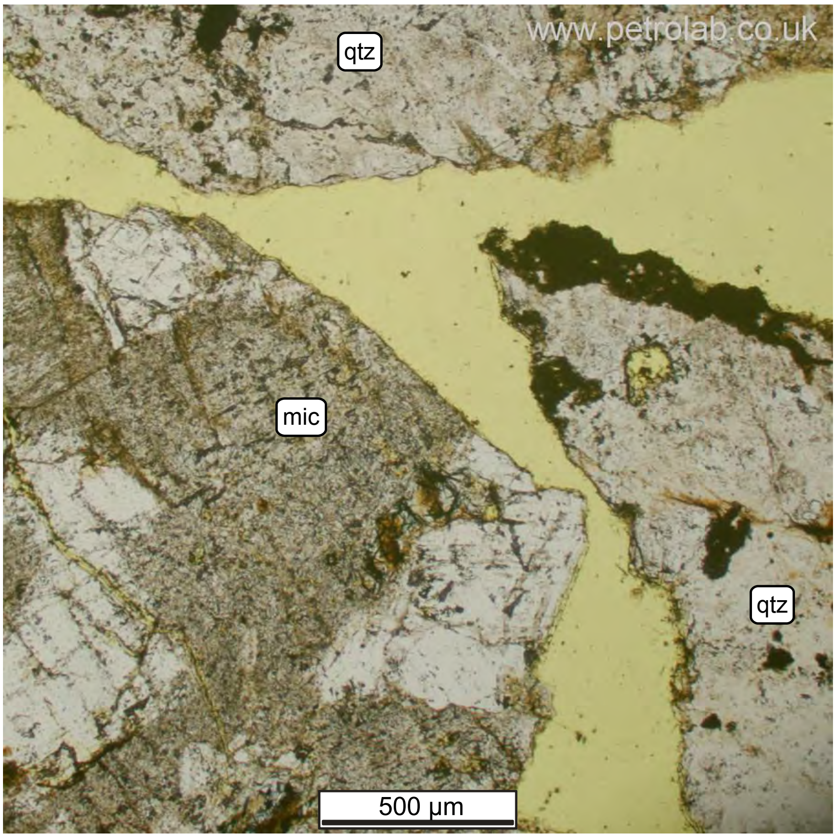
Sample D253944				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Pyrite	5 µm	40 µm	20 µm	Euhedral to anhedral
Description	Pyrite is a very fine-grained ultra-trace phase, only present as a few isolated grains. Encapsulation is generally very high throughout with a few liberated grains. All pyrite grains appear largely unreacted.			
Muscovite	10 µm	300 µm	150 µm	Anhedral
Description	Muscovite forms a trace interstitial phase usually associated with illite. It was most likely introduced as part of the hydrothermal alteration.			
Goethite	5 µm	200 µm	80 µm	Anhedral
Description	Goethite is a trace phase thinly disseminated in the sample. It generally forms isolated grains medium-sized grains often associated with hematite and magnetite.			
Hematite	10 µm	400 µm	180 µm	Anhedral
Description	Hematite is a trace phase thinly disseminated through the sample. It is generally associated with goethite and magnetite.			
Magnetite	10 µm	400 µm	180 µm	Subhedral
Description	Magnetite is a trace phase, generally subhedral, that is thinly disseminated through the sample. It shows a close association with hematite and goethite where observed.			
Schafarzikite	10 µm	40 µm	20 µm	Anhedral
Description	Schafarzikite is a Sb-bearing alteration product that is observed in rims around some composite particles. It also shows a strong association with altered pyrite.			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample D253944

- The sample is a moderately altered Monzo-Granite. Hydrothermal alteration of the feldspar grains has been minor to pervasive with the formation of fine white mica (illite) as the common alteration product. Alteration is generally slightly more pervasive in the microcline rather than the albite. Pyrite is observed as thinly disseminated through the sample and often shows a moderate degree of alteration and reaction. From SEM analysis some of the common alteration products associated with the altering pyrite are goethite and schafarzikite. The presence of Schafarzikite with pyrite suggests that there may have been some associated stibnite present that has since altered away. There may also be some antimony present within the pyrite in solid solution.

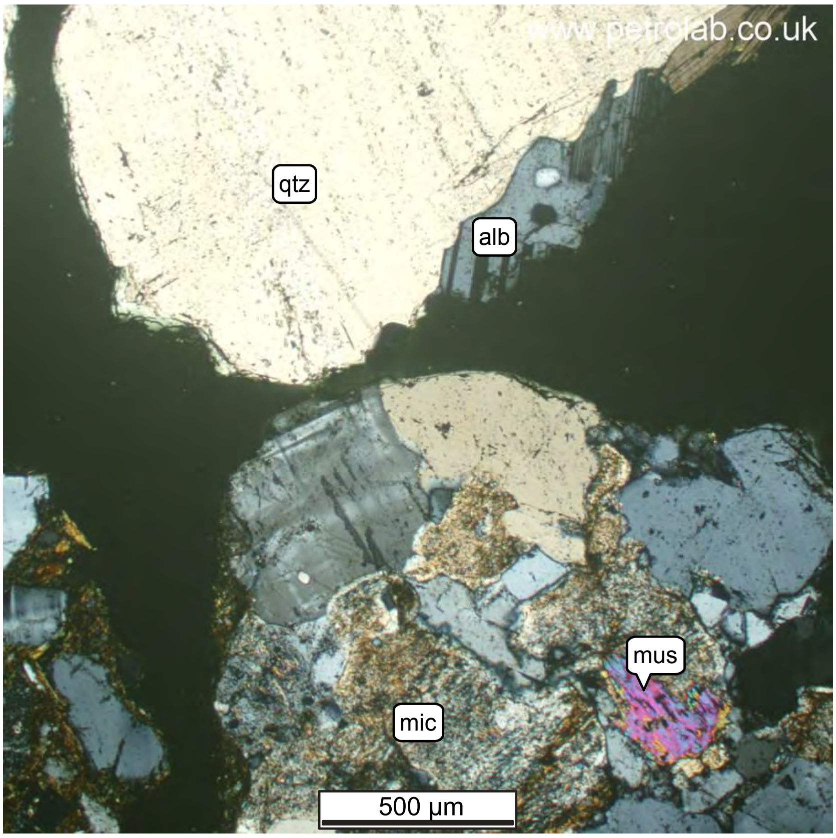
Photomicrographs



C **Sample D253944**

Photomicrograph showing particles containing coarse-grained quartz (qtz) and partially to pervasively altered microcline (mic).

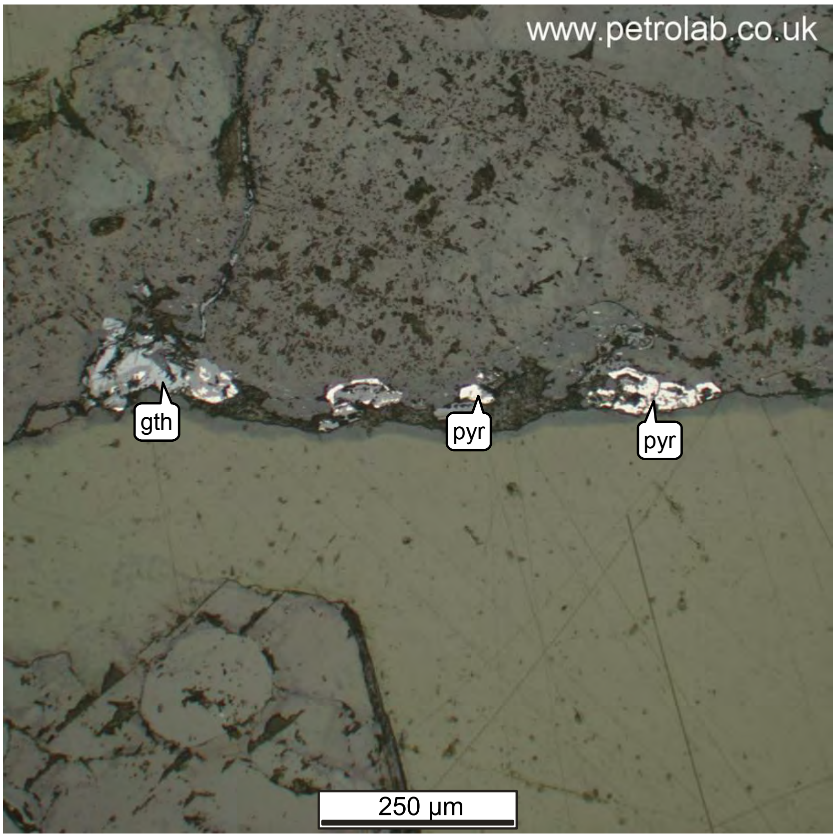
Image C
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



D **Sample D253944**

Photomicrograph showing particles containing coarse-grained quartz (qtz) associated with albite (alb) and heavily altered microcline (mic). There is also some interstitial muscovite (mus).

Image D
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50

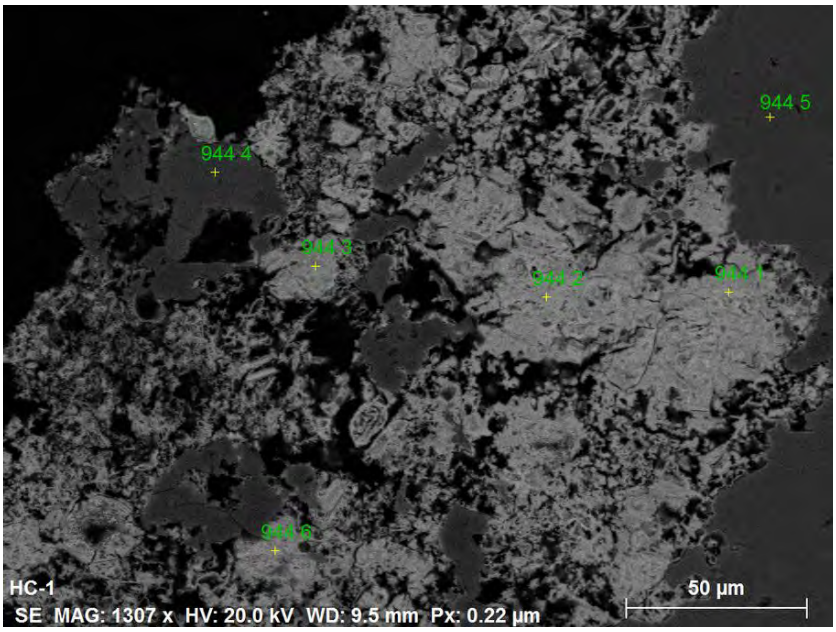


E Sample D253944

Photomicrograph showing partially to pervasively altered pyrite (pyr). The main alteration product is goethite (gth).

Image E
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100

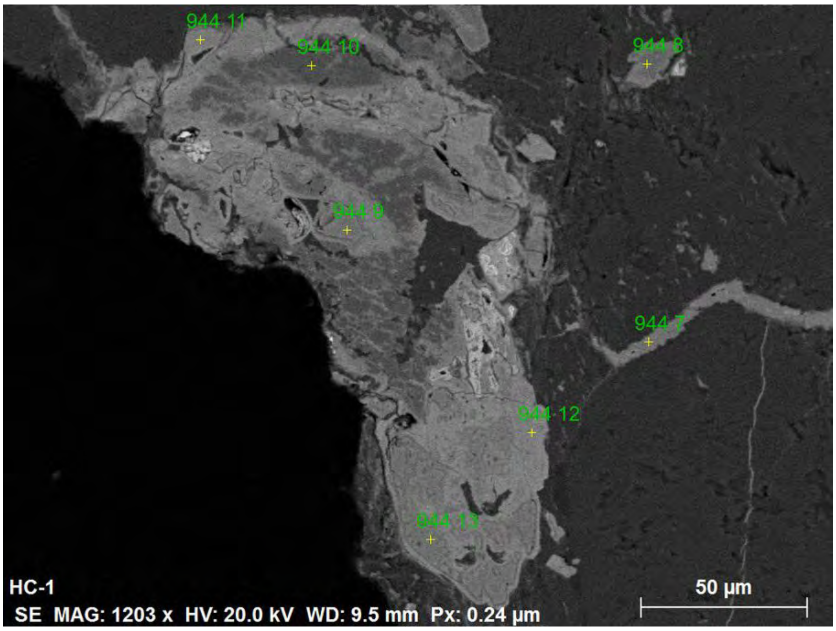
F Sample D253944



Back scatter image showing the crystallization of surficial schafarzikite (944-1,2,3 & 6) adjacent to microcline (944-4 & 5).

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

G Sample D253944



Back scatter image showing heavily altered pyrite (944-9 & 13) with the formation of closely associated schafarzikite (944-7,11 & 12), goethite (944-8) and rutile (944-10).

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

16) Sample D253840

Sample as received

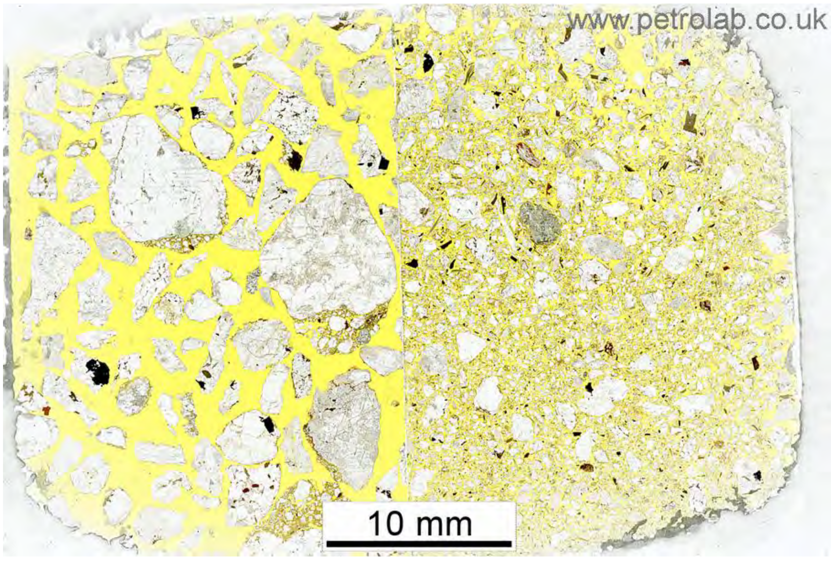
Sample D253840		
Petrolab ID	**Date received**	**Type · condition · properties**
#6482	16/11/2016	Metallurgical test · 599 g

A **Sample D253840**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B **Sample D253840**

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample D253840		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	49.4% | 49.6%
Albite	$NaAlSi_3O_8$ | sg~2.62	24.0% | 23.8%
Microcline	$KAlSi_3O_8$ | sg~2.56	16.8% | 16.3%
Illite / Biotite / Muscovite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	9.8% | 10.2%
Magnetite	$Fe{+}{+}Fe{+}{+}{+}_2O_4$ | sg~5.15	<0.1% | <0.1%
Hematite	Fe_2O_3 | sg~5.30	<0.1% | <0.1%
Pyroxene group	$CaMg(Si,Al)_2O_6$ | sg~3.40	<0.1% | <0.1%
Amorphous Fe arsenates	(Fe,As,O,H) +/- Ca,P,Sb	<0.1% | <0.1%
Senarmontite	Sb_2O_3 | sg~5.50	<0.1% | <0.1%
Cervantite	Sb_2O_4 | sg~6.64	<0.1% | <0.1%
Pyrite	FeS_2 | sg~5.01	<0.1% | <0.1%
Jarosite	$KFe_3(SO_4)_2(OH)_6$ | sg~3.25	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample D253840				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	100 µm	4000 µm	1000 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. Grain size is highly variable with coarse minerals but also examples of very fine quartz that appears to be the product of hydrothermal alteration that has greatly reduced the grain size.			
Albite	10 µm	1000 µm	400 µm	Subhedral to anhedral
Description	Albite forms generally anhedral grains. Alteration is minor to pervasive with occasional examples of well preserved and visible twinning. Where altered, the principal alteration product is the formation of fine-mica. Given the extent of alteration, grain size estimations are very rough.			
Microcline	100 µm	3000 µm	1000 µm	Generally anhedral
Description	This alkali feldspar is associated with the albite and the quartz as part of the original igneous texture. Alteration is pervasive with the formation of fine-white mica (illite) as the common breakdown product.			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the albite and alkali feldspar minerals. It is generally very fine-grained and the level of alteration is moderate to pervasive. The sample shows evidence for weak veining and hydrothermal infiltration, with illite as a common component of both the veins and alteration products.			

1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite, illite and biotite have strongly overlapping XRD traces so their quantification is reported as a combined total.

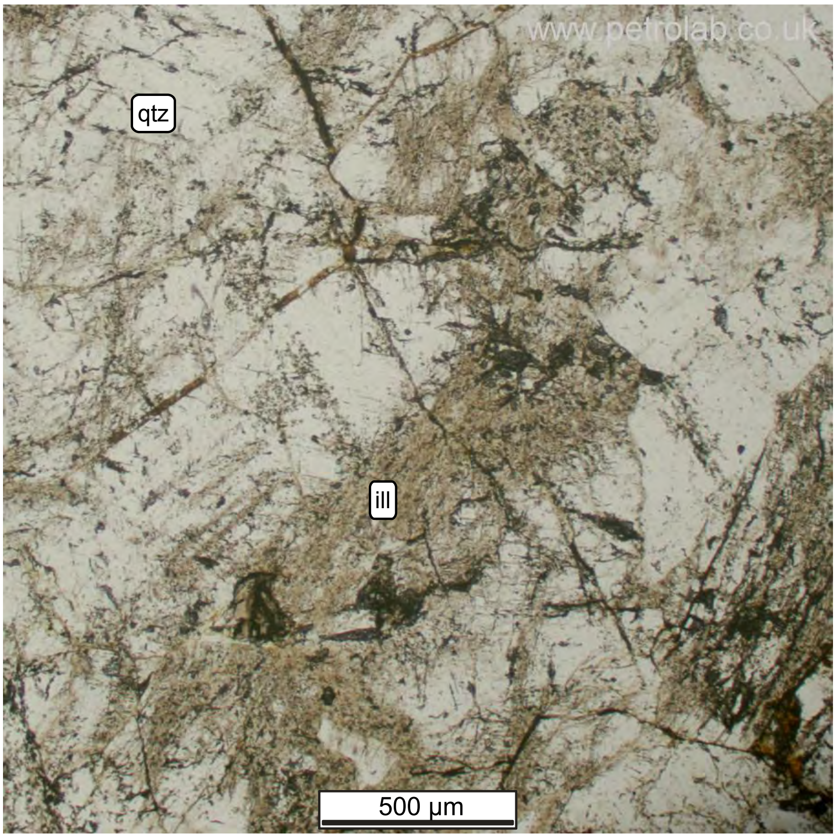
Sample D253840				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Biotite group	50 µm	400 µm	200 µm	Anhedral
Description	Biotite is generally present as isolated grains interstitial to quartz and alkali feldspar. It shows very little evidence for alteration.			
Magnetite	50 µm	800 µm	200 µm	Subhedral
Description	Magnetite is a medium-grained phase, generally subhedral, that is thinly disseminated through the sample. In a few of the grains there is some crystallographically controlled exsolution of hematite. There is a very little alteration with no discernible formation of goethite as an additional mineralogical product.			
Muscovite	20 µm	200 µm	100 µm	Anhedral
Description	Muscovite is generally present as isolated grains interstitial to quartz and feldspar. It shows very little evidence for alteration. There is an occasional association with areas of intense hydrothermal alteration.			
Hematite	10 µm	400 µm	180 µm	Anhedral
Description	Hematite is a trace phase thinly disseminated through the sample. It is generally associated with magnetite as crystallographically controlled exsolution.			
Pyroxene group	20 µm	400 µm	100 µm	Anhedral
Description	Pyroxene is a rare phase but where presents tends to form euhedral grains with little signs of alteration.			
Amorphous Fe arsenates	-	-	-	-
Description	Amorphous Fe arsenates form discontinuous bands around some of the particles as well as some composite patches within particles. They usually contain a small amount of phosphorous present as			
Senarmontite	5 µm	80 µm	25 µm	Anhedral
Description	Senarmontite is forming in close association with cervantite. No stibnite is observed within the sample so it is possible that the formation of senarmontite and cervantite represent the end-process of the alteration of stibnite.			
Cervantite	5 µm	80 µm	25 µm	Anhedral
Description	Cervantite is present as partial rims around senarmontite as a further alteration product.			
Pyrite	2 µm	20 µm	10 µm	Subhedral
Description	Pyrite was only observed during SEM analysis and consisted of very fine-grained arsenic-bearing examples encapsulated within composite particles. They contain variable amounts of phosphorous (1 – 6 wt%).			
Jarosite	2 µm	40 µm	10 µm	Anhedral
Description	Jarosite is present as rare thin discontinuous bands forming on particles. The bands reach up to 40 µm thick.			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample D253840

- The sample is a moderately altered Monzo-Granite. Hydrothermal alteration of the feldspar grains has been moderate to pervasive with the formation of fine white mica (illite) as the common alteration product. Alteration is generally slightly more pervasive in the alkali feldspar rather than the albite. Sulfide mineralisation was observed during SEM analysis and consisted of rare isolated grains of very fine-grained arsenical pyrite. There has also been the formation of As- and Sb-bearing secondary mineral products with the presence of amorphous Fe arsenates, senarmontite and cervantite. Jarosite was also observed forming rare discontinuous bands on a couple of particles.

Photomicrographs



C **Sample D253840**

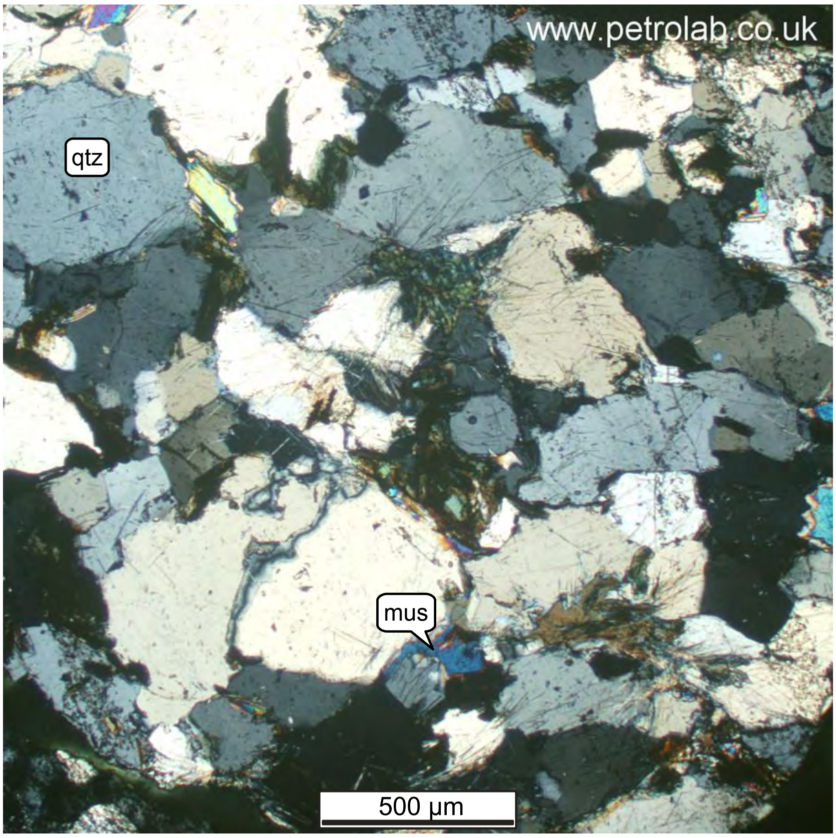
Photomicrograph of coarse-grained quartz (qtz) partially infiltrated by very fine-grained illite (ill).

Image C

Nikon Microphot-FXA petrological microscope

Plane polarised transmitted light

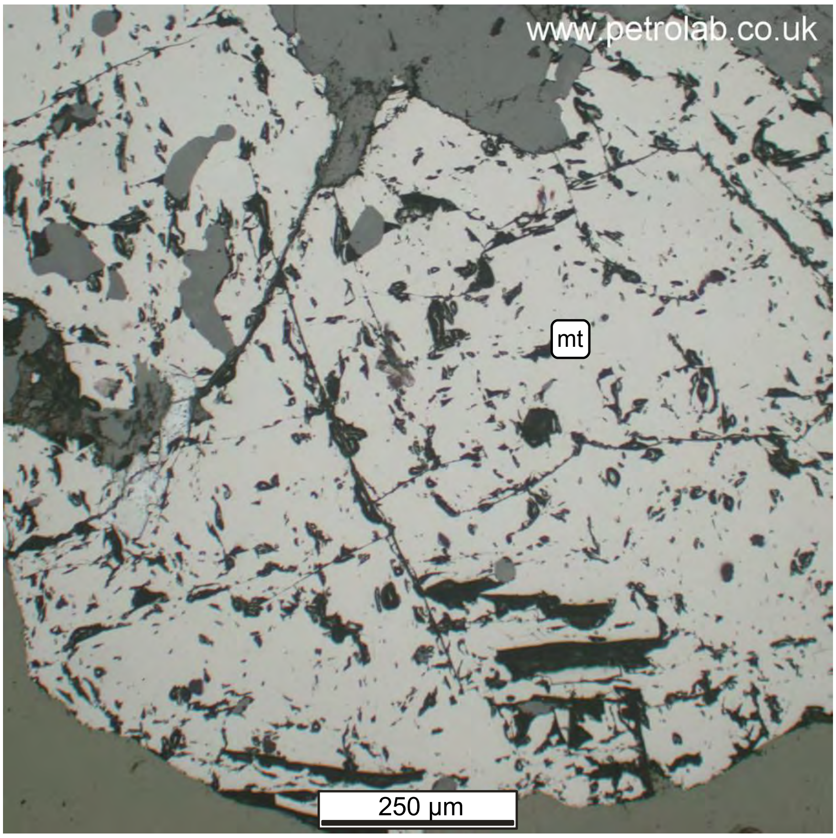
x50



D **Sample D253840**

Photomicrograph showing closely intergrown medium-grained quartz (qtz) and muscovite (mus).

Image D
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50

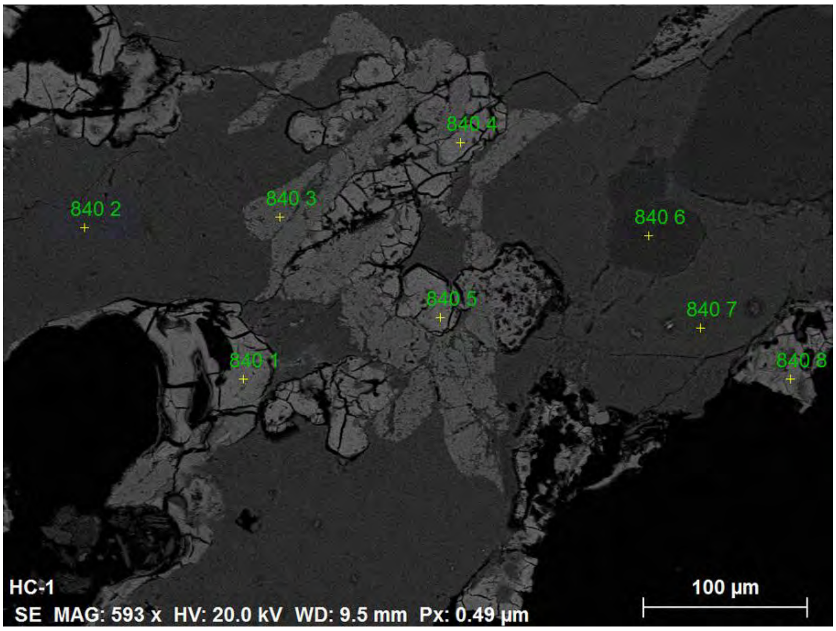


E **Sample D253840**

Photomicrograph of medium-grained unaltered magnetite (mt) grain. This is typical of magnetite deportment within the sample.

Image E
Nikon Microphot-FXA petrological microscope
Plane polarised reflected light
x100

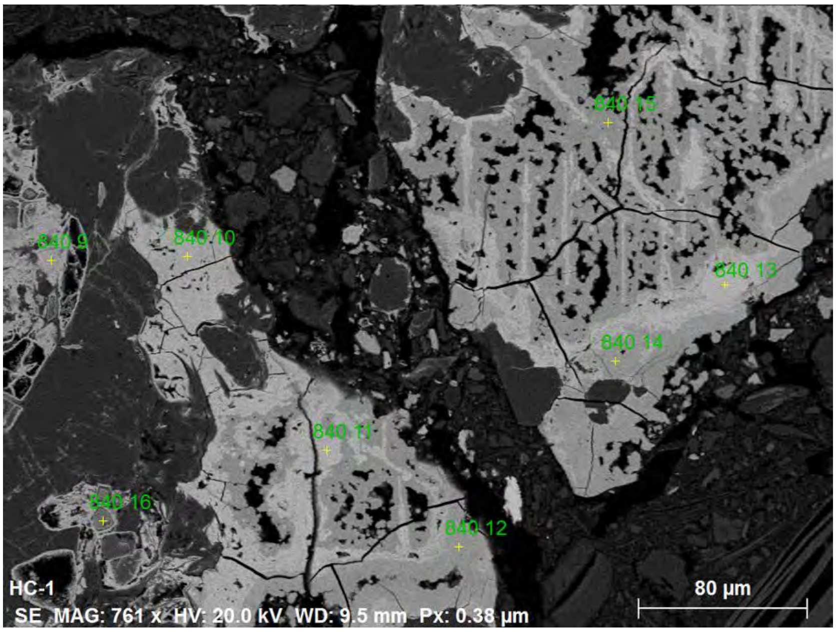
F **Sample D253840**



Back scatter image showing the formation of amorphous Fe arsenates (840-1,4,5 & 8) interstitial to microcline (840-2 & 7), rutile (840-3) and quartz (840-6).

Image F
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

G **Sample D253840**



Back scatter image showing the alteration products of stibnite with the formation of senarmontite (840-10,11 & 13) further altering to cervantite (840-9,12 & 15). There is an isolated grain of arsenical pyrite (840-16) containing 3 wt% As and 1 wt% Sb.

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

17) Sample D253856

Sample as received

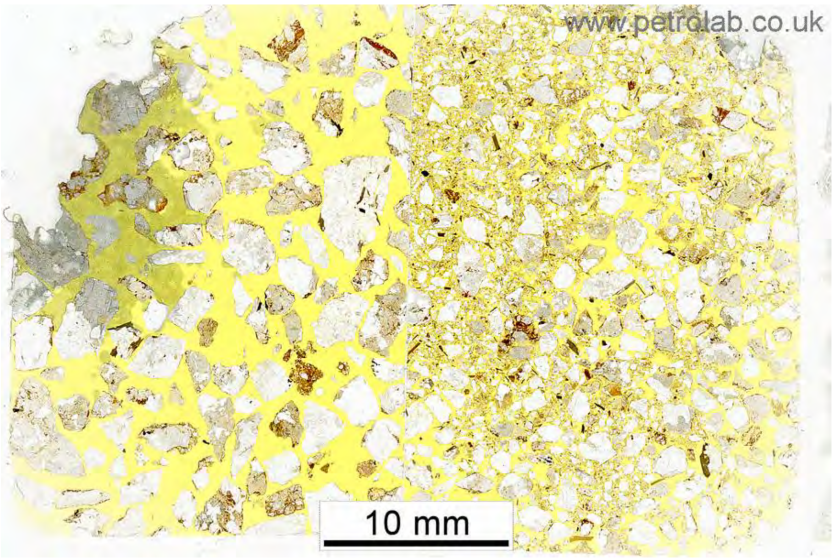
Sample D253856		
Petrolab ID	**Date received**	**Type · condition · properties**
#6483	16/11/2016	Metallurgical test · 840 g

A **Sample D253856**

Photograph of sample as received (scale in cm).

Image A
Nikon D7000 digital camera
Daylight balanced oblique light

Thin section(s)



B **Sample D253856**

Low magnification view of sample thin section.

Image B
Epson scanner
White cold cathode light

Mineral abundance

Sample D253856		
Mineral / Phase	**General formula | s.g.**	**Vol% | Wt%[1]**
Quartz	SiO_2 | sg~2.65	44.7% | 45.0%
Microcline	$KAlSi_3O_8$ | sg~2.56	26.3% | 25.6%
Albite	$NaAlSi_3O_8$ | sg~2.62	18.6% | 18.5%
Illite / Muscovite / Biotite[2]	$(K,H_3O)(Al,Mg,Fe)_2(Si,Al)_4O_{10}[(OH)_2,(H_2O)]$ | sg~2.75	10.4% | 10.9%
Chlorite group (clinochlore)	$(Mg,Fe{+}{+})_5Al(Si_3Al)O_{10}(OH)_8$ | sg~2.65	<0.1% | <0.1%
Goethite	FeOOH | sg~4.27	<0.1% | <0.1%
Hematite	Fe_2O_3 | sg~5.30	<0.1% | <0.1%
Magnetite	$Fe{+}{+}Fe{+}{+}{+}_2O_4$ | sg~5.15	<0.1% | <0.1%
Arsenopyrite	FeAsS | sg~6.07	<0.1% | <0.1%
Accessory minerals	Accessory minerals | sg~4.00	<0.1% | <0.1%

Phase description

Sample D253856				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Quartz	100 µm	4000 µm	1000 µm	Subhedral
Description	Quartz is the dominant mineral in the sample forming anhedral to subhedral grains with occasionally undulose extinction. Grain size is highly variable with coarse minerals but also examples of very fine quartz that appears to be the product of hydrothermal alteration that has greatly reduced the grain size.			
Microcline	100 µm	3000 µm	1000 µm	Generally anhedral
Description	This alkali feldspar is associated with the albite and the quartz as part of the original igneous texture. Alteration is pervasive with the formation of fine-white mica (illite) as the common breakdown product.			
Albite	10 µm	2000 µm	400 µm	Subhedral to anhedral
Description	Albite forms generally anhedral grains. Alteration is minor to pervasive with occasional examples of well preserved and visible twinning. Where altered, the principal alteration product is the formation of fine-mica. Given the extent of alteration, grain size estimations are very rough.			
Illite	5 µm	50 µm	10 µm	Anhedral
Description	Illite is the dominant alteration product from the albite and alkali feldspar minerals. It is generally very fine-grained and the level of alteration is moderate to pervasive. The sample shows evidence for weak veining and hydrothermal infiltration, with illite as a common component of both the veins and alteration products.			
Biotite group	50 µm	500 µm	200 µm	Anhedral
Description	Biotite is generally present as isolated grains interstitial to quartz and alkali feldspar. It shows very little evidence for alteration.			

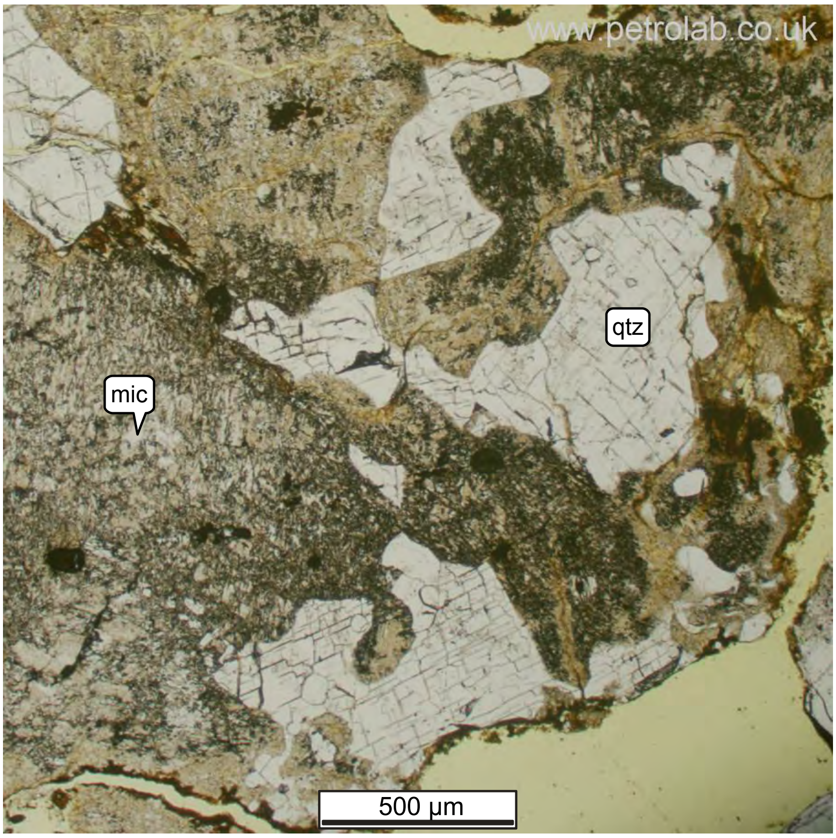
1 Wt% is calculated from the XRD analysis volume estimate using average mineral s.g. data at webmineral.com (or as otherwise stated). Any additional phases observed in the sample by microscopy techniques but not resolved by the XRD analysis are noted as trace (<0.1%).
2 Muscovite, illite and biotite have strongly overlapping XRD traces so their quantification is reported as a combined total.

Sample D253856				
Mineral / Phase	**Grain size (min | max | typical)**			**Prominent grain type**
Muscovite	20 µm	200 µm	100 µm	Anhedral
Description	Muscovite is generally present as isolated interstitial to grains of quartz and feldspar. It shows very little evidence for alteration. There is an occasional association with areas of intense hydrothermal alteration.			
Chlorite group (clinochlore)	5 µm	50 µm	20 µm	Anhedral
Description	Chlorite is associated with illite and muscovite as part of the hydrothermal alteration that overprints much of the alkali feldspar grains.			
Goethite	2 µm	30 µm	10 µm	Anhedral
Description	Goethite was observed during SEM analysis and consisted of fine crusts on only a few particles. Analysis of these crusts reveal 8-10% arsenic content. It is possible that these represent finely interleaved intergrowths of amorphous Fe arsenate and goethite.			
Hematite	10 µm	400 µm	180 µm	Anhedral
Description	Hematite is a trace phase thinly disseminated through the sample. It is generally associated with magnetite as crystallographically controlled exsolution.			
Magnetite	10 µm	200 µm	50 µm	Subhedral
Description	Magnetite is a medium-grained phase, generally subhedral, that is thinly disseminated through the sample. In a few of the grains there is some crystallographically controlled exsolution of hematite. There is a very little alteration with no discernible formation of goethite as an additional mineralogical product.			
Arsenopyrite	10 µm	70 µm	30 µm	Euhedral
Description	Arsenopyrite is a trace phase generally observed as euhedral grains that are highly encapsulated. It is strongly associated with pyrite grains, often as partial rims.			
Accessory minerals	-	-	-	Anhedral to euhedral
Description	Accessory minerals were observed during SEM analysis and refer to discrete very rare phases that are largely ubiquitous through all the samples. These include phases such as rutile, ilmenite, zircon, baryte, fluorapatite and monazite. No arsenic or antimony was observed with any of these phases.			

Sample summary

Sample D253856
• The sample is a strongly altered Syeno-Granite. Hydrothermal alteration of the feldspar grains has been moderate to pervasive with the formation of fine white mica (illite) as the common alteration product. Alteration is generally slightly more pervasive in the alkali feldspar rather than the albite. Sulfide mineralisation was in ultra-trace proportions in this sample consisting only of isolated encapsulated grains of arsenopyrite. Neither pyrite or stibnite was observed. Secondary alteration products were also a negligible proportion of this sample though SEM did observe some very thin layers of arsenic-bearing iron-oxide material on rare occasions. These were only 20-30 µm thick.

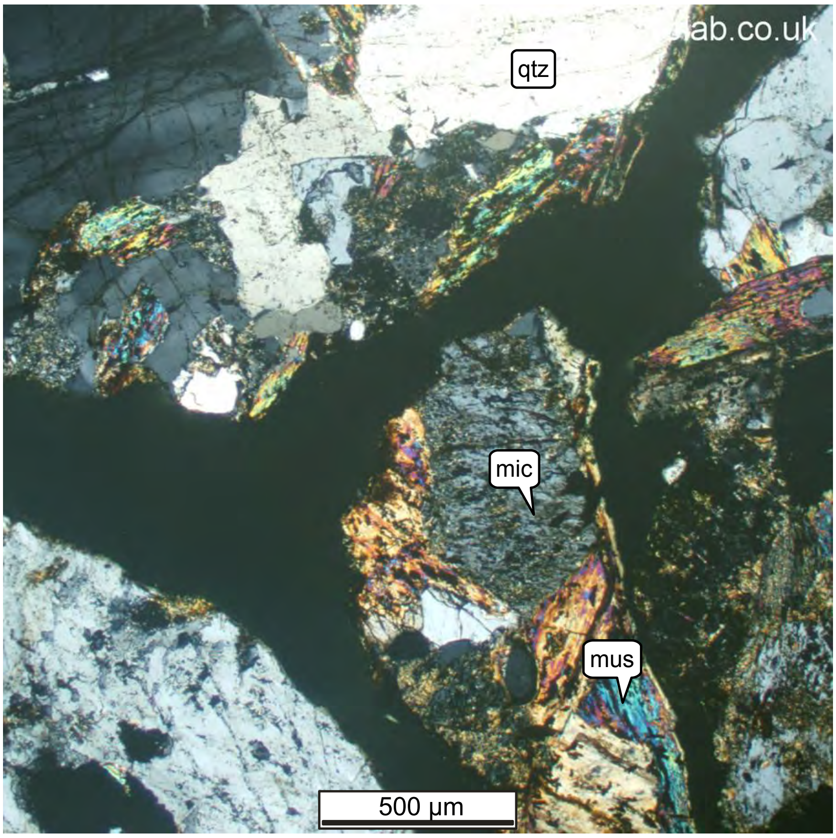
Photomicrographs



C **Sample D253856**

Photomicrograph showing intergrown quartz (qtz) and intensely altered microcline (mic). The principal alteration product is illite. There is also the formation of iron-oxide products around the rim of the particle.

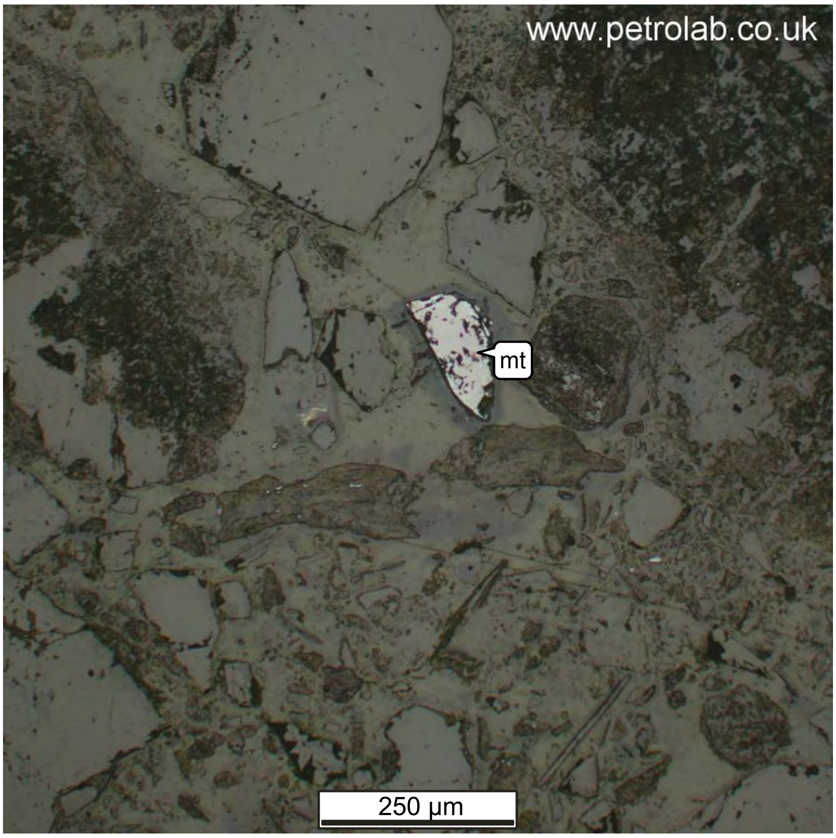
Image C
Nikon Microphot-FXA petrological microscope
Plane polarised transmitted light
x50



D **Sample D253856**

Photomicrograph showing medium-grained intergrowths of quartz (qtz), altered microcline (mic) and muscovite (mus).

Image D
Nikon Microphot-FXA petrological microscope
Cross polarised transmitted light
x50



E **Sample D253856**

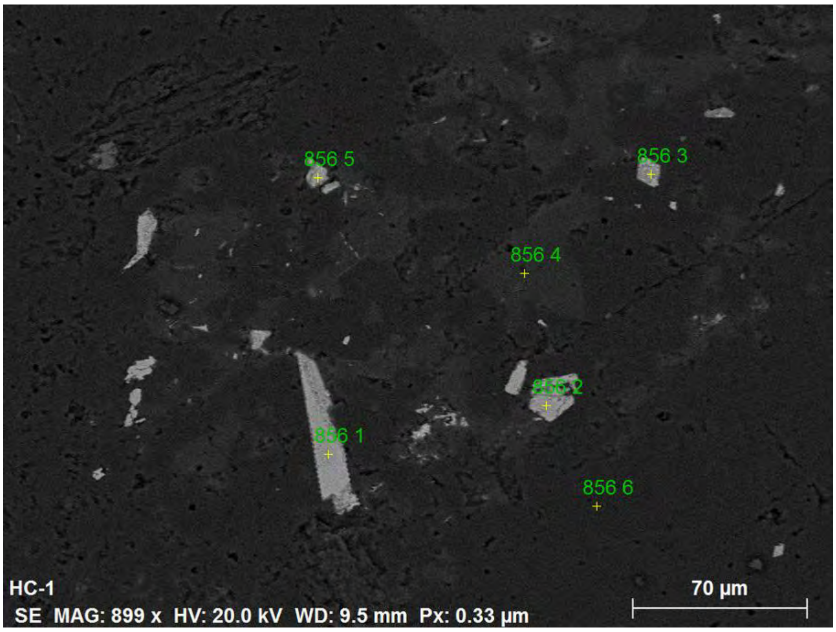
Photomicrograph of single isolated grain of magnetite (mt), typical of the trace magnetite content of the sample.

Image E

Nikon Microphot-FXA petrological microscope

Plane polarised reflected light

x100



F **Sample D253856**

Photomicrograph showing isolated grains of arsenopyrite (856-1,2 & 5), monazite (856-3) hosted in a composite particle containing quartz (856-6) and microcline (856-4).

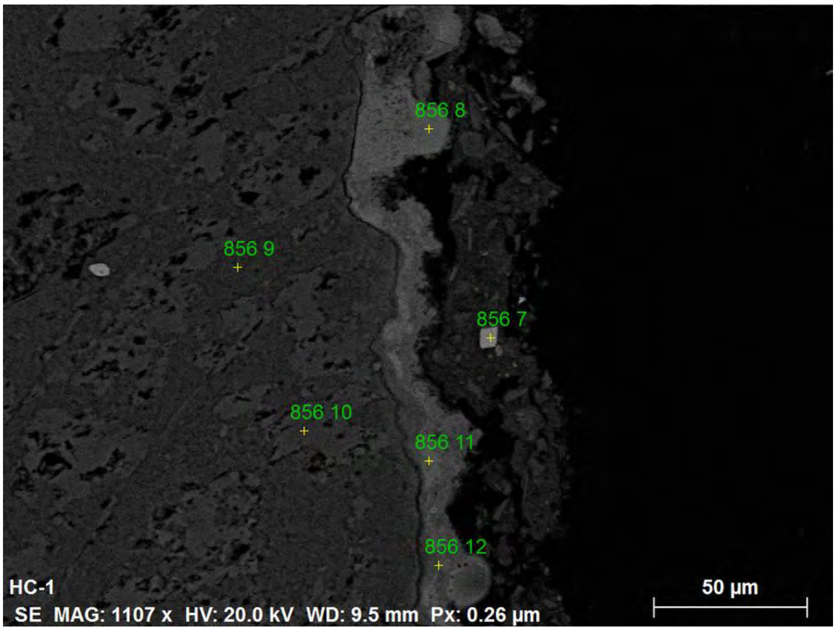
Image F

ZEISS EVO MA-25 SEM

Backscatter electron (BSE) mode

Scale shown

G **Sample D253856**



Back scatter image showing a thin crust of arsenic-bearing goethite (856-8,11 & 12) hosted on a composite particle containing muscovite (856-9) and microcline (856-10). There is also a small zircon grain on the edge of the particle. The goethite contains 8-10 wt % arsenic.

Image G
ZEISS EVO MA-25 SEM
Backscatter electron (BSE) mode
Scale shown

Conclusions

The principal conclusions from this study are as follows;

1. The majority of samples represent variably altered granites, with the precise composition varying from monzo-granite to syeno-granite through to alkali feldspar granite. In general the alkali feldspar proportion is higher than the albite proportion and in some samples there is no detectable albite content. Hydrothermal alteration has been moderate to pervasive with the breakdown of feldspar grains to illite and occasionally the formation of net-textured alteration veins and veinlets.
2. Associated with the hydrothermal alteration has been the infiltration of sulfide mineralisation with the crystallization of pyrite, arsenopyrite and, in the WRD samples in particular, some stibnite. The sulfide mineralisation shows a close association with muscovite which was likely introduced as part of the same mineralisation event.
3. The pyrite is coarser-grained than the arsenopyrite, generally present at grain sizes from 300 µm through to 500 µm. Arsenopyrite is finer-grained and generally present in the size range from 50 µm to 150 µm. The pyrite and arsenopyrite are closely associated with one another, often with the arsenopyrite forming fine-grained rims around the pyrite. In addition, the pyrite itself usually contains measurable arsenic content. Quantification by SEM analysis suggests arsenic contents of roughly 1 to 3 wt% though with several analyses reporting higher contents. Stibnite was frequently observed in the WRD samples with only rare observations in one of the HCT samples (HC-16). It is generally fine-grained with a similar size distribution to the arsenopyrite. Nevertheless rare coarser examples were apparent, reaching up to one millimetre across.
4. The hydrothermal alteration has also been responsible for the infiltration of substantial carbonate mineralisation. XRD analysis suggests the presence of calcite and dolomite. However, SEM analysis suggests that much of this dolomite is “ferroan” with some Fe contents close to the ankerite / ferroan dolomite compositional space. The carbonate content of the HCTs is substantially higher than that present in the WRD grab samples. This was apparent from XRD analysis where all HCTs returned measurable carbonate content whilst none of the WRD samples had detectable carbonate content. This finding was supported by the petrographic and SEM analysis.
5. Sulfide encapsulation shows some variation across the HCT samples with generally high encapsulation rates in the coarse (+2 mm) size fraction but moderate to minor liberation in the fine (-2mm) size fraction. The fine size fraction typically represents between 50% and 70% by weight of the submitted HCT samples so the slightly greater liberation in the fine size fraction represent a potentially significant source for sulfide reaction.
6. Despite the slightly greater liberation in the fine size fraction of the HCT samples the majority of exposed sulfide grains show very little evidence for *in-situ* reaction. In some instances this may be related to a generally euhedral habit, increasing the mineral stability and contributing to a slow reaction rate. Nevertheless it points to latent reaction potential still present within the HCT samples. The formation of secondary alteration products is very limited in the HCT samples with amorphous Fe arsenates only observed in HC-3 and HC-16.
7. For nearly all HCT samples (with the exception of HC-14), the mineral quantification

records an excess of carbonate minerals compared with sulfide minerals. This, coupled with significant rates of encapsulation suggests that most samples will remain neutral during HCT testing. Nevertheless the presence of arsenical pyrite and arsenopyrite make the leaching of arsenic into solution very likely.

8. For the WRD samples rates of sulfide encapsulation are similar to the HCT samples though the fine size fraction represents between 80% and 90% by weight of the submitted sample.
9. Sulfide alteration within the WRD samples is more significant. Whilst unreacted sulfides are dominant there are more examples of alteration rims, pseudomorphs and occasionally perimorphs. Furthermore, secondary mineral products from the breakdown of pyrite, arsenopyrite and stibnite are present. The secondary As- and Sb-bearing minerals observed within the sample include amorphous Fe arsenates, arseniosiderite, senarmontite, cervantite and schafarzikite[1]. The secondary Sb-bearing minerals often contain measurable As contents. There are also very fine-grained Fe-oxy-hydroxides and jarosite present that contained low levels of As and Sb as solid solution contents.
10. The WRD samples contain much less carbonate mineralisation than the HCT samples. This was an observation of the XRD analysis where all HCT tests recorded carbonate contents greater than 1% but where in comparison none of the WRD samples had detectable (by XRD) carbonate content. Whilst petrographic analysis observed some carbonate content in three of the WRD samples the much lower proportions present in the WRD sample was confirmed by the additional microscopy techniques.

1 It is noted that these secondary Sb-bearing minerals all have polymorphs with the same chemical formula but different crystal structures. It is not clear from this analysis which mineral is being observed under SEM conditions. Further analysis would be required to confirm which exactly of the two polymorphs is being observed in each case. The minerals and there polymorphs are as follows with the possible corresponding polymorph in brackets. Senarmontite (valentinite), cervantite (clinocervantite), schafarzikite (tripuhyite).

Recommendations

The principal recommendations from this report are as follows.

1. Further analysis of the As and Sb trace element proportions of the pyrite is recommended to refine the solid solution content and concentrations of the pyrite grains. This would be required using an analysis system such as microprobe or laser ICP-MS to gain greater precision on the currently estimated solid solution proportions. Pyrite would be the focus of further work in the HCT samples, with an additional focus on the secondary Sb-bearing minerals in the WRD samples.
2. Further analysis of the 'ferroan' dolomite present in the dolomite-bearing samples (sample HC-3 in particular), to determine the Fe content with greater precision. Several grains analysed at close to the ankerite / ferroan dolomite phase boundary and it is likely that a minor proportion of the ferroan dolomite is ankerite. This would be required using an analysis tool such as EPMA and would allow a quantification of the reduction in neutralisation capacity.

Appendix 1 – X-ray diffraction analysis

The diffractogram traces for the XRD analysis on 17 samples are provided overpage. In each case, analyses were undertaken on the whole sized fraction (whole rock). Phase abundance from XRD analysis is regarded as semi-quantitative and interpretation of the results must take cognisance of that. Phases present in trace amounts (<1 wt%) are generally not identifiable.

- Size Fraction: Whole Rock HCT samples (3 pages)
- Size Fraction: Whole Rock WRD samples (3 pages)

X-ray Mineral Services Ltd

X-ray Diffraction Traces

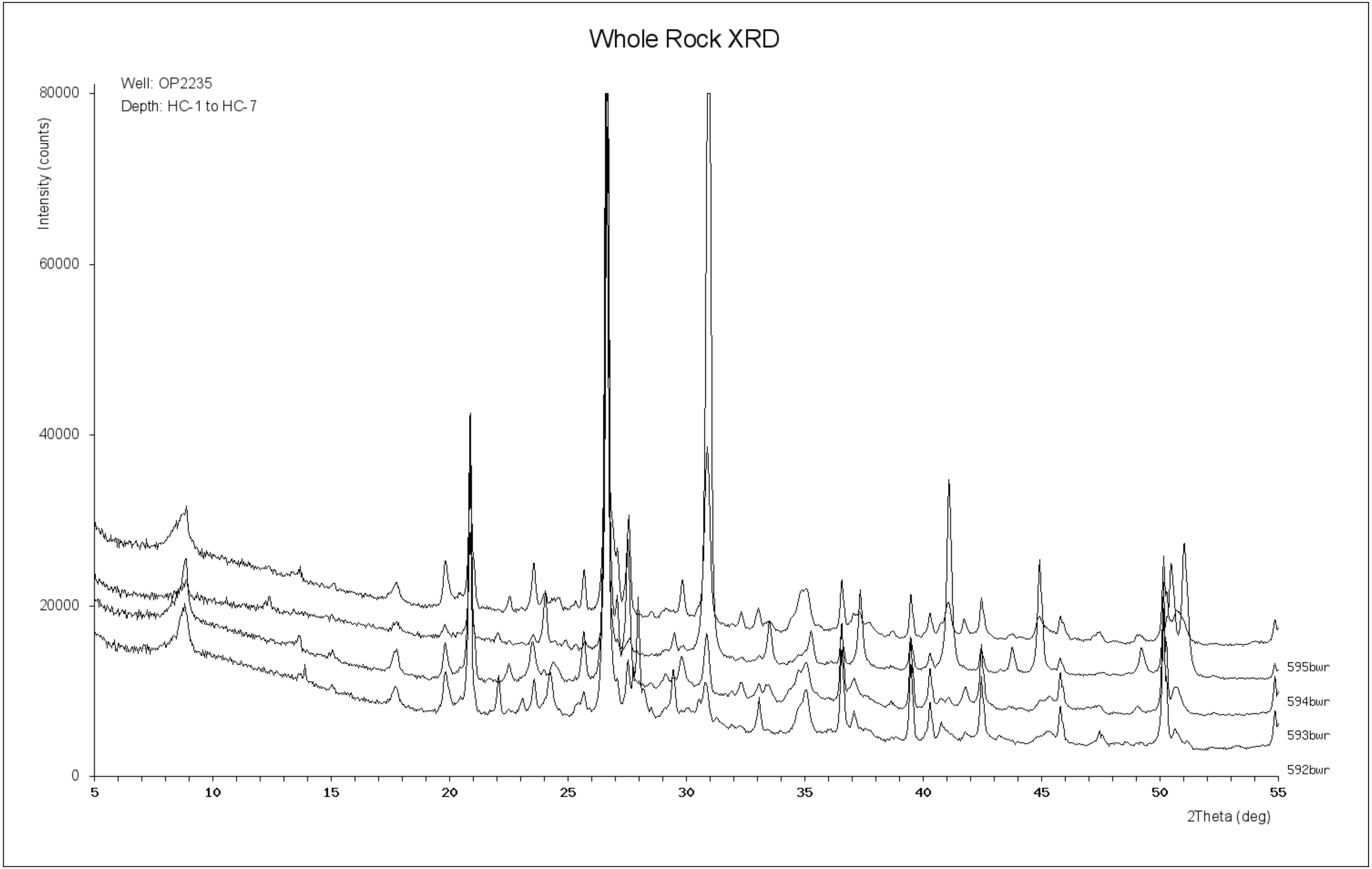
Client: Petrolab

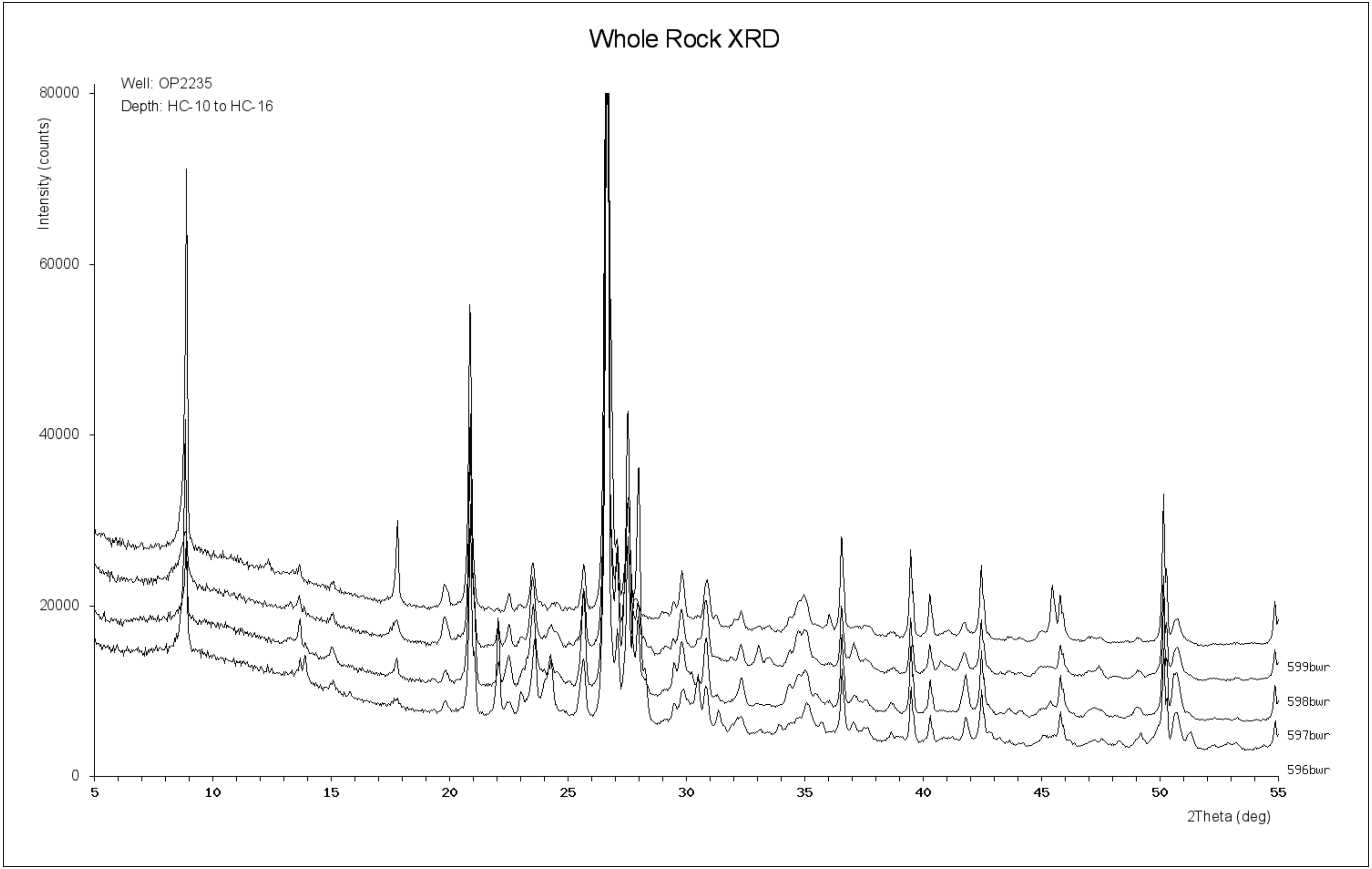
Key to laboratory numbering

Well: OP2235

Sample ID	Description	Lab No
3654 MGI-09-09 (143-163) HC-1	Post-leach HCT	592
3654 MGI-10-23 (135-151) HC-3	Post-leach HCT	593
3654 MGI-10-36 (220-256) HC-4	Post-leach HCT	594
3654 MGI-10-48 (272-283) HC-7	Post-leach HCT	595
3654 MGI-10-51 (790-815.5) HC-10	Post-leach HCT	596
3654 MGI-11-60 (513-543) HC-12	Post-leach HCT	597
3654 MGI-11-64 (185.5-208) HC-14	Post-leach HCT	598
3654 MGI-13-S31 (15.24-18.29) HC-16	Post-leach HCT	599

wr = Whole rock XRD
ut = Air-dried clay XRD


Whole Rock XRD
Well: OP2235
Depth: HC-1 to HC-7
Intensity (counts)
80000
60000
40000
20000
0
5
10
15
20
25
30
35
40
45
50
55
2Theta (deg)
595bwr
594bwr
593bwr
592bwr



Whole Rock XRD
Well: OP2235
Depth: HC-10 to HC-16
Intensity (counts)
80000
60000
40000
20000
0
5
10
15
20
25
30
35
40
45
50
55
2Theta (deg)
599bwr
598bwr
597bwr
596bwr

X-ray Mineral Services Ltd

X-ray Diffraction Traces

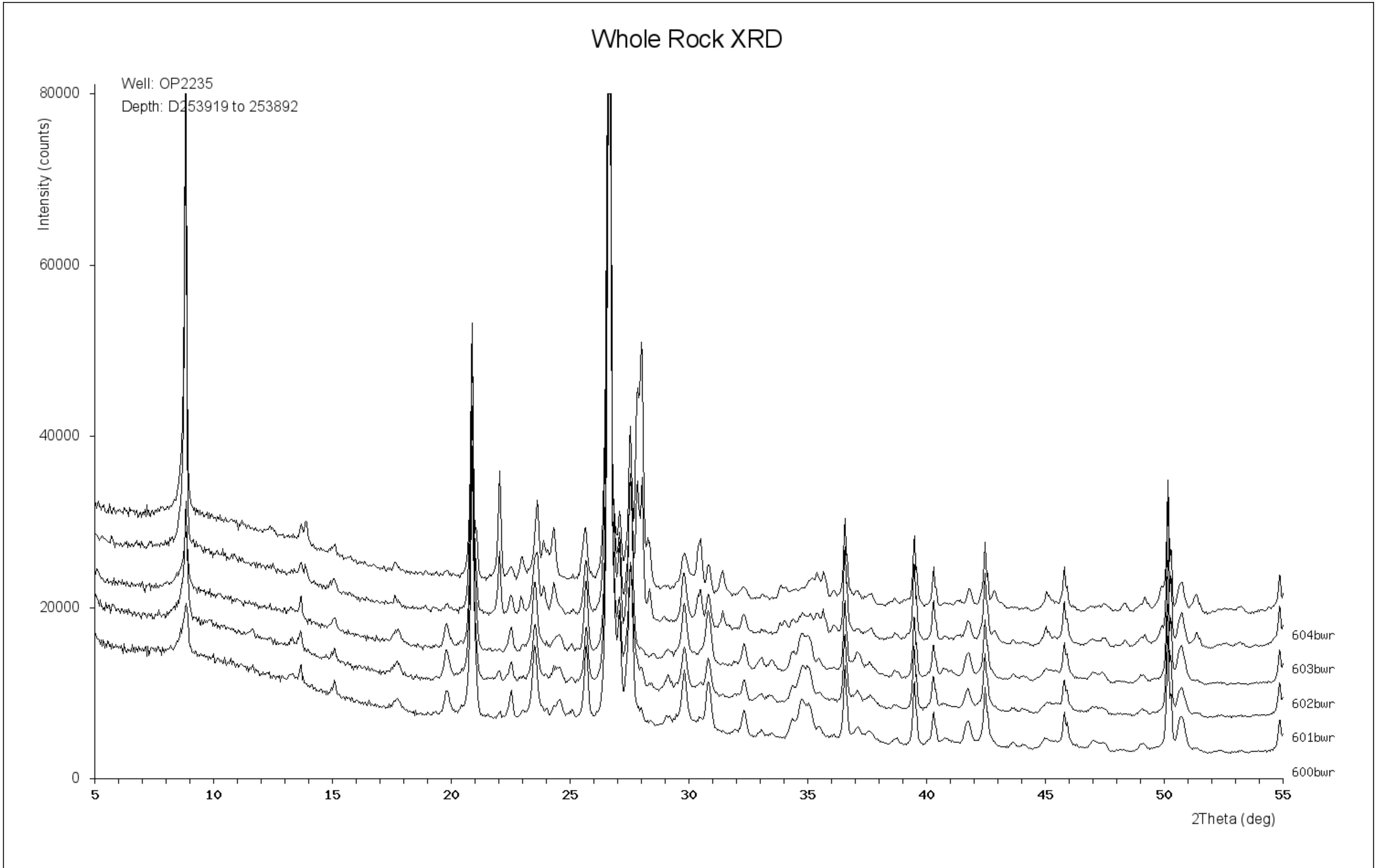
Client: Petrolab

Key to laboratory numbering

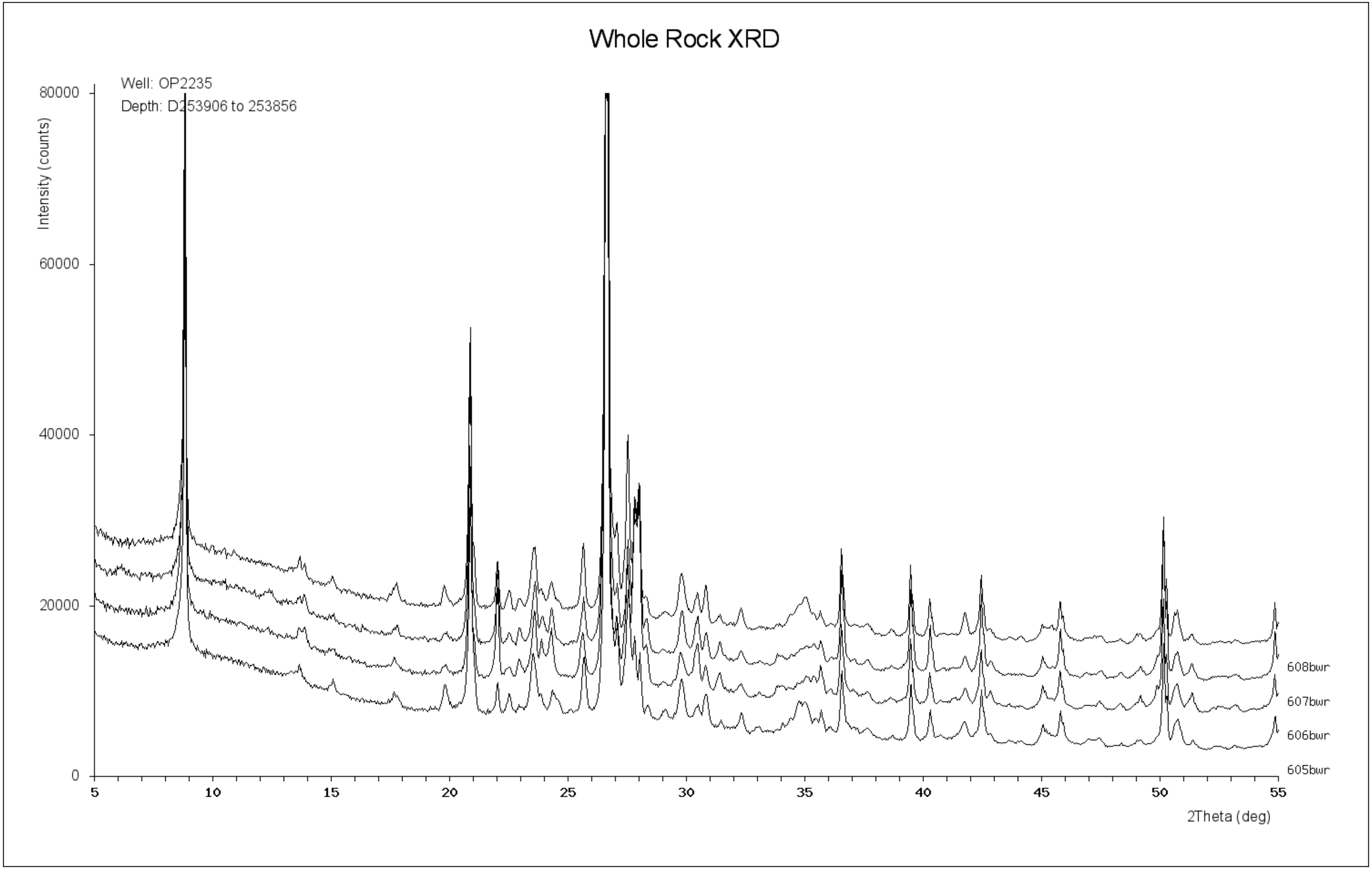
Well: OP2235

D253919	WRD grab sample	600
D253917	WRD grab sample	601
D253923	WRD grab sample	602
D253833	WRD grab sample	603
D253892	WRD grab sample	604
D253906	WRD grab sample	605
D253944	WRD grab sample	606
D253840	WRD grab sample	607
D253856	WRD grab sample	608

wr = Whole rock XRD
ut = Air-dried clay XRD



Whole Rock XRD
Well: OP2235
Depth: D253919 to 253892
Intensity (counts)
80000
60000
40000
20000
0
5
10
15
20
25
30
35
40
45
50
55
2Theta (deg)
604bwr
603bwr
602bwr
601bwr
600bwr



Whole Rock XRD
Well: OP2235
Depth: D253906 to 253856
Intensity (counts)
80000
60000
40000
20000
0
5
10
15
20
25
30
35
40
45
50
55
2Theta (deg)
608bwr
607bwr
606bwr
605bwr

Appendix D
McClelland Laboratory Reports

Midas Gold Corp.
MLI Job No. 3654

Table 1 . - Humidity Cell Analytical Results, MGI-09-09 (143-163) **(1.4928 Kg)**

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	SO_4= mg/l	SO_4= mg/kg	SO_4= Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
0	0.759	7.26	58	732	0.17	0.086	0.086	<0.10	<0.17	320.0	162.70	162.70	109.50	55.67	55.67	36.00	18.30	18.30	0	0.00	0.00	42	21.35	21.35
1	0.712	7.53	277	839	<0.10	0.000	0.086	<0.10	<0.10	400.0	190.78	353.48	118.90	56.71	112.38	38.00	18.12	36.42	0	0.00	0.00	26	12.40	33.75
2	0.739	7.47	278	972	<0.10	0.000	0.086	<0.10	<0.10	570.0	282.17	635.65	144.60	71.58	183.96	42.50	21.04	57.46	0	0.00	0.00	33	16.34	50.09
3	0.714	7.55	291	654	<0.10	0.000	0.086	<0.10	<0.10	320.0	153.05	788.70	98.00	46.87	230.83	25.90	12.39	69.85	2	0.96	0.96	33	15.78	65.87
4	0.747	7.57	281	380	<0.10	0.000	0.086	<0.10	<0.10	150.0	75.06	863.76	50.90	25.47	256.30	14.68	7.35	77.20	1	0.50	1.46	38	19.02	84.89
5	0.752	7.80	295	243	<0.10	0.000	0.086	<0.10	<0.10	50.0	25.19	888.95	36.30	18.29	274.59	7.75	3.90	81.10	0	0.00	1.46	42	21.16	106.05
6	0.671	7.45	313	220	<0.10	0.000	0.086	<0.10	<0.10	50.0	22.47	911.42	31.30	14.07	288.66	6.58	2.96	84.06	1	0.45	1.91	23	10.34	116.39
7	0.724	7.51	276	276	<0.10	0.000	0.086	<0.10	<0.10	60.0	29.10	940.52	41.90	20.32	308.98	9.79	4.75	88.81	2	0.97	2.88	36	17.46	133.85
8	0.729	7.41	217	234	<0.10	0.000	0.086	<0.10	<0.10	50.0	24.42	964.94	32.40	15.82	324.80	8.58	4.19	93.00	0	0.00	2.88	42	20.51	154.36
9	0.726	7.53	198	183	<0.10	0.000	0.086	<0.10	<0.10	52.0	25.29	990.23	23.20	11.28	336.08	6.42	3.12	96.12	0	0.00	2.88	33	16.05	170.41
10	0.734	7.82	229	154	<0.10	0.000	0.086	<0.10	<0.10	41.0	20.16	1010.39	18.90	9.29	345.37	5.96	2.93	99.05	0	0.00	2.88	35	17.21	187.62
11	0.683	7.70	216	154	<0.10	0.000	0.086	<0.10	<0.10	46.0	21.05	1031.44	15.70	7.18	352.55	4.30	1.97	101.02	0	0.00	2.88	26	11.90	199.52
12	0.720	7.64	176	205	<0.10	0.000	0.086	<0.10	<0.10	60.0	28.94	1060.38	29.10	14.04	366.59	6.70	3.23	104.25	0	0.00	2.88	28	13.50	213.02
13	0.675	7.55	292	157	<0.10	0.000	0.086	<0.10	<0.10	47.0	21.25	1081.63	19.60	8.86	375.45	4.30	1.94	106.19	0	0.00	2.88	21	9.50	222.52
14	0.681	7.71	212	156	<0.10	0.000	0.086	<0.10	<0.10	48.0	21.90	1103.53	15.19	6.93	382.38	4.22	1.93	108.12	0	0.00	2.88	22	10.04	232.56
15	0.556	7.61	193	190	<0.10	0.000	0.086	<0.10	<0.10	39.0	14.53	1118.06	18.08	6.73	389.11	5.69	2.12	110.24	0	0.00	2.88	37	13.78	246.34
16	0.624	7.55	246	124	<0.10	0.000	0.086	<0.10	<0.10	37.0	15.47	1133.53	11.80	4.93	394.04	3.21	1.34	111.58	0	0.00	2.88	22	9.20	255.54
17	0.596	7.71	207	142	<0.10	0.000	0.086	<0.10	<0.10	44.0	17.57	1151.10	13.87	5.54	399.58	3.52	1.41	112.99	0	0.00	2.88	22	8.78	264.32
18	0.626	7.93	204	179	<0.10	0.000	0.086	<0.10	<0.10	50.0	20.97	1172.07	17.75	7.44	407.02	5.12	2.15	115.14	0	0.00	2.88	26	10.90	275.22
19	0.653	7.52	212	133	<0.10	0.000	0.086	<0.10	<0.10	48.0	21.00	1193.07	12.45	5.45	412.47	3.27	1.43	116.57	0	0.00	2.88	23	10.06	285.28
20	0.671	7.61	215	138	<0.10	0.000	0.086	<0.10	<0.10	48.0	21.58	1214.65	13.18	5.92	418.39	3.14	1.41	117.98	0	0.00	2.88	24	10.79	296.07
21	0.666	7.66	253	136	<0.10	0.000	0.086	<0.10	<0.10	45.0	20.08	1234.73	13.99	6.24	424.63	3.52	1.57	119.55	0	0.00	2.88	27	12.05	308.12
22	0.672	7.46	222	124	<0.10	0.000	0.086	<0.10	<0.10	42.0	18.91	1253.64	13.82	6.22	430.85	3.28	1.48	121.03	0	0.00	2.88	25	11.25	319.37
23	0.674	7.53	254	133	<0.10	0.000	0.086	<0.10	<0.10	38.0	17.16	1270.80	13.18	5.95	436.80	3.35	1.51	122.54	0	0.00	2.88	27	12.19	331.56
24	0.652	7.94	228	105	<0.10	0.000	0.086	<0.10	<0.10	32.0	13.98	1284.78	10.11	4.42	441.22	2.76	1.21	123.75	0	0.00	2.88	22	9.61	341.17
25	0.570	7.82	260	115	<0.10	0.000	0.086	<0.10	<0.10	39.0	14.89	1299.67	10.27	3.92	445.14	3.05	1.16	124.91	0	0.00	2.88	23	8.78	349.95
26	0.653	7.40	250	120	<0.10	0.000	0.086	<0.10	<0.10	35.0	15.31	1314.98	11.35	4.96	450.10	3.51	1.54	126.45	0	0.00	2.88	28	12.25	362.20
27	0.648	7.44	283	97.8	<0.10	0.000	0.086	<0.10	<0.10	23.0	9.98	1324.96	8.98	3.90	454.00	2.79	1.21	127.66	0	0.00	2.88	22	9.55	371.75
28	0.678	7.04	311	93.8	<0.10	0.000	0.086	<0.10	<0.10	28.0	12.72	1337.68	9.96	4.52	458.52	2.55	1.16	128.82	1	0.45	3.33	17	7.72	379.47
29	0.613	7.89	295	91.0	<0.10	0.000	0.086	<0.10	<0.10	25.0	10.27	1347.95	8.74	3.59	462.11	2.31	0.95	129.77	0	0.00	3.33	19	7.80	387.27
30	0.604	7.64	258	93.5	<0.10	0.000	0.086	<0.10	<0.10	29.0	11.73	1359.68	10.85	4.39	466.50	2.56	1.04	130.81	0	0.00	3.33	17	6.88	394.15
31	0.701	7.71	364	103	<0.10	0.000	0.086	<0.10	<0.10	37.0	17.37	1377.05	13.24	6.22	472.72	2.99	1.40	132.21	1	0.47	3.80	22	10.33	404.48
32	0.722	7.63	370	107	<0.10	0.000	0.086	<0.10	<0.10	32.0	15.48	1392.53	11.39	5.51	478.23	3.08	1.49	133.70	0	0.00	3.80	24	11.61	416.09
33	0.586	7.55	356	86.0	<0.10	0.000	0.086	<0.10	<0.10	7.0	2.75	1395.28	8.61	3.38	481.61	1.70	0.67	134.37	0	0.00	3.80	21	8.24	424.33
34	0.634	7.86	287	87.5	<0.10	0.000	0.086	<0.10	<0.10	22.0	9.34	1404.62	8.51	3.61	485.22	2.73	1.16	135.53	0	0.00	3.80	22	9.34	433.67
35	0.618	7.42	337	85.5	<0.10	0.000	0.086	<0.10	<0.10	20.0	8.28	1412.90	8.31	3.44	488.66	2.38	0.99	136.52	0	0.00	3.80	21	8.69	442.36
36	0.670	7.57	339	97.8	<0.10	0.000	0.086	<0.10	<0.10	25.0	11.22	1424.12	12.70	5.70	494.36	3.59	1.61	138.13	0	0.00	3.80	24	10.77	453.13
37	0.660	7.63	307	93.5	<0.10	0.000	0.086	<0.10	<0.10	24.0	10.61	1434.73	11.47	5.07	499.43	3.32	1.47	139.60	0	0.00	3.80	25	11.05	464.18
38	0.698	7.14	267	96.8	<0.10	0.000	0.086	<0.10	<0.10	19.0	8.88	1443.61	11.54	5.40	504.83	3.14	1.47	141.07	0	0.00	3.80	22	10.29	474.47
39	0.712	7.27	241	137	<0.10	0.000	0.086	<0.10	<0.10	30.0	14.31	1457.92	15.78	7.53	512.36	4.64	2.21	143.28	0	0.00	3.80	33	15.74	490.21
40	0.734	7.33	348	105	<0.10	0.000	0.086	<0.10	<0.10	22.0	10.82	1468.74	10.97	5.39	517.75	2.94	1.45	144.73	0	0.00	3.80	25	12.29	502.50
41	0.697	7.82	343	142	<0.10	0.000	0.086	<0.10	<0.10	21.0	9.81	1478.55	14.10	6.58	524.33	3.77	1.76	146.49	0	0.00	3.80	35	16.34	518.84
42	0.744	7.76	364	136	<0.10	0.000	0.086	<0.10	<0.10	17.0	8.47	1487.02	13.20	6.58	530.91	3.63	1.81	148.30	0	0.00	3.80	33	16.45	535.29
43	0.787	7.99	355	124	<0.10	0.000	0.086	<0.10	<0.10	15.0	7.91	1494.93	13.72	7.23	538.14	3.54	1.87	150.17	0	0.00	3.80	40	21.09	556.38
44	0.691	7.89	402	120	<0.10	0.000	0.086	<0..10	<0.10	17.0	7.87	1502.80	12.17	5.63	543.77	3.53	1.63	151.80	0	0.00	3.80	36	16.66	573.04
45	0.700	7.92	389	123	<0.10	0.000	0.086	<0.10	<0.10	23.0	10.79	1513.59	13.77	6.46	550.23	3.86	1.81	153.61	0	0.00	3.80	39	18.29	591.33

Midas Gold Corp.
MLI Job No. 3654

Table 1 . - Humidity Cell Analytical Results, MGI-09-09 (143-163) (1.4928 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
46	0.650	7.76	346	114	<0.10	0.000	0.086	<0.10	<0.10	11.0	4.79	1518.38	13.27	5.78	556.01	3.98	1.73	155.34	0	0.00	3.80	34	14.80	606.13
47	0.744	7.80	333	94.6	<0.10	0.000	0.086	<0.10	<0.10	8.0	3.99	1522.37	11.36	5.66	561.67	3.05	1.52	156.86	0	0.00	3.80	31	15.45	621.58
48	0.669	7.66	353	82.7	<0.10	0.000	0.086	<0.10	<0.10	8.0	3.59	1525.96	11.35	5.09	566.76	3.21	1.44	158.30	0	0.00	3.80	25	11.20	632.78
49	0.706	7.83	300	102	<0.10	0.000	0.086	<0.10	<0.10	9.0	4.26	1530.22	11.97	5.66	572.42	3.36	1.59	159.89	0	0.00	3.80	33	15.61	648.39
50	0.744	7.08	355	87.6	<0.10	0.000	0.086	<0.10	<0.10	10.0	4.98	1535.20	11.41	5.69	578.11	3.31	1.65	161.54	0	0.00	3.80	28	13.95	662.34
51	0.719	7.67	339	115	<0.10	0.000	0.086	<0.10	<0.10	10.0	4.82	1540.02	14.86	7.16	585.27	4.37	2.10	163.64	0	0.00	3.80	36	17.34	679.68
52	0.671	7.92	320	132	<0.10	0.000	0.086	<0.10	<0.10	6.0	2.70	1542.72	14.20	6.38	591.65	4.49	2.02	165.66	0	0.00	3.80	45	20.23	699.91
53	0.759	7.69	329	120	<0.10	0.000	0.086	<0.10	<0.10	9.0	4.58	1547.30	16.64	8.46	600.11	4.53	2.30	167.96	0	0.00	3.80	46	23.39	723.30
54	0.686	7.62	308	117	<0.10	0.000	0.086	<0.10	<0.10	12.0	5.51	1552.81	15.15	6.96	607.07	4.05	1.86	169.82	0	0.00	3.80	41	18.84	742.14
55	0.760	7.30	307	123	<0.10	0.000	0.086	<0.10	<0.10	8.0	4.07	1556.88	13.60	6.92	613.99	3.77	1.92	171.74	0	0.00	3.80	44	22.40	764.54
56	0.657	7.50	294	100	<0.10	0.000	0.086	<0.10	<0.10	10.0	4.40	1561.28	12.94	5.70	619.69	3.82	1.68	173.42	0	0.00	3.80	35	15.40	779.94
57	0.739	7.81	291	105	<0.10	0.000	0.086	<0.10	<0.10	8.0	3.96	1565.24	12.29	6.08	625.77	3.62	1.79	175.21	0	0.00	3.80	43	21.29	801.23
58	0.689	7.97	313	138	<0.10	0.000	0.086	<0.10	<0.10	10.0	4.62	1569.86	15.52	7.16	632.93	4.57	2.11	177.32	0	0.00	3.80	52	24.00	825.23
59	0.704	7.84	308	126	<0.10	0.000	0.086	<0.10	<0.10	10.0	4.72	1574.58	16.70	7.88	640.81	4.88	2.30	179.62	0	0.00	3.80	52	24.52	849.75
60	0.718	7.67	318	118	<0.10	0.000	0.086	<0.10	<0.10	10.0	4.81	1579.39	16.70	8.03	648.84	4.48	2.15	181.77	0	0.00	3.80	48	23.09	872.84
61	0.783	7.58	325	77.4	<0.10	0.000	0.086	<0.10	<0.10	6.0	3.15	1582.54	9.33	4.89	653.73	2.64	1.38	183.15	0	0.00	3.80	27	14.16	887.00
62	0.660	7.78	309	138	<0.10	0.000	0.086	<0.10	<0.10	13.0	5.75	1588.29	14.99	6.63	660.36	4.74	2.10	185.25	0	0.00	3.80	50	22.11	909.11
63	0.669	7.81	287	147	<0.10	0.000	0.086	<0.10	<0.10	9.0	4.03	1592.32	16.16	7.24	667.60	4.70	2.11	187.36	0	0.00	3.80	54	24.20	933.31
64	0.693	7.55	330	127	<0.10	0.000	0.086	<0.10	<0.10	10.0	4.64	1596.96	14.75	6.85	674.45	4.37	2.03	189.39	0	0.00	3.80	44	20.43	953.74
65	0.771	7.74	294	128	<0.10	0.000	0.086	<0.10	<0.10	10.0	5.16	1602.12	16.85	8.70	683.15	5.04	2.60	191.99	0	0.00	3.80	44	22.73	976.47
66	0.696	7.65	271	136	<0.10	0.000	0.086	<0.10	<0.10	11.0	5.13	1607.25	15.96	7.44	690.59	4.82	2.25	194.24	0	0.00	3.80	48	22.38	998.85
67	0.727	7.79	321	145	<0.10	0.000	0.086	<0.10	<0.10	12.0	5.84	1613.09	17.65	8.60	699.19	5.22	2.54	196.78	0	0.00	3.80	54	26.30	1025.15
68	0.671	7.68	295	54.3	<0.10	0.000	0.086	<0.10	<0.10	5.0	2.25	1615.34	6.89	3.10	702.29	1.98	0.89	197.67	0	0.00	3.80	20	8.99	1034.14
69	0.594	7.36	282	61.3	<0.10	0.000	0.086	<0.10	<0.10	9.0	3.58	1618.92	7.18	2.86	705.15	1.98	0.79	198.46	0	0.00	3.80	19	7.56	1041.70
70	0.613	7.34	286	68.0	<0.10	0.000	0.086	<0.10	<0.10	12.0	4.93	1623.85	8.00	3.29	708.44	2.32	0.95	199.41	0	0.00	3.80	19	7.80	1049.50
71	0.596	7.40	203	61.0	<0.10	0.000	0.086	<0.10	<0.10	11.0	4.39	1628.24	6.96	2.78	711.22	2.19	0.87	200.28	0	0.00	3.80	17	6.79	1056.29
72	0.626	7.51	256	64.4	<0.10	0.000	0.086	<0.10	<0.10	12.0	5.03	1633.27	7.67	3.22	714.44	2.38	1.00	201.28	0	0.00	3.80	17	7.13	1063.42
73	0.609	7.30	206	59.8	<0.10	0.000	0.086	<0.10	<0.10	10.0	4.08	1637.35	6.99	2.85	717.29	2.07	0.84	202.12	0	0.00	3.80	17	6.94	1070.36
74	0.611	7.37	210	61.6	<0.10	0.000	0.086	<0.10	<0.10	10.0	4.09	1641.44	7.11	2.91	720.20	2.32	0.95	203.07	0	0.00	3.80	17	6.96	1077.32
75	0.591	7.42	198	66.1	<0.10	0.000	0.086	<0.10	<0.10	13.0	5.15	1646.59	6.48	2.57	722.77	2.41	0.95	204.02	0	0.00	3.80	17	6.73	1084.05
76	0.628	7.42	260	74.0	<0.10	0.000	0.086	<0.10	<0.10	14.0	5.89	1652.48	9.13	3.84	726.61	2.87	1.21	205.23	0	0.00	3.80	20	8.41	1092.46
77	0.588	7.36	224	68.3	<0.10	0.000	0.086	<0.10	<0.10	11.0	4.33	1656.81	7.08	2.79	729.40	2.60	1.02	206.25	0	0.00	3.80	19	7.48	1099.94
78	0.638	7.57	221	73.6	<0.10	0.000	0.086	<0.10	<0.10	14.0	5.98	1662.79	8.53	3.65	733.05	2.92	1.25	207.50	0	0.00	3.80	20	8.55	1108.49
79	0.612	7.60	253	72.7	<0.10	0.000	0.086	<0.10	<0.10	12.0	4.92	1667.71	7.83	3.21	736.26	2.72	1.12	208.62	0	0.00	3.80	21	8.61	1117.10
80	0.589	7.35	234	64.5	<0.10	0.000	0.086	<0.10	<0.10	10.0	3.95	1671.66	7.05	2.78	739.04	2.60	1.03	209.65	0	0.00	3.80	19	7.50	1124.60
81	0.568	7.30	222	59.5	<0.10	0.000	0.086	<0.10	<0.10	10.0	3.80	1675.46	5.94	2.26	741.30	2.22	0.84	210.49	0	0.00	3.80	17	6.47	1131.07
82	0.589	7.29	270	71.6	<0.10	0.000	0.086	<0.10	<0.10	12.0	4.73	1680.19	7.33	2.89	744.19	2.64	1.04	211.53	0	0.00	3.80	19	7.50	1138.57
83	0.585	7.65	311	74.7	<0.10	0.000	0.086	<0.10	<0.10	14.0	5.49	1685.68	7.56	2.96	747.15	2.73	1.07	212.60	0	0.00	3.80	21	8.23	1146.80
84	0.573	7.71	327	73.2	<0.10	0.000	0.086	<0.10	<0.10	14.0	5.37	1691.05	8.00	3.07	750.22	2.84	1.09	213.69	0	0.00	3.80	20	7.68	1154.48
85	0.593	7.62	307	69.9	<0.10	0.000	0.086	<0.10	<0.10	13.0	5.16	1696.21	7.27	2.89	753.11	2.50	0.99	214.68	0	0.00	3.80	19	7.55	1162.03
86	0.584	7.51	338	72.8	<0.10	0.000	0.086	<0.10	<0.10	12.0	4.69	1700.90	7.30	2.86	755.97	2.78	1.09	215.77	0	0.00	3.80	21	8.22	1170.25
87	0.577	7.68	335	71.2	<0.10	0.000	0.086	<0.10	<0.10	11.0	4.25	1705.15	7.19	2.78	758.75	2.59	1.00	216.77	0	0.00	3.80	22	8.50	1178.75
88	0.623	7.67	343	73.7	<0.10	0.000	0.086	<0.10	<0.10	15.0	6.26	1711.41	8.79	3.67	762.42	2.79	1.16	217.93	0	0.00	3.80	20	8.35	1187.10
89	0.598	7.65	369	66.7	<0.10	0.000	0.086	<0.10	<0.10	15.0	6.01	1717.42	7.44	2.98	765.40	2.89	1.16	219.09	0	0.00	3.80	20	8.01	1195.11
90	0.581	7.52	413	70.9	<0.10	0.000	0.086	<0.10	<0.10	13.0	5.06	1722.48	7.34	2.86	768.26	2.66	1.04	220.13	0	0.00	3.80	20	7.78	1202.89

Midas Gold Corp.
MLI Job No. 3654

Table 1 . - Humidity Cell Analytical Results, MGI-09-09 (143-163) **(1.4928 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
91	0.609	7.48	322	82.4	<0.10	0.000	0.086	<0.10	<0.10	16.0	6.53	1729.01	8.45	3.45	771.71	2.93	1.20	221.33	0	0.00	3.80	22	8.98	1211.87
92	0.576	7.63	358	70.8	<0.10	0.000	0.086	<0.10	<0.10	16.0	6.17	1735.18	7.43	2.87	774.58	2.53	0.98	222.31	0	0.00	3.80	20	7.72	1219.59
93	0.642	7.53	378	68.3	<0.10	0.000	0.086	<0.10	<0.10	15.0	6.45	1741.63	7.29	3.14	777.72	2.60	1.12	223.43	0	0.00	3.80	18	7.74	1227.33
94	0.591	7.57	345	70.4	<0.10	0.000	0.086	<0.10	<0.10	17.0	6.73	1748.36	7.11	2.81	780.53	2.52	1.00	224.43	0	0.00	3.80	19	7.52	1234.85
95	0.585	7.45	351	75.1	<0.10	0.000	0.086	<0.10	<0.10	14.0	5.49	1753.85	8.92	3.50	784.03	3.29	1.29	225.72	0	0.00	3.80	20	7.84	1242.69
96	0.653	7.59	365	87.6	<0.10	0.000	0.086	<0.10	<0.10	16.0	7.00	1760.85	10.24	4.48	788.51	3.57	1.56	227.28	0	0.00	3.80	26	11.37	1254.06
97	0.646	7.40	366	80.0	<0.10	0.000	0.086	<0.10	<0.10	13.0	5.63	1766.48	8.31	3.60	792.11	3.15	1.36	228.64	0	0.00	3.80	24	10.39	1264.45
98	0.570	7.47	342	98.2	<0.10	0.000	0.086	<0.10	<0.10	12.0	4.58	1771.06	11.85	4.52	796.63	4.02	1.53	230.17	0	0.00	3.80	33	12.60	1277.05
99	0.632	7.59	368	101.0	<0.10	0.000	0.086	<0.10	<0.10	14.0	5.93	1776.99	12.28	5.20	801.83	4.27	1.81	231.98	0	0.00	3.80	32	13.55	1290.60
100	0.550	7.51	342	82.0	<0.10	0.000	0.086	<0.10	<0.10	10.0	3.68	1780.67	9.52	3.51	805.34	3.21	1.18	233.16	0	0.00	3.80	29	10.68	1301.28
101	0.620	7.61	333	87.9	<0.10	0.000	0.086	<0.10	<0.10	8.0	3.32	1783.99	10.97	4.56	809.90	3.75	1.56	234.72	0	0.00	3.80	30	12.46	1313.74
102	0.666	7.65	354	80.2	0.12	0.054	0.140	<0.10	<0.12	7.0	3.12	1787.11	9.10	4.06	813.96	3.32	1.48	236.20	0	0.00	3.80	30	13.38	1327.12
103	0.619	7.78	328	70.5	<0.10	0.000	0.140	<0.10	<0.10	7.0	2.90	1790.01	8.11	3.36	817.32	2.74	1.14	237.34	0	0.00	3.80	26	10.78	1337.90
104	0.678	7.69	336	68.7	0.10	0.045	0.185	<0.10	<0.1	5.0	2.27	1792.28	7.66	3.48	820.80	2.84	1.29	238.63	0	0.00	3.80	25	11.35	1349.25
105	0.672	7.48	284	65.1	0.21	0.095	0.280	<0.10	<0.21	5.0	2.25	1794.53	7.63	3.43	824.23	2.73	1.23	239.86	0	0.00	3.80	24	10.80	1360.05
106	0.652	7.49	316	90.6	<0.10	0.000	0.280	<0.10	<0.10	7.6	3.32	1797.85	10.23	4.47	828.70	3.66	1.60	241.46	0	0.00	3.80	37	16.16	1376.21
107	0.632	7.46	347	70.2	<0.10	0.000	0.280	<0.10	<0.10	6.7	2.84	1800.69	16.07	6.80	835.50	3.16	1.34	242.80	0	0.00	3.80	30	12.70	1388.91
108	0.713	7.54	371	95.3	<0.10	0.000	0.280	<0.10	<0.10	7.1	3.39	1804.08	21.47	10.25	845.75	4.11	1.96	244.76	0	0.00	3.80	40	19.11	1408.02
109	0.719	7.40	374	104	<0.10	0.000	0.280	<0.10	<0.10	8.3	4.00	1808.08	22.34	10.76	856.51	4.35	2.10	246.86	0	0.00	3.80	43	20.71	1428.73
110	0.719	7.57	356	89.5	<0.10	0.000	0.280	<0.10	<0.10	6.2	2.99	1811.07	24.99	12.04	868.55	3.27	1.57	248.43	0	0.00	3.80	37	17.82	1446.55
111	0.683	7.57	370	93.4	<0.10	0.000	0.280	<0.10	<0.10	6.1	2.79	1813.86	14.65	6.70	875.25	3.79	1.73	250.16	0	0.00	3.80	44	20.13	1466.68
112	0.699	7.51	367	88.7	<0.10	0.000	0.280	<0.10	<0.10	4.9	2.29	1816.15	10.15	4.75	880.00	3.30	1.55	251.71	0	0.00	3.80	42	19.67	1486.35
113	0.573	7.59	364	66.2	<0.10	0.000	0.280	<0.10	<0.10	3.3	1.27	1817.42	7.47	2.87	882.87	2.47	0.95	252.66	0	0.00	3.80	34	13.05	1499.40
114	0.664	7.38	325	62.6	<0.10	0.000	0.280	<0.10	<0.10	4.6	2.05	1819.47	7.68	3.42	886.29	2.40	1.07	253.73	0	0.00	3.80	31	13.79	1513.19
115	0.667	7.18	353	113	<0.10	0.000	0.280	<0.10	<0.10	4.7	2.10	1821.57	14.33	6.40	892.69	4.37	1.95	255.68	0	0.00	3.80	30	13.40	1526.59
116	0.644	7.42	374	63.8	<0.10	0.000	0.280	<0.10	<0.10	4.1	1.77	1823.34	7.82	3.37	896.06	2.50	1.08	256.76	0	0.00	3.80	32	13.80	1540.39
117	0.667	7.40	372	72.7	<0.10	0.000	0.280	<0.10	<0.10	5.4	2.41	1825.75	8.25	3.69	899.75	2.64	1.18	257.94	0	0.00	3.80	33	14.74	1555.13
118	0.697	7.46	361	77.1	<0.10	0.000	0.280	<0.10	<0.10	5.8	2.71	1828.46	9.01	4.21	903.96	2.94	1.37	259.31	0	0.00	3.80	36	16.81	1571.94
119	0.639	7.24	388	58.6	<0.10	0.000	0.280	<0.10	<0.10	4.3	1.84	1830.30	7.02	3.00	906.96	2.09	0.89	260.20	0	0.00	3.80	27	11.56	1583.50
120	0.657	7.49	368	52.1	<0.10	0.000	0.280	<0.10	<0.10	4.9	2.16	1832.46	6.00	2.64	909.60	2.18	0.96	261.16	0	0.00	3.80	23	10.12	1593.62
121	0.686	7.50	361	55.9	<0.10	0.000	0.280	<0.10	<0.10	4.7	2.16	1834.62	7.11	3.27	912.87	2.13	0.98	262.14	0	0.00	3.80	27	12.41	1606.03
122	0.627	7.32	361	72.2	<0.10	0.000	0.280	<0.10	<0.10	6.2	2.60	1837.22	8.48	3.56	916.43	2.80	1.18	263.32	0	0.00	3.80	27	11.34	1617.37
123	0.698	7.60	380	84.7	<0.10	0.000	0.280	<0.10	<0.10	6.4	2.99	1840.21	10.42	4.87	921.30	3.27	1.53	264.85	0	0.00	3.80	41	19.17	1636.54
124	0.618	7.52	382	74.7	<0.10	0.000	0.280	<0.10	<0.10	6.1	2.53	1842.74	9.01	3.73	925.03	3.13	1.30	266.15	0	0.00	3.80	36	14.90	1651.44
125	0.615	7.71	378	66.2	<0.10	0.000	0.280	<0.10	<0.10	5.9	2.43	1845.17	7.34	3.02	928.05	2.72	1.12	267.27	0	0.00	3.80	30	12.36	1663.80
126	0.622	7.67	373	80.0	<0.10	0.000	0.280	<0.10	<0.10	7.4	3.08	1848.25	8.60	3.58	931.63	3.19	1.33	268.60	0	0.00	3.80	19	7.92	1671.72
127	0.667	7.63	376	76.4	<0.10	0.000	0.280	<0.10	<0.10	7.1	3.17	1851.42	9.24	4.13	935.76	3.27	1.46	270.06	0	0.00	3.80	37	16.53	1688.25
128	0.701	7.70	370	82.1	<0.10	0.000	0.280	<0.10	<0.10	6.8	3.19	1854.61	9.18	4.31	940.07	3.19	1.50	271.56	0	0.00	3.80	39	18.31	1706.56
129	0.580	7.78	361	71.7	<0.10	0.000	0.280	<0.10	<0.10	5.7	2.21	1856.82	9.67	3.76	943.83	2.99	1.16	272.72	0	0.00	3.80	33	12.82	1719.38
130	0.579	7.64	346	90.0	<0.10	0.000	0.280	<0.10	<0.10	10	3.88	1860.70	10.44	4.05	947.88	3.90	1.51	274.23	0	0.00	3.80	20	7.76	1727.14
131	0.655	7.50	370	62.6	<0.10	0.000	0.280	<0.10	<0.10	4.4	1.93	1862.63	7.31	3.21	951.09	2.58	1.13	275.36	0	0.00	3.80	29	12.72	1739.86
132	0.609	7.70	344	69.9	<0.10	0.000	0.280	<0.10	<0.10	5.3	2.16	1864.79	7.96	3.25	954.34	2.79	1.14	276.50	0	0.00	3.80	33	13.46	1753.32
133	0.653	7.84	302	70.5	<0.10	0.000	0.280	<0.10	<0.10	5.2	2.27	1867.06	7.80	3.41	957.75	2.82	1.23	277.73	0	0.00	3.80	18	7.87	1761.19
134	0.639	7.82	312	73.9	0.11	0.047	0.327	<0.10	<0.11	5.7	2.44	1869.50	9.27	3.97	961.72	2.84	1.22	278.95	0	0.00	3.80	21	8.99	1770.18
135	0.734	7.66	260	76.2	<0.10	0.000	0.327	<0.10	<0.10	5.6	2.75	1872.25	10.02	4.93	966.65	3.07	1.51	280.46	0	0.00	3.80	30	14.75	1784.93

Midas Gold Corp.
MLI Job No. 3654

Table 1 . - Humidity Cell Analytical Results, MGI-09-09 (143-163) **(1.4928 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
136	0.692	7.84	225	76.8	<0.10	0.000	0.327	<0.10	<0.10	5.5	2.55	1874.80	9.07	4.20	970.85	3.12	1.45	281.91	0	0.00	3.80	34	15.76	1800.69
137	0.652	8.05	259	79.5	<0.10	0.000	0.327	<0.10	<0.10	6.4	2.80	1877.60	9.45	4.13	974.98	3.26	1.42	283.33	0	0.00	3.80	37	16.16	1816.85
138	0.686	7.83	203	89.1	<0.10	0.000	0.327	<0.10	<0.10	7.2	3.31	1880.91	11.65	5.35	980.33	3.58	1.65	284.98	0	0.00	3.80	44	20.22	1837.07
139	0.716	8.06	254	80.4	<0.10	0.000	0.327	<0.10	<0.10	6.3	3.02	1883.93	9.07	4.35	984.68	3.06	1.47	286.45	0	0.00	3.80	37	17.75	1854.82
140	0.672	8.00	250	90.3	<0.10	0.000	0.327	<0.10	<0.10	6.6	2.97	1886.90	10.71	4.82	989.50	3.74	1.68	288.13	0	0.00	3.80	35	15.76	1870.58
141	0.686	7.90	229	84.6	<0.10	0.000	0.327	<0.10	<0.10	9.2	4.23	1891.13	9.70	4.46	993.96	3.26	1.50	289.63	0	0.00	3.80	32	14.71	1885.29
142	0.631	7.89	161	96.8	<0.10	0.000	0.327	<0.10	<0.10	8.7	3.68	1894.81	10.43	4.41	998.37	3.51	1.48	291.11	0	0.00	3.80	34	14.37	1899.66
143	0.623	7.93	198	93.7	<0.10	0.000	0.327	<0.10	<0.10	13.0	5.43	1900.24	12.37	5.16	1003.53	4.36	1.82	292.93	0	0.00	3.80	36	15.02	1914.68
144	0.664	7.95	136	107	<0.10	0.000	0.327	<0.10	<0.10	10.0	4.45	1904.69	13.81	6.14	1009.67	4.76	2.12	295.05	0	0.00	3.80	42	18.68	1933.36

Testing terminated

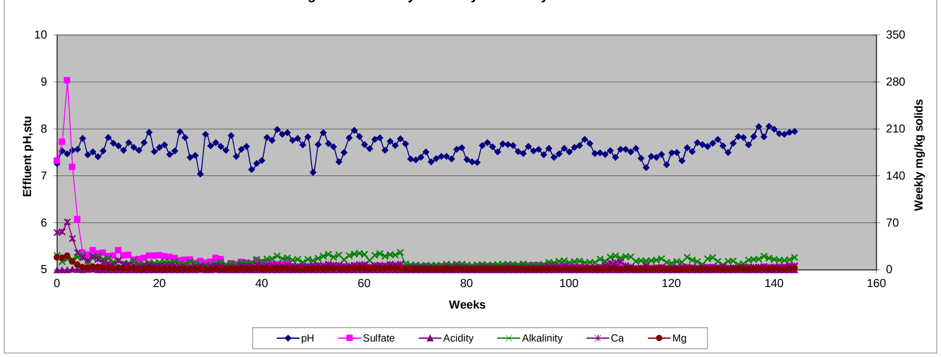


Figure 1a.- Weekly Humidity Cell Analytical Results

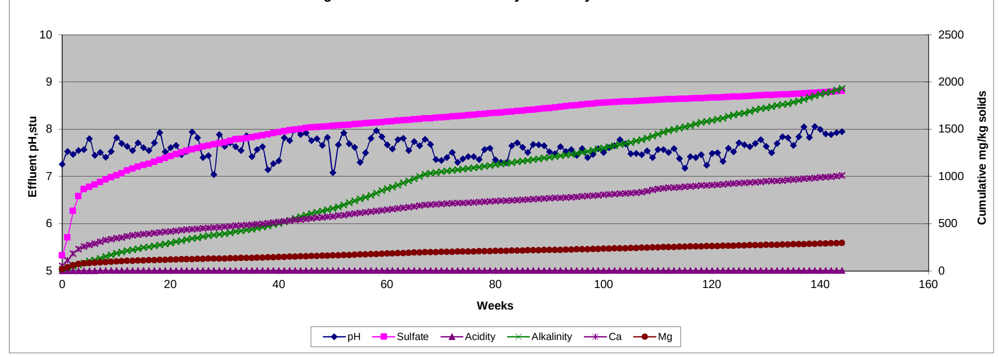


Figure 1b.- Cumulative Humidity Cell Analytical Results

Midas Gold Corp.
MLI Job No. 3654

Table 2 . - Humidity Cell Analytical Results, MGI-10-22 (71-85) **(1.498 Kg)**

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	$SO_4^{=}$ mg/l	$SO_4^{=}$ mg/kg	$SO_4^{=}$ Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
0	0.786	7.91	239	123	<0.10	0.000	0.000	<0.10	<0.10	12.0	6.30	6.30	13.50	7.08	7.08	2.40	1.26	1.26	0	0.00	0.00	23	12.07	12.07
1	0.701	7.99	241	154	<0.10	0.000	0.000	<0.10	<0.10	23.0	10.76	17.06	18.21	8.52	15.60	3.00	1.40	2.66	0	0.00	0.00	39	18.25	30.32
2	0.699	7.99	249	121	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.20	21.26	14.46	6.75	22.35	2.60	1.21	3.87	0	0.00	0.00	40	18.66	48.98
3	0.726	8.07	260	104	<0.10	0.000	0.000	<0.10	<0.10	24.0	11.63	32.89	13.45	6.52	28.87	2.45	1.19	5.06	0	0.00	0.00	41	19.87	68.85
4	0.747	7.67	290	94.7	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.00	33.89	12.51	6.24	35.11	2.36	1.18	6.24	0	0.00	0.00	39	19.45	88.30
5	0.744	7.49	261	86.8	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.99	34.88	11.94	5.93	41.04	2.03	1.01	7.25	0	0.00	0.00	43	21.36	109.66
6	0.748	8.00	283	94.0	<0.10	0.000	0.000	<0.10	<0.10	4.0	2.00	36.88	14.09	7.04	48.08	2.42	1.21	8.46	0	0.00	0.00	38	18.97	128.63
7	0.749	7.64	272	103	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.50	39.38	17.26	8.63	56.71	2.88	1.44	9.90	0	0.00	0.00	42	21.00	149.63
8	0.741	7.43	218	125	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.44	44.82	19.65	9.72	66.43	3.70	1.83	11.73	0	0.00	0.00	47	23.25	172.88
9	0.745	7.95	169	104	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.97	49.79	13.94	6.93	73.36	2.82	1.40	13.13	0	0.00	0.00	35	17.41	190.29
10	0.741	7.84	225	104	<0.10	0.000	0.000	<0.10	<0.10	18.0	8.90	58.69	13.35	6.60	79.96	3.23	1.60	14.73	0	0.00	0.00	33	16.32	206.61
11	0.699	7.88	212	95.0	<0.10	0.000	0.000	<0.10	<0.10	13.0	6.07	64.76	10.50	4.90	84.86	2.12	0.99	15.72	0	0.00	0.00	29	13.53	220.14
12	0.762	7.52	151	105	<0.10	0.000	0.000	<0.10	<0.10	18.0	9.16	73.92	15.80	8.04	92.90	2.60	1.32	17.04	0	0.00	0.00	34	17.30	237.44
13	0.686	7.59	260	83.7	<0.10	0.000	0.000	<0.10	<0.10	18.0	8.24	82.16	11.00	5.04	97.94	1.70	0.78	17.82	0	0.00	0.00	21	9.62	247.06
14	0.654	7.58	215	79.3	<0.10	0.000	0.000	<0.10	<0.10	17.0	7.42	89.58	8.38	3.66	101.60	1.68	0.73	18.55	0	0.00	0.00	28	12.22	259.28
15	0.556	7.79	187	66.7	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.37	89.95	7.06	2.62	104.22	1.38	0.51	19.06	0	0.00	0.00	25	9.28	268.56
16	0.617	7.73	223	58.2	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.47	92.42	5.84	2.41	106.63	1.23	0.51	19.57	0	0.00	0.00	19	7.83	276.39
17	0.604	7.81	210	55.4	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.21	93.63	5.52	2.23	108.86	1.09	0.44	20.01	0	0.00	0.00	19	7.66	284.05
18	0.617	7.91	202	58.6	<0.10	0.000	0.000	<0.10	<0.10	7.0	2.88	96.51	5.64	2.32	111.18	1.37	0.56	20.57	0	0.00	0.00	21	8.65	292.70
19	0.633	7.78	208	56.9	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.69	98.20	5.56	2.35	113.53	1.28	0.54	21.11	0	0.00	0.00	20	8.45	301.15
20	0.661	7.77	216	66.4	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.32	99.52	6.63	2.93	116.46	1.27	0.56	21.67	0	0.00	0.00	23	10.15	311.30
21	0.658	7.76	245	58.5	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.88	100.40	6.43	2.82	119.28	1.24	0.54	22.21	0	0.00	0.00	24	10.54	321.84
22	0.618	7.70	214	48.4	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.06	102.46	5.60	2.31	121.59	1.04	0.43	22.64	0	0.00	0.00	21	8.66	330.50
23	0.657	7.73	253	57.6	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.88	103.34	5.62	2.46	124.05	1.16	0.51	23.15	0	0.00	0.00	24	10.53	341.03
24	0.633	8.03	226	49.7	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.54	105.88	5.47	2.31	126.36	1.07	0.45	23.60	0	0.00	0.00	21	8.87	349.90
25	0.571	7.84	254	49.1	<0.10	0.000	0.000	<0.10	<0.10	9.0	3.43	109.31	4.83	1.84	128.20	1.03	0.39	23.99	0	0.00	0.00	20	7.62	357.52
26	0.668	7.80	236	59.2	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.12	112.43	5.85	2.61	130.81	1.00	0.45	24.44	0	0.00	0.00	24	10.70	368.22
27	0.594	7.59	267	55.5	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.79	113.22	5.31	2.11	132.92	1.33	0.53	24.97	0	0.00	0.00	21	8.33	376.55
28	0.653	7.37	300	55.6	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.31	114.53	6.28	2.74	135.66	1.18	0.51	25.48	1	0.44	0.44	19	8.28	384.83
29	0.607	8.27	291	58.4	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.03	116.56	6.21	2.52	138.18	1.27	0.51	25.99	0	0.00	0.44	19	7.70	392.53
30	0.571	7.75	261	50.0	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.38	116.94	5.67	2.16	140.34	1.10	0.42	26.41	0	0.00	0.44	17	6.48	399.01
31	0.679	7.83	353	60.9	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.45	117.39	8.56	3.88	144.22	1.36	0.62	27.03	0	0.00	0.44	22	9.97	408.98
32	0.719	7.71	360	63.5	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.84	121.23	7.52	3.61	147.83	1.43	0.69	27.72	0	0.00	0.44	24	11.52	420.50
33	0.636	7.53	346	52.6	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.85	122.08	5.63	2.39	150.22	1.32	0.56	28.28	0	0.00	0.44	20	8.49	428.99
34	0.631	7.87	285	53.1	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.68	123.76	5.88	2.48	152.70	1.28	0.54	28.82	0	0.00	0.44	22	9.27	438.26
35	0.647	7.60	345	52.7	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.43	124.19	5.87	2.54	155.24	1.23	0.53	29.35	0	0.00	0.44	24	10.37	448.63
36	0.680	7.74	319	55.0	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.45	124.64	7.70	3.50	158.74	1.51	0.69	30.04	0	0.00	0.44	24	10.89	459.52
37	0.643	7.77	306	56.7	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.86	125.50	7.61	3.27	162.01	1.64	0.70	30.74	0	0.00	0.44	24	10.30	469.82
38	0.658	7.46	285	52.0	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.44	125.94	6.64	2.92	164.93	1.31	0.58	31.32	0	0.00	0.44	22	9.66	479.48
39	0.734	7.37	268	62.8	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	126.43	8.13	3.98	168.91	1.66	0.81	32.13	0	0.00	0.44	27	13.23	492.71
40	0.699	7.62	324	58.1	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.47	126.90	6.79	3.17	172.08	1.24	0.58	32.71	0	0.00	0.44	24	11.20	503.91
41	0.731	7.50	387	69.7	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	127.39	7.36	3.59	175.67	1.44	0.70	33.41	0	0.00	0.44	27	13.18	517.09
42	0.668	7.65	352	67.8	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.45	127.84	7.29	3.25	178.92	1.48	0.66	34.07	1	0.45	0.88	25	11.15	528.24
43	0.729	8.08	322	70.2	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	128.33	8.60	4.19	183.11	1.63	0.79	34.86	0	0.00	0.88	33	16.06	544.30
44	0.695	8.10	362	63.3	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.46	128.79	7.27	3.37	186.48	1.44	0.67	35.53	0	0.00	0.88	29	13.45	557.75
45	0.685	8.00	372	61.3	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.91	129.70	7.35	3.36	189.84	1.47	0.67	36.20	0	0.00	0.88	28	12.80	570.55

Midas Gold Corp.
MLI Job No. 3654

Table 2 . - Humidity Cell Analytical Results, MGI-10-22 (71-85) **(1.498 Kg)**

	Vol.	Effluent	Redox, mV	Conductivity	Total Fe			$Fe^{2}+$	$Fe^{3}+$	SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	L	pH	(vs Ag/AgCl)	µS/cm	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
46	0.638	7.80	336	52.4	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.43	130.13	6.92	2.95	192.79	1.45	0.62	36.82	0	0.00	0.88	23	9.80	580.35
47	0.691	8.03	320	68.0	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.46	130.59	9.48	4.37	197.16	1.88	0.87	37.69	0	0.00	0.88	30	13.84	594.19
48	0.672	7.81	327	53.4	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.45	131.04	7.47	3.35	200.51	1.64	0.74	38.43	0	0.00	0.88	23	10.32	604.51
49	0.717	7.92	316	59.6	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.48	131.52	7.90	3.78	204.29	1.54	0.74	39.17	0	0.00	0.88	28	13.40	617.91
50	0.733	7.42	313	58.1	0.12	0.059	0.059	<0.10	<0.12	1.0	0.49	132.01	8.51	4.16	208.45	1.58	0.77	39.94	0	0.00	0.88	27	13.21	631.12
51	0.678	7.77	314	54.1	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.45	132.46	7.40	3.35	211.80	1.50	0.68	40.62	0	0.00	0.88	24	10.86	641.98
52	0.655	7.87	325	59.1	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.44	132.90	8.08	3.53	215.33	1.62	0.71	41.33	0	0.00	0.88	28	12.24	654.22
53	0.711	7.66	321	58.2	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.47	133.37	7.58	3.60	218.93	1.61	0.76	42.09	0	0.00	0.88	29	13.76	667.98
54	0.720	7.67	300	60.8	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.48	133.85	8.54	4.10	223.03	1.73	0.83	42.92	0	0.00	0.88	28	13.46	681.44
55	0.699	7.74	272	57.0	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	133.85	8.17	3.81	226.84	1.69	0.79	43.71	0	0.00	0.88	27	12.60	694.04
56	0.669	7.50	286	50.1	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.45	134.30	6.56	2.93	229.77	1.49	0.67	44.38	0	0.00	0.88	23	10.27	704.31
57	0.683	7.67	291	53.1	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	134.30	6.65	3.03	232.80	1.51	0.69	45.07	0	0.00	0.88	27	12.31	716.62
58	0.734	7.91	306	62.5	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	134.30	8.21	4.02	236.82	1.78	0.87	45.94	0	0.00	0.88	30	14.70	731.32
59	0.659	7.74	308	51.1	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	134.30	7.75	3.41	240.23	1.50	0.66	46.60	0	0.00	0.88	26	11.44	742.76
60	0.714	7.73	301	56.4	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.48	134.78	7.48	3.57	243.80	1.73	0.82	47.42	0	0.00	0.88	28	13.35	756.11
61	0.723	7.59	301	57.6	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	134.78	7.69	3.71	247.51	1.59	0.77	48.19	0	0.00	0.88	27	13.03	769.14
62	0.664	7.53	336	47.0	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.44	135.22	6.40	2.84	250.35	1.49	0.66	48.85	0	0.00	0.88	22	9.75	778.89
63	0.616	7.78	302	47.3	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	135.22	6.20	2.55	252.90	1.48	0.61	49.46	0	0.00	0.88	23	9.46	788.35
64	0.615	7.65	302	55.0	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	135.22	7.67	3.15	256.05	1.96	0.80	50.26	0	0.00	0.88	25	10.26	798.61
65	0.750	7.58	274	62.3	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	135.22	8.47	4.24	260.29	1.94	0.97	51.23	0	0.00	0.88	28	14.02	812.63
66	0.703	7.71	269	58.2	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.47	135.69	7.96	3.74	264.03	1.82	0.85	52.08	0	0.00	0.88	28	13.14	825.77
67	0.696	7.84	314	56.9	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	135.69	7.74	3.60	267.63	1.74	0.81	52.89	0	0.00	0.88	28	13.01	838.78
68	0.676	7.76	298	55.4	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	135.69	7.87	3.55	271.18	1.79	0.81	53.70	0	0.00	0.88	26	11.73	850.51
69	0.626	7.72	282	45.5	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.42	136.11	6.07	2.54	273.72	1.38	0.58	54.28	0	0.00	0.88	21	8.78	859.29
70	0.643	7.48	279	50.7	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	136.11	6.26	2.69	276.41	1.50	0.64	54.92	0	0.00	0.88	21	9.01	868.30
71	0.648	7.44	200	51.9	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	136.11	6.64	2.87	279.28	1.67	0.72	55.64	0	0.00	0.88	23	9.95	878.25
72	0.659	7.66	255	54.3	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	136.11	7.14	3.14	282.42	1.82	0.80	56.44	0	0.00	0.88	25	11.00	889.25
73	0.626	7.60	207	45.7	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.42	136.53	5.70	2.38	284.80	1.64	0.69	57.13	0	0.00	0.88	21	8.78	898.03
74	0.634	7.64	217	46.1	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	136.53	6.24	2.64	287.44	1.78	0.75	57.88	0	0.00	0.88	22	9.31	907.34
75	0.634	7.61	198	46.8	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	136.53	5.50	2.33	289.77	1.64	0.69	58.57	0	0.00	0.88	22	9.31	916.65
76	0.634	7.46	256	52.3	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	136.53	6.74	2.85	292.62	1.86	0.79	59.36	0	0.00	0.88	24	10.16	926.81
77	0.587	7.30	221	51.6	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	136.53	6.11	2.39	295.01	1.84	0.72	60.08	0	0.00	0.88	22	8.62	935.43
78	0.634	7.51	225	63.4	<0.10	0.000	0.059	<0.10	<0.10	6.0	2.54	139.07	8.04	3.40	298.41	2.27	0.96	61.04	0	0.00	0.88	23	9.73	945.16
79	0.618	7.37	238	54.8	<0.10	0.000	0.059	<0.10	<0.10	2.0	0.83	139.90	6.79	2.80	301.21	2.12	0.87	61.91	0	0.00	0.88	24	9.90	955.06
80	0.577	7.29	221	47.2	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	139.90	5.71	2.20	303.41	1.72	0.66	62.57	0	0.00	0.88	20	7.70	962.76
81	0.576	7.38	211	53.8	<0.10	0.000	0.059	<0.10	<0.10	3.0	1.15	141.05	5.97	2.30	305.71	2.09	0.80	63.37	0	0.00	0.88	19	7.31	970.07
82	0.577	7.47	245	52.9	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.39	141.44	5.75	2.21	307.92	2.13	0.82	64.19	0	0.00	0.88	21	8.09	978.16
83	0.586	7.36	286	56.2	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	141.44	6.04	2.36	310.28	2.19	0.86	65.05	0	0.00	0.88	22	8.61	986.77
84	0.576	7.44	315	42.2	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	141.44	4.93	1.90	312.18	1.58	0.61	65.66	0	0.00	0.88	18	6.92	993.69
85	0.593	7.39	302	52.3	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.40	141.84	6.19	2.45	314.63	2.06	0.82	66.48	0	0.00	0.88	22	8.71	1002.40
86	0.576	7.42	302	52.9	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	141.84	5.67	2.18	316.81	2.13	0.82	67.30	0	0.00	0.88	24	9.23	1011.63
87	0.582	7.43	311	56.1	<0.10	0.000	0.059	<0.10	<0.10	2.0	0.78	142.62	6.28	2.44	319.25	2.30	0.89	68.19	0	0.00	0.88	24	9.32	1020.95
88	0.601	7.48	318	54.4	<0.10	0.000	0.059	<0.10	<0.10	2.0	0.80	143.42	6.73	2.70	321.95	2.24	0.90	69.09	0	0.00	0.88	23	9.23	1030.18
89	0.588	7.45	335	49.5	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	143.42	5.57	2.19	324.14	2.20	0.86	69.95	0	0.00	0.88	22	8.64	1038.82
90	0.593	7.22	356	52.2	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.40	143.82	5.44	2.15	326.29	2.03	0.80	70.75	0	0.00	0.88	23	9.10	1047.92

Midas Gold Corp.
MLI Job No. 3654

Table 2 . - Humidity Cell Analytical Results, MGI-10-22 (71-85) **(1.498 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
91	0.605	7.49	302	49.9	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.40	144.22	5.40	2.18	328.47	1.95	0.79	71.54	0	0.00	0.88	22	8.89	1056.81
92	0.604	7.38	327	54.1	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.40	144.62	6.20	2.50	330.97	2.25	0.91	72.45	0	0.00	0.88	24	9.68	1066.49
93	0.610	7.58	333	57.9	<0.10	0.000	0.059	<0.10	<0.10	2.0	0.81	145.43	6.84	2.79	333.76	2.72	1.11	73.56	0	0.00	0.88	27	10.99	1077.48
94	0.581	7.41	308	51.4	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.39	145.82	5.44	2.11	335.87	2.09	0.81	74.37	0	0.00	0.88	23	8.92	1086.40
95	0.532	7.46	330	60.8	<0.10	0.000	0.059	<0.10	<0.10	3.0	1.07	146.89	6.86	2.44	338.31	2.81	1.00	75.37	0	0.00	0.88	24	8.52	1094.92
96	0.650	7.44	361	59.0	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.43	147.32	7.41	3.22	341.53	2.71	1.18	76.55	0	0.00	0.88	26	11.28	1106.20
97	0.613	7.33	329	60.0	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	147.32	6.00	2.46	343.99	2.82	1.15	77.70	0	0.00	0.88	27	11.05	1117.25
98	0.596	7.40	339	73.5	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.40	147.72	9.26	3.68	347.67	3.41	1.36	79.06	0	0.00	0.88	33	13.13	1130.38
99	0.584	7.43	352	71.8	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.39	148.11	8.49	3.31	350.98	3.45	1.34	80.40	0	0.00	0.88	32	12.48	1142.86
100	0.581	7.35	327	60.9	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	148.11	7.27	2.82	353.80	2.86	1.11	81.51	0	0.00	0.88	29	11.25	1154.11
101	0.586	7.41	319	60.6	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.39	148.50	7.56	2.96	356.76	2.77	1.08	82.59	0	0.00	0.88	27	10.56	1164.67
102	0.623	7.52	346	61.6	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.42	148.92	6.97	2.90	359.66	2.68	1.11	83.70	0	0.00	0.88	29	12.06	1176.73
103	0.595	7.52	308	57.7	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.40	149.32	6.47	2.57	362.23	2.69	1.07	84.77	0	0.00	0.88	27	10.72	1187.45
104	0.650	7.48	318	61.1	<0.10	0.000	0.059	<0.10	<0.10	1.0	0.43	149.75	6.75	2.93	365.16	2.83	1.23	86.00	0	0.00	0.88	28	12.15	1199.60
105	0.625	7.68	328	52.1	<0.10	0.000	0.059	<0.10	<0.10	2.0	0.83	150.58	6.17	2.57	367.73	2.27	0.95	86.95	0	0.00	0.88	25	10.43	1210.03
106	0.656	7.44	309	53.7	<0.10	0.000	0.059	<0.10	<0.10	1.4	0.61	151.19	6.32	2.77	370.50	2.26	0.99	87.94	0	0.00	0.88	27	11.82	1221.85
107	0.606	7.27	322	53.4	<0.10	0.000	0.059	<0.10	<0.10	1.4	0.57	151.76	6.73	2.72	373.22	2.53	1.02	88.96	0	0.00	0.88	28	11.33	1233.18
108	0.658	7.40	351	61.1	<0.10	0.000	0.059	<0.10	<0.10	1.4	0.61	152.37	7.66	3.36	376.58	2.92	1.28	90.24	0	0.00	0.88	31	13.62	1246.80
109	0.733	7.29	338	65.3	<0.10	0.000	0.059	<0.10	<0.10	1.1	0.54	152.91	8.84	4.33	380.91	2.80	1.37	91.61	0	0.00	0.88	37	18.10	1264.90
110	0.658	7.37	355	62.2	<0.10	0.000	0.059	<0.10	<0.10	1.6	0.70	153.61	8.20	3.60	384.51	2.59	1.14	92.75	0	0.00	0.88	31	13.62	1278.52
111	0.684	7.36	363	60.3	<0.10	0.000	0.059	<0.10	<0.10	1.5	0.68	154.29	7.18	3.28	387.79	2.53	1.16	93.91	0	0.00	0.88	32	14.61	1293.13
112	0.619	7.46	343	65.7	<0.10	0.000	0.059	<0.10	<0.10	1.3	0.54	154.83	7.07	2.92	390.71	2.97	1.23	95.14	0	0.00	0.88	34	14.05	1307.18
113	0.583	7.42	345	48.3	<0.10	0.000	0.059	<0.10	<0.10	1.2	0.47	155.30	5.26	2.05	392.76	2.09	0.81	95.95	0	0.00	0.88	27	10.51	1317.69
114	0.616	7.25	303	60.6	<0.10	0.000	0.059	<0.10	<0.10	1.4	0.58	155.88	7.21	2.96	395.72	2.78	1.14	97.09	0	0.00	0.88	34	13.98	1331.67
115	0.606	7.18	345	78.2	<0.10	0.000	0.059	<0.10	<0.10	1.1	0.44	156.32	9.79	3.96	399.68	3.40	1.38	98.47	0	0.00	0.88	28	11.33	1343.00
116	0.601	7.43	345	45.4	<0.10	0.000	0.059	<0.10	<0.10	1.4	0.56	156.88	4.56	1.83	401.51	2.22	0.89	99.36	0	0.00	0.88	26	10.43	1353.43
117	0.633	7.18	335	50.2	<0.10	0.000	0.059	<0.10	<0.10	1.7	0.72	157.60	5.26	2.22	403.73	2.11	0.89	100.25	0	0.00	0.88	27	11.41	1364.84
118	0.671	7.36	352	56.1	<0.10	0.000	0.059	<0.10	<0.10	1.4	0.63	158.23	6.93	3.10	406.83	2.41	1.08	101.33	0	0.00	0.88	32	14.33	1379.17
119	0.644	7.15	357	45.9	<0.10	0.000	0.059	<0.10	<0.10	1.7	0.73	158.96	5.36	2.30	409.13	1.96	0.84	102.17	0	0.00	0.88	25	10.75	1389.92
120	0.581	7.35	305	39.4	<0.10	0.000	0.059	<0.10	<0.10	1.4	0.54	159.50	4.72	1.83	410.96	1.81	0.70	102.87	0	0.00	0.88	22	8.53	1398.45
121	0.695	7.34	303	55.6	<0.10	0.000	0.059	<0.10	<0.10	1.7	0.79	160.29	6.47	3.00	413.96	2.33	1.08	103.95	0	0.00	0.88	32	14.85	1413.30
122	0.618	7.21	286	45.5	<0.10	0.000	0.059	<0.10	<0.10	1.4	0.58	160.87	5.32	2.19	416.15	1.82	0.75	104.70	0	0.00	0.88	22	9.08	1422.38
123	0.628	7.25	305	45.5	<0.10	0.000	0.059	<0.10	<0.10	1.4	0.59	161.46	5.69	2.39	418.54	1.99	0.83	105.53	0	0.00	0.88	26	10.90	1433.28
124	0.601	7.44	321	46.2	<0.10	0.000	0.059	<0.10	<0.10	1.5	0.60	162.06	5.30	2.13	420.67	2.12	0.85	106.38	0	0.00	0.88	27	10.83	1444.11
125	0.594	7.67	356	48.1	<0.10	0.000	0.059	<0.10	<0.10	1.5	0.59	162.65	5.23	2.07	422.74	2.20	0.87	107.25	0	0.00	0.88	25	9.91	1454.02
126	0.603	7.51	305	44.1	<0.10	0.000	0.059	<0.10	<0.10	1.9	0.76	163.41	4.53	1.82	424.56	1.82	0.73	107.98	0	0.00	0.88	17	6.84	1460.86
127	0.664	7.44	341	50.1	<0.10	0.000	0.059	<0.10	<0.10	1.5	0.66	164.07	6.05	2.68	427.24	2.19	0.97	108.95	0	0.00	0.88	31	13.74	1474.60
128	0.684	7.61	341	48.2	<0.10	0.000	0.059	<0.10	<0.10	1.2	0.55	164.62	5.75	2.63	429.87	1.96	0.89	109.84	0	0.00	0.88	29	13.24	1487.84
129	0.634	7.59	330	40.2	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	164.62	5.54	2.34	432.21	1.45	0.61	110.45	0	0.00	0.88	23	9.73	1497.57
130	0.586	7.63	335	37.2	<0.10	0.000	0.059	<0.10	<0.10	1.6	0.63	165.25	4.59	1.80	434.01	1.66	0.65	111.10	0	0.00	0.88	13	5.09	1502.66
131	0.608	7.65	355	42.3	<0.10	0.000	0.059	<0.10	<0.10	1.4	0.57	165.82	4.82	1.96	435.97	2.03	0.82	111.92	0	0.00	0.88	23	9.34	1512.00
132	0.578	7.71	307	44.1	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	165.82	4.80	1.85	437.82	2.11	0.81	112.73	0	0.00	0.88	25	9.65	1521.65
133	0.661	7.79	288	46.8	<0.10	0.000	0.059	<0.10	<0.10	1.5	0.66	166.48	5.51	2.43	440.25	2.15	0.95	113.68	0	0.00	0.88	18	7.94	1529.59
134	0.632	7.83	289	51.9	<0.10	0.000	0.059	<0.10	<0.10	1.4	0.59	167.07	6.00	2.53	442.78	2.25	0.95	114.63	0	0.00	0.88	21	8.86	1538.45
135	0.682	7.65	246	55.8	<0.10	0.000	0.059	<0.10	<0.10	1.1	0.50	167.57	6.89	3.14	445.92	2.22	1.01	115.64	0	0.00	0.88	27	12.29	1550.74

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Table 2 . - Humidity Cell Analytical Results, MGI-10-22 (71-85) (1.498 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
136	0.704	7.86	272	56.2	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	167.57	6.94	3.26	449.18	2.37	1.11	116.75	0	0.00	0.88	30	14.10	1564.84
137	0.623	8.08	243	45.1	<0.10	0.000	0.059	<0.10	<0.10	1.1	0.46	168.03	5.26	2.19	451.37	1.91	0.79	117.54	0	0.00	0.88	25	10.40	1575.24
138	0.673	7.94	228	45.2	<0.10	0.000	0.059	<0.10	<0.10	1.2	0.54	168.57	5.77	2.59	453.96	1.75	0.79	118.33	0	0.00	0.88	31	13.93	1589.17
139	0.613	8.02	262	48.6	<0.10	0.000	0.059	<0.10	<0.10	1.1	0.45	169.02	4.91	2.01	455.97	1.89	0.77	119.10	0	0.00	0.88	27	11.05	1600.22
140	0.655	7.95	250	48.9	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	169.02	5.29	2.31	458.28	2.08	0.91	120.01	0	0.00	0.88	22	9.62	1609.84
141	0.710	7.92	266	48.3	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	169.02	6.33	3.00	461.28	2.02	0.96	120.97	0	0.00	0.88	23	10.90	1620.74
142	0.575	8.00	185	48.8	<0.10	0.000	0.059	<0.10	<0.10	<1.0	0.00	169.02	5.52	2.12	463.40	1.95	0.75	121.72	0	0.00	0.88	22	8.44	1629.18
143	0.637	8.04	216	59.8	<0.10	0.000	0.059	<0.10	<0.10	2.8	1.17	170.19	8.03	3.41	466.81	2.81	1.19	122.91	0	0.00	0.88	30	12.76	1641.94
144	0.578	8.00	186	35.8	<0.10	0.000	0.059	<0.10	<0.10	2.4	0.93	171.12	4.17	1.61	468.42	1.64	0.63	123.54	0	0.00	0.88	17	6.56	1648.50

Testing terminated

Figure 2a.- Weekly Humidity Cell Analytical Results

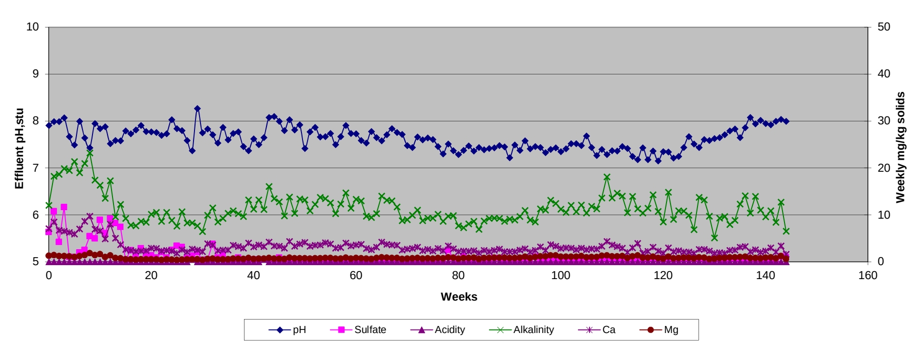
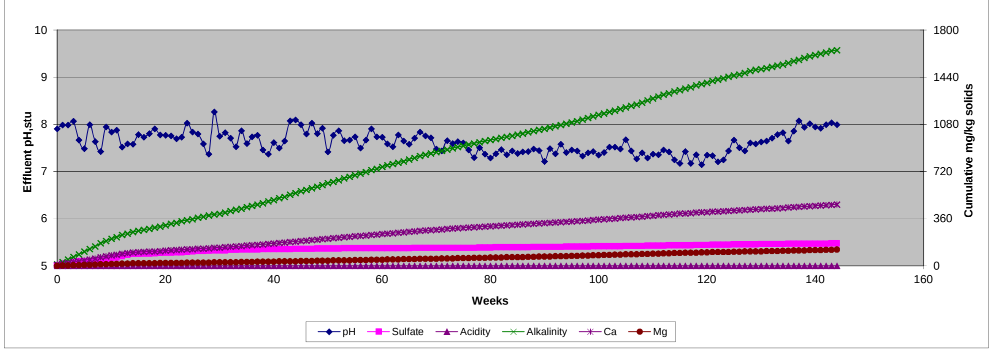


Figure 2b.- Cumulative Humidity Cell Analytical Results



Midas Gold Corp.
MLI Job No. 3654

Table 3 . - Humidity Cell Analytical Results, MGI-10-23 (135-151) **(1.4974 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
0	0.754	7.65	238	234	<0.10	0.000	0.000	<0.10	<0.10	50.0	25.18	25.18	29.20	14.70	14.70	6.90	3.47	3.47	0	0.00	0.00	23	11.58	11.58
1	0.710	7.74	254	340	<0.10	0.000	0.000	<0.10	<0.10	100.0	47.42	72.60	45.99	21.81	36.51	9.50	4.50	7.97	0	0.00	0.00	37	17.54	29.12
2	0.740	7.80	261	228	<0.10	0.000	0.000	<0.10	<0.10	56.0	27.67	100.27	28.01	13.84	50.35	6.20	3.06	11.03	0	0.00	0.00	43	21.25	50.37
3	0.710	7.88	268	149	<0.10	0.000	0.000	<0.10	<0.10	25.0	11.85	112.12	19.88	9.43	59.78	4.16	1.97	13.00	0	0.00	0.00	41	19.44	69.81
4	0.749	7.67	283	124	<0.10	0.000	0.000	<0.10	<0.10	18.0	9.00	121.12	14.56	7.28	67.06	3.70	1.85	14.85	0	0.00	0.00	37	18.51	88.32
5	0.735	7.67	259	129	<0.10	0.000	0.000	<0.10	<0.10	20.0	9.82	130.94	15.99	7.85	74.91	3.70	1.82	16.67	0	0.00	0.00	40	19.63	107.95
6	0.685	7.70	295	168	<0.10	0.000	0.000	<0.10	<0.10	47.0	21.50	152.44	23.69	10.84	85.75	5.03	2.30	18.97	0	0.00	0.00	26	11.89	119.84
7	0.745	7.46	281	167	<0.10	0.000	0.000	<0.10	<0.10	36.0	17.91	170.35	25.29	12.58	98.33	5.21	2.59	21.56	2	1.00	1.00	40	19.90	139.74
8	0.736	7.34	227	154	<0.10	0.000	0.000	<0.10	<0.10	27.0	13.27	183.62	21.98	10.80	109.13	5.13	2.52	24.08	0	0.00	1.00	42	20.64	160.38
9	0.732	7.82	179	130	<0.10	0.000	0.000	<0.10	<0.10	27.0	13.20	196.82	16.02	7.83	116.96	4.02	1.97	26.05	0	0.00	1.00	33	16.13	176.51
10	0.732	7.79	223	127	<0.10	0.000	0.000	<0.10	<0.10	27.0	13.20	210.02	14.63	7.15	124.11	4.36	2.13	28.18	0	0.00	1.00	31	15.15	191.66
11	0.704	7.66	218	145	<0.10	0.000	0.000	<0.10	<0.10	41.0	19.28	229.30	14.63	6.88	130.99	3.67	1.73	29.91	0	0.00	1.00	25	11.75	203.41
12	0.726	7.58	155	134	<0.10	0.000	0.000	<0.10	<0.10	32.0	15.51	244.81	19.30	9.36	140.35	4.20	2.04	31.95	0	0.00	1.00	28	13.58	216.99
13	0.639	7.45	248	147	<0.10	0.000	0.000	<0.10	<0.10	44.0	18.78	263.59	16.80	7.17	147.52	3.80	1.62	33.57	0	0.00	1.00	23	9.82	226.81
14	0.639	7.45	220	110	<0.10	0.000	0.000	<0.10	<0.10	37.0	15.79	279.38	11.18	4.77	152.29	2.60	1.11	34.68	0	0.00	1.00	15	6.40	233.21
15	0.543	7.78	190	150	<0.10	0.000	0.000	<0.10	<0.10	38.0	13.78	293.16	14.78	5.36	157.65	3.64	1.32	36.00	0	0.00	1.00	28	10.15	243.36
16	0.616	7.47	234	127	<0.10	0.000	0.000	<0.10	<0.10	41.0	16.87	310.03	12.39	5.10	162.75	2.89	1.19	37.19	0	0.00	1.00	15	6.17	249.53
17	0.582	7.73	215	118	<0.10	0.000	0.000	<0.10	<0.10	19.0	7.38	317.41	11.37	4.42	167.17	2.43	0.94	38.13	0	0.00	1.00	18	7.00	256.53
18	0.650	7.70	205	112	<0.10	0.000	0.000	<0.10	<0.10	17.0	7.38	324.79	10.69	4.64	171.81	2.88	1.25	39.38	1	0.43	1.43	20	8.68	265.21
19	0.673	7.61	215	99.9	<0.10	0.000	0.000	<0.10	<0.10	20.0	8.99	333.78	9.46	4.25	176.06	2.28	1.02	40.40	0	0.00	1.43	19	8.54	273.75
20	0.687	7.62	221	117	<0.10	0.000	0.000	<0.10	<0.10	40.0	18.35	352.13	11.16	5.12	181.18	2.46	1.13	41.53	0	0.00	1.43	21	9.63	283.38
21	0.615	7.54	255	110	<0.10	0.000	0.000	<0.10	<0.10	37.0	15.20	367.33	11.28	4.63	185.81	2.53	1.04	42.57	0	0.00	1.43	21	8.62	292.00
22	0.731	7.40	230	99.2	<0.10	0.000	0.000	<0.10	<0.10	26.0	12.69	380.02	11.22	5.48	191.29	2.27	1.11	43.68	0	0.00	1.43	19	9.28	301.28
23	0.657	7.47	262	90.5	<0.10	0.000	0.000	<0.10	<0.10	25.0	10.97	390.99	8.48	3.72	195.01	1.94	0.85	44.53	0	0.00	1.43	17	7.46	308.74
24	0.657	7.78	233	86.0	<0.10	0.000	0.000	<0.10	<0.10	27.0	11.85	402.84	8.85	3.88	198.89	1.96	0.86	45.39	0	0.00	1.43	16	7.02	315.76
25	0.551	7.32	254	85.0	<0.10	0.000	0.000	<0.10	<0.10	20.0	7.36	410.20	7.86	2.89	201.78	1.81	0.67	46.06	6	2.21	3.64	31	11.41	327.17
26	0.644	7.56	243	110	<0.10	0.000	0.000	<0.10	<0.10	37.0	15.91	426.11	10.29	4.43	206.21	1.81	0.78	46.84	0	0.00	3.64	17	7.31	334.48
27	0.644	7.34	275	80.8	<0.10	0.000	0.000	<0.10	<0.10	25.0	10.75	436.86	7.82	3.36	209.57	1.93	0.83	47.67	5	2.15	5.79	23	9.89	344.37
28	0.683	7.13	309	86.8	<0.10	0.000	0.000	<0.10	<0.10	28.0	12.77	449.63	8.91	4.06	213.63	1.98	0.90	48.57	0	0.00	5.79	15	6.84	351.21
29	0.601	7.19	312	77.8	<0.10	0.000	0.000	<0.10	<0.10	22.0	8.83	458.46	7.46	2.99	216.62	1.61	0.65	49.22	3	1.20	6.99	12	4.82	356.03
30	0.565	7.47	249	79.0	<0.10	0.000	0.000	<0.10	<0.10	22.0	8.30	466.76	7.65	2.89	219.51	1.67	0.63	49.85	1	0.38	7.37	12	4.53	360.56
31	0.696	7.45	356	101	<0.10	0.000	0.000	<0.10	<0.10	40.0	18.59	485.35	13.59	6.32	225.83	2.49	1.16	51.01	1	0.47	7.83	14	6.51	367.07
32	0.698	7.42	360	90.8	<0.10	0.000	0.000	<0.10	<0.10	30.0	13.98	499.33	9.46	4.41	230.24	2.20	1.03	52.04	0	0.00	7.83	16	7.46	374.53
33	0.597	7.27	347	78.6	<0.10	0.000	0.000	<0.10	<0.10	18.0	7.18	506.51	7.78	3.10	233.34	1.50	0.60	52.64	0	0.00	7.83	15	5.98	380.51
34	0.669	7.69	286	84.2	<0.10	0.000	0.000	<0.10	<0.10	24.0	10.72	517.23	8.33	3.72	237.06	2.18	0.97	53.61	1	0.45	8.28	18	8.04	388.55
35	0.646	7.34	345	75.7	<0.10	0.000	0.000	<0.10	<0.10	17.0	7.33	524.56	7.55	3.26	240.32	1.74	0.75	54.36	1	0.43	8.71	15	6.47	395.02
36	0.666	7.44	345	75.2	<0.10	0.000	0.000	<0.10	<0.10	21.0	9.34	533.90	9.41	4.19	244.51	2.19	0.97	55.33	2	0.89	9.60	15	6.67	401.69
37	0.664	7.38	323	80.0	<0.10	0.000	0.000	<0.10	<0.10	21.0	9.31	543.21	10.20	4.52	249.03	2.19	0.97	56.30	0	0.00	9.60	16	7.09	408.78
38	0.714	7.22	300	79.7	<0.10	0.000	0.000	<0.10	<0.10	17.0	8.11	551.32	9.17	4.37	253.40	2.09	1.00	57.30	0	0.00	9.60	16	7.63	416.41
39	0.732	7.25	267	94.0	<0.10	0.000	0.000	<0.10	<0.10	21.0	10.27	561.59	11.26	5.50	258.90	2.73	1.33	58.63	0	0.00	9.60	21	10.27	426.68
40	0.699	7.33	345	82.4	<0.10	0.000	0.000	<0.10	<0.10	19.0	8.87	570.46	8.41	3.93	262.83	1.93	0.90	59.53	0	0.00	9.60	16	7.47	434.15
41	0.719	7.57	374	102	<0.10	0.000	0.000	<0.10	<0.10	15.0	7.20	577.66	10.00	4.80	267.63	2.32	1.11	60.64	0	0.00	9.60	22	10.56	444.71
42	0.693	7.31	368	96.5	<0.10	0.000	0.000	<0.10	<0.10	15.0	6.94	584.60	9.78	4.53	272.16	2.11	0.98	61.62	3	1.39	10.99	19	8.79	453.50
43	0.728	7.83	319	97.5	<0.10	0.000	0.000	<0.10	<0.10	14.0	6.81	591.41	10.64	5.17	277.33	2.42	1.18	62.80	0	0.00	10.99	28	13.61	467.11
44	0.684	7.83	367	83.6	<0.10	0.000	0.000	<0.10	<0.10	13.0	5.94	597.35	8.48	3.87	281.20	2.10	0.96	63.76	0	0.00	10.99	21	9.59	476.70
45	0.678	7.80	376	72.9	<0.10	0.000	0.000	<0.10	<0.10	14.0	6.34	603.69	7.51	3.40	284.60	1.89	0.86	64.62	0	0.00	10.99	20	9.06	485.76

Table 3 . - Humidity Cell Analytical Results, MGI-10-23 (135-151) (1.4974 Kg)

	Vol.	Effluent	Redox, mV	Conductivity	Total Fe			Fe^{2}+	Fe^{3}+	SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	L	pH	(vs Ag/AgCI)	µS/cm	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
46	0.652	7.57	352	67.6	<0.10	0.000	0.000	<0.10	<0.10	9.0	3.92	607.61	7.34	3.20	287.80	1.90	0.83	65.45	0	0.00	10.99	17	7.40	493.16
47	0.692	7.31	370	84.7	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.62	612.23	10.27	4.75	292.55	2.51	1.16	66.61	0	0.00	10.99	22	10.17	503.33
48	0.642	7.58	340	67.1	<0.10	0.000	0.000	<0.10	<0.10	9.0	3.86	616.09	8.97	3.85	296.40	2.00	0.86	67.47	0	0.00	10.99	18	7.72	511.05
49	0.771	7.76	320	69.4	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.60	619.69	8.03	4.13	300.53	1.92	0.99	68.46	0	0.00	10.99	22	11.33	522.38
50	0.733	7.34	318	75.1	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.94	622.63	10.12	4.95	305.48	2.38	1.17	69.63	0	0.00	10.99	25	12.24	534.62
51	0.928	7.58	315	72.1	<0.10	0.000	0.000	<0.10	<0.10	8.0	4.96	627.59	9.52	5.90	311.38	2.14	1.33	70.96	0	0.00	10.99	23	14.25	548.87
52	0.676	7.69	340	74.7	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.81	629.40	9.23	4.17	315.55	2.18	0.98	71.94	0	0.00	10.99	26	11.74	560.61
53	0.727	7.52	323	65.7	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.94	631.34	8.49	4.12	319.67	1.95	0.95	72.89	0	0.00	10.99	26	12.62	573.23
54	0.727	7.56	305	71.8	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.88	635.22	9.64	4.68	324.35	2.20	1.07	73.96	0	0.00	10.99	24	11.65	584.88
55	0.723	7.58	281	69.2	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.38	638.60	9.00	4.35	328.70	2.02	0.98	74.94	0	0.00	10.99	24	11.59	596.47
56	0.675	7.36	285	56.2	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.70	641.30	7.36	3.32	332.02	1.69	0.76	75.70	0	0.00	10.99	18	8.11	604.58
57	0.690	7.39	312	62.3	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.30	643.60	7.14	3.29	335.31	1.85	0.85	76.55	0	0.00	10.99	24	11.06	615.64
58	0.713	7.72	315	72.9	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.86	646.46	9.33	4.44	339.75	2.10	1.00	77.55	0	0.00	10.99	27	12.86	628.50
59	0.685	7.42	312	69.3	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.74	649.20	9.93	4.54	344.29	2.13	0.97	78.52	0	0.00	10.99	26	11.89	640.39
60	0.729	7.63	312	69.6	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.43	651.63	8.18	3.98	348.27	2.20	1.07	79.59	0	0.00	10.99	26	12.66	653.05
61	0.765	7.45	306	64.0	<0.10	0.000	0.000	<0.10	<0.10	6.0	3.07	654.70	7.85	4.01	352.28	1.82	0.93	80.52	0	0.00	10.99	22	11.24	664.29
62	0.685	7.46	313	68.9	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.66	658.36	8.68	3.97	356.25	2.15	0.98	81.50	0	0.00	10.99	24	10.98	675.27
63	0.686	7.63	323	71.5	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.75	661.11	9.38	4.30	360.55	2.21	1.01	82.51	0	0.00	10.99	25	11.45	686.72
64	0.700	7.47	310	68.6	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.80	663.91	8.76	4.10	364.65	2.13	1.00	83.51	0	0.00	10.99	23	10.75	697.47
65	0.718	7.47	285	75.9	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.36	667.27	10.09	4.84	369.49	2.44	1.17	84.68	0	0.00	10.99	25	11.99	709.46
66	0.753	7.21	244	72.7	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.52	670.79	9.88	4.97	374.46	2.19	1.10	85.78	0	0.00	10.99	23	11.57	721.03
67	0.717	7.18	356	72.8	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.87	673.66	9.36	4.48	378.94	2.16	1.03	86.81	0	0.00	10.99	26	12.45	733.48
68	0.674	7.39	311	70.7	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.15	676.81	9.64	4.34	383.28	2.27	1.02	87.83	0	0.00	10.99	23	10.35	743.83
69	0.659	7.51	300	64.0	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.40	681.21	8.32	3.66	386.94	1.81	0.80	88.63	0	0.00	10.99	21	9.24	753.07
70	0.660	7.42	287	80.9	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.41	685.62	10.00	4.41	391.35	2.31	1.02	89.65	0	0.00	10.99	26	11.46	764.53
71	0.634	7.38	204	71.6	<0.10	0.000	0.000	<0.10	<0.10	9.0	3.81	689.43	9.22	3.90	395.25	2.16	0.91	90.56	0	0.00	10.99	23	9.74	774.27
72	0.687	7.24	218	71.9	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.67	693.10	9.18	4.21	399.46	2.45	1.12	91.68	0	0.00	10.99	25	11.47	785.74
73	0.663	7.20	208	71.6	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.10	696.20	9.68	4.29	403.75	2.26	1.00	92.68	0	0.00	10.99	26	11.51	797.25
74	0.706	7.33	193	71.0	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.30	699.50	9.19	4.33	408.08	2.26	1.07	93.75	0	0.00	10.99	26	12.26	809.51
75	0.665	7.21	199	69.8	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.55	703.05	8.58	3.81	411.89	2.07	0.92	94.67	0	0.00	10.99	24	10.66	820.17
76	0.726	7.39	261	74.0	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.36	707.41	9.88	4.79	416.68	2.25	1.09	95.76	0	0.00	10.99	26	12.61	832.78
77	0.596	7.20	212	72.4	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.18	710.59	8.87	3.53	420.21	2.20	0.88	96.64	0	0.00	10.99	23	9.15	841.93
78	0.789	7.39	198	73.0	<0.10	0.000	0.000	<0.10	<0.10	8.0	4.22	714.81	9.53	5.02	425.23	2.42	1.28	97.92	0	0.00	10.99	26	13.70	855.63
79	0.655	7.18	229	64.5	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.06	717.87	8.04	3.52	428.75	1.94	0.85	98.77	0	0.00	10.99	21	9.19	864.82
80	0.573	7.33	232	76.3	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.06	720.93	9.13	3.49	432.24	2.46	0.94	99.71	0	0.00	10.99	23	8.80	873.62
81	0.659	7.24	222	91.8	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.28	726.21	9.73	4.28	436.52	2.70	1.19	100.90	0	0.00	10.99	25	11.00	884.62
82	0.635	7.33	256	72.6	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.66	730.87	8.07	3.42	439.94	2.13	0.90	101.80	0	0.00	10.99	22	9.33	893.95
83	0.650	7.54	311	73.9	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.34	735.21	8.39	3.64	443.58	2.18	0.95	102.75	0	0.00	10.99	23	9.98	903.93
84	0.587	7.53	337	96.3	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.31	739.52	10.71	4.20	447.78	2.77	1.09	103.84	0	0.00	10.99	29	11.37	915.30
85	0.650	7.44	341	71.8	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.34	743.86	8.96	3.89	451.67	2.23	0.97	104.81	0	0.00	10.99	24	10.42	925.72
86	0.590	7.44	340	81.8	<0.10	0.000	0.000	<0.10	<0.10	10.0	3.94	747.80	8.80	3.47	455.14	2.48	0.98	105.79	0	0.00	10.99	26	10.24	935.96
87	0.584	7.58	326	100	<0.10	0.000	0.000	<0.10	<0.10	12.0	4.68	752.48	10.39	4.05	459.19	2.91	1.13	106.92	0	0.00	10.99	31	12.09	948.05
88	0.658	7.49	356	74.7	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.83	757.31	10.17	4.47	463.66	2.43	1.07	107.99	0	0.00	10.99	26	11.43	959.48
89	0.621	7.51	364	81.5	<0.10	0.000	0.000	<0.10	<0.10	12.0	4.98	762.29	9.41	3.90	467.56	2.63	1.09	109.08	0	0.00	10.99	26	10.78	970.26
90	0.676	7.51	377	86.2	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.51	766.80	8.68	3.92	471.48	2.38	1.07	110.15	0	0.00	10.99	28	12.64	982.90

Midas Gold Corp.
MLI Job No. 3654

Table 3 . - Humidity Cell Analytical Results, MGI-10-23 (135-151) (1.4974 Kg)

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	SO_4= mg/l	SO_4= mg/kg	SO_4= Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
91	0.648	7.39	305	70.3	<0.10	0.000	0.000	<0.10	<0.10	13.0	5.63	772.43	7.73	3.35	474.83	2.10	0.91	111.06	0	0.00	10.99	22	9.52	992.42
92	0.613	7.35	368	66.6	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.09	776.52	8.20	3.36	478.19	2.07	0.85	111.91	0	0.00	10.99	22	9.01	1001.43
93	0.606	7.49	350	81.5	<0.10	0.000	0.000	<0.10	<0.10	13.0	5.26	781.78	10.83	4.38	482.57	2.84	1.15	113.06	0	0.00	10.99	25	10.12	1011.55
94	0.618	7.41	332	74.8	<0.10	0.000	0.000	<0.10	<0.10	12.0	4.95	786.73	8.63	3.56	486.13	2.30	0.95	114.01	0	0.00	10.99	24	9.91	1021.46
95	0.615	7.53	351	92.5	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.11	790.84	11.01	4.52	490.65	3.00	1.23	115.24	0	0.00	10.99	28	11.50	1032.96
96	0.726	7.52	370	76.1	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.36	795.20	10.63	5.15	495.80	2.59	1.26	116.50	0	0.00	10.99	27	13.09	1046.05
97	0.721	7.34	341	66.0	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.33	799.53	7.72	3.72	499.52	2.07	1.00	117.50	0	0.00	10.99	22	10.59	1056.64
98	0.635	7.33	356	74.1	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.39	802.92	9.97	4.23	503.75	2.64	1.12	118.62	0	0.00	10.99	26	11.03	1067.67
99	0.592	7.46	369	87.3	<0.10	0.000	0.000	<0.10	<0.10	10.0	3.95	806.87	11.59	4.58	508.33	3.10	1.23	119.85	0	0.00	10.99	29	11.47	1079.14
100	0.653	7.36	352	71.3	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.05	809.92	9.14	3.99	512.32	2.43	1.06	120.91	0	0.00	10.99	26	11.34	1090.48
101	0.581	7.39	342	66.8	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.33	812.25	8.78	3.41	515.73	2.50	0.97	121.88	0	0.00	10.99	24	9.31	1099.79
102	0.697	7.42	359	76.6	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.86	814.11	10.13	4.72	520.45	2.65	1.23	123.11	0	0.00	10.99	30	13.96	1113.75
103	0.702	7.49	344	87.9	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.34	816.45	11.45	5.37	525.82	2.97	1.39	124.50	0	0.00	10.99	32	15.00	1128.75
104	0.709	7.52	347	66.6	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.95	817.40	8.49	4.02	529.84	2.15	1.02	125.52	0	0.00	10.99	26	12.31	1141.06
105	0.634	7.55	339	85.1	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.69	819.09	10.70	4.53	534.37	2.96	1.25	126.77	0	0.00	10.99	33	13.97	1155.03
106	0.731	7.50	313	109	<0.10	0.000	0.000	<0.10	<0.10	5.8	2.83	821.92	12.23	5.97	540.34	3.07	1.50	128.27	0	0.00	10.99	44	21.48	1176.51
107	0.650	7.47	335	74.0	<0.10	0.000	0.000	<0.10	<0.10	4.4	1.91	823.83	9.89	4.29	544.63	2.69	1.17	129.44	0	0.00	10.99	33	14.32	1190.83
108	0.687	7.52	366	72.3	<0.10	0.000	0.000	<0.10	<0.10	5.1	2.34	826.17	9.18	4.21	548.84	2.71	1.24	130.68	0	0.00	10.99	31	14.22	1205.05
109	0.723	7.75	340	81.8	<0.10	0.000	0.000	<0.10	<0.10	6.1	2.95	829.12	11.20	5.41	554.25	2.92	1.41	132.09	0	0.00	10.99	37	17.86	1222.91
110	0.677	7.51	361	87.6	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.71	831.83	11.38	5.15	559.40	2.75	1.24	133.33	0	0.00	10.99	36	16.28	1239.19
111	0.706	7.56	361	90.0	<0.10	0.000	0.000	<0.10	<0.10	5.3	2.50	834.33	11.74	5.54	564.94	2.98	1.41	134.74	0	0.00	10.99	41	19.33	1258.52
112	0.704	7.45	365	80.7	<0.10	0.000	0.000	<0.10	<0.10	4.6	2.16	836.49	8.80	4.14	569.08	2.24	1.05	135.79	0	0.00	10.99	36	16.93	1275.45
113	0.636	7.42	373	70.6	<0.10	0.000	0.000	<0.10	<0.10	4.1	1.74	838.23	8.45	3.59	572.67	2.43	1.03	136.82	0	0.00	10.99	33	14.02	1289.47
114	0.632	7.33	322	94.2	<0.10	0.000	0.000	<0.10	<0.10	4.9	2.07	840.30	9.58	4.04	576.71	2.63	1.11	137.93	0	0.00	10.99	39	16.46	1305.93
115	0.565	7.16	347	95.9	<0.10	0.000	0.000	<0.10	<0.10	4.1	1.55	841.85	12.90	4.87	581.58	3.56	1.34	139.27	0	0.00	10.99	32	12.07	1318.00
116	0.700	7.41	369	71.7	<0.10	0.000	0.000	<0.10	<0.10	4.9	2.29	844.14	9.93	4.64	586.22	2.56	1.20	140.47	0	0.00	10.99	33	15.43	1333.43
117	0.636	7.27	363	68.5	<0.10	0.000	0.000	<0.10	<0.10	5.6	2.38	846.52	7.91	3.36	589.58	2.14	0.91	141.38	0	0.00	10.99	29	12.32	1345.75
118	0.672	7.35	352	69.2	<0.10	0.000	0.000	<0.10	<0.10	7.6	3.41	849.93	8.36	3.75	593.33	2.20	0.99	142.37	0	0.00	10.99	27	12.12	1357.87
119	0.611	7.26	389	59.0	<0.10	0.000	0.000	<0.10	<0.10	5.7	2.33	852.26	7.54	3.08	596.41	2.03	0.83	143.20	0	0.00	10.99	25	10.20	1368.07
120	0.604	7.32	355	52.2	<0.10	0.000	0.000	<0.10	<0.10	6.7	2.70	854.96	6.35	2.56	598.97	1.88	0.76	143.96	0	0.00	10.99	21	8.47	1376.54
121	0.716	7.71	313	68.3	<0.10	0.000	0.000	<0.10	<0.10	6.8	3.25	858.21	8.31	3.97	602.94	2.30	1.10	145.06	0	0.00	10.99	31	14.82	1391.36
122	0.572	7.77	300	61.7	<0.10	0.000	0.000	<0.10	<0.10	7.6	2.90	861.11	7.32	2.80	605.74	2.08	0.79	145.85	0	0.00	10.99	22	8.40	1399.76
123	0.677	7.54	343	82.4	<0.10	0.000	0.000	<0.10	<0.10	7.9	3.57	864.68	10.55	4.77	610.51	2.92	1.32	147.17	0	0.00	10.99	37	16.73	1416.49
124	0.683	7.68	333	71.4	<0.10	0.000	0.000	<0.10	<0.10	7.3	3.33	868.01	9.09	4.15	614.66	2.51	1.14	148.31	0	0.00	10.99	32	14.60	1431.09
125	0.653	7.61	372	67.6	<0.10	0.000	0.000	<0.10	<0.10	7.8	3.40	871.41	7.70	3.36	618.02	2.12	0.92	149.23	0	0.00	10.99	27	11.77	1442.86
126	0.667	7.60	339	72.7	<0.10	0.000	0.000	<0.10	<0.10	7.7	3.43	874.84	8.59	3.83	621.85	2.21	0.98	150.21	0	0.00	10.99	23	10.25	1453.11
127	0.647	7.62	357	77.2	<0.10	0.000	0.000	<0.10	<0.10	8.4	3.63	878.47	10.38	4.49	626.34	2.63	1.14	151.35	0	0.00	10.99	34	14.69	1467.80
128	0.736	7.63	362	75.0	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.44	881.91	8.18	4.02	630.36	2.51	1.23	152.58	0	0.00	10.99	34	16.71	1484.51
129	0.601	7.66	363	73.6	<0.10	0.000	0.000	<0.10	<0.10	7.9	3.17	885.08	10.07	4.04	634.40	2.49	1.00	153.58	0	0.00	10.99	30	12.04	1496.55
130	0.549	7.79	332	110	<0.10	0.000	0.000	<0.10	<0.10	20	7.33	892.41	13.72	5.03	639.43	4.30	1.58	155.16	0	0.00	10.99	27	9.90	1506.45
131	0.661	7.64	360	64.8	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.21	894.62	8.32	3.67	643.10	2.43	1.07	156.23	0	0.00	10.99	30	13.24	1519.69
132	0.647	7.66	349	65.9	<0.10	0.000	0.000	<0.10	<0.10	5.3	2.29	896.91	7.74	3.34	646.44	2.44	1.05	157.28	0	0.00	10.99	30	12.96	1532.65
133	0.668	7.76	305	64.3	<0.10	0.000	0.000	<0.10	<0.10	5.9	2.63	899.54	7.72	3.44	649.88	2.44	1.09	158.37	0	0.00	10.99	24	10.71	1543.36
134	0.631	7.83	309	63.1	<0.10	0.000	0.000	<0.10	<0.10	6.2	2.61	902.15	7.68	3.24	653.12	2.09	0.88	159.25	0	0.00	10.99	22	9.27	1552.63
135	0.690	7.72	248	68.6	<0.10	0.000	0.000	<0.10	<0.10	5.9	2.72	904.87	8.65	3.99	657.11	2.35	1.08	160.33	0	0.00	10.99	27	12.44	1565.07

Midas Gold Corp.
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Table 3 . - Humidity Cell Analytical Results, MGI-10-23 (135-151) **(1.4974 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
136	0.712	7.73	289	67.8	<0.10	0.000	0.000	<0.10	<0.10	5.5	2.62	907.49	8.55	4.07	661.18	2.25	1.07	161.40	0	0.00	10.99	28	13.31	1578.38
137	0.685	7.81	245	65.5	<0.10	0.000	0.000	<0.10	<0.10	6.2	2.84	910.33	8.32	3.81	664.99	2.14	0.98	162.38	0	0.00	10.99	28	12.81	1591.19
138	0.714	7.79	255	65.8	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.86	913.19	8.99	4.29	669.28	2.25	1.07	163.45	0	0.00	10.99	34	16.21	1607.40
139	0.702	7.77	281	68.8	<0.10	0.000	0.000	<0.10	<0.10	5.9	2.77	915.96	7.46	3.50	672.78	1.94	0.91	164.36	0	0.00	10.99	28	13.13	1620.53
140	0.703	7.84	251	71.7	<0.10	0.000	0.000	<0.10	<0.10	5.8	2.72	918.68	8.42	3.95	676.73	2.38	1.12	165.48	0	0.00	10.99	27	12.68	1633.21
141	0.710	7.80	256	69.1	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.79	922.47	8.66	4.11	680.84	2.30	1.09	166.57	0	0.00	10.99	24	11.38	1644.59
142	0.644	7.82	208	71.9	<0.10	0.000	0.000	<0.10	<0.10	7.4	3.18	925.65	8.84	3.80	684.64	2.45	1.05	167.62	0	0.00	10.99	26	11.18	1655.77
143	0.627	7.88	246	67.4	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.19	929.84	8.70	3.64	688.28	2.63	1.10	168.72	0	0.00	10.99	25	10.47	1666.24
144	0.729	7.78	242	69.7	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.87	934.71	8.51	4.14	692.42	2.61	1.27	169.99	0	0.00	10.99	25	12.17	1678.41

Testing terminated

Figure 3a.- Weekly Humidity Cell Analytical Results

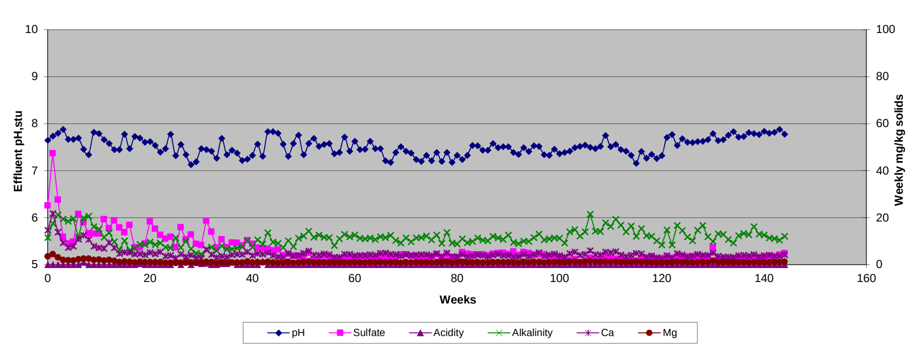

Figure 3b.- Cumulative Humidity Cell Analytical Results

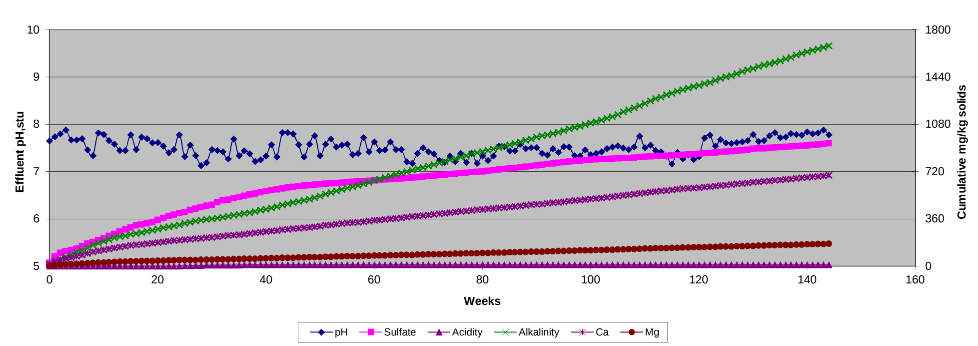

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Table 4 . - Humidity Cell Analytical Results, MGI-10-36 (220-256) **(1.5044 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
0	0.769	8.53	170	215	<0.10	0.000	0.000	<0.10	<0.10	25.0	12.78	12.78	15.90	8.13	8.13	13.40	6.85	6.85	0	0.00	0.00	40	20.45	20.45
1	0.709	8.10	239	285	<0.10	0.000	0.000	<0.10	<0.10	67.0	31.58	44.36	19.36	9.12	17.25	17.40	8.20	15.05	0	0.00	0.00	40	18.85	39.30
2	0.753	8.26	236	284	<0.10	0.000	0.000	<0.10	<0.10	71.0	35.54	79.90	17.73	8.87	26.12	19.30	9.66	24.71	0	0.00	0.00	51	25.53	64.83
3	0.707	8.53	238	151	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.41	81.31	10.88	5.11	31.23	10.39	4.88	29.59	0	0.00	0.00	46	21.62	86.45
4	0.740	8.24	259	135	<0.10	0.000	0.000	<0.10	<0.10	15.0	7.38	88.69	10.06	4.95	36.18	9.41	4.63	34.22	0	0.00	0.00	50	24.59	111.04
5	0.736	8.10	245	122	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.91	92.60	9.74	4.77	40.95	8.27	4.05	38.27	0	0.00	0.00	46	22.50	133.54
6	0.619	8.72	255	86.1	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.06	94.66	7.49	3.08	44.03	5.99	2.46	40.73	0	0.00	0.00	36	14.81	148.35
7	0.757	8.11	255	125	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.52	97.18	13.53	6.81	50.84	8.46	4.26	44.99	0	0.00	0.00	56	28.18	176.53
8	0.726	7.85	209	141	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.93	99.11	15.45	7.46	58.30	9.64	4.65	49.64	0	0.00	0.00	64	30.89	207.42
9	0.709	8.47	156	96.2	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.36	101.47	7.74	3.65	61.95	6.80	3.20	52.84	0	0.00	0.00	39	18.38	225.80
10	0.723	8.31	207	106	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.84	105.31	8.37	4.02	65.97	8.21	3.95	56.79	0	0.00	0.00	44	21.15	246.95
11	0.680	8.70	177	82.9	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.36	106.67	5.85	2.64	68.61	4.93	2.23	59.02	0	0.00	0.00	35	15.82	262.77
12	0.705	8.12	140	87.0	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.87	108.54	8.70	4.08	72.69	6.00	2.81	61.83	0	0.00	0.00	37	17.34	280.11
13	0.670	8.18	229	89.0	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.23	110.77	6.50	2.89	75.58	4.80	2.14	63.97	0	0.00	0.00	37	16.48	296.59
14	0.623	8.33	184	83.2	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.31	114.08	5.79	2.40	77.98	4.77	1.98	65.95	0	0.00	0.00	35	14.49	311.08
15	0.569	8.80	146	112	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.76	114.84	7.13	2.70	80.68	6.52	2.47	68.42	0	0.00	0.00	45	17.02	328.10
16	0.606	8.68	186	91.9	<0.10	0.000	0.000	<0.10	<0.10	7.0	2.82	117.66	5.97	2.40	83.08	5.28	2.13	70.55	0	0.00	0.00	35	14.10	342.20
17	0.594	8.70	179	90.5	<0.10	0.000	0.000	<0.10	<0.10	5.0	1.97	119.63	6.40	2.53	85.61	4.59	1.81	72.36	0	0.00	0.00	33	13.03	355.23
18	0.633	8.40	185	97.5	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.26	120.89	6.42	2.70	88.31	5.73	2.41	74.77	0	0.00	0.00	38	15.99	371.22
19	0.653	8.60	182	89.2	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.43	121.32	6.12	2.66	90.97	4.92	2.14	76.91	0	0.00	0.00	37	16.06	387.28
20	0.724	8.33	195	104	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.93	123.25	7.72	3.72	94.69	4.65	2.24	79.15	0	0.00	0.00	40	19.25	406.53
21	0.648	8.31	228	85.3	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.72	124.97	6.58	2.83	97.52	4.35	1.87	81.02	0	0.00	0.00	38	16.37	422.90
22	0.646	8.15	209	73.7	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.72	126.69	6.10	2.62	100.14	3.72	1.60	82.62	0	0.00	0.00	32	13.74	436.64
23	0.641	8.20	243	79.3	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.28	127.97	5.84	2.49	102.63	3.90	1.66	84.28	0	0.00	0.00	31	13.21	449.85
24	0.644	8.47	211	74.4	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.43	128.40	5.81	2.49	105.12	3.79	1.62	85.90	0	0.00	0.00	33	14.13	463.98
25	0.576	7.93	236	82.2	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.77	129.17	5.72	2.19	107.31	3.84	1.47	87.37	0	0.00	0.00	36	13.78	477.76
26	0.672	8.13	230	82.2	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.91	134.08	5.88	2.63	109.94	3.61	1.61	88.98	0	0.00	0.00	34	15.19	492.95
27	0.596	8.11	253	78.9	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.38	136.46	5.09	2.02	111.96	4.40	1.74	90.72	0	0.00	0.00	29	11.49	504.44
28	0.652	7.72	310	71.9	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.30	137.76	5.71	2.47	114.43	3.43	1.49	92.21	0	0.00	0.00	29	12.57	517.01
29	0.590	8.22	287	82.3	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.14	140.90	6.22	2.44	116.87	3.82	1.50	93.71	0	0.00	0.00	28	10.98	527.99
30	0.625	8.21	243	87.3	<0.10	0.000	0.000	<0.10	<0.10	13.0	5.40	146.30	5.34	2.22	119.09	4.07	1.69	95.40	0	0.00	0.00	26	10.80	538.79
31	0.710	7.15	363	92.2	<0.10	0.000	0.000	<0.10	<0.10	22.0	10.38	156.68	9.58	4.52	123.61	4.40	2.08	97.48	0	0.00	0.00	27	12.74	551.53
32	0.746	7.44	366	88.8	<0.10	0.000	0.000	<0.10	<0.10	13.0	6.45	163.13	8.05	3.99	127.60	4.36	2.16	99.64	0	0.00	0.00	34	16.86	568.39
33	0.604	7.34	357	70.7	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.80	163.93	5.64	2.26	129.86	3.90	1.57	101.21	0	0.00	0.00	28	11.24	579.63
34	0.609	8.16	273	68.3	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.43	166.36	5.56	2.25	132.11	3.56	1.44	102.65	0	0.00	0.00	31	12.55	592.18
35	0.607	7.99	333	76.9	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.42	168.78	6.34	2.56	134.67	3.78	1.53	104.18	0	0.00	0.00	29	11.70	603.88
36	0.617	8.43	292	74.5	<0.10	0.000	0.000	<0.10	<0.10	7.0	2.87	171.65	7.93	3.25	137.92	4.82	1.98	106.16	0	0.00	0.00	28	11.48	615.36
37	0.610	7.94	312	71.9	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.03	173.68	7.00	2.84	140.76	4.13	1.67	107.83	0	0.00	0.00	28	11.35	626.71
38	0.655	7.75	297	66.8	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.74	175.42	6.06	2.64	143.40	3.41	1.48	109.31	0	0.00	0.00	27	11.76	638.47
39	0.665	7.64	283	77.5	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.65	178.07	7.09	3.13	146.53	4.37	1.93	111.24	0	0.00	0.00	31	13.70	652.17
40	0.637	7.75	331	70.6	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.69	179.76	6.02	2.55	149.08	3.17	1.34	112.58	0	0.00	0.00	27	11.43	663.60
41	0.667	7.93	357	81.1	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.33	181.09	6.37	2.82	151.90	3.34	1.48	114.06	0	0.00	0.00	30	13.30	676.90
42	0.707	7.80	351	82.6	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.41	182.50	6.27	2.95	154.85	3.62	1.70	115.76	0	0.00	0.00	29	13.63	690.53
43	0.703	8.43	289	89.4	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.40	183.90	8.24	3.85	158.70	4.15	1.94	117.70	0	0.00	0.00	41	19.16	709.69
44	0.646	8.55	334	77.3	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.29	185.19	6.20	2.66	161.36	3.74	1.61	119.31	0	0.00	0.00	34	14.60	724.29
45	0.633	8.31	342	75.7	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.68	186.87	6.75	2.84	164.20	3.68	1.55	120.86	0	0.00	0.00	33	13.89	738.18

Midas Gold Corp.
MLI Job No. 3654

Table 4 . - Humidity Cell Analytical Results, MGI-10-36 (220-256) **(1.5044 Kg)**

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	SO_4= mg/l	SO_4= mg/kg	SO_4= Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
46	0.610	8.49	282	71.5	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.22	188.09	6.20	2.51	166.71	4.00	1.62	122.48	0	0.00	0.00	30	12.16	750.34
47	0.645	8.26	301	80.2	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.86	188.95	9.17	3.93	170.64	4.23	1.81	124.29	0	0.00	0.00	36	15.43	765.77
48	0.591	8.29	295	65.0	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.79	189.74	7.03	2.76	173.40	3.75	1.47	125.76	0	0.00	0.00	27	10.61	776.38
49	0.671	8.37	292	71.0	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.89	190.63	6.70	2.99	176.39	3.69	1.65	127.41	0	0.00	0.00	32	14.27	790.65
50	0.647	7.86	297	67.6	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.43	191.06	7.45	3.20	179.59	3.58	1.54	128.95	0	0.00	0.00	30	12.90	803.55
51	0.627	8.12	307	65.6	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.83	191.89	7.36	3.07	182.66	3.49	1.45	130.40	0	0.00	0.00	29	12.09	815.64
52	0.623	8.32	306	77.8	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.41	192.30	7.68	3.18	185.84	4.19	1.74	132.14	0	0.00	0.00	35	14.49	830.13
53	0.654	7.94	291	79.6	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.43	192.73	8.35	3.63	189.47	4.16	1.81	133.95	0	0.00	0.00	38	16.52	846.65
54	0.683	8.03	286	74.1	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.45	193.18	8.38	3.80	193.27	3.89	1.77	135.72	0	0.00	0.00	33	14.98	861.63
55	0.651	7.92	267	73.5	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.43	193.61	7.79	3.37	196.64	3.77	1.63	137.35	0	0.00	0.00	33	14.28	875.91
56	0.611	7.95	265	74.6	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.41	194.02	7.82	3.18	199.82	4.00	1.62	138.97	0	0.00	0.00	33	13.40	889.31
57	0.656	7.76	283	67.1	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.87	194.89	6.67	2.91	202.73	3.22	1.40	140.37	0	0.00	0.00	33	14.39	903.70
58	0.739	8.46	284	80.4	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	195.38	8.62	4.23	206.96	3.88	1.91	142.28	0	0.00	0.00	37	18.18	921.88
59	0.642	7.74	271	69.6	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.43	195.81	7.69	3.28	210.24	3.51	1.50	143.78	0	0.00	0.00	33	14.08	935.96
60	0.656	7.71	279	65.6	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.87	196.68	7.37	3.21	213.45	3.61	1.57	145.35	0	0.00	0.00	32	13.95	949.91
61	0.688	7.53	283	58.1	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	196.68	6.48	2.96	216.41	2.75	1.26	146.61	0	0.00	0.00	27	12.35	962.26
62	0.620	7.71	282	64.3	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.24	197.92	7.27	3.00	219.41	3.55	1.46	148.07	0	0.00	0.00	29	11.95	974.21
63	0.605	7.94	287	62.2	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.21	199.13	6.61	2.66	222.07	3.52	1.42	149.49	0	0.00	0.00	27	10.86	985.07
64	0.732	7.65	286	80.5	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.46	200.59	9.00	4.38	226.45	4.04	1.97	151.46	0	0.00	0.00	33	16.06	1001.13
65	0.714	7.38	263	73.4	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.95	201.54	8.01	3.80	230.25	3.67	1.74	153.20	0	0.00	0.00	32	15.19	1016.32
66	0.607	7.42	224	59.5	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.21	202.75	6.75	2.72	232.97	2.92	1.18	154.38	0	0.00	0.00	26	10.49	1026.81
67	0.621	7.80	314	61.4	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.83	203.58	6.47	2.67	235.64	3.04	1.25	155.63	0	0.00	0.00	27	11.15	1037.96
68	0.648	7.42	283	62.5	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.86	204.44	7.11	3.06	238.70	3.55	1.53	157.16	0	0.00	0.00	27	11.63	1049.59
69	0.588	7.47	272	68.2	<0.10	0.000	0.000	<0.10	<0.10	5.0	1.95	206.39	7.35	2.87	241.57	3.36	1.31	158.47	0	0.00	0.00	27	10.55	1060.14
70	0.614	7.15	272	78.5	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.08	210.47	7.73	3.15	244.72	4.05	1.65	160.12	0	0.00	0.00	25	10.20	1070.34
71	0.607	7.17	199	69.0	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.42	212.89	6.83	2.76	247.48	3.47	1.40	161.52	0	0.00	0.00	24	9.68	1080.02
72	0.647	7.45	217	65.0	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.58	215.47	6.76	2.91	250.39	3.64	1.57	163.09	0	0.00	0.00	27	11.61	1091.63
73	0.610	7.35	208	63.2	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.81	216.28	6.62	2.68	253.07	3.53	1.43	164.52	0	0.00	0.00	27	10.95	1102.58
74	0.611	7.43	201	58.8	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.06	220.34	6.66	2.70	255.77	3.35	1.36	165.88	0	0.00	0.00	26	10.56	1113.14
75	0.605	7.34	188	68.0	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.61	221.95	6.49	2.61	258.38	3.70	1.49	167.37	0	0.00	0.00	28	11.26	1124.40
76	0.641	7.32	243	68.9	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.13	224.08	6.94	2.96	261.34	3.80	1.62	168.99	0	0.00	0.00	29	12.36	1136.76
77	0.726	7.48	216	70.5	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.48	224.56	7.47	3.60	264.94	3.49	1.68	170.67	0	0.00	0.00	30	14.48	1151.24
78	0.598	7.69	215	74.2	<0.10	0.000	0.000	<0.10	<0.10	5.0	1.99	226.55	7.85	3.12	268.06	3.85	1.53	172.20	0	0.00	0.00	29	11.53	1162.77
79	0.591	7.28	206	64.6	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.36	228.91	6.46	2.54	270.60	3.31	1.30	173.50	0	0.00	0.00	23	9.04	1171.81
80	0.592	7.43	221	75.7	<0.10	0.000	0.000	<0.10	<0.10	9.0	3.54	232.45	7.19	2.83	273.43	3.90	1.53	175.03	0	0.00	0.00	23	9.05	1180.86
81	0.580	7.36	213	82.0	<0.10	0.000	0.000	<0.10	<0.10	9.0	3.47	235.92	7.26	2.80	276.23	4.46	1.72	176.75	0	0.00	0.00	25	9.64	1190.50
82	0.591	7.52	248	80.7	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.32	240.24	7.33	2.88	279.11	4.14	1.63	178.38	0	0.00	0.00	25	9.82	1200.32
83	0.587	7.71	284	80.9	<0.10	0.000	0.000	<0.10	<0.10	13.0	5.07	245.31	7.34	2.86	281.97	4.01	1.56	179.94	0	0.00	0.00	25	9.75	1210.07
84	0.589	7.56	294	77.2	<0.10	0.000	0.000	<0.10	<0.10	12.0	4.70	250.01	7.57	2.96	284.93	3.82	1.50	181.44	0	0.00	0.00	24	9.40	1219.47
85	0.506	7.78	255	95.5	<0.10	0.000	0.000	<0.10	<0.10	16.0	5.38	255.39	9.54	3.21	288.14	5.49	1.85	183.29	0	0.00	0.00	32	10.76	1230.23
86	0.591	7.51	292	78.5	0.12	0.047	0.047	<0.10	<0.12	9.0	3.54	258.93	7.61	2.99	291.13	4.27	1.68	184.97	0	0.00	0.00	27	10.61	1240.84
87	0.586	7.68	300	75.3	<0.10	0.000	0.047	<0.10	<0.10	9.0	3.51	262.44	7.39	2.88	294.01	3.90	1.52	186.49	0	0.00	0.00	27	10.52	1251.36
88	0.588	7.48	301	78.5	<0.10	0.000	0.047	<0.10	<0.10	11.0	4.30	266.74	8.88	3.47	297.48	4.48	1.75	188.24	0	0.00	0.00	26	10.16	1261.52
89	0.591	7.65	327	72.3	<0.10	0.000	0.047	<0.10	<0.10	12.0	4.71	271.45	7.15	2.81	300.29	4.08	1.60	189.84	0	0.00	0.00	24	9.43	1270.95
90	0.585	7.42	345	75.6	<0.10	0.000	0.047	<0.10	<0.10	10.0	3.89	275.34	6.81	2.65	302.94	3.59	1.40	191.24	0	0.00	0.00	25	9.72	1280.67

Table 4 . - Humidity Cell Analytical Results, MGI-10-36 (220-256) (1.5044 Kg)

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	SO_4= mg/l	SO_4= mg/kg	SO_4= Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
91	0.587	7.59	291	75.1	<0.10	0.000	0.047	<0.10	<0.10	12.0	4.68	280.02	6.67	2.60	305.54	3.67	1.43	192.67	0	0.00	0.00	24	9.36	1290.03
92	0.588	7.48	312	79.1	<0.10	0.000	0.047	<0.10	<0.10	10.0	3.91	283.93	8.02	3.13	308.67	4.02	1.57	194.24	0	0.00	0.00	27	10.55	1300.58
93	0.612	7.62	322	76.8	<0.10	0.000	0.047	<0.10	<0.10	11.0	4.47	288.40	7.78	3.16	311.83	4.40	1.79	196.03	0	0.00	0.00	25	10.17	1310.75
94	0.590	7.54	306	71.6	<0.10	0.000	0.047	<0.10	<0.10	8.0	3.14	291.54	6.80	2.67	314.50	3.49	1.37	197.40	0	0.00	0.00	26	10.20	1320.95
95	0.588	7.61	325	84.5	<0.10	0.000	0.047	<0.10	<0.10	12.0	4.69	296.23	8.56	3.35	317.85	4.84	1.89	199.29	0	0.00	0.00	29	11.33	1332.28
96	0.653	7.46	354	75.7	<0.10	0.000	0.047	<0.10	<0.10	10.0	4.34	300.57	8.37	3.63	321.48	4.44	1.93	201.22	0	0.00	0.00	27	11.72	1344.00
97	0.594	7.45	328	72.0	<0.10	0.000	0.047	<0.10	<0.10	7.0	2.76	303.33	7.27	2.87	324.35	4.17	1.65	202.87	0	0.00	0.00	28	11.06	1355.06
98	0.593	7.51	333	100	<0.10	0.000	0.047	<0.10	<0.10	7.0	2.76	306.09	10.78	4.25	328.60	5.48	2.16	205.03	0	0.00	0.00	39	15.37	1370.43
99	0.599	7.54	341	99.3	<0.10	0.000	0.047	<0.10	<0.10	7.0	2.79	308.88	11.53	4.59	333.19	5.76	2.29	207.32	0	0.00	0.00	39	15.53	1385.96
100	0.598	7.47	320	92.5	<0.10	0.000	0.047	<0.10	<0.10	6.0	2.39	311.27	10.30	4.09	337.28	4.73	1.88	209.20	0	0.00	0.00	36	14.31	1400.27
101	0.591	7.53	316	92.6	<0.10	0.000	0.047	<0.10	<0.10	5.0	1.96	313.23	10.77	4.23	341.51	4.86	1.91	211.11	0	0.00	0.00	35	13.75	1414.02
102	0.602	7.66	304	84.3	<0.10	0.000	0.047	<0.10	<0.10	5.0	2.00	315.23	9.24	3.70	345.21	4.30	1.72	212.83	0	0.00	0.00	34	13.61	1427.63
103	0.599	7.79	292	81.1	<0.10	0.000	0.047	<0.10	<0.10	2.0	0.80	316.03	9.22	3.67	348.88	4.15	1.65	214.48	0	0.00	0.00	33	13.14	1440.77
104	0.640	7.67	310	76.9	<0.10	0.000	0.047	<0.10	<0.10	3.0	1.28	317.31	8.16	3.47	352.35	4.05	1.72	216.20	0	0.00	0.00	31	13.19	1453.96
105	0.737	7.85	323	81.7	<0.10	0.000	0.047	<0.10	<0.10	3.0	1.47	318.78	9.70	4.75	357.10	4.06	1.99	218.19	0	0.00	0.00	37	18.13	1472.09
106	0.611	7.46	282	64.3	<0.10	0.000	0.047	<0.10	<0.10	2.6	1.06	319.84	7.39	3.00	360.10	3.35	1.36	219.55	0	0.00	0.00	31	12.59	1484.68
107	0.601	7.60	300	63.8	<0.10	0.000	0.047	<0.10	<0.10	2.8	1.12	320.96	6.89	2.75	362.85	3.32	1.33	220.88	0	0.00	0.00	32	12.78	1497.46
108	0.658	7.64	316	70.4	<0.10	0.000	0.047	<0.10	<0.10	3.0	1.31	322.27	7.56	3.31	366.16	3.55	1.55	222.43	0	0.00	0.00	33	14.43	1511.89
109	0.719	7.89	323	73.0	<0.10	0.000	0.047	<0.10	<0.10	2.8	1.34	323.61	9.00	4.30	370.46	3.76	1.80	224.23	0	0.00	0.00	39	18.64	1530.53
110	0.614	7.87	321	65.4	<0.10	0.000	0.047	<0.10	<0.10	2.5	1.02	324.63	7.28	2.97	373.43	3.49	1.42	225.65	0	0.00	0.00	31	12.65	1543.18
111	0.678	7.81	331	76.6	<0.10	0.000	0.047	<0.10	<0.10	2.7	1.22	325.85	8.98	4.05	377.48	3.83	1.73	227.38	0	0.00	0.00	39	17.58	1560.76
112	0.620	7.58	319	76.7	<0.10	0.000	0.047	<0.10	<0.10	2.5	1.03	326.88	7.50	3.09	380.57	3.18	1.31	228.69	0	0.00	0.00	39	16.07	1576.83
113	0.588	7.72	310	67.8	<0.10	0.000	0.047	<0.10	<0.10	2.3	0.90	327.78	7.74	3.03	383.60	3.26	1.27	229.96	0	0.00	0.00	36	14.07	1590.90
114	0.647	7.51	276	81.2	<0.10	0.000	0.047	<0.10	<0.10	3.3	1.42	329.20	9.17	3.94	387.54	4.11	1.77	231.73	0	0.00	0.00	42	18.06	1608.96
115	0.605	7.25	344	116	<0.10	0.000	0.047	<0.10	<0.10	2.6	1.05	330.25	14.40	5.79	393.33	5.54	2.23	233.96	0	0.00	0.00	44	17.69	1626.65
116	0.593	7.59	303	59.0	<0.10	0.000	0.047	<0.10	<0.10	2.5	0.99	331.24	7.15	2.82	396.15	3.28	1.29	235.25	0	0.00	0.00	32	12.61	1639.26
117	0.611	7.37	302	60.1	<0.10	0.000	0.047	<0.10	<0.10	3.4	1.38	332.62	6.30	2.56	398.71	2.74	1.11	236.36	0	0.00	0.00	30	12.18	1651.44
118	0.665	7.37	320	60.3	<0.10	0.000	0.047	<0.10	<0.10	3.1	1.37	333.99	7.02	3.10	401.81	2.87	1.27	237.63	0	0.00	0.00	33	14.59	1666.03
119	0.650	7.47	325	55.2	<0.10	0.000	0.047	<0.10	<0.10	2.6	1.12	335.11	6.52	2.82	404.63	2.61	1.13	238.76	0	0.00	0.00	29	12.53	1678.56
120	0.594	7.69	267	54.8	<0.10	0.000	0.047	<0.10	<0.10	2.6	1.03	336.14	6.46	2.55	407.18	2.89	1.14	239.90	0	0.00	0.00	30	11.85	1690.41
121	0.686	7.90	280	60.8	<0.10	0.000	0.047	<0.10	<0.10	3.2	1.46	337.60	6.57	3.00	410.18	2.82	1.29	241.19	0	0.00	0.00	35	15.96	1706.37
122	0.593	7.95	269	55.5	<0.10	0.000	0.047	<0.10	<0.10	2.8	1.10	338.70	5.82	2.29	412.47	2.69	1.06	242.25	0	0.00	0.00	29	11.43	1717.80
123	0.599	7.47	282	52.3	<0.10	0.000	0.047	<0.10	<0.10	3.0	1.19	339.89	5.91	2.35	414.82	2.67	1.06	243.31	0	0.00	0.00	29	11.55	1729.35
124	0.600	7.82	292	59.6	<0.10	0.000	0.047	<0.10	<0.10	3.4	1.36	341.25	6.05	2.41	417.23	3.00	1.20	244.51	0	0.00	0.00	32	12.76	1742.11
125	0.587	7.99	274	70.9	<0.10	0.000	0.047	<0.10	<0.10	3.5	1.37	342.62	7.03	2.74	419.97	3.71	1.45	245.96	0	0.00	0.00	37	14.44	1756.55
126	0.576	7.85	273	59.0	<0.10	0.000	0.047	<0.10	<0.10	3.3	1.26	343.88	6.11	2.34	422.31	2.71	1.04	247.00	0	0.00	0.00	25	9.57	1766.12
127	0.608	7.73	315	59.9	<0.10	0.000	0.047	<0.10	<0.10	4.8	1.94	345.82	6.58	2.66	424.97	3.13	1.26	248.26	0	0.00	0.00	32	12.93	1779.05
128	0.663	7.87	298	60.2	<0.10	0.000	0.047	<0.10	<0.10	3.4	1.50	347.32	6.13	2.70	427.67	3.05	1.34	249.60	0	0.00	0.00	34	14.98	1794.03
129	0.592	7.89	297	54.2	<0.10	0.000	0.047	<0.10	<0.10	2.4	0.94	348.26	6.98	2.75	430.42	2.63	1.03	250.63	0	0.00	0.00	29	11.41	1805.44
130	0.584	7.96	281	57.2	<0.10	0.000	0.047	<0.10	<0.10	3.3	1.28	349.54	6.55	2.54	432.96	3.03	1.18	251.81	0	0.00	0.00	26	10.09	1815.53
131	0.591	7.88	334	59.1	<0.10	0.000	0.047	<0.10	<0.10	3.8	1.49	351.03	6.55	2.57	435.53	2.89	1.14	252.95	0	0.00	0.00	30	11.79	1827.32
132	0.589	7.93	297	61.0	<0.10	0.000	0.047	<0.10	<0.10	3.0	1.17	352.20	6.43	2.52	438.05	3.10	1.21	254.16	0	0.00	0.00	32	12.53	1839.85
133	0.610	7.98	265	58.9	<0.10	0.000	0.047	<0.10	<0.10	3.2	1.30	353.50	6.19	2.51	440.56	3.02	1.22	255.38	0	0.00	0.00	26	10.54	1850.39
134	0.605	7.91	275	59.3	<0.10	0.000	0.047	<0.10	<0.10	2.6	1.05	354.55	6.15	2.47	443.03	2.64	1.06	256.44	0	0.00	0.00	25	10.05	1860.44
135	0.672	7.86	242	60.3	<0.10	0.000	0.047	<0.10	<0.10	2.5	1.12	355.67	6.72	3.00	446.03	3.09	1.38	257.82	0	0.00	0.00	30	13.40	1873.84

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Table 4 . - Humidity Cell Analytical Results, MGI-10-36 (220-256) (1.5044 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
136	0.649	7.99	282	54.3	<0.10	0.000	0.047	<0.10	<0.10	1.7	0.73	356.40	6.51	2.81	448.84	3.01	1.30	259.12	0	0.00	0.00	29	12.51	1886.35
137	0.617	8.25	228	51.9	<0.10	0.000	0.047	<0.10	<0.10	2.0	0.82	357.22	5.86	2.40	451.24	2.48	1.02	260.14	0	0.00	0.00	28	11.48	1897.83
138	0.675	8.19	223	59.3	<0.10	0.000	0.047	<0.10	<0.10	2.2	0.99	358.21	7.25	3.25	454.49	2.63	1.18	261.32	0	0.00	0.00	38	17.05	1914.88
139	0.641	8.38	251	56.4	<0.10	0.000	0.047	<0.10	<0.10	1.9	0.81	359.02	5.54	2.36	456.85	2.53	1.08	262.40	0	0.00	0.00	35	14.91	1929.79
140	0.623	8.26	232	56.3	<0.10	0.000	0.047	<0.10	<0.10	1.6	0.66	359.68	5.97	2.47	459.32	2.82	1.17	263.57	0	0.00	0.00	27	11.18	1940.97
141	0.679	8.14	263	60.6	<0.10	0.000	0.047	<0.10	<0.10	2.6	1.17	360.85	7.55	3.41	462.73	2.82	1.27	264.84	0	0.00	0.00	30	13.54	1954.51
142	0.591	8.18	202	54.8	<0.10	0.000	0.047	<0.10	<0.10	1.6	0.63	361.48	6.02	2.36	465.09	2.49	0.98	265.82	0	0.00	0.00	26	10.21	1964.72
143	0.596	8.58	232	59.3	<0.10	0.000	0.047	<0.10	<0.10	4.8	1.90	363.38	6.90	2.73	467.82	2.89	1.14	266.96	0	0.00	0.00	27	10.70	1975.42
144	0.601	8.68	224	63.0	<0.10	0.000	0.047	<0.10	<0.10	5.8	2.30	365.68	6.87	2.74	470.56	2.93	1.17	268.13	0	0.00	0.00	27	10.79	1986.21

Testing terminated

Figure 4a.- Weekly Humidity Cell Analytical Results

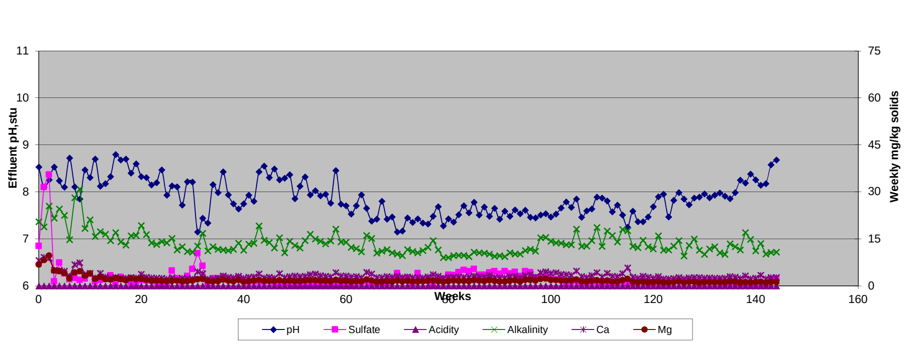

Figure 4b.- Cumulative Humidity Cell Analytical Results

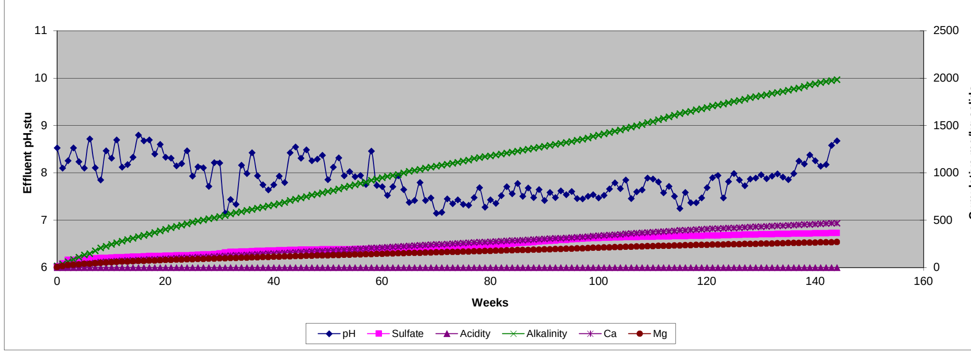

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Table 5 . - Humidity Cell Analytical Results, MGI-10-41 (70-102) **(1.5161 Kg)**

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	SO_4= mg/l	SO_4= mg/kg	SO_4= Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
0	0.583	7.42	237	282	<0.10	0.000	0.000	<0.10	<0.10	20.0	7.69	7.69	10.50	4.04	4.04	8.10	3.11	3.11	0	0.00	0.00	34	13.07	13.07
1	0.735	7.80	252	225	<0.10	0.000	0.000	<0.10	<0.10	25.0	12.12	19.81	11.63	5.64	9.68	9.10	4.41	7.52	0	0.00	0.00	64	31.03	44.10
2	0.743	7.74	257	146	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.43	23.24	6.55	3.21	12.89	6.00	2.94	10.46	0	0.00	0.00	51	24.99	69.09
3	0.740	7.82	267	130	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.95	25.19	5.34	2.61	15.50	4.56	2.23	12.69	0	0.00	0.00	50	24.40	93.49
4	0.741	7.71	280	89.9	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.98	26.17	4.52	2.21	17.71	4.29	2.10	14.79	0	0.00	0.00	35	17.11	110.60
5	0.747	7.67	267	76.0	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.99	27.16	3.72	1.83	19.54	3.37	1.66	16.45	0	0.00	0.00	29	14.29	124.89
6	0.733	7.71	296	116	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.93	29.09	4.45	2.15	21.69	4.13	2.00	18.45	0	0.00	0.00	40	19.34	144.23
7	0.733	7.58	275	83.0	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.93	31.02	4.39	2.12	23.81	3.89	1.88	20.33	1	0.48	0.48	33	15.95	160.18
8	0.667	7.48	222	99.1	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.76	32.78	4.65	2.05	25.86	4.80	2.11	22.44	0	0.00	0.48	35	15.40	175.58
9	0.748	7.71	186	87.8	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.97	34.75	3.57	1.76	27.62	3.94	1.94	24.38	0	0.00	0.48	32	15.79	191.37
10	0.673	7.64	225	73.2	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.66	37.41	2.31	1.03	28.65	2.89	1.28	25.66	0	0.00	0.48	25	11.10	202.47
11	0.741	7.55	216	66.0	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.96	39.37	1.96	0.96	29.61	2.23	1.09	26.75	0	0.00	0.48	21	10.26	212.73
12	0.733	7.31	162	60.9	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.93	41.30	2.30	1.11	30.72	2.60	1.26	28.01	0	0.00	0.48	19	9.19	221.92
13	0.812	7.33	250	48.1	<0.10	0.000	0.000	<0.10	<0.10	4.0	2.14	43.44	1.90	1.02	31.74	2.20	1.18	29.19	1	0.54	1.02	22	11.78	233.70
14	0.866	7.15	214	37.7	0.20	0.114	0.114	<0.10	<0.2	8.0	4.57	48.01	1.25	0.71	32.45	1.42	0.81	30.00	0	0.00	1.02	12	6.85	240.55
15	0.657	7.14	187	34.2	0.44	0.191	0.305	<0.10	<0.44	6.0	2.60	50.61	1.11	0.48	32.93	1.10	0.48	30.48	1	0.43	1.45	9	3.90	244.45
16	0.707	7.20	232	39.7	0.13	0.061	0.366	<0.10	<0.13	3.0	1.40	52.01	1.34	0.62	33.55	1.56	0.73	31.21	0	0.00	1.45	10	4.66	249.11
17	0.845	7.33	220	42.1	0.19	0.106	0.472	<0.10	<0.19	2.0	1.11	53.12	1.59	0.89	34.44	1.60	0.89	32.10	0	0.00	1.45	13	7.25	256.36
18	0.694	7.47	202	33.4	0.15	0.069	0.541	<0.10	<0.15	4.0	1.83	54.95	1.05	0.48	34.92	1.14	0.52	32.62	2	0.92	2.37	8	3.66	260.02
19	0.749	7.32	203	31.7	0.20	0.099	0.640	<0.10	<0.2	3.0	1.48	56.43	1.03	0.51	35.43	1.17	0.58	33.20	2	0.99	3.36	10	4.94	264.96
20	0.757	7.27	216	31.9	0.19	0.095	0.735	<0.10	<0.19	5.0	2.50	58.93	1.11	0.55	35.98	1.11	0.55	33.75	0	0.00	3.36	12	5.99	270.95
21	0.717	7.20	257	30.7	0.14	0.066	0.801	<0.10	<0.14	5.0	2.36	61.29	1.13	0.53	36.51	1.19	0.56	34.31	0	0.00	3.36	10	4.73	275.68
22	0.696	7.06	235	28.3	0.17	0.078	0.879	<0.10	<0.17	3.0	1.38	62.67	1.28	0.59	37.10	1.05	0.48	34.79	0	0.00	3.36	10	4.59	280.27
23	0.747	7.28	263	34.0	0.10	0.049	0.928	<0.10	<0.1	3.0	1.48	64.15	1.28	0.63	37.73	1.40	0.69	35.48	0	0.00	3.36	12	5.91	286.18
24	0.670	7.68	228	33.6	0.14	0.062	0.990	<0.10	<0.14	5.0	2.21	66.36	1.33	0.59	38.32	1.40	0.62	36.10	2	0.88	4.24	12	5.30	291.48
25	0.800	7.36	247	40.2	<0.10	0.000	0.990	<0.10	<0.10	3.0	1.58	67.94	1.41	0.74	39.06	1.65	0.87	36.97	0	0.00	4.24	17	8.97	300.45
26	0.763	7.47	239	31.5	0.14	0.070	1.060	<0.10	<0.14	4.0	2.01	69.95	1.17	0.59	39.65	1.55	0.78	37.75	0	0.00	4.24	13	6.54	306.99
27	0.745	6.97	275	30.6	0.30	0.147	1.207	<0.10	<0.3	3.0	1.47	71.42	1.05	0.52	40.17	1.46	0.72	38.47	0	0.00	4.24	10	4.91	311.90
28	0.683	6.67	353	35.0	<0.10	0.000	1.207	<0.10	<0.10	4.0	1.80	73.22	1.30	0.59	40.76	1.55	0.70	39.17	2	0.90	5.14	10	4.50	316.40
29	0.789	7.26	273	43.8	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.56	74.78	1.79	0.93	41.69	2.07	1.08	40.25	0	0.00	5.14	15	7.81	324.21
30	0.733	6.70	282	35.0	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.97	75.75	1.04	0.50	42.19	1.60	0.77	41.02	2	0.97	6.11	9	4.35	328.56
31	0.765	7.14	323	34.0	<0.10	0.000	1.207	<0.10	<0.10	6.0	3.03	78.78	1.35	0.68	42.87	1.76	0.89	41.91	1	0.51	6.61	11	5.55	334.11
32	0.727	6.94	328	36.2	<0.10	0.000	1.207	<0.10	<0.10	7.0	3.36	82.14	1.35	0.65	43.52	1.92	0.92	42.83	0	0.00	6.61	12	5.75	339.86
33	0.726	7.01	316	50.0	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.44	83.58	1.73	0.83	44.35	1.92	0.92	43.75	0	0.00	6.61	16	7.66	347.52
34	0.743	7.79	263	52.3	<0.10	0.000	1.207	<0.10	<0.10	5.0	2.45	86.03	2.17	1.06	45.41	3.14	1.54	45.29	2	0.98	7.59	22	10.78	358.30
35	0.741	7.36	314	39.3	<0.10	0.000	1.207	<0.10	<0.10	4.0	1.96	87.99	1.65	0.81	46.22	2.28	1.11	46.40	3	1.47	9.06	15	7.33	365.63
36	0.724	7.33	301	40.0	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.96	88.95	2.00	0.96	47.18	2.64	1.26	47.66	2	0.96	10.01	15	7.16	372.79
37	0.777	7.39	308	46.2	<0.10	0.000	1.207	<0.10	<0.10	5.0	2.56	91.51	2.22	1.14	48.32	2.88	1.48	49.14	0	0.00	10.01	18	9.22	382.01
38	0.739	7.26	279	40.1	<0.10	0.000	1.207	<0.10	<0.10	4.0	1.95	93.46	1.78	0.87	49.19	2.35	1.15	50.29	0	0.00	10.01	14	6.82	388.83
39	0.745	7.20	294	43.6	<0.10	0.000	1.207	<0.10	<0.10	5.0	2.46	95.92	2.01	0.99	50.18	2.70	1.33	51.62	0	0.00	10.01	15	7.37	396.20
40	0.735	6.76	346	43.8	<0.10	0.000	1.207	<0.10	<0.10	5.0	2.42	98.34	1.65	0.80	50.98	2.18	1.06	52.68	2	0.97	10.98	13	6.30	402.50
41	0.715	7.66	365	56.2	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.41	99.75	1.90	0.90	51.88	2.91	1.37	54.05	0	0.00	10.98	19	8.96	411.46
42	0.784	7.55	358	64.7	<0.10	0.000	1.207	<0.10	<0.10	4.0	2.07	101.82	2.16	1.12	53.00	3.48	1.80	55.85	3	1.55	12.54	22	11.38	422.84
43	0.737	7.67	291	54.8	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.46	103.28	2.14	1.04	54.04	3.20	1.56	57.41	0	0.00	12.54	21	10.21	433.05
44	0.720	7.76	337	60.7	<0.10	0.000	1.207	<0.10	<0.10	4.0	1.90	105.18	2.22	1.05	55.09	3.64	1.73	59.14	0	0.00	12.54	24	11.40	444.45
45	0.745	7.77	349	59.9	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.98	106.16	2.50	1.23	56.32	4.01	1.97	61.11	0	0.00	12.54	25	12.28	456.73
46	0.751	7.49	342	53.7	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.49	107.65	2.38	1.18	57.50	3.69	1.83	62.94	0	0.00	12.54	21	10.40	467.13
47	0.736	7.49	324	55.5	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.97	108.62	2.34	1.14	58.64	4.02	1.95	64.89	0	0.00	12.54	21	10.19	477.32
48	0.743	7.55	332	60.2	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.47	110.09	2.74	1.34	59.98	4.82	2.36	67.25	0	0.00	12.54	25	12.25	489.57
49	0.729	7.71	307	60.0	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.96	111.05	2.28	1.10	61.08	4.30	2.07	69.32	0	0.00	12.54	26	12.50	502.07
50	0.735	7.27	269	44.5	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.97	112.02	1.99	0.96	62.04	3.12	1.51	70.83	0	0.00	12.54	17	8.24	510.31

Midas Gold Corp.
MLI Job No. 3654

Table 5 . - Humidity Cell Analytical Results, MGI-10-41 (70-102) **(1.5161 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
51	0.745	7.41	278	49.4	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.47	113.49	2.08	1.02	63.06	3.63	1.78	72.61	0	0.00	12.54	19	9.34	519.65
52	0.747	7.35	352	44.5	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.99	114.48	1.65	0.81	63.87	3.19	1.57	74.18	2	0.99	13.52	24	11.83	531.48
53	0.736	7.35	310	43.1	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.97	115.45	1.61	0.78	64.65	2.97	1.44	75.62	5	2.43	15.95	23	11.17	542.65
54	0.750	7.51	247	61.9	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.99	116.44	1.37	0.68	65.33	3.15	1.56	77.18	0	0.00	15.95	26	12.86	555.51
55	0.733	7.59	242	40.6	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.97	117.41	1.62	0.78	66.11	2.94	1.42	78.60	0	0.00	15.95	17	8.22	563.73
56	0.747	7.25	248	45.3	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.99	118.40	1.89	0.93	67.04	3.55	1.75	80.35	0	0.00	15.95	18	8.87	572.60
57	0.746	7.42	291	47.6	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.98	119.38	1.85	0.91	67.95	3.39	1.67	82.02	0	0.00	15.95	24	11.81	584.41
58	0.710	7.62	273	64.3	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.47	119.85	2.40	1.12	69.07	5.16	2.42	84.44	0	0.00	15.95	29	13.58	597.99
59	0.779	7.42	247	61.0	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.51	120.36	2.47	1.27	70.34	4.87	2.50	86.94	0	0.00	15.95	29	14.90	612.89
60	0.732	7.44	211	47.8	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.48	120.84	1.89	0.91	71.25	3.90	1.88	88.82	0	0.00	15.95	21	10.14	623.03
61	0.735	7.53	220	66.0	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.97	121.81	2.46	1.19	72.44	5.40	2.62	91.44	0	0.00	15.95	30	14.54	637.57
62	0.754	7.51	298	50.7	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.49	123.30	1.93	0.96	73.40	4.12	2.05	93.49	0	0.00	15.95	22	10.94	648.51
63	0.748	7.47	304	51.4	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.99	124.29	1.80	0.89	74.29	4.03	1.99	95.48	0	0.00	15.95	21	10.36	658.87
64	0.747	7.37	253	49.3	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.99	125.28	1.69	0.83	75.12	3.66	1.80	97.28	0	0.00	15.95	19	9.36	668.23
65	0.732	7.43	263	54.5	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.48	125.76	1.99	0.96	76.08	4.60	2.22	99.50	0	0.00	15.95	22	10.62	678.85
66	0.750	7.39	191	56.5	<0.10	0.000	1.207	<0.10	<0.10	4.0	1.98	127.74	2.13	1.05	77.13	4.69	2.32	101.82	0	0.00	15.95	24	11.87	690.72
67	0.722	7.39	322	59.1	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.48	128.22	2.02	0.96	78.09	4.68	2.23	104.05	0	0.00	15.95	26	12.38	703.10
68	0.758	7.26	236	56.4	<0.10	0.000	1.207	<0.10	<0.10	2.0	1.00	129.22	2.00	1.00	79.09	4.72	2.36	106.41	0	0.00	15.95	23	11.50	714.60
69	0.719	7.51	268	61.3	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.42	130.64	2.12	1.01	80.10	5.05	2.39	108.80	0	0.00	15.95	25	11.86	726.46
70	0.754	7.43	251	69.5	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.99	131.63	2.28	1.13	81.23	5.51	2.74	111.54	0	0.00	15.95	29	14.42	740.88
71	0.748	7.35	189	64.6	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.99	132.62	2.07	1.02	82.25	5.38	2.65	114.19	0	0.00	15.95	27	13.32	754.20
72	0.748	7.41	174	65.6	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.48	134.10	2.21	1.09	83.34	5.74	2.83	117.02	0	0.00	15.95	29	14.31	768.51
73	0.738	7.31	180	60.6	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.49	134.59	1.95	0.95	84.29	5.42	2.64	119.66	0	0.00	15.95	27	13.14	781.65
74	0.748	7.42	179	64.9	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.49	135.08	2.17	1.07	85.36	5.73	2.83	122.49	0	0.00	15.95	29	14.31	795.96
75	0.705	7.27	185	68.0	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.40	136.48	1.97	0.92	86.28	5.80	2.70	125.19	0	0.00	15.95	29	13.49	809.45
76	0.775	7.48	158	75.9	<0.10	0.000	1.207	<0.10	<0.10	2.0	1.02	137.50	2.32	1.19	87.47	7.19	3.68	128.87	0	0.00	15.95	34	17.38	826.83
77	0.749	7.28	170	63.6	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.49	137.99	2.21	1.09	88.56	5.25	2.59	131.46	0	0.00	15.95	26	12.84	839.67
78	0.742	7.26	191	62.1	<0.10	0.000	1.207	<0.10	<0.10	<1.0	0.00	137.99	1.88	0.92	89.48	5.32	2.60	134.06	0	0.00	15.95	26	12.72	852.39
79	0.749	7.28	172	62.2	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.49	138.48	1.73	0.85	90.33	5.56	2.75	136.81	0	0.00	15.95	26	12.84	865.23
80	0.732	7.34	174	61.2	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.97	139.45	1.60	0.77	91.10	5.92	2.86	139.67	0	0.00	15.95	25	12.07	877.30
81	0.703	7.32	182	84.7	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.93	140.38	2.18	1.01	92.11	7.92	3.67	143.34	0	0.00	15.95	36	16.69	893.99
82	0.757	7.55	201	71.5	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.50	141.88	1.81	0.90	93.01	6.79	3.39	146.73	0	0.00	15.95	31	15.48	909.47
83	0.738	7.73	288	71.5	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.49	142.37	1.84	0.90	93.91	6.21	3.02	149.75	0	0.00	15.95	31	15.09	924.56
84	0.733	7.62	331	71.7	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.97	143.34	1.81	0.88	94.79	6.85	3.31	153.06	0	0.00	15.95	31	14.99	939.55
85	0.718	7.73	319	83.7	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.42	144.76	1.94	0.92	95.71	7.59	3.59	156.65	0	0.00	15.95	38	18.00	957.55
86	0.772	7.43	336	70.5	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.51	145.27	1.69	0.86	96.57	6.70	3.41	160.06	0	0.00	15.95	33	16.80	974.35
87	0.737	7.64	304	69.6	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.46	146.73	1.54	0.75	97.32	6.76	3.29	163.35	0	0.00	15.95	32	15.56	989.91
88	0.713	7.64	349	76.2	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.41	148.14	1.96	0.92	98.24	7.55	3.55	166.90	0	0.00	15.95	35	16.46	1006.37
89	0.786	7.72	348	89.4	<0.10	0.000	1.207	<0.10	<0.10	5.0	2.59	150.73	1.95	1.01	99.25	9.40	4.87	171.77	0	0.00	15.95	41	21.26	1027.63
90	0.739	7.48	352	71.0	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.97	151.70	1.41	0.69	99.94	6.76	3.30	175.07	0	0.00	15.95	32	15.60	1043.23
91	0.717	7.45	288	74.1	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.42	153.12	1.53	0.72	100.66	6.60	3.12	178.19	0	0.00	15.95	32	15.13	1058.36
92	0.743	7.59	343	84.1	<0.10	0.000	1.207	<0.10	<0.10	3.0	1.47	154.59	1.78	0.87	101.53	7.74	3.79	181.98	0	0.00	15.95	38	18.62	1076.98
93	0.753	7.69	333	81.9	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.99	155.58	1.65	0.82	102.35	8.29	4.12	186.10	0	0.00	15.95	36	17.88	1094.86
94	0.705	7.63	331	80.1	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.93	156.51	1.55	0.72	103.07	7.31	3.40	189.50	0	0.00	15.95	35	16.28	1111.14
95	0.786	7.55	347	88.6	<0.10	0.000	1.207	<0.10	<0.10	<1.0	0.00	156.51	1.78	0.92	103.99	9.92	5.14	194.64	0	0.00	15.95	39	20.22	1131.36
96	0.708	7.55	361	75.0	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.93	157.44	1.57	0.73	104.72	8.06	3.76	198.40	0	0.00	15.95	34	15.88	1147.24
97	0.746	7.54	312	84.0	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.49	157.93	1.41	0.69	105.41	8.90	4.38	202.78	0	0.00	15.95	38	18.70	1165.94
98	0.742	7.44	339	85.8	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.49	158.42	1.57	0.77	106.18	9.07	4.44	207.22	0	0.00	15.95	38	18.60	1184.54
99	0.741	7.50	361	86.9	<0.10	0.000	1.207	<0.10	<0.10	2.0	0.98	159.40	1.50	0.73	106.91	9.17	4.48	211.70	0	0.00	15.95	39	19.06	1203.60
100	0.740	7.37	352	75.4	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.49	159.89	1.26	0.61	107.52	7.56	3.69	215.39	0	0.00	15.95	34	16.60	1220.20

Midas Gold Corp.
MLI Job No. 3654

Table 5 . - Humidity Cell Analytical Results, MGI-10-41 (70-102) (1.5161 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
101	0.752	7.33	329	66.2	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.50	160.39	1.22	0.61	108.13	6.67	3.31	218.70	0	0.00	15.95	30	14.88	1235.08
102	0.738	7.41	362	56.5	<0.10	0.000	1.207	<0.10	<0.10	<1.0	0.00	160.39	1.10	0.54	108.67	5.72	2.78	221.48	0	0.00	15.95	27	13.14	1248.22
103	0.715	7.42	340	52.6	<0.10	0.000	1.207	<0.10	<0.10	<1.0	0.00	160.39	0.99	0.47	109.14	5.32	2.51	223.99	0	0.00	15.95	24	11.32	1259.54
104	0.759	7.51	316	50.4	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.50	160.89	0.84	0.42	109.56	5.28	2.64	226.63	0	0.00	15.95	24	12.02	1271.56
105	0.724	7.44	336	46.6	<0.10	0.000	1.207	<0.10	<0.10	1.0	0.48	161.37	0.79	0.38	109.94	4.56	2.18	228.81	0	0.00	15.95	24	11.46	1283.02
106	0.727	7.28	302	41.2	0.15	0.072	1.279	<0.10	<0.15	<1.0	0.00	161.37	0.76	0.36	110.30	4.00	1.92	230.73	0	0.00	15.95	22	10.55	1293.57
107	0.778	7.47	315	43.7	0.14	0.072	1.351	<0.10	<0.14	<1.0	0.00	161.37	0.75	0.38	110.68	4.31	2.21	232.94	0	0.00	15.95	25	12.83	1306.40
108	0.706	7.43	360	40.4	<0.10	0.000	1.351	<0.10	<0.10	<1.0	0.00	161.37	0.71	0.33	111.01	4.09	1.90	234.84	0	0.00	15.95	21	9.78	1316.18
109	0.775	7.86	318	39.5	0.12	0.061	1.412	<0.10	<0.12	<1.0	0.00	161.37	0.78	0.40	111.41	3.75	1.92	236.76	0	0.00	15.95	25	12.78	1328.96
110	0.750	7.35	360	46.0	<0.10	0.000	1.412	<0.10	<0.10	<1.0	0.00	161.37	0.85	0.42	111.83	4.16	2.06	238.82	0	0.00	15.95	23	11.38	1340.34
111	0.732	7.30	365	38.4	0.12	0.058	1.470	<0.10	<0.12	1.2	0.58	161.95	0.54	0.26	112.09	3.79	1.83	240.65	0	0.00	15.95	21	10.14	1350.48
112	0.738	7.28	363	42.7	<0.10	0.000	1.470	<0.10	<0.10	<1.0	0.00	161.95	0.58	0.28	112.37	3.35	1.63	242.28	0	0.00	15.95	23	11.20	1361.68
113	0.741	7.20	371	33.1	<0.10	0.000	1.470	<0.10	<0.10	1.0	0.49	162.44	0.51	0.25	112.62	2.93	1.43	243.71	0	0.00	15.95	19	9.29	1370.97
114	0.752	7.01	322	29.4	<0.10	0.000	1.470	<0.10	<0.10	<1.0	0.00	162.44	0.51	0.25	112.87	2.57	1.27	244.98	0	0.00	15.95	18	8.93	1379.90
115	0.719	7.05	336	52.0	<0.10	0.000	1.470	<0.10	<0.10	<1.0	0.00	162.44	0.94	0.45	113.32	5.32	2.52	247.50	0	0.00	15.95	20	9.48	1389.38
116	0.762	7.10	379	27.7	<0.10	0.000	1.470	<0.10	<0.10	<1.0	0.00	162.44	0.56	0.28	113.60	2.54	1.28	248.78	0	0.00	15.95	17	8.54	1397.92
117	0.723	7.03	367	26.6	<0.10	0.000	1.470	<0.10	<0.10	<1.0	0.00	162.44	0.49	0.23	113.83 *	2.07	0.99	249.77	0	0.00	15.95	15	7.15	1405.07
118	0.756	7.14	357	25.7	<0.10	0.000	1.470	<0.10	<0.10	<1.0	0.00	162.44	0.49	0.24	114.07 *	2.11	1.05	250.82	0	0.00	15.95	16	7.98	1413.05
119	0.736	7.01	400	25.3	<0.10	0.000	1.470	<0.10	<0.10	<1.0	0.00	162.44	0.58	0.28	114.35	2.12	1.03	251.85	0	0.00	15.95	14	6.80	1419.85
120	0.738	7.13	360	24.1	<0.10	0.000	1.470	<0.10	<0.10	<1.0	0.00	162.44	0.49	0.24	114.59 *	2.23	1.09	252.94	0	0.00	15.95	14	6.81	1426.66
121	0.735	7.65	277	25.5	<0.10	0.000	1.470	<0.10	<0.10	<1.0	0.00	162.44	0.59	0.29	114.88	2.24	1.09	254.03	0	0.00	15.95	17	8.24	1434.90
122	0.743	7.79	258	27.1	0.11	0.054	1.524	<0.10	<0.11	<1.0	0.00	162.44	0.49	0.24	115.12 *	2.28	1.12	255.15	0	0.00	15.95	17	8.33	1443.23
123	0.743	7.48	326	26.9	<0.10	0.000	1.524	<0.10	<0.10	<1.0	0.00	162.44	0.73	0.36	115.48	2.32	1.14	256.29	0	0.00	15.95	16	7.84	1451.07
124	0.723	7.58	317	26.6	<0.10	0.000	1.524	<0.10	<0.10	1.0	0.48	162.92	0.49	0.23	115.71 *	2.53	1.21	257.50	0	0.00	15.95	17	8.11	1459.18
125	0.764	7.41	364	27.6	<0.10	0.000	1.524	<0.10	<0.10	1.2	0.60	163.52	0.49	0.25	115.96 *	2.34	1.18	258.68	0	0.00	15.95	16	8.06	1467.24
126	0.717	7.33	314	28.2	<0.10	0.000	1.524	<0.10	<0.10	1.2	0.57	164.09	0.49	0.23	116.19 *	2.28	1.08	259.76	0	0.00	15.95	15	7.09	1474.33
127	0.767	7.43	332	29.1	<0.10	0.000	1.524	<0.10	<0.10	1.1	0.56	164.65	0.49	0.25	116.44 *	2.55	1.29	261.05	0	0.00	15.95	19	9.61	1483.94
128	0.751	7.39	351	26.8	<0.10	0.000	1.524	<0.10	<0.10	1.1	0.54	165.19	0.49	0.24	116.68 *	2.32	1.15	262.20	0	0.00	15.95	17	8.42	1492.36
129	0.724	7.30	361	26.7	<0.10	0.000	1.524	<0.10	<0.10	1.2	0.57	165.76	1.33	0.64	117.32	2.24	1.07	263.27	0	0.00	15.95	14	6.69	1499.05
130	0.752	7.25	358	25.9	<0.10	0.000	1.524	<0.10	<0.10	1.2	0.60	166.36	0.57	0.28	117.60	2.41	1.20	264.47	0	0.00	15.95	13	6.45	1505.50
131	0.702	7.25	359	27.5	<0.10	0.000	1.524	<0.10	<0.10	1.1	0.51	166.87	0.56	0.26	117.86	2.48	1.15	265.62	0	0.00	15.95	15	6.95	1512.45
132	0.761	7.38	330	30.3	<0.10	0.000	1.524	<0.10	<0.10	1.0	0.50	167.37	0.53	0.27	118.13	2.78	1.40	267.02	0	0.00	15.95	17	8.53	1520.98
133	0.744	7.56	266	29.4	<0.10	0.000	1.524	<0.10	<0.10	1.0	0.49	167.86	0.57	0.28	118.41	2.66	1.31	268.33	0	0.00	15.95	15	7.36	1528.34
134	0.753	7.51	268	31.8	<0.10	0.000	1.524	<0.10	<0.10	1.1	0.55	168.41	0.52	0.26	118.67	2.77	1.38	269.71	0	0.00	15.95	14	6.95	1535.29
135	0.741	7.50	207	32.1	<0.10	0.000	1.524	<0.10	<0.10	1.1	0.54	168.95	0.62	0.30	118.97	2.59	1.27	270.98	0	0.00	15.95	16	7.82	1543.11
136	0.737	7.49	230	35.7	<0.10	0.000	1.524	<0.10	<0.10	<1.0	0.00	168.95	0.74	0.36	119.33	3.23	1.57	272.55	0	0.00	15.95	18	8.75	1551.86
137	0.759	7.57	241	30.8	<0.10	0.000	1.524	<0.10	<0.10	1.2	0.60	169.55	0.49	0.25	119.58 *	2.82	1.41	273.96	0	0.00	15.95	16	8.01	1559.87
138	0.742	7.62	176	29.3	<0.10	0.000	1.524	<0.10	<0.10	1.2	0.59	170.14	0.49	0.24	119.82 *	2.52	1.23	275.19	0	0.00	15.95	25	12.24	1572.11
139	0.731	7.67	249	33.9	<0.10	0.000	1.524	<0.10	<0.10	1.2	0.58	170.72	0.49	0.24	120.06 *	2.77	1.34	276.53	0	0.00	15.95	19	9.16	1581.27
140	0.750	7.60	201	34.7	<0.10	0.000	1.524	<0.10	<0.10	<1.0	0.00	170.72	0.51	0.25	120.31	3.19	1.58	278.11	0	0.00	15.95	16	7.92	1589.19
141	0.741	7.65	233	33.9	<0.10	0.000	1.524	<0.10	<0.10	1.7	0.83	171.55	0.57	0.28	120.59	2.99	1.46	279.57	0	0.00	15.95	16	7.82	1597.01
142	0.735	7.69	206	33.9	0.10	0.048	1.572	<0.10	<0.1	1.1	0.53	172.08	0.85	0.41	121.00	3.06	1.48	281.05	0	0.00	15.95	16	7.76	1604.77
143	0.745	7.66	199	40.2	<0.10	0.000	1.572	<0.10	<0.10	2.1	1.03	173.11	0.86	0.42	121.42	3.55	1.74	282.79	0	0.00	15.95	18	8.85	1613.62
144	0.734	7.69	197	44.8	<0.10	0.000	1.572	<0.10	<0.10	2.3	1.11	174.22	1.49	0.72	122.14	4.03	1.95	284.74	0	0.00	15.95	21	10.17	1623.79
145	0.754	7.50	330	35.3	<0.10	0.000	1.572	<0.10	<0.10	1.1	0.54	174.76	0.74	0.37	122.51	2.99	1.49	286.23	0	0.00	15.95	17	8.45	1632.24
146	0.739	7.41	328	37.9	<0.10	0.000	1.572	<0.10	<0.10	4.0	1.97	176.73	1.08	0.53	123.04	3.57	1.74	287.97	0	0.00	15.95	17	8.29	1640.53
147	0.637	7.29	360	43.2	<0.10	0.000	1.572	<0.10	<0.10	4.5	1.89	178.62	1.53	0.64	123.68	4.08	1.71	289.68	0	0.00	15.95	18	7.56	1648.09
148	0.752	7.59	357	37.0	<0.10	0.000	1.572	<0.10	<0.10	2.7	1.34	179.96	0.96	0.48	124.16	3.61	1.79	291.47	0	0.00	15.95	18	8.93	1657.02
149	0.737	7.68	302	39.2	<0.10	0.000	1.572	<0.10	<0.10	2.7	1.31	181.27	0.67	0.33	124.49	5.49	2.67	294.14	0	0.00	15.95	20	9.72	1666.74
150	0.743	7.71	373	49.3	<0.10	0.000	1.572	<0.10	<0.10	3.6	1.74	183.01	0.77	0.38	124.87	7.16	3.51	297.65	0	0.00	15.95	24	11.76	1678.50

Midas Gold Corp.
MLI Job No. 3654

Table 5 . - Humidity Cell Analytical Results, MGI-10-41 (70-102) (1.5161 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
151	0.742	7.72	421	42.0	<0.10	0.000	1.572	<0.10	<0.10	2.5	1.24	184.25	0.57	0.28	125.15	4.15	2.03	299.68	0	0.00	15.95	20	9.79	1688.29
152	0.726	7.64	460	44.0	<0.10	0.000	1.572	<0.10	<0.10	2.4	1.13	185.38	0.59	0.28	125.43	4.92	2.36	302.04	0	0.00	15.95	21	10.06	1698.35
153	0.758	7.63	447	40.9	<0.10	0.000	1.572	<0.10	<0.10	3.0	1.48	186.86	0.51	0.25	125.68	3.99	1.99	304.03	0	0.00	15.95	20	10.00	1708.35
154	0.733	7.61	414	46.5	<0.10	0.000	1.572	<0.10	<0.10	3.0	1.45	188.31	1.23	0.59	126.27	4.46	2.16	306.19	0	0.00	15.95	21	10.15	1718.50
155	0.739	7.59	441	48.4	<0.10	0.000	1.572	<0.10	<0.10	3.0	1.46	189.77	1.03	0.50	126.77	4.68	2.28	308.47	0	0.00	15.95	22	10.72	1729.22
156	0.752	7.61	392	50.2	<0.10	0.000	1.572	<0.10	<0.10	3.1	1.54	191.31	1.87	0.93	127.70	5.40	2.68	311.15	0	0.00	15.95	22	10.91	1740.13
157	0.723	7.76	395	46.0	<0.10	0.000	1.572	<0.10	<0.10	2.4	1.13	192.44	2.72	1.30	129.00	5.90	2.81	313.96	0	0.00	15.95	22	10.49	1750.62
158	0.775	7.50	376	44.9	<0.10	0.000	1.572	<0.10	<0.10	3.1	1.56	194.00	3.28	1.68	130.68	5.64	2.88	316.84	0	0.00	15.95	22	11.25	1761.87
159	0.686	7.63	383	45.4	<0.10	0.000	1.572	<0.10	<0.10	2.9	1.30	195.30	0.97	0.44	131.12	4.38	1.98	318.82	0	0.00	15.95	22	9.95	1771.82
160	0.783	7.66	381	50.3	<0.10	0.000	1.572	<0.10	<0.10	3.5	1.79	197.09	1.39	0.72	131.84	5.19	2.68	321.50	0	0.00	15.95	23	11.88	1783.70
161	0.644	7.49	403	49.2	<0.10	0.000	1.572	<0.10	<0.10	3.0	1.27	198.36	0.99	0.42	132.26	5.35	2.27	323.77	0	0.00	15.95	25	10.62	1794.32
162	0.803	7.65	399	52.0	<0.10	0.000	1.572	<0.10	<0.10	2.2	1.17	199.53	2.31	1.22	133.48	6.38	3.38	327.15	0	0.00	15.95	27	14.30	1808.62
163	0.753	7.80	396	42.9	<0.10	0.000	1.572	<0.10	<0.10	3.8	1.87	201.40	0.64	0.32	133.80	4.65	2.31	329.46	0	0.00	15.95	22	10.93	1819.55
164	0.728	7.80	394	44.9	<0.10	0.000	1.572	<0.10	<0.10	3.9	1.88	203.28	1.13	0.54	134.34	4.34	2.08	331.54	0	0.00	15.95	22	10.56	1830.11
165	0.719	7.75	394	49.3	<0.10	0.000	1.572	<0.10	<0.10	3.0	1.43	204.71	1.38	0.65	134.99	5.01	2.38	333.92	0	0.00	15.95	24	11.38	1841.49
166	0.706	7.73	402	47.1	<0.10	0.000	1.572	<0.10	<0.10	2.6	1.20	205.91	0.81	0.38	135.37	4.60	2.14	336.06	0	0.00	15.95	25	11.64	1853.13
167	0.736	7.64	404	52.7	<0.10	0.000	1.572	<0.10	<0.10	2.3	1.14	207.05	0.78	0.38	135.75	4.99	2.42	338.48	0	0.00	15.95	26	12.62	1865.75
168	0.788	7.85	391	49.6	<0.10	0.000	1.572	<0.10	<0.10	3.9	2.05	209.10	0.75	0.39	136.14	4.95	2.57	341.05	0	0.00	15.95	25	12.99	1878.74
169	0.749	7.76	410	47.3	<0.10	0.000	1.572	<0.10	<0.10	3.0	1.49	210.59	0.84	0.41	136.55	4.81	2.38	343.43	0	0.00	15.95	24	11.86	1890.60
170	0.670	7.79	407	50.2	<0.10	0.000	1.572	<0.10	<0.10	4.8	2.13	212.72	1.17	0.52	137.07	4.86	2.15	345.58	0	0.00	15.95	24	10.61	1901.21
171	0.770	7.85	416	54.7	<0.10	0.000	1.572	<0.10	<0.10	3.8	1.94	214.66	0.75	0.38	137.45	5.24	2.66	348.24	0	0.00	15.95	27	13.81	1915.02
172	0.738	7.79	392	68.1	<0.10	0.000	1.572	<0.10	<0.10	3.2	1.55	216.21	1.06	0.52	137.97	6.68	3.25	351.49	0	0.00	15.95	33	16.06	1931.08
173	0.751	7.80	401	69.5	<0.10	0.000	1.572	<0.10	<0.10	3.0	1.47	217.68	3.25	1.61	139.58	8.69	4.30	355.79	0	0.00	15.95	36	17.83	1948.91
174	0.715	7.94	390	55.5	<0.10	0.000	1.572	<0.10	<0.10	3.2	1.49	219.17	0.85	0.40	139.98	5.96	2.81	358.60	0	0.00	15.95	28	13.20	1962.11
175	0.747	7.97	416	59.8	<0.10	0.000	1.572	<0.10	<0.10	3.1	1.54	220.71	1.23	0.61	140.59	6.10	3.01	361.61	0	0.00	15.95	32	15.77	1977.88

*Reported as <0.50

Figure 5a.- Weekly Humidity Cell Analytical Results

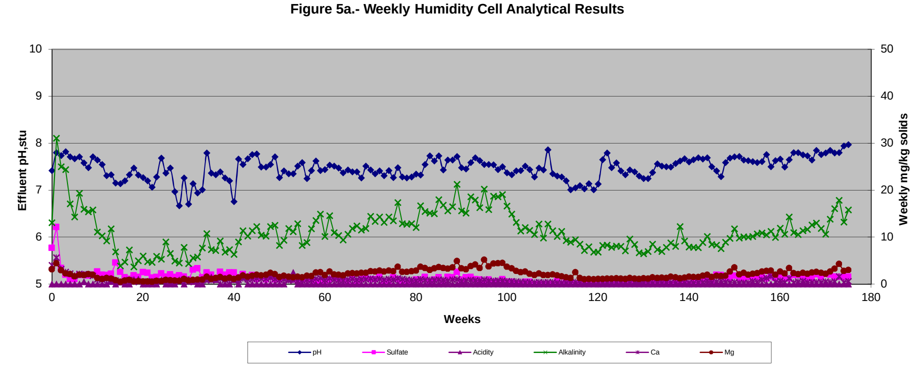
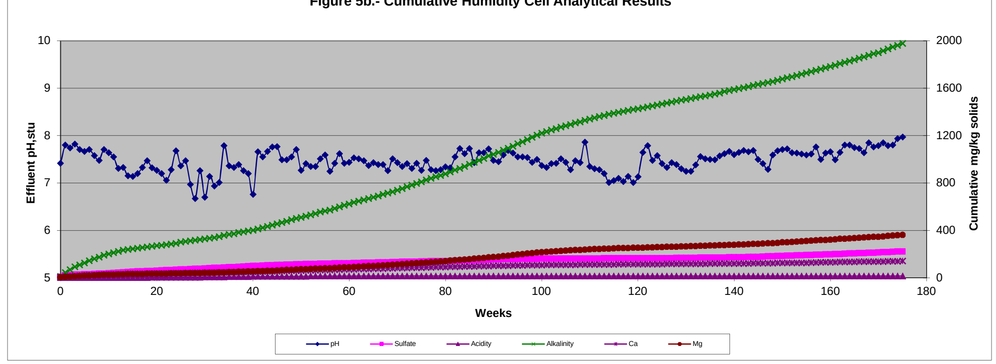


Figure 5b.- Cumulative Humidity Cell Analytical Results



Midas Gold Corp.
MLI Job No. 3654

Table 6 . - Humidity Cell Analytical Results, MGI-10-48 (150-165) (1.5069 Kg)

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	SO_4= mg/l	SO_4= mg/kg	SO_4= Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
0	0.698	7.88	213	361	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.63	4.63	43.30	20.06	20.06	17.00	7.87	7.87	0	0.00	0.00	98	45.39	45.39
1	0.755	8.08	238	271	<0.10	0.000	0.000	<0.10	<0.10	25.0	12.53	17.16	27.47	13.76	33.82	9.90	4.96	12.83	0	0.00	0.00	89	44.59	89.98
2	0.757	8.05	246	226	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.53	22.69	22.01	11.06	44.88	8.60	4.32	17.15	0	0.00	0.00	84	42.20	132.18
3	0.735	8.05	259	209	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	23.18	21.21	10.35	55.23	7.19	3.51	20.66	0	0.00	0.00	80	39.02	171.20
4	0.742	7.92	279	194	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.97	25.15	18.03	8.88	64.11	7.04	3.47	24.13	0	0.00	0.00	77	37.91	209.11
5	0.794	7.95	261	118	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.53	25.68	13.88	7.31	71.42	4.87	2.57	26.70	0	0.00	0.00	56	29.51	238.62
6	0.663	8.14	281	138	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.20	27.88	17.32	7.62	79.04	6.41	2.82	29.52	0	0.00	0.00	58	25.52	264.14
7	0.750	7.93	266	128	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.99	29.87	17.39	8.66	87.70	5.82	2.90	32.42	0	0.00	0.00	58	28.87	293.01
8	0.731	7.79	215	173	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.43	32.30	21.38	10.37	98.07	8.48	4.11	36.53	0	0.00	0.00	76	36.87	329.88
9	0.731	8.12	179	130	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.94	34.24	14.52	7.04	105.11	6.04	2.93	39.46	0	0.00	0.00	56	27.17	357.05
10	0.773	8.14	216	120	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.59	37.83	12.59	6.46	111.57	6.05	3.10	42.56	0	0.00	0.00	52	26.67	383.72
11	0.709	7.71	211	114	0.19	0.089	0.089	<0.10	<0.19	6.0	2.82	40.65	10.56	4.97	116.54	4.44	2.09	44.65	0	0.00	0.00	54	25.41	409.13
12	0.704	7.88	163	136	<0.10	0.000	0.089	<0.10	<0.10	6.0	2.80	43.45	17.30	8.08	124.62	6.30	2.94	47.59	0	0.00	0.00	57	26.63	435.76
13	0.766	8.12	234	127	<0.10	0.000	0.089	<0.10	<0.10	6.0	3.05	46.50	18.80	9.56	134.18	5.20	2.64	50.23	0	0.00	0.00	57	28.97	464.73
14	0.777	7.79	197	128	<0.10	0.000	0.089	<0.10	<0.10	8.0	4.13	50.63	12.70	6.55	140.73	4.92	2.54	52.77	0	0.00	0.00	62	31.97	496.70
15	0.659	7.98	183	121	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.44	51.07	11.05	4.83	145.56	4.36	1.91	54.68	0	0.00	0.00	51	22.30	519.00
16	0.670	7.73	215	127	<0.10	0.000	0.089	<0.10	<0.10	4.0	1.78	52.85	11.77	5.23	150.79	4.89	2.17	56.85	0	0.00	0.00	57	25.34	544.34
17	0.766	8.09	213	134	<0.10	0.000	0.089	<0.10	<0.10	4.0	2.03	54.88	11.95	6.07	156.86	4.46	2.27	59.12	0	0.00	0.00	54	27.45	571.79
18	0.755	7.99	206	140	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.50	55.38	12.71	6.37	163.23	4.76	2.38	61.50	0	0.00	0.00	56	28.06	599.85
19	0.747	7.93	211	121	<0.10	0.000	0.089	<0.10	<0.10	4.0	1.98	57.36	10.63	5.27	168.50	4.41	2.19	63.69	0	0.00	0.00	51	25.28	625.13
20	0.711	8.03	208	128	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.47	57.83	11.37	5.36	173.86	4.05	1.91	65.60	0	0.00	0.00	51	24.06	649.19
21	0.743	7.88	248	113	<0.10	0.000	0.089	<0.10	<0.10	2.0	0.99	58.82	10.87	5.36	179.22	3.94	1.94	67.54	0	0.00	0.00	53	26.13	675.32
22	0.717	7.88	233	101	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.48	59.30	10.80	5.14	184.36	3.50	1.67	69.21	0	0.00	0.00	48	22.84	698.16
23	0.713	7.92	258	113	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.47	59.77	10.30	4.87	189.23	3.72	1.76	70.97	0	0.00	0.00	48	22.71	720.87
24	0.663	8.00	235	107	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.44	60.21	10.50	4.62	193.85	3.79	1.67	72.64	0	0.00	0.00	50	22.00	742.87
25	0.757	7.84	252	118	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.50	60.71	10.33	5.19	199.04	3.70	1.86	74.50	0	0.00	0.00	51	25.62	768.49
26	0.728	7.92	239	102	<0.10	0.000	0.089	<0.10	<0.10	2.0	0.97	61.68	9.34	4.51	203.55	3.66	1.77	76.27	0	0.00	0.00	48	23.19	791.68
27	0.748	7.81	267	103	<0.10	0.000	0.089	<0.10	<0.10	2.0	0.99	62.67	9.64	4.79	208.34	3.88	1.93	78.20	0	0.00	0.00	46	22.83	814.51
28	0.696	7.41	327	99.1	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.46	63.13	10.02	4.63	212.97	3.33	1.54	79.74	0	0.00	0.00	40	18.48	832.99
29	0.783	7.88	281	101	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.52	63.65	10.18	5.29	218.26	3.43	1.78	81.52	0	0.00	0.00	45	23.38	856.37
30	0.718	7.52	254	96.3	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.48	64.13	7.95	3.79	222.05	3.39	1.62	83.14	0	0.00	0.00	42	20.01	876.38
31	0.735	7.65	333	93.0	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.49	64.62	9.77	4.77	226.82	3.35	1.63	84.77	0	0.00	0.00	43	20.97	897.35
32	0.720	7.71	335	91.0	<0.10	0.000	0.089	<0.10	<0.10	2.0	0.96	65.58	9.18	4.39	231.21	3.29	1.57	86.34	0	0.00	0.00	42	20.07	917.42
33	0.729	7.54	327	92.2	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.48	66.06	9.49	4.59	235.80	3.37	1.63	87.97	0	0.00	0.00	43	20.80	938.22
34	0.699	7.92	269	94.6	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.46	66.52	9.61	4.46	240.26	3.58	1.66	89.63	0	0.00	0.00	45	20.87	959.09
35	0.726	7.82	340	90.7	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.48	67.00	9.48	4.57	244.83	3.40	1.64	91.27	0	0.00	0.00	43	20.72	979.81
36	0.716	7.47	345	88.0	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.48	67.48	10.90	5.18	250.01	3.79	1.80	93.07	0	0.00	0.00	41	19.48	999.29
37	0.725	7.78	317	92.8	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.48	67.96	11.90	5.73	255.74	3.56	1.71	94.78	0	0.00	0.00	44	21.17	1020.46
38	0.740	7.76	310	90.2	<0.10	0.000	0.089	<0.10	<0.10	3.0	1.47	69.43	10.78	5.29	261.03	3.47	1.70	96.48	0	0.00	0.00	42	20.63	1041.09
39	0.730	7.74	272	91.4	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.48	69.91	10.39	5.03	266.06	3.74	1.81	98.29	0	0.00	0.00	42	20.35	1061.44
40	0.744	7.42	300	95.3	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.49	70.40	9.84	4.86	270.92	3.23	1.59	99.88	0	0.00	0.00	40	19.75	1081.19
41	0.740	7.15	411	106	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.49	70.89	9.27	4.55	275.47	3.26	1.60	101.48	0	0.00	0.00	40	19.64	1100.83
42	0.715	7.65	377	110	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.47	71.36	9.97	4.73	280.20	3.34	1.58	103.06	0	0.00	0.00	41	19.45	1120.28
43	0.740	8.15	295	94.2	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.49	71.85	9.55	4.69	284.89	3.12	1.53	104.59	0	0.00	0.00	46	22.59	1142.87
44	0.715	8.13	344	93.2	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.47	72.32	9.37	4.45	289.34	3.17	1.50	106.09	0	0.00	0.00	43	20.40	1163.27
45	0.734	8.07	355	92.7	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.49	72.81	9.95	4.85	294.19	3.14	1.53	107.62	0	0.00	0.00	44	21.43	1184.70

Table 6 . - Humidity Cell Analytical Results, MGI-10-48 (150-165) **(1.5069 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
46	0.726	7.97	319	91.0	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.48	73.29	10.36	4.99	299.18	3.51	1.69	109.31	0	0.00	0.00	42	20.23	1204.93
47	0.737	7.83	321	95.7	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.49	73.78	10.94	5.35	304.53	3.73	1.82	111.13	0	0.00	0.00	44	21.52	1226.45
48	0.708	7.94	323	88.5	<0.10	0.000	0.089	<0.10	<0.10	2.0	0.94	74.72	11.10	5.22	309.75	3.72	1.75	112.88	0	0.00	0.00	40	18.79	1245.24
49	0.726	8.03	293	87.6	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.48	75.20	9.98	4.81	314.56	3.23	1.56	114.44	0	0.00	0.00	43	20.72	1265.96
50	0.744	7.76	290	86.5	<0.10	0.000	0.089	<0.10	<0.10	3.0	1.48	76.68	11.27	5.56	320.12	3.42	1.69	116.13	0	0.00	0.00	41	20.24	1286.20
51	0.734	7.91	308	89.4	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.49	77.17	11.59	5.65	325.77	3.72	1.81	117.94	0	0.00	0.00	42	20.46	1306.66
52	0.723	8.01	323	90.7	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.48	77.65	10.93	5.24	331.01	3.42	1.64	119.58	0	0.00	0.00	45	21.59	1328.25
53	0.733	7.86	289	89.9	<0.10	0.000	0.089	<0.10	<0.10	3.0	1.46	79.11	11.53	5.61	336.62	3.51	1.71	121.29	0	0.00	0.00	45	21.89	1350.14
54	0.735	7.95	273	85.0	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	79.11	11.65	5.68	342.30	4.99	2.43	123.72	0	0.00	0.00	40	19.51	1369.65
55	0.762	7.81	268	88.5	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	79.11	10.81	5.47	347.77	3.31	1.67	125.39	0	0.00	0.00	43	21.74	1391.39
56	0.659	7.83	260	85.8	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	79.11	10.53	4.60	352.37	3.36	1.47	126.86	0	0.00	0.00	40	17.49	1408.88
57	0.708	7.88	281	83.0	<0.10	0.000	0.089	<0.10	<0.10	3.0	1.41	80.52	9.38	4.41	356.78	3.17	1.49	128.35	0	0.00	0.00	42	19.73	1428.61
58	0.711	8.11	283	85.1	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	80.52	10.38	4.90	361.68	3.35	1.58	129.93	0	0.00	0.00	42	19.82	1448.43
59	0.715	7.82	266	86.5	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	80.52	11.32	5.37	367.05	3.40	1.61	131.54	0	0.00	0.00	44	20.88	1469.31
60	0.699	7.92	261	84.4	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	80.52	11.88	5.51	372.56	3.64	1.69	133.23	0	0.00	0.00	42	19.48	1488.79
61	0.731	7.77	262	87.6	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.49	81.01	9.94	4.82	377.38	3.22	1.56	134.79	0	0.00	0.00	42	20.37	1509.16
62	0.702	7.79	305	87.5	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.47	81.48	11.17	5.20	382.58	3.51	1.64	136.43	0	0.00	0.00	43	20.03	1529.19
63	0.678	7.95	309	88.5	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	81.48	10.63	4.78	387.36	3.46	1.56	137.99	0	0.00	0.00	42	18.90	1548.09
64	0.674	7.79	291	86.8	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	81.48	10.34	4.62	391.98	3.68	1.65	139.64	0	0.00	0.00	40	17.89	1565.98
65	0.717	7.75	271	86.6	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	81.48	10.94	5.21	397.19	3.57	1.70	141.34	0	0.00	0.00	40	19.03	1585.01
66	0.696	7.49	237	84.2	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.46	81.94	10.37	4.79	401.98	3.22	1.49	142.83	0	0.00	0.00	39	18.01	1603.02
67	0.752	7.59	331	88.7	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	81.94	11.29	5.63	407.61	3.26	1.63	144.46	0	0.00	0.00	43	21.46	1624.48
68	0.706	7.65	278	85.5	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.47	82.41	11.35	5.32	412.93	3.54	1.66	146.12	0	0.00	0.00	40	18.74	1643.22
69	0.704	7.17	257	89.8	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.47	82.88	11.34	5.30	418.23	3.34	1.56	147.68	0	0.00	0.00	39	18.22	1661.44
70	0.678	7.25	255	83.6	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.45	83.33	10.24	4.61	422.84	3.01	1.35	149.03	0	0.00	0.00	35	15.75	1677.19
71	0.682	7.39	236	85.8	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	83.33	10.40	4.71	427.55	3.23	1.46	150.49	0	0.00	0.00	35	15.84	1693.03
72	0.703	7.49	225	84.3	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	83.33	11.05	5.16	432.71	3.37	1.57	152.06	0	0.00	0.00	38	17.73	1710.76
73	0.706	7.40	205	82.2	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	83.33	10.61	4.97	437.68	3.48	1.63	153.69	0	0.00	0.00	38	17.80	1728.56
74	0.691	7.59	218	83.4	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.46	83.79	10.93	5.01	442.69	3.36	1.54	155.23	0	0.00	0.00	39	17.88	1746.44
75	0.655	7.48	205	77.0	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	83.79	9.19	3.99	446.68	3.06	1.33	156.56	0	0.00	0.00	35	15.21	1761.65
76	0.670	7.53	193	79.5	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	83.79	9.63	4.28	450.96	3.06	1.36	157.92	0	0.00	0.00	37	16.45	1778.10
77	0.774	7.55	208	88.6	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	83.79	10.84	5.57	456.53	3.30	1.70	159.62	0	0.00	0.00	40	20.55	1798.65
78	0.710	7.60	220	84.0	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	83.79	10.49	4.94	461.47	3.18	1.50	161.12	0	0.00	0.00	37	17.43	1816.08
79	0.709	7.50	197	83.6	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	83.79	9.84	4.63	466.10	3.25	1.53	162.65	0	0.00	0.00	38	17.88	1833.96
80	0.708	7.58	214	81.3	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	83.79	10.03	4.71	470.81	3.35	1.57	164.22	0	0.00	0.00	37	17.38	1851.34
81	0.675	7.43	204	77.1	<0.10	0.000	0.089	<0.10	<0.10	2.0	0.90	84.69	9.04	4.05	474.86	3.02	1.35	165.57	0	0.00	0.00	33	14.78	1866.12
82	0.696	7.53	248	78.6	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	84.69	9.95	4.60	479.46	3.17	1.46	167.03	0	0.00	0.00	35	16.17	1882.29
83	0.688	7.83	305	81.5	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	84.69	9.63	4.40	483.86	2.86	1.31	168.34	0	0.00	0.00	37	16.89	1899.18
84	0.682	7.62	330	77.6	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	84.69	9.46	4.28	488.14	2.98	1.35	169.69	0	0.00	0.00	35	15.84	1915.02
85	0.604	7.65	334	75.8	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	84.69	9.81	3.93	492.07	2.81	1.13	170.82	0	0.00	0.00	36	14.43	1929.45
86	0.793	7.57	338	85.5	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	84.69	10.67	5.62	497.69	3.27	1.72	172.54	0	0.00	0.00	42	22.10	1951.55
87	0.669	7.69	319	76.9	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	84.69	9.08	4.03	501.72	3.05	1.35	173.89	0	0.00	0.00	37	16.43	1967.98
88	0.683	7.70	346	76.6	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.45	85.14	10.24	4.64	506.36	3.11	1.41	175.30	0	0.00	0.00	36	16.32	1984.30
89	0.652	7.74	360	73.5	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	85.14	10.08	4.36	510.72	3.24	1.40	176.70	0	0.00	0.00	34	14.71	1999.01
90	0.745	7.65	364	83.1	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.49	85.63	9.44	4.67	515.39	3.11	1.54	178.24	0	0.00	0.00	38	18.79	2017.80

Midas Gold Corp.
MLI Job No. 3654

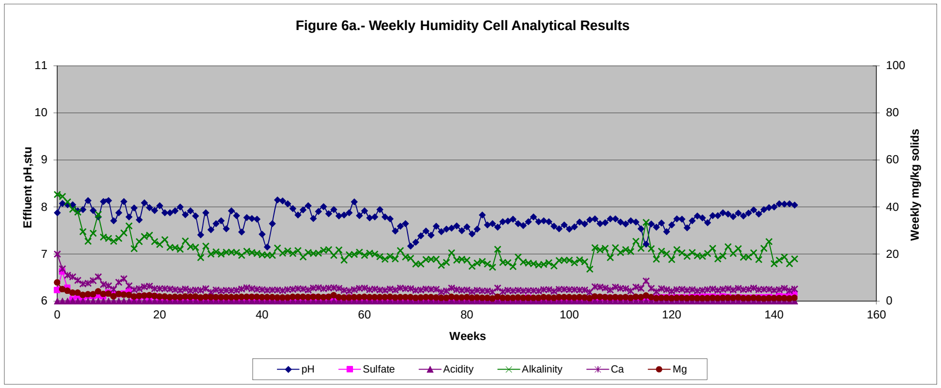
Table 6 . - Humidity Cell Analytical Results, MGI-10-48 (150-165) **(1.5069 Kg)**

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	$SO_4^{=}$ mg/l	$SO_4^{=}$ mg/kg	$SO_4^{=}$ Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
91	0.694	7.61	288	80.6	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.46	86.09	9.33	4.30	519.69	3.00	1.38	179.62	0	0.00	0.00	36	16.58	2034.38
92	0.677	7.69	348	78.1	<0.10	0.000	0.089	<0.10	<0.10	3.0	1.35	87.44	10.04	4.51	524.20	2.84	1.28	180.90	0	0.00	0.00	36	16.17	2050.55
93	0.685	7.79	345	77.9	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.45	87.89	9.84	4.47	528.67	3.05	1.39	182.29	0	0.00	0.00	35	15.91	2066.46
94	0.683	7.69	340	80.5	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.45	88.34	9.71	4.40	533.07	2.87	1.30	183.59	0	0.00	0.00	34	15.41	2081.87
95	0.692	7.71	347	77.0	<0.10	0.000	0.089	<0.10	<0.10	<1.0	0.00	88.34	10.65	4.89	537.96	3.37	1.55	185.14	0	0.00	0.00	34	15.61	2097.48
96	0.703	7.69	362	76.5	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.47	88.81	10.56	4.93	542.89	3.13	1.46	186.60	0	0.00	0.00	35	16.33	2113.81
97	0.666	7.59	332	76.7	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.44	89.25	9.49	4.19	547.08	3.10	1.37	187.97	0	0.00	0.00	34	15.03	2128.84
98	0.653	7.54	350	90.4	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.43	89.68	11.65	5.05	552.13	3.70	1.60	189.57	0	0.00	0.00	40	17.33	2146.17
99	0.655	7.62	363	90.9	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.43	90.11	11.47	4.99	557.12	3.73	1.62	191.19	0	0.00	0.00	40	17.39	2163.56
100	0.657	7.53	347	89.0	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.44	90.55	11.29	4.92	562.04	3.55	1.55	192.74	0	0.00	0.00	40	17.44	2181.00
101	0.667	7.58	336	86.8	<0.10	0.000	0.089	<0.10	<0.10	1.0	0.44	90.99	11.13	4.93	566.97	3.48	1.54	194.28	0	0.00	0.00	37	16.38	2197.38
102	0.680	7.68	349	87.4	0.12	0.054	0.143	<0.10	<0.12	<1.0	0.00	90.99	10.65	4.81	571.78	3.43	1.55	195.83	0	0.00	0.00	39	17.60	2214.98
103	0.646	7.64	331	87.4	<0.10	0.000	0.143	<0.10	<0.10	1.0	0.43	91.42	11.12	4.77	576.55	3.58	1.53	197.36	0	0.00	0.00	39	16.72	2231.70
104	0.588	7.73	333	78.7	<0.10	0.000	0.143	<0.10	<0.10	2.0	0.78	92.20	9.60	3.75	580.30	3.23	1.26	198.62	0	0.00	0.00	35	13.66	2245.36
105	0.815	7.75	338	90.0	<0.10	0.000	0.143	<0.10	<0.10	1.0	0.54	92.74	11.40	6.17	586.47	3.43	1.86	200.48	0	0.00	0.00	42	22.72	2268.08
106	0.731	7.65	316	92.0	<0.10	0.000	0.143	<0.10	<0.10	1.9	0.92	93.66	12.30	5.97	592.44	3.49	1.69	202.17	0	0.00	0.00	45	21.83	2289.91
107	0.738	7.67	330	92.7	<0.10	0.000	0.143	<0.10	<0.10	2.8	1.37	95.03	11.31	5.54	597.98	3.36	1.65	203.82	0	0.00	0.00	46	22.53	2312.44
108	0.697	7.75	349	83.8	<0.10	0.000	0.143	<0.10	<0.10	2.1	0.97	96.00	10.20	4.72	602.70	3.25	1.50	205.32	0	0.00	0.00	40	18.50	2330.94
109	0.743	7.75	343	90.8	<0.10	0.000	0.143	<0.10	<0.10	2.4	1.18	97.18	12.18	6.01	608.71	3.35	1.65	206.97	0	0.00	0.00	46	22.68	2353.62
110	0.710	7.68	355	92.4	<0.10	0.000	0.143	<0.10	<0.10	2.2	1.04	98.22	11.61	5.47	614.18	3.13	1.47	208.44	0	0.00	0.00	44	20.73	2374.35
111	0.717	7.64	358	89.8	<0.10	0.000	0.143	<0.10	<0.10	2.4	1.14	99.36	11.21	5.33	619.51	3.31	1.57	210.01	0	0.00	0.00	46	21.89	2396.24
112	0.663	7.71	357	96.2	<0.10	0.000	0.143	<0.10	<0.10	2.5	1.10	100.46	9.89	4.35	623.86	2.91	1.28	211.29	0	0.00	0.00	48	21.12	2417.36
113	0.752	7.68	357	96.2	<0.10	0.000	0.143	<0.10	<0.10	2.5	1.25	101.71	11.87	5.92	629.78	3.54	1.77	213.06	0	0.00	0.00	51	25.45	2442.81
114	0.721	7.54	316	88.2	<0.10	0.000	0.143	<0.10	<0.10	2.3	1.10	102.81	11.40	5.45	635.23	3.28	1.57	214.63	0	0.00	0.00	47	22.49	2465.30
115	0.720	7.21	360	131	<0.10	0.000	0.143	<0.10	<0.10	2.7	1.29	104.10	17.89	8.55	643.78	4.87	2.33	216.96	0	0.00	0.00	70	33.45	2498.75
116	0.732	7.64	356	84.8	<0.10	0.000	0.143	<0.10	<0.10	2.3	1.12	105.22	11.32	5.50	649.28	3.21	1.56	218.52	0	0.00	0.00	46	22.35	2521.10
117	0.687	7.57	346	79.3	<0.10	0.000	0.143	<0.10	<0.10	3.1	1.41	106.63	9.04	4.12	653.40	2.70	1.23	219.75	0	0.00	0.00	39	17.78	2538.88
118	0.744	7.66	339	81.5	<0.10	0.000	0.143	<0.10	<0.10	3.1	1.53	108.16	10.76	5.31	658.71	2.86	1.41	221.16	0	0.00	0.00	43	21.23	2560.11
119	0.724	7.48	373	79.3	<0.10	0.000	0.143	<0.10	<0.10	3.0	1.44	109.60	10.09	4.85	663.56	2.71	1.30	222.46	0	0.00	0.00	42	20.18	2580.29
120	0.664	7.62	339	73.8	<0.10	0.000	0.143	<0.10	<0.10	3.0	1.32	110.92	9.55	4.21	667.77	2.77	1.22	223.68	0	0.00	0.00	40	17.63	2597.92
121	0.751	7.75	307	80.8	<0.10	0.000	0.143	<0.10	<0.10	3.1	1.54	112.46	9.71	4.84	672.61	2.70	1.35	225.03	0	0.00	0.00	44	21.93	2619.85
122	0.738	7.74	305	80.6	<0.10	0.000	0.143	<0.10	<0.10	3.1	1.52	113.98	10.38	5.08	677.69	2.64	1.29	226.32	0	0.00	0.00	42	20.57	2640.42
123	0.698	7.56	337	75.1	<0.10	0.000	0.143	<0.10	<0.10	3.0	1.39	115.37	10.08	4.67	682.36	2.61	1.21	227.53	0	0.00	0.00	41	18.99	2659.41
124	0.725	7.71	334	79.0	<0.10	0.000	0.143	<0.10	<0.10	3.4	1.64	117.01	10.06	4.84	687.20	2.80	1.35	228.88	0	0.00	0.00	43	20.69	2680.10
125	0.694	7.81	346	81.5	<0.10	0.000	0.143	<0.10	<0.10	3.6	1.66	118.67	9.46	4.36	691.56	2.66	1.23	230.11	0	0.00	0.00	42	19.34	2699.44
126	0.719	7.77	326	79.8	0.78	0.372	0.515	<0.10	<0.78	3.7	1.77	120.44	9.70	4.63	696.19	2.65	1.26	231.37	0	0.00	0.00	40	19.09	2718.53
127	0.713	7.67	345	77.5	<0.10	0.000	0.515	<0.10	<0.10	3.7	1.75	122.19	10.29	4.87	701.06	2.56	1.21	232.58	0	0.00	0.00	43	20.35	2738.88
128	0.753	7.82	344	80.6	<0.10	0.000	0.515	<0.10	<0.10	3.5	1.75	123.94	10.45	5.22	706.28	2.68	1.34	233.92	0	0.00	0.00	45	22.49	2761.37
129	0.659	7.82	346	78.0	<0.10	0.000	0.515	<0.10	<0.10	3.4	1.49	125.43	10.64	4.65	710.93	2.63	1.15	235.07	0	0.00	0.00	41	17.93	2779.30
130	0.688	7.88	352	81.4	<0.10	0.000	0.515	<0.10	<0.10	4.0	1.83	127.26	10.92	4.99	715.92	3.04	1.39	236.46	0	0.00	0.00	42	19.18	2798.48
131	0.795	7.85	352	80.9	<0.10	0.000	0.515	<0.10	<0.10	3.1	1.64	128.90	10.14	5.35	721.27	2.66	1.40	237.86	0	0.00	0.00	44	23.21	2821.69
132	0.680	7.80	335	82.5	<0.10	0.000	0.515	<0.10	<0.10	3.0	1.35	130.25	10.67	4.81	726.08	2.88	1.30	239.16	0	0.00	0.00	45	20.31	2842.00
133	0.764	7.87	291	84.9	<0.10	0.000	0.515	<0.10	<0.10	3.0	1.52	131.77	10.77	5.46	731.54	2.99	1.52	240.68	0	0.00	0.00	44	22.31	2864.31
134	0.721	7.81	297	80.9	<0.10	0.000	0.515	<0.10	<0.10	2.8	1.34	133.11	10.30	4.93	736.47	2.42	1.16	241.84	0	0.00	0.00	39	18.66	2882.97
135	0.710	7.87	246	80.1	<0.10	0.000	0.515	<0.10	<0.10	3.0	1.41	134.52	10.58	4.98	741.45	2.47	1.16	243.00	0	0.00	0.00	40	18.85	2901.82

Table 6 . - Humidity Cell Analytical Results, MGI-10-48 (150-165) (1.5069 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
136	0.757	7.94	283	80.9	<0.10	0.000	0.515	<0.10	<0.10	2.6	1.31	135.83	10.99	5.52	746.97	2.57	1.29	244.29	0	0.00	0.00	41	20.60	2922.42
137	0.719	7.85	257	77.4	<0.10	0.000	0.515	<0.10	<0.10	3.0	1.43	137.26	10.27	4.90	751.87	2.65	1.26	245.55	0	0.00	0.00	37	17.65	2940.07
138	0.692	7.95	247	77.2	<0.10	0.000	0.515	<0.10	<0.10	3.1	1.42	138.68	11.01	5.06	756.93	2.46	1.13	246.68	0	0.00	0.00	49	22.50	2962.57
139	0.765	7.99	273	80.6	<0.10	0.000	0.515	<0.10	<0.10	3.1	1.57	140.25	9.90	5.03	761.96	2.42	1.23	247.91	0	0.00	0.00	50	25.38	2987.95
140	0.708	8.00	215	76.8	<0.10	0.000	0.515	<0.10	<0.10	2.8	1.32	141.57	9.69	4.55	766.51	2.48	1.17	249.08	0	0.00	0.00	34	15.97	3003.92
141	0.731	8.07	270	79.7	<0.10	0.000	0.515	<0.10	<0.10	4.1	1.99	143.56	10.18	4.94	771.45	2.55	1.24	250.32	0	0.00	0.00	36	17.46	3021.38
142	0.765	8.06	222	78.7	<0.10	0.000	0.515	<0.10	<0.10	3.4	1.73	145.29	10.78	5.47	776.92	2.51	1.27	251.59	0	0.00	0.00	37	18.78	3040.16
143	0.664	8.07	241	76.4	<0.10	0.000	0.515	<0.10	<0.10	5.0	2.20	147.49	10.25	4.52	781.44	2.59	1.14	252.73	0	0.00	0.00	36	15.86	3056.02
144	0.750	8.04	232	77.7	<0.10	0.000	0.515	<0.10	<0.10	6.1	3.04	150.53	10.27	5.11	786.55	2.58	1.28	254.01	0	0.00	0.00	36	17.92	3073.94

Testing terminated



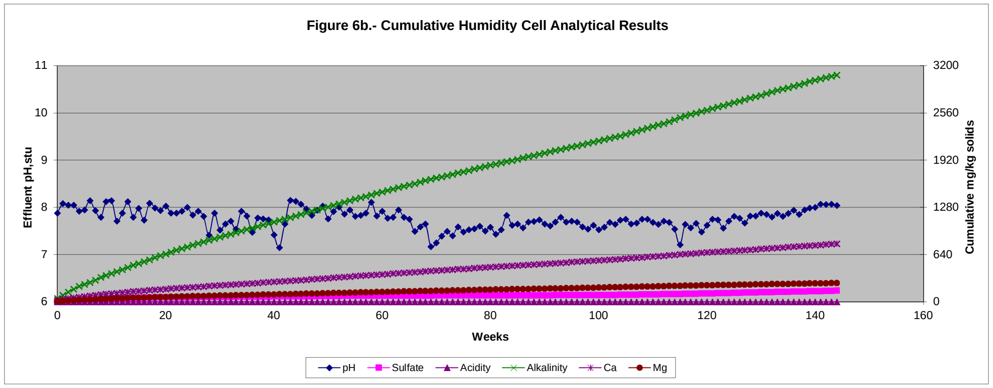


Table 7 . - Humidity Cell Analytical Results, MGI-10-48 (272-283) (1.5068 Kg)

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	SO_4= mg/l	SO_4= mg/kg	SO_4= Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
0	0.712	7.77	243	896	<0.10	0.000	0.000	<0.10	<0.10	310.0	146.48	146.48	107.30	50.70	50.70	58.70	27.74	27.74	0	0.00	0.00	52	24.57	24.57
1	0.737	7.84	252	765	<0.10	0.000	0.000	<0.10	<0.10	290.0	141.84	288.32	86.80	42.46	93.16	40.60	19.86	47.60	0	0.00	0.00	62	30.33	54.90
2	0.754	7.78	258	430	<0.10	0.000	0.000	<0.10	<0.10	20.0	10.01	298.33	44.60	22.32	115.48	21.30	10.66	58.26	0	0.00	0.00	60	30.02	84.92
3	0.721	7.93	265	302	<0.10	0.000	0.000	<0.10	<0.10	20.0	9.57	307.90	36.00	17.23	132.71	14.33	6.86	65.12	0	0.00	0.00	61	29.19	114.11
4	0.748	7.85	280	241	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	308.40	24.70	12.26	144.97	12.35	6.13	71.25	0	0.00	0.00	66	32.76	146.87
5	0.737	7.91	268	207	<0.10	0.000	0.000	<0.10	<0.10	27.0	13.21	321.61	21.70	10.61	155.58	9.52	4.66	75.91	0	0.00	0.00	66	32.28	179.15
6	0.763	7.96	289	251	<0.10	0.000	0.000	<0.10	<0.10	32.0	16.20	337.81	24.10	12.20	167.78	11.03	5.59	81.50	0	0.00	0.00	74	37.47	216.62
7	0.733	7.75	274	217	<0.10	0.000	0.000	<0.10	<0.10	25.0	12.16	349.97	24.30	11.82	179.60	10.14	4.93	86.43	0	0.00	0.00	74	36.00	252.62
8	0.641	7.77	219	265	<0.10	0.000	0.000	<0.10	<0.10	28.0	11.91	361.88	27.00	11.49	191.09	13.63	5.80	92.23	0	0.00	0.00	87	37.01	289.63
9	0.821	8.03	185	285	<0.10	0.000	0.000	<0.10	<0.10	25.0	13.62	375.50	20.40	11.12	202.21	11.03	6.01	98.24	0	0.00	0.00	94	51.22	340.85
10	0.637	7.79	232	661	<0.10	0.000	0.000	<0.10	<0.10	70.0	29.59	405.09	43.10	18.22	220.43	24.57	10.39	108.63	0	0.00	0.00	103	43.54	384.39
11	0.769	7.92	209	215	<0.10	0.000	0.000	<0.10	<0.10	40.0	20.41	425.50	18.70	9.54	229.97	9.74	4.97	113.60	0	0.00	0.00	63	32.15	416.54
12	0.720	8.03	153	273	<0.10	0.000	0.000	<0.10	<0.10	52.0	24.85	450.35	32.20	15.39	245.36	14.80	7.07	120.67	0	0.00	0.00	79	37.75	454.29
13	0.737	7.91	238	317	<0.10	0.000	0.000	<0.10	<0.10	75.0	36.68	487.03	36.20	17.71	263.07	16.10	7.87	128.54	0	0.00	0.00	73	35.71	490.00
14	0.799	7.84	198	178	<0.10	0.000	0.000	<0.10	<0.10	34.0	18.03	505.06	15.78	8.37	271.44	7.69	4.08	132.62	0	0.00	0.00	55	29.16	519.16
15	0.738	7.79	186	247	<0.10	0.000	0.000	<0.10	<0.10	66.0	32.33	537.39	20.94	10.26	281.70	10.02	4.91	137.53	0	0.00	0.00	42	20.57	539.73
16	0.763	7.84	214	245	<0.10	0.000	0.000	<0.10	<0.10	55.0	27.85	565.24	22.14	11.21	292.91	10.87	5.50	143.03	0	0.00	0.00	56	28.36	568.09
17	0.720	7.88	214	269	<0.10	0.000	0.000	<0.10	<0.10	62.0	29.63	594.87	23.82	11.38	304.29	10.29	4.92	147.95	0	0.00	0.00	46	21.98	590.07
18	0.758	7.53	215	201	<0.10	0.000	0.000	<0.10	<0.10	44.0	22.13	617.00	15.71	7.90	312.19	7.29	3.67	151.62	0	0.00	0.00	48	24.15	614.22
19	0.720	7.75	216	210	<0.10	0.000	0.000	<0.10	<0.10	53.0	25.33	642.33	17.06	8.15	320.34	8.15	3.89	155.51	0	0.00	0.00	43	20.55	634.77
20	0.766	7.85	211	177	<0.10	0.000	0.000	<0.10	<0.10	38.0	19.32	661.65	15.24	7.75	328.09	6.54	3.32	158.83	0	0.00	0.00	47	23.89	658.66
21	0.724	7.75	253	185	<0.10	0.000	0.000	<0.10	<0.10	54.0	25.95	687.60	17.13	8.23	336.32	7.53	3.62	162.45	0	0.00	0.00	48	23.06	681.72
22	0.730	7.76	230	159	<0.10	0.000	0.000	<0.10	<0.10	34.0	16.47	704.07	15.82	7.66	343.98	6.40	3.10	165.55	0	0.00	0.00	49	23.74	705.46
23	0.746	7.82	256	158	<0.10	0.000	0.000	<0.10	<0.10	17.0	8.42	712.49	13.92	6.89	350.87	6.26	3.10	168.65	0	0.00	0.00	47	23.27	728.73
24	0.745	7.89	235	148	<0.10	0.000	0.000	<0.10	<0.10	24.0	11.87	724.36	13.13	6.49	357.36	6.11	3.02	171.67	0	0.00	0.00	47	23.24	751.97
25	0.762	7.70	257	146	<0.10	0.000	0.000	<0.10	<0.10	26.0	13.15	737.51	12.17	6.15	363.51	5.45	2.76	174.43	0	0.00	0.00	44	22.25	774.22
26	0.715	7.81	242	160	<0.10	0.000	0.000	<0.10	<0.10	38.0	18.03	755.54	14.32	6.80	370.31	5.38	2.55	176.98	0	0.00	0.00	47	22.30	796.52
27	0.765	7.72	266	137	<0.10	0.000	0.000	<0.10	<0.10	21.0	10.66	766.20	12.12	6.15	376.46	6.01	3.05	180.03	0	0.00	0.00	44	22.34	818.86
28	0.688	7.46	335	143	<0.10	0.000	0.000	<0.10	<0.10	37.0	16.89	783.09	14.18	6.47	382.93	5.42	2.47	182.50	0	0.00	0.00	44	20.09	838.95
29	0.760	7.80	275	130	<0.10	0.000	0.000	<0.10	<0.10	12.0	6.05	789.14	12.80	6.46	389.39	5.20	2.62	185.12	0	0.00	0.00	41	20.68	859.63
30	0.736	7.55	238	131	<0.10	0.000	0.000	<0.10	<0.10	23.0	11.23	800.37	11.54	5.64	395.03	5.22	2.55	187.67	0	0.00	0.00	41	20.03	879.66
31	0.793	7.62	329	117	<0.10	0.000	0.000	<0.10	<0.10	20.0	10.53	810.90	12.20	6.42	401.45	5.13	2.70	190.37	0	0.00	0.00	41	21.58	901.24
32	0.732	7.61	335	134	<0.10	0.000	0.000	<0.10	<0.10	33.0	16.03	826.93	12.68	6.16	407.61	5.55	2.70	193.07	0	0.00	0.00	39	18.95	920.19
33	0.741	7.50	328	139	<0.10	0.000	0.000	<0.10	<0.10	22.0	10.82	837.75	13.11	6.45	414.06	5.38	2.65	195.72	0	0.00	0.00	43	21.15	941.34
34	0.733	7.91	271	136	<0.10	0.000	0.000	<0.10	<0.10	28.0	13.62	851.37	13.03	6.34	420.40	5.98	2.91	198.63	0	0.00	0.00	41	19.94	961.28
35	0.728	7.72	319	124	<0.10	0.000	0.000	<0.10	<0.10	27.0	13.04	864.41	11.51	5.56	425.96	5.30	2.56	201.19	0	0.00	0.00	36	17.39	978.67
36	0.727	7.52	319	122	<0.10	0.000	0.000	<0.10	<0.10	26.0	12.54	876.95	14.50	7.00	432.96	6.29	3.03	204.22	0	0.00	0.00	38	18.33	997.00
37	0.751	7.03	316	128	<0.10	0.000	0.000	<0.10	<0.10	28.0	13.96	890.91	14.93	7.44	440.40	6.17	3.08	207.30	0	0.00	0.00	38	18.94	1015.94
38	0.738	7.68	310	126	<0.10	0.000	0.000	<0.10	<0.10	16.0	7.84	898.75	14.15	6.93	447.33	5.76	2.82	210.12	0	0.00	0.00	38	18.61	1034.55
39	0.736	7.66	269	127	<0.10	0.000	0.000	<0.10	<0.10	20.0	9.77	908.52	13.47	6.58	453.91	5.91	2.89	213.01	0	0.00	0.00	38	18.56	1053.11
40	0.750	7.45	295	132	<0.10	0.000	0.000	<0.10	<0.10	21.0	10.45	918.97	12.22	6.08	459.99	5.47	2.72	215.73	0	0.00	0.00	37	18.42	1071.53
41	0.740	7.47	349	141	<0.10	0.000	0.000	<0.10	<0.10	17.0	8.35	927.32	11.14	5.47	465.46	4.94	2.43	218.16	0	0.00	0.00	37	18.17	1089.70
42	0.750	7.65	365	147	<0.10	0.000	0.000	<0.10	<0.10	18.0	8.96	936.28	12.90	6.42	471.88	5.55	2.76	220.92	0	0.00	0.00	37	18.42	1108.12
43	0.729	7.78	359	127	<0.10	0.000	0.000	<0.10	<0.10	18.0	8.71	944.99	11.94	5.78	477.66	4.96	2.40	223.32	0	0.00	0.00	40	19.35	1127.47
44	0.756	7.88	359	129	<0.10	0.000	0.000	<0.10	<0.10	18.0	9.03	954.02	11.70	5.87	483.53	5.13	2.57	225.89	0	0.00	0.00	40	20.07	1147.54
45	0.740	7.48	415	118	<0.10	0.000	0.000	<0.10	<0.10	22.0	10.80	964.82	12.29	6.04	489.57	4.84	2.38	228.27	0	0.00	0.00	36	17.68	1165.22

Midas Gold Corp.
MLI Job No. 3654

Table 7 . - Humidity Cell Analytical Results, MGI-10-48 (272-283) (1.5068 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
46	0.737	7.33	365	115	<0.10	0.000	0.000	<0.10	<0.10	18.0	8.80	973.62	12.55	6.14	495.71	5.21	2.55	230.82	0	0.00	0.00	34	16.63	1181.85
47	0.731	7.62	337	121	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.34	978.96	12.44	6.04	501.75	5.50	2.67	233.49	0	0.00	0.00	37	17.95	1199.80
48	0.741	7.34	358	110	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.41	984.37	13.34	6.56	508.31	5.53	2.72	236.21	0	0.00	0.00	33	16.23	1216.03
49	0.723	7.92	315	109	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.76	990.13	11.46	5.50	513.81	4.65	2.23	238.44	0	0.00	0.00	35	16.79	1232.82
50	0.733	7.67	287	109	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.35	995.48	11.89	5.78	519.59	4.95	2.41	240.85	0	0.00	0.00	36	17.51	1250.33
51	0.743	7.71	366	113	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.93	1000.41	12.76	6.29	525.88	5.30	2.61	243.46	0	0.00	0.00	38	18.74	1269.07
52	0.735	7.81	344	109	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.39	1004.80	11.51	5.61	531.49	4.90	2.39	245.85	0	0.00	0.00	38	18.54	1287.61
53	0.734	7.48	321	103	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.41	1008.21	11.36	5.53	537.02	4.80	2.34	248.19	0	0.00	0.00	38	18.51	1306.12
54	0.771	7.82	286	105	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.63	1013.84	10.08	5.16	542.18	4.34	2.22	250.41	0	0.00	0.00	36	18.42	1324.54
55	0.749	7.77	266	93.4	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.98	1017.82	9.92	4.93	547.11	4.18	2.08	252.49	0	0.00	0.00	34	16.90	1341.44
56	0.741	7.60	273	92.8	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.43	1022.25	10.76	5.29	552.40	4.59	2.26	254.75	0	0.00	0.00	30	14.75	1356.19
57	0.731	7.69	280	92.3	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.85	1027.10	9.44	4.58	556.98	4.18	2.03	256.78	0	0.00	0.00	33	16.01	1372.20
58	0.747	7.88	297	96.3	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.96	1032.06	10.08	5.00	561.98	4.23	2.10	258.88	0	0.00	0.00	33	16.36	1388.56
59	0.752	7.65	278	94.2	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.99	1037.05	10.92	5.45	567.43	4.19	2.09	260.97	0	0.00	0.00	34	16.97	1405.53
60	0.718	7.71	279	92.4	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.81	1040.86	10.67	5.08	572.51	4.50	2.14	263.11	0	0.00	0.00	33	15.72	1421.25
61	0.740	7.60	283	88.3	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.42	1045.28	9.51	4.67	577.18	4.10	2.01	265.12	0	0.00	0.00	29	14.24	1435.49
62	0.736	7.66	317	92.8	<0.10	0.000	0.000	<0.10	<0.10	13.0	6.35	1051.63	10.76	5.26	582.44	4.70	2.30	267.42	0	0.00	0.00	32	15.63	1451.12
63	0.735	7.65	325	91.6	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.88	1056.51	9.70	4.73	587.17	4.06	1.98	269.40	0	0.00	0.00	30	14.63	1465.75
64	0.740	7.66	298	100	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.91	1061.42	11.55	5.67	592.84	4.52	2.22	271.62	0	0.00	0.00	33	16.21	1481.96
65	0.733	7.56	282	97.3	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.86	1066.28	10.83	5.27	598.11	4.58	2.23	273.85	0	0.00	0.00	31	15.08	1497.04
66	0.722	7.53	251	94.1	<0.10	0.000	0.000	<0.10	<0.10	13.0	6.23	1072.51	10.12	4.85	602.96	4.30	2.06	275.91	0	0.00	0.00	29	13.90	1510.94
67	0.762	7.63	336	97.5	<0.10	0.000	0.000	<0.10	<0.10	10.0	5.06	1077.57	10.89	5.51	608.47	4.30	2.17	278.08	0	0.00	0.00	34	17.19	1528.13
68	0.726	7.51	298	90.7	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.82	1082.39	10.59	5.10	613.57	4.27	2.06	280.14	0	0.00	0.00	29	13.97	1542.10
69	0.707	7.43	242	92.9	<0.10	0.000	0.000	<0.10	<0.10	16.0	7.51	1089.90	10.32	4.84	618.41	4.37	2.05	282.19	0	0.00	0.00	29	13.61	1555.71
70	0.728	7.20	230	94.0	<0.10	0.000	0.000	<0.10	<0.10	16.0	7.73	1097.63	9.93	4.80	623.21	3.90	1.88	284.07	0	0.00	0.00	27	13.04	1568.75
71	0.721	7.37	202	99.8	<0.10	0.000	0.000	<0.10	<0.10	16.0	7.66	1105.29	10.04	4.80	628.01	4.35	2.08	286.15	0	0.00	0.00	29	13.88	1582.63
72	0.752	7.50	239	96.8	<0.10	0.000	0.000	<0.10	<0.10	15.0	7.49	1112.78	10.21	5.10	633.11	4.29	2.14	288.29	0	0.00	0.00	30	14.97	1597.60
73	0.704	7.39	215	79.7	<0.10	0.000	0.000	<0.10	<0.10	13.0	6.07	1118.85	8.55	3.99	637.10	3.56	1.66	289.95	0	0.00	0.00	25	11.68	1609.28
74	0.725	7.51	231	93.0	<0.10	0.000	0.000	<0.10	<0.10	17.0	8.18	1127.03	10.42	5.01	642.11	4.30	2.07	292.02	0	0.00	0.00	29	13.95	1623.23
75	0.677	7.36	216	93.0	<0.10	0.000	0.000	<0.10	<0.10	17.0	7.64	1134.67	9.30	4.18	646.29	4.11	1.85	293.87	0	0.00	0.00	26	11.68	1634.91
76	0.644	7.47	227	115	<0.10	0.000	0.000	<0.10	<0.10	23.0	9.83	1144.50	12.73	5.44	651.73	5.26	2.25	296.12	0	0.00	0.00	34	14.53	1649.44
77	0.736	7.32	227	85.2	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.40	1148.90	8.64	4.22	655.95	3.67	1.79	297.91	0	0.00	0.00	26	12.70	1662.14
78	0.700	7.52	235	91.7	<0.10	0.000	0.000	<0.10	<0.10	17.0	7.90	1156.80	10.32	4.79	660.74	4.13	1.92	299.83	0	0.00	0.00	27	12.54	1674.68
79	0.693	7.44	208	86.1	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.06	1161.86	9.23	4.25	664.99	3.81	1.75	301.58	0	0.00	0.00	26	11.96	1686.64
80	0.695	7.42	233	94.5	<0.10	0.000	0.000	<0.10	<0.10	16.0	7.38	1169.24	9.86	4.55	669.54	4.43	2.04	303.62	0	0.00	0.00	27	12.45	1699.09
81	0.713	7.40	215	97.1	<0.10	0.000	0.000	<0.10	<0.10	15.0	7.10	1176.34	9.66	4.57	674.11	4.59	2.17	305.79	0	0.00	0.00	27	12.78	1711.87
82	0.728	7.46	257	95.8	<0.10	0.000	0.000	<0.10	<0.10	16.0	7.73	1184.07	10.12	4.89	679.00	4.32	2.09	307.88	0	0.00	0.00	28	13.53	1725.40
83	0.694	7.70	310	96.5	<0.10	0.000	0.000	<0.10	<0.10	19.0	8.75	1192.82	9.99	4.60	683.60	4.08	1.88	309.76	0	0.00	0.00	27	12.44	1737.84
84	0.725	7.66	346	98.4	<0.10	0.000	0.000	<0.10	<0.10	14.0	6.74	1199.56	10.76	5.18	688.78	4.40	2.12	311.88	0	0.00	0.00	27	12.99	1750.83
85	0.642	7.48	354	98.5	<0.10	0.000	0.000	<0.10	<0.10	21.0	8.95	1208.51	10.68	4.55	693.33	4.27	1.82	313.70	0	0.00	0.00	26	11.08	1761.91
86	0.832	7.58	349	102	<0.10	0.000	0.000	<0.10	<0.10	13.0	7.18	1215.69	11.23	6.20	699.53	4.61	2.55	316.25	0	0.00	0.00	36	19.88	1781.79
87	0.701	7.59	333	91.2	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.58	1221.27	9.44	4.39	703.92	4.15	1.93	318.18	0	0.00	0.00	29	13.49	1795.28
88	0.729	7.60	363	95.9	<0.10	0.000	0.000	<0.10	<0.10	17.0	8.22	1229.49	12.10	5.85	709.77	4.47	2.16	320.34	0	0.00	0.00	29	14.03	1809.31
89	0.669	7.58	370	100	<0.10	0.000	0.000	<0.10	<0.10	24.0	10.66	1240.15	11.07	4.91	714.68	4.61	2.05	322.39	0	0.00	0.00	27	11.99	1821.30
90	0.771	7.62	370	96.9	<0.10	0.000	0.000	<0.10	<0.10	14.0	7.16	1247.31	10.15	5.19	719.87	4.40	2.25	324.64	0	0.00	0.00	32	16.37	1837.67

Midas Gold Corp.
MLI Job No. 3654

Table 7 . - Humidity Cell Analytical Results, MGI-10-48 (272-283) (1.5068 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
91	0.728	7.51	283	101	<0.10	0.000	0.000	<0.10	<0.10	14.0	6.76	1254.07	10.34	5.00	724.87	4.16	2.01	326.65	0	0.00	0.00	30	14.49	1852.16
92	0.709	7.60	357	96.3	<0.10	0.000	0.000	<0.10	<0.10	16.0	7.53	1261.60	11.08	5.21	730.08	4.24	2.00	328.65	0	0.00	0.00	29	13.65	1865.81
93	0.716	7.75	351	120	<0.10	0.000	0.000	<0.10	<0.10	18.0	8.55	1270.15	13.70	6.51	736.59	5.75	2.73	331.38	0	0.00	0.00	39	18.53	1884.34
94	0.654	7.75	336	96.3	<0.10	0.000	0.000	<0.10	<0.10	15.0	6.51	1276.66	10.59	4.60	741.19	3.86	1.68	333.06	0	0.00	0.00	28	12.15	1896.49
95	0.682	7.59	382	104	<0.10	0.000	0.000	<0.10	<0.10	17.0	7.69	1284.35	12.50	5.66	746.85	4.88	2.21	335.27	0	0.00	0.00	25	11.32	1907.81
96	0.790	7.61	369	100	<0.10	0.000	0.000	<0.10	<0.10	16.0	8.39	1292.74	11.68	6.12	752.97	4.64	2.43	337.70	0	0.00	0.00	33	17.30	1925.11
97	0.721	7.49	337	94.4	<0.10	0.000	0.000	<0.10	<0.10	16.0	7.66	1300.40	9.95	4.76	757.73	4.28	2.05	339.75	0	0.00	0.00	28	13.40	1938.51
98	0.717	7.44	350	112	<0.10	0.000	0.000	<0.10	<0.10	17.0	8.09	1308.49	13.02	6.20	763.93	5.10	2.43	342.18	0	0.00	0.00	35	16.65	1955.16
99	0.719	7.46	368	107	<0.10	0.000	0.000	<0.10	<0.10	15.0	7.16	1315.65	12.27	5.85	769.78	4.96	2.37	344.55	0	0.00	0.00	33	15.75	1970.91
100	0.682	7.43	352	104	<0.10	0.000	0.000	<0.10	<0.10	14.0	6.34	1321.99	12.52	5.67	775.45	4.88	2.21	346.76	0	0.00	0.00	33	14.94	1985.85
101	0.685	7.45	343	95.1	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.09	1326.08	10.86	4.94	780.39	4.63	2.10	348.86	0	0.00	0.00	30	13.64	1999.49
102	0.724	7.49	361	86.9	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.84	1329.92	10.08	4.84	785.23	4.15	1.99	350.85	0	0.00	0.00	29	13.93	2013.42
103	0.695	7.49	343	88.5	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.23	1333.15	10.44	4.82	790.05	4.06	1.87	352.72	0	0.00	0.00	30	13.84	2027.26
104	0.637	7.50	335	90.4	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.38	1336.53	9.95	4.21	794.26	4.09	1.73	354.45	0	0.00	0.00	29	12.26	2039.52
105	0.816	7.65	339	104	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.79	1340.32	11.95	6.47	800.73	4.67	2.53	356.98	0	0.00	0.00	39	21.12	2060.64
106	0.705	7.53	308	88.2	<0.10	0.000	0.000	<0.10	<0.10	7.9	3.70	1344.02	10.20	4.77	805.50	4.19	1.96	358.94	0	0.00	0.00	36	16.84	2077.48
107	0.750	7.64	330	91.2	<0.10	0.000	0.000	<0.10	<0.10	8.8	4.38	1348.40	9.49	4.72	810.22	4.10	2.04	360.98	0	0.00	0.00	37	18.42	2095.90
108	0.728	7.60	356	89.3	<0.10	0.000	0.000	<0.10	<0.10	9.5	4.59	1352.99	10.08	4.87	815.09	4.03	1.95	362.93	0	0.00	0.00	33	15.94	2111.84
109	0.702	7.85	337	87.2	<0.10	0.000	0.000	<0.10	<0.10	8.8	4.10	1357.09	10.85	5.05	820.14	4.00	1.86	364.79	0	0.00	0.00	37	17.24	2129.08
110	0.732	7.57	365	93.1	<0.10	0.000	0.000	<0.10	<0.10	8.5	4.13	1361.22	10.02	4.87	825.01	4.15	2.02	366.81	0	0.00	0.00	36	17.49	2146.57
111	0.738	7.50	369	81.0	<0.10	0.000	0.000	<0.10	<0.10	8.2	4.02	1365.24	8.89	4.35	829.36	3.78	1.85	368.66	0	0.00	0.00	33	16.16	2162.73
112	0.685	7.45	361	92.1	<0.10	0.000	0.000	<0.10	<0.10	10	4.55	1369.79	10.09	4.59	833.95	4.00	1.82	370.48	0	0.00	0.00	36	16.37	2179.10
113	0.681	7.56	364	92.0	<0.10	0.000	0.000	<0.10	<0.10	9.4	4.25	1374.04	10.01	4.52	838.47	4.11	1.86	372.34	0	0.00	0.00	38	17.17	2196.27
114	0.730	7.34	327	91.3	<0.10	0.000	0.000	<0.10	<0.10	8.2	3.97	1378.01	10.22	4.95	843.42	4.13	2.00	374.34	0	0.00	0.00	39	18.89	2215.16
115	0.729	7.15	354	120	0.11	0.053	0.053	<0.10	<0.11	9.3	4.50	1382.51	14.34	6.94	850.36	6.14	2.97	377.31	0	0.00	0.00	38	18.38	2233.54
116	0.727	7.49	369	73.7	<0.10	0.000	0.053	<0.10	<0.10	7.7	3.72	1386.23	8.22	3.97	854.33	3.41	1.65	378.96	0	0.00	0.00	31	14.96	2248.50
117	0.738	7.31	364	78.3	<0.10	0.000	0.053	<0.10	<0.10	11	5.39	1391.62	7.50	3.67	858.00	3.01	1.47	380.43	0	0.00	0.00	27	13.22	2261.72
118	0.695	7.46	351	73.0	<0.10	0.000	0.053	<0.10	<0.10	10	4.61	1396.23	8.21	3.79	861.79	3.24	1.49	381.92	0	0.00	0.00	28	12.91	2274.63
119	0.693	7.41	385	74.7	<0.10	0.000	0.053	<0.10	<0.10	11	5.06	1401.29	8.18	3.76	865.55	3.37	1.55	383.47	0	0.00	0.00	27	12.42	2287.05
120	0.632	7.45	356	70.7	<0.10	0.000	0.053	<0.10	<0.10	12	5.03	1406.32	7.84	3.29	868.84	3.52	1.48	384.95	0	0.00	0.00	26	10.91	2297.96
121	0.779	7.74	305	84.2	<0.10	0.000	0.053	<0.10	<0.10	11	5.69	1412.01	8.82	4.56	873.40	3.66	1.89	386.84	0	0.00	0.00	35	18.09	2316.05
122	0.703	7.86	296	67.9	<0.10	0.000	0.053	<0.10	<0.10	9.6	4.48	1416.49	7.22	3.37	876.77	3.04	1.42	388.26	0	0.00	0.00	34	15.86	2331.91
123	0.738	7.53	339	77.8	<0.10	0.000	0.053	<0.10	<0.10	11	5.39	1421.88	8.49	4.16	880.93	3.66	1.79	390.05	0	0.00	0.00	31	15.18	2347.09
124	0.724	7.70	328	75.4	<0.10	0.000	0.053	<0.10	<0.10	11	5.29	1427.17	8.46	4.06	884.99	3.31	1.59	391.64	0	0.00	0.00	31	14.90	2361.99
125	0.718	7.75	363	81.8	<0.10	0.000	0.053	<0.10	<0.10	12	5.72	1432.89	8.47	4.04	889.03	3.70	1.76	393.40	0	0.00	0.00	31	14.77	2376.76
126	0.731	7.59	331	77.9	<0.10	0.000	0.053	<0.10	<0.10	10	4.85	1437.74	7.67	3.72	892.75	3.03	1.47	394.87	0	0.00	0.00	30	14.55	2391.31
127	0.706	7.62	357	74.0	<0.10	0.000	0.053	<0.10	<0.10	11	5.15	1442.89	8.60	4.03	896.78	3.23	1.51	396.38	0	0.00	0.00	30	14.06	2405.37
128	0.749	7.68	357	75.0	<0.10	0.000	0.053	<0.10	<0.10	9.9	4.92	1447.81	9.27	4.61	901.39	3.95	1.96	398.34	0	0.00	0.00	32	15.91	2421.28
129	0.694	7.70	357	71.5	<0.10	0.000	0.053	<0.10	<0.10	9.8	4.51	1452.32	8.55	3.94	905.33	3.14	1.45	399.79	0	0.00	0.00	28	12.90	2434.18
130	0.665	7.71	361	78.2	<0.10	0.000	0.053	<0.10	<0.10	11	4.85	1457.17	8.53	3.76	909.09	3.50	1.54	401.33	0	0.00	0.00	30	13.24	2447.42
131	0.785	7.79	358	80.3	<0.10	0.000	0.053	<0.10	<0.10	8.9	4.64	1461.81	8.95	4.66	913.75	3.69	1.92	403.25	0	0.00	0.00	35	18.23	2465.65
132	0.706	7.82	349	79.4	<0.10	0.000	0.053	<0.10	<0.10	8.1	3.80	1465.61	9.35	4.38	918.13	3.58	1.68	404.93	0	0.00	0.00	36	16.87	2482.52
133	0.769	7.87	298	78.6	<0.10	0.000	0.053	<0.10	<0.10	7.7	3.93	1469.54	8.61	4.39	922.52	3.75	1.91	406.84	0	0.00	0.00	34	17.35	2499.87
134	0.657	7.80	303	66.8	<0.10	0.000	0.053	<0.10	<0.10	7.6	3.31	1472.85	7.02	3.06	925.58	2.65	1.16	408.00	0	0.00	0.00	26	11.34	2511.21
135	0.758	7.79	250	83.7	<0.10	0.000	0.053	<0.10	<0.10	8.9	4.48	1477.33	9.10	4.58	930.16	3.63	1.83	409.83	0	0.00	0.00	33	16.60	2527.81

Midas Gold Corp.
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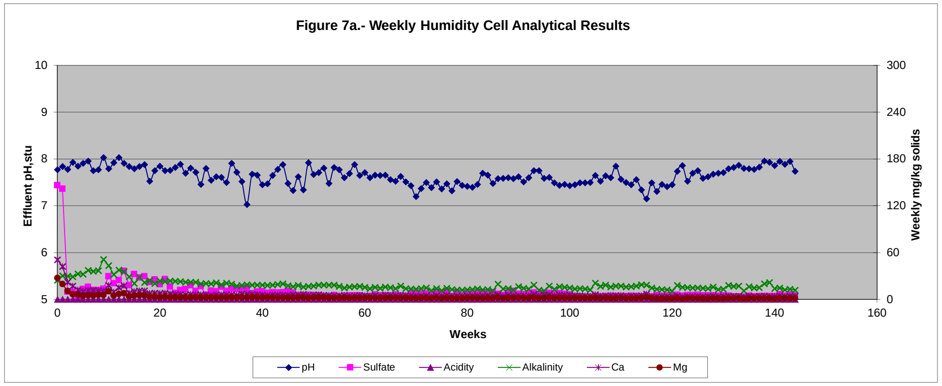
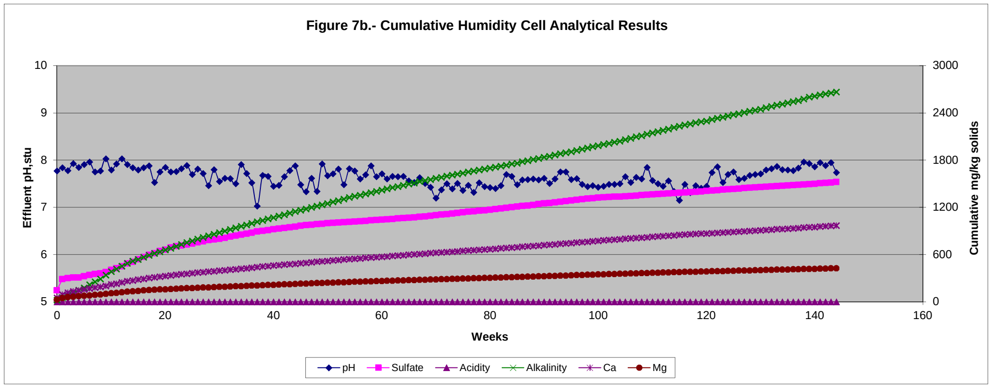
Table 7 . - Humidity Cell Analytical Results, MGI-10-48 (272-283) (1.5068 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
136	0.708	7.78	294	78.7	<0.10	0.000	0.053	<0.10	<0.10	8.0	3.76	1481.09	8.47	3.98	934.14	3.52	1.65	411.48	0	0.00	0.00	32	15.04	2542.85
137	0.742	7.83	260	77.9	<0.10	0.000	0.053	<0.10	<0.10	8.6	4.23	1485.32	8.61	4.24	938.38	3.49	1.72	413.20	0	0.00	0.00	31	15.27	2558.12
138	0.743	7.96	247	79.0	<0.10	0.000	0.053	<0.10	<0.10	8.4	4.14	1489.46	9.26	4.57	942.95	3.44	1.70	414.90	0	0.00	0.00	41	20.22	2578.34
139	0.737	7.93	281	79.0	<0.10	0.000	0.053	<0.10	<0.10	8.4	4.11	1493.57	7.86	3.84	946.79	3.30	1.61	416.51	0	0.00	0.00	45	22.01	2600.35
140	0.715	7.86	215	72.9	<0.10	0.000	0.053	<0.10	<0.10	8.6	4.08	1497.65	8.05	3.82	950.61	3.16	1.50	418.01	0	0.00	0.00	30	14.24	2614.59
141	0.754	7.95	275	88.4	<0.10	0.000	0.053	<0.10	<0.10	13	6.51	1504.16	9.81	4.91	955.52	3.80	1.90	419.91	0	0.00	0.00	30	15.01	2629.60
142	0.728	7.89	225	75.5	<0.10	0.000	0.053	<0.10	<0.10	9.9	4.78	1508.94	8.28	4.00	959.52	3.33	1.61	421.52	0	0.00	0.00	26	12.56	2642.16
143	0.716	7.95	261	81.2	<0.10	0.000	0.053	<0.10	<0.10	13.0	6.18	1515.12	8.89	4.22	963.74	3.56	1.69	423.21	0	0.00	0.00	28	13.31	2655.47
144	0.702	7.74	267	81.7	<0.10	0.000	0.053	<0.10	<0.10	11.0	5.12	1520.24	9.12	4.25	967.99	3.63	1.69	424.90	0	0.00	0.00	26	12.11	2667.58

Testing terminated





Midas Gold Corp.
MLI Job No. 3654

Table 8 . - Humidity Cell Analytical Results, MGI-10-48 (726-746) (1.5084 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
0	0.737	8.60	181	429	<0.10	0.000	0.000	<0.10	<0.10	90.0	43.97	43.97	38.50	18.81	18.81	28.40	13.88	13.88	0	0.00	0.00	52	25.41	25.41
1	0.716	8.13	236	313	<0.10	0.000	0.000	<0.10	<0.10	50.0	23.73	67.70	22.65	10.75	29.56	18.90	8.97	22.85	0	0.00	0.00	50	23.73	49.14
2	0.750	8.25	237	282	<0.10	0.000	0.000	<0.10	<0.10	68.0	33.81	101.51	21.48	10.68	40.24	17.10	8.50	31.35	0	0.00	0.00	58	28.84	77.98
3	0.713	8.39	242	183	<0.10	0.000	0.000	<0.10	<0.10	35.0	16.54	118.05	14.31	6.76	47.00	10.81	5.11	36.46	0	0.00	0.00	49	23.16	101.14
4	0.762	8.26	260	160	<0.10	0.000	0.000	<0.10	<0.10	28.0	14.14	132.19	13.14	6.64	53.64	9.66	4.88	41.34	0	0.00	0.00	55	27.78	128.92
5	0.750	8.18	255	142	<0.10	0.000	0.000	<0.10	<0.10	20.0	9.94	142.13	11.64	5.79	59.43	7.68	3.82	45.16	0	0.00	0.00	49	24.36	153.28
6	0.682	8.74	253	86.7	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.07	146.20	8.17	3.69	63.12	5.20	2.35	47.51	0	0.00	0.00	39	17.63	170.91
7	0.742	7.93	262	129	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.90	152.10	14.94	7.35	70.47	7.09	3.49	51.00	0	0.00	0.00	50	24.60	195.51
8	0.744	7.82	216	179	<0.10	0.000	0.000	<0.10	<0.10	20.0	9.86	161.96	21.93	10.82	81.29	10.88	5.37	56.37	0	0.00	0.00	69	34.03	229.54
9	0.742	8.27	171	123	<0.10	0.000	0.000	<0.10	<0.10	18.0	8.85	170.81	10.24	5.04	86.33	7.95	3.91	60.28	0	0.00	0.00	40	19.68	249.22
10	0.740	8.37	202	102	<0.10	0.000	0.000	<0.10	<0.10	14.0	6.87	177.68	8.82	4.33	90.66	6.82	3.35	63.63	0	0.00	0.00	40	19.62	268.84
11	0.722	8.48	186	91.2	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.74	183.42	6.70	3.21	93.87	4.81	2.30	65.93	0	0.00	0.00	34	16.27	285.11
12	0.744	8.28	136	87.2	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.43	188.85	8.80	4.34	98.21	5.00	2.47	68.40	0	0.00	0.00	31	15.29	300.40
13	0.692	8.20	215	61.9	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.29	191.14	5.30	2.43	100.64	2.80	1.28	69.68	0	0.00	0.00	29	13.30	313.70
14	0.651	8.19	181	81.0	<0.10	0.000	0.000	<0.10	<0.10	18.0	7.77	198.91	5.97	2.58	103.22	3.81	1.64	71.32	0	0.00	0.00	29	12.52	326.22
15	0.553	8.58	156	108	<0.10	0.000	0.000	<0.10	<0.10	16.0	5.87	204.78	6.72	2.46	105.68	5.24	1.92	73.24	0	0.00	0.00	29	10.63	336.85
16	0.618	8.28	197	97.7	<0.10	0.000	0.000	<0.10	<0.10	13.0	5.33	210.11	6.31	2.59	108.27	5.06	2.07	75.31	0	0.00	0.00	26	10.65	347.50
17	0.598	8.71	181	97.9	<0.10	0.000	0.000	<0.10	<0.10	12.0	4.76	214.87	6.07	2.41	110.68	4.29	1.70	77.01	0	0.00	0.00	25	9.91	357.41
18	0.640	8.15	192	106	<0.10	0.000	0.000	<0.10	<0.10	14.0	5.94	220.81	6.26	2.66	113.34	4.88	2.07	79.08	0	0.00	0.00	32	13.58	370.99
19	0.662	8.41	190	99.4	<0.10	0.000	0.000	<0.10	<0.10	16.0	7.02	227.83	5.93	2.60	115.94	4.72	2.07	81.15	0	0.00	0.00	28	12.29	383.28
20	0.654	8.38	189	101	<0.10	0.000	0.000	<0.10	<0.10	18.0	7.80	235.63	6.55	2.84	118.78	4.25	1.84	82.99	0	0.00	0.00	26	11.27	394.55
21	0.634	8.11	233	101	<0.10	0.000	0.000	<0.10	<0.10	27.0	11.35	246.98	7.17	3.01	121.79	4.66	1.96	84.95	1	0.42	0.42	29	12.19	406.74
22	0.690	7.93	224	99.2	<0.10	0.000	0.000	<0.10	<0.10	28.0	12.81	259.79	7.52	3.44	125.23	4.54	2.08	87.03	0	0.00	0.42	26	11.89	418.63
23	0.666	8.03	247	93.6	<0.10	0.000	0.000	<0.10	<0.10	20.0	8.83	268.62	6.34	2.80	128.03	4.09	1.81	88.84	0	0.00	0.42	25	11.04	429.67
24	0.673	7.45	243	94.3	<0.10	0.000	0.000	<0.10	<0.10	26.0	11.60	280.22	6.65	2.97	131.00	4.18	1.86	90.70	0	0.00	0.42	35	15.62	445.29
25	0.560	8.36	234	107	<0.10	0.000	0.000	<0.10	<0.10	23.0	8.54	288.76	6.57	2.44	133.44	4.60	1.71	92.41	0	0.00	0.42	27	10.02	455.31
26	0.660	8.13	228	93.6	<0.10	0.000	0.000	<0.10	<0.10	25.0	10.94	299.70	6.79	2.97	136.41	5.00	2.19	94.60	0	0.00	0.42	26	11.38	466.69
27	0.608	7.96	251	103	<0.10	0.000	0.000	<0.10	<0.10	31.0	12.50	312.20	6.60	2.66	139.07	4.91	1.98	96.58	0	0.00	0.42	25	10.08	476.77
28	0.652	7.62	318	94.1	<0.10	0.000	0.000	<0.10	<0.10	27.0	11.67	323.87	7.48	3.23	142.30	3.97	1.72	98.30	0	0.00	0.42	23	9.94	486.71
29	0.598	8.47	265	103	<0.10	0.000	0.000	<0.10	<0.10	22.0	8.72	332.59	7.77	3.08	145.38	4.29	1.70	100.00	0	0.00	0.42	22	8.72	495.43
30	0.581	8.29	235	108	<0.10	0.000	0.000	<0.10	<0.10	31.0	11.94	344.53	7.87	3.03	148.41	4.77	1.84	101.84	0	0.00	0.42	23	8.86	504.29
31	0.681	8.14	318	103	<0.10	0.000	0.000	<0.10	<0.10	28.0	12.64	357.17	8.08	3.65	152.06	4.95	2.23	104.07	0	0.00	0.42	25	11.29	515.58
32	0.677	8.03	328	96.8	<0.10	0.000	0.000	<0.10	<0.10	27.0	12.12	369.29	7.49	3.36	155.42	4.49	2.02	106.09	0	0.00	0.42	25	11.22	526.80
33	0.718	7.56	326	100	<0.10	0.000	0.000	<0.10	<0.10	17.0	8.09	377.38	8.12	3.87	159.29	3.02	1.44	107.53	0	0.00	0.42	29	13.80	540.60
34	0.660	8.03	271	87.0	<0.10	0.000	0.000	<0.10	<0.10	22.0	9.63	387.01	6.79	2.97	162.26	3.94	1.72	109.25	0	0.00	0.42	24	10.50	551.10
35	0.610	7.92	333	93.9	<0.10	0.000	0.000	<0.10	<0.10	20.0	8.09	395.10	7.34	2.97	165.23	4.36	1.76	111.01	0	0.00	0.42	25	10.11	561.21
36	0.668	7.91	305	80.8	<0.10	0.000	0.000	<0.10	<0.10	18.0	7.97	403.07	7.69	3.41	168.64	4.25	1.88	112.89	0	0.00	0.42	24	10.63	571.84
37	0.642	7.44	283	76.3	<0.10	0.000	0.000	<0.10	<0.10	16.0	6.81	409.88	7.53	3.20	171.84	3.80	1.62	114.51	0	0.00	0.42	22	9.36	581.20
38	0.645	7.97	301	93.1	<0.10	0.000	0.000	<0.10	<0.10	15.0	6.41	416.29	8.50	3.63	175.47	4.75	2.03	116.54	0	0.00	0.42	26	11.12	592.32
39	0.744	7.76	291	104	<0.10	0.000	0.000	<0.10	<0.10	15.0	7.40	423.69	10.11	4.99	180.46	5.40	2.66	119.20	0	0.00	0.42	34	16.77	609.09
40	0.693	7.54	319	95.6	<0.10	0.000	0.000	<0.10	<0.10	16.0	7.35	431.04	8.17	3.75	184.21	3.91	1.80	121.00	0	0.00	0.42	27	12.40	621.49
41	0.721	7.58	350	103	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.30	435.34	7.62	3.64	187.85	3.75	1.79	122.79	0	0.00	0.42	30	14.34	635.83
42	0.665	7.77	358	97.1	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.85	440.19	7.52	3.32	191.17	3.83	1.69	124.48	0	0.00	0.42	27	11.90	647.73
43	0.701	7.60	315	93.1	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.65	444.84	8.25	3.83	195.00	3.93	1.83	126.31	0	0.00	0.42	26	12.08	659.81
44	0.702	7.16	386	97.3	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.12	449.96	8.42	3.92	198.92	4.31	2.01	128.32	0	0.00	0.42	24	11.17	670.98
45	0.665	7.61	358	91.5	<0.10	0.000	0.000	<0.10	<0.10	14.0	6.17	456.13	8.50	3.75	202.67	4.08	1.80	130.12	0	0.00	0.42	27	11.90	682.88

Midas Gold Corp.
MLI Job No. 3654

Table 8 . - Humidity Cell Analytical Results, MGI-10-48 (726-746) **(1.5084 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
46	0.620	7.70	338	79.1	<0.10	0.000	0.000	<0.10	<0.10	9.0	3.70	459.83	7.47	3.07	205.74	3.65	1.50	131.62	0	0.00	0.42	27	11.10	693.98
47	0.688	8.20	312	100	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.19	463.02	10.19	4.65	210.39	4.87	2.22	133.84	0	0.00	0.42	36	16.42	710.40
48	0.654	7.66	328	81.3	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.60	465.62	8.45	3.66	214.05	4.43	1.92	135.76	0	0.00	0.42	30	13.01	723.41
49	0.742	8.14	310	87.5	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.44	469.06	8.48	4.17	218.22	3.89	1.91	137.67	0	0.00	0.42	35	17.22	740.63
50	0.729	7.87	284	87.1	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.42	471.48	9.24	4.47	222.69	4.28	2.07	139.74	0	0.00	0.42	34	16.43	757.06
51	0.682	7.92	308	86.3	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.71	474.19	9.75	4.41	227.10	4.32	1.95	141.69	0	0.00	0.42	33	14.92	771.98
52	0.646	7.93	345	87.8	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.71	475.90	9.17	3.93	231.03	4.47	1.91	143.60	0	0.00	0.42	35	14.99	786.97
53	0.711	7.68	299	90.1	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.41	477.31	10.18	4.80	235.83	4.63	2.18	145.78	0	0.00	0.42	38	17.91	804.88
54	0.731	8.04	259	92.8	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.39	480.70	11.25	5.45	241.28	8.59	4.16	149.94	0	0.00	0.42	36	17.45	822.33
55	0.649	7.91	259	93.3	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.15	482.85	9.97	4.29	245.57	4.36	1.88	151.82	0	0.00	0.42	38	16.35	838.68
56	0.678	7.86	254	100	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.25	485.10	11.41	5.13	250.70	4.95	2.22	154.04	0	0.00	0.42	40	17.98	856.66
57	0.753	7.86	278	94.1	<0.10	0.000	0.000	<0.10	<0.10	4.0	2.00	487.10	10.12	5.05	255.75	4.29	2.14	156.18	0	0.00	0.42	43	21.47	878.13
58	0.712	8.11	277	121	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.36	489.46	11.85	5.59	261.34	5.20	2.45	158.63	0	0.00	0.42	48	22.66	900.79
59	0.667	7.83	264	99.4	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.21	491.67	11.31	5.00	266.34	4.57	2.02	160.65	0	0.00	0.42	43	19.01	919.80
60	0.696	7.95	273	105	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.85	493.52	13.02	6.01	272.35	5.04	2.33	162.98	0	0.00	0.42	45	20.76	940.56
61	0.795	7.85	270	99.2	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.64	496.16	11.06	5.83	278.18	4.23	2.23	165.21	0	0.00	0.42	42	22.14	962.70
62	0.719	7.91	314	108	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.86	499.02	11.42	5.44	283.62	4.89	2.33	167.54	0	0.00	0.42	43	20.50	983.20
63	0.662	7.84	323	95.1	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.19	501.21	9.96	4.37	287.99	4.14	1.82	169.36	0	0.00	0.42	36	15.80	999.00
64	0.603	7.92	285	122	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.00	503.21	9.94	3.97	291.96	4.67	1.87	171.23	0	0.00	0.42	42	16.79	1015.79
65	0.744	7.83	273	103	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.95	507.16	12.05	5.94	297.90	5.09	2.51	173.74	0	0.00	0.42	39	19.24	1035.03
66	0.705	7.71	257	98.6	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.27	510.43	11.51	5.38	303.28	4.51	2.11	175.85	0	0.00	0.42	38	17.76	1052.79
67	0.730	7.68	323	93.9	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.90	513.33	11.46	5.55	308.83	3.90	1.89	177.74	0	0.00	0.42	38	18.39	1071.18
68	0.720	7.62	291	87.9	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.34	516.67	10.51	5.02	313.85	4.16	1.99	179.73	0	0.00	0.42	33	15.75	1086.93
69	0.588	7.51	250	88.5	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.29	520.96	10.09	3.93	317.78	3.69	1.44	181.17	0	0.00	0.42	31	12.08	1099.01
70	0.685	7.35	242	96.3	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.54	525.50	10.69	4.85	322.63	4.11	1.87	183.04	0	0.00	0.42	34	15.44	1114.45
71	0.659	7.34	203	92.9	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.37	529.87	10.37	4.53	327.16	4.07	1.78	184.82	0	0.00	0.42	31	13.54	1127.99
72	0.640	7.48	235	101	<0.10	0.000	0.000	<0.10	<0.10	9.0	3.82	533.69	10.38	4.40	331.56	4.21	1.79	186.61	0	0.00	0.42	36	15.27	1143.26
73	0.612	7.43	211	81.5	<0.10	0.000	0.000	<0.10	<0.10	7.0	2.84	536.53	9.70	3.94	335.50	3.72	1.51	188.12	0	0.00	0.42	30	12.17	1155.43
74	0.676	7.61	224	92.8	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.38	541.91	11.07	4.96	340.46	4.24	1.90	190.02	0	0.00	0.42	34	15.24	1170.67
75	0.617	7.39	193	83.5	<0.10	0.000	0.000	<0.10	<0.10	9.0	3.68	545.59	8.98	3.67	344.13	3.73	1.53	191.55	0	0.00	0.42	30	12.27	1182.94
76	0.703	7.62	228	85.1	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.13	550.72	9.91	4.62	348.75	3.68	1.72	193.27	0	0.00	0.42	31	14.45	1197.39
77	0.583	7.37	211	92.4	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.25	554.97	9.57	3.70	352.45	3.95	1.53	194.80	0	0.00	0.42	29	11.21	1208.60
78	0.662	7.70	226	115	<0.10	0.000	0.000	<0.10	<0.10	19.0	8.34	563.31	13.61	5.97	358.42	5.45	2.39	197.19	0	0.00	0.42	36	15.80	1224.40
79	0.583	7.47	176	105	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.09	566.40	10.62	4.10	362.52	4.60	1.78	198.97	0	0.00	0.42	36	13.91	1238.31
80	0.584	7.57	191	107	<0.10	0.000	0.000	<0.10	<0.10	13.0	5.03	571.43	10.70	4.14	366.66	4.67	1.81	200.78	0	0.00	0.42	35	13.55	1251.86
81	0.639	7.38	205	110	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.24	575.67	10.23	4.33	370.99	4.70	1.99	202.77	0	0.00	0.42	38	16.10	1267.96
82	0.603	7.39	242	96.5	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.40	580.07	10.10	4.04	375.03	4.48	1.79	204.56	0	0.00	0.42	34	13.59	1281.55
83	0.631	7.51	345	105	<0.10	0.000	0.000	<0.10	<0.10	14.0	5.86	585.93	11.10	4.64	379.67	4.86	2.03	206.59	0	0.00	0.42	37	15.48	1297.03
84	0.628	7.79	343	109	<0.10	0.000	0.000	<0.10	<0.10	13.0	5.41	591.34	11.82	4.92	384.59	4.94	2.06	208.65	0	0.00	0.42	38	15.82	1312.85
85	0.634	7.70	345	98.3	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.20	595.54	11.02	4.63	389.22	4.60	1.93	210.58	0	0.00	0.42	36	15.13	1327.98
86	0.571	7.69	346	86.4	<0.10	0.000	0.000	<0.10	<0.10	10.0	3.79	599.33	9.27	3.51	392.73	4.09	1.55	212.13	0	0.00	0.42	31	11.73	1339.71
87	0.569	7.70	321	101	<0.10	0.000	0.000	<0.10	<0.10	13.0	4.90	604.23	10.23	3.86	396.59	5.10	1.92	214.05	0	0.00	0.42	34	12.83	1352.54
88	0.649	7.73	342	98.1	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.16	609.39	12.00	5.16	401.75	4.64	2.00	216.05	0	0.00	0.42	35	15.06	1367.60
89	0.603	7.74	348	107	<0.10	0.000	0.000	<0.10	<0.10	14.0	5.60	614.99	10.68	4.27	406.02	5.19	2.07	218.12	0	0.00	0.42	36	14.39	1381.99
90	0.657	7.78	361	103	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.79	619.78	10.26	4.47	410.49	4.71	2.05	220.17	0	0.00	0.42	35	15.24	1397.23

Midas Gold Corp.
MLI Job No. 3654

Table 8 . - Humidity Cell Analytical Results, MGI-10-48 (726-746) (1.5084 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
91	0.622	7.60	284	95.3	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.54	624.32	8.98	3.70	414.19	4.08	1.68	221.85	0	0.00	0.42	32	13.20	1410.43
92	0.585	7.60	353	95.2	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.27	628.59	10.39	4.03	418.22	4.46	1.73	223.58	0	0.00	0.42	34	13.19	1423.62
93	0.568	7.87	340	121	<0.10	0.000	0.000	<0.10	<0.10	14.0	5.27	633.86	12.43	4.68	422.90	5.48	2.06	225.64	0	0.00	0.42	39	14.69	1438.31
94	0.581	7.88	326	105	<0.10	0.000	0.000	<0.10	<0.10	12.0	4.62	638.48	11.33	4.36	427.26	4.96	1.91	227.55	0	0.00	0.42	36	13.87	1452.18
95	0.635	7.69	382	98.9	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.05	643.53	11.67	4.91	432.17	4.85	2.04	229.59	0	0.00	0.42	28	11.79	1463.97
96	0.670	7.69	358	98.9	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.89	648.42	12.55	5.57	437.74	4.62	2.05	231.64	0	0.00	0.42	37	16.43	1480.40
97	0.680	7.63	317	102	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.96	653.38	11.03	4.97	442.71	4.90	2.21	233.85	0	0.00	0.42	36	16.23	1496.63
98	0.596	7.64	333	139	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.35	657.73	15.03	5.94	448.65	6.02	2.38	236.23	0	0.00	0.42	47	18.57	1515.20
99	0.601	7.59	354	117	<0.10	0.000	0.000	<0.10	<0.10	10.0	3.98	661.71	14.05	5.60	454.25	5.96	2.37	238.60	0	0.00	0.42	44	17.53	1532.73
100	0.683	7.57	343	106	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.26	663.97	13.57	6.14	460.39	4.98	2.25	240.85	0	0.00	0.42	43	19.47	1552.20
101	0.596	7.56	327	111	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.58	665.55	13.73	5.43	465.82	5.23	2.07	242.92	0	0.00	0.42	43	16.99	1569.19
102	0.588	7.66	338	115	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.34	667.89	13.77	5.37	471.19	5.82	2.27	245.19	0	0.00	0.42	43	16.76	1585.95
103	0.679	7.64	328	93.3	<0.10	0.000	0.000	<0.10	<0.10	3.7	1.67	669.56	11.29	5.08	476.27	4.43	1.99	247.18	0	0.00	0.42	39	17.56	1603.51
104	0.618	7.65	328	92.3	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.23	670.79	11.03	4.52	480.79	4.24	1.74	248.92	0	0.00	0.42	37	15.16	1618.67
105	0.710	7.71	334	98.2	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.82	673.61	12.05	5.67	486.46	4.71	2.22	251.14	0	0.00	0.42	43	20.24	1638.91
106	0.714	7.58	304	103	<0.10	0.000	0.000	<0.10	<0.10	4.6	2.18	675.79	13.18	6.24	492.70	4.84	2.29	253.43	0	0.00	0.42	47	22.25	1661.16
107	0.631	7.66	325	94.5	<0.10	0.000	0.000	<0.10	<0.10	4.8	2.01	677.80	10.21	4.27	496.97	4.11	1.72	255.15	0	0.00	0.42	45	18.82	1679.98
108	0.661	7.80	341	91.5	<0.10	0.000	0.000	<0.10	<0.10	4.9	2.15	679.95	11.09	4.86	501.83	4.41	1.93	257.08	0	0.00	0.42	40	17.53	1697.51
109	0.729	7.87	335	97.5	<0.10	0.000	0.000	<0.10	<0.10	4.5	2.17	682.12	12.77	6.17	508.00	4.57	2.21	259.29	0	0.00	0.42	47	22.71	1720.22
110	0.671	7.73	352	115	<0.10	0.000	0.000	<0.10	<0.10	6.9	3.07	685.19	14.11	6.28	514.28	4.68	2.08	261.37	0	0.00	0.42	48	21.35	1741.57
111	0.691	7.70	352	132	<0.10	0.000	0.000	<0.10	<0.10	6.3	2.89	688.08	16.90	7.74	522.02	5.86	2.68	264.05	0	0.00	0.42	63	28.86	1770.43
112	0.727	7.67	351	112	<0.10	0.000	0.000	<0.10	<0.10	4.6	2.22	690.30	12.20	5.88	527.90	3.88	1.87	265.92	0	0.00	0.42	54	26.03	1796.46
113	0.635	7.71	355	94.6	0.10	0.042	0.042	<0.10	<0.1	4.0	1.68	691.98	10.96	4.61	532.51	4.05	1.70	267.62	0	0.00	0.42	47	19.79	1816.25
114	0.596	7.62	311	124	<0.10	0.000	0.042	<0.10	<0.10	6.0	2.37	694.35	12.98	5.13	537.64	5.17	2.04	269.66	0	0.00	0.42	57	22.52	1838.77
115	0.678	7.36	348	146	<0.10	0.000	0.042	<0.10	<0.10	4.1	1.84	696.19	19.35	8.70	546.34	6.81	3.06	272.72	0	0.00	0.42	54	24.27	1863.04
116	0.609	7.51	356	88.2	<0.10	0.000	0.042	<0.10	<0.10	4.5	1.82	698.01	11.01	4.45	550.79	4.04	1.63	274.35	0	0.00	0.42	44	17.76	1880.80
117	0.647	7.46	350	88.0	<0.10	0.000	0.042	<0.10	<0.10	6.9	2.96	700.97	9.01	3.86	554.65	3.64	1.56	275.91	0	0.00	0.42	38	16.30	1897.10
118	0.658	7.48	338	95.8	<0.10	0.000	0.042	<0.10	<0.10	7.6	3.32	704.29	12.14	5.30	559.95	4.18	1.82	277.73	0	0.00	0.42	45	19.63	1916.73
119	0.615	7.53	373	88.3	<0.10	0.000	0.042	<0.10	<0.10	7.6	3.10	707.39	10.02	4.09	564.04	3.67	1.50	279.23	0	0.00	0.42	41	16.72	1933.45
120	0.600	7.60	339	80.1	<0.10	0.000	0.042	<0.10	<0.10	7.8	3.10	710.49	10.01	3.98	568.02	3.90	1.55	280.78	0	0.00	0.42	38	15.12	1948.57
121	0.669	7.83	299	99.7	<0.10	0.000	0.042	<0.10	<0.10	7.7	3.42	713.91	11.53	5.11	573.13	4.25	1.88	282.66	0	0.00	0.42	48	21.29	1969.86
122	0.703	7.87	302	115	<0.10	0.000	0.042	<0.10	<0.10	7.5	3.50	717.41	14.49	6.75	579.88	4.77	2.22	284.88	0	0.00	0.42	55	25.63	1995.49
123	0.658	7.61	337	96.0	<0.10	0.000	0.042	<0.10	<0.10	7.2	3.14	720.55	11.02	4.81	584.69	4.18	1.82	286.70	0	0.00	0.42	47	20.50	2015.99
124	0.649	7.68	335	97.5	<0.10	0.000	0.042	<0.10	<0.10	7.8	3.36	723.91	11.47	4.94	589.63	4.11	1.77	288.47	0	0.00	0.42	48	20.65	2036.64
125	0.701	7.91	358	98.5	<0.10	0.000	0.042	<0.10	<0.10	8.1	3.76	727.67	11.55	5.37	595.00	3.99	1.85	290.32	0	0.00	0.42	46	21.38	2058.02
126	0.678	7.83	330	98.3	<0.10	0.000	0.042	<0.10	<0.10	7.6	3.42	731.09	11.21	5.04	600.04	3.99	1.79	292.11	0	0.00	0.42	45	20.23	2078.25
127	0.665	7.74	343	94.3	<0.10	0.000	0.042	<0.10	<0.10	8.0	3.53	734.62	12.70	5.60	605.64	4.11	1.81	293.92	0	0.00	0.42	47	20.72	2098.97
128	0.712	7.88	348	109	<0.10	0.000	0.042	<0.10	<0.10	7.4	3.49	738.11	12.70	5.99	611.63	4.50	2.12	296.04	0	0.00	0.42	55	25.96	2124.93
129	0.642	7.87	348	88.3	<0.10	0.000	0.042	<0.10	<0.10	7.0	2.98	741.09	11.43	4.86	616.49	3.76	1.60	297.64	0	0.00	0.42	43	18.30	2143.23
130	0.572	7.97	334	109	<0.10	0.000	0.042	<0.10	<0.10	15	5.69	746.78	12.30	4.66	621.15	4.85	1.84	299.48	0	0.00	0.42	43	16.31	2159.54
131	0.621	7.85	349	86.5	<0.10	0.000	0.042	<0.10	<0.10	6.4	2.63	749.41	10.15	4.18	625.33	3.74	1.54	301.02	0	0.00	0.42	43	17.70	2177.24
132	0.707	7.94	339	98.0	<0.10	0.000	0.042	<0.10	<0.10	5.9	2.77	752.18	11.71	5.49	630.82	4.21	1.97	302.99	0	0.00	0.42	50	23.44	2200.68
133	0.676	7.93	291	92.7	<0.10	0.000	0.042	<0.10	<0.10	5.9	2.64	754.82	10.67	4.78	635.60	4.12	1.85	304.84	0	0.00	0.42	46	20.62	2221.30
134	0.613	7.99	286	90.0	<0.10	0.000	0.042	<0.10	<0.10	6.5	2.64	757.46	9.70	3.94	639.54	3.49	1.42	306.26	0	0.00	0.42	41	16.66	2237.96
135	0.690	7.87	236	102	<0.10	0.000	0.042	<0.10	<0.10	6.6	3.02	760.48	12.71	5.81	645.35	3.95	1.81	308.07	0	0.00	0.42	48	21.96	2259.92

Midas Gold Corp.
MLI Job No. 3654

Table 8 . - Humidity Cell Analytical Results, MGI-10-48 (726-746) **(1.5084 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
136	0.746	7.88	316	96.7	<0.10	0.000	0.042	<0.10	<0.10	5.8	2.87	763.35	11.77	5.82	651.17	3.99	1.97	310.04	0	0.00	0.42	46	22.75	2282.67
137	0.694	7.86	250	93.0	<0.10	0.000	0.042	<0.10	<0.10	6.7	3.08	766.43	11.69	5.38	656.55	3.87	1.78	311.82	0	0.00	0.42	43	19.78	2302.45
138	0.721	8.04	248	88.2	<0.10	0.000	0.042	<0.10	<0.10	6.2	2.96	769.39	11.93	5.70	662.25	3.53	1.69	313.51	0	0.00	0.42	50	23.90	2326.35
139	0.682	8.11	270	105	<0.10	0.000	0.042	<0.10	<0.10	7.0	3.16	772.55	11.28	5.10	667.35	4.03	1.82	315.33	0	0.00	0.42	51	23.06	2349.41
140	0.737	8.02	203	90.1	<0.10	0.000	0.042	<0.10	<0.10	6.1	2.98	775.53	10.77	5.26	672.61	3.59	1.75	317.08	0	0.00	0.42	37	18.08	2367.49
141	0.713	8.00	281	90.5	<0.10	0.000	0.042	<0.10	<0.10	8.5	4.02	779.55	11.72	5.54	678.15	3.83	1.81	318.89	0	0.00	0.42	36	17.02	2384.51
142	0.640	7.88	186	86.8	<0.10	0.000	0.042	<0.10	<0.10	8.1	3.44	782.99	10.44	4.43	682.58	3.73	1.58	320.47	0	0.00	0.42	35	14.85	2399.36
143	0.639	7.97	273	87.8	<0.10	0.000	0.042	<0.10	<0.10	7.9	3.33	786.32	9.92	4.20	686.78	3.64	1.54	322.01	0	0.00	0.42	36	15.25	2414.61
144	0.654	7.96	228	93.2	<0.10	0.000	0.042	<0.10	<0.10	10.8	4.66	790.98	11.01	4.77	691.55	3.97	1.72	323.73	0	0.00	0.42	37	16.04	2430.65

Testing terminated

Figure 8a.- Weekly Humidity Cell Analytical Results

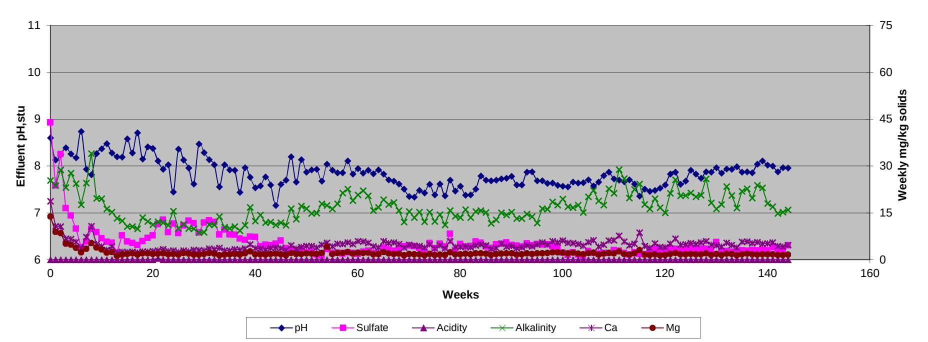
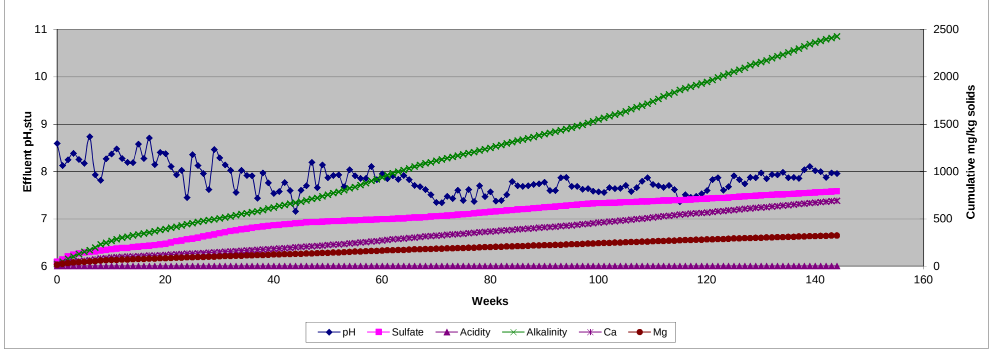


Figure 8b.- Cumulative Humidity Cell Analytical Results



Midas Gold Corp.
MLI Job No. 3654

Table 9 . - Humidity Cell Analytical Results, MGI-10-50 (250-270) **(1.4956 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
0	0.749	7.83	232	398	<0.10	0.000	0.000	<0.10	<0.10	60.0	30.05	30.05	29.70	14.87	14.87	15.30	7.66	7.66	0	0.00	0.00	85	42.57	42.57
1	0.684	8.04	241	244	<0.10	0.000	0.000	<0.10	<0.10	31.0	14.18	44.23	17.95	8.21	23.08	8.80	4.02	11.68	0	0.00	0.00	66	30.18	72.75
2	0.760	8.05	243	259	<0.10	0.000	0.000	<0.10	<0.10	25.0	12.70	56.93	18.65	9.48	32.56	10.50	5.34	17.02	0	0.00	0.00	83	42.18	114.93
3	0.760	8.06	256	204	<0.10	0.000	0.000	<0.10	<0.10	12.0	6.10	63.03	17.73	9.01	41.57	7.60	3.86	20.88	0	0.00	0.00	75	38.11	153.04
4	0.723	7.96	271	191	<0.10	0.000	0.000	<0.10	<0.10	16.0	7.73	70.76	15.03	7.27	48.84	9.35	4.52	25.40	0	0.00	0.00	73	35.29	188.33
5	0.767	7.91	272	136	<0.10	0.000	0.000	<0.10	<0.10	25.0	12.82	83.58	11.40	5.85	54.69	4.71	2.42	27.82	0	0.00	0.00	58	29.74	218.07
6	0.716	8.05	280	205	<0.10	0.000	0.000	<0.10	<0.10	25.0	11.97	95.55	21.42	10.25	64.94	10.71	5.13	32.95	0	0.00	0.00	69	33.03	251.10
7	0.737	7.79	267	172	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.45	99.00	18.48	9.11	74.05	8.33	4.10	37.05	0	0.00	0.00	71	34.99	286.09
8	0.735	7.86	217	198	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.46	101.46	19.39	9.53	83.58	10.57	5.19	42.24	0	0.00	0.00	84	41.28	327.37
9	0.741	8.05	190	149	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.98	103.44	14.10	6.99	90.57	8.28	4.10	46.34	0	0.00	0.00	65	32.20	359.57
10	0.728	8.00	222	133	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.41	106.85	11.47	5.58	96.15	8.35	4.06	50.40	0	0.00	0.00	58	28.23	387.80
11	0.722	7.97	211	132	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.93	108.78	9.90	4.78	100.93	6.13	2.96	53.36	0	0.00	0.00	55	26.55	414.35
12	0.686	7.97	166	176	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.21	111.99	18.70	8.58	109.51	9.90	4.54	57.90	0	0.00	0.00	74	33.94	448.29
13	0.762	7.91	236	128	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.55	114.54	12.30	6.27	115.78	6.50	3.31	61.21	0	0.00	0.00	56	28.53	476.82
14	0.778	7.80	206	124	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.72	120.26	9.55	4.97	120.75	5.65	2.94	64.15	0	0.00	0.00	51	26.53	503.35
15	0.717	7.75	188	122	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.84	124.10	8.97	4.30	125.05	5.14	2.46	66.61	0	0.00	0.00	42	20.14	523.49
16	0.775	7.91	213	133	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.66	128.76	10.58	5.48	130.53	6.41	3.32	69.93	0	0.00	0.00	49	25.39	548.88
17	0.748	7.86	214	126	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.50	133.26	9.75	4.88	135.41	5.16	2.58	72.51	0	0.00	0.00	43	21.51	570.39
18	0.688	7.85	203	132	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.52	138.78	9.64	4.43	139.84	5.32	2.45	74.96	0	0.00	0.00	44	20.24	590.63
19	0.742	7.86	212	135	<0.10	0.000	0.000	<0.10	<0.10	14.0	6.95	145.73	9.89	4.91	144.75	6.07	3.01	77.97	0	0.00	0.00	49	24.31	614.94
20	0.748	7.98	208	154	<0.10	0.000	0.000	<0.10	<0.10	20.0	10.00	155.73	12.20	6.10	150.85	6.14	3.07	81.04	0	0.00	0.00	52	26.01	640.95
21	0.729	7.53	250	132	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.39	160.12	10.69	5.21	156.06	5.71	2.78	83.82	0	0.00	0.00	62	30.22	671.17
22	0.748	7.78	231	131	<0.10	0.000	0.000	<0.10	<0.10	12.0	6.00	166.12	12.06	6.03	162.09	5.87	2.94	86.76	0	0.00	0.00	55	27.51	698.68
23	0.732	7.84	257	146	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.47	167.59	11.60	5.68	167.77	6.66	3.26	90.02	0	0.00	0.00	55	26.92	725.60
24	0.752	7.76	235	136	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.53	172.12	11.22	5.64	173.41	6.18	3.11	93.13	0	0.00	0.00	60	30.17	755.77
25	0.718	7.76	255	118	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.80	176.92	8.95	4.30	177.71	4.90	2.35	95.48	0	0.00	0.00	44	21.12	776.89
26	0.755	7.92	238	125	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.53	180.45	9.85	4.97	182.68	4.12	2.08	97.56	0	0.00	0.00	56	28.27	805.16
27	0.738	7.33	278	122	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.96	183.41	9.82	4.85	187.53	6.55	3.23	100.79	0	0.00	0.00	50	24.67	829.83
28	0.752	7.59	299	127	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	183.91	11.20	5.63	193.16	5.89	2.96	103.75	0	0.00	0.00	55	27.65	857.48
29	0.733	7.87	257	123	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	184.40	10.91	5.35	198.51	5.81	2.85	106.60	0	0.00	0.00	53	25.98	883.46
30	0.761	7.77	230	136	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.51	184.91	10.04	5.11	203.62	6.56	3.34	109.94	0	0.00	0.00	60	30.53	913.99
31	0.771	7.75	310	123	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.03	185.94	10.88	5.61	209.23	6.27	3.23	113.17	0	0.00	0.00	57	29.38	943.37
32	0.727	7.71	309	100	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.89	189.83	8.63	4.19	213.42	4.91	2.39	115.56	0	0.00	0.00	43	20.90	964.27
33	0.719	7.69	309	126	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.48	190.31	11.13	5.35	218.77	6.86	3.30	118.86	0	0.00	0.00	59	28.36	992.63
34	0.746	7.98	267	134	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.49	192.80	11.10	5.54	224.31	7.13	3.56	122.42	0	0.00	0.00	62	30.93	1023.56
35	0.751	7.87	320	120	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.00	193.80	10.40	5.22	229.53	6.34	3.18	125.60	0	0.00	0.00	55	27.62	1051.18
36	0.730	7.80	300	116	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.46	195.26	12.60	6.15	235.68	7.35	3.59	129.19	0	0.00	0.00	53	25.87	1077.05
37	0.741	7.61	277	143	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	195.76	15.25	7.56	243.24	8.88	4.40	133.59	0	0.00	0.00	66	32.70	1109.75
38	0.728	7.90	287	127	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.95	197.71	12.57	6.12	249.36	7.53	3.67	137.26	0	0.00	0.00	57	27.75	1137.50
39	0.772	7.92	270	152	<0.10	0.000	0.000	<0.10	<0.10	4.0	2.06	199.77	14.42	7.44	256.80	9.19	4.74	142.00	0	0.00	0.00	70	36.13	1173.63
40	0.739	7.67	307	116	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.47	202.24	9.17	4.53	261.33	5.81	2.87	144.87	0	0.00	0.00	47	23.22	1196.85
41	0.717	7.72	345	151	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.40	204.64	11.64	5.58	266.91	7.00	3.36	148.23	0	0.00	0.00	59	28.28	1225.13
42	0.738	7.16	415	189	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.48	206.12	14.53	7.17	274.08	9.26	4.57	152.80	0	0.00	0.00	65	32.07	1257.20
43	0.768	8.25	270	162	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.54	207.66	12.93	6.64	280.72	8.69	4.46	157.26	0	0.00	0.00	78	40.05	1297.25
44	0.727	7.69	423	131	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.94	209.60	10.50	5.10	285.82	7.16	3.48	160.74	0	0.00	0.00	57	27.71	1324.96
45	0.753	7.96	335	141	<0.10	0.000	0.000	<0.10	<0.10	4.0	2.01	211.61	12.28	6.18	292.00	8.04	4.05	164.79	0	0.00	0.00	65	32.73	1357.69

Midas Gold Corp.
MLI Job No. 3654

Table 9 . - Humidity Cell Analytical Results, MGI-10-50 (250-270) **(1.4956 Kg)**

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	$SO_4^{=}$ mg/l	$SO_4^{=}$ mg/kg	$SO_4^{=}$ Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
46	0.730	7.84	314	130	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.46	213.07	11.98	5.85	297.85	8.25	4.03	168.82	0	0.00	0.00	59	28.80	1386.49
47	0.728	7.90	312	151	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.46	214.53	12.92	6.29	304.14	9.41	4.58	173.40	0	0.00	0.00	68	33.10	1419.59
48	0.761	7.95	308	153	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.53	216.06	15.50	7.89	312.03	10.88	5.54	178.94	0	0.00	0.00	71	36.13	1455.72
49	0.716	7.67	353	126	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.44	217.50	10.86	5.20	317.23	7.81	3.74	182.68	0	0.00	0.00	60	28.72	1484.44
50	0.756	7.91	252	146	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.01	218.51	13.81	6.98	324.21	9.79	4.95	187.63	0	0.00	0.00	70	35.38	1519.82
51	0.747	7.98	277	136	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.00	219.51	12.84	6.41	330.62	8.96	4.48	192.11	0	0.00	0.00	64	31.97	1551.79
52	0.730	7.98	287	123	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	220.00	10.99	5.36	335.98	8.33	4.07	196.18	0	0.00	0.00	58	28.31	1580.10
53	0.750	7.90	287	128	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	220.50	11.80	5.92	341.90	9.13	4.58	200.76	0	0.00	0.00	63	31.59	1611.69
54	0.728	7.71	301	121	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.97	221.47	11.99	5.84	347.74	8.98	4.37	205.13	0	0.00	0.00	55	26.77	1638.46
55	0.750	7.29	287	119	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.00	222.47	10.12	5.07	352.81	8.21	4.12	209.25	0	0.00	0.00	56	28.08	1666.54
56	0.730	7.59	274	122	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	222.96	10.78	5.26	358.07	8.87	4.33	213.58	0	0.00	0.00	57	27.82	1694.36
57	0.728	8.04	254	126	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	223.45	10.61	5.16	363.23	8.64	4.21	217.79	0	0.00	0.00	64	31.15	1725.51
58	0.740	8.01	310	139	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	223.94	11.65	5.76	368.99	10.16	5.03	222.82	0	0.00	0.00	67	33.15	1758.66
59	0.768	7.93	248	116	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.51	224.45	9.44	4.85	373.84	8.04	4.13	226.95	0	0.00	0.00	59	30.30	1788.96
60	0.720	7.69	300	123	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.96	225.41	10.75	5.18	379.02	9.16	4.41	231.36	0	0.00	0.00	60	28.88	1817.84
61	0.753	7.84	300	134	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.01	226.42	10.77	5.42	384.44	9.21	4.64	236.00	0	0.00	0.00	63	31.72	1849.56
62	0.737	7.88	305	130	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.99	227.41	11.27	5.55	389.99	9.88	4.87	240.87	0	0.00	0.00	64	31.54	1881.10
63	0.736	7.92	286	128	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	227.90	10.53	5.18	395.17	9.62	4.73	245.60	0	0.00	0.00	62	30.51	1911.61
64	0.746	7.85	312	121	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	227.90	9.23	4.60	399.77	8.84	4.41	250.01	0	0.00	0.00	53	26.44	1938.05
65	0.726	7.74	278	122	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	228.39	10.18	4.94	404.71	10.48	5.09	255.10	0	0.00	0.00	53	25.73	1963.78
66	0.701	7.76	246	127	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.41	229.80	10.06	4.72	409.43	9.41	4.41	259.51	0	0.00	0.00	58	27.19	1990.97
67	0.771	7.99	324	151	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.52	230.32	12.26	6.32	415.75	11.64	6.00	265.51	0	0.00	0.00	76	39.18	2030.15
68	0.733	7.80	259	118	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.98	231.30	9.63	4.72	420.47	9.79	4.80	270.31	0	0.00	0.00	55	26.96	2057.11
69	0.735	7.79	246	138	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.47	232.77	10.52	5.17	425.64	10.28	5.05	275.36	0	0.00	0.00	64	31.45	2088.56
70	0.729	7.58	248	132	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.46	234.23	10.12	4.93	430.57	10.13	4.94	280.30	0	0.00	0.00	60	29.25	2117.81
71	0.735	7.53	200	144	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.47	235.70	10.61	5.21	435.78	11.20	5.50	285.80	0	0.00	0.00	65	31.94	2149.75
72	0.719	7.74	228	145	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.44	237.14	11.07	5.32	441.10	11.79	5.67	291.47	0	0.00	0.00	66	31.73	2181.48
73	0.740	7.69	183	133	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.99	238.13	10.08	4.99	446.09	10.76	5.32	296.79	0	0.00	0.00	62	30.68	2212.16
74	0.690	7.90	199	144	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.46	238.59	10.42	4.81	450.90	11.85	5.47	302.26	0	0.00	0.00	68	31.37	2243.53
75	0.718	7.74	185	132	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.92	240.51	8.40	4.03	454.93	10.65	5.11	307.37	0	0.00	0.00	59	28.32	2271.85
76	0.714	7.93	180	154	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.39	242.90	11.33	5.41	460.34	12.66	6.04	313.41	0	0.00	0.00	71	33.90	2305.75
77	0.746	7.86	199	157	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.00	243.90	10.56	5.27	465.61	12.37	6.17	319.58	0	0.00	0.00	73	36.41	2342.16
78	0.718	7.92	220	140	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.48	244.38	9.65	4.63	470.24	11.82	5.67	325.25	0	0.00	0.00	65	31.20	2373.36
79	0.774	7.82	175	152	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	244.38	9.94	5.14	475.38	12.84	6.64	331.89	0	0.00	0.00	71	36.74	2410.10
80	0.726	7.73	192	111	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.97	245.35	7.02	3.41	478.79	9.36	4.54	336.43	0	0.00	0.00	51	24.76	2434.86
81	0.715	7.51	192	118	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.91	247.26	7.00	3.35	482.14	9.74	4.66	341.09	0	0.00	0.00	52	24.86	2459.72
82	0.739	7.71	217	144	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.98	249.24	8.60	4.25	486.39	11.92	5.89	346.98	0	0.00	0.00	66	32.61	2492.33
83	0.725	7.97	286	148	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.97	250.21	9.23	4.47	490.86	12.10	5.87	352.85	0	0.00	0.00	69	33.45	2525.78
84	0.746	7.96	315	147	<0.10	0.000	0.000	<0.10	<0.10	4.0	2.00	252.21	9.37	4.67	495.53	12.41	6.19	359.04	0	0.00	0.00	69	34.42	2560.20
85	0.706	7.97	317	154	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.36	254.57	9.63	4.55	500.08	13.85	6.54	365.58	0	0.00	0.00	76	35.88	2596.08
86	0.763	7.95	307	181	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.51	255.08	11.25	5.74	505.82	16.88	8.61	374.19	0	0.00	0.00	92	46.94	2643.02
87	0.735	7.98	311	139	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.47	256.55	8.15	4.01	509.83	12.66	6.22	380.41	0	0.00	0.00	67	32.93	2675.95
88	0.757	8.08	327	156	<0.10	0.000	0.000	<0.10	<0.10	4.0	2.02	258.57	10.50	5.31	515.14	14.77	7.48	387.89	0	0.00	0.00	76	38.47	2714.42
89	0.700	7.96	343	145	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.28	261.85	8.30	3.88	519.02	13.68	6.40	394.29	0	0.00	0.00	68	31.83	2746.25
90	0.775	7.96	356	181	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.04	262.89	10.06	5.21	524.23	15.83	8.20	402.49	0	0.00	0.00	88	45.60	2791.85

Midas Gold Corp.
MLI Job No. 3654

Table 9 . - Humidity Cell Analytical Results, MGI-10-50 (250-270) (1.4956 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
91	0.723	7.94	276	179	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.90	265.79	9.44	4.56	528.79	15.49	7.49	409.98	0	0.00	0.00	82	39.64	2831.49
92	0.762	7.98	320	196	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.55	268.34	11.43	5.82	534.61	18.25	9.30	419.28	0	0.00	0.00	94	47.89	2879.38
93	0.704	8.15	322	228	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.82	271.16	13.71	6.45	541.06	23.55	11.09	430.37	0	0.00	0.00	107	50.37	2929.75
94	0.763	8.14	317	213	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.55	273.71	12.11	6.18	547.24	18.56	9.47	439.84	0	0.00	0.00	99	50.51	2980.26
95	0.764	7.95	334	181	<0.10	0.000	0.000	<0.10	<0.10	4.0	2.04	275.75	10.68	5.46	552.70	18.17	9.28	449.12	0	0.00	0.00	83	42.40	3022.66
96	0.725	7.96	343	160	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.97	276.72	9.83	4.77	557.47	15.60	7.56	456.68	0	0.00	0.00	76	36.84	3059.50
97	0.749	8.00	305	235	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	277.22	13.02	6.52	563.99	23.89	11.96	468.64	0	0.00	0.00	114	57.09	3116.59
98	0.755	7.90	319	194	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.01	278.23	10.68	5.39	569.38	18.91	9.55	478.19	0	0.00	0.00	89	44.93	3161.52
99	0.725	7.97	341	231	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.45	279.68	12.41	6.02	575.40	23.58	11.43	489.62	0	0.00	0.00	108	52.35	3213.87
100	0.801	7.86	325	227	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.54	280.22	12.81	6.86	582.26	23.13	12.39	502.01	0	0.00	0.00	106	56.77	3270.64
101	0.747	7.76	314	185	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.00	281.22	10.39	5.19	587.45	17.87	8.93	510.94	0	0.00	0.00	80	39.96	3310.60
102	0.727	7.89	336	173	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	281.71	9.41	4.57	592.02	17.53	8.52	519.46	0	0.00	0.00	78	37.92	3348.52
103	0.731	7.91	322	168	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	282.20	8.95	4.37	596.39	16.28	7.96	527.42	0	0.00	0.00	77	37.64	3386.16
104	0.755	7.88	312	148	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	282.70	7.30	3.69	600.08	14.24	7.19	534.61	0	0.00	0.00	67	33.82	3419.98
105	0.734	7.94	323	141	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.98	283.68	6.84	3.36	603.44	13.29	6.52	541.13	0	0.00	0.00	68	33.37	3453.35
106	0.717	7.83	296	163	<0.10	0.000	0.000	<0.10	<0.10	2.9	1.39	285.07	8.68	4.16	607.60	16.30	7.81	548.94	0	0.00	0.00	84	40.27	3493.62
107	0.770	7.62	345	172	<0.10	0.000	0.000	<0.10	<0.10	2.9	1.49	286.56	7.84	4.04	611.64	15.66	8.06	557.00	0	0.00	0.00	93	47.88	3541.50
108	0.770	7.91	331	185	<0.10	0.000	0.000	<0.10	<0.10	2.9	1.49	288.05	9.49	4.89	616.53	19.19	9.88	566.88	0	0.00	0.00	94	48.40	3589.90
109	0.737	7.99	333	132	<0.10	0.000	0.000	<0.10	<0.10	3.5	1.72	289.77	7.07	3.48	620.01	13.27	6.54	573.42	0	0.00	0.00	69	34.00	3623.90
110	0.735	7.76	340	148	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.47	291.24	7.60	3.73	623.74	12.96	6.37	579.79	0	0.00	0.00	75	36.86	3660.76
111	0.768	7.76	350	140	<0.10	0.000	0.000	<0.10	<0.10	3.1	1.59	292.83	7.12	3.66	627.40	13.45	6.91	586.70	0	0.00	0.00	75	38.51	3699.27
112	0.716	7.75	349	147	<0.10	0.000	0.000	<0.10	<0.10	3.7	1.77	294.60	6.11	2.93	630.33	11.59	5.55	592.25	0	0.00	0.00	76	36.38	3735.65
113	0.733	7.79	343	167	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.47	296.07	8.45	4.14	634.47	15.87	7.78	600.03	0	0.00	0.00	94	46.07	3781.72
114	0.714	7.58	312	121	<0.10	0.000	0.000	<0.10	<0.10	3.2	1.53	297.60	6.31	3.01	637.48	11.72	5.60	605.63	0	0.00	0.00	66	31.51	3813.23
115	0.732	7.41	340	154	<0.10	0.000	0.000	<0.10	<0.10	3.1	1.52	299.12	8.35	4.09	641.57	15.17	7.42	613.05	0	0.00	0.00	57	27.90	3841.13
116	0.724	7.72	350	105	<0.10	0.000	0.000	<0.10	<0.10	2.9	1.40	300.52	5.41	2.62	644.19	10.34	5.01	618.06	0	0.00	0.00	58	28.08	3869.21
117	0.720	7.68	339	107	<0.10	0.000	0.000	<0.10	<0.10	3.8	1.83	302.35	4.59	2.21	646.40	8.89	4.28	622.34	0	0.00	0.00	54	26.00	3895.21
118	0.730	7.63	327	111	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.95	304.30	6.04	2.95	649.35	11.34	5.54	627.88	0	0.00	0.00	60	29.29	3924.50
119	0.714	7.75	356	110	<0.10	0.000	0.000	<0.10	<0.10	4.1	1.96	306.26	5.64	2.69	652.04	10.25	4.89	632.77	0	0.00	0.00	61	29.12	3953.62
120	0.699	7.83	322	105	<0.10	0.000	0.000	<0.10	<0.10	4.1	1.92	308.18	5.71	2.67	654.71	10.63	4.97	637.74	0	0.00	0.00	60	28.04	3981.66
121	0.756	7.98	296	126	<0.10	0.000	0.000	<0.10	<0.10	3.7	1.87	310.05	6.06	3.06	657.77	11.52	5.82	643.56	0	0.00	0.00	72	36.39	4018.05
122	0.739	8.00	294	121	<0.10	0.000	0.000	<0.10	<0.10	3.9	1.93	311.98	6.20	3.06	660.83	10.83	5.35	648.91	0	0.00	0.00	66	32.61	4050.66
123	0.730	7.84	325	131	<0.10	0.000	0.000	<0.10	<0.10	3.7	1.81	313.79	6.61	3.23	664.06	12.32	6.01	654.92	0	0.00	0.00	76	37.10	4087.76
124	0.751	7.97	318	131	<0.10	0.000	0.000	<0.10	<0.10	3.9	1.96	315.75	6.89	3.46	667.52	12.75	6.40	661.32	0	0.00	0.00	77	38.66	4126.42
125	0.741	8.14	342	133	<0.10	0.000	0.000	<0.10	<0.10	4.1	2.03	317.78	6.40	3.17	670.69	12.63	6.26	667.58	0	0.00	0.00	73	36.17	4162.59
126	0.729	8.02	315	138	<0.10	0.000	0.000	<0.10	<0.10	3.9	1.90	319.68	7.00	3.41	674.10	12.11	5.90	673.48	0	0.00	0.00	76	37.04	4199.63
127	0.754	7.97	330	136	<0.10	0.000	0.000	<0.10	<0.10	3.8	1.92	321.60	8.08	4.07	678.17	13.43	6.77	680.25	0	0.00	0.00	82	41.34	4240.97
128	0.734	7.99	337	126	<0.10	0.000	0.000	<0.10	<0.10	3.6	1.77	323.37	6.05	2.97	681.14	11.38	5.58	685.83	0	0.00	0.00	73	35.83	4276.80
129	0.741	8.09	335	117	<0.10	0.000	0.000	<0.10	<0.10	3.6	1.78	325.15	7.00	3.47	684.61	10.47	5.19	691.02	0	0.00	0.00	67	33.20	4310.00
130	0.711	8.11	339	114	<0.10	0.000	0.000	<0.10	<0.10	3.6	1.71	326.86	6.04	2.87	687.48	10.97	5.22	696.24	0	0.00	0.00	66	31.38	4341.38
131	0.738	8.10	336	119	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.48	328.34	6.28	3.10	690.58	11.16	5.51	701.75	0	0.00	0.00	70	34.54	4375.92
132	0.734	8.13	324	124	<0.10	0.000	0.000	<0.10	<0.10	2.8	1.37	329.71	6.38	3.13	693.71	11.33	5.56	707.31	0	0.00	0.00	73	35.83	4411.75
133	0.716	8.14	270	120	<0.10	0.000	0.000	<0.10	<0.10	2.9	1.39	331.10	6.25	2.99	696.70	10.93	5.23	712.54	0	0.00	0.00	69	33.03	4444.78
134	0.734	8.07	276	124	<0.10	0.000	0.000	<0.10	<0.10	2.7	1.33	332.43	6.05	2.97	699.67	10.14	4.98	717.52	0	0.00	0.00	68	33.37	4478.15
135	0.746	8.15	220	152	<0.10	0.000	0.000	<0.10	<0.10	2.8	1.40	333.83	7.75	3.87	703.54	13.36	6.66	724.18	0	0.00	0.00	83	41.40	4519.55

Midas Gold Corp.
MLI Job No. 3654

Table 9 . - Humidity Cell Analytical Results, MGI-10-50 (250-270) (1.4956 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
136	0.737	8.22	279	154	<0.10	0.000	0.000	<0.10	<0.10	2.4	1.18	335.01	7.90	3.89	707.43	14.19	6.99	731.17	0	0.00	0.00	88	43.36	4562.91
137	0.741	8.29	244	112	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.49	336.50	6.27	3.11	710.54	9.98	4.94	736.11	0	0.00	0.00	65	32.20	4595.11
138	0.730	8.23	274	107	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.46	337.96	6.17	3.01	713.55	9.54	4.66	740.77	0	0.00	0.00	68	33.19	4628.30
139	0.735	8.25	272	122	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.47	339.43	5.67	2.79	716.34	10.07	4.95	745.72	0	0.00	0.00	69	33.91	4662.21
140	0.747	8.28	192	150	<0.10	0.000	0.000	<0.10	<0.10	2.7	1.35	340.78	7.89	3.94	720.28	14.26	7.12	752.84	0	0.00	0.00	77	38.46	4700.67
141	0.727	8.27	249	130	<0.10	0.000	0.000	<0.10	<0.10	4.3	2.09	342.87	7.10	3.45	723.73	12.71	6.18	759.02	0	0.00	0.00	65	31.60	4732.27
142	0.729	8.30	179	126	<0.10	0.000	0.000	<0.10	<0.10	3.2	1.56	344.43	6.47	3.15	726.88	11.23	5.47	764.49	0	0.00	0.00	66	32.17	4764.44
143	0.732	8.29	243	115	<0.10	0.000	0.000	<0.10	<0.10	3.5	1.69	346.12	6.32	3.09	729.97	10.70	5.24	769.73	0	0.00	0.00	60	29.37	4793.81
144	0.713	8.22	231	120	<0.10	0.000	0.000	<0.10	<0.10	5.1	2.42	348.54	6.79	3.24	733.21	11.14	5.31	775.04	0	0.00	0.00	60	28.60	4822.41

Testing terminated

Figure 9a.- Weekly Humidity Cell Analytical Results

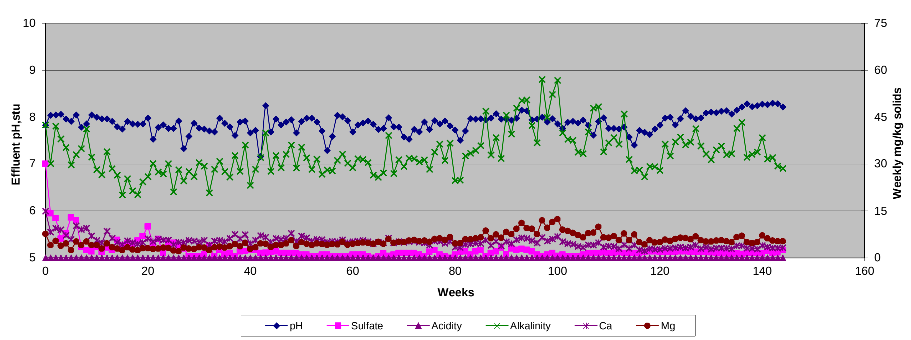
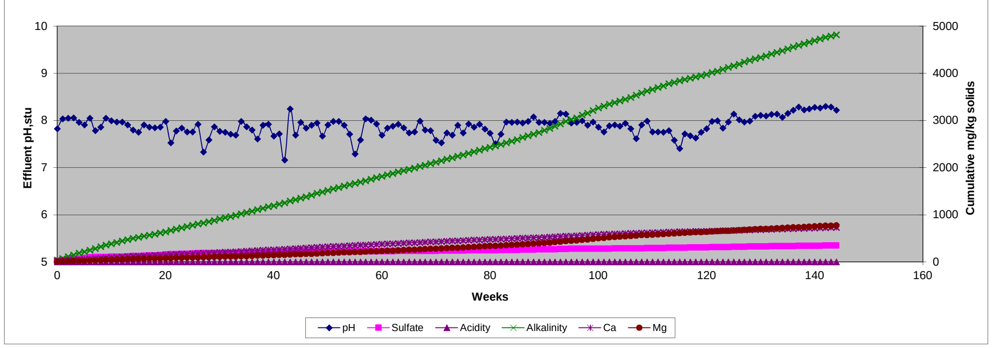


Figure 9b.- Cumulative Humidity Cell Analytical Results



Midas Gold Corp.
MLI Job No. 3654

Table 10 . - Humidity Cell Analytical Results, MGI-10-51 (790-815.5) (1.5096 Kg)

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	SO_4= mg/l	SO_4= mg/kg	SO_4= Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
0	0.724	8.54	173	230	<0.10	0.000	0.000	<0.10	<0.10	31.0	14.87	14.87	15.50	7.43	7.43	4.40	2.11	2.11	0	0.00	0.00	57	27.34	27.34
1	0.745	8.12	234	206	<0.10	0.000	0.000	<0.10	<0.10	14.0	6.91	21.78	18.70	9.23	16.66	4.90	2.42	4.53	0	0.00	0.00	69	34.05	61.39
2	0.743	7.67	259	169	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.92	26.70	17.04	8.39	25.05	4.60	2.26	6.79	0	0.00	0.00	66	32.48	93.87
3	0.709	8.14	247	147	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.82	29.52	17.17	8.06	33.11	3.99	1.87	8.66	0	0.00	0.00	59	27.71	121.58
4	0.745	8.05	262	130	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.96	32.48	14.14	6.98	40.09	4.03	1.99	10.65	0	0.00	0.00	53	26.16	147.74
5	0.778	7.95	269	112	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.55	34.03	13.66	7.04	47.13	3.22	1.66	12.31	0	0.00	0.00	47	24.22	171.96
6	0.726	8.12	271	128	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.40	36.43	17.70	8.51	55.64	4.49	2.16	14.47	0	0.00	0.00	53	25.49	197.45
7	0.701	7.86	261	136	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.86	38.29	20.11	9.34	64.98	4.51	2.09	16.56	0	0.00	0.00	58	26.93	224.38
8	0.813	7.86	215	155	<0.10	0.000	0.000	<0.10	<0.10	4.0	2.15	40.44	21.53	11.60	76.58	5.76	3.10	19.66	0	0.00	0.00	69	37.16	261.54
9	0.733	8.08	185	127	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.91	43.35	15.68	7.61	84.19	4.60	2.23	21.89	0	0.00	0.00	53	25.73	287.27
10	0.745	8.04	221	114	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.94	48.29	11.68	5.76	89.95	4.38	2.16	24.05	0	0.00	0.00	46	22.70	309.97
11	0.758	8.05	205	112	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.52	52.81	12.02	6.04	95.99	3.21	1.61	25.66	0	0.00	0.00	43	21.59	331.56
12	0.736	7.86	158	114	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.39	57.20	15.70	7.65	103.64	3.80	1.85	27.51	0	0.00	0.00	40	19.50	351.06
13	0.683	7.87	228	123	<0.10	0.000	0.000	<0.10	<0.10	13.0	5.88	63.08	15.30	6.92	110.56	3.40	1.54	29.05	0	0.00	0.00	42	19.00	370.06
14	0.713	7.90	196	129	<0.10	0.000	0.000	<0.10	<0.10	21.0	9.92	73.00	14.00	6.61	117.17	3.45	1.63	30.68	0	0.00	0.00	43	20.31	390.37
15	0.628	7.91	187	116	<0.10	0.000	0.000	<0.10	<0.10	12.0	4.99	77.99	11.52	4.79	121.96	2.88	1.20	31.88	0	0.00	0.00	36	14.98	405.35
16	0.686	7.91	211	150	<0.10	0.000	0.000	<0.10	<0.10	18.0	8.18	86.17	15.73	7.15	129.11	4.07	1.85	33.73	0	0.00	0.00	45	20.45	425.80
17	0.685	7.72	215	173	<0.10	0.000	0.000	<0.10	<0.10	19.0	8.62	94.79	15.99	7.26	136.37	3.39	1.54	35.27	0	0.00	0.00	54	24.50	450.30
18	0.688	7.92	201	157	<0.10	0.000	0.000	<0.10	<0.10	21.0	9.57	104.36	16.71	7.62	143.99	3.44	1.57	36.84	0	0.00	0.00	45	20.51	470.81
19	0.749	7.49	220	130	<0.10	0.000	0.000	<0.10	<0.10	18.0	8.93	113.29	13.75	6.82	150.81	3.02	1.50	38.34	0	0.00	0.00	48	23.82	494.63
20	0.674	7.58	213	146	<0.10	0.000	0.000	<0.10	<0.10	28.0	12.50	125.79	15.74	7.03	157.84	2.95	1.32	39.66	0	0.00	0.00	50	22.32	516.95
21	0.754	7.73	246	118	<0.10	0.000	0.000	<0.10	<0.10	18.0	8.99	134.78	13.85	6.92	164.76	2.48	1.24	40.90	0	0.00	0.00	44	21.98	538.93
22	0.726	7.51	235	110	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.77	140.55	13.91	6.69	171.45	2.27	1.09	41.99	0	0.00	0.00	48	23.08	562.01
23	0.719	7.49	259	121	<0.10	0.000	0.000	<0.10	<0.10	18.0	8.57	149.12	13.34	6.35	177.80	2.50	1.19	43.18	0	0.00	0.00	49	23.34	585.35
24	0.724	7.87	231	112	<0.10	0.000	0.000	<0.10	<0.10	19.0	9.11	158.23	13.28	6.37	184.17	2.29	1.10	44.28	0	0.00	0.00	39	18.70	604.05
25	0.698	7.74	256	115	<0.10	0.000	0.000	<0.10	<0.10	20.0	9.25	167.48	12.64	5.84	190.01	2.15	0.99	45.27	0	0.00	0.00	35	16.18	620.23
26	0.684	7.43	245	115	<0.10	0.000	0.000	<0.10	<0.10	19.0	8.61	176.09	13.10	5.94	195.95	2.11	0.96	46.23	0	0.00	0.00	46	20.84	641.07
27	0.719	7.38	276	106	<0.10	0.000	0.000	<0.10	<0.10	16.0	7.62	183.71	11.50	5.48	201.43	2.06	0.98	47.21	0	0.00	0.00	35	16.67	657.74
28	0.671	7.61	292	109	<0.10	0.000	0.000	<0.10	<0.10	15.0	6.67	190.38	14.16	6.29	207.72	2.03	0.90	48.11	2	0.89	0.89	39	17.34	675.08
29	0.776	7.87	264	101	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.65	196.03	12.64	6.50	214.22	1.77	0.91	49.02	0	0.00	0.89	36	18.51	693.59
30	0.732	7.64	242	98.1	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.82	201.85	10.41	5.05	219.27	1.82	0.88	49.90	0	0.00	0.89	34	16.49	710.08
31	0.734	7.71	309	93.0	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.83	207.68	11.99	5.83	225.10	1.77	0.86	50.76	0	0.00	0.89	35	17.02	727.10
32	0.700	7.73	319	94.4	<0.10	0.000	0.000	<0.10	<0.10	13.0	6.03	213.71	11.59	5.37	230.47	1.81	0.84	51.60	0	0.00	0.89	35	16.23	743.33
33	0.705	7.58	312	91.6	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.27	216.98	11.30	5.28	235.75	2.01	0.94	52.54	0	0.00	0.89	35	16.35	759.68
34	0.715	6.91	338	94.3	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.21	222.19	11.78	5.58	241.33	1.86	0.88	53.42	0	0.00	0.89	32	15.16	774.84
35	0.720	7.30	360	94.3	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.82	226.01	11.53	5.50	246.83	1.89	0.90	54.32	0	0.00	0.89	34	16.22	791.06
36	0.728	7.79	313	85.9	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.38	229.39	13.40	6.46	253.29	1.94	0.94	55.26	0	0.00	0.89	35	16.88	807.94
37	0.735	7.60	290	90.4	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.90	233.29	14.08	6.86	260.15	1.91	0.93	56.19	0	0.00	0.89	36	17.53	825.47
38	0.731	7.26	270	86.4	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.91	236.20	12.66	6.13	266.28	1.70	0.82	57.01	0	0.00	0.89	32	15.50	840.97
39	0.740	7.75	295	90.1	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.45	238.65	12.49	6.12	272.40	1.84	0.90	57.91	0	0.00	0.89	36	17.65	858.62
40	0.719	7.61	327	90.1	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.38	241.03	11.65	5.55	277.95	1.53	0.73	58.64	0	0.00	0.89	35	16.67	875.29
41	0.653	7.72	353	107	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.60	243.63	12.46	5.39	283.34	1.82	0.79	59.43	0	0.00	0.89	38	16.44	891.73
42	0.808	7.49	356	103	<0.10	0.000	0.000	<0.10	<0.10	4.0	2.14	245.77	12.16	6.51	289.85	1.70	0.91	60.34	0	0.00	0.89	36	19.27	911.00
43	0.745	8.05	305	89.1	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.97	247.74	11.09	5.47	295.32	1.64	0.81	61.15	0	0.00	0.89	39	19.25	930.25
44	0.701	7.86	351	89.5	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.32	250.06	10.62	4.93	300.25	1.67	0.78	61.93	0	0.00	0.89	37	17.18	947.43
45	0.699	7.95	343	90.0	<0.10	0.000	0.000	<0.10	<0.10	5.0	2.32	252.38	12.53	5.80	306.05	1.78	0.82	62.75	0	0.00	0.89	38	17.60	965.03

Midas Gold Corp.
MLI Job No. 3654

Table 10 . - Humidity Cell Analytical Results,   MGI-10-51 (790-815.5)   (1.5096 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
46	0.791	7.77	330	83.3	<0.10	0.000	0.000	<0.10	<0.10	10.0	5.24	257.62	11.91	6.24	312.29	1.80	0.94	63.69	0	0.00	0.89	35	18.34	983.37
47	0.731	7.88	325	95.4	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.45	259.07	13.85	6.71	319.00	2.06	1.00	64.69	0	0.00	0.89	40	19.37	1002.74
48	0.721	7.77	318	81.8	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.91	260.98	13.03	6.22	325.22	2.07	0.99	65.68	0	0.00	0.89	35	16.72	1019.46
49	0.743	7.95	315	79.6	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.98	261.96	11.27	5.55	330.77	1.64	0.81	66.49	0	0.00	0.89	37	18.21	1037.67
50	0.754	7.76	274	74.9	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.00	262.96	11.41	5.70	336.47	1.71	0.85	67.34	0	0.00	0.89	35	17.48	1055.15
51	0.733	7.81	307	81.3	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.97	263.93	12.45	6.05	342.52	1.80	0.87	68.21	0	0.00	0.89	36	17.48	1072.63
52	0.709	7.85	315	83.8	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.47	264.40	12.11	5.69	348.21	1.94	0.91	69.12	0	0.00	0.89	38	17.85	1090.48
53	0.693	7.73	295	80.5	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.46	264.86	12.22	5.61	353.82	1.88	0.86	69.98	0	0.00	0.89	38	17.44	1107.92
54	0.746	7.69	302	80.7	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.98	266.84	9.20	4.55	358.37	2.13	1.05	71.03	0	0.00	0.89	36	17.79	1125.71
55	0.668	7.65	265	80.6	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.44	267.28	12.04	5.33	363.70	1.89	0.84	71.87	0	0.00	0.89	37	16.37	1142.08
56	0.773	7.50	276	76.7	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.02	268.30	11.64	5.96	369.66	1.82	0.93	72.80	0	0.00	0.89	34	17.41	1159.49
57	0.726	7.80	274	76.3	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	268.30	10.74	5.17	374.83	1.72	0.83	73.63	0	0.00	0.89	38	18.28	1177.77
58	0.695	7.88	311	85.4	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.46	268.76	12.33	5.68	380.51	1.95	0.90	74.53	0	0.00	0.89	40	18.42	1196.19
59	0.760	7.75	270	78.5	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.01	269.77	11.78	5.93	386.44	1.78	0.90	75.43	0	0.00	0.89	39	19.63	1215.82
60	0.751	7.68	293	76.5	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	270.27	12.38	6.16	392.60	1.89	0.94	76.37	0	0.00	0.89	36	17.91	1233.73
61	0.737	7.63	293	75.1	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	270.76	10.89	5.32	397.92	1.72	0.84	77.21	0	0.00	0.89	35	17.09	1250.82
62	0.690	7.76	309	85.0	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.91	271.67	12.11	5.54	403.46	2.15	0.98	78.19	0	0.00	0.89	40	18.28	1269.10
63	0.749	7.82	303	84.4	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	271.67	11.98	5.94	409.40	2.06	1.02	79.21	0	0.00	0.89	40	19.85	1288.95
64	0.698	7.70	299	72.1	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	271.67	10.44	4.83	414.23	1.72	0.80	80.01	0	0.00	0.89	31	14.33	1303.28
65	0.724	7.65	267	83.1	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	271.67	12.50	5.99	420.22	2.10	1.01	81.02	0	0.00	0.89	36	17.27	1320.55
66	0.742	7.65	265	74.3	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.98	272.65	10.04	4.93	425.15	1.61	0.79	81.81	0	0.00	0.89	34	16.71	1337.26
67	0.700	7.71	325	76.3	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.46	273.11	11.62	5.39	430.54	1.81	0.84	82.65	0	0.00	0.89	36	16.69	1353.95
68	0.715	7.70	297	78.3	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.47	273.58	12.22	5.79	436.33	2.08	0.99	83.64	0	0.00	0.89	36	17.05	1371.00
69	0.670	7.69	271	80.6	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.89	274.47	11.93	5.29	441.62	1.88	0.83	84.47	0	0.00	0.89	36	15.98	1386.98
70	0.695	7.53	262	84.4	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.46	274.93	12.21	5.62	447.24	1.99	0.92	85.39	0	0.00	0.89	37	17.03	1404.01
71	0.703	7.56	216	80.6	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.47	275.40	11.47	5.34	452.58	2.02	0.94	86.33	0	0.00	0.89	35	16.30	1420.31
72	0.660	7.54	248	82.3	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.44	275.84	11.59	5.07	457.65	2.12	0.93	87.26	0	0.00	0.89	37	16.18	1436.49
73	0.694	7.51	212	75.8	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.46	276.30	11.36	5.22	462.87	1.93	0.89	88.15	0	0.00	0.89	35	16.09	1452.58
74	0.674	7.56	231	68.9	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.45	276.75	9.91	4.42	467.29	1.87	0.83	88.98	0	0.00	0.89	32	14.29	1466.87
75	0.702	7.50	207	74.9	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.93	277.68	9.92	4.61	471.90	1.92	0.89	89.87	0	0.00	0.89	35	16.28	1483.15
76	0.660	7.69	228	78.9	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	277.68	11.65	5.09	476.99	2.14	0.94	90.81	0	0.00	0.89	36	15.74	1498.89
77	0.606	7.58	228	69.5	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.40	278.08	10.38	4.17	481.16	1.93	0.77	91.58	0	0.00	0.89	31	12.44	1511.33
78	0.690	7.68	247	71.2	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.46	278.54	10.68	4.88	486.04	1.94	0.89	92.47	0	0.00	0.89	31	14.17	1525.50
79	0.598	7.58	212	58.2	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	278.54	7.29	2.89	488.93	1.68	0.67	93.14	0	0.00	0.89	27	10.70	1536.20
80	0.565	7.55	212	60.7	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.37	278.91	7.64	2.86	491.79	1.79	0.67	93.81	0	0.00	0.89	27	10.11	1546.31
81	0.602	7.48	210	71.2	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.20	280.11	8.55	3.41	495.20	2.18	0.87	94.68	0	0.00	0.89	29	11.56	1557.87
82	0.638	7.62	239	69.6	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.27	281.38	8.36	3.53	498.73	2.09	0.88	95.56	0	0.00	0.89	31	13.10	1570.97
83	0.606	7.75	289	66.3	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	281.38	8.13	3.26	501.99	1.95	0.78	96.34	0	0.00	0.89	29	11.64	1582.61
84	0.602	7.74	333	81.6	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.60	282.98	11.02	4.39	506.38	2.60	1.04	97.38	0	0.00	0.89	36	14.36	1596.97
85	0.638	7.65	326	76.1	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.42	283.40	9.51	4.02	510.40	2.23	0.94	98.32	0	0.00	0.89	35	14.79	1611.76
86	0.589	7.72	325	74.2	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.39	283.79	9.71	3.79	514.19	2.58	1.01	99.33	0	0.00	0.89	35	13.66	1625.42
87	0.600	7.64	366	78.9	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.40	284.19	10.02	3.98	518.17	2.61	1.04	100.37	0	0.00	0.89	37	14.71	1640.13
88	0.617	7.77	350	80.9	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.23	285.42	12.03	4.92	523.09	2.71	1.11	101.48	0	0.00	0.89	38	15.53	1655.66
89	0.636	7.68	384	83.8	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.26	286.68	10.74	4.52	527.61	2.98	1.26	102.74	0	0.00	0.89	38	16.01	1671.67
90	0.653	7.42	403	80.8	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.43	287.11	10.16	4.39	532.00	2.62	1.13	103.87	0	0.00	0.89	37	16.00	1687.67

Midas Gold Corp.
MLI Job No. 3654

Table 10 . - Humidity Cell Analytical Results, MGI-10-51 (790-815.5) **(1.5096 Kg)**

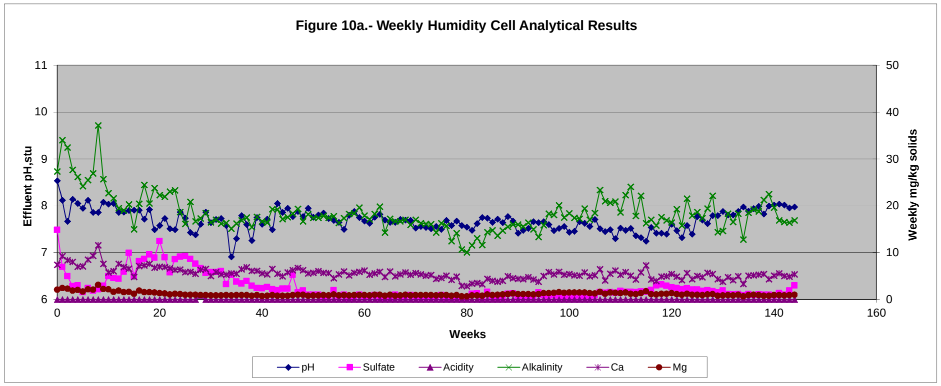
					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
91	0.619	7.48	274	87.5	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.82	287.93	10.63	4.36	536.36	2.82	1.16	105.03	0	0.00	0.89	38	15.58	1703.25
92	0.654	7.52	357	82.6	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.43	288.36	10.96	4.75	541.11	2.68	1.16	106.19	0	0.00	0.89	38	16.46	1719.71
93	0.553	7.66	353	96.8	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.73	289.09	11.70	4.29	545.40	2.89	1.06	107.25	0	0.00	0.89	41	15.02	1734.73
94	0.560	7.64	350	82.8	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.48	290.57	10.29	3.82	549.22	3.12	1.16	108.41	0	0.00	0.89	36	13.35	1748.08
95	0.632	7.66	356	85.3	0.13	0.054	0.054	<0.10	<0.13	2.0	0.84	291.41	12.03	5.04	554.26	3.24	1.36	109.77	0	0.00	0.89	38	15.91	1763.99
96	0.693	7.60	361	85.1	<0.10	0.000	0.054	<0.10	<0.10	1.0	0.46	291.87	12.71	5.83	560.09	2.95	1.35	111.12	0	0.00	0.89	40	18.36	1782.35
97	0.719	7.47	354	84.9	<0.10	0.000	0.054	<0.10	<0.10	2.0	0.95	292.82	11.20	5.33	565.42	2.97	1.41	112.53	0	0.00	0.89	38	18.10	1800.45
98	0.660	7.52	295	104	<0.10	0.000	0.054	<0.10	<0.10	1.0	0.44	293.26	13.59	5.94	571.36	3.53	1.54	114.07	0	0.00	0.89	46	20.11	1820.56
99	0.616	7.56	365	94.6	<0.10	0.000	0.054	<0.10	<0.10	1.0	0.41	293.67	12.97	5.29	576.65	3.41	1.39	115.46	0	0.00	0.89	43	17.55	1838.11
100	0.632	7.44	335	92.6	<0.10	0.000	0.054	<0.10	<0.10	1.0	0.42	294.09	13.01	5.45	582.10	3.46	1.45	116.91	0	0.00	0.89	44	18.42	1856.53
101	0.612	7.46	328	92.8	<0.10	0.000	0.054	<0.10	<0.10	1.0	0.41	294.50	12.68	5.14	587.24	3.62	1.47	118.38	0	0.00	0.89	43	17.43	1873.96
102	0.579	7.66	336	97.1	<0.10	0.000	0.054	<0.10	<0.10	2.0	0.77	295.27	13.19	5.06	592.30	3.89	1.49	119.87	0	0.00	0.89	45	17.26	1891.22
103	0.699	7.63	330	91.2	<0.10	0.000	0.054	<0.10	<0.10	1.0	0.46	295.73	12.53	5.80	598.10	3.22	1.49	121.36	0	0.00	0.89	42	19.45	1910.67
104	0.678	7.56	333	83.1	<0.10	0.000	0.054	<0.10	<0.10	1.0	0.45	296.18	11.02	4.95	603.05	2.89	1.30	122.66	0	0.00	0.89	38	17.07	1927.74
105	0.664	7.71	342	90.5	<0.10	0.000	0.054	<0.10	<0.10	2.0	0.88	297.06	11.69	5.14	608.19	2.93	1.29	123.95	0	0.00	0.89	42	18.47	1946.21
106	0.735	7.51	327	96.9	<0.10	0.000	0.054	<0.10	<0.10	3.2	1.56	298.62	13.31	6.48	614.67	3.29	1.60	125.55	0	0.00	0.89	48	23.37	1969.58
107	0.646	7.45	339	83.5	<0.10	0.000	0.054	<0.10	<0.10	3.2	1.37	299.99	9.54	4.08	618.75	2.79	1.19	126.74	0	0.00	0.89	49	20.97	1990.55
108	0.708	7.49	354	89.9	<0.10	0.000	0.054	<0.10	<0.10	3.3	1.55	301.54	11.74	5.51	624.26	3.15	1.48	128.22	0	0.00	0.89	44	20.64	2011.19
109	0.736	7.30	369	84.6	<0.10	0.000	0.054	<0.10	<0.10	2.9	1.41	302.95	12.69	6.19	630.45	2.88	1.40	129.62	0	0.00	0.89	43	20.96	2032.15
110	0.668	7.53	356	90.4	<0.10	0.000	0.054	<0.10	<0.10	4.1	1.81	304.76	11.95	5.29	635.74	2.97	1.31	130.93	0	0.00	0.89	42	18.59	2050.74
111	0.673	7.48	359	95.5	<0.10	0.000	0.054	<0.10	<0.10	3.6	1.60	306.36	13.09	5.84	641.58	3.32	1.48	132.41	0	0.00	0.89	50	22.29	2073.03
112	0.712	7.52	356	98.2	<0.10	0.000	0.054	<0.10	<0.10	3.4	1.60	307.96	10.79	5.09	646.67	2.51	1.18	133.59	0	0.00	0.89	51	24.05	2097.08
113	0.587	7.36	346	83.9	<0.10	0.000	0.054	<0.10	<0.10	3.9	1.52	309.48	10.97	4.27	650.94	2.87	1.12	134.71	0	0.00	0.89	46	17.89	2114.97
114	0.656	7.32	318	94.6	<0.10	0.000	0.054	<0.10	<0.10	3.8	1.65	311.13	13.30	5.78	656.72	3.12	1.36	136.07	0	0.00	0.89	51	22.16	2137.13
115	0.616	7.25	327	128	<0.10	0.000	0.054	<0.10	<0.10	3.9	1.59	312.72	17.89	7.30	664.02	4.27	1.74	137.81	0	0.00	0.89	40	16.32	2153.45
116	0.613	7.54	364	79.0	<0.10	0.000	0.054	<0.10	<0.10	4.9	1.99	314.71	10.58	4.30	668.32	2.85	1.16	138.97	0	0.00	0.89	42	17.05	2170.50
117	0.644	7.42	352	79.4	<0.10	0.000	0.054	<0.10	<0.10	7.0	2.99	317.70	9.22	3.93	672.25	2.41	1.03	140.00	0	0.00	0.89	37	15.78	2186.28
118	0.665	7.42	352	83.5	<0.10	0.000	0.054	<0.10	<0.10	7.2	3.17	320.87	11.08	4.88	677.13	2.67	1.18	141.18	0	0.00	0.89	40	17.62	2203.90
119	0.639	7.40	378	87.0	<0.10	0.000	0.054	<0.10	<0.10	6.9	2.92	323.79	11.63	4.92	682.05	2.79	1.18	142.36	0	0.00	0.89	40	16.93	2220.83
120	0.636	7.61	353	79.1	<0.10	0.000	0.054	<0.10	<0.10	6.0	2.53	326.32	12.95	5.46	687.51	3.23	1.36	143.72	0	0.00	0.89	39	16.43	2237.26
121	0.710	7.47	355	80.0	<0.10	0.000	0.054	<0.10	<0.10	5.1	2.40	328.72	10.45	4.91	692.42	2.46	1.16	144.88	0	0.00	0.89	41	19.28	2256.54
122	0.596	7.32	357	83.7	<0.10	0.000	0.054	<0.10	<0.10	5.4	2.13	330.85	10.51	4.15	696.57	2.52	0.99	145.87	0	0.00	0.89	40	15.79	2272.33
123	0.692	7.58	381	89.9	<0.10	0.000	0.054	<0.10	<0.10	5.1	2.34	333.19	12.37	5.67	702.24	2.55	1.17	147.04	0	0.00	0.89	47	21.54	2293.87
124	0.677	7.40	378	77.9	<0.10	0.000	0.054	<0.10	<0.10	4.6	2.06	335.25	9.71	4.35	706.59	2.14	0.96	148.00	0	0.00	0.89	40	17.94	2311.81
125	0.689	7.77	362	81.2	<0.10	0.000	0.054	<0.10	<0.10	4.6	2.10	337.35	10.95	5.00	711.59	2.10	0.96	148.96	0	0.00	0.89	41	18.71	2330.52
126	0.673	7.70	370	78.9	<0.10	0.000	0.054	<0.10	<0.10	4.1	1.83	339.18	10.62	4.73	716.32	2.08	0.93	149.89	0	0.00	0.89	39	17.39	2347.91
127	0.682	7.62	374	79.3	<0.10	0.000	0.054	<0.10	<0.10	4.3	1.94	341.12	12.60	5.69	722.01	2.31	1.04	150.93	0	0.00	0.89	43	19.43	2367.34
128	0.712	7.79	366	84.9	<0.10	0.000	0.054	<0.10	<0.10	3.7	1.75	342.87	11.55	5.45	727.46	2.34	1.10	152.03	0	0.00	0.89	47	22.17	2389.51
129	0.621	7.79	368	67.7	<0.10	0.000	0.054	<0.10	<0.10	3.6	1.48	344.35	10.58	4.35	731.81	1.99	0.82	152.85	0	0.00	0.89	35	14.40	2403.91
130	0.598	7.88	335	72.5	<0.10	0.000	0.054	<0.10	<0.10	4.8	1.90	346.25	9.58	3.79	735.60	2.21	0.88	153.73	0	0.00	0.89	37	14.66	2418.57
131	0.710	7.81	356	70.9	<0.10	0.000	0.054	<0.10	<0.10	2.4	1.13	347.38	10.05	4.73	740.33	2.03	0.95	154.68	0	0.00	0.89	39	18.34	2436.91
132	0.657	7.81	346	69.4	<0.10	0.000	0.054	<0.10	<0.10	2.4	1.04	348.42	9.50	4.13	744.46	2.00	0.87	155.55	0	0.00	0.89	38	16.54	2453.45
133	0.693	7.88	293	73.0	<0.10	0.000	0.054	<0.10	<0.10	2.4	1.10	349.52	10.71	4.92	749.38	2.11	0.97	156.52	0	0.00	0.89	40	18.36	2471.81
134	0.586	7.98	299	66.7	<0.10	0.000	0.054	<0.10	<0.10	2.2	0.85	350.37	8.51	3.30	752.68	1.70	0.66	157.18	0	0.00	0.89	33	12.81	2484.62
135	0.718	7.89	246	76.3	<0.10	0.000	0.054	<0.10	<0.10	2.4	1.14	351.51	10.68	5.08	757.76	1.92	0.91	158.09	0	0.00	0.89	39	18.55	2503.17

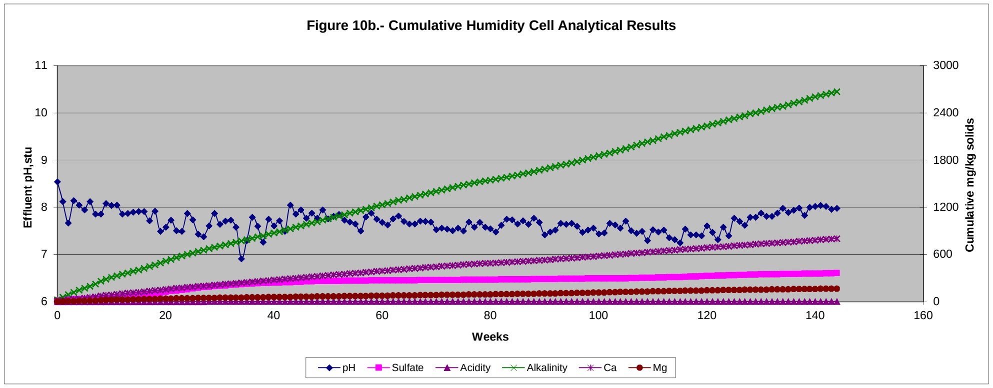
Midas Gold Corp.
MLI Job No. 3654

Table 10 . - Humidity Cell Analytical Results, MGI-10-51 (790-815.5) (1.5096 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
136	0.743	7.94	296	73.8	<0.10	0.000	0.054	<0.10	<0.10	1.8	0.89	352.40	10.43	5.13	762.89	1.95	0.96	159.05	0	0.00	0.89	39	19.20	2522.37
137	0.710	7.99	262	73.7	<0.10	0.000	0.054	<0.10	<0.10	2.2	1.03	353.43	11.20	5.27	768.16	1.95	0.92	159.97	0	0.00	0.89	40	18.81	2541.18
138	0.729	7.83	258	69.5	<0.10	0.000	0.054	<0.10	<0.10	2.1	1.01	354.44	11.20	5.41	773.57	1.68	0.81	160.78	0	0.00	0.89	44	21.25	2562.43
139	0.723	8.00	284	69.0	<0.10	0.000	0.054	<0.10	<0.10	2.0	0.96	355.40	9.05	4.33	777.90	1.64	0.79	161.57	0	0.00	0.89	47	22.51	2584.94
140	0.722	8.02	220	74.4	<0.10	0.000	0.054	<0.10	<0.10	1.8	0.86	356.26	10.64	5.09	782.99	1.94	0.93	162.50	0	0.00	0.89	41	19.61	2604.55
141	0.729	8.04	270	74.7	<0.10	0.000	0.054	<0.10	<0.10	2.8	1.35	357.61	11.56	5.58	788.57	1.95	0.94	163.44	0	0.00	0.89	35	16.90	2621.45
142	0.676	8.02	208	75.6	<0.10	0.000	0.054	<0.10	<0.10	2.2	0.99	358.60	11.23	5.03	793.60	1.89	0.85	164.29	0	0.00	0.89	37	16.57	2638.02
143	0.709	7.96	259	71.8	<0.10	0.000	0.054	<0.10	<0.10	4.0	1.89	360.49	10.35	4.86	798.46	1.97	0.93	165.22	0	0.00	0.89	35	16.44	2654.46
144	0.710	7.98	266	76.2	<0.10	0.000	0.054	<0.10	<0.10	6.4	2.99	363.48	11.35	5.34	803.80	2.12	1.00	166.22	0	0.00	0.89	36	16.93	2671.39

Testing terminated





Midas Gold Corp.
MLI Job No. 3654

Table 11 . - Humidity Cell Analytical Results, MGI-11-60 (147-157.5) **(1.4995 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
0	0.657	7.31	275	603	<0.10	0.000	0.000	<0.10	<0.10	190.0	83.25	83.25	69.40	30.41	30.41	26.40	11.57	11.57	0	0.00	0.00	43	18.84	18.84
1	0.714	7.82	252	737	<0.10	0.000	0.000	<0.10	<0.10	310.0	147.61	230.86	81.60	38.85	69.26	28.90	13.76	25.33	0	0.00	0.00	46	21.90	40.74
2	0.736	7.76	259	606	<0.10	0.000	0.000	<0.10	<0.10	220.0	107.98	338.84	60.00	29.45	98.71	24.60	12.07	37.40	0	0.00	0.00	53	26.01	66.75
3	0.681	7.93	260	508	<0.10	0.000	0.000	<0.10	<0.10	180.0	81.75	420.59	58.60	26.61	125.32	20.83	9.46	46.86	0	0.00	0.00	58	26.34	93.09
4	0.773	7.88	273	417	<0.10	0.000	0.000	<0.10	<0.10	140.0	72.17	492.76	42.80	22.06	147.38	17.63	9.09	55.95	0	0.00	0.00	62	31.96	125.05
5	0.744	7.89	274	308	<0.10	0.000	0.000	<0.10	<0.10	100.0	49.62	542.38	35.90	17.81	165.19	11.82	5.86	61.81	0	0.00	0.00	55	27.29	152.34
6	0.673	8.20	266	169	<0.10	0.000	0.000	<0.10	<0.10	44.0	19.75	562.13	18.50	8.30	173.49	6.48	2.91	64.72	0	0.00	0.00	31	13.91	166.25
7	0.729	7.73	267	273	<0.10	0.000	0.000	<0.10	<0.10	50.0	24.31	586.44	31.80	15.46	188.95	11.52	5.60	70.32	0	0.00	0.00	57	27.71	193.96
8	0.730	7.73	220	278	<0.10	0.000	0.000	<0.10	<0.10	40.0	19.47	605.91	29.70	14.46	203.41	13.19	6.42	76.74	0	0.00	0.00	70	34.08	228.04
9	0.714	8.10	187	199	<0.10	0.000	0.000	<0.10	<0.10	42.0	20.00	625.91	19.20	9.14	212.55	8.90	4.24	80.98	0	0.00	0.00	53	25.24	253.28
10	0.741	8.07	225	183	<0.10	0.000	0.000	<0.10	<0.10	35.0	17.30	643.21	16.90	8.35	220.90	9.05	4.47	85.45	0	0.00	0.00	59	29.16	282.44
11	0.691	8.13	209	165	<0.10	0.000	0.000	<0.10	<0.10	23.0	10.60	653.81	13.90	6.41	227.31	6.43	2.96	88.41	0	0.00	0.00	55	25.35	307.79
12	0.732	8.11	162	150	<0.10	0.000	0.000	<0.10	<0.10	15.0	7.32	661.13	16.00	7.81	235.12	6.70	3.27	91.68	0	0.00	0.00	53	25.87	333.66
13	0.672	7.87	232	93.5	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.03	665.16	8.60	3.85	238.97	3.60	1.61	93.29	0	0.00	0.00	34	15.24	348.90
14	0.638	7.94	199	115	<0.10	0.000	0.000	<0.10	<0.10	18.0	7.66	672.82	8.89	3.78	242.75	4.40	1.87	95.16	0	0.00	0.00	42	17.87	366.77
15	0.514	7.85	194	176	<0.10	0.000	0.000	<0.10	<0.10	13.0	4.46	677.28	12.12	4.15	246.90	6.61	2.27	97.43	0	0.00	0.00	67	22.97	389.74
16	0.608	8.09	207	145	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.05	681.33	10.32	4.18	251.08	5.93	2.40	99.83	0	0.00	0.00	49	19.87	409.61
17	0.583	8.04	209	140	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.28	685.61	9.61	3.74	254.82	5.04	1.96	101.79	0	0.00	0.00	50	19.44	429.05
18	0.642	8.11	197	152	0.44	0.188	0.188	<0.10	<0.44	12.0	5.14	690.75	11.28	4.83	259.65	5.76	2.47	104.26	0	0.00	0.00	55	23.55	452.60
19	0.645	7.92	208	129	<0.10	0.000	0.188	<0.10	<0.10	7.0	3.01	693.76	9.14	3.93	263.58	5.11	2.20	106.46	0	0.00	0.00	51	21.94	474.54
20	0.687	7.94	208	153	<0.10	0.000	0.188	<0.10	<0.10	13.0	5.96	699.72	11.43	5.24	268.82	5.29	2.42	108.88	0	0.00	0.00	58	26.57	501.11
21	0.621	7.98	239	127	<0.10	0.000	0.188	<0.10	<0.10	6.0	2.48	702.20	10.07	4.17	272.99	4.93	2.04	110.92	0	0.00	0.00	54	22.36	523.47
22	0.678	7.86	230	130	<0.10	0.000	0.188	<0.10	<0.10	19.0	8.59	710.79	10.94	4.95	277.94	4.95	2.24	113.16	0	0.00	0.00	56	25.32	548.79
23	0.673	7.83	253	143	<0.10	0.000	0.188	<0.10	<0.10	10.0	4.49	715.28	11.28	5.06	283.00	5.82	2.61	115.77	0	0.00	0.00	58	26.03	574.82
24	0.684	8.08	227	122	<0.10	0.000	0.188	<0.10	<0.10	20.0	9.12	724.40	9.79	4.47	287.47	4.79	2.18	117.95	0	0.00	0.00	52	23.72	598.54
25	0.559	8.01	249	125	<0.10	0.000	0.188	<0.10	<0.10	5.0	1.86	726.26	8.60	3.21	290.68	4.60	1.71	119.66	0	0.00	0.00	49	18.27	616.81
26	0.694	7.96	229	121	<0.10	0.000	0.188	<0.10	<0.10	9.0	4.17	730.43	9.15	4.23	294.91	4.98	2.30	121.96	0	0.00	0.00	52	24.07	640.88
27	0.604	7.56	273	111	<0.10	0.000	0.188	<0.10	<0.10	7.0	2.82	733.25	8.00	3.22	298.13	4.77	1.92	123.88	0	0.00	0.00	44	17.72	658.60
28	0.660	7.72	285	122	<0.10	0.000	0.188	<0.10	<0.10	3.0	1.32	734.57	9.84	4.33	302.46	4.85	2.13	126.01	0	0.00	0.00	48	21.13	679.73
29	0.603	8.06	273	103	<0.10	0.000	0.188	<0.10	<0.10	3.0	1.21	735.78	7.96	3.20	305.66	4.14	1.66	127.67	0	0.00	0.00	41	16.49	696.22
30	0.584	7.85	245	113	<0.10	0.000	0.188	<0.10	<0.10	4.0	1.56	737.34	7.85	3.06	308.72	4.63	1.80	129.47	0	0.00	0.00	44	17.14	713.36
31	0.691	7.93	310	113	<0.10	0.000	0.188	<0.10	<0.10	8.0	3.69	741.03	9.55	4.40	313.12	4.83	2.23	131.70	0	0.00	0.00	46	21.20	734.56
32	0.724	7.96	320	131	<0.10	0.000	0.188	<0.10	<0.10	13.0	6.28	747.31	10.67	5.15	318.27	5.62	2.71	134.41	0	0.00	0.00	54	26.07	760.63
33	0.581	7.73	319	98.0	<0.10	0.000	0.188	<0.10	<0.10	5.0	1.94	749.25	7.64	2.96	321.23	2.99	1.16	135.57	0	0.00	0.00	41	15.89	776.52
34	0.614	7.83	290	109	<0.10	0.000	0.188	<0.10	<0.10	9.0	3.69	752.94	8.24	3.37	324.60	4.84	1.98	137.55	0	0.00	0.00	44	18.02	794.54
35	0.621	7.62	348	121	<0.10	0.000	0.188	<0.10	<0.10	7.0	2.90	755.84	9.31	3.86	328.46	5.57	2.31	139.86	0	0.00	0.00	49	20.29	814.83
36	0.647	8.00	319	98.6	<0.10	0.000	0.188	<0.10	<0.10	4.0	1.73	757.57	9.42	4.06	332.52	4.96	2.14	142.00	0	0.00	0.00	42	18.12	832.95
37	0.621	7.68	302	115	<0.10	0.000	0.188	<0.10	<0.10	11.0	4.56	762.13	10.89	4.51	337.03	6.09	2.52	144.52	0	0.00	0.00	47	19.46	852.41
38	0.681	7.55	274	110	<0.10	0.000	0.188	<0.10	<0.10	7.0	3.18	765.31	10.23	4.65	341.68	5.18	2.35	146.87	0	0.00	0.00	44	19.98	872.39
39	0.689	7.48	232	125	<0.10	0.000	0.188	<0.10	<0.10	10.0	4.59	769.90	11.49	5.28	346.96	6.37	2.93	149.80	0	0.00	0.00	48	22.06	894.45
40	0.689	7.80	324	140	<0.10	0.000	0.188	<0.10	<0.10	11.0	5.05	774.95	10.79	4.96	351.92	5.85	2.69	152.49	0	0.00	0.00	54	24.81	919.26
41	0.691	7.83	354	148	<0.10	0.000	0.188	<0.10	<0.10	7.0	3.23	778.18	11.25	5.18	357.10	5.85	2.70	155.19	0	0.00	0.00	56	25.81	945.07
42	0.667	7.58	355	162	<0.10	0.000	0.188	<0.10	<0.10	7.0	3.11	781.29	11.26	5.01	362.11	7.06	3.14	158.33	0	0.00	0.00	56	24.91	969.98
43	0.726	8.21	301	175	<0.10	0.000	0.188	<0.10	<0.10	7.0	3.39	784.68	14.82	7.18	369.29	8.15	3.95	162.28	0	0.00	0.00	81	39.22	1009.20
44	0.706	8.02	346	163	<0.10	0.000	0.188	<0.10	<0.10	7.0	3.30	787.98	13.29	6.26	375.55	7.09	3.34	165.62	0	0.00	0.00	71	33.43	1042.63
45	0.688	8.00	344	169	<0.10	0.000	0.188	<0.10	<0.10	9.0	4.13	792.11	14.85	6.81	382.36	8.27	3.79	169.41	0	0.00	0.00	76	34.87	1077.50

Midas Gold Corp.
MLI Job No. 3654

Table 11 . - Humidity Cell Analytical Results, MGI-11-60 (147-157.5) **(1.4995 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
46	0.698	8.09	314	137	<0.10	0.000	0.188	<0.10	<0.10	6.0	2.79	794.90	12.60	5.87	388.23	7.30	3.40	172.81	0	0.00	0.00	59	27.46	1104.96
47	0.655	7.96	317	129	<0.10	0.000	0.188	<0.10	<0.10	4.0	1.75	796.65	12.00	5.24	393.47	7.04	3.08	175.89	0	0.00	0.00	55	24.02	1128.98
48	0.620	8.01	312	117	<0.10	0.000	0.188	<0.10	<0.10	5.0	2.07	798.72	11.63	4.81	398.28	6.63	2.74	178.63	0	0.00	0.00	49	20.26	1149.24
49	0.695	8.10	301	123	<0.10	0.000	0.188	<0.10	<0.10	4.0	1.85	800.57	10.80	5.01	403.29	6.03	2.79	181.42	0	0.00	0.00	57	26.42	1175.66
50	0.589	7.51	340	122	<0.10	0.000	0.188	<0.10	<0.10	4.0	1.57	802.14	11.50	4.52	407.81	6.34	2.49	183.91	0	0.00	0.00	52	20.43	1196.09
51	0.695	8.02	312	126	<0.10	0.000	0.188	<0.10	<0.10	5.0	2.32	804.46	11.87	5.50	413.31	6.56	3.04	186.95	0	0.00	0.00	57	26.42	1222.51
52	0.648	8.07	308	125	<0.10	0.000	0.188	<0.10	<0.10	2.0	0.86	805.32	10.85	4.69	418.00	6.73	2.91	189.86	0	0.00	0.00	59	25.50	1248.01
53	0.608	7.98	288	131	<0.10	0.000	0.188	<0.10	<0.10	2.0	0.81	806.13	12.57	5.10	423.10	7.32	2.97	192.83	0	0.00	0.00	63	25.54	1273.55
54	0.748	7.99	292	136	<0.10	0.000	0.188	<0.10	<0.10	5.0	2.49	808.62	9.45	4.71	427.81	6.67	3.33	196.16	0	0.00	0.00	62	30.93	1304.48
55	0.609	7.79	265	125	<0.10	0.000	0.188	<0.10	<0.10	4.0	1.62	810.24	9.68	3.93	431.74	7.99	3.25	199.41	0	0.00	0.00	58	23.56	1328.04
56	0.737	7.81	267	126	<0.10	0.000	0.188	<0.10	<0.10	3.0	1.47	811.71	12.06	5.93	437.67	7.06	3.47	202.88	0	0.00	0.00	57	28.02	1356.06
57	0.676	8.09	263	134	<0.10	0.000	0.188	<0.10	<0.10	3.0	1.35	813.06	12.71	5.73	443.40	7.24	3.26	206.14	0	0.00	0.00	66	29.75	1385.81
58	0.584	8.20	297	165	<0.10	0.000	0.188	<0.10	<0.10	5.0	1.95	815.01	14.58	5.68	449.08	8.83	3.44	209.58	0	0.00	0.00	77	29.99	1415.80
59	0.630	8.04	265	136	<0.10	0.000	0.188	<0.10	<0.10	3.0	1.26	816.27	12.66	5.32	454.40	7.42	3.12	212.70	0	0.00	0.00	67	28.15	1443.95
60	0.706	7.97	290	141	<0.10	0.000	0.188	<0.10	<0.10	4.0	1.88	818.15	14.10	6.64	461.04	8.64	4.07	216.77	0	0.00	0.00	69	32.49	1476.44
61	0.736	7.86	294	147	<0.10	0.000	0.188	<0.10	<0.10	3.0	1.47	819.62	13.96	6.85	467.89	7.87	3.86	220.63	0	0.00	0.00	69	33.87	1510.31
62	0.641	7.98	303	159	<0.10	0.000	0.188	<0.10	<0.10	4.0	1.71	821.33	15.21	6.50	474.39	9.44	4.04	224.67	0	0.00	0.00	75	32.06	1542.37
63	0.632	8.13	295	189	<0.10	0.000	0.188	<0.10	<0.10	2.0	0.84	822.17	17.20	7.25	481.64	10.34	4.36	229.03	0	0.00	0.00	90	37.93	1580.30
64	0.717	7.86	299	167	<0.10	0.000	0.188	<0.10	<0.10	1.0	0.48	822.65	15.89	7.60	489.24	9.41	4.50	233.53	0	0.00	0.00	76	36.34	1616.64
65	0.747	7.77	274	158	<0.10	0.000	0.188	<0.10	<0.10	2.0	1.00	823.65	15.39	7.67	496.91	9.21	4.59	238.12	0	0.00	0.00	69	34.37	1651.01
66	0.688	7.87	268	135	<0.10	0.000	0.188	<0.10	<0.10	5.0	2.29	825.94	12.97	5.95	502.86	7.82	3.59	241.71	0	0.00	0.00	60	27.53	1678.54
67	0.637	8.04	311	146	<0.10	0.000	0.188	<0.10	<0.10	4.0	1.70	827.64	14.34	6.09	508.95	7.95	3.38	245.09	0	0.00	0.00	68	28.89	1707.43
68	0.677	7.98	296	124	<0.10	0.000	0.188	<0.10	<0.10	4.0	1.81	829.45	12.11	5.47	514.42	7.34	3.31	248.40	0	0.00	0.00	55	24.83	1732.26
69	0.556	7.93	282	144	<0.10	0.000	0.188	<0.10	<0.10	9.0	3.34	832.79	12.75	4.73	519.15	7.96	2.95	251.35	0	0.00	0.00	63	23.36	1755.62
70	0.647	7.79	273	170	<0.10	0.000	0.188	<0.10	<0.10	7.0	3.02	835.81	16.69	7.20	526.35	9.63	4.16	255.51	0	0.00	0.00	74	31.93	1787.55
71	0.614	7.82	221	175	<0.10	0.000	0.188	<0.10	<0.10	9.0	3.69	839.50	16.27	6.66	533.01	10.41	4.26	259.77	0	0.00	0.00	75	30.71	1818.26
72	0.646	7.90	248	186	<0.10	0.000	0.188	<0.10	<0.10	9.0	3.88	843.38	17.53	7.55	540.56	10.86	4.68	264.45	0	0.00	0.00	81	34.90	1853.16
73	0.638	7.81	208	144	<0.10	0.000	0.188	<0.10	<0.10	5.0	2.13	845.51	13.69	5.82	546.38	8.41	3.58	268.03	0	0.00	0.00	64	27.23	1880.39
74	0.608	7.88	225	171	<0.10	0.000	0.188	<0.10	<0.10	8.0	3.24	848.75	14.94	6.06	552.44	10.85	4.40	272.43	0	0.00	0.00	76	30.82	1911.21
75	0.617	7.87	215	173	<0.10	0.000	0.188	<0.10	<0.10	10.0	4.11	852.86	14.08	5.79	558.23	11.03	4.54	276.97	0	0.00	0.00	75	30.86	1942.07
76	0.720	7.99	231	163	<0.10	0.000	0.188	<0.10	<0.10	7.0	3.36	856.22	15.18	7.29	565.52	9.81	4.71	281.68	0	0.00	0.00	72	34.57	1976.64
77	0.547	7.74	225	130	<0.10	0.000	0.188	<0.10	<0.10	5.0	1.82	858.04	10.82	3.95	569.47	7.51	2.74	284.42	0	0.00	0.00	55	20.06	1996.70
78	0.632	7.92	244	140	<0.10	0.000	0.188	<0.10	<0.10	11.0	4.64	862.68	12.60	5.31	574.78	8.30	3.50	287.92	0	0.00	0.00	58	24.45	2021.15
79	0.593	7.93	217	143	<0.10	0.000	0.188	<0.10	<0.10	6.0	2.37	865.05	11.78	4.66	579.44	8.57	3.39	291.31	0	0.00	0.00	62	24.52	2045.67
80	0.527	7.83	214	117	<0.10	0.000	0.188	<0.10	<0.10	6.0	2.11	867.16	9.21	3.24	582.68	7.54	2.65	293.96	0	0.00	0.00	49	17.22	2062.89
81	0.575	7.69	214	126	<0.10	0.000	0.188	<0.10	<0.10	9.0	3.45	870.61	8.91	3.42	586.10	8.49	3.26	297.22	0	0.00	0.00	49	18.79	2081.68
82	0.584	7.68	251	111	<0.10	0.000	0.188	<0.10	<0.10	10.0	3.89	874.50	8.63	3.36	589.46	6.76	2.63	299.85	0	0.00	0.00	44	17.14	2098.82
83	0.596	7.87	293	121	<0.10	0.000	0.188	<0.10	<0.10	11.0	4.37	878.87	9.44	3.75	593.21	7.25	2.88	302.73	0	0.00	0.00	49	19.48	2118.30
84	0.566	7.82	322	116	0.18	0.068	0.256	<0.10	<0.18	12.0	4.53	883.40	9.36	3.53	596.74	7.17	2.71	305.44	0	0.00	0.00	47	17.74	2136.04
85	0.584	7.98	302	146	<0.10	0.000	0.256	<0.10	<0.10	13.0	5.06	888.46	11.62	4.53	601.27	9.47	3.69	309.13	0	0.00	0.00	64	24.93	2160.97
86	0.542	7.94	312	120	<0.10	0.000	0.256	<0.10	<0.10	8.0	2.89	891.35	8.89	3.21	604.48	7.49	2.71	311.84	0	0.00	0.00	53	19.16	2180.13
87	0.563	7.89	319	122	<0.10	0.000	0.256	<0.10	<0.10	10.0	3.75	895.10	9.36	3.51	607.99	7.66	2.88	314.72	0	0.00	0.00	52	19.52	2199.65
88	0.596	7.89	338	116	<0.10	0.000	0.256	<0.10	<0.10	12.0	4.77	899.87	9.88	3.93	611.92	7.50	2.98	317.70	0	0.00	0.00	48	19.08	2218.73
89	0.570	7.99	344	119	<0.10	0.000	0.256	<0.10	<0.10	12.0	4.56	904.43	8.81	3.35	615.27	8.42	3.20	320.90	0	0.00	0.00	50	19.01	2237.74
90	0.552	7.79	354	122	<0.10	0.000	0.256	<0.10	<0.10	13.0	4.79	909.22	8.21	3.02	618.29	7.44	2.74	323.64	0	0.00	0.00	50	18.41	2256.15

Midas Gold Corp.
MLI Job No. 3654

Table 11 . - Humidity Cell Analytical Results, MGI-11-60 (147-157.5) **(1.4995 Kg)**

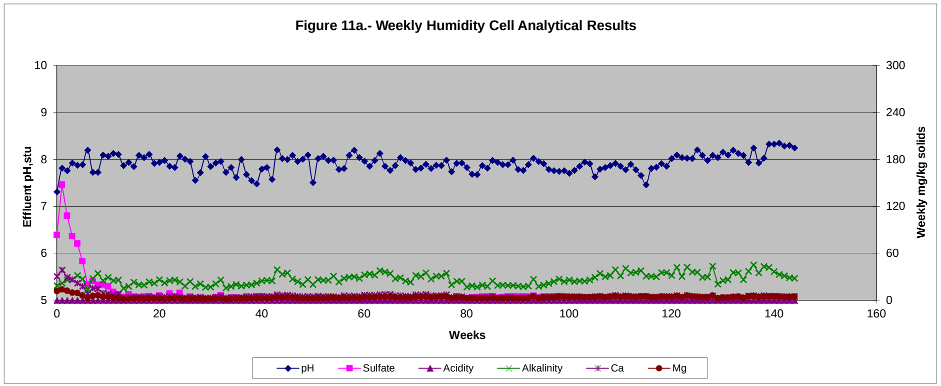
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	$SO_4^{=}$ mg/l	$SO_4^{=}$ mg/kg	$SO_4^{=}$ Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
91	0.568	7.77	267	118	0.19	0.072	0.328	<0.10	<0.19	12.0	4.55	913.77	8.74	3.31	621.60	7.55	2.86	326.50	0	0.00	0.00	46	17.42	2273.57
92	0.564	7.89	321	119	<0.10	0.000	0.328	<0.10	<0.10	12.0	4.51	918.28	9.61	3.61	625.21	7.70	2.90	329.40	0	0.00	0.00	48	18.05	2291.62
93	0.625	8.03	322	160	<0.10	0.000	0.328	<0.10	<0.10	13.0	5.42	923.70	12.67	5.28	630.49	11.00	4.58	333.98	0	0.00	0.00	64	26.68	2318.30
94	0.533	7.96	319	124	<0.10	0.000	0.328	<0.10	<0.10	10.0	3.55	927.25	8.95	3.18	633.67	7.42	2.64	336.62	0	0.00	0.00	50	17.77	2336.07
95	0.583	7.91	339	127	<0.10	0.000	0.328	<0.10	<0.10	12.0	4.67	931.92	10.20	3.97	637.64	8.59	3.34	339.96	0	0.00	0.00	50	19.44	2355.51
96	0.627	7.79	350	127	<0.10	0.000	0.328	<0.10	<0.10	11.0	4.60	936.52	10.01	4.19	641.83	8.71	3.64	343.60	0	0.00	0.00	51	21.33	2376.84
97	0.597	7.76	314	145	<0.10	0.000	0.328	<0.10	<0.10	12.0	4.78	941.30	10.90	4.34	646.17	10.32	4.11	347.71	0	0.00	0.00	60	23.89	2400.73
98	0.586	7.75	300	167	<0.10	0.000	0.328	<0.10	<0.10	10.0	3.91	945.21	13.81	5.40	651.57	11.83	4.62	352.33	0	0.00	0.00	70	27.36	2428.09
99	0.566	7.76	345	150	1.74	0.657	0.985	<0.10	<1.74	13.0	4.91	950.12	12.39	4.68	656.25	11.08	4.18	356.51	0	0.00	0.00	63	23.78	2451.87
100	0.570	7.71	324	158	<0.10	0.000	0.985	<0.10	<0.10	10.0	3.80	953.92	12.67	4.82	661.07	11.09	4.22	360.73	0	0.00	0.00	68	25.85	2477.72
101	0.573	7.77	309	149	<0.10	0.000	0.985	<0.10	<0.10	8.0	3.06	956.98	12.16	4.65	665.72	11.33	4.33	365.06	0	0.00	0.00	63	24.07	2501.79
102	0.589	7.86	328	146	0.11	0.043	1.028	<0.10	<0.11	6.0	2.36	959.34	11.83	4.65	670.37	10.67	4.19	369.25	0	0.00	0.00	63	24.75	2526.54
103	0.587	7.95	304	143	0.10	0.039	1.067	<0.10	<0.1	5.0	1.96	961.30	11.21	4.39	674.76	10.46	4.09	373.34	0	0.00	0.00	62	24.27	2550.81
104	0.625	7.91	314	143	<0.10	0.000	1.067	<0.10	<0.10	4.0	1.67	962.97	10.02	4.18	678.94	9.47	3.95	377.29	0	0.00	0.00	62	25.84	2576.65
105	0.635	7.63	358	149	<0.10	0.000	1.067	<0.10	<0.10	3.0	1.27	964.24	10.82	4.58	683.52	10.09	4.27	381.56	0	0.00	0.00	69	29.22	2605.87
106	0.588	7.80	302	172	<0.10	0.000	1.067	<0.10	<0.10	4.7	1.84	966.08	12.72	4.99	688.51	12.40	4.86	386.42	0	0.00	0.00	87	34.12	2639.99
107	0.621	7.83	321	143	<0.10	0.000	1.067	<0.10	<0.10	4.4	1.82	967.90	10.12	4.19	692.70	9.76	4.04	390.46	0	0.00	0.00	73	30.23	2670.22
108	0.645	7.87	336	149	<0.10	0.000	1.067	<0.10	<0.10	4.1	1.76	969.66	11.09	4.77	697.47	10.81	4.65	395.11	0	0.00	0.00	74	31.83	2702.05
109	0.713	7.92	336	157	<0.10	0.000	1.067	<0.10	<0.10	3.9	1.85	971.51	13.53	6.43	703.90	11.91	5.66	400.77	0	0.00	0.00	82	38.99	2741.04
110	0.654	7.86	338	147	<0.10	0.000	1.067	<0.10	<0.10	3.5	1.53	973.04	11.89	5.19	709.09	10.10	4.41	405.18	0	0.00	0.00	72	31.40	2772.44
111	0.675	7.78	344	170	<0.10	0.000	1.067	<0.10	<0.10	3.7	1.67	974.71	13.42	6.04	715.13	11.13	5.01	410.19	0	0.00	0.00	91	40.96	2813.40
112	0.549	7.90	332	182	<0.10	0.000	1.067	<0.10	<0.10	3.9	1.43	976.14	12.28	4.50	719.63	12.68	4.64	414.83	0	0.00	0.00	96	35.15	2848.55
113	0.624	7.78	342	156	<0.10	0.000	1.067	<0.10	<0.10	3.7	1.54	977.68	11.63	4.84	724.47	10.49	4.37	419.20	0	0.00	0.00	86	35.79	2884.34
114	0.601	7.66	303	172	<0.10	0.000	1.067	<0.10	<0.10	3.6	1.44	979.12	12.73	5.10	729.57	12.94	5.19	424.39	0	0.00	0.00	95	38.08	2922.42
115	0.578	7.46	312	176	<0.10	0.000	1.067	<0.10	<0.10	3.8	1.46	980.58	13.75	5.30	734.87	13.17	5.08	429.47	0	0.00	0.00	80	30.84	2953.26
116	0.629	7.81	338	127	<0.10	0.000	1.067	<0.10	<0.10	3.1	1.30	981.88	10.54	4.42	739.29	9.23	3.87	433.34	0	0.00	0.00	73	30.62	2983.88
117	0.623	7.84	325	140	<0.10	0.000	1.067	<0.10	<0.10	4.2	1.74	983.62	10.07	4.18	743.47	9.61	3.99	437.33	0	0.00	0.00	73	30.33	3014.21
118	0.636	7.91	316	153	<0.10	0.000	1.067	<0.10	<0.10	4.7	1.99	985.61	11.17	4.74	748.21	11.04	4.68	442.01	0	0.00	0.00	84	35.63	3049.84
119	0.679	7.86	344	142	<0.10	0.000	1.067	<0.10	<0.10	4.2	1.90	987.51	11.09	5.02	753.23	9.59	4.34	446.35	0	0.00	0.00	78	35.32	3085.16
120	0.576	8.02	310	144	<0.10	0.000	1.067	<0.10	<0.10	4.1	1.57	989.08	11.84	4.55	757.78	11.32	4.35	450.70	0	0.00	0.00	83	31.88	3117.04
121	0.686	8.10	295	167	<0.10	0.000	1.067	<0.10	<0.10	4.8	2.20	991.28	13.07	5.98	763.76	11.88	5.43	456.13	0	0.00	0.00	92	42.09	3159.13
122	0.622	8.04	290	141	<0.10	0.000	1.067	<0.10	<0.10	4.7	1.95	993.23	9.94	4.12	767.88	9.52	3.95	460.08	0	0.00	0.00	74	30.70	3189.83
123	0.671	8.03	305	169	<0.10	0.000	1.067	<0.10	<0.10	5.3	2.37	995.60	13.17	5.89	773.77	13.02	5.83	465.91	0	0.00	0.00	95	42.51	3232.34
124	0.654	8.02	318	147	<0.10	0.000	1.067	<0.10	<0.10	4.9	2.14	997.74	11.72	5.11	778.88	10.63	4.64	470.55	0	0.00	0.00	83	36.20	3268.54
125	0.624	8.21	338	157	<0.10	0.000	1.067	<0.10	<0.10	4.8	2.00	999.74	11.25	4.68	783.56	10.83	4.51	475.06	0	0.00	0.00	86	35.79	3304.33
126	0.632	8.09	318	133	<0.10	0.000	1.067	<0.10	<0.10	5.8	2.44	1002.18	9.92	4.18	787.74	8.99	3.79	478.85	0	0.00	0.00	70	29.50	3333.83
127	0.672	7.98	342	119	<0.10	0.000	1.067	<0.10	<0.10	5.1	2.29	1004.47	9.45	4.24	791.98	8.60	3.85	482.70	0	0.00	0.00	66	29.58	3363.41
128	0.640	8.09	338	184	<0.10	0.000	1.067	<0.10	<0.10	6.9	2.94	1007.41	13.33	5.69	797.67	13.50	5.76	488.46	0	0.00	0.00	102	43.53	3406.94
129	0.582	8.04	343	96	<0.10	0.000	1.067	<0.10	<0.10	3.8	1.47	1008.88	7.62	2.96	800.63	6.87	2.67	491.13	0	0.00	0.00	53	20.57	3427.51
130	0.559	8.16	286	124	<0.10	0.000	1.067	<0.10	<0.10	6.2	2.31	1011.19	8.59	3.20	803.83	9.66	3.60	494.73	0	0.00	0.00	68	25.35	3452.86
131	0.618	8.10	343	117	<0.10	0.000	1.067	<0.10	<0.10	5.2	2.14	1013.33	8.57	3.53	807.36	8.55	3.52	498.25	0	0.00	0.00	64	26.38	3479.24
132	0.615	8.20	330	149	<0.10	0.000	1.067	<0.10	<0.10	5.0	2.05	1015.38	10.39	4.26	811.62	10.93	4.48	502.73	0	0.00	0.00	86	35.27	3514.51
133	0.664	8.13	286	139	<0.10	0.000	1.067	<0.10	<0.10	3.8	1.68	1017.06	10.13	4.49	816.11	10.43	4.62	507.35	0	0.00	0.00	79	34.98	3549.49
134	0.630	8.09	299	119	<0.10	0.000	1.067	<0.10	<0.10	3.6	1.51	1018.57	8.67	3.64	819.75	7.83	3.29	510.64	0	0.00	0.00	63	26.47	3575.96
135	0.723	7.94	250	149	<0.10	0.000	1.067	<0.10	<0.10	4.6	2.22	1020.79	11.85	5.71	825.46	10.27	4.95	515.59	0	0.00	0.00	77	37.13	3613.09

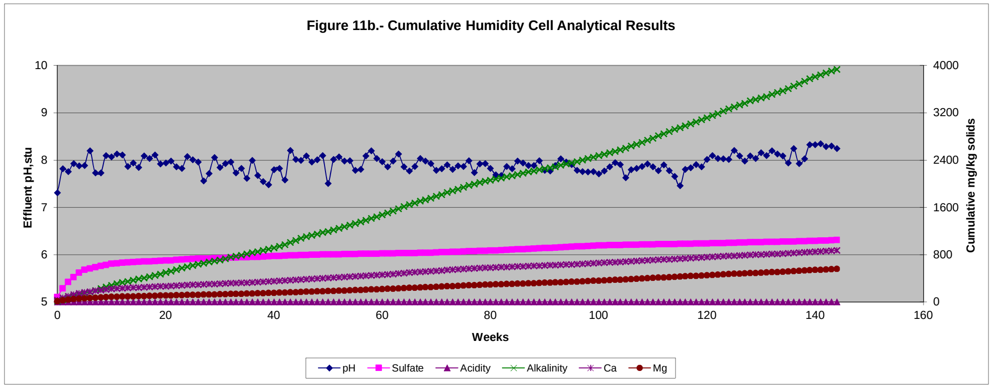
Midas Gold Corp.
MLI Job No. 3654

Table 11 . - Humidity Cell Analytical Results, MGI-11-60 (147-157.5) (1.4995 Kg)

	Vol.	Effluent	Redox, mV	Conductivity	Total Fe			$Fe^{2}+$	$Fe^{3}+$	SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	L	pH	(vs Ag/AgCI)	µS/cm	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
136	0.736	8.25	291	166	<0.10	0.000	1.067	<0.10	<0.10	3.4	1.67	1022.46	12.24	6.01	831.47	11.51	5.65	521.24	0	0.00	0.00	92	45.16	3658.25
137	0.698	7.93	254	135	<0.10	0.000	1.067	<0.10	<0.10	4.2	1.96	1024.42	10.97	5.11	836.58	9.49	4.42	525.66	0	0.00	0.00	75	34.91	3693.16
138	0.721	8.03	239	145	<0.10	0.000	1.067	<0.10	<0.10	4.5	2.16	1026.58	12.59	6.05	842.63	9.61	4.62	530.28	0	0.00	0.00	90	43.27	3736.43
139	0.709	8.33	278	153	<0.10	0.000	1.067	<0.10	<0.10	4.7	2.22	1028.80	11.33	5.36	847.99	9.97	4.71	534.99	0	0.00	0.00	89	42.08	3778.51
140	0.702	8.33	224	163	<0.10	0.000	1.067	<0.10	<0.10	4.4	2.06	1030.86	12.15	5.69	853.68	11.32	5.30	540.29	0	0.00	0.00	78	36.52	3815.03
141	0.705	8.35	267	147	<0.10	0.000	1.067	<0.10	<0.10	6.7	3.15	1034.01	10.63	5.00	858.68	9.85	4.63	544.92	0	0.00	0.00	70	32.91	3847.94
142	0.659	8.29	214	145	<0.10	0.000	1.067	<0.10	<0.10	6.7	2.94	1036.95	10.93	4.80	863.48	10.11	4.44	549.36	0	0.00	0.00	71	31.20	3879.14
143	0.664	8.30	258	134	<0.10	0.000	1.067	<0.10	<0.10	7.2	3.18	1040.13	10.49	4.65	868.13	9.73	4.31	553.67	0	0.00	0.00	65	28.78	3907.92
144	0.670	8.25	278	135	<0.10	0.000	1.067	<0.10	<0.10	10.2	4.54	1044.67	10.27	4.59	872.72	9.59	4.28	557.95	0	0.00	0.00	63	28.15	3936.07

Testing terminated





Midas Gold Corp.
MLI Job No. 3654

Table 12 . - Humidity Cell Analytical Results, MGI-11-60 (513-543) (1.5005 Kg)

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	SO_4= mg/l	SO_4= mg/kg	SO_4= Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg		Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
0	0.732	8.21	219	177	<0.10	0.000	0.000	<0.10	<0.10	27.0	13.17	13.17	13.50	6.59	6.59	3.70	1.80	1.80		0	0.00	0.00	30	14.64	14.64
1	0.721	8.08	236	214	<0.10	0.000	0.000	<0.10	<0.10	34.0	16.34	29.51	17.50	8.41	15.00	4.80	2.31	4.11		0	0.00	0.00	46	22.10	36.74
2	0.748	8.08	242	133	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.99	33.50	12.35	6.16	21.16	3.30	1.65	5.76		0	0.00	0.00	47	23.43	60.17
3	0.716	8.20	245	94.4	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.43	34.93	9.87	4.71	25.87	2.48	1.18	6.94		0	0.00	0.00	38	18.13	78.30
4	0.742	8.01	265	94.0	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.98	36.91	11.03	5.45	31.32	2.50	1.24	8.18		0	0.00	0.00	39	19.29	97.59
5	0.743	7.98	271	92.3	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.47	40.38	12.40	6.14	37.46	2.31	1.14	9.32		0	0.00	0.00	37	18.32	115.91
6	0.673	8.11	272	90.8	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.93	45.31	13.03	5.84	43.30	2.56	1.15	10.47		0	0.00	0.00	31	13.90	129.81
7	0.752	7.68	266	116	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.51	50.82	18.23	9.14	52.44	3.24	1.62	12.09		0	0.00	0.00	43	21.55	151.36
8	0.735	7.59	224	130	<0.10	0.000	0.000	<0.10	<0.10	13.0	6.37	57.19	19.10	9.36	61.80	3.56	1.74	13.83		0	0.00	0.00	48	23.51	174.87
9	0.732	7.96	192	104	<0.10	0.000	0.000	<0.10	<0.10	14.0	6.83	64.02	13.44	6.56	68.36	2.74	1.34	15.17		0	0.00	0.00	34	16.59	191.46
10	0.743	7.97	222	104	<0.10	0.000	0.000	<0.10	<0.10	18.0	8.91	72.93	13.07	6.47	74.83	2.81	1.39	16.56		0	0.00	0.00	34	16.84	208.30
11	0.713	7.94	210	100	<0.10	0.000	0.000	<0.10	<0.10	14.0	6.65	79.58	11.69	5.55	80.38	2.02	0.96	17.52		0	0.00	0.00	31	14.73	223.03
12	0.727	7.64	168	104	<0.10	0.000	0.000	<0.10	<0.10	17.0	8.24	87.82	16.00	7.75	88.13	2.30	1.11	18.63		0	0.00	0.00	33	15.99	239.02
13	0.685	7.67	245	97.3	<0.10	0.000	0.000	<0.10	<0.10	19.0	8.67	96.49	13.50	6.16	94.29	1.80	0.82	19.45		0	0.00	0.00	25	11.41	250.43
14	0.649	7.73	206	83.4	<0.10	0.000	0.000	<0.10	<0.10	17.0	7.35	103.84	10.03	4.34	98.63	1.39	0.60	20.05		0	0.00	0.00	25	10.81	261.24
15	0.547	7.94	190	77.0	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.73	104.57	8.10	2.95	101.58	1.18	0.43	20.48		0	0.00	0.00	28	10.21	271.45
16	0.640	7.84	210	65.4	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.41	107.98	7.58	3.23	104.81	1.13	0.48	20.96		0	0.00	0.00	25	10.66	282.11
17	0.606	7.93	204	70.1	<0.10	0.000	0.000	<0.10	<0.10	7.0	2.83	110.81	7.59	3.07	107.88	1.00	0.40	21.36		0	0.00	0.00	24	9.69	291.80
18	0.642	7.96	192	84.6	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.00	113.81	9.39	4.02	111.90	1.19	0.51	21.87		0	0.00	0.00	27	11.55	303.35
19	0.662	7.78	208	85.2	<0.10	0.000	0.000	<0.10	<0.10	17.0	7.50	121.31	9.31	4.11	116.01	1.27	0.56	22.43		0	0.00	0.00	26	11.47	314.82
20	0.649	7.76	210	102	<0.10	0.000	0.000	<0.10	<0.10	19.0	8.22	129.53	11.49	4.97	120.98	1.20	0.52	22.95		0	0.00	0.00	27	11.68	326.50
21	0.755	7.67	248	94.2	<0.10	0.000	0.000	<0.10	<0.10	20.0	10.06	139.59	12.20	6.14	127.12	1.15	0.58	23.53		0	0.00	0.00	30	15.09	341.59
22	0.676	7.63	232	77.5	<0.10	0.000	0.000	<0.10	<0.10	15.0	6.76	146.35	10.34	4.66	131.78	0.89	0.40	23.93		0	0.00	0.00	25	11.26	352.85
23	0.672	7.69	246	78.6	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.37	151.72	9.49	4.25	136.03	0.91	0.41	24.34		0	0.00	0.00	25	11.20	364.05
24	0.653	7.88	230	74.2	<0.10	0.000	0.000	<0.10	<0.10	11.0	4.79	156.51	9.26	4.03	140.06	0.84	0.37	24.71		0	0.00	0.00	25	10.88	374.93
25	0.559	7.88	249	68.2	<0.10	0.000	0.000	<0.10	<0.10	7.0	2.61	159.12	7.55	2.81	142.87	0.67	0.25	24.96		0	0.00	0.00	23	8.57	383.50
26	0.668	7.74	232	68.7	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.45	163.57	8.81	3.92	146.79	0.72	0.32	25.28		0	0.00	0.00	25	11.13	394.63
27	0.654	7.35	268	62.9	<0.10	0.000	0.000	<0.10	<0.10	8.0	3.49	167.06	7.39	3.22	150.01	0.67	0.29	25.57		0	0.00	0.00	20	8.72	403.35
28	0.670	7.51	300	63.4	0.10	0.045	0.045	<0.10	<0.1	7.0	3.13	170.19	8.77	3.92	153.93	0.60	0.27	25.84		0	0.00	0.00	22	9.82	413.17
29	0.584	7.95	271	64.4	<0.10	0.000	0.045	<0.10	<0.10	2.0	0.78	170.97	8.65	3.37	157.30	0.61	0.24	26.08		0	0.00	0.00	21	8.17	421.34
30	0.654	7.61	250	64.1	<0.10	0.000	0.045	<0.10	<0.10	7.0	3.05	174.02	6.91	3.01	160.31	0.63	0.27	26.35		0	0.00	0.00	22	9.59	430.93
31	0.697	8.05	253	60.4	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.46	174.48	9.00	4.18	164.49	0.59	0.27	26.62		0	0.00	0.00	25	11.61	442.54
32	0.734	7.69	323	65.0	<0.10	0.000	0.045	<0.10	<0.10	7.0	3.42	177.90	9.08	4.44	168.93	0.62	0.30	26.92		0	0.00	0.00	25	12.23	454.77
33	0.602	7.47	320	58.1	<0.10	0.000	0.045	<0.10	<0.10	3.0	1.20	179.10	7.65	3.07	172.00	0.52	0.21	27.13		0	0.00	0.00	23	9.23	464.00
34	0.652	7.82	288	56.7	<0.10	0.000	0.045	<0.10	<0.10	3.0	1.30	180.40	7.59	3.30	175.30	0.53	0.23	27.36		1	0.44	0.44	25	10.86	474.86
35	0.672	7.59	332	56.4	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.45	180.85	7.68	3.44	178.74	0.54	0.24	27.60		0	0.00	0.44	25	11.20	486.06
36	0.716	7.83	312	58.2	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.48	181.33	10.10	4.82	183.56	0.59	0.28	27.88		0	0.00	0.44	26	12.41	498.47
37	0.697	7.60	307	53.8	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.46	181.79	9.40	4.37	187.93	0.49	0.23	28.11	*	0	0.00	0.44	24	11.15	509.62
38	0.655	7.51	289	57.5	<0.10	0.000	0.045	<0.10	<0.10	2.0	0.87	182.66	8.84	3.86	191.79	0.49	0.21	28.32	*	0	0.00	0.44	25	10.91	520.53
39	0.717	7.42	254	69.0	<0.10	0.000	0.045	<0.10	<0.10	4.0	1.91	184.57	11.28	5.39	197.18	0.64	0.31	28.63		0	0.00	0.44	29	13.86	534.39
40	0.771	7.73	330	63.2	<0.10	0.000	0.045	<0.10	<0.10	2.0	1.03	185.60	8.73	4.49	201.67	0.49	0.25	28.88	*	0	0.00	0.44	26	13.36	547.75
41	0.727	7.78	357	66.7	<0.10	0.000	0.045	<0.10	<0.10	2.0	0.97	186.57	8.41	4.07	205.74	0.49	0.24	29.12	*	0	0.00	0.44	26	12.60	560.35
42	0.705	7.62	354	72.5	<0.10	0.000	0.045	<0.10	<0.10	2.0	0.94	187.51	9.48	4.45	210.19	0.49	0.23	29.35	*	0	0.00	0.44	27	12.69	573.04
43	0.692	8.05	298	62.2	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.46	187.97	8.75	4.04	214.23	0.49	0.23	29.58	*	0	0.00	0.44	27	12.45	585.49
44	0.745	7.67	353	62.4	<0.10	0.000	0.045	<0.10	<0.10	2.0	0.99	188.96	8.29	4.12	218.35	0.49	0.24	29.82	*	0	0.00	0.44	25	12.41	597.90
45	0.684	7.95	349	55.4	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.46	189.42	8.09	3.69	222.04	0.49	0.22	30.04	*	0	0.00	0.44	24	10.94	608.84

Midas Gold Corp.
MLI Job No. 3654

Table 12 . - Humidity Cell Analytical Results, MGI-11-60 (513-543) **(1.5005 Kg)**

					Total Fe					SO_4=			Ca			Mg				Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg		mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
46	0.659	7.62	338	45.4	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.44	189.86	7.21	3.17	225.21	0.49	0.22	30.26	*	0	0.00	0.44	20	8.78	617.62
47	0.699	7.60	335	53.4	<0.10	0.000	0.045	<0.10	<0.10	2.0	0.93	190.79	8.44	3.93	229.14	0.49	0.23	30.49	*	0	0.00	0.44	23	10.71	628.33
48	0.650	7.61	317	42.2	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.43	191.22	7.45	3.23	232.37	0.49	0.21	30.70	*	0	0.00	0.44	19	8.23	636.56
49	0.716	7.89	311	50.7	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.48	191.70	8.00	3.82	236.19	0.49	0.23	30.93	*	0	0.00	0.44	24	11.45	648.01
50	0.672	7.41	300	48.2	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.45	192.15	8.73	3.91	240.10	0.49	0.22	31.15	*	0	0.00	0.44	22	9.85	657.86
51	0.732	7.63	315	53.9	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.49	192.64	9.11	4.44	244.54	0.49	0.24	31.39	*	0	0.00	0.44	25	12.20	670.06
52	0.701	7.66	322	53.6	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.47	193.11	8.54	3.99	248.53	0.49	0.23	31.62	*	0	0.00	0.44	25	11.68	681.74
53	0.656	7.58	295	50.4	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.44	193.55	8.93	3.90	252.43	0.49	0.21	31.83	*	0	0.00	0.44	24	10.49	692.23
54	0.757	7.58	309	50.3	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.50	194.05	9.66	4.87	257.30	0.49	0.25	32.08	*	0	0.00	0.44	24	12.11	704.34
55	0.696	7.64	272	43.1	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	9.61	4.46	261.76	0.49	0.23	32.31	*	0	0.00	0.44	21	9.74	714.08
56	0.661	7.21	285	34.3	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	5.46	2.41	264.17	0.49	0.22	32.53	*	0	0.00	0.44	16	7.05	721.13
57	0.667	7.54	288	39.6	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	6.55	2.91	267.08	0.49	0.22	32.75	*	0	0.00	0.44	27	12.00	733.13
58	0.695	7.74	315	48.8	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	7.19	3.33	270.41	0.49	0.23	32.98	*	0	0.00	0.44	23	10.65	743.78
59	0.692	7.58	279	47.5	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	8.31	3.83	274.24	0.49	0.23	33.21	*	0	0.00	0.44	24	11.07	754.85
60	0.689	7.58	304	42.0	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	7.39	3.39	277.63	0.49	0.22	33.43	*	0	0.00	0.44	21	9.64	764.49
61	0.718	7.50	284	43.2	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	7.24	3.46	281.09	0.49	0.23	33.66	*	0	0.00	0.44	21	10.05	774.54
62	0.666	7.62	321	38.0	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	6.46	2.87	283.96	0.49	0.22	33.88	*	0	0.00	0.44	22	9.76	784.30
63	0.633	7.67	298	41.3	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	6.69	2.82	286.78	0.49	0.21	34.09	*	0	0.00	0.44	20	8.44	792.74
64	0.572	7.43	299	41.0	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	6.96	2.65	289.43	0.49	0.19	34.28	*	0	0.00	0.44	19	7.24	799.98
65	0.747	7.49	271	56.2	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	10.14	5.05	294.48	0.49	0.24	34.52	*	0	0.00	0.44	26	12.94	812.92
66	0.685	7.49	265	44.1	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	7.68	3.51	297.99	0.49	0.22	34.74	*	0	0.00	0.44	23	10.50	823.42
67	0.672	7.56	331	40.3	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	7.01	3.14	301.13	0.49	0.22	34.96	*	0	0.00	0.44	19	8.51	831.93
68	0.678	7.48	308	35.1	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	6.16	2.78	303.91	0.49	0.22	35.18	*	0	0.00	0.44	17	7.68	839.61
69	0.610	7.46	292	32.6	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.05	5.18	2.11	306.02	0.49	0.20	35.38	*	0	0.00	0.44	15	6.10	845.71
70	0.622	7.43	279	41.6	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.41	194.46	6.93	2.87	308.89	0.49	0.20	35.58	*	0	0.00	0.44	19	7.88	853.59
71	0.701	7.50	221	44.3	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.46	7.44	3.48	312.37	0.49	0.23	35.81	*	0	0.00	0.44	21	9.81	863.40
72	0.654	7.49	259	40.9	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	194.46	6.70	2.92	315.29	0.49	0.21	36.02	*	0	0.00	0.44	20	8.72	872.12
73	0.659	7.50	224	47.9	<0.10	0.000	0.045	<0.10	<0.10	4.0	1.76	196.22	8.45	3.71	319.00	0.49	0.22	36.24	*	0	0.00	0.44	23	10.10	882.22
74	0.712	7.51	242	42.7	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	196.22	7.88	3.74	322.74	0.49	0.23	36.47	*	0	0.00	0.44	21	9.96	892.18
75	0.643	7.43	231	36.3	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.43	196.65	5.70	2.44	325.18	0.49	0.21	36.68	*	0	0.00	0.44	18	7.71	899.89
76	0.652	7.39	255	41.2	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	196.65	7.69	3.34	328.52	0.49	0.21	36.89	*	0	0.00	0.44	20	8.69	908.58
77	0.578	7.31	240	36.3	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.39	197.04	6.09	2.35	330.87	0.49	0.19	37.08	*	0	0.00	0.44	16	6.16	914.74
78	0.643	7.56	263	46.2	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.04	7.71	3.30	334.17	0.49	0.21	37.29	*	0	0.00	0.44	19	8.14	922.88
79	0.593	7.48	227	43.3	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.04	6.96	2.75	336.92	0.49	0.19	37.48	*	0	0.00	0.44	20	7.90	930.78
80	0.575	7.70	230	45.0	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.04	7.36	2.82	339.74	0.49	0.19	37.67	*	0	0.00	0.44	20	7.66	938.44
81	0.613	7.34	224	42.9	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.04	6.40	2.61	342.35	0.49	0.20	37.87	*	0	0.00	0.44	19	7.76	946.20
82	0.609	7.52	249	37.5	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.04	5.81	2.36	344.71	0.49	0.20	38.07	*	0	0.00	0.44	18	7.31	953.51
83	0.635	7.77	298	44.0	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.04	6.69	2.83	347.54	0.49	0.21	38.28	*	0	0.00	0.44	20	8.46	961.97
84	0.600	7.64	340	41.0	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.04	6.96	2.78	350.32	0.49	0.20	38.48	*	0	0.00	0.44	18	7.20	969.17
85	0.623	7.61	331	38.0	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.04	6.50	2.70	353.02	0.49	0.20	38.68	*	0	0.00	0.44	17	7.06	976.23
86	0.573	7.43	330	29.4	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.04	4.68	1.79	354.81	0.49	0.19	38.87	*	0	0.00	0.44	14	5.35	981.58
87	0.570	7.46	329	30.7	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.04	4.92	1.87	356.68	0.49	0.19	39.06	*	0	0.00	0.44	15	5.70	987.28
88	0.609	7.36	365	33.4	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.04	6.11	2.48	359.16	0.49	0.20	39.26	*	0	0.00	0.44	16	6.49	993.77
89	0.580	7.49	332	31.8	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.04	5.19	2.01	361.17	0.49	0.19	39.45	*	0	0.00	0.44	15	5.80	999.57
90	0.581	7.55	352	32.6	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.39	197.43	5.12	1.98	363.15	0.49	0.19	39.64	*	0	0.00	0.44	16	6.20	1005.77

Midas Gold Corp.
MLI Job No. 3654

Table 12 . - Humidity Cell Analytical Results, MGI-11-60 (513-543) (1.5005 Kg)

					Total Fe					SO_4=			Ca			Mg				Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg		mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
91	0.602	7.28	297	35.9	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.43	5.28	2.12	365.27	0.49	0.20	39.84	*	0	0.00	0.44	16	6.42	1012.19
92	0.601	7.40	346	32.6	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.40	197.83	5.47	2.19	367.46	0.49	0.20	40.04	*	0	0.00	0.44	16	6.41	1018.60
93	0.642	7.54	340	38.3	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	197.83	6.60	2.82	370.28	0.49	0.21	40.25	*	0	0.00	0.44	18	7.70	1026.30
94	0.571	7.59	325	35.5	<0.10	0.000	0.045	<0.10	<0.10	2.0	0.76	198.59	5.68	2.16	372.44	0.49	0.19	40.44	*	0	0.00	0.44	17	6.47	1032.77
95	0.583	7.47	357	37.8	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	198.59	6.30	2.45	374.89	0.49	0.19	40.63	*	0	0.00	0.44	16	6.22	1038.99
96	0.655	7.39	366	41.5	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.44	199.03	7.48	3.27	378.16	0.49	0.21	40.84	*	0	0.00	0.44	20	8.73	1047.72
97	0.637	7.38	329	37.9	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	199.03	6.42	2.73	380.89	0.49	0.21	41.05	*	0	0.00	0.44	18	7.64	1055.36
98	0.586	7.20	327	45.2	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	199.03	8.17	3.19	384.08	0.49	0.19	41.24	*	0	0.00	0.44	22	8.59	1063.95
99	0.575	7.40	353	57.1	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.38	199.41	11.07	4.24	388.32	0.49	0.19	41.43	*	0	0.00	0.44	27	10.35	1074.30
100	0.574	7.38	339	54.9	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.38	199.79	10.13	3.88	392.20	0.49	0.19	41.62	*	0	0.00	0.44	28	10.71	1085.01
101	0.603	7.39	319	56.8	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.40	200.19	10.75	4.32	396.52	0.49	0.20	41.82	*	0	0.00	0.44	27	10.85	1095.86
102	0.619	7.49	342	57.3	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	200.19	11.66	4.81	401.33	0.49	0.20	42.02	*	0	0.00	0.44	30	12.38	1108.24
103	0.649	7.48	330	50.5	<0.10	0.000	0.045	<0.10	<0.10	2.0	0.87	201.06	9.04	3.91	405.24	0.49	0.21	42.23	*	0	0.00	0.44	25	10.81	1119.05
104	0.660	7.51	330	44.8	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.44	201.50	7.05	3.10	408.34	0.49	0.22	42.45	*	0	0.00	0.44	23	10.12	1129.17
105	0.674	7.32	354	43.7	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.45	201.95	7.33	3.29	411.63	0.49	0.22	42.67	*	0	0.00	0.44	24	10.78	1139.95
106	0.614	7.21	315	35.5	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	201.95	5.95	2.43	414.06	0.49	0.20	42.87	*	0	0.00	0.44	21	8.59	1148.54
107	0.697	7.54	329	47.8	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	201.95	7.52	3.49	417.55	0.49	0.23	43.10	*	0	0.00	0.44	27	12.54	1161.08
108	0.639	7.46	356	36.6	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	201.95	5.91	2.52	420.07	0.49	0.21	43.31	*	0	0.00	0.44	21	8.94	1170.02
109	0.711	7.82	333	51.1	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	201.95	9.36	4.44	424.51	0.49	0.23	43.54	*	0	0.00	0.44	31	14.69	1184.71
110	0.671	7.41	356	46.7	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	201.95	8.85	3.96	428.47	0.49	0.22	43.76	*	0	0.00	0.44	25	11.18	1195.89
111	0.708	7.38	363	58.7	<0.10	0.000	0.045	<0.10	<0.10	1.2	0.57	202.52	10.49	4.95	433.42	0.49	0.23	43.99	*	0	0.00	0.44	32	15.10	1210.99
112	0.608	7.45	355	55.7	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	202.52	7.85	3.18	436.60	0.49	0.20	44.19	*	0	0.00	0.44	31	12.56	1223.55
113	0.637	7.47	348	51.6	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	202.52	8.37	3.55	440.15	0.49	0.21	44.40	*	0	0.00	0.44	31	13.16	1236.71
114	0.574	7.43	310	56.8	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	202.52	9.96	3.81	443.96	0.49	0.19	44.59	*	0	0.00	0.44	34	13.01	1249.72
115	0.671	7.18	332	99.9	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	202.52	19.03	8.51	452.47	0.59	0.26	44.85		0	0.00	0.44	30	13.42	1263.14
116	0.651	7.41	354	53.9	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	202.52	8.19	3.55	456.02	0.49	0.21	45.06	*	0	0.00	0.44	32	13.88	1277.02
117	0.633	7.33	345	52.5	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.42	202.94	8.27	3.49	459.51	0.49	0.21	45.27	*	0	0.00	0.44	29	12.23	1289.25
118	0.741	7.43	340	56.0	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	202.94	10.53	5.20	464.71	0.49	0.24	45.51	*	0	0.00	0.44	33	16.30	1305.55
119	0.688	7.35	372	49.0	<0.10	0.000	0.045	<0.10	<0.10	1.0	0.46	203.40	8.97	4.11	468.82	0.49	0.22	45.73	*	0	0.00	0.44	27	12.38	1317.93
120	0.611	7.49	345	38.8	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	203.40	6.72	2.74	471.56	0.49	0.20	45.93	*	0	0.00	0.44	23	9.37	1327.30
121	0.711	7.77	298	46.6	<0.10	0.000	0.045	<0.10	<0.10	1.1	0.52	203.92	8.18	3.88	475.44	0.49	0.23	46.16	*	0	0.00	0.44	28	13.27	1340.57
122	0.549	7.85	288	48.0	<0.10	0.000	0.045	<0.10	<0.10	1.3	0.48	204.40	7.67	2.81	478.25	0.49	0.18	46.34	*	0	0.00	0.44	27	9.88	1350.45
123	0.679	7.62	333	60.7	<0.10	0.000	0.045	<0.10	<0.10	3.8	1.72	206.12	10.55	4.77	483.02	0.49	0.22	46.56	*	0	0.00	0.44	32	14.48	1364.93
124	0.637	7.61	319	40.1	<0.10	0.000	0.045	<0.10	<0.10	1.3	0.55	206.67	7.07	3.00	486.02	0.49	0.21	46.77	*	0	0.00	0.44	24	10.19	1375.12
125	0.627	7.67	355	41.4	<0.10	0.000	0.045	<0.10	<0.10	1.3	0.54	207.21	6.42	2.68	488.70	0.49	0.20	46.97	*	0	0.00	0.44	24	10.03	1385.15
126	0.634	7.53	337	42.6	<0.10	0.000	0.045	<0.10	<0.10	1.3	0.55	207.76	6.80	2.87	491.57	0.49	0.21	47.18	*	0	0.00	0.44	24	10.14	1395.29
127	0.650	7.55	350	41.7	<0.10	0.000	0.045	<0.10	<0.10	1.3	0.56	208.32	7.42	3.21	494.78	0.49	0.21	47.39	*	0	0.00	0.44	26	11.26	1406.55
128	0.700	7.56	366	40.3	<0.10	0.000	0.045	<0.10	<0.10	1.2	0.56	208.88	6.76	3.15	497.93	0.49	0.23	47.62	*	0	0.00	0.44	25	11.66	1418.21
129	0.563	7.65	351	37.6	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	208.88	6.94	2.60	500.53	0.49	0.18	47.80	*	0	0.00	0.44	21	7.88	1426.09
130	0.560	7.53	356	35.0	<0.10	0.000	0.045	<0.10	<0.10	1.6	0.60	209.48	5.88	2.19	502.72	0.49	0.18	47.98	*	0	0.00	0.44	19	7.09	1433.18
131	0.672	7.33	378	42.7	<0.10	0.000	0.045	<0.10	<0.10	1.4	0.63	210.11	6.77	3.03	505.75	0.49	0.22	48.20	*	0	0.00	0.44	22	9.85	1443.03
132	0.620	7.44	363	38.5	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	210.11	6.69	2.76	508.51	0.49	0.20	48.40	*	0	0.00	0.44	22	9.09	1452.12
133	0.695	7.73	313	45.6	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	210.11	7.47	3.46	511.97	0.49	0.23	48.63	*	0	0.00	0.44	25	11.58	1463.70
134	0.595	7.67	304	35.2	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	210.11	6.07	2.41	514.38	0.49	0.19	48.82	*	0	0.00	0.44	19	7.53	1471.23
135	0.705	7.60	257	46.1	<0.10	0.000	0.045	<0.10	<0.10	1.2	0.56	210.67	7.97	3.74	518.12	0.49	0.23	49.05	*	0	0.00	0.44	23	10.81	1482.04

Midas Gold Corp.
MLI Job No. 3654

Table 12 . - Humidity Cell Analytical Results, MGI-11-60 (513-543) (1.5005 Kg)

					Total Fe					SO_4=			Ca			Mg				Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg		mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
136	0.723	7.63	309	41.5	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	210.67	7.63	3.68	521.80	0.49	0.24	49.29	*	0	0.00	0.44	22	10.60	1492.64
137	0.680	7.82	270	43.5	<0.10	0.000	0.045	<0.10	<0.10	1.2	0.54	211.21	7.46	3.38	525.18	0.49	0.22	49.51	*	0	0.00	0.44	21	9.52	1502.16
138	0.720	7.84	256	42.1	<0.10	0.000	0.045	<0.10	<0.10	1.1	0.53	211.74	7.56	3.63	528.81	0.49	0.24	49.75	*	0	0.00	0.44	33	15.83	1517.99
139	0.694	7.80	288	39.8	<0.10	0.000	0.045	<0.10	<0.10	1.1	0.51	212.25	6.11	2.83	531.64	0.49	0.23	49.98	*	0	0.00	0.44	34	15.73	1533.72
140	0.699	7.80	243	44.3	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	212.25	7.23	3.37	535.01	0.49	0.23	50.21	*	0	0.00	0.44	31	14.44	1548.16
141	0.717	7.82	284	44.6	<0.10	0.000	0.045	<0.10	<0.10	1.6	0.76	213.01	6.64	3.17	538.18	0.49	0.23	50.44	*	0	0.00	0.44	21	10.03	1558.19
142	0.618	7.78	231	39.3	<0.10	0.000	0.045	<0.10	<0.10	<1.0	0.00	213.01	6.63	2.73	540.91	0.49	0.20	50.64	*	0	0.00	0.44	19	7.83	1566.02
143	0.672	7.77	276	44.1	<0.10	0.000	0.045	<0.10	<0.10	2.4	1.06	214.07	7.32	3.28	544.19	0.49	0.22	50.86	*	0	0.00	0.44	20	8.96	1574.98
144	0.671	7.71	297	40.8	<0.10	0.000	0.045	<0.10	<0.10	3.6	1.61	215.68	7.26	3.25	547.44	0.49	0.22	51.08	*	0	0.00	0.44	19	8.50	1583.48

*Reported as <0.50
Testing terminated

Figure 12a.- Weekly Humidity Cell Analytical Results

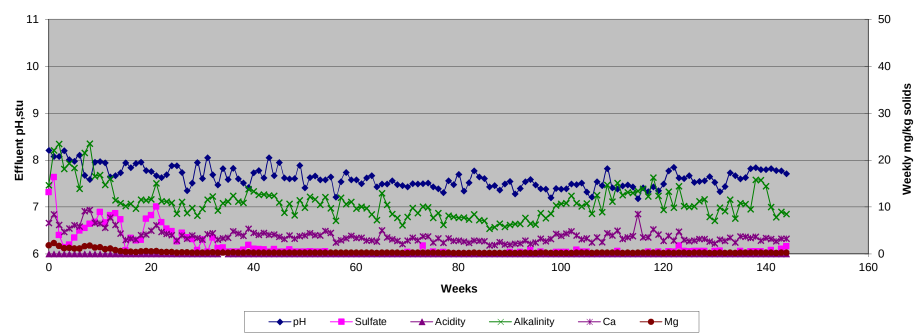


Figure 12b.- Cumulative Humidity Cell Analytical Results

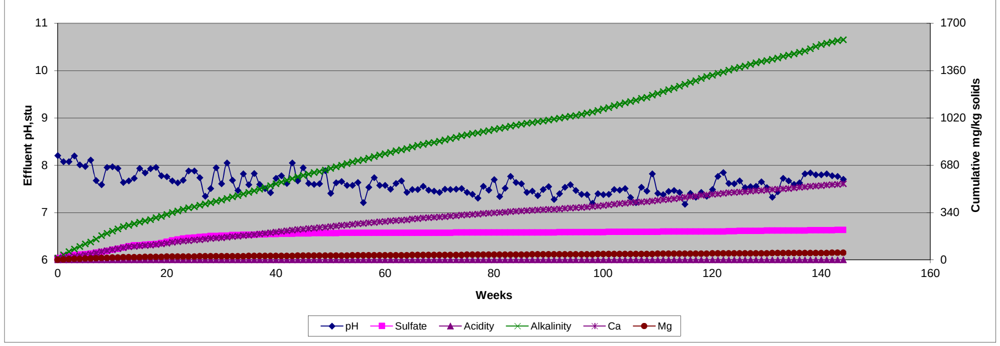


Table 13 . - Humidity Cell Analytical Results, MGI-11-62 (814-833) **(1.5057 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
0	0.716	8.97	165	505	0.30	0.143	0.143	<0.10	<0.3	2.0	0.95	0.95	4.80	2.28	2.28	1.70	0.81	0.81	0	0.00	0.00	182	86.55	86.55
1	0.767	8.70	207	390	<0.10	0.000	0.143	<0.10	<0.10	6.0	3.06	4.01	4.39	2.24	4.52	1.30	0.66	1.47	0	0.00	0.00	172	87.62	174.17
2	0.612	8.95	204	156	0.97	0.394	0.537	0.14	0.83	3.0	1.22	5.23	1.98	0.80	5.32	0.70	0.28	1.75	0	0.00	0.00	71	28.86	203.03
3	0.737	8.57	235	268	<0.10	0.000	0.537	<0.10	<0.10	2.0	0.98	6.21	4.79	2.34	7.66	1.64	0.80	2.55	0	0.00	0.00	125	61.18	264.21
4	0.779	8.30	257	213	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.52	6.73	6.36	3.29	10.95	2.33	1.21	3.76	0	0.00	0.00	105	54.32	318.53
5	0.735	8.08	270	161	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.49	7.22	6.94	3.39	14.34	2.11	1.03	4.79	0	0.00	0.00	81	39.54	358.07
6	0.722	8.20	272	192	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.48	7.70	12.53	6.01	20.35	4.19	2.01	6.80	0	0.00	0.00	90	43.16	401.23
7	0.745	7.92	262	181	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.49	8.19	15.37	7.60	27.95	4.95	2.45	9.25	0	0.00	0.00	89	44.04	445.27
8	0.741	7.93	217	219	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.49	8.68	20.63	10.15	38.10	8.00	3.94	13.19	0	0.00	0.00	106	52.17	497.44
9	0.762	8.16	191	177	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.51	9.19	16.05	8.12	46.22	6.75	3.42	16.61	0	0.00	0.00	87	44.03	541.47
10	0.723	8.12	222	147	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.48	9.67	12.82	6.16	52.38	6.26	3.01	19.62	0	0.00	0.00	73	35.05	576.52
11	0.721	8.14	207	142	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.48	10.15	11.22	5.37	57.75	4.77	2.28	21.90	0	0.00	0.00	69	33.04	609.56
12	0.688	8.00	163	166	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.46	10.61	17.90	8.18	65.93	6.70	3.06	24.96	0	0.00	0.00	82	37.47	647.03
13	0.754	7.87	226	144	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	11.11	13.80	6.91	72.84	5.20	2.60	27.56	0	0.00	0.00	78	39.06	686.09
14	0.796	8.12	199	141	<0.10	0.000	0.537	<0.10	<0.10	2.0	1.06	12.17	11.78	6.23	79.07	4.95	2.62	30.18	0	0.00	0.00	71	37.53	723.62
15	0.755	7.93	200	125	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	12.67	9.83	4.93	84.00	3.94	1.98	32.16	0	0.00	0.00	59	29.58	753.20
16	0.664	8.02	215	128	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.44	13.11	10.58	4.67	88.67	4.56	2.01	34.17	0	0.00	0.00	60	26.46	779.66
17	0.802	8.06	214	153	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.53	13.64	12.61	6.72	95.39	4.88	2.60	36.77	0	0.00	0.00	70	37.28	816.94
18	0.759	8.02	205	132	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	14.14	10.86	5.47	100.86	4.23	2.13	38.90	0	0.00	0.00	61	30.75	847.69
19	0.755	7.85	218	116	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	14.64	8.96	4.49	105.35	4.00	2.01	40.91	0	0.00	0.00	56	28.08	875.77
20	0.732	7.96	209	119	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.49	15.13	9.48	4.61	109.96	3.57	1.74	42.65	0	0.00	0.00	54	26.25	902.02
21	0.711	7.87	248	112	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.47	15.60	10.03	4.74	114.70	3.78	1.78	44.43	0	0.00	0.00	58	27.39	929.41
22	0.746	7.91	230	116	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	16.10	11.31	5.60	120.30	4.00	1.98	46.41	0	0.00	0.00	61	30.22	959.63
23	0.722	7.94	253	135	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.48	16.58	11.31	5.42	125.72	4.73	2.27	48.68	0	0.00	0.00	63	30.21	989.84
24	0.758	8.00	233	135	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	17.08	12.49	6.29	132.01	4.93	2.48	51.16	0	0.00	0.00	67	33.73	1023.57
25	0.745	7.45	252	110	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.49	17.57	9.04	4.47	136.48	3.54	1.75	52.91	0	0.00	0.00	61	30.18	1053.75
26	0.733	7.94	235	122	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.49	18.06	10.51	5.12	141.60	3.50	1.70	54.61	0	0.00	0.00	61	29.70	1083.45
27	0.715	7.61	274	111	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.47	18.53	9.91	4.71	146.31	4.56	2.17	56.78	0	0.00	0.00	53	25.17	1108.62
28	0.718	7.68	306	114	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.48	19.01	11.00	5.25	151.56	4.08	1.95	58.73	0	0.00	0.00	55	26.23	1134.85
29	0.754	7.67	304	118	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	19.51	10.85	5.43	156.99	4.32	2.16	60.89	0	0.00	0.00	57	28.54	1163.39
30	0.712	7.80	246	104	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.47	19.98	7.68	3.63	160.62	3.86	1.83	62.72	0	0.00	0.00	50	23.64	1187.03
31	0.752	7.93	278	112	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	20.48	10.62	5.30	165.92	4.59	2.29	65.01	0	0.00	0.00	58	28.97	1216.00
32	0.753	7.93	326	148	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	20.98	14.40	7.20	173.12	6.17	3.09	68.10	0	0.00	0.00	75	37.51	1253.51
33	0.741	7.81	324	143	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.49	21.47	13.64	6.71	179.83	6.03	2.97	71.07	0	0.00	0.00	74	36.42	1289.93
34	0.744	7.85	292	114	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.49	21.96	10.67	5.27	185.10	4.90	2.42	73.49	0	0.00	0.00	57	28.16	1318.09
35	0.718	7.75	342	102	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.48	22.44	9.47	4.52	189.62	4.37	2.08	75.57	0	0.00	0.00	51	24.32	1342.41
36	0.749	7.99	328	109	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	22.94	12.40	6.17	195.79	5.41	2.69	78.26	0	0.00	0.00	56	27.86	1370.27
37	0.726	7.79	316	113	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.48	23.42	14.24	6.87	202.66	5.75	2.77	81.03	0	0.00	0.00	60	28.93	1399.20
38	0.681	7.80	298	146	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.45	23.87	14.03	6.35	209.01	6.50	2.94	83.97	0	0.00	0.00	71	32.11	1431.31
39	0.714	7.96	241	266	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.47	24.34	25.22	11.96	220.97	12.15	5.76	89.73	0	0.00	0.00	131	62.12	1493.43
40	0.717	7.99	329	195	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.48	24.82	17.39	8.28	229.25	8.26	3.93	93.66	0	0.00	0.00	92	43.81	1537.24
41	0.744	8.02	356	294	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.49	25.31	19.82	9.79	239.04	9.77	4.83	98.49	0	0.00	0.00	129	63.74	1600.98
42	0.631	7.74	363	270	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.42	25.73	20.78	8.71	247.75	10.86	4.55	103.04	0	0.00	0.00	108	45.26	1646.24
43	0.708	8.21	302	245	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.47	26.20	21.23	9.98	257.73	10.23	4.81	107.85	0	0.00	0.00	128	60.19	1706.43
44	0.755	8.11	330	219	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	26.70	19.09	9.57	267.30	9.80	4.91	112.76	0	0.00	0.00	110	55.16	1761.59
45	0.710	8.13	345	243	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.47	27.17	21.49	10.13	277.43	10.11	4.77	117.53	0	0.00	0.00	124	58.47	1820.06

Midas Gold Corp.
MLI Job No. 3654

Table 13 . - Humidity Cell Analytical Results, MGI-11-62 (814-833) **(1.5057 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
46	0.737	8.12	315	223	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.49	27.66	22.15	10.84	288.27	11.01	5.39	122.92	0	0.00	0.00	110	53.84	1873.90
47	0.746	7.96	340	211	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	28.16	22.12	10.96	299.23	11.26	5.58	128.50	0	0.00	0.00	105	52.02	1925.92
48	0.729	8.11	308	179	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.48	28.64	21.48	10.40	309.63	10.01	4.85	133.35	0	0.00	0.00	89	43.09	1969.01
49	0.748	8.12	297	180	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	29.14	18.45	9.17	318.80	8.98	4.46	137.81	0	0.00	0.00	95	47.19	2016.20
50	0.749	7.87	302	179	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	29.64	19.83	9.86	328.66	9.00	4.48	142.29	0	0.00	0.00	92	45.76	2061.96
51	0.608	7.98	302	121	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.40	30.04	13.83	5.58	334.24	5.96	2.41	144.70	0	0.00	0.00	63	25.44	2087.40
52	0.748	8.01	317	111	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.50	30.54	11.48	5.70	339.94	5.39	2.68	147.38	0	0.00	0.00	56	27.82	2115.22
53	0.727	7.94	277	110	<0.10	0.000	0.537	<0.10	<0.10	1.0	0.48	31.02	12.18	5.88	345.82	5.33	2.57	149.95	0	0.00	0.00	58	28.00	2143.22
54	0.696	7.92	297	88.5	0.10	0.046	0.583	<0.10	<0.1	1.0	0.46	31.48	17.44	8.06	353.88	2.67	1.23	151.18	0	0.00	0.00	45	20.80	2164.02
55	0.745	7.83	269	96.6	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	6.25	3.09	356.97	4.60	2.28	153.46	0	0.00	0.00	49	24.24	2188.26
56	0.710	7.76	266	89.0	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	8.89	4.19	361.16	4.63	2.18	155.64	0	0.00	0.00	45	21.22	2209.48
57	0.705	7.75	287	85.4	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	7.93	3.71	364.87	4.00	1.87	157.51	0	0.00	0.00	46	21.54	2231.02
58	0.725	8.07	304	96.6	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	9.51	4.58	369.45	4.90	2.36	159.87	0	0.00	0.00	50	24.08	2255.10
59	0.749	7.80	300	125	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	13.15	6.54	375.99	6.52	3.24	163.11	0	0.00	0.00	67	33.33	2288.43
60	0.713	7.88	300	98.8	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	10.75	5.09	381.08	5.24	2.48	165.59	0	0.00	0.00	52	24.62	2313.05
61	0.740	7.74	292	90.2	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	9.23	4.54	385.62	4.62	2.27	167.86	0	0.00	0.00	47	23.10	2336.15
62	0.721	7.65	301	98.0	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	10.42	4.99	390.61	6.04	2.89	170.75	0	0.00	0.00	51	24.42	2360.57
63	0.714	7.94	306	93.7	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	9.50	4.50	395.11	5.14	2.44	173.19	0	0.00	0.00	48	22.76	2383.33
64	0.673	7.73	309	81.1	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	7.90	3.53	398.64	4.44	1.98	175.17	0	0.00	0.00	40	17.88	2401.21
65	0.714	7.69	276	91.9	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	9.75	4.62	403.26	5.17	2.45	177.62	0	0.00	0.00	44	20.86	2422.07
66	0.662	7.52	243	81.6	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	8.07	3.55	406.81	4.66	2.05	179.67	0	0.00	0.00	38	16.71	2438.78
67	0.766	7.43	334	95.2	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	9.11	4.63	411.44	5.26	2.68	182.35	0	0.00	0.00	48	24.42	2463.20
68	0.714	7.27	296	81.7	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	8.12	3.85	415.29	4.99	2.37	184.72	0	0.00	0.00	39	18.49	2481.69
69	0.716	7.71	301	97.5	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	9.01	4.28	419.57	5.36	2.55	187.27	0	0.00	0.00	49	23.30	2504.99
70	0.715	7.38	288	82.2	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	8.06	3.83	423.40	4.91	2.33	189.60	0	0.00	0.00	41	19.47	2524.46
71	0.690	7.38	233	88.9	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	7.98	3.66	427.06	5.36	2.46	192.06	0	0.00	0.00	43	19.71	2544.17
72	0.686	7.52	221	85.1	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.48	7.71	3.51	430.57	5.14	2.34	194.40	0	0.00	0.00	43	19.59	2563.76
73	0.681	7.38	204	73.1	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.45	31.93	6.54	2.96	433.53	4.44	2.01	196.41	0	0.00	0.00	37	16.73	2580.49
74	0.696	7.56	195	80.2	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.93	7.36	3.40	436.93	4.95	2.29	198.70	0	0.00	0.00	41	18.95	2599.44
75	0.677	7.28	187	68.1	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	31.93	5.51	2.48	439.41	4.24	1.91	200.61	0	0.00	0.00	35	15.74	2615.18
76	0.645	7.62	249	74.8	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.43	32.36	6.82	2.92	442.33	4.76	2.04	202.65	0	0.00	0.00	37	15.85	2631.03
77	0.795	7.52	196	112	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	32.36	9.83	5.19	447.52	6.77	3.57	206.22	0	0.00	0.00	55	29.04	2660.07
78	0.701	7.50	185	75.7	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	32.36	6.16	2.87	450.39	4.78	2.23	208.45	0	0.00	0.00	37	17.23	2677.30
79	0.700	7.65	220	72.2	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	32.36	6.04	2.81	453.20	4.46	2.07	210.52	0	0.00	0.00	35	16.27	2693.57
80	0.657	7.64	229	69.8	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	32.36	5.58	2.43	455.63	4.73	2.06	212.58	0	0.00	0.00	35	15.27	2708.84
81	0.696	7.56	224	73.9	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.46	32.82	5.54	2.56	458.19	4.80	2.22	214.80	0	0.00	0.00	36	16.64	2725.48
82	0.720	7.65	260	80.8	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.48	33.30	6.28	3.00	461.19	5.00	2.39	217.19	0	0.00	0.00	40	19.13	2744.61
83	0.698	7.89	295	82.5	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.46	33.76	6.81	3.16	464.35	5.25	2.43	219.62	0	0.00	0.00	42	19.47	2764.08
84	0.757	7.81	331	91.8	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	33.76	7.91	3.98	468.33	6.08	3.06	222.68	0	0.00	0.00	46	23.13	2787.21
85	0.625	7.80	333	72.7	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	33.76	6.11	2.54	470.87	4.70	1.95	224.63	0	0.00	0.00	38	15.77	2802.98
86	0.836	7.78	320	132	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.56	34.32	10.97	6.09	476.96	9.85	5.47	230.10	0	0.00	0.00	71	39.42	2842.40
87	0.715	7.80	324	81.8	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	34.32	6.34	3.01	479.97	5.46	2.59	232.69	0	0.00	0.00	43	20.42	2862.82
88	0.727	7.83	343	84.8	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	34.32	7.43	3.59	483.56	6.08	2.94	235.63	0	0.00	0.00	44	21.24	2884.06
89	0.656	7.84	354	86.8	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	34.32	6.83	2.98	486.54	6.35	2.77	238.40	0	0.00	0.00	44	19.17	2903.23
90	0.775	7.82	358	147	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.51	34.83	10.43	5.37	491.91	10.49	5.40	243.80	0	0.00	0.00	73	37.57	2940.80

Midas Gold Corp.
MLI Job No. 3654

Table 13 . - Humidity Cell Analytical Results, MGI-11-62 (814-833) **(1.5057 Kg)**

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	SO_4= mg/l	SO_4= mg/kg	SO_4= Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
91	0.762	7.71	271	95.6	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.51	35.34	6.67	3.38	495.29	6.54	3.31	247.11	0	0.00	0.00	46	23.28	2964.08
92	0.718	7.72	335	95.7	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.48	35.82	7.35	3.50	498.79	6.73	3.21	250.32	0	0.00	0.00	48	22.89	2986.97
93	0.713	7.82	337	82.0	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.47	36.29	6.12	2.90	501.69	5.90	2.79	253.11	0	0.00	0.00	40	18.94	3005.91
94	0.738	7.83	321	90.9	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.49	36.78	6.14	3.01	504.70	5.96	2.92	256.03	0	0.00	0.00	44	21.57	3027.48
95	0.719	7.83	345	101	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.48	37.26	8.00	3.82	508.52	7.88	3.76	259.79	0	0.00	0.00	49	23.40	3050.88
96	0.743	7.77	353	104	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.49	37.75	8.42	4.15	512.67	8.20	4.05	263.84	0	0.00	0.00	52	25.66	3076.54
97	0.728	7.69	318	112	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.48	38.23	7.85	3.80	516.47	8.14	3.94	267.78	0	0.00	0.00	55	26.59	3103.13
98	0.728	7.70	313	128	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	38.23	9.75	4.71	521.18	10.71	5.18	272.96	0	0.00	0.00	61	29.49	3132.62
99	0.713	7.74	341	136	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	38.23	11.03	5.22	526.40	10.97	5.19	278.15	0	0.00	0.00	64	30.31	3162.93
100	0.704	7.67	329	114	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.47	38.70	8.57	4.01	530.41	8.87	4.15	282.30	0	0.00	0.00	55	25.72	3188.65
101	0.714	7.72	317	110	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.47	39.17	8.16	3.87	534.28	9.15	4.34	286.64	0	0.00	0.00	53	25.13	3213.78
102	0.746	7.84	333	124	<0.10	0.000	0.583	<0.10	<0.10	2.0	0.99	40.16	9.92	4.91	539.19	10.45	5.18	291.82	0	0.00	0.00	61	30.22	3244.00
103	0.711	7.82	334	112	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.47	40.63	8.59	4.06	543.25	9.19	4.34	296.16	0	0.00	0.00	54	25.50	3269.50
104	0.713	7.83	322	117	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.47	41.10	7.76	3.67	546.92	9.09	4.30	300.46	0	0.00	0.00	56	26.52	3296.02
105	0.729	7.76	339	134	<0.10	0.000	0.583	<0.10	<0.10	1.0	0.48	41.58	9.72	4.71	551.63	10.13	4.90	305.36	0	0.00	0.00	68	32.92	3328.94
106	0.749	7.77	305	131	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	9.38	4.67	556.30	10.20	5.07	310.43	0	0.00	0.00	69	34.32	3363.26
107	0.767	7.77	321	123	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.13	4.14	560.44	9.09	4.63	315.06	0	0.00	0.00	65	33.11	3396.37
108	0.727	7.82	337	104	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	7.12	3.44	563.88	8.01	3.87	318.93	0	0.00	0.00	55	26.56	3422.93
109	0.744	7.92	333	107	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.47	4.19	568.07	8.97	4.43	323.36	0	0.00	0.00	61	30.14	3453.07
110	0.731	7.78	344	122	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	9.01	4.37	572.44	9.49	4.61	327.97	0	0.00	0.00	63	30.59	3483.66
111	0.731	7.73	349	119	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.57	4.16	576.60	9.33	4.53	332.50	0	0.00	0.00	66	32.04	3515.70
112	0.736	7.76	348	134	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.04	3.93	580.53	8.20	4.01	336.51	0	0.00	0.00	73	35.68	3551.38
113	0.715	7.75	346	124	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.49	4.03	584.56	9.32	4.43	340.94	0	0.00	0.00	72	34.19	3585.57
114	0.760	7.56	307	112	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.01	4.04	588.60	8.96	4.52	345.46	0	0.00	0.00	65	32.81	3618.38
115	0.705	7.33	325	135	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	10.76	5.04	593.64	11.02	5.16	350.62	0	0.00	0.00	58	27.16	3645.54
116	0.749	7.78	349	105	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	7.69	3.83	597.47	8.36	4.16	354.78	0	0.00	0.00	64	31.84	3677.38
117	0.740	7.59	339	98.3	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	6.65	3.27	600.74	7.02	3.45	358.23	0	0.00	0.00	54	26.54	3703.92
118	0.712	7.69	330	93.5	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	7.66	3.62	604.36	7.30	3.45	361.68	0	0.00	0.00	55	26.01	3729.93
119	0.747	7.75	355	103	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	7.56	3.75	608.11	7.89	3.91	365.59	0	0.00	0.00	62	30.76	3760.69
120	0.684	7.83	329	96.0	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	7.40	3.36	611.47	8.21	3.73	369.32	0	0.00	0.00	60	27.26	3787.95
121	0.728	7.97	296	113	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.28	4.00	615.47	8.60	4.16	373.48	0	0.00	0.00	69	33.36	3821.31
122	0.777	8.00	290	127	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.82	4.55	620.02	9.73	5.02	378.50	0	0.00	0.00	75	38.70	3860.01
123	0.756	7.81	321	115	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	9.00	4.52	624.54	9.05	4.54	383.04	0	0.00	0.00	70	35.15	3895.16
124	0.741	7.93	319	112	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.94	4.40	628.94	8.18	4.03	387.07	0	0.00	0.00	68	33.46	3928.62
125	0.730	8.12	341	112	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	7.78	3.77	632.71	8.84	4.29	391.36	0	0.00	0.00	66	32.00	3960.62
126	0.733	7.99	323	109	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	7.66	3.73	636.44	7.80	3.80	395.16	0	0.00	0.00	64	31.16	3991.78
127	0.730	7.93	332	114	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.20	3.98	640.42	8.39	4.07	399.23	0	0.00	0.00	70	33.94	4025.72
128	0.767	8.02	337	105	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	7.67	3.91	644.33	7.91	4.03	403.26	0	0.00	0.00	65	33.11	4058.83
129	0.683	8.04	338	98.5	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	7.84	3.56	647.89	7.32	3.32	406.58	0	0.00	0.00	60	27.22	4086.05
130	0.751	8.11	339	108	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.23	4.10	651.99	8.53	4.25	410.83	0	0.00	0.00	66	32.92	4118.97
131	0.735	8.07	344	118	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.98	4.38	656.37	9.24	4.51	415.34	0	0.00	0.00	72	35.15	4154.12
132	0.743	8.15	334	118	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.92	4.40	660.77	9.42	4.65	419.99	0	0.00	0.00	74	36.52	4190.64
133	0.689	8.11	287	407	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	7.99	3.66	664.43	8.06	3.69	423.68	0	0.00	0.00	65	29.74	4220.38
134	0.759	8.14	294	131	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	9.79	4.93	669.36	9.23	4.65	428.33	0	0.00	0.00	76	38.31	4258.69
135	0.751	8.05	258	128	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	9.06	4.52	673.88	9.04	4.51	432.84	0	0.00	0.00	73	36.41	4295.10

Midas Gold Corp.
MLI Job No. 3654

Table 13 . - Humidity Cell Analytical Results, MGI-11-62 (814-833) (1.5057 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
136	0.749	8.17	293	114	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.94	4.45	678.33	8.52	4.24	437.08	0	0.00	0.00	68	33.83	4328.93
137	0.751	8.29	253	113	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.88	4.43	682.76	7.81	3.90	440.98	0	0.00	0.00	68	33.92	4362.85
138	0.712	8.19	259	107	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.33	3.94	686.70	7.62	3.60	444.58	0	0.00	0.00	80	37.83	4400.68
139	0.739	8.27	287	123	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.69	4.27	690.97	8.89	4.36	448.94	0	0.00	0.00	77	37.79	4438.47
140	0.744	8.32	219	121	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.66	4.28	695.25	8.51	4.20	453.14	0	0.00	0.00	64	31.62	4470.09
141	0.748	8.30	272	121	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.32	4.13	699.38	8.45	4.20	457.34	0	0.00	0.00	65	32.29	4502.38
142	0.723	8.23	228	107	<0.10	0.000	0.583	<0.10	<0.10	<1.0	0.00	41.58	8.16	3.92	703.30	7.90	3.79	461.13	0	0.00	0.00	59	28.33	4530.71
143	0.727	8.28	257	117	<0.10	0.000	0.583	<0.10	<0.10	<1	0.00	41.58	8.83	4.26	707.56	8.37	4.04	465.17	0	0.00	0.00	64	30.90	4561.61
144	0.724	8.25	279	130	<0.10	0.000	0.583	<0.10	<0.10	1.5	0.72	42.30	9.85	4.74	712.30	10.14	4.88	470.05	0	0.00	0.00	69	33.18	4594.79

Testing terminated

Figure 13a.- Weekly Humidity Cell Analytical Results

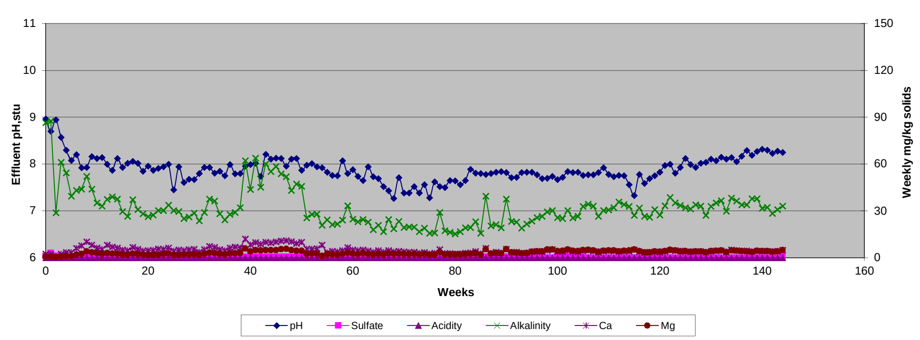
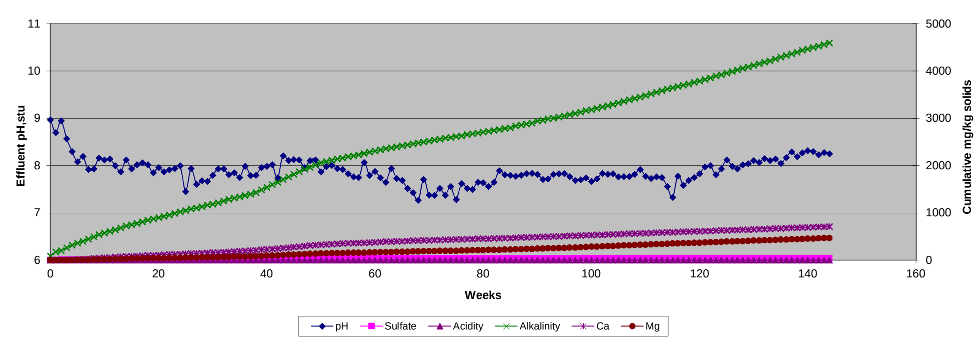


Figure 13b.- Cumulative Humidity Cell Analytical Results



Midas Gold Corp.
MLI Job No. 3654

Table 14 . - Humidity Cell Analytical Results, MGI-11-64 (185.5-208) (1.5163 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
0	0.755	7.98	172	647	<0.10	0.000	0.000	<0.10	<0.10	150.0	74.69	74.69	85.00	42.32	42.32	20.30	10.11	10.11	0	0.00	0.00	84	41.83	41.83
1	0.683	8.09	232	343	<0.10	0.000	0.000	<0.10	<0.10	30.0	13.51	88.20	37.96	17.10	59.42	8.70	3.92	14.03	0	0.00	0.00	81	36.49	78.32
2	0.790	7.99	245	268	<0.10	0.000	0.000	<0.10	<0.10	42.0	21.88	110.08	27.28	14.21	73.63	6.70	3.49	17.52	0	0.00	0.00	73	38.03	116.35
3	0.746	7.97	260	319	<0.10	0.000	0.000	<0.10	<0.10	70.0	34.44	144.52	38.83	19.10	92.73	9.33	4.59	22.11	0	0.00	0.00	66	32.47	148.82
4	0.738	7.63	281	248	<0.10	0.000	0.000	<0.10	<0.10	47.0	22.88	167.40	30.05	14.63	107.36	7.33	3.57	25.68	0	0.00	0.00	76	36.99	185.81
5	0.763	7.90	272	171	<0.10	0.000	0.000	<0.10	<0.10	12.0	6.04	173.44	21.31	10.72	118.08	4.84	2.44	28.12	0	0.00	0.00	61	30.70	216.51
6	0.734	7.97	279	238	<0.10	0.000	0.000	<0.10	<0.10	51.0	24.69	198.13	32.85	15.90	133.98	6.30	3.05	31.17	0	0.00	0.00	56	27.11	243.62
7	0.716	7.75	265	222	<0.10	0.000	0.000	<0.10	<0.10	40.0	18.89	217.02	33.38	15.76	149.74	6.99	3.30	34.47	0	0.00	0.00	63	29.75	273.37
8	0.745	7.83	218	276	<0.10	0.000	0.000	<0.10	<0.10	37.0	18.18	235.20	37.20	18.28	168.02	9.63	4.73	39.20	0	0.00	0.00	87	42.75	316.12
9	0.744	7.98	197	244	<0.10	0.000	0.000	<0.10	<0.10	41.0	20.12	255.32	30.89	15.16	183.18	8.25	4.05	43.25	0	0.00	0.00	72	35.33	351.45
10	0.737	7.95	223	228	<0.10	0.000	0.000	<0.10	<0.10	53.0	25.76	281.08	27.65	13.44	196.62	8.69	4.22	47.47	0	0.00	0.00	62	30.14	381.59
11	0.753	7.92	215	234	<0.10	0.000	0.000	<0.10	<0.10	45.0	22.35	303.43	25.19	12.51	209.13	6.52	3.24	50.71	0	0.00	0.00	61	30.29	411.88
12	0.708	7.89	166	283	<0.10	0.000	0.000	<0.10	<0.10	59.0	27.55	330.98	42.80	19.98	229.11	9.60	4.48	55.19	0	0.00	0.00	76	35.49	447.37
13	0.757	7.85	230	239	<0.10	0.000	0.000	<0.10	<0.10	50.0	24.96	355.94	32.50	16.23	245.34	6.70	3.34	58.53	0	0.00	0.00	64	31.95	479.32
14	0.736	7.75	207	278	<0.10	0.000	0.000	<0.10	<0.10	74.0	35.92	391.86	31.56	15.32	260.66	7.35	3.57	62.10	0	0.00	0.00	47	22.81	502.13
15	0.746	7.78	201	247	<0.10	0.000	0.000	<0.10	<0.10	40.0	19.68	411.54	26.52	13.05	273.71	5.77	2.84	64.94	0	0.00	0.00	46	22.63	524.76
16	0.658	7.82	219	267	<0.10	0.000	0.000	<0.10	<0.10	61.0	26.47	438.01	29.42	12.77	286.48	7.12	3.09	68.03	0	0.00	0.00	46	19.96	544.72
17	0.795	7.87	216	226	<0.10	0.000	0.000	<0.10	<0.10	48.0	25.17	463.18	24.36	12.77	299.25	5.12	2.68	70.71	0	0.00	0.00	55	28.84	573.56
18	0.762	7.86	204	276	<0.10	0.000	0.000	<0.10	<0.10	52.0	26.13	489.31	32.12	16.14	315.39	6.69	3.36	74.07	0	0.00	0.00	43	21.61	595.17
19	0.734	7.70	215	208	<0.10	0.000	0.000	<0.10	<0.10	63.0	30.50	519.81	22.12	10.71	326.10	4.91	2.38	76.45	0	0.00	0.00	41	19.85	615.02
20	0.730	7.80	211	223	<0.10	0.000	0.000	<0.10	<0.10	55.0	26.48	546.29	24.31	11.70	337.80	4.40	2.12	78.57	0	0.00	0.00	43	20.70	635.72
21	0.720	7.77	247	200	<0.10	0.000	0.000	<0.10	<0.10	54.0	25.64	571.93	23.53	11.17	348.97	4.32	2.05	80.62	0	0.00	0.00	47	22.32	658.04
22	0.734	7.71	236	186	<0.10	0.000	0.000	<0.10	<0.10	49.0	23.72	595.65	23.91	11.57	360.54	4.12	1.99	82.61	0	0.00	0.00	46	22.27	680.31
23	0.738	7.75	257	202	<0.10	0.000	0.000	<0.10	<0.10	43.0	20.93	616.58	21.26	10.35	370.89	4.36	2.12	84.73	0	0.00	0.00	51	24.82	705.13
24	0.754	7.83	237	182	<0.10	0.000	0.000	<0.10	<0.10	33.0	16.41	632.99	21.45	10.67	381.56	4.00	1.99	86.72	0	0.00	0.00	47	23.37	728.50
25	0.729	7.57	253	164	<0.10	0.000	0.000	<0.10	<0.10	45.0	21.63	654.62	17.72	8.52	390.08	3.21	1.54	88.26	0	0.00	0.00	40	19.23	747.73
26	0.727	7.70	245	158	<0.10	0.000	0.000	<0.10	<0.10	42.0	20.14	674.76	17.31	8.30	398.38	3.00	1.44	89.70	0	0.00	0.00	42	20.14	767.87
27	0.735	7.52	273	152	<0.10	0.000	0.000	<0.10	<0.10	33.0	16.00	690.76	17.23	8.35	406.73	3.61	1.75	91.45	0	0.00	0.00	41	19.87	787.74
28	0.706	7.58	301	153	<0.10	0.000	0.000	<0.10	<0.10	25.0	11.64	702.40	19.24	8.96	415.69	3.14	1.46	92.91	0	0.00	0.00	43	20.02	807.76
29	0.746	7.63	278	147	<0.10	0.000	0.000	<0.10	<0.10	21.0	10.33	712.73	17.39	8.56	424.25	2.95	1.45	94.36	0	0.00	0.00	42	20.66	828.42
30	0.760	7.62	240	152	<0.10	0.000	0.000	<0.10	<0.10	34.0	17.04	729.77	16.94	8.49	432.74	3.25	1.63	95.99	0	0.00	0.00	41	20.55	848.97
31	0.762	7.20	346	152	<0.10	0.000	0.000	<0.10	<0.10	37.0	18.59	748.36	19.02	9.56	442.30	3.36	1.69	97.68	0	0.00	0.00	41	20.60	869.57
32	0.738	7.30	348	145	<0.10	0.000	0.000	<0.10	<0.10	38.0	18.50	766.86	18.00	8.76	451.06	3.07	1.49	99.17	0	0.00	0.00	35	17.03	886.60
33	0.779	7.27	346	138	<0.10	0.000	0.000	<0.10	<0.10	28.0	14.39	781.25	16.28	8.36	459.42	3.44	1.77	100.94	0	0.00	0.00	38	19.52	906.12
34	0.712	7.77	292	131	<0.10	0.000	0.000	<0.10	<0.10	30.0	14.09	795.34	15.51	7.28	466.70	2.86	1.34	102.28	0	0.00	0.00	35	16.43	922.55
35	0.755	7.65	343	129	<0.10	0.000	0.000	<0.10	<0.10	20.0	9.96	805.30	15.46	7.70	474.40	2.75	1.37	103.65	0	0.00	0.00	37	18.42	940.97
36	0.702	7.78	332	128	<0.10	0.000	0.000	<0.10	<0.10	25.0	11.57	816.87	18.90	8.75	483.15	3.22	1.49	105.14	0	0.00	0.00	37	17.13	958.10
37	0.741	7.65	324	138	<0.10	0.000	0.000	<0.10	<0.10	38.0	18.57	835.44	19.24	9.40	492.55	3.13	1.53	106.67	0	0.00	0.00	40	19.55	977.65
38	0.737	7.65	309	136	<0.10	0.000	0.000	<0.10	<0.10	29.0	14.10	849.54	17.95	8.72	501.27	2.98	1.45	108.12	0	0.00	0.00	35	17.01	994.66
39	0.737	7.59	278	143	<0.10	0.000	0.000	<0.10	<0.10	38.0	18.47	868.01	18.17	8.83	510.10	3.28	1.59	109.71	0	0.00	0.00	38	18.47	1013.13
40	0.743	7.70	344	151	<0.10	0.000	0.000	<0.10	<0.10	35.0	17.15	885.16	17.56	8.60	518.70	2.89	1.42	111.13	0	0.00	0.00	35	17.15	1030.28
41	0.726	7.81	363	150	<0.10	0.000	0.000	<0.10	<0.10	19.0	9.10	894.26	15.95	7.64	526.34	2.70	1.29	112.42	0	0.00	0.00	40	19.15	1049.43
42	0.742	7.66	363	167	<0.10	0.000	0.000	<0.10	<0.10	26.0	12.72	906.98	18.09	8.85	535.19	3.13	1.53	113.95	0	0.00	0.00	39	19.08	1068.51
43	0.723	7.93	312	146	<0.10	0.000	0.000	<0.10	<0.10	23.0	10.97	917.95	17.33	8.26	543.45	2.76	1.32	115.27	0	0.00	0.00	43	20.50	1089.01
44	0.700	7.89	356	144	<0.10	0.000	0.000	<0.10	<0.10	23.0	10.62	928.57	16.13	7.45	550.90	2.77	1.28	116.55	0	0.00	0.00	39	18.00	1107.01
45	0.762	7.90	360	138	<0.10	0.000	0.000	<0.10	<0.10	29.0	14.57	943.14	17.26	8.67	559.57	2.92	1.47	118.02	0	0.00	0.00	42	21.11	1128.12

Midas Gold Corp.
MLI Job No. 3654

Table 14 . - Humidity Cell Analytical Results, MGI-11-64 (185.5-208) **(1.5163 Kg)**

					Total Fe			Fe^{2}+	Fe^{3}+	SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
46	0.779	7.85	330	134	<0.10	0.000	0.000	<0.10	<0.10	22.0	11.30	954.44	17.81	9.15	568.72	3.05	1.57	119.59	0	0.00	0.00	39	20.04	1148.16
47	0.717	7.63	339	134	<0.10	0.000	0.000	<0.10	<0.10	13.0	6.15	960.59	17.00	8.04	576.76	2.81	1.33	120.92	0	0.00	0.00	35	16.55	1164.71
48	0.760	7.74	320	124	<0.10	0.000	0.000	<0.10	<0.10	12.0	6.01	966.60	19.12	9.58	586.34	3.02	1.51	122.43	0	0.00	0.00	35	17.54	1182.25
49	0.698	7.87	321	118	<0.10	0.000	0.000	<0.10	<0.10	13.0	5.98	972.58	15.37	7.08	593.42	2.41	1.11	123.54	0	0.00	0.00	34	15.65	1197.90
50	0.732	7.55	305	120	<0.10	0.000	0.000	<0.10	<0.10	12.0	5.79	978.37	17.58	8.49	601.91	2.85	1.38	124.92	0	0.00	0.00	36	17.38	1215.28
51	0.738	7.74	306	127	<0.10	0.000	0.000	<0.10	<0.10	14.0	6.81	985.18	19.01	9.25	611.16	2.86	1.39	126.31	0	0.00	0.00	37	18.01	1233.29
52	0.766	7.75	329	123	<0.10	0.000	0.000	<0.10	<0.10	12.0	6.06	991.24	16.63	8.40	619.56	2.64	1.33	127.64	0	0.00	0.00	37	18.69	1251.98
53	0.740	7.71	301	110	<0.10	0.000	0.000	<0.10	<0.10	11.0	5.37	996.61	15.87	7.75	627.31	2.46	1.20	128.84	0	0.00	0.00	35	17.08	1269.06
54	0.714	7.67	302	119	<0.10	0.000	0.000	<0.10	<0.10	21.0	9.89	1006.50	15.18	7.15	634.46	1.33	0.63	129.47	0	0.00	0.00	31	14.60	1283.66
55	0.749	7.70	278	108	2.22	1.097	1.097	<0.10	<2.22	13.0	6.42	1012.92	9.64	4.76	639.22	2.12	1.05	130.52	0	0.00	0.00	33	16.30	1299.96
56	0.758	7.59	276	122	<0.10	0.000	1.097	<0.10	<0.10	18.0	9.00	1021.92	17.06	8.53	647.75	2.70	1.35	131.87	0	0.00	0.00	36	18.00	1317.96
57	0.729	7.66	282	121	<0.10	0.000	1.097	<0.10	<0.10	18.0	8.65	1030.57	15.98	7.68	655.43	2.44	1.17	133.04	0	0.00	0.00	37	17.79	1335.75
58	0.736	7.79	317	119	<0.10	0.000	1.097	<0.10	<0.10	18.0	8.74	1039.31	15.35	7.45	662.88	2.47	1.20	134.24	0	0.00	0.00	34	16.50	1352.25
59	0.744	7.54	285	110	<0.10	0.000	1.097	<0.10	<0.10	17.0	8.34	1047.65	15.78	7.74	670.62	2.47	1.21	135.45	0	0.00	0.00	33	16.19	1368.44
60	0.721	7.65	315	118	<0.10	0.000	1.097	<0.10	<0.10	14.0	6.66	1054.31	16.98	8.07	678.69	2.67	1.27	136.72	0	0.00	0.00	33	15.69	1384.13
61	0.723	7.58	308	120	<0.10	0.000	1.097	<0.10	<0.10	21.0	10.01	1064.32	16.88	8.05	686.74	2.63	1.25	137.97	0	0.00	0.00	35	16.69	1400.82
62	0.762	7.56	318	114	<0.10	0.000	1.097	<0.10	<0.10	19.0	9.55	1073.87	17.34	8.71	695.45	2.65	1.33	139.30	0	0.00	0.00	32	16.08	1416.90
63	0.727	7.65	327	111	<0.10	0.000	1.097	<0.10	<0.10	17.0	8.15	1082.02	15.20	7.29	702.74	2.49	1.19	140.49	0	0.00	0.00	30	14.38	1431.28
64	0.707	7.52	317	105	<0.10	0.000	1.097	<0.10	<0.10	17.0	7.93	1089.95	14.37	6.70	709.44	2.25	1.05	141.54	0	0.00	0.00	26	12.12	1443.40
65	0.723	7.51	288	109	<0.10	0.000	1.097	<0.10	<0.10	20.0	9.54	1099.49	15.52	7.40	716.84	2.45	1.17	142.71	0	0.00	0.00	26	12.40	1455.80
66	0.700	7.38	228	121	<0.10	0.000	1.097	<0.10	<0.10	25.0	11.54	1111.03	17.80	8.22	725.06	2.70	1.25	143.96	0	0.00	0.00	30	13.85	1469.65
67	0.783	7.37	336	101	<0.10	0.000	1.097	<0.10	<0.10	14.0	7.23	1118.26	15.19	7.84	732.90	2.11	1.09	145.05	0	0.00	0.00	30	15.49	1485.14
68	0.730	7.48	284	100	<0.10	0.000	1.097	<0.10	<0.10	17.0	8.18	1126.44	14.41	6.94	739.84	2.32	1.12	146.17	0	0.00	0.00	23	11.07	1496.21
69	0.738	7.54	304	109	<0.10	0.000	1.097	<0.10	<0.10	25.0	12.17	1138.61	14.99	7.30	747.14	2.19	1.07	147.24	0	0.00	0.00	26	12.65	1508.86
70	0.727	7.46	288	104	<0.10	0.000	1.097	<0.10	<0.10	23.0	11.03	1149.64	15.28	7.33	754.47	2.33	1.12	148.36	0	0.00	0.00	24	11.51	1520.37
71	0.719	7.43	237	100	<0.10	0.000	1.097	<0.10	<0.10	22.0	10.43	1160.07	13.36	6.34	760.81	2.04	0.97	149.33	0	0.00	0.00	23	10.91	1531.28
72	0.736	7.29	234	99.2	<0.10	0.000	1.097	<0.10	<0.10	23.0	11.16	1171.23	13.76	6.68	767.49	2.20	1.07	150.40	0	0.00	0.00	24	11.65	1542.93
73	0.729	7.09	221	89.6	<0.10	0.000	1.097	<0.10	<0.10	18.0	8.65	1179.88	13.03	6.26	773.75	1.92	0.92	151.32	0	0.00	0.00	23	11.06	1553.99
74	0.734	7.21	227	90.8	<0.10	0.000	1.097	<0.10	<0.10	19.0	9.20	1189.08	13.61	6.59	780.34	1.95	0.94	152.26	0	0.00	0.00	23	11.13	1565.12
75	0.717	7.10	205	90.3	<0.10	0.000	1.097	<0.10	<0.10	22.0	10.40	1199.48	11.63	5.50	785.84	1.89	0.89	153.15	0	0.00	0.00	20	9.46	1574.58
76	0.679	7.33	261	87.2	<0.10	0.000	1.097	<0.10	<0.10	21.0	9.40	1208.88	12.37	5.54	791.38	2.01	0.90	154.05	0	0.00	0.00	20	8.96	1583.54
77	0.797	7.32	233	92.5	<0.10	0.000	1.097	<0.10	<0.10	15.0	7.88	1216.76	12.69	6.67	798.05	1.90	1.00	155.05	0	0.00	0.00	25	13.14	1596.68
78	0.722	7.30	221	87.4	<0.10	0.000	1.097	<0.10	<0.10	22.0	10.48	1227.24	10.89	5.19	803.24	1.91	0.91	155.96	0	0.00	0.00	20	9.52	1606.20
79	0.690	7.37	231	76.8	<0.10	0.000	1.097	<0.10	<0.10	15.0	6.83	1234.07	10.10	4.60	807.84	1.69	0.77	156.73	0	0.00	0.00	18	8.19	1614.39
80	0.723	7.28	241	79.5	<0.10	0.000	1.097	<0.10	<0.10	15.0	7.15	1241.22	10.63	5.07	812.91	1.83	0.87	157.60	0	0.00	0.00	17	8.11	1622.50
81	0.712	7.19	234	75.3	<0.10	0.000	1.097	<0.10	<0.10	17.0	7.98	1249.20	9.08	4.26	817.17	1.53	0.72	158.32	0	0.00	0.00	16	7.51	1630.01
82	0.728	7.23	269	79.5	<0.10	0.000	1.097	<0.10	<0.10	18.0	8.64	1257.84	10.26	4.93	822.10	1.70	0.82	159.14	0	0.00	0.00	18	8.64	1638.65
83	0.719	7.54	314	83.6	<0.10	0.000	1.097	<0.10	<0.10	20.0	9.48	1267.32	10.61	5.03	827.13	1.65	0.78	159.92	0	0.00	0.00	18	8.54	1647.19
84	0.748	7.44	357	86.0	<0.10	0.000	1.097	<0.10	<0.10	22.0	10.85	1278.17	11.82	5.83	832.96	1.80	0.89	160.81	0	0.00	0.00	20	9.87	1657.06
85	0.647	7.26	361	81.0	<0.10	0.000	1.097	<0.10	<0.10	20.0	8.53	1286.70	10.95	4.67	837.63	1.77	0.76	161.57	0	0.00	0.00	16	6.83	1663.89
86	0.829	7.41	350	95.0	<0.10	0.000	1.097	<0.10	<0.10	16.0	8.75	1295.45	13.65	7.46	845.09	2.15	1.18	162.75	0	0.00	0.00	27	14.76	1678.65
87	0.698	7.49	339	77.9	<0.10	0.000	1.097	<0.10	<0.10	14.0	6.44	1301.89	10.29	4.74	849.83	1.77	0.81	163.56	0	0.00	0.00	19	8.75	1687.40
88	0.731	7.43	380	77.8	<0.10	0.000	1.097	<0.10	<0.10	18.0	8.68	1310.57	11.70	5.64	855.47	1.76	0.85	164.41	0	0.00	0.00	18	8.68	1696.08
89	0.637	7.36	363	78.3	<0.10	0.000	1.097	<0.10	<0.10	28.0	11.76	1322.33	10.03	4.21	859.68	1.76	0.74	165.15	0	0.00	0.00	16	6.72	1702.80
90	0.810	7.57	365	101	0.77	0.411	1.508	<0.10	<0.77	17.0	9.08	1331.41	12.73	6.80	866.48	2.34	1.25	166.40	0	0.00	0.00	29	15.49	1718.29

Midas Gold Corp.
MLI Job No. 3654

Table 14 . - Humidity Cell Analytical Results, MGI-11-64 (185.5-208) **(1.5163 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
91	0.750	7.30	280	84.9	<0.10	0.000	1.508	<0.10	<0.10	18.0	8.90	1340.31	10.46	5.17	871.65	1.88	0.93	167.33	0	0.00	0.00	19	9.40	1727.69
92	0.716	7.29	364	83.8	<0.10	0.000	1.508	<0.10	<0.10	19.0	8.97	1349.28	11.14	5.26	876.91	1.98	0.93	168.26	0	0.00	0.00	19	8.97	1736.66
93	0.698	7.62	351	128	<0.10	0.000	1.508	<0.10	<0.10	28.0	12.89	1362.17	18.48	8.51	885.42	3.32	1.53	169.79	0	0.00	0.00	31	14.27	1750.93
94	0.723	7.63	340	114	<0.10	0.000	1.508	<0.10	<0.10	21.0	10.01	1372.18	14.67	6.99	892.41	2.51	1.20	170.99	0	0.00	0.00	31	14.78	1765.71
95	0.713	7.58	362	113	<0.10	0.000	1.508	<0.10	<0.10	20.0	9.40	1381.58	16.57	7.79	900.20	3.18	1.50	172.49	0	0.00	0.00	31	14.58	1780.29
96	0.719	7.54	365	116	<0.10	0.000	1.508	<0.10	<0.10	21.0	9.96	1391.54	17.57	8.33	908.53	3.23	1.53	174.02	0	0.00	0.00	33	15.65	1795.94
97	0.761	7.50	336	124	<0.10	0.000	1.508	<0.10	<0.10	21.0	10.54	1402.08	15.61	7.83	916.36	3.40	1.71	175.73	0	0.00	0.00	36	18.07	1814.01
98	0.698	7.43	325	122	<0.10	0.000	1.508	<0.10	<0.10	22.0	10.13	1412.21	17.36	7.99	924.35	3.36	1.55	177.28	0	0.00	0.00	36	16.57	1830.58
99	0.723	7.50	361	134	<0.10	0.000	1.508	<0.10	<0.10	22.0	10.49	1422.70	20.85	9.94	934.29	3.77	1.80	179.08	0	0.00	0.00	39	18.60	1849.18
100	0.666	7.35	349	113	<0.10	0.000	1.508	<0.10	<0.10	21.0	9.22	1431.92	16.55	7.27	941.56	3.06	1.34	180.42	0	0.00	0.00	30	13.18	1862.36
101	0.734	7.36	335	112	<0.10	0.000	1.508	<0.10	<0.10	16.0	7.75	1439.67	16.07	7.78	949.34	3.16	1.53	181.95	0	0.00	0.00	30	14.52	1876.88
102	0.729	7.46	354	109	<0.10	0.000	1.508	<0.10	<0.10	19.0	9.13	1448.80	16.11	7.75	957.09	3.21	1.54	183.49	0	0.00	0.00	29	13.94	1890.82
103	0.718	7.55	349	115	<0.10	0.000	1.508	<0.10	<0.10	16.0	7.58	1456.38	16.48	7.80	964.89	3.07	1.45	184.94	0	0.00	0.00	30	14.21	1905.03
104	0.711	7.50	346	104	<0.10	0.000	1.508	<0.10	<0.10	18.0	8.44	1464.82	12.54	5.88	970.77	2.58	1.21	186.15	0	0.00	0.00	25	11.72	1916.75
105	0.694	7.44	357	113	0.12	0.055	1.563	<0.10	<0.12	17.0	7.78	1472.60	15.04	6.88	977.65	2.75	1.26	187.41	0	0.00	0.00	30	13.73	1930.48
106	0.761	7.42	320	106	<0.10	0.000	1.563	<0.10	<0.10	15	7.53	1480.13	14.97	7.51	985.16	2.82	1.42	188.83	0	0.00	0.00	36	18.07	1948.55
107	0.750	7.54	340	110	<0.10	0.000	1.563	<0.10	<0.10	18	8.90	1489.03	13.92	6.89	992.05	2.81	1.39	190.22	0	0.00	0.00	36	17.81	1966.36
108	0.719	7.52	355	102	<0.10	0.000	1.563	<0.10	<0.10	19	9.01	1498.04	12.51	5.93	997.98	2.72	1.29	191.51	0	0.00	0.00	28	13.28	1979.64
109	0.750	7.73	348	109	<0.10	0.000	1.563	<0.10	<0.10	18	8.90	1506.94	13.31	6.58	1004.56	2.96	1.46	192.97	0	0.00	0.00	36	17.81	1997.45
110	0.734	7.54	362	117	<0.10	0.000	1.563	<0.10	<0.10	17	8.23	1515.17	16.15	7.82	1012.38	3.09	1.50	194.47	0	0.00	0.00	38	18.39	2015.84
111	0.737	7.47	368	112	<0.10	0.000	1.563	<0.10	<0.10	16	7.78	1522.95	14.96	7.27	1019.65	3.01	1.46	195.93	0	0.00	0.00	38	18.47	2034.31
112	0.733	7.49	366	128	<0.10	0.000	1.563	<0.10	<0.10	19	9.18	1532.13	17.21	8.32	1027.97	3.36	1.62	197.55	0	0.00	0.00	42	20.30	2054.61
113	0.741	7.51	361	111	<0.10	0.000	1.563	<0.10	<0.10	15	7.33	1539.46	13.47	6.58	1034.55	2.84	1.39	198.94	0	0.00	0.00	41	20.04	2074.65
114	0.738	7.49	327	101	<0.10	0.000	1.563	<0.10	<0.10	15	7.30	1546.76	13.99	6.81	1041.36	2.84	1.38	200.32	0	0.00	0.00	35	17.03	2091.68
115	0.659	7.21	343	154	<0.10	0.000	1.563	<0.10	<0.10	23	10.00	1556.76	20.11	8.74	1050.10	4.71	2.05	202.37	0	0.00	0.00	33	14.34	2106.02
116	0.801	7.57	368	115	<0.10	0.000	1.563	<0.10	<0.10	17	8.98	1565.74	16.44	8.68	1058.78	3.25	1.72	204.09	0	0.00	0.00	40	21.13	2127.15
117	0.695	7.31	360	110	<0.10	0.000	1.563	<0.10	<0.10	25	11.46	1577.20	13.80	6.33	1065.11	2.92	1.34	205.43	0	0.00	0.00	28	12.83	2139.98
118	0.721	7.35	352	110	<0.10	0.000	1.563	<0.10	<0.10	24	11.41	1588.61	14.57	6.93	1072.04	2.98	1.42	206.85	0	0.00	0.00	31	14.74	2154.72
119	0.751	7.31	384	110	<0.10	0.000	1.563	<0.10	<0.10	22	10.90	1599.51	14.67	7.27	1079.31	3.02	1.50	208.35	0	0.00	0.00	31	15.35	2170.07
120	0.696	7.56	355	106	<0.10	0.000	1.563	<0.10	<0.10	23	10.56	1610.07	14.76	6.78	1086.09	3.27	1.50	209.85	0	0.00	0.00	31	14.23	2184.30
121	0.743	7.83	312	102	<0.10	0.000	1.563	<0.10	<0.10	18	8.82	1618.89	13.86	6.79	1092.88	2.91	1.43	211.28	0	0.00	0.00	35	17.15	2201.45
122	0.737	7.85	301	102	<0.10	0.000	1.563	<0.10	<0.10	19	9.23	1628.12	12.70	6.17	1099.05	2.77	1.35	212.63	0	0.00	0.00	33	16.04	2217.49
123	0.754	7.72	333	102	<0.10	0.000	1.563	<0.10	<0.10	19	9.45	1637.57	13.39	6.66	1105.71	2.87	1.43	214.06	0	0.00	0.00	35	17.40	2234.89
124	0.744	7.71	332	96.2	<0.10	0.000	1.563	<0.10	<0.10	19	9.32	1646.89	12.90	6.33	1112.04	2.68	1.31	215.37	0	0.00	0.00	32	15.70	2250.59
125	0.701	7.79	371	106	<0.10	0.000	1.563	<0.10	<0.10	21	9.71	1656.60	12.41	5.74	1117.78	2.88	1.33	216.70	0	0.00	0.00	31	14.33	2264.92
126	0.769	7.75	345	104	<0.10	0.000	1.563	<0.10	<0.10	18	9.13	1665.73	12.80	6.49	1124.27	2.75	1.39	218.09	0	0.00	0.00	34	17.24	2282.16
127	0.724	7.61	359	100	<0.10	0.000	1.563	<0.10	<0.10	20	9.55	1675.28	12.52	5.98	1130.25	2.53	1.21	219.30	0	0.00	0.00	32	15.28	2297.44
128	0.760	7.71	366	98.6	<0.10	0.000	1.563	<0.10	<0.10	17	8.52	1683.80	11.90	5.96	1136.21	2.71	1.36	220.66	0	0.00	0.00	34	17.04	2314.48
129	0.724	7.71	368	96.2	<0.10	0.000	1.563	<0.10	<0.10	18	8.59	1692.39	12.77	6.10	1142.31	2.65	1.27	221.93	0	0.00	0.00	29	13.85	2328.33
130	0.699	7.68	372	94.6	<0.10	0.000	1.563	<0.10	<0.10	18	8.30	1700.69	11.69	5.39	1147.70	2.89	1.33	223.26	0	0.00	0.00	28	12.91	2341.24
131	0.766	7.75	369	93.8	<0.10	0.000	1.563	<0.10	<0.10	14	7.07	1707.76	11.78	5.95	1153.65	2.66	1.34	224.60	0	0.00	0.00	34	17.18	2358.42
132	0.716	7.77	353	94.4	<0.10	0.000	1.563	<0.10	<0.10	14	6.61	1714.37	12.13	5.73	1159.38	2.81	1.33	225.93	0	0.00	0.00	35	16.53	2374.95
133	0.707	7.76	305	92.7	<0.10	0.000	1.563	<0.10	<0.10	14	6.53	1720.90	11.86	5.53	1164.91	2.84	1.32	227.25	0	0.00	0.00	33	15.39	2390.34
134	0.745	7.73	313	99.2	<0.10	0.000	1.563	<0.10	<0.10	15	7.37	1728.27	12.57	6.18	1171.09	2.60	1.28	228.53	0	0.00	0.00	35	17.20	2407.54
135	0.786	7.77	270	101	<0.10	0.000	1.563	<0.10	<0.10	13	6.74	1735.01	13.48	6.99	1178.08	2.80	1.45	229.98	0	0.00	0.00	36	18.66	2426.20

Midas Gold Corp.
MLI Job No. 3654

Table 14 . - Humidity Cell Analytical Results, MGI-11-64 (185.5-208) **(1.5163 Kg)**

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	$SO_4^{=}$ mg/l	$SO_4^{=}$ mg/kg	$SO_4^{=}$ Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
136	0.721	7.81	313	90.0	<0.10	0.000	1.563	<0.10	<0.10	13	6.18	1741.19	11.73	5.58	1183.66	2.66	1.26	231.24	0	0.00	0.00	31	14.74	2440.94
137	0.743	7.99	262	94.2	<0.10	0.000	1.563	<0.10	<0.10	14	6.86	1748.05	10.68	5.23	1188.89	2.32	1.14	232.38	0	0.00	0.00	34	16.66	2457.60
138	0.720	7.78	269	80.3	<0.10	0.000	1.563	<0.10	<0.10	14	6.65	1754.70	11.35	5.39	1194.28	2.26	1.07	233.45	0	0.00	0.00	38	18.04	2475.64
139	0.764	7.91	298	94.8	<0.10	0.000	1.563	<0.10	<0.10	14	7.05	1761.75	11.33	5.71	1199.99	2.52	1.27	234.72	0	0.00	0.00	41	20.66	2496.30
140	0.728	7.85	231	88.3	<0.10	0.000	1.563	<0.10	<0.10	15	7.20	1768.95	10.55	5.07	1205.06	2.56	1.23	235.95	0	0.00	0.00	30	14.40	2510.70
141	0.733	7.90	292	102	<0.10	0.000	1.563	<0.10	<0.10	20	9.67	1778.62	11.32	5.47	1210.53	2.81	1.36	237.31	0	0.00	0.00	27	13.05	2523.75
142	0.769	7.88	238	87.4	<0.10	0.000	1.563	<0.10	<0.10	16	8.11	1786.73	11.06	5.61	1216.14	2.53	1.28	238.59	0	0.00	0.00	25	12.68	2536.43
143	0.710	7.82	275	97.5	<0.10	0.000	1.563	<0.10	<0.10	13.0	6.09	1792.82	12.29	5.75	1221.89	2.99	1.40	239.99	0	0.00	0.00	26	12.17	2548.60
144	0.753	7.76	286	95.8	<0.10	0.000	1.563	<0.10	<0.10	19.0	9.44	1802.26	13.43	6.67	1228.56	2.89	1.44	241.43	0	0.00	0.00	26	12.91	2561.51

Testing terminated

Figure 14a.- Weekly Humidity Cell Analytical Results

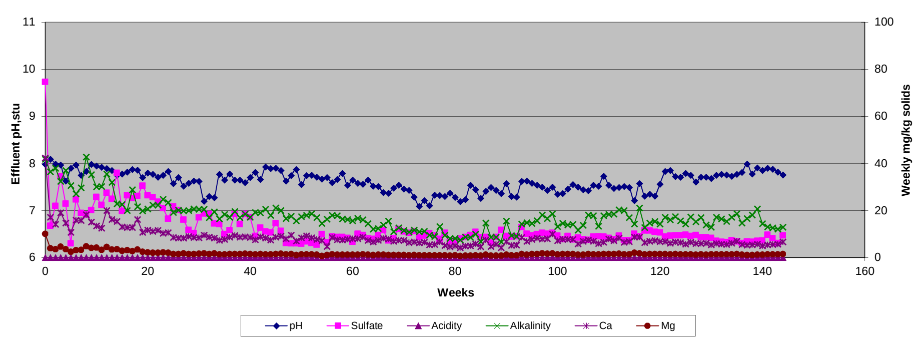
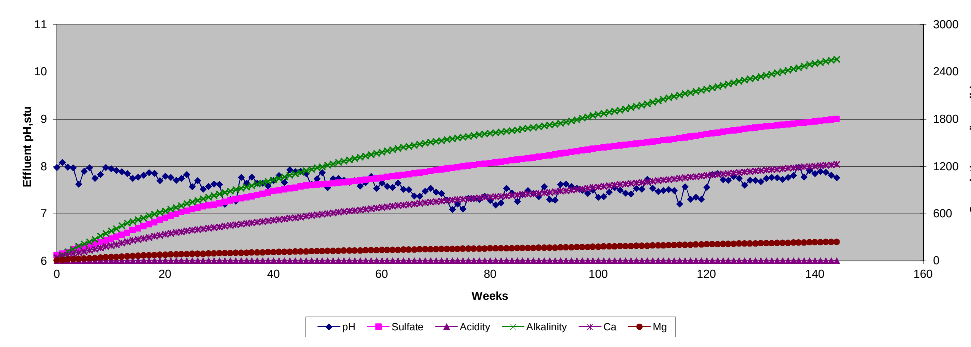


Figure 14b.- Cumulative Humidity Cell Analytical Results



Midas Gold Corp.
MLI Job No. 3654

Table 15 . - Humidity Cell Analytical Results, MGI-13-S09 (0.00-3.05) **(1.5067 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
0	1.140	7.64	253	308	<0.10	0.000	0.000	<0.10	<0.10	10.0	7.57	7.57	43.27	32.74	32.74	6.13	4.64	4.64	0	0.00	0.00	99	74.91	74.91
1	0.758	7.54	247	229	<0.10	0.000	0.000	<0.10	<0.10	20.0	10.06	17.63	21.75	10.94	43.68	3.51	1.77	6.41	0	0.00	0.00	95	47.79	122.70
2	0.749	7.58	323	173	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.97	22.60	21.35	10.61	54.29	3.13	1.56	7.97	0	0.00	0.00	80	39.77	162.47
3	0.722	7.88	317	198	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.48	23.08	22.20	10.64	64.93	3.15	1.51	9.48	0	0.00	0.00	93	44.56	207.03
4	0.729	7.67	327	171	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.48	23.56	17.63	8.53	73.46	1.99	0.96	10.44	0	0.00	0.00	81	39.19	246.22
5	0.724	7.92	288	174	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.48	24.04	20.35	9.78	83.24	3.03	1.46	11.90	0	0.00	0.00	83	39.88	286.10
6	0.771	7.82	336	113	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.51	24.55	14.57	7.46	90.70	2.16	1.11	13.01	0	0.00	0.00	56	28.66	314.76
7	0.775	7.93	321	108	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.51	25.06	17.20	8.85	99.55	2.22	1.14	14.15	0	0.00	0.00	55	28.29	343.05
8	0.773	7.75	319	120	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.51	25.57	18.82	9.66	109.21	2.30	1.18	15.33	0	0.00	0.00	58	29.76	372.81
9	0.689	7.80	303	100	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.46	26.03	14.79	6.76	115.97	1.81	0.83	16.16	0	0.00	0.00	48	21.95	394.76
10	0.751	7.82	298	116	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	26.53	16.86	8.40	124.37	2.07	1.03	17.19	0	0.00	0.00	55	27.41	422.17
11	0.724	7.32	317	110	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.48	27.01	14.50	6.97	131.34	1.60	0.77	17.96	0	0.00	0.00	46	22.10	444.27
12	0.777	7.94	358	121	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.52	27.53	14.92	7.69	139.03	1.71	0.88	18.84	0	0.00	0.00	52	26.82	471.09
13	0.714	7.74	364	120	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.47	28.00	14.27	6.76	145.79	1.78	0.84	19.68	0	0.00	0.00	48	22.75	493.84
14	0.733	8.12	310	116	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.46	29.46	14.25	6.93	152.72	1.73	0.84	20.52	0	0.00	0.00	52	25.30	519.14
15	0.703	7.92	349	100	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.47	29.93	12.00	5.60	158.32	1.45	0.68	21.20	0	0.00	0.00	49	22.86	542.00
16	0.768	7.94	356	100	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.51	30.44	14.42	7.35	165.67	1.65	0.84	22.04	0	0.00	0.00	50	25.49	567.49
17	0.695	7.88	327	96.6	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.46	30.90	15.44	7.12	172.79	1.61	0.74	22.78	0	0.00	0.00	47	21.68	589.17
18	0.735	7.81	323	103	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	31.39	16.85	8.22	181.01	1.75	0.85	23.63	0	0.00	0.00	50	24.39	613.56
19	0.749	7.88	316	89.9	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	31.89	15.23	7.57	188.58	1.53	0.76	24.39	0	0.00	0.00	44	21.87	635.43
20	0.764	7.97	307	89.4	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.51	32.40	13.99	7.09	195.67	1.36	0.69	25.08	0	0.00	0.00	46	23.33	658.76
21	0.730	7.73	299	90.0	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.48	32.88	15.77	7.64	203.31	1.50	0.73	25.81	0	0.00	0.00	46	22.29	681.05
22	0.733	7.83	315	93.7	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	33.37	15.47	7.53	210.84	1.43	0.70	26.51	0	0.00	0.00	47	22.87	703.92
23	0.756	7.84	317	89.0	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	33.87	13.19	6.62	217.46	1.27	0.64	27.15	0	0.00	0.00	45	22.58	726.50
24	0.760	7.80	299	89.1	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	34.37	15.71	7.92	225.38	1.38	0.70	27.85	0	0.00	0.00	46	23.20	749.70
25	0.740	7.86	284	89.1	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	34.37	17.07	8.38	233.76	1.53	0.75	28.60	0	0.00	0.00	45	22.10	771.80
26	0.747	7.84	262	87.3	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	34.37	12.26	6.08	239.84	1.21	0.60	29.20	0	0.00	0.00	45	22.31	794.11
27	0.729	7.72	266	85.1	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	34.37	12.75	6.17	246.01	1.13	0.55	29.75	0	0.00	0.00	42	20.32	814.43
28	0.765	7.79	282	82.4	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	34.37	13.59	6.90	252.91	1.08	0.55	30.30	0	0.00	0.00	43	21.83	836.26
29	0.740	7.93	302	86.4	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	34.37	13.25	6.51	259.42	1.13	0.55	30.85	0	0.00	0.00	44	21.61	857.87
30	0.738	7.73	271	84.9	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	34.37	14.39	7.05	266.47	1.15	0.56	31.41	0	0.00	0.00	45	22.04	879.91
31	0.730	7.84	295	81.9	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	34.37	13.74	6.66	273.13	1.14	0.55	31.96	0	0.00	0.00	43	20.83	900.74
32	0.728	7.70	290	75.9	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	34.37	12.81	6.19	279.32	1.00	0.48	32.44	0	0.00	0.00	40	19.33	920.07
33	0.735	7.70	313	79.7	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	34.37	14.08	6.87	286.19	1.11	0.54	32.98	0	0.00	0.00	41	20.00	940.07
34	0.748	7.80	306	79.1	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	34.87	13.22	6.56	292.75	0.97	0.48	33.46	0	0.00	0.00	40	19.86	959.93
35	0.719	7.68	300	76.3	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	34.87	11.82	5.64	298.39	0.99	0.47	33.93	0	0.00	0.00	37	17.66	977.59
36	0.708	7.66	281	76.5	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	34.87	12.87	6.05	304.44	1.00	0.47	34.40	0	0.00	0.00	37	17.39	994.98
37	0.733	7.43	239	69.8	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	35.36	11.78	5.73	310.17	0.87	0.42	34.82	0	0.00	0.00	35	17.03	1012.01
38	0.775	7.62	324	74.0	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.36	12.91	6.64	316.81	0.94	0.48	35.30	0	0.00	0.00	38	19.55	1031.56
39	0.725	7.51	286	79.6	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.36	13.89	6.68	323.49	1.05	0.51	35.81	0	0.00	0.00	38	18.28	1049.84
40	0.727	7.65	307	80.0	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.48	35.84	13.18	6.36	329.85	0.90	0.43	36.24	0	0.00	0.00	39	18.82	1068.66
41	0.711	7.56	289	75.5	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	13.42	6.33	336.18	0.97	0.46	36.70	0	0.00	0.00	37	17.46	1086.12
42	0.734	7.58	225	73.3	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	12.35	6.02	342.20	0.87	0.42	37.12	0	0.00	0.00	36	17.54	1103.66
43	0.718	7.50	237	71.5	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	12.12	5.78	347.98	0.90	0.43	37.55	0	0.00	0.00	35	16.68	1120.34
44	0.717	7.42	220	67.2	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	11.61	5.52	353.50	0.81	0.39	37.94	0	0.00	0.00	34	16.18	1136.52
45	0.733	7.52	229	69.3	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	12.40	6.03	359.53	0.85	0.41	38.35	0	0.00	0.00	35	17.03	1153.55

Table 15 . - Humidity Cell Analytical Results, MGI-13-S09 (0.00-3.05) (1.5067 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
46	0.732	7.39	209	65.0	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	10.10	4.91	364.44	0.76	0.37	38.72	0	0.00	0.00	32	15.55	1169.10
47	0.725	7.38	251	71.6	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	11.88	5.72	370.16	0.87	0.42	39.14	0	0.00	0.00	35	16.84	1185.94
48	0.742	7.47	237	74.7	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	12.45	6.13	376.29	0.85	0.42	39.56	0	0.00	0.00	36	17.73	1203.67
49	0.736	7.46	232	72.3	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	10.75	5.25	381.54	0.81	0.40	39.96	0	0.00	0.00	35	17.10	1220.77
50	0.736	7.47	228	63.7	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	10.62	5.19	386.73	0.77	0.38	40.34	0	0.00	0.00	32	15.63	1236.40
51	0.688	7.54	228	66.5	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	10.61	4.84	391.57	0.83	0.38	40.72	0	0.00	0.00	32	14.61	1251.01
52	0.701	7.40	225	63.5	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	9.89	4.60	396.17	0.73	0.34	41.06	0	0.00	0.00	30	13.96	1264.97
53	0.695	7.51	259	65.2	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	9.85	4.54	400.71	0.72	0.33	41.39	0	0.00	0.00	32	14.76	1279.73
54	0.744	7.77	296	65.0	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	10.81	5.34	406.05	0.71	0.35	41.74	0	0.00	0.00	33	16.30	1296.03
55	0.725	7.69	344	68.3	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	12.24	5.89	411.94	0.78	0.38	42.12	0	0.00	0.00	34	16.36	1312.39
56	0.734	7.63	340	65.0	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	11.41	5.56	417.50	0.72	0.35	42.47	0	0.00	0.00	33	16.08	1328.47
57	0.747	7.57	338	69.7	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	12.08	5.99	423.49	0.79	0.39	42.86	0	0.00	0.00	36	17.85	1346.32
58	0.716	7.68	337	62.3	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	10.47	4.98	428.47	0.71	0.34	43.20	0	0.00	0.00	33	15.68	1362.00
59	0.732	7.75	362	67.9	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	13.47	6.54	435.01	0.77	0.37	43.57	0	0.00	0.00	34	16.52	1378.52
60	0.821	7.65	362	65.4	<0.10	0.000	0.000	<0.10	<0.10	<1.0	0.00	35.84	11.43	6.23	441.24	0.77	0.42	43.99	0	0.00	0.00	33	17.98	1396.50
61	0.678	7.59	364	63.2	0.27	0.121	0.121	<0.10	<0.27	1.0	0.45	36.29	9.60	4.32	445.56	0.68	0.31	44.30	0	0.00	0.00	32	14.40	1410.90
62	0.706	7.51	293	64.1	<0.10	0.000	0.121	<0.10	<0.10	1.0	0.47	36.76	10.27	4.81	450.37	0.68	0.32	44.62	0	0.00	0.00	31	14.53	1425.43
63	0.723	7.56	353	67.1	<0.10	0.000	0.121	<0.10	<0.10	1.0	0.48	37.24	11.79	5.66	456.03	0.72	0.35	44.97	0	0.00	0.00	33	15.84	1441.27
64	0.723	7.64	347	62.6	<0.10	0.000	0.121	<0.10	<0.10	2.0	0.96	38.20	10.88	5.22	461.25	0.71	0.34	45.31	0	0.00	0.00	31	14.88	1456.15
65	0.750	7.64	344	67.4	<0.10	0.000	0.121	<0.10	<0.10	1.0	0.50	38.70	10.51	5.23	466.48	0.66	0.33	45.64	0	0.00	0.00	32	15.93	1472.08
66	0.828	7.64	363	64.9	0.11	0.060	0.181	<0.10	<0.11	<1.0	0.00	38.70	11.09	6.09	472.57	0.73	0.40	46.04	0	0.00	0.00	31	17.04	1489.12
67	0.703	7.53	368	62.3	<0.10	0.000	0.181	<0.10	<0.10	1.0	0.47	39.17	11.46	5.35	477.92	0.79	0.37	46.41	0	0.00	0.00	32	14.93	1504.05
68	0.710	7.53	324	67.7	<0.10	0.000	0.181	<0.10	<0.10	2.0	0.94	40.11	11.17	5.26	483.18	0.75	0.35	46.76	0	0.00	0.00	33	15.55	1519.60
69	0.760	7.46	324	74.5	<0.10	0.000	0.181	<0.10	<0.10	1.0	0.50	40.61	13.45	6.78	489.96	0.86	0.43	47.19	0	0.00	0.00	36	18.16	1537.76
70	0.698	7.47	364	76.8	<0.10	0.000	0.181	<0.10	<0.10	1.0	0.46	41.07	13.85	6.42	496.38	0.95	0.44	47.63	0	0.00	0.00	36	16.68	1554.44
71	0.676	7.34	352	60.5	<0.10	0.000	0.181	<0.10	<0.10	1.0	0.45	41.52	10.86	4.87	501.25	0.72	0.32	47.95	0	0.00	0.00	30	13.46	1567.90
72	0.711	7.37	333	63.9	<0.10	0.000	0.181	<0.10	<0.10	1.0	0.47	41.99	11.70	5.52	506.77	0.76	0.36	48.31	0	0.00	0.00	31	14.63	1582.53
73	0.706	7.44	356	60.0	<0.10	0.000	0.181	<0.10	<0.10	1.0	0.47	42.46	11.00	5.15	511.92	0.75	0.35	48.66	0	0.00	0.00	30	14.06	1596.59
74	0.712	7.54	349	65.7	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	42.46	12.22	5.77	517.69	0.80	0.38	49.04	0	0.00	0.00	31	14.65	1611.24
75	0.680	7.57	341	56.6	<0.10	0.000	0.181	<0.10	<0.10	2.0	0.90	43.36	8.68	3.92	521.61	0.61	0.28	49.32	0	0.00	0.00	27	12.19	1623.43
76	0.733	7.49	353	62.7	<0.10	0.000	0.181	<0.10	<0.10	2.0	0.97	44.33	10.38	5.05	526.66	0.66	0.32	49.64	0	0.00	0.00	32	15.57	1639.00
77	0.740	7.48	320	71.1	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	12.08	5.93	532.59	0.78	0.38	50.02	0	0.00	0.00	38	18.66	1657.66
78	0.762	7.59	337	71.8	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	11.35	5.74	538.33	0.78	0.39	50.41	0	0.00	0.00	39	19.72	1677.38
79	0.705	7.58	357	61.2	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	9.65	4.52	542.85	0.67	0.31	50.72	0	0.00	0.00	31	14.51	1691.89
80	0.715	7.81	342	63.5	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	11.46	5.44	548.29	0.75	0.36	51.08	0	0.00	0.00	39	18.51	1710.40
81	0.754	7.53	366	74.5	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	13.26	6.64	554.93	0.83	0.42	51.50	0	0.00	0.00	38	19.02	1729.42
82	0.709	7.45	371	62.7	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	10.37	4.88	559.81	0.70	0.33	51.83	0	0.00	0.00	34	16.00	1745.42
83	0.751	7.44	368	71.8	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	11.15	5.56	565.37	0.74	0.37	52.20	0	0.00	0.00	38	18.94	1764.36
84	0.722	7.50	363	68.5	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	10.40	4.98	570.35	0.71	0.34	52.54	0	0.00	0.00	39	18.69	1783.05
85	0.768	7.23	330	58.1	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	10.08	5.14	575.49	0.66	0.34	52.88	0	0.00	0.00	34	17.33	1800.38
86	0.691	7.22	346	88.7	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	15.71	7.20	582.69	1.10	0.50	53.38	0	0.00	0.00	30	13.76	1814.14
87	0.758	7.42	371	56.1	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	9.72	4.89	587.58	0.63	0.32	53.70	0	0.00	0.00	34	17.10	1831.24
88	0.709	7.22	360	52.2	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	8.15	3.84	591.42	0.56	0.26	53.96	0	0.00	0.00	29	13.65	1844.89
89	0.755	7.35	351	51.8	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	9.06	4.54	595.96	0.54	0.27	54.23	0	0.00	0.00	31	15.53	1860.42
90	0.718	7.37	387	52.8	<0.10	0.000	0.181	<0.10	<0.10	<1.0	0.00	44.33	8.82	4.20	600.16	0.59	0.28	54.51	0	0.00	0.00	31	14.77	1875.19

Midas Gold Corp.
MLI Job No. 3654

Table 15 . - Humidity Cell Analytical Results, MGI-13-S09 (0.00-3.05) (1.5067 Kg)

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	$Fe^{2}+$ mg/l	$Fe^{3}+$ mg/l	SO_4= mg/l	SO_4= mg/kg	SO_4= Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
91	0.677	7.55	356	50.1	0.10	0.045	0.226	<0.10	<0.1	<1.0	0.00	44.33	9.34	4.20	604.36	0.62	0.28	54.79	0	0.00	0.00	30	13.48	1888.67
92	0.748	7.77	310	56.7	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	9.40	4.67	609.03	0.62	0.31	55.10	0	0.00	0.00	34	16.88	1905.55
93	0.765	7.88	304	55.3	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	9.09	4.62	613.65	0.58	0.29	55.39	0	0.00	0.00	33	16.76	1922.31
94	0.710	7.65	348	53.8	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	8.70	4.10	617.75	0.59	0.28	55.67	0	0.00	0.00	33	15.55	1937.86
95	0.717	7.75	332	51.5	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	8.56	4.07	621.82	0.56	0.27	55.94	0	0.00	0.00	32	15.23	1953.09
96	0.719	7.67	371	51.7	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	8.49	4.05	625.87	0.53	0.25	56.19	0	0.00	0.00	31	14.79	1967.88
97	0.755	7.76	344	58.0	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	9.68	4.85	630.72	0.59	0.30	56.49	0	0.00	0.00	34	17.04	1984.92
98	0.753	7.60	360	53.2	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	8.65	4.32	635.04	0.56	0.28	56.77	0	0.00	0.00	33	16.49	2001.41
99	0.726	7.64	365	53.3	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	8.41	4.05	639.09	0.59	0.28	57.05	0	0.00	0.00	33	15.90	2017.31
100	0.680	7.76	371	50.0	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	9.30	4.20	643.29	0.56	0.25	57.30	0	0.00	0.00	30	13.54	2030.85
101	0.825	7.81	373	59.2	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	10.17	5.57	648.86	0.66	0.36	57.66	0	0.00	0.00	36	19.71	2050.56
102	0.751	7.78	369	59.4	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	9.93	4.95	653.81	0.64	0.32	57.98	0	0.00	0.00	35	17.45	2068.01
103	0.746	7.84	349	74.3	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	11.94	5.91	659.72	0.74	0.37	58.35	0	0.00	0.00	44	21.79	2089.80
104	0.777	7.86	300	57.8	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	11.67	6.02	665.74	0.79	0.41	58.76	0	0.00	0.00	40	20.63	2110.43
105	0.722	7.88	309	78.6	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	12.78	6.12	671.86	0.77	0.37	59.13	0	0.00	0.00	44	21.08	2131.51
106	0.719	7.72	275	63.5	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	10.88	5.19	677.05	0.67	0.32	59.45	0	0.00	0.00	35	16.70	2148.21
107	0.776	7.83	308	359	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	9.82	5.06	682.11	0.62	0.32	59.77	0	0.00	0.00	33	17.00	2165.21
108	0.707	7.68	265	75.4	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	13.16	6.18	688.29	0.81	0.38	60.15	0	0.00	0.00	42	19.71	2184.92
109	0.740	8.01	267	71.2	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	12.27	6.03	694.32	0.76	0.37	60.52	0	0.00	0.00	52	25.54	2210.46
110	0.729	8.04	292	75.2	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	11.38	5.51	699.83	0.74	0.36	60.88	0	0.00	0.00	61	29.51	2239.97
111	0.741	8.02	228	67.9	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	11.19	5.50	705.33	0.74	0.36	61.24	0	0.00	0.00	38	18.69	2258.66
112	0.666	7.96	278	68.2	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	11.34	5.01	710.34	0.76	0.34	61.58	0	0.00	0.00	31	13.70	2272.36
113	0.731	8.02	240	65.1	<0.10	0.000	0.226	<0.10	<0.10	<1.0	0.00	44.33	10.62	5.15	715.49	0.72	0.35	61.93	0	0.00	0.00	35	16.98	2289.34
114	0.745	7.91	276	61.5	<0.10	0.000	0.226	<0.10	<0.10	<1	0.00	44.33	10.16	5.02	720.51	0.73	0.36	62.29	0	0.00	0.00	32	15.82	2305.16
115	0.714	7.88	274	66.5	<0.10	0.000	0.226	<0.10	<0.10	<1	0.00	44.33	11.36	5.38	725.89	0.78	0.37	62.66	0	0.00	0.00	34	16.11	2321.27
116	0.728	7.91	310	68.6	<0.10	0.000	0.226	<0.10	<0.10	0.0	0.00	44.33	13.23	6.39	732.28	0.86	0.42	63.08	0	0.00	0.00	37	17.88	2339.15

Testing terminated

Figure 15a.- Weekly Humidity Cell Analytical Results

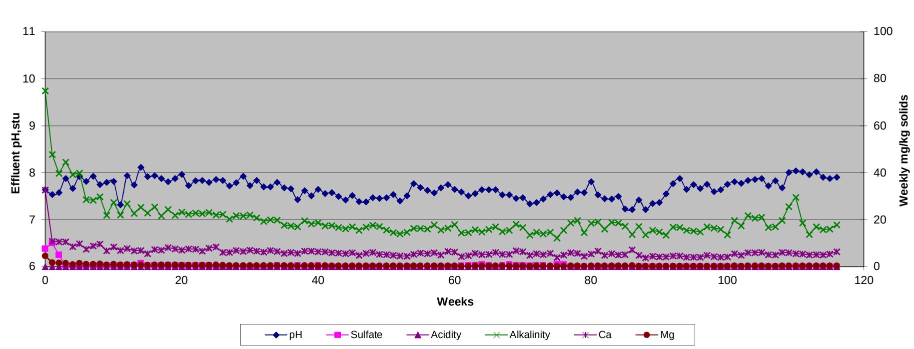


Figure 15b.- Cumulative Humidity Cell Analytical Results

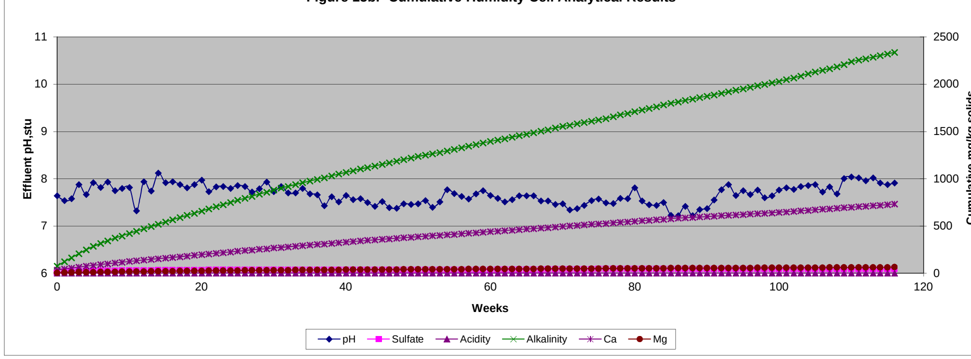


Table 16 . - Humidity Cell Analytical Results, MGI-13-S31 (15.24-18.29) (1.4982 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
0	1.176	7.90	209	1285	1.03	0.808	0.808	<0.10	<1.03	600.0	470.97	470.97	487.14	382.38	382.38	16.92	13.28	13.28	0	0.00	0.00	69	54.16	54.16
1	0.727	7.91	175	934	0.26	0.126	0.934	<0.10	<0.26	440.0	213.51	684.48	176.87	85.83	468.21	4.10	1.99	15.27	0	0.00	0.00	83	40.28	94.44
2	0.738	7.95	287	352	0.12	0.059	0.993	<0.10	<0.12	10.0	4.93	689.41	61.94	30.51	498.72	1.50	0.74	16.01	0	0.00	0.00	86	42.36	136.80
3	0.745	8.04	260	295	0.13	0.065	1.058	<0.10	<0.13	43.0	21.38	710.79	41.56	20.67	519.39	1.06	0.53	16.54	0	0.00	0.00	86	42.76	179.56
4	0.692	7.84	256	220	0.13	0.060	1.118	<0.10	<0.13	10.0	4.62	715.41	35.56	16.42	535.81	1.10	0.51	17.05	0	0.00	0.00	73	33.72	213.28
5	0.727	8.03	245	227	0.12	0.058	1.176	<0.10	<0.12	40.0	19.41	734.82	36.35	17.64	553.45	1.07	0.52	17.57	0	0.00	0.00	74	35.91	249.19
6	0.740	7.96	276	201	0.15	0.074	1.250	<0.10	<0.15	10.0	4.94	739.76	33.04	16.32	569.77	0.94	0.46	18.03	0	0.00	0.00	66	32.60	281.79
7	0.734	7.61	170	190	0.13	0.064	1.314	<0.10	<0.13	10.0	4.90	744.66	33.40	16.36	586.13	0.88	0.43	18.46	0	0.00	0.00	60	29.40	311.19
8	0.739	7.87	218	187	0.12	0.059	1.373	<0.10	<0.12	10.0	4.93	749.59	34.84	17.19	603.32	0.92	0.45	18.91	0	0.00	0.00	62	30.58	341.77
9	0.748	7.92	171	228	0.13	0.065	1.438	<0.10	<0.13	10.0	4.99	754.58	38.34	19.14	622.46	1.04	0.52	19.43	0	0.00	0.00	68	33.95	375.72
10	0.710	7.84	177	210	0.11	0.052	1.490	<0.10	<0.11	30.0	14.22	768.80	33.40	15.83	638.29	0.97	0.46	19.89	0	0.00	0.00	63	29.86	405.58
11	0.723	7.58	205	223	<0.10	0.000	1.490	<0.10	<0.10	10.0	4.83	773.63	31.93	15.41	653.70	0.82	0.40	20.29	0	0.00	0.00	61	29.44	435.02
12	0.729	7.37	400	234	<0.10	0.000	1.490	<0.10	<0.10	10.0	4.87	778.50	29.21	14.21	667.91	0.79	0.38	20.67	0	0.00	0.00	58	28.22	463.24
13	0.686	7.73	371	205	<0.10	0.000	1.490	<0.10	<0.10	20.0	9.16	787.66	28.00	12.82	680.73	0.77	0.35	21.02	0	0.00	0.00	57	26.10	489.34
14	0.710	8.37	201	206	<0.10	0.000	1.490	<0.10	<0.10	10.0	4.74	792.40	28.12	13.33	694.06	0.75	0.36	21.38	0	0.00	0.00	71	33.65	522.99
15	0.709	8.08	270	190	<0.10	0.000	1.490	<0.10	<0.10	10.0	4.73	797.13	26.82	12.69	706.75	0.80	0.38	21.76	0	0.00	0.00	66	31.23	554.22
16	0.762	8.24	322	213	<0.10	0.000	1.490	<0.10	<0.10	13.0	6.61	803.74	25.76	13.10	719.85	0.67	0.34	22.10	0	0.00	0.00	56	28.48	582.70
17	0.655	8.15	190	266	<0.10	0.000	1.490	<0.10	<0.10	29.0	12.68	816.42	43.62	19.07	738.92	1.34	0.59	22.69	0	0.00	0.00	91	39.78	622.48
18	0.805	8.02	214	170	<0.10	0.000	1.490	<0.10	<0.10	7.0	3.76	820.18	28.57	15.35	754.27	0.80	0.43	23.12	0	0.00	0.00	63	33.85	656.33
19	0.707	8.23	211	186	<0.10	0.000	1.490	<0.10	<0.10	9.0	4.25	824.43	35.36	16.69	770.96	1.01	0.48	23.60	0	0.00	0.00	74	34.92	691.25
20	0.726	8.16	212	168	<0.10	0.000	1.490	<0.10	<0.10	7.0	3.39	827.82	29.95	14.51	785.47	0.83	0.40	24.00	0	0.00	0.00	71	34.41	725.66
21	0.754	7.89	224	163	<0.10	0.000	1.490	<0.10	<0.10	8.0	4.03	831.85	31.99	16.10	801.57	0.87	0.44	24.44	0	0.00	0.00	66	33.22	758.88
22	0.715	7.96	217	166	<0.10	0.000	1.490	<0.10	<0.10	8.0	3.82	835.67	31.10	14.84	816.41	0.90	0.43	24.87	0	0.00	0.00	67	31.98	790.86
23	0.742	8.10	224	157	<0.10	0.000	1.490	<0.10	<0.10	6.0	2.97	838.64	26.70	13.22	829.63	0.81	0.40	25.27	0	0.00	0.00	66	32.69	823.55
24	0.778	8.04	202	153	<0.10	0.000	1.490	<0.10	<0.10	5.0	2.60	841.24	30.07	15.62	845.25	0.85	0.44	25.71	0	0.00	0.00	66	34.27	857.82
25	0.713	8.06	201	151	<0.10	0.000	1.490	<0.10	<0.10	8.0	3.81	845.05	17.45	8.30	853.55	2.08	0.99	26.70	0	0.00	0.00	64	30.46	888.28
26	0.746	7.94	202	147	<0.10	0.000	1.490	<0.10	<0.10	5.0	2.49	847.54	22.50	11.20	864.75	0.61	0.30	27.00	0	0.00	0.00	63	31.37	919.65
27	0.745	7.94	198	149	<0.10	0.000	1.490	<0.10	<0.10	4.0	1.99	849.53	25.24	12.55	877.30	0.82	0.41	27.41	0	0.00	0.00	62	30.83	950.48
28	0.713	8.00	212	140	<0.10	0.000	1.490	<0.10	<0.10	3.0	1.43	850.96	24.80	11.80	889.10	0.72	0.34	27.75	0	0.00	0.00	63	29.98	980.46
29	0.743	8.16	223	146	<0.10	0.000	1.490	<0.10	<0.10	3.0	1.49	852.45	25.84	12.81	901.91	0.77	0.38	28.13	0	0.00	0.00	65	32.24	1012.70
30	0.745	7.94	230	136	<0.10	0.000	1.490	<0.10	<0.10	3.0	1.49	853.94	25.76	12.81	914.72	0.75	0.37	28.50	0	0.00	0.00	63	31.33	1044.03
31	0.735	7.99	244	129	<0.10	0.000	1.490	<0.10	<0.10	2.0	0.98	854.92	24.88	12.21	926.93	0.72	0.35	28.85	0	0.00	0.00	59	28.94	1072.97
32	0.737	7.83	236	121	<0.10	0.000	1.490	<0.10	<0.10	2.0	0.98	855.90	23.08	11.35	938.28	0.64	0.31	29.16	0	0.00	0.00	54	26.56	1099.53
33	0.737	7.89	260	122	<0.10	0.000	1.490	<0.10	<0.10	3.0	1.48	857.38	23.13	11.38	949.66	0.72	0.35	29.51	0	0.00	0.00	53	26.07	1125.60
34	0.733	7.99	257	121	<0.10	0.000	1.490	<0.10	<0.10	2.0	0.98	858.36	21.41	10.47	960.13	0.66	0.32	29.83	0	0.00	0.00	54	26.42	1152.02
35	0.727	7.88	251	115	<0.10	0.000	1.490	<0.10	<0.10	1.0	0.49	858.85	20.76	10.07	970.20	0.62	0.30	30.13	0	0.00	0.00	49	23.78	1175.80
36	0.739	7.82	238	116	<0.10	0.000	1.490	<0.10	<0.10	2.0	0.99	859.84	22.96	11.33	981.53	0.66	0.33	30.46	0	0.00	0.00	48	23.68	1199.48
37	0.727	7.56	234	109	<0.10	0.000	1.490	<0.10	<0.10	3.0	1.46	861.30	19.83	9.62	991.15	0.59	0.29	30.75	0	0.00	0.00	45	21.84	1221.32
38	0.744	7.85	285	114	<0.10	0.000	1.490	<0.10	<0.10	1.0	0.50	861.80	22.15	11.00	1002.15	0.61	0.30	31.05	0	0.00	0.00	51	25.33	1246.65
39	0.738	7.73	256	113	<0.10	0.000	1.490	<0.10	<0.10	1.0	0.49	862.29	21.87	10.77	1012.92	0.68	0.33	31.38	0	0.00	0.00	49	24.14	1270.79
40	0.736	7.70	239	114	<0.10	0.000	1.490	<0.10	<0.10	2.0	0.98	863.27	21.19	10.41	1023.33	0.59	0.29	31.67	0	0.00	0.00	46	22.60	1293.39
41	0.730	7.58	249	112	<0.10	0.000	1.490	<0.10	<0.10	1.0	0.49	863.76	22.13	10.78	1034.11	0.65	0.32	31.99	0	0.00	0.00	43	20.95	1314.34
42	0.733	7.58	231	110	<0.10	0.000	1.490	<0.10	<0.10	<1.0	0.00	863.76	19.13	9.36	1043.47	0.59	0.29	32.28	0	0.00	0.00	42	20.55	1334.89
43	0.733	7.67	223	107	<0.10	0.000	1.490	<0.10	<0.10	1.0	0.49	864.25	19.25	9.42	1052.89	0.59	0.29	32.57	0	0.00	0.00	46	22.51	1357.40
44	0.718	7.64	207	113	<0.10	0.000	1.490	<0.10	<0.10	1.0	0.48	864.73	21.81	10.45	1063.34	0.69	0.33	32.90	0	0.00	0.00	49	23.48	1380.88
45	0.729	7.76	214	117	<0.10	0.000	1.490	<0.10	<0.10	2.0	0.97	865.70	21.89	10.65	1073.99	0.72	0.35	33.25	0	0.00	0.00	51	24.82	1405.70

Table 16 . - Humidity Cell Analytical Results, MGI-13-S31 (15.24-18.29) (1.4982 Kg)

Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	Total Fe mg/l	Total Fe mg/kg	Total Fe Cum. mg/kg	Fe^{2+} mg/l	Fe^{3+} mg/l	$SO_4^{=}$ mg/l	$SO_4^{=}$ mg/kg	$SO_4^{=}$ Cum. mg/kg	Ca mg/l	Ca mg/kg	Ca Cum. mg/kg	Mg mg/l	Mg mg/kg	Mg Cum. mg/kg	Acidity, $CaCO_3$ Equivalents mg/l	Acidity mg/kg	Acidity Cum. mg/kg	Alkalinity, $CaCO_3$ Equivalents mg/l	Alkalinity mg/kg	Alkalinity Cum. mg/kg
46	0.730	7.56	205	107	<0.10	0.000	1.490	<0.10	<0.10	1.0	0.49	866.19	18.21	8.87	1082.86	0.62	0.30	33.55	0	0.00	0.00	46	22.41	1428.11
47	0.701	7.50	187	107	<0.10	0.000	1.490	<0.10	<0.10	1.0	0.47	866.66	19.92	9.32	1092.18	0.62	0.29	33.84	0	0.00	0.00	46	21.52	1449.63
48	0.673	7.55	210	111	<0.10	0.000	1.490	<0.10	<0.10	<1.0	0.00	866.66	18.90	8.49	1100.67	0.67	0.30	34.14	0	0.00	0.00	46	20.66	1470.29
49	0.678	7.73	197	113	<0.10	0.000	1.490	<0.10	<0.10	<1.0	0.00	866.66	17.77	8.04	1108.71	0.68	0.31	34.45	0	0.00	0.00	48	21.72	1492.01
50	0.658	7.70	195	106	<0.10	0.000	1.490	<0.10	<0.10	<1.0	0.00	866.66	18.51	8.13	1116.84	0.70	0.31	34.76	0	0.00	0.00	45	19.76	1511.77
51	0.681	7.68	209	103	<0.10	0.000	1.490	<0.10	<0.10	<1.0	0.00	866.66	17.65	8.02	1124.86	0.64	0.29	35.05	0	0.00	0.00	44	20.00	1531.77
52	0.710	7.49	205	110	<0.10	0.000	1.490	<0.10	<0.10	1.0	0.47	867.13	18.47	8.75	1133.61	0.70	0.33	35.38	0	0.00	0.00	45	21.33	1553.10
53	0.724	7.57	230	107	<0.10	0.000	1.490	<0.10	<0.10	<1.0	0.00	867.13	17.98	8.69	1142.30	0.65	0.31	35.69	0	0.00	0.00	45	21.75	1574.85
54	0.734	7.85	271	109	<0.10	0.000	1.490	<0.10	<0.10	1.0	0.49	867.62	18.27	8.95	1151.25	0.65	0.32	36.01	0	0.00	0.00	48	23.52	1598.37
55	0.722	7.85	306	111	<0.10	0.000	1.490	<0.10	<0.10	1.0	0.48	868.10	19.97	9.62	1160.87	0.68	0.33	36.34	0	0.00	0.00	48	23.13	1621.50
56	0.751	7.77	305	102	<0.10	0.000	1.490	<0.10	<0.10	2.0	1.00	869.10	18.33	9.19	1170.06	0.67	0.34	36.68	0	0.00	0.00	46	23.06	1644.56
57	0.725	7.68	317	106	<0.10	0.000	1.490	<0.10	<0.10	<1.0	0.00	869.10	19.01	9.20	1179.26	0.68	0.33	37.01	0	0.00	0.00	49	23.71	1668.27
58	0.718	7.83	319	97.5	<0.10	0.000	1.490	<0.10	<0.10	<1.0	0.00	869.10	16.62	7.96	1187.22	0.65	0.31	37.32	0	0.00	0.00	45	21.57	1689.84
59	0.715	7.87	338	98.0	<0.10	0.000	1.490	<0.10	<0.10	2.0	0.95	870.05	20.44	9.75	1196.97	0.66	0.31	37.63	0	0.00	0.00	44	21.00	1710.84
60	0.708	7.76	353	99.1	<0.10	0.000	1.490	<0.10	<0.10	1.0	0.47	870.52	17.17	8.11	1205.08	0.71	0.34	37.97	0	0.00	0.00	42	19.85	1730.69
61	0.738	7.65	360	98.4	<0.10	0.000	1.490	<0.10	<0.10	2.0	0.99	871.51	15.40	7.59	1212.67	0.65	0.32	38.29	0	0.00	0.00	43	21.18	1751.87
62	0.727	7.67	274	96.0	<0.10	0.000	1.490	<0.10	<0.10	2.0	0.97	872.48	16.02	7.77	1220.44	0.61	0.30	38.59	0	0.00	0.00	41	19.90	1771.77
63	0.714	7.70	336	92.9	<0.10	0.000	1.490	<0.10	<0.10	2.0	0.95	873.43	16.65	7.93	1228.37	0.62	0.30	38.89	0	0.00	0.00	41	19.54	1791.31
64	0.723	7.76	339	88.9	<0.10	0.000	1.490	<0.10	<0.10	3.0	1.45	874.88	16.25	7.84	1236.21	0.63	0.30	39.19	0	0.00	0.00	37	17.86	1809.17
65	0.693	7.75	324	91.6	<0.10	0.000	1.490	<0.10	<0.10	2.0	0.93	875.81	14.93	6.91	1243.12	0.59	0.27	39.46	0	0.00	0.00	38	17.58	1826.75
66	0.711	7.74	343	90.4	0.25	0.119	1.609	<0.10	<0.25	<1.0	0.00	875.81	15.97	7.58	1250.70	0.67	0.32	39.78	0	0.00	0.00	38	18.03	1844.78
67	0.705	7.65	352	91.5	<0.10	0.000	1.609	<0.10	<0.10	1.0	0.47	876.28	17.31	8.15	1258.85	0.69	0.32	40.10	0	0.00	0.00	40	18.82	1863.60
68	0.727	7.59	316	101	<0.10	0.000	1.609	<0.10	<0.10	2.0	0.97	877.25	16.48	8.00	1266.85	0.75	0.36	40.46	0	0.00	0.00	43	20.87	1884.47
69	0.731	7.58	301	110	<0.10	0.000	1.609	<0.10	<0.10	1.0	0.49	877.74	21.23	10.36	1277.21	0.88	0.43	40.89	0	0.00	0.00	46	22.44	1906.91
70	0.695	7.56	352	100	<0.10	0.000	1.609	<0.10	<0.10	1.0	0.46	878.20	19.03	8.83	1286.04	0.84	0.39	41.28	0	0.00	0.00	42	19.48	1926.39
71	0.697	7.48	327	92.9	<0.10	0.000	1.609	<0.10	<0.10	2.0	0.93	879.13	17.40	8.09	1294.13	0.76	0.35	41.63	0	0.00	0.00	39	18.14	1944.53
72	0.692	7.50	320	94.3	<0.10	0.000	1.609	<0.10	<0.10	1.0	0.46	879.59	18.37	8.48	1302.61	0.82	0.38	42.01	0	0.00	0.00	39	18.01	1962.54
73	0.702	7.58	334	92.2	<0.10	0.000	1.609	<0.10	<0.10	1.0	0.47	880.06	17.46	8.18	1310.79	0.82	0.38	42.39	0	0.00	0.00	39	18.27	1980.81
74	0.711	7.72	328	100	<0.10	0.000	1.609	<0.10	<0.10	<1.0	0.00	880.06	18.21	8.64	1319.43	0.84	0.40	42.79	0	0.00	0.00	42	19.93	2000.74
75	0.706	7.72	329	95.9	<0.10	0.000	1.609	<0.10	<0.10	1.0	0.47	880.53	15.09	7.11	1326.54	0.72	0.34	43.13	0	0.00	0.00	39	18.38	2019.12
76	0.832	7.70	348	111	<0.10	0.000	1.609	<0.10	<0.10	1.0	0.56	881.09	19.45	10.80	1337.34	0.87	0.48	43.61	0	0.00	0.00	50	27.77	2046.89
77	0.738	7.60	313	91.3	<0.10	0.000	1.609	<0.10	<0.10	2.0	0.99	882.08	16.26	8.01	1345.35	0.80	0.39	44.00	0	0.00	0.00	43	21.18	2068.07
78	0.742	7.66	330	106	<0.10	0.000	1.609	<0.10	<0.10	1.8	0.89	882.97	17.20	8.52	1353.87	0.91	0.45	44.45	0	0.00	0.00	52	25.75	2093.82
79	0.723	7.74	339	95.4	<0.10	0.000	1.609	<0.10	<0.10	2.0	0.97	883.94	16.59	8.01	1361.88	0.84	0.41	44.86	0	0.00	0.00	45	21.72	2115.54
80	0.739	7.85	345	95.8	<0.10	0.000	1.609	<0.10	<0.10	2.0	0.99	884.93	17.94	8.85	1370.73	0.88	0.43	45.29	0	0.00	0.00	50	24.66	2140.20
81	0.733	7.59	359	88.3	<0.10	0.000	1.609	<0.10	<0.10	1.9	0.93	885.86	15.56	7.61	1378.34	0.76	0.37	45.66	0	0.00	0.00	40	19.57	2159.77
82	0.752	7.63	356	100	<0.10	0.000	1.609	<0.10	<0.10	2.0	1.00	886.86	17.95	9.01	1387.35	0.89	0.45	46.11	0	0.00	0.00	50	25.10	2184.87
83	0.722	7.61	355	110	<0.10	0.000	1.609	<0.10	<0.10	1.9	0.92	887.78	18.24	8.79	1396.14	0.95	0.46	46.57	0	0.00	0.00	53	25.54	2210.41
84	0.706	7.64	346	96.7	<0.10	0.000	1.609	<0.10	<0.10	1.8	0.85	888.63	15.96	7.52	1403.66	0.92	0.43	47.00	0	0.00	0.00	50	23.56	2233.97
85	0.690	7.43	315	84.9	<0.10	0.000	1.609	<0.10	<0.10	1.7	0.78	889.41	15.13	6.97	1410.63	0.87	0.40	47.40	0	0.00	0.00	45	20.72	2254.69
86	0.650	7.31	347	134	<0.10	0.000	1.609	<0.10	<0.10	1.9	0.82	890.23	24.78	10.75	1421.38	1.52	0.66	48.06	0	0.00	0.00	37	16.05	2270.74
87	0.670	7.55	355	73.6	<0.10	0.000	1.609	<0.10	<0.10	1.7	0.76	890.99	12.93	5.78	1427.16	0.78	0.35	48.41	0	0.00	0.00	40	17.89	2288.63
88	0.688	7.40	344	75.7	<0.10	0.000	1.609	<0.10	<0.10	2.3	1.06	892.05	12.03	5.52	1432.68	0.73	0.34	48.75	0	0.00	0.00	37	16.99	2305.62
89	0.682	7.50	338	70.7	<0.10	0.000	1.609	<0.10	<0.10	2.1	0.96	893.01	12.47	5.68	1438.36	0.70	0.32	49.07	0	0.00	0.00	37	16.84	2322.46
90	0.678	7.49	354	70.4	<0.10	0.000	1.609	<0.10	<0.10	2.5	1.13	894.14	11.39	5.15	1443.51	0.71	0.32	49.39	0	0.00	0.00	36	16.29	2338.75

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Table 16 . - Humidity Cell Analytical Results, MGI-13-S31 (15.24-18.29) (1.4982 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
91	0.629	7.54	341	65.2	<0.10	0.000	1.609	<0.10	<0.10	2.5	1.05	895.19	11.50	4.83	1448.34	0.72	0.30	49.69	0	0.00	0.00	34	14.27	2353.02
92	0.706	7.81	313	76.8	<0.10	0.000	1.609	<0.10	<0.10	2.6	1.23	896.42	13.09	6.17	1454.51	0.77	0.36	50.05	0	0.00	0.00	41	19.32	2372.34
93	0.679	7.86	303	75.9	<0.10	0.000	1.609	<0.10	<0.10	2.7	1.22	897.64	12.39	5.62	1460.13	0.75	0.34	50.39	0	0.00	0.00	40	18.13	2390.47
94	0.672	7.80	342	78.5	<0.10	0.000	1.609	<0.10	<0.10	2.8	1.26	898.90	13.19	5.92	1466.05	0.84	0.38	50.77	0	0.00	0.00	42	18.84	2409.31
95	0.675	7.85	328	74.7	<0.10	0.000	1.609	<0.10	<0.10	2.7	1.22	900.12	12.59	5.67	1471.72	0.76	0.34	51.11	0	0.00	0.00	40	18.02	2427.33
96	0.683	7.88	357	73.6	<0.10	0.000	1.609	<0.10	<0.10	3.1	1.41	901.53	11.35	5.17	1476.89	0.70	0.32	51.43	0	0.00	0.00	37	16.87	2444.20
97	0.697	7.86	337	78.3	<0.10	0.000	1.609	<0.10	<0.10	3.1	1.44	902.97	13.08	6.09	1482.98	0.77	0.36	51.79	0	0.00	0.00	41	19.07	2463.27
98	0.669	7.75	350	73.5	<0.10	0.000	1.609	<0.10	<0.10	2.9	1.29	904.26	12.49	5.58	1488.56	0.74	0.33	52.12	0	0.00	0.00	40	17.86	2481.13
99	0.681	7.88	354	79.7	<0.10	0.000	1.609	<0.10	<0.10	3.1	1.41	905.67	12.04	5.47	1494.03	0.79	0.36	52.48	0	0.00	0.00	43	19.55	2500.68
100	0.642	7.86	351	70.3	<0.10	0.000	1.609	<0.10	<0.10	2.8	1.20	906.87	12.69	5.44	1499.47	0.77	0.33	52.81	0	0.00	0.00	36	15.43	2516.11
101	0.609	7.90	342	76.7	<0.10	0.000	1.609	<0.10	<0.10	2.9	1.18	908.05	12.78	5.19	1504.66	0.85	0.35	53.16	0	0.00	0.00	40	16.26	2532.37
102	0.681	7.78	361	63.1	<0.10	0.000	1.609	<0.10	<0.10	2.1	0.95	909.00	10.67	4.85	1509.51	0.74	0.34	53.50	0	0.00	0.00	34	15.45	2547.82
103	0.660	7.73	331	77.5	<0.10	0.000	1.609	<0.10	<0.10	2.5	1.10	910.10	12.70	5.59	1515.10	0.85	0.37	53.87	0	0.00	0.00	42	18.50	2566.32
104	0.661	7.86	289	78.1	<0.10	0.000	1.609	<0.10	<0.10	2.2	0.97	911.07	13.32	5.88	1520.98	0.89	0.39	54.26	0	0.00	0.00	42	18.53	2584.85
105	0.661	7.91	302	70.5	<0.10	0.000	1.609	<0.10	<0.10	2.4	1.06	912.13	11.17	4.93	1525.91	0.72	0.32	54.58	0	0.00	0.00	34	15.00	2599.85
106	0.722	7.87	261	82.0	<0.10	0.000	1.609	<0.10	<0.10	2.2	1.06	913.19	13.52	6.52	1532.43	0.80	0.39	54.97	0	0.00	0.00	40	19.28	2619.13
107	0.716	7.87	303	75.4	<0.10	0.000	1.609	<0.10	<0.10	1.7	0.81	914.00	12.44	5.95	1538.38	0.79	0.38	55.35	0	0.00	0.00	38	18.16	2637.29
108	0.667	7.83	267	63.0	<0.10	0.000	1.609	<0.10	<0.10	1.9	0.85	914.85	10.80	4.81	1543.19	0.67	0.30	55.65	0	0.00	0.00	30	13.36	2650.65
109	0.728	7.99	256	74.1	<0.10	0.000	1.609	<0.10	<0.10	2.3	1.12	915.97	12.41	6.03	1549.22	0.77	0.37	56.02	0	0.00	0.00	50	24.30	2674.95
110	0.687	7.84	273	74.0	<0.10	0.000	1.609	<0.10	<0.10	3.7	1.70	917.67	10.33	4.74	1553.96	0.71	0.33	56.35	0	0.00	0.00	46	21.09	2696.04
111	0.735	7.94	230	70.1	<0.10	0.000	1.609	<0.10	<0.10	1.6	0.78	918.45	10.69	5.24	1559.20	0.72	0.35	56.70	0	0.00	0.00	32	15.70	2711.74
112	0.746	8.05	281	71.2	<0.10	0.000	1.609	<0.10	<0.10	2.6	1.29	919.74	10.38	5.17	1564.37	0.71	0.35	57.05	0	0.00	0.00	38	18.92	2730.66
113	0.706	7.93	241	63.9	<0.10	0.000	1.609	<0.10	<0.10	2.3	1.08	920.82	9.82	4.63	1569.00	0.73	0.34	57.39	0	0.00	0.00	29	13.67	2744.33
114	0.669	7.96	269	65.9	<0.10	0.000	1.609	<0.10	<0.10	4.2	1.87	922.69	10.14	4.53	1573.53	0.73	0.33	57.72	0	0.00	0.00	30	13.40	2757.73
115	0.685	7.82	288	59.6	<0.10	0.000	1.609	<0.10	<0.10	4.9	2.23	924.92	9.57	4.38	1577.91	0.78	0.36	58.08	0	0.00	0.00	27	12.34	2770.07
116	0.636	7.80	307	57.9	<0.10	0.000	1.609	<0.10	<0.10	0.0	0.00	924.92	9.66	4.10	1582.01	0.73	0.31	58.39	0	0.00	0.00	27	11.46	2781.53

Testing terminated

Figure 16a.- Weekly Humidity Cell Analytical Results

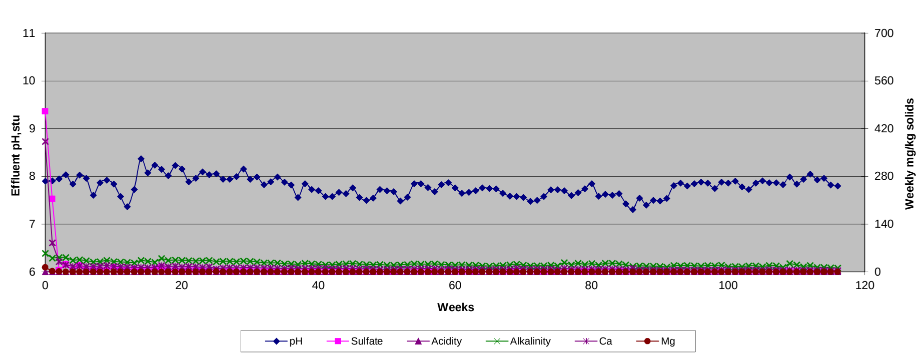
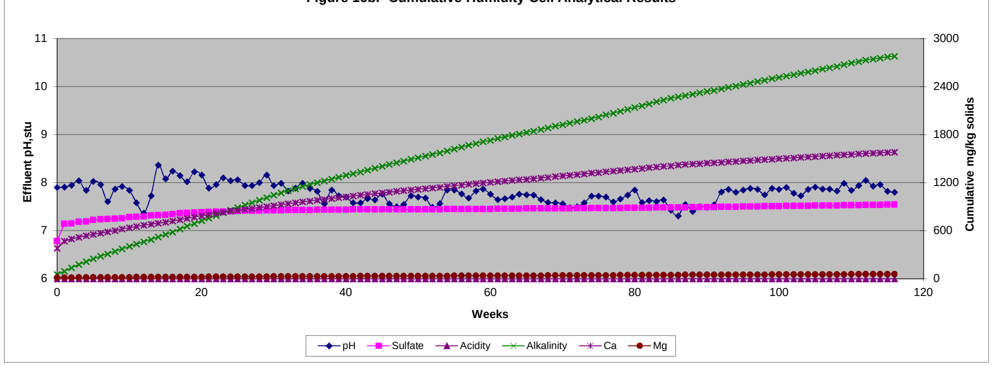


Figure 16b.- Cumulative Humidity Cell Analytical Results



Midas Gold Corp.
MLI Job No. 3654

Table 17 . - Humidity Cell Analytical Results, MGI-13-S41 (1.52-3.05) **(1.5058 Kg)**

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCI)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
0	1.157	7.82	186	236	<0.10	0.000	0.000	<0.10	<0.10	20.0	15.37	15.37	27.84	21.39	21.39	2.77	2.13	2.13	0	0.00	0.00	78	59.93	59.93
1	0.754	7.75	189	243	<0.10	0.000	0.000	<0.10	<0.10	10.0	5.01	20.38	20.66	10.35	31.74	2.71	1.36	3.49	0	0.00	0.00	76	38.06	97.99
2	0.702	7.77	259	194	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.66	25.04	22.99	10.72	42.46	2.66	1.24	4.73	0	0.00	0.00	73	34.03	132.02
3	0.719	7.92	232	183	<0.10	0.000	0.000	<0.10	<0.10	10.0	4.77	29.81	18.37	8.77	51.23	2.05	0.98	5.71	0	0.00	0.00	73	34.86	166.88
4	0.539	7.72	235	171	<0.10	0.000	0.000	<0.10	<0.10	7.0	2.51	32.32	18.14	6.49	57.72	2.15	0.77	6.48	0	0.00	0.00	70	25.06	191.94
5	0.719	8.01	207	173	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.30	36.62	21.17	10.11	67.83	2.62	1.25	7.73	0	0.00	0.00	71	33.90	225.84
6	0.780	7.96	266	120	<0.10	0.000	0.000	<0.10	<0.10	3.0	1.55	38.17	14.32	7.42	75.25	1.70	0.88	8.61	0	0.00	0.00	53	27.45	253.29
7	0.733	7.70	252	131	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.92	41.09	19.00	9.25	84.50	2.15	1.05	9.66	0	0.00	0.00	55	26.77	280.06
8	0.740	7.14	327	132	<0.10	0.000	0.000	<0.10	<0.10	9.0	4.42	45.51	19.01	9.34	93.84	2.17	1.07	10.73	0	0.00	0.00	51	25.06	305.12
9	0.724	7.97	244	129	<0.10	0.000	0.000	<0.10	<0.10	6.0	2.88	48.39	17.28	8.31	102.15	1.96	0.94	11.67	0	0.00	0.00	54	25.96	331.08
10	0.767	7.88	276	127	<0.10	0.000	0.000	<0.10	<0.10	6.0	3.06	51.45	17.16	8.74	110.89	2.02	1.03	12.70	0	0.00	0.00	51	25.98	357.06
11	0.739	7.66	295	126	<0.10	0.000	0.000	<0.10	<0.10	7.0	3.44	54.89	14.41	7.07	117.96	1.61	0.79	13.49	0	0.00	0.00	49	24.05	381.11
12	0.728	7.57	359	128	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.93	56.82	14.61	7.06	125.02	1.63	0.79	14.28	0	0.00	0.00	47	22.72	403.83
13	0.729	7.86	357	139	<0.10	0.000	0.000	<0.10	<0.10	4.0	1.94	58.76	15.57	7.54	132.56	1.87	0.91	15.19	0	0.00	0.00	50	24.21	428.04
14	0.761	7.95	357	104	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.51	59.27	13.74	6.94	139.50	1.60	0.81	16.00	0	0.00	0.00	52	26.28	454.32
15	0.755	8.02	292	119	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.00	60.27	13.69	6.86	146.36	1.67	0.84	16.84	0	0.00	0.00	53	26.57	480.89
16	0.748	7.59	407	119	<0.10	0.000	0.000	<0.10	<0.10	2.0	0.99	61.26	16.46	8.18	154.54	1.89	0.94	17.78	0	0.00	0.00	52	25.83	506.72
17	0.718	7.53	355	117	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.48	61.74	16.70	7.96	162.50	2.00	0.95	18.73	0	0.00	0.00	50	23.84	530.56
18	0.724	7.89	294	123	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.48	62.22	17.41	8.37	170.87	2.08	1.00	19.73	0	0.00	0.00	55	26.44	557.00
19	0.758	7.62	340	110	<0.10	0.000	0.000	<0.10	<0.10	2.0	1.01	63.23	17.56	8.84	179.71	2.03	1.02	20.75	0	0.00	0.00	48	24.16	581.16
20	0.734	8.03	279	110	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	63.72	16.61	8.10	187.81	1.92	0.94	21.69	0	0.00	0.00	53	25.83	606.99
21	0.756	7.84	225	104	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	64.22	16.35	8.21	196.02	1.90	0.95	22.64	0	0.00	0.00	50	25.10	632.09
22	0.755	7.56	347	102	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.50	64.72	16.34	8.19	204.21	1.76	0.88	23.52	0	0.00	0.00	46	23.06	655.15
23	0.732	7.96	279	113	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.49	65.21	15.60	7.58	211.79	1.95	0.95	24.47	0	0.00	0.00	53	25.76	680.91
24	0.771	7.73	333	110	<0.10	0.000	0.000	<0.10	<0.10	1.0	0.51	65.72	18.75	9.60	221.39	2.02	1.03	25.50	0	0.00	0.00	52	26.63	707.54
25	0.708	7.95	220	110	1.07	0.503	0.503	<0.10	<1.07	<1.0	0.00	65.72	15.44	7.26	228.65	5.55	2.61	28.11	0	0.00	0.00	53	24.92	732.46
26	0.761	7.92	191	101	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	65.72	10.37	5.24	233.89	4.92	2.49	30.60	0	0.00	0.00	49	24.76	757.22
27	0.746	7.82	205	109	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	65.72	15.49	7.67	241.56	1.96	0.97	31.57	0	0.00	0.00	51	25.27	782.49
28	0.737	7.93	210	106	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	65.72	15.08	7.38	248.94	1.78	0.87	32.44	0	0.00	0.00	53	25.94	808.43
29	0.733	8.07	220	108	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	65.72	15.54	7.56	256.50	1.95	0.95	33.39	0	0.00	0.00	53	25.80	834.23
30	0.759	7.85	235	104	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	65.72	16.62	8.38	264.88	2.01	1.01	34.40	0	0.00	0.00	52	26.21	860.44
31	0.720	7.93	219	107	<0.10	0.000	0.503	<0.10	<0.10	1.0	0.48	66.20	16.27	7.78	272.66	2.08	0.99	35.39	0	0.00	0.00	53	25.34	885.78
32	0.747	7.79	225	101	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.20	15.26	7.57	280.23	1.76	0.87	36.26	0	0.00	0.00	49	24.31	910.09
33	0.750	7.85	250	103	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.20	16.35	8.14	288.37	2.07	1.03	37.29	0	0.00	0.00	51	25.40	935.49
34	0.717	7.94	234	107	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.20	15.73	7.49	295.86	2.03	0.97	38.26	0	0.00	0.00	52	24.76	960.25
35	0.699	7.84	238	100	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.20	15.17	7.04	302.90	1.95	0.91	39.17	0	0.00	0.00	47	21.82	982.07
36	0.730	7.78	231	102	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.20	15.87	7.69	310.59	2.04	0.99	40.16	0	0.00	0.00	47	22.79	1004.86
37	0.721	7.69	223	100	<0.10	0.000	0.503	<0.10	<0.10	1.0	0.48	66.68	15.43	7.39	317.98	1.89	0.90	41.06	0	0.00	0.00	48	22.98	1027.84
38	0.734	7.80	296	96.0	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	15.75	7.68	325.66	1.77	0.86	41.92	0	0.00	0.00	47	22.91	1050.75
39	0.726	7.76	239	97.1	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	15.75	7.59	333.25	1.90	0.92	42.84	0	0.00	0.00	46	22.18	1072.93
40	0.690	7.67	220	100	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	15.55	7.13	340.38	1.83	0.84	43.68	0	0.00	0.00	46	21.08	1094.01
41	0.684	7.55	224	93.0	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	14.86	6.75	347.13	1.84	0.84	44.52	0	0.00	0.00	41	18.62	1112.63
42	0.690	7.39	181	97.2	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	14.43	6.61	353.74	1.87	0.86	45.38	0	0.00	0.00	42	19.25	1131.88
43	0.701	7.59	207	92.6	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	13.97	6.50	360.24	1.79	0.83	46.21	0	0.00	0.00	43	20.02	1151.90
44	0.696	7.59	196	87.1	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	13.91	6.43	366.67	1.77	0.82	47.03	0	0.00	0.00	41	18.95	1170.85
45	0.697	7.72	202	88.5	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	14.07	6.51	373.18	1.73	0.80	47.83	0	0.00	0.00	43	19.90	1190.75

Table 17 . - Humidity Cell Analytical Results, MGI-13-S41 (1.52-3.05) (1.5058 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
46	0.677	7.54	204	86.2	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	11.86	5.33	378.51	1.64	0.74	48.57	0	0.00	0.00	40	17.98	1208.73
47	0.708	7.61	199	93.2	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	15.13	7.11	385.62	1.80	0.85	49.42	0	0.00	0.00	44	20.69	1229.42
48	0.728	7.60	192	91.0	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	13.97	6.75	392.37	1.73	0.84	50.26	0	0.00	0.00	42	20.31	1249.73
49	0.680	7.69	181	83.8	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	11.53	5.21	397.58	1.52	0.69	50.95	0	0.00	0.00	39	17.61	1267.34
50	0.676	7.63	181	87.5	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	12.31	5.53	403.11	1.64	0.74	51.69	0	0.00	0.00	40	17.96	1285.30
51	0.684	7.66	200	89.5	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	13.21	6.00	409.11	1.89	0.86	52.55	0	0.00	0.00	41	18.62	1303.92
52	0.681	7.52	194	86.8	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	12.30	5.56	414.67	1.71	0.77	53.32	0	0.00	0.00	40	18.09	1322.01
53	0.619	7.61	215	83.9	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	11.66	4.79	419.46	1.54	0.63	53.95	0	0.00	0.00	40	16.44	1338.45
54	0.682	7.83	283	90.2	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	13.39	6.06	425.52	1.72	0.78	54.73	0	0.00	0.00	43	19.48	1357.93
55	0.698	7.80	325	89.3	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	14.50	6.72	432.24	1.67	0.77	55.50	0	0.00	0.00	42	19.47	1377.40
56	0.726	7.79	316	87.7	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	13.40	6.46	438.70	1.77	0.85	56.35	0	0.00	0.00	43	20.73	1398.13
57	0.698	7.69	328	85.0	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	13.01	6.03	444.73	1.68	0.78	57.13	0	0.00	0.00	43	19.93	1418.06
58	0.708	7.84	324	82.7	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	12.08	5.68	450.41	1.70	0.80	57.93	0	0.00	0.00	42	19.75	1437.81
59	0.717	7.86	349	81.6	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	13.67	6.51	456.92	1.60	0.76	58.69	0	0.00	0.00	40	19.05	1456.86
60	0.665	7.77	350	83.0	<0.10	0.000	0.503	<0.10	<0.10	<1.0	0.00	66.68	12.51	5.52	462.44	1.78	0.79	59.48	0	0.00	0.00	39	17.22	1474.08
61	0.781	7.63	358	87.8	1.45	0.752	1.255	<0.10	<1.45	6.0	3.11	69.79	12.02	6.23	468.67	1.67	0.87	60.35	0	0.00	0.00	41	21.27	1495.35
62	0.724	7.62	284	86.1	1.68	0.808	2.063	<0.10	<1.68	6.0	2.88	72.67	12.97	6.24	474.91	1.59	0.76	61.11	0	0.00	0.00	40	19.23	1514.58
63	0.705	7.71	339	88.2	<0.10	0.000	2.063	<0.10	<0.10	1.0	0.47	73.14	13.61	6.37	481.28	1.70	0.80	61.91	0	0.00	0.00	42	19.66	1534.24
64	0.714	7.66	371	84.5	<0.10	0.000	2.063	<0.10	<0.10	1.0	0.47	73.61	12.62	5.98	487.26	1.67	0.79	62.70	0	0.00	0.00	35	16.60	1550.84
65	0.728	7.77	332	87.4	<0.10	0.000	2.063	<0.10	<0.10	1.0	0.48	74.09	12.85	6.21	493.47	1.60	0.77	63.47	0	0.00	0.00	40	19.34	1570.18
66	0.699	7.73	349	89.1	0.10	0.046	2.109	<0.10	<0.1	<1.0	0.00	74.09	13.47	6.25	499.72	1.89	0.88	64.35	0	0.00	0.00	40	18.57	1588.75
67	0.715	7.67	355	87.9	<0.10	0.000	2.109	<0.10	<0.10	1.0	0.47	74.56	15.21	7.22	506.94	1.86	0.88	65.23	0	0.00	0.00	41	19.47	1608.22
68	0.723	7.58	312	95.4	<0.10	0.000	2.109	<0.10	<0.10	1.0	0.48	75.04	13.62	6.54	513.48	1.96	0.94	66.17	0	0.00	0.00	44	21.13	1629.35
69	0.750	7.57	301	102	<0.10	0.000	2.109	<0.10	<0.10	1.0	0.50	75.54	16.91	8.42	521.90	2.16	1.08	67.25	0	0.00	0.00	46	22.91	1652.26
70	0.699	7.62	351	101	<0.10	0.000	2.109	<0.10	<0.10	1.0	0.46	76.00	15.99	7.42	529.32	2.18	1.01	68.26	0	0.00	0.00	45	20.89	1673.15
71	0.662	7.55	332	98.2	<0.10	0.000	2.109	<0.10	<0.10	1.0	0.44	76.44	15.47	6.80	536.12	2.11	0.93	69.19	0	0.00	0.00	44	19.34	1692.49
72	0.724	7.56	315	103	<0.10	0.000	2.109	<0.10	<0.10	1.0	0.48	76.92	16.53	7.95	544.07	2.39	1.15	70.34	0	0.00	0.00	45	21.64	1714.13
73	0.706	7.64	338	94.5	<0.10	0.000	2.109	<0.10	<0.10	2.0	0.94	77.86	15.29	7.17	551.24	2.17	1.02	71.36	0	0.00	0.00	43	20.16	1734.29
74	0.688	7.74	328	98.0	<0.10	0.000	2.109	<0.10	<0.10	1.0	0.46	78.32	15.51	7.09	558.33	2.12	0.97	72.33	0	0.00	0.00	44	20.10	1754.39
75	0.657	7.75	323	92.8	<0.10	0.000	2.109	<0.10	<0.10	1.0	0.44	78.76	13.01	5.68	564.01	1.86	0.81	73.14	0	0.00	0.00	42	18.33	1772.72
76	0.823	7.87	341	85.5	<0.10	0.000	2.109	<0.10	<0.10	1.0	0.55	79.31	12.39	6.77	570.78	1.76	0.96	74.10	0	0.00	0.00	46	25.14	1797.86
77	0.777	7.64	303	97.1	<0.10	0.000	2.109	<0.10	<0.10	1.8	0.93	80.24	14.78	7.63	578.41	2.11	1.09	75.19	0	0.00	0.00	48	24.77	1822.63
78	0.727	7.68	326	113	<0.10	0.000	2.109	<0.10	<0.10	2.2	1.06	81.30	16.08	7.76	586.17	2.16	1.04	76.23	0	0.00	0.00	57	27.52	1850.15
79	0.735	7.79	340	105	<0.10	0.000	2.109	<0.10	<0.10	2.7	1.32	82.62	15.01	7.33	593.50	2.09	1.02	77.25	0	0.00	0.00	50	24.41	1874.56
80	0.751	7.91	343	110	<0.10	0.000	2.109	<0.10	<0.10	3.1	1.55	84.17	16.46	8.21	601.71	2.26	1.13	78.38	0	0.00	0.00	58	28.93	1903.49
81	0.708	7.72	351	126	<0.10	0.000	2.109	<0.10	<0.10	3.3	1.55	85.72	20.13	9.46	611.17	2.51	1.18	79.56	0	0.00	0.00	60	28.21	1931.70
82	0.766	7.67	353	119	<0.10	0.000	2.109	<0.10	<0.10	3.6	1.83	87.55	18.43	9.38	620.55	2.48	1.26	80.82	0	0.00	0.00	59	30.01	1961.71
83	0.664	7.62	354	123	<0.10	0.000	2.109	<0.10	<0.10	3.6	1.59	89.14	17.68	7.80	628.35	2.31	1.02	81.84	0	0.00	0.00	60	26.46	1988.17
84	0.736	7.67	348	114	<0.10	0.000	2.109	<0.10	<0.10	3.5	1.71	90.85	16.69	8.16	636.51	2.30	1.12	82.96	0	0.00	0.00	59	28.84	2017.01
85	0.800	7.45	315	107	<0.10	0.000	2.109	<0.10	<0.10	3.4	1.81	92.66	17.08	9.07	645.58	2.18	1.16	84.12	0	0.00	0.00	55	29.22	2046.23
86	0.731	7.33	342	146	<0.10	0.000	2.109	<0.10	<0.10	4.5	2.18	94.84	23.97	11.64	657.22	3.17	1.54	85.66	0	0.00	0.00	42	20.39	2066.62
87	0.747	7.73	355	106	<0.10	0.000	2.109	<0.10	<0.10	4.4	2.18	97.02	16.60	8.23	665.45	2.11	1.05	86.71	0	0.00	0.00	55	27.28	2093.90
88	0.709	7.54	342	102	<0.10	0.000	2.109	<0.10	<0.10	5.8	2.73	99.75	15.28	7.19	672.64	2.01	0.95	87.66	0	0.00	0.00	48	22.60	2116.50
89	0.712	7.68	330	110	<0.10	0.000	2.109	<0.10	<0.10	6.7	3.17	102.92	17.55	8.30	680.94	2.19	1.04	88.70	0	0.00	0.00	53	25.06	2141.56
90	0.721	7.60	360	104	<0.10	0.000	2.109	<0.10	<0.10	5.8	2.78	105.70	15.79	7.56	688.50	1.91	0.91	89.61	0	0.00	0.00	52	24.90	2166.46

Midas Gold Corp.
MLI Job No. 3654

Table 17 . - Humidity Cell Analytical Results, MGI-13-S41 (1.52-3.05) (1.5058 Kg)

					Total Fe					SO_4=			Ca			Mg			Acidity, $CaCO_3$ Equivalents			Alkalinity, $CaCO_3$ Equivalents		
Week	Vol. L	Effluent pH	Redox, mV (vs Ag/AgCl)	Conductivity µS/cm	mg/l	mg/kg	Cum. mg/kg	Fe^{2}+ mg/l	Fe^{3}+ mg/l	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg	mg/l	mg/kg	Cum. mg/kg
91	0.746	7.74	335	100	<0.10	0.000	2.109	<0.10	<0.10	6.2	3.07	108.77	16.61	8.23	696.73	2.10	1.04	90.65	0	0.00	0.00	52	25.76	2192.22
92	0.759	7.88	307	101	<0.10	0.000	2.109	<0.10	<0.10	5.6	2.82	111.59	15.26	7.69	704.42	1.86	0.94	91.59	0	0.00	0.00	52	26.21	2218.43
93	0.702	7.89	304	97.7	<0.10	0.000	2.109	<0.10	<0.10	5.8	2.70	114.29	13.99	6.52	710.94	1.79	0.83	92.42	0	0.00	0.00	49	22.84	2241.27
94	0.735	7.86	335	101	<0.10	0.000	2.109	<0.10	<0.10	6.8	3.32	117.61	16.23	7.92	718.86	1.93	0.94	93.36	0	0.00	0.00	51	24.89	2266.16
95	0.718	7.84	327	99.2	<0.10	0.000	2.109	<0.10	<0.10	6.3	3.00	120.61	16.09	7.67	726.53	1.91	0.91	94.27	0	0.00	0.00	51	24.32	2290.48
96	0.718	7.84	327	99.2	<0.10	0.000	2.109	<0.10	<0.10	6.4	3.05	123.66	14.20	6.77	733.30	1.82	0.87	95.14	0	0.00	0.00	51	24.32	2314.80
97	0.762	7.84	333	99.2	<0.10	0.000	2.109	<0.10	<0.10	6.5	3.29	126.95	14.36	7.27	740.57	1.69	0.86	96.00	0	0.00	0.00	49	24.80	2339.60
98	0.754	7.80	349	99.1	<0.10	0.000	2.109	<0.10	<0.10	6.6	3.30	130.25	15.48	7.75	748.32	1.85	0.93	96.93	0	0.00	0.00	50	25.04	2364.64
99	0.747	7.88	352	91.4	<0.10	0.000	2.109	<0.10	<0.10	5.4	2.68	132.93	13.42	6.66	754.98	1.74	0.86	97.79	0	0.00	0.00	47	23.32	2387.96
100	0.742	7.98	356	100	<0.10	0.000	2.109	<0.10	<0.10	6.5	3.20	136.13	15.91	7.84	762.82	1.76	0.87	98.66	0	0.00	0.00	49	24.15	2412.11
101	0.671	7.97	352	91.4	<0.10	0.000	2.109	<0.10	<0.10	5.9	2.63	138.76	13.96	6.22	769.04	1.67	0.74	99.40	0	0.00	0.00	46	20.50	2432.61
102	0.753	7.94	358	90.4	<0.10	0.000	2.109	<0.10	<0.10	4.6	2.30	141.06	13.30	6.65	775.69	1.69	0.85	100.25	0	0.00	0.00	46	23.00	2455.61
103	0.699	7.86	337	76.9	<0.10	0.000	2.109	<0.10	<0.10	2.8	1.30	142.36	11.73	5.45	781.14	1.30	0.60	100.85	0	0.00	0.00	42	19.50	2475.11
104	0.762	8.03	287	85.8	<0.10	0.000	2.109	<0.10	<0.10	4.2	2.13	144.49	12.95	6.55	787.69	1.53	0.77	101.62	0	0.00	0.00	44	22.27	2497.38
105	0.676	8.02	297	85.2	<0.10	0.000	2.109	<0.10	<0.10	3.7	1.66	146.15	12.12	5.44	793.13	1.40	0.63	102.25	0	0.00	0.00	42	18.86	2516.24
106	0.756	7.96	256	96.8	<0.10	0.000	2.109	<0.10	<0.10	4.2	2.11	148.26	14.18	7.12	800.25	1.70	0.85	103.10	0	0.00	0.00	47	23.60	2539.84
107	0.740	8.01	293	92.8	<0.10	0.000	2.109	<0.10	<0.10	3.6	1.77	150.03	13.29	6.53	806.78	1.68	0.83	103.93	0	0.00	0.00	46	22.61	2562.45
108	0.747	7.67	260	90.4	<0.10	0.000	2.109	<0.10	<0.10	4.5	2.23	152.26	13.69	6.79	813.57	1.65	0.82	104.75	0	0.00	0.00	45	22.32	2584.77
109	0.739	8.09	242	92.1	<0.10	0.000	2.109	<0.10	<0.10	4.5	2.21	154.47	15.06	7.39	820.96	1.66	0.81	105.56	0	0.00	0.00	59	28.96	2613.73
110	0.728	8.10	252	94.1	<0.10	0.000	2.109	<0.10	<0.10	4.3	2.08	156.55	12.91	6.24	827.20	1.54	0.74	106.30	0	0.00	0.00	72	34.81	2648.54
111	0.752	8.10	215	95.0	<0.10	0.000	2.109	<0.10	<0.10	5.6	2.80	159.35	13.56	6.77	833.97	1.71	0.85	107.15	0	0.00	0.00	43	21.47	2670.01
112	0.731	8.07	274	95.0	<0.10	0.000	2.109	<0.10	<0.10	6.1	2.96	162.31	15.86	7.70	841.67	2.00	0.97	108.12	0	0.00	0.00	42	20.39	2690.40
113	0.724	8.08	240	86.8	<0.10	0.000	2.109	<0.10	<0.10	5.4	2.60	164.91	12.60	6.06	847.73	1.55	0.75	108.87	0	0.00	0.00	39	18.75	2709.15
114	0.744	7.97	259	74.4	<0.10	0.000	2.109	<0.10	<0.10	3.4	1.68	166.59	11.54	5.70	853.43	1.30	0.64	109.51	0	0.00	0.00	34	16.80	2725.95
115	0.704	7.95	284	84.1	<0.10	0.000	2.109	<0.10	<0.10	5.5	2.59	169.18	12.32	5.76	859.19	1.59	0.74	110.25	0	0.00	0.00	38	17.77	2743.72
116	0.756	8.03	300	83.7	<0.10	0.000	2.109	<0.10	<0.10	0.0	0.00	169.18	13.15	6.60	865.79	1.67	0.84	111.09	0	0.00	0.00	40	20.08	2763.80

Testing terminated

Figure 17a.- Weekly Humidity Cell Analytical Results

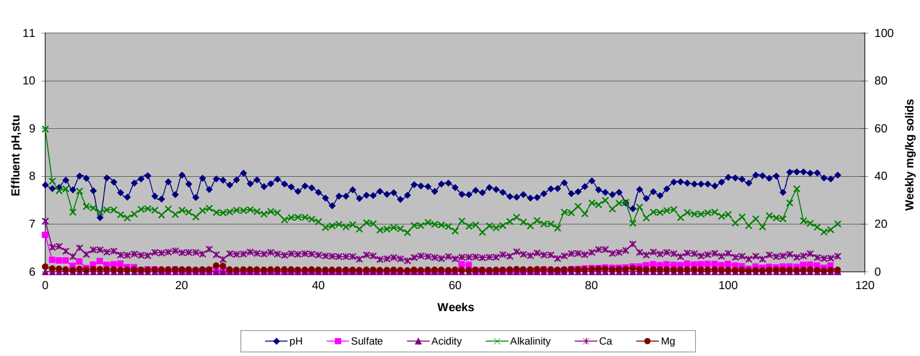


Figure 17b.- Cumulative Humidity Cell Analytical Results

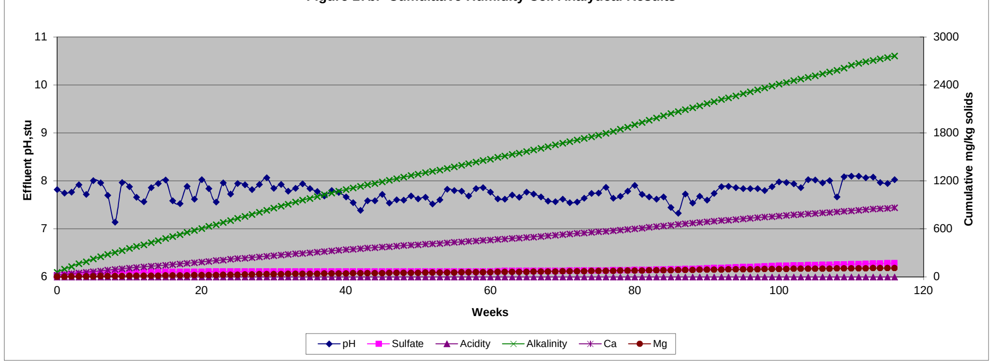


Table . - Profile II Analytical Results, HC Extracts, Golden Meadows Project, Sample MGI-09-09 (143-163)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	44	25	33	37	42	28	17	20
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	54	31	40	45	51	35	21	24
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	0.064	<0.045	0.075	<0.045
Antimony	0.067	0.10	0.13	0.13	0.11	0.12	0.096	0.077
Arsenic	0.084	0.18	0.14	0.13	0.18	0.14	0.17	0.13
Barium	0.076	0.067	0.040	0.077	0.078	0.11	0.12	0.021
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	0.12	<0.10	<0.10	<0.10
Cadmium	0.00018	<0.00015	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	79	100	95	39	26	20	14	15
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	0.0098	0.0071	0.0064	<0.0030	<0.0030	<0.015	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	310	410	370	140	94	71	49	53
Iron	0.14	<0.050	<0.010	<0.010	<0.050	<0.010	0.014	0.020
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	28	37	31	11	6.9	5.1	3.6	4.0
Manganese	0.50	0.24	0.36	0.12	0.065	0.043	0.0057	0.0080
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.0002	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.35	0.13	0.16	0.093	0.050	0.076	N/R	N/R
Nitrogen, Total	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	<0.32
Nitrogen, Total Kjeldahl	0.52	0.32	0.34	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.41	7.34	7.45	7.42	7.60	7.53	7.13	7.54
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	9.6	8.3	8.3	4.3	3.0	1.6	1.6	1.7
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.00040	<0.00040	0.0021	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040
Sodium	6.7	8.1	5.3	2.1	1.4	1.3	1.5	<0.50
Strontium	3.2	3.7	3.5	1.9	1.4	1.1	0.65	0.65
Sulfate	310	400	350	140	65	60	32	34
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	570	630	N/R	250	200	N/R	74	84
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	0.014	0.026	<0.010	<0.010	<0.010
Cations, meq/L	6.83	8.62	7.76	3.06	2.02	1.52	1.11	1.12
Anions, meq/L	7.34	8.84	7.94	3.65	2.19	1.82	1.01	1.10
Balance, %	3.6	1.3	1.2	8.8	4.1	9.0	4.7	<1.0
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Midas Gold Inc.
MLI Job No. 3654

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-09-09 (143-163)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	17	18	23	26	28	35	23	51
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	21	22	23	26	28	35	23	51
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.063	0.067	0.081	0.090	0.064	0.086	0.046	0.089
Arsenic	0.12	0.13	0.14	0.19	0.13	0.18	0.13	0.20
Barium	0.022	0.018	0.020	0.026	0.024	0.039	0.030	0.057
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.13	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	12	11	12	13	12	14	10	16
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	0.0039	<0.0030	<0.0030	<0.0030	<0.0060
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	44	41	44	48	42	50	37	59
Iron	<0.010	<0.010	0.023	0.013	<0.010	<0.010	<0.010	0.013
Lead	<0.00070	<0.00070	<0.00070	<0.00070	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	3.3	3.1	3.3	3.8	3.1	3.9	2.9	4.7
Manganese	<0.0050	0.0076	0.0080	0.0089	<0.0050	0.0074	0.0057	0.011
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.058	<0.050	<0.050	0.052	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.44	7.56	7.55	7.63	6.64	7.23	7.44	7.90
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.4	1.1	1.1	1.6	1.2	1.3	0.88	1.4
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.00040	<0.00040	<0.00040	<0.00040	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	0.53	0.51	0.55	0.56	0.49	0.59	0.39	0.63
Sulfate	26	23	24	20	21	23	13	13
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	N/R	57	76	53	50	56	36	170
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.91	0.83	0.90	1.01	0.88	1.05	0.76	1.22
Anions, meq/L	0.89	0.84	0.88	0.84	0.81	0.96	0.58	1.29
Balance, %	1.3	<1.0	1.3	8.9	4.2	4.8	13	2.7
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-09-09 (143-163)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	38	49	46	18	17	17	19	18
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	38	49	46	18	17	17	19	18
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	0.055	<0.045
Antimony	0.058	0.069	0.061	0.017	0.018	0.025	0.043	0.034
Arsenic	0.16	0.20	0.20	0.059	0.065	0.082	0.12	0.13
Barium	0.060	0.098	0.094	0.034	0.041	0.037	0.033	0.034
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	14	16	15	6.4	7.5	8.8	7.1	7.7
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.014
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	51	61	56	24	29	34	28	30
Iron	<0.010	<0.010	<0.010	0.015	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	4.1	4.8	4.6	1.9	2.5	3.0	2.4	2.7
Manganese	0.0052	0.011	0.0096	0.0067	<0.0050	0.0052	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	0.090	<0.050	<0.050	0.053	0.083
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.72	7.40	7.29	6.80	6.57	7.00	7.00	7.30
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.1	1.2	1.1	0.92	<2.5	0.65	0.81	0.98
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	0.78	<0.50	<0.50
Strontium	0.49	0.61	0.59	0.19	0.25	0.25	0.21	0.23
Sulfate	12	11	11	6.5	12	14	8.2	12
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	0.00083
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	64	110	62	46	40	84	220	48
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.06	1.22	1.16	0.51	0.58	0.74	0.58	0.64
Anions, meq/L	1.01	1.21	1.15	0.50	0.59	0.63	0.55	0.61
Balance, %	2.6	<1.0	<1.0	1.0	<1.0	7.7	2.7	2.2
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-09-09 (143-163)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	18	18	26	26	26	38	37	29
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	18	18	26	26	26	38	37	29
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	0.051	<0.045	0.074	0.045	0.055	<0.045	0.058
Antimony	0.027	0.024	0.028	0.025	0.019	0.031	0.018	0.018
Arsenic	0.12	0.12	0.14	0.32	0.25	0.28	0.23	0.26
Barium	0.038	0.029	0.033	0.035	0.024	0.038	0.048	0.040
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	0.10	<0.10	<0.10	0.36	<0.10
Cadmium	<0.00016	<0.00016	0.00033	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	8.2	7.3	10	10	8.1	12	11	8.1
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0035	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	32	29	40	39	32	47	41	31
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	2.9	2.7	3.7	3.4	2.8	4.2	3.4	2.7
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0053
Mercury	<0.00010	<0.00010	0.00035	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.039
Nitrogen, Ammonia	0.087	0.060	0.059	0.059	<0.050	<0.050	0.081	0.058
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.40	<0.40	<0.40	<0.40
pH, stu	7.00	7.37	7.54	7.24	7.20	7.37	7.26	7.71
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.89	0.86	1.0	0.90	0.70	0.94	0.72	0.84
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	0.82	<0.50	<0.50
Strontium	0.23	0.21	0.27	0.24	0.19	0.30	0.25	0.18
Sulfate	13	11	16	10	7.4	7.2	4.9	4.7
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	26	28	120	N/R	58	96	51	31
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	0.043	0.023	0.016	<0.010	<0.010	<0.010
Cations, meq/L	0.68	0.62	0.83	0.81	0.66	1.01	0.85	0.66
Anions, meq/L	0.63	0.59	0.85	0.73	0.67	0.92	0.85	0.68
Balance, %	3.4	2.4	1.1	5.6	1.2	4.9	<1.0	1.6
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220	1602245

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-09-09 (143-163)

	Extract Week						
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144*
Alkalinity, $CaCO_3$	19	32	35	29	35	38	43
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	19	32	35	29	34	38	43
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.068	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.015	0.025	0.021	0.020	0.016	0.019	0.026
Arsenic	0.15	0.23	0.15	0.14	0.12	0.12	0.15
Barium	0.038	0.047	0.045	0.044	0.046	0.051	0.11
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	7.0	9.3	8.8	7.3	9.0	10	13
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	0.0043	0.0040	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	27	36	35	29	35	41	51
Iron	<0.020	<0.020	<0.020	<0.020	0.060	<0.020	0.022
Lead	<0.0007	<0.0007	0.0011	0.0012	0.0013	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	2.4	3.2	3.0	2.6	3.0	3.5	4.4
Manganese	0.0050	0.0068	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.13
Nitrite as N	0.028	0.030	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.056	0.089	<0.050	0.069	0.065	<0.050	0.053
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	6.89	7.36	7.63	7.85	8.33	7.55	7.83
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.75	0.93	0.69	0.69	0.72	0.72	0.80
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	0.52	<0.50	<0.50	<0.50	<0.50	2.6
Strontium	0.15	0.22	0.21	0.17	0.20	0.22	0.28
Sulfate	4.7	6.1	7.0	5.5	5.5	6.6	11
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	44	12	<10	35	30	53	76
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	0.021	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.58	0.78	0.70	0.60	0.73	0.81	1.15
Anions, meq/L	0.48	0.69	0.84	0.69	0.79	0.89	1.10
Balance, %	9.1	6.3	8.7	6.8	4.2	4.9	2.4
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733

N/R = Not Reported
*Testing terminated after week 144

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-22 (71-85)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	20	38	41	39	47	29	16	20
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	24	47	49	48	57	35	20	24
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.060	0.072	0.074	0.082	0.089	0.063	0.067	0.078
Antimony	0.053	0.14	0.13	0.11	0.15	0.11	0.054	0.048
Arsenic	0.10	0.25	0.26	0.24	0.73	1.3	0.73	0.50
Barium	0.012	0.017	0.018	0.018	0.11	0.016	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	0.13	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	10	16	13	12	18	12	6.7	7.5
Chloride	7.1	2.8	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	0.0036	<0.015	<0.0030	0.0031	<0.015	0.0045	<0.0030
Fluoride	0.23	0.31	0.22	0.22	<0.10	<0.10	0.12	0.14
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	33	53	43	38	57	41	22	25
Iron	<0.010	<0.010	<0.010	<0.010	0.015	<0.050	0.018	0.012
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	1.9	3.5	2.6	2.3	3.3	2.3	1.3	1.5
Manganese	0.0066	0.023	0.025	0.025	0.058	0.048	0.0099	0.013
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.0002	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	0.026	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.21	0.064	0.051	<0.050	<0.050	<0.050	N/R	N/R
Nitrogen, Total	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	<0.32
Nitrogen, Total Kjeldahl	0.38	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.59	7.66	7.60	7.55	7.47	7.53	7.30	7.51
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	6.7	5.4	4.4	3.5	3.1	2.2	1.8	1.8
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040
Sodium	4.9	4.7	2.2	0.90	1.1	<0.50	<0.50	<0.50
Strontium	<0.10	0.16	0.13	0.12	0.16	0.12	<0.10	<0.10
Sulfate	13	22	12	5.0	12	18	7.0	6.0
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	90	86	67	66	130	70	36	73
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	0.033	<0.010	<0.010	<0.010
Cations, meq/L	1.06	1.44	1.08	0.93	1.31	0.85	0.50	0.55
Anions, meq/L	0.88	1.32	1.06	0.90	1.18	0.95	0.48	0.53
Balance, %	8.9	4.3	<1.0	1.3	5.1	5.3	1.7	2.6
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-22 (71-85)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	16	18	22	22	28	27	22	35
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	20	22	22	22	28	27	22	35
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.099	0.12	0.071	0.16	0.14	0.12	0.12	0.089
Antimony	0.031	0.037	0.045	0.039	0.027	0.022	0.018	0.016
Arsenic	0.49	0.49	0.52	0.64	0.36	0.25	0.26	0.20
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.21	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	6.3	7.7	8.5	9.7	8.2	7.5	7.0	8.2
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	0.0059	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	21	25	27	32	27	25	24	27
Iron	<0.010	<0.010	<0.010	0.010	<0.010	0.010	<0.010	<0.010
Lead	<0.00070	<0.00070	<0.00070	<0.00070	<0.0007	<0.0007	0.00071	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	1.4	1.4	1.5	1.8	1.6	1.4	1.5	1.7
Manganese	0.0080	0.012	0.013	0.015	<0.015	0.012	0.010	0.014
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	N/R	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.48	7.48	7.53	7.56	6.95	7.17	7.50	7.34
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.4	1.3	1.3	1.8	1.2	1.0	0.90	0.94
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.010	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.00040	<0.00040	<0.00040	<0.00040	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	4.7	6.7	5.7	1.9	2.9	1.8	2.7	2.5
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	58	34	34	32	21	25	28	20
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	0.010	<0.010	<0.010
Cations, meq/L	0.48	0.55	0.59	0.70	0.59	0.53	0.51	0.58
Anions, meq/L	0.43	0.50	0.48	0.40	0.44	0.40	0.35	0.75
Balance, %	5.0	4.4	10	27	15	14	18	13
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-22 (71-85)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	22	27	25	26	27	22	20	16
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	22	27	25	26	27	22	20	16
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.099	0.088	0.14	0.13	0.14	0.13	0.16	0.12
Antimony	0.014	0.015	0.015	0.014	0.012	0.012	0.016	0.012
Arsenic	0.16	0.14	0.21	0.16	0.16	0.16	0.18	0.16
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	7.3	8.3	7.1	7.6	7.4	6.7	5.5	4.8
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	25	28	26	26	27	24	21	18
Iron	<0.010	<0.010	<0.010	0.012	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	0.0012
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	1.6	1.8	2.0	1.7	2.0	1.9	1.7	1.5
Manganese	0.010	0.016	0.012	0.014	0.011	0.0093	0.0061	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.061
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.41	7.25	7.16	7.07	6.92	7.24	7.31	7.26
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.74	0.73	0.86	0.85	0.79	0.75	0.84	0.87
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	0.56	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	1.9	1.8	2.1	2.0	2.2	1.9	1.1	1.6
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	52	50	40	38	30	36	96	28
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.53	0.59	0.56	0.56	0.57	0.55	0.45	0.40
Anions, meq/L	0.48	0.58	0.54	0.56	0.59	0.48	0.42	0.35
Balance, %	4.7	1.2	1.2	<1.0	1.3	6.8	3.6	6.5
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-22 (71-85)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	22	23	28	32	30	29	31	N/R
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	N/R
HCO_3	22	23	28	32	30	29	31	N/R
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	N/R
Aluminum	0.12	0.13	0.11	0.11	0.049	0.046	0.052	<0.045
Antimony	0.013	0.0095	0.012	0.0083	0.0076	0.0064	0.0055	0.0052
Arsenic	0.20	0.19	0.17	0.62	0.40	0.22	0.24	0.25
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	0.12	<0.10	<0.10	0.42	<0.10
Cadmium	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	6.1	5.8	7.4	7.4	7.3	7.4	7.3	5.6
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0033	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	24	23	29	30	30	31	30	24
Iron	<0.020	<0.020	<0.020	0.024	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	2.2	2.2	2.7	2.9	2.9	3.0	3.0	2.4
Manganese	<0.0050	0.0056	0.0066	0.0074	0.0055	0.0070	0.0089	0.0077
Mercury	0.00010	<0.00010	0.00025	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.046
Nitrogen, Ammonia	0.052	<0.050	<0.050	<0.050	<0.050	<0.050	0.054	0.064
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.40	<0.40	<0.40	<0.40
pH, stu	7.24	7.49	7.53	7.50	7.35	7.27	7.38	N/R
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.98	0.96	1.0	0.90	0.77	0.65	0.63	0.68
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	0.61	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	3.1	2.4	<1.0	1.7	1.4	1.4	1.4	1.5
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	<10	<40	78	N/R	36	<10	24	30
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	0.015	<0.010	0.012	<0.010	0.010	0.010
Cations, meq/L	0.53	0.51	0.63	0.64	0.63	0.66	0.64	N/R
Anions, meq/L	0.50	0.51	0.56	0.68	0.63	0.61	0.65	N/R
Balance, %	2.2	<1.0	5.9	2.3	<1.0	4.4	<1.0	N/R
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220	1602245

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-22 (71-85)

	Extract Week						
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144*
Alkalinity, $CaCO_3$	16	16	22	20	30	22	15
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	16	16	22	20	30	22	15
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.077	0.064	0.091	0.080	<0.045	<0.045	0.052
Antimony	0.0044	0.0062	0.0055	0.0050	0.0060	0.0054	0.0040
Arsenic	0.12	0.12	0.066	0.073	0.059	0.053	0.048
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	5.1	5.5	5.6	4.4	6.3	5.5	3.8
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	21	23	22	19	25	22	16
Iron	0.022	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	0.0034	0.00091	0.0077	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	1.9	2.2	1.8	1.8	2.2	1.9	1.5
Manganese	0.0064	0.0068	<0.0050	<0.0050	<0.0050	0.0052	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	0.036	<0.025	0.037	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.054	0.060	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	6.97	7.29	6.82	7.72	8.13	7.67	7.51
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.56	0.67	<0.50	<0.50	<0.50	<0.50	<0.50
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	1.4	1.5	1.2	1.1	<1.0	<1.0	1.1
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	84	<10	<10	18	27	52	25
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	0.013	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.44	0.48	0.44	0.38	0.52	0.43	0.32
Anions, meq/L	0.35	0.35	0.46	0.42	0.60	0.44	0.32
Balance, %	11	16	3.0	5.8	7.4	1.0	<1.0
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733

N/R = Not Reported
*Testing terminated after week 144

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-23 (135-151)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	19	37	42	36	42	26	12	18
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	23	45	51	44	51	32	14	21
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.084	0.047	<0.045	<0.045	0.063	<0.045	<0.045	<0.045
Antimony	0.12	0.17	0.29	0.24	0.24	0.21	0.16	0.17
Arsenic	1.0	2.3	3.4	2.4	3.5	2.9	2.6	2.7
Barium	0.019	0.076	0.023	0.023	0.16	0.025	0.018	0.019
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	0.14	<0.10	<0.10	<0.10
Cadmium	<0.00015	0.00055	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	24	37	24	14	19	15	15	13
Chloride	5.2	4.6	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	0.0075	<0.015	<0.0030	0.0074	<0.015	0.0045	<0.0030
Fluoride	<0.10	0.21	0.22	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	84	130	86	50	66	52	51	44
Iron	<0.050	0.015	0.020	<0.010	0.013	0.011	<0.010	0.026
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	6.1	10	6.2	3.5	4.5	3.4	3.3	3.0
Manganese	0.032	0.049	0.039	0.028	0.049	0.046	0.012	0.028
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.15	0.13	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	0.027	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.25	0.11	0.082	0.065	<0.050	0.072	N/R	N/R
Nitrogen, Total	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	<0.32
Nitrogen, Total Kjeldahl	0.59	0.30	0.23	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.37	7.66	7.60	7.54	7.52	7.52	7.02	7.45
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	7.5	6.2	5.8	4.0	3.6	3.1	2.7	2.5
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040
Sodium	2.6	4.7	2.0	0.58	1.6	<0.50	<0.50	<0.50
Strontium	0.71	1.1	0.69	0.40	0.47	0.38	0.34	0.27
Sulfate	62	95	49	17	26	30	36	27
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	160	220	160	72	150	98	69	36
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	0.042	<0.010	<0.010	<0.010
Cations, meq/L	2.03	3.05	1.95	1.12	1.49	1.11	1.09	0.96
Anions, meq/L	1.83	2.87	1.87	1.08	1.38	1.15	0.98	0.91
Balance, %	5.3	3.1	2.2	2.0	4.0	1.6	5.3	3.0
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-23 (135-151)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	12	13	14	13	14	17	16	27
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	14	16	14	13	14	17	16	27
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.092	0.12	0.13	0.096	0.088	0.095	0.072	0.080
Arsenic	1.8	2.2	2.1	1.9	1.7	1.6	1.3	1.5
Barium	0.013	0.013	0.013	0.011	0.014	0.016	0.012	0.017
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.15	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	11	10	10	9.4	10	9.6	8.3	9.5
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	36	36	35	33	35	33	29	33
Iron	<0.010	<0.010	0.046	<0.010	<0.010	<0.010	<0.010	<0.010
Lead	<0.00070	<0.00070	<0.00070	<0.00070	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	2.4	2.3	2.3	2.2	2.4	2.2	2.0	2.2
Manganese	0.017	0.022	0.024	0.021	0.017	0.025	0.018	0.027
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.062	<0.050	0.051	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.31	7.34	7.24	7.28	6.86	7.07	7.30	7.16
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.9	1.6	1.5	1.7	1.6	1.4	1.1	1.2
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.010	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.00040	<0.00040	<0.00040	<0.00040	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	0.22	0.21	0.20	0.17	0.16	0.16	0.13	0.15
Sulfate	23	22	22	18	18	15	12	9.3
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	64	47	54	53	34	41	50	21
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.80	0.73	0.73	0.69	0.74	0.70	0.61	0.69
Anions, meq/L	0.71	0.72	0.69	0.59	0.56	0.54	0.46	0.73
Balance, %	6.0	<1.0	3.2	8.3	13	13	13	3.3
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts, Golden Meadows Project, Sample MGI-10-23 (135-151)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	17	23	22	23	26	25	22	26
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	17	23	22	23	26	25	22	26
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	0.083	<0.045
Antimony	0.054	0.067	0.058	0.062	0.052	0.058	0.072	0.073
Arsenic	0.98	1.2	1.3	1.4	1.2	1.5	1.6	2.0
Barium	0.014	0.019	0.020	0.022	0.020	0.023	0.027	0.026
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	7.7	9.5	8.9	9.5	9.5	10	9.5	11
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	27	33	31	33	33	35	34	39
Iron	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	1.8	2.2	2.2	2.2	2.3	2.4	2.4	2.8
Manganese	0.018	0.031	0.026	0.028	0.026	0.028	0.019	0.024
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.068	0.066
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.29	7.22	7.10	7.14	6.95	7.28	7.41	7.42
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.0	1.1	1.0	1.1	<2.5	0.99	1.2	1.2
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	0.12	0.14	0.14	0.14	0.14	0.14	0.14	0.16
Sulfate	7.3	7.7	8.0	8.6	8.5	8.7	8.5	11
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	40	68	30	70	41	48	220	36
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.56	0.68	0.65	0.68	0.66	0.72	0.72	0.81
Anions, meq/L	0.49	0.62	0.61	0.64	0.70	0.68	0.62	0.75
Balance, %	6.4	4.9	3.6	3.4	2.4	3.0	7.4	4.2
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-23 (135-151)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	25	21	30	26	28	29	33	27
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	25	21	30	26	28	29	33	27
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	0.054
Antimony	0.054	0.036	0.050	0.029	0.031	0.024	0.019	0.024
Arsenic	1.7	1.4	1.5	2.5	2.0	1.3	1.3	1.8
Barium	0.024	0.022	0.023	0.020	0.018	0.024	0.023	0.021
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	0.11	<0.10	<0.10	0.32	<0.10
Cadmium	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	9.8	7.9	11	9.5	8.6	9.9	10	9.5
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	35	29	39	34	30	36	36	34
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0025	<0.0007	<0.0007	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	2.5	2.2	2.9	2.4	2.2	2.6	2.6	2.4
Manganese	0.019	0.016	0.018	0.016	0.012	0.018	0.021	0.022
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.048
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.060	0.067
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.40	<0.40	<0.40	<0.40
pH, stu	7.23	7.42	7.57	7.15	7.35	7.23	7.42	7.57
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.1	0.90	0.97	0.78	0.63	0.66	0.66	0.77
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.64	<0.50
Strontium	0.14	0.11	0.14	0.12	0.10	0.12	0.13	0.12
Sulfate	8.8	7.9	8.7	7.7	3.9	5.3	4.7	5.6
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	47	16	82	92	40	<10	42	53
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	0.018	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.72	0.60	0.81	0.69	0.63	0.73	0.76	0.70
Anions, meq/L	0.68	0.58	0.78	0.68	0.64	0.69	0.76	0.66
Balance, %	2.9	1.2	2.0	<1.0	1.1	2.5	<1.0	3.4
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220	1602245

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-23 (135-151)

	Extract Week						
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144*
Alkalinity, $CaCO_3$	16	28	29	26	28	28	26
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	16	28	29	26	28	28	26
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.078	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.016	0.025	0.020	0.020	0.014	0.018	0.019
Arsenic	0.80	1.0	0.77	0.79	0.61	0.69	0.76
Barium	0.020	0.023	0.021	0.022	0.020	0.020	0.066
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	7.0	9.7	8.5	7.8	8.4	9.0	8.6
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	26	35	30	29	30	32	31
Iron	0.023	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	0.0016	0.0017	0.0055	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	2.0	2.5	2.2	2.2	2.2	2.3	2.4
Manganese	0.016	0.021	0.014	0.017	0.016	0.011	0.0061
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	0.038	0.058	0.054	0.036	0.032	0.034	0.037
Nitrogen, Ammonia	<0.050	0.056	<0.050	0.067	0.060	<0.050	<0.050
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	7.04	7.51	6.96	7.75	7.84	7.78	7.78
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.69	0.82	0.56	0.59	0.60	0.54	<0.50
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.1
Strontium	<0.10	0.12	0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	6.4	7.3	7.0	6.5	5.6	5.8	8.3
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	110	16	19	33	25	44	55
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.54	0.71	0.62	0.59	0.62	0.65	0.72
Anions, meq/L	0.45	0.71	0.73	0.66	0.68	0.68	0.69
Balance, %	9.0	<1.0	7.8	5.2	4.1	2.1	1.8
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733

N/R = Not Reported
*Testing terminated after week 144

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-36 (220-256)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	39	38	51	46	62	36	35	39
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	48	47	63	56	76	44	43	48
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.051	0.052	0.054	0.062	<0.045	<0.045	0.061	0.050
Antimony	0.013	0.026	0.039	0.030	0.019	0.024	0.031	0.027
Arsenic	0.052	0.10	0.14	0.14	0.20	0.17	0.20	0.16
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	0.11	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	14	17	16	9.5	14	6.9	7.0	8.8
Chloride	15	14	6.4	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	0.0037	0.0035	<0.015	<0.0030	0.0040	<0.015	0.034	0.029
Fluoride	<0.10	<0.10	0.14	<0.10	<0.10	<0.10	0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	82	120	120	61	70	38	42	45
Iron	0.062	<0.010	<0.050	<0.010	<0.010	0.010	<0.010	<0.010
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	11	20	19	9.1	8.4	4.9	5.9	5.7
Manganese	0.020	0.010	0.012	0.0069	0.029	<0.0050	<0.0050	<0.0050
Mercury	0.00011	<0.00010	<0.00010	<0.00010	<0.0002	<0.00010	0.0005	0.00013
Molybdenum	<0.010	<0.010	0.011	<0.010	<0.010	<0.010	0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.022	<0.010
Nitrate as N	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.18	<0.050	<0.050	<0.050	<0.050	<0.050	N/R	N/R
Nitrogen, Total	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	<0.32
Nitrogen, Total Kjeldahl	0.32	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	8.22	7.95	7.57	7.91	7.83	7.84	7.59	8.07
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	8.4	5.8	5.7	2.8	1.9	1.4	1.7	1.3
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	0.0071	0.0074	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040	<0.0010	0.0089	0.0046
Sodium	4.0	4.0	2.3	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	28	59	61	17	7.4	6.7	7.2	6.2
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	0.0033	0.0034	0.0027	<0.0010	<0.0020	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	130	160	180	77	140	53	35	50
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	2.01	2.82	2.61	1.30	1.44	0.78	0.88	0.95
Anions, meq/L	1.80	2.39	2.49	1.27	1.40	0.86	0.86	0.92
Balance, %	5.5	8.2	2.4	1.2	1.4	4.7	1.4	1.7
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-36 (220-256)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	28	28	34	27	28	30	25	34
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	34	34	34	27	28	30	25	34
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	0.061	<0.045	<0.045	0.045	<0.045	<0.045	<0.045
Antimony	0.016	0.015	0.019	0.013	0.011	0.012	0.0090	0.011
Arsenic	0.13	0.13	0.12	0.13	0.12	0.12	0.10	0.13
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	0.015	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.14	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	6.7	7.0	9.0	7.2	7.1	7.2	6.6	8.2
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	0.0058	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.050	<0.0030	0.0041	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	35	34	41	36	34	34	30	38
Iron	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Lead	<0.00070	<0.00070	<0.00070	<0.00070	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	4.5	4.1	4.6	4.4	3.9	4.0	3.4	4.3
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	0.12	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.064	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	0.72	<0.32	0.38	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	0.72	<0.20	0.26	<0.20	<0.20	<0.20	<0.20
pH, stu	7.87	8.10	7.89	7.70	7.07	7.20	7.37	7.22
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.90	0.84	0.74	0.76	<2.5	0.52	<0.50	0.58
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.00040	<0.00040	<0.00040	<0.00040	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	7.3	7.5	9.4	9.1	5.6	4.6	4.9	4.9
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	49	45	59	42	30	26	28	22
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.73	0.71	0.85	0.74	0.68	0.70	0.61	0.78
Anions, meq/L	0.71	0.71	0.75	0.64	0.49	0.50	0.44	0.78
Balance, %	1.5	<1.0	5.9	7.3	16	17	16	<1.0
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-36 (220-256)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	33	30	33	27	27	28	22	21
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	33	30	33	27	27	28	22	21
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.011	0.0090	0.011	0.0087	0.0069	0.0087	0.0081	0.0067
Arsenic	0.12	0.080	0.076	0.077	0.067	0.081	0.070	0.063
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	8.6	7.3	8.5	6.9	7.1	7.3	7.4	7.4
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	39	33	38	31	32	34	35	34
Iron	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	4.2	3.6	4.0	3.4	3.6	3.8	3.9	3.8
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.056
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.57	7.24	7.26	7.06	6.82	7.27	7.38	7.42
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.57
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	4.6	3.3	5.8	4.4	6.2	5.2	9.8	11
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	48	46	19	48	32	56	100	40
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.77	0.66	0.75	0.62	0.65	0.68	0.69	0.70
Anions, meq/L	0.76	0.67	0.78	0.63	0.67	0.67	0.64	0.65
Balance, %	1.3	<1.0	1.8	<1.0	1.4	<1.0	3.5	3.8
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-36 (220-256)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	26	22	28	38	35	32	35	N/R
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	N/R
HCO_3	26	22	28	38	35	32	35	N/R
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	N/R
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.0076	0.0071	0.0069	0.0064	0.0057	0.0051	0.0049	0.0055
Arsenic	0.074	0.069	0.077	0.26	0.27	0.17	0.17	0.23
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	0.11	<0.10	<0.10	0.41	<0.10
Cadmium	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	8.0	7.0	8.0	11	8.6	7.9	8.4	6.9
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0098	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	38	34	37	47	38	34	36	30
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	4.3	4.0	4.1	5.0	4.1	3.6	3.6	3.1
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	0.00015	<0.00010	0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.034
Nitrogen, Ammonia	0.051	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.057
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.40	<0.40	<0.40	<0.40
pH, stu	7.20	7.49	7.48	7.49	7.37	7.29	7.50	N/R
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.63	0.60	0.58	0.59	<0.50	<0.50	<0.50	<0.50
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.60	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	11	9.9	9.9	7.3	5.5	3.1	2.5	2.8
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	56	100	69	110	61	<10	38	31
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.77	0.70	0.75	0.98	0.77	0.69	0.74	N/R
Anions, meq/L	0.75	0.65	0.77	0.91	0.81	0.70	0.75	N/R
Balance, %	1.5	3.8	<1.0	3.4	3.0	<1.0	<1.0	N/R
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220	1602245

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-36 (220-256)

	Extract Week						
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144*
Alkalinity, $CaCO_3$	26	28	26	28	27	27	29
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	26	28	26	28	27	27	29
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.0055	0.0064	0.0044	0.0047	0.0034	0.0037	0.0042
Arsenic	0.15	0.13	0.079	0.068	0.049	0.050	0.059
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.082
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	6.7	6.6	5.8	6.0	5.7	6.1	6.8
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	29	29	26	26	25	26	29
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	0.00096	0.0018	0.0014	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	2.9	3.1	2.7	2.8	2.5	2.6	3.0
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.030
Nitrogen, Ammonia	0.055	0.060	<0.050	0.066	0.065	0.050	<0.050
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	0.55	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	0.52	<0.40	<0.40
pH, stu	7.18	7.25	6.90	7.84	7.89	7.80	8.21
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	0.0006	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.6
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	2.5	3.4	3.4	3.1	1.8	1.6	5.1
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	88	<10	<10	21	25	33	50
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.58	0.59	0.51	0.53	0.50	0.52	0.70
Anions, meq/L	0.57	0.55	0.59	0.62	0.58	0.57	0.69
Balance, %	<1.0	3.3	7.2	7.8	6.7	4.7	<1.0
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733

N/R = Not Reported
*Testing terminated after week 144

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-41 (70-102)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	36	65	51	33	31	14	7.0	6.6
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	44	79	62	40	38	16	8.6	8.0
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	0.11	0.11
Antimony	0.0040	0.012	0.0099	0.0072	0.0049	0.0040	<0.0025	<0.0025
Arsenic	0.0054	0.017	0.012	0.0060	0.0060	0.0074	0.0054	<0.0050
Barium	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	0.12	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	8.6	9.7	6.3	4.2	4.1	1.9	1.5	1.2
Chloride	17	2.1	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.015	0.0057	<0.050	<0.015	<0.0030	<0.0030
Fluoride	0.43	0.48	0.49	0.29	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	51	63	41	27	27	13	11	8.5
Iron	0.033	<0.010	<0.010	<0.050	0.012	0.031	0.17	0.16
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	7.1	9.4	6.0	4.0	4.2	2.0	1.7	1.3
Manganese	0.014	0.040	0.039	0.026	0.037	0.033	0.026	0.025
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.26	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	0.048	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.12	<0.050	<0.050	<0.050	<0.050	<0.050	0.062	<0.050
Nitrogen, Total	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	<0.32
Nitrogen, Total Kjeldahl	0.45	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.45	7.68	7.65	7.37	7.35	7.18	6.85	6.97
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	32	21	15	10	8.6	5.0	3.7	2.7
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040
Sodium	15	5.6	1.9	0.63	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	40	21	10	5.8	6.8	6.7	7.3	5.2
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	170	140	110	69	65	54	26	29
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	2.49	2.04	1.28	0.82	0.77	0.39	0.34	0.26
Anions, meq/L	2.07	1.82	1.25	0.79	0.76	0.40	0.29	0.24
Balance, %	9.2	5.8	1.0	1.9	<1.0	1.5	6.7	3.7
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-41 (70-102)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	7.0	8.2	9.5	13	12	20	22	15
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	8.6	10	9.5	13	12	20	22	15
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	<0.0025	<0.0025	<0.0025	0.00092	0.00093	0.00071	0.00061	<0.0010
Arsenic	<0.0050	<0.0050	<0.0050	<0.0030	<0.0030	<0.0030	<0.0030	0.0015
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.016	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	1.5	1.5	1.5	1.9	2.5	2.5	2.7	1.7
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	11	11	12	15	17	23	26	17
Iron	0.047	0.026	0.023	0.018	0.025	0.011	0.013	0.013
Lead	<0.00070	<0.00070	<0.00070	<0.00070	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	1.8	1.8	1.9	2.5	2.7	4.0	4.7	3.2
Manganese	0.032	0.034	0.036	0.047	0.040	0.064	0.069	0.034
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.03	7.10	6.94	7.19	6.83	6.85	7.38	6.60
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	3.2	2.5	2.3	2.6	2.6	2.8	2.8	2.3
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.00040	<0.00040	<0.00040	<0.00040	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	6.2	5.7	5.0	5.4	5.9	5.4	4.9	4.8
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	30	22	41	27	12	27	40	20
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	0.014	0.012	<0.010	<0.010
Cations, meq/L	0.31	0.29	0.29	0.37	0.42	0.53	0.60	0.41
Anions, meq/L	0.27	0.28	0.26	0.33	0.28	0.38	0.40	0.40
Balance, %	6.7	1.2	5.9	6.4	19	16	20	1.1
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts, Golden Meadows Project, Sample MGI-10-41 (70-102)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	17	18	18	23	30	35	27	30
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	17	18	18	23	30	35	27	30
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	<0.00050	<0.0025	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050	<0.00050
Arsenic	<0.0025	<0.0050	<0.0030	<0.0030	<0.0050	<0.0030	<0.0030	<0.0030
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	1.8	1.8	1.6	1.9	2.2	2.3	1.5	1.7
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	20	21	19	25	31	36	25	31
Iron	0.017	0.019	0.018	0.014	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	0.00093	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	3.7	3.9	3.8	4.8	6.2	7.3	5.3	6.5
Manganese	0.035	0.037	0.029	0.028	0.026	0.023	0.013	0.0094
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.24	6.94	6.81	6.92	6.77	7.34	7.24	7.32
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	2.2	2.3	2.2	2.5	2.9	2.9	2.4	2.7
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	4.4	3.7	4.1	4.0	4.3	3.8	3.1	3.4
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	31	52	23	33	27	30	25	39
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.014
Cations, meq/L	0.45	0.47	0.45	0.56	0.70	0.79	0.57	0.69
Anions, meq/L	0.43	0.44	0.45	0.54	0.69	0.78	0.60	0.67
Balance, %	2.4	3.9	<1.0	1.1	<1.0	<1.0	2.7	1.4
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-41 (70-102)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	36	33	37	38	26	18	18	13
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	36	33	37	38	26	18	18	13
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	0.065	0.090	0.074	0.094
Antimony	<0.0020	<0.00050	<0.00051	<0.00051	<0.0025	<0.00051	<0.0025	<0.00050
Arsenic	<0.0010	<0.0030	<0.0030	<0.0030	<0.0050	<0.0050	<0.0050	0.0079
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	0.16	<0.10	<0.10	0.16	0.10
Cadmium	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	1.8	1.6	1.4	1.3	0.80	0.54	0.52	<0.50
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	36	37	37	36	25	18	17	12
Iron	0.027	<0.020	<0.020	<0.020	0.039	0.058	0.040	0.078
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	7.7	7.9	8.1	7.9	5.5	4.2	3.8	2.6
Manganese	0.011	0.0060	0.0061	<0.0050	<0.0050	<0.0050	0.0060	0.0055
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.40	<0.40	<0.40	<0.40
pH, stu	7.31	7.63	7.69	7.16	7.09	7.02	6.87	7.15
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	2.8	2.6	2.9	2.6	2.0	1.8	1.8	1.8
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	3.4	3.8	4.0	2.9	1.3	<1.0	1.0	<1.0
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	50	44	66	36	20	18	<10	30
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	0.012	<0.010	0.019	<0.010	0.010	0.011
Cations, meq/L	0.80	0.80	0.81	0.78	0.55	0.43	0.40	0.28
Anions, meq/L	0.79	0.74	0.82	0.82	0.55	0.36	0.38	0.26
Balance, %	<1.0	3.8	<1.0	2.4	<1.0	9.1	1.9	2.9
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220	1602245

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-41 (70-102)

	Extract Week							
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144	Week 148
Alkalinity, $CaCO_3$	10	12	11	13	16	15	21	17
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	10	12	11	13	16	15	21	17
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.12	0.096	0.069	<0.045	<0.045	0.057	0.058	<0.045
Antimony	<0.0025	<0.0025	<0.00051	<0.00051	0.00056	<0.0025	<0.0025	<0.0025
Arsenic	0.0055	0.016	<0.0030	<0.0030	<0.0030	0.0048	0.0045	0.0093
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.069	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.1	<0.50
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.012	0.0055	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	10	11	9.4	11	14	13	19	15
Iron	0.079	0.058	0.032	0.026	0.12	0.037	0.033	<0.020
Lead	<0.0007	<0.0007	0.0017	0.0019	0.0090	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	2.3	2.5	2.1	2.5	3.1	3.0	4.0	3.5
Manganese	0.0081	0.0070	0.0052	0.0069	0.012	0.010	0.0079	0.0083
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	0.076	0.074	<0.050
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	6.79	7.26	6.65	7.50	7.59	7.59	7.73	7.65
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.7	1.8	1.4	1.5	1.8	1.8	1.9	1.7
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.2	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	<1.0	1.0	1.1	1.1	<1.0	<1.0	2.3	1.1
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	40	10	12	10	13	19	35	15
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	0.012	0.012	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.25	0.27	0.22	0.25	0.35	0.31	0.54	0.33
Anions, meq/L	0.20	0.26	0.24	0.28	0.32	0.30	0.47	0.33
Balance, %	11	1.0	5.3	7.0	4.7	1.1	7.3	<1.0
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733	1609568

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts, Golden Meadows Project, Sample MGI-10-41 (70-102)

	Extract Week						
Analysis, mg/L	Week 152	Week 156	Week 160	Week 164	Week 168	Week 172	Week 176
Alkalinity, $CaCO_3$	20	25	22	20	26	33	40
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	20	25	22	20	26	33	40
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	<0.0025	<0.0025	<0.0025	<0.0025	<0.0010	<0.0010	<0.0010
Arsenic	<0.0050	<0.0050	<0.0050	<0.0050	0.0025	<0.0010	<0.0010
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	0.50	0.67	0.55	<0.50	0.52	0.64	0.72
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	19	20	20	19	23	29	34
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	4.3	4.5	4.5	4.4	5.2	6.7	7.9
Manganese	<0.0050	0.017	0.0090	0.0079	0.0080	0.011	0.010
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.030	<0.030
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.052	<0.050	<0.050
Nitrogen, Total	<0.52	<0.52	<0.55	<0.55	<0.55	<0.55	<0.55
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	7.38	7.39	7.44	7.54	7.20	7.52	7.84
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.9	2.0	1.9	2.0	2.3	2.4	2.5
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0050
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	1.2	1.5	1.4	1.5	1.7	1.7	1.9
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.0010	<0.00040	<0.0010	<0.0010	<0.00040	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	<10	<10	42	27	32	38	27
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.43	0.46	0.45	0.41	0.52	0.64	0.75
Anions, meq/L	0.43	0.54	0.47	0.43	0.55	0.70	0.85
Balance, %	<1.0	8.4	2.2	2.0	3.6	3.87	5.99
WET Lab Report #	1610577	1611481	1612418	1701188	1702169	1703182	1704041

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (150-165)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	100	88	83	69	74	58	51	52
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	130	110	100	84	91	71	62	63
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	0.045	<0.045	<0.045	<0.045
Antimony	0.025	0.030	0.027	0.023	0.014	0.022	0.015	0.013
Arsenic	0.010	0.018	0.019	0.020	0.021	0.027	0.018	0.018
Barium	0.017	0.026	0.026	0.022	0.026	0.019	0.017	0.018
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	0.14	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	35	24	20	16	19	14	14	13
Chloride	14	1.5	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.015	<0.0030	0.0039	<0.015	<0.0030	<0.0030
Fluoride	0.47	0.55	0.52	0.34	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	150	100	86	69	79	55	56	53
Iron	<0.010	<0.010	<0.010	<0.050	0.012	<0.050	0.015	<0.010
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	15	11	8.4	6.6	7.4	5.2	5.4	4.9
Manganese	<0.0050	0.0053	<0.0050	<0.0050	0.0067	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	0.014	0.017	0.015	<0.010	<0.010	<0.010	<0.050	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.38	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.096	<0.050	<0.050	<0.050	<0.050	<0.050	0.052	<0.050
Nitrogen, Total	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	<0.32
Nitrogen, Total Kjeldahl	0.39	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.99	7.91	7.93	7.84	7.77	7.85	7.73	7.87
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	8.1	6.1	5.6	4.8	4.7	3.9	3.7	3.2
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	0.0068	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040
Sodium	11	6.5	3.3	1.5	0.74	0.52	<0.50	<0.50
Strontium	0.16	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	40	25	15	7.7	7.5	8.8	8.1	5.8
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	220	150	120	91	130	86	64	66
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	3.67	2.54	1.98	1.53	1.72	1.25	1.24	1.13
Anions, meq/L	3.41	2.40	1.98	1.55	1.65	1.35	1.18	1.15
Balance, %	3.7	2.8	<1.0	<1.0	2.0	3.8	2.3	<1.0
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (150-165)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	49	45	43	44	45	41	41	45
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	59	55	43	44	45	41	41	45
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.045	<0.045	<0.045	<0.045	<0.045	0.052	<0.045	<0.045
Antimony	0.012	0.012	0.0093	0.0096	0.0090	0.0081	0.0075	0.0080
Arsenic	0.019	0.019	0.016	0.015	0.014	0.013	0.012	0.010
Barium	0.015	0.015	0.016	0.014	0.018	0.013	0.014	0.030
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	13	12	10	11	12	10	11	12
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	0.0037	0.0059	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	50	46	40	43	44	40	42	45
Iron	0.018	<0.050	<0.050	0.030	0.024	0.018	0.018	0.020
Lead	<0.00070	<0.00070	<0.00070	<0.00070	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	4.5	4.0	3.4	3.6	3.6	3.4	3.5	3.8
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	0.00043	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.93	7.88	7.77	7.86	7.16	7.32	7.64	7.06
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	3.1	2.6	2.2	2.3	2.3	2.2	1.9	2.0
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.00040	<0.00040	<0.00040	<0.00040	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	5.2	4.5	2.6	2.8	2.9	2.7	3.0	2.5
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	64	45	47	55	45	44	48	57
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.10	0.99	0.84	0.91	0.96	0.84	0.89	0.96
Anions, meq/L	1.08	1.00	0.76	0.78	0.67	0.61	0.61	0.95
Balance, %	1.3	<1.0	4.8	7.5	18	16	18	<1.0
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (150-165)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	42	42	42	41	42	37	39	36
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	42	42	42	41	42	37	39	36
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	0.050	<0.045	<0.045	<0.045	<0.045	0.047
Antimony	0.0069	0.0066	0.0066	0.0071	0.0064	0.0061	0.0054	0.0058
Arsenic	0.0087	0.0090	0.010	0.0082	0.0055	0.0072	0.0052	0.0083
Barium	0.017	0.014	0.017	0.041	0.014	0.014	0.012	0.025
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	11	11	10	11	12	10	9.6	9.7
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	42	43	41	42	44	39	36	36
Iron	0.017	0.017	0.024	0.012	<0.020	0.19	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	3.4	3.6	3.5	3.5	3.6	3.1	2.9	2.8
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	0.0053	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.68	7.42	7.25	7.27	7.01	7.42	7.47	7.58
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.7	1.7	1.7	1.8	1.8	1.7	1.5	1.7
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	0.79	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	2.2	1.9	2.3	2.8	3.1	2.6	2.1	1.8
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	52	66	39	48	34	36	110	38
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.87	0.89	0.84	0.88	0.94	0.84	0.76	0.76
Anions, meq/L	0.89	0.88	0.89	0.88	0.90	0.79	0.82	0.76
Balance, %	<1.0	<1.0	2.9	<1.0	2.0	3.0	4.3	<1.0
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (150-165)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	37	38	38	46	39	40	46	44
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	37	38	38	46	39	40	46	44
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	0.051	0.053	0.070	0.059	0.046	0.047	<0.045
Antimony	0.0056	0.0049	0.0051	0.0051	0.0047	0.0045	0.0041	0.0047
Arsenic	0.0067	0.0074	0.0052	0.014	0.012	0.011	0.011	0.011
Barium	0.016	0.021	0.021	0.021	0.014	0.014	0.018	0.014
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	0.13	<0.10	<0.10	0.33	<0.10
Cadmium	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	9.8	9.3	10	12	10	11	12	12
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	37	35	39	44	38	41	45	42
Iron	<0.020	0.021	<0.020	0.032	0.021	<0.020	<0.020	<0.020
Lead	<0.0007	0.0009	<0.0007	<0.0007	0.00092	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	3.0	2.9	3.2	3.6	3.1	3.4	3.5	3.2
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.40	<0.40	<0.40	<0.40
pH, stu	7.35	7.63	7.81	7.30	7.32	7.35	7.88	7.68
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.6	1.5	1.6	2.0	1.8	1.5	1.5	1.6
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	0.80	<0.50	<0.50	<0.50	<0.50	<0.50	0.65	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	1.9	2.7	2.9	2.7	2.5	2.2	2.5	2.5
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	42	32	92	83	18	43	43	49
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	0.015	0.011	0.014	<0.010	<0.010	<0.010
Cations, meq/L	0.81	0.75	0.81	0.96	0.81	0.87	0.96	0.90
Anions, meq/L	0.78	0.82	0.82	0.98	0.83	0.85	0.97	0.93
Balance, %	2.0	4.3	<1.0	1.0	1.4	1.6	<1.0	1.6
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220	1602245

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (150-165)

	Extract Week						
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144*
Alkalinity, $CaCO_3$	35	38	38	39	39	32	37
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	35	38	38	39	39	32	37
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.046	0.048	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.0047	0.0047	0.0039	0.0041	0.0037	0.0036	0.0036
Arsenic	0.012	0.014	0.011	0.0067	0.0075	0.0062	0.0067
Barium	0.013	0.015	0.013	0.013	0.012	0.016	0.086
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	11	11	9.5	10	10	10	10
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.013	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	38	38	34	35	36	35	35
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	0.0007	0.0056	0.0026	0.0044	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	2.8	2.8	2.4	2.5	2.5	2.4	2.4
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	7.35	7.72	6.99	7.93	7.97	7.90	8.05
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.5	1.5	1.2	1.2	1.3	1.4	1.1
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.1
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	2.9	3.4	3.6	3.2	2.6	2.8	4.5
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	53	<10	13	40	28	38	55
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.82	0.82	0.70	0.74	0.75	0.73	0.82
Anions, meq/L	0.76	0.83	0.83	0.85	0.83	0.70	0.83
Balance, %	4.0	<1.0	8.6	6.7	5.5	2.4	1.0
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733

N/R = Not Reported
*Testing terminated after week 144

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (272-283)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	54	63	61	66	82	82	55	47
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	66	76	74	81	100	100	67	57
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.047	0.046	<0.045	0.054	0.050	<0.045	<0.045	<0.045
Antimony	0.049	0.060	0.069	0.11	0.13	0.15	0.073	0.062
Arsenic	0.11	0.45	0.50	0.88	1.9	1.6	0.79	0.86
Barium	0.017	0.018	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.50	<0.10	<0.10	0.12	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	87	78	40	24	25	26	25	17
Chloride	54	14	2.9	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	0.0036	<0.015	<0.0030	0.0034	<0.015	<0.0030	<0.0030
Fluoride	<1.0	0.34	0.37	0.62	0.28	0.10	0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	430	370	190	110	110	120	110	75
Iron	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010	<0.010
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	52	44	21	12	12	12	11	7.8
Manganese	0.088	0.075	0.051	0.026	0.029	0.046	0.027	0.024
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010
Nickel	0.015	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<1.0	0.13	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.20	<0.050	<0.050	<0.050	<0.050	0.082	<0.050	<0.050
Nitrogen, Total	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	<0.32
Nitrogen, Total Kjeldahl	0.57	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.69	7.78	7.82	7.78	7.86	7.98	7.74	7.78
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	19	15	9.4	7.8	7.4	6.8	4.2	2.8
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040
Sodium	3.0	2.4	0.94	0.50	<0.50	<0.50	<0.50	<0.50
Strontium	0.33	0.30	0.15	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	280	260	120	42	28	46	56	29
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	650	510	270	130	150	160	130	99
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.020	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	9.26	8.01	4.01	2.41	2.43	2.46	2.26	1.56
Anions, meq/L	8.43	7.08	3.81	2.23	2.24	2.60	2.27	1.54
Balance, %	4.6	6.1	2.5	3.8	4.2	2.7	<1.0	<1.0
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (272-283)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	46	38	41	40	42	37	34	38
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	57	46	41	40	42	37	34	38
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.057	0.044	0.040	0.043	0.036	0.033	0.029	0.026
Arsenic	0.87	0.82	0.70	0.88	0.70	0.71	0.58	0.65
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	16	16	15	15	15	13	12	12
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	0.0095	<0.0030	0.0045	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	71	68	61	63	61	56	53	49
Iron	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Lead	<0.00070	<0.00070	<0.00070	<0.00070	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	7.3	6.7	6.0	6.2	6.0	5.4	5.2	4.9
Manganese	0.015	0.013	0.013	0.0090	<0.0050	0.0096	0.0052	0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.81	7.68	7.62	7.72	7.30	7.37	7.60	7.13
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	2.5	1.8	1.5	1.6	1.6	1.4	1.1	1.1
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.00040	<0.00040	<0.00040	<0.00040	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	23	29	24	22	21	21	18	15
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	87	78	65	77	48	93	72	45
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.46	1.40	1.28	1.30	1.28	1.13	1.06	1.03
Anions, meq/L	1.41	1.36	1.17	1.11	1.00	0.93	0.83	1.07
Balance, %	1.8	1.4	4.5	7.7	12	9.4	12	2.0
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (272-283)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	31	32	34	30	31	34	30	27
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	31	32	34	30	31	34	30	27
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	0.049	<0.045
Antimony	0.022	0.020	0.020	0.021	0.019	0.025	0.020	0.020
Arsenic	0.46	0.40	0.44	0.51	0.41	0.58	0.52	0.52
Barium	0.013	<0.010	<0.010	<0.010	<0.010	<0.010	0.014	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	11	11	11	11	12	14	9.9	10
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	47	45	47	44	48	57	42	42
Iron	<0.010	<0.010	<0.010	<0.010	<0.020	0.027	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	4.6	4.4	4.7	4.2	4.7	5.5	4.3	4.0
Manganese	<0.0050	0.0056	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	0.13	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.52	7.32	7.22	7.14	6.84	7.40	7.48	7.46
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.0	0.83	0.90	0.86	0.86	0.88	0.79	0.86
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	0.60	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	13	12	14	13	16	19	15	16
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	48	74	53	52	46	100	70	61
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.95	0.93	0.96	0.92	1.01	1.20	0.87	0.85
Anions, meq/L	0.89	0.89	0.97	0.88	0.95	1.08	0.91	0.87
Balance, %	3.4	2.4	<1.0	2.1	2.8	5.5	2.2	1.3
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (272-283)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	29	27	36	36	32	32	34	28
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	29	27	36	36	32	32	34	28
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	0.067	0.059	0.067	0.048	<0.045
Antimony	0.020	0.018	0.020	0.017	0.017	0.015	0.014	0.018
Arsenic	0.53	0.53	0.52	1.1	0.90	0.67	0.71	0.73
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	0.12	<0.10	<0.10	0.35	<0.10
Cadmium	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	11	11	12	12	10	10	10	8.8
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	45	45	51	51	43	43	43	36
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	4.3	4.3	5.0	4.9	4.2	4.2	4.2	3.6
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	0.054	0.052	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.52	<0.52	0.68	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.40	<0.40	0.66	<0.40
pH, stu	7.30	7.39	7.69	7.36	7.22	7.33	7.58	7.30
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.87	0.75	0.78	0.80	0.62	0.53	0.61	0.54
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.59	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	16	15	15	14	12	9.8	9.9	9.1
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	66	36	71	93	46	29	40	47
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	0.015	<0.010	<0.010	<0.010	0.046
Cations, meq/L	0.92	0.92	1.03	1.03	0.87	0.87	0.89	0.75
Anions, meq/L	0.91	0.85	1.03	1.01	0.89	0.84	0.89	0.75
Balance, %	<1.0	3.9	<1.0	<1.0	1.1	1.5	<1.0	<1.0
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220	1602245

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (272-283)

	Extract Week						
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144*
Alkalinity, $CaCO_3$	15	25	26	30	30	26	29
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	15	25	26	30	30	26	29
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.098	0.22	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.017	0.018	0.015	0.016	0.014	0.013	0.013
Arsenic	0.49	0.42	0.33	0.36	0.34	0.29	0.32
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.071
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	8.5	9.0	7.5	8.2	8.4	8.2	8.8
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0084	0.0044
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	35	37	31	34	35	34	36
Iron	0.028	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	0.0074	0.0011	0.0090	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	3.4	3.5	3.0	3.3	3.4	3.2	3.4
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	7.15	7.53	6.75	7.57	7.83	7.73	7.93
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.69	0.52	<0.50	<0.50	<0.50	<0.50	<0.50
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.2
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	11	11	10	8.7	8.1	8.6	12
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	55	29	15	30	34	25	48
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	0.016	0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.73	0.78	0.62	0.68	0.71	0.67	0.81
Anions, meq/L	0.53	0.73	0.73	0.78	0.77	0.70	0.83
Balance, %	16	3.1	7.9	6.8	3.8	1.9	<1.0
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733

N/R = Not Reported
*Testing terminated after week 144

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (726-746)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	52	48	56	48	67	28	22	21
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	61	59	68	58	81	34	27	26
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.048	<0.045	0.046	<0.045	0.060	0.061	0.046	<0.045
Antimony	0.060	0.072	0.079	0.065	0.039	0.035	0.044	0.042
Arsenic	0.22	0.35	0.46	0.49	0.51	0.48	0.67	0.77
Barium	<0.010	<0.010	<0.010	0.13	0.16	0.12	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	0.13	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	30	20	19	12	18	7.2	7.3	7.3
Chloride	32	8.3	2.7	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	0.0034	<0.0030	<0.015	<0.0030	<0.0030	<0.015	0.0055	<0.0030
Fluoride	0.22	0.13	0.16	0.14	<0.10	<0.10	0.12	0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	180	130	120	70	86	35	41	39
Iron	<0.010	<0.010	<0.010	<0.010	0.010	0.017	<0.050	<0.010
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	26	20	17	9.5	9.7	4.2	5.4	5.2
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	0.0091	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.16	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.40
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.17	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.059
Nitrogen, Total	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	0.40
Nitrogen, Total Kjeldahl	0.43	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	8.32	7.87	7.95	7.75	7.83	7.33	7.38	7.57
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	15	8.0	7.0	3.7	2.3	1.2	2.1	2.1
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040
Sodium	3.8	1.8	1.2	1.6	1.5	1.1	<0.50	<0.50
Strontium	0.16	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	87	66	61	26	20	13	17	16
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	290	180	170	90	170	N/R	47	47
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	0.017	<0.010	<0.010	0.093
Cations, meq/L	4.20	2.93	2.58	1.54	1.83	0.79	0.87	0.85
Anions, meq/L	3.74	2.58	2.47	1.50	1.74	0.83	0.80	0.79
Balance, %	5.8	6.3	2.3	1.5	2.4	2.3	3.9	3.6
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (726-746)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	19	19	22	21	28	28	27	34
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	23	23	22	21	28	28	27	34
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	0.056	<0.045	<0.045	<0.045	0.051	<0.045	<0.045
Antimony	0.035	0.034	0.041	0.037	0.040	0.038	0.030	0.029
Arsenic	0.97	1.2	1.4	1.2	1.3	1.2	0.84	0.81
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.16	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	8.2	8.6	8.6	7.6	9.2	9.3	8.4	9.2
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	0.0089	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	42	42	41	36	41	42	38	41
Iron	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Lead	<0.00070	<0.00070	<0.00070	<0.00070	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	5.2	4.9	4.8	4.2	4.4	4.5	4.1	4.3
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.35	7.80	7.57	7.57	7.31	7.33	7.54	7.15
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.8	1.4	1.5	1.3	1.3	1.1	0.95	1.0
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.00040	<0.00040	<0.00040	<0.00040	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	1.6	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	21	21	20	15	15	14	10	8.5
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	58	61	49	46	50	46	59	29
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.88	0.87	0.86	0.76	0.92	0.87	0.78	0.84
Anions, meq/L	0.81	0.81	0.78	0.66	0.69	0.67	0.57	0.86
Balance, %	4.1	3.6	5.2	7.2	14	13	16	1.5
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (726-746)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	41	44	36	34	38	31	36	37
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	41	44	36	34	38	31	36	37
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	0.050	0.059	0.047	<0.045	0.080	0.057
Antimony	0.037	0.033	0.026	0.026	0.028	0.022	0.029	0.030
Arsenic	1.0	0.88	0.84	0.69	0.70	0.58	0.84	0.83
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	0.00034	<0.00015	<0.00015	<0.00015
Calcium	12	13	10	11	12	10	11	11
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	51	53	45	43	49	41	48	47
Iron	<0.010	<0.010	<0.010	<0.010	<0.020	0.067	0.025	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	5.0	5.0	4.6	4.0	4.7	3.8	4.7	4.5
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.71	7.55	7.30	7.30	7.03	7.38	7.58	7.62
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.1	0.93	0.90	0.73	<2.5	0.55	1.1	0.90
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	8.6	8.6	8.7	9.2	11	9.7	11	11
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	56	80	46	53	70	52	200	72
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.04	1.08	0.91	0.90	0.99	0.83	0.97	0.95
Anions, meq/L	1.00	1.06	0.90	0.87	0.99	0.82	0.95	0.97
Balance, %	1.7	1.2	<1.0	1.8	<1.0	<1.0	1.3	1.0
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (726-746)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	36	35	40	48	42	40	51	N/R
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	N/R
HCO_3	36	35	40	48	42	40	51	N/R
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	N/R
Aluminum	0.058	0.080	0.050	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.026	0.020	0.027	0.018	0.017	0.011	0.012	0.014
Arsenic	0.71	0.68	0.81	1.5	1.1	0.53	0.59	0.80
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	0.12	<0.10	<0.10	0.34	<0.10
Cadmium	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	11	9.5	13	14	11	12	14	11
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	46	41	54	54	46	46	56	45
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	4.6	4.2	5.0	5.0	4.4	4.3	4.8	4.1
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.035
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.40	<0.40	<0.40	<0.40
pH, stu	7.42	7.63	7.76	7.56	7.46	7.46	7.77	N/R
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.95	0.78	0.79	0.57	0.51	<0.50	<0.50	0.61
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.53	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	11	10	11	6.5	4.9	5.2	4.5	5.3
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	57	32	66	94	22	18	57	59
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	0.012	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.96	0.85	1.09	1.12	0.92	0.95	1.12	N/R
Anions, meq/L	0.95	0.91	1.03	1.09	0.94	0.91	1.11	N/R
Balance, %	<1.0	3.4	2.7	1.4	<1.0	2.4	<1.0	N/R
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220	1602245

N/R = Not Reported

Midas Gold Inc.
MLI Job No. 3654

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-48 (726-746)

	Extract Week						
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144*
Alkalinity, $CaCO_3$	33	42	47	43	43	41	39
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	33	42	47	43	43	41	39
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.050	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.013	0.016	0.016	0.015	0.013	0.013	0.015
Arsenic	0.39	0.36	0.37	0.35	0.34	0.33	0.37
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.062
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	11	13	12	11	12	12	11
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	42	49	48	44	45	44	44
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	0.0066	0.0017	0.0014	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	3.8	4.3	4.0	3.8	3.8	3.6	4.0
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	0.052	<0.050	<0.050
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	7.27	7.84	7.06	7.90	7.86	8.11	7.98
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.62	0.58	<0.50	<0.50	<0.50	<0.50	<0.50
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.0
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	7.5	7.9	7.6	6.3	5.8	6.1	9.5
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	90	31	33	49	39	60	54
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	0.012	0.014	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.88	1.02	0.93	0.86	0.93	0.90	0.96
Anions, meq/L	0.82	1.00	1.10	0.99	0.98	0.95	0.98
Balance, %	4.0	<1.0	8.4	7.0	2.8	2.8	<1.0
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733

N/R = Not Reported
*Testing terminated after week 144

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-50 (250-270)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	89	67	86	74	84	77	48	52
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	110	81	100	90	100	94	59	63
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	0.059	<0.045	0.058	0.058	<0.045	<0.045	<0.045
Antimony	0.26	0.16	0.17	0.16	0.15	0.26	0.17	0.22
Arsenic	0.47	2.0	1.6	1.5	1.4	0.78	0.61	0.45
Barium	<0.010	0.012	0.014	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	0.15	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	25	15	18	15	18	17	12	14
Chloride	1.8	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	0.0034	<0.0030	<0.015	<0.0030	0.0031	<0.0030	<0.0030	<0.0030
Fluoride	1.3	0.58	0.33	0.16	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	120	76	88	72	85	78	59	66
Iron	<0.010	0.010	<0.010	0.019	0.012	0.012	0.016	0.015
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.50	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	14	9.3	10	8.4	9.8	8.8	6.8	7.6
Manganese	<0.0050	<0.0050	0.0057	0.0055	0.0081	0.012	<0.0050	0.012
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010
Nickel	0.015	0.018	0.022	0.013	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.34	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.28
Nitrite as N	0.068	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.24	0.082	0.085	<0.050	<0.050	0.085	<0.050	<0.050
Nitrogen, Total	1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	<0.32
Nitrogen, Total Kjeldahl	0.73	0.22	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	8.02	7.86	7.98	7.84	7.83	8.00	7.52	7.86
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	39	22	20	15	11	8.4	4.5	3.9
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040
Sodium	8.4	<2.5	1.4	<0.50	0.88	<0.50	<0.50	<0.50
Strontium	0.12	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	68	22	25	16	9.0	9.8	12	14
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	270	140	140	110	110	100	68	80
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.015	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.012
Cations, meq/L	3.78	2.09	2.30	1.83	2.03	1.79	1.27	1.43
Anions, meq/L	3.36	1.82	2.18	1.82	1.83	1.74	1.22	1.34
Balance, %	5.8	7.0	2.7	<1.0	5.3	1.4	2.3	2.9
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-50 (250-270)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	58	57	44	55	53	56	73	60
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	71	70	44	55	53	56	73	60
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.047	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.16	0.12	0.087	0.076	0.057	0.046	0.039	0.028
Arsenic	0.26	0.23	0.23	0.15	0.13	0.094	0.062	0.057
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	14	14	9.8	12	11	12	14	11
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	0.0037	<0.0030	0.012	0.024	0.0045	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	64	64	46	58	55	63	79	61
Iron	0.017	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Lead	<0.00070	<0.00070	<0.00070	<0.00070	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	7.3	7.4	5.2	6.9	6.6	7.9	10	8.2
Manganese	0.011	0.015	0.0097	0.012	<0.0050	0.011	0.014	0.0099
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	0.11	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	8.05	8.00	7.68	7.88	7.49	7.55	7.95	7.46
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	3.2	2.6	1.8	1.9	1.9	1.7	1.6	1.4
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.00040	<0.00040	<0.00040	<0.00040	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	10	7.3	5.9	6.2	6.8	6.4	5.5	5.4
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	74	64	59	54	54	60	90	44
Vanadium	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.39	1.37	0.96	1.22	1.14	1.29	1.56	1.26
Anions, meq/L	1.37	1.30	0.85	1.03	0.85	0.89	1.10	1.31
Balance, %	<1.0	2.8	6.1	8.2	14	19	18	2.0
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-50 (250-270)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	60	61	57	57	75	76	54	70
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	60	61	57	57	75	76	54	70
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.024	0.022	0.018	0.019	0.016	0.016	0.012	0.013
Arsenic	0.049	0.044	0.042	0.037	0.026	0.030	0.026	0.029
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	11	11	9.4	9.6	11	12	7.1	9.4
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	63	69	59	63	76	83	54	74
Iron	<0.010	<0.010	<0.010	<0.010	<0.020	0.030	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	8.6	9.8	8.6	9.4	12	13	8.8	12
Manganese	0.0082	0.0079	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00011	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.84	7.70	7.51	7.54	7.50	7.85	7.78	7.93
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.2	1.2	1.0	0.99	1.1	1.0	0.89	0.99
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	0.63	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	4.8	4.3	4.7	4.9	5.8	5.5	4.0	4.8
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	69	54	44	66	80	50	51	71
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.29	1.41	1.20	1.28	1.56	1.70	1.10	1.48
Anions, meq/L	1.30	1.31	1.24	1.24	1.62	1.63	1.16	1.50
Balance, %	<1.0	3.9	1.4	1.5	1.7	1.9	2.7	<1.0
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-50 (250-270)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	79	98	86	130	78	96	72	56
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	79	98	86	130	78	96	72	56
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.012	0.010	0.0089	0.0087	0.011	0.0097	0.011	0.017
Arsenic	0.024	0.018	0.015	0.014	0.023	0.012	0.012	0.038
Barium	<0.010	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	0.16	<0.10	<0.10	0.11	<0.10
Cadmium	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	9.5	11	10	12	7.3	9.3	7.0	5.4
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	80	100	94	120	76	96	72	55
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	14	18	17	23	14	18	13	10
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.40	<0.40	<0.40	<0.40
pH, stu	7.83	8.06	8.04	7.95	7.76	7.94	7.92	7.79
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.96	1.0	0.97	1.0	0.66	0.71	0.62	0.65
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<1.0	<0.50
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	4.9	5.7	5.8	3.9	3.8	3.1	3.7	3.2
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	74	81	92	96	45	86	52	46
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.65	2.06	1.92	2.52	1.53	1.96	1.43	1.11
Anions, meq/L	1.68	2.08	1.84	2.68	1.64	1.98	1.52	1.19
Balance, %	<1.0	<1.0	2.2	3.1	3.3	<1.0	2.8	3.4
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220	1602245

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-50 (250-270)

	Extract Week						
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144*
Alkalinity, $CaCO_3$	52	68	63	63	82	79	62
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	52	68	63	63	82	79	62
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.017	0.013	0.010	0.0092	0.0072	0.0064	0.0056
Arsenic	0.034	0.018	0.015	0.013	0.0079	0.012	0.0090
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.065
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	0.00021	<0.00015	<0.00015	0.00028	<0.00015	<0.00015
Calcium	5.8	7.2	5.8	5.9	8.2	8.0	6.4
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0040	0.0032
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	58	69	57	58	78	76	61
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	0.00071	0.0016	0.0020	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	11	12	10	10	14	14	11
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	0.051	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	7.54	7.99	7.22	8.06	8.20	8.16	8.24
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.56	0.64	<0.50	<0.50	0.56	0.53	<0.50
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.9
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	4.0	3.9	3.7	2.9	2.4	2.7	4.5
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	62	37	22	62	59	98	59
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.21	1.36	1.12	1.12	1.58	1.56	1.31
Anions, meq/L	1.12	1.44	1.34	1.32	1.69	1.64	1.33
Balance, %	3.7	2.7	9.0	8.3	3.4	2.2	<1.0
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733

N/R = Not Reported
*Testing terminated after week 144

Midas Gold Inc.
MLI Job No. 3654

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-51 (790-815.5)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	57	71	62	53	69	40	44	41
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	70	86	76	65	84	49	54	50
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.084	0.074	0.097	0.12	0.12	0.089	0.087	0.091
Antimony	0.12	0.14	0.12	0.078	0.079	0.067	0.067	0.055
Arsenic	0.33	0.44	0.48	0.44	0.73	0.72	1.1	1.3
Barium	<0.010	0.015	0.013	<0.010	0.011	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	0.13	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	12	14	14	13	18	14	19	18
Chloride	3.0	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	0.0048	<0.0030	<0.015	0.0045	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	0.73	0.36	0.34	0.21	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	44	52	52	48	63	49	66	59
Iron	<0.010	<0.010	<0.010	0.019	0.012	<0.010	0.024	<0.010
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	3.6	4.4	4.4	3.8	4.8	3.3	4.4	3.6
Manganese	0.0051	0.021	0.022	0.021	0.032	0.028	0.032	0.050
Mercury	0.00017	0.00016	<0.0005	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.050	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.17	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.13
Nitrite as N	0.080	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.38	0.12	0.12	0.055	<0.050	0.065	<0.050	<0.050
Nitrogen, Total	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	<0.32
Nitrogen, Total Kjeldahl	0.82	0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	8.22	7.92	7.91	7.72	7.82	7.63	7.60	7.70
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	14	8.7	7.3	5.3	4.8	2.5	2.1	1.9
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040
Sodium	20	7.8	3.7	1.6	0.74	0.51	<0.50	<0.50
Strontium	1.4	1.6	1.4	1.2	1.4	0.99	1.2	0.92
Sulfate	29	17	14	8.4	6.5	13	22	19
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	170	120	91	64	130	79	82	73
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	2.15	1.64	1.43	1.18	1.46	1.07	1.38	1.25
Anions, meq/L	1.89	1.78	1.56	1.25	1.51	1.07	1.34	1.22
Balance, %	6.6	4.2	4.3	2.7	1.6	<1.0	1.2	1.2
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-51 (790-815.5)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	37	39	35	36	39	35	34	39
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	45	47	35	36	39	35	34	39
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.12	0.13	0.10	0.13	0.16	0.13	0.14	0.12
Antimony	0.037	0.032	0.026	0.022	0.019	0.017	0.014	0.011
Arsenic	1.1	0.86	0.76	0.70	0.61	0.49	0.39	0.34
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.30	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	16	15	13	14	14	12	12	12
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	51	48	41	42	42	38	39	39
Iron	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010
Lead	<0.00070	<0.00070	<0.00070	<0.00070	<0.0007	<0.0007	0.0011	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	2.7	2.4	1.9	2.0	1.9	1.8	1.9	1.9
Manganese	0.030	0.043	0.033	0.032	0.021	0.030	0.030	0.030
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.77	7.79	7.62	7.66	7.44	7.32	7.61	7.35
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.6	1.2	1.1	1.2	1.2	1.0	0.94	0.95
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.00040	<0.00040	<0.00040	<0.00040	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	0.68	0.59	0.48	0.44	0.38	0.35	0.32	0.31
Sulfate	17	14	9.7	8.4	6.2	5.9	4.9	4.3
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	72	68	58	61	56	44	58	31
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.08	0.99	0.85	0.91	0.90	0.79	0.80	0.79
Anions, meq/L	1.09	1.06	0.78	0.76	0.65	0.59	0.56	0.87
Balance, %	<1.0	3.4	4.3	8.6	16	14	18	4.5
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-51 (790-815.5)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	36	36	32	36	40	36	27	35
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	36	36	32	36	40	36	27	35
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.10	0.11	0.081	0.12	0.11	0.13	0.16	0.12
Antimony	0.0092	0.0086	0.0071	0.0087	0.0080	0.0078	0.010	0.010
Arsenic	0.25	0.21	0.16	0.21	0.18	0.15	0.18	0.24
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	0.00042	<0.00015	<0.00015
Calcium	12	12	10	12	13	12	7.8	11
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	37	39	33	38	41	39	26	38
Iron	<0.010	<0.010	<0.010	<0.010	<0.020	0.029	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	1.8	1.9	1.7	2.0	2.3	2.2	1.7	2.5
Manganese	0.031	0.036	0.032	0.031	0.032	0.028	0.012	0.015
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	0.00016	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	0.066	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.63	7.43	7.20	7.32	7.06	7.41	7.44	7.53
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.76	0.77	0.62	0.82	0.81	0.65	0.94	1.3
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	0.50	<0.50	<0.50
Strontium	0.27	0.26	0.23	0.24	0.26	0.22	0.15	0.21
Sulfate	3.4	3.2	3.4	3.5	3.7	3.3	1.9	3.6
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	47	80	31	44	40	52	190	44
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.014
Cations, meq/L	0.78	0.79	0.66	0.80	0.87	0.84	0.57	0.80
Anions, meq/L	0.80	0.79	0.71	0.79	0.88	0.79	0.58	0.77
Balance, %	1.2	<1.0	3.3	<1.0	<1.0	2.9	<1.0	1.8
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-51 (790-815.5)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	38	38	42	46	41	41	45	N/R
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	N/R
HCO_3	38	38	42	46	41	41	45	N/R
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	N/R
Aluminum	0.13	0.14	0.10	0.065	0.056	0.057	0.054	<0.045
Antimony	0.0079	0.0059	0.0061	0.0046	0.0034	0.0031	0.0028	<0.0025
Arsenic	0.22	0.19	0.16	0.73	0.43	0.25	0.23	0.26
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	0.12	<0.10	<0.10	0.36	<0.10
Cadmium	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	11	11	13	13	12	12	13	11
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	38	39	45	47	41	43	46	38
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	2.6	2.9	3.0	3.5	3.0	3.0	3.1	2.7
Manganese	0.012	0.014	0.016	0.016	0.017	0.025	0.031	0.023
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	0.11	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.40	<0.40	<0.40	<0.40
pH, stu	7.39	7.59	7.76	7.29	7.43	7.36	7.66	N/R
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.1	1.0	0.99	0.95	0.67	0.60	0.66	0.62
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.65	<0.50
Strontium	0.20	0.20	0.20	0.20	0.16	0.17	0.17	0.13
Sulfate	3.5	3.1	3.4	2.5	2.7	3.4	3.3	5.7
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	51	32	74	88	54	66	57	50
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	0.015	<0.010	<0.010	0.010	<0.010
Cations, meq/L	0.81	0.83	0.93	0.97	0.87	0.87	0.96	N/R
Anions, meq/L	0.83	0.82	0.92	0.97	0.88	0.89	0.97	N/R
Balance, %	1.6	<1.0	<1.0	<1.0	<1.0	1.3	<1.0	N/R
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220	1602245

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-10-51 (790-815.5)

	Extract Week						
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144*
Alkalinity, $CaCO_3$	35	28	39	32	36	36	38
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	35	28	39	32	36	36	38
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.050	0.056	<0.045	<0.045	0.051	0.062	0.12
Antimony	0.0035	0.0037	0.0035	0.0026	0.0030	0.0028	0.0028
Arsenic	0.18	0.12	0.11	0.069	0.066	0.074	0.075
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.061
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	12	12	11	8.9	10	11	10
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	41	39	37	29	34	35	33
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	0.0025	<0.0007	0.00072	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	2.7	2.3	2.2	1.7	1.8	1.8	1.8
Manganese	0.024	0.024	0.022	0.016	0.020	0.021	0.016
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.11	0.13	0.12	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	6.88	7.41	6.97	7.76	7.84	7.79	7.80
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.69	0.58	0.50	<0.50	<0.50	<0.50	<0.50
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	1.9
Strontium	0.14	0.14	0.14	0.10	0.12	0.12	0.11
Sulfate	5.7	4.7	3.8	2.6	1.8	1.8	3.4
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	66	17	26	31	32	29	45
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	0.010	<0.010	<0.010	<0.020	<0.010	<0.010
Cations, meq/L	0.84	0.81	0.74	0.58	0.67	0.70	0.74
Anions, meq/L	0.83	0.59	0.87	0.69	0.76	0.76	0.83
Balance, %	1.1	16	7.7	8.5	6.0	3.6	5.5
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733

N/R = Not Reported
*Testing terminated after week 144

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-60 (147-157.5)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	42	45	53	62	70	54	48	56
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	51	55	64	76	85	66	59	68
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	0.049	0.057	0.066	<0.045	<0.045	<0.045
Antimony	0.16	0.089	0.11	0.11	0.089	0.12	0.13	0.14
Arsenic	<0.0050	0.0069	0.0060	0.0063	0.0087	0.0054	0.0066	0.0081
Barium	0.054	0.035	0.034	0.070	0.041	0.13	0.025	0.026
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	53	67	55	41	27	12	12	14
Chloride	16	14	5.9	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.015	<0.0030	0.0036	<0.0030	0.0086	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.22	0.18
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	230	290	240	170	120	52	56	62
Iron	<0.010	<0.010	<0.010	0.015	0.013	0.020	0.016	<0.050
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50
Magnesium	23	29	24	17	12	5.2	6.2	6.4
Manganese	0.070	0.086	0.071	0.059	0.044	0.020	0.032	0.014
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	0.022	0.011	<0.010	<0.010	<0.010	<0.010	0.068	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.38	0.17	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	0.027	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.20	0.053	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<1.1	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	<0.32
Nitrogen, Total Kjeldahl	0.38	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.73	7.62	7.81	7.81	7.83	7.84	7.66	7.92
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	8.2	7.0	6.2	5.0	4.3	2.4	3.4	3.8
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	0.0072	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.00040	<0.00040	<0.0020	<0.00040	<0.00040	<0.0010	<0.00040	0.0005
Sodium	19	20	16	12	5.1	3.1	2.2	<2.5
Strontium	8.8	9.5	8.1	6.8	5.2	2.5	2.6	2.7
Sulfate	200	260	200	130	61	18	17	11
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.50
Total Dissolved Solids	400	490	400	270	200	86	71	75
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.011	<0.010
Zinc	<0.010	<0.010	<0.010	0.021	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	5.59	6.78	5.58	4.10	2.68	1.22	1.29	1.32
Anions, meq/L	5.48	6.72	5.38	3.95	2.66	1.46	1.33	1.35
Balance, %	<1.0	<1.0	1.8	1.9	<1.0	8.6	1.5	1.1
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-60 (147-157.5)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	52	49	56	43	60	68	48	58
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	63	60	56	43	60	68	48	58
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	0.051	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.12	0.11	0.11	0.074	0.091	0.077	0.054	0.047
Arsenic	0.0069	0.0072	<0.0050	0.0038	0.0057	<0.0030	0.0045	0.0026
Barium	0.022	0.024	0.024	0.018	0.025	0.028	0.020	0.021
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	12	9.6	9.9	8.3	13	14	9.5	12
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	0.14	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	52	44	45	39	61	65	47	60
Iron	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.014
Lead	<0.00070	<0.00070	<0.00070	<0.00070	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	5.5	4.9	4.8	4.5	6.7	7.5	5.6	7.2
Manganese	0.0073	0.011	0.012	0.011	<0.015	0.016	0.012	0.014
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.042	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	0.35	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	0.25	<0.20	<0.20	<0.20	<0.20
pH, stu	7.96	7.98	7.87	7.75	7.49	7.65	7.74	7.37
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	3.4	2.5	2.3	2.1	3.1	3.0	2.0	2.5
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.00040	<0.00040	<0.00040	<0.00040	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	0.98	0.58	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	2.3	2.0	2.1	1.7	2.6	2.9	2.0	2.5
Sulfate	10	11	9.7	8.1	9.6	8.9	7.9	6.1
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	69	64	69	53	60	73	88	38
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.18	0.98	0.95	0.84	1.28	1.39	0.99	1.26
Anions, meq/L	1.25	1.22	1.12	0.88	1.01	1.10	0.81	1.29
Balance, %	2.8	11	8.3	2.4	12	12	9.8	1.2
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-60 (147-157.5)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	60	69	82	58	88	77	50	46
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	60	69	82	58	88	77	50	46
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.052	0.048	0.043	0.038	0.045	0.038	0.037	0.024
Arsenic	<0.0030	<0.0030	<0.0030	<0.0030	0.0044	<0.0030	0.0055	<0.0050
Barium	0.024	0.025	0.030	0.021	0.030	0.028	0.019	0.017
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	0.00021	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	13	14	16	12	18	16	9.6	9.1
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.036
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.042
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	63	70	80	60	91	83	53	53
Iron	<0.010	<0.010	<0.010	<0.010	<0.020	0.061	<0.020	0.16
Lead	<0.0007	<0.0007	<0.0007	<0.0007	0.00078	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	7.4	8.6	9.7	7.2	11	10	7.1	7.3
Manganese	0.014	0.016	0.026	0.017	0.019	0.020	0.0083	0.013
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	0.11	0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.82	7.76	7.71	7.47	7.47	7.86	7.75	7.68
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	2.3	2.4	2.4	2.0	2.6	2.3	2.3	2.1
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	0.56	<0.50	<0.50
Strontium	2.6	2.8	3.3	2.4	3.7	3.1	2.0	1.8
Sulfate	6.0	5.9	5.5	6.6	9.6	7.6	6.0	9.7
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	71	78	81	70	40	84	70	60
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.029
Cations, meq/L	1.32	1.47	1.66	1.24	1.87	1.71	1.12	1.12
Anions, meq/L	1.32	1.50	1.75	1.30	1.97	1.70	1.12	1.12
Balance, %	<1.0	1.1	2.8	2.1	2.5	<1.0	<1.0	<1.0
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-60 (147-157.5)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	49	50	55	66	72	72	40	N/R
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	4.5	N/R
HCO_3	49	50	55	66	72	72	35	N/R
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	N/R
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.020	0.018	0.019	0.022	0.018	0.015	0.016	0.013
Arsenic	0.0033	<0.0030	<0.0030	<0.0050	<0.0050	<0.0030	<0.0050	<0.0030
Barium	0.017	0.016	0.017	0.022	0.016	0.017	0.019	0.015
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.13	<0.10
Cadmium	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	8.9	8.4	10	13	11	12	13	10
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	52	53	64	78	70	75	88	63
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	7.3	7.7	9.2	11	10	11	14	9.0
Manganese	0.0065	0.0055	0.0067	0.0079	0.0083	0.0085	0.0090	0.010
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.23
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.031	0.052
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	0.061
Nitrogen, Total	<0.32	<0.32	<0.32	<0.010	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.32	<0.40	<0.40	<0.40	<0.40
pH, stu	7.53	7.78	7.89	7.90	7.73	7.46	N/R	N/R
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	2.0	2.0	2.3	2.4	2.1	1.9	2.0	1.6
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.56	<0.50
Strontium	1.9	1.8	2.0	2.6	2.2	2.4	2.6	2.0
Sulfate	10	9.9	10	8.5	5.6	4.3	3.9	3.5
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	40	110	120	<0.20	46	32	38	64
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	0.011	<0.010	<0.010	<0.010
Cations, meq/L	1.10	1.10	1.32	1.62	1.43	1.55	N/R	N/R
Anions, meq/L	1.19	1.21	1.31	1.50	1.56	1.53	N/R	N/R
Balance, %	4.0	4.4	<1.0	3.8	4.3	<1.0	N/R	N/R
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220/1603427	1602245

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-60 (147-157.5)

	Extract Week						
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144*
Alkalinity, $CaCO_3$	73	32	88	74	85	80	65
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	73	32	88	74	85	80	65
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.015	0.015	0.015	0.014	0.011	0.012	0.010
Arsenic	<0.0050	<0.0050	<0.0050	<0.0050	<0.0030	<0.0030	<0.0030
Barium	0.018	0.017	0.020	0.016	0.017	0.018	0.098
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	12	12	13	10	12	13	9.9
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	78	75	83	69	75	78	63
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	0.0010	0.0023	0.00082	0.0060	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	12	11	12	10	11	11	9.2
Manganese	0.0085	0.0091	<0.0050	<0.0050	0.0050	0.0056	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.29	0.21	<0.10	<0.10	<0.10	<0.10	0.11
Nitrite as N	<0.025	<0.025	<0.025	0.028	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	7.62	8.06	7.52	8.14	8.22	8.13	8.24
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.7	1.7	1.5	1.5	1.4	1.4	0.90
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.4
Strontium	2.4	2.3	2.6	2.0	2.4	2.3	1.8
Sulfate	4.1	4.9	7.0	5.2	4.1	4.4	8.1
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	82	69	64	46	75	71	79
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	0.011	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.63	1.55	1.67	1.36	1.55	1.59	1.38
Anions, meq/L	1.57	0.68	1.90	1.59	1.78	1.69	1.48
Balance, %	2.0	39	6.4	7.7	7.0	3.1	3.4
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733

N/R = Not Reported
*Testing terminated after week 144

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-60 (513-543)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	19	44	46	36	48	29	21	23
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	23	54	56	44	58	36	25	28
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.076	<0.045	0.069	0.074	0.071	0.075	0.11	0.083
Antimony	0.12	0.34	0.24	0.12	0.072	0.056	0.057	0.047
Arsenic	0.56	1.3	1.3	0.68	1.7	2.2	1.2	2.0
Barium	0.012	0.029	0.019	0.13	0.017	0.012	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	0.13	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	10	14	9.7	9.5	17	14	8.9	13
Chloride	14	8.7	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.015	0.0031	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	0.15	0.19	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	39	53	36	33	56	44	27	38
Iron	<0.010	<0.010	<0.010	0.20	<0.010	<0.010	<0.010	<0.010
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	3.2	4.6	2.8	2.4	3.2	2.1	1.2	1.4
Manganese	0.022	0.041	0.040	0.038	0.12	0.090	0.035	0.068
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	0.014	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.44	0.27	0.10	0.12	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.28	<0.050	<0.050	<0.050	<0.050	0.052	<0.050	<0.050
Nitrogen, Total	1.2	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	<0.32
Nitrogen, Total Kjeldahl	0.76	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.84	7.76	7.81	7.50	7.63	7.50	7.29	7.43
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	12	11	7.6	4.2	3.3	2.0	1.5	1.3
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.00040	<0.0010	<0.0010	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040
Sodium	6.8	6.5	2.4	1.6	<0.50	<0.50	0.64	<0.50
Strontium	1.2	1.6	1.0	0.85	1.2	0.83	0.46	0.57
Sulfate	23	29	10	6.8	12	17	5.9	16
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	100	130	82	60	130	76	42	N/R
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.39	1.64	1.02	0.87	1.21	0.94	0.62	0.81
Anions, meq/L	1.29	1.76	1.13	0.87	1.20	0.94	0.53	0.79
Balance, %	3.7	3.5	5.1	<1.0	<1.0	<1.0	7.8	1.1
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-60 (513-543)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	21	20	23	25	28	23	15	25
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	26	24	23	25	28	23	15	25
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.074	0.12	0.090	0.11	0.16	0.11	0.075	0.077
Antimony	0.028	0.026	0.031	0.025	0.023	0.022	0.012	0.013
Arsenic	1.7	1.3	1.1	0.83	0.68	0.64	0.36	0.40
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.17	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	11	9.7	10	10	11	9.4	6.6	9.0
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	33	27	27	27	29	23	17	23
Iron	<0.010	<0.050	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Lead	<0.00070	0.0014	<0.00070	<0.00070	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	0.98	0.75	0.61	0.56	0.58	<0.50	<0.50	<0.50
Manganese	0.042	0.045	0.047	0.047	0.047	0.058	0.037	0.052
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.060	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.56	7.58	7.44	7.50	7.29	7.03	7.31	7.10
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.2	0.91	0.83	0.88	0.90	0.86	<1.0	0.64
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.00040	<0.00040	<0.00040	<0.00040	0.0013	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	0.41	0.33	0.30	0.26	0.26	0.22	0.14	0.17
Sulfate	11	8.6	5.3	3.2	3.1	3.6	2.7	2.3
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	57	37	47	51	24	31	60	13
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	0.019	<0.010	<0.010
Cations, meq/L	0.67	0.58	0.58	0.58	0.64	0.51	0.34	0.48
Anions, meq/L	0.66	0.57	0.49	0.48	0.44	0.38	0.26	0.55
Balance, %	1.4	1.0	8.9	9.9	18	14	14	7.0
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-60 (513-543)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	14	18	16	16	18	17	17	16
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	14	18	16	16	18	17	17	16
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.056	0.055	0.076	0.051	0.070	0.082	0.19	0.079
Antimony	0.0080	0.0097	0.0079	0.0079	0.0081	0.0089	0.011	0.0098
Arsenic	0.23	0.29	0.31	0.22	0.27	0.32	0.45	0.37
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	6.0	7.5	6.7	5.7	7.1	7.4	7.6	6.9
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	15	19	17	14	18	18	19	17
Iron	<0.010	<0.010	<0.010	<0.010	<0.020	0.026	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Manganese	0.040	0.042	0.028	0.030	0.022	0.019	0.018	0.024
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20
pH, stu	7.12	7.09	6.94	7.23	6.75	7.13	7.27	7.23
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.74	0.72
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	0.10	0.13	0.13	<0.10	0.11	0.10	0.12	<0.10
Sulfate	1.7	1.8	1.9	1.8	2.0	1.7	1.1	1.4
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	32	84	29	32	10	24	80	130
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.31	0.38	0.34	0.29	0.36	0.38	0.42	0.37
Anions, meq/L	0.32	0.40	0.36	0.36	0.40	0.38	0.36	0.35
Balance, %	1.3	2.0	2.2	10	5.0	<1.0	7.3	3.2
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-60 (513-543)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	13	13	20	28	23	16	23	19
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	13	13	20	28	23	16	23	19
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.065	0.099	0.069	0.060	<0.045	0.045	<0.045	<0.045
Antimony	0.0086	0.0063	0.012	0.0068	0.0050	0.0028	0.0027	0.0027
Arsenic	0.29	0.26	0.41	0.65	0.33	0.14	0.20	0.23
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	0.12	<0.10	<0.10	0.42	<0.10
Cadmium	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	5.6	5.0	7.9	10	8.1	6.6	8.9	8.4
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	14	13	20	25	20	18	23	22
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Manganese	0.016	0.018	0.020	0.053	0.036	0.042	0.059	0.047
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	0.027
Nitrogen, Ammonia	<0.050	0.051	<0.050	<0.050	<0.050	<0.050	0.052	0.10
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.40	<0.40	<0.40	<0.40
pH, stu	6.97	7.21	7.16	7.17	7.15	6.90	7.39	7.35
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.56	<0.50	0.69	0.65	<0.50	<0.50	<0.50	<1.0
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.72	<0.50
Strontium	<0.10	<0.10	0.10	0.12	<0.10	<0.10	<0.10	<0.10
Sulfate	2.1	1.8	2.0	1.4	<1.0	<1.0	<1.0	<1.0
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	26	<10	47	86	59	<10	<10	39
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.30	0.26	0.42	0.52	0.41	0.34	0.48	0.43
Anions, meq/L	0.30	0.30	0.44	0.59	0.46	0.32	0.46	0.38
Balance, %	<1.0	5.9	2.5	5.8	6.3	2.4	2.2	5.8
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220	1602245

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-60 (513-543)

	Extract Week						
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144*
Alkalinity, $CaCO_3$	9.8	N/R	17	17	18	19	19
CO_3, $CaCO_3$	<1.0	N/R	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	9.8	N/R	17	17	18	19	19
OH	<1.0	N/R	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.059	0.055	<0.045	<0.045	<0.045	0.049	0.046
Antimony	0.0028	0.0045	0.0041	0.0049	0.0047	0.0052	0.0054
Arsenic	0.13	0.17	0.13	0.18	0.14	0.20	0.22
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.065
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	7.3	7.2	6.3	6.3	6.9	7.7	6.7
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	19	19	16	17	18	20	18
Iron	<0.020	<0.020	<0.020	0.031	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Manganese	0.037	0.035	0.033	0.031	0.036	0.033	0.020
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	0.033	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.083	0.083	0.061	0.067	<0.050	<0.050	<0.050
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	7.07	7.16	6.74	7.56	7.54	7.55	7.68
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.0
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	<1.0	1.3	1.3	1.2	<1.0	<1.0	2.1
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	33	16	13	<10	16	<10	34
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	0.027	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.38	0.37	0.32	0.32	0.38	0.39	0.43
Anions, meq/L	0.20	<0.10	0.37	0.36	0.36	0.38	0.42
Balance, %	32	86	7.0	6.4	2.1	1.4	<1.0
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733

N/R = Not Reported
*Testing terminated after week 144

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-62 (814-833)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	150	180	71	110	110	83	60	53
CO_3, $CaCO_3$	23	7.2	7.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	140	200	72	130	130	100	73	65
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	1.3	0.17	2.1	0.26	0.074	0.047	0.053	0.049
Antimony	0.13	0.084	0.016	0.034	0.027	0.048	0.034	0.028
Arsenic	0.028	0.014	0.0068	<0.0050	<0.0050	<0.0050	<0.0050	0.0051
Barium	0.069	0.016	0.14	0.15	0.032	0.029	0.016	0.014
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	0.15	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	4.0	4.0	1.9	5.8	16	14	12	11
Chloride	17	1.1	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	0.0076	<0.0030	<0.015	<0.0030	0.0044	<0.0030	<0.0030	<0.0030
Fluoride	2.3	0.73	0.20	0.13	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	16	16	7.8	23	67	58	49	44
Iron	0.23	<0.050	0.59	0.063	<0.010	<0.010	<0.010	<0.050
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	1.4	1.4	0.70	2.2	6.4	5.5	4.6	4.2
Manganese	<0.0050	<0.0050	0.010	0.0084	0.036	0.030	0.024	0.024
Mercury	0.00018	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	0.025	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.62	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	0.081	<0.025	0.14	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.48	0.11	0.17	0.15	0.13	0.21	<0.050	0.063
Nitrogen, Total	2.2	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	<0.32
Nitrogen, Total Kjeldahl	1.5	0.26	0.46	0.24	0.21	0.21	<0.20	<0.20
pH, stu	8.99	8.53	8.73	8.11	8.03	8.05	7.76	7.87
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	10	9.6	5.4	8.7	11	7.8	5.2	3.9
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.025	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040
Sodium	89	75	30	35	8.0	2.9	1.9	1.0
Strontium	0.41	0.42	0.18	0.68	1.9	1.6	1.3	1.0
Sulfate	24	12	4.2	3.4	2.1	1.9	2.0	1.4
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	280	250	120	130	130	100	62	52
Vanadium	0.016	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	0.012	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	4.63	3.85	1.87	2.26	1.96	1.49	1.20	1.05
Anions, meq/L	4.21	3.84	1.51	2.21	2.17	1.68	1.24	1.09
Balance, %	4.8	<1.0	11	1.1	5.1	5.8	1.6	2.2
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-62 (814-833)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	68	57	77	59	100	110	88	59
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	83	69	77	59	100	110	88	59
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	0.070	<0.045	0.047	0.047	<0.045	<0.045	<0.045
Antimony	0.023	0.017	0.014	0.012	0.014	0.012	0.0088	0.0052
Arsenic	<0.0050	<0.0050	<0.0050	<0.0060	<0.0030	<0.0030	<0.0030	0.0011
Barium	0.014	0.011	0.013	<0.010	0.014	0.015	0.016	0.14
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	0.37	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	0.0004	<0.00015	<0.00015	<0.00015
Calcium	15	11	15	11	21	20	19	12
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	0.0043	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	61	47	62	49	93	88	88	52
Iron	<0.010	<0.010	<0.010	0.012	<0.010	<0.010	<0.010	<0.010
Lead	<0.00070	<0.00070	<0.00070	<0.00070	<0.0007	<0.0007	0.0011	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	5.8	4.5	6.1	5.0	9.6	9.6	9.6	5.4
Manganese	0.022	0.015	0.0097	<0.0050	0.019	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	0.011	0.024	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	0.28	0.36	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	0.36	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	0.21	<0.20	<0.20	<0.20	<0.20
pH, stu	8.08	8.00	7.92	7.88	7.86	7.99	8.05	7.59
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	4.4	2.8	3.0	2.5	3.8	3.0	2.7	2.0
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.00040	<0.00040	<0.00040	<0.00040	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	1.1	0.71	0.76	0.61	0.87	0.63	0.58	<0.50
Strontium	1.3	1.0	1.4	0.95	1.6	1.7	1.4	0.84
Sulfate	1.3	1.2	<1.0	1.0	<1.0	<1.0	<1.0	1.1
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	75	58	66	58	84	96	110	35
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.39	1.03	1.36	1.06	1.98	1.89	1.83	1.09
Anions, meq/L	1.41	1.18	1.26	0.99	1.34	1.48	1.18	1.20
Balance, %	<1.0	6.9	3.8	3.4	19	12	22	4.7
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-62 (814-833)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	47	52	41	42	46	28	37	47
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	47	52	41	42	46	28	37	47
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	0.056	0.047	0.047	<0.045	<0.045	<0.045	0.081	<0.045
Antimony	0.0034	0.0028	0.0030	0.0024	0.0021	0.0016	0.0016	0.0098
Arsenic	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Barium	0.093	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.032
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	10	11	8.3	7.9	8.2	6.7	5.6	7.5
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	46	51	41	39	45	37	33	43
Iron	<0.010	<0.010	0.014	<0.010	<0.020	0.029	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	5.0	5.8	4.9	4.8	6.0	4.8	4.6	5.9
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	0.33
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.33
pH, stu	7.74	7.56	7.29	7.29	7.05	7.44	7.59	7.89
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.6	1.4	1.4	1.2	1.3	1.1	1.1	1.3
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	0.68	0.58	<0.50	<0.50
Strontium	0.68	0.71	0.56	0.50	0.56	0.42	0.37	0.47
Sulfate	1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	55	54	39	42	24	<10	28	42
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.96	1.07	0.86	0.82	0.97	0.78	0.70	0.89
Anions, meq/L	0.96	1.04	0.82	0.84	0.92	0.56	0.74	0.94
Balance, %	<1.0	1.3	2.4	1.2	2.5	17	3.1	2.5
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts, Golden Meadows Project, Sample MGI-11-62 (814-833)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	45	45	58	62	65	54	68	56
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	45	45	58	62	65	54	68	56
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	0.048	<0.045	<0.045
Antimony	<0.0020	0.0012	0.0016	0.00098	<0.0025	0.0010	<0.0025	<0.0025
Arsenic	<0.0010	<0.0030	<0.0030	<0.0030	<0.0050	<0.0030	<0.0050	<0.0060
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	0.11	<0.10	<0.10	0.28	<0.10
Cadmium	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	6.8	7.0	8.9	8.6	8.9	7.7	9.4	8.0
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	41	45	57	60	62	53	65	54
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	5.9	6.8	8.4	9.3	9.7	8.2	10	8.2
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	0.00021	<0.00010	0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.40	<0.40	<0.40	<0.40
pH, stu	7.46	7.78	7.87	7.75	7.69	7.59	7.88	7.78
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.1	1.1	1.4	1.2	1.1	0.93	1.0	1.1
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0040
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	0.55	<0.50	<0.50	<0.50	<0.50	0.54	0.82	<0.50
Strontium	0.45	0.46	0.54	0.50	0.52	0.44	0.53	0.42
Sulfate	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	44	27	69	74	56	46	54	44
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.88	0.94	1.17	1.23	1.27	1.11	1.35	1.10
Anions, meq/L	0.90	0.90	1.16	1.24	1.30	1.08	1.36	1.12
Balance, %	1.3	2.0	<1.0	<1.0	1.1	1.5	<1.0	<1.0
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220	1602245

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-62 (814-833)

	Extract Week						
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144*
Alkalinity, $CaCO_3$	54	60	55	64	62	65	72
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	54	60	55	64	62	65	72
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	<0.0025	<0.0025	<0.0051	<0.0025	0.0012	<0.0025	<0.0025
Arsenic	<0.0050	<0.0050	<0.0050	<0.0030	<0.0030	<0.0030	<0.0030
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.082
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	0.00016
Calcium	7.6	8.8	6.8	9.0	8.6	9.2	9.7
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	0.0034	0.0035
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	52	59	46	59	55	61	64
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	0.0055	<0.0007	0.0028	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	8.1	9.1	7.1	8.9	8.0	9.2	9.6
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Mercury	0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	7.54	7.89	7.19	8.08	8.12	8.04	8.28
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.98	0.96	0.72	0.82	0.80	0.87	0.89
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	1.6	2.2
Strontium	0.39	0.44	0.34	0.41	0.37	0.37	0.40
Sulfate	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.1
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	54	23	34	67	75	69	65
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.07	1.21	0.94	1.20	1.12	1.31	1.39
Anions, meq/L	1.08	1.20	1.10	1.28	1.24	1.30	1.46
Balance, %	<1.0	<1.0	7.7	3.1	5.0	<1.0	2.4
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733

N/R = Not Reported
*Testing terminated after week 144

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-64 (185.5-208)

	Extract Week							
Analysis, mg/L	Week 0	Week 1	Week 2	Week 4	Week 8	Week 12	Week 16	Week 20
Alkalinity, $CaCO_3$	86	83	75	72	88	79	45	43
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	100	100	92	88	110	96	54	52
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	0.047	0.055	0.098	<0.045	<0.045	<0.045
Antimony	0.52	0.37	0.35	0.24	0.24	0.30	0.14	0.12
Arsenic	1.1	1.7	3.3	2.7	2.8	5.2	4.5	4.3
Barium	0.076	0.039	0.034	0.030	0.028	0.027	0.017	0.012
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	0.17	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.0010	<0.00015	<0.00015	<0.0005	<0.00015	<0.00015
Calcium	63	31	26	30	35	40	37	28
Chloride	25	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	0.013	<0.0030	<0.015	<0.0030	0.0044	<0.0030	<0.0030	<0.0030
Fluoride	<1.0	0.79	0.40	0.15	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	230	110	95	110	120	140	120	91
Iron	<0.010	<0.010	<0.010	0.012	0.020	<0.010	<0.010	<0.010
Lead	<0.00070	<0.00070	<0.0007	<0.00070	<0.00070	<0.0010	<0.00070	<0.00070
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	17	8.6	7.0	7.6	8.7	8.7	7.4	5.3
Manganese	0.037	0.029	0.036	0.039	0.060	0.10	0.078	0.072
Mercury	0.00018	<0.00010	<0.00010	<0.00010	0.00015	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<1.0	<0.10	<0.10	0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.25	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	0.57	0.28	0.25	0.17	0.10	0.15	<0.050	<0.050
Nitrogen, Total	1.3	<1.1	<1.1	<1.1	<1.1	<1.1	<0.32	<0.32
Nitrogen, Total Kjeldahl	1.3	0.56	0.36	0.27	<0.20	<0.20	<0.20	<0.20
pH, stu	8.06	7.83	7.98	7.74	7.90	7.95	7.60	7.72
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	36	22	17	14	11	8.4	5.1	3.4
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Silver	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040	<0.0010	<0.00040	<0.00040
Sodium	14	4.0	2.1	0.88	0.51	<0.50	<0.50	<0.50
Strontium	0.58	0.30	0.24	0.25	0.28	0.30	0.26	0.18
Sulfate	150	55	33	40	38	55	72	47
Sulfide, Total	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Thallium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	430	220	150	150	190	180	170	130
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	6.11	3.01	2.42	2.54	2.78	2.94	2.59	1.92
Anions, meq/L	5.47	2.83	2.22	2.29	2.59	2.72	2.38	1.83
Balance, %	5.5	3.1	4.4	5.1	3.5	3.9	4.1	2.5
WET Lab Report #	1311319	1311438	1312047	1312324	1401240	1402201	1403238	1404198

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-64 (185.5-208)

	Extract Week							
Analysis, mg/L	Week 24	Week 28	Week 32	Week 36	Week 40	Week 44	Week 48	Week 52
Alkalinity, $CaCO_3$	47	43	37	37	38	37	41	37
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	57	53	37	37	38	37	41	37
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	0.058	<0.045	<0.045	<0.045	0.047	0.050	0.047
Antimony	0.11	0.095	0.077	0.069	0.060	0.058	0.048	0.042
Arsenic	3.4	2.8	2.4	1.9	1.6	1.3	1.1	1.2
Barium	<0.010	0.011	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	26	21	20	19	21	19	18	18
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	83	68	62	60	65	60	57	56
Iron	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.015
Lead	<0.00070	<0.00070	<0.00070	<0.00070	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	4.8	3.7	3.1	3.1	3.3	3.1	2.9	2.8
Manganese	0.055	0.051	0.045	0.043	0.029	0.043	0.043	0.040
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	0.011	<0.010	<0.010	<0.010	<0.042	<0.010	<0.010	<0.010
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	0.22	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	0.27	<0.20	<0.20	<0.20	<0.20
pH, stu	7.84	7.75	7.49	7.64	7.35	7.28	7.44	7.25
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	3.2	2.3	2.0	2.0	2.2	1.9	1.6	1.6
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0050	<0.0050	<0.0050	<0.0020	<0.0020	<0.0020	<0.0020	<0.010
Silver	<0.00040	<0.00040	<0.00040	<0.00040	<0.0004	<0.0004	<0.0004	<0.0008
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	0.16	0.14	0.13	0.12	0.14	0.12	0.11	0.11
Sulfate	36	28	29	25	29	27	22	21
Sulfide, Total	<0.10	<0.10	<0.10	N/R	N/R	N/R	N/R	N/R
Thallium	<0.0010	<0.0010	<0.0010	<0.00040	<0.00040	<0.00040	<0.00040	<0.0005
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	110	83	84	78	90	77	80	66
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.78	1.42	1.31	1.26	1.38	1.26	1.18	1.18
Anions, meq/L	1.68	1.47	1.21	1.13	1.11	1.06	1.01	1.18
Balance, %	2.7	1.7	3.8	5.4	11	8.6	8.0	<1.0
WET Lab Report #	1405108	1406064	1407039	1407753	1408700	1409656	1410585	1411424

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-64 (185.5-208)

	Extract Week							
Analysis, mg/L	Week 56	Week 60	Week 64	Week 68	Week 72	Week 76	Week 80	Week 84
Alkalinity, $CaCO_3$	37	33	26	22	25	17	16	19
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	37	33	26	22	25	17	16	19
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.038	0.030	0.025	0.024	0.024	0.021	0.018	0.0016
Arsenic	0.87	0.82	0.82	0.77	0.66	0.51	0.45	0.54
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	19	17	14	14	14	12	11	12
Chloride	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00	<1.00
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	59	55	45	42	45	38	34	38
Iron	<0.010	<0.010	<0.010	0.050	<0.020	0.051	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	0.0035	<0.0007	<0.0007	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	2.8	2.7	2.2	2.0	2.2	1.8	1.7	1.9
Manganese	0.048	0.046	0.036	0.036	0.032	0.028	0.022	0.021
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.010	<0.010	<0.010	<0.010	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32	<0.32
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.20	<0.20	0.20	<0.20
pH, stu	7.61	7.38	7.11	7.08	6.87	7.11	7.21	7.29
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	1.5	1.3	1.2	0.99	0.95	0.82	0.70	0.95
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Strontium	0.12	0.11	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	21	22	21	21	21	20	16	18
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	74	82	78	61	43	74	51	62
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.22	1.11	0.91	0.89	0.91	0.77	0.71	0.78
Anions, meq/L	1.18	1.12	0.96	0.88	0.94	0.76	0.65	0.75
Balance, %	1.7	<1.0	2.4	<1.0	1.7	1.0	4.0	1.7
WET Lab Report #	1412509	1501260	1502253	1503271	1504185	1505080	1506054	1506836

N/R = Not Reported

Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-64 (185.5-208)

	Extract Week							
Analysis, mg/L	Week 88	Week 92	Week 96	Week 100	Week 104	Week 108	Week 112	Week 116
Alkalinity, $CaCO_3$	16	18	36	32	27	26	38	36
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	16	18	36	32	27	26	38	36
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	0.047	<0.045	<0.045	<0.045
Antimony	0.018	0.016	0.028	0.020	0.017	0.014	0.014	0.017
Arsenic	0.45	0.41	0.92	1.4	1.0	0.67	0.90	1.1
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	0.14	<0.10	<0.10	0.33	<0.10
Cadmium	<0.00016	<0.00016	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	11	11	18	16	15	14	17	18
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	34	35	58	54	48	45	57	60
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.0007	<0.00070	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	1.7	1.9	3.2	3.1	2.8	2.6	3.4	3.6
Manganese	0.017	0.015	0.016	0.012	0.0085	0.0069	0.0056	0.0060
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	0.00038	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.32	<0.32	<0.32	<0.32	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.20	<0.20	<0.20	<0.20	<0.40	<0.40	<0.40	<0.40
pH, stu	7.03	7.36	7.68	7.37	7.23	7.23	7.56	7.55
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.75	0.70	1.1	0.98	0.82	0.70	0.70	<1.0
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.10	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.00040	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	0.60	<0.50
Strontium	<0.10	<0.10	0.11	0.10	<0.10	<0.10	0.11	0.11
Sulfate	17	18	22	22	21	19	19	21
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	62	32	79	99	48	60	65	76
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	0.71	0.72	1.19	1.08	1.01	0.93	1.17	1.19
Anions, meq/L	0.67	0.73	1.18	1.10	0.98	0.92	1.16	1.16
Balance, %	2.5	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	1.6
WET Lab Report #	1507726	1508636	1509606	1510564	1511418	1512460	1601220	1602245

N/R = Not Reported

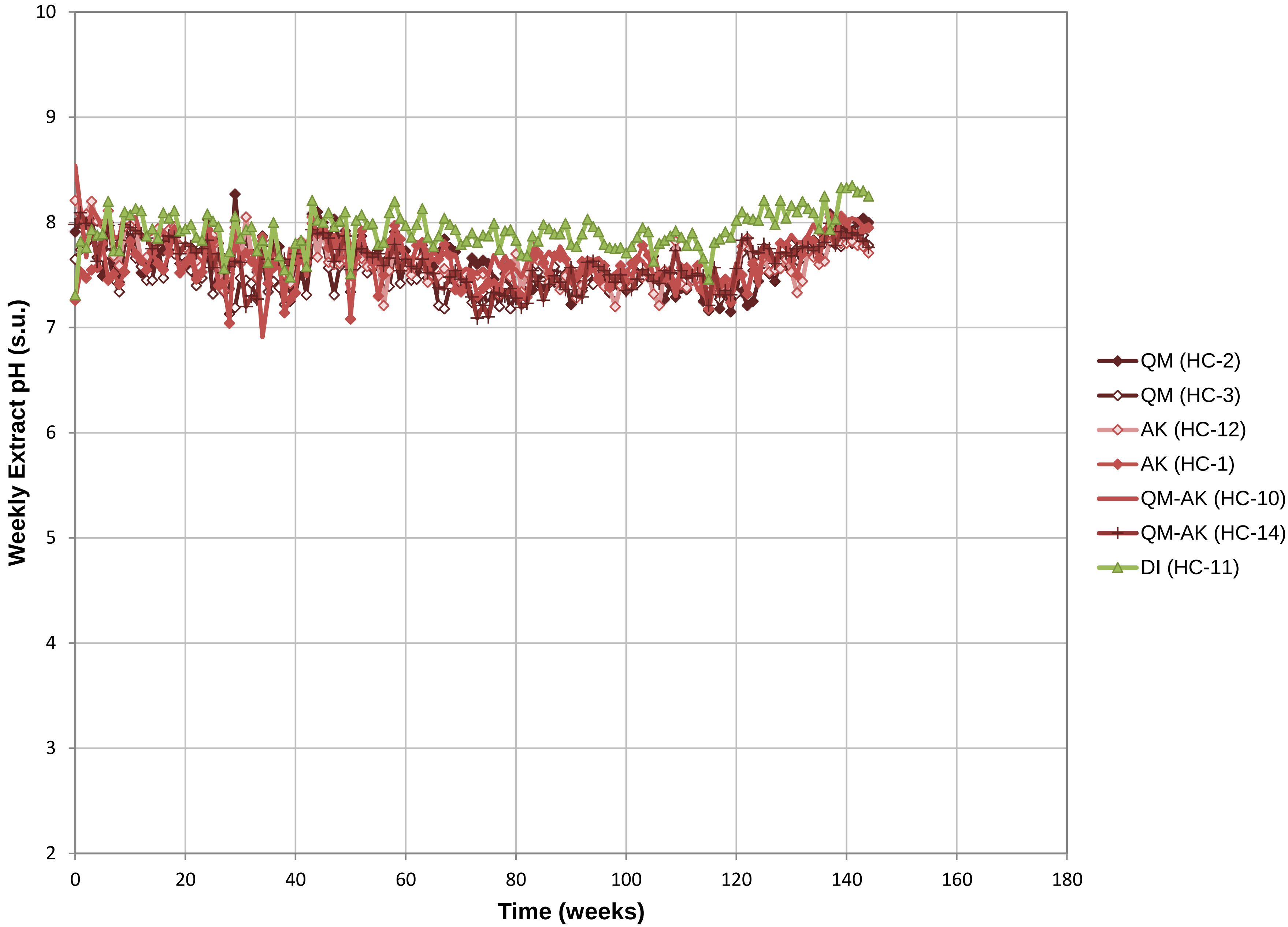
Table . - Profile II Analytical Results, HC Extracts,
Golden Meadows Project, Sample MGI-11-64 (185.5-208)

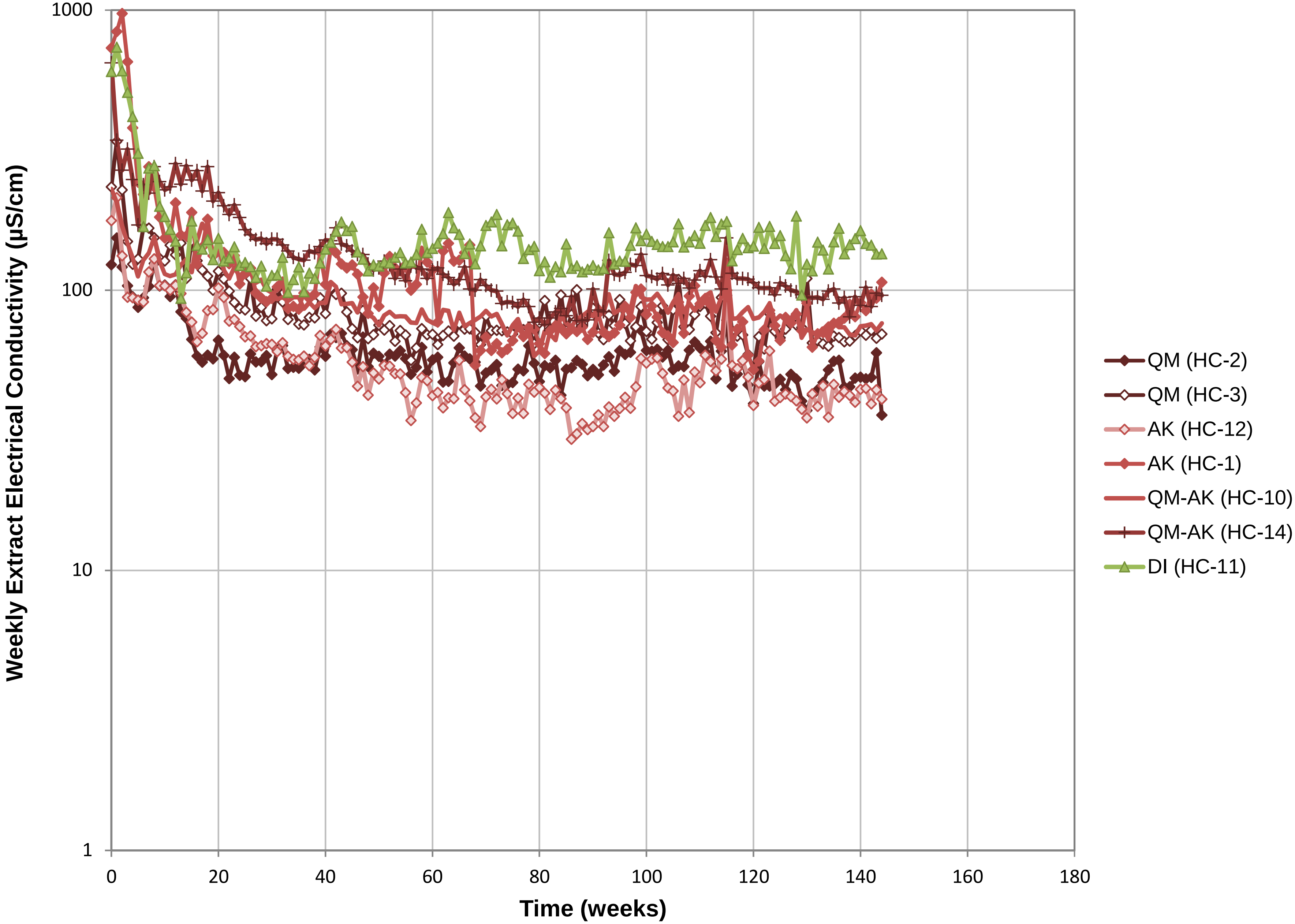
	Extract Week						
Analysis, mg/L	Week 120	Week 124	Week 128	Week 132	Week 136	Week 140	Week 144*
Alkalinity, $CaCO_3$	28	26	28	30	29	26	28
CO_3, $CaCO_3$	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
HCO_3	28	26	28	30	29	26	28
OH	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Aluminum	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045	<0.045
Antimony	0.014	0.014	0.011	0.013	0.011	0.011	0.012
Arsenic	0.65	0.50	0.36	0.48	0.42	0.34	0.37
Barium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	0.063
Beryllium	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010	<0.0010
Bismuth	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Boron	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Cadmium	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015	<0.00015
Calcium	16	15	12	12	11	11	12
Chloride	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050	<0.0050
Cobalt	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Copper	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030	<0.0030
Fluoride	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Gallium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Hardness, $CaCO_3$	51	49	39	41	38	39	41
Iron	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Lead	<0.0007	<0.0007	0.0017	<0.0007	0.00078	<0.0007	<0.0007
Lithium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Magnesium	3.1	2.9	2.4	2.5	2.5	2.6	2.7
Manganese	<0.0050	<0.0050	<0.0050	<0.0050	0.16	<0.0050	<0.0050
Mercury	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010	<0.00010
Molybdenum	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020	<0.020
Nickel	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Nitrate as N	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Nitrite as N	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025	<0.025
Nitrogen, Ammonia	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050	<0.050
Nitrogen, Total	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52	<0.52
Nitrogen, Total Kjeldahl	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40	<0.40
pH, stu	7.24	7.52	6.88	7.74	7.73	7.65	7.83
Phosphorus	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50
Potassium	0.76	0.67	0.52	0.55	0.60	0.57	<0.50
Scandium	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100	<0.100
Selenium	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020	<0.0020
Silver	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004	<0.0004
Sodium	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	2.0
Strontium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Sulfate	22	19	18	15	13	15	18
Sulfide, Total	N/R	N/R	N/R	N/R	N/R	N/R	N/R
Thallium	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040	<0.00040
Tin	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Titanium	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10	<0.10
Total Dissolved Solids	78	<10	41	36	72	79	65
Vanadium	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010	<0.010
Zinc	<0.010	0.014	<0.010	<0.010	<0.010	<0.010	<0.010
Cations, meq/L	1.07	1.00	0.81	0.82	0.79	0.78	0.91
Anions, meq/L	1.02	0.92	0.93	0.91	0.85	0.83	0.93
Balance, %	2.6	4.7	7.2	5.4	4.0	3.4	1.4
WET Lab Report #	1603226	1604074	1605068	1605852	1606861	1607748	1608733

N/R = Not Reported
*Testing terminated after week 144

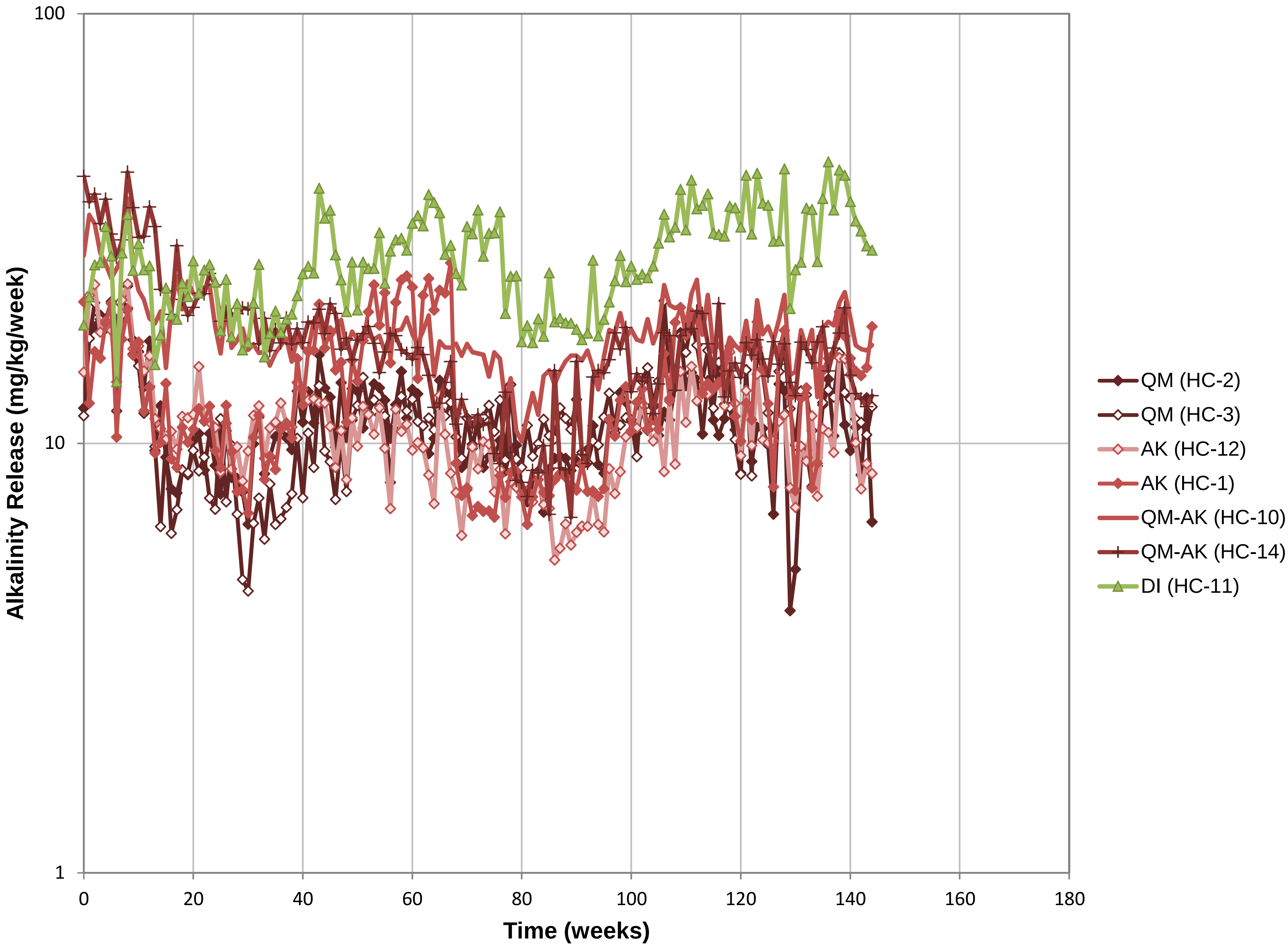
Appendix B2

Kinetic Test Data Evaluation Graphs

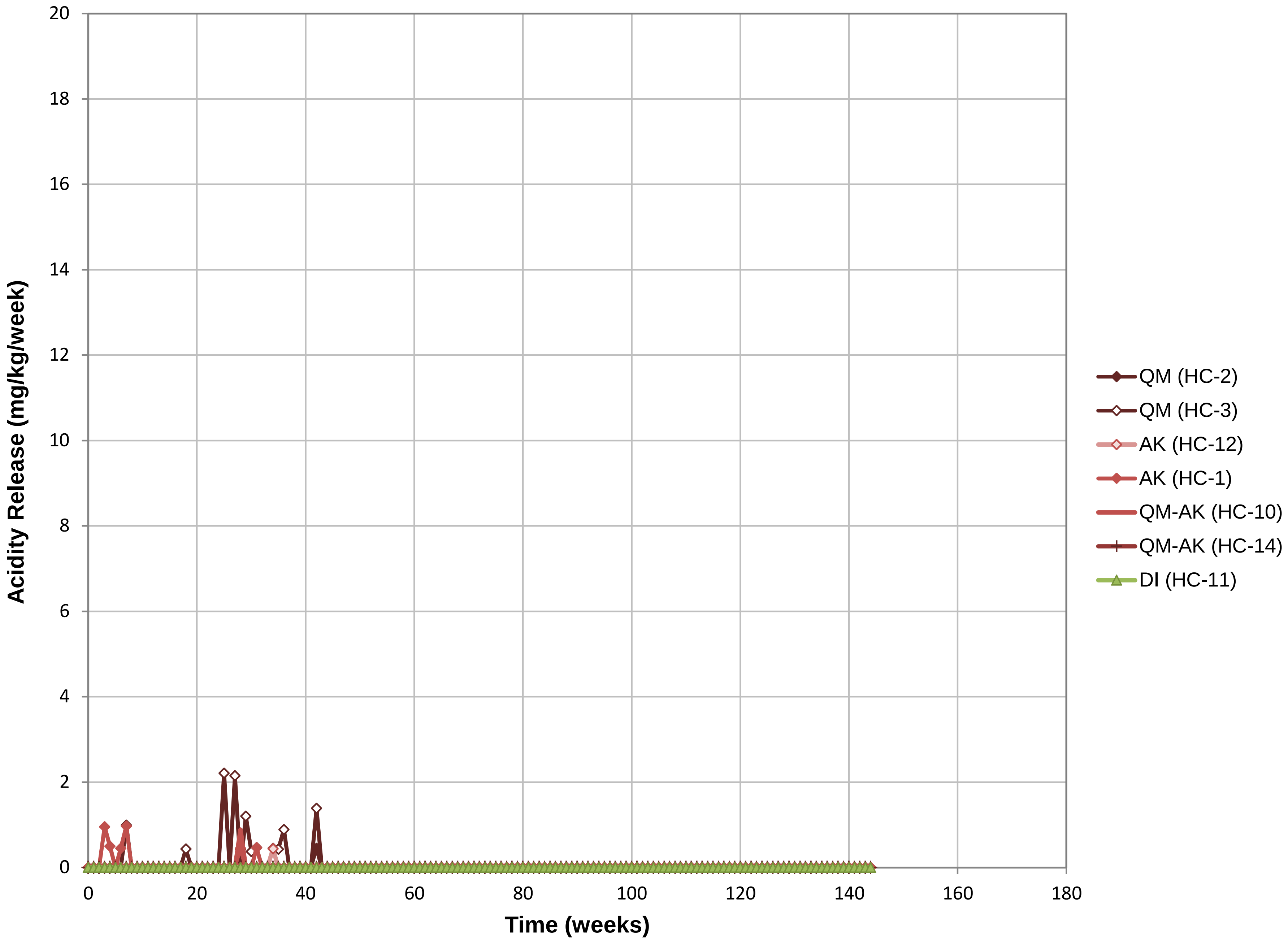

Weekly Extract pH (s.u.)
10
9
8
7
6
5
4
3
2
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



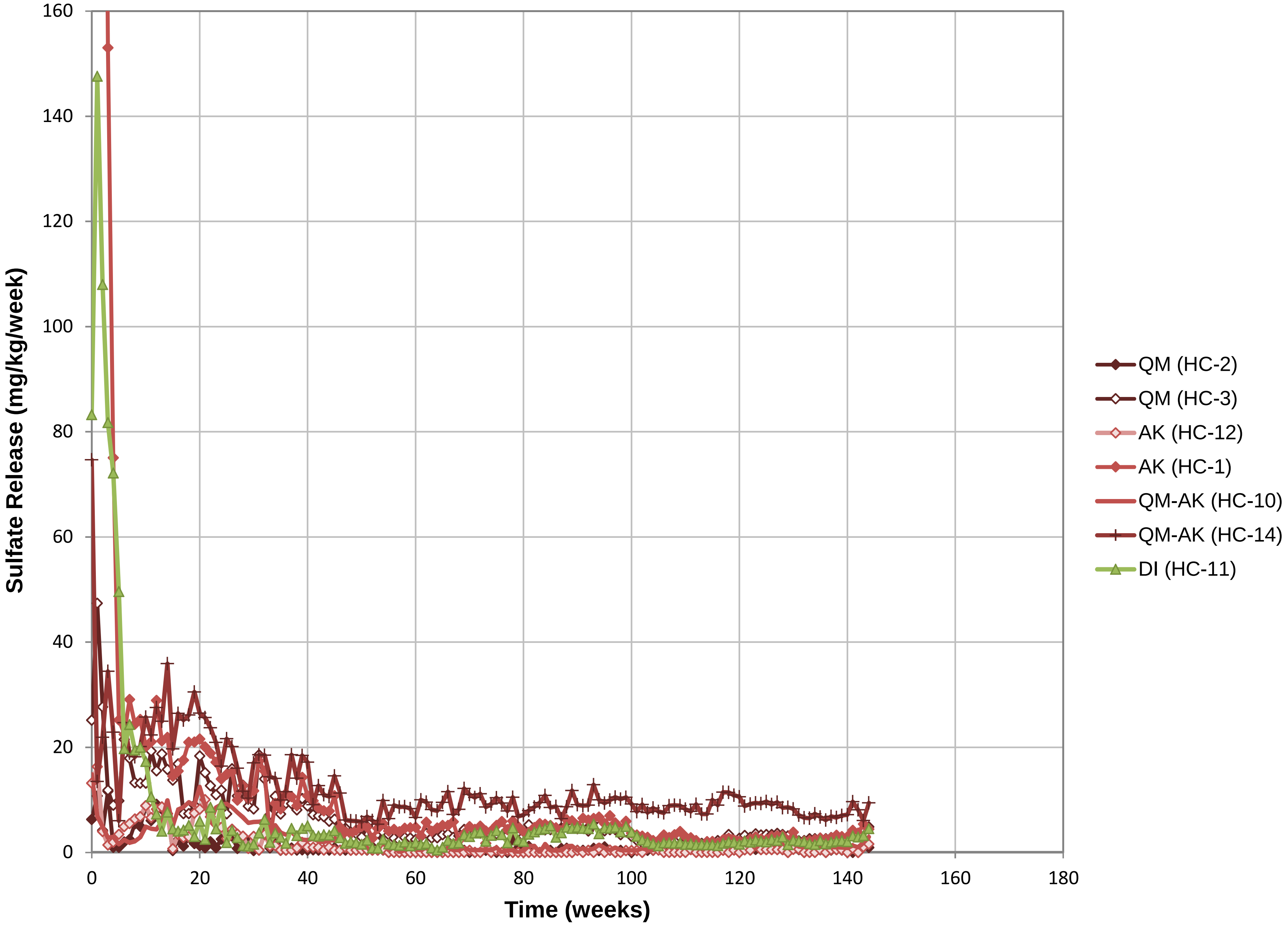
Weekly Extract Electrical Conductivity (µS/cm)
1000
100
10
1
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



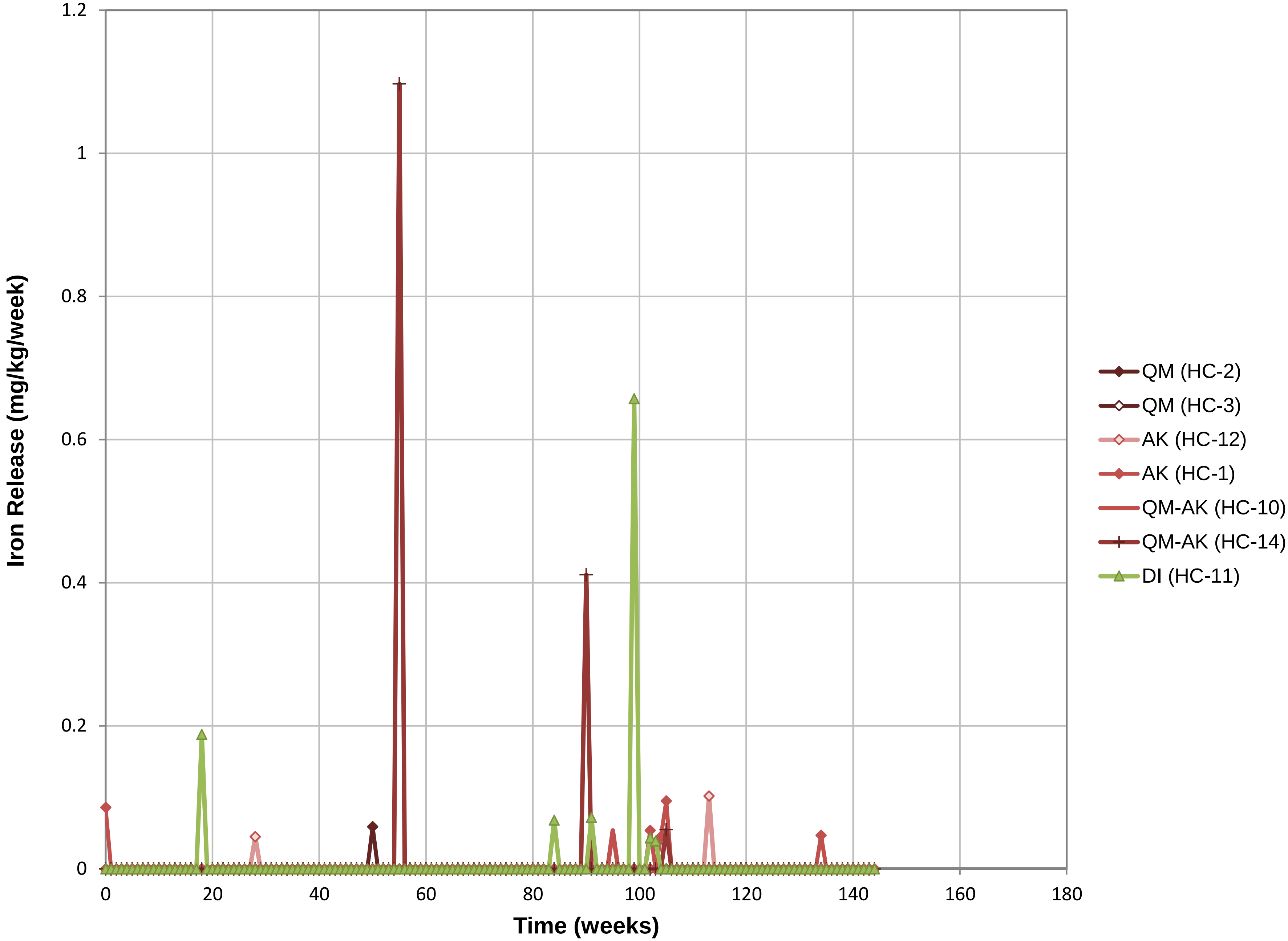
100
10
1
0
20
40
60
80
100
120
140
160
180
Time (weeks)
Alkalinity Release (mg/kg/week)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)

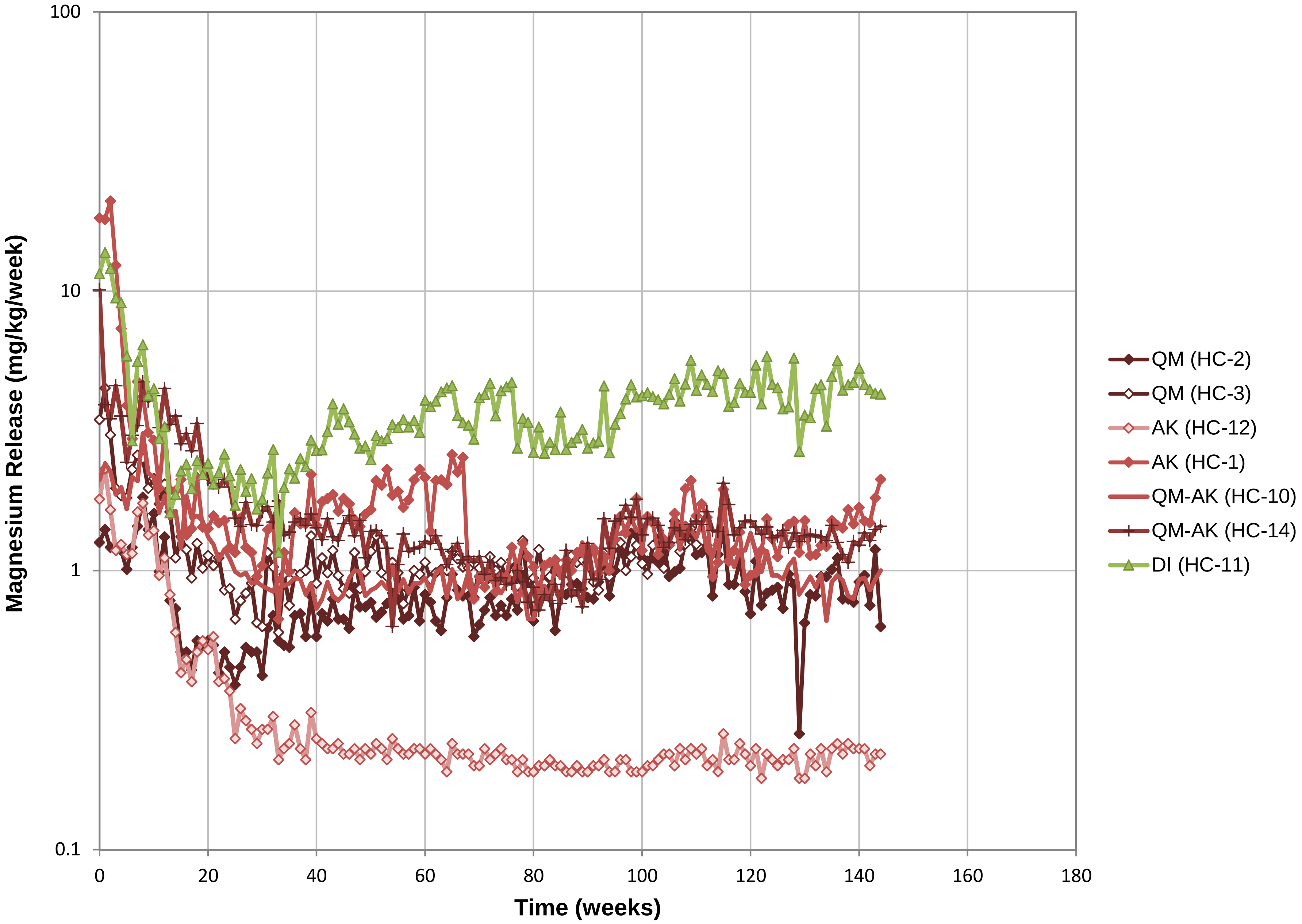


Acidity Release (mg/kg/week)
20
18
16
14
12
10
8
6
4
2
0
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)

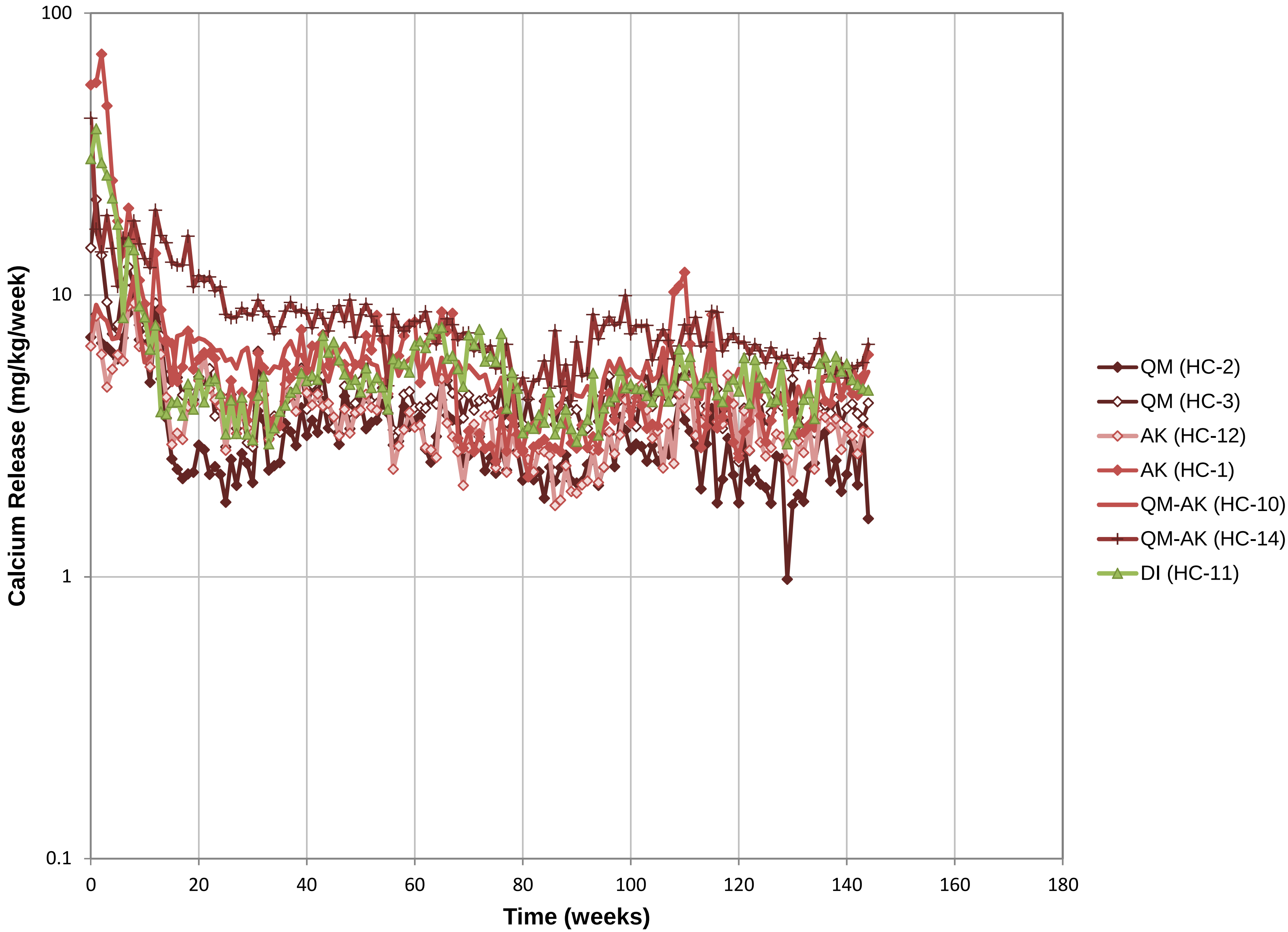


Sulfate Release (mg/kg/week)
0
20
40
60
80
100
120
140
160
Time (weeks)
0
20
40
60
80
100
120
140
160
180
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)

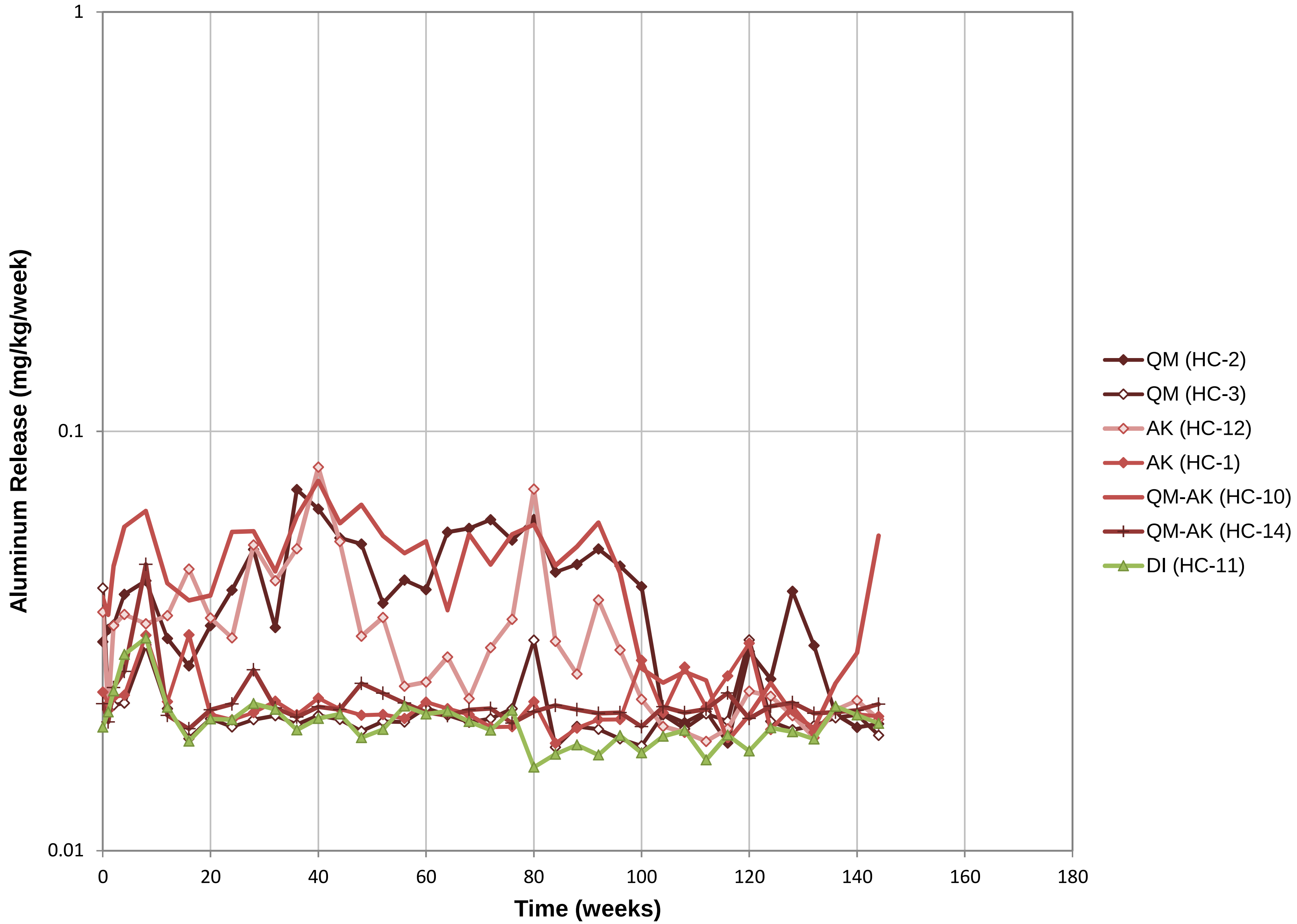

Iron Release (mg/kg/week)
1.2
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



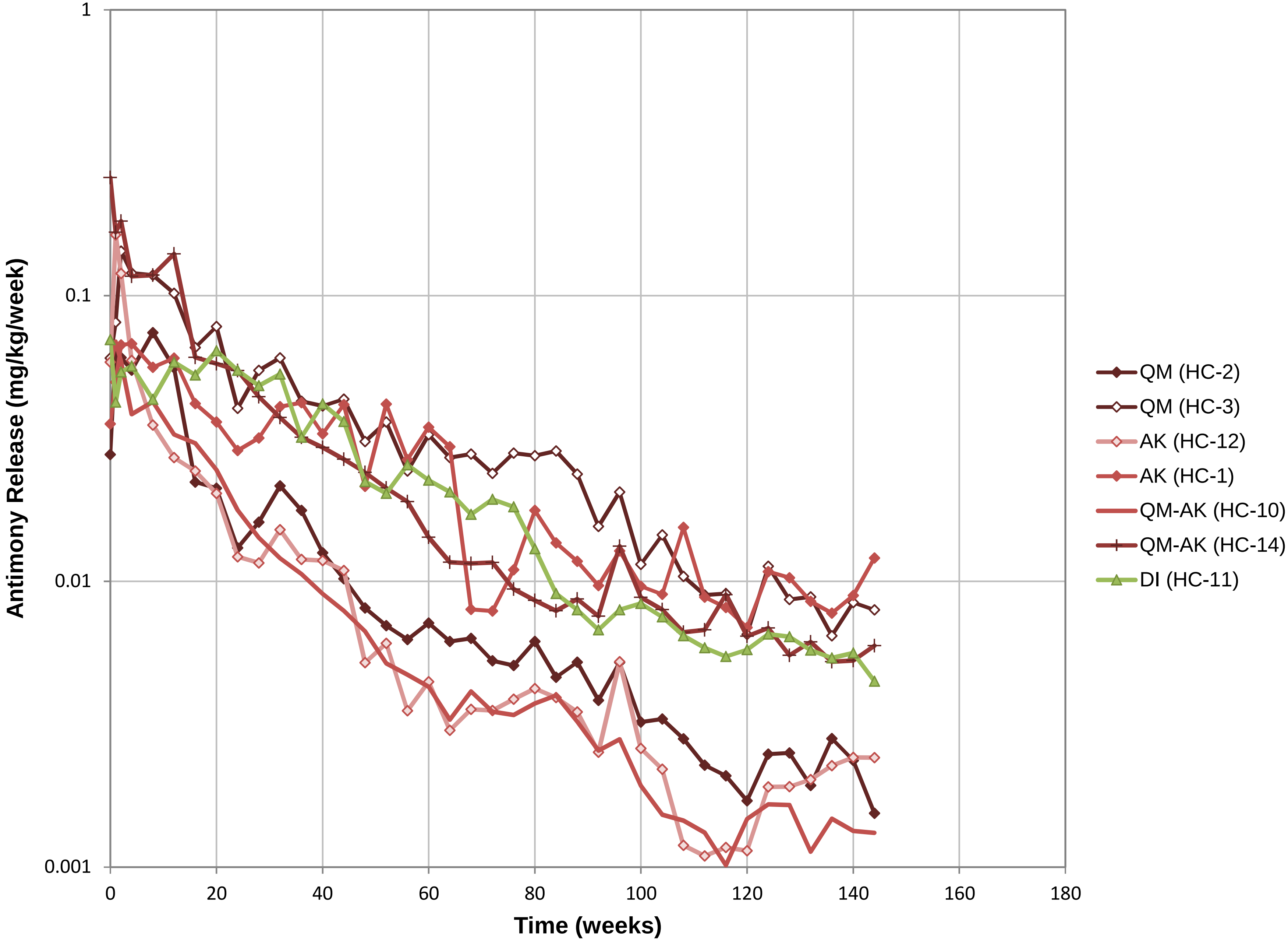
Magnesium Release (mg/kg/week)
100
10
1
0.1
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



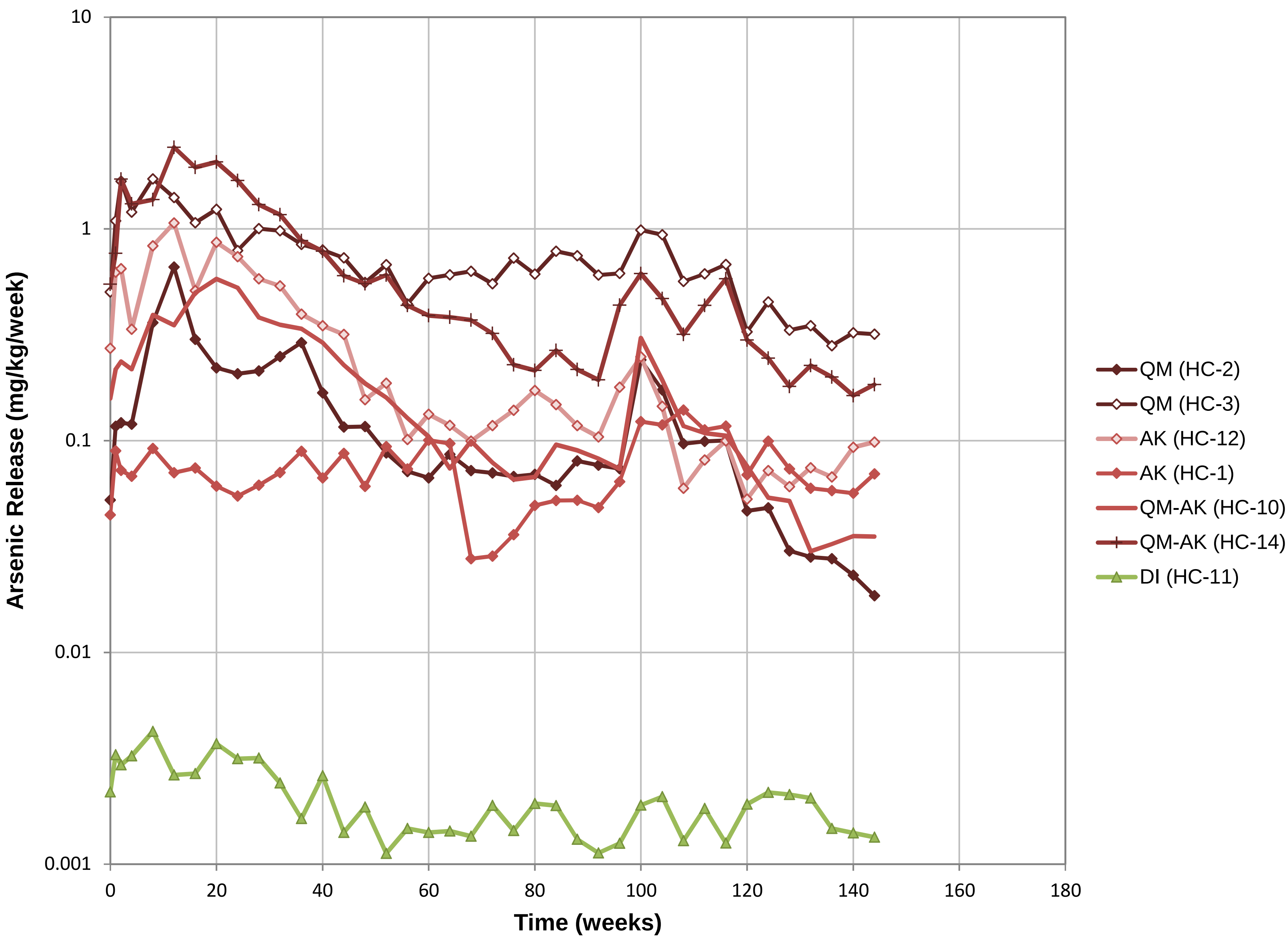
Calcium Release (mg/kg/week)
100
10
1
0.1
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



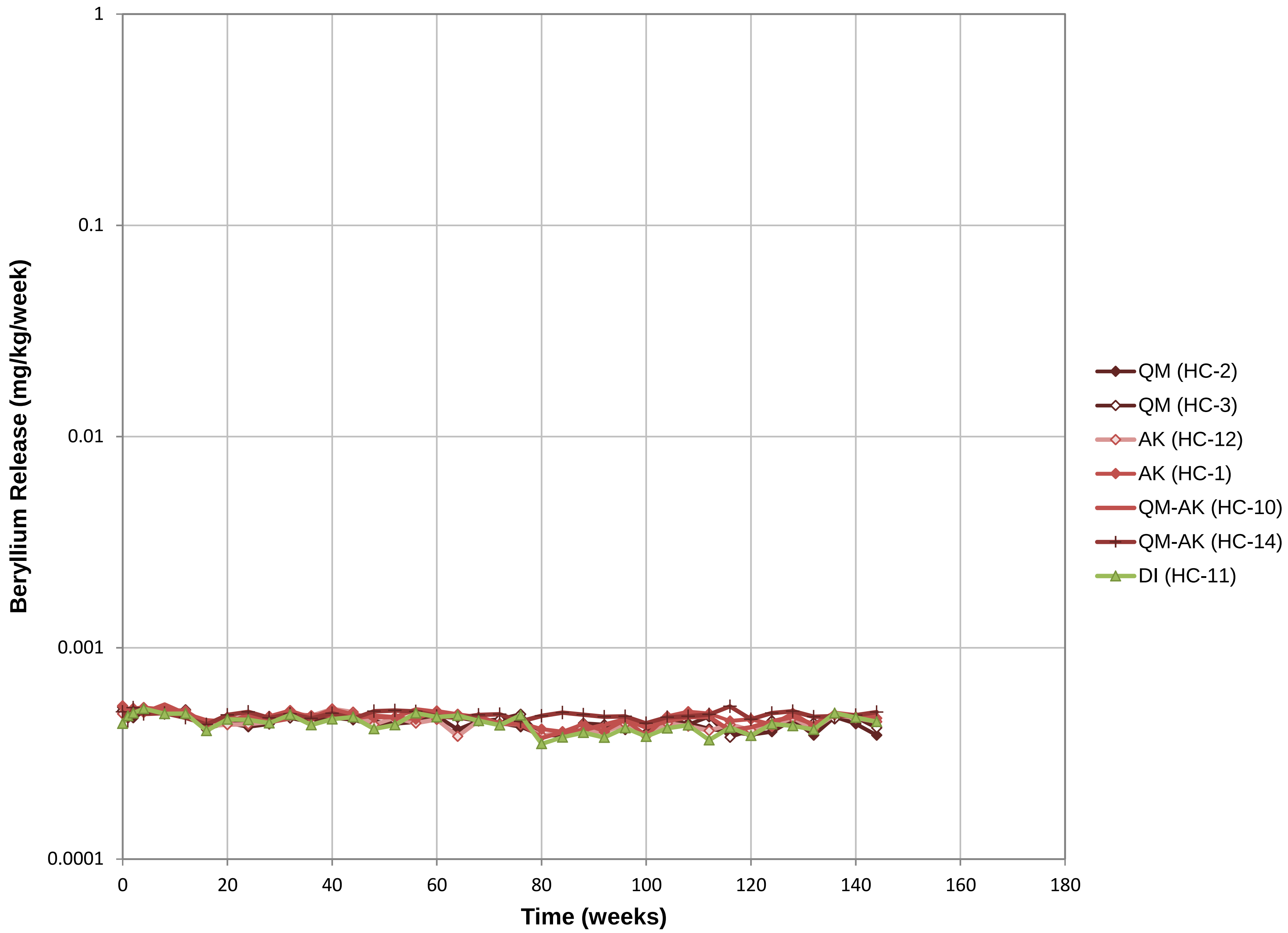
Aluminum Release (mg/kg/week)
1
0.1
0.01
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)

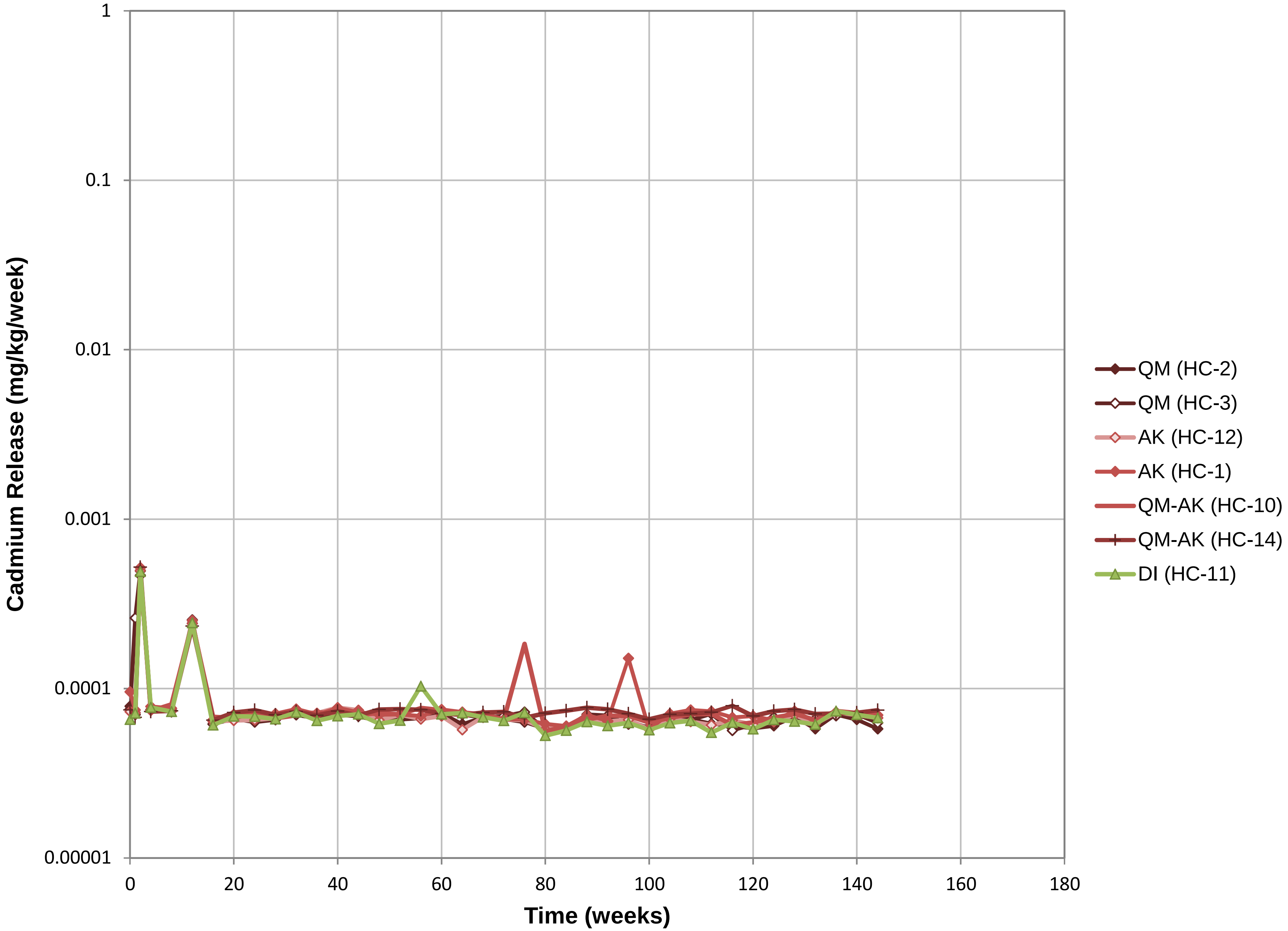


Antimony Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)

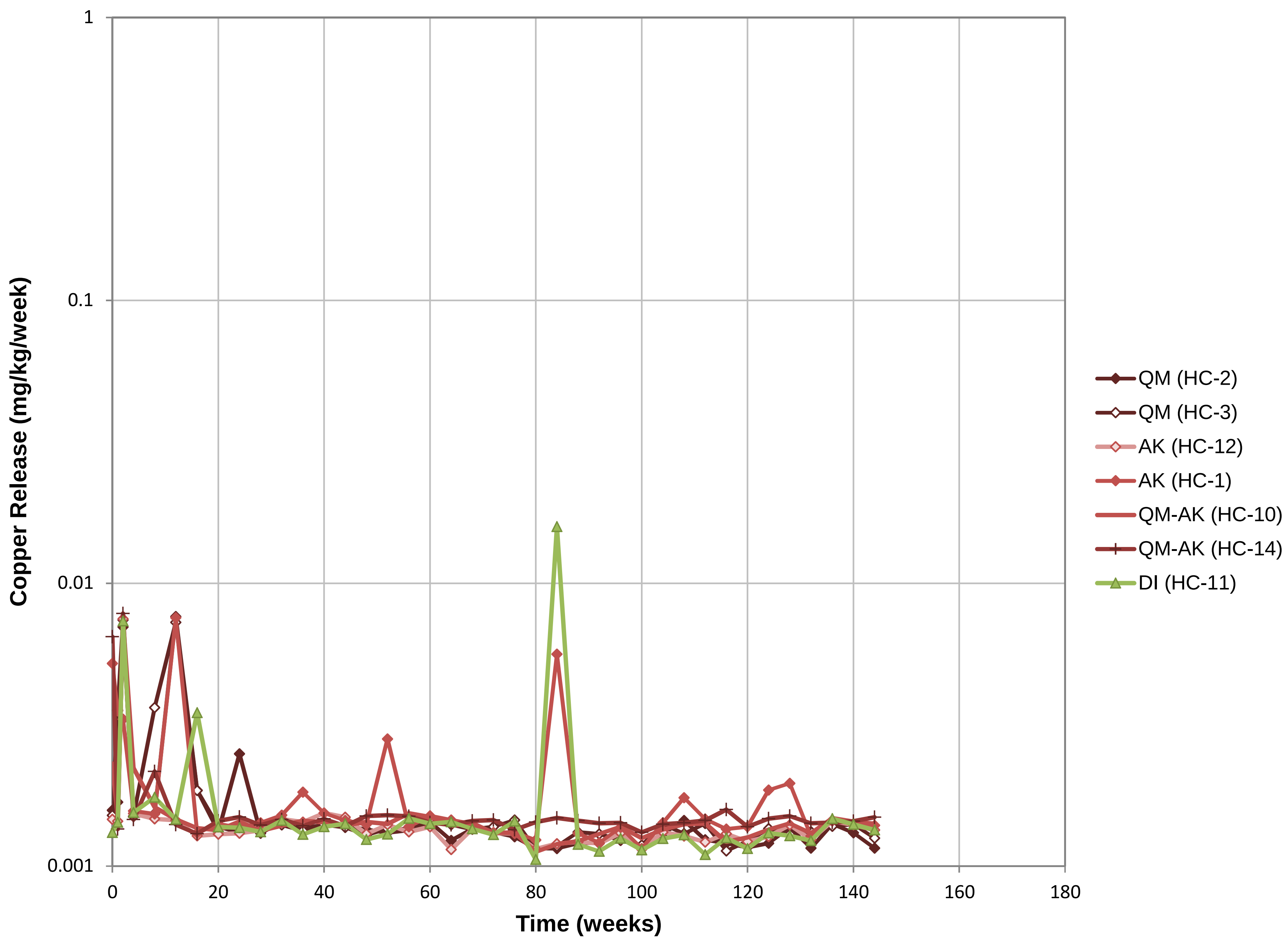


Arsenic Release (mg/kg/week)
10
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)

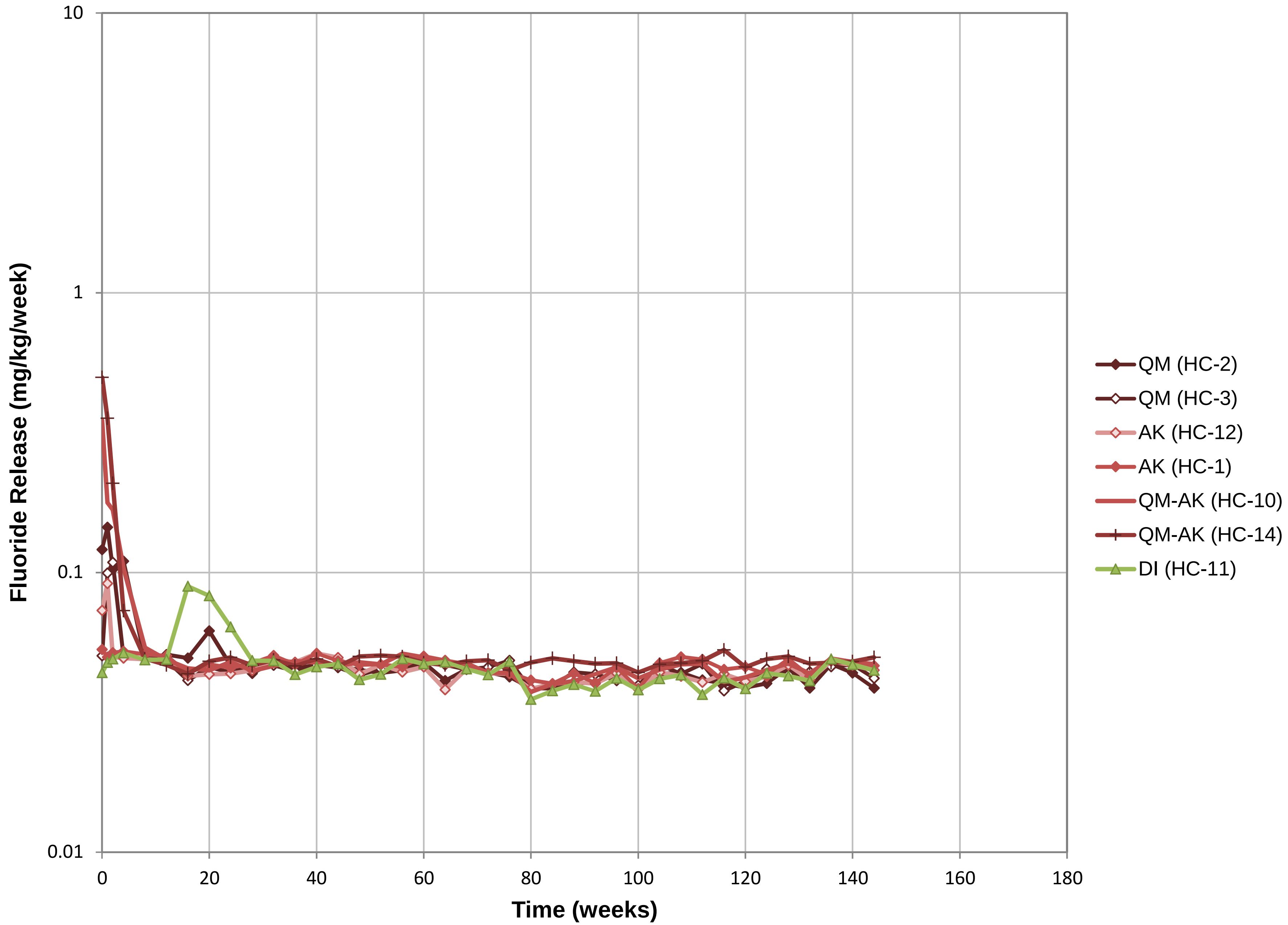

Beryllium Release (mg/kg/week)
1
0.1
0.01
0.001
0.0001
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



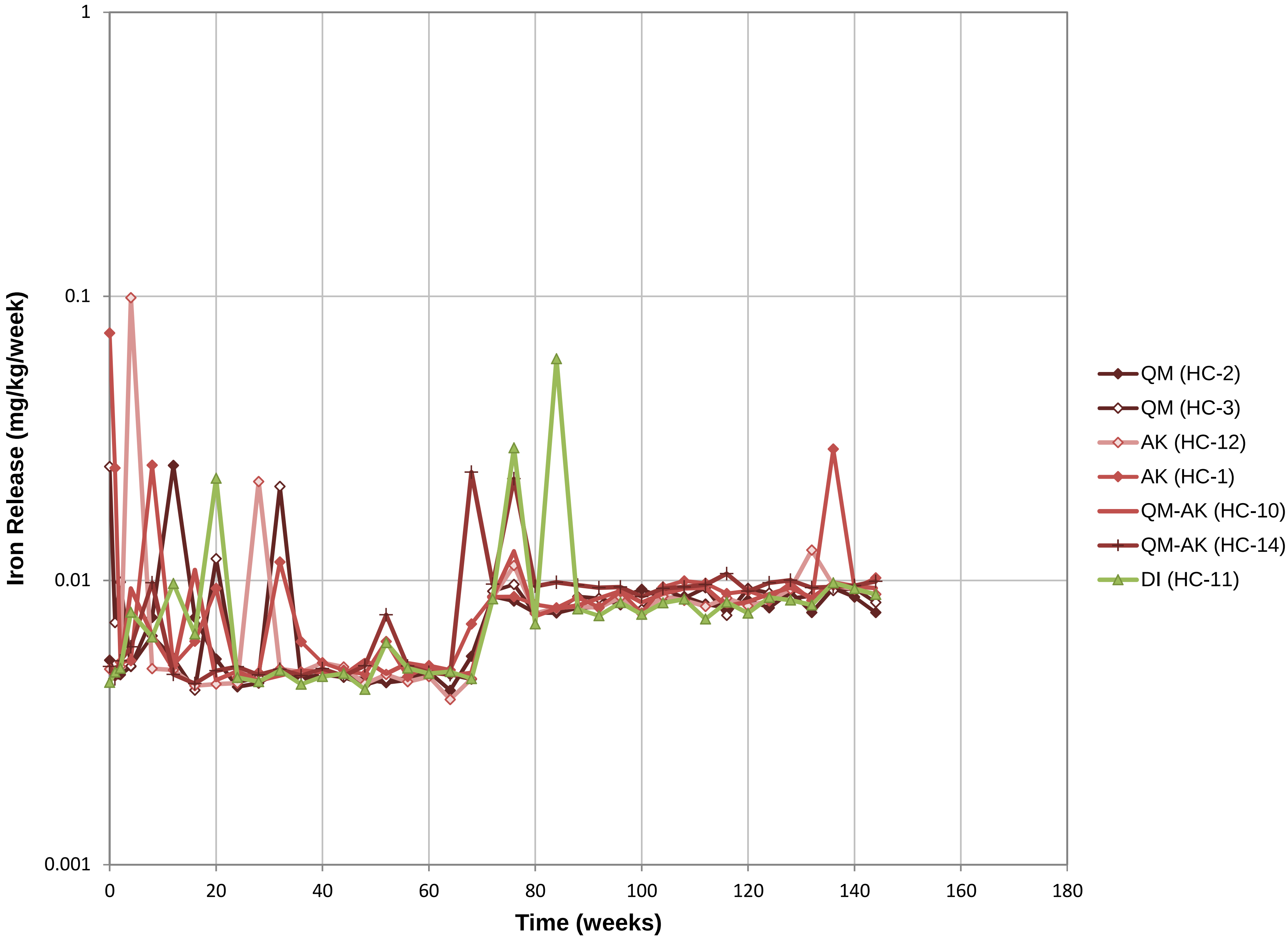
Cadmium Release (mg/kg/week)
1
0.1
0.01
0.001
0.0001
0.00001
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



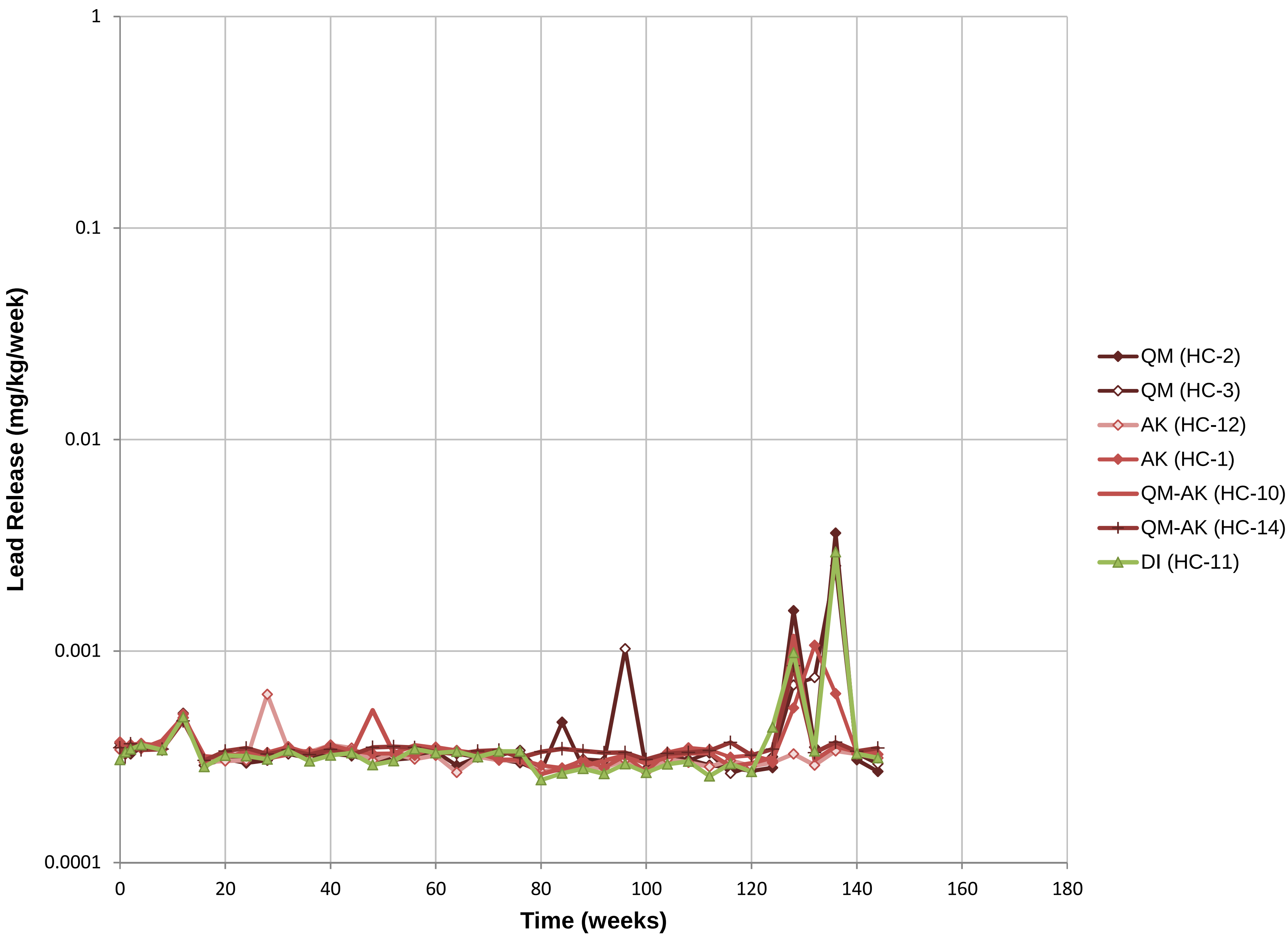
Copper Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



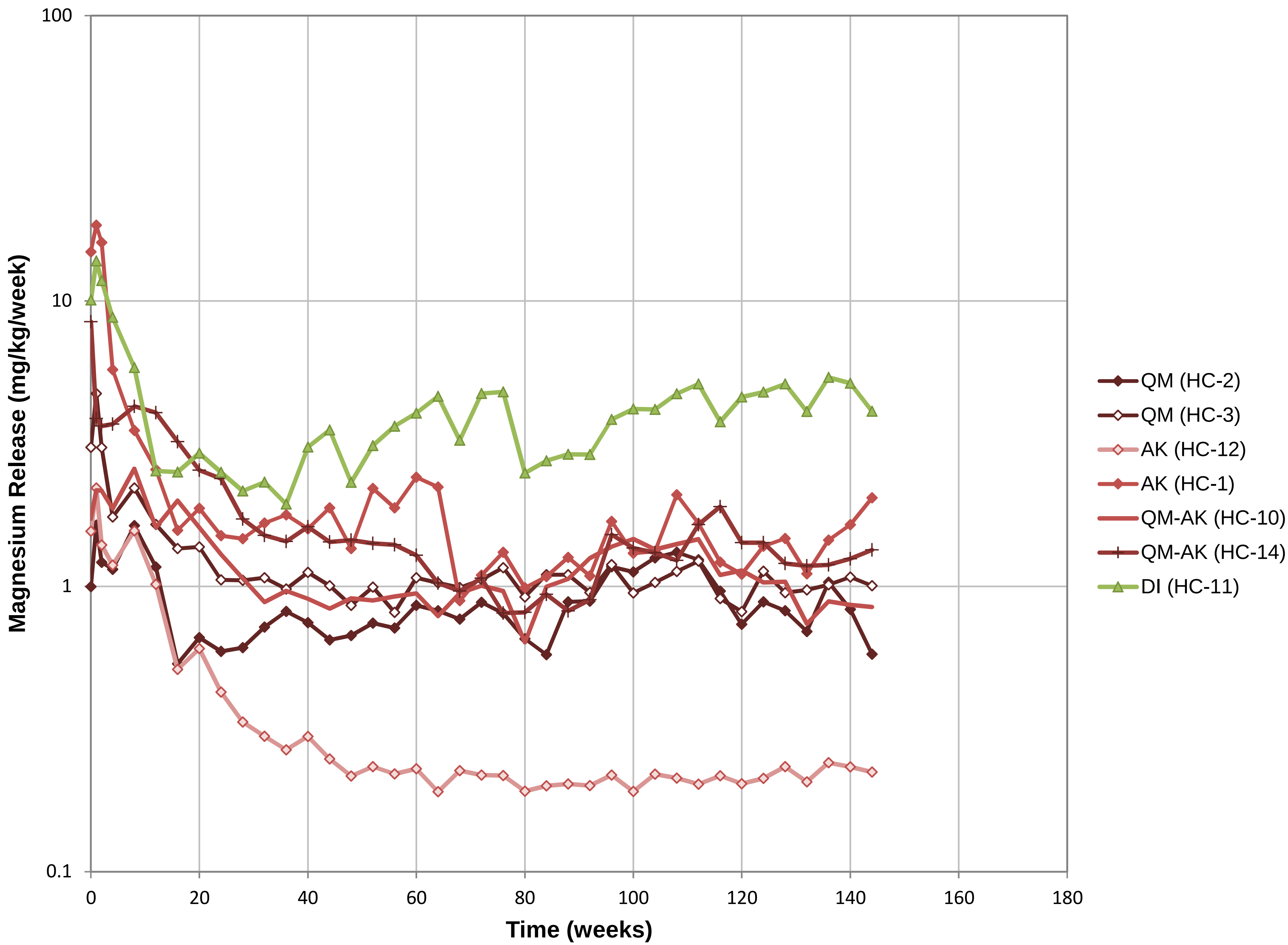
10
1
0.1
0.01
0
20
40
60
80
100
120
140
160
180
Fluoride Release (mg/kg/week)
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



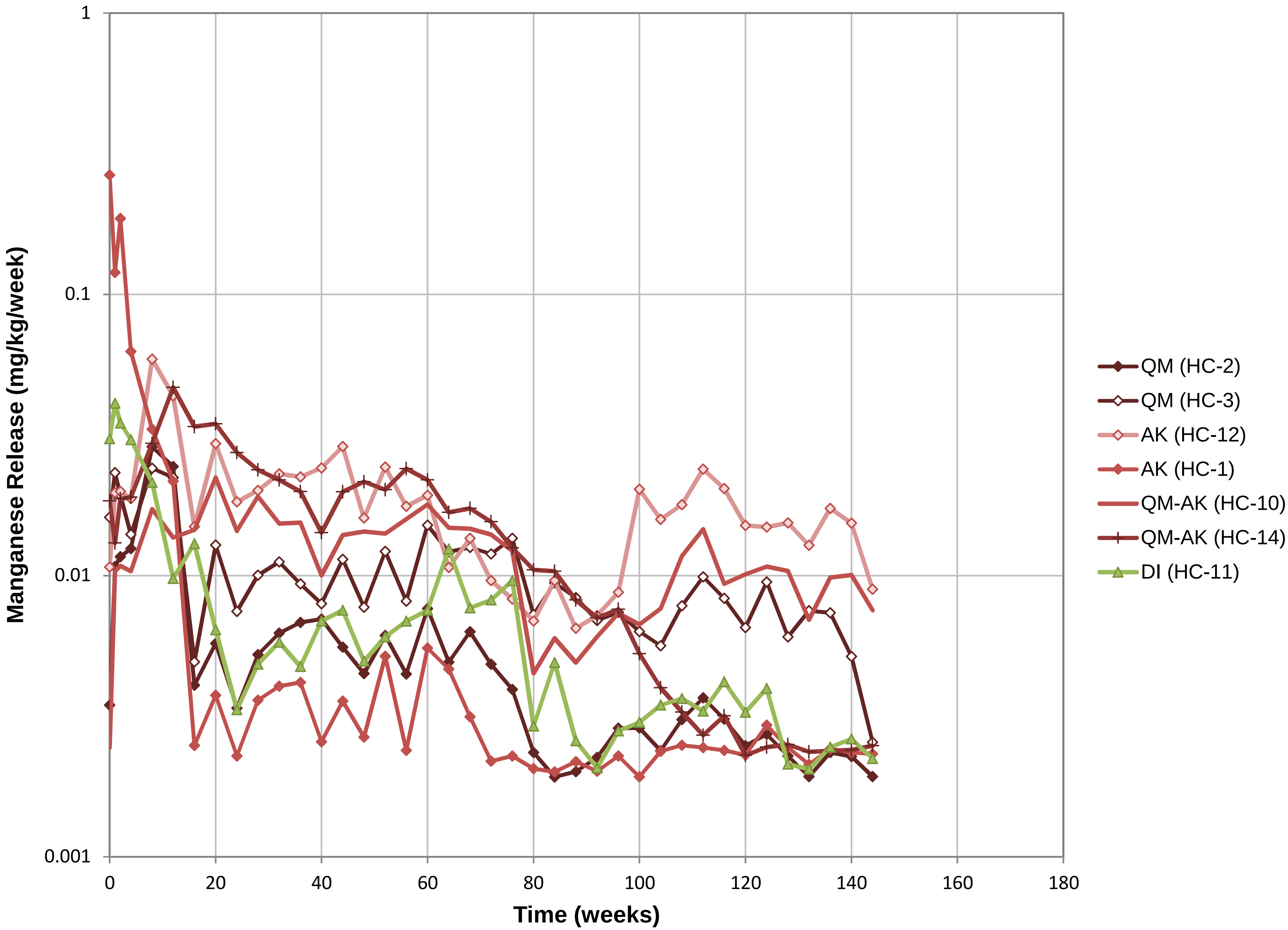
Iron Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



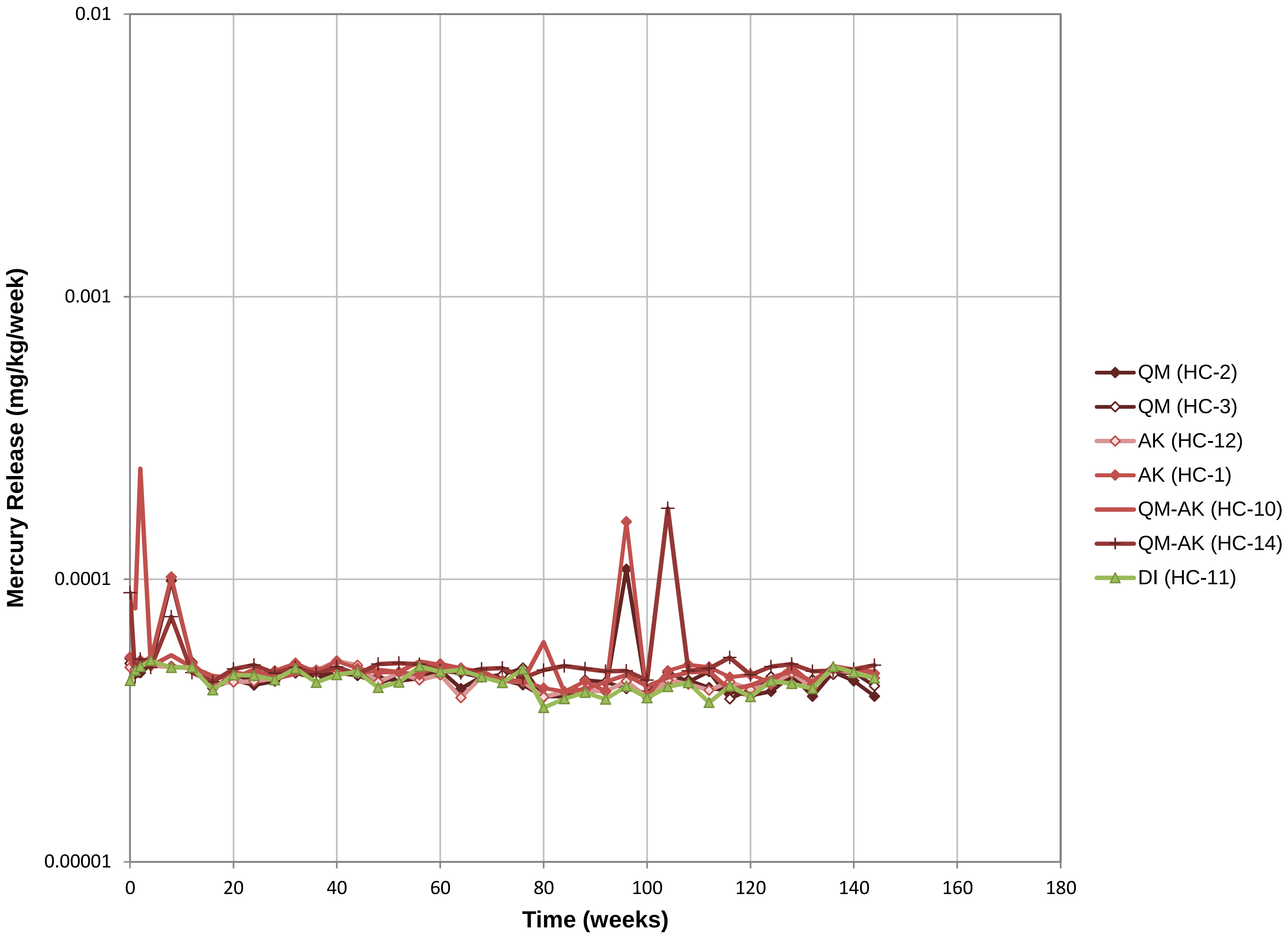
Lead Release (mg/kg/week)
1
0.1
0.01
0.001
0.0001
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



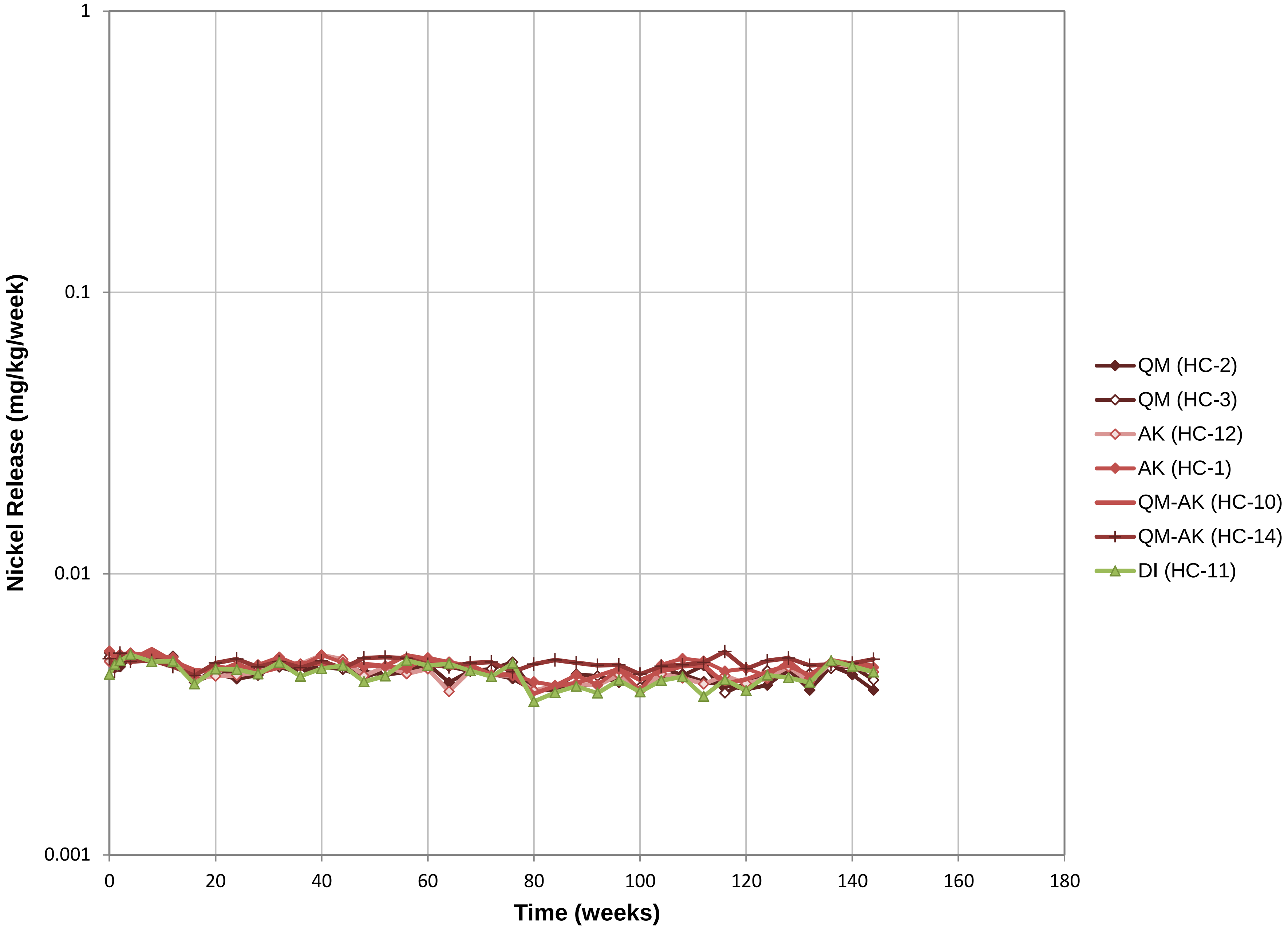
100
10
1
0.1
0
20
40
60
80
100
120
140
160
180
Magnesium Release (mg/kg/week)
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



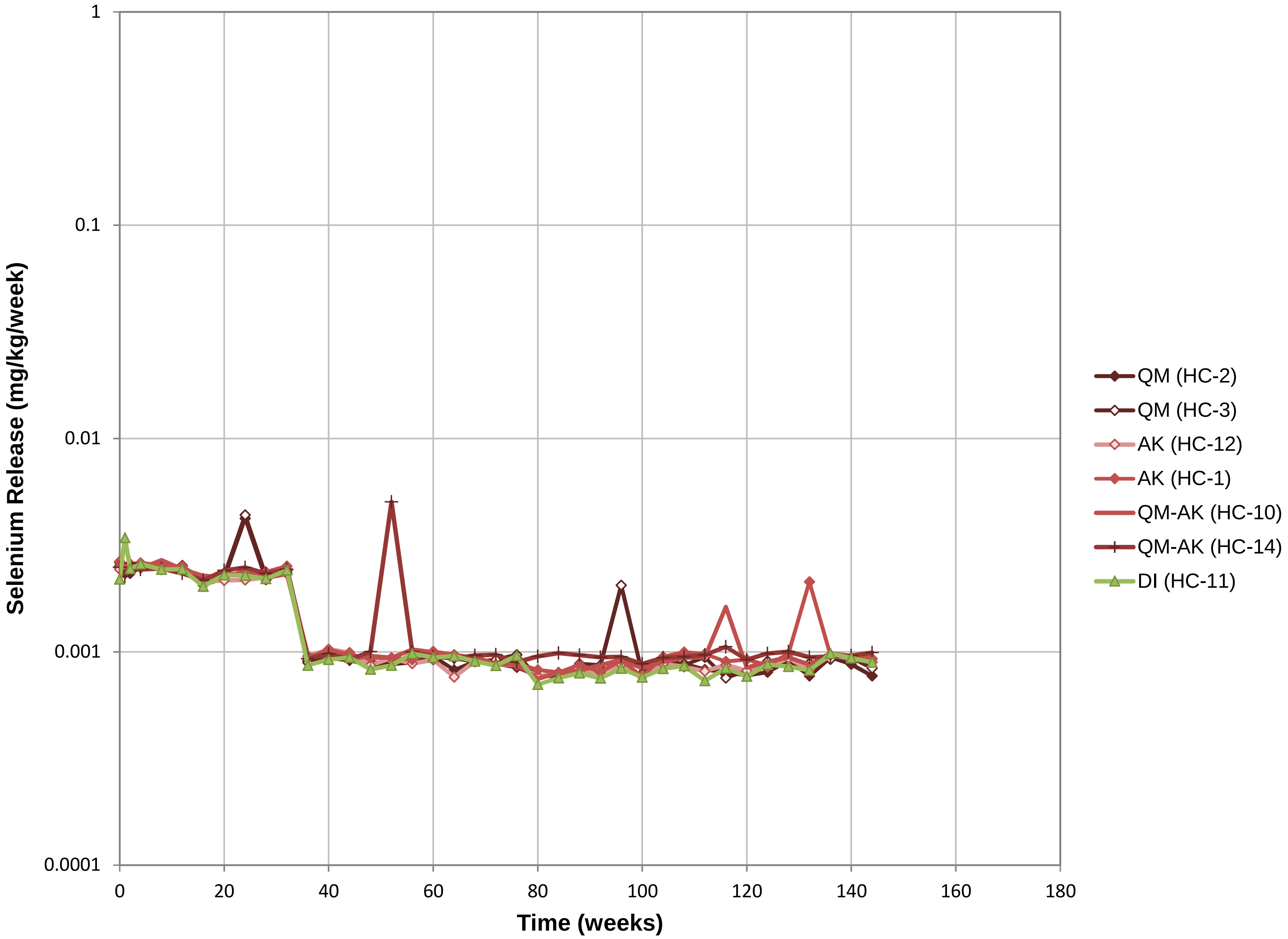
Manganese Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



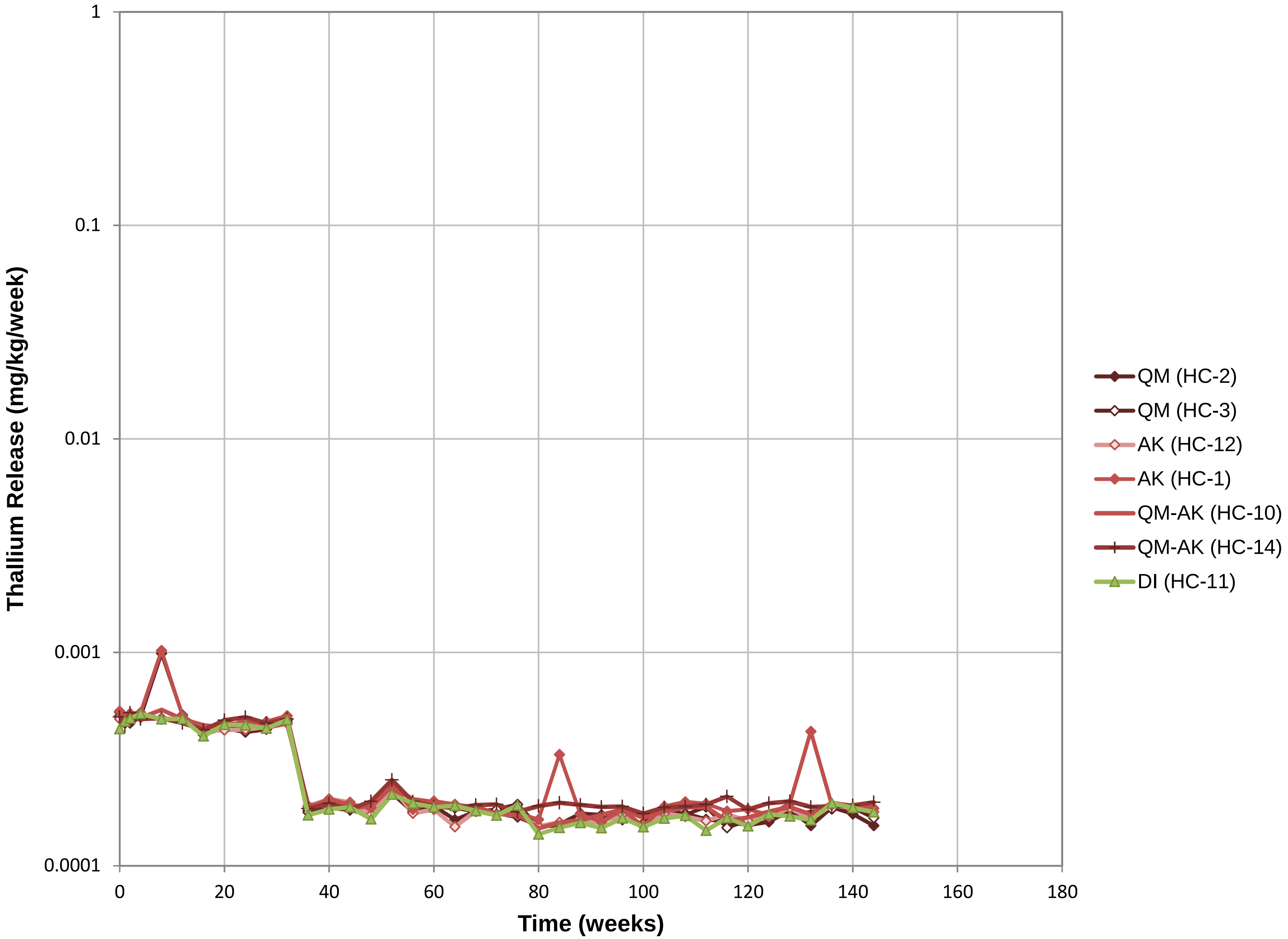
0.01
0.001
0.0001
0.00001
Mercury Release (mg/kg/week)
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



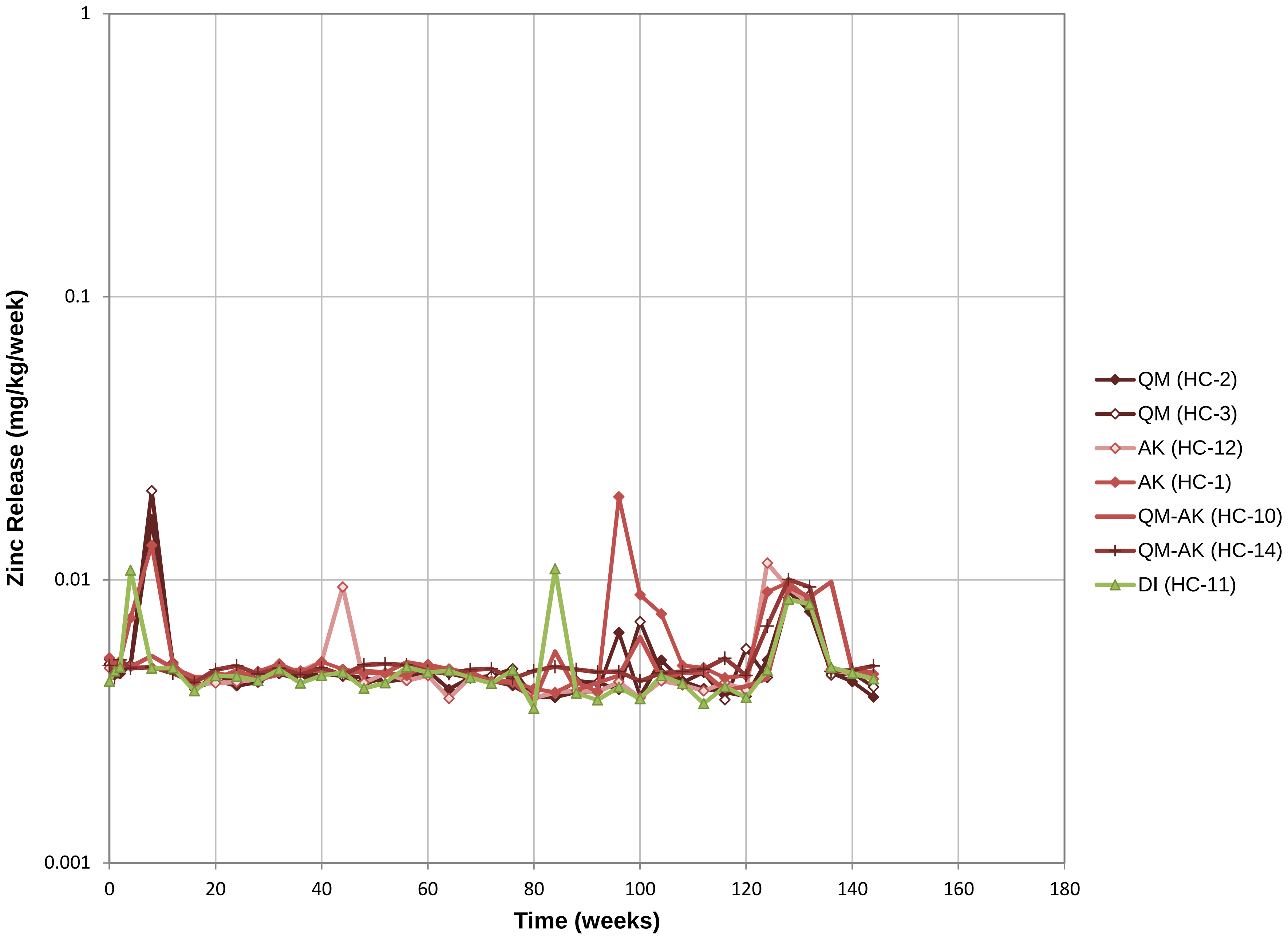
Nickel Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



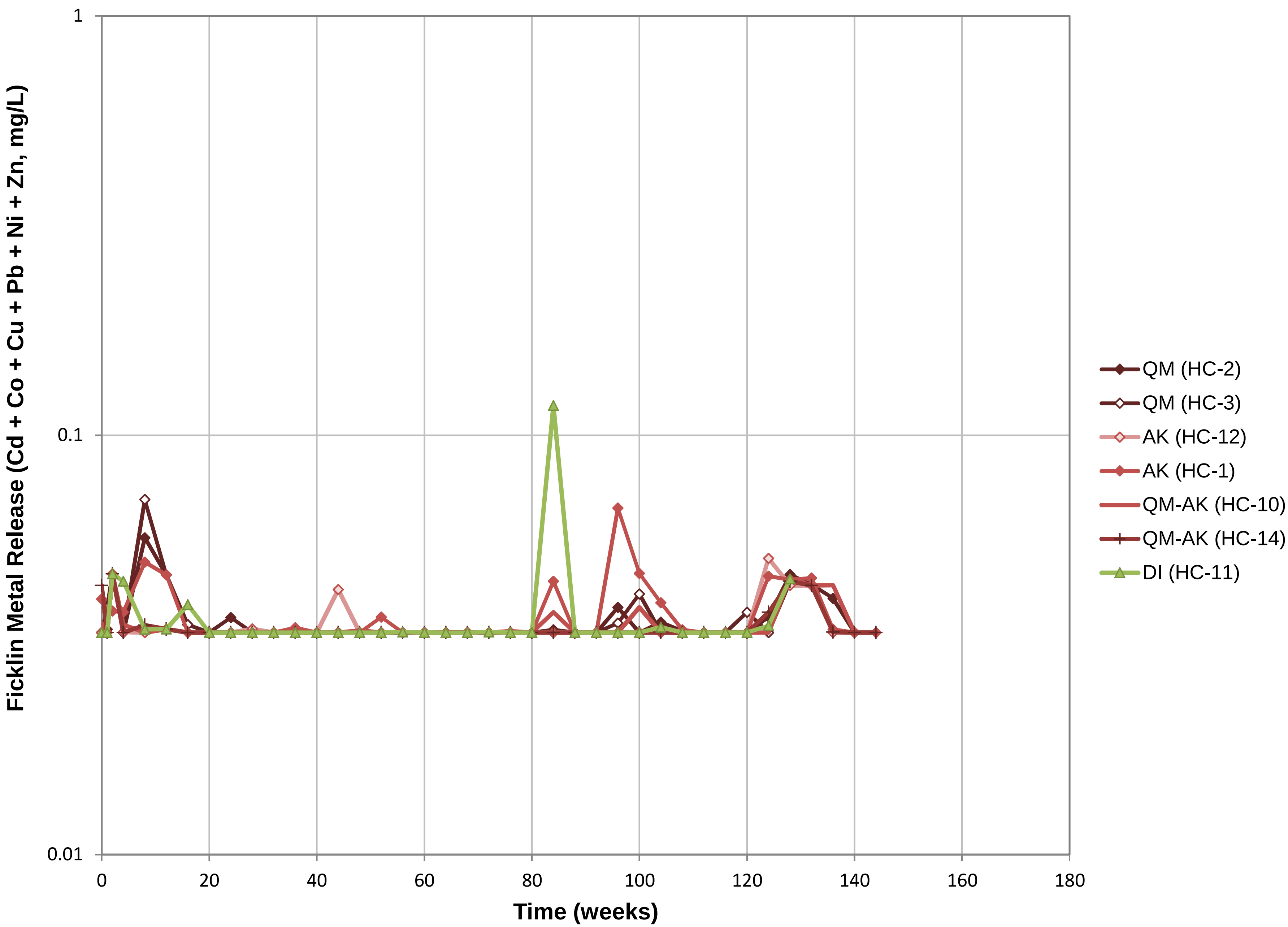
Selenium Release (mg/kg/week)
1
0.1
0.01
0.001
0.0001
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



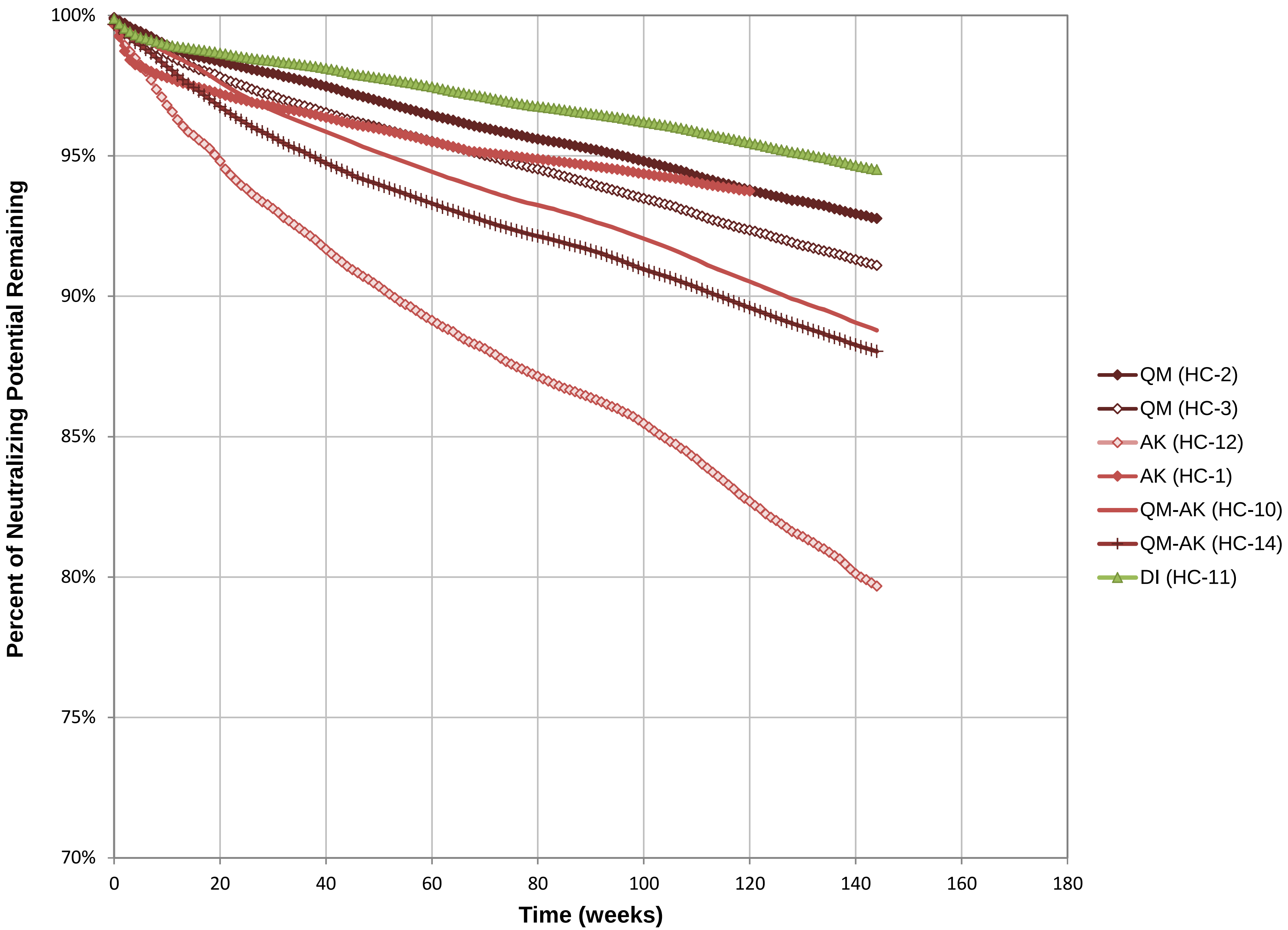
1
0.1
0.01
0.001
0.0001
Thallium Release (mg/kg/week)
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



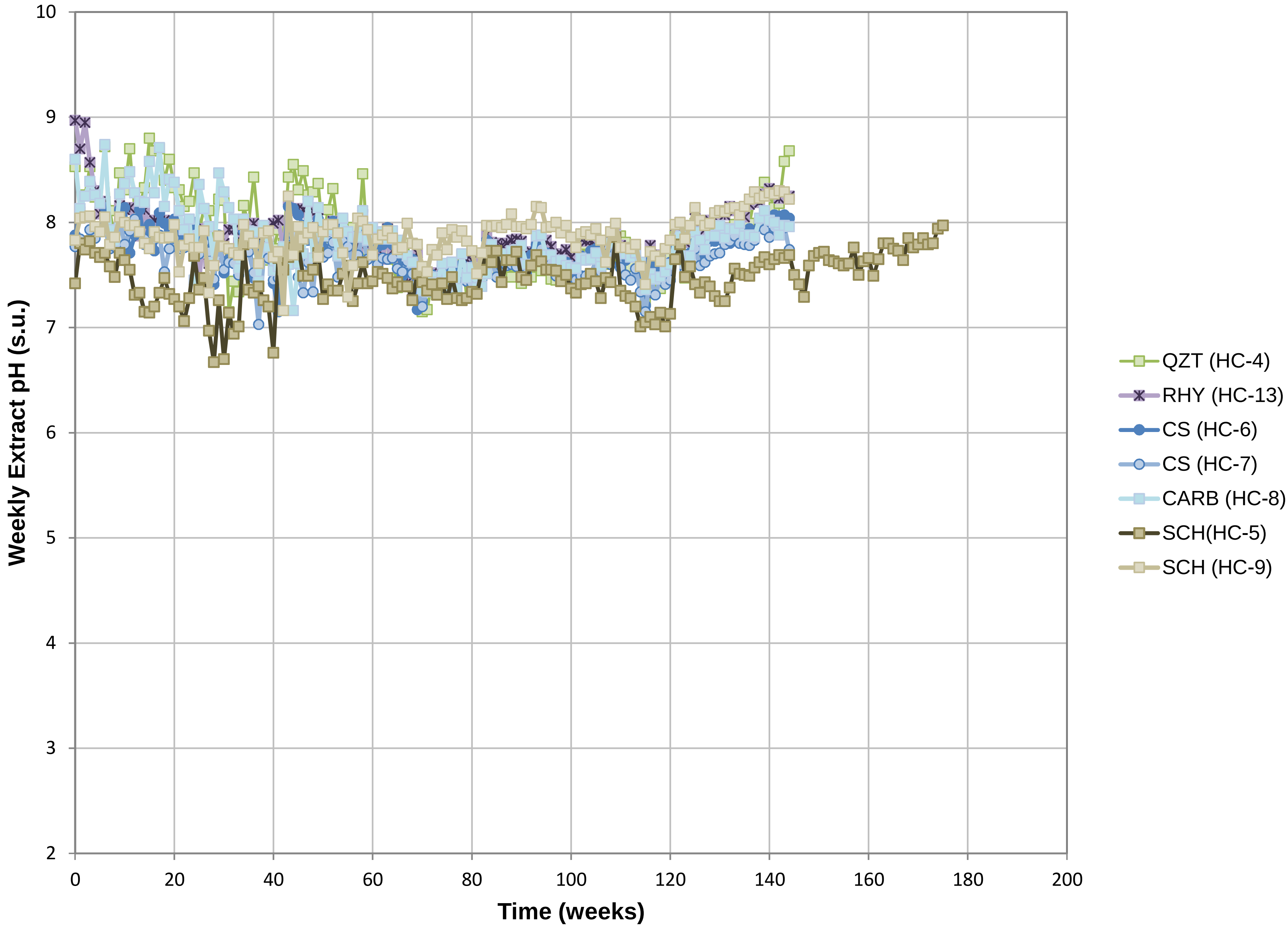
Zinc Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



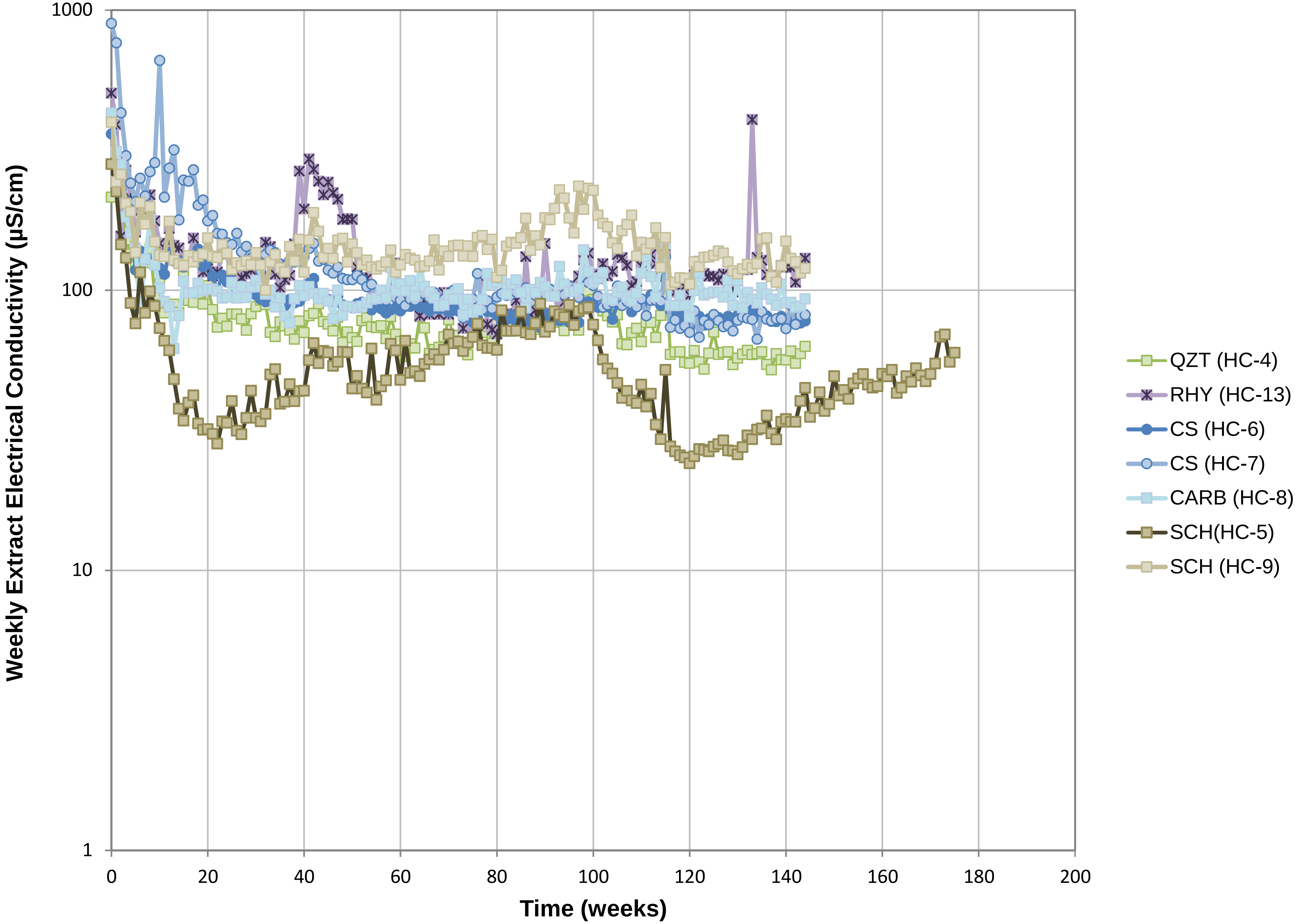
Ficklin Metal Release (Cd + Co + Cu + Pb + Ni + Zn, mg/L)
1
0.1
0.01
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



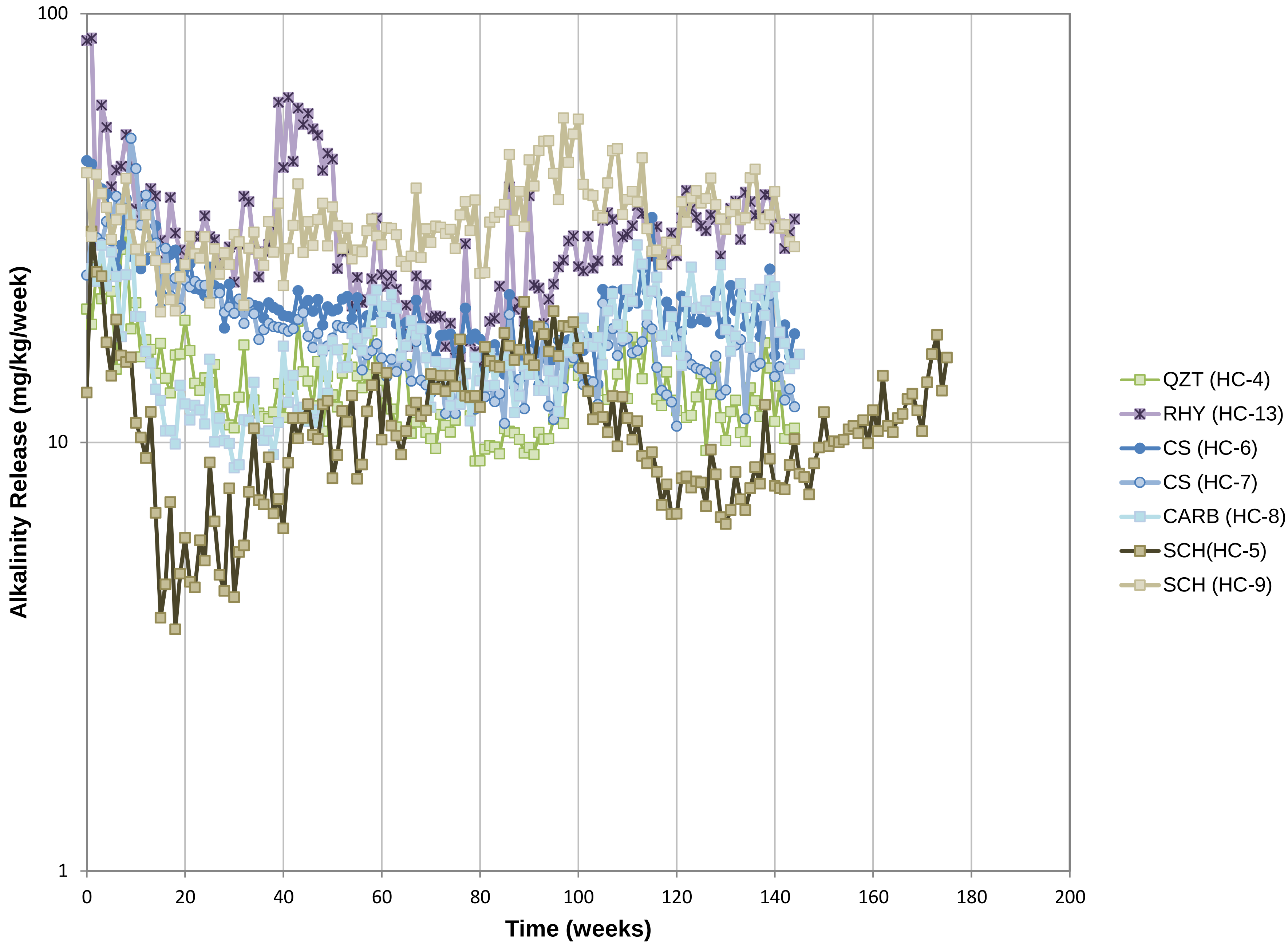
100%
95%
90%
85%
80%
75%
70%
Percent of Neutralizing Potential Remaining
0
20
40
60
80
100
120
140
160
180
Time (weeks)
QM (HC-2)
QM (HC-3)
AK (HC-12)
AK (HC-1)
QM-AK (HC-10)
QM-AK (HC-14)
DI (HC-11)



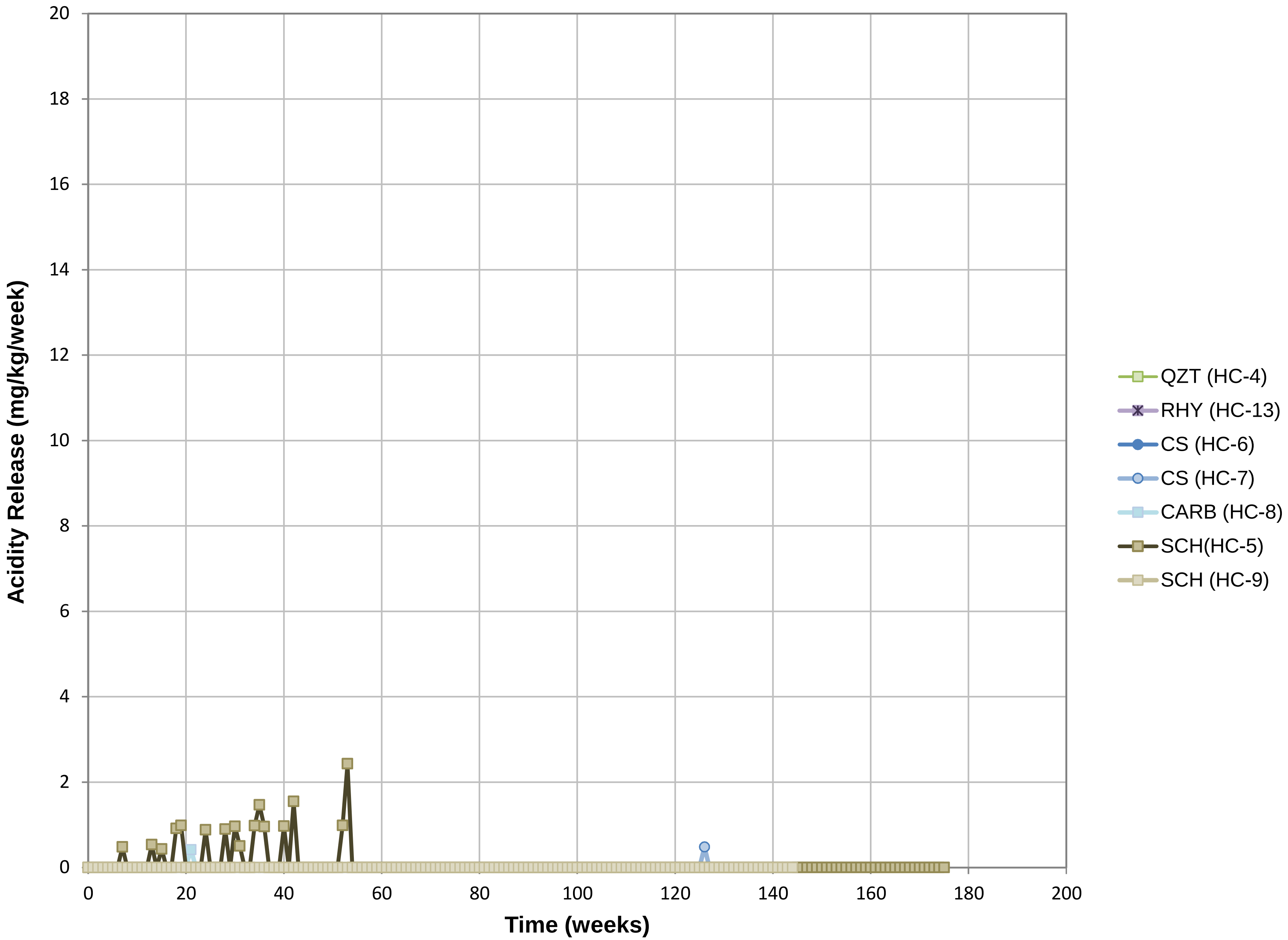
Weekly Extract pH (s.u.)
10
9
8
7
6
5
4
3
2
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



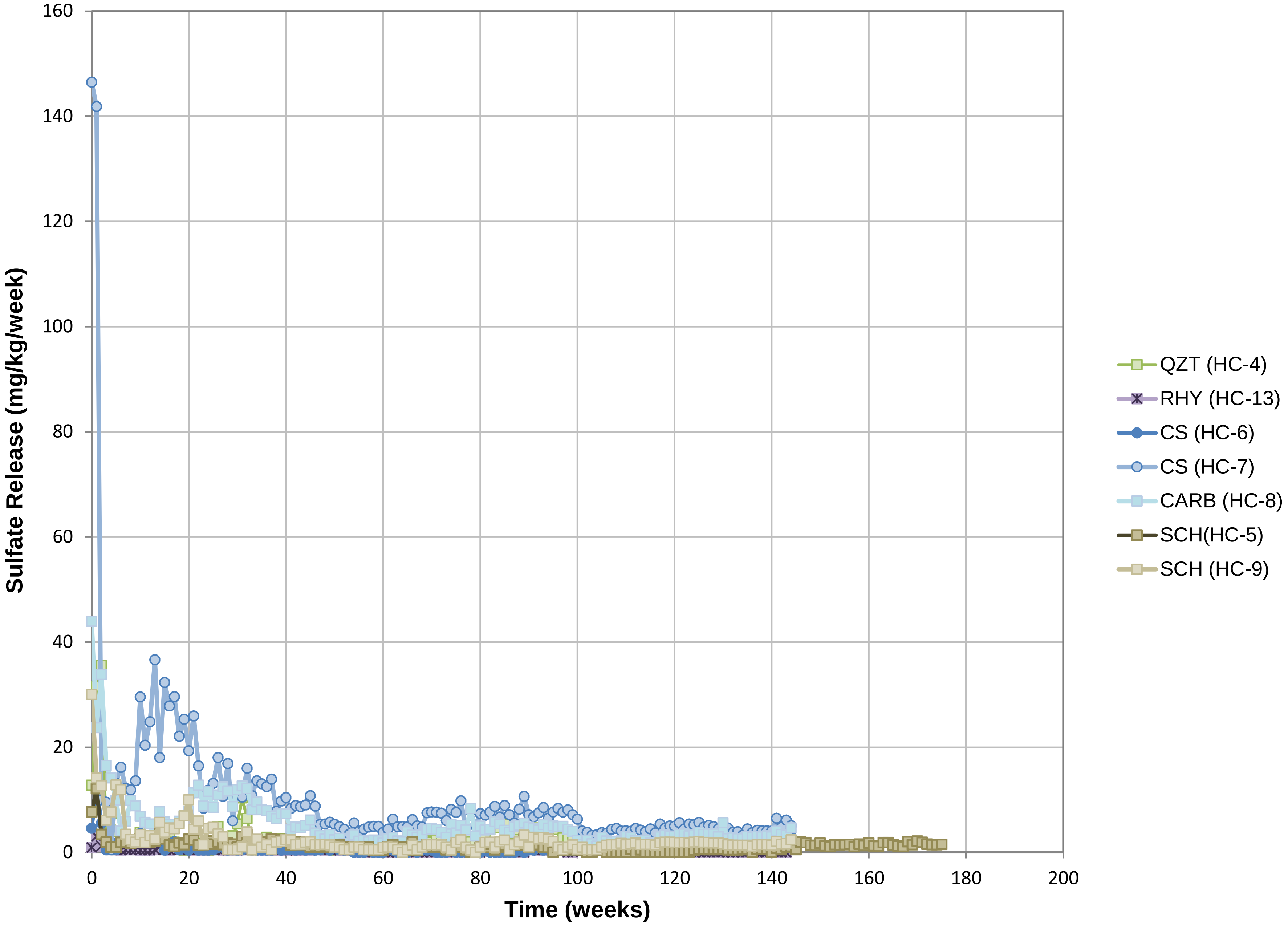
1000
100
10
1
0
20
40
60
80
100
120
140
160
180
200
Weekly Extract Electrical Conductivity (µS/cm)
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



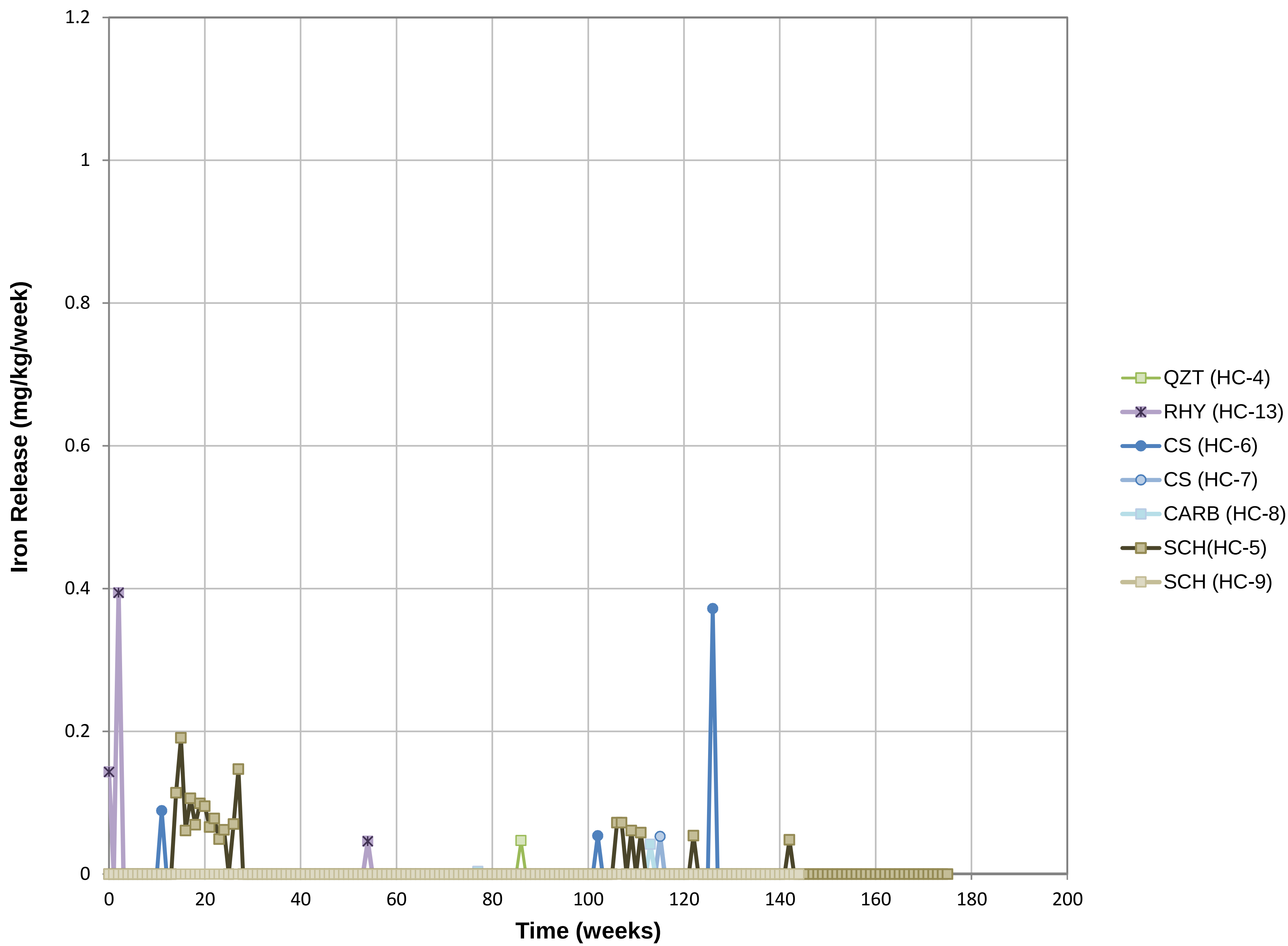
100
10
1
0
20
40
60
80
100
120
140
160
180
200
Alkalinity Release (mg/kg/week)
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)

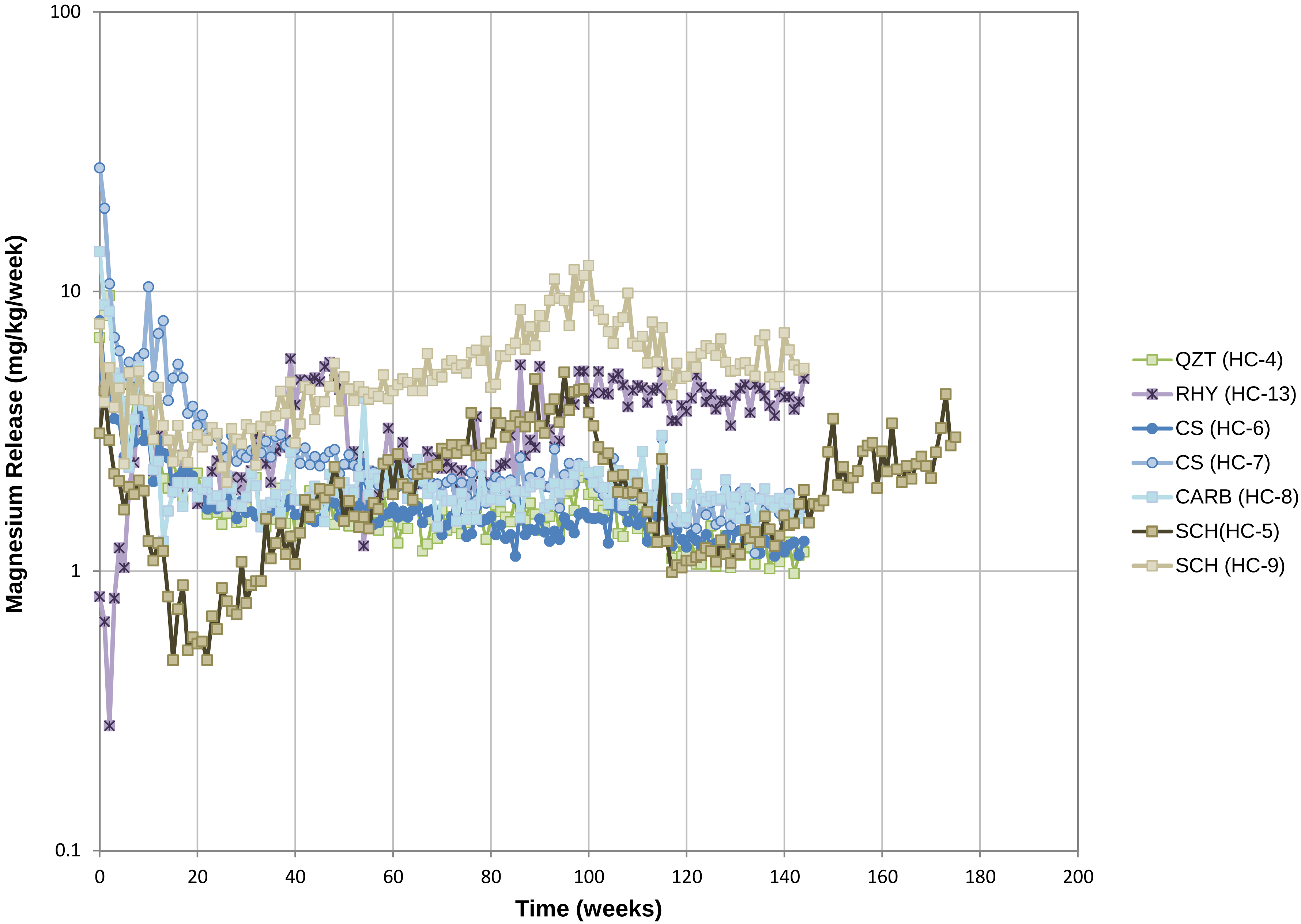


Acidity Release (mg/kg/week)
20
18
16
14
12
10
8
6
4
2
0
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)

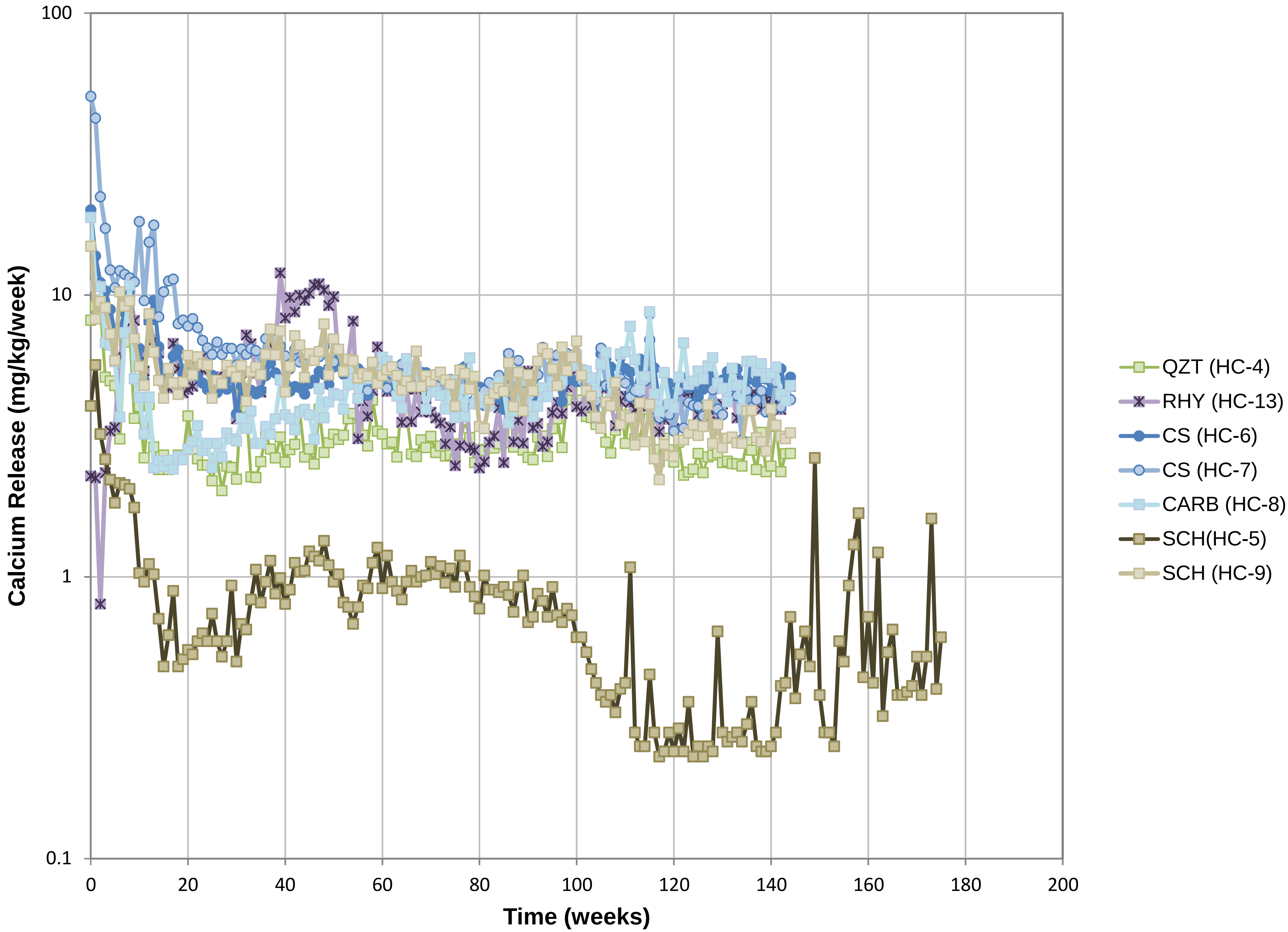


Sulfate Release (mg/kg/week)
160
140
120
100
80
60
40
20
0
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)

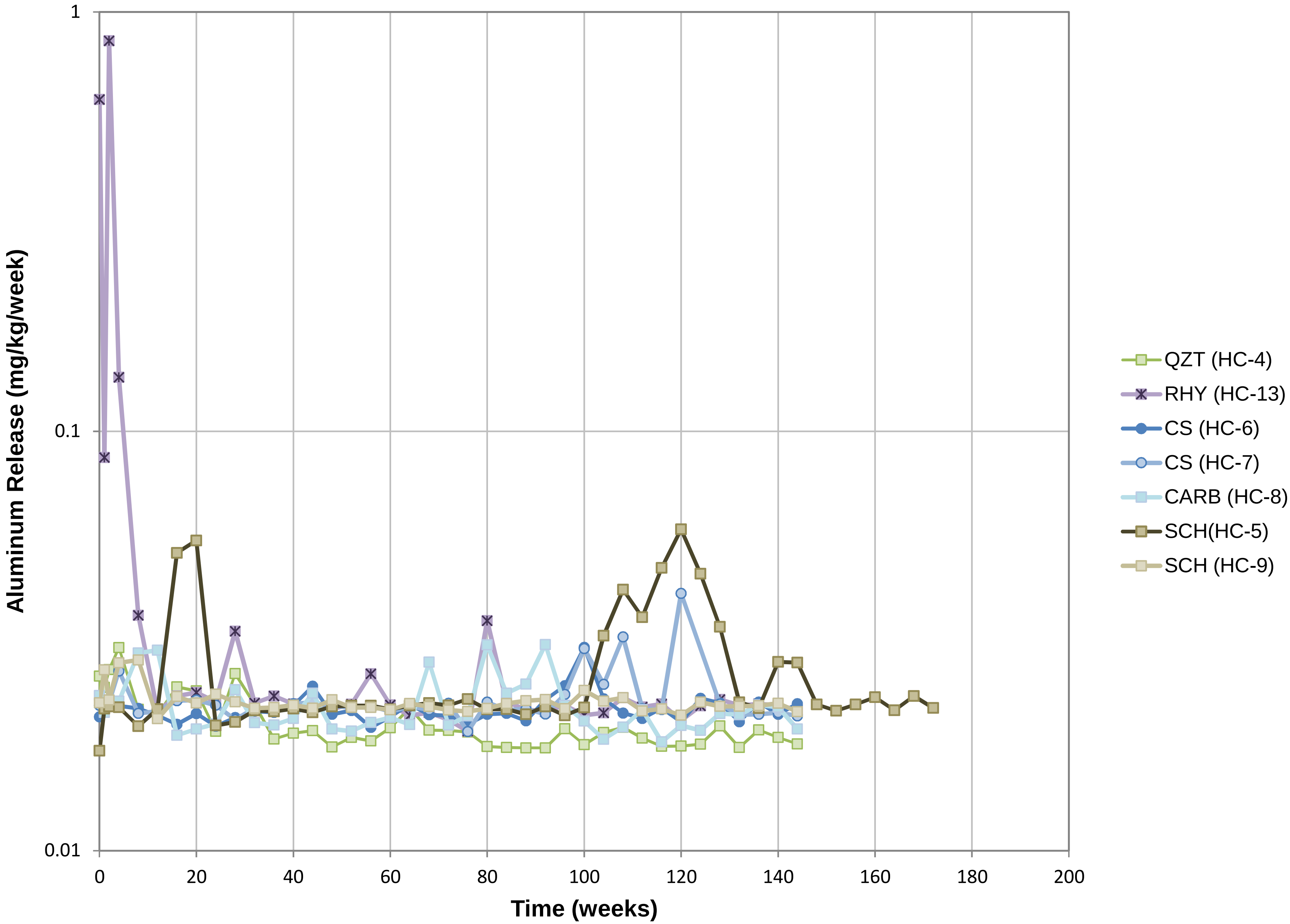

Iron Release (mg/kg/week)
1.2
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



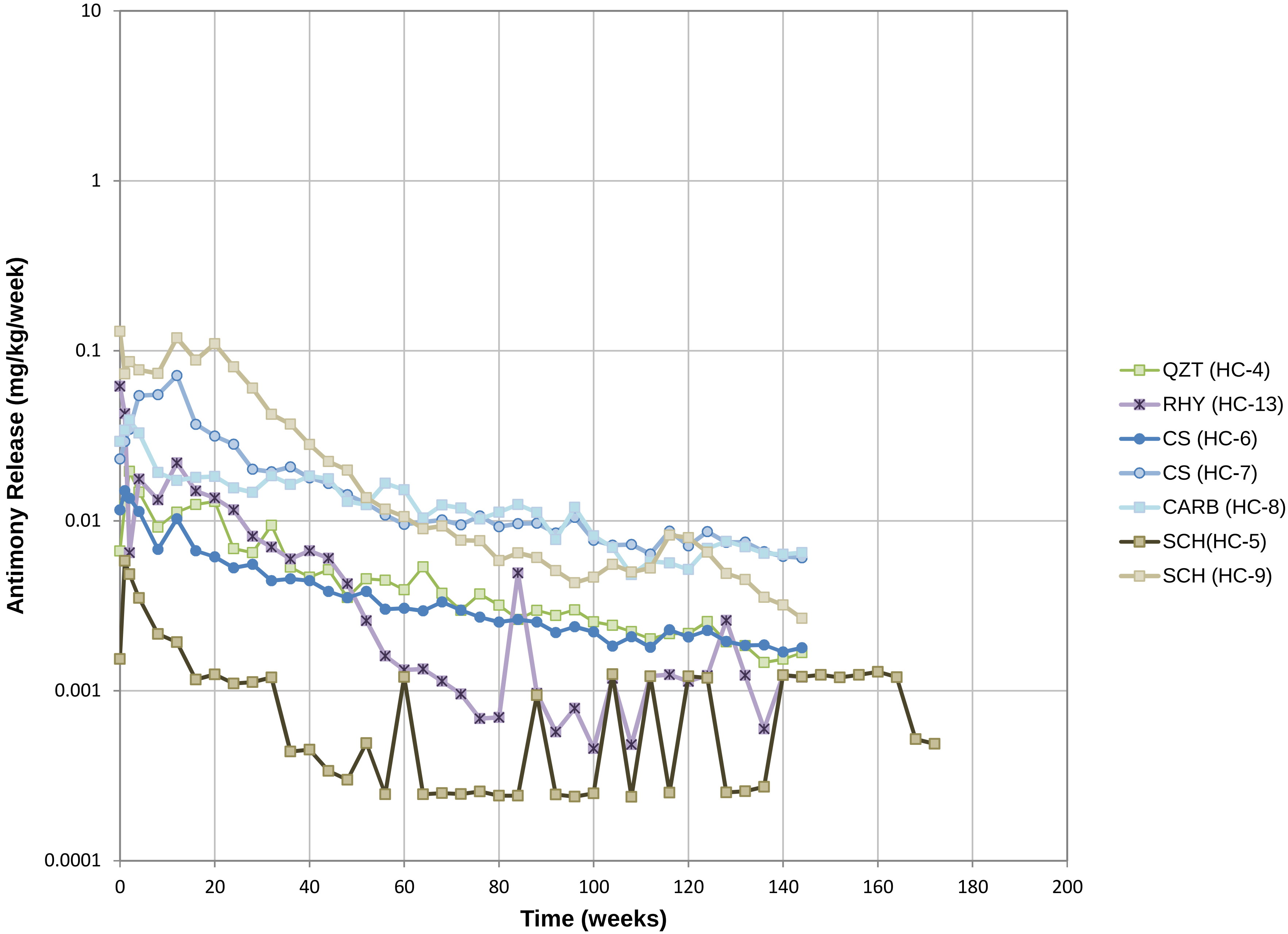
Magnesium Release (mg/kg/week)
100
10
1
0.1
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



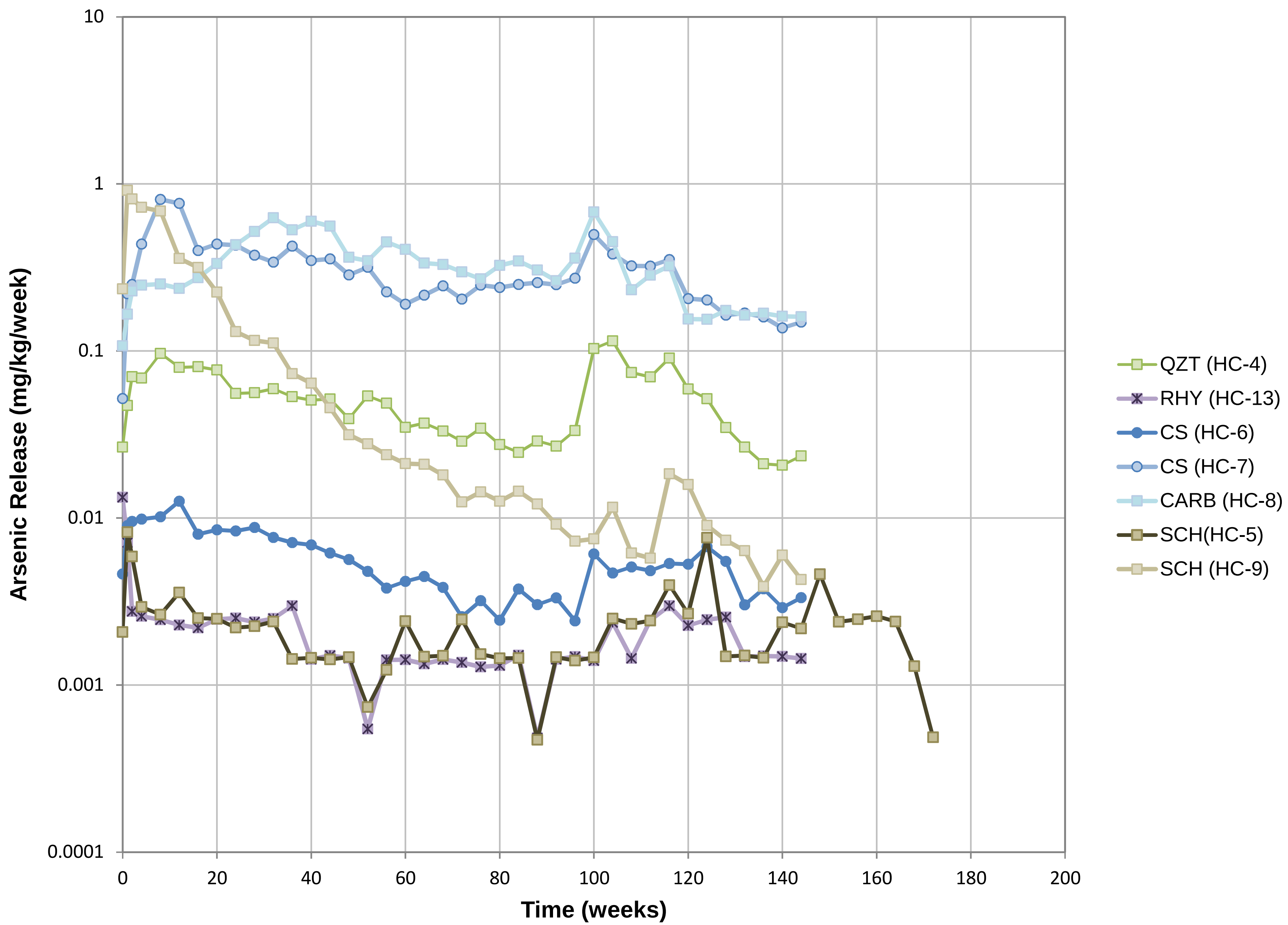
Calcium Release (mg/kg/week)
100
10
1
0.1
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



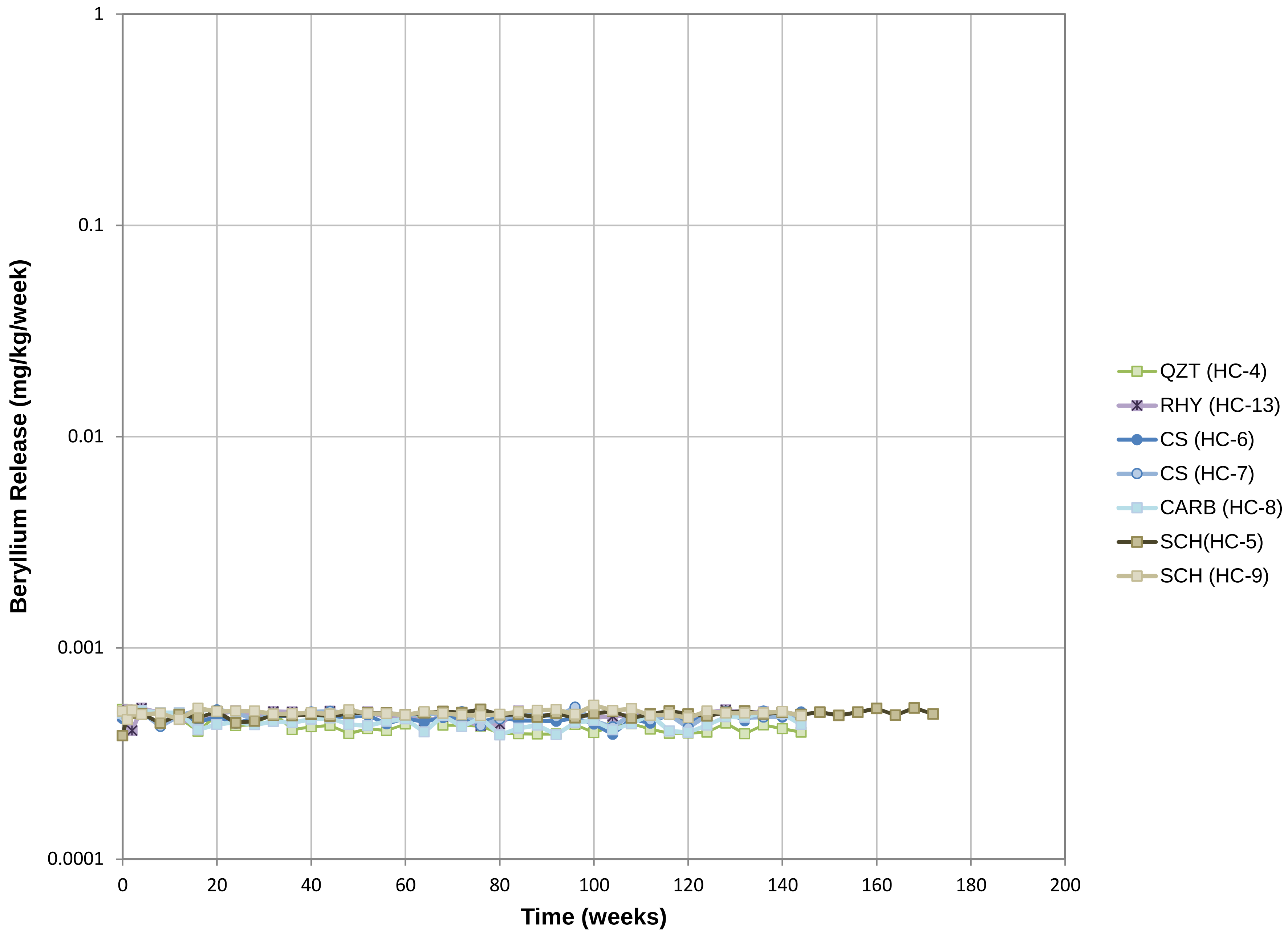
Aluminum Release (mg/kg/week)
1
0.1
0.01
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



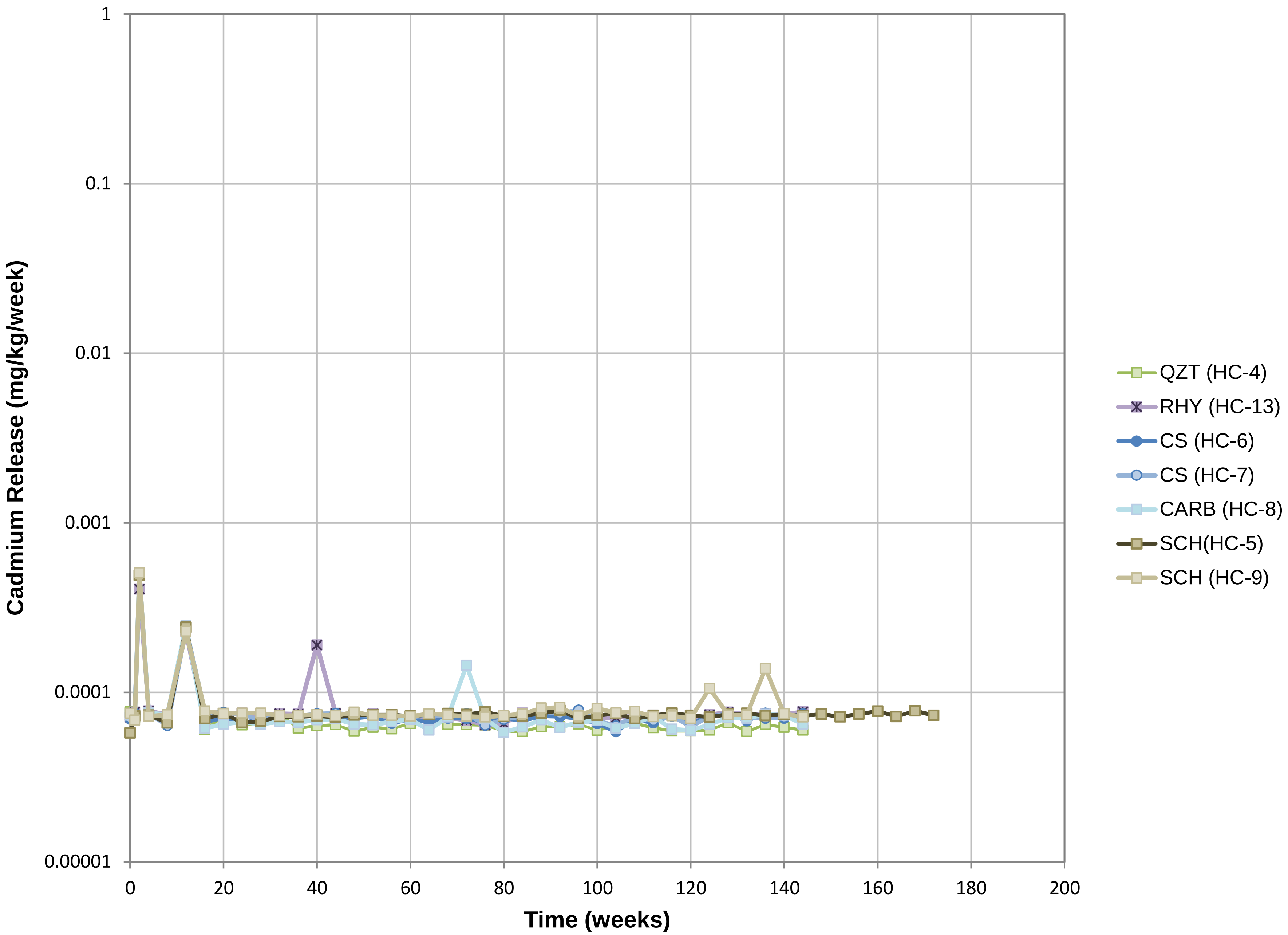
Antimony Release (mg/kg/week)
10
1
0.1
0.01
0.001
0.0001
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



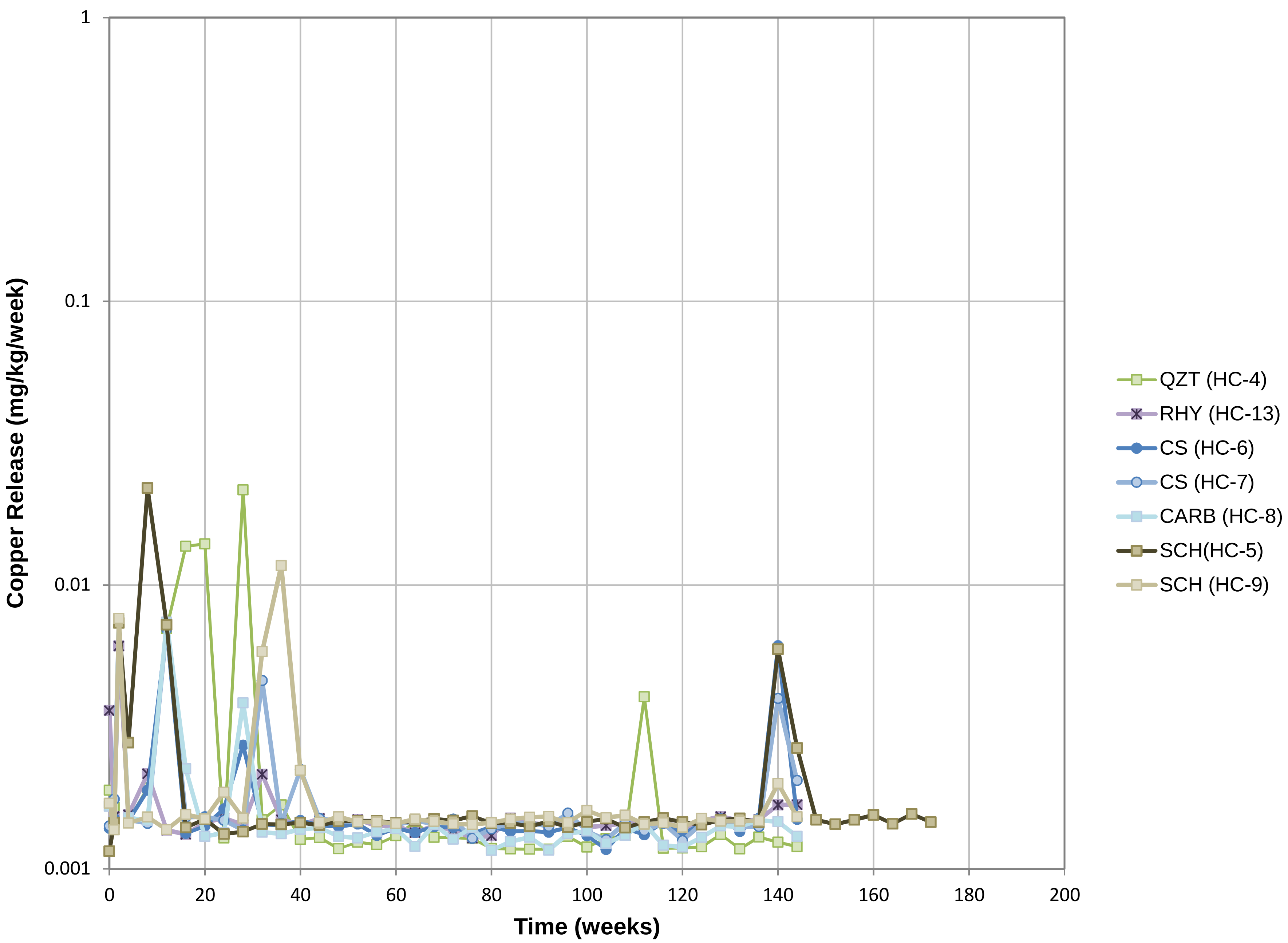
10
1
0.1
0.01
0.001
0.0001
Arsenic Release (mg/kg/week)
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



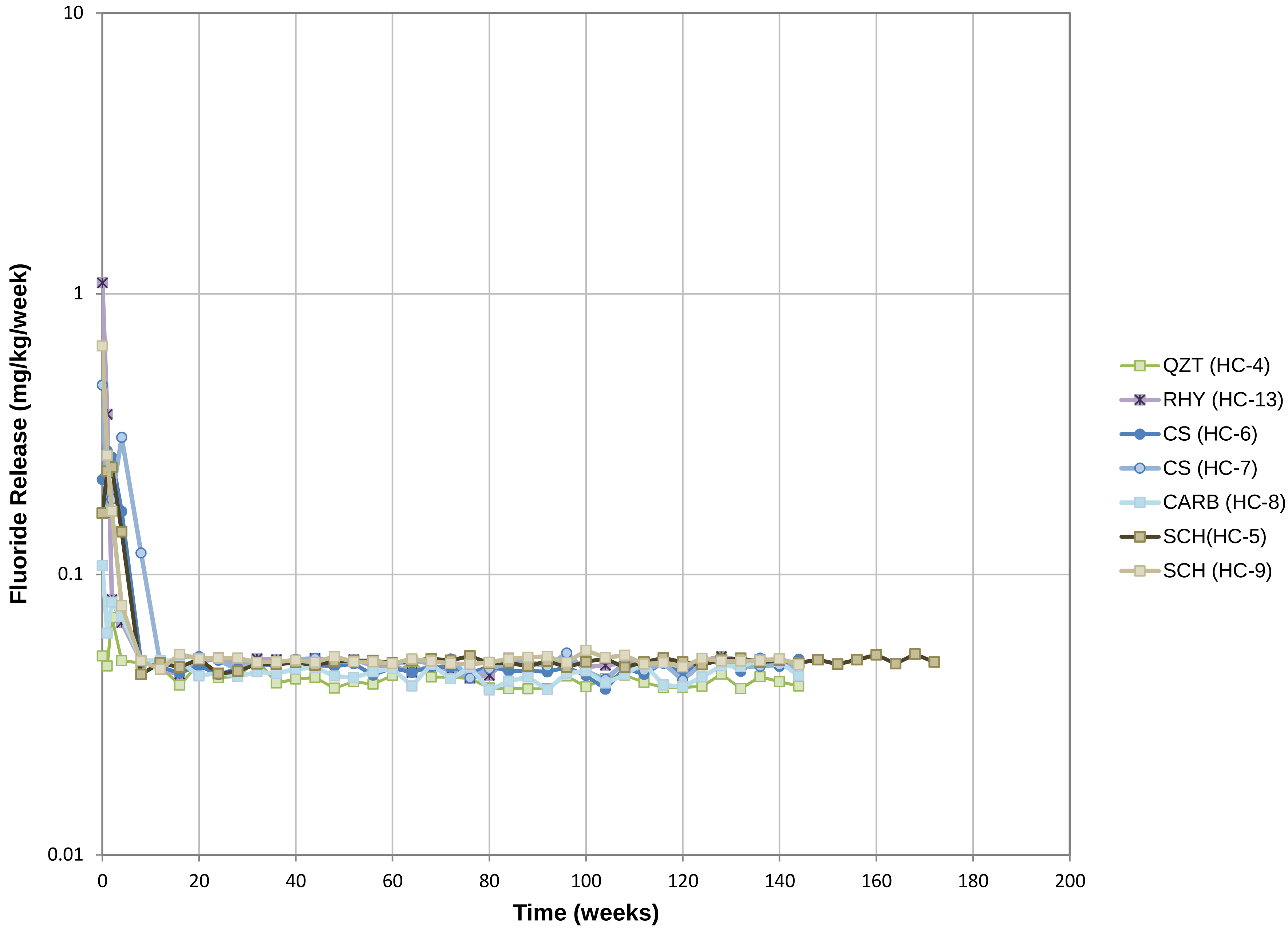
Beryllium Release (mg/kg/week)
1
0.1
0.01
0.001
0.0001
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



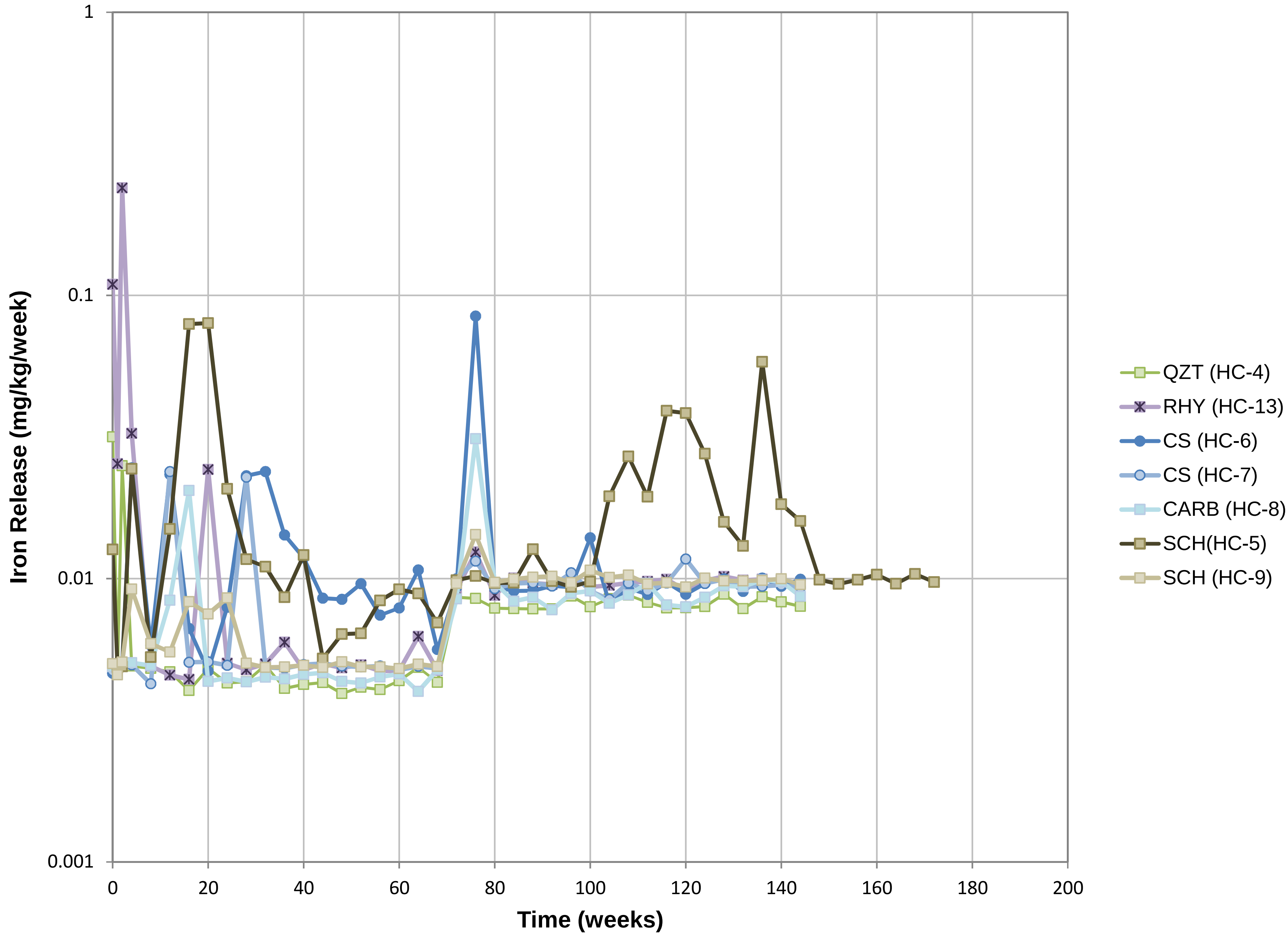
Cadmium Release (mg/kg/week)
1
0.1
0.01
0.001
0.0001
0.00001
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



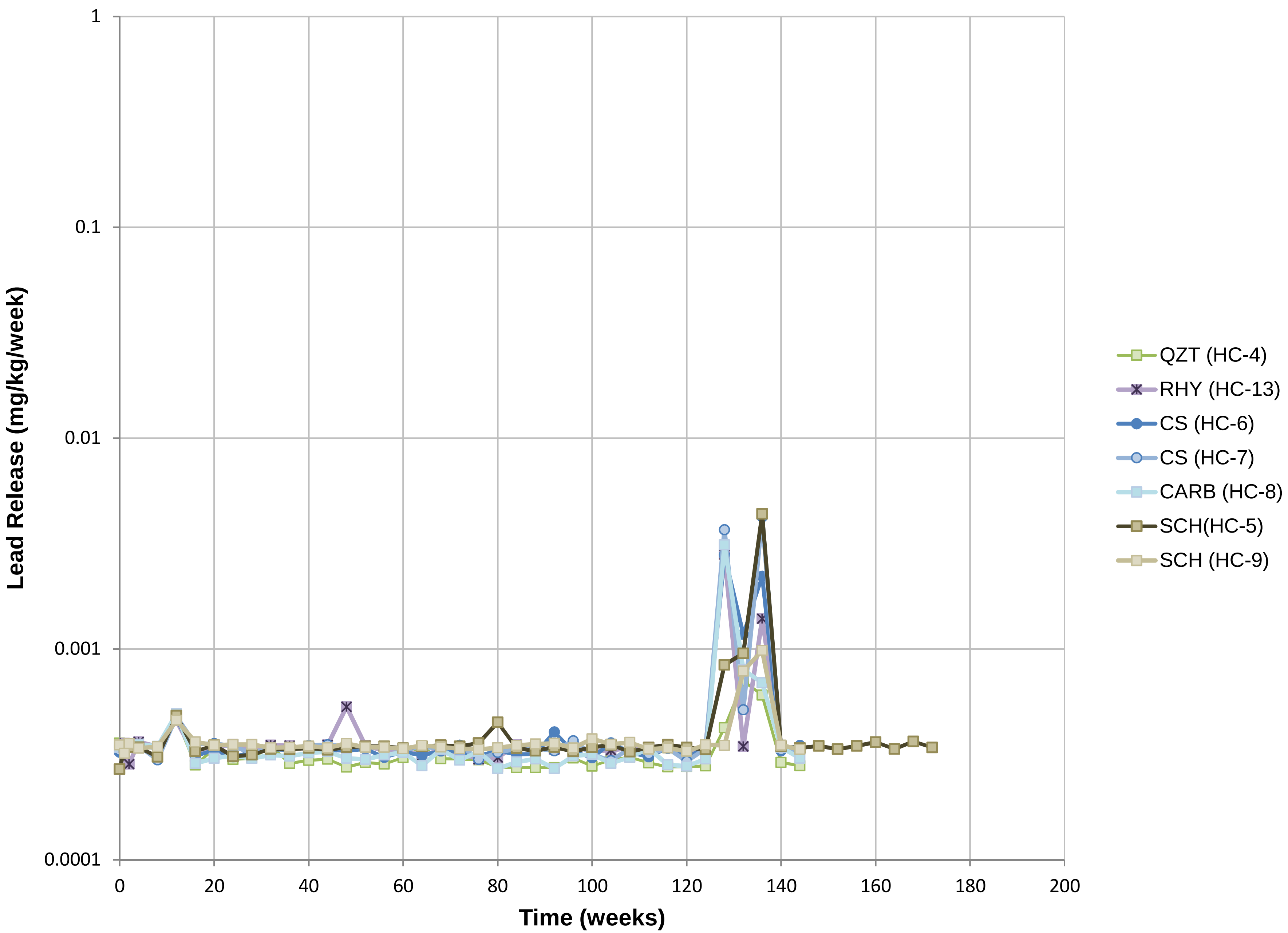
Copper Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



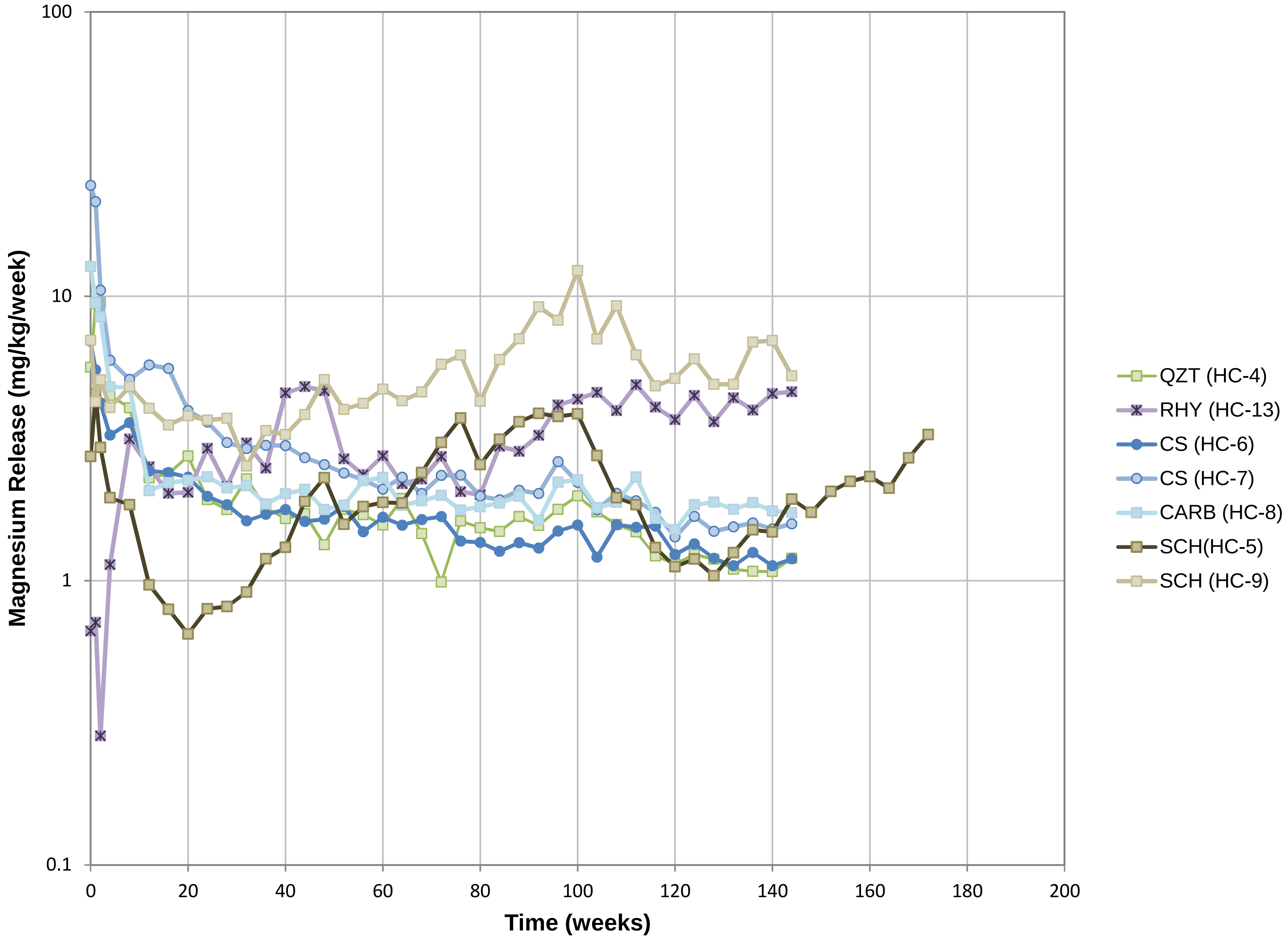
Fluoride Release (mg/kg/week)
10
1
0.1
0.01
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



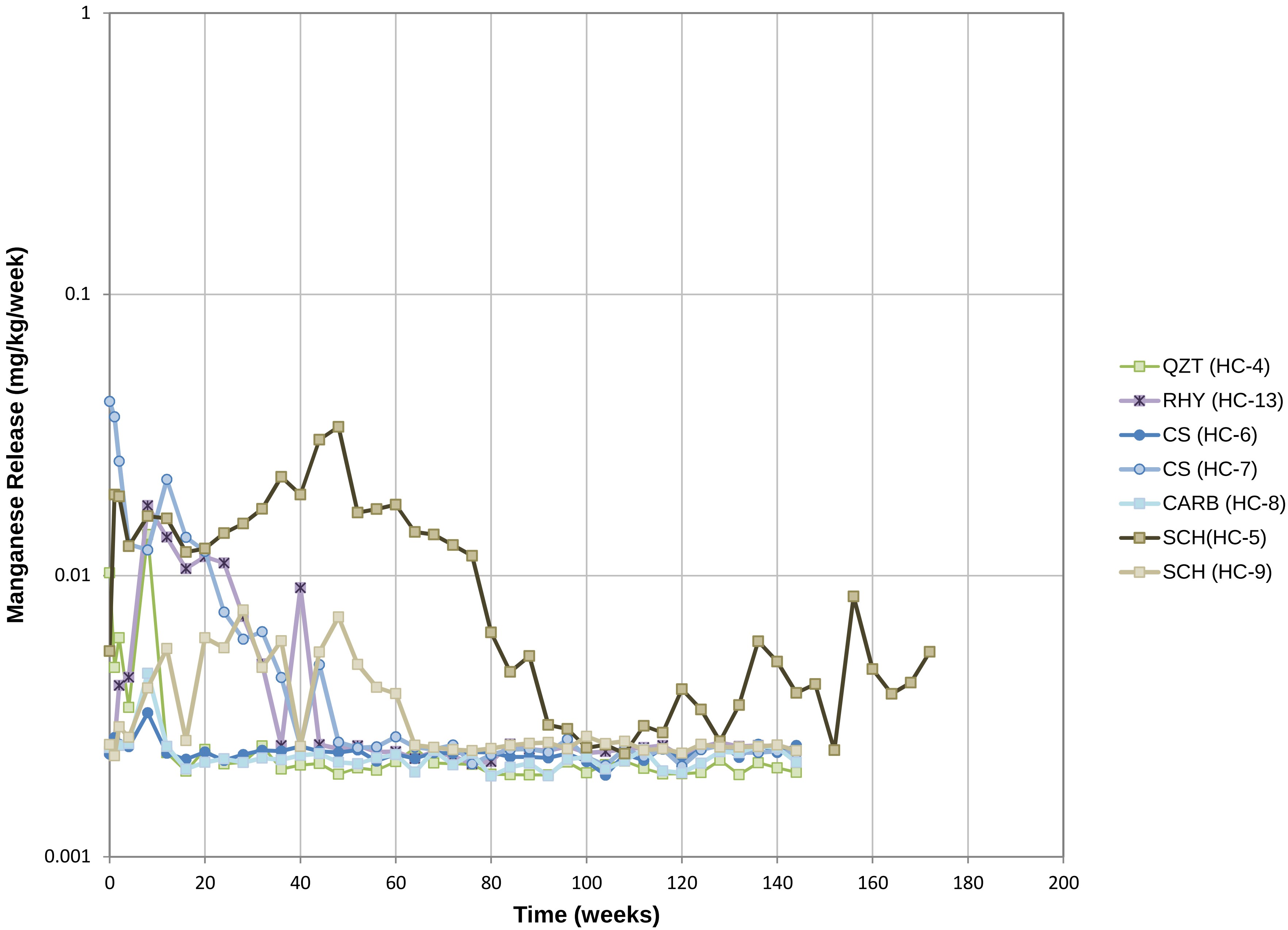
1
0.1
0.01
0.001
Iron Release (mg/kg/week)
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)

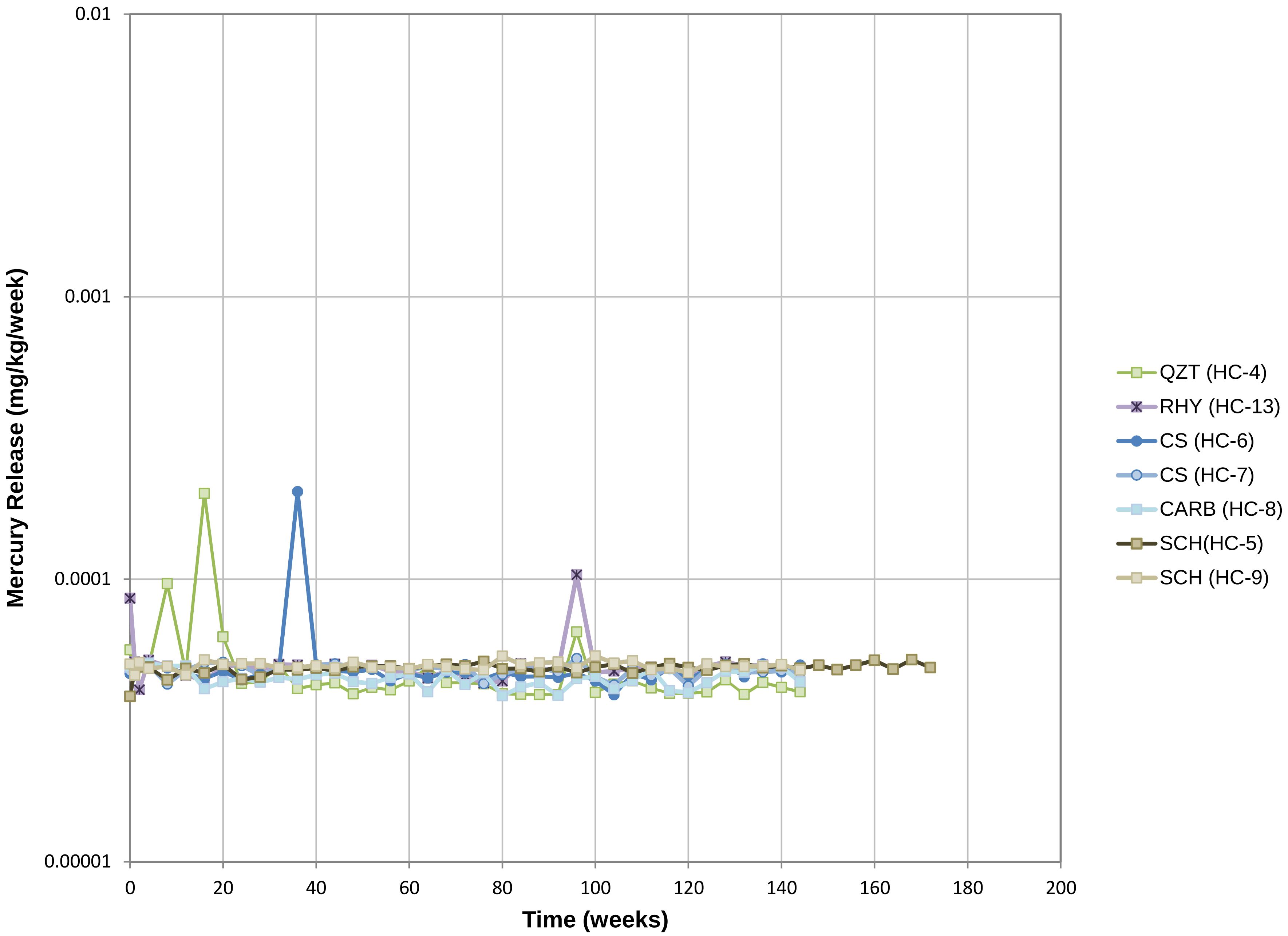


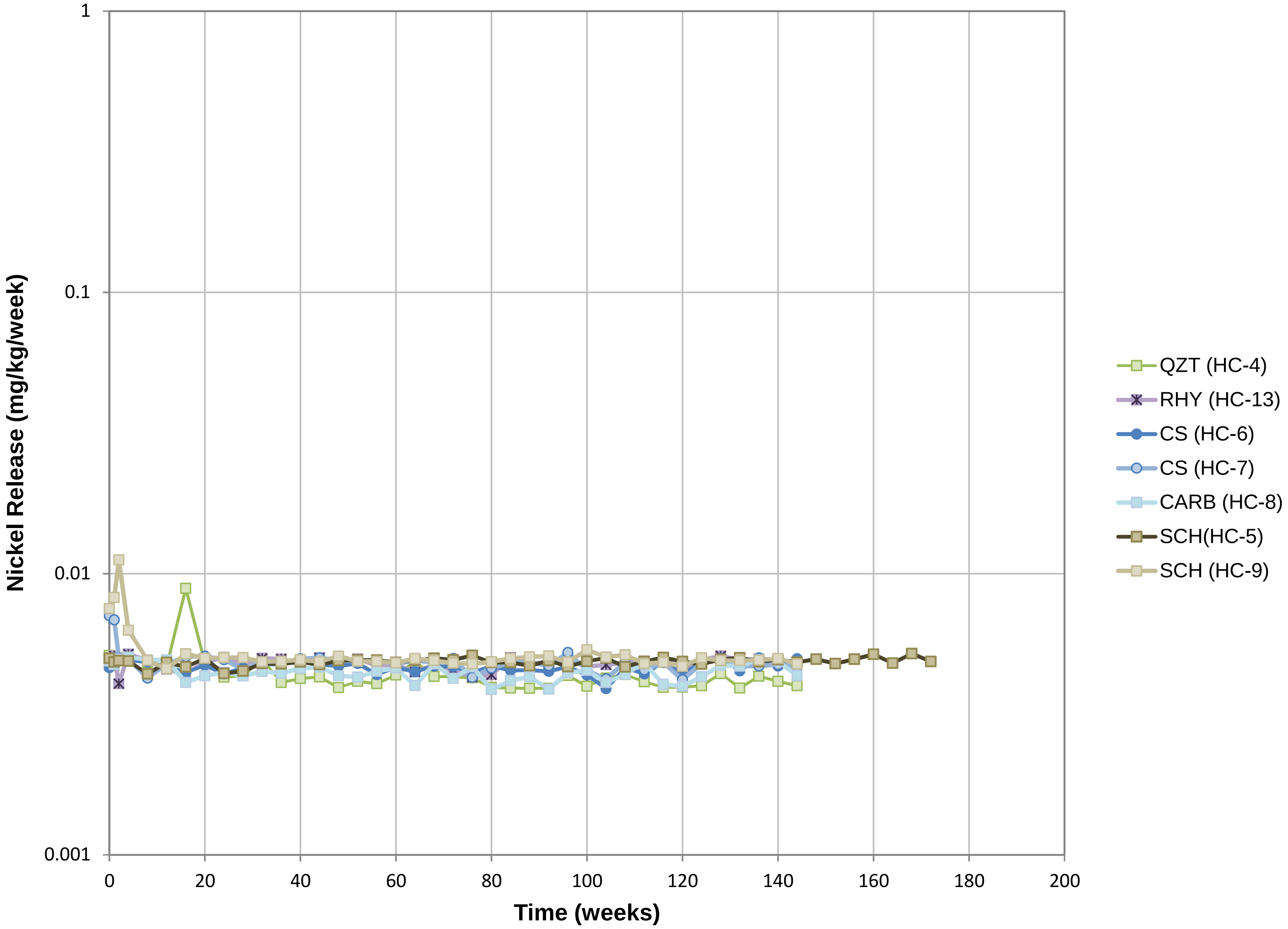
Lead Release (mg/kg/week)
1
0.1
0.01
0.001
0.0001
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



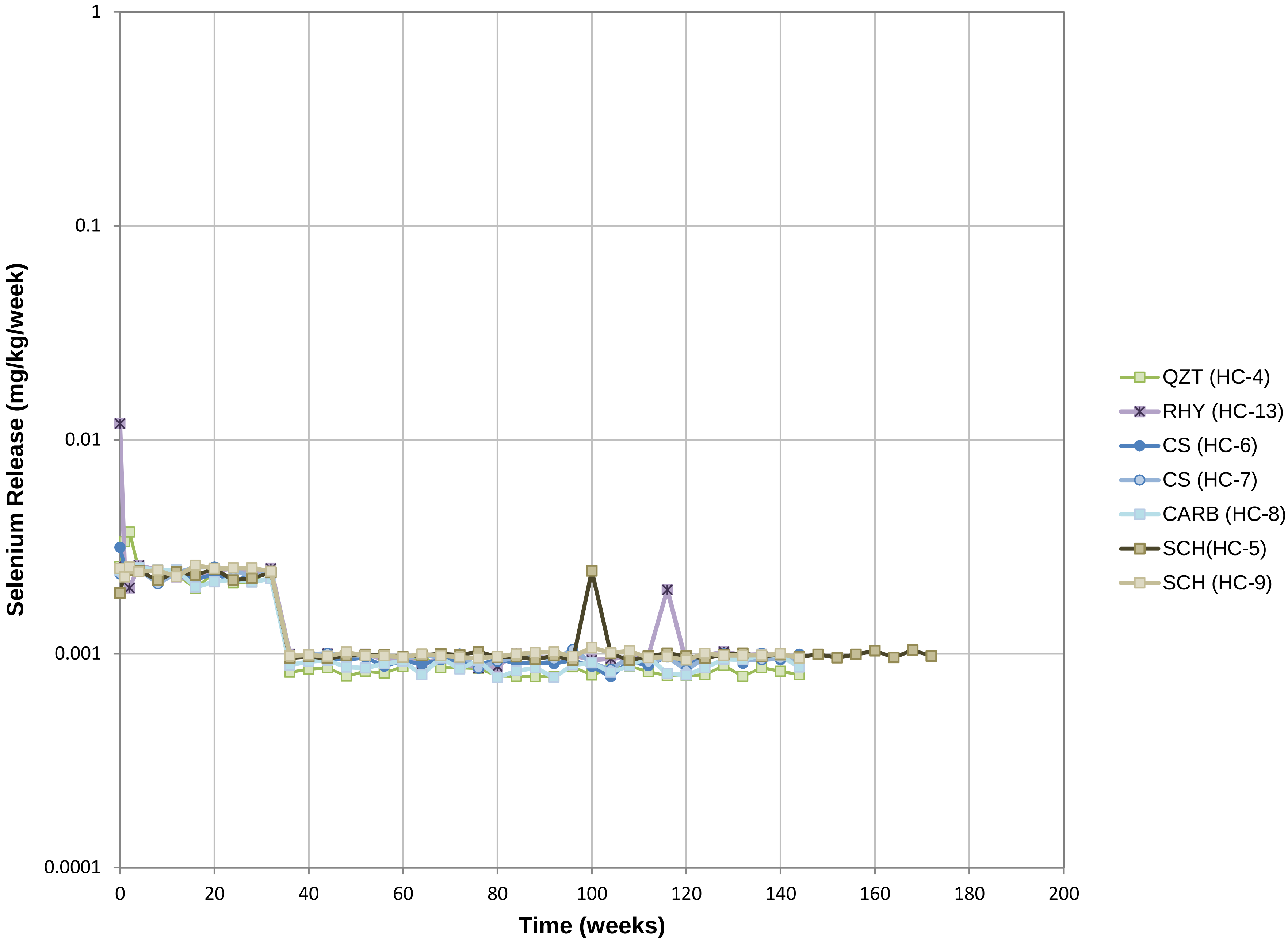
Magnesium Release (mg/kg/week)
100
10
1
0.1
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)


Manganese Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)

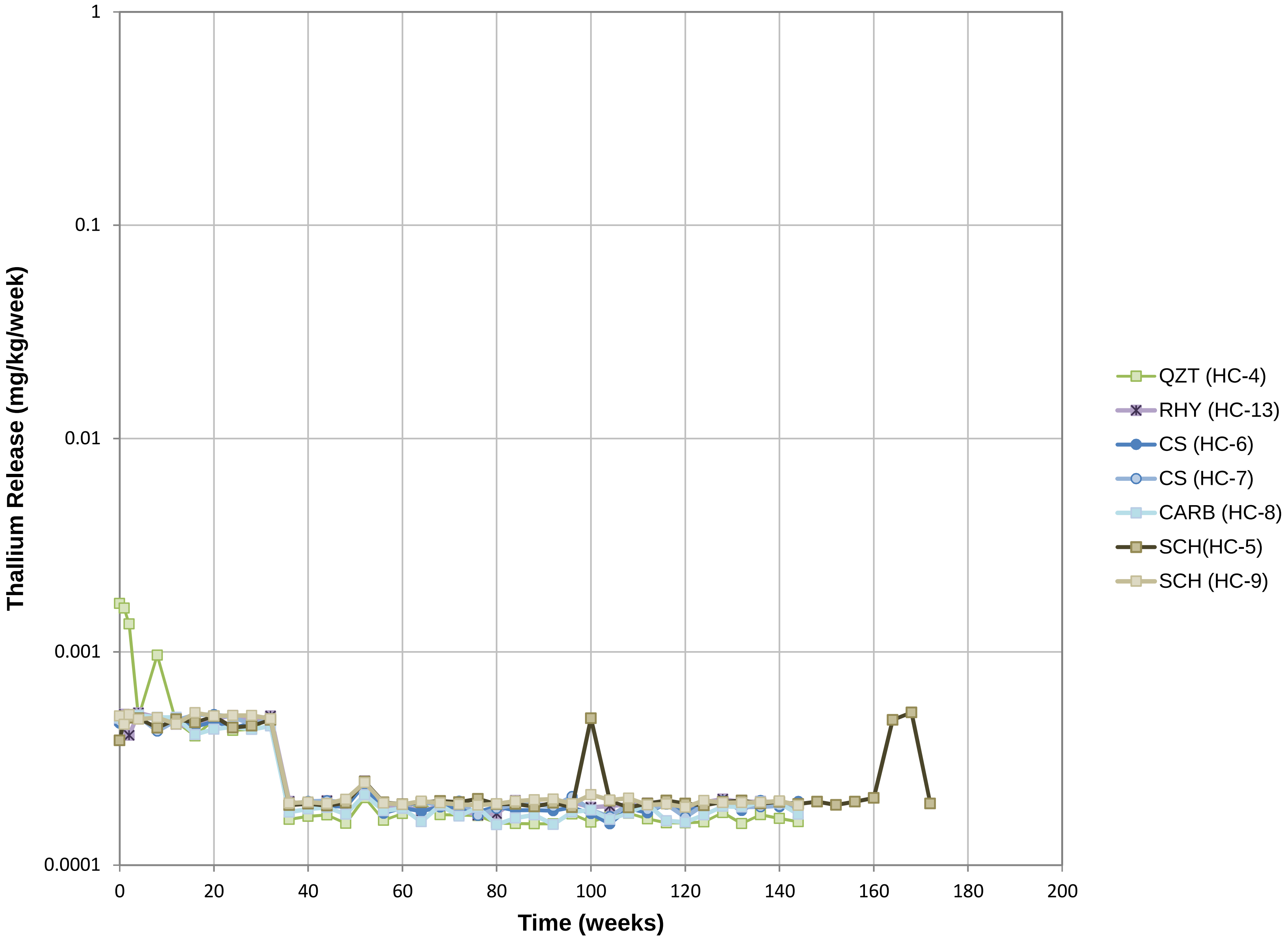

Mercury Release (mg/kg/week)
0.01
0.001
0.0001
0.00001
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



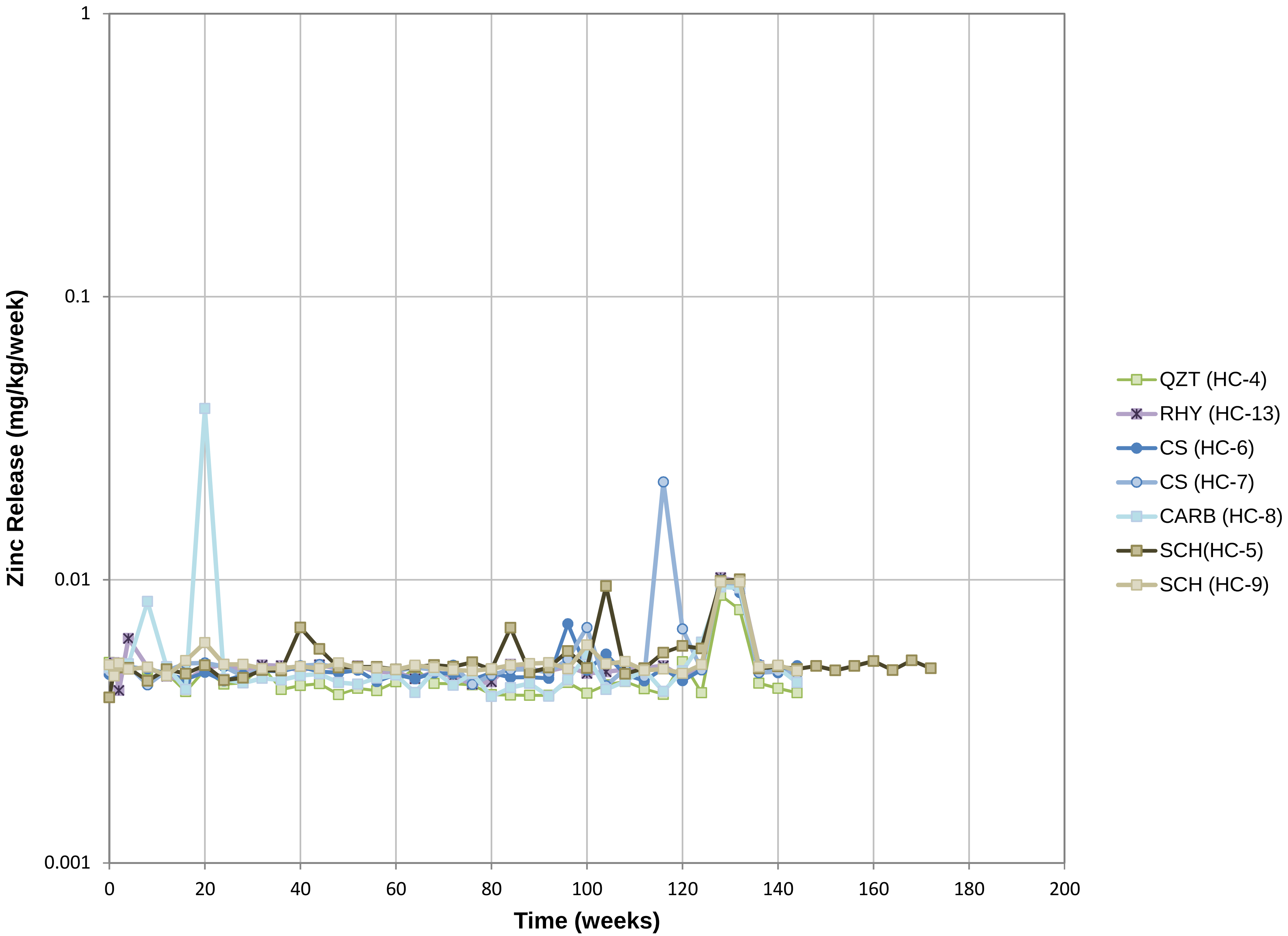
Nickel Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



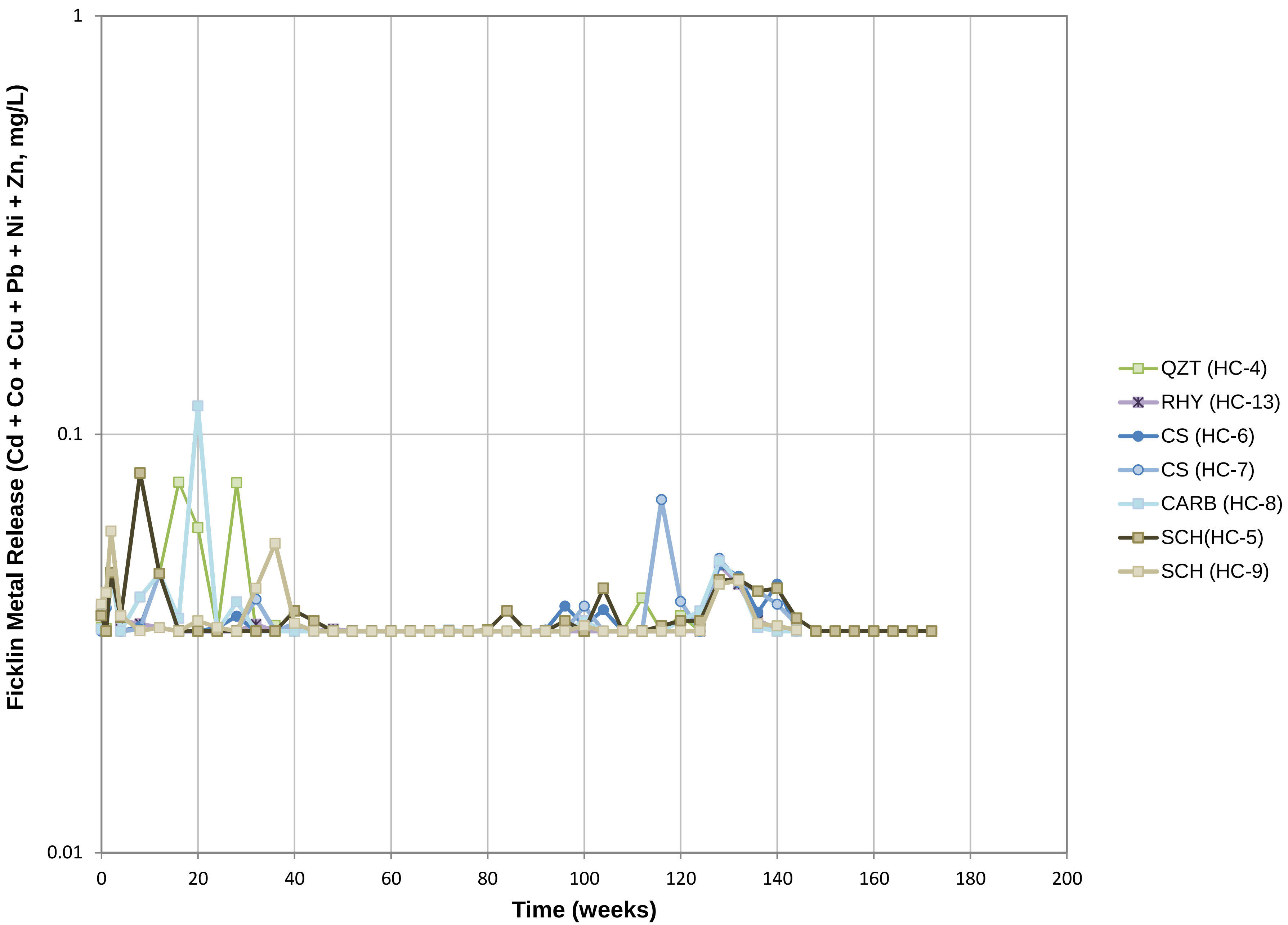
Selenium Release (mg/kg/week)
1
0.1
0.01
0.001
0.0001
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



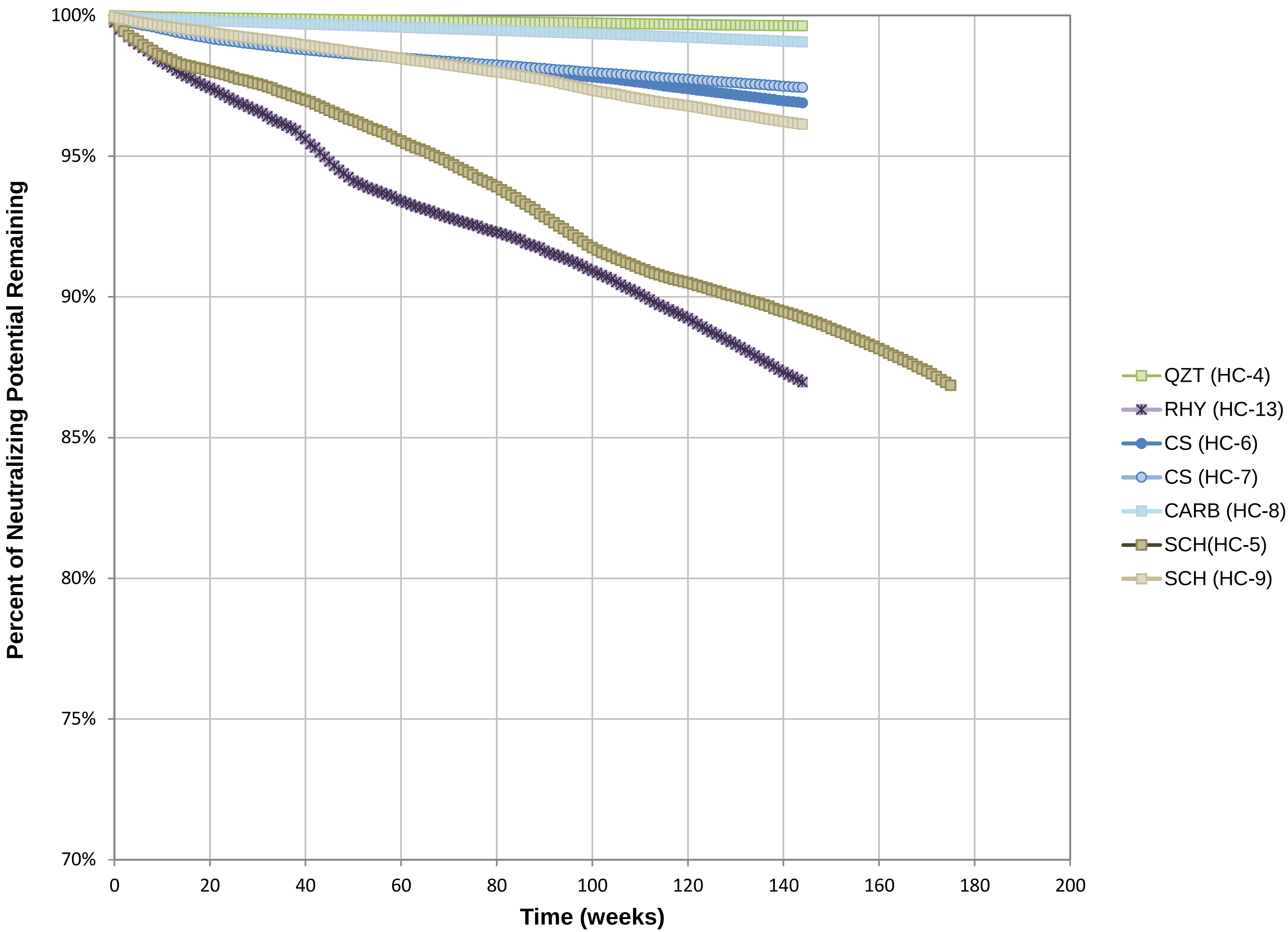
Thallium Release (mg/kg/week)
1
0.1
0.01
0.001
0.0001
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



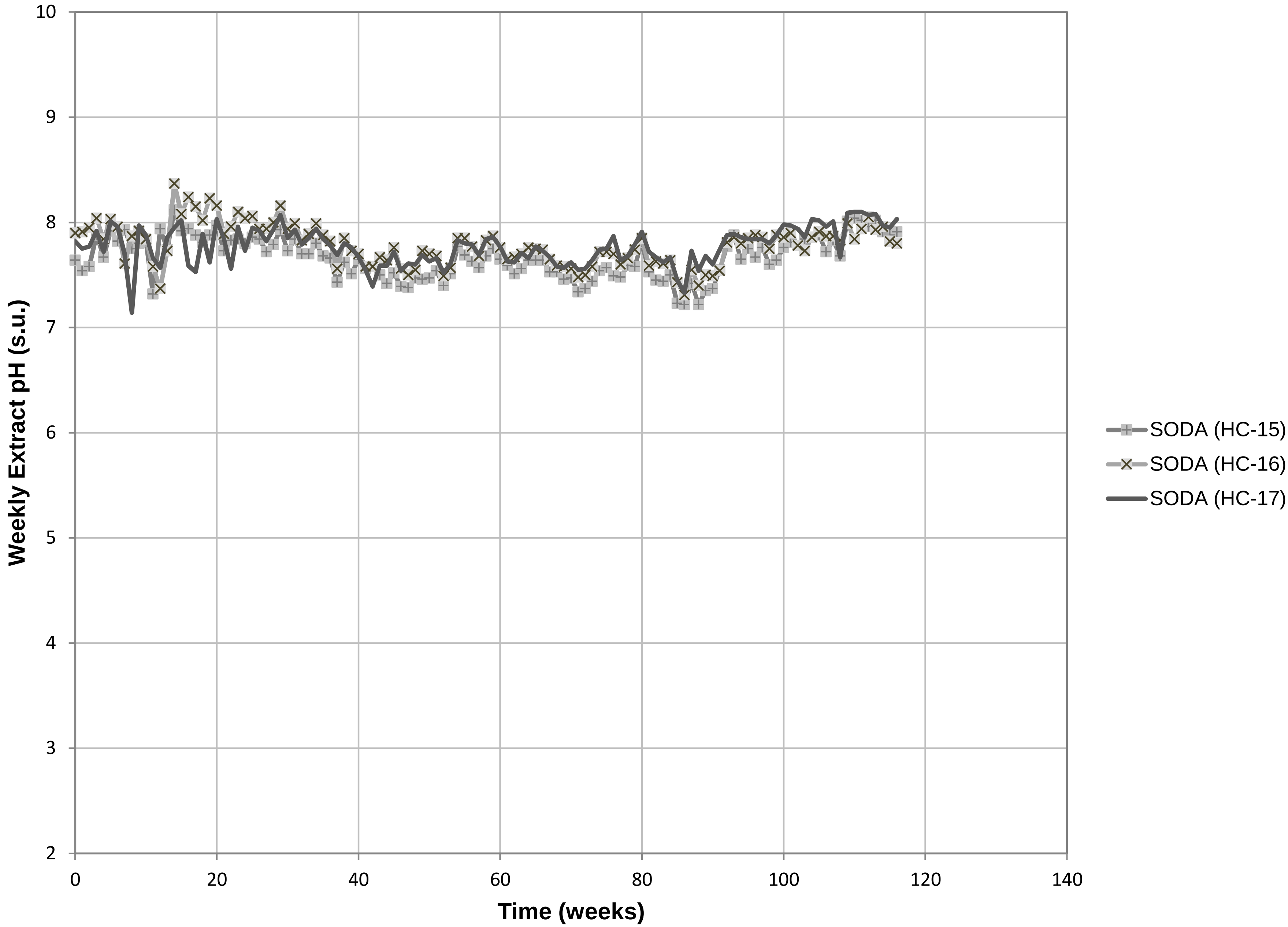
Zinc Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



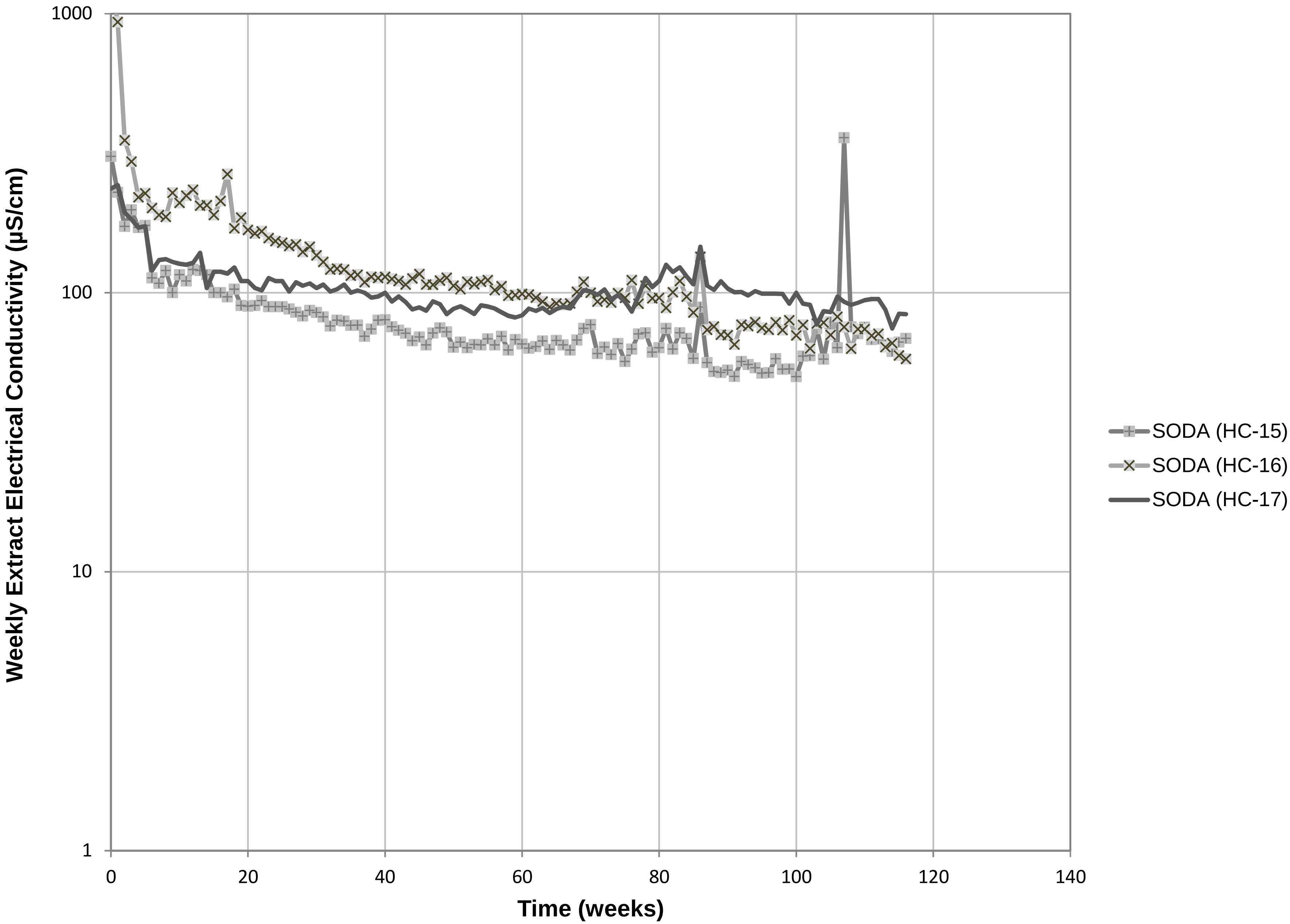
Ficklin Metal Release (Cd + Co + Cu + Pb + Ni + Zn, mg/L)
1
0.1
0.01
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



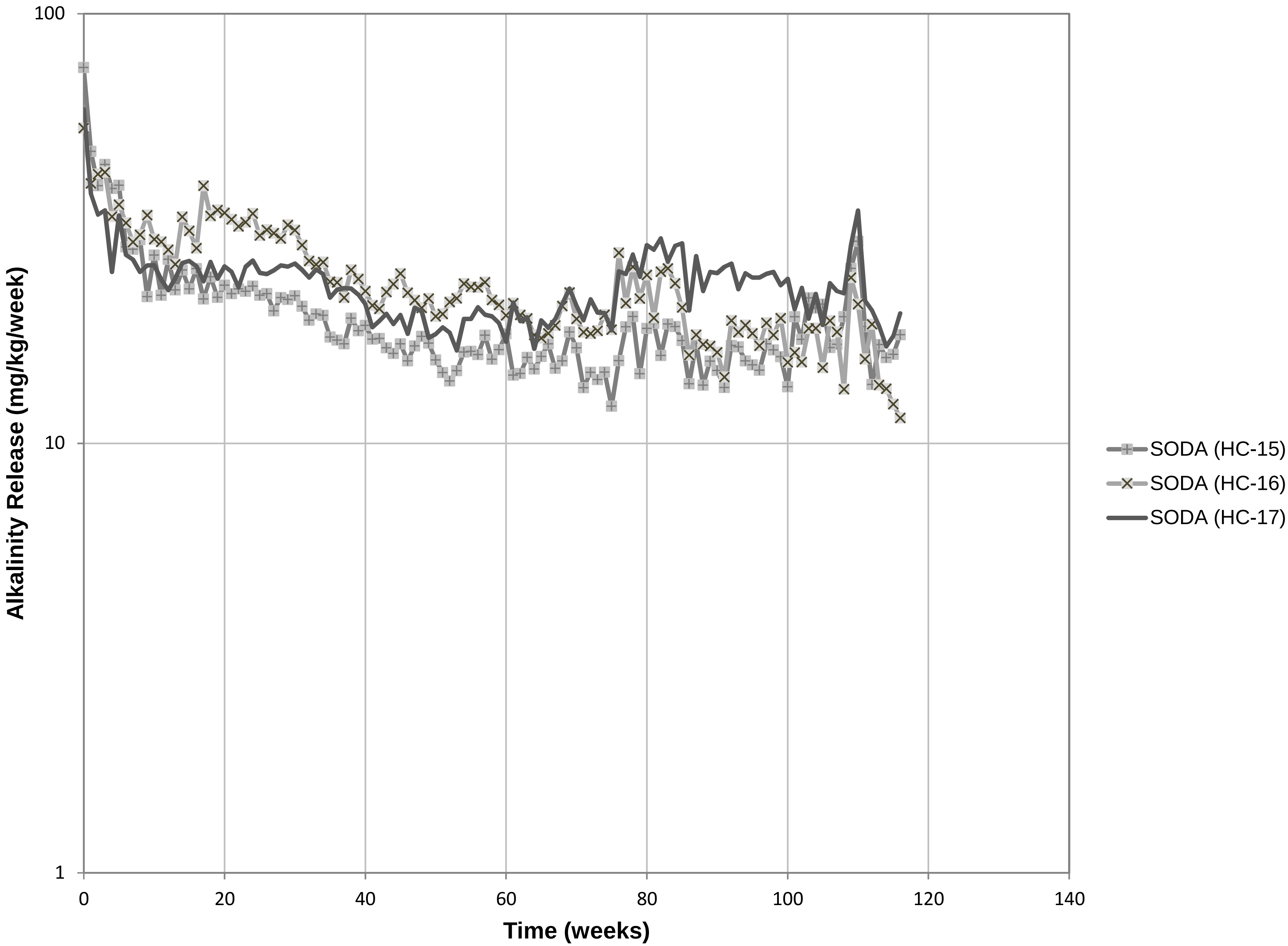
Percent of Neutralizing Potential Remaining
100%
95%
90%
85%
80%
75%
70%
0
20
40
60
80
100
120
140
160
180
200
Time (weeks)
QZT (HC-4)
RHY (HC-13)
CS (HC-6)
CS (HC-7)
CARB (HC-8)
SCH(HC-5)
SCH (HC-9)



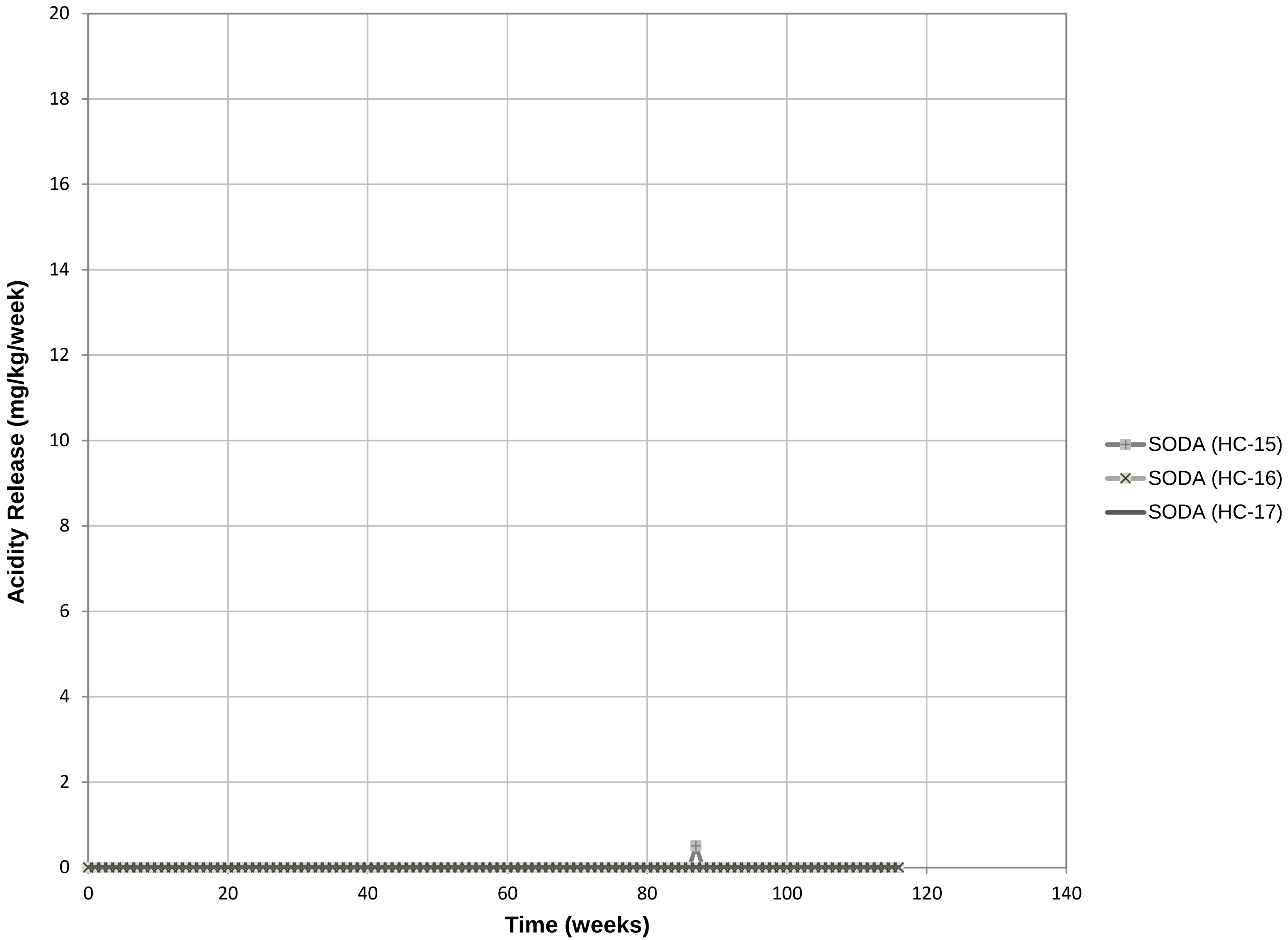
Weekly Extract pH (s.u.)
10
9
8
7
6
5
4
3
2
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



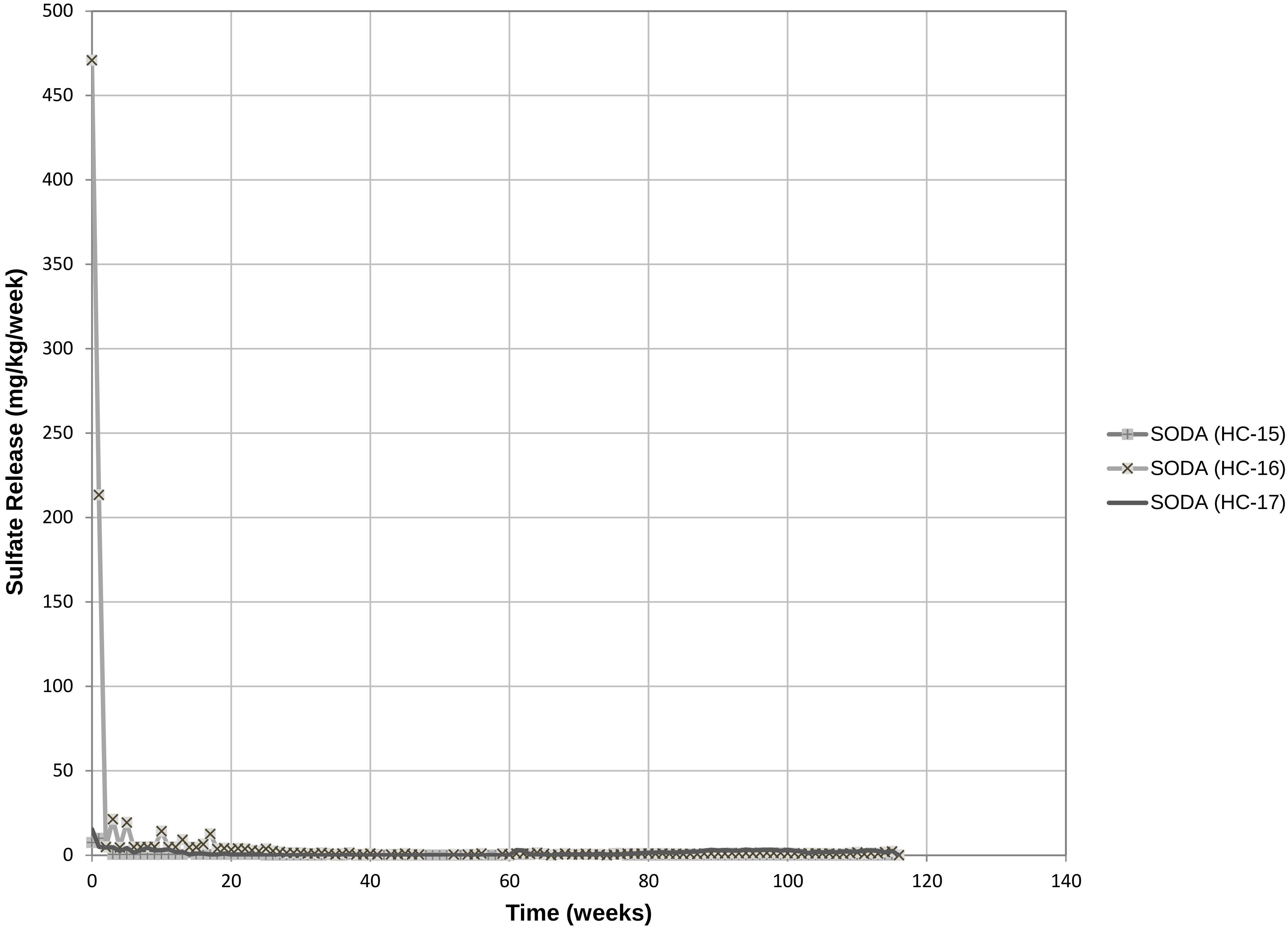
Weekly Extract Electrical Conductivity (µS/cm)
1000
100
10
1
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



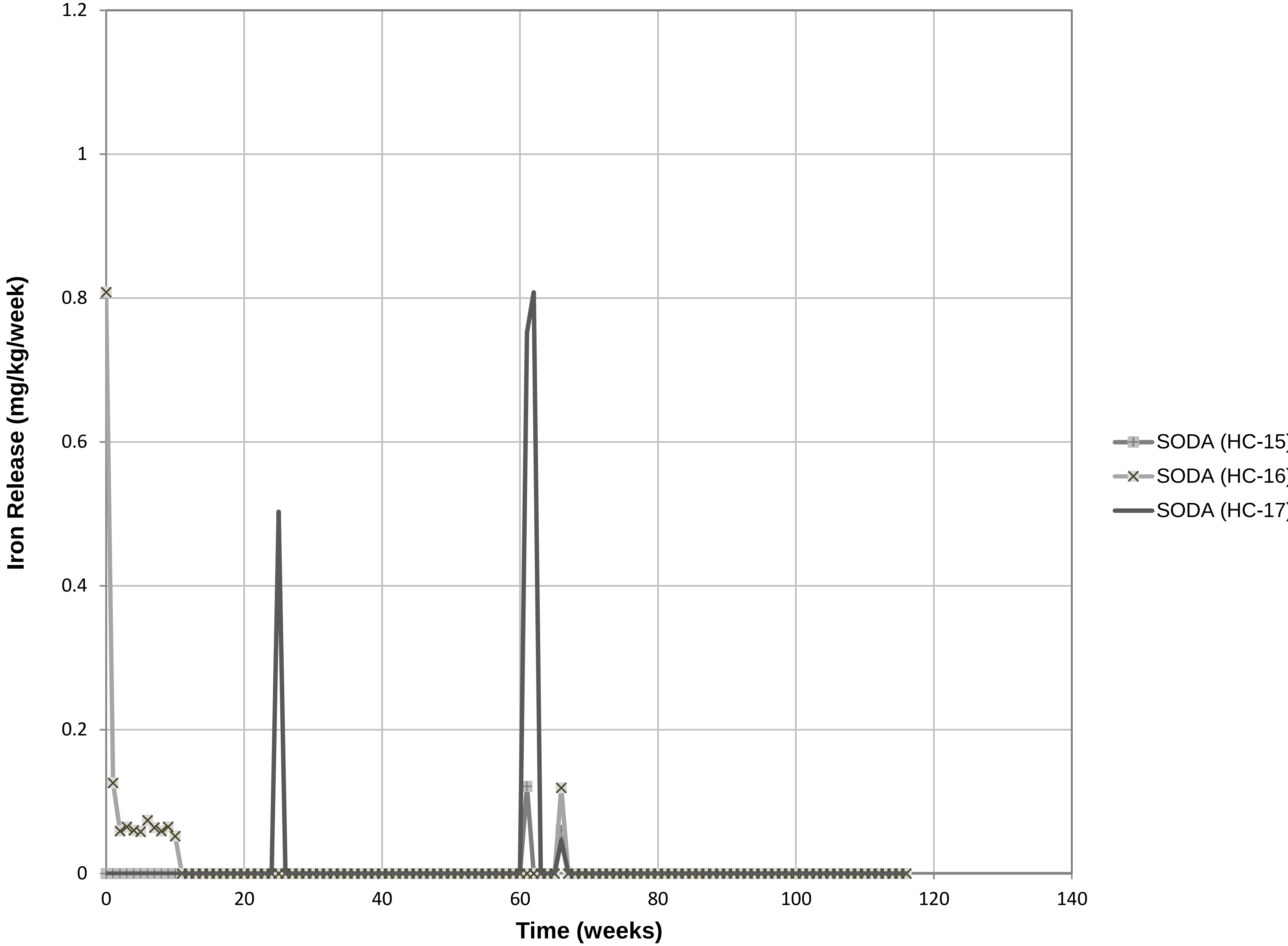
100
10
1
0
20
40
60
80
100
120
140
Alkalinity Release (mg/kg/week)
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)

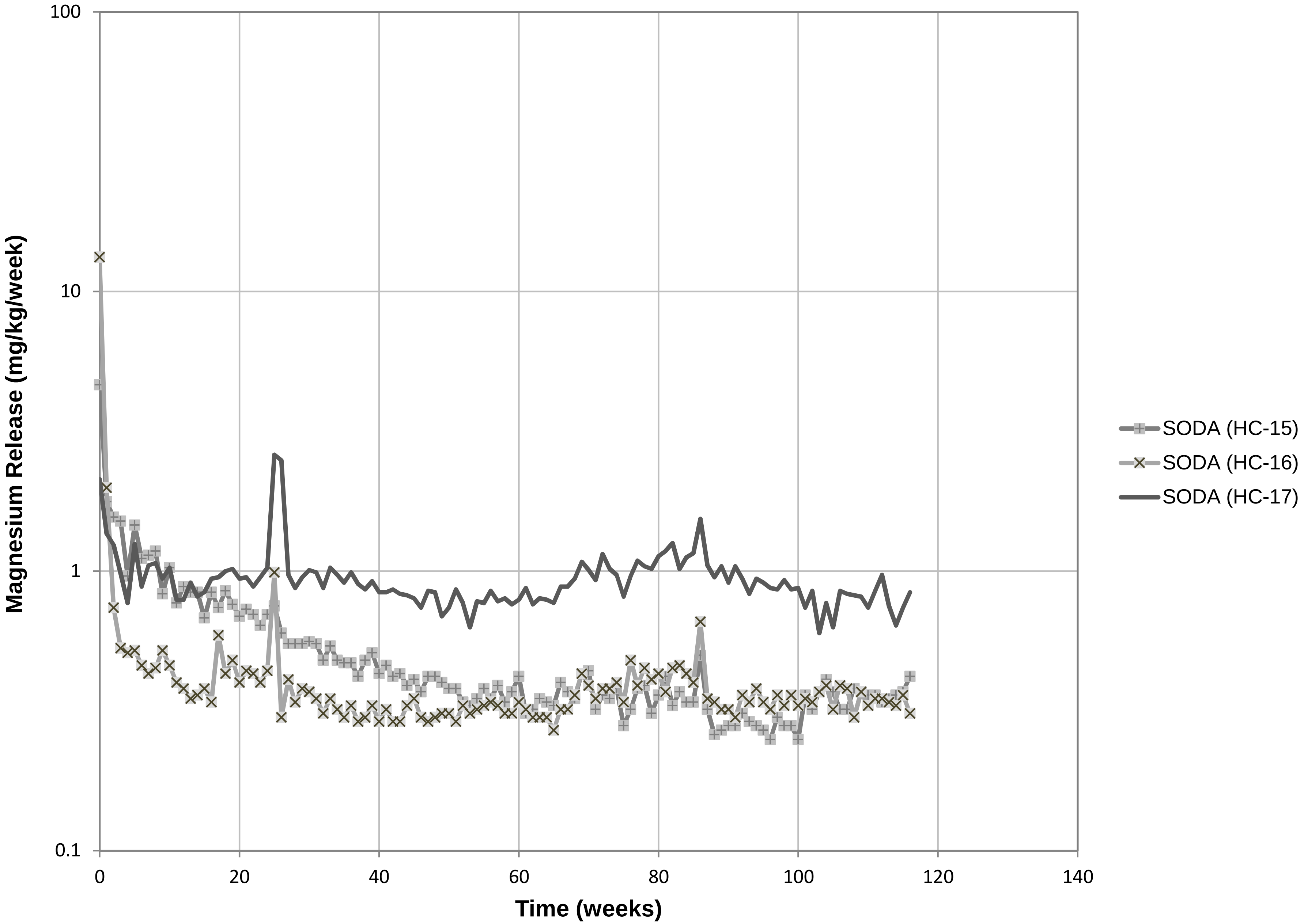


Acidity Release (mg/kg/week)
20
18
16
14
12
10
8
6
4
2
0
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)

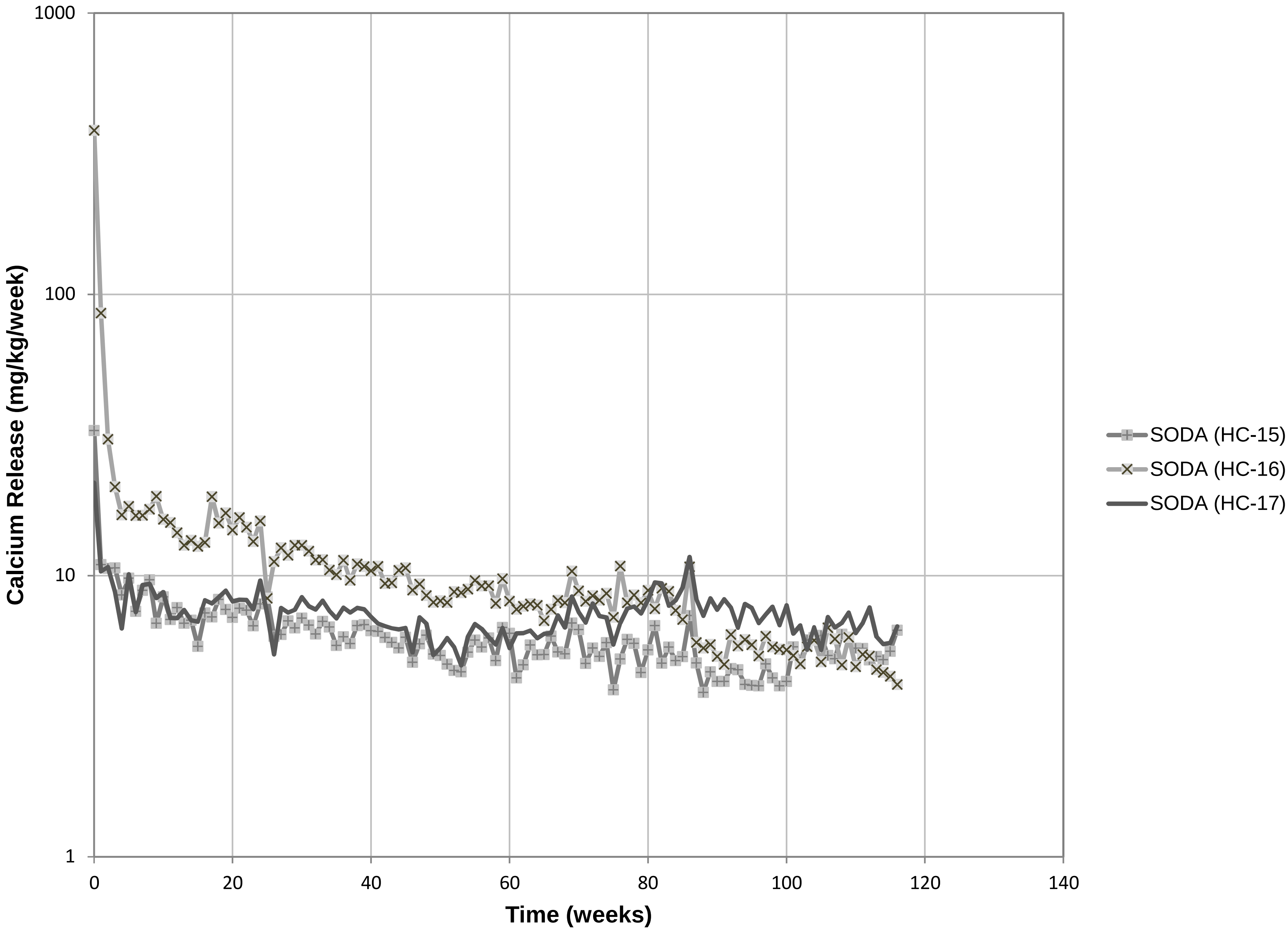


Sulfate Release (mg/kg/week)
500
450
400
350
300
250
200
150
100
50
0
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)

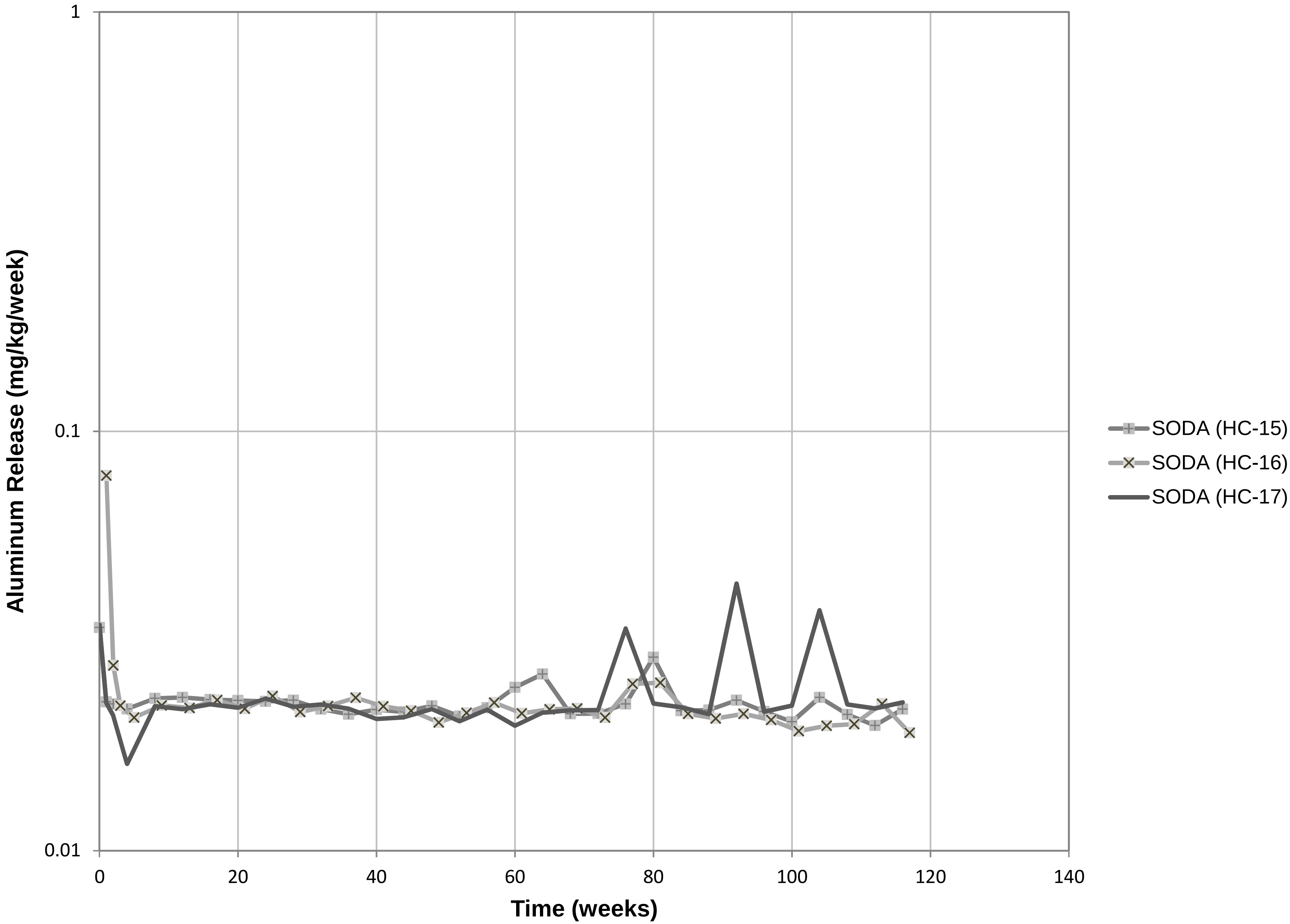

Iron Release (mg/kg/week)
1.2
1
0.8
0.6
0.4
0.2
0
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



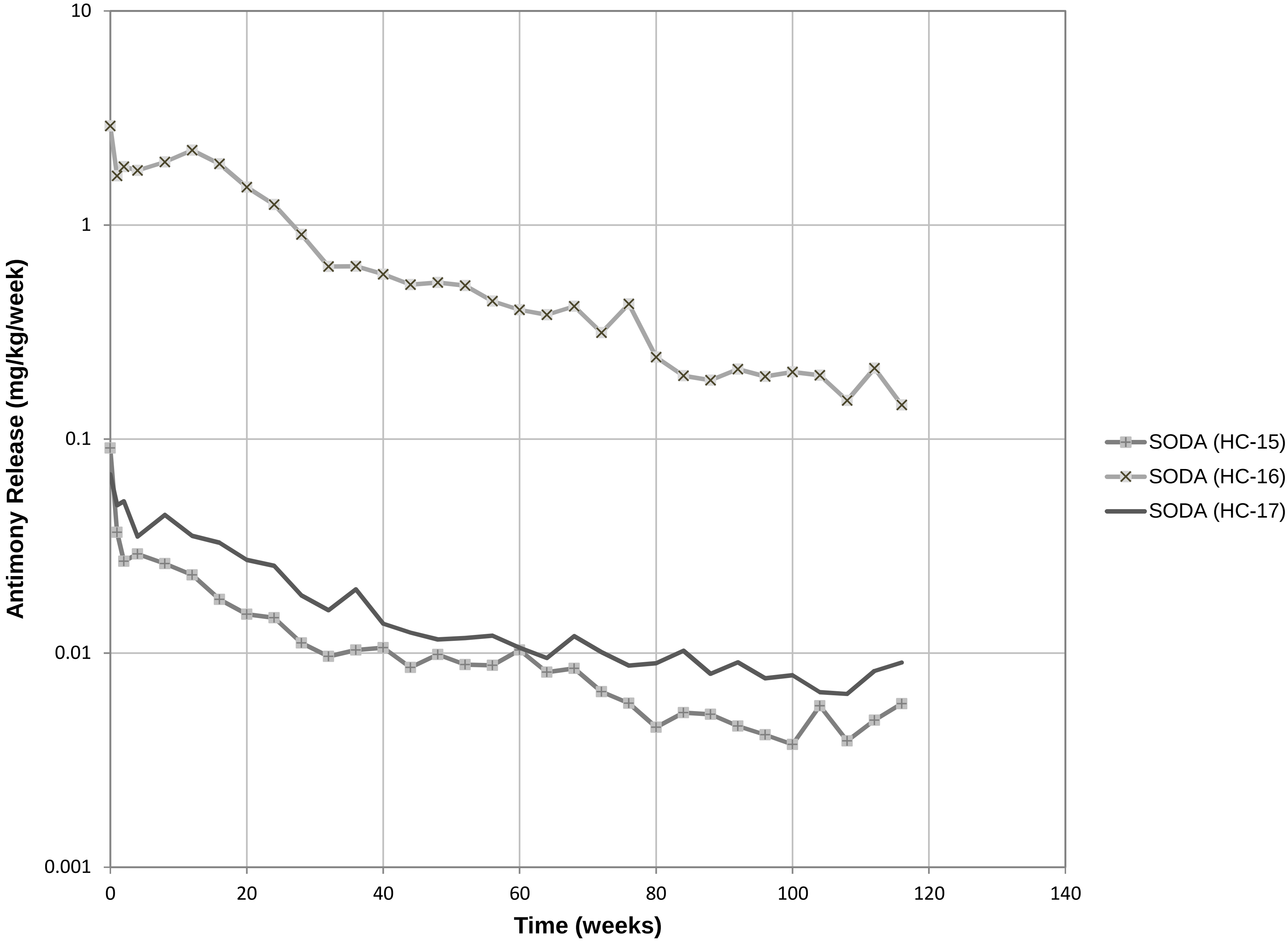
Magnesium Release (mg/kg/week)
100
10
1
0.1
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)

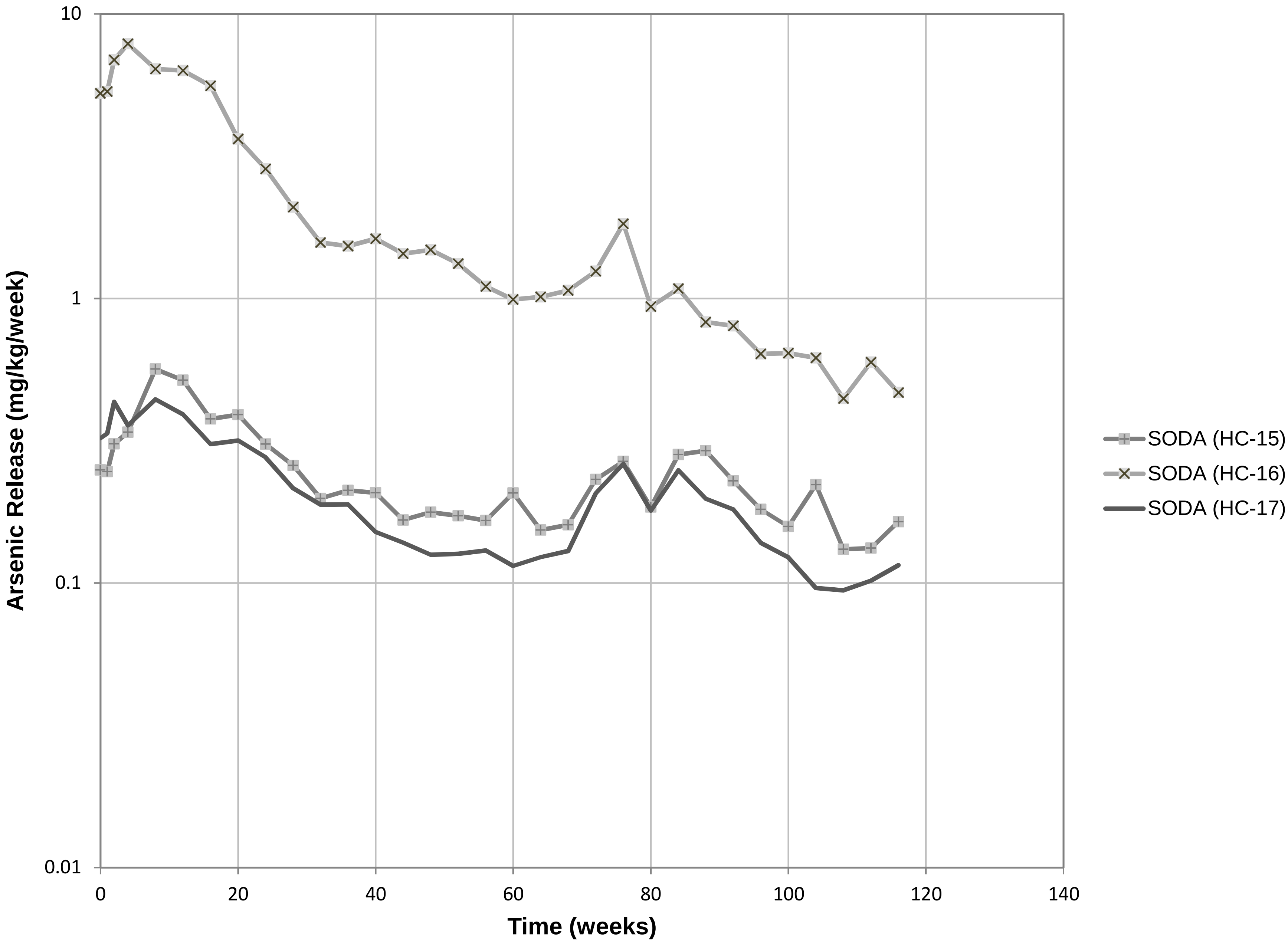


1000
100
10
1
Calcium Release (mg/kg/week)
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)

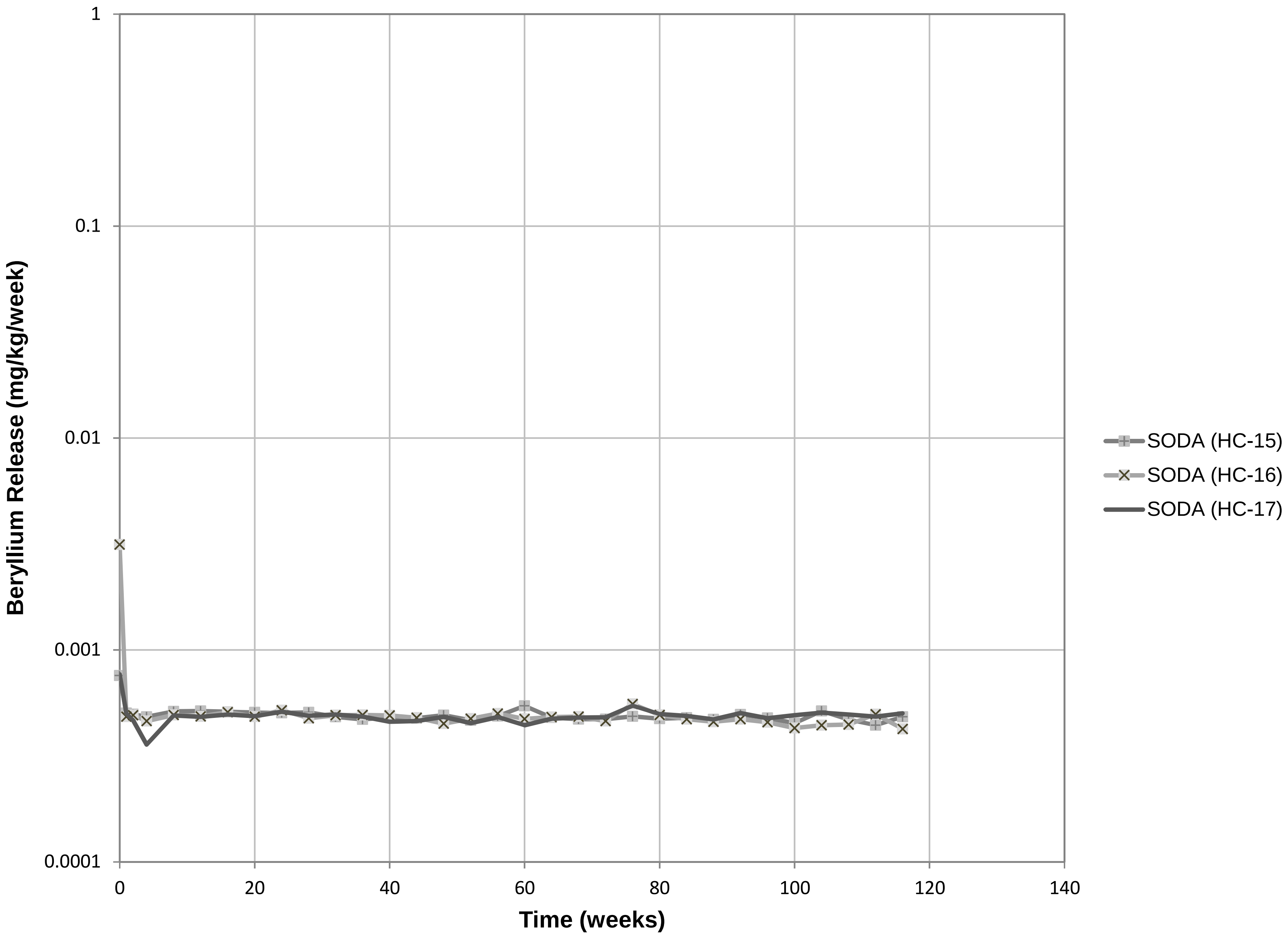


1
0.1
0.01
0
20
40
60
80
100
120
140
Aluminum Release (mg/kg/week)
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)

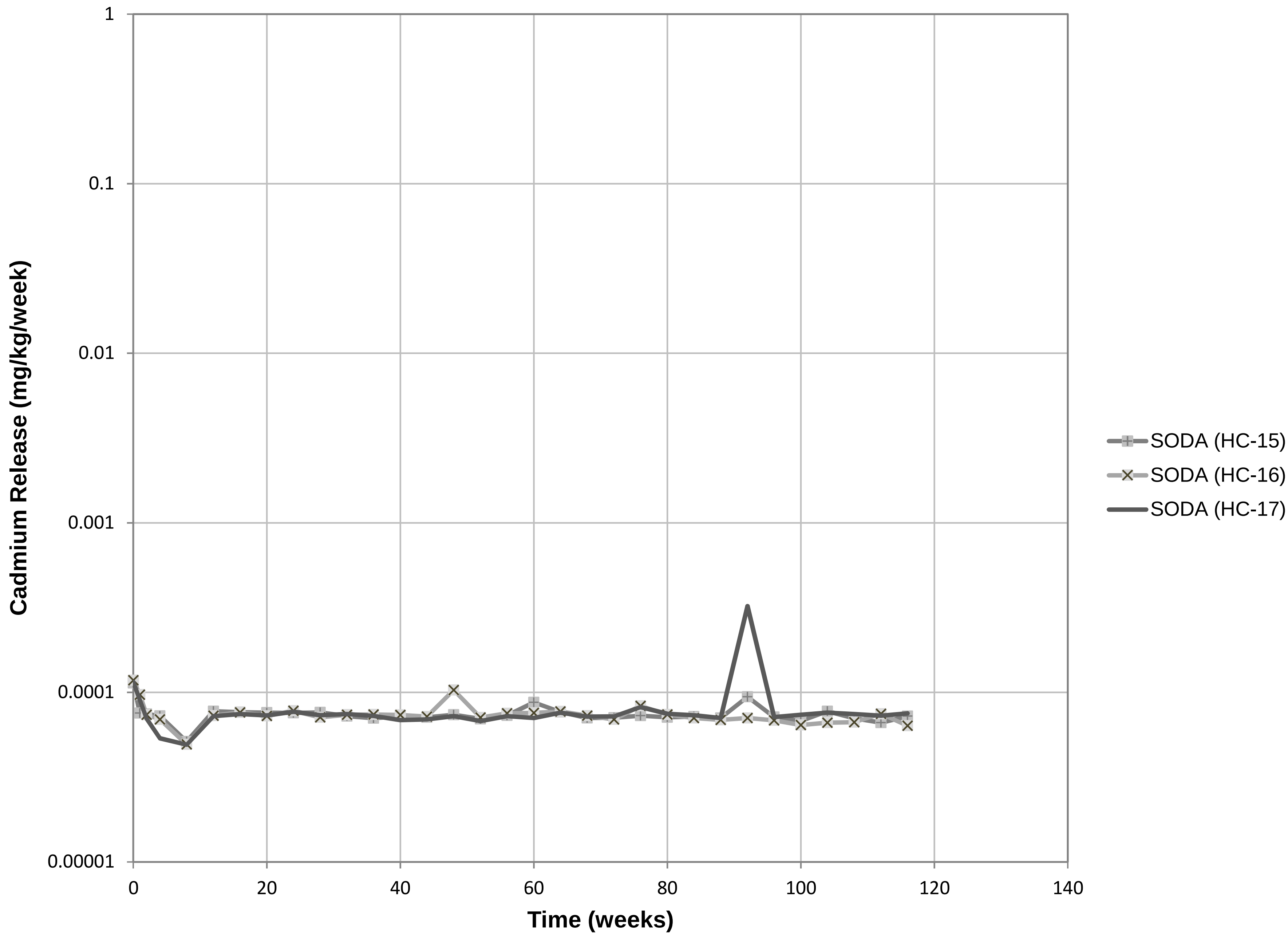

Antimony Release (mg/kg/week)
10
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



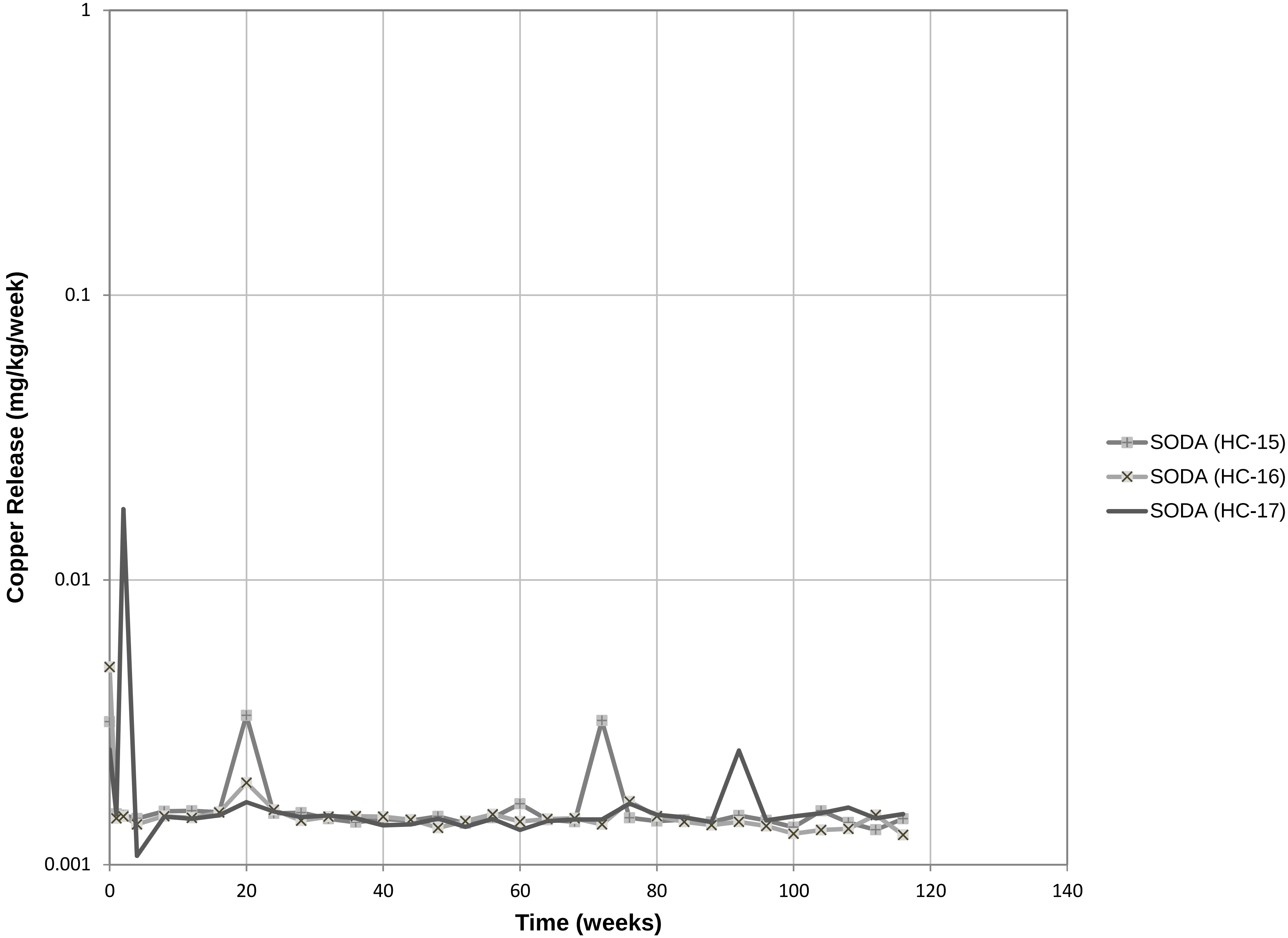
10
1
0.1
0.01
0
20
40
60
80
100
120
140
Arsenic Release (mg/kg/week)
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



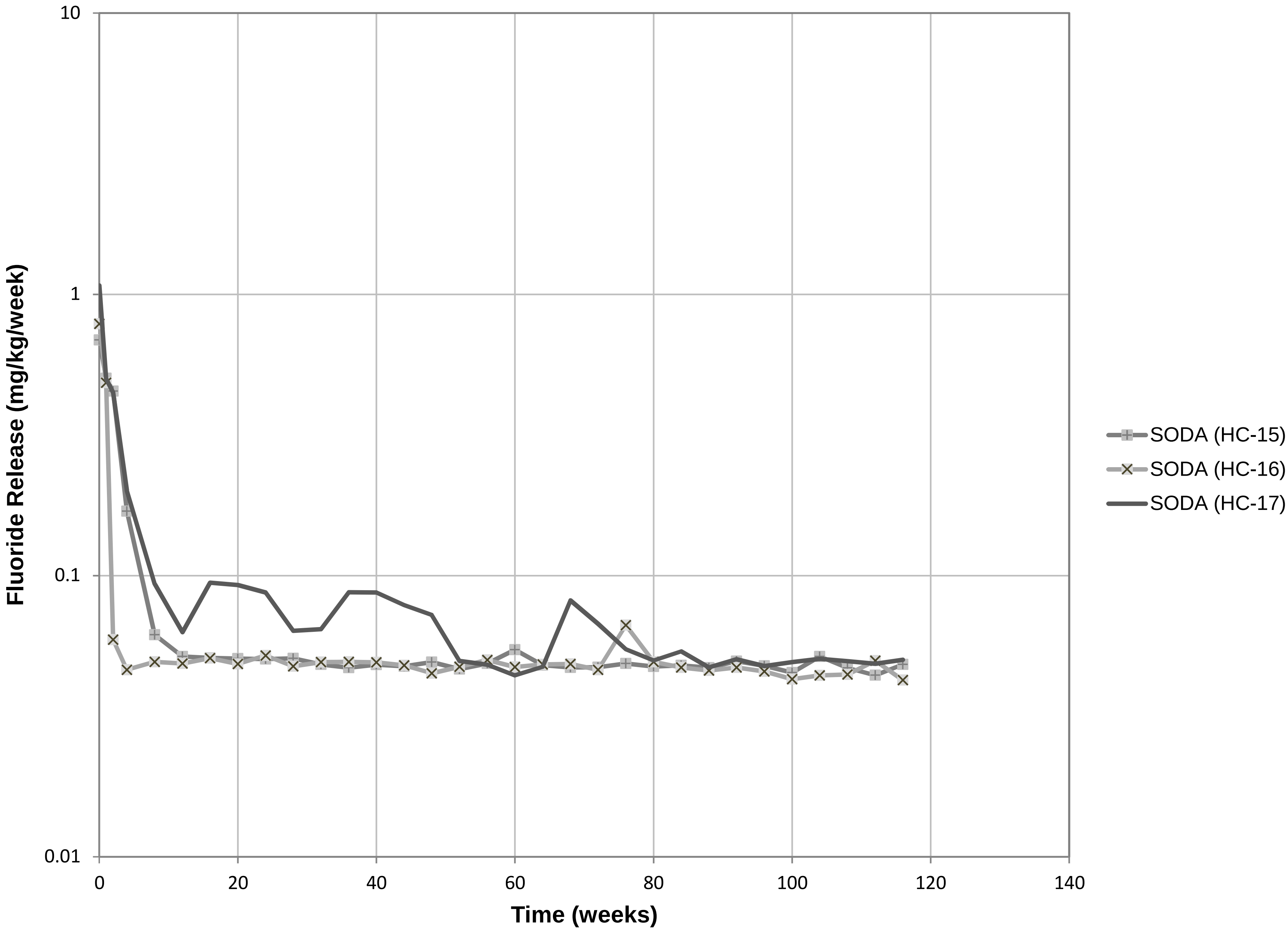
1
0.1
0.01
0.001
0.0001
0
20
40
60
80
100
120
140
Beryllium Release (mg/kg/week)
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



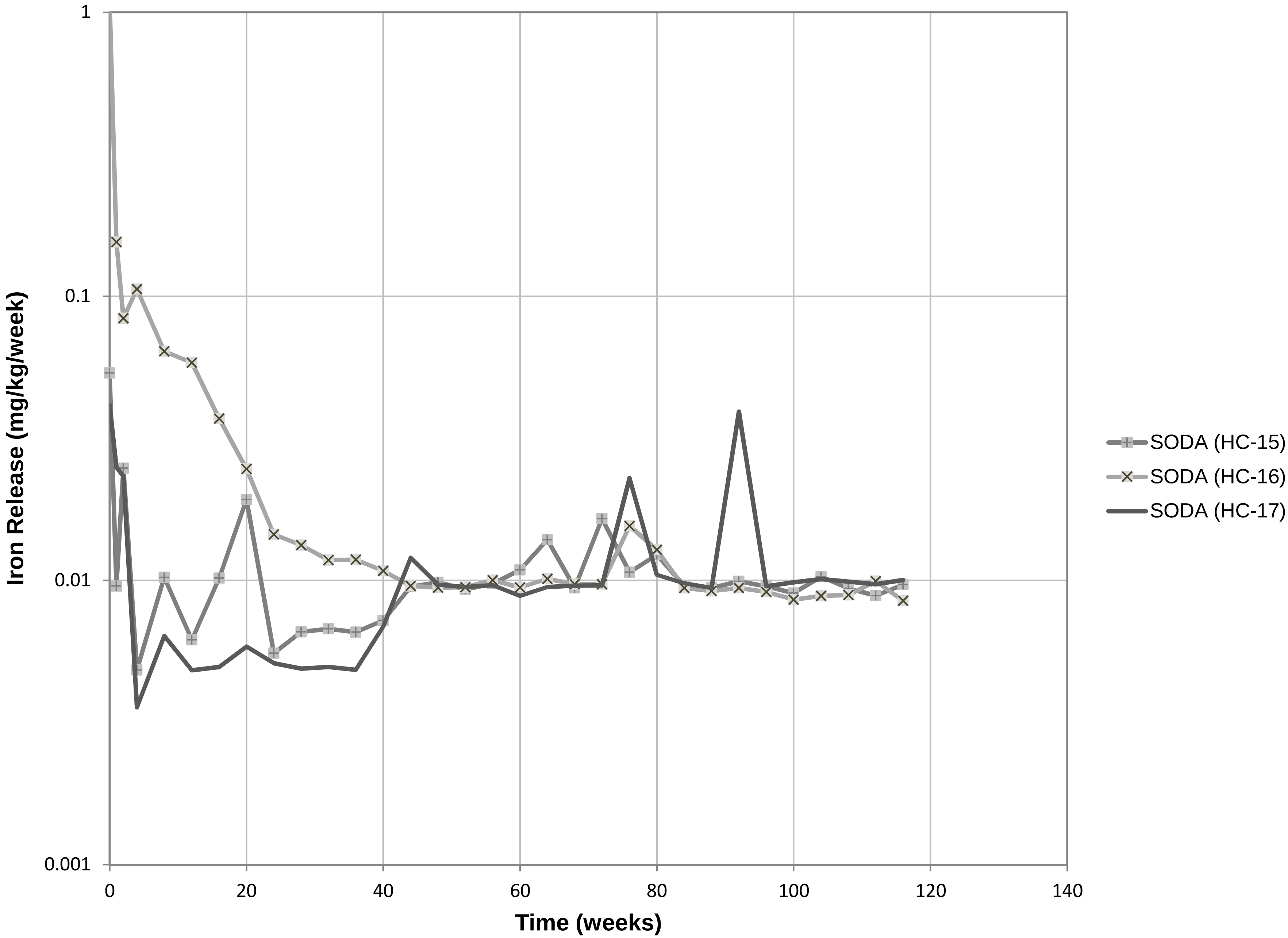
1
0.1
0.01
0.001
0.0001
0.00001
Cadmium Release (mg/kg/week)
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



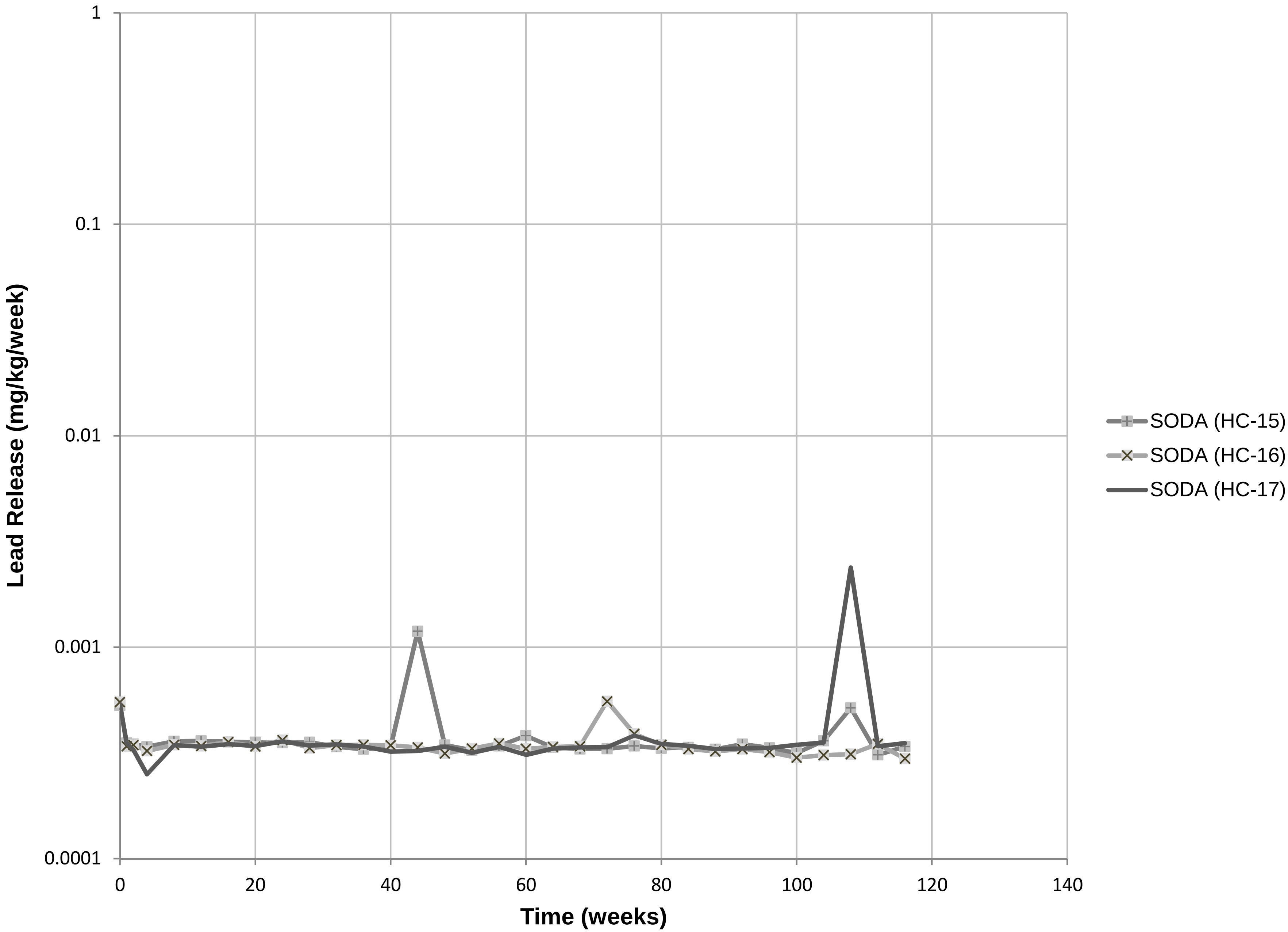
Copper Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



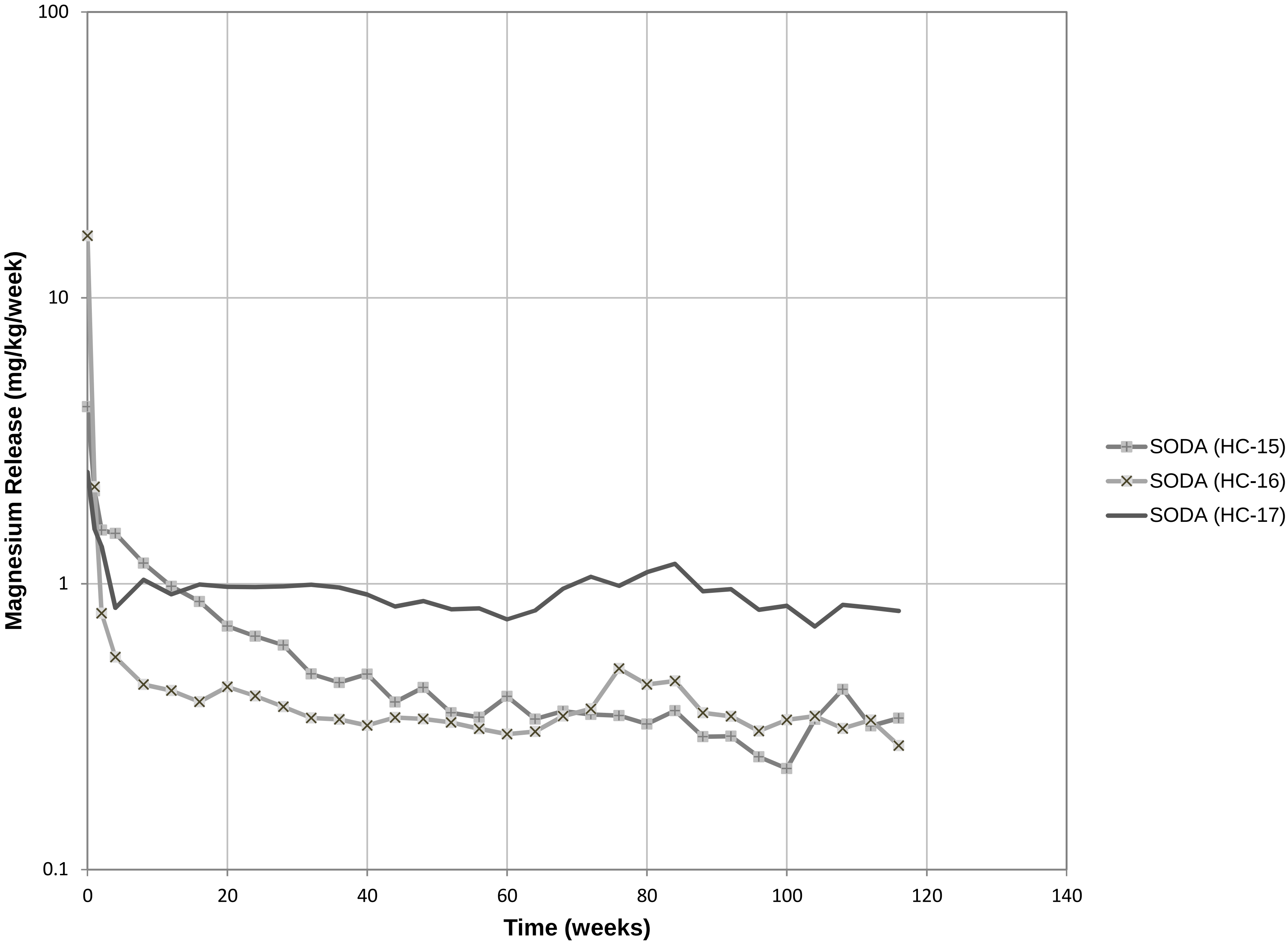
10
1
0.1
0.01
0
20
40
60
80
100
120
140
Fluoride Release (mg/kg/week)
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



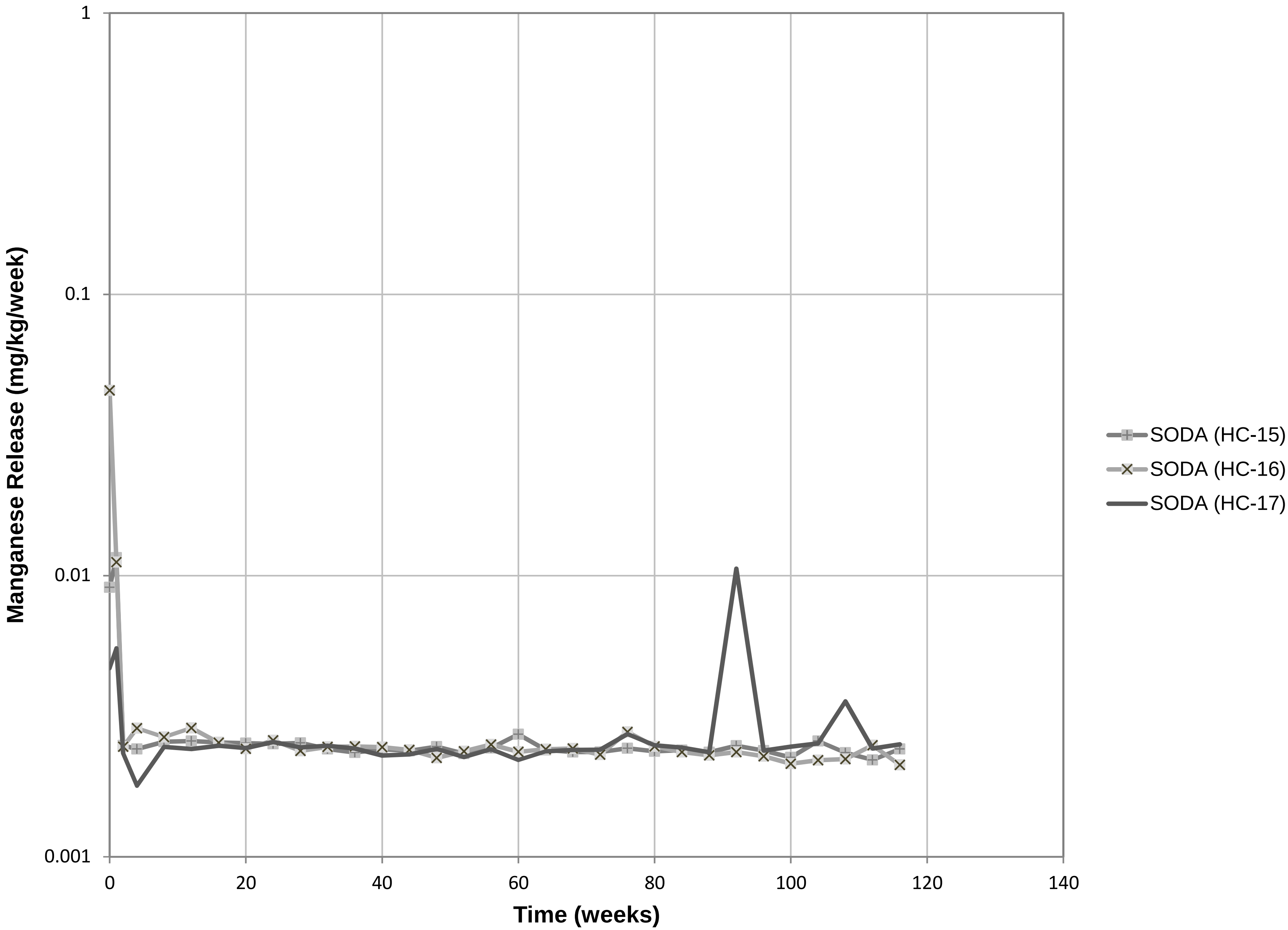
1
0.1
0.01
0.001
Iron Release (mg/kg/week)
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



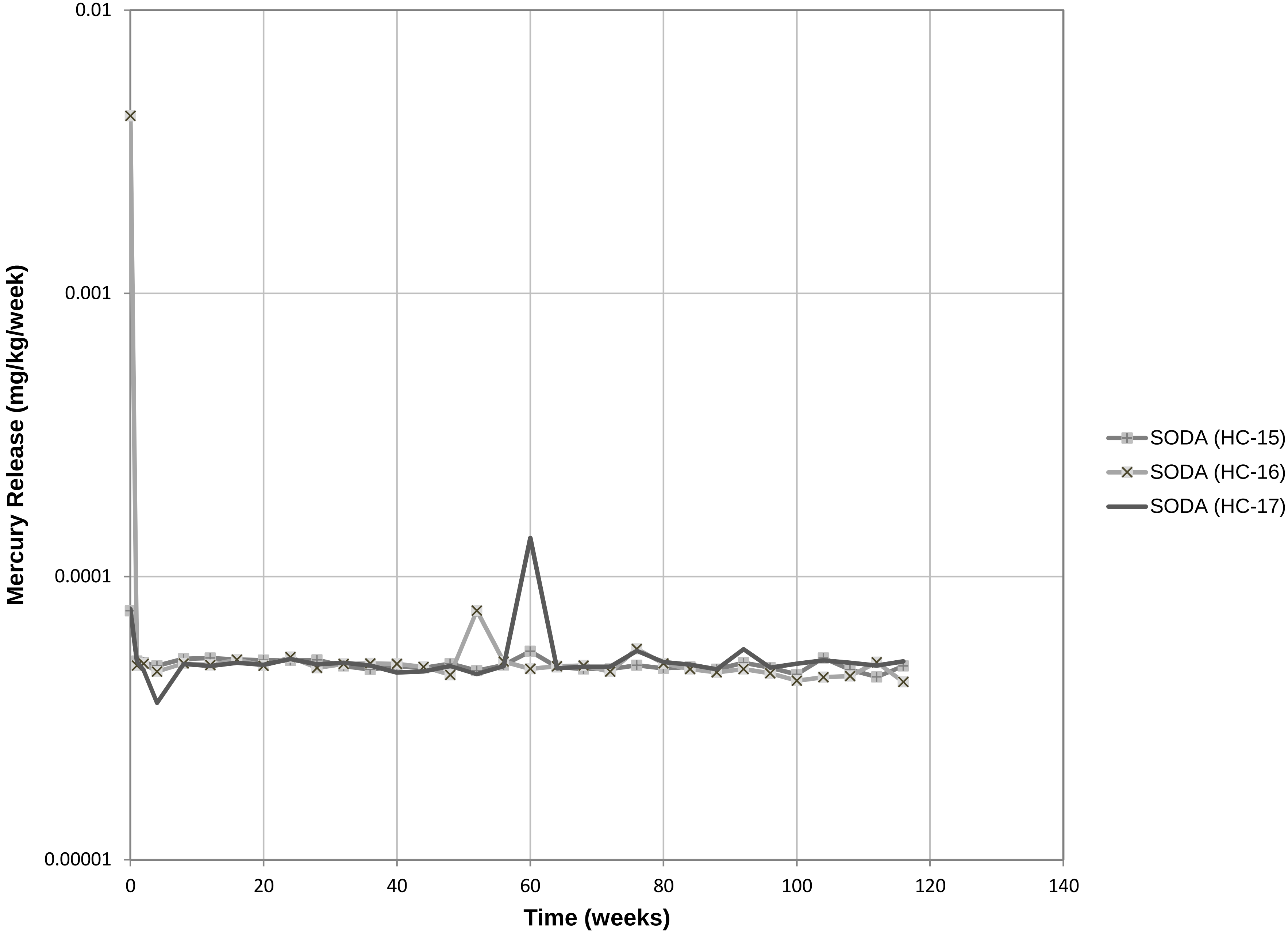
Lead Release (mg/kg/week)
1
0.1
0.01
0.001
0.0001
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



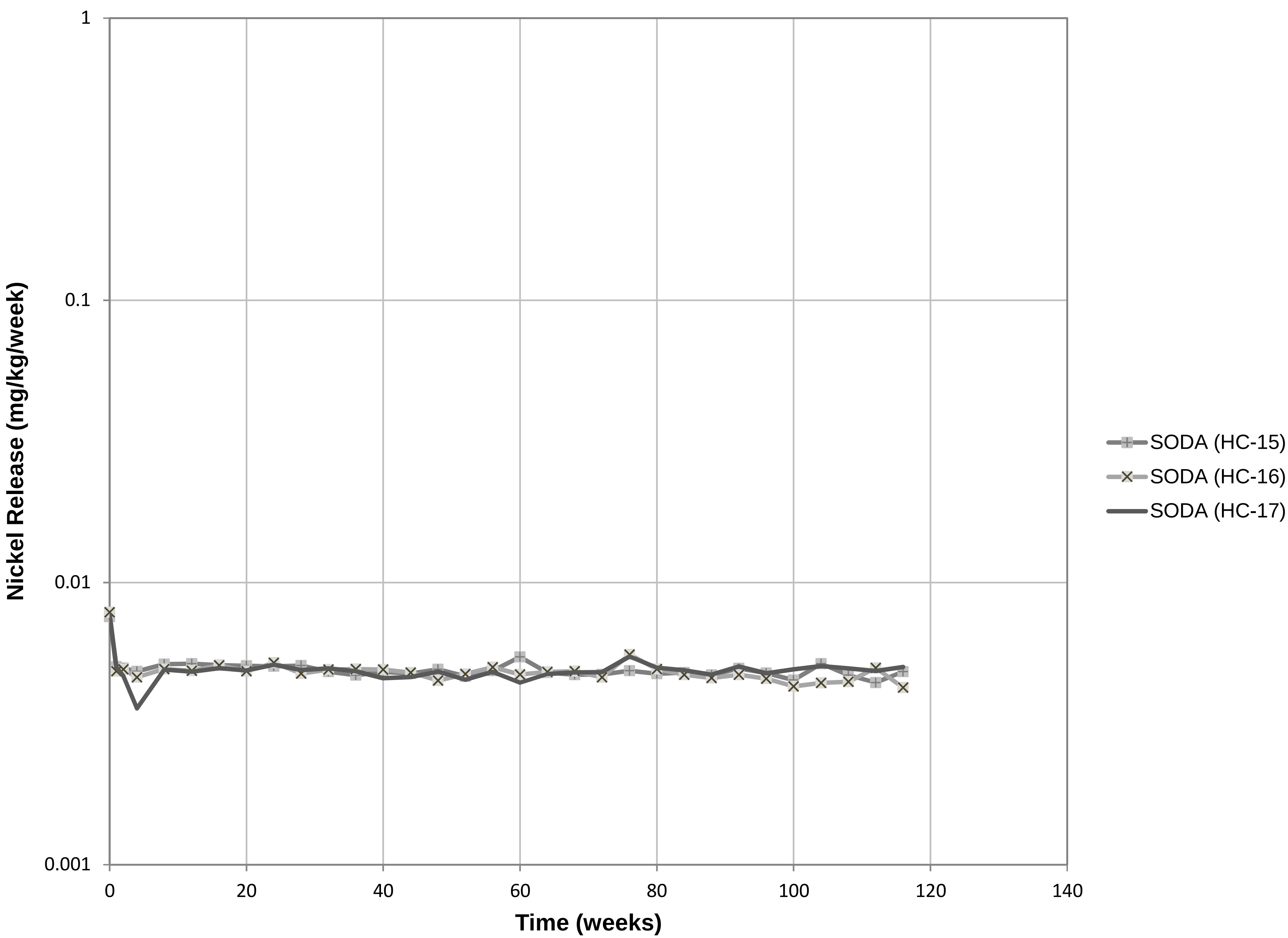
100
10
1
0.1
Magnesium Release (mg/kg/week)
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



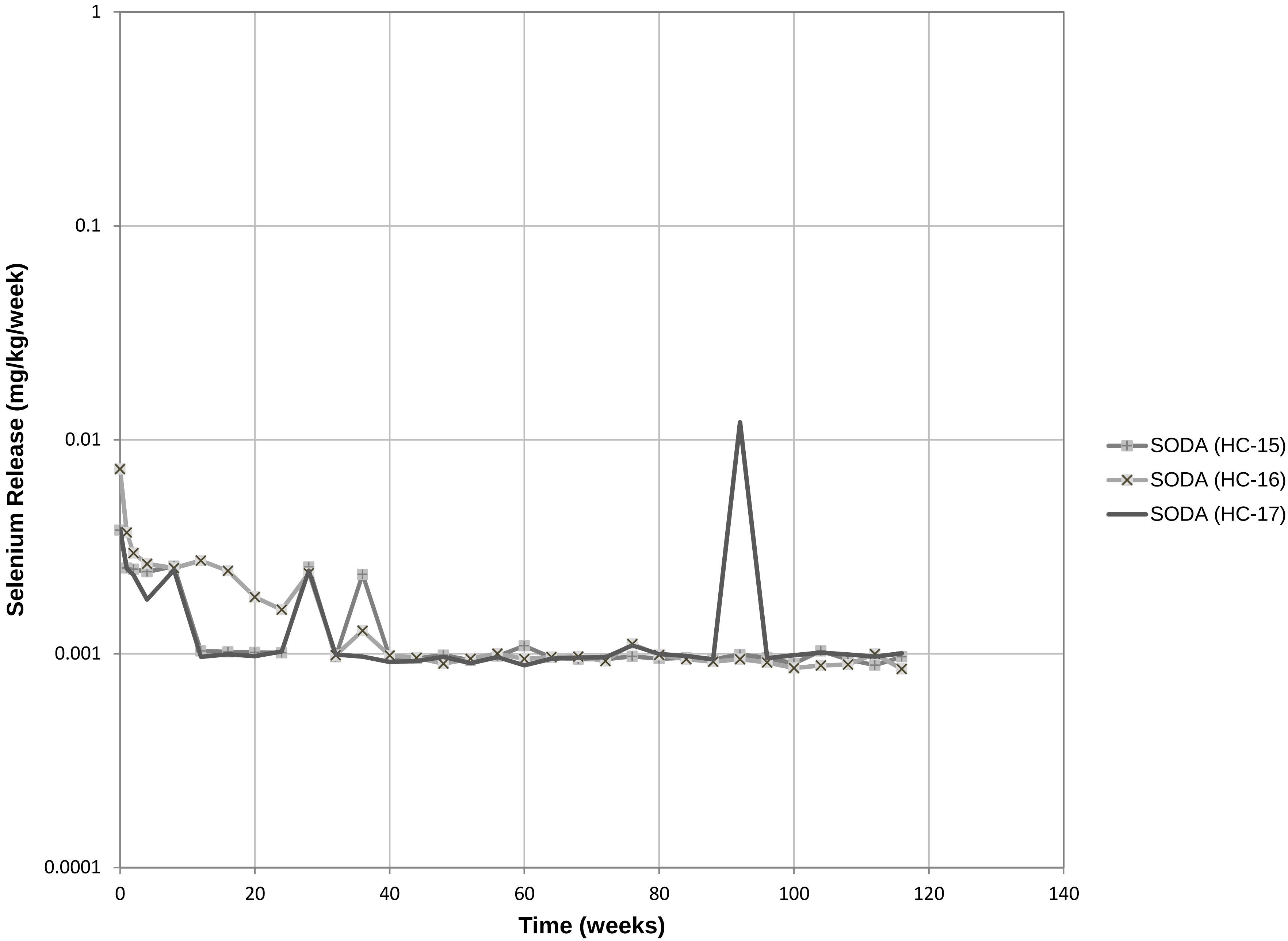
Manganese Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



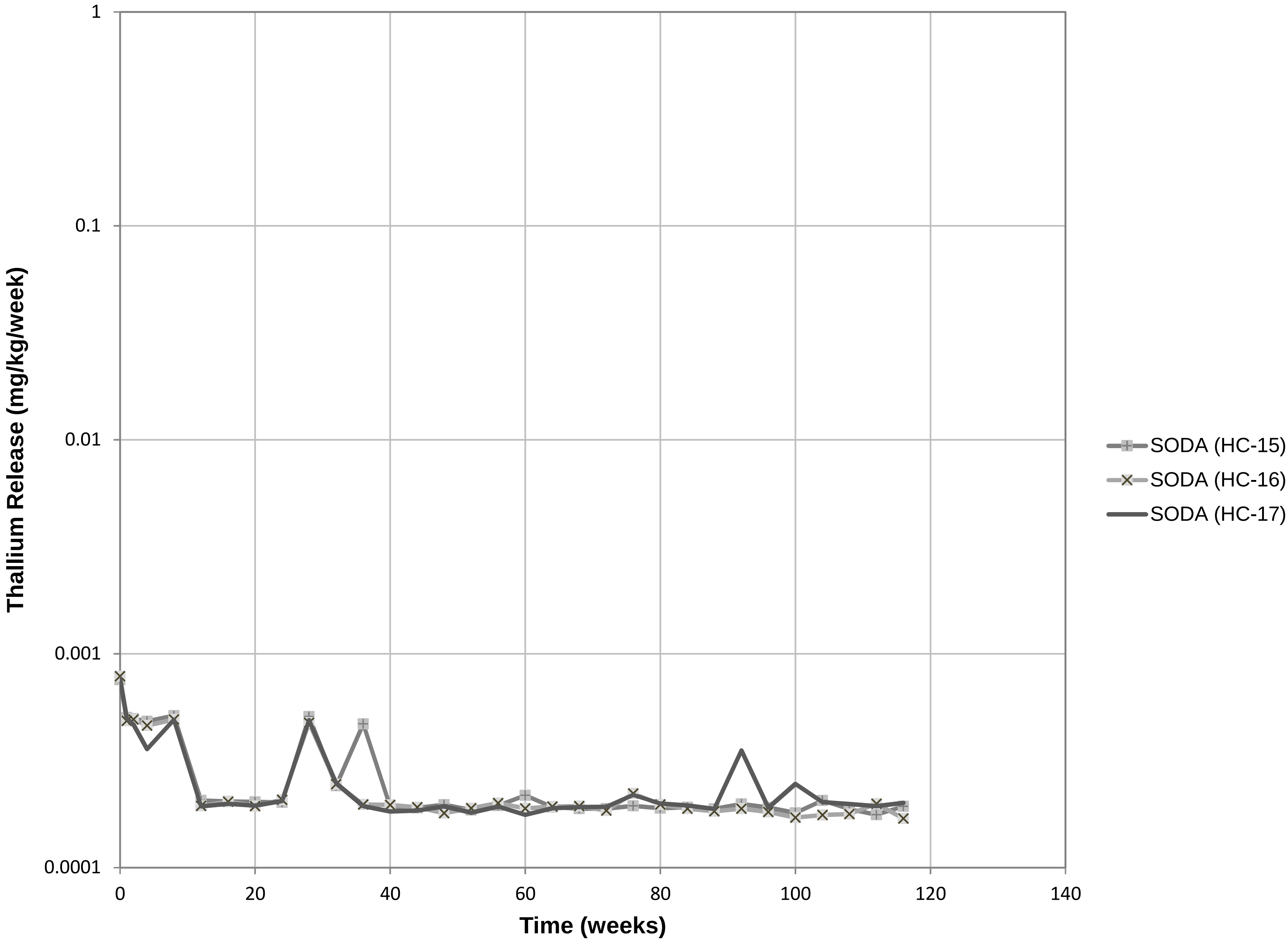
0.01
0.001
0.0001
0.00001
Mercury Release (mg/kg/week)
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



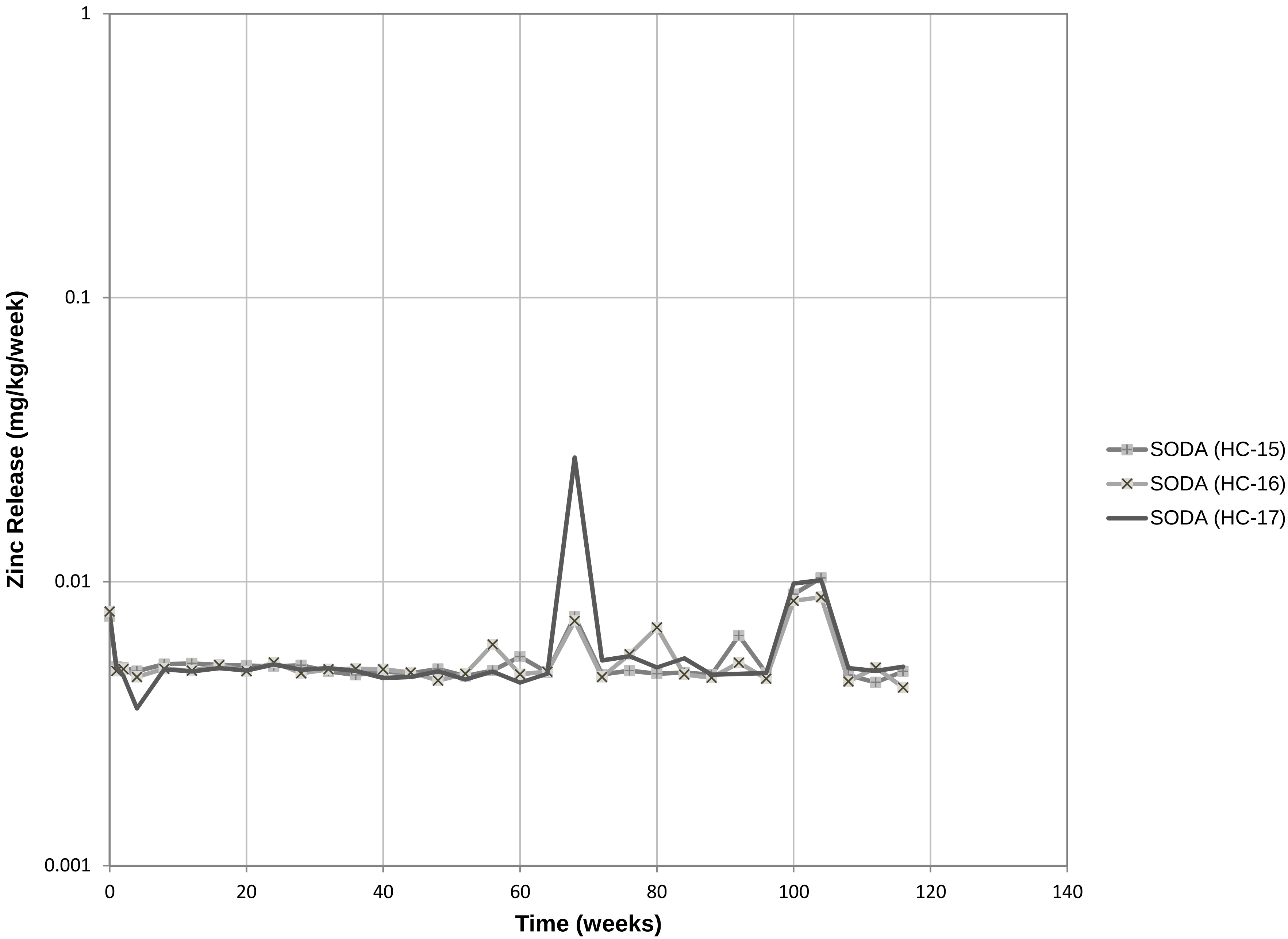
Nickel Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



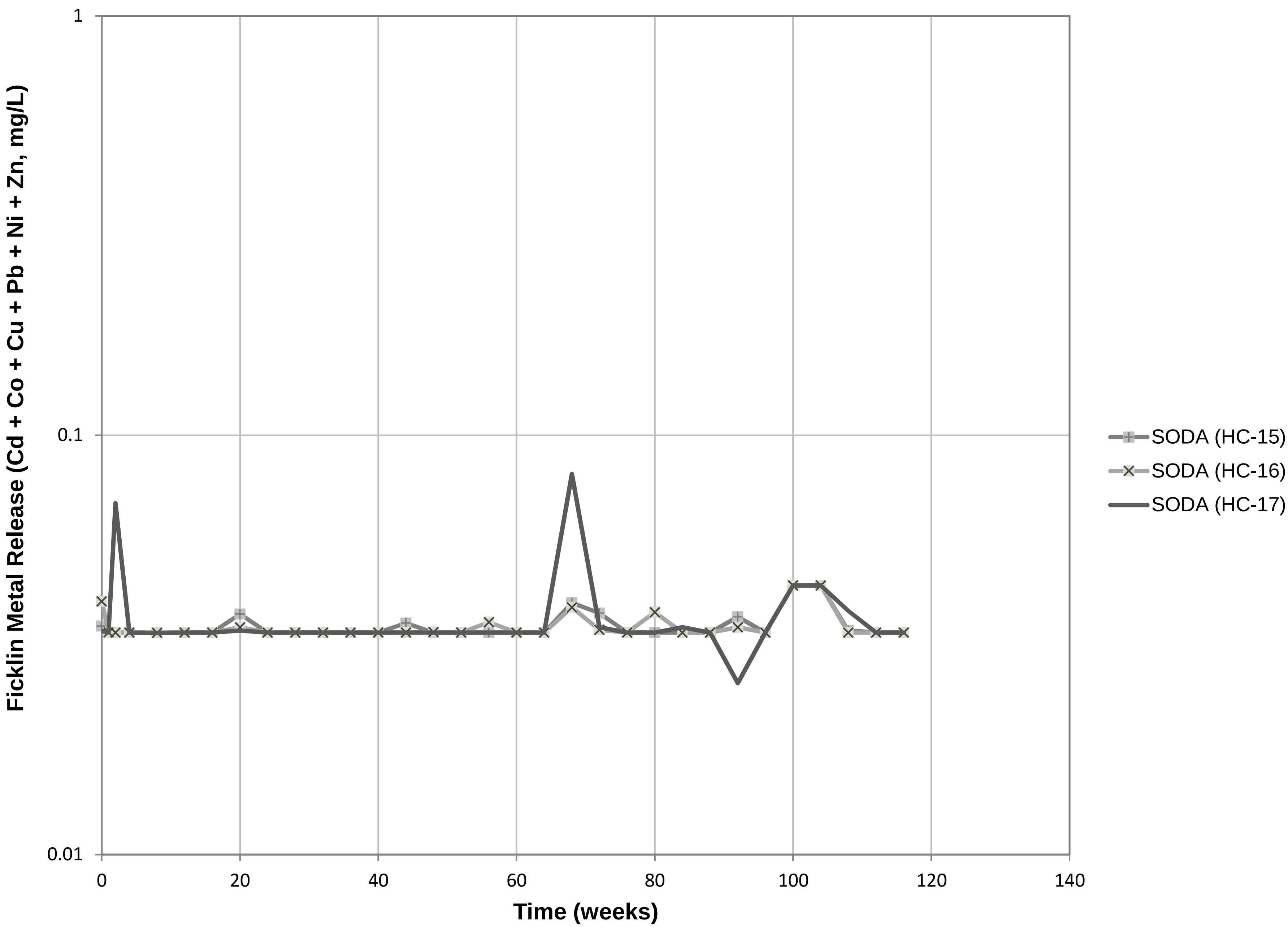
Selenium Release (mg/kg/week)
1
0.1
0.01
0.001
0.0001
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



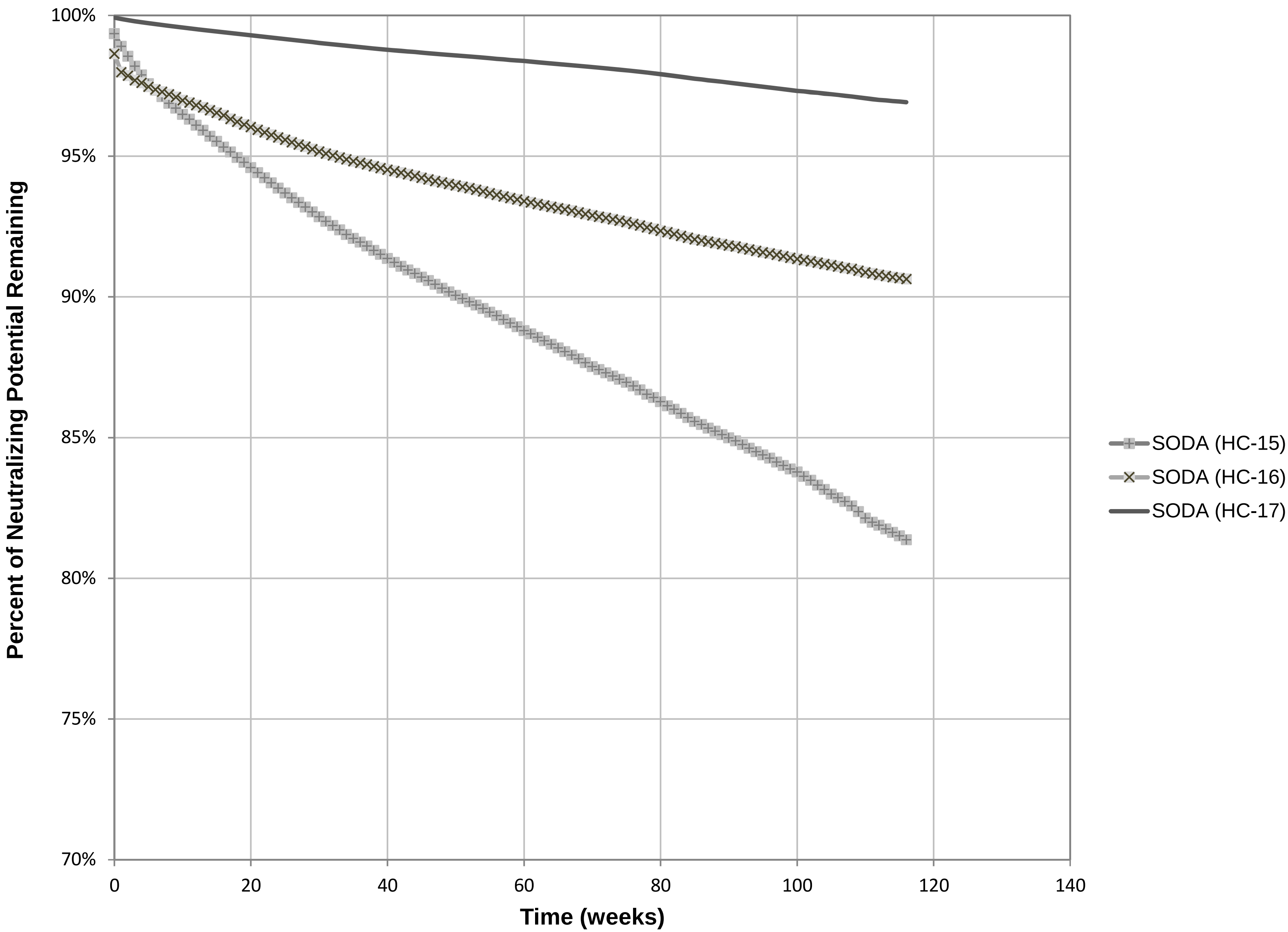
1
0.1
0.01
0.001
0.0001
0
20
40
60
80
100
120
140
Thallium Release (mg/kg/week)
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



Zinc Release (mg/kg/week)
1
0.1
0.01
0.001
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)



Ficklin Metal Release (Cd + Co + Cu + Pb + Ni + Zn, mg/L)
1
0.1
0.01
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)


Percent of Neutralizing Potential Remaining
100%
95%
90%
85%
80%
75%
70%
0
20
40
60
80
100
120
140
Time (weeks)
SODA (HC-15)
SODA (HC-16)
SODA (HC-17)

Appendix B3

Termination Test Results

McClelland Laboratories Laboratory Reports

Midas Gold
MLI Job No. 3654

Table . - Multi Element ICP Analytical Results, Humidity Cell Leach Residue
Golden Meadows Project

	Samples							
Analysis, mg/kg	09-09 (143-163) HC-1	10-22 (71-85) HC-2	10-23 (135-151) HC-3	10-36 (220-256) HC-4	10-48 (150-165) HC-6	10-48 (272-283) HC-7	10-48 (726-746) HC-8	10-50 (250-270) HC-9
Ag	0.06	0.24	1.26	8.27	0.07	3.15	0.69	0.14
Al	76,000	81,000	76,300	22,600	79,500	76,200	54,000	104,500
As	582	1,770	9,680	525	61.7	2,150	934	619
Ba	1,070	980	880	50	390	470	420	550
Be	3.89	3.75	4.06	1.41	3.17	3.13	1.77	4.85
Bi	0.04	0.03	0.03	0.14	1.07	0.22	0.05	0.08
Ca	19,000	20,100	10,100	145,000	66,000	40,100	84,500	4,400
Cd	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Ce	84.6	113.0	90.4	32.1	91.8	76.8	57.8	104.5
Co	4.1	5.5	4.6	18.1	17.6	14.6	3.8	22.1
Cr	57	77	55	38	105	99	61	134
Cs	5.83	5.23	6.04	2.43	8.80	9.20	3.63	5.82
Cu	14.5	10.9	9.2	53.1	11.8	25.9	13.9	47.5
Fe	19,600	24,200	21,500	22,800	37,900	26,900	16,400	54,800
Ga	20.9	23.3	21.5	6.99	20.8	22.5	13.50	26.7
Ge	0.10	0.08	0.10	0.07	0.10	0.10	0.07	0.15
Hf	0.4	0.2	0.3	0.4	0.7	1.0	0.6	0.4
Hg	1.040	2.83	6.90	3.54	0.302	3.33	1.095	0.454
In	0.021	0.035	0.030	0.021	0.059	0.034	0.023	0.083
K	35,500	33,700	51,600	12,100	27,400	50,600	45,200	42,200
La	42.1	55.2	45.0	15.3	46.0	38.9	27.7	52.7
Li	11.8	22.0	15.9	14.6	20.1	15.0	10.5	36.0
Mg	4,400	5,700	4,500	79,500	14,700	19,300	39,800	13,100
Mn	288	444	366	3,010	456	396	373	466
Mo	2.59	1.58	2.47	5.43	2.18	1.65	16.95	2.42
Na	11,900	24,100	1,400	100	17,100	900	1,000	1,700
Nb	40.7	48.7	41.0	6.5	19.8	11.5	23.3	16.6
Ni	3.0	4.0	3.3	23.5	45.1	38.8	8.5	69.3
P	840	1,160	930	480	430	500	320	500
Pb	6.5	8.0	7.5	3.4	3.5	14.5	5.6	7.5
Rb	164.0	158.0	233	66.8	158.5	216	175.5	189.5
Re	<0.002	<0.002	0.002	0.003	0.002	<0.002	0.003	0.002
S (total)	16,700	4,300	16,500	4,800	3,500	17,100	5,600	5,200
Sb	30.1	22.7	80.5	67.5	30.0	46.7	20.4	33.4
Sc	3.2	3.9	3.6	3.8	11.3	8.8	4.2	16.5
Se	<1	1	<1	1	1	1	1	<1
Sn	2.0	2.1	2.2	1.1	3.3	3.3	1.2	3.4
Sr	417	522	181.0	363	292	858	194.5	81.4
Ta	2.88	3.89	3.51	0.43	1.91	0.95	2.41	1.35
Te	0.10	<0.05	<0.05	0.40	0.08	0.27	0.07	<0.05
Th	11.35	15.35	12.80	4.62	19.15	16.25	8.13	20.9
Ti	2,640	3,400	2,410	1,650	3,520	3,100	1,570	4,430
Tl	0.78	2.03	4.97	0.68	0.75	3.49	1.39	0.73
U	3.2	5.1	5.5	5.2	3.4	4.9	3.8	4.4
V	29	42	29	61	77	89	25	88
W	12.5	17.9	61.1	33.0	11.0	41.9	20.7	13.8
Y	11.6	16.7	12.9	9.7	24.0	11.2	17.2	11.0
Zn	39	55	45	20	16	37	20	70
Zr	10.3	5.1	7.5	12.4	19.2	30.5	18.4	12.6

ALS Minerals Report #RE16149266

Table . - Multi Element ICP Analytical Results, Humidity Cell Leach Residue
Golden Meadows Project

	Samples							
Analysis, mg/kg	10-51 (790-815.5) HC-10	11-60 (147-157.5) HC-11	11-60 (513-543) HC-12	11-62 (814-833) HC-13	11-64 (185.5-208) HC-14	13-S09 (0.00-3.05) HC-15	13-S31 (15.24-18.29) HC-16	13-S41 (1.52-3.05) HC-17
Ag	0.20	0.24	0.28	0.04	1.44	0.70	2.81	0.80
Al	78,000	82,700	72,800	76,500	80,900	78,500	68,300	69,600
As	1,515	192	883	12	5,800	922	3,060	1,150
Ba	990	1,850	540	1,410	900	760	660	420
Be	4.30	3.87	1.81	2.45	4.65	3.48	2.67	4.21
Bi	0.06	0.05	0.02	0.14	0.02	0.12	0.12	0.44
Ca	13,500	30,200	5,100	10,500	14,000	11,200	13,200	43,000
Cd	<0.02	0.09	<0.02	0.06	<0.02	0.02	0.02	<0.02
Ce	68.5	119.0	22.0	98.0	103.5	72.2	81.2	80.7
Co	3.0	18.9	0.5	3.6	4.9	9.2	8.7	14.6
Cr	72	72	74	52	57	151	154	145
Cs	3.50	3.36	1.68	5.17	5.95	4.82	4.52	7.68
Cu	5.3	19.0	2.9	10.9	6.1	16.0	15.1	13.1
Fe	13,500	51,000	4,600	18,800	22,200	24,500	24,300	32,600
Ga	22.7	20.8	19.90	18.25	22.1	19.90	19.15	18.95
Ge	0.14	0.16	0.11	0.13	0.14	0.15	0.16	0.13
Hf	0.4	7.7	0.7	2.4	0.3	0.5	0.4	0.5
Hg	0.848	2.11	0.226	0.433	0.644	1.205	2.34	1.780
In	0.026	0.065	0.023	0.034	0.034	0.035	0.040	0.065
K	43,700	45,900	47,200	45,300	46,500	37,600	49,300	31,600
La	35.8	58.2	10.6	54.3	52.8	37.3	43.2	41.6
Li	10.9	34.0	3.8	55.4	15.8	22.6	22.7	25.5
Mg	2,500	12,100	900	2,500	4,600	4,100	5,400	9,400
Mn	237	722	188	379	303	347	209	416
Mo	1.70	1.26	1.60	2.12	2.51	2.54	2.80	4.13
Na	24,800	8,300	8,800	20,800	7,000	13,200	2,000	7,900
Nb	32.0	35.9	22.4	18.5	34.1	18.9	19.8	12.4
Ni	5.3	37.9	2.1	2.7	5.1	24.4	23.8	36.2
P	1,020	2,940	260	410	1,030	520	490	440
Pb	10.1	12.7	12.7	18.0	9.0	9.0	7.3	4.2
Rb	173.0	136.0	154.5	176.5	187.5	150.0	216	154.0
Re	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	0.002
S (total)	4,900	4,000	2,800	400	16,500	300	3,400	1,200
Sb	17.75	183.0	12.65	23.4	43.2	70.8	248	74.8
Sc	2.9	13.8	2.3	3.4	3.6	7.2	6.8	10.1
Se	1	<1	<1	<1	1	8	3	2
Sn	2.1	1.7	2.1	2.8	1.7	1.9	2.8	3.2
Sr	443	777	119.5	282	222	260	126.5	210
Ta	1.97	1.75	1.02	1.38	2.17	1.41	1.41	0.99
Te	<0.05	0.16	0.09	<0.05	<0.05	0.13	1.10	0.17
Th	9.74	5.71	5.72	19.65	15.05	12.35	14.65	16.45
Ti	1,860	8,910	260	1,940	3,010	2,570	2,460	3,100
Tl	1.23	0.81	1.53	1.03	2.08	0.85	1.46	1.10
U	2.9	2.3	5.8	3.6	3.0	3.4	3.5	3.3
V	20	126	2	16	35	64	61	75
W	18.0	224	3.2	16.4	31.4	17.2	26.7	19.2
Y	15.1	26.0	6.3	16.2	12.9	11.1	9.8	16.4
Zn	29	99	8	56	50	30	20	21
Zr	11.9	341	16.2	68.1	8.5	13.4	11.2	15.0

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Table . - Modified Acid/Base Accounting (Mod ABA) Static ARD Potential Test Results, Humidity Cell Residues
Golden Meadows Project

Sample	Paste	Sulfur, weight percent (as S)									NAG	NAG pH, kg H_2SO_4/T		Sulfur, weight percent (as S) - HCl Wash		
I.D.	pH	Total	SO_4	Pyritic $S^{=}$	Non-Ext S	Non Sulfate S	AGP[1)]	ANP	NNP	Ratio	pH	@ 4.5	@ 7	SO_4	Pyritic $S^{=}$	Non Sulfate S
MGI-09-09 (143-163) HC-1	8.0	1.48	0.31	1.17	<0.01	1.17	36.6	55.0	18.4	1.50	7.65	<0.1	<0.1	0.40	1.08	1.08
MGI-10-22 (71-85) HC-2	8.5	0.37	0.09	0.28	<0.01	0.28	8.8	27.0	18.2	3.07	6.75	<0.1	<0.1	0.12	0.25	0.25
MGI-10-23 (135-151) HC-3	8.0	1.50	0.37	1.10	0.03	1.13	34.4	32.5	-1.9	0.94	2.58	8.4	9.2	0.43	1.04	1.07
MGI-10-36 (220-256) HC-4	8.6	0.38	0.31	0.07	<0.01	0.07	2.2	667	664.8	303.18	7.47	<0.1	<0.1	0.12	0.26	0.26
MGI-10-48 (150-165) HC-6	8.0	0.32	0.09	0.23	<0.01	0.23	7.2	112	104.8	15.56	7.30	<0.1	<0.1	0.12	0.20	0.20
MGI-10-48 (272-283) HC-7	8.6	1.55	0.29	1.25	0.01	1.26	39.1	169	129.9	4.32	7.70	<0.1	<0.1	0.41	1.13	1.14
MGI-10-48 (726-746) HC-8	8.2	0.47	0.27	0.20	<0.01	0.20	6.3	347	340.7	55.08	7.19	<0.1	<0.1	0.15	0.33	0.33
MGI-10-50 (250-270) HC-9	8.4	0.46	0.08	0.39	<0.01	0.39	12.2	88.7	76.5	7.27	6.67	<0.1	<0.1	0.14	0.32	0.32
MGI-10-51 (790-815.5) HC-10	8.6	0.46	0.10	0.35	<0.01	0.35	10.9	25.0	14.1	2.29	7.05	<0.1	<0.1	0.19	0.26	0.26
MGI-11-60 (147-157.5) HC-11	8.4	0.38	0.10	0.28	<0.01	0.28	8.8	119	110.2	13.52	7.95	<0.1	<0.1	0.14	0.24	0.24
MGI-11-60 (513-543) HC-12	8.8	0.26	0.07	0.20	<0.01	0.20	6.3	12.5	6.2	1.98	6.84	<0.1	<0.1	0.09	0.17	0.17
MGI-11-62 (814-833) HC-13	8.4	0.03	0.01	0.02	<0.01	0.02	0.6	31.3	30.7	52.17	7.90	<0.1	<0.1	0.02	0.02	0.02
MGI-11-64 (185.5-208) HC-14	8.3	1.49	0.41	1.07	0.01	1.08	33.4	36.3	2.9	1.09	7.04	<0.1	<0.1	0.47	1.01	1.02
MGI-13-S09 (0.00-3.05) HC-15	8.1	0.02	0.02	<0.01	<0.01	<0.01	<0.3	15.5	15.5	>51.67	6.82	<0.1	<0.1	0.02	<0.01	<0.01
MGI-13-S31 (15.24-18.29) HC-16	8.2	0.30	0.10	0.20	<0.01	0.20	6.3	40.0	33.7	6.35	7.18	<0.1	<0.1	0.12	0.18	0.18
MGI-13-S41 (1.52-3.05) HC-17	8.2	0.10	0.04	0.06	<0.01	0.06	1.9	96.2	94.3	50.63	8.02	<0.1	<0.1	0.05	0.05	0.05

1) AGP based on Pyritic $S^{=}$ content (%$S^{=}$ x 31.25). AGP, ANP and NNP in units of tons $CaCO_3$ equivalents per 1,000 tons of solids.

SVL Report # W6I0151

ALS Minerals Laboratory Reports

ALS Minerals
ALS USA Inc.
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To: MCCLELLAND LABS
1016 GREG ST
SPARKS NV 89431

Finalized Date: 23- SEP- 2016
Account: EIM

CERTIFICATE RE16149266

Project: 3654

This report is for 16 Pulp samples submitted to our lab in Reno, NV, USA on 6- SEP- 2016.

The following have access to data associated with this certificate:

CHRISTINE DEBURLE	JACK MCPARTLAND	

SAMPLE PREPARATION

ALS CODE	DESCRIPTION
WEI- 21	Received Sample Weight
LOG- 24	Pulp Login - Rcd w/o Barcode
LOG- QC	QC Test on Received Samples

ANALYTICAL PROCEDURES

ALS CODE	DESCRIPTION	INSTRUMENT
Hg- MS42	Trace Hg by ICPMS	ICP- MS
ME- MS61	48 element four acid ICP- MS	

The results of this assay were based solely upon the content of the sample submitted. Any decision to invest should be made only after the potential investment value of the claim 'or deposit has been determined based on the results of assays of multiple samples of geological materials collected by the prospective investor or by a qualified person selected by him/her and based on an evaluation of all engineering data which is available concerning any proposed project. Statement required by Nevada State Law NRS 519

To: MCCLELLAND LABS
ATTN: JACK MCPARTLAND
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SPARKS NV 89431

This is the Final Report and supersedes any preliminary report with this certificate number. Results apply to samples as submitted. All pages of this report have been checked and approved for release.

***** See Appendix Page for comments regarding this certificate *****

Signature:
Colin Ramshaw, Vancouver Laboratory Manager

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Finalized Date: 23- SEP- 2016
Account: EIM

Project: 3654

CERTIFICATE OF ANALYSIS RE16149266

Sample Description / Method	WEI- 21	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
Analyte	Recvd Wt.	Ag	Al	As	Ba	Be	Bi	Ca	Cd	Ce	Co	Cr	Cs	Cu	Fe
Units	kg	ppm	%	ppm	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	%
LOR	0.02	0.01	0.01	0.2	10	0.05	0.01	0.01	0.02	0.01	0.1	1	0.05	0.2	0.01
3654 MGI- 09- 09 (143- 163) HC- 1 ICP	0.10	0.06	7.60	582	1070	3.89	0.04	1.90	<0.02	84.6	4.1	57	5.83	14.5	1.96
3654 MGI- 10- 22 (71- 85) HC- 2 ICP	0.10	0.24	8.10	1770	980	3.75	0.03	2.01	<0.02	113.0	5.5	77	5.23	10.9	2.42
3654 MGI- 10- 23 (135- 151) HC- 3 ICP	0.10	1.26	7.63	9680	880	4.06	0.03	1.01	<0.02	90.4	4.6	55	6.04	9.2	2.15
3654 MGI- 10- 36 (220- 256) HC- 4 ICP	0.10	8.27	2.26	525	50	1.41	0.14	14.50	<0.02	32.1	18.1	38	2.43	53.1	2.28
3654 MGI- 10- 48 (150- 165) HC- 6 ICP	0.10	0.07	7.95	61.7	390	3.17	1.07	6.60	<0.02	91.8	17.6	105	8.80	11.8	3.79
3654 MGI- 10- 48 (272- 283) HC- 7 ICP	0.10	3.15	7.62	2150	470	3.13	0.22	4.01	<0.02	76.8	14.6	99	9.20	25.9	2.69
3654 MGI- 10- 48 (726- 746) HC- 8 ICP	0.10	0.69	5.40	934	420	1.77	0.05	8.45	<0.02	57.8	3.8	61	3.63	13.9	1.64
3654 MGI- 10- 50 (250- 270) HC- 9 ICP	0.10	0.14	10.45	619	550	4.85	0.08	0.44	<0.02	104.5	22.1	134	5.82	47.5	5.48
3654 MGI- 10- 51 (790- 815.5) HC- 10 ICP	0.10	0.20	7.80	1515	990	4.30	0.06	1.35	<0.02	68.5	3.0	72	3.50	5.3	1.35
3654 MGI- 11- 60 (147- 157.5) HC- 11 ICP	0.10	0.24	8.27	191.5	1850	3.87	0.05	3.02	0.09	119.0	18.9	72	3.36	19.0	5.10
3654 MGI- 11- 60 (513- 543) HC- 12 ICP	0.10	0.28	7.28	883	540	1.81	0.02	0.51	<0.02	22.0	0.5	74	1.68	2.9	0.46
3654 MGI- 11- 62 (814- 833) HC- 13 ICP	0.10	0.04	7.65	12.2	1410	2.45	0.14	1.05	0.06	98.0	3.6	52	5.17	10.9	1.88
3654 MGI- 11- 64 (185.5- 208) HC- 14 ICP	0.10	1.44	8.09	5800	900	4.65	0.02	1.40	<0.02	103.5	4.9	57	5.95	6.1	2.22
3654 MGI- 13- S09 (0.00- 3.05) HC- 15 ICP	0.10	0.70	7.85	922	760	3.48	0.12	1.12	0.02	72.2	9.2	151	4.82	16.0	2.45
3654 MGI- 13- S31 (15.24- 18.29) HC- 16 ICP	0.10	2.81	6.83	3060	660	2.67	0.12	1.32	0.02	81.2	8.7	154	4.52	15.1	2.43
3654 MGI- 13- S41 (1.52- 3.05) HC- 17 ICP	0.10	0.80	6.96	1150	420	4.21	0.44	4.30	<0.02	80.7	14.6	145	7.68	13.1	3.26

ALS Minerals

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To: MCCLELLAND LABS
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SPARKS NV 89431

Finalized Date: 23- SEP- 2016
Account: EIM

Project: 3654

CERTIFICATE OF ANALYSIS RE16149266

Sample Description / Method / Analyte / Units / LOR	ME- MS61 Ga ppm 0.05	ME- MS61 Ge ppm 0.05	ME- MS61 Hf ppm 0.1	Hg- MS42 Hg ppm 0.005	ME- MS61 In ppm 0.005	ME- MS61 K % 0.01	ME- MS61 La ppm 0.5	ME- MS61 Li ppm 0.2	ME- MS61 Mg % 0.01	ME- MS61 Mn ppm 5	ME- MS61 Mo ppm 0.05	ME- MS61 Na % 0.01	ME- MS61 Nb ppm 0.1	ME- MS61 Ni ppm 0.2	ME- MS61 P ppm 10
3654 MGI- 09- 09 (143- 163) HC- 1 ICP	20.9	0.10	0.4	1.040	0.021	3.55	42.1	11.8	0.44	288	2.59	1.19	40.7	3.0	840
3654 MGI- 10- 22 (71- 85) HC- 2 ICP	23.3	0.08	0.2	2.83	0.035	3.37	55.2	22.0	0.57	444	1.58	2.41	48.7	4.0	1160
3654 MGI- 10- 23 (135- 151) HC- 3 ICP	21.5	0.10	0.3	6.90	0.030	5.16	45.0	15.9	0.45	366	2.47	0.14	41.0	3.3	930
3654 MGI- 10- 36 (220- 256) HC- 4 ICP	6.99	0.07	0.4	3.54	0.021	1.21	15.3	14.6	7.95	3010	5.43	0.01	6.5	23.5	480
3654 MGI- 10- 48 (150- 165) HC- 6 ICP	20.8	0.10	0.7	0.302	0.059	2.74	46.0	20.1	1.47	456	2.18	1.71	19.8	45.1	430
3654 MGI- 10- 48 (272- 283) HC- 7 ICP	22.5	0.10	1.0	3.33	0.034	5.06	38.9	15.0	1.93	396	1.65	0.09	11.5	38.8	500
3654 MGI- 10- 48 (726- 746) HC- 8 ICP	13.50	0.07	0.6	1.095	0.023	4.52	27.7	10.5	3.98	373	16.95	0.10	23.3	8.5	320
3654 MGI- 10- 50 (250- 270) HC- 9 ICP	26.7	0.15	0.4	0.454	0.083	4.22	52.7	36.0	1.31	466	2.42	0.17	16.6	69.3	500
3654 MGI- 10- 51 (790- 815.5) HC- 10 ICP	22.7	0.14	0.4	0.848	0.026	4.37	35.8	10.9	0.25	237	1.70	2.48	32.0	5.3	1020
3654 MGI- 11- 60 (147- 157.5) HC- 11 ICP	20.8	0.16	7.7	2.11	0.065	4.59	58.2	34.0	1.21	722	1.26	0.83	35.9	37.9	2940
3654 MGI- 11- 60 (513- 543) HC- 12 ICP	19.90	0.11	0.7	0.226	0.023	4.72	10.6	3.8	0.09	188	1.60	0.88	22.4	2.1	260
3654 MGI- 11- 62 (814- 833) HC- 13 ICP	18.25	0.13	2.4	0.433	0.034	4.53	54.3	55.4	0.25	379	2.12	2.08	18.5	2.7	410
3654 MGI- 11- 64 (185.5- 208) HC- 14 ICP	22.1	0.14	0.3	0.644	0.034	4.65	52.8	15.8	0.46	303	2.51	0.70	34.1	5.1	1030
3654 MGI- 13- S09 (0.00- 3.05) HC- 15 ICP	19.90	0.15	0.5	1.205	0.035	3.76	37.3	22.6	0.41	347	2.54	1.32	18.9	24.4	520
3654 MGI- 13- S31 (15.24- 18.29) HC- 16 ICP	19.15	0.16	0.4	2.34	0.040	4.93	43.2	22.7	0.54	209	2.80	0.20	19.8	23.8	490
3654 MGI- 13- S41 (1.52- 3.05) HC- 17 ICP	18.95	0.13	0.5	1.780	0.065	3.16	41.6	25.5	0.94	416	4.13	0.79	12.4	36.2	440

***** See Appendix Page for comments regarding this certificate *****

ALS Minerals

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To: MCCLELLAND LABS
1016 GREG ST
SPARKS NV 89431

Finalized Date: 23- SEP- 2016
Account: EIM

Project: 3654

CERTIFICATE OF ANALYSIS RE16149266

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	Pb	Rb	Re	S	Sb	Sc	Se	Sn	Sr	Ta	Te	Th	Ti	Tl	U
	Units	ppm	ppm	ppm	%	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	%	ppm	ppm
	LOR	0.5	0.1	0.002	0.01	0.05	0.1	1	0.2	0.2	0.05	0.05	0.01	0.005	0.02	0.1
3654 MGI- 09- 09 (143- 163) HC- 1 ICP		6.5	164.0	<0.002	1.67	30.1	3.2	<1	2.0	417	2.88	0.10	11.35	0.264	0.78	3.2
3654 MGI- 10- 22 (71- 85) HC- 2 ICP		8.0	158.0	<0.002	0.43	22.7	3.9	1	2.1	522	3.89	<0.05	15.35	0.340	2.03	5.1
3654 MGI- 10- 23 (135- 151) HC- 3 ICP		7.5	233	0.002	1.65	80.5	3.6	<1	2.2	181.0	3.51	<0.05	12.80	0.241	4.97	5.5
3654 MGI- 10- 36 (220- 256) HC- 4 ICP		3.4	66.8	0.003	0.48	67.5	3.8	1	1.1	363	0.43	0.40	4.62	0.165	0.68	5.2
3654 MGI- 10- 48 (150- 165) HC- 6 ICP		3.5	158.5	0.002	0.35	30.0	11.3	1	3.3	292	1.91	0.08	19.15	0.352	0.75	3.4
3654 MGI- 10- 48 (272- 283) HC- 7 ICP		14.5	216	<0.002	1.71	46.7	8.8	1	3.3	858	0.95	0.27	16.25	0.310	3.49	4.9
3654 MGI- 10- 48 (726- 746) HC- 8 ICP		5.6	175.5	0.003	0.56	20.4	4.2	1	1.2	194.5	2.41	0.07	8.13	0.157	1.39	3.8
3654 MGI- 10- 50 (250- 270) HC- 9 ICP		7.5	189.5	0.002	0.52	33.4	16.5	<1	3.4	81.4	1.35	<0.05	20.9	0.443	0.73	4.4
3654 MGI- 10- 51 (790- 815.5) HC- 10 ICP		10.1	173.0	<0.002	0.49	17.75	2.9	1	2.1	443	1.97	<0.05	9.74	0.186	1.23	2.9
3654 MGI- 11- 60 (147- 157.5) HC- 11 ICP		12.7	136.0	<0.002	0.40	183.0	13.8	<1	1.7	777	1.75	0.16	5.71	0.891	0.81	2.3
3654 MGI- 11- 60 (513- 543) HC- 12 ICP		12.7	154.5	<0.002	0.28	12.65	2.3	<1	2.1	119.5	1.02	0.09	5.72	0.026	1.53	5.8
3654 MGI- 11- 62 (814- 833) HC- 13 ICP		18.0	176.5	<0.002	0.04	23.4	3.4	<1	2.8	282	1.38	<0.05	19.65	0.194	1.03	3.6
3654 MGI- 11- 64 (185.5- 208) HC- 14 ICP		9.0	187.5	<0.002	1.65	43.2	3.6	1	1.7	222	2.17	<0.05	15.05	0.301	2.08	3.0
3654 MGI- 13- 509 (0.00- 3.05) HC- 15 ICP		9.0	150.0	<0.002	0.03	70.8	7.2	8	1.9	260	1.41	0.13	12.35	0.257	0.85	3.4
3654 MGI- 13- 531 (15.24- 18.29) HC- 16 ICP		7.3	216	<0.002	0.34	248	6.8	3	2.8	126.5	1.41	1.10	14.65	0.246	1.46	3.5
3654 MGI- 13- 541 (1.52- 3.05) HC- 17 ICP		4.2	154.0	0.002	0.12	74.8	10.1	2	3.2	210	0.99	0.17	16.45	0.310	1.10	3.3

***** See Appendix Page for comments regarding this certificate *****

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To: MCCLELLAND LABS
1016 GREG ST
SPARKS NV 89431

Finalized Date: 23- SEP- 2016
Account: EIM

Project: 3654

CERTIFICATE OF ANALYSIS RE16149266

Sample Description	Method	ME- MS61	ME- MS61	ME- MS61	ME- MS61	ME- MS61
	Analyte	V	W	Y	Zn	Zr
	Units	ppm	ppm	ppm	ppm	ppm
	LOR	1	0.1	0.1	2	0.5
3654 MGI- 09- 09 (143- 163) HC- 1 ICP		29	12.5	11.6	39	10.3
3654 MGI- 10- 22 (71- 85) HC- 2 ICP		42	17.9	16.7	55	5.1
3654 MGI- 10- 23 (135- 151) HC- 3 ICP		29	61.1	12.9	45	7.5
3654 MGI- 10- 36 (220- 256) HC- 4 ICP		61	33.0	9.7	20	12.4
3654 MGI- 10- 48 (150- 165) HC- 6 ICP		77	11.0	24.0	16	19.2
3654 MGI- 10- 48 (272- 283) HC- 7 ICP		89	41.9	11.2	37	30.5
3654 MGI- 10- 48 (726- 746) HC- 8 ICP		25	20.7	17.2	20	18.4
3654 MGI- 10- 50 (250- 270) HC- 9 ICP		88	13.8	11.0	70	12.6
3654 MGI- 10- 51 (790- 815.5) HC- 10 ICP		20	18.0	15.1	29	11.9
3654 MGI- 11- 60 (147- 157.5) HC- 11 ICP		126	224	26.0	99	341
3654 MGI- 11- 60 (513- 543) HC- 12 ICP		2	3.2	6.3	8	16.2
3654 MGI- 11- 62 (814- 833) HC- 13 ICP		16	16.4	16.2	56	68.1
3654 MGI- 11- 64 (185.5- 208) HC- 14 ICP		35	31.4	12.9	50	8.5
3654 MGI- 13- 509 (0.00- 3.05) HC- 15 ICP		64	17.2	11.1	30	13.4
3654 MGI- 13- 531 (15.24- 18.29) HC- 16 ICP		61	26.7	9.8	20	11.2
3654 MGI- 13- 541 (1.52- 3.05) HC- 17 ICP		75	19.2	16.4	21	15.0

***** See Appendix Page for comments regarding this certificate *****

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Finalized Date: 23- SEP- 2016
Account: EIM

Project: 3654

CERTIFICATE OF ANALYSIS RE16149266

CERTIFICATE COMMENTS

ANALYTICAL COMMENTS

REE's may not be totally soluble in this method.
Applies to Method: ME- MS61

LABORATORY ADDRESSES

Processed at ALS Reno located at 4977 Energy Way, Reno, NV, USA.
Applies to Method: LOG- 24 LOG- QC WEI- 21

Processed at ALS Vancouver located at 2103 Dollarton Hwy, North Vancouver, BC, Canada.
Applies to Method: Hg- MS42 ME- MS61

SVL Laboratory Reports

McClelland Laboratories Inc
1016 Greg Street
Sparks, NV 89431

Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	Notes
3654 MGI-09-09 (143-163) HC-1 ABA	W6I0151-01	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-10-22 (71-85) HC-2 ABA	W6I0151-02	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-10-23 (135-151) HC-3 ABA	W6I0151-03	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-10-36 (220-256) HC-4 ABA	W6I0151-04	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-10-48 (150-165) HC-6 ABA	W6I0151-05	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-10-48 (272-283) HC-7 ABA	W6I0151-06	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-10-48 (726-746) HC-8 ABA	W6I0151-07	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-10-50 (250-270) HC-9 ABA	W6I0151-08	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-10-51 (790-815.5) HC-10 ABA	W6I0151-09	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-11-60 (147-157.5) HC-11 ABA	W6I0151-10	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-11-60 (513-543) HC-12 ABA	W6I0151-11	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-11-62 (814-833) HC-13 ABA	W6I0151-12	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-11-64 (185.5-208) HC-14 ABA	W6I0151-13	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-13-S09 (0.00-3.05) HC-15 ABA	W6I0151-14	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-13-S31 (15.24-18.29) HC-16 ABA	W6I0151-15	Soil	06-Sep-16 12:00	08-Sep-2016	
3654 MGI-13-S41 (1.52-3.05) HC-17 ABA	W6I0151-16	Soil	06-Sep-16 12:00	08-Sep-2016	

Solid samples are analyzed on an as-received, wet-weight basis, unless otherwise requested. Non-Detects are reported at the MDL.
Sample preparation is defined by the client as per their Data Quality Objectives.
This report supercedes any previous reports for this Work Order. The complete report includes pages for each sample, a full QC report, and a notes section.
The results presented in this report relate only to the samples, and meet all requirements of the NELAC Standards unless otherwise noted.

Case Narrative: W6I0151

Nevada does not accredit for NAG titration.

www.svl.net One Government Gulch - PO Box 929 Kellogg ID 83837-0929 (208) 784-1258 Fax (208) 783-0891

McClelland Laboratories Inc
1016 Greg Street
Sparks, NV 89431

Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-09-09 (143-163) HC-1 ABA**
SVL Sample ID: **W6I0151-01 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	18.4	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	36.6	TCaCO3/kT	0.3			N/A		09/19/16 07:35	
Modified Sobek	**ANP**	55.0	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A2
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 14:18	
Modified Sobek	**Non-Sulfate Sulfur**	1.17	%	0.01	0.005		W638130	AGF	09/19/16 07:35	
Modified Sobek	**Pyritic Sulfur**	1.17	%	0.01			N/A		09/19/16 07:35	
Modified Sobek	**Sulfate Sulfur**	0.31	%	0.01			N/A		09/19/16 07:35	
Modified Sobek	**Total Sulfur**	1.48	%	0.01	0.005		W638130	AGF	09/15/16 08:29	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	21.2	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	33.8	TCaCO3/kT	0.3			N/A		09/16/16 17:21	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 14:18	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	1.08	%	0.01	0.005		W638130	AGF	09/16/16 17:21	R2B
Modified Sobek	**Pyritic Sulfur-HCl**	1.08	%	0.01			N/A		09/16/16 17:21	
Modified Sobek	**Sulfate Sulfur-HCl**	0.40	%	0.01			N/A		09/16/16 17:21	
Modified Sobek	**Total Sulfur**	1.48	%	0.01	0.005		W638130	AGF	09/15/16 08:29	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @19.7°C**	7.65	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @18.6°C**	8.0	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern

John Kern
Laboratory Director

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McClelland Laboratories Inc
1016 Greg Street
Sparks, NV 89431

Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-10-22 (71-85) HC-2 ABA**
SVL Sample ID: **W6I0151-02 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	18.1	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	8.8	TCaCO3/kT	0.3			N/A		09/19/16 07:38	
Modified Sobek	**ANP**	27.0	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A5
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 14:21	
Modified Sobek	**Non-Sulfate Sulfur**	0.28	%	0.01	0.005		W638130	AGF	09/19/16 07:38	
Modified Sobek	**Pyritic Sulfur**	0.28	%	0.01			N/A		09/19/16 07:38	
Modified Sobek	**Sulfate Sulfur**	0.09	%	0.01			N/A		09/19/16 07:38	
Modified Sobek	**Total Sulfur**	0.37	%	0.01	0.005		W638130	AGF	09/15/16 08:32	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	19.2	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	7.8	TCaCO3/kT	0.3			N/A		09/16/16 17:24	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 14:21	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.25	%	0.01	0.005		W638130	AGF	09/16/16 17:24	
Modified Sobek	**Pyritic Sulfur-HCl**	0.25	%	0.01			N/A		09/16/16 17:24	
Modified Sobek	**Sulfate Sulfur-HCl**	0.12	%	0.01			N/A		09/16/16 17:24	
Modified Sobek	**Total Sulfur**	0.37	%	0.01	0.005		W638130	AGF	09/15/16 08:32	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @20.0°C**	6.75	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @18.1°C**	8.5	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
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Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-10-23 (135-151) HC-3 ABA**
SVL Sample ID: **W6I0151-03 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	-1.9	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	34.4	TCaCO3/kT	0.3			N/A		09/19/16 07:41	
Modified Sobek	**ANP**	32.5	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A2
Modified Sobek	**Non-extractable Sulfur**	0.03	%	0.01	0.005		W638130	AGF	09/16/16 14:24	
Modified Sobek	**Non-Sulfate Sulfur**	1.13	%	0.01	0.005		W638130	AGF	09/19/16 07:41	
Modified Sobek	**Pyritic Sulfur**	1.10	%	0.01			N/A		09/19/16 07:41	
Modified Sobek	**Sulfate Sulfur**	0.37	%	0.01			N/A		09/19/16 07:41	
Modified Sobek	**Total Sulfur**	1.50	%	0.01	0.005		W638130	AGF	09/15/16 08:35	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	ABA-HCl	< 0.3	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	32.5	TCaCO3/kT	0.3			N/A		09/16/16 17:33	
Modified Sobek	**Non-extractable Sulfur**	0.03	%	0.01	0.005		W638130	AGF	09/16/16 14:24	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	1.07	%	0.01	0.005		W638130	AGF	09/16/16 17:33	
Modified Sobek	**Pyritic Sulfur-HCl**	1.04	%	0.01			N/A		09/16/16 17:33	
Modified Sobek	**Sulfate Sulfur-HCl**	0.43	%	0.01			N/A		09/16/16 17:33	
Modified Sobek	**Total Sulfur**	1.50	%	0.01	0.005		W638130	AGF	09/15/16 08:35	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @20.1°C**	2.58	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	**NAG@pH 4.5**	8.4	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	**NAG@pH 7**	9.2	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @18.9°C**	8.0	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

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Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-10-36 (220-256) HC-4 ABA**
SVL Sample ID: **W6I0151-04 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	665	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	2.3	TCaCO3/kT	0.3			N/A		09/19/16 07:46	
Modified Sobek	**ANP**	667	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A1
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 14:27	
Modified Sobek	**Non-Sulfate Sulfur**	0.07	%	0.01	0.005		W638130	AGF	09/19/16 07:46	
Modified Sobek	**Pyritic Sulfur**	0.07	%	0.01			N/A		09/19/16 07:46	
Modified Sobek	**Sulfate Sulfur**	0.31	%	0.01			N/A		09/19/16 07:46	
Modified Sobek	**Total Sulfur**	0.38	%	0.01	0.005		W638130	AGF	09/15/16 08:38	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	659	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	8.2	TCaCO3/kT	0.3			N/A		09/16/16 17:36	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 14:27	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.26	%	0.01	0.005		W638130	AGF	09/16/16 17:36	
Modified Sobek	**Pyritic Sulfur-HCl**	0.26	%	0.01			N/A		09/16/16 17:36	
Modified Sobek	**Sulfate Sulfur-HCl**	0.12	%	0.01			N/A		09/16/16 17:36	
Modified Sobek	**Total Sulfur**	0.38	%	0.01	0.005		W638130	AGF	09/15/16 08:38	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @20.2°C**	7.47	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @18.8°C**	8.6	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
John Kern
Laboratory Director

SVL holds the following certifications:
AZ:0538, **CA**:2080, **ID**:ID00019 & ID00965 (Microbiology), **NV**:ID000192007A, **UT**(**TNI**):ID000192015-1, **WA**:C573

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Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-10-48 (150-165) HC-6 ABA**
SVL Sample ID: **W6I0151-05 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	105	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	7.2	TCaCO3/kT	0.3			N/A		09/19/16 07:48	
Modified Sobek	**ANP**	112	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A1
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 14:30	
Modified Sobek	**Non-Sulfate Sulfur**	0.23	%	0.01	0.005		W638130	AGF	09/19/16 07:48	
Modified Sobek	**Pyritic Sulfur**	0.23	%	0.01			N/A		09/19/16 07:48	
Modified Sobek	**Sulfate Sulfur**	0.09	%	0.01			N/A		09/19/16 07:48	
Modified Sobek	**Total Sulfur**	0.32	%	0.01	0.005		W638130	AGF	09/15/16 08:41	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	106	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	6.3	TCaCO3/kT	0.3			N/A		09/16/16 17:39	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 14:30	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.20	%	0.01	0.005		W638130	AGF	09/16/16 17:39	
Modified Sobek	**Pyritic Sulfur-HCl**	0.20	%	0.01			N/A		09/16/16 17:39	
Modified Sobek	**Sulfate Sulfur-HCl**	0.12	%	0.01			N/A		09/16/16 17:39	
Modified Sobek	**Total Sulfur**	0.32	%	0.01	0.005		W638130	AGF	09/15/16 08:41	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @20.2°C**	7.30	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @19.0°C**	8.0	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern

John Kern
Laboratory Director

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Sparks, NV 89431

Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-10-48 (272-283) HC-7 ABA**
SVL Sample ID: **W6I0151-06 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	130	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	39.0	TCaCO3/kT	0.3			N/A		09/19/16 07:52	
Modified Sobek	**ANP**	169	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A2
Modified Sobek	**Non-extractable Sulfur**	0.01	%	0.01	0.005		W638130	AGF	09/16/16 14:33	
Modified Sobek	**Non-Sulfate Sulfur**	1.26	%	0.01	0.005		W638130	AGF	09/19/16 07:52	
Modified Sobek	**Pyritic Sulfur**	1.25	%	0.01			N/A		09/19/16 07:52	
Modified Sobek	**Sulfate Sulfur**	0.29	%	0.01			N/A		09/19/16 07:52	
Modified Sobek	**Total Sulfur**	1.55	%	0.01	0.005		W638130	AGF	09/15/16 08:44	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	133	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	35.3	TCaCO3/kT	0.3			N/A		09/16/16 17:43	
Modified Sobek	**Non-extractable Sulfur**	0.01	%	0.01	0.005		W638130	AGF	09/16/16 14:33	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	1.14	%	0.01	0.005		W638130	AGF	09/16/16 17:43	
Modified Sobek	**Pyritic Sulfur-HCl**	1.13	%	0.01			N/A		09/16/16 17:43	
Modified Sobek	**Sulfate Sulfur-HCl**	0.41	%	0.01			N/A		09/16/16 17:43	
Modified Sobek	**Total Sulfur**	1.55	%	0.01	0.005		W638130	AGF	09/15/16 08:44	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @19.7°C**	7.70	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @18.4°C**	8.6	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

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Sparks, NV 89431

Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-10-48 (726-746) HC-8 ABA**
SVL Sample ID: **W6I0151-07 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	341	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	6.2	TCaCO3/kT	0.3			N/A		09/19/16 07:56	
Modified Sobek	**ANP**	347	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A1
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 14:41	
Modified Sobek	**Non-Sulfate Sulfur**	0.20	%	0.01	0.005		W638130	AGF	09/19/16 07:56	
Modified Sobek	**Pyritic Sulfur**	0.20	%	0.01			N/A		09/19/16 07:56	
Modified Sobek	**Sulfate Sulfur**	0.27	%	0.01			N/A		09/19/16 07:56	
Modified Sobek	**Total Sulfur**	0.47	%	0.01	0.005		W638130	AGF	09/15/16 08:47	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	337	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	10.2	TCaCO3/kT	0.3			N/A		09/16/16 17:46	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 14:41	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.33	%	0.01	0.005		W638130	AGF	09/16/16 17:46	
Modified Sobek	**Pyritic Sulfur-HCl**	0.33	%	0.01			N/A		09/16/16 17:46	
Modified Sobek	**Sulfate Sulfur-HCl**	0.15	%	0.01			N/A		09/16/16 17:46	
Modified Sobek	**Total Sulfur**	0.47	%	0.01	0.005		W638130	AGF	09/15/16 08:47	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @21.0°C**	7.19	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @22.0°C**	8.2	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern

John Kern
Laboratory Director

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Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-10-50 (250-270) HC-9 ABA**
SVL Sample ID: **W6I0151-08 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	76.7	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	12.0	TCaCO3/kT	0.3			N/A		09/19/16 08:00	
Modified Sobek	**ANP**	88.7	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A2
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:04	
Modified Sobek	**Non-Sulfate Sulfur**	0.39	%	0.01	0.005		W638130	AGF	09/19/16 08:00	
Modified Sobek	**Pyritic Sulfur**	0.39	%	0.01			N/A		09/19/16 08:00	
Modified Sobek	**Sulfate Sulfur**	0.08	%	0.01			N/A		09/19/16 08:00	
Modified Sobek	**Total Sulfur**	0.46	%	0.01	0.005		W638130	AGF	09/15/16 08:56	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	78.8	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	10.0	TCaCO3/kT	0.3			N/A		09/16/16 17:49	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:04	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.32	%	0.01	0.005		W638130	AGF	09/16/16 17:49	
Modified Sobek	**Pyritic Sulfur-HCl**	0.32	%	0.01			N/A		09/16/16 17:49	
Modified Sobek	**Sulfate Sulfur-HCl**	0.14	%	0.01			N/A		09/16/16 17:49	
Modified Sobek	**Total Sulfur**	0.46	%	0.01	0.005		W638130	AGF	09/15/16 08:56	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @20.4°C**	6.67	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @19.0°C**	8.4	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

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McClelland Laboratories Inc
1016 Greg Street
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Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-10-51 (790-815.5) HC-10 ABA**
SVL Sample ID: **W6I0151-09 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	14.0	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	11.0	TCaCO3/kT	0.3			N/A		09/19/16 08:09	
Modified Sobek	**ANP**	25.0	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A2
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:07	
Modified Sobek	**Non-Sulfate Sulfur**	0.35	%	0.01	0.005		W638130	AGF	09/19/16 08:09	
Modified Sobek	**Pyritic Sulfur**	0.35	%	0.01			N/A		09/19/16 08:09	
Modified Sobek	**Sulfate Sulfur**	0.10	%	0.01			N/A		09/19/16 08:09	
Modified Sobek	**Total Sulfur**	0.46	%	0.01	0.005		W638130	AGF	09/15/16 08:59	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	16.8	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	8.2	TCaCO3/kT	0.3			N/A		09/16/16 17:52	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:07	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.26	%	0.01	0.005		W638130	AGF	09/16/16 17:52	
Modified Sobek	**Pyritic Sulfur-HCl**	0.26	%	0.01			N/A		09/16/16 17:52	
Modified Sobek	**Sulfate Sulfur-HCl**	0.19	%	0.01			N/A		09/16/16 17:52	
Modified Sobek	**Total Sulfur**	0.46	%	0.01	0.005		W638130	AGF	09/15/16 08:59	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @20.7°C**	7.05	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @19.0°C**	8.6	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

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Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-11-60 (147-157.5) HC-11 ABA**
SVL Sample ID: **W6I0151-10 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	110	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	8.7	TCaCO3/kT	0.3			N/A		09/19/16 08:12	
Modified Sobek	**ANP**	119	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A2
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:10	
Modified Sobek	**Non-Sulfate Sulfur**	0.28	%	0.01	0.005		W638130	AGF	09/19/16 08:12	
Modified Sobek	**Pyritic Sulfur**	0.28	%	0.01			N/A		09/19/16 08:12	
Modified Sobek	**Sulfate Sulfur**	0.10	%	0.01			N/A		09/19/16 08:12	
Modified Sobek	**Total Sulfur**	0.38	%	0.01	0.005		W638130	AGF	09/15/16 09:02	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	111	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	7.5	TCaCO3/kT	0.3			N/A		09/16/16 17:55	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:10	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.24	%	0.01	0.005		W638130	AGF	09/16/16 17:55	
Modified Sobek	**Pyritic Sulfur-HCl**	0.24	%	0.01			N/A		09/16/16 17:55	
Modified Sobek	**Sulfate Sulfur-HCl**	0.14	%	0.01			N/A		09/16/16 17:55	
Modified Sobek	**Total Sulfur**	0.38	%	0.01	0.005		W638130	AGF	09/15/16 09:02	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @20.0°C**	7.95	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @19.1°C**	8.4	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

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Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-11-60 (513-543) HC-12 ABA**
SVL Sample ID: **W6I0151-11 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	6.4	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	6.1	TCaCO3/kT	0.3			N/A		09/19/16 08:15	
Modified Sobek	**ANP**	12.5	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A5
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:13	
Modified Sobek	**Non-Sulfate Sulfur**	0.20	%	0.01	0.005		W638130	AGF	09/19/16 08:15	
Modified Sobek	**Pyritic Sulfur**	0.20	%	0.01			N/A		09/19/16 08:15	
Modified Sobek	**Sulfate Sulfur**	0.07	%	0.01			N/A		09/19/16 08:15	
Modified Sobek	**Total Sulfur**	0.26	%	0.01	0.005		W638130	AGF	09/15/16 09:05	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	7.2	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	5.3	TCaCO3/kT	0.3			N/A		09/16/16 17:58	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:13	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.17	%	0.01	0.005		W638130	AGF	09/16/16 17:58	
Modified Sobek	**Pyritic Sulfur-HCl**	0.17	%	0.01			N/A		09/16/16 17:58	
Modified Sobek	**Sulfate Sulfur-HCl**	0.09	%	0.01			N/A		09/16/16 17:58	
Modified Sobek	**Total Sulfur**	0.26	%	0.01	0.005		W638130	AGF	09/15/16 09:05	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @19.9°C**	6.84	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @19.2°C**	8.8	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern

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Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-11-62 (814-833) HC-13 ABA**
SVL Sample ID: **W6I0151-12 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	30.7	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	0.6	TCaCO3/kT	0.3			N/A		09/19/16 08:18	
Modified Sobek	**ANP**	31.3	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A2
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:16	
Modified Sobek	**Non-Sulfate Sulfur**	0.02	%	0.01	0.005		W638130	AGF	09/19/16 08:18	
Modified Sobek	**Pyritic Sulfur**	0.02	%	0.01			N/A		09/19/16 08:18	
Modified Sobek	**Sulfate Sulfur**	0.01	%	0.01			N/A		09/19/16 08:18	
Modified Sobek	**Total Sulfur**	0.03	%	0.01	0.005		W638130	AGF	09/15/16 09:08	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	30.7	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	0.6	TCaCO3/kT	0.3			N/A		09/16/16 18:01	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:16	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.02	%	0.01	0.005		W638130	AGF	09/16/16 18:01	
Modified Sobek	**Pyritic Sulfur-HCl**	0.02	%	0.01			N/A		09/16/16 18:01	
Modified Sobek	**Sulfate Sulfur-HCl**	0.02	%	0.01			N/A		09/16/16 18:01	
Modified Sobek	**Total Sulfur**	0.03	%	0.01	0.005		W638130	AGF	09/15/16 09:08	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @19.9°C**	7.90	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @19.2°C**	8.4	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern

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Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-11-64 (185.5-208) HC-14 ABA**
SVL Sample ID: **W6I0151-13 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	2.9	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	33.4	TCaCO3/kT	0.3			N/A		09/19/16 08:22	
Modified Sobek	**ANP**	36.3	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A2
Modified Sobek	**Non-extractable Sulfur**	0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:19	
Modified Sobek	**Non-Sulfate Sulfur**	1.08	%	0.01	0.005		W638130	AGF	09/19/16 08:22	
Modified Sobek	**Pyritic Sulfur**	1.07	%	0.01			N/A		09/19/16 08:22	
Modified Sobek	**Sulfate Sulfur**	0.41	%	0.01			N/A		09/19/16 08:22	
Modified Sobek	**Total Sulfur**	1.49	%	0.01	0.005		W638130	AGF	09/15/16 09:11	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	4.7	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	31.5	TCaCO3/kT	0.3			N/A		09/16/16 18:09	
Modified Sobek	**Non-extractable Sulfur**	0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:19	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	1.02	%	0.01	0.005		W638130	AGF	09/16/16 18:09	
Modified Sobek	**Pyritic Sulfur-HCl**	1.01	%	0.01			N/A		09/16/16 18:09	
Modified Sobek	**Sulfate Sulfur-HCl**	0.47	%	0.01			N/A		09/16/16 18:09	
Modified Sobek	**Total Sulfur**	1.49	%	0.01	0.005		W638130	AGF	09/15/16 09:11	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @19.9°C**	7.04	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @19.0°C**	8.3	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

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Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-13-S09 (0.00-3.05) HC-15 ABA**
SVL Sample ID: **W6I0151-14 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	15.5	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	AGP	< 0.3	TCaCO3/kT	0.3			N/A		09/19/16 08:25	
Modified Sobek	**ANP**	15.5	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A5
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:22	
Modified Sobek	Non-Sulfate Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/19/16 08:25	
Modified Sobek	Pyritic Sulfur	< 0.01	%	0.01			N/A		09/19/16 08:25	
Modified Sobek	**Sulfate Sulfur**	0.02	%	0.01			N/A		09/19/16 08:25	
Modified Sobek	**Total Sulfur**	0.02	%	0.01	0.005		W638130	AGF	09/15/16 09:14	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	15.5	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	AGP-HCl	< 0.3	TCaCO3/kT	0.3			N/A		09/16/16 18:12	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:22	
Modified Sobek	Non-Sulfate Sulfur-HCl	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 18:12	
Modified Sobek	Pyritic Sulfur-HCl	< 0.01	%	0.01			N/A		09/16/16 18:12	
Modified Sobek	**Sulfate Sulfur-HCl**	0.02	%	0.01			N/A		09/16/16 18:12	
Modified Sobek	**Total Sulfur**	0.02	%	0.01	0.005		W638130	AGF	09/15/16 09:14	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @19.4°C**	6.82	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @19.0°C**	8.1	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern

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Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-13-S31 (15.24-18.29) HC-16 ABA**
SVL Sample ID: **W6I0151-15 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	33.7	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	6.3	TCaCO3/kT	0.3			N/A		09/19/16 08:28	
Modified Sobek	**ANP**	40.0	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A2
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:31	
Modified Sobek	**Non-Sulfate Sulfur**	0.20	%	0.01	0.005		W638130	AGF	09/19/16 08:28	
Modified Sobek	**Pyritic Sulfur**	0.20	%	0.01			N/A		09/19/16 08:28	
Modified Sobek	**Sulfate Sulfur**	0.10	%	0.01			N/A		09/19/16 08:28	
Modified Sobek	**Total Sulfur**	0.30	%	0.01	0.005		W638130	AGF	09/15/16 09:17	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	34.5	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	5.5	TCaCO3/kT	0.3			N/A		09/16/16 18:15	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 15:31	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.18	%	0.01	0.005		W638130	AGF	09/16/16 18:15	
Modified Sobek	**Pyritic Sulfur-HCl**	0.18	%	0.01			N/A		09/16/16 18:15	
Modified Sobek	**Sulfate Sulfur-HCl**	0.12	%	0.01			N/A		09/16/16 18:15	
Modified Sobek	**Total Sulfur**	0.30	%	0.01	0.005		W638130	AGF	09/15/16 09:17	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @19.6°C**	7.18	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @18.8°C**	8.2	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

McClelland Laboratories Inc
1016 Greg Street
Sparks, NV 89431

Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Client Sample ID: **3654 MGI-13-S41 (1.52-3.05) HC-17 ABA**
SVL Sample ID: **W6I0151-16 (Soil)**

Sample Report Page 1 of 1

Sampled: 06-Sep-16 12:00
Received: 08-Sep-16
Sampled By:

Method	Analyte	Result	Units	RL	MDL	Dilution	Batch	Analyst	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms										
Modified Sobek	**ABA**	94.3	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP**	2.0	TCaCO3/kT	0.3			N/A		09/19/16 08:31	
Modified Sobek	**ANP**	96.2	TCaCO3/kT	0.3			W638130	AGF	09/19/16 15:03	A2
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 16:26	
Modified Sobek	**Non-Sulfate Sulfur**	0.06	%	0.01	0.005		W638130	AGF	09/19/16 08:31	
Modified Sobek	**Pyritic Sulfur**	0.06	%	0.01			N/A		09/19/16 08:31	
Modified Sobek	**Sulfate Sulfur**	0.04	%	0.01			N/A		09/19/16 08:31	
Modified Sobek	**Total Sulfur**	0.10	%	0.01	0.005		W638130	AGF	09/15/16 09:20	
Acid/Base Accounting & Sulfur Forms (HCl Wash)										
Modified Sobek	**ABA-HCl**	94.5	TCaCO3/kT	0.3			N/A		09/19/16 15:03	
Modified Sobek	**AGP-HCl**	1.7	TCaCO3/kT	0.3			N/A		09/16/16 18:18	
Modified Sobek	Non-extractable Sulfur	< 0.01	%	0.01	0.005		W638130	AGF	09/16/16 16:26	
Modified Sobek	**Non-Sulfate Sulfur-HCl**	0.05	%	0.01	0.005		W638130	AGF	09/16/16 18:18	
Modified Sobek	**Pyritic Sulfur-HCl**	0.05	%	0.01			N/A		09/16/16 18:18	
Modified Sobek	**Sulfate Sulfur-HCl**	0.05	%	0.01			N/A		09/16/16 18:18	
Modified Sobek	**Total Sulfur**	0.10	%	0.01	0.005		W638130	AGF	09/15/16 09:20	
Classical Chemistry Parameters										
AMIRA P387A	**NAG pH @20.2°C**	8.02	pH Units				W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 4.5	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
AMIRA P387A	NAG@pH 7	0	kg H2SO4/T	0.1			W638135	MCB	09/17/16 10:53	
EPA 600/2-78-054 mod	**Paste pH @19.0°C**	8.2	pH Units				W638262	AGF	09/19/16 12:15	

This data has been reviewed for accuracy and has been authorized for release by the Laboratory Director or designee.

John Kern
Laboratory Director

McClelland Laboratories Inc
1016 Greg Street
Sparks, NV 89431

Project Name: MLI: 3654
Work Order: **W6I0151**
Reported: 20-Sep-16 09:37

Quality Control - BLANK Data

Method	Analyte	Units	Result	MDL	MRL	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms								
Modified Sobek	ANP	TCaCO3/kT	<0.3		0.3	W638130	19-Sep-16	
Modified Sobek	Non-extractable Sulfur	%	<0.01	0.005	0.01	W638130	16-Sep-16	
Modified Sobek	Non-Sulfate Sulfur	%	<0.01	0.005	0.01	W638130	19-Sep-16	
Modified Sobek	Total Sulfur	%	<0.01	0.005	0.01	W638130	15-Sep-16	
Acid/Base Accounting & Sulfur Forms (HCl Wash)								
Modified Sobek	Non-extractable Sulfur	%	<0.01	0.005	0.01	W638130	16-Sep-16	
Modified Sobek	Non-Sulfate Sulfur-HCl	%	<0.01	0.005	0.01	W638130	16-Sep-16	
Modified Sobek	Total Sulfur	%	<0.01	0.005	0.01	W638130	15-Sep-16	

Quality Control - LABORATORY CONTROL SAMPLE Data

Method	Analyte	Units	LCS Result	LCS True	% Rec.	Acceptance Limits	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms									
Modified Sobek	ANP	TCaCO3/kT	205	212	96.7	80 - 120	W638130	19-Sep-16	
Modified Sobek	Total Sulfur	%	0.97	1.00	96.6	80 - 120	W638130	15-Sep-16	
Acid/Base Accounting & Sulfur Forms (HCl Wash)									
Modified Sobek	Total Sulfur	%	0.97	1.00	96.6	80 - 120	W638130	15-Sep-16	
Classical Chemistry Parameters									
AMIRA P387A	NAG pH @20.1°C	pH Units	7.14	7.93	90.0	90 - 110	W638135	17-Sep-16	
EPA 600/2-78-054 mod	Paste pH @18.1°C	pH Units	7.6	7.40	103	93.7 - 106.3	W638262	19-Sep-16	

Quality Control - DUPLICATE Data

Method	Analyte	Units	Duplicate Result	Sample Result	RPD	RPD Limit	Batch ID	Analyzed	Notes
Acid/Base Accounting & Sulfur Forms									
Modified Sobek	ANP	TCaCO3/kT	53.7	55.0	2.3	20	W638130	19-Sep-16	
Modified Sobek	Non-extractable Sulfur	%	<0.01	<0.01	UDL	20	W638130	16-Sep-16	
Modified Sobek	Non-Sulfate Sulfur	%	1.10	1.17	6.2	20	W638130	19-Sep-16	
Modified Sobek	Total Sulfur	%	1.54	1.48	4.0	20	W638130	15-Sep-16	
Acid/Base Accounting & Sulfur Forms (HCl Wash)									
Modified Sobek	Non-extractable Sulfur	%	<0.01	<0.01	UDL	20	W638130	16-Sep-16	
Modified Sobek	Non-Sulfate Sulfur-HCl	%	0.88	1.08	20.2	20	W638130	16-Sep-16	R2B
Modified Sobek	Total Sulfur	%	1.54	1.48	4.0	20	W638130	15-Sep-16	
Classical Chemistry Parameters									
AMIRA P387A	NAG pH @19.7°C	pH Units	7.55	7.65	1.3	20	W638135	17-Sep-16	
AMIRA P387A	NAG@pH 4.5	kg H2SO4/T	0	0	UDL	20	W638135	17-Sep-16	
AMIRA P387A	NAG@pH 7	kg H2SO4/T	0	0	UDL	20	W638135	17-Sep-16	
EPA 600/2-78-054 mod	Paste pH @18.6°C	pH Units	8.1	8.0	0.5	20	W638262	19-Sep-16	

McClelland Laboratories Inc	**Project Name: MLI: 3654**
1016 Greg Street	Work Order: **W6I0151**
Sparks, NV 89431	Reported: 20-Sep-16 09:37

Notes and Definitions

A1	1 g of sample used in ANP analysis
A2	2 g of sample used in ANP analysis
A5	5 g of sample used in ANP analysis
R2B	RPD exceeded the laboratory acceptance limit.
LCS	Laboratory Control Sample (Blank Spike)
RPD	Relative Percent Difference
UDL	A result is less than the detection limit
R > 4S	% recovery not applicable, sample concentration more than four times greater than spike level
<RL	A result is less than the reporting limit
MRL	Method Reporting Limit
MDL	Method Detection Limit
N/A	Not Applicable