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Project No: 1CI008.000

Environmental Technologist
Mount Polley Mining Corporation
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Attention: Colleen Hughes, CCEP

Dear Colleen:

2012 Review of Humidity Cell Data, Mount Polley Mine

This letter provides SRK Consulting (Canada) Inc.'s (SRK's) annual review of results from ongoing humidity cell testing on one sample from the Northeast Zone, three samples from the Southeast Zone, three samples from the Springer Zone and one sample from the Pond Zone.

1 Chronology of the Humidity Cell Program

The overall progression of the kinetic test program is described. Tests have been started to characterize weathering performance of rock as new mineralized zones have been identified and brought into production.

Samples were selected by Mount Polley staff with general guidance from SRK. Sample selection methodology has been provided in previous annual reports (SRK 2004, 2005).

No changes to number of samples being tested were made in 2012.

1.1 Northeast Zone (Wight Pit)

Four humidity cell tests (HCTs) were started on July 19, 2004 on samples from Northeast Zone (Wight Pit). These tests contain the following drill core samples of waste rock:

- HC2 – Contains sample 31576
- HC3 – Contains sample 32491
- HC4 – Contains sample 31943
- HC5 – Contains sample 32519

In response to recommendations made in the 2007 Annual Report, humidity cells HC3, HC4 and HC5 were terminated on August 11, 2008 and HC2 was continued. At the time of this report, 440 weeks of data were available for HC2.

1.2 Southeast Zone

Two HCTs were started on September 26, 2005 for the Southeast Zone, providing 378 weeks of data at the time of this report. These tests contain drill core chips from the following samples:

- HC6 – Contains sample SE-05-17 Comp #1
- HC7 – Contains sample SE-05-30 Comp #1

HC 8 was started on August 11, 2008. At the time of this report, 229 weeks of data were available for HC8.

- HC8 – Contains sample SE-07-66-72.5-75.13

1.3 Springer Zone

One test was started on August 11, 2008 (HC9) and three tests were started on October 12, 2009 (HC14, HC15 and HC 16).

HC14 was from the central area of the West Wall. HC15 and HC16 were from the eastern and western areas of the South Wall.

These tests contain drill core chips from the following samples:

- HC9 – Contains sample 476111
- HC14 – Contains sample 465240; SD-07-23
- HC15 – Contains sample 475695; SD-07-48
- HC16 – Contains sample 480684; SD-07-57

HC9 was terminated on October 6, 2009.

At the time of this report, 168 weeks of data were available for HC14, HC15 and HC 16.

1.4 Pond Zone

Two tests were started on April 20, 2009. HC12 and HC13 contained composited samples of crushed monzonite and diorite, respectively from the Pond Zone. The samples were selected by Mount Polley staff. These tests were subjected to an acid leach to remove carbonate minerals prior to humidity cell testing so that the reactivity of silicate minerals could be assessed. HC12 and HC13 contain the following samples:

- HC12 – Contains sample 50033-1; Composite 4

- HC13 – Contains sample 50033-1; Composite 5

HC12 was terminated on June 8, 2009. At the time of this report, 193 weeks of data were available for HC13.

1.5 Summary

Eight humidity cell tests are currently operating at Maxxam Analytics (formerly CANTEST Ltd. and Vizon Scitech Inc.).

2 Methods

2.1 Leachate Analysis

Due to the long duration of the testwork, decreases in the analytical frequency for humidity cell leachates were implemented on September 12, 2011. Following this change, general parameters and anions (pH, conductivity, oxidation redox potential (ORP), sulphate, acidity, and alkalinity), are now being analysed monthly and dissolved elements are being analyzed quarterly.

3 Results

3.1 Static Geochemical Characteristics of the Samples

Chemical characteristics of the samples are provided in Tables 1 and 2. The samples were analyzed for sulphur forms (sulphide by difference between total sulphur and sulphate), total inorganic carbon, neutralization potential by the Sobek et al. (1978) method and element scan by ICP following aqua regia digestion. Because previous analysis had shown that samples did not contain sulphate, no sulphate analysis was completed for HC 14, HC 15 and HC 16 and it was assumed that in these samples all sulphur was in the form of sulphide. Mineralogical data are also available for HC8, HC9, HC10, HC11, HC14, HC15 and HC16.

3.2 Leachate Chemistry

Humidity cell data are provided in Attachment A. Graphs illustrating leachate chemistry trends throughout the testing period are provided in Attachment B. With the exception of pH, conductivity, and ORP, measured parameters are plotted as release rates (i.e. loadings) through time. Release rates are calculated as the amount of a parameter released per kilogram of sample per week (mg/kg/wk).

The laboratory initially provided a general element scan with detection limits that resulted in limited detection of many parameters. After January 2006, leachate samples were analyzed using lower detection limits. For graphing, results with high detection limits analyzed prior to January 2006 were not plotted which for some parameters has resulted in the appearance of a large data gap following detectable initial flush concentrations (Attachment B). In 2008, CANTEST changed the laboratory used for elemental scans and as a result detection limits changed again. Over a period of 12 cycles, leachates were analyzed at elevated detection limits,

after which detection limits generally decreased. As a result, a 'step' feature exists in graphs of release rates for several parameters.

3.3 Major Ions

In 2012, leachates from most tests remained weakly alkaline, with the exception of HC13. The Southeast Zone tests had slightly lower pH values than the Northeast Zone, Springer Zone and Boundary Zone.

The pH of HC13, which was stripped of carbonate by acid leach was stable at pH 5.6 in 2010 and 2011. In 2012, the pH of HC13 continually decreased, ranging from 4.9 to 5.4 and averaged pH of 5.1.

Leachate from Northeast Zone sample HC2 continued to be dominated by calcium and alkalinity reflecting primarily dissolution of carbonate minerals. Both calcium and alkalinity have been relatively stable in HC2 for the past three years.

Alkalinity release was relatively high for Springer Zone humidity cells, ranging from approximately 4.8 to 23 mg $CaCO_3$/kg/wk. Alkalinity release rates were highest and most variable for HC14, ranging from 5.9 to 23 mg $CaCO_3$/kg/wk in 2012. Samples HC13 and HC16 had high Si release rates compared to other active humidity cells, approximately 1 to 1.5 mg/kg/wk. The initial flush of Springer Zone humidity cells HC14 and HC15 released high rates of several major ions including calcium, magnesium, sulphate and to a lesser extent sodium, though rates stabilized at the end of 2009 at levels similar to other Mt. Polley humidity cells.

Sulphate release in 2012 was stable for all Mt. Polley humidity cells. Sulphate release rates in HC2 remained stable in 2012, ranging from 5.2 to 6.5 mg/kg/wk. After the initial flush, HC15, which contained a sample with higher S content (Total S = 2.5%), showed a stabilized sulphate release rate of approximately 12 mg/kg/wk in 2012. Sample HC15 had a higher sulphate release rate than other Mt. Polley mine samples, Boundary samples, and other Springer Zone samples.

Magnesium, sodium and potassium were generally released at much lower concentrations than calcium and were generally highest in Springer Zone samples. Sample HC14 had the highest release rates of magnesium and potassium, although both parameters showed decreasing trends in 2012 and were approximately 0.6 and 0.1 mg/kg/wk, respectively at the end of the year. Springer Zone samples HC15 and HC16 had the highest sodium release rates. Both samples had decreasing trends for sodium and were approximately 0.4 mg/kg/wk for HC16 to 0.6 mg/kg/wk for HC15 at the end of 2012.

3.4 Trace Ions

The analyses showed an initial flush of elevated concentrations for several parameters in some cells (Co, Cu, Mn, Ni and Se). Most of these parameters have since declined or stabilized at near detection limit concentrations.

Leachate from Pond Zone sample HC13, which had been stripped of carbonate and generated acidity, showed elevated concentrations of several parameters including Ba, Co, Cu, Mn, Ni and

Zn. The release rates of these parameters (with the exception of Mn and Ni) increased in 2012, coinciding with the continuing decrease in pH. Iron and aluminum leaching have not accelerated as pH remains higher than required to mobilize these elements.

Molybdenum concentrations continued to be highest from HC6 (which contained 168 mg/kg Mo in the sample – an order-of-magnitude greater than the other samples). The Mo release rate peaked at 0.13 mg/kg/wk in week 22, and then decreased reaching approximately 0.03 mg/kg/wk in 2012. HC2 also showed Mo concentrations initially increasing to a peak concentration of 0.15 mg/L in week 12 followed by a steadily decreasing trend. In recent years, concentrations yielded by HC2 have been slowly declining, with release rates of around 0.0025 mg/kg/wk at the end of 2012.

HC7 also showed somewhat elevated Mo release (peak of 0.035 mg/kg/wk) for the first 42 weeks, after which leaching decreased to 0.006 mg/kg/wk in week 46. After week 46, molybdenum leaching steadily increased, reaching a second peak in week 148 at 0.022 mg/kg/wk, and then has continuously decreased, with a release rate of approximately 0.004 mg/kg/wk at the end of 2012.

Arsenic concentrations were relatively elevated in leachate from HC16, increasing to 0.0035 mg/kg/wk in week 5. Since then, the release rates decreased and continues to do so, decreasing to 0.0002 mg/kg/wk at the end of 2012.

Selenium release rates from Springer Zone humidity cells continued to decrease in 2012. Release rates from HC14 decreased to approximately 0.001 mg/kg/wk at the end of 2012 (after 99 weeks) but were still high relative to the other humidity cells.

4 Discussion

Previous annual reports have provided discussion with respect to the following specific issues:

- Site specific criterion to classify potentially ARD generating (PAG) rock;
- Delay to onset of ARD for PAG rock;
- Neutralization potential from non-carbonate sources; and
- Potential for contaminant leaching under non-acidic conditions.

The site specific NP/AP criterion was assessed in previous reports. Figure 1 provides an update of the continuing strong relationship between average sulphate release (i.e. oxidation rate) and $(Ca+Mg)/SO_4$. Previous conclusions about site specific NP/AP criteria remain valid based on data collected in 2012.

Likewise, ongoing calcium and magnesium depletion indicates similar rates of NP depletion and delay to onset of acidic conditions in the tests.

Sample HC13 from the Pond Zone was depleted of its carbonate content at the beginning of the test to evaluate non-carbonate buffering. Although leachate chemistry was stable for 2.5 years,

pHs have recently decreased slightly. As a result, leaching of various metals parameters including Ba, Co, Cu, Mn, Ni and Zn has accelerated.

As previously reported, there is a lack of correlations between release rates and bulk characteristics of the rock. Molybdenum showed correlations between release and bulk composition (Figure 3). No parameters showed good correlations between release rates and sulphur.

5 Conclusions and Recommendations

Consistent with previous reports, results obtained from humidity cell testwork to date indicate:

- Neutral pH weathering conditions are consistent with the carbonate content of the rock;
- A site specific criterion for PAG rock of 1.4 was suggested based on results from HC15;
- Time frames to generate ARD are of the order of decades, but shorter in the Springer Zone and the Southeast Zone where TIC is lower than in the Northeast Zone;
- Relatively low contaminant leaching rates, with only molybdenum and selenium leaching at neutral pH;
- Release rates correlate with bulk characteristics for molybdenum; and
- No parameters showed correlations with sulphur content.

All tests with the exception of Pond Zone sample HC13 are showing stable leachate chemistry and, based on current release rates, are not expected to show major changes on leachate pH in the short term. While there is value in continuing testwork to demonstrate stability of long term trends, the tests could be terminated except for HC13 which should be continued to monitor pH changes and the role of silicate minerals in buffering acidity.

Sincerely,
SRK Consulting (Canada) Inc.

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Lachlan MacLean, PhD.
Consultant (Geochemistry)

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Stephen Day, MSc., PGeo.
Corporate Consultant (Geochemistry)
Reviewer

Table 1: Humidity Cell Sample Characterisitics

HCT	Sample ID	Zone	Rock Type	Date Started	Status	Paste pH	Total S S,%	Sulphate S, %	Sulphide S, %	AP kg $CaCO_3$/t	TIC		NP kg $CaCO_3$/t	Fizz Rating	NP/AP	TIC/AP
											%C	kg $CaCO_3$/t				
HC2	31576	NE	PPp	21-Jul-04	Ongoing	8.0	1.4	<0.01	1.40	44	0.79	66	83	Moderate	1.9	1.5
HC3	32491	NE	Bx	21-Jul-04	Stopped	8.3	0.45	<0.01	0.45	14	1.1	91	140	Moderate	10	6.4
HC4	31943	NE	Bx	21-Jul-04	Stopped	8.4	0.99	<0.01	0.99	31	1.1	88	127	Moderate	4.1	2.9
HC5	32519	NE	PPp	21-Jul-04	Stopped	8.6	0.54	<0.01	0.54	17	0.62	52	88	Moderate	5.2	3.1
HC6	SE-05-17 Comp #1	SE	Monz	26-Sep-05	Ongoing	8.4	0.72	<0.01	0.72	23	0.12	9.8	21	Slight	0.91	0.43
HC7	SE-05-30 Comp #1	SE	Monz	26-Sep-05	Ongoing	8.7	0.37	<0.01	0.37	12	0.12	9.8	40	Moderate	3.5	0.85
HC8	SE-07-66-72.5-75.13	SE	-	11-Aug-08	Ongoing	9.2	1.03	0.01	1.02	32	0.08	6.8	19	Slight	0.59	0.21
HC10	146677	Boundary	-	11-Aug-08	Stopped	8.4	0.1	0.01	0.09	2.8	2.0	167	150	Strong	53	59
HC11	146794	Boundary	-	11-Aug-08	Stopped	8.4	0.15	0.01	0.14	4.4	1.4	120	155	Strong	35	27
HC12	50033-1; Composite-4	Pond	Monz	20-Apr-09	Stopped	6.6	0.51	<0.01	0.51	16	-0.01	-0.5	8.4	None	0.53	-0.03
HC13	50033-1; Composite-5	Pond	Di	20-Apr-09	Ongoing	7.7	0.19	<0.01	0.19	5.9	-0.01	-0.5	7.9	None	1.3	-0.08
HC9	476111	Springer	-	11-Aug-08	Stopped	7.9	0.04	0.01	0.03	0.9	0.01	0.9	18	None	19	0.97
HC14	465240; SD-07-23	Springer	Bx	12-Oct-09	Ongoing	8.1	0.39	-	-	12	0.48	40	96	Strong	7.9	3.3
HC15	475695; SD-07-48	Springer	Di	12-Oct-09	Ongoing	8.1	2.52	-	-	79	0.27	23	94	Strong	1.2	0.29
HC16	480684; SD-07-57	Springer	Monz	12-Oct-09	Ongoing	8.9	0.06	-	-	1.9	0.14	12	69	Strong	37	6.4

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Table 2: Humidity Cell Sample Characteristics (Continued)

HCT	Zone	Rock Type	Ag ppm	As ppm	Cd ppm	Cu ppm	Hg ppm	Mn ppm	Mo ppm	Ni ppm	Pb ppm	Sb ppm	Se ppm	Zn ppm
HC2	NE	PPp	0.40	19	1.1	329	0.57	1405	13	1.2	38	0.30	0.7	173
HC3	NE	Bx	1.1	12	0.6	1722	0.39	1852	5.8	3.3	17	0.20	1.0	151
HC4	NE	Bx	1.2	10	0.9	1336	0.25	2044	7.6	4.2	21	0.30	1.4	165
HC5	NE	PPp	0.70	18	0.1	1695	0.19	1382	1.9	4.1	13	0.50	1.3	100
HC6	SE	Monz	0.30	17	<0.1	706	0.10	422	168	1.7	7.6	0.70	0.9	34
HC7	SE	Monz	<0.1	15	0.10	180	0.020	477	6.1	12	10	0.40	0.5	30
HC8	SE		0.12	10	0.10	164	0.018	458	6.0	2.7	7.5	0.92	1.5	40
HC10	Boundary		0.13	14	0.21	507	0.036	2804	1.4	12	7.8	0.64	0.7	109
HC11	Boundary		0.17	17	0.37	254	0.12	2268	3.0	9.2	10	0.54	1.3	107
HC12	Pond	Monz	0.48	14	0.15	344	0.02	611	4.9	4.7	5.7	0.37	1.9	47
HC13	Pond	Di	0.25	12	0.11	247	0.01	522	3.5	4.1	6.0	0.40	1.2	49
HC9	Springer		0.34	11	0.42	713	0.08	1094	1.1	9.3	7.8	0.21	0.5	89
HC14	Springer	Bx	0.62	34	0.98	715	0.40	1546	6.0	2.8	10	0.28	4.3	86
HC15	Springer	Di	0.88	18	0.09	779	0.015	495	18	5.0	11	0.07	8.2	41
HC16	Springer	Monz	0.52	13	0.43	362	0.14	731	3.5	2.4	10	0.16	0.5	92

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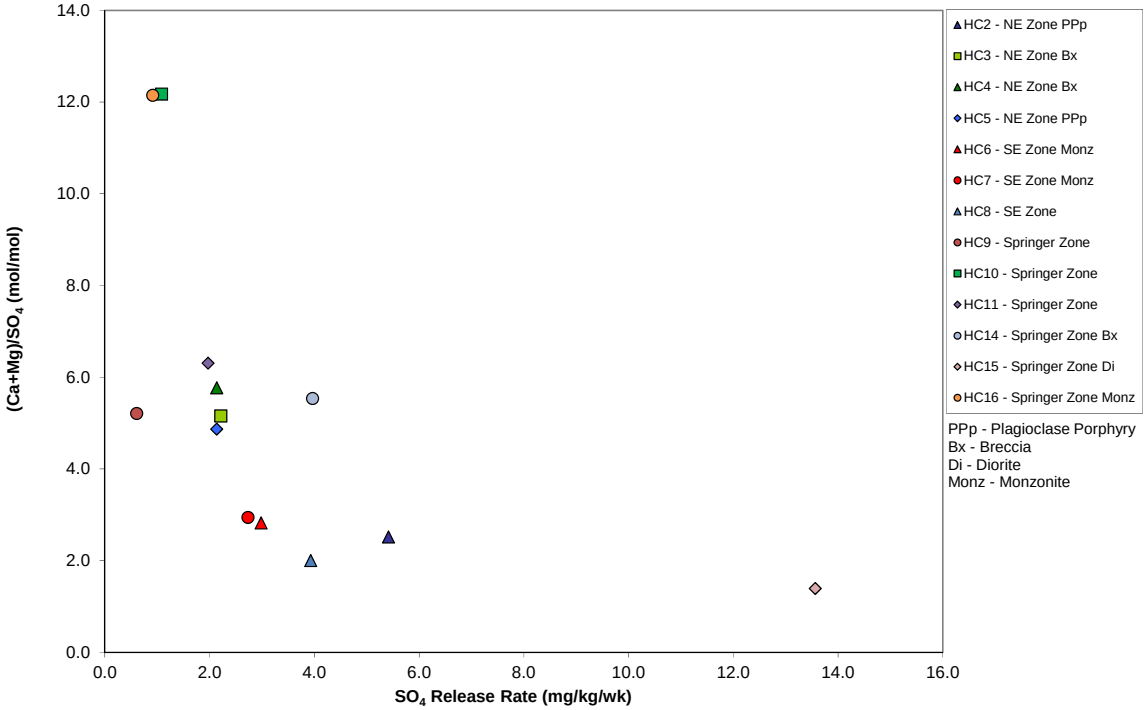

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Figure 1: Relationship between Average Sulphate Release Rates and Molar (Ca+Mg)/SO_4

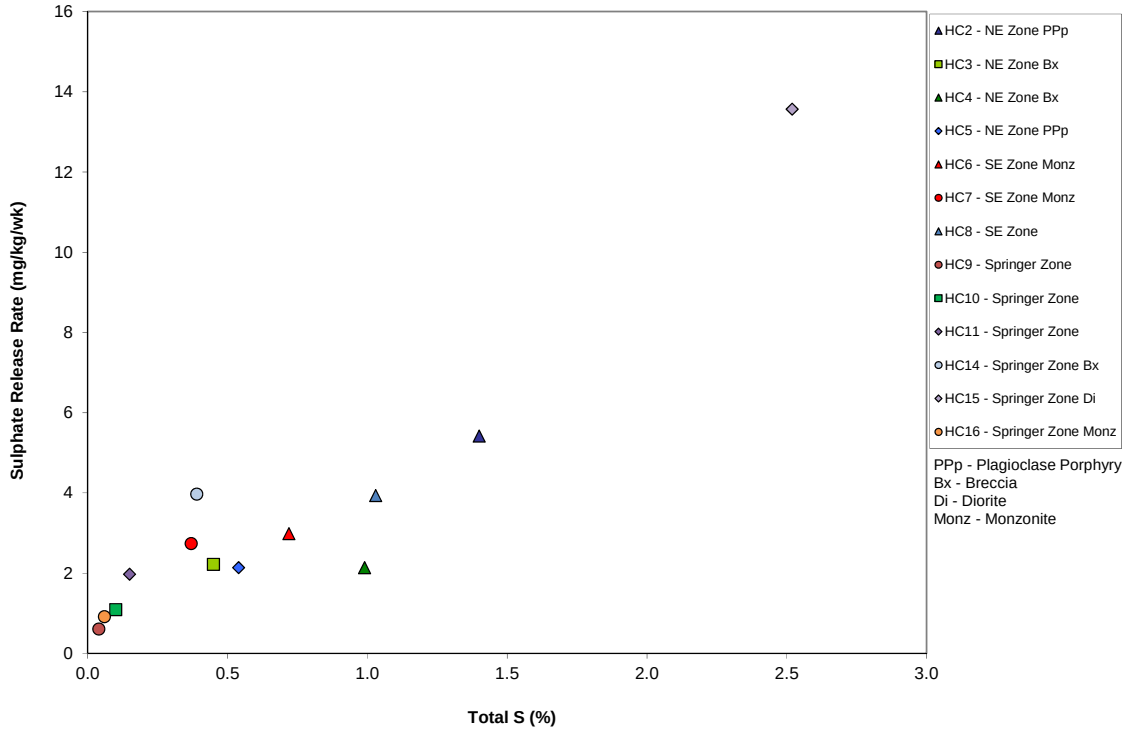

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Figure 2: Relationship between Average Sulphate Release Rates and Sulphur Content

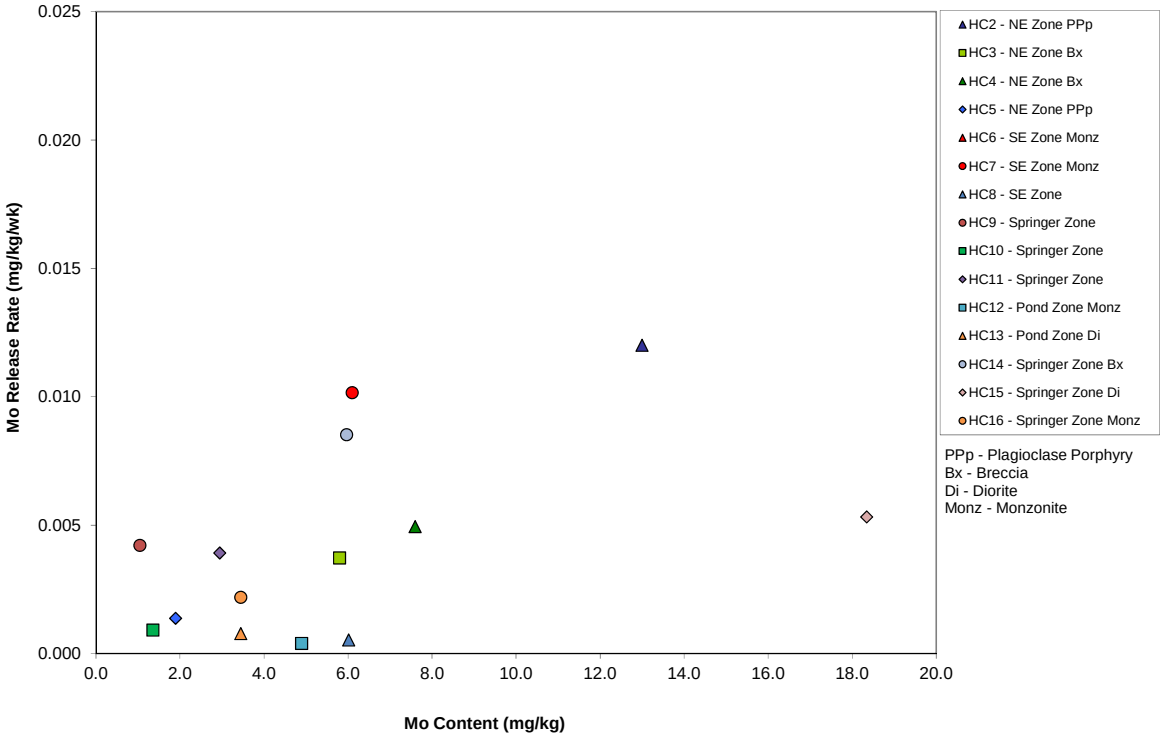

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Figure 3: Relationship between Average Molybdenum Release Rates and Molybdenum Content

Attachment A: Humidity Cell Results

Leachate Chemistry of 31576 (HC-2)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08) Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb	Ni ppb
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**	**1**
6-Oct-08	220	500	500	8.07	61	140	10	-1	19	0.032	-1	-1	18	-1	-1	80	-0.2	11.8	-1	-1	0.016	-0.05	-1	0.001	0.19	-0.001	16	-1
13-Oct-08	221	500	495	8.00	66		13			-0.05	-50	-30	19	-3	#N/A	-10	-10	13.2	-10	-20	-20	-0.01	-30	#N/A	0.2	-0.003	-20	-20
20-Oct-08	222	500	495	8.08	62	145	8	-1	20																			
27-Oct-08	223	500	500	7.70	69		11																					
3-Nov-08	224	500	485	7.98	63	170	12	-1	19	0.032	-1	-1	18	-1	-1	-50	-0.2	11.3	-1	-1	0.004	-0.05	-1	-0.001	0.29	0.006	12	-1
10-Nov-08	225	500	500	7.54	71		11			-0.05	-50	-30	18	-3	#N/A	-10	-10	12.1	-10	-20	-20	-0.01	-30	#N/A	0.19	-0.003	-20	-20
17-Nov-08	226	500	480	7.52	65	150	9	-1	19																			
24-Nov-08	227	500	475	7.53	65		10																					
1-Dec-08	228	500	490	7.77	69	170	11	1	20	0.026	-1	-1	20	-1	-1	-50	-0.2	11.8	-1	-1	0.016	-0.05	-1	0.001	0.17	-0.001	13	-1
8-Dec-08	229	500	490	7.55	67		10			-0.05	-50	-30	20	-3	#N/A	-10	-10	12.8	-10	-20	-20	-0.01	-30	#N/A	0.19	-0.003	-20	-20
15-Dec-08	230	500	470	7.31	63	180	10	-1	18																			
22-Dec-08	231	500	505	7.79	70		10																					
29-Dec-08	232	500	475	7.59	66	170	6	1	19	0.044	-1	-1	19	-1	-1	-50	-0.2	11.7	-1	-1	-0.001	-0.05	-1	-0.001	0.16	0.003	13	-1
5-Jan-09	233	500	495	7.39	68		8																					
12-Jan-09	234	500	500	7.80	66	180	11	1	20																			
19-Jan-09	235	500	500	7.73	69		12																					
26-Jan-09	236	500	450	7.92	52	180	8	-1	18	0.031	0.3	0.7	14	-0.2	-0.2	-10	0.06	9.7	-0.2	-0.2	0.0026	-0.01	-0.2	0.0004	0.13	0.0024	11	-0.2
2-Feb-09	237	500	460	7.40	53		7																					
9-Feb-09	238	500	465	7.37	53	185	8	-1	17																			
16-Feb-09	239	500	500	7.53	63		8																					
23-Feb-09	240	500	460	7.76	55	195	7	-1	17	0.023	0.2	0.5	14	-0.2	-0.2	-10	-0.04	9.23	-0.2	-0.2	0.001	-0.01	-0.2	0.0003	0.13	0.0018	12	-0.2
2-Mar-09	241	500	455	7.86	56		9																					
9-Mar-09	242	500	480	7.80	54	150	9	1	17																			
16-Mar-09	243	500	485	7.74	56		4																					
23-Mar-09	244	500	500	7.78	59	185	10	1	16	0.02	0.2	0.4	15	-0.2	-0.2	-10	-0.04	10.3	-0.2	-0.2	0.0019	-0.01	-0.2	0.0003	0.14	0.0049	11	-0.2
30-Mar-09	245	500	500	7.51	61		9																					
6-Apr-09	246	500	490	7.81	60	190	10	-1	17																			
13-Apr-09	247	500	480	7.67	61		9																					
20-Apr-09	248	500	490	7.67	67	150	10	-1	18	0.028	0.3	0.5	20	-0.2	-0.2	-10	-0.04	12.2	-0.2	-0.2	0.0005	-0.01	-0.2	-0.0002	0.16	0.0043	12	-0.2
27-Apr-09	249	500	490	7.85	66		10																					
4-May-09	250	500	495	8.14	64	170	9	-1	18																			
11-May-09	251	500	495	7.80	64		12																					
18-May-09	252	500	500	7.80	69	170	12	-1	19	0.024	0.2	0.5	17	-0.2	-0.2	-10	-0.04	11.9	-0.2	-0.2	0.0013	-0.01	-0.2	0.0003	0.15	0.0031	9.2	-0.2
25-May-09	253	500	495	7.83	66		9																					
1-Jun-09	254	500	500	7.85	66	170	9	-1	20																			
8-Jun-09	255	500	485	7.70	80		12																					
15-Jun-09	256	500	490	8.16	65	170	10	-1	19	0.031	0.2	0.5	15	-0.2	-0.2	-10	-0.04	11.3	-0.2	-0.2	0.0004	-0.01	-0.2	0.0002	0.15	0.0024	8.3	-0.2
22-Jun-09	257	500	500	7.72	64		14																					
29-Jun-09	258	500	500	7.79	70	140	12	-1	19																			
6-Jul-09	259	500	485	7.68	63		11																					
13-Jul-09	260	500	495	7.87	64	155	10	-1	19	0.021	0.2	0.5	17	-0.2	-0.2	-10	-0.04	11.3	-0.2	-0.2	0.0004	-0.01	-0.2	0.0003	0.13	0.0047	8.9	0.3
20-Jul-09	261	500	500	7.71	71		13																					
27-Jul-09	262	500	495	8.01	67	160	13	-1	18																			
3-Aug-09	263	500	500	7.78	72		15																					
10-Aug-09	264	500	490	7.86	68	160	12	-1	19	0.022	0.2	0.5	16	-0.2	-0.2	-10	-0.04	10.7	-0.2	-0.2	0.0004	-0.01	-0.2	0.0003	0.13	0.0022	8.8	-0.2
17-Aug-09	265	500	490	7.74	66		12																					
24-Aug-09	266	500	500	7.86	61	170	10	-1	17																			
31-Aug-09	267	500	490	7.92	67		11																					
7-Sep-09	268	500	490	7.90	68	175	14	-1	17	0.021	-0.2	0.4	16	-0.2	-0.2	-10	-0.04	11.7	-0.2	-0.2	0.0009	-0.01	-0.2	0.0004	0.14	0.003	8.8	-0.2
14-Sep-09	269	500	490	7.77	64		10																					
21-Sep-09	270	500	500	7.77	66	170	12	-1	17																			
28-Sep-09	271	500	490	7.80	67		10																					
5-Oct-09	272	500	500	7.92	62	185	9	-1	17	0.022	0.2	0.5	13	-0.1	-0.1	-5	0.01	10.7	-0.2	-0.1	0.0003	-0.01	-0.05	0.0003	0.13	0.0018	9.2	-0.2
12-Oct-09	273	500	490	7.96	71		12																					
19-Oct-09	274	500	490	8.00	62	170	10	-1	17																			
26-Oct-09	275	500	485	7.76	64		11																					
2-Nov-09	276	500	490	7.84	66	165	11	1	17	0.02	0.2	0.5	16	-0.1	-0.1	-5	0.03	11.2	-0.2	-0.1	0.0026	-0.01	-0.05	0.0013	0.17	0.0023	9.6	0.3
9-Nov-09	277	500	490	7.96	70		14																					
16-Nov-09	278	500	485	7.88	65	150	12	-1	17																			
23-Nov-09	279	500	485	7.89	64		12																					
30-Nov-09	280	500	480	7.93	68	155	14	-1	19	0.022	0.2	0.7	15	-0.1	-0.1	-5	0.03	11.5	-0.2	-0.1	0.0013	-0.01	-0.05	0.0008	0.14	0.0021	9.3	-0.2

Leachate Chemistry of 31576 (HC-2)																		Alkalinity		Ion Balance		
Sampling Date	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance %
Detection Limits	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
6-Oct-08	-0.15	0.2	-1	0.6	-0.25	0.15	93	-1	-0.1	-0.5	-1	-1	-0.0005	1	8	-10	18.24	0.20	0.06	0.58	0.61	-2.31%
13-Oct-08	-0.15	-0.25	#N/A	0.49	-10	-0.1	110	#N/A	#N/A	#N/A	-30	-5	#N/A	-10	7	-20						
20-Oct-08																						
27-Oct-08																						
3-Nov-08	0.2	0.5	-1	0.3	-0.25	0.41	95	-1	-0.1	-0.5	-1	-1	-0.0005	-1	-5	-10	18.29	0.16	0.05	0.62	0.61	0.94%
10-Nov-08	-0.15	0.3	#N/A	0.43	-10	-0.1	99	#N/A	#N/A	#N/A	-30	-5	#N/A	-10	-5	-20						
17-Nov-08																						
24-Nov-08																						
1-Dec-08	-0.15	0.1	-1	0.3	-0.25	0.11	96	-1	-0.1	-0.5	-1	-1	-0.0005	-1	-5	-10	19.36	0.11	0.03	0.62	0.60	1.59%
8-Dec-08	-0.15	-0.25	#N/A	0.43	-10	-0.1	100	#N/A	#N/A	#N/A	-30	-5	#N/A	-10	-5	-20						
15-Dec-08																						
22-Dec-08																						
29-Dec-08	-0.15	0.1	-1	0.9	-0.25	0.06	90	-1	-0.1	-0.5	-1	-1	-0.0005	-1	-5	-10	18.91	0.07	0.02	0.51	0.59	-7.92%
5-Jan-09																						
12-Jan-09																						
19-Jan-09																						
26-Jan-09	-0.03	0.31	-0.2	0.46	-0.05	0.08	70	-0.2	0.02	-0.1	-0.2	-0.2	0.0002	0.7	-1	-2	17.32	0.14	0.04	0.52	0.50	1.88%
2-Feb-09																						
9-Feb-09																						
16-Feb-09																						
23-Feb-09	-0.03	0.2	-0.2	0.36	-0.05	0.07	68	-0.2	-0.02	-0.1	-0.2	-0.2	0.0002	0.6	-1	-2	16.38	0.09	0.03	0.48	0.47	0.48%
2-Mar-09																						
9-Mar-09																						
16-Mar-09																						
23-Mar-09	-0.03	0.19	-0.2	0.38	-0.05	0.07	73	-0.2	-0.02	-0.1	-0.2	-0.2	0.0002	0.6	1	-2	15.88	0.09	0.03	0.53	0.52	0.38%
30-Mar-09																						
6-Apr-09																						
13-Apr-09																						
20-Apr-09	-0.03	0.19	-0.2	0.4	-0.05	0.06	87	-0.2	-0.02	-0.1	-0.2	0.2	0.0002	0.7	-1	-2	17.90	0.08	0.02	0.57	0.62	-4.24%
27-Apr-09																						
4-May-09																						
11-May-09																						
18-May-09	-0.03	0.18	-0.2	0.47	-0.05	0.07	71	-0.2	-0.02	-0.1	-0.2	-0.2	0.0002	0.6	-1	-2	18.86	0.11	0.03	0.63	0.60	2.16%
25-May-09																						
1-Jun-09																						
8-Jun-09																						
15-Jun-09	-0.03	0.17	-0.2	0.46	-0.05	0.06	66	-0.2	-0.02	-0.1	-0.2	-0.2	0.0002	0.7	-1	-2	18.67	0.25	0.07	0.59	0.57	1.30%
22-Jun-09																						
29-Jun-09																						
6-Jul-09																						
13-Jul-09	-0.03	0.15	-0.2	0.39	-0.05	0.06	67	-0.2	-0.02	-0.1	-0.2	-0.2	0.0002	0.5	1	-2	18.83	0.13	0.04	0.59	0.57	1.49%
20-Jul-09																						
27-Jul-09																						
3-Aug-09																						
10-Aug-09	-0.03	0.11	-0.2	0.39	-0.05	0.06	65	-0.2	-0.02	-0.1	-0.2	-0.2	0.0002	0.6	-1	-2	18.84	0.13	0.04	0.63	0.54	7.63%
17-Aug-09																						
24-Aug-09																						
31-Aug-09																						
7-Sep-09	-0.03	0.16	-0.2	0.37	-0.05	0.06	68	-0.2	-0.02	-0.1	-0.2	-0.2	0.0002	0.6	-1	-2	16.83	0.13	0.04	0.63	0.59	3.26%
14-Sep-09																						
21-Sep-09																						
28-Sep-09																						
5-Oct-09	-0.015	0.12	-0.2	0.3	-0.04	0.058	68	-0.2	-0.02	-0.05	-0.1	-0.2	0.00018	0.5	-1	-0.1	16.83	0.13	0.04	0.53	0.54	-1.24%
12-Oct-09																						
19-Oct-09																						
26-Oct-09																						
2-Nov-09	-0.015	0.14	-0.2	0.43	-0.04	0.083	72	-0.2	-0.02	-0.05	-0.1	-0.2	0.00019	0.5	-1	-0.1	16.86	0.11	0.03	0.57	0.57	-0.09%
9-Nov-09																						
16-Nov-09																						
23-Nov-09																						
30-Nov-09	0.03	0.13	-0.2	0.38	-0.04	0.088	63	-0.2	-0.02	-0.05	-0.1	-0.2	0.00014	0.5	1	-0.1	18.81	0.15	0.04	0.67	0.58	7.12%

Leachate Chemistry of 31576 (HC-2)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08) Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb	Ni ppb
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**	**1**
7-Dec-09	281	500	490	8.00	65		11																					
14-Dec-09	282	500	495	7.91	66	140	10	1	18																			
21-Dec-09	283	500	495	7.88	64		11																					
28-Dec-09	284	500	495	7.80	67	165	12	1	18	0.015	0.2	0.4	16	-0.1	-0.1	-5	0.03	11	-0.2	-0.1	0.0007	-0.01	-0.05	-0.0001	0.14	0.0024	9	-0.2
4-Jan-10	285	500	490	7.93	62		11																					
11-Jan-10	286	500	500	7.90	61	160	11	1	17																			
18-Jan-10	287	500	490	7.70	64		11																					
25-Jan-10	288	500	500	7.62	65	145	12	1	17	0.019	0.2	0.4	14	-0.1	-0.1	-5	0.01	11.3	-0.2	-0.1	0.001	-0.01	1.8	-0.0001	0.12	0.0017	8.5	-0.2
1-Feb-10	289	500	500	7.29	66		14																					
8-Feb-10	290	500	500	7.67	64	150	11	1	18																			
15-Feb-10	291	500	465	7.64	60		14																					
22-Feb-10	292	500	475	7.63	68	175	15	1	17	0.017	0.2	0.3	15	-0.1	-0.1	-5	-0.01	11.3	-0.2	-0.1	0.0004	-0.01	-0.05	0.0003	0.13	0.0022	8.3	-0.2
1-Mar-10	293	500	495	7.62	64		14																					
8-Mar-10	294	500	490	7.68	64	195	14	1	16																			
15-Mar-10	295	500	495	7.57	61		12																					
22-Mar-10	296	500	500	7.49	62	175	12	1	16	0.024	0.2	0.4	15	-0.1	-0.1	-5	0.02	11.1	-0.2	-0.1	0.0009	0.01	-0.05	0.0003	0.14	0.0021	8.4	0.3
29-Mar-10	297	500	495	7.71	62		12																					
5-Apr-10	298	500	485	7.72	64	200	13	1	18																			
12-Apr-10	299	500	490	7.64	63		12																					
19-Apr-10	300	500	490	7.78	63	150	13	1	17	0.02	0.19	0.35	15.4	-0.01	-0.005	-50	0.03	10.8	-0.1	-0.005	0.00043	0.001	0.022	-0.0005	0.12	0.00226	8.95	-0.02
26-Apr-10	301	500	500	7.66	71		12																					
3-May-10	302	500	490	7.62	64	160	13	1	17																			
10-May-10	303	500	490	7.61	69		14																					
17-May-10	304	500	500	7.61	66	150	12	1	18	0.0241	0.18	0.35	15.7	-0.01	-0.005	-50	0.02	11.3	-0.1	0.007	0.00047	0.002	0.026	-0.0005	0.12	0.00175	7.93	0.07
24-May-10	305	500	500	7.57	67		15																					
31-May-10	306	500	495	7.96	60	170	12	-1	16																			
7-Jun-10	307	500	498	7.78	63		13																					
14-Jun-10	308	500	500	7.75	66	185	13	1	17	0.02	0.19	0.35	15	-0.01	-0.005	-50	0.019	10.1	-0.1	-0.005	0.00022	0.001	0.042	-0.0005	0.11	0.00119	8.03	-0.02
21-Jun-10	309	500	480	7.83	62		12																					
28-Jun-10	310	500	490	7.90	62	190	13	1	17																			
5-Jul-10	311	500	495	7.84	66		12																					
12-Jul-10	312	500	480	7.99	61	180	14	1	17	0.0203	0.2	0.41	15.6	-0.01	-0.005	-50	0.017	10.9	-0.1	0.006	0.00085	0.002	0.039	-0.0005	0.11	0.00156	9.13	0.03
19-Jul-10	313	500	490	7.71	62		13																					
26-Jul-10	314	500	490	7.88	62	170	13	1	17																			
2-Aug-10	315	500	490	7.75	65		15																					
9-Aug-10	316	500	495	7.90	59	170	12	1	17	0.0231	0.2	0.41	15.4	-0.01	-0.005	-50	0.016	10.7	0.1	-0.005	0.00053	0.002	0.051	-0.0005	0.11	0.00159	8.47	0.03
16-Aug-10	317	500	490	7.90	63		15																					
23-Aug-10	318	500	490	8.03	66	150	13	1	17																			
30-Aug-10	319	500	500	7.92	60		13																					
6-Sep-10	320	500	495	7.72	68	180	16	1	17	0.0181	0.18	0.29	15.8	-0.01	-0.005	-50	0.017	11.7	-0.1	-0.005	0.00045	0.002	0.036	-0.0005	0.12	0.00189	8.25	-0.02
13-Sep-10	321	500	500	7.59	60		11																					
20-Sep-10	322	500	495	7.88	63	180	14	1	17																			
27-Sep-10	323	500	495	7.75	60		14																					
4-Oct-10	324	500	500	7.83	57	175	14	1	17	0.0173	0.18	0.3	14.6	-0.01	-0.005	-50	0.026	11.1	-0.1	0.01	0.0004	0.001	0.081	-0.0005	0.11	0.00138	7.51	0.06
11-Oct-10	325	500	495	7.84	52		15																					
18-Oct-10	326	500	500	7.85	63	180	14	1	17																			
25-Oct-10	327	500	490	7.85	67		16																					
1-Nov-10	328	500	500	8.04	69	185	14	1	18	0.0256	0.17	0.31	14.5	-0.01	-0.005	-50	0.032	11.6	-0.1	0.007	0.00048	-0.001	0.145	-0.0005	0.14	0.00172	8.35	0.08
8-Nov-10	329	500	495	7.68	68		13																					
15-Nov-10	330	500	480	7.99	63	195	16	1	18																			
22-Nov-10	331	500	490	7.95	68		14																					
29-Nov-10	332	500	495	7.86	64	180	15	-1	17	0.0221	0.2	0.35	15.1	-0.01	-0.005	-50	0.023	11.7	-0.1	-0.005	0.00101	0.002	0.061	-0.0005	0.12	0.00228	8.15	0.08
6-Dec-10	333	500	500	7.65	68		14																					
13-Dec-10	334	500	495	7.85	73	145	14	-1	17																			
20-Dec-10	335	500	490	7.60	70		14																					
27-Dec-10	336	500	500	7.68	61	175	11	-1	18	0.0225	0.21	0.35	13.7	-0.01	-0.005	-50	0.019	11	-0.1	0.007	0.00022	-0.001	0.016	-0.0005	0.1	0.0018	8.61	-0.02
3-Jan-11	337	500	485	7.65	81		18																					
10-Jan-11	338	500	480	7.81	78	155	15	1	18																			
17-Jan-11	339	500	490	7.68	76		14																					
24-Jan-11	340	500	495	7.75	73	150	14	-1	18	0.0243	0.17	0.37	15.8	-0.01	-0.005	-50	0.02	12.3	0.4	0.009	0.0009	0.001	0.093	-0.0005	0.12	0.00319	8.4	0.04

Leachate Chemistry of 31576 (HC-2)																		Alkalinity		Ion Balance		
Sampling Date	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance %
Detection Limits	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
7-Dec-09																						
14-Dec-09																						
21-Dec-09																						
28-Dec-09	0.04	0.14	-0.2	0.3	-0.04	0.09	65	-0.2	-0.02	-0.05	-0.1	-0.2	0.00018	0.5	2	-0.1	17.86	0.11	0.03	0.61	0.56	4.43%
4-Jan-10																						
11-Jan-10																						
18-Jan-10																						
25-Jan-10	0.07	0.4	-0.2	0.38	-0.04	0.076	58	-0.2	-0.02	-0.05	-0.1	0.3	0.00017	0.5	1	-0.1	16.91	0.07	0.02	0.59	0.58	1.09%
1-Feb-10																						
8-Feb-10																						
15-Feb-10																						
22-Feb-10	-0.015	0.12	-0.2	0.34	-0.04	0.076	55	-0.2	-0.02	-0.05	-0.1	-0.2	0.00015	0.4	4	-0.1	16.91	0.07	0.02	0.65	0.57	6.66%
1-Mar-10																						
8-Mar-10																						
15-Mar-10																						
22-Mar-10	0.04	0.13	-0.2	0.31	-0.04	0.1	54	-0.2	-0.02	-0.05	-0.1	-0.2	0.00015	0.5	-1	-0.1	15.94	0.05	0.02	0.57	0.56	0.59%
29-Mar-10																						
5-Apr-10																						
12-Apr-10																						
19-Apr-10	-0.002	0.11	0.07	0.4	-0.005	0.05	50.3	-0.02	-0.002	-0.005	-0.01	-0.5	0.000171	-0.2	1.4	-0.1	16.87	0.10	0.03	0.61	0.54	5.76%
26-Apr-10																						
3-May-10																						
10-May-10																						
17-May-10	-0.002	0.11	0.07	0.4	-0.005	0.07	51.4	-0.02	0.005	-0.005	-0.01	-0.5	0.000176	0.4	0.2	-0.1	17.91	0.07	0.02	0.61	0.57	3.42%
24-May-10																						
31-May-10																						
7-Jun-10																						
14-Jun-10	-0.002	0.11	0.06	0.3	-0.005	-0.05	49.2	-0.02	-0.002	-0.005	-0.01	-0.5	0.000153	0.4	0.9	-0.1	16.88	0.09	0.03	0.61	0.51	9.08%
21-Jun-10																						
28-Jun-10																						
5-Jul-10																						
12-Jul-10	-0.002	0.11	0.09	0.4	-0.005	0.06	49.9	-0.02	-0.002	-0.005	-0.01	-0.5	0.000164	0.4	2.1	-0.1	16.80	0.15	0.05	0.63	0.55	7.02%
19-Jul-10																						
26-Jul-10																						
2-Aug-10																						
9-Aug-10	-0.002	0.11	0.16	0.4	-0.005	0.06	47.3	-0.02	0.003	-0.005	0.02	-0.5	0.000165	0.5	2	-0.1	16.83	0.13	0.04	0.59	0.54	4.52%
16-Aug-10																						
23-Aug-10																						
30-Aug-10																						
6-Sep-10	-0.002	0.12	0.06	0.4	-0.005	0.05	49.6	-0.02	-0.002	-0.005	-0.01	-0.5	0.000155	0.3	0.8	-0.1	16.89	0.08	0.03	0.67	0.59	6.71%
13-Sep-10																						
20-Sep-10																						
27-Sep-10																						
4-Oct-10	0.018	0.1	0.05	0.3	-0.005	0.07	44.4	-0.02	0.003	-0.005	-0.01	-0.5	0.00016	-0.2	3.9	-0.1	16.86	0.11	0.03	0.63	0.56	6.12%
11-Oct-10																						
18-Oct-10																						
25-Oct-10																						
1-Nov-10	0.004	0.12	-0.04	0.4	-0.005	0.07	45.6	-0.02	-0.002	-0.005	0.02	-0.5	0.000179	0.4	1.5	-0.1	17.76	0.18	0.05	0.65	0.59	5.28%
8-Nov-10																						
15-Nov-10																						
22-Nov-10																						
29-Nov-10	0.002	0.11	0.08	0.4	-0.005	0.07	46.3	-0.02	0.002	-0.005	0.03	-0.5	0.000165	0.3	0.9	-0.1	16.85	0.11	0.04	0.65	0.59	5.09%
6-Dec-10																						
13-Dec-10																						
20-Dec-10																						
27-Dec-10	-0.002	0.1	0.05	0.4	-0.005	-0.05	41.6	-0.02	-0.002	-0.005	0.11	-0.5	0.000176	0.5	0.6	-0.1	17.90	0.08	0.02	0.59	0.55	3.24%
3-Jan-11																						
10-Jan-11																						
17-Jan-11																						
24-Jan-11	0.009	0.12	0.06	0.4	-0.005	0.08	44	-0.02	0.003	-0.005	0.01	-0.5	0.000226	-0.2	1.1	-0.1	17.88	0.09	0.03	0.65	0.62	2.54%

Leachate Chemistry of 31576 (HC-2)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08) Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb	Ni ppb
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**	**1**
31-Jan-11	341	500	495	7.59	75		15																					
7-Feb-11	342	500	495	7.81	73	180	16	-1	17																			
14-Feb-11	343	500	495	7.69	72		15																					
21-Feb-11	344	500	495	7.77	72	170	11	-1	17	0.0215	0.17	0.29	14.3	-0.01	-0.005	-50	0.021	12.1	-0.1	0.006	0.00052	0.001	0.032	-0.0005	0.12	0.00236	7.77	0.04
28-Feb-11	345	500	490	7.59	69		13																					
7-Mar-11	346	500	490	7.69	70	165	14	-1	18																			
14-Mar-11	347	500	490	7.55	68		15																					
21-Mar-11	348	500	495	7.73	73	170	14	-1	18	0.0229	0.17	0.3	15.1	-0.01	-0.005	-50	0.023	10.9	-0.1	0.009	0.00027	-0.001	0.02	-0.0005	0.11	0.00272	5.82	0.02
28-Mar-11	349	500	480	7.64	73		13																					
4-Apr-11	350	500	500	7.59	71	140	11	-1	17																			
11-Apr-11	351	500	495	7.94	62		12																					
18-Apr-11	352	500	495	7.84	65	160	13	1	17	0.0214	0.16	0.31	12.8	-0.01	-0.005	-50	0.025	10.3	-0.1	0.019	0.00025	0.002	0.02	-0.0005	0.10	0.00213	7.48	0.11
25-Apr-11	353	500	495	7.60	67		12																					
2-May-11	354	500	495	7.45	64	150	11	2	13																			
9-May-11	355	500	485	7.79	72		12																					
16-May-11	356	500	495	7.60	69	170	12	-1	15	0.0206	0.17	0.29	15.2	-0.01	-0.005	-50	0.029	11.7	-0.1	0.039	0.00062	-0.001	0.059	-0.0005	0.11	0.00479	7.56	0.06
23-May-11	357	500	500	7.60	69		14																					
30-May-11	358	500	485	7.87	61	145	11	1	15																			
6-Jun-11	359	500	495	7.51	63		11																					
13-Jun-11	360	500	495	7.45	64	155	12	1	14	0.0214	0.16	0.24	13.9	-0.01	-0.005	-50	0.026	11.1	-0.1	0.011	0.00036	-0.001	0.057	-0.0005	0.10	0.00187	7.92	0.06
20-Jun-11	361	500	500	7.67	65		13																					
27-Jun-11	362	500	490	7.52	66	155	13	2	16																			
4-Jul-11	363	500	500	7.57	67		11																					
11-Jul-11	364	500	495	7.73	68	170	12	1	15	0.0223	0.14	0.27	13.7	-0.01	-0.005	-50	0.018	11.4	-0.1	0.017	0.0012	0.001	0.063	-0.0005	0.09	0.00309	7.01	0.03
18-Jul-11	365	500	500	7.48	68		12																					
25-Jul-11	366	500	495	7.73	68	180	12	-1	16																			
1-Aug-11	367	500	500	7.53	75		13																					
8-Aug-11	368	500	500	7.62	68	170	12	-1	15	0.0244	0.14	0.25	14.9	-0.01	-0.005	-50	0.015	11.2	-0.1	0.023	0.00054	0.001	0.024	-0.0005	0.10	0.0020	7.24	0.06
15-Aug-11	369	500	500	7.64	73		12																					
22-Aug-11	370	500	490	7.60	67	185	11	-1	15																			
29-Aug-11	371	500	500	7.62	68		13																					
5-Sep-11	372	500	500	7.91	81	155	15	-1	13	0.0190	0.15	0.28	14.5	-0.01	-0.005	-50	0.024	11.7	-0.1	0.012	0.00032	-0.001	0.032	-0.0005	0.12	0.00251	7.06	0.13
12-Sep-11	373	500	495																									
19-Sep-11	374	500	495																									
26-Sep-11	375	500	490																									
3-Oct-11	376	500	485	7.65	68	155	13	-1	17																			
10-Oct-11	377	500	500																									
17-Oct-11	378	500	500																									
24-Oct-11	379	500	475																									
31-Oct-11	380	500	500	7.44	75	160	13	-1	17																			
7-Nov-11	381	500	490																									
14-Nov-11	382	500	500																									
21-Nov-11	383	500	475																									
28-Nov-11	384	500	495	7.59	72	120	13	-1	15																			
5-Dec-11	385	500	455																									
12-Dec-11	386	500	485																									
19-Dec-11	387	500	475																									
26-Dec-11	388	500	495	7.59	79	140	14	-1	16																			
2-Jan-12	389	500	490																									
9-Jan-12	390	500	490																									
16-Jan-12	391	500	475																									
23-Jan-12	392	500	480	7.54	68	145	12	-1	17	0.0271	0.14	0.28	13.4	-0.01	-0.005	-50	0.015	11.5	-0.1	0.007	0.00037	0.005	0.039	-0.0005	0.1	0.00086	7.18	-0.02
30-Jan-12	393	500	480																									
6-Feb-12	394	500	490																									
13-Feb-12	395	500	485																									
20-Feb-12	396	500	485	7.74	64	135	12	-1	16																			
27-Feb-12	397	500	480																									
5-Mar-12	398	500	485																									

Leachate Chemistry of 31576 (HC-2)																		Alkalinity		Ion Balance		
Sampling Date	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance %
Detection Limits	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
31-Jan-11																						
7-Feb-11																						
14-Feb-11																						
21-Feb-11	0.019	0.12	0.08	0.4	-0.005	0.08	41	-0.02	-0.002	-0.005	-0.01	-0.5	0.000181	0.4	1.4	-0.1	16.88	0.09	0.03	0.57	0.61	-3.43%
28-Feb-11																						
7-Mar-11																						
14-Mar-11																						
21-Mar-11	0.022	0.11	0.04	0.3	-0.005	0.08	43.4	-0.02	0.002	-0.005	-0.01	-0.5	0.000139	0.4	1.6	-0.1	17.88	0.09	0.03	0.65	0.55	8.49%
28-Mar-11																						
4-Apr-11																						
11-Apr-11																						
18-Apr-11	0.015	0.10	0.1	0.3	0.007	0.07	44.9	-0.02	0.018	-0.005	0.02	-0.5	0.000144	0.5	4.1	-0.1	16.86	0.11	0.03	0.61	0.52	8.15%
25-Apr-11																						
2-May-11																						
9-May-11																						
16-May-11	0.01	0.10	0.09	0.4	-0.005	0.07	41.5	-0.02	0.003	-0.005	-0.01	-0.5	0.000224	0.3	4.6	-0.1	14.92	0.06	0.02	0.55	0.59	-3.35%
23-May-11																						
30-May-11																						
6-Jun-11																						
13-Jun-11	0.009	0.11	0.06	0.4	-0.005	0.07	35.7	-0.02	-0.002	-0.005	-0.01	-0.5	0.000133	0.4	8.4	-0.1	13.95	0.04	0.01	0.53	0.56	-2.59%
20-Jun-11																						
27-Jun-11																						
4-Jul-11																						
11-Jul-11	0.008	0.10	0.04	0.4	-0.005	0.06	37.2	-0.02	-0.002	-0.005	0.06	-0.5	0.000356	0.3	3.6	-0.1	14.90	0.08	0.03	0.55	0.57	-1.91%
18-Jul-11																						
25-Jul-11																						
1-Aug-11																						
8-Aug-11	-0.002	0.12	0.06	0.3	-0.005	0.07	37.2	-0.02	0.002	-0.005	-0.01	-0.5	0.000119	0.4	5.8	-0.1	14.92	0.06	0.02	0.55	0.56	-1.20%
15-Aug-11																						
22-Aug-11																						
29-Aug-11																						
5-Sep-11	0.004	0.10	0.07	0.3	-0.005	0.06	37.3	-0.02	-0.002	-0.005	0.01	-0.5	0.000148	-0.2	4.0	-0.1	12.86	0.10	0.04	0.57	0.59	-1.38%
12-Sep-11																						
19-Sep-11																						
26-Sep-11																						
3-Oct-11																						
10-Oct-11																						
17-Oct-11																						
24-Oct-11																						
31-Oct-11																						
7-Nov-11																						
14-Nov-11																						
21-Nov-11																						
28-Nov-11																						
5-Dec-11																						
12-Dec-11																						
19-Dec-11																						
26-Dec-11																						
2-Jan-12																						
9-Jan-12																						
16-Jan-12																						
23-Jan-12	-0.002	0.12	0.06	0.4	-0.005	0.08	33.0	-0.02	0.003	-0.005	-0.2	-0.5	0.000144	0.4	0.5	-0.1	16.43	0.05	0.02	0.58	0.58	0.13%
30-Jan-12																						
6-Feb-12																						
13-Feb-12																						
20-Feb-12																						
27-Feb-12																						
5-Mar-12																						

Leachate Chemistry of 31576 (HC-2)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08) Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb	Ni ppb
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**	**1**
12-Mar-12	399	500	495																									
19-Mar-12	400	500	465	7.83	64	125	11	-1	15																			
26-Mar-12	401	500	485																									
2-Apr-12	402	500	490																									
9-Apr-12	403	500	490																									
16-Apr-12	404	500	490	7.61	62	135	12	-1	15	0.0228	0.13	0.18	12.3	-0.01	-0.005	-50	0.021	10.1	-0.1	0.005	0.00054	0.006	0.049	-0.0005	0.09	0.00225	5.69	0.025
23-Apr-12	405	500	495																									
30-Apr-12	406	500	480																									
7-May-12	407	500	490																									
14-May-12	408	500	485	7.70	73	120	13	-1	16																			
21-May-12	409	500	495																									
28-May-12	410	500	490																									
4-Jun-12	411	500	485																									
11-Jun-12	412	500	480	7.85	71	130	13	-1	15																			
18-Jun-12	413	500	490																									
25-Jun-12	414	500	495																									
2-Jul-12	415	500	490																									
9-Jul-12	416	500	495	7.76	68	135	11	1	15	0.0219	0.142	0.323	11.6	-0.01	-0.005	-50	0.0168	10.9	-0.1	0.0055	0.00037	0.0014	0.0323	-0.0005	0.085	0.00267	6.14	0.103
16-Jul-12	417	500	495																									
23-Jul-12	418	500	475																									
30-Jul-12	419	500	490																									
6-Aug-12	420	500	490	7.72	73	140	13	-1	16																			
13-Aug-12	421	500	490																									
20-Aug-12	422	500	475																									
27-Aug-12	423	500	490																									
3-Sep-12	424	500	485	7.68	74	135	14	1	16																			
10-Sep-12	425	500	480																									
17-Sep-12	426	500	475																									
24-Sep-12	427	500	480																									
1-Oct-12	428	500	485	7.70	71	145	12	-1	16	0.0234	0.227	0.301	11.3	-0.01	-0.005	-50	0.015	11	-0.1	0.016	0.0055	0.0066	0.11	-0.0005	0.095	0.00232	6.19	0.095
8-Oct-12	429	500	475																									
15-Oct-12	430	500	485																									
22-Oct-12	431	500	485																									
29-Oct-12	432	500	480	7.74	69	140	12	-1	16																			
5-Nov-12	433	500	470																									
12-Nov-12	434	500	480																									
19-Nov-12	435	500	475																									
26-Nov-12	436	500	475	7.73	65	140	12	3	16																			
3-Dec-12	437	500	485																									
10-Dec-12	438	500	480																									
17-Dec-12	439	500	480																									
24-Dec-12	440	500	470	7.65	62	135	12	-1	17	0.0246	0.115	0.22	10.8	-0.01	-0.005	-50	0.019	11.2	0.2	0.01	0.00046	0.0026	0.019	-0.0005	0.09	0.00296	5.29	0.102
31-Dec-12	441	500	485																									
7-Jan-13	442	500	480																									

Leachate Chemistry of 31576 (HC-2)																		Alkalinity		Ion Balance		
Sampling Date	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance %
Detection Limits	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
12-Mar-12																						
19-Mar-12																						
26-Mar-12																						
2-Apr-12																						
9-Apr-12																						
16-Apr-12	-0.002	0.097	-0.04	0.29	-0.005	0.064	28.7	-0.02	0.004	-0.005	-0.2	-0.5	0.000111	0.27	7.05	-0.1	14.72	0.06	0.02	0.54	0.51	2.83%
23-Apr-12																						
30-Apr-12																						
7-May-12																						
14-May-12																						
21-May-12																						
28-May-12																						
4-Jun-12																						
11-Jun-12																						
18-Jun-12																						
25-Jun-12																						
2-Jul-12																						
9-Jul-12	0.0043	0.087	0.055	0.35	-0.005	0.07	27.6	-0.02	-0.002	-0.005	-0.2	-0.5	0.000108	0.87	1.58	-0.1	14.59	0.08	0.03	0.51	0.55	-3.19%
16-Jul-12																						
23-Jul-12																						
30-Jul-12																						
6-Aug-12																						
13-Aug-12																						
20-Aug-12																						
27-Aug-12																						
3-Sep-12																						
10-Sep-12																						
17-Sep-12																						
24-Sep-12																						
1-Oct-12	0.0055	0.106	0.042	0.33	-0.005	0.086	27.2	-0.02	0.002	-0.005	0.26	-0.5	0.000114	0.59	0.53	-0.1	15.50	0.07	0.03	0.56	0.55	0.95%
8-Oct-12																						
15-Oct-12																						
22-Oct-12																						
29-Oct-12																						
5-Nov-12																						
12-Nov-12																						
19-Nov-12																						
26-Nov-12																						
3-Dec-12																						
10-Dec-12																						
17-Dec-12																						
24-Dec-12	0.0046	0.117	0.044	0.34	-0.005	0.108	25.4	-0.02	0.004	-0.005	-0.2	-0.5	0.000099	0.35	9.12	-0.1	17.01	0.07	0.02	0.58	0.56	1.70%
31-Dec-12																						
7-Jan-13																						

Note:

Terminated as per email from Collen Hughes (10-Jan-13)

Schedule change as per Ron Martel's email dated 8-Sep-11.

ICP-ES to be done at Cantest effective 6-Oct-08 as per email from Ron Martel (1-Oct-08).

Switched to ICP-MS at Cantest effective 6-Oct-08 as per e-mail from Christina James.

Sulphate (by Colourimetry), Acidity & Alkalinity (by PC Titrator) is now done by water lab at Maxxam from 2-May-11.

Leachate Chemistry of SE-05-17 (HC-6)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08): Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**
6-Oct-08	158	500	495	7.64	38	145	7	-1	14	0.026	-1	-1	2	-1	-1	70	-0.2	7.65	-1	-1	0.014	-0.05	-1	-0.001	0.06	-0.001	144
13-Oct-08	159	500	490	7.57	42		4			-0.05	-50	-30	2	-3	#N/A	-10	-10	7.87	-10	-20	-20	-0.01	-30	#N/A	0.06	-0.003	150
20-Oct-08	160	500	490	7.66	40	150	7	-1	15																		
27-Oct-08	161	500	500	7.52	42		8																				
3-Nov-08	162	500	495	7.52	41	170	6	-1	13	0.035	-1	-1	2	-1	-1	-50	-0.2	7.15	-1	-1	0.003	-0.05	-1	-0.001	0.05	-0.001	150
10-Nov-08	163	500	470	7.39	45		7			-0.05	-50	-30	2	-3	#N/A	-10	-10	7.85	-10	-20	-20	0.01	-30	#N/A	0.06	-0.003	160
17-Nov-08	164	500	475	7.41	44	150	6	-1	13																		
24-Nov-08	165	500	475	7.41	52		7																				
1-Dec-08	166	500	495	7.54	45	190	6	1	14	0.093	-1	-1	2	-1	-1	-50	-0.2	7.94	-1	-1	0.021	-0.05	-1	-0.001	0.06	-0.001	170
8-Dec-08	167	500	495	7.41	44		7			-0.05	-50	-30	2	-3	#N/A	-10	-10	8.07	-10	-20	-20	-0.01	-30	#N/A	0.06	-0.003	140
15-Dec-08	168	500	455	7.64	41	180	3	-1	12																		
22-Dec-08	169	500	505	7.53	46		6																				
29-Dec-08	170	500	495	7.40	47	190	5	1	14	0.04	-1	-1	2	-1	-1	-50	-0.2	8.27	-1	-1	0.002	-0.05	-1	-0.001	0.05	-0.001	202
5-Jan-09	171	500	495	7.33	45		6																				
12-Jan-09	172	500	500	7.35	44	200	7	1	14																		
19-Jan-09	173	500	495	7.23	45		7																				
26-Jan-09	174	500	440	7.02	41	150	4	1	11	0.032	-0.2	0.5	2.1	-0.2	-0.2	-10	-0.04	7.37	-0.2	-0.2	0.013	-0.01	-0.2	-0.0002	0.05	0.0006	135
2-Feb-09	175	500	460	7.00	48		10																				
9-Feb-09	176	500	490	7.50	48	195	9	1	13																		
16-Feb-09	177	500	500	7.22	49		7																				
23-Feb-09	178	500	460	7.44	44	200	6	1	12	0.019	-0.2	0.4	2.2	-0.2	-0.2	-10	-0.04	7.54	-0.2	-0.2	0.0041	-0.01	-0.2	-0.0002	0.05	0.0004	107
2-Mar-09	179	500	435	7.40	42		6																				
9-Mar-09	180	500	470	7.58	49	150	7	1	13																		
16-Mar-09	181	500	480	7.52	50		9																				
23-Mar-09	182	500	485	7.59	51	200	6	-1	13	0.018	-0.2	0.3	2.3	-0.2	-0.2	-10	-0.04	8.79	-0.2	-0.2	0.004	-0.01	-0.2	-0.0002	0.06	0.0004	155
30-Mar-09	183	500	500	7.41	46		7																				
6-Apr-09	184	500	495	7.42	45	200	6	-1	12																		
13-Apr-09	185	500	470	7.38	48		1																				
20-Apr-09	186	500	475	7.43	49	180	6	-1	12	0.016	-0.2	0.3	1.9	-0.2	-0.2	-10	-0.04	8.15	-0.2	-0.2	0.003	-0.01	-0.2	-0.0002	0.05	0.0004	182
27-Apr-09	187	500	460	7.55	48		8																				
4-May-09	188	500	500	7.57	47	190	9	1	12																		
11-May-09	189	500	475	7.40	51		8																				
18-May-09	190	500	495	7.51	50	180	5	1	13	0.017	-0.2	0.3	2.2	-0.2	-0.2	-10	-0.04	8.51	-0.2	-0.2	0.0028	-0.01	-0.2	-0.0002	0.05	0.0003	197
25-May-09	191	500	490	7.34	43		4																				
1-Jun-09	192	500	500	7.47	44	170	6	1	12																		
8-Jun-09	193	500	500	7.40	45		5																				
15-Jun-09	194	500	490	7.45	42	175	5	1	11	0.018	-0.2	-0.2	1.7	-0.2	-0.2	-10	-0.04	7.14	-0.2	-0.2	0.0035	-0.01	-0.2	-0.0002	0.04	0.0004	164
22-Jun-09	195	500	490	7.39	45		8																				
29-Jun-09	196	500	500	7.53	43	155	5	1	12																		
6-Jul-09	197	500	485	7.37	42		5																				
13-Jul-09	198	500	495	7.52	44	160	5	-1	11	0.015	-0.2	0.3	2	-0.2	-0.2	-10	-0.04	7.51	-0.2	-0.2	0.0028	-0.01	-0.2	-0.0002	0.04	0.0005	172
20-Jul-09	199	500	495	7.41	48		8																				
27-Jul-09	200	500	490	7.52	51	170	8	-1	12																		
3-Aug-09	201	500	485	7.37	56		8																				
10-Aug-09	202	500	475	7.31	46	180	7	-1	11	0.017	-0.2	0.3	1.9	-0.2	-0.2	-10	-0.04	6.84	-0.2	-0.2	0.0022	-0.01	-0.2	-0.0002	0.04	0.0003	145
17-Aug-09	203	500	485	7.48	49		5																				
24-Aug-09	204	500	490	7.49	43	180	5	-1	11																		
31-Aug-09	205	500	490	7.60	49		4																				
7-Sep-09	206	500	475	7.53	48	180	8	-1	12	0.017	-0.2	0.3	2	-0.2	-0.2	-10	-0.04	7.83	-0.2	-0.2	0.0024	-0.01	-0.2	-0.0002	0.04	0.0004	150
14-Sep-09	207	500	485	7.51	46		3																				
21-Sep-09	208	500	495	7.53	41	180	5	-1	12																		
28-Sep-09	209	500	495	7.51	45		5																				
5-Oct-09	210	500	495	7.46	46	190	6	-1	12	0.015	-0.1	0.3	1.6	-0.1	-0.1	-5	0.03	6.96	-0.2	-0.1	0.0021	-0.01	-0.05	-0.0001	0.041	0.0003	146
12-Oct-09	211	500	485	7.55	46		5																				
19-Oct-09	212	500	495	7.44	44	175	5	-1	12																		

Leachate Chemistry of SE-05-17 (HC-6)																						
																		Alkalinity			Ion Balance	
Sampling Date	Ni	P	K	Se	Si	Ag	Na	Sr	Te	Tl	Th	Sn	Ti	U	V	Zn	Zr	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance
	ppb	ppm	ppm	ppb	ppm	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb						%
Detection Limits	1	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
6-Oct-08	-1	-0.15	-0.1	-1	0.5	-0.25	0.11	9	-1	-0.1	-0.5	-1	-1	-0.0005	-1	-5	-10	13.42	0.06	0.02	0.42	0.39	3.64%
13-Oct-08	-20	-0.15	-0.25	#N/A	0.56	-10	-0.1	11	#N/A	#N/A	#N/A	-30	-5	#N/A	-10	-5	-20						
20-Oct-08																							
27-Oct-08																							
3-Nov-08	-1	-0.15	-0.1	-1	0.5	-0.25	0.08	9	-1	-0.1	-0.5	-1	-1	-0.0005	-1	-5	-10	12.94	0.04	0.02	0.39	0.36	3.26%
10-Nov-08	-20	-0.15	0.3	#N/A	0.5	-10	-0.1	10	#N/A	#N/A	#N/A	-30	-5	#N/A	-10	-5	-20						
17-Nov-08																							
24-Nov-08																							
1-Dec-08	-1	-0.15	-0.1	-1	0.3	-0.25	0.09	10	-1	-0.1	-0.5	-1	-1	-0.0005	-1	-5	-10	13.44	0.04	0.02	0.40	0.40	-1.24%
8-Dec-08	-20	-0.15	-0.25	#N/A	0.5	-10	-0.1	11	#N/A	#N/A	#N/A	-30	-5	#N/A	-10	-5	-20						
15-Dec-08																							
22-Dec-08																							
29-Dec-08	-1	-0.15	-0.1	-1	1	-0.25	-0.05	11	11	-0.1	-0.1	-0.5	-1	-0.0005	-1	5	-10	13.46	0.03	0.01	0.37	0.41	-5.13%
5-Jan-09																							
12-Jan-09																							
19-Jan-09																							
26-Jan-09	-0.2	-0.03	0.15	0.6	0.58	-0.05	0.05	9.7	-0.2	0.03	-0.1	-0.2	-0.2	-0.0001	0.9	-1	-2	10.98	0.01	0.01	0.30	0.37	-10.40%
2-Feb-09																							
9-Feb-09																							
16-Feb-09																							
23-Feb-09	-0.2	-0.03	0.09	0.5	0.46	-0.05	0.04	9.7	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.7	-1	-2	11.46	0.03	0.01	0.36	0.38	-3.29%
2-Mar-09																							
9-Mar-09																							
16-Mar-09																							
23-Mar-09	-0.2	-0.03	0.09	-0.2	0.51	-0.05	0.05	11	-0.2	0.02	-0.1	-0.2	-0.2	-0.0001	0.8	-1	-2	12.93	0.05	0.02	0.39	0.44	-6.85%
30-Mar-09																							
6-Apr-09																							
13-Apr-09																							
20-Apr-09	-0.2	-0.03	0.05	-0.2	0.42	-0.05	0.04	10	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.6	#N/A	-2	11.96	0.03	0.01	0.37	0.41	-5.54%
27-Apr-09																							
4-May-09																							
11-May-09																							
18-May-09	-0.2	-0.03	0.07	0.5	0.56	-0.05	0.05	9.5	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.7	-1	-2	12.94	0.04	0.02	0.36	0.43	-7.88%
25-May-09																							
1-Jun-09																							
8-Jun-09																							
15-Jun-09	-0.2	-0.03	0.06	-0.2	0.47	-0.05	0.04	7.6	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.6	-1	-2	10.96	0.03	0.01	0.32	0.36	-4.95%
22-Jun-09																							
29-Jun-09																							
6-Jul-09																							
13-Jul-09	0.2	-0.03	0.06	-0.2	0.46	-0.05	0.04	9.1	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.6	-1	-2	10.95	0.03	0.02	0.32	0.38	-7.38%
20-Jul-09																							
27-Jul-09																							
3-Aug-09																							
10-Aug-09	-0.2	-0.03	0.02	-0.2	0.44	-0.05	0.04	8.4	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.6	-1	-2	10.97	0.02	0.01	0.37	0.34	3.35%
17-Aug-09																							
24-Aug-09																							
31-Aug-09																							
7-Sep-09	-0.2	-0.03	0.07	-0.2	0.43	-0.05	0.04	9	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.6	-1	-2	11.95	0.04	0.02	0.41	0.39	1.85%
14-Sep-09																							
21-Sep-09																							
28-Sep-09																							
5-Oct-09	-0.2	-0.015	0.04	0.3	0.33	-0.04	0.036	9.3	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.5	-1	-0.1	11.95	0.03	0.01	0.37	0.35	2.35%
12-Oct-09																							
19-Oct-09																							

Leachate Chemistry of SE-05-17 (HC-6)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08) Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**
26-Oct-09	213	500	490	7.55	44		3																				
2-Nov-09	214	500	495	7.48	48	170	5	1	11	0.016	-0.1	0.3	1.9	-0.1	-0.1	-5	0.06	7.71	-0.2	-0.1	0.0032	-0.01	-0.05	0.0008	0.054	0.0004	156
9-Nov-09	215	500	495	7.59	47		7																				
16-Nov-09	216	500	480	7.40	46	160	5	-1	12																		
23-Nov-09	217	500	485	7.37	49		5																				
30-Nov-09	218	500	475	7.48	47	150	6	1	11	0.017	-0.1	0.4	1.9	-0.1	-0.1	-5	-0.01	8.42	-0.2	-0.1	0.0033	-0.01	-0.05	0.0004	0.045	0.0003	131
7-Dec-09	219	500	495	7.47	40		5																				
14-Dec-09	220	500	495	7.52	40	150	5	1	12																		
21-Dec-09	221	500	500	7.48	38		4																				
28-Dec-09	222	500	490	7.56	42	150	6	1	13	0.013	-0.1	0.3	1.8	-0.1	-0.1	-5	0.06	6.86	-0.2	-0.1	0.0028	-0.01	-0.05	-0.0001	0.039	0.0004	151
4-Jan-10	223	500	495	7.52	39		7																				
11-Jan-10	224	500	495	7.54	37	170	4	1	12																		
18-Jan-10	225	500	480	7.52	40		6																				
25-Jan-10	226	500	490	7.43	40	150	6	1	12	0.015	-0.1	0.2	1.4	-0.1	-0.1	-5	0.04	7.19	-0.2	-0.1	0.0028	-0.01	-0.05	-0.0001	0.034	0.0002	143
1-Feb-10	227	500	495	7.18	42		7																				
8-Feb-10	228	500	495	7.45	39	160	6	1	12																		
15-Feb-10	229	500	480	7.39	41		7																				
22-Feb-10	230	500	475	7.55	45	180	6	1	12	0.013	-0.1	0.2	1.8	-0.1	-0.1	-5	0.02	7.42	-0.2	-0.1	0.0022	-0.01	-0.05	-0.0001	0.044	0.0003	130
1-Mar-10	231	500	495	7.51	40		9																				
8-Mar-10	232	500	495	7.39	40	190	8	1	11																		
15-Mar-10	233	500	495	7.30	36		5																				
22-Mar-10	234	500	495	7.38	37	195	4	1	11	0.016	-0.1	0.2	1.4	-0.1	-0.1	-5	0.04	6.52	-0.2	-0.1	0.0027	-0.01	-0.05	-0.0001	0.036	0.0004	129
29-Mar-10	235	500	485	7.47	39		5																				
5-Apr-10	236	500	485	7.42	39	220	5	2	13																		
12-Apr-10	237	500	480	7.32	38		6																				
19-Apr-10	238	500	490	7.51	39	160	6	1	12	0.0177	0.06	0.24	1.63	-0.01	-0.005	-50	0.085	6.69	-0.1	0.015	0.00261	-0.001	0.017	-0.0005	-0.05	0.00035	138
26-Apr-10	239	500	490	7.44	39		5																				
3-May-10	240	500	480	7.51	38	155	6	1	12																		
10-May-10	241	500	495	7.34	39		6																				
17-May-10	242	500	485	7.41	38	170	6	1	12	0.0168	0.05	0.21	1.59	-0.01	-0.005	-50	0.088	6.51	-0.1	0.021	0.00297	0.001	0.023	-0.0005	-0.05	0.00023	123
24-May-10	243	500	495	7.49	37		7																				
31-May-10	244	500	480	7.48	35	180	6	-1	11																		
7-Jun-10	245	500	500	7.45	37		6																				
14-Jun-10	246	500	485	7.48	39	185	5	1	12	0.0164	0.05	0.22	1.56	-0.01	-0.005	-50	0.037	5.29	-0.1	0.011	0.00157	-0.001	0.031	-0.0005	-0.05	0.00018	116
21-Jun-10	247	500	495	7.41	36		5																				
28-Jun-10	248	500	485	7.52	35	185	6	1	11																		
5-Jul-10	249	500	490	7.44	36		5																				
12-Jul-10	250	500	475	7.53	28	185	6	1	12	0.0163	0.06	0.24	1.65	-0.01	-0.005	-50	0.041	6.61	-0.1	0.014	0.00209	-0.001	0.012	-0.0005	-0.05	0.00025	117
19-Jul-10	251	500	495	7.46	33		5																				
26-Jul-10	252	500	485	7.55	36	170	6	1	12																		
2-Aug-10	253	500	470	7.49	33		7																				
9-Aug-10	254	500	480	7.56	32	195	6	1	12	0.0183	0.05	0.26	1.5	-0.01	-0.005	-50	0.019	5.87	-0.1	0.016	0.00268	-0.001	0.034	-0.0005	-0.05	0.00035	96.3
16-Aug-10	255	500	475	7.45	36		7																				
23-Aug-10	256	500	495	7.52	38	170	6	1	11																		
30-Aug-10	257	500	490	7.48	35		5																				
6-Sep-10	258	500	485	7.79	40	195	8	1	12	0.0183	0.05	0.24	1.61	-0.01	-0.005	-50	0.048	7.07	-0.1	0.016	0.00256	0.003	0.107	-0.0005	-0.05	0.0004	113
13-Sep-10	259	500	495	7.39	33		5																				
20-Sep-10	260	500	490	7.45	35	190	6	1	12																		
27-Sep-10	261	500	495	7.64	32		6																				
4-Oct-10	262	500	490	7.56	28	185	7	-1	12	0.0178	0.05	0.26	1.86	-0.01	-0.005	-50	0.047	6.13	-0.1	0.018	0.00237	0.001	0.08	-0.0005	-0.05	0.0003	94.7
11-Oct-10	263	500	490	7.41	23		7																				
18-Oct-10	264	500	485	7.53	39	175	7	-1	13																		
25-Oct-10	265	500	495	7.39	41		8																				
1-Nov-10	266	500	490	7.54	41	185	6	-1	12	0.0211	0.04	0.92	1.56	-0.01	-0.005	-50	0.026	6.39	-0.1	0.023	0.00275	-0.001	0.04	-0.0005	0.05	0.00033	97.3

Leachate Chemistry of SE-05-17 (HC-6)																			Alkalinity		Ion Balance		
Sampling Date	Ni	P	K	Se	Si	Ag	Na	Sr	Te	Tl	Th	Sn	Ti	U	V	Zn	Zr	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance
	ppb	ppm	ppm	ppb	ppm	ppb	ppm	ppb	ppb	ppb	ppb	ppb	ppb	ppm	ppb	ppb	ppb						%
Detection Limits	1	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
26-Oct-09																							
2-Nov-09	0.2	-0.015	0.04	0.2	0.5	-0.04	0.054	11	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.5	-1	-0.1	10.95	0.03	0.02	0.32	0.39	-8.83%
9-Nov-09																							
16-Nov-09																							
23-Nov-09																							
30-Nov-09	-0.2	0.02	0.05	0.3	0.41	-0.04	0.064	14.9	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.5	-1	-0.1	10.95	0.03	0.02	0.35	0.42	-10.01%
7-Dec-09																							
14-Dec-09																							
21-Dec-09																							
28-Dec-09	-0.2	0.05	0.05	0.3	0.34	-0.04	0.08	8.9	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.5	-1	-0.1	12.94	0.04	0.02	0.39	0.35	5.45%
4-Jan-10																							
11-Jan-10																							
18-Jan-10																							
25-Jan-10	-0.2	-0.015	0.04	0.3	0.41	-0.04	0.032	8.3	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.5	-1	-0.1	11.46	0.03	0.01	0.36	0.36	-0.53%
1-Feb-10																							
8-Feb-10																							
15-Feb-10																							
22-Feb-10	-0.2	-0.015	0.05	-0.2	0.43	-0.04	0.049	8.7	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.5	1	-0.1	11.94	0.04	0.02	0.37	0.40	-4.86%
1-Mar-10																							
8-Mar-10																							
15-Mar-10																							
22-Mar-10	0.2	0.03	0.05	-0.2	0.36	-0.04	0.066	7.5	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.5	0.9	-0.1	10.96	0.02	0.01	0.30	0.36	-7.91%
29-Mar-10																							
5-Apr-10																							
12-Apr-10																							
19-Apr-10	-0.02	-0.002	-0.05	0.24	0.4	-0.005	-0.05	8.46	-0.02	0.005	-0.005	-0.01	-0.5	0.000039	0.3	2	-0.1	11.95	0.04	0.02	0.37	0.39	-3.36%
26-Apr-10																							
3-May-10																							
10-May-10																							
17-May-10	0.12	-0.002	-0.05	0.23	0.4	-0.005	-0.05	8.34	-0.02	0.008	-0.005	0.01	-0.5	0.000032	0.4	0.2	-0.1	11.96	0.03	0.01	0.37	0.33	5.57%
24-May-10																							
31-May-10																							
7-Jun-10																							
14-Jun-10	-0.02	-0.002	-0.05	0.17	0.3	-0.005	-0.05	8.1	-0.02	0.006	-0.005	0.02	-0.5	0.00003	0.5	0.9	-0.1	11.95	0.03	0.02	0.34	0.29	8.88%
21-Jun-10																							
28-Jun-10																							
5-Jul-10																							
12-Jul-10	-0.02	-0.002	-0.05	0.24	0.5	-0.005	-0.05	8.75	-0.02	0.009	-0.005	-0.01	-0.5	0.000041	0.5	1.6	-0.1	11.95	0.04	0.02	0.37	0.37	-1.24%
19-Jul-10																							
26-Jul-10																							
2-Aug-10																							
9-Aug-10	0.03	-0.002	-0.05	0.23	0.3	-0.005	-0.05	7.75	-0.02	0.008	-0.005	0.01	-0.5	0.000036	0.6	1.8	-0.1	11.94	0.04	0.02	0.37	0.34	3.14%
16-Aug-10																							
23-Aug-10																							
30-Aug-10																							
6-Sep-10	-0.02	-0.002	0.05	0.23	0.5	-0.005	0.03	8.68	-0.02	0.007	-0.005	0.01	-0.5	0.000034	0.4	1.6	-0.1	11.90	0.07	0.03	0.41	0.40	0.90%
13-Sep-10																							
20-Sep-10																							
27-Sep-10																							
4-Oct-10	0.13	0.018	-0.05	0.19	0.4	-0.005	0.06	8.39	-0.02	0.008	-0.005	0.06	-0.5	0.000038	0.4	5.3	-0.1	11.94	0.04	0.02	0.39	0.47	-9.46%
11-Oct-10																							
18-Oct-10																							
25-Oct-10																							
1-Nov-10	0.1	0.006	0.06	-0.04	0.4	-0.005	-0.05	8.08	-0.02	0.008	-0.005	0.03	-0.5	0.000057	0.5	1.5	-0.1	11.94	0.04	0.02	0.37	0.37	-0.18%

Leachate Chemistry of SE-05-17 (HC-6)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08) Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**
8-Nov-10	267	500	490	7.43	39		6																				
15-Nov-10	268	500	470	7.52	35	205	8	-1	12																		
22-Nov-10	269	500	490	7.54	40		7																				
29-Nov-10	270	500	480	7.51	39	190	7	-1	12	0.0204	0.05	0.27	1.5	-0.01	-0.005	-50	0.047	6.67	-0.1	0.015	0.00271	-0.001	0.046	-0.0005	-0.05	0.00026	97.3
6-Dec-10	271	500	485	7.32	43		6																				
13-Dec-10	272	500	490	7.48	42	150	7	-1	12																		
20-Dec-10	273	500	500	7.40	45		8																				
27-Dec-10	274	500	495	7.56	34	180	5	1	12	0.0151	0.04	0.26	1.31	-0.01	-0.005	-50	0.024	5.22	0.1	0.015	0.00202	-0.001	0.006	-0.0005	-0.05	0.00028	66.5
3-Jan-11	275	500	495	7.40	45		8																				
10-Jan-11	276	500	495	7.47	45	180	7	1	12																		
17-Jan-11	277	500	485	7.49	45		7																				
24-Jan-11	278	500	485	7.39	44	170	6	1	11	0.0216	0.04	0.2	2.15	-0.01	-0.005	-50	0.051	7.04	0.3	0.013	0.00357	0.001	0.154	-0.0005	-0.05	0.00038	96.8
31-Jan-11	279	500	500	7.31	46		7																				
7-Feb-11	280	500	500	7.42	40	180	7	1	11																		
14-Feb-11	281	500	500	7.38	42		6																				
21-Feb-11	282	500	500	7.40	44	175	5	-1	11	0.0183	0.05	0.23	2.36	-0.01	-0.005	-50	0.062	6.94	-0.1	0.018	0.00218	0.001	0.074	-0.0005	-0.05	0.00045	89.1
28-Feb-11	283	500	480	7.39	43		6																				
7-Mar-11	284	500	495	7.43	42	175	6	-1	11																		
14-Mar-11	285	500	490	7.40	42		7																				
21-Mar-11	286	500	485	7.40	43	180	6	-1	11	0.0165	0.04	0.22	2.16	-0.01	-0.005	-50	0.008	6.77	-0.1	0.021	0.00194	-0.001	0.007	-0.0005	-0.05	0.00037	72.7
28-Mar-11	287	500	490	7.27	41		7																				
4-Apr-11	288	500	495	7.15	41	150	5	-1	11																		
11-Apr-11	289	500	485	7.31	32		5																				
18-Apr-11	290	500	485	7.05	38	170	9	-1	11	0.0172	0.05	0.15	2.27	-0.01	-0.005	-50	0.03	6.37	-0.1	0.016	0.00188	-0.001	0.053	-0.0005	-0.05	0.00042	88.6
25-Apr-11	291	500	490	7.36	39		5																				
2-May-11	292	500	495	7.32	37	160	5	1	10																		
9-May-11	293	500	490	7.31	38		5																				
16-May-11	294	500	495	7.35	39	195	5	-1	10	0.0163	0.05	0.17	1.67	-0.01	-0.005	-50	0.007	6.85	-0.1	0.031	0.0022	-0.001	0.019	-0.0005	-0.05	0.00113	86.5
23-May-11	295	500	500	7.28	40		6																				
30-May-11	296	500	475	7.33	34	150	7	-1	8																		
6-Jun-11	297	500	495	7.37	36		5																				
13-Jun-11	298	500	480	7.30	37	145	5	-1	8	0.0185	0.04	0.19	1.59	-0.01	-0.005	-50	0.018	6.39	-0.1	0.015	0.00164	-0.001	0.018	-0.0005	-0.05	0.00136	88.6
20-Jun-11	299	500	495	7.36	40		8																				
27-Jun-11	300	500	500	7.26	39	160	6	1	8																		
4-Jul-11	301	500	495	7.25	37		6																				
11-Jul-11	302	500	495	7.37	40	180	5	1	9	0.021	0.04	0.23	1.78	-0.01	-0.005	-50	0.022	6.74	-0.1	0.05	0.00283	0.001	0.095	-0.0005	-0.05	0.00172	68.9
18-Jul-11	303	500	495	7.29	39		5																				
25-Jul-11	304	500	490	7.45	43	190	5	1	9																		
1-Aug-11	305	500	495	7.33	48		5																				
8-Aug-11	306	500	495	7.48	41	190	5	-1	9	0.0187	0.05	0.22	10.7	-0.01	-0.005	-50	0.018	6.49	-0.1	0.014	0.00175	-0.001	0.015	-0.0005	-0.05	0.00047	87.6
15-Aug-11	307	500	495	7.41	44		6																				
22-Aug-11	308	500	485	7.41	40	195	5	-1	9																		
29-Aug-11	309	500	495	7.53	41		6																				
5-Sep-11	310	500	495	7.49	45	175	6	-1	7	0.0157	0.05	0.15	1.8	-0.01	-0.005	-50	-0.005	6.80	-0.1	0.031	0.00214	-0.001	0.021	-0.0005	-0.05	0.00031	83.2
12-Sep-11	311	500	495																								
19-Sep-11	312	500	485																								
26-Sep-11	313	500	500																								
3-Oct-11	314	500	495	7.43	35	150	6	-1	8																		
10-Oct-11	315	500	495																								
17-Oct-11	316	500	495																								
24-Oct-11	317	500	490																								
31-Oct-11	318	500	495	7.31	46	200	7	-1	10																		
7-Nov-11	319	500	490																								

Leachate Chemistry of SE-05-17 (HC-6)																			Alkalinity		Ion Balance		
Sampling Date	Ni ppb	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance %
Detection Limits	1	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
8-Nov-10																							
15-Nov-10																							
22-Nov-10																							
29-Nov-10	0.03	0.004	-0.05	0.21	0.4	-0.005	-0.05	8.61	-0.02	0.008	-0.005	-0.01	-0.5	0.000042	0.3	0.9	-0.1	11.95	0.04	0.02	0.39	0.36	4.01%
6-Dec-10																							
13-Dec-10																							
20-Dec-10																							
27-Dec-10	-0.02	-0.002	-0.05	0.13	0.3	-0.005	-0.05	7.22	-0.02	0.007	-0.005	0.01	-0.5	0.000027	0.4	0.3	-0.1	11.94	0.04	0.02	0.34	0.27	12.77%
3-Jan-11																							
10-Jan-11																							
17-Jan-11																							
24-Jan-11	0.09	0.011	-0.05	0.18	0.4	-0.005	0.05	8.89	-0.02	0.011	-0.005	0.01	-0.5	0.000045	0.2	1	-0.1	10.96	0.03	0.01	0.35	0.38	-4.48%
31-Jan-11																							
7-Feb-11																							
14-Feb-11																							
21-Feb-11	0.1	0.015	-0.05	0.19	0.4	-0.005	0.05	8.75	-0.02	0.007	-0.005	0.01	0.6	0.000029	0.4	2	-0.1	10.96	0.03	0.01	0.32	0.40	-10.81%
28-Feb-11																							
7-Mar-11																							
14-Mar-11																							
21-Mar-11	0.05	0.021	-0.05	0.2	0.4	-0.005	0.05	8.74	-0.02	0.009	-0.005	0.01	-0.5	0.000032	0.4	4.6	-0.1	10.96	0.03	0.01	0.35	0.47	-15.73%
28-Mar-11																							
4-Apr-11																							
11-Apr-11																							
18-Apr-11	0.07	0.016	-0.05	0.15	0.4	-0.005	-0.05	13.3	-0.02	0.008	-0.005	0.02	-0.5	0.000034	0.4	4.4	-0.1	10.98	0.01	0.01	0.40	0.45	-6.04%
25-Apr-11																							
2-May-11																							
9-May-11																							
16-May-11	0.05	0.011	-0.05	0.22	0.4	-0.005	-0.05	9.45	-0.02	0.009	-0.005	0.02	-0.5	0.000052	0.3	5	-0.1	9.57	0.02	0.01	0.30	0.49	-24.32%
23-May-11																							
30-May-11																							
6-Jun-11																							
13-Jun-11	0.05	0.005	-0.05	0.19	0.4	-0.005	0.05	7.95	-0.02	0.008	-0.005	0.02	-0.5	0.00003	0.4	3.9	-0.1	8.27	0.02	0.01	0.27	0.43	-22.89%
20-Jun-11																							
27-Jun-11																							
4-Jul-11																							
11-Jul-11	0.08	0.006	-0.05	0.15	0.4	-0.005	-0.05	8.71	-0.02	0.008	-0.005	0.02	-0.5	0.000129	0.4	7.4	-0.1	9.27	0.02	0.01	0.28	0.56	-33.24%
18-Jul-11																							
25-Jul-11																							
1-Aug-11																							
8-Aug-11	0.08	0.004	0.08	0.19	0.4	-0.005	0.05	9.58	-0.02	0.011	0.009	-0.01	-0.5	0.000022	0.5	6.3	-0.1	8.56	0.02	0.02	0.28	0.51	-29.94%
15-Aug-11																							
22-Aug-11																							
29-Aug-11																							
5-Sep-11	0.1	0.003	-0.05	0.19	0.4	-0.005	-0.05	8.53	-0.02	0.011	-0.005	0.01	-0.5	0.000058	-0.2	3	-0.1	7.16	0.02	0.02	0.27	0.43	-21.89%
12-Sep-11																							
19-Sep-11																							
26-Sep-11																							
3-Oct-11																							
10-Oct-11																							
17-Oct-11																							
24-Oct-11																							
31-Oct-11																							
7-Nov-11																							

Leachate Chemistry of SE-05-17 (HC-6)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08) Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**
14-Nov-11	320	500	490																								
21-Nov-11	321	500	480																								
28-Nov-11	322	500	495	7.38	39	130	6	-1	9																		
5-Dec-11	323	500	485																								
12-Dec-11	324	500	485																								
19-Dec-11	325	500	455																								
26-Dec-11	326	500	495	7.20	41	140	6	-1	6																		
2-Jan-12	327	500	485																								
9-Jan-12	328	500	485																								
16-Jan-12	329	500	475																								
23-Jan-12	330	500	480	7.32	39	125	5	-1	9	0.0175	0.04	0.16	1.59	-0.01	-0.005	-50	0.01	6.90	-0.1	0.015	0.00212	0.001	0.008	-0.0005	-0.05	0.00028	71.9
30-Jan-12	331	500	480																								
6-Feb-12	332	500	475																								
13-Feb-12	333	500	480																								
20-Feb-12	334	500	490	7.40	27	130	5	-1	8																		
27-Feb-12	335	500	485																								
5-Mar-12	336	500	490																								
12-Mar-12	337	500	490																								
19-Mar-12	338	500	490	7.42	35	125	5	-1	8																		
26-Mar-12	339	500	495																								
2-Apr-12	340	500	495																								
9-Apr-12	341	500	485																								
16-Apr-12	342	500	495	7.40	33	130	5	-1	9	0.0168	0.04	0.10	1.40	-0.01	-0.005	-50	0.005	5.38	-0.1	0.011	0.00194	0.0023	0.007	-0.0005	-0.05	0.00019	67.8
23-Apr-12	343	500	495																								
30-Apr-12	344	500	495																								
7-May-12	345	500	485																								
14-May-12	346	500	475	7.33	40	140	5	-1	8																		
21-May-12	347	500	490																								
28-May-12	348	500	490																								
4-Jun-12	349	500	495																								
11-Jun-12	350	500	475	7.42	38	130	5	-1	9																		
18-Jun-12	351	500	480																								
25-Jun-12	352	500	470																								
2-Jul-12	353	500	485																								
9-Jul-12	354	500	495	7.47	39	140	5	1	10	0.0165	0.044	0.239	1.43	-0.01	-0.005	-50	0.0127	6.19	-0.1	0.0125	0.00193	-0.001	-0.005	-0.0005	-0.05	0.00041	64.7
16-Jul-12	355	500	480																								
23-Jul-12	356	500	485																								
30-Jul-12	357	500	495																								
6-Aug-12	358	500	475	7.44	42	145	5	-1	9																		
13-Aug-12	359	500	485																								
20-Aug-12	360	500	485																								
27-Aug-12	361	500	490																								
3-Sep-12	362	500	470	7.36	43	130	5	1	8																		
10-Sep-12	363	500	480																								
17-Sep-12	364	500	480																								
24-Sep-12	365	500	480																								
1-Oct-12	366	500	480	7.38	42	140	5	1	10	0.0165	0.107	0.224	2.36	-0.01	-0.005	-50	0.015	5.28	-0.1	0.023	0.00566	0.0035	0.076	-0.0005	-0.05	0.00053	56.5
8-Oct-12	367	500	480																								
15-Oct-12	368	500	470																								
22-Oct-12	369	500	485																								
29-Oct-12	370	500	455	7.51	39	135	5	-1	8																		
5-Nov-12	371	500	475																								
12-Nov-12	372	500	475																								

Leachate Chemistry of SE-05-17 (HC-6)																							
																		Alkalinity			Ion Balance		
Sampling Date	Ni ppb	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance %
Detection Limits	1	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
14-Nov-11																							
21-Nov-11																							
28-Nov-11																							
5-Dec-11																							
12-Dec-11																							
19-Dec-11																							
26-Dec-11																							
2-Jan-12																							
9-Jan-12																							
16-Jan-12																							
23-Jan-12	0.03	-0.002	-0.05	0.18	0.5	0.007	-0.05	8.61	-0.02	0.008	-0.005	-0.2	-0.5	0.000022	0.4	0.4	-0.1	8.83	0.02	0.01	0.27	0.35	-12.35%
30-Jan-12																							
6-Feb-12																							
13-Feb-12																							
20-Feb-12																							
27-Feb-12																							
5-Mar-12																							
12-Mar-12																							
19-Mar-12																							
26-Mar-12																							
2-Apr-12																							
9-Apr-12																							
16-Apr-12	0.035	-0.002	-0.05	0.207	0.34	0.005	0.051	6.96	-0.02	0.007	-0.005	-0.2	-0.5	0.000023	0.32	4.89	-0.1	8.74	0.02	0.01	0.27	0.41	-20.35%
23-Apr-12																							
30-Apr-12																							
7-May-12																							
14-May-12																							
21-May-12																							
28-May-12																							
4-Jun-12																							
11-Jun-12																							
18-Jun-12																							
25-Jun-12																							
2-Jul-12																							
9-Jul-12	0.089	0.005	-0.05	0.214	0.42	-0.005	0.059	7.4	-0.02	0.0091	-0.005	-0.2	-0.5	0.0000301	1.04	1.28	-0.1	10.06	0.03	0.01	0.31	0.34	-5.73%
16-Jul-12																							
23-Jul-12																							
30-Jul-12																							
6-Aug-12																							
13-Aug-12																							
20-Aug-12																							
27-Aug-12																							
3-Sep-12																							
10-Sep-12																							
17-Sep-12																							
24-Sep-12																							
1-Oct-12	0.094	0.0057	-0.05	0.121	0.34	-0.005	0.062	7.38	-0.02	0.009	-0.005	-0.2	-0.5	0.000025	0.54	0.94	-0.1	10.07	0.02	0.01	0.31	0.29	3.56%
8-Oct-12																							
15-Oct-12																							
22-Oct-12																							
29-Oct-12																							
5-Nov-12																							
12-Nov-12																							

Leachate Chemistry of SE-05-17 (HC-6)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08) Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**
19-Nov-12	373	500	475																								
26-Nov-12	374	500	485	7.42	33	140	5	1	9																		
3-Dec-12	375	500	480																								
10-Dec-12	376	500	480																								
17-Dec-12	377	500	475																								
24-Dec-12	378	500	470	7.47	33	130	5	-1	9	0.0174	0.036	0.178	1.76	-0.01	-0.005	-50	0.01	6.01	0.17	0.018	0.00248	0.0053	0.013	-0.0005	-0.05	0.00041	63.9
31-Dec-12	379	500	475																								
7-Jan-13	380	500	470																								

Leachate Chemistry of SE-05-17 (HC-6)																							
																		Alkalinity			Ion Balance		
Sampling Date	Ni ppb	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance %
Detection Limits	1	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
19-Nov-12																							
26-Nov-12																							
3-Dec-12																							
10-Dec-12																							
17-Dec-12																							
24-Dec-12	0.067	0.005	-0.05	0.138	0.39	-0.005	0.073	7.51	-0.02	0.013	-0.005	-0.2	-0.5	0.000024	0.41	7.21	-0.1	8.64	0.02	0.01	0.29	0.52	-28.87%
31-Dec-12																							
7-Jan-13																							

Note:

Terminated as per email from Collen Hughes (10-Jan-13)

Schedule change as per Ron Martel's email dated 8-Sep-11.

ICP-ES to be done at Cantest effective 6-Oct-08 as per email from Ron Martel (1-Oct-08).

Switched to ICP-MS at Cantest effective 6-Oct-08 as per e-mail from Christina James.

Sulphate (by Colourimetry), Acidity & Alkalinity (by PC Titrator) is now done by water lab at Maxxam from 2-May-11.

Leachate Chemistry of SE-05-30 (HC-7)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08) Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**
6-Oct-08	158	500	495	7.62	37	140	8	-1	14	0.039	-1	-1	1	-1	-1	60	-0.2	7.49	-1	-1	0.013	-0.05	-1	-0.001	0.11	-0.001	32
13-Oct-08	159	500	495	7.52	39		6			-0.05	-50	-30	1	-3	#N/A	-10	-10	7.56	-10	-20	-20	-0.01	-30	#N/A	0.11	-0.003	40
20-Oct-08	160	500	500	7.62	35	170	5	-1	15																		
27-Oct-08	161	500	500	7.46	40		8																				
3-Nov-08	162	500	495	7.40	38	180	6	-1	12	0.024	-1	-1	1	-1	-1	-50	-0.2	7.2	-1	-1	0.012	-0.05	-1	-0.001	0.1	-0.001	33
10-Nov-08	163	500	500	7.34	43		6			-0.05	-50	-30	1	-3	#N/A	-10	-10	7.2	-10	-20	-20	-0.01	-30	#N/A	0.1	-0.003	40
17-Nov-08	164	500	500	7.31	42	160	5	1	13																		
24-Nov-08	165	500	485	7.35	42		6																				
1-Dec-08	166	500	495	7.51	43	170	7	1	13	0.022	-1	-1	1	-1	-1	-50	-0.2	7.36	-1	-1	0.016	-0.05	-1	-0.001	0.09	-0.001	38
8-Dec-08	167	500	505	7.38	41		6			-0.05	-50	-30	1	-3	#N/A	-10	-10	7.51	-10	-20	-20	-0.01	-30	#N/A	0.1	-0.003	40
15-Dec-08	168	500	490	7.54	40	175	5	-1	13																		
22-Dec-08	169	500	510	7.50	43		1																				
29-Dec-08	170	500	495	7.34	42	170	4	1	13	0.042	-1	-1	1	-1	-1	-50	-0.2	7.42	-1	-1	-0.001	-0.05	-1	-0.001	0.09	-0.001	36
5-Jan-09	171	500	490	7.24	40		5																				
12-Jan-09	172	500	495	7.27	39	190	4	-1	13																		
19-Jan-09	173	500	495	7.20	41		7																				
26-Jan-09	174	500	430	7.73	36	140	4	-1	12	0.085	-0.2	0.2	1.9	-0.2	-0.2	-10	-0.04	6.46	-0.2	-0.2	0.0054	0.02	-0.2	-0.0002	0.08	0.0012	28
2-Feb-09	175	500	440	7.25	32		6																				
9-Feb-09	176	500	470	7.40	39	195	4	1	11																		
16-Feb-09	177	500	500	7.40	48		7																				
23-Feb-09	178	500	445	7.40	33	200	4	1	10	0.024	-0.2	-0.2	0.8	-0.2	-0.2	-10	-0.04	5.34	-0.2	-0.2	0.0012	-0.01	-0.2	-0.0002	0.07	0.0004	22
2-Mar-09	179	500	440	7.50	37		5																				
9-Mar-09	180	500	470	7.42	38	160	6	1	11																		
16-Mar-09	181	500	475	7.44	38		6																				
23-Mar-09	182	500	480	7.66	46	190	5	-1	13	0.031	-0.2	0.2	1.1	-0.2	-0.2	-10	-0.04	8.02	-0.2	-0.2	0.0013	-0.01	-0.2	-0.0002	0.09	0.0004	36
30-Mar-09	183	500	500	7.41	45		5																				
6-Apr-09	184	500	490	7.59	44	200	7	-1	13																		
13-Apr-09	185	500	470	7.44	38		3																				
20-Apr-09	186	500	470	7.41	37	180	5	1	11	0.022	-0.2	-0.2	0.7	-0.2	-0.2	-10	-0.04	5.87	-0.2	-0.2	0.0012	-0.01	-0.2	-0.0002	0.07	0.0005	30
27-Apr-09	187	500	475	7.52	44		2																				
4-May-09	188	500	490	7.67	42	180	7	1	12																		
11-May-09	189	500	495	7.44	44		8																				
18-May-09	190	500	495	7.42	46	180	6	1	13	0.027	-0.2	-0.2	1.1	-0.2	-0.2	-10	-0.04	7.83	-0.2	-0.2	0.0012	-0.01	-0.2	-0.0002	0.09	0.0003	32
25-May-09	191	500	480	7.27	35		3																				
1-Jun-09	192	500	500	7.44	41	165	5	1	13																		
8-Jun-09	193	500	495	7.71	42		6																				
15-Jun-09	194	500	480	7.33	34	185	3	1	10	0.025	-0.2	-0.2	0.8	-0.2	-0.2	-10	-0.04	5.75	-0.2	-0.2	0.0013	-0.01	-0.2	-0.0002	0.07	0.0003	23
22-Jun-09	195	500	490	7.34	39		5																				
29-Jun-09	196	500	500	7.55	40	150	4	1	13																		
6-Jul-09	197	500	475	7.29	34		5																				
13-Jul-09	198	500	480	7.50	37	165	5	-1	11	0.023	-0.2	0.2	0.7	-0.2	-0.2	-10	-0.04	6.34	-0.2	-0.2	0.0008	-0.01	-0.2	-0.0002	0.07	0.0005	24
20-Jul-09	199	500	495	7.46	43		7																				
27-Jul-09	200	500	485	7.56	44	170	7	-1	12																		
3-Aug-09	201	500	480	7.33	43		5																				
10-Aug-09	202	500	475	7.45	43	180	7	-1	12	0.027	-0.2	0.2	2.8	-0.2	-0.2	-10	-0.04	6.5	-0.2	-0.2	0.0008	-0.01	-0.2	-0.0002	0.07	0.0003	23
17-Aug-09	203	500	490	7.49	40		4																				
24-Aug-09	204	500	490	7.52	41	160	5	1	12																		
31-Aug-09	205	500	485	7.52	41		5																				
7-Sep-09	206	500	485	7.42	40	175	6	1	10	0.022	-0.2	0.2	1.2	-0.2	-0.2	-10	-0.04	6.76	-0.2	-0.2	0.0012	-0.01	-0.2	-0.0002	0.07	0.0008	19
14-Sep-09	207	500	485	7.48	42		6																				
21-Sep-09	208	500	495	7.55	40	175	6	1	13																		
28-Sep-09	209	500	495	7.48	42		6																				
5-Oct-09	210	500	480	7.59	43	185	3	-1	12	0.025	-0.1	0.2	1	-0.1	-0.1	-5	-0.01	7.22	-0.2	-0.1	0.0012	-0.01	-0.05	-0.0001	0.077	0.0003	22
12-Oct-09	211	500	490	7.54	45		3																				
19-Oct-09	212	500	485	7.56	42	180	1	-1	12																		
26-Oct-09	213	500	495	7.45	41		5																				

Leachate Chemistry of SE-05-30 (HC-7)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08) Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**
2-Nov-09	214	500	490	7.41	45	170	6	1	12	0.024	-0.1	0.2	0.9	-0.1	-0.1	-5	-0.01	7.48	-0.2	-0.1	0.002	-0.01	-0.05	0.001	0.095	0.0004	22
9-Nov-09	215	500	490	7.45	43		7																				
16-Nov-09	216	500	490	7.50	41	160	5	1	12																		
23-Nov-09	217	500	495	7.42	44		5																				
30-Nov-09	218	500	475	7.39	42	150	6	1	11	0.024	-0.1	0.2	1.1	-0.1	-0.1	-5	-0.01	7.71	-0.2	-0.1	0.0018	-0.01	-0.05	0.0005	0.079	0.0004	18
7-Dec-09	219	500	500	7.45	39		5																				
14-Dec-09	220	500	490	7.42	38	145	4	1	12																		
21-Dec-09	221	500	495	7.50	38		5																				
28-Dec-09	222	500	485	7.58	39	150	4	1	13	0.018	-0.1	0.2	1	-0.1	-0.1	-5	-0.01	6.85	-0.2	-0.1	0.0018	-0.01	-0.05	-0.0001	0.061	0.0003	19
4-Jan-10	223	500	495	7.58	37		4																				
11-Jan-10	224	500	495	7.64	35	170	3	1	12																		
18-Jan-10	225	500	495	7.58	38		5																				
25-Jan-10	226	500	495	7.35	39	170	5	1	12	0.025	-0.1	-0.2	0.9	-0.1	-0.1	-5	-0.01	6.98	-0.2	-0.1	0.0011	-0.01	-0.05	-0.0001	0.065	0.0003	19
1-Feb-10	227	500	490	7.21	41		6																				
8-Feb-10	228	500	495	7.48	37	165	5	1	12																		
15-Feb-10	229	500	490	7.42	38		6																				
22-Feb-10	230	500	470	7.58	40	170	7	1	12	0.022	-0.1	-0.2	0.7	-0.1	-0.1	-5	-0.01	7.1	-0.2	-0.1	0.001	-0.01	-0.05	-0.0001	0.077	0.0003	17
1-Mar-10	231	500	495	7.43	40		7																				
8-Mar-10	232	500	490	7.51	39	195	6	1	11																		
15-Mar-10	233	500	470	7.43	35		4																				
22-Mar-10	234	500	495	7.35	37	190	4	1	11	0.025	-0.1	-0.2	0.9	-0.1	-0.1	-5	-0.01	6.73	-0.2	-0.1	0.0014	-0.01	-0.05	-0.0001	0.069	0.0003	18
29-Mar-10	235	500	490	7.51	36		5																				
5-Apr-10	236	500	490	7.40	36	210	5	1	13																		
12-Apr-10	237	500	485	7.38	35		4																				
19-Apr-10	238	500	495	7.39	36	150	5	1	12	0.0289	0.03	0.13	0.78	-0.01	-0.005	-50	0.012	5.99	-0.1	0.016	0.00118	0.001	0.013	-0.0005	0.06	0.00073	17.7
26-Apr-10	239	500	485	7.38	36		5																				
3-May-10	240	500	490	7.57	36	155	5	1	11																		
10-May-10	241	500	495	7.45	38		5																				
17-May-10	242	500	495	7.55	37	155	5	1	13	0.0314	0.03	0.17	0.77	-0.01	-0.005	-50	0.008	6.31	-0.1	0.016	0.00103	0.002	0.013	-0.0005	0.06	0.00027	16.9
24-May-10	243	500	495	7.30	34		5																				
31-May-10	244	500	485	7.59	34	160	4	-1	12																		
7-Jun-10	245	500	495	7.40	35		5																				
14-Jun-10	246	500	495	7.47	37	185	4	1	12	0.0286	0.03	0.17	1.73	-0.01	-0.005	-50	0.007	6.24	-0.1	0.005	0.00058	-0.001	0.028	-0.0005	0.06	0.00019	15.5
21-Jun-10	247	500	490	7.52	34		4																				
28-Jun-10	248	500	490	7.67	34	180	5	1	12																		
5-Jul-10	249	500	490	7.51	35		5																				
12-Jul-10	250	500	470	7.65	25	175	6	1	11	0.0274	0.03	0.21	1.2	-0.01	-0.005	-50	0.007	5.98	-0.1	0.011	0.00117	0.001	0.014	-0.0005	0.05	0.0003	15.5
19-Jul-10	251	500	500	7.65	34		5																				
26-Jul-10	252	500	490	7.61	34	165	5	1	12																		
2-Aug-10	253	500	495	7.59	32		5																				
9-Aug-10	254	500	495	7.53	30	180	5	1	12	0.0251	0.03	0.15	1.05	-0.01	-0.005	-50	-0.005	5.53	-0.1	0.014	0.00106	0.001	0.048	-0.0005	0.05	0.00025	13.4
16-Aug-10	255	500	485	7.62	35		6																				
23-Aug-10	256	500	490	7.56	36	160	5	1	12																		
30-Aug-10	257	500	500	7.52	33		4																				
6-Sep-10	258	500	485	7.53	35	165	7	1	12	0.0227	0.03	0.15	0.86	-0.01	-0.005	-50	0.008	6.13	-0.1	0.01	0.00114	0.001	0.015	-0.0005	0.06	0.00024	14.6
13-Sep-10	259	500	500	7.59	31		4																				
20-Sep-10	260	500	490	7.59	32	200	5	1	12																		
27-Sep-10	261	500	495	7.51	33		5																				
4-Oct-10	262	500	500	7.68	30	185	5	1	13	0.0264	0.05	0.15	0.88	-0.01	-0.005	-50	0.008	6.08	-0.1	0.017	0.00106	0.002	0.062	-0.0005	0.06	0.00024	13.2
11-Oct-10	263	500	490	7.49	35		6																				
18-Oct-10	264	500	490	7.55	35	175	5	-1	13																		
25-Oct-10	265	500	490	7.51	38		7																				
1-Nov-10	266	500	495	7.63	38	185	5	-1	13	0.0314	-0.02	0.16	1.5	-0.01	-0.005	-50	0.012	6.2	-0.1	0.01	0.00104	-0.001	0.131	-0.0005	0.07	0.0003	13.5
8-Nov-10	267	500	490	7.40	36		5																				
15-Nov-10	268	500	480	7.55	32	200	6	-1	12																		

Leachate Chemistry of SE-05-30 (HC-7)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb
										Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08)																	
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**
22-Nov-10	269	500	490	7.50	37		5																				
29-Nov-10	270	500	485	7.56	36	185	7	-1	12	0.0251	0.03	0.13	0.84	-0.01	-0.005	-50	0.006	6.1	-0.1	0.01	0.00107	-0.001	0.055	-0.0005	0.06	0.00035	13.5
6-Dec-10	271	500	460	7.38	39		5																				
13-Dec-10	272	500	495	7.52	42	155	6	-1	12																		
20-Dec-10	273	500	495	7.35	45		6																				
27-Dec-10	274	500	495	7.69	34	175	4	-1	12	0.0247	0.03	0.14	0.75	-0.01	-0.005	-50	0.006	5.73	0.1	0.009	0.00061	-0.001	0.009	-0.0005	-0.05	0.00018	11.7
3-Jan-11	275	500	485	7.42	44		7																				
10-Jan-11	276	500	485	7.56	45	175	5	-1	12																		
17-Jan-11	277	500	490	7.45	44		5																				
24-Jan-11	278	500	470	7.45	44	170	5	1	12	0.0294	0.03	0.24	6.57	-0.01	-0.005	-50	0.014	7.5	0.3	0.199	0.00222	0.002	0.18	-0.0005	0.27	0.00263	14.3
31-Jan-11	279	500	490	7.43	45		6																				
7-Feb-11	280	500	500	7.52	43	185	7	-1	12																		
14-Feb-11	281	500	500	7.43	42		6																				
21-Feb-11	282	500	485	7.48	44	175	5	-1	12	0.0258	0.03	0.14	0.98	-0.01	-0.005	-50	0.017	7.26	-0.1	0.012	0.00094	0.001	0.121	-0.0005	0.07	0.00037	13.4
28-Feb-11	283	500	485	7.40	42		4																				
7-Mar-11	284	500	495	7.46	44	175	5	-1	11																		
14-Mar-11	285	500	490	7.38	42		6																				
21-Mar-11	286	500	490	7.47	41	185	6	-1	12	0.0255	0.02	0.1	0.87	-0.01	-0.005	-50	0.012	6.64	-0.1	0.022	0.00071	-0.001	0.016	-0.0005	0.06	0.00046	9.94
28-Mar-11	287	500	490	7.37	40		5																				
4-Apr-11	288	500	495	7.31	39	150	4	-1	11																		
11-Apr-11	289	500	490	7.34	32		3																				
18-Apr-11	290	500	490	7.21	38	170	4	-1	11	0.023	0.04	0.08	0.86	-0.01	-0.005	-50	0.011	6.16	-0.1	0.015	0.00222	0.001	0.023	-0.0005	0.06	0.00032	13.3
25-Apr-11	291	500	490	7.36	39		4																				
2-May-11	292	500	490	7.33	36	155	3	1	9																		
9-May-11	293	500	495	7.24	38		4																				
16-May-11	294	500	490	7.23	38	195	4	-1	8	0.022	0.03	0.09	0.89	-0.01	-0.005	-50	0.009	6.6	-0.1	0.022	0.00088	-0.001	0.026	-0.0005	0.08	0.00079	12.5
23-May-11	295	500	490	7.47	38		5																				
30-May-11	296	500	470	7.35	31	150	4	1	8																		
6-Jun-11	297	500	500	7.32	37		4																				
13-Jun-11	298	500	495	7.31	34	150	4	-1	9	0.0237	0.02	0.13	1.32	-0.01	-0.005	-50	0.009	6.01	-0.1	0.013	0.00085	-0.001	0.019	-0.0005	0.05	0.00026	12.6
20-Jun-11	299	500	480	7.40	40		4																				
27-Jun-11	300	500	495	7.25	38	150	5	1	9																		
4-Jul-11	301	500	495	7.36	37		4																				
11-Jul-11	302	500	495	7.34	39	185	3	1	8	0.0295	0.02	0.11	0.84	-0.01	-0.005	-50	0.006	6.9	-0.1	0.023	0.0291	0.003	0.029	-0.0005	0.06	0.00131	13.3
18-Jul-11	303	500	490	7.31	41		4																				
25-Jul-11	304	500	495	7.41	42	195	5	-1	11																		
1-Aug-11	305	500	495	7.34	46		4																				
8-Aug-11	306	500	495	7.36	39	195	4	-1	8	0.0255	0.02	0.11	0.96	-0.01	-0.005	-50	-0.005	6.36	-0.1	0.019	0.00102	0.002	0.009	-0.0005	0.06	0.00042	11.3
15-Aug-11	307	500	490	7.45	43		4																				
22-Aug-11	308	500	495	7.37	38	190	4	-1	9																		
29-Aug-11	309	500	490	7.39	39		4																				
5-Sep-11	310	500	495	7.53	42	175	5	-1	10	0.0203	0.03	0.14	0.82	-0.01	-0.005	-50	-0.005	6.65	-0.1	0.054	0.0009	-0.001	0.025	-0.0005	0.06	0.00033	11.8
12-Sep-11	311	500	495																								
19-Sep-11	312	500	490																								
26-Sep-11	313	500	495																								
3-Oct-11	314	500	490	7.31	33	155	4	-1	9																		
10-Oct-11	315	500	495																								
17-Oct-11	316	500	495																								
24-Oct-11	317	500	485																								
31-Oct-11	318	500	490	7.16	44	160	6	-0.5	10																		
7-Nov-11	319	500	485																								
14-Nov-11	320	500	500																								
21-Nov-11	321	500	475																								

Leachate Chemistry of SE-05-30 (HC-7)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08) Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**
28-Nov-11	322	500	480	7.38	40	130	4	-1	8																		
5-Dec-11	323	500	485																								
12-Dec-11	324	500	490																								
19-Dec-11	325	500	485																								
26-Dec-11	326	500	495	7.21	42	140	4	-1	9																		
2-Jan-12	327	500	480																								
9-Jan-12	328	500	480																								
16-Jan-12	329	500	485																								
23-Jan-12	330	500	480	7.31	38	130	4	-1	10	0.0239	0.02	0.12	0.88	-0.01	-0.005	-50	-0.005	6.43	0.2	0.016	0.00108	0.005	0.025	-0.0005	0.06	0.00024	10.5
30-Jan-12	331	500	475																								
6-Feb-12	332	500	485																								
13-Feb-12	333	500	485																								
20-Feb-12	334	500	480	7.42	26	130	4	-1	9																		
27-Feb-12	335	500	485																								
5-Mar-12	336	500	485																								
12-Mar-12	337	500	490																								
19-Mar-12	338	500	490	7.47	33	125	3	-1	11																		
26-Mar-12	339	500	485																								
2-Apr-12	340	500	490																								
9-Apr-12	341	500	475																								
16-Apr-12	342	500	490	7.36	30	135	4	-1	10	0.0231	-0.02	0.10	0.699	-0.01	-0.005	-50	-0.005	5.02	0.1	0.015	0.00127	0.0047	0.042	-0.0005	-0.05	0.00048	9.3
23-Apr-12	343	500	490																								
30-Apr-12	344	500	475																								
7-May-12	345	500	480																								
14-May-12	346	500	460	7.34	36	135	4	-1	9																		
21-May-12	347	500	495																								
28-May-12	348	500	475																								
4-Jun-12	349	500	485																								
11-Jun-12	350	500	480	7.46	36	125	5	-1	10																		
18-Jun-12	351	500	485																								
25-Jun-12	352	500	495																								
2-Jul-12	353	500	480																								
9-Jul-12	354	500	485	7.48	37	135	3	-1	9	0.0215	0.027	0.163	0.674	-0.01	-0.005	-50	-0.005	5.74	-0.1	0.0126	0.00083	-0.001	0.0194	-0.0005	0.054	0.00027	9.48
16-Jul-12	355	500	485																								
23-Jul-12	356	500	485																								
30-Jul-12	357	500	490																								
6-Aug-12	358	500	480	7.47	39	145	5	-1	9																		
13-Aug-12	359	500	490																								
20-Aug-12	360	500	475																								
27-Aug-12	361	500	485																								
3-Sep-12	362	500	485	7.39	39	130	3	1	9																		
10-Sep-12	363	500	485																								
17-Sep-12	364	500	480																								
24-Sep-12	365	500	475																								
1-Oct-12	366	500	485	7.51	37	145	4	-1	10	0.0229	0.08	0.116	1.76	-0.01	-0.005	-50	-0.005	5.42	0.12	0.011	0.00445	0.005	0.098	-0.0005	0.053	0.00045	8.47
8-Oct-12	367	500	480																								
15-Oct-12	368	500	475																								
22-Oct-12	369	500	480																								
29-Oct-12	370	500	475	7.58	36	135	4	-1	8																		
5-Nov-12	371	500	475																								
12-Nov-12	372	500	485																								
19-Nov-12	373	500	470																								
26-Nov-12	374	500	475	7.34	32	135	4	2	8																		

Leachate Chemistry of SE-05-30 (HC-7)

Sampling Date	Accum. Weeks	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08) Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm	Mn ppm	Mo ppb
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**	**0.001**	**0.5**
3-Dec-12	375	500	480																								
10-Dec-12	376	500	470																								
17-Dec-12	377	500	475																								
24-Dec-12	378	500	460	7.44	27	130	4	-1	8	0.0243	0.023	0.142	0.704	-0.01	-0.005	-50	-0.005	4.95	0.21	0.015	0.00105	0.0021	0.047	-0.0005	-0.05	0.00034	8
31-Dec-12	379	500	455																								
7-Jan-13	380	500	465																								

Leachate Chemistry of SE-05-30 (HC-7)																							
																		Alkalinity			Ion Balance		
Sampling Date	Ni ppb	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance %
Detection Limits	1	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
6-Oct-08	-1	-0.15	0.1	-1	0.5	-0.25	0.14	6	-1	-0.1	-0.5	1	-1	-0.0005	-1	-5	-10	13.43	0.05	0.02	0.44	0.38	6.31%
13-Oct-08	-20	-0.15	-0.25	#N/A	0.57	-10	-0.1	7	#N/A	#N/A	#N/A	-30	-5	#N/A	-10	-5	-20						
20-Oct-08																							
27-Oct-08																							
3-Nov-08	-1	-0.15	-0.1	-1	0.5	-0.25	0.09	5	-1	-0.1	-0.5	-1	-1	-0.0005	-1	-5	-10	11.46	0.03	0.01	0.36	0.37	-1.40%
10-Nov-08	-20	-0.15	0.3	#N/A	0.49	-10	-0.1	6	#N/A	#N/A	#N/A	-30	-5	#N/A	-10	-5	-20						
17-Nov-08																							
24-Nov-08																							
1-Dec-08	-1	-0.15	-0.1	-1	0.3	-0.25	0.08	6	-1	-0.1	-0.5	-1	-1	-0.0005	-1	-5	-10	12.94	0.04	0.02	0.41	0.37	4.39%
8-Dec-08	-20	-0.15	-0.25	#N/A	0.48	-10	-0.1	6	#N/A	#N/A	#N/A	-30	-5	#N/A	-10	-5	-20						
15-Dec-08																							
22-Dec-08																							
29-Dec-08	-1	-0.15	-0.1	-1	1	-0.25	-0.05	6	-1	-0.1	-0.5	-1	-1	-0.0005	-1	-5	-10	12.96	0.03	0.01	0.34	0.37	-3.89%
5-Jan-09																							
12-Jan-09																							
19-Jan-09																							
26-Jan-09	-0.2	-0.03	0.19	-0.2	0.57	-0.05	0.06	5.2	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.5	-1	-2	11.42	0.06	0.03	0.31	0.33	-2.70%
2-Feb-09																							
9-Feb-09																							
16-Feb-09																							
23-Feb-09	-0.2	-0.03	0.07	-0.2	0.38	-0.05	0.03	3.8	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.3	-1	-2	9.47	0.02	0.01	0.27	0.27	0.50%
2-Mar-09																							
9-Mar-09																							
16-Mar-09																							
23-Mar-09	-0.2	-0.03	0.09	-0.2	0.49	-0.05	0.04	5.9	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.5	-1	-2	12.92	0.06	0.02	0.36	0.40	-5.26%
30-Mar-09																							
6-Apr-09																							
13-Apr-09																							
20-Apr-09	-0.2	-0.03	0.05	-0.2	0.38	-0.05	0.03	4.3	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.3	1	-2	10.96	0.03	0.01	0.32	0.30	4.53%
27-Apr-09																							
4-May-09																							
11-May-09																							
18-May-09	-0.2	-0.03	0.09	-0.2	0.55	-0.05	0.06	4.9	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.4	-1	-2	12.95	0.03	0.01	0.39	0.40	-1.43%
25-May-09																							
1-Jun-09																							
8-Jun-09																							
15-Jun-09	-0.2	-0.03	0.07	-0.2	0.45	-0.05	0.03	3.6	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.4	1	-2	9.97	0.02	0.01	0.26	0.29	-5.10%
22-Jun-09																							
29-Jun-09																							
6-Jul-09																							
13-Jul-09	0.2	-0.03	0.07	-0.2	0.43	-0.05	0.04	4.2	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.4	-1	-2	10.95	0.03	0.02	0.32	0.32	0.64%
20-Jul-09																							
27-Jul-09																							
3-Aug-09																							
10-Aug-09	-0.2	-0.03	0.04	-0.2	0.45	-0.05	0.04	9	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.4	-1	-2	11.95	0.03	0.01	0.39	0.33	8.23%
17-Aug-09																							
24-Aug-09																							
31-Aug-09																							
7-Sep-09	-0.2	-0.03	0.08	-0.2	0.42	-0.05	0.03	4.1	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	0.3	-1	-2	9.96	0.02	0.01	0.33	0.34	-2.33%
14-Sep-09																							
21-Sep-09																							
28-Sep-09																							
5-Oct-09	-0.2	-0.015	0.06	-0.2	0.38	-0.04	0.04	5.2	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.4	-1	-0.1	11.94	0.04	0.02	0.30	0.36	-9.16%
12-Oct-09																							
19-Oct-09																							
26-Oct-09																							

Leachate Chemistry of SE-05-30 (HC-7)																							
																		Alkalinity			Ion Balance		
Sampling Date	Ni ppb	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance %
Detection Limits	1	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
2-Nov-09	-0.2	-0.015	0.06	-0.2	0.51	-0.04	0.051	5.5	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.3	-1	-0.1	11.96	0.03	0.01	0.37	0.38	-1.78%
9-Nov-09																							
16-Nov-09																							
23-Nov-09																							
30-Nov-09	-0.2	0.03	0.07	-0.2	0.4	-0.04	0.063	4.9	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.3	-1	-0.1	10.96	0.03	0.01	0.35	0.39	-5.99%
7-Dec-09																							
14-Dec-09																							
21-Dec-09																							
28-Dec-09	-0.2	0.05	0.07	-0.2	0.32	-0.04	0.072	4.5	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.3	-1	-0.1	12.93	0.05	0.02	0.34	0.35	-0.35%
4-Jan-10																							
11-Jan-10																							
18-Jan-10																							
25-Jan-10	-0.2	-0.015	0.06	-0.2	0.42	-0.04	0.031	4.2	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.3	-1	-0.1	11.96	0.03	0.01	0.34	0.35	-0.90%
1-Feb-10																							
8-Feb-10																							
15-Feb-10																							
22-Feb-10	-0.2	-0.015	0.06	-0.2	0.43	-0.04	0.042	4.2	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.3	-1	-0.1	11.94	0.04	0.02	0.39	0.36	3.78%
1-Mar-10																							
8-Mar-10																							
15-Mar-10																							
22-Mar-10	-0.2	0.02	0.07	-0.2	0.4	-0.04	0.069	4.1	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.3	2	-0.1	10.97	0.02	0.01	0.30	0.34	-5.75%
29-Mar-10																							
5-Apr-10																							
12-Apr-10																							
19-Apr-10	0.07	-0.002	0.06	0.15	0.4	-0.005	-0.05	4.11	-0.02	-0.002	-0.005	-0.01	-0.5	0.000014	-0.2	1	-0.1	11.96	0.03	0.01	0.34	0.33	1.68%
26-Apr-10																							
3-May-10																							
10-May-10																							
17-May-10	0.06	-0.002	0.05	0.15	0.4	-0.005	-0.05	4.17	-0.02	0.003	-0.005	-0.01	-0.5	0.000025	0.2	0.1	-0.1	12.94	0.04	0.02	0.36	0.32	6.31%
24-May-10																							
31-May-10																							
7-Jun-10																							
14-Jun-10	-0.02	-0.002	0.06	0.13	0.4	-0.005	-0.05	4.14	-0.02	0.002	-0.005	0.02	-0.5	0.000023	0.3	0.5	-0.1	11.95	0.03	0.01	0.32	0.33	-0.98%
21-Jun-10																							
28-Jun-10																							
5-Jul-10																							
12-Jul-10	-0.02	-0.002	0.05	0.17	0.4	-0.005	-0.05	3.93	-0.02	0.002	-0.005	-0.01	-0.5	0.000026	0.3	0.6	-0.1	10.93	0.05	0.02	0.35	0.32	3.93%
19-Jul-10																							
26-Jul-10																							
2-Aug-10																							
9-Aug-10	-0.02	-0.002	-0.05	0.13	0.4	-0.005	-0.05	3.72	-0.02	0.002	-0.005	-0.01	-0.5	0.00001	0.3	1.1	-0.1	11.95	0.04	0.02	0.34	0.31	5.11%
16-Aug-10																							
23-Aug-10																							
30-Aug-10																							
6-Sep-10	-0.02	-0.002	0.06	0.12	0.4	-0.005	0.03	3.94	-0.02	0.002	-0.005	-0.01	-0.5	0.000012	0.2	0.2	-0.1	11.95	0.04	0.02	0.39	0.32	9.94%
13-Sep-10																							
20-Sep-10																							
27-Sep-10																							
4-Oct-10	0.04	0.017	0.06	0.11	0.4	-0.005	-0.05	3.98	-0.02	-0.002	-0.005	0.27	-0.5	0.000026	-0.2	1	-0.1	12.92	0.06	0.02	0.36	0.34	3.55%
11-Oct-10																							
18-Oct-10																							
25-Oct-10																							
1-Nov-10	-0.02	0.006	0.06	-0.04	0.4	-0.005	-0.05	4.09	-0.02	-0.002	-0.005	-0.01	-0.5	0.000029	0.2	0.9	-0.1	12.93	0.05	0.02	0.36	0.34	2.96%
8-Nov-10																							
15-Nov-10																							

Leachate Chemistry of SE-05-30 (HC-7)																							
																		Alkalinity			Ion Balance		
Sampling Date	Ni ppb	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance %
Detection Limits	1	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
22-Nov-10																							
29-Nov-10	0.03	0.003	0.05	0.12	0.4	-0.005	-0.05	4.1	-0.02	0.002	-0.005	-0.01	-0.5	0.000017	-0.2	0.9	-0.1	11.94	0.04	0.02	0.39	0.34	6.79%
6-Dec-10																							
13-Dec-10																							
20-Dec-10																							
27-Dec-10	-0.02	-0.002	-0.05	0.09	0.4	-0.005	-0.05	3.5	-0.02	0.002	-0.005	0.05	-0.5	0.000022	0.3	0.8	-0.1	11.92	0.05	0.02	0.32	0.31	1.35%
3-Jan-11																							
10-Jan-11																							
17-Jan-11																							
24-Jan-11	0.7	0.01	0.14	0.11	0.4	-0.005	0.06	5.81	-0.02	0.004	-0.005	0.02	-0.5	0.000058	-0.2	2.7	-0.1	11.95	0.03	0.01	0.34	0.48	-16.56%
31-Jan-11																							
7-Feb-11																							
14-Feb-11																							
21-Feb-11	0.04	0.02	0.07	0.12	0.5	-0.005	0.06	4.52	-0.02	0.003	-0.005	0.02	-0.5	0.000023	0.3	1.5	-0.1	11.95	0.03	0.02	0.34	0.41	-9.19%
28-Feb-11																							
7-Mar-11																							
14-Mar-11																							
21-Mar-11	0.04	0.018	-0.05	0.11	0.4	-0.005	-0.05	4.09	-0.02	0.003	-0.005	-0.01	-0.5	0.000012	0.2	1.6	-0.1	11.95	0.03	0.01	0.37	0.38	-2.63%
28-Mar-11																							
4-Apr-11																							
11-Apr-11																							
18-Apr-11	0.08	0.016	0.06	0.11	0.4	-0.005	-0.05	4.79	-0.02	0.013	-0.005	0.03	-0.5	0.00002	0.3	4.7	-0.1	10.98	0.02	0.01	0.31	0.46	-19.78%
25-Apr-11																							
2-May-11																							
9-May-11																							
16-May-11	0.06	0.008	0.05	0.17	0.4	-0.005	-0.05	4.5	-0.02	0.002	-0.005	-0.01	-0.5	0.000025	-0.2	4.1	-0.1	8.38	0.01	0.01	0.26	0.46	-27.89%
23-May-11																							
30-May-11																							
6-Jun-11																							
13-Jun-11	0.04	0.01	0.05	0.11	0.4	-0.005	-0.05	3.77	-0.02	-0.002	-0.005	0.01	-0.5	0.000009	0.2	6.2	-0.1	8.97	0.02	0.01	0.26	0.49	-30.41%
20-Jun-11																							
27-Jun-11																							
4-Jul-11																							
11-Jul-11	0.21	0.007	0.07	0.10	0.4	-0.005	-0.05	4.14	-0.02	-0.002	-0.005	-0.01	-0.5	0.000059	0.2	5.2	-0.1	8.07	0.02	0.01	0.23	0.51	-37.95%
18-Jul-11																							
25-Jul-11																							
1-Aug-11																							
8-Aug-11	0.04	0.006	0.08	0.12	0.4	-0.005	0.05	4.3	-0.02	0.003	-0.005	0.03	-0.5	0.000006	0.3	5.2	-0.1	7.87	0.02	0.01	0.24	0.48	-34.42%
15-Aug-11																							
22-Aug-11																							
29-Aug-11																							
5-Sep-11	0.07	-0.002	-0.05	0.14	0.4	-0.005	-0.05	4.11	-0.02	0.003	-0.005	0.02	-0.5	0.000013	-0.2	3.2	-0.1	9.95	0.03	0.02	0.30	0.43	-17.89%
12-Sep-11																							
19-Sep-11																							
26-Sep-11																							
3-Oct-11																							
10-Oct-11																							
17-Oct-11																							
24-Oct-11																							
31-Oct-11																							
7-Nov-11																							
14-Nov-11																							
21-Nov-11																							

Leachate Chemistry of SE-05-30 (HC-7)																		Alkalinity			Ion Balance		
Sampling Date	Ni ppb	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance %
Detection Limits	1	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
28-Nov-11																							
5-Dec-11																							
12-Dec-11																							
19-Dec-11																							
26-Dec-11																							
2-Jan-12																							
9-Jan-12																							
16-Jan-12																							
23-Jan-12	0.09	0.002	0.06	0.09	0.5	-0.005	-0.05	4.08	-0.02	0.003	-0.005	-0.2	-0.5	0.00001	0.2	0.4	-0.1	10.07	0.02	0.01	0.28	0.34	-9.71%
30-Jan-12																							
6-Feb-12																							
13-Feb-12																							
20-Feb-12																							
27-Feb-12																							
5-Mar-12																							
12-Mar-12																							
19-Mar-12																							
26-Mar-12																							
2-Apr-12																							
9-Apr-12																							
16-Apr-12	0.063	-0.002	-0.05	0.10	0.3	-0.005	-0.05	3.18	-0.02	0.002	-0.005	0.4	-0.5	0.000009	-0.2	5.0	-0.1	9.75	0.02	0.01	0.27	0.41	-19.95%
23-Apr-12																							
30-Apr-12																							
7-May-12																							
14-May-12																							
21-May-12																							
28-May-12																							
4-Jun-12																							
11-Jun-12																							
18-Jun-12																							
25-Jun-12																							
2-Jul-12																							
9-Jul-12	0.08	0.0035	-0.05	0.118	0.43	-0.005	-0.05	3.36	-0.02	0.002	-0.005	-0.2	-0.5	0.000009	0.91	2.03	-0.1	9.02	0.03	0.02	0.25	0.35	-17.49%
16-Jul-12																							
23-Jul-12																							
30-Jul-12																							
6-Aug-12																							
13-Aug-12																							
20-Aug-12																							
27-Aug-12																							
3-Sep-12																							
10-Sep-12																							
17-Sep-12																							
24-Sep-12																							
1-Oct-12	0.056	0.0034	-0.05	0.089	0.4	-0.005	0.051	3.4	-0.02	0.004	-0.005	-0.2	-0.5	0.000009	0.42	0.45	-0.1	9.50	0.03	0.02	0.27	0.29	-3.37%
8-Oct-12																							
15-Oct-12																							
22-Oct-12																							
29-Oct-12																							
5-Nov-12																							
12-Nov-12																							
19-Nov-12																							
26-Nov-12																							

Leachate Chemistry of SE-05-30 (HC-7)																							
																		Alkalinity			Ion Balance		
Sampling Date	Ni ppb	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Bicarbonate	Carbonate	Hydroxide	Anions	Cations	Balance %
Detection Limits	1	0.15	0.1	1	0.25	0.25	0.15	1	1	0.1	0.5	1	1	0.0005	1	5	10						
3-Dec-12																							
10-Dec-12																							
17-Dec-12																							
24-Dec-12	0.107	0.0033	0.053	0.114	0.39	-0.005	0.062	3.07	-0.02	0.004	-0.005	-0.2	-0.5	0.000008	0.29	5.3	-0.1	8.16	0.02	0.01	0.25	0.41	-23.95%
31-Dec-12																							
7-Jan-13																							

Note:

Terminated as per email from Collen Hughes (10-Jan-13)

Schedule change as per Ron Martel's email dated 8-Sep-11.

ICP-ES to be done at Cantest effective 6-Oct-08 as per email from Ron Martel (1-Oct-08).

Switched to ICP-MS at Cantest effective 6-Oct-08 as per e-mail from Christina James.

Sulphate (by Colourimetry), Acidity & Alkalinity (by PC Titrator) is now done by water lab at Maxxam from 2-May-11.

CANTEST

Project Name: Mt. Polley
Cantest Project No: 2-21-910
HC-8; Sample ID: SE-07-66-72.5-75.13

Sampling Date	Week No.	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/l)	Acidity (mg CaCO3/l) to pH 4.5	Acidity (mg CaCO3/l) to pH 8.3	Total Alkalinity (mg CaCO3/l) to pH 4.5	Dissolved Metals by ICP-ES at Acme: Ag ppb	Al ppm	As ppb	B ppb	Ba ppb	Be ppb	Bi ppb	Ca ppm	Cd ppb	Ce ppb	Co ppb	Cr ppb	Cu ppm	Fe ppm	K ppm	Li ppm
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.5**	**0.05**	**0.001**	**0.5**	**5**	**0.05**	**0.05**	**0.05**	**0.05**	**0.05**	**0.01**	**0.02**	**0.5**	**0.1**	**0.01**	**0.05**	**0.05**
11-Aug-08	1	750	685	8.93	96	120	22	#N/A	#N/A	19	-0.05	0.2	2.1	6	7.99	-0.05	-0.05	7.803	-0.05	0.01	0.08	-0.5	0.0038	-0.01	2.464	0.0013
18-Aug-08	2	500	475	8.41	106	135	27	#N/A	#N/A	18																
25-Aug-08	3	500	500	8.45	75	145	17	#N/A	#N/A	17	-0.05	0.119	1.6	5	5.05	-0.05	-0.05	7.731	-0.05	0.01	0.08	-0.5	0.0027	-0.01	1.196	0.0012
1-Sep-08	4	500	500	8.87	56	150	10	#N/A	#N/A	17																
8-Sep-08	5	500	455	9.03	39	155	6	#N/A	#N/A	16	-0.05	0.141	1.7	-5	3.6	-0.05	-0.05	5.16	-0.05	0.01	0.04	-0.5	0.0034	-0.01	0.807	0.0007
15-Sep-08	6	500	470	8.45	47	130	7	#N/A	#N/A	16																
22-Sep-08	7	500	480	8.00	48	130	9	#N/A	1	16	-0.05	0.147	1.5	-5	4.63	-0.05	-0.05	7.82	-0.05	-0.01	0.05	-0.5	0.0024	-0.01	0.69	0.0006
29-Sep-08	8	500	465	8.37	40	130	7	#N/A	#N/A	14																

Leachate Chemistry of SE-07-66-72.5-75.13 (HC-8)

Sampling Date	Week No.	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/l)	Acidity (mg CaCO3/l) to pH 4.5	Acidity (mg CaCO3/l) to pH 8.3	Total Alkalinity (mg CaCO3/l) to pH 4.5	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08): Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**
6-Oct-08	9	500	485	8.66	47	135	10	#N/A	#N/A	16	0.042	2	-1	7	-1	-1	-50	-0.2	7.75	-1	-1	0.011	-0.05	-1	0.001	0.73
13-Oct-08	10	500	475	8.48	52	135	10	#N/A	#N/A	15	0.11	-50	-30	4	-3	#N/A	-10	-10	7.75	-10	-20	-0.02	-0.01	-30	#N/A	0.85
20-Oct-08	11	500	495	8.60	49	145	9	#N/A	#N/A	16	0.052	2	-1	8	-1	-1	-50	-0.2	8.98	-1	-1	0.027	-0.05	-1	-0.001	0.62
27-Oct-08	12	500	500	7.95	59	145	11	#N/A	-1	16	0.11	-50	-30	4	-3	#N/A	-10	-10	8.56	-10	-20	-0.02	-0.01	-30	#N/A	0.73
3-Nov-08	13	500	485	8.22	53	165	8	#N/A	-1	14	0.085	-1	-1	3	-1	-1	-50	-0.2	8.61	-1	-1	0.014	-0.05	-1	-0.001	0.56
10-Nov-08	14	500	495	7.46	62	170	10	#N/A	2	16	0.1	-50	-30	4	-3	#N/A	-10	-10	8.61	-10	-20	-0.02	-0.01	-30	#N/A	0.66
17-Nov-08	15	500	475	7.53	51	160	8	#N/A	-1	14	0.075	-1	-1	5	-1	-1	-50	-0.2	7.44	-1	-1	0.015	-0.05	-1	-0.001	0.48
24-Nov-08	16	500	455	7.59	50	150	7	#N/A	1	14																
1-Dec-08	17	500	490	7.86	56	170	10	#N/A	1	15	0.063	-1	-1	4	-1	-1	-50	-0.2	8.92	-1	-1	0.013	-0.05	-1	-0.001	0.54
8-Dec-08	18	500	495	7.71	56	185	10	#N/A	-1	14																
15-Dec-08	19	500	490	7.25	54	160	11	#N/A	-1	14	0.10	-1	-1	3	-1	-1	-50	-0.2	10.1	-1	-1	0.002	-0.05	-1	-0.001	0.57
22-Dec-08	20	500	500	7.58	58	190	8	#N/A	1	14																
29-Dec-08	21	500	490	7.53	56	185	7	#N/A	1	14	0.14	-1	-1	4	-1	-1	-50	-0.2	9.06	-1	-1	-0.001	-0.05	-1	-0.001	0.43
5-Jan-09	22	500	485	7.39	52	160	7	#N/A	1	14																
12-Jan-09	23	500	490	7.57	50	190	10	#N/A	1	14	0.09	0.7	0.7	3.1	-0.2	-0.2	-10	-0.04	7.95	-0.2	-0.2	0.0004	-0.01	-0.2	0.0003	0.38
19-Jan-09	24	500	495	7.52	51	190	11	#N/A	1	14																
26-Jan-09	25	500	450	7.85	49	125	4	#N/A	-1	11	0.11	0.7	0.9	2.6	-0.2	-0.2	-10	-0.04	6.21	-0.2	-0.2	0.002	0.01	-0.2	0.0002	0.28
2-Feb-09	26	500	450	7.98	38	150	4	#N/A	-1	12																
9-Feb-09	27	500	450	7.78	40	160	6	#N/A	1	12	0.09	0.5	0.7	2.4	-0.2	-0.2	-10	-0.04	6.65	-0.2	-0.2	0.0016	-0.01	-0.2	0.0004	0.3
16-Feb-09	28	500	500	7.88	48	190	7	#N/A	-1	14																
23-Feb-09	29	500	455	7.90	38	190	2	#N/A	-1	12	0.10	0.6	0.8	2.8	-0.2	-0.2	-10	-0.04	6.04	-0.2	-0.2	0.0013	-0.01	-0.2	-0.0002	0.25
2-Mar-09	30	500	455	8.00	31	210	-1	#N/A	-1	12																
9-Mar-09	31	500	470	8.12	35	130	2	#N/A	-1	12	0.085	0.5	0.7	2.4	-0.2	-0.2	-10	-0.04	6	-0.2	-0.2	0.0012	-0.01	-0.2	0.0003	0.24
16-Mar-09	32	500	475	8.01	37	170	5	#N/A	-1	12																
23-Mar-09	33	500	490	7.86	42	165	3	#N/A	-1	13	0.07	0.6	0.6	2.7	-0.2	-0.2	-10	-0.04	6.86	-0.2	-0.2	0.0008	-0.01	-0.2	0.0003	0.27
30-Mar-09	34	500	500	7.42	43	165	5	#N/A	1	13																
6-Apr-09	35	500	485	7.65	42	175	6	#N/A	-1	12	0.065	0.5	0.6	2.6	-0.2	-0.2	-10	-0.04	6.63	-0.2	-0.2	0.0019	-0.01	-0.2	-0.0002	0.25
13-Apr-09	36	500	495	7.56	46	165	4	#N/A	1	12																
20-Apr-09	37	500	480	7.56	44	160	5	#N/A	1	11	0.073	0.5	0.6	2.4	-0.2	-0.2	-10	-0.04	6.85	-0.2	-0.2	0.0006	-0.01	-0.2	0.0002	0.25
27-Apr-09	38	500	480	7.67	42	155	5	#N/A	1	11																
4-May-09	39	500	490	7.83	45	170	8	#N/A	-1	12	0.071	0.5	0.5	2.6	-0.2	-0.2	-10	-0.04	7.26	-0.2	-0.2	0.0025	-0.01	-0.2	-0.0002	0.25
11-May-09	40	500	485	7.70	46	180	7	#N/A	-1	12																
18-May-09	41	500	490	7.56	49	185	7	#N/A	1	12	0.072	0.5	0.5	2.9	-0.2	-0.2	-10	-0.04	7.96	-0.2	-0.2	0.0018	-0.01	-0.2	-0.0002	0.25
25-May-09	42	500	470	7.56	40	190	6	#N/A	1	11																
1-Jun-09	43	500	500	7.55	45	165	6	#N/A	1	12	0.063	0.4	0.4	2.4	-0.2	-0.2	-10	-0.04	6.78	-0.2	-0.2	0.0006	-0.01	-0.2	-0.0002	0.2

Leachate Chemistry of SE-07-66-72.5-75.13 (HC-8)

Sampling Date	Week No.	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/l)	Acidity (mg CaCO3/l) to pH 4.5	Acidity (mg CaCO3/l) to pH 8.3	Total Alkalinity (mg CaCO3/l) to pH 4.5	Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm
											Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08)															
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**
8-Jun-09	44	500	480	7.50	46	185	7	#N/A	1	11																
15-Jun-09	45	500	475	7.53	40	180	5	#N/A	1	10	0.072	0.4	0.3	2.2	-0.2	-0.2	-10	-0.04	6.23	-0.2	-0.2	0.0004	-0.01	-0.2	-0.0002	0.19
22-Jun-09	46	500	485	7.47	47	150	9	#N/A	1	11																
29-Jun-09	47	500	480	7.60	46	160	6	#N/A	1	12	0.068	0.4	0.8	2.7	-0.2	-0.2	-10	-0.04	7.02	-0.2	-0.2	0.0058	-0.01	-0.2	-0.0002	0.18
6-Jul-09	48	500	470	7.38	42	170	7	#N/A	1	11																
13-Jul-09	49	500	465	7.69	43	160	8	#N/A	-1	10	0.07	0.4	0.4	2.5	-0.2	-0.2	-10	-0.04	7.1	-0.2	-0.2	0.0004	-0.01	-0.2	-0.0002	0.19
20-Jul-09	50	500	500	7.54	47	180	10	#N/A	1	11																
27-Jul-09	51	500	480	7.73	48	180	9	#N/A	-1	11	0.065	0.4	0.4	2.4	-0.2	-0.2	-10	-0.04	7.06	-0.2	-0.2	0.0011	-0.01	-0.2	-0.0002	0.16
3-Aug-09	52	500	495	7.51	52	165	10	#N/A	1	10																
10-Aug-09	53	500	495	7.45	43	180	8	#N/A	-1	10	0.059	0.4	0.3	2.4	-0.2	-0.2	-10	-0.04	5.97	-0.2	-0.2	0.0012	-0.01	-0.2	-0.0002	0.15
17-Aug-09	54	500	480	7.51	44	175	6	#N/A	1	11																
24-Aug-09	55	500	490	7.54	43	175	8	#N/A	1	11	0.064	0.4	0.3	2.6	-0.2	-0.2	-10	-0.04	7.21	-0.2	-0.2	0.0005	-0.01	-0.2	-0.0002	0.15
31-Aug-09	56	500	480	7.79	44	180	5	#N/A	1	11																
7-Sep-09	57	500	480	7.43	44	190	9	#N/A	1	10	0.062	0.4	0.3	2.3	-0.2	-0.2	-10	-0.04	6.75	-0.2	-0.2	0.0006	-0.01	-0.2	-0.0002	0.16
14-Sep-09	58	500	475	7.69	41	180	7	#N/A	-1	10																
21-Sep-09	59	500	495	7.61	42	160	7	#N/A	-1	11	0.048	0.4	0.7	2.1	-0.1	-0.1	-5	-0.01	6.03	-0.2	-0.1	0.0006	-0.01	0.06	-0.0001	0.15
28-Sep-09	60	500	500	7.50	42	150	6	#N/A	-1	11																
5-Oct-09	61	500	470	7.80	40	190	7	#N/A	-1	9	0.058	0.3	0.4	2	-0.1	-0.1	-5	-0.01	6.43	-0.2	-0.1	0.0007	-0.01	-0.05	-0.0001	0.15
12-Oct-09	62	500	465	7.62	46	195	7	#N/A	-1	10																
19-Oct-09	63	500	485	7.68	41	185	8	#N/A	-1	11	0.054	0.4	0.3	2.1	-0.1	-0.1	-5	-0.01	5.89	-0.2	-0.1	0.0006	-0.01	-0.05	-0.0001	0.13
26-Oct-09	64	500	485	7.63	40	160	8	#N/A	-1	10																
2-Nov-09	65	500	490	7.53	42	160	7	#N/A	-1	10	0.055	0.4	0.3	2.3	-0.1	-0.1	-5	-0.01	6.5	-0.2	-0.1	0.0007	-0.01	-0.05	0.0008	0.17
9-Nov-09	66	500	495	7.58	41	165	7	#N/A	1	11																
16-Nov-09	67	500	465	7.40	41	155	5	#N/A	-1	10	0.065	0.4	0.5	2.3	-0.1	-0.1	-5	-0.01	7.35	0.6	-0.1	0.001	-0.01	-0.05	-0.0001	0.14
23-Nov-09	68	500	490	7.40	40	150	8	#N/A	1	10																
30-Nov-09	69	500	465	7.47	38	145	5	#N/A	1	10	0.051	0.3	0.4	2.1	-0.1	-0.1	-5	-0.01	6.11	-0.2	-0.1	0.0017	-0.01	-0.05	0.0006	0.12
7-Dec-09	70	500	490	7.55	40	135	6	#N/A	1	11																
14-Dec-09	71	500	490	7.60	40	140	5	#N/A	1	11	0.056	0.4	0.5	2	-0.1	-0.1	-5	-0.01	6.69	-0.2	-0.1	0.0014	-0.01	-0.05	-0.0001	0.12
21-Dec-09	72	500	490	7.58	40	150	7	#N/A	1	10																
28-Dec-09	73	500	490	7.52	41	165	5	#N/A	1	11	0.043	0.4	0.3	2.2	-0.1	-0.1	-5	-0.01	7	-0.2	-0.1	0.0008	-0.01	-0.05	-0.0001	0.12
4-Jan-10	74	500	485	7.53	39	135	7	#N/A	1	11																
11-Jan-10	75	500	495	7.51	36	150	6	#N/A	1	10	0.047	0.3	0.3	2	-0.1	-0.1	7	-0.01	6.32	-0.2	-0.1	0.0012	-0.01	-0.05	-0.0001	0.11
18-Jan-10	76	500	490	7.60	39	150	7	#N/A	1	10																
25-Jan-10	77	500	490	7.40	40	150	7	#N/A	1	10	0.047	0.3	0.3	1.8	-0.1	-0.1	-5	-0.01	6.71	-0.2	-0.1	0.0007	-0.01	-0.05	-0.0001	0.12
1-Feb-10	78	500	490	7.28	40	170	8	#N/A	1	10																
8-Feb-10	79	500	500	7.37	38	155	8	#N/A	1	10	0.045	0.3	0.2	1.9	-0.1	-0.1	-5	-0.01	6.39	-0.2	-0.1	0.001	-0.01	-0.05	-0.0001	0.098
15-Feb-10	80	500	485	7.42	39	160	9	#N/A	1	10																
22-Feb-10	81	500	450	7.59	38	190	8	#N/A	1	10	0.059	0.3	0.2	1.8	-0.1	-0.1	-5	-0.01	6.01	-0.2	-0.1	0.0007	-0.01	-0.05	-0.0001	0.11
1-Mar-10	82	500	480	7.38	40	180	10	#N/A	1	10																
8-Mar-10	83	500	485	7.46	39	190	9	#N/A	1	10	0.058	0.3	0.3	5	-0.1	-0.1	9	0.002	6.84	-0.2	0.1	0.0012	-0.01	0.24	0.0005	0.13
15-Mar-10	84	500	480	7.60	38	185	8	#N/A	1	10																
22-Mar-10	85	500	495	7.47	38	190	6	#N/A	1	9	0.044	0.3	0.2	1.8	-0.1	-0.1	-5	-0.01	6.28	-0.2	-0.1	0.0012	-0.01	-0.05	0.0002	0.1
29-Mar-10	86	500	490	7.52	39	185	7	#N/A	1	10																
5-Apr-10	87	500	485	7.34	39	190	6	#N/A	2	10	0.0493	0.3	0.22	1.95	-0.01	-0.005	-50	-0.005	6.16	-0.1	0.01	0.0005	0.002	0.029	-0.0005	0.1
12-Apr-10	88	500	495	7.55	38	170	7	#N/A	1	10																
19-Apr-10	89	500	485	7.44	38	155	8	#N/A	1	9	0.0471	0.3	0.21	1.99	-0.01	-0.005	-50	0.006	6.14	-0.1	0.01	0.00052	-0.001	0.021	-0.0005	0.1
26-Apr-10	90	500	480	7.36	39	180	7	#N/A	1	10																
3-May-10	91	500	495	7.55	39	170	7	#N/A	1	10	0.0498	0.28	0.31	1.98	-0.01	-0.005	-50	0.012	6.1	-0.1	0.017	0.00076	0.001	0.023	-0.0005	0.09
10-May-10	92	500	495	7.37	40	175	8	#N/A	1	10																
17-May-10	93	500	470	7.38	39	180	8	#N/A	1	10	0.0518	0.26	0.21	1.89	-0.01	-0.005	-50	-0.005	6.34	-0.1	0.015	0.00076	0.001	0.017	-0.0005	0.1
24-May-10	94	500	480	7.31	40	175	10	#N/A	1	9																

Leachate Chemistry of SE-07-66-72.5-75.13 (HC-8)

Sampling Date	Week No.	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/l)	Acidity (mg CaCO3/l) to pH 4.5	Acidity (mg CaCO3/l) to pH 8.3	Total Alkalinity (mg CaCO3/l) to pH 4.5	Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm
											Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08)														
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**
31-May-10	95	500	475	7.49	36	170	7	#N/A	1	9	0.0578	0.28	0.29	2.1	0.01	-0.005	-50	0.029	6.23	-0.1	#N/A	0.00198	0.01	0.106	-0.0005	0.14
7-Jun-10	96	500	500	7.48	38	180	8	#N/A	1	9																
14-Jun-10	97	500	495	7.46	40	165	7	#N/A	1	9	0.0418	0.27	0.19	2.6	-0.01	-0.005	-50	-0.005	5.6	-0.1	0.007	0.00038	-0.001	0.058	-0.0005	0.09
21-Jun-10	98	500	495	7.48	37	185	8	#N/A	1	10																
28-Jun-10	99	500	485	7.52	37	185	8	#N/A	1	9	0.0507	0.26	0.2	2.17	-0.01	-0.005	-50	-0.005	6.34	-0.1	0.01	0.00048	0.001	0.03	-0.0005	0.09
5-Jul-10	100	500	495	7.50	38	175	7	#N/A	1	10																
12-Jul-10	101	500	470	7.52	29	180	9	#N/A	1	9	0.0428	0.26	0.25	2.12	-0.01	-0.005	-50	-0.005	6.25	-0.1	0.01	0.00047	-0.001	-0.005	-0.0005	0.09
19-Jul-10	102	500	500	7.44	36	170	8	#N/A	1	10																
26-Jul-10	103	500	490	7.48	37	160	8	#N/A	1	9	0.0419	0.38	0.19	2.29	-0.01	-0.005	-50	-0.005	6.26	-0.1	0.018	0.00079	0.001	0.036	-0.0005	0.1
2-Aug-10	104	500	490	7.44	37	185	9	#N/A	1	9																
9-Aug-10	105	500	485	7.49	34	175	7	#N/A	1	9	0.0416	0.24	0.19	2.13	-0.01	-0.005	-50	-0.005	5.96	-0.1	0.011	0.00046	-0.001	0.058	-0.0005	0.08
16-Aug-10	106	500	485	7.50	28	195	9	#N/A	1	10																
23-Aug-10	107	500	485	7.44	40	160	8	#N/A	1	9	0.0454	0.23	0.13	2.26	-0.01	-0.005	-50	-0.005	6.59	-0.1	0.017	0.00122	0.004	0.045	-0.0005	0.09
30-Aug-10	108	500	495	7.53	37	180	8	#N/A	1	9																
6-Sep-10	109	500	480	7.43	41	180	11	#N/A	1	9	0.0419	0.24	0.17	2.17	-0.01	-0.005	-50	-0.005	6.95	-0.1	0.015	0.00055	0.001	0.049	-0.0005	0.09
13-Sep-10	110	500	495	7.39	35	180	7	#N/A	1	9																
20-Sep-10	111	500	490	7.35	37	190	8	#N/A	1	9	0.0425	0.24	0.18	2.37	-0.01	-0.005	-50	0.007	5.94	0.1	0.025	0.00114	0.005	0.249	-0.0005	0.08
27-Sep-10	112	500	495	7.51	34	200	9	#N/A	1	9																
4-Oct-10	113	500	495	7.49	31	175	10	#N/A	-1	10	0.0357	0.23	0.15	2.1	-0.01	-0.005	-50	0.007	6.03	-0.1	0.026	0.00091	0.001	0.051	-0.0005	0.08
11-Oct-10	114	500	480	7.30	37	180	10	#N/A	-1	10																
18-Oct-10	115	500	490	7.42	38	175	9	#N/A	-1	10	0.0429	0.24	0.17	2.47	-0.01	-0.005	-50	0.006	6.38	-0.1	0.019	0.00079	0.001	0.055	-0.0005	0.08
25-Oct-10	116	500	490	7.42	42	190	11	#N/A	-1	9																
1-Nov-10	117	500	500	7.41	42	185	8	#N/A	-1	9	0.0395	0.2	0.63	2	-0.01	-0.005	-50	-0.005	6.56	-0.1	0.025	0.00093	-0.001	0.038	-0.0005	0.09
8-Nov-10	118	500	490	7.39	41	170	8	#N/A	-1	9																
15-Nov-10	119	500	470	7.39	36	195	10	#N/A	-1	9	0.045	0.23	0.15	2.3	-0.01	-0.005	-50	0.008	7	-0.1	0.034	0.00501	0.002	0.216	-0.0005	0.09
22-Nov-10	120	500	490	7.46	42	180	9	#N/A	-1	9																
29-Nov-10	121	500	470	7.38	40	180	10	#N/A	-1	9	0.0424	0.2	0.22	2.1	-0.01	-0.005	-50	-0.005	6.66	-0.1	0.022	0.00164	-0.001	0.063	-0.0005	0.09
6-Dec-10	122	500	475	7.34	44	165	9	#N/A	1	9																
13-Dec-10	123	500	495	7.44	43	155	10	#N/A	-1	9	0.0329	0.23	0.21	2.29	-0.01	0.006	-50	-0.005	6.8	-0.1	0.025	0.00063	0.001	0.49	-0.0005	0.08
20-Dec-10	124	500	495	7.37	43	160	10	#N/A	-1	9																
27-Dec-10	125	500	490	7.53	34	180	6	#N/A	-1	9	0.0358	0.19	0.19	1.71	-0.01	-0.005	-50	-0.005	5.28	-0.1	0.023	0.0004	-0.001	0.009	-0.0005	0.06
3-Jan-11	126	500	490	7.35	50	205	12	#N/A	1	9																
10-Jan-11	127	500	480	7.41	46	175	9	#N/A	1	9	0.0359	0.21	0.14	2.16	-0.01	-0.005	-50	-0.005	5.97	-0.1	0.025	0.00191	0.001	0.104	-0.0005	0.08
17-Jan-11	128	500	475	7.37	43	155	10	#N/A	1	9																
24-Jan-11	129	500	480	7.40	42	165	9	#N/A	1	8	0.045	0.2	0.12	4.94	-0.01	-0.005	-50	-0.005	6.79	0.3	0.035	0.00179	0.002	0.155	-0.0005	0.08
31-Jan-11	130	500	490	7.39	45	200	11	#N/A	1	9																
7-Feb-11	131	500	500	7.33	43	175	12	#N/A	-1	8	0.0378	0.21	0.13	2.21	-0.01	-0.005	-50	-0.005	6.43	-0.1	0.023	0.00093	0.002	0.078	-0.0005	0.08
14-Feb-11	132	500	490	7.31	42	160	9	#N/A	-1	9																
21-Feb-11	133	500	490	7.35	44	170	6	#N/A	-1	9	0.0392	0.21	0.15	3.15	-0.01	-0.005	-50	0.007	7.02	-0.1	0.02	0.00071	0.002	0.056	-0.0005	0.08
28-Feb-11	134	500	490	7.29	42	185	9	#N/A	-1	9																
7-Mar-11	135	500	495	7.32	43	170	9	#N/A	-1	8	0.0339	0.18	0.12	2.31	-0.01	-0.005	-50	0.007	6.45	-0.1	0.029	0.0008	0.002	0.056	-0.0005	0.08
14-Mar-11	136	500	495	7.33	41	170	11	#N/A	1	9																
21-Mar-11	137	500	485	7.27	44	185	9	-1	-1	8	0.0363	0.19	0.13	2.42	-0.01	-0.005	-50	0.011	6.31	-0.1	0.041	0.00079	-0.001	0.028	-0.0005	0.08
28-Mar-11	138	500	500	7.23	43	180	9	-1	-1	7																
4-Apr-11	139	500	490	7.18	42	145	8	-1	-1	7	0.0352	0.18	0.15	2.4	-0.01	-0.005	-50	0.012	6.77	-0.1	0.025	0.0009	-0.001	0.018	-0.0005	0.08
11-Apr-11	140	500	490	7.24	35	145	8	-1	3	7																
18-Apr-11	141	500	480	7.08	39	165	8	-1	-1	7	0.0323	0.17	0.08	2.21	-0.01	-0.005	-50	0.015	6.05	-0.1	0.027	0.00049	-0.001	0.054	-0.0005	0.07
25-Apr-11	142	500	490	7.21	39	190	8	-1	-1	6																
2-May-11	143	500	495	7.23	39	150	8	-1	2	6	0.0326	0.17	0.1	2.07	-0.01	-0.005	-50	0.011	7.2	-0.1	0.06	0.00061	0.001	0.021	-0.0005	0.08
9-May-11	144	500	495	7.18	40	170	8	-1	-1	7																
16-May-11	145	500	485	7.29	41	190	8	-1	-1	6	0.034	0.18	0.08	1.99	-0.01	-0.005	-50	-0.005	6.87	-0.1	0.038	0.00064	-0.001	0.014	-0.0005	0.07

Leachate Chemistry of SE-07-66-72.5-75.13 (HC-8)

Sampling Date	Week No.	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/l)	Acidity (mg CaCO3/l) to pH 4.5	Acidity (mg CaCO3/l) to pH 8.3	Total Alkalinity (mg CaCO3/l) to pH 4.5	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08): Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**
23-May-11	146	500	500	7.19	41	190	9	-1	1	6																
30-May-11	147	500	480	7.21	37	150	8	-1	-1	6	0.0315	0.16	0.2	1.83	-0.01	-0.005	-50	-0.005	5.59	0.1	0.04	0.00052	0.004	0.017	-0.0005	0.06
6-Jun-11	148	500	500	7.19	38	190	7	-1	1	7																
13-Jun-11	149	500	490	7.23	38	155	8	-1	-1	6	0.0331	0.17	0.1	1.89	-0.01	-0.005	-50	-0.005	6.56	-0.1	0.025	0.0005	0.001	0.023	-0.0005	0.07
20-Jun-11	150	500	495	7.23	41	145	10	-1	3	5																
27-Jun-11	151	500	490	7.16	41	150	9	-1	1	6	0.0319	0.16	0.1	2.06	-0.01	-0.005	-50	-0.005	6.63	-0.1	0.041	0.00056	-0.001	0.009	-0.0005	0.07
4-Jul-11	152	500	500	7.14	38	170	8	-1	-1	6																
11-Jul-11	153	500	500	7.29	40	180	8	-1	-1	6	0.0337	0.15	0.12	2.1	-0.01	-0.005	-50	0.01	6.23	-0.1	0.067	0.00076	-0.001	0.051	-0.0005	0.07
18-Jul-11	154	500	495	7.22	42	175	9	-1	-1	6																
25-Jul-11	155	500	480	7.24	43	190	8	-1	-1	7	0.0312	0.15	0.12	1.82	-0.01	-0.005	-50	-0.005	6.66	-0.1	0.042	0.00061	-0.001	0.014	-0.0005	0.07
1-Aug-11	156	500	500	7.26	49	190	10	-1	-1	7																
8-Aug-11	157	500	500	7.25	41	175	8	-1	-1	6	0.0307	0.17	0.1	2.16	-0.01	-0.005	-50	0.007	6	-0.1	0.028	0.0007	-0.001	0.017	-0.0005	0.08
15-Aug-11	158	500	500	7.26	45	185	8	-1	-1	7																
22-Aug-11	159	500	485	7.16	41	195	8	-1	-1	6	0.0285	0.15	0.1	1.84	-0.01	-0.005	-50	-0.005	6.56	0.1	0.043	0.00092	-0.001	0.04	-0.0005	0.07
29-Aug-11	160	500	490	7.34	39	150	8	-1	-1	7																
5-Sep-11	161	500	495	7.32	44	160	10	-1	-1	6	0.0282	0.15	0.11	1.98	-0.01	-0.005	-50	-0.005	6.53	-0.1	0.056	0.00067	-0.001	0.011	-0.0005	0.08
12-Sep-11	162	500	495																							
19-Sep-11	163	500	485																							
26-Sep-11	164	500	500																							
3-Oct-11	165	500	490	7.20	34	155	9	-1	-1	6																
10-Oct-11	166	500	490																							
17-Oct-11	167	500	495																							
24-Oct-11	168	500	485																							
31-Oct-11	169	500	495	7.04	45	165	10	-1	-1	7																
7-Nov-11	170	500	490																							
14-Nov-11	171	500	485																							
21-Nov-11	172	500	475																							
28-Nov-11	173	500	475	7.24	44	120	9	-1	-1	9																
5-Dec-11	174	500	475																							
12-Dec-11	175	500	490																							
19-Dec-11	176	500	485																							
26-Dec-11	177	500	470	7.04	46	150	11	-1	-1	6																
2-Jan-12	178	500	490																							
9-Jan-12	179	500	495																							
16-Jan-12	180	500	480																							
23-Jan-12	181	500	475	7.25	40	140	8	-1	-1	6	0.0272	0.14	0.07	2.01	-0.01	-0.005	-50	0.015	6.77	0.2	0.017	0.00048	0.003	0.042	-0.0005	0.07
30-Jan-12	182	500	490																							
6-Feb-12	183	500	485																							
13-Feb-12	184	500	490																							
20-Feb-12	185	500	485	7.24	30	130	8	-1	-1	7																
27-Feb-12	186	500	480																							
5-Mar-12	187	500	470																							
12-Mar-12	188	500	475																							
19-Mar-12	189	500	485	7.32	38	130	8	-1	-1	6																
26-Mar-12	190	500	485																							
2-Apr-12	191	500	485																							
9-Apr-12	192	500	480																							
16-Apr-12	193	500	480	7.23	37	140	8	-1	-1	6	0.0241	0.11	0.052	1.7	-0.01	-0.005	-50	-0.005	5.73	0.1	0.018	0.000427	0.0017	0.011	-0.0005	0.06
23-Apr-12	194	500	490																							

Leachate Chemistry of SE-07-66-72.5-75.13 (HC-8)

Sampling Date	Week No.	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/l)	Acidity (mg CaCO3/l) to pH 4.5	Acidity (mg CaCO3/l) to pH 8.3	Total Alkalinity (mg CaCO3/l) to pH 4.5	Dissolved Metals by ICP-MS at Cantest (as per e-mail from Christina James at SRK dated 9-Dec08) Al ppm	Sb ppb	As ppb	Ba ppb	Be ppb	Bi ppb	B ppb	Cd ppb	Ca ppm	Cr ppb	Co ppb	Cu ppm	Fe ppm	Pb ppb	Li ppm	Mg ppm
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.5**	**0.005**	**1**	**1**	**1**	**1**	**1**	**50**	**0.2**	**0.05**	**1**	**1**	**0.001**	**0.05**	**1**	**0.001**	**0.05**
30-Apr-12	195	500	485																							
7-May-12	196	500	485																							
14-May-12	197	500	475	7.18	42	150	9	-1	-1	5																
21-May-12	198	500	495																							
28-May-12	199	500	475																							
4-Jun-12	200	500	490																							
11-Jun-12	201	500	485	7.26	41	140	10	-1	-1	5																
18-Jun-12	202	500	480																							
25-Jun-12	203	500	485																							
2-Jul-12	204	500	480																							
9-Jul-12	205	500	490	7.32	41	140	8	-1	1	6	0.0238	0.124	0.121	1.62	-0.01	-0.005	-50	0.0069	6.44	-0.1	0.0262	0.000502	-0.001	-0.005	-0.0005	0.063
16-Jul-12	206	500	480																							
23-Jul-12	207	500	480																							
30-Jul-12	208	500	485																							
6-Aug-12	209	500	480	7.20	45	135	10	-1	-1	6																
13-Aug-12	210	500	485																							
20-Aug-12	211	500	480																							
27-Aug-12	212	500	495																							
3-Sep-12	213	500	460	7.21	44	135	9	-1	1	4																
10-Sep-12	214	500	480																							
17-Sep-12	215	500	475																							
24-Sep-12	216	500	485																							
1-Oct-12	217	500	480	7.24	44	135	9	-1	-1	6	0.0229	0.147	0.1	2.3	-0.01	-0.005	-50	-0.005	6.09	0.11	0.026	0.00657	0.0049	0.117	-0.0005	0.062
8-Oct-12	218	500	475																							
15-Oct-12	219	500	475																							
22-Oct-12	220	500	480																							
29-Oct-12	221	500	480	7.23	43	145	9	-1	1	6																
5-Nov-12	222	500	480																							
12-Nov-12	223	500	475																							
19-Nov-12	224	500	475																							
26-Nov-12	225	500	485	7.15	37	140	10	-1	-1	5																
3-Dec-12	226	500	490																							
10-Dec-12	227	500	480																							
17-Dec-12	228	500	470																							
24-Dec-12	229	500	470	7.21	35	130	9	-1	-1	5	0.0228	0.093	0.079	1.82	-0.01	-0.005	-50	0.005	5.86	0.2	0.034	0.000722	0.0025	0.012	-0.0005	0.06
31-Dec-12	230	500	475																							
7-Jan-13	231	500	475																							

CANTEST

Sampling Date	Mg ppm	Mn ppm	Mo ppb	Na ppm	Ni ppb	P ppm	Pb ppb	Sb ppb	Se ppb	Si ppm	Te ppb	Ti ppb	Tl ppb	U ppm	V ppb	W ppb	Zn ppb	Ion Balance Anions	Ion Balance Cations	Ion Balance Balance %
Detection Limits	**0.05**	**0.00005**	**0.1**	**0.05**	**0.2**	**20**	**0.1**	**0.05**	**0.5**	**1**	**0.05**	**10**	**0.01**	**0.02**	**0.2**	**0.02**	**0.5**			
11-Aug-08	1.008	0.01158	3.9	10.218	0.8	0.022	0.2	6.13	1.4	1.032	-0.05	-10	-0.01	0.00005	5.6	0.47	-0.5	0.83	0.92	-5.23
18-Aug-08																				
25-Aug-08	1.077	0.02751	4	5.606	0.2	-0.02	-0.1	5.64	1.1	1.41	-0.05	-10	-0.01	0.00047	7.7	0.36	-0.5	0.69	0.67	1.46
1-Sep-08																				
8-Sep-08	0.704	0.0112	1.3	1.989	-0.2	0.054	0.3	2.13	-0.5	1.024	-0.05	-10	-0.01	0.00025	7.1	0.14	0.6	0.44	0.38	6.63
15-Sep-08																				
22-Sep-08	0.834	0.01706	1.4	1.072	-0.2	-0.02	0.1	1.71	0.6	1.154	-0.05	-10	-0.01	0.00028	5.1	0.1	-0.5	0.51	0.47	3.66
29-Sep-08																				

Leachate Chemistry of SE-07-66-72.5-75.13 (HC-8)

Sampling Date	Mn ppm	Mo ppb	Ni ppb	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Ion Balance Anions	Ion Balance Cations	Ion Balance Balance %
Detection Limits	**0.001**	**0.5**	**1**	**0.15**	**0.1**	**1**	**0.25**	**0.25**	**0.15**	**1**	**1**	**0.1**	**0.5**	**1**	**1**	**0.0005**	**1**	**5**	**10**			
6-Oct-08	-0.001	1.5	-1	-0.15	0.6	-1	1	-0.25	0.77	29	-1	-0.1	-0.5	-1	-1	-0.0005	4	7	-10	0.52	0.50	1.66
13-Oct-08	0.012	-20	-20	-0.15	-0.25	#N/A	1.1	-10	0.8	32	#N/A	#N/A	#N/A	-30	-5	#N/A	-10	8	-20			
20-Oct-08	0.002	1.2	-1	-0.15	0.5	-1	1	-0.25	0.58	26	-1	-0.1	-0.5	-1	-1	-0.0005	3		-10	0.50	0.54	-4.53
27-Oct-08	0.006	-20	-20	-0.15	0.3	#N/A	0.92	-10	0.5	30	#N/A	#N/A	#N/A	-30	-5	#N/A	-10	-5	-20			
3-Nov-08	-0.001	1.3	-1	-0.15	0.4	-1	0.8	-0.25	0.36	25	-1	-0.1	-0.5	-1	-1	-0.0005	3	-5	-10	0.45	0.51	-6.85
10-Nov-08	0.003	-20	-20	-0.15	0.4	#N/A	0.86	-10	0.3	28	#N/A	#N/A	#N/A	-30	-5	#N/A	-10	-5	-20			
17-Nov-08	-0.001	1.1	-1	-0.15	0.4	-1	0.7	-0.25	0.27	22	-1	-0.1	-0.5	-1	-1	-0.0005	3	-5	-10	0.45	0.44	0.49
24-Nov-08																						
1-Dec-08	-0.001	1.5	-1	-0.15	0.4	-1	0.7	-0.25	0.25	26	-1	-0.1	-0.5	-1	-1	-0.0005	3	-5	-10	0.51	0.52	-1.03
8-Dec-08																						
15-Dec-08	0.001	1.3	-1	-0.15	0.3	-1	0.85	0.4	0.42	24	-1	0.1	-0.5	-1	-1	-0.0005	3	-5	-10	0.50	0.59	-8.24
22-Dec-08																						
29-Dec-08	-0.001	1.5	-1	-0.15	0.3	-1	1.3	-0.25	0.17	24	-1	-0.1	-0.5	-1	-1	-0.0005	3	-5	-10	0.43	0.52	-9.86
5-Jan-09																						
12-Jan-09	0.0006	1.3	-0.2	-0.03	0.25	-0.2	0.72	-0.05	0.15	21	-0.2	-0.02	-0.1	-0.2	-0.2	0.0002	2.2	-1	-2	0.48	0.45	2.85
19-Jan-09																						
26-Jan-09	0.0014	1.1	-0.2	-0.03	0.41	-0.2	0.73	-0.05	0.15	17	-0.2	-0.02	-0.1	-0.2	-0.2	0.0002	2.4	-1	-2	0.30	0.36	-8.93
2-Feb-09																						
9-Feb-09	0.0023	0.6	-0.2	-0.03	0.34	-0.2	0.63	-0.05	0.15	16	-0.2	-0.02	-0.1	-0.2	-0.2	0.0001	2.5	-1	-2	0.36	0.38	-3.72
16-Feb-09																						
23-Feb-09	0.0017	0.7	-0.2	-0.03	0.46	-0.2	0.63	-0.05	0.14	15	-0.2	-0.02	-0.1	-0.2	-0.2	0.0001	2.3	-1	-2	0.28	0.35	-10.96
2-Mar-09																						
9-Mar-09	0.0032	0.5	-0.2	-0.03	0.4	-0.2	0.64	-0.05	0.13	14	-0.2	-0.02	-0.1	-0.2	-0.2	0.0001	2.5	-1	-2	0.28	0.35	-10.12
16-Mar-09																						
23-Mar-09	0.0016	0.6	-0.2	-0.03	0.38	-0.2	0.68	-0.05	0.13	17	-0.2	-0.02	-0.1	-0.2	-0.2	0.0001	2.5	-1	-2	0.32	0.39	-9.27
30-Mar-09																						
6-Apr-09	0.0008	0.6	-0.2	-0.03	0.29	-0.2	0.61	-0.05	0.1	15	-0.2	-0.02	-0.1	-0.2	-0.2	0.0001	2.1	-1	-2	0.37	0.37	-0.83
13-Apr-09																						
20-Apr-09	0.0004	0.7	-0.2	-0.03	0.28	-0.2	0.56	-0.05	0.09	16	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	1.9	-1	-2	0.32	0.38	-8.23
27-Apr-09																						
4-May-09	0.0006	0.7	-0.2	-0.03	0.27	-0.2	0.62	-0.05	0.09	15	-0.2	-0.02	-0.1	-0.2	-0.2	0.0001	1.8	-1	-2	0.41	0.40	0.53
11-May-09																						
18-May-09	0.0005	0.9	0.9	-0.03	0.28	-0.2	0.69	-0.05	0.1	15	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	1.8	-1	-2	0.39	0.44	-6.35
25-May-09																						
1-Jun-09	0.0004	0.7	-0.2	-0.03	0.23	-0.2	0.6	-0.05	0.07	13	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	1.5	-1	-2	0.37	0.37	-0.87

Leachate Chemistry of SE-07-66-72.5-75.13 (HC-8)

Sampling Date	Mn ppm	Mo ppb	Ni ppb	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Ion Balance Anions	Ion Balance Cations	Ion Balance Balance %
Detection Limits	**0.001**	**0.5**	**1**	**0.15**	**0.1**	**1**	**0.25**	**0.25**	**0.15**	**1**	**1**	**0.1**	**0.5**	**1**	**1**	**0.0005**	**1**	**5**	**10**			
8-Jun-09																						
15-Jun-09	0.0005	1	-0.2	-0.03	0.24	-0.2	0.55	-0.05	0.08	11	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	1.5	-1	-2	0.30	0.34	-6.26
22-Jun-09																						
29-Jun-09	0.0005	0.7	-0.2	-0.03	0.2	0.4	0.54	-0.05	0.08	15	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	1.5	-1	-2	0.37	0.38	-2.29
6-Jul-09																						
13-Jul-09	0.0004	0.9	0.2	-0.03	0.24	-0.2	0.55	-0.05	0.09	13	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	1.4	-1	-2	0.37	0.39	-2.89
20-Jul-09																						
27-Jul-09	0.0003	0.9	-0.2	-0.03	0.2	-0.2	0.49	-0.05	0.05	13	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	1.3	-1	-2	0.41	0.38	3.40
3-Aug-09																						
10-Aug-09	0.0003	0.8	-0.2	-0.03	0.16	-0.2	0.49	-0.05	0.07	11	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	1.2	-1	-2	0.37	0.32	6.09
17-Aug-09																						
24-Aug-09	0.0004	0.9	-0.2	-0.03	0.19	-0.2	0.52	-0.05	0.07	13	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	1.4	-1	-2	0.39	0.39	-0.16
31-Aug-09																						
7-Sep-09	0.0005	1.1	-0.2	-0.03	0.2	-0.2	0.48	-0.05	0.07	11	-0.2	-0.02	-0.1	-0.2	-0.2	-0.0001	1.2	-1	-2	0.39	0.37	2.89
14-Sep-09																						
21-Sep-09	0.0004	0.9	-0.2	-0.015	0.15	-0.2	0.47	-0.04	0.07	11	-0.2	-0.02	-0.05	-0.1	-0.2	0.00005	0.9	-1	-0.1	0.37	0.33	5.75
28-Sep-09																						
5-Oct-09	0.0004	1	-0.2	-0.015	0.16	-0.2	0.37	-0.04	0.062	12	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	1	-1	-0.1	0.33	0.35	-3.16
12-Oct-09																						
19-Oct-09	0.0007	1	-0.2	-0.015	0.15	-0.2	0.41	-0.04	0.063	9.5	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.9	-1	-0.1	0.39	0.32	9.78
26-Oct-09																						
2-Nov-09	0.0005	1.2	-0.2	-0.015	0.16	-0.2	0.52	-0.04	0.088	12	-0.2	-0.02	-0.05	-0.1	0.2	0.00005	1	-1	-0.1	0.35	0.35	-1.03
9-Nov-09																						
16-Nov-09	0.0006	1.6	-0.2	-0.015	0.16	-0.2	0.36	-0.04	0.065	12	-0.2	-0.02	0.12	-0.1	-0.2	0.00006	1.2	-1	-0.1	0.30	0.39	-12.77
23-Nov-09																						
30-Nov-09	0.0002	1	-0.2	0.03	0.13	-0.2	0.36	-0.04	0.081	8.6	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.8	-1	-0.1	0.30	0.33	-3.76
7-Dec-09																						
14-Dec-09	0.0003	1	-0.2	-0.015	0.15	-0.2	0.38	-0.04	0.055	11	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.8	-1	-0.1	0.32	0.36	-4.80
21-Dec-09																						
28-Dec-09	0.0003	1.3	-0.2	0.05	0.14	-0.2	0.35	-0.04	0.092	10	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.8	-1	-0.1	0.32	0.37	-6.91
4-Jan-10																						
11-Jan-10	0.0005	1.2	-0.2	-0.015	0.13	-0.2	0.42	-0.04	0.051	9.5	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.9	-1	-0.1	0.33	0.34	-1.64
18-Jan-10																						
25-Jan-10	0.0003	1.3	-0.2	-0.015	0.12	-0.2	0.42	-0.04	0.048	9.1	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.8	-1	-0.1	0.35	0.36	-1.42
1-Feb-10																						
8-Feb-10	0.0004	1.3	-0.2	-0.015	0.12	-0.2	0.42	-0.04	0.047	8.7	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.8	-1	-0.1	0.37	0.34	4.11
15-Feb-10																						
22-Feb-10	0.0003	1.1	-0.2	-0.015	0.13	-0.2	0.36	-0.04	0.056	7.9	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.8	-1	-0.1	0.37	0.32	6.50
1-Mar-10																						
8-Mar-10	0.00053	1.4	-0.2	-0.015	0.13	-0.2	0.4	-0.04	0.07	9.7	-0.2	-0.02	-0.05	-0.1	-0.2	0.00005	0.7	-1	-0.1	0.39	0.37	2.91
15-Mar-10																						
22-Mar-10	0.0005	1.4	-0.2	0.02	0.12	-0.2	0.36	-0.04	0.074	7.9	-0.2	-0.02	-0.05	-0.1	-0.2	-0.00005	0.8	3	-0.1	0.31	0.33	-4.46
29-Mar-10																						
5-Apr-10	0.00074	1.41	0.05	-0.002	0.12	0.12	0.4	-0.005	-0.05	8.52	-0.02	0.011	-0.005	-0.01	-0.5	0.000039	0.8	0.6	-0.1	0.33	0.33	-0.30
12-Apr-10																						
19-Apr-10	0.00045	1.47	0.02	-0.002	0.12	0.11	0.4	-0.005	-0.05	8.4	-0.02	-0.002	-0.005	-0.01	-0.5	0.000042	0.5	0.7	-0.1	0.35	0.33	3.11
26-Apr-10																						
3-May-10	0.0008	1.35	0.07	-0.002	0.11	0.11	0.4	-0.005	-0.05	8.38	-0.02	0.004	-0.005	-0.01	-0.5	0.000037	0.6	0.3	-0.1	0.35	0.32	3.42
10-May-10																						
17-May-10	0.0004	1.33	0.12	-0.002	0.11	0.11	0.4	-0.005	-0.05	8.23	-0.02	-0.002	-0.005	-0.01	-0.5	0.000034	0.7	0.1	-0.1	0.37	0.34	4.36
24-May-10																						

Leachate Chemistry of SE-07-66-72.5-75.13 (HC-8)

Sampling Date	Mn ppm	Mo ppb	Ni ppb	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Ion Balance Anions	Ion Balance Cations	Ion Balance Balance %
Detection Limits	**0.001**	**0.5**	**1**	**0.15**	**0.1**	**1**	**0.25**	**0.25**	**0.15**	**1**	**1**	**0.1**	**0.5**	**1**	**1**	**0.0005**	**1**	**5**	**10**			
31-May-10	#N/A	1.31	-0.02	-0.002	0.15	0.09	0.4	-0.005	-0.05	8.65	-0.02	0.004	-0.005	0.02	-0.5	0.000041	0.7	0.4	-0.1	0.33	0.34	-1.46
7-Jun-10																						
14-Jun-10	0.00044	1.39	-0.02	-0.002	0.12	0.09	0.3	-0.005	-0.05	7.87	-0.02	-0.002	-0.005	0.02	-0.5	0.00003	0.6	0.7	-0.1	0.33	0.30	4.58
21-Jun-10																						
28-Jun-10	0.00062	1.13	-0.02	-0.002	0.13	0.12	0.4	-0.005	-0.05	8.06	-0.02	0.006	-0.005	0.01	-0.5	0.000031	0.6	0.5	-0.1	0.35	0.34	1.63
5-Jul-10																						
12-Jul-10	0.00041	1.38	-0.02	-0.002	0.14	0.15	0.4	-0.005	-0.05	7.93	-0.02	-0.002	-0.005	-0.01	-0.5	0.000034	0.6	0.8	-0.1	0.37	0.33	5.31
19-Jul-10																						
26-Jul-10	0.00069	2	0.02	-0.002	0.14	0.14	0.4	-0.005	0.05	8.04	-0.02	-0.002	-0.005	0.14	-0.5	0.000031	0.5	0.9	-0.1	0.35	0.33	2.21
2-Aug-10																						
9-Aug-10	0.0008	1.38	0.03	-0.002	0.14	0.11	0.4	-0.005	-0.05	7.37	-0.02	-0.002	-0.005	-0.01	-0.5	0.00003	0.6	1	-0.1	0.33	0.31	1.69
16-Aug-10																						
23-Aug-10	0.00119	1.25	0.04	-0.002	0.15	0.11	0.4	-0.005	0.05	7.51	-0.02	-0.002	-0.005	-0.01	-0.5	0.000029	0.4	1.8	-0.1	0.35	0.35	-0.19
30-Aug-10																						
6-Sep-10	0.00105	1.52	3.81	-0.002	0.15	0.09	0.4	-0.005	0.04	7.92	-0.02	-0.002	-0.005	-0.01	-0.5	0.000025	0.5	0.9	-0.1	0.41	0.37	5.68
13-Sep-10																						
20-Sep-10	0.00102	1.34	0.07	-0.002	0.16	0.1	0.3	-0.005	-0.05	7.93	-0.02	-0.002	-0.005	0.02	-0.5	0.000024	0.6	2.1	-0.1	0.35	0.31	4.85
27-Sep-10																						
4-Oct-10	0.00098	1.51	0.06	0.015	0.14	0.11	0.3	-0.005	0.06	7.22	-0.02	-0.002	-0.005	0.09	-0.5	0.000029	0.3	1.7	-0.1	0.41	0.32	12.40
11-Oct-10																						
18-Oct-10	0.00106	1.6	0.08	0.002	0.15	0.11	0.4	-0.005	0.08	7.89	-0.02	0.003	-0.005	0.01	-0.5	0.000059	0.5	2.6	-0.1	0.39	0.34	6.87
25-Oct-10																						
1-Nov-10	0.00123	1.39	0.03	0.007	0.14	-0.04	0.4	-0.005	0.06	7.04	-0.02	-0.002	-0.005	0.01	-0.5	0.000029	0.5	2.1	-0.1	0.35	0.35	0.09
8-Nov-10																						
15-Nov-10	0.00172	1.28	0.05	0.008	0.16	0.08	0.4	-0.005	0.06	7.46	-0.02	-0.002	-0.005	-0.01	-0.5	0.000041	0.5	1.4	-0.1	0.39	0.37	2.52
22-Nov-10																						
29-Nov-10	0.00113	1.32	0.04	0.003	0.15	0.11	0.4	-0.005	0.05	7.13	-0.02	-0.002	-0.005	-0.01	-0.5	0.000023	0.4	1	-0.1	0.39	0.35	5.02
6-Dec-10																						
13-Dec-10	0.00108	1.26	0.07	0.003	0.14	0.1	0.4	-0.005	-0.05	7.07	-0.02	0.003	-0.005	-0.01	1.8	0.000026	0.6	1.6	-0.1	0.39	0.36	4.34
20-Dec-10																						
27-Dec-10	0.00111	1.09	-0.02	-0.002	0.12	0.07	0.3	-0.005	-0.05	5.71	-0.02	-0.002	-0.005	0.03	-0.5	0.000024	0.5	0.3	-0.1	0.31	0.28	4.60
3-Jan-11																						
10-Jan-11	0.00117	1.19	0.05	0.004	0.14	0.09	0.4	-0.005	-0.05	6.93	-0.02	-0.002	0.005	0.01	-0.5	0.000032	0.4	1.1	0.1	0.37	0.31	7.71
17-Jan-11																						
24-Jan-11	0.00145	1.4	0.08	0.012	0.15	0.08	0.3	-0.005	0.07	6.86	-0.02	-0.002	-0.005	0.01	-0.5	0.000028	0.3	1.5	-0.1	0.35	0.36	-1.49
31-Jan-11																						
7-Feb-11	0.00145	1.23	0.03	0.006	0.13	0.09	0.3	-0.005	0.06	6.6	-0.02	-0.002	-0.005	0.02	-0.5	0.000024	0.4	1.8	-0.1	0.41	0.34	9.59
14-Feb-11																						
21-Feb-11	0.00104	1.32	0.03	0.016	0.14	0.11	0.4	-0.005	0.06	6.72	-0.02	-0.002	-0.005	0.08	-0.5	0.000021	0.6	1.5	-0.1	0.31	0.37	-9.38
28-Feb-11																						
7-Mar-11	0.001	1	0.12	0.01	0.12	0.07	0.3	-0.005	0.07	8.89	-0.02	-0.002	-0.005	-0.01	-0.5	0.000017	0.6	3.8	-0.1	0.35	0.34	1.24
14-Mar-11																						
21-Mar-11	0.00171	1.11	0.03	0.02	0.13	0.09	0.3	-0.005	0.06	6.91	-0.02	-0.002	-0.005	0.01	-0.5	0.000019	0.4	1.6	-0.1	0.34	0.33	1.63
28-Mar-11																						
4-Apr-11	0.00121	1.08	0.05	0.009	0.13	0.11	0.3	-0.005	0.1	6.67	-0.02	-0.002	-0.005	0.01	-0.5	0.000019	0.4	7.2	-0.1	0.29	0.36	-9.55
11-Apr-11																						
18-Apr-11	0.00137	1.32	0.05	0.016	0.12	0.1	0.3	-0.005	-0.05	8.86	-0.02	-0.002	-0.005	0.02	-0.5	0.000018	0.4	3.9	-0.1	0.29	0.32	-3.71
25-Apr-11																						
2-May-11	0.0031	1.22	0.09	0.01	0.13	0.1	0.4	-0.005	0.06	6.84	-0.02	-0.002	-0.005	-0.01	-0.5	0.00003	0.4	4.8	-0.1	0.27	0.38	-16.03
9-May-11																						
16-May-11	0.00154	1.46	0.04	0.009	0.12	0.12	0.4	-0.005	-0.05	6.79	-0.02	-0.002	-0.005	-0.01	-0.5	0.000033	0.4	5.4	-0.1	0.29	0.36	-11.15

Leachate Chemistry of SE-07-66-72.5-75.13 (HC-8)

Sampling Date	Mn ppm	Mo ppb	Ni ppb	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Ion Balance Anions	Ion Balance Cations	Ion Balance Balance %
Detection Limits	**0.001**	**0.5**	**1**	**0.15**	**0.1**	**1**	**0.25**	**0.25**	**0.15**	**1**	**1**	**0.1**	**0.5**	**1**	**1**	**0.0005**	**1**	**5**	**10**			
23-May-11																						
30-May-11	0.00121	1.09	0.06	0.007	0.11	0.16	0.3	0.009	-0.05	5.14	-0.02	0.007	-0.005	0.01	1.5	0.000015	0.6	5.4	-0.1	0.28	0.29	-2.21
6-Jun-11																						
13-Jun-11	0.00161	1.31	0.07	0.01	0.13	0.1	0.3	-0.005	0.06	5.87	-0.02	-0.002	-0.005	0.02	-0.5	0.000014	0.4	5	-0.1	0.29	0.34	-8.99
20-Jun-11																						
27-Jun-11	0.00179	1.18	0.06	0.015	0.13	0.09	0.3	-0.005	0.06	6.17	-0.02	-0.002	-0.005	-0.01	-0.5	0.000017	0.4	3.8	-0.1	0.31	0.35	-6.34
4-Jul-11																						
11-Jul-11	0.00272	1.71	0.05	0.007	0.13	0.07	0.3	-0.005	-0.05	5.98	-0.02	-0.002	-0.005	0.02	-0.5	0.000076	0.3	5	-0.1	0.28	0.33	-7.27
18-Jul-11																						
25-Jul-11	0.00227	1.02	0.05	0.007	0.13	0.08	0.4	-0.005	-0.05	5.76	-0.02	-0.002	-0.005	0.01	-0.5	0.000015	0.4	5	-0.1	0.31	0.35	-6.26
1-Aug-11																						
8-Aug-11	0.0012	1.33	0.05	0.005	0.15	0.1	0.3	-0.005	0.06	6	-0.02	-0.002	0.007	0.02	-0.5	0.00001	0.4	4.7	-0.1	0.30	0.32	-2.17
15-Aug-11																						
22-Aug-11	0.00183	1.05	0.49	#N/A	0.12	0.08	0.3	-0.005	0.07	5.65	-0.02	-0.002	-0.005	-0.01	-0.5	0.000024	-0.2	6.4	-0.1	0.29	0.34	-7.56
29-Aug-11																						
5-Sep-11	0.00194	1.24	0.07	0.003	0.11	0.11	0.3	-0.005	-0.05	5.89	-0.02	-0.002	-0.005	0.02	-0.5	0.000013	-0.2	7.5	-0.1	0.32	0.34	-2.89
12-Sep-11																						
19-Sep-11																						
26-Sep-11																						
3-Oct-11																						
10-Oct-11																						
17-Oct-11																						
24-Oct-11																						
31-Oct-11																						
7-Nov-11																						
14-Nov-11																						
21-Nov-11																						
28-Nov-11																						
5-Dec-11																						
12-Dec-11																						
19-Dec-11																						
26-Dec-11																						
2-Jan-12																						
9-Jan-12																						
16-Jan-12																						
23-Jan-12	0.00171	0.90	0.07	0.003	0.13	0.09	0.4	-0.005	0.05	5.53	-0.02	-0.002	-0.005	-0.2	-0.5	0.000012	0.3	0.9	-0.1	0.30	0.35	-8.36
30-Jan-12																						
6-Feb-12																						
13-Feb-12																						
20-Feb-12																						
27-Feb-12																						
5-Mar-12																						
12-Mar-12																						
19-Mar-12																						
26-Mar-12																						
2-Apr-12																						
9-Apr-12																						
16-Apr-12	0.00153	1.02	0.06	-0.002	0.094	0.086	0.3	0.005	-0.05	4.64	-0.02	0.002	-0.005	-0.2	-0.5	0.000010	-0.2	4.7	-0.1	0.28	0.30	-3.47
23-Apr-12																						

Leachate Chemistry of SE-07-66-72.5-75.13 (HC-8)

Sampling Date	Mn ppm	Mo ppb	Ni ppb	P ppm	K ppm	Se ppb	Si ppm	Ag ppb	Na ppm	Sr ppb	Te ppb	Tl ppb	Th ppb	Sn ppb	Ti ppb	U ppm	V ppb	Zn ppb	Zr ppb	Ion Balance Anions	Ion Balance Cations	Ion Balance Balance %
Detection Limits	**0.001**	**0.5**	**1**	**0.15**	**0.1**	**1**	**0.25**	**0.25**	**0.15**	**1**	**1**	**0.1**	**0.5**	**1**	**1**	**0.0005**	**1**	**5**	**10**			
30-Apr-12																						
7-May-12																						
14-May-12																						
21-May-12																						
28-May-12																						
4-Jun-12																						
11-Jun-12																						
18-Jun-12																						
25-Jun-12																						
2-Jul-12																						
9-Jul-12	0.00259	0.845	0.063	0.0036	0.089	0.098	0.31	-0.005	-0.05	4.52	-0.02	-0.002	-0.005	-0.2	-0.5	0.0000084	0.89	0.61	-0.1	0.29	0.33	-7.88
16-Jul-12																						
23-Jul-12																						
30-Jul-12																						
6-Aug-12																						
13-Aug-12																						
20-Aug-12																						
27-Aug-12																						
3-Sep-12																						
10-Sep-12																						
17-Sep-12																						
24-Sep-12																						
1-Oct-12	0.0025	0.823	0.083	0.0051	0.094	0.105	0.28	-0.005	0.054	4.33	0.02	-0.002	-0.005	-0.2	-0.5	0.000008	0.4	0.83	-0.1	0.30	0.32	-3.11
8-Oct-12																						
15-Oct-12																						
22-Oct-12																						
29-Oct-12																						
5-Nov-12																						
12-Nov-12																						
19-Nov-12																						
26-Nov-12																						
3-Dec-12																						
10-Dec-12																						
17-Dec-12																						
24-Dec-12	0.00208	0.747	0.108	0.0046	0.097	0.09	0.27	-0.005	0.064	4.24	-0.02	-0.002	-0.005	-0.2	-0.5	0.000007	0.31	8.29	-0.1	0.29	0.31	-2.90
31-Dec-12																						
7-Jan-13																						

Note:

Terminated as per email from Collen Hughes (10-Jan-13)

Schedule change as per Ron Martel's email dated 8-Sep-11.

ICP-ES to be done at Cantest effective 6-Oct-08 as per email from Ron Martel (1-Oct-08).

Switched to ICP-MS at Cantest effective 6-Oct-08 as per e-mail from Christina James.

Sulphate (by Colourimetry), Acidity & Alkalinity (by PC Titrator) is now done by water lab at Maxxam from 2-May-11.

Maxxam ID			Z26025
Sampling Date			12/27/2010
COC Number			8326749
Elements	**Units**	**RDL**	**HC-6 Lab-Dup**
Dissolved Metals by ICPMS			
Dissolved Aluminum (Al)	mg/L	0.0002	0.0156
Dissolved Antimony (Sb)	mg/L	0.00002	0.00005
Dissolved Arsenic (As)	mg/L	0.00002	0.00025
Dissolved Barium (Ba)	mg/L	0.00002	0.00137
Dissolved Beryllium (Be)	mg/L	0.00001	-0.00001
Dissolved Bismuth (Bi)	mg/L	0.000005	-0.000005
Dissolved Boron (B)	mg/L	0.05	-0.05
Dissolved Cadmium (Cd)	mg/L	0.000005	0.000025
Dissolved Cesium (Cs)	mg/L	0.00005	-0.00005
Dissolved Chromium (Cr)	mg/L	0.0001	-0.0001
Dissolved Cobalt (Co)	mg/L	0.000005	0.000010
Dissolved Copper (Cu)	mg/L	0.00005	0.00193
Dissolved Iron (Fe)	mg/L	0.001	-0.001
Dissolved Lanthanum (La)	mg/L	0.00005	-0.00005
Dissolved Lead (Pb)	mg/L	0.000005	0.000005
Dissolved Lithium (Li)	mg/L	0.0005	-0.0005
Dissolved Manganese (Mn)	mg/L	0.00005	0.00027
Dissolved Molybdenum (Mo)	mg/L	0.00005	0.0689
Dissolved Nickel (Ni)	mg/L	0.00002	-0.00002
Dissolved Phosphorus (P)	mg/L	0.002	-0.002
Dissolved Rubidium (Rb)	mg/L	0.00005	0.00014
Dissolved Selenium (Se)	mg/L	0.00004	0.00014
Dissolved Silicon (Si)	mg/L	0.1	0.4
Dissolved Silver (Ag)	mg/L	0.000005	-0.000005
Dissolved Strontium (Sr)	mg/L	0.00005	0.00724
Dissolved Tellurium (Te)	mg/L	0.00002	-0.00002
Dissolved Thallium (Tl)	mg/L	0.000002	0.000007
Dissolved Thorium (Th)	mg/L	0.000005	-0.000005
Dissolved Tin (Sn)	mg/L	0.00001	0.00001
Dissolved Titanium (Ti)	mg/L	0.0005	-0.0005
Dissolved Tungsten (W)	mg/L	0.00001	0.00003
Dissolved Uranium (U)	mg/L	0.000002	0.000026
Dissolved Vanadium (V)	mg/L	0.0002	0.0005
Dissolved Zinc (Zn)	mg/L	0.0001	0.0004
Dissolved Zirconium (Zr)	mg/L	0.0001	-0.0001
Dissolved Calcium (Ca)	mg/L	0.05	
Dissolved Magnesium (Mg)	mg/L	0.05	
Dissolved Potassium (K)	mg/L	0.05	
Dissolved Sodium (Na)	mg/L	0.05	
Dissolved Sulphur (S)	mg/L	10	

Project Name: Mt. Polley
Cantest Project No: 2-21-910
HC-16; Sample ID: 480684 (Springer Samples)

Method:				pH Meter	EC Meter	ORP Meter	Turbidity	Tiration using pH Meter & Calculation			Dissolved Metals by ICP-MS Method at Cantest															
Sampling Date	Week No.	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L) to pH 4.5	Acidity (mg CaCO3/L) to pH 8.3	Total Alkalinity (mg CaCO3/L) to pH 4.5	Al (mg/L)	Sb (mg/L)	As (mg/L)	Ba (mg/L)	Be (mg/L)	Bi (mg/L)	B (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Co (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Li (mg/L)	Mg (mg/L)
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.5**	**0.005**	**0.001**	**0.001**	**0.001**	**0.001**	**0.001**	**0.05**	**0.0002**	**0.05**	**0.001**	**0.001**	**0.001**	**0.05**	**0.001**	**0.001**	**0.05**
12-Oct-09	1	750	610	9.03	171	170	40	#N/A	#N/A	25	0.12	-0.0001	0.0029	0.033	-0.0001	-0.0001	0.026	0.00002	10.6	-0.0002	-0.0001	0.0044	0.01	0.0001	0.0036	1.49
19-Oct-09	2	500	490	8.82	144	150	31	#N/A	#N/A	33																
26-Oct-09	3	500	495	8.87	105	130	16	#N/A	#N/A	34	0.094	0.0002	0.0053	0.01	-0.0001	-0.0001	0.042	-0.00001	8.09	-0.0002	-0.0001	0.0024	0.02	0.00006	0.0032	1.27
2-Nov-09	4	500	490	8.70	90	125	7	#N/A	#N/A	37																
9-Nov-09	5	500	495	8.81	78	140	4	#N/A	#N/A	36	0.14	-0.0005	0.007	0.008	-0.0005	-0.0005	0.03	-0.00005	7.29	-0.001	-0.0005	0.0032	-0.05	-0.00025	0.0065	1.04
16-Nov-09	6	500	475	8.68	73	135	5	#N/A	#N/A	34																
23-Nov-09	7	500	490	8.60	76	130	2	#N/A	#N/A	35	0.11	0.0001	0.0069	0.0086	-0.0001	-0.0001	0.018	0.00001	8.16	-0.0002	-0.0001	0.0046	0.02	0.0001	0.0011	0.81
30-Nov-09	8	500	465	8.56	87	130	3	#N/A	#N/A	38																
7-Dec-09	9	500	495	8.59	74	125	3	#N/A	#N/A	35	0.1	-0.0001	0.0057	0.0081	-0.0001	-0.0001	0.011	-0.00001	7.27	-0.0002	-0.0001	0.0044	0.02	0.00008	0.0014	0.88
14-Dec-09	10	500	485	8.61	73	125	-1	#N/A	#N/A	33																
21-Dec-09	11	500	490	8.63	73	130	3	#N/A	#N/A	32	0.099	0.0001	0.0053	0.0074	-0.0001	-0.0001	0.01	-0.00001	8.2	-0.0002	-0.0001	0.0037	0.02	0.00007	0.0015	1
28-Dec-09	12	500	485	8.54	74	125	3	#N/A	#N/A	32																
4-Jan-10	13	500	490	8.57	74	115	3	#N/A	#N/A	33	0.071	0.0001	0.005	0.0075	-0.0001	-0.0001	0.011	-0.00001	8.94	-0.0002	-0.0001	0.0027	0.01	0.00007	0.0014	1.1
11-Jan-10	14	500	485	8.46	69	145	4	#N/A	#N/A	32																
18-Jan-10	15	500	475	8.53	72	125	4	#N/A	#N/A	31	0.1	-0.0001	0.0042	0.0066	-0.0001	-0.0001	0.012	-0.00001	8.57	-0.0002	-0.0001	0.0026	0.02	0.00007	0.0011	1
25-Jan-10	16	500	490	8.46	74	135	4	#N/A	#N/A	32																
1-Feb-10	17	500	490	8.35	71	145	4	#N/A	#N/A	31	0.091	-0.0001	0.0035	0.0065	-0.0001	-0.0001	0.009	-0.00001	8.78	-0.0002	-0.0001	0.0019	0.01	0.00005	0.0011	1.13
8-Feb-10	18	500	485	8.35	72	145	4	#N/A	#N/A	31																
15-Feb-10	19	500	490	8.47	70	150	4	#N/A	#N/A	32	0.112	-0.0001	0.0038	0.0066	-0.0001	-0.0001	0.005	-0.00001	8.77	-0.0002	-0.0001	0.0023	0.01	0.00007	0.0007	1.15
22-Feb-10	20	500	470	8.46	76	165	4	#N/A	#N/A	32																
1-Mar-10	21	500	470	8.40	74	150	5	#N/A	#N/A	33	0.12	-0.0001	0.0034	0.0076	-0.0001	-0.0001	0.007	0.00002	9.84	-0.0002	-0.0001	0.0032	0.02	0.00009	0.0011	1.03
8-Mar-10	22	500	495	8.48	68	180	4	#N/A	#N/A	30																
15-Mar-10	23	500	495	8.59	64	175	3	#N/A	#N/A	29	0.14	-0.0001	0.0029	0.0073	-0.0001	-0.0001	0.01	-0.00001	8.84	-0.0002	-0.0001	0.0029	0.02	0.00008	0.0008	0.99
22-Mar-10	24	500	495	8.50	63	170	1	#N/A	#N/A	29																
29-Mar-10	25	500	480	8.53	66	155	3	#N/A	#N/A	30	0.094	-0.0001	0.0026	0.0059	-0.0001	-0.0001	0.005	-0.00001	8.95	-0.0002	-0.0001	0.0015	0.01	-0.00005	0.0009	1.02
5-Apr-10	26	500	490	8.54	64	160	3	#N/A	#N/A	30																
12-Apr-10	27	500	495	8.39	64	160	3	#N/A	#N/A	31	0.151	-0.00002	0.0024	0.0073	-0.00001	-0.000005	-0.05	0.00002	9.39	-0.0001	-0.000005	0.0022	0.023	-0.000005	0.0005	1.13
19-Apr-10	28	500	495	8.46	63	140	3	#N/A	#N/A	29																
26-Apr-10	29	500	490	8.39	64	170	3	#N/A	#N/A	30	0.125	0.00005	0.00274	0.00651	-0.00001	-0.000005	-0.05	0.000011	8.95	-0.0001	0.000018	0.00186	0.015	0.000054	0.0007	1.04
3-May-10	30	500	495	8.44	63	150	3	#N/A	#N/A	29																
10-May-10	31	500	495	8.30	63	180	2	#N/A	#N/A	29	0.122	0.00006	0.00223	0.0066	-0.00001	-0.000005	-0.05	0.000016	9	-0.0001	0.000017	0.00227	0.015	0.000104	0.0008	1.01
17-May-10	32	500	485	8.32	64	170	3	#N/A	#N/A	30																
24-May-10	33	500	460	8.46	63	170	3	#N/A	#N/A	29	0.134	0.00005	0.00164	0.00689	-0.00001	-0.000005	-0.05	0.000014	9.87	0.0001	0.00002	0.00197	0.015	0.000057	0.0008	1.13
31-May-10	34	500	475	8.26	64	160	2	#N/A	-1	30																
7-Jun-10	35	500	500	8.41	64	180	2	#N/A	#N/A	30	0.154	0.00006	0.00196	0.00891	-0.00001	-0.000005	-0.05	0.000014	8.76	-0.0001	0.000028	0.00252	0.02	0.000113	0.0008	1.07
14-Jun-10	36	500	485	8.46	67	155	2	#N/A	#N/A	30																
21-Jun-10	37	500	490	8.32	61	170	2	#N/A	#N/A	30	0.166	0.00004	0.00217	0.0079	-0.00001	-0.000005	-0.05	0.000022	8.78	-0.0001	0.000065	0.00372	0.025	0.000041	0.0008	1.15
28-Jun-10	38	500	490	8.42	62	170	3	#N/A	#N/A	30																
5-Jul-10	39	500	490	8.34	61	165	1	#N/A	#N/A	31	0.167	0.00005	0.00186	0.0084	-0.00001	-0.000005	-0.05	0.000014	8.82	-0.0001	0.000028	0.00283	0.019	0.000101	0.0009	1.11
12-Jul-10	40	500	465	8.39	54	165	2	#N/A	#N/A	30																
19-Jul-10	41	500	500	8.38	56	155	2	#N/A	#N/A	29	0.159	0.00004	0.00171	0.00703	-0.00001	-0.000005	-0.05	0.000014	8.72	-0.0001	0.00002	0.00239	0.021	0.00009	0.0006	1.04
26-Jul-10	42	500	480	8.46	60	150	1	#N/A	#N/A	30																
2-Aug-10	43	500	485	8.39	56	165	2	#N/A	#N/A	28	0.145	0.00005	0.00154	0.00632	-0.00001	-0.000005	-0.05	0.000012	8.66	-0.0001	0.000017	0.00184	0.015	0.000094	0.0006	1.01
9-Aug-10	44	500	485	8.36	53	160	2	#N/A	#N/A	28																
16-Aug-10	45	500	485	8.32	59	160	3	#N/A	#N/A	29	0.162	0.00004	0.00149	0.00697	-0.00001	-0.000005	-0.05	0.000013	9.09	-0.0001	0.000021	0.00271	0.017	0.00009	0.0007	1.09
23-Aug-10	46	500	485	8.38	62	145	2	#N/A	#N/A	29																
30-Aug-10	47	500	485	8.40	57	165	2	#N/A	#N/A	28	0.146	0.00003	0.00137	0.00618	-0.00001	-0.000005	-0.05	0.000016	8.56	-0.0001	0.000016	0.00235	0.014	0.000069	0.0006	0.99
6-Sep-10	48	500	465	8.33	62	160	4	#N/A	#N/A	29																
13-Sep-10	49	500	500	8.31	51	160	1	#N/A	#N/A	27	0.159	0.00003	0.00137	0.00547	-0.00001	-0.000005	-0.05	0.000018	7.81	0.0002	0.000018	0.00181	0.016	0.000071	0.0006	0.88

Project Name: Mt. Polley
Cantest Project No: 2-21-910
HC-16; Sample ID: 480684 (Springer Samples)

Sampling Date	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)	P (mg/L)	K (mg/L)	Se (mg/L)	Si (mg/L)	Ag (mg/L)	Na (mg/L)	Sr (mg/L)	Te (mg/L)	Tl (mg/L)	Th (mg/L)	Sn (mg/L)	Ti (mg/L)	U (mg/L)	V (mg/L)	Zn (mg/L)	Zr (mg/L)	Ion Balance Anions	Ion Balance Cations	Ion Balance Balance %	
Detection Limits	**0.001**	**0.0005**	**0.001**	**0.15**	**0.1**	**0.001**	**0.25**	**0.00025**	**0.05**	**0.001**	**0.001**	**0.0001**	**0.0005**	**0.001**	**0.001**	**0.0005**	**0.001**	**0.005**	**0.01**				
12-Oct-09	0.0027	0.017	-0.0002	-0.015	0.59	0.0058	2.84	-0.00004	15.8	0.107	-0.0002	-0.00002	-0.0001	-0.0001	0.0019	0.0001	0.0023	-0.001	-0.0001	1.33	1.36	-0.93%	ICP-MS
19-Oct-09																							
26-Oct-09	0.0023	0.015	-0.0002	-0.015	0.28	0.0014	4.47	-0.00004	13.5	0.064	-0.0002	-0.00002	-0.00005	-0.0001	0.0016	0.0001	0.004	-0.001	-0.0001	1.01	1.11	-4.40%	ICP-MS
2-Nov-09																							
9-Nov-09	0.0026	0.0077	-0.001	-0.075	0.21	0.002	4.4	-0.0002	9.66	0.05	-0.001	-0.0001	-0.00025	-0.0005	0.002	-0.00025	0.0042	-0.005	-0.0005	0.80	0.89	-4.89%	ICP-MS
16-Nov-09																							
23-Nov-09	0.0028	0.0068	-0.0002	-0.015	0.22	0.0021	3.84	-0.00004	6.18	0.054	-0.0002	-0.00002	-0.00005	-0.0001	0.0017	0.00024	0.0045	-0.001	-0.0001	0.74	0.75	-0.84%	ICP-MS
30-Nov-09																							
7-Dec-09	0.0028	0.0056	-0.0002	-0.015	0.15	0.0015	3.89	-0.00004	5.36	0.052	-0.0002	-0.00002	-0.00005	-0.0001	0.0018	0.00018	0.0034	-0.001	-0.0001	0.76	0.68	5.88%	ICP-MS
14-Dec-09																							
21-Dec-09	0.0023	0.0059	-0.0002	-0.015	0.17	0.0017	3.82	-0.00004	4.77	0.054	-0.0002	-0.00002	-0.00005	-0.0001	0.0014	0.00019	0.0029	-0.001	-0.0001	0.70	0.71	-0.39%	ICP-MS
28-Dec-09																							
4-Jan-10	0.0019	0.0056	-0.0002	-0.015	0.14	0.0013	3.84	-0.00004	4.56	0.051	-0.0002	-0.00002	-0.00005	-0.0001	0.0011	0.00019	0.0029	-0.001	-0.0001	0.71	0.74	-1.83%	ICP-MS
11-Jan-10																							
18-Jan-10	0.0014	0.0059	-0.0002	-0.015	0.13	0.0015	3.66	-0.00004	3.8	0.053	-0.0002	-0.00002	-0.00005	-0.0001	0.0014	0.00015	0.0023	-0.001	-0.0001	0.70	0.68	1.47%	ICP-MS
25-Jan-10																							
1-Feb-10	0.0011	0.0055	-0.0002	-0.015	0.13	0.001	3.56	-0.00004	3.64	0.053	-0.0002	-0.00002	-0.00005	-0.0001	0.001	0.00014	0.0021	-0.001	-0.0001	0.69	0.70	-0.16%	ICP-MS
8-Feb-10																							
15-Feb-10	0.0013	0.0053	-0.0002	-0.015	0.13	0.0013	3.73	-0.00004	3.5	0.0564	-0.0002	-0.00002	-0.00005	-0.0001	0.0013	0.0001	0.002	-0.001	-0.0001	0.71	0.69	1.45%	ICP-MS
22-Feb-10																							
1-Mar-10	0.002	0.0055	-0.0002	-0.015	0.13	0.001	3.81	-0.00004	2.77	0.062	-0.0002	-0.00002	-0.00005	-0.0001	0.0018	0.00016	0.0022	-0.001	-0.0001	0.76	0.71	4.02%	ICP-MS
8-Mar-10																							
15-Mar-10	0.0013	0.0054	-0.0002	-0.015	0.12	0.0011	3.65	-0.00004	2.82	0.052	-0.0002	-0.00002	-0.00005	-0.0001	0.0019	0.00012	0.0019	-0.001	-0.0001	0.64	0.66	-1.11%	ICP-MS
22-Mar-10																							
29-Mar-10	0.001	0.0053	-0.0002	-0.015	0.11	0.0007	3.2	-0.00004	2.37	0.05	-0.0002	-0.00002	-0.00005	-0.0001	0.0009	0.00011	0.0015	-0.001	-0.0001	0.66	0.64	1.77%	ICP-MS
5-Apr-10																							
12-Apr-10	0.0008	0.0052	-0.00002	-0.002	0.12	0.0008	4.19	-0.000005	2.46	0.051	-0.00002	-0.000002	-0.000005	-0.00001	0.0011	0.0001	0.0002	-0.0001	-0.0001	0.68	0.68	0.11%	ICP-MS
19-Apr-10																							
26-Apr-10	0.00088	0.00524	0.00003	0.003	0.11	0.00074	3.7	-0.000005	2.15	0.0505	-0.00002	-0.000002	-0.000005	-0.00001	0.0014	0.000117	0.0017	0.0004	-0.0001	0.66	0.64	2.11%	ICP-MS
3-May-10																							
10-May-10	0.00091	0.00529	0.00003	0.004	0.11	0.00075	3.6	-0.000005	1.92	0.0494	-0.00002	-0.000002	-0.000005	-0.00001	0.0011	0.000112	0.0015	0.0006	-0.0001	0.62	0.62	-0.25%	ICP-MS
17-May-10																							
24-May-10	0.00113	0.0059	0.00002	0.004	0.09	0.0005	3.5	-0.000005	1.86	0.0526	-0.00002	-0.000002	-0.000005	-0.00001	0.0014	0.000115	0.0012	0.0006	-0.0001	0.64	0.68	-2.51%	ICP-MS
31-May-10																							
7-Jun-10	0.00113	0.00495	0.00003	0.005	0.1	0.00064	3.5	0.000009	1.84	0.05	-0.00002	-0.000002	-0.000005	0.00001	0.0015	0.000116	0.0014	0.0013	-0.0001	0.64	0.62	1.88%	ICP-MS
14-Jun-10																							
21-Jun-10	0.00055	0.00508	0.00008	-0.002	0.23	0.00068	3.5	-0.000005	1.96	0.0512	-0.00002	-0.000002	-0.000005	0.00002	0.002	0.000119	0.0014	-0.0001	-0.0001	0.64	0.64	0.47%	ICP-MS
28-Jun-10																							
5-Jul-10	0.00125	0.00495	0.00003	0.004	0.13	0.00057	3.7	-0.000005	1.79	0.0533	-0.00002	-0.000002	-0.000005	-0.00001	0.0022	0.000103	0.0014	0.0005	-0.0001	0.64	0.62	1.31%	ICP-MS
12-Jul-10																							
19-Jul-10	0.00114	0.00451	-0.00002	0.002	0.11	0.0005	3.5	0.000009	1.66	0.0476	-0.00002	-0.000002	-0.000005	-0.00001	0.0021	0.00009	0.0012	0.0005	-0.0001	0.62	0.61	1.23%	ICP-MS
26-Jul-10																							
2-Aug-10	0.00086	0.00508	0.00003	0.006	0.05	0.0005	3.2	-0.000005	1.62	0.0471	-0.00002	-0.000002	-0.000005	-0.00001	0.0013	0.000077	0.001	0.0005	-0.0001	0.60	0.60	0.46%	ICP-MS
9-Aug-10																							
16-Aug-10	0.00094	0.00445	0.00021	0.003	0.11	0.00048	3.3	0.000006	1.62	0.0508	-0.00002	-0.000002	-0.000005	-0.00001	0.0012	0.000085	0.0009	0.0003	-0.0001	0.64	0.63	1.20%	ICP-MS
23-Aug-10																							
30-Aug-10	0.00079	0.00502	0.00002	0.004	0.11	0.00045	3.2	0.000011	1.45	0.0473	-0.00002	-0.000002	-0.000005	0.00001	0.0011	0.000079	0.0011	0.0003	-0.0001	0.60	0.58	1.51%	ICP-MS
6-Sep-10																							
13-Sep-10	0.00079	0.00453	0.00003	0.004	0.1	0.00044	3.1	-0.000005	1.36	0.0435	-0.00002	-0.000002	-0.000005	0.00004	0.0011	0.000056	0.0007	0.0003	-0.0001	0.56	0.54	2.33%	ICP-MS

Project Name: Mt. Polley
Cantest Project No: 2-21-910
HC-16; Sample ID: 480684 (Springer Samples)

Method:				pH Meter	EC Meter	ORP Meter	Turbidity	Tiration using pH Meter & Calculation			Dissolved Metals by ICP-MS Method at Cantest															
Sampling Date	Week No.	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L) to pH 4.5	Acidity (mg CaCO3/L) to pH 8.3	Total Alkalinity (mg CaCO3/L) to pH 4.5	Al (mg/L)	Sb (mg/L)	As (mg/L)	Ba (mg/L)	Be (mg/L)	Bi (mg/L)	B (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Co (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Li (mg/L)	Mg (mg/L)
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.5**	**0.005**	**0.001**	**0.001**	**0.001**	**0.001**	**0.001**	**0.05**	**0.0002**	**0.05**	**0.001**	**0.001**	**0.001**	**0.05**	**0.001**	**0.001**	**0.05**
20-Sep-10	50	500	485	8.35	57	165	2	#N/A	#N/A	26																
27-Sep-10	51	500	495	8.41	50	165	2	#N/A	#N/A	26	0.175	0.00004	0.00131	0.00608	-0.00001	-0.000005	-0.05	0.00001	8.39	-0.0001	0.000026	0.00239	0.02	0.0001	-0.0005	0.93
4-Oct-10	52	500	495	8.37	46	170	3	#N/A	#N/A	28																
11-Oct-10	53	500	485	8.30	56	160	3	#N/A	#N/A	27	0.128	0.00003	0.00119	0.0055	-0.00001	-0.000005	-0.05	0.000015	7.92	-0.0001	0.000034	0.00107	0.006	0.000059	0.0005	0.86
18-Oct-10	54	500	490	8.32	59	160	3	#N/A	#N/A	27																
25-Oct-10	55	500	495	8.34	60	180	4	#N/A	#N/A	27	0.123	0.00003	0.00117	0.00594	-0.00001	-0.000005	-0.05	0.000015	8.56	0.0002	0.000039	0.00123	0.006	0.000064	0.0006	0.87
1-Nov-10	56	500	495	8.39	65	175	2	#N/A	#N/A	29																
8-Nov-10	57	500	485	8.30	62	160	2	#N/A	#N/A	28	0.143	0.00003	0.00109	0.00562	-0.00001	-0.000005	-0.05	0.000012	8.96	-0.0001	0.000012	0.00128	0.008	0.000063	0.0006	0.87
15-Nov-10	58	500	480	8.34	62	175	4	#N/A	#N/A	29																
22-Nov-10	59	500	490	8.31	68	170	4	#N/A	#N/A	29	0.133	0.00003	0.00117	0.00577	-0.00001	-0.000005	-0.05	0.000011	9.48	-0.0001	0.000009	0.00991	0.006	0.000285	0.0006	1.03
29-Nov-10	60	500	480	8.22	62	160	3	#N/A	-1	29																
6-Dec-10	61	500	475	8.16	70	165	3	#N/A	-1	28	0.114	0.00004	0.00105	0.00594	-0.00001	-0.000005	-0.05	0.000015	9.34	0.0002	0.000047	0.00103	0.006	0.000147	0.0007	1.03
13-Dec-10	62	500	480	8.19	66	150	4	#N/A	-1	29																
20-Dec-10	63	500	495	8.23	73	145	2	#N/A	-1	29	0.131	0.00003	0.00119	0.00618	-0.00001	-0.000005	-0.05	0.000011	9.47	-0.0001	0.00001	0.00121	0.006	0.000044	-0.0005	1.05
27-Dec-10	64	500	480	8.17	64	160	2	#N/A	-1	29																
3-Jan-11	65	500	495	8.12	67	170	3	#N/A	-1	29	0.122	0.00006	0.00112	0.00589	-0.00001	-0.000005	-0.05	0.000012	9.13	-0.0001	0.000008	0.00104	0.004	0.000029	0.0006	0.99
10-Jan-11	66	500	490	8.24	69	160	3	#N/A	-1	28																
17-Jan-11	67	500	480	8.20	69	155	2	#N/A	-1	28	0.135	0.00004	0.00113	0.00575	-0.00001	-0.000005	-0.05	0.000016	8.85	-0.0001	0.000039	0.00188	0.009	0.000115	-0.0005	0.92
24-Jan-11	68	500	485	8.24	69	165	2	#N/A	-1	30																
31-Jan-11	69	500	500	8.22	66	185	3	#N/A	-1	27	0.195	0.00004	0.00106	0.00541	-0.00001	-0.000005	-0.05	0.000015	8.39	-0.0001	0.000019	0.00166	0.007	0.000067	0.0006	0.9
7-Feb-11	70	500	480	8.22	66	175	4	#N/A	-1	27																
14-Feb-11	71	500	485	8.30	68	160	3	#N/A	#N/A	29	0.13	0.00003	0.00113	0.00544	-0.00001	-0.000005	-0.05	0.000011	9.62	-0.0001	0.000009	0.00136	0.005	0.000046	-0.0005	0.96
21-Feb-11	72	500	490	8.12	69	170	-1	#N/A	-1	29																
28-Feb-11	73	500	490	8.17	69	160	2	#N/A	-1	29	0.148	0.00002	0.00122	0.00579	-0.00001	-0.000005	-0.05	0.000018	9.89	-0.0001	0.000008	0.00081	0.005	0.000054	0.0005	1.04
7-Mar-11	74	500	480	8.15	69	150	3	#N/A	-1	30																
14-Mar-11	75	500	495	8.16	68	160	3	#N/A	-1	29	0.139	0.00003	0.0012	0.00532	-0.00001	-0.000005	-0.05	0.000022	8.96	-0.0001	-0.000005	0.00056	0.002	0.000025	0.0005	0.93
21-Mar-11	76	500	485	7.85	67	160	2	-1	-1	31																
28-Mar-11	77	500	490	8.20	63	155	2	-1	-1	27	0.158	0.00002	0.001	0.00545	-0.00001	-0.000005	-0.05	0.000013	8.95	-0.0001	0.000026	0.00081	0.004	0.000038	-0.0005	0.87
4-Apr-11	78	500	490	7.75	63	150	2	-1	-1	29																
11-Apr-11	79	500	485	7.70	55	145	2	-1	-1	28	0.145	0.00003	0.00104	0.00504	-0.00001	-0.000005	-0.05	0.000009	8.91	-0.0001	-0.000005	0.00048	0.002	0.000018	-0.0005	0.88
18-Apr-11	80	500	485	7.91	60	140	1	-1	-1	27																
25-Apr-11	81	500	480	7.95	60	170	1	-1	-1	26	0.143	0.00004	0.00094	0.0051	-0.00001	-0.000005	-0.05	0.000021	8.88	-0.0001	0.000009	0.0006	0.003	0.000063	-0.0005	0.87
2-May-11	82	500	480	7.92	57	145	1	-1	1	24																
9-May-11	83	500	495	8.12	60	180	2	-1	-1	28	0.146	0.00003	0.00094	0.00463	-0.00001	-0.000005	-0.05	0.000015	8.29	-0.0001	0.000008	0.00054	0.003	0.000025	-0.0005	0.84
16-May-11	84	500	480	8.14	55	170	2	-1	-1	25																
23-May-11	85	500	495	8.07	58	145	2	-1	-1	27	0.133	0.00003	0.00103	0.00472	-0.00001	-0.000005	-0.05	-0.000005	8.55	-0.0001	0.000038	0.00063	0.002	0.000019	-0.0005	0.84
30-May-11	86	500	475	7.83	61	145	2	-1	1	28																
6-Jun-11	87	500	480	8.03	56	160	1	-1	-1	28	0.138	-0.00002	0.00096	0.00443	-0.00001	-0.000005	-0.05	0.000013	8.3	-0.0001	0.000021	0.00047	0.001	0.000024	-0.0005	0.8
13-Jun-11	88	500	495	7.68	51	140	1	-1	-1	23																
20-Jun-11	89	500	495	8.00	56	150	2	-1	1	23	0.149	0.00003	0.00081	0.00504	-0.00001	-0.000005	-0.05	0.000008	9	-0.0001	0.00003	0.00054	0.003	0.000023	-0.0005	0.81
27-Jun-11	90	500	485	7.84	57	155	2	-1	2	24																
4-Jul-11	91	500	490	8.11	53	160	1	-1	1	24	0.137	0.00002	0.00079	0.0044	-0.00001	-0.000005	-0.05	0.000006	8.54	-0.0001	-0.000005	0.00047	0.002	0.000026	-0.0005	0.75
11-Jul-11	92	500	495	7.94	55	160	-1	-1	1	24																
18-Jul-11	93	500	495	7.73	58	175	2	-1	-1	24	0.13	0.00002	0.00082	0.00469	-0.00001	-0.000005	-0.05	0.000013	7.74	-0.0001	0.000047	0.00052	-0.001	0.000013	-0.0005	0.67
25-Jul-11	94	500	485	7.79	59	170	2	-1	1	24																
1-Aug-11	95	500	495	8.12	63	170	1	-1	1	25	0.157	0.00002	0.00082	0.00494	-0.00001	-0.000005	-0.05	0.000008	8.54	-0.0001	0.000042	0.00055	0.001	0.000007	-0.0005	0.77
8-Aug-11	96	500	495	8.20	59	165	1	-1	-1	25																
15-Aug-11	97	500	490	8.17	62	170	2	-1	-1	25	0.144	0.00002	0.00082	0.00504	-0.00001	-0.000005	-0.05	0.00001	8.58	0.0001	0.00023	0.00215	0.004	0.000029	-0.0005	0.73
22-Aug-11	98	500	485	8.19	59	185	1	-1	2	54																

Project Name: Mt. Polley
Cantest Project No: 2-21-910
HC-16; Sample ID: 480684 (Springer Samples)

Sampling Date	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)	P (mg/L)	K (mg/L)	Se (mg/L)	Si (mg/L)	Ag (mg/L)	Na (mg/L)	Sr (mg/L)	Te (mg/L)	Tl (mg/L)	Th (mg/L)	Sn (mg/L)	Ti (mg/L)	U (mg/L)	V (mg/L)	Zn (mg/L)	Zr (mg/L)	Ion Balance Anions	Ion Balance Cations	Ion Balance Balance %	
Detection Limits	**0.001**	**0.0005**	**0.001**	**0.15**	**0.1**	**0.001**	**0.25**	**0.00025**	**0.05**	**0.001**	**0.001**	**0.0001**	**0.0005**	**0.001**	**0.001**	**0.0005**	**0.001**	**0.005**	**0.01**				
20-Sep-10																							
27-Sep-10	0.00098	0.00595	0.00003	0.002	0.1	0.00039	2.9	0.000009	1.33	0.0438	-0.00002	-0.000002	-0.000005	0.00003	0.001	0.000073	0.0011	0.0007	-0.0001	0.56	0.57	-0.60%	ICP-MS
4-Oct-10																							
11-Oct-10	0.0015	0.0072	0.00007	0.007	0.08	0.00036	2.4	0.000008	1.16	0.0453	-0.00002	-0.000002	-0.000005	0.00008	0.0007	0.000079	0.0008	0.0022	-0.0001	0.60	0.53	6.77%	ICP-MS
18-Oct-10																							
25-Oct-10	0.00123	0.00712	0.00003	0.009	0.08	0.00035	2.8	-0.000005	1.22	0.0457	-0.00002	-0.000002	-0.000005	0.00004	-0.0005	0.000075	0.0007	0.0035	-0.0001	0.62	0.56	5.32%	ICP-MS
1-Nov-10																							
8-Nov-10	0.00048	0.00762	0.00006	0.013	0.08	0.00037	2.8	0.000009	1.26	0.0463	-0.00002	-0.000002	-0.000005	0.00002	-0.0005	0.000071	0.0008	0.0006	-0.0001	0.60	0.58	1.50%	ICP-MS
15-Nov-10																							
22-Nov-10	0.00062	0.00787	0.00002	0.012	0.09	0.00034	3	0.00001	1.34	0.0511	-0.00002	-0.000002	-0.000005	0.00002	0.0005	0.000081	0.0009	0.0008	-0.0001	0.66	0.63	2.94%	ICP-MS
29-Nov-10																							
6-Dec-10	0.00166	0.00721	0.00016	0.01	0.09	0.00033	2.6	0.000006	1.31	0.0508	-0.00002	-0.000002	-0.000005	0.00003	0.0028	0.000077	0.0011	0.0032	-0.0001	0.62	0.61	0.61%	ICP-MS
13-Dec-10																							
20-Dec-10	0.0004	0.0073	0.00004	0.006	0.09	0.00033	2.9	0.000009	1.32	0.0529	-0.00002	-0.000002	-0.000005	0.00002	-0.0005	0.000077	0.0013	0.0008	-0.0001	0.62	0.63	-0.28%	ICP-MS
27-Dec-10																							
3-Jan-11	0.00026	0.00936	-0.00002	-0.002	0.08	0.0005	2.4	0.00001	1.26	0.049	-0.00002	0.000004	0.000025	0.00003	0.0016	0.000096	0.0009	0.0006	-0.0001	0.64	0.60	3.45%	ICP-MS
10-Jan-11																							
17-Jan-11	0.00136	0.00689	0.00009	0.01	0.09	0.0003	2.5	0.000011	1.21	0.0457	-0.00002	-0.000002	-0.000005	0.00003	-0.0005	0.000066	0.0011	0.0014	-0.0001	0.60	0.58	1.84%	ICP-MS
24-Jan-11																							
31-Jan-11	0.00058	0.00683	-0.00002	0.013	0.09	0.00034	2.2	0.000011	1.24	0.0447	-0.00002	-0.000002	-0.000005	0.00003	0.0011	0.000068	0.001	0.0008	-0.0001	0.60	0.56	3.34%	ICP-MS
7-Feb-11																							
14-Feb-11	0.00029	0.00696	0.00007	0.008	0.08	0.00031	3.2	0.000006	1.22	0.0505	-0.00002	-0.000002	-0.000005	0.00002	-0.0005	0.000068	0.001	0.0012	-0.0001	0.64	0.62	1.75%	ICP-MS
21-Feb-11																							
28-Feb-11	0.00031	0.0064	0.00005	0.017	0.1	0.00038	3.1	0.000006	1.39	0.0519	-0.00002	-0.000002	-0.000005	0.00001	-0.0005	0.000071	0.001	0.0013	-0.0001	0.62	0.65	-2.24%	ICP-MS
7-Mar-11																							
14-Mar-11	0.00014	0.00523	-0.00002	0.019	0.08	0.00034	2.8	-0.000005	1.27	0.0482	-0.00002	-0.000002	-0.000005	-0.00001	-0.0005	0.000065	0.0009	0.0008	-0.0001	0.64	0.59	4.38%	ICP-MS
21-Mar-11																							
28-Mar-11	0.00085	0.00489	0.00005	0.016	0.1	0.0003	3.1	-0.000005	1.18	0.0441	-0.00002	-0.000002	-0.000005	-0.00001	-0.0005	0.000059	0.0007	0.0032	-0.0001	0.57	0.58	-0.94%	ICP-MS
4-Apr-11																							
11-Apr-11	0.00019	0.00475	-0.00002	0.015	0.09	0.00028	2.7	-0.000005	1.23	0.0458	-0.00002	-0.000002	-0.000005	-0.00001	-0.0005	0.00005	0.0007	0.0019	-0.0001	0.59	0.58	1.03%	ICP-MS
18-Apr-11																							
25-Apr-11	0.0002	0.00553	0.00005	0.013	0.08	0.0003	2.7	-0.000005	1.18	0.044	-0.00002	-0.000002	-0.000005	0.00003	-0.0005	0.000054	0.0008	0.0044	-0.0001	0.54	0.58	-3.57%	ICP-MS
2-May-11																							
9-May-11	0.00018	0.00486	0.00005	0.013	0.08	0.00026	2.6	-0.000005	1.12	0.0444	-0.00002	-0.000002	-0.000005	0.00002	-0.0005	0.000044	0.0007	0.0037	-0.0001	0.59	0.54	4.46%	ICP-MS
16-May-11																							
23-May-11	0.00132	0.00506	0.00006	0.008	0.08	0.00025	2.6	-0.000005	1.14	0.0434	-0.00002	-0.000002	-0.000005	0.00001	-0.0005	0.000054	0.0008	0.0041	-0.0001	0.59	0.55	2.71%	ICP-MS
30-May-11																							
6-Jun-11	0.00015	0.00487	0.00003	0.018	0.08	0.00026	2.6	0.000005	1.11	0.0444	-0.00002	-0.000002	-0.000005	0.00002	-0.0005	0.000072	0.0008	0.0042	-0.0001	0.57	0.54	3.06%	ICP-MS
13-Jun-11																							
20-Jun-11	0.00116	0.00483	0.00006	0.015	0.08	0.00024	2.6	-0.000005	1.13	0.0432	0.00002	-0.000002	-0.000005	0.00001	-0.0005	0.000043	0.0006	0.0047	-0.0001	0.50	0.58	-7.09%	ICP-MS
27-Jun-11																							
4-Jul-11	0.00017	0.00462	-0.00002	0.011	0.08	0.00023	2.5	0.000005	1.05	0.0414	-0.00002	-0.000002	-0.000005	0.00003	-0.0005	0.000043	0.0007	0.0048	-0.0001	0.50	0.54	-4.09%	ICP-MS
11-Jul-11																							
18-Jul-11	0.00155	0.00359	-0.00002	0.002	0.08	0.00025	2.3	-0.000005	0.92	0.0426	-0.00002	-0.000002	-0.000005	0.00001	-0.0005	0.000039	0.0005	0.0052	-0.0001	0.52	0.49	2.80%	ICP-MS
25-Jul-11																							
1-Aug-11	0.00161	0.00499	0.00004	0.021	0.08	0.00022	2.4	-0.000005	1.12	0.0446	-0.00002	-0.000002	-0.000005	0.00001	-0.0005	0.000045	0.0006	0.0031	-0.0001	0.53	0.55	-2.36%	ICP-MS
8-Aug-11																							
15-Aug-11	0.00413	0.00408	0.00054	0.016	0.09	0.00023	2.3	-0.000005	1.12	0.0408	-0.00002	-0.000002	-0.000005	0.00002	0.0008	0.000043	0.0008	0.0096	-0.0001	0.53	0.55	-1.58%	ICP-MS
22-Aug-11																							

Project Name: Mt. Polley
Cantest Project No: 2-21-910
HC-16; Sample ID: 480684 (Springer Samples)

Method:				pH Meter	EC Meter	ORP Meter	Turbidity	Tiration using pH Meter & Calculation			Dissolved Metals by ICP-MS Method at Cantest															
Sampling Date	Week No.	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L) to pH 4.5	Acidity (mg CaCO3/L) to pH 8.3	Total Alkalinity (mg CaCO3/L) to pH 4.5	Al (mg/L)	Sb (mg/L)	As (mg/L)	Ba (mg/L)	Be (mg/L)	Bi (mg/L)	B (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Co (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Li (mg/L)	Mg (mg/L)
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.5**	**0.005**	**0.001**	**0.001**	**0.001**	**0.001**	**0.001**	**0.05**	**0.0002**	**0.05**	**0.001**	**0.001**	**0.001**	**0.05**	**0.001**	**0.001**	**0.05**
29-Aug-11	99	500	470	8.26	58	160	3	-1	-1	24	0.139	0.00002	0.00076	0.00437	-0.00001	-0.000005	-0.05	-0.000005	8.5	-0.0001	0.000008	0.00294	0.014	0.000019	-0.0005	0.75
5-Sep-11	100	500	490	8.29	58	150	2	-1	-1	23																
12-Sep-11	101	500	500																							
19-Sep-11	102	500	475																							
26-Sep-11	103	500	495																							
3-Oct-11	104	500	480	7.80	47	145	1	-1	-1	23																
10-Oct-11	105	500	485																							
17-Oct-11	106	500	480																							
24-Oct-11	107	500	475																							
31-Oct-11	108	500	485	7.58	57	250	3	-1	1	24																
7-Nov-11	109	500	460																							
14-Nov-11	110	500	500																							
21-Nov-11	111	500	485																							
28-Nov-11	112	500	470	7.88	59	245	1	-1	-1	25																
5-Dec-11	113	500	480																							
12-Dec-11	114	500	480																							
19-Dec-11	115	500	480																							
26-Dec-11	116	500	490	7.90	56	140	2	-1	-1	25																
2-Jan-12	117	500	485																							
9-Jan-12	118	500	480																							
16-Jan-12	119	500	485																							
23-Jan-12	120	500	480	7.94	53	130	1	-1	-1	25	0.174	0.00002	0.00064	0.00469	-0.00001	-0.000005	-0.05	-0.000005	8.43	-0.0001	0.000008	0.0008	0.005	0.000019	-0.0005	0.65
30-Jan-12	121	500	480																							
6-Feb-12	122	500	485																							
13-Feb-12	123	500	485																							
20-Feb-12	124	500	480	7.85	41	115	1	-1	1	23																
27-Feb-12	125	500	485																							
5-Mar-12	126	500	465																							
12-Mar-12	127	500	470																							
19-Mar-12	128	500	485	7.94	49	125	-1	-1	1	26																
26-Mar-12	129	500	485																							
2-Apr-12	130	500	485																							
9-Apr-12	131	500	490																							
16-Apr-12	132	500	480	7.79	45	135	1	-1	-1	23	0.093	0.000026	0.00051	0.00377	0.000016	-0.000005	-0.05	0.000019	6.79	-0.0001	0.000006	0.00042	0.0028	0.000059	-0.0005	0.54
23-Apr-12	133	500	485																							
30-Apr-12	134	500	480																							
7-May-12	135	500	485																							
14-May-12	136	500	490	7.68	44	130	1	-1	1	21																
21-May-12	137	500	495																							
28-May-12	138	500	470																							
4-Jun-12	139	500	495																							
11-Jun-12	140	500	470	7.25	52	135	1	-1	1	24																
18-Jun-12	141	500	485																							
25-Jun-12	142	500	485																							
2-Jul-12	143	500	485																							
9-Jul-12	144	500	485	7.93	53	135	1	-1	1	24	0.151	-0.00002	0.00077	0.00364	-0.00001	-0.000005	-0.05	-0.000005	7.63	-0.0001	0.0000066	0.00057	0.0012	0.0000076	-0.0005	0.575

Project Name: Mt. Polley
Cantest Project No: 2-21-910
HC-16; Sample ID: 480684 (Springer Samples)

Sampling Date	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)	P (mg/L)	K (mg/L)	Se (mg/L)	Si (mg/L)	Ag (mg/L)	Na (mg/L)	Sr (mg/L)	Te (mg/L)	Tl (mg/L)	Th (mg/L)	Sn (mg/L)	Ti (mg/L)	U (mg/L)	V (mg/L)	Zn (mg/L)	Zr (mg/L)	Ion Balance Anions	Ion Balance Cations	Ion Balance Balance %	
Detection Limits	**0.001**	**0.0005**	**0.001**	**0.15**	**0.1**	**0.001**	**0.25**	**0.00025**	**0.05**	**0.001**	**0.001**	**0.0001**	**0.0005**	**0.001**	**0.001**	**0.0005**	**0.001**	**0.005**	**0.01**				
29-Aug-11	0.00032	0.00407	0.00172	0.008	0.08	0.00016	2.2	-0.000005	1.02	0.0419	-0.00002	-0.000002	-0.000005	0.00002	-0.0005	0.000041	0.0003	0.0069	-0.0001	0.55	0.54	0.71%	ICP-MS
5-Sep-11																							
12-Sep-11																							
19-Sep-11																							
26-Sep-11																							
3-Oct-11																							
10-Oct-11																							
17-Oct-11																							
24-Oct-11																							
31-Oct-11																							
7-Nov-11																							
14-Nov-11																							
21-Nov-11																							
28-Nov-11																							
5-Dec-11																							
12-Dec-11																							
19-Dec-11																							
26-Dec-11																							
2-Jan-12																							
9-Jan-12																							
16-Jan-12																							
23-Jan-12	0.00021	0.00358	0.00005	0.002	0.09	0.00016	2.3	0.000006	1.04	0.0399	-0.00002	-0.000002	-0.000005	0.0009	-0.0005	0.000038	0.0005	0.0005	-0.0001	0.51	0.53	-2.14%	ICP-MS
30-Jan-12																							
6-Feb-12																							
13-Feb-12																							
20-Feb-12																							
27-Feb-12																							
5-Mar-12																							
12-Mar-12																							
19-Mar-12																							
26-Mar-12																							
2-Apr-12																							
9-Apr-12																							
16-Apr-12	0.000495	0.00312	0.000037	0.625	0.909	0.000114	1.7	0.000005	1.14	0.0334	-0.00002	0.000002	-0.000005	-0.0002	-0.0005	0.000039	0.00033	0.00656	-0.0001	0.48	0.46	1.54%	ICP-MS
23-Apr-12																							
30-Apr-12																							
7-May-12																							
14-May-12																							
21-May-12																							
28-May-12																							
4-Jun-12																							
11-Jun-12																							
18-Jun-12																							
25-Jun-12																							
2-Jul-12																							
9-Jul-12	0.000109	0.0028	0.000074	0.0053	0.077	0.000143	2.28	-0.000005	1.02	0.0361	-0.00002	-0.000002	-0.000005	-0.0002	-0.0005	0.0000321	0.00105	0.00091	-0.0001	0.50	0.48	1.24%	ICP-MS

Project Name: Mt. Polley
Cantest Project No: 2-21-910
HC-16; Sample ID: 480684 (Springer Samples)

Method:				pH Meter	EC Meter	ORP Meter	Turbidity	Tiration using pH Meter & Calculation			Dissolved Metals by ICP-MS Method at Cantest															
Sampling Date	Week No.	Volume (ml) Input	Volume (ml) Output	pH (pH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO3/L) to pH 4.5	Acidity (mg CaCO3/L) to pH 8.3	Total Alkalinity (mg CaCO3/L) to pH 4.5	Al (mg/L)	Sb (mg/L)	As (mg/L)	Ba (mg/L)	Be (mg/L)	Bi (mg/L)	B (mg/L)	Cd (mg/L)	Ca (mg/L)	Cr (mg/L)	Co (mg/L)	Cu (mg/L)	Fe (mg/L)	Pb (mg/L)	Li (mg/L)	Mg (mg/L)
Detection Limits		**5**	**5**	**0.5**	**0.5**	**50**	**1**	**0.5**	**0.5**	**0.5**	**0.005**	**0.001**	**0.001**	**0.001**	**0.001**	**0.001**	**0.05**	**0.0002**	**0.05**	**0.001**	**0.001**	**0.001**	**0.05**	**0.001**	**0.001**	**0.05**
16-Jul-12	145	500	485																							
23-Jul-12	146	500	495																							
30-Jul-12	147	500	465																							
6-Aug-12	148	500	485	7.91	47	140	1	-1	-1	21																
13-Aug-12	149	500	480																							
20-Aug-12	150	500	475																							
27-Aug-12	151	500	490																							
3-Sep-12	152	500	475	7.93	49	155	1	-1	1	23																
10-Sep-12	153	500	480																							
17-Sep-12	154	500	485																							
24-Sep-12	155	500	495																							
1-Oct-12	156	500	485	8.07	53	135	1	-1	2	25	0.166	0.000076	0.00055	0.00393	-0.00001	-0.000005	-0.05	-0.000005	7.44	-0.0001	0.000008	0.00658	0.0102	0.000181	-0.0005	0.51
8-Oct-12	157	500	465																							
15-Oct-12	158	500	475																							
22-Oct-12	159	500	485																							
29-Oct-12	160	500	490	8.16	52	140	2	-1	-1	25																
5-Nov-12	161	500	485																							
12-Nov-12	162	500	495																							
19-Nov-12	163	500	475																							
26-Nov-12	164	500	460	7.78	48	140	2	-1	-1	24																
3-Dec-12	165	500	490																							
10-Dec-12	166	500	465																							
17-Dec-12	167	500	470																							
24-Dec-12	168	500	465	7.89	41	140	1	-1	-1	21	0.124	-0.00002	0.0004	0.0033	-0.00001	-0.000005	-0.05	0.000005	6.9	0.00015	0.000005	0.00062	0.0029	0.000016	-0.0005	0.463
31-Dec-12	169	500	480																							
7-Jan-13	170	500	475																							

Note: **Note:**

Terminated as p **Terminated as per email from Collen Hughes (10-Jan-13)**

Schedule change Schedule change as per Ron Martel's email dated 8-Sep-11.

ICP-ES to be dor ICP-ES to be done at Cantest effective 6-Oct-08 as per email from Ron Martel (1-Oct-08).

Switched to ICP-I Switched to ICP-MS at Cantest effective 6-Oct-08 as per e-mail from Christina James.

Sulphate (by Col Sulphate (by Colourimetry), Acidity & Alkalinity (by PC Titrator) is now done by water lab at Maxxam from 2-May-11.

Project Name: Mt. Polley
Cantest Project No: 2-21-910
HC-16; Sample ID: 480684 (Springer Samples)

Sampling Date	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)	P (mg/L)	K (mg/L)	Se (mg/L)	Si (mg/L)	Ag (mg/L)	Na (mg/L)	Sr (mg/L)	Te (mg/L)	Tl (mg/L)	Th (mg/L)	Sn (mg/L)	Ti (mg/L)	U (mg/L)	V (mg/L)	Zn (mg/L)	Zr (mg/L)	Ion Balance Anions	Ion Balance Cations	Ion Balance Balance %	
Detection Limits	**0.001**	**0.0005**	**0.001**	**0.15**	**0.1**	**0.001**	**0.25**	**0.00025**	**0.05**	**0.001**	**0.001**	**0.0001**	**0.0005**	**0.001**	**0.001**	**0.0005**	**0.001**	**0.005**	**0.01**				
16-Jul-12																							
23-Jul-12																							
30-Jul-12																							
6-Aug-12																							
13-Aug-12																							
20-Aug-12																							
27-Aug-12																							
3-Sep-12																							
10-Sep-12																							
17-Sep-12																							
24-Sep-12																							
1-Oct-12	0.000205	0.0028	0.000063	0.0042	0.075	0.000138	2.05	-0.000005	0.988	0.035	-0.00002	-0.000002	-0.000005	-0.0002	-0.0005	0.000032	0.00061	0.00077	-0.0001	0.53	0.47	6.02%	ICP-MS
8-Oct-12																							
15-Oct-12																							
22-Oct-12																							
29-Oct-12																							
5-Nov-12																							
12-Nov-12																							
19-Nov-12																							
26-Nov-12																							
3-Dec-12																							
10-Dec-12																							
17-Dec-12																							
24-Dec-12	0.000122	0.00262	0.000072	0.0042	0.059	0.000129	1.82	-0.000005	0.864	0.0303	-0.00002	-0.000002	-0.000005	-0.0002	-0.0005	0.000025	0.00036	0.00593	-0.0001	0.44	0.43	1.74%	ICP-MS
31-Dec-12																							
7-Jan-13																							

Note: **Note:**

Terminated as p **Terminated as per email from Collen Hughes (10-Jan-13)**

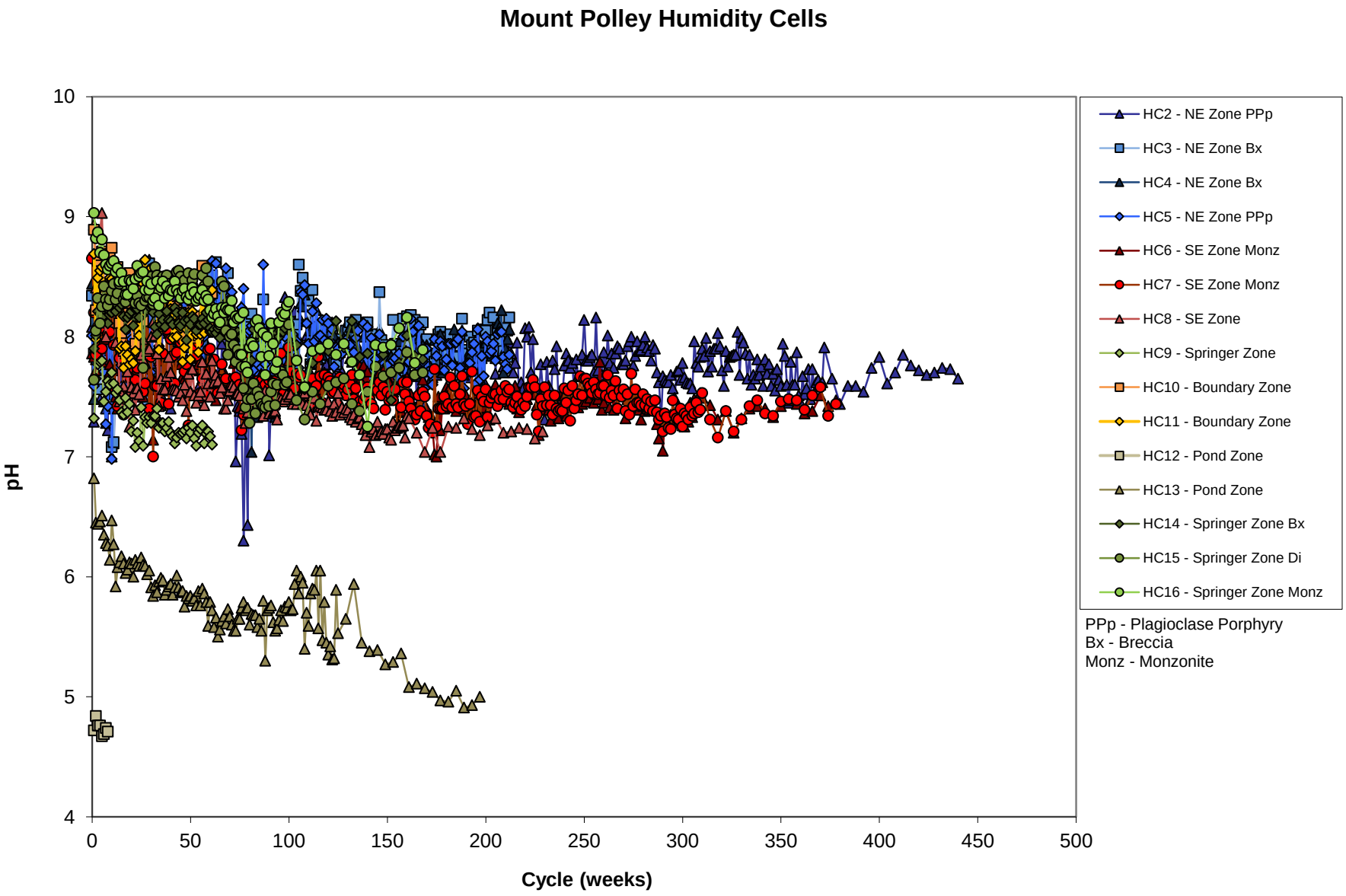
Schedule change Schedule change as per Ron Martel's email dated 8-Sep-11.

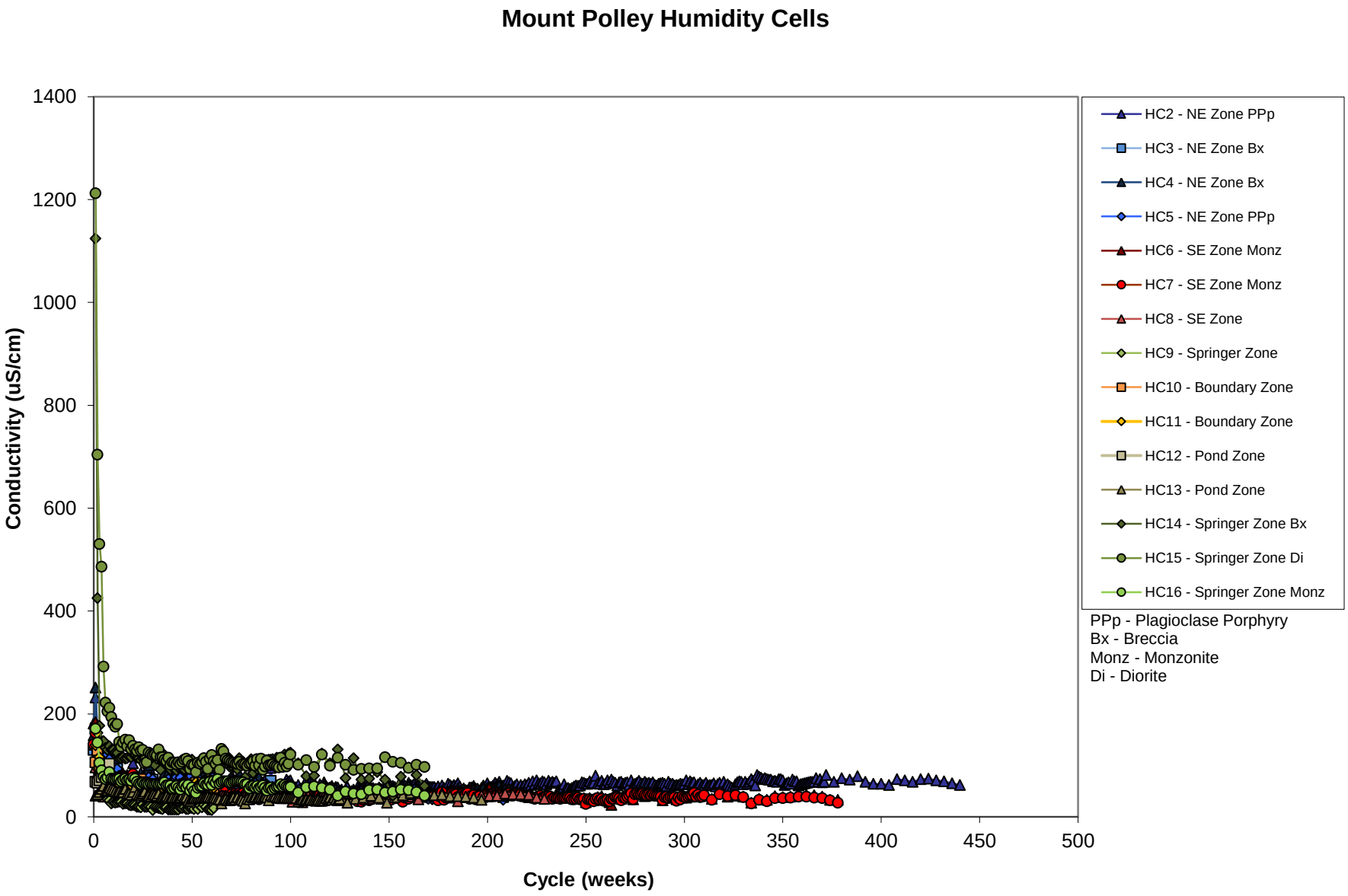
ICP-ES to be dor ICP-ES to be done at Cantest effective 6-Oct-08 as per email from Ron Martel (1-Oct-08).

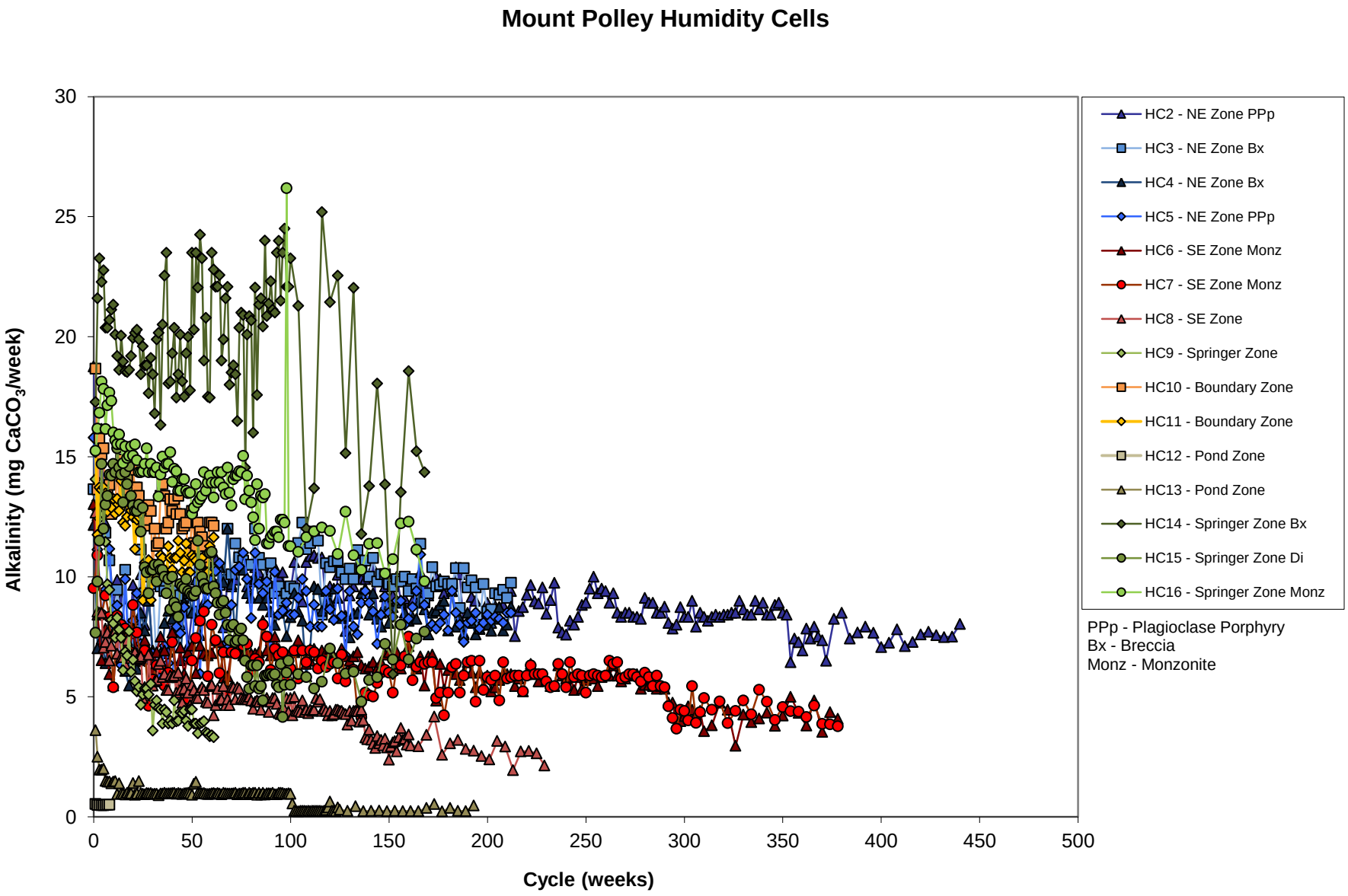
Switched to ICP-I Switched to ICP-MS at Cantest effective 6-Oct-08 as per e-mail from Christina James.

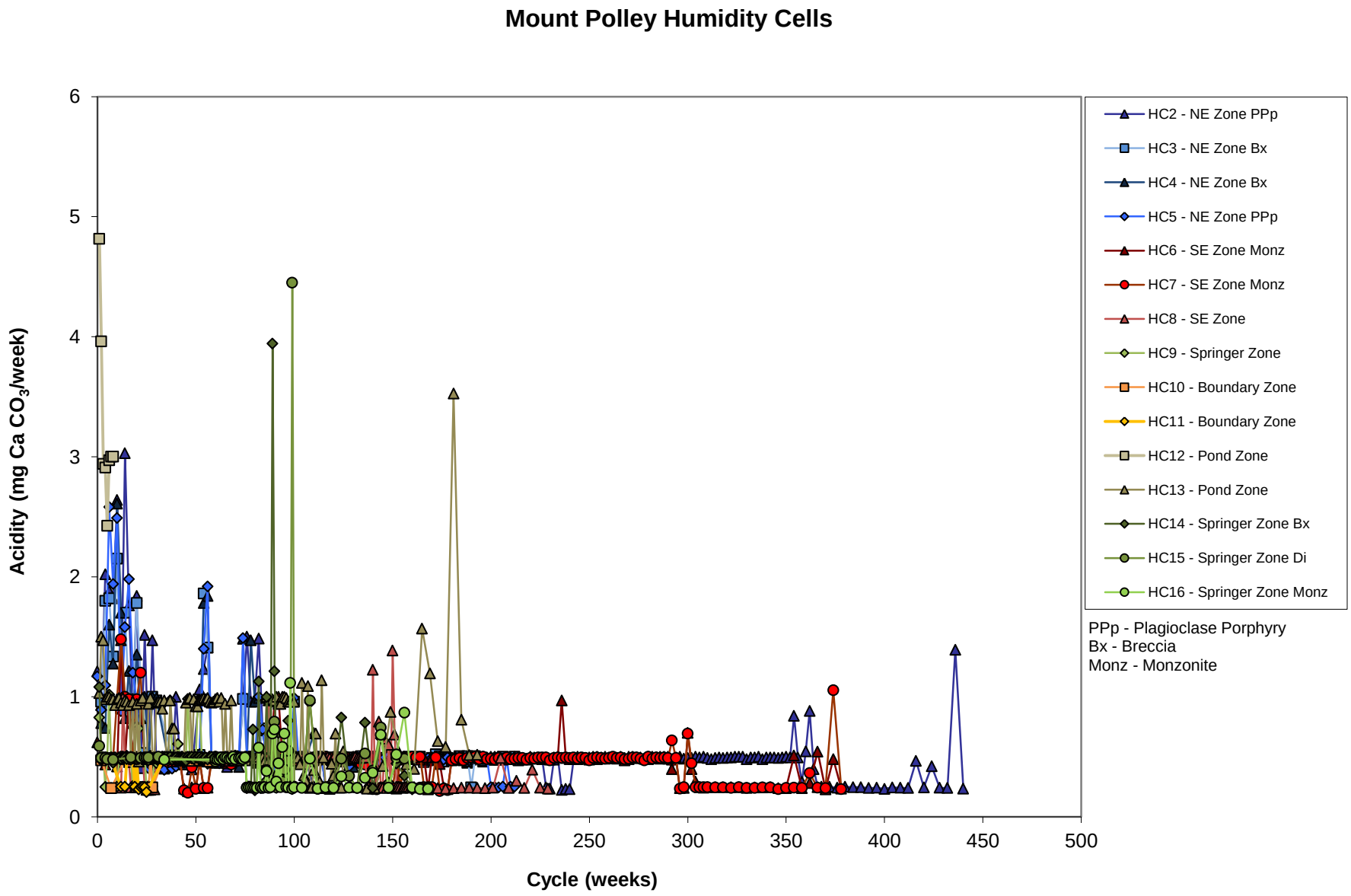
Sulphate (by Col Sulphate (by Colourimetry), Acidity & Alkalinity (by PC Titrator) is now done by water lab at Maxxam from 2-May-11.

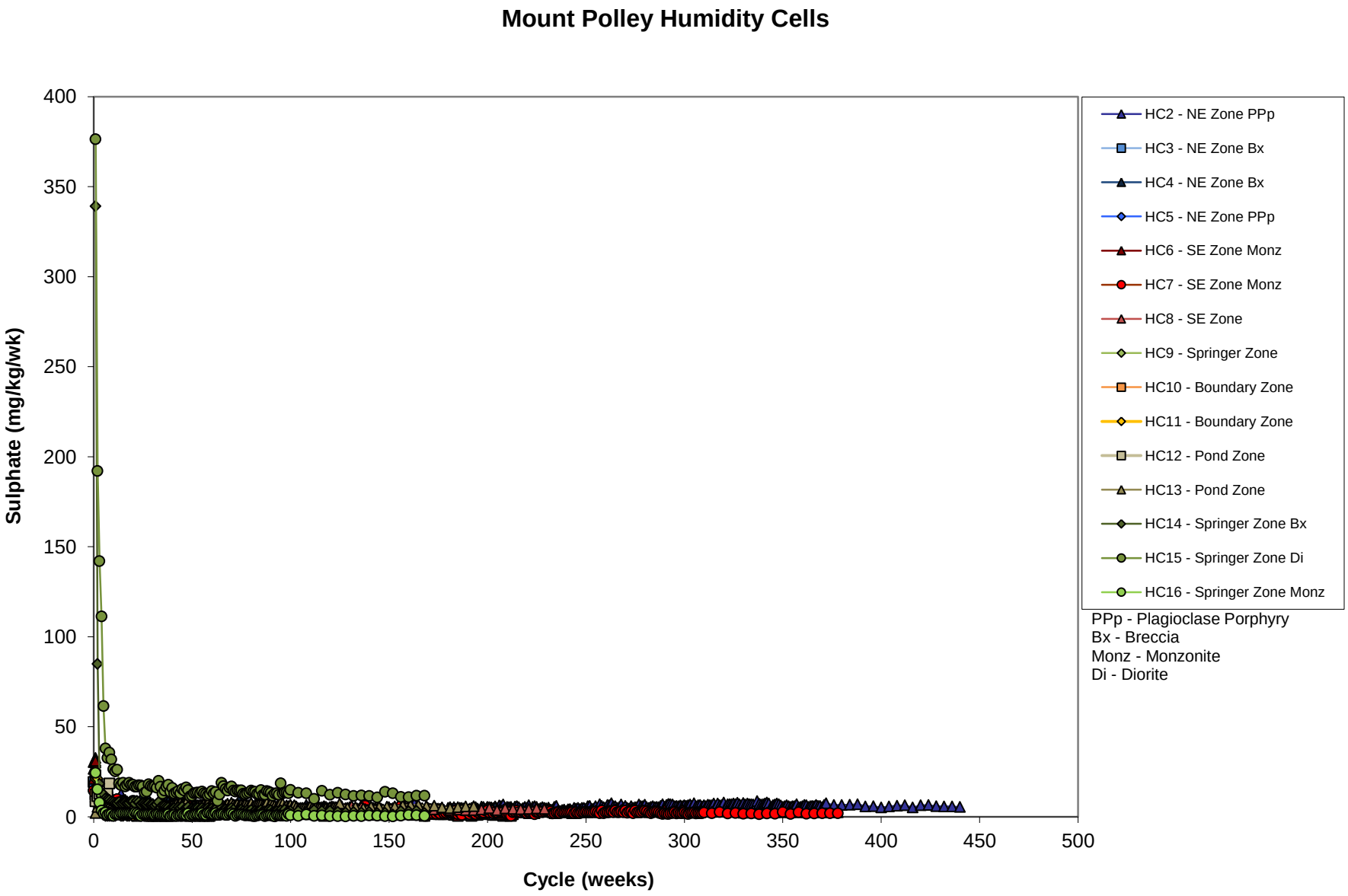
Attachment B: Humidity Cell Loadings Graphs

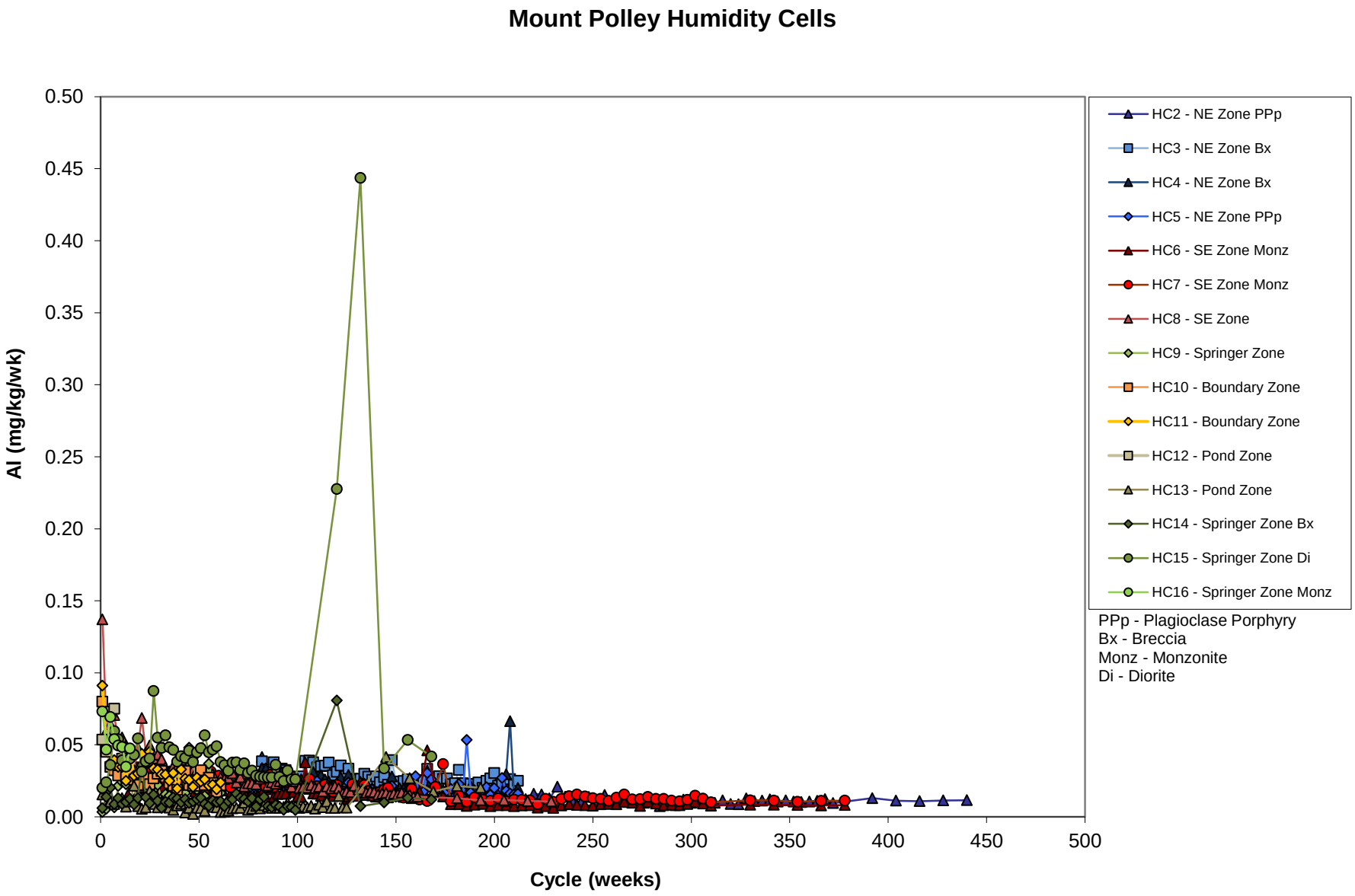

Mount Polley Humidity Cells
pH
Cycle (weeks)
10
9
8
7
6
5
4
0
50
100
150
200
250
300
350
400
450
500
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite


Mount Polley Humidity Cells
Conductivity (uS/cm)
Cycle (weeks)
0
200
400
600
800
1000
1200
1400
0
50
100
150
200
250
300
350
400
450
500
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

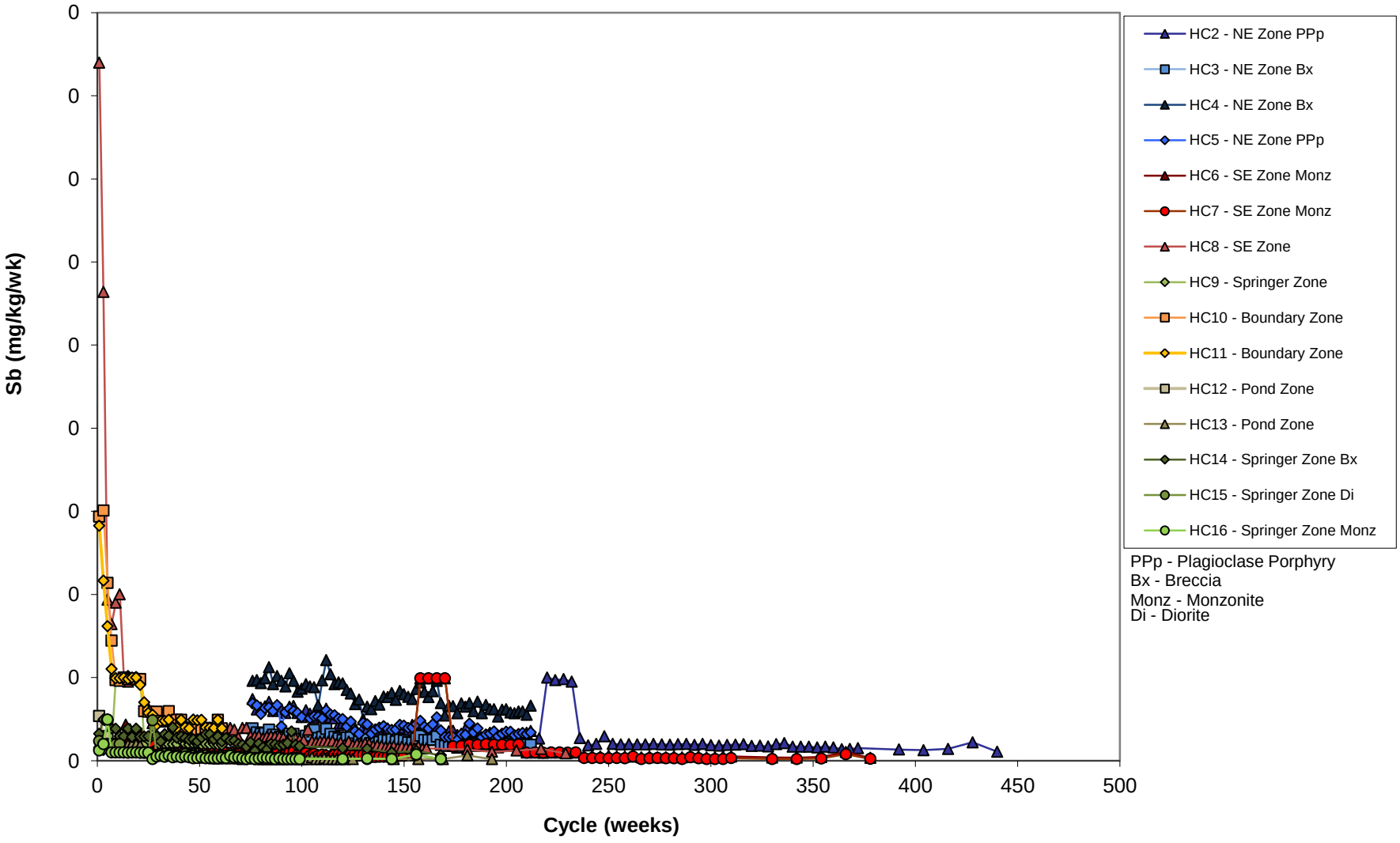

Mount Polley Humidity Cells
Alkalinity (mg CaCO3/week)
Cycle (weeks)
0
5
10
15
20
25
30
0
50
100
150
200
250
300
350
400
450
500
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite

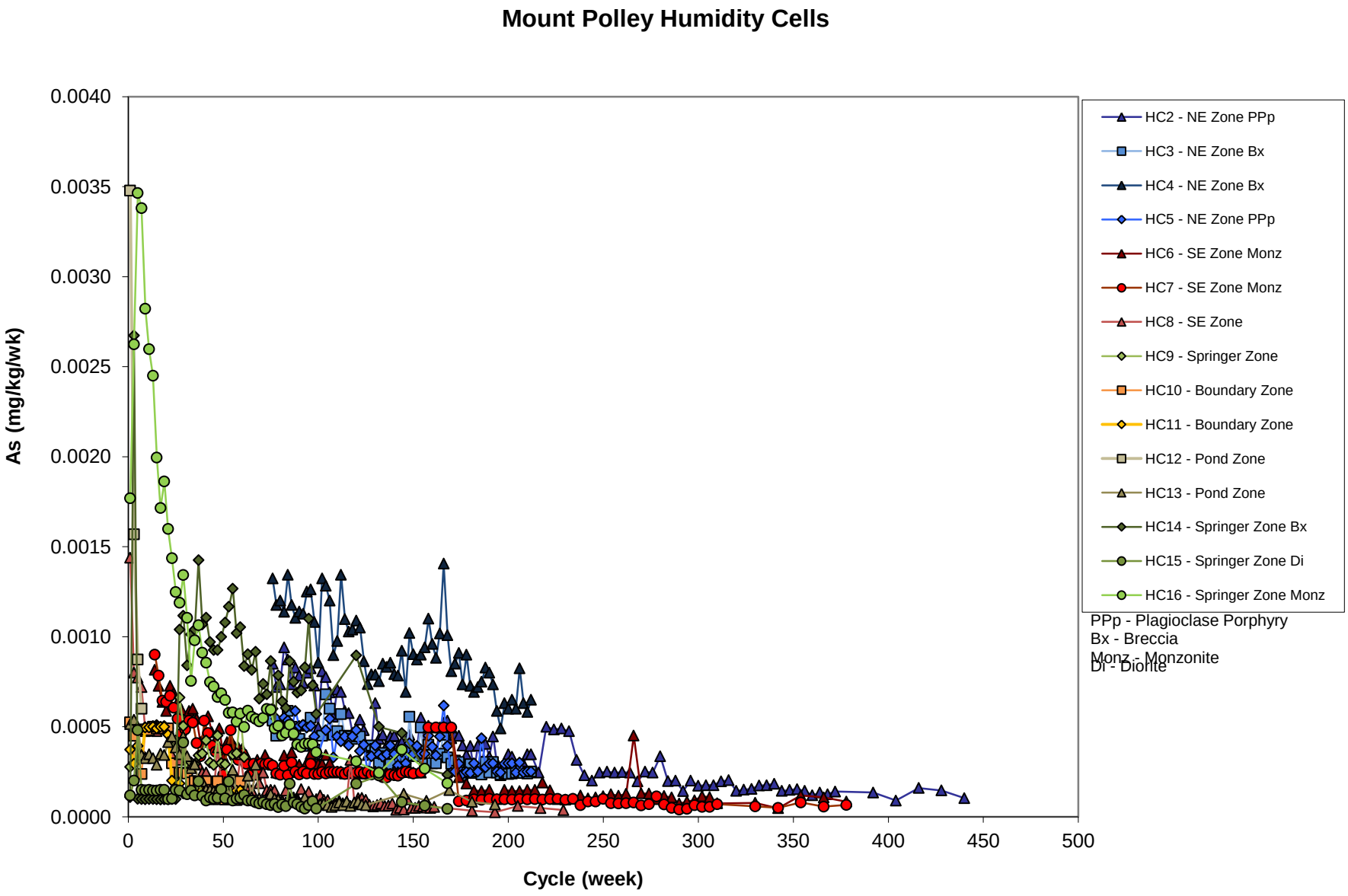

Mount Polley Humidity Cells
Acidity (mg Ca CO3/week)
Cycle (weeks)
0
1
2
3
4
5
6
0
50
100
150
200
250
300
350
400
450
500
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite

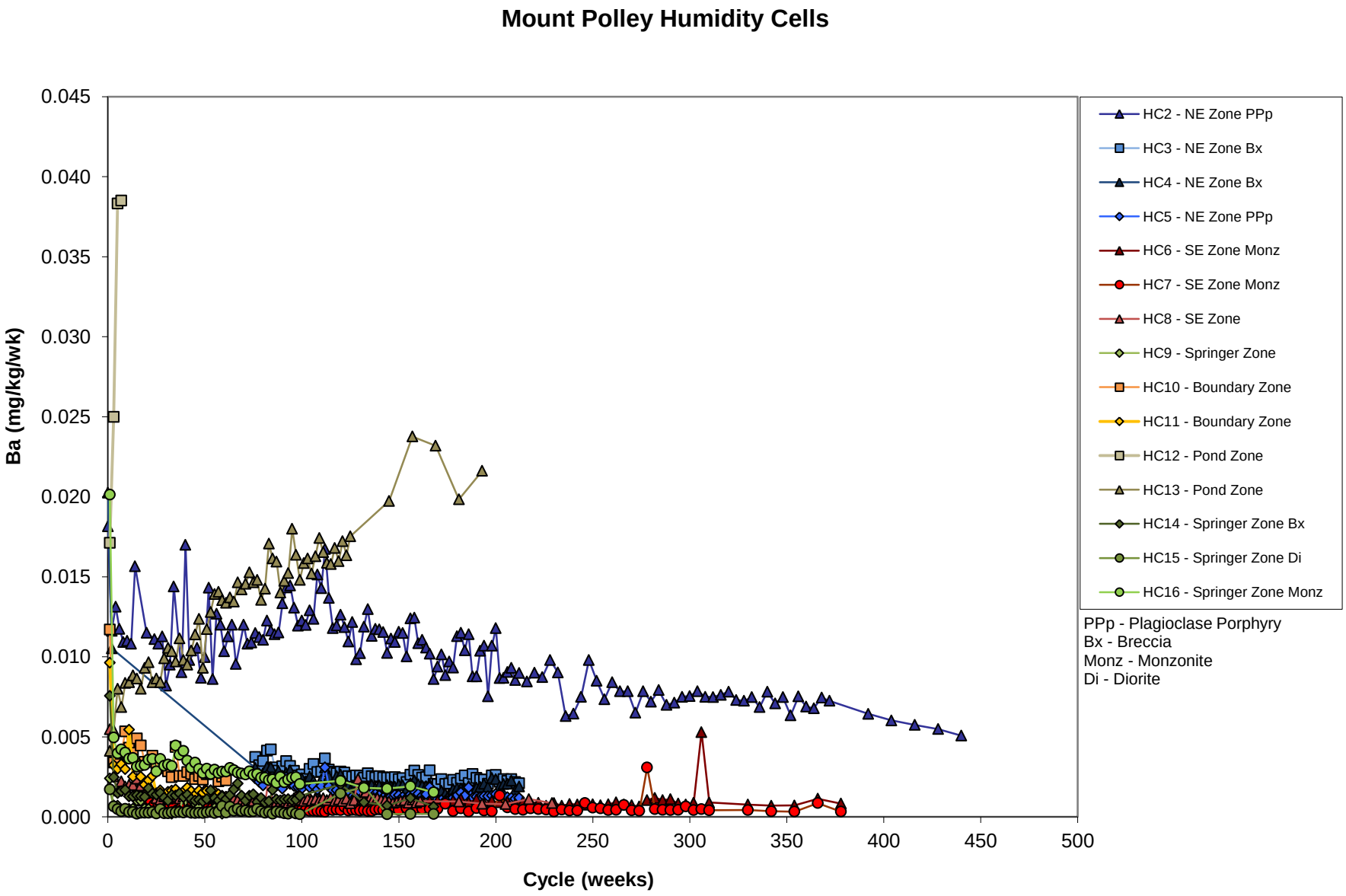

Mount Polley Humidity Cells
Sulphate (mg/kg/wk)
Cycle (weeks)
0
50
100
150
200
250
300
350
400
450
500
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

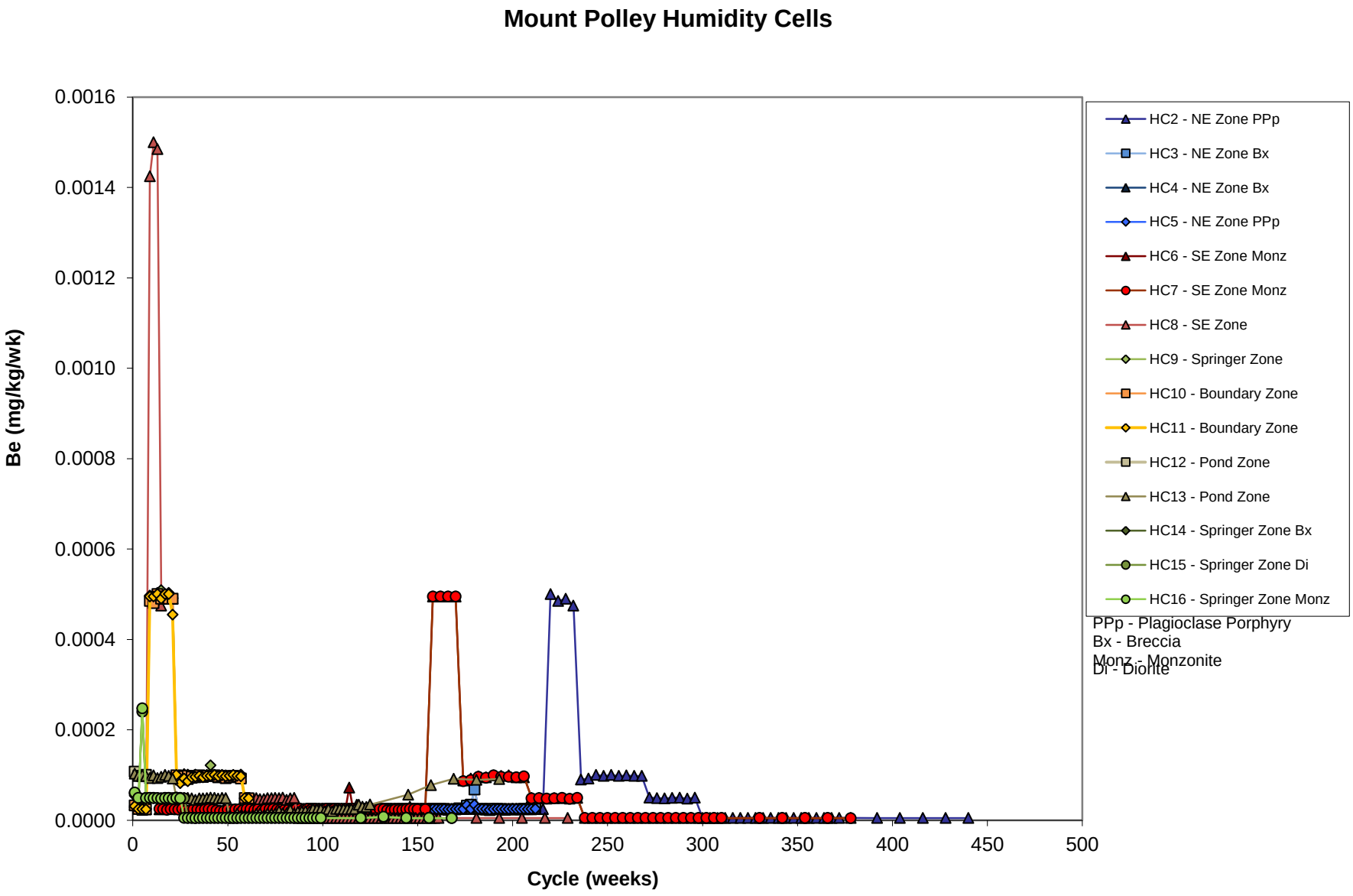

Mount Polley Humidity Cells
Al (mg/kg/wk)
0.50
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

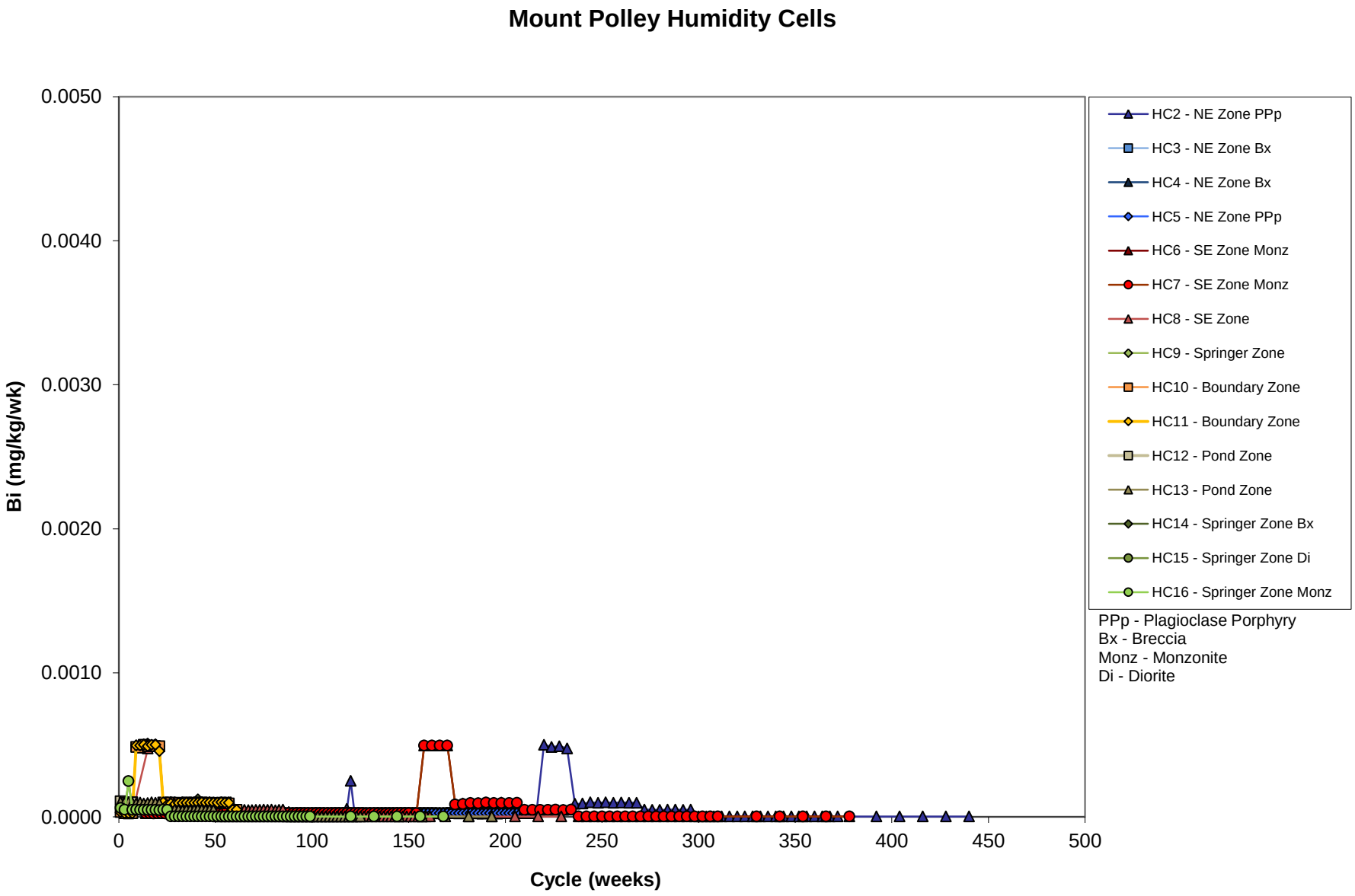
Mount Polley Humidity Cells

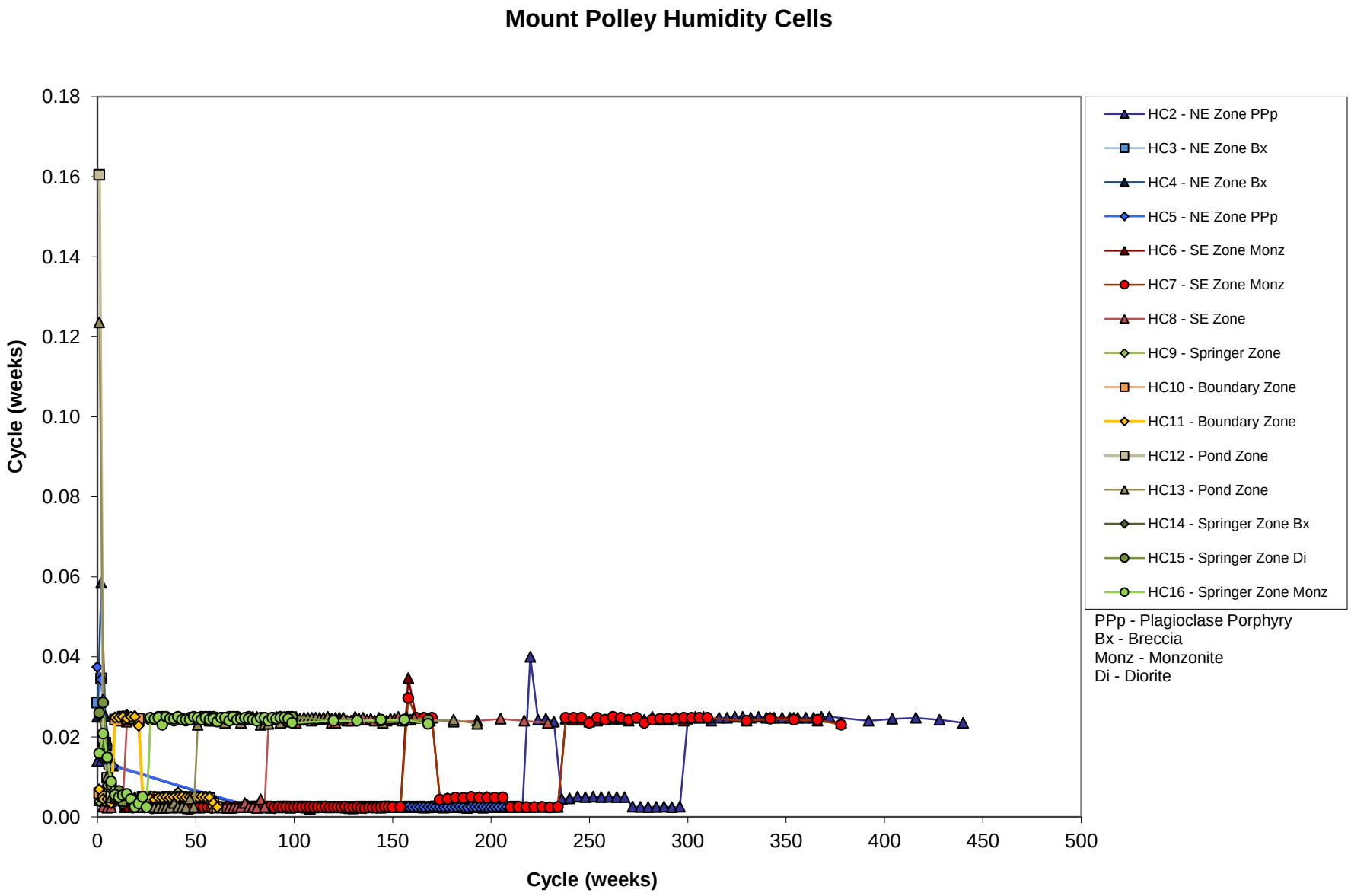


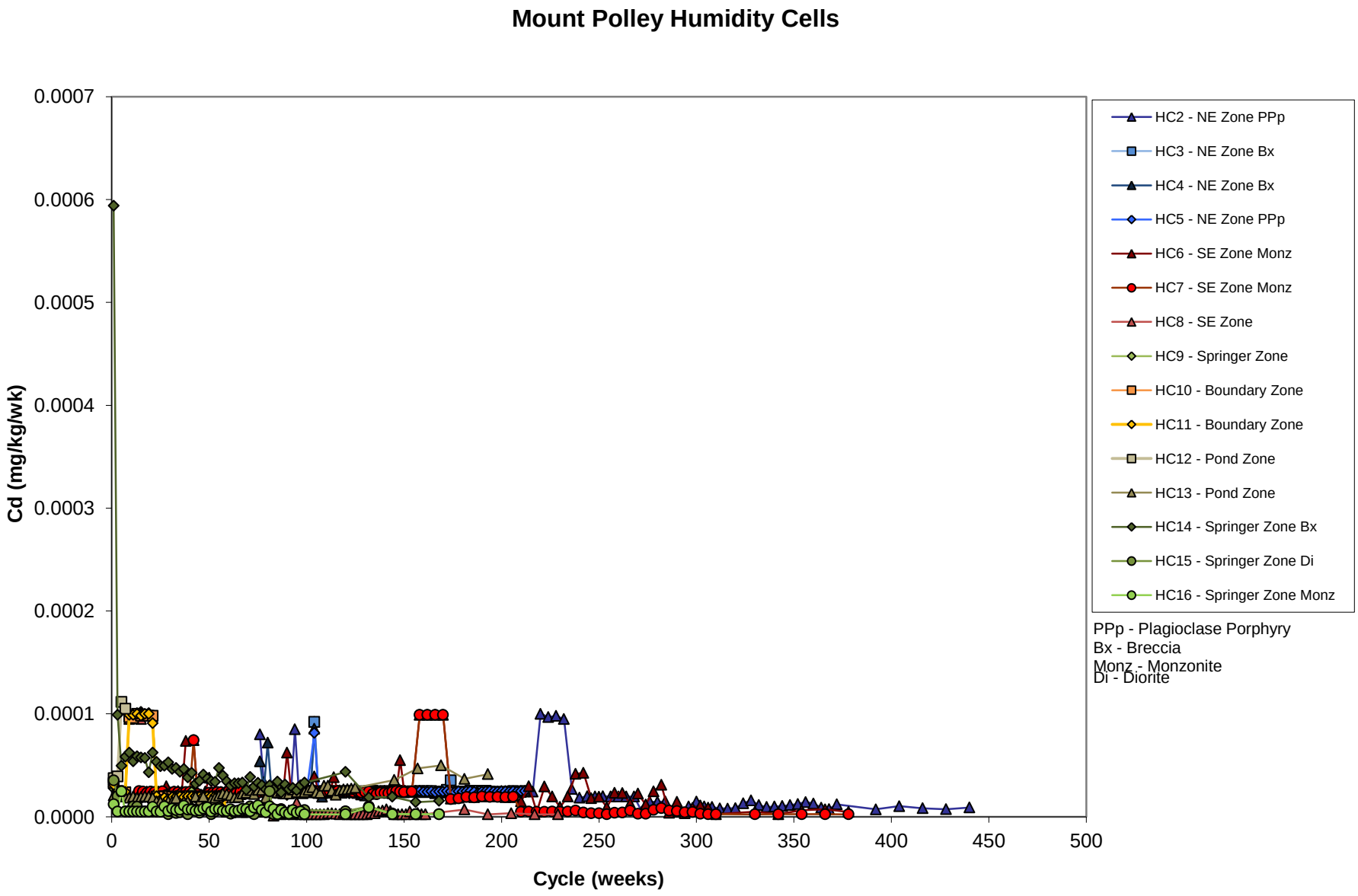

Mount Polley Humidity Cells
As (mg/kg/wk)
0.0040
0.0035
0.0030
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
0
50
100
150
200
250
300
350
400
450
500
Cycle (week)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

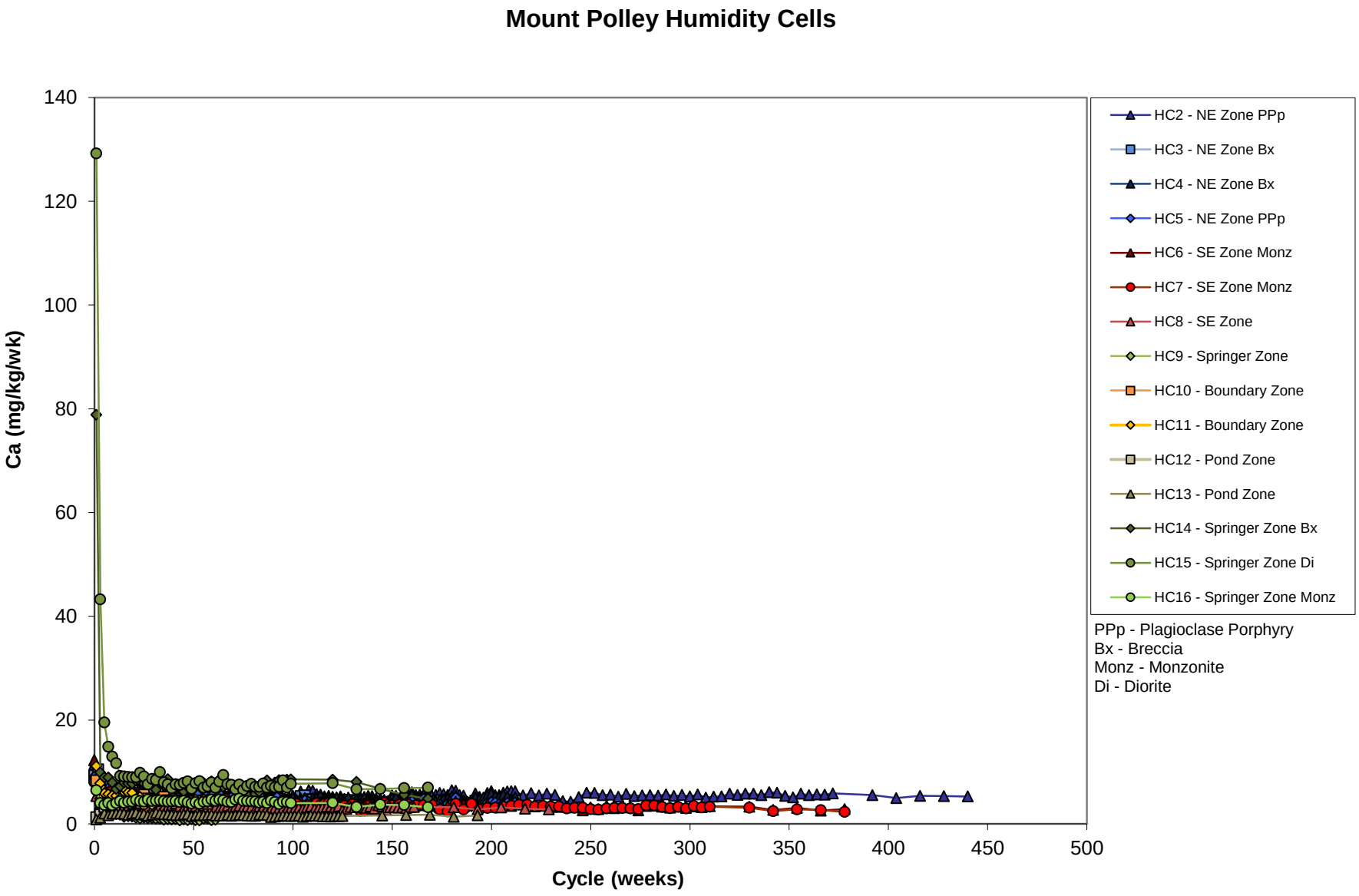

Mount Polley Humidity Cells
Ba (mg/kg/wk)
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

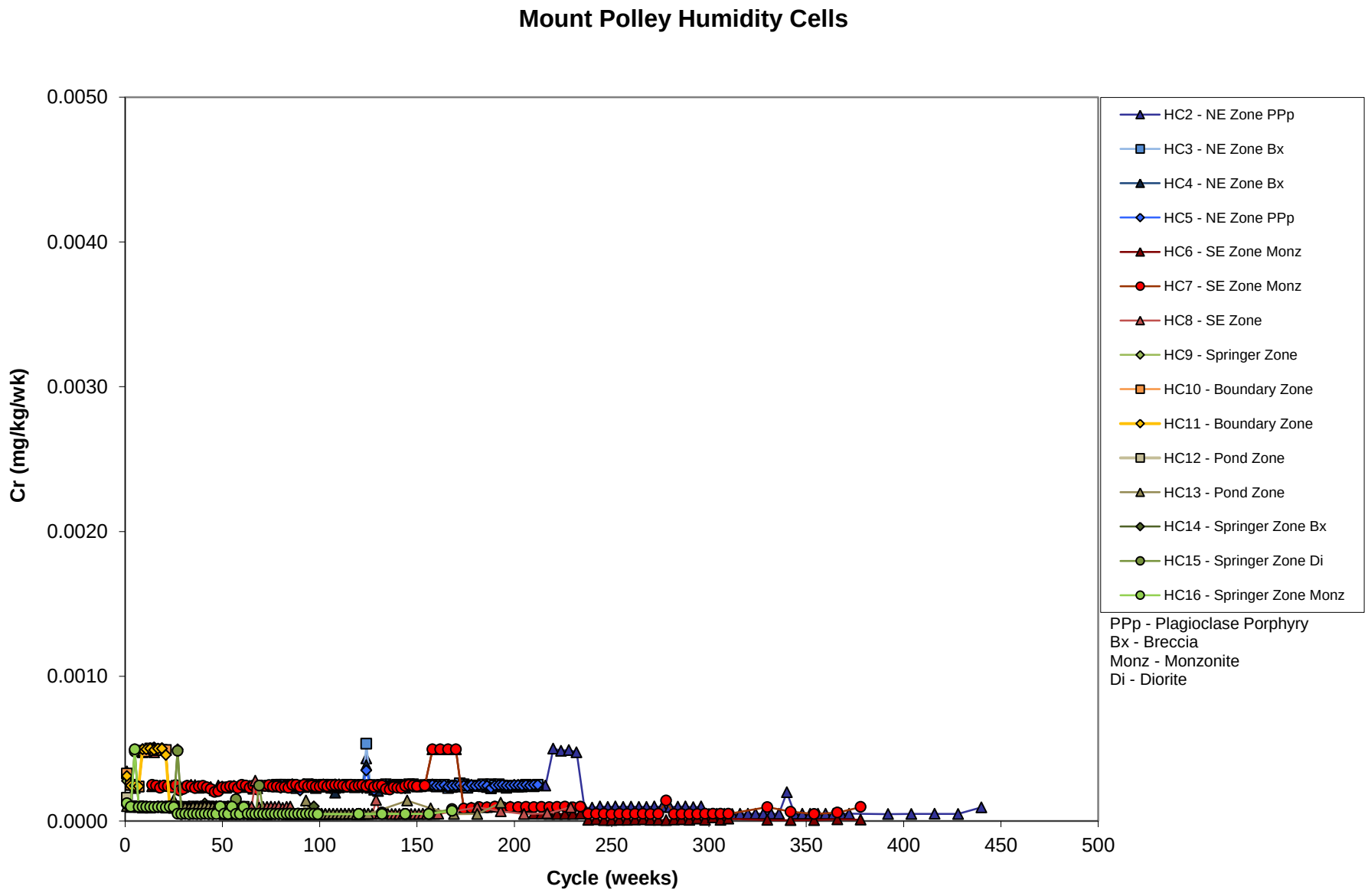

Mount Polley Humidity Cells
Be (mg/kg/wk)
0.0016
0.0014
0.0012
0.0010
0.0008
0.0006
0.0004
0.0002
0.0000
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

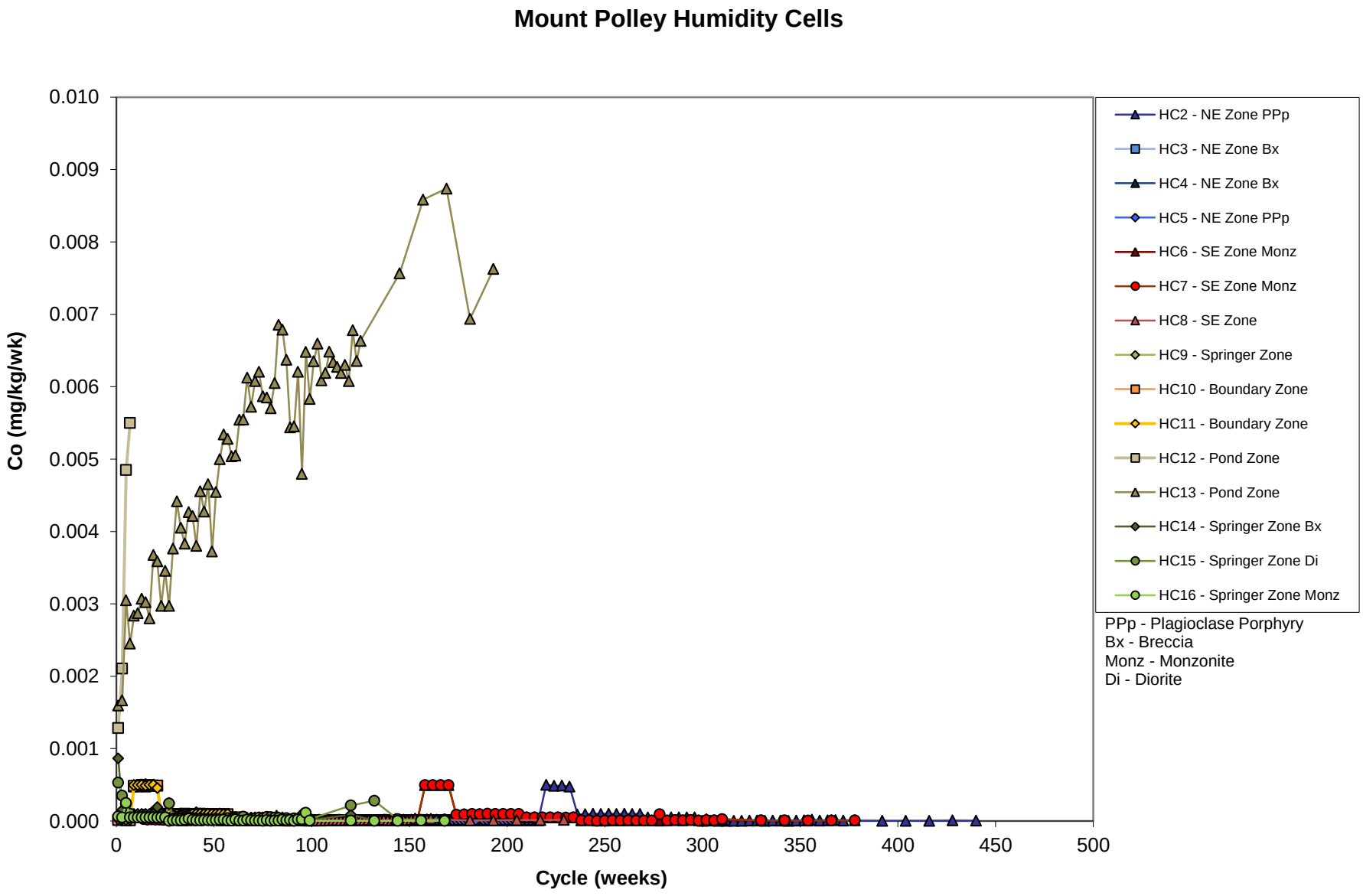

Mount Polley Humidity Cells
Bi (mg/kg/wk)
0.0050
0.0040
0.0030
0.0020
0.0010
0.0000
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

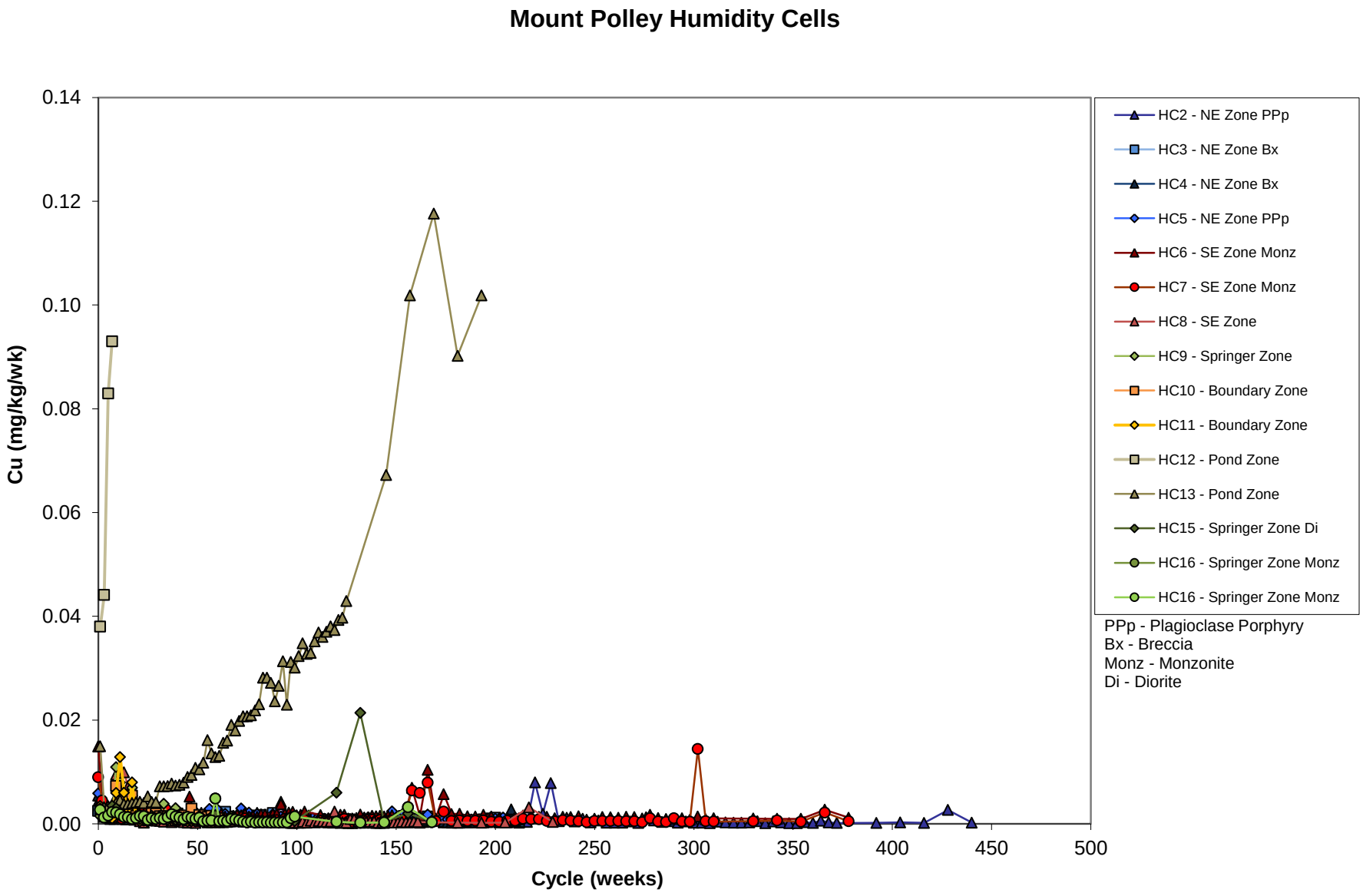

Mount Polley Humidity Cells
Cycle (weeks)
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

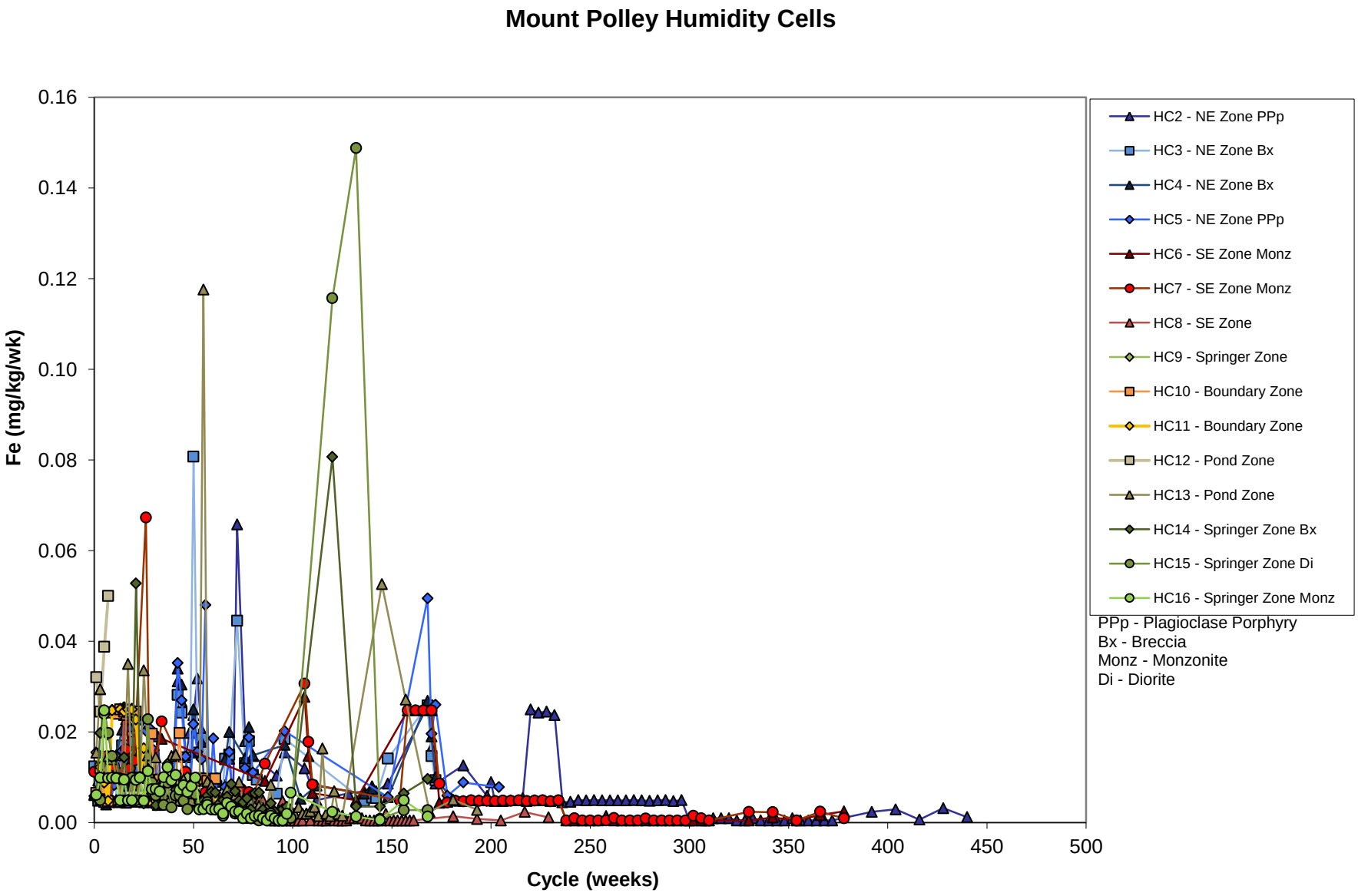

Mount Polley Humidity Cells
Cd (mg/kg/wk)
0.0007
0.0006
0.0005
0.0004
0.0003
0.0002
0.0001
0.0000
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

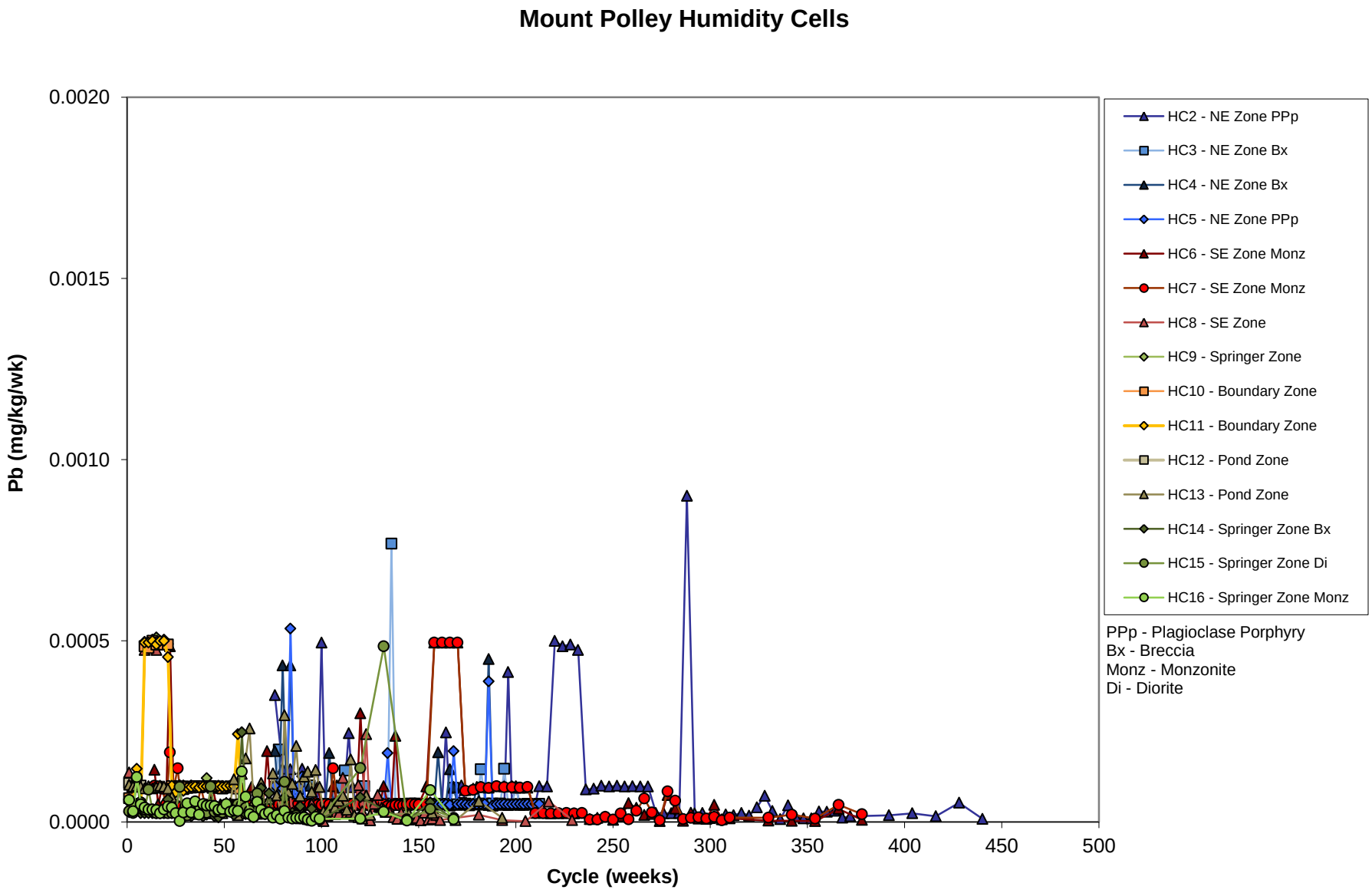

Mount Polley Humidity Cells
Ca (mg/kg/wk)
Cycle (weeks)
0
20
40
60
80
100
120
140
0
50
100
150
200
250
300
350
400
450
500
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

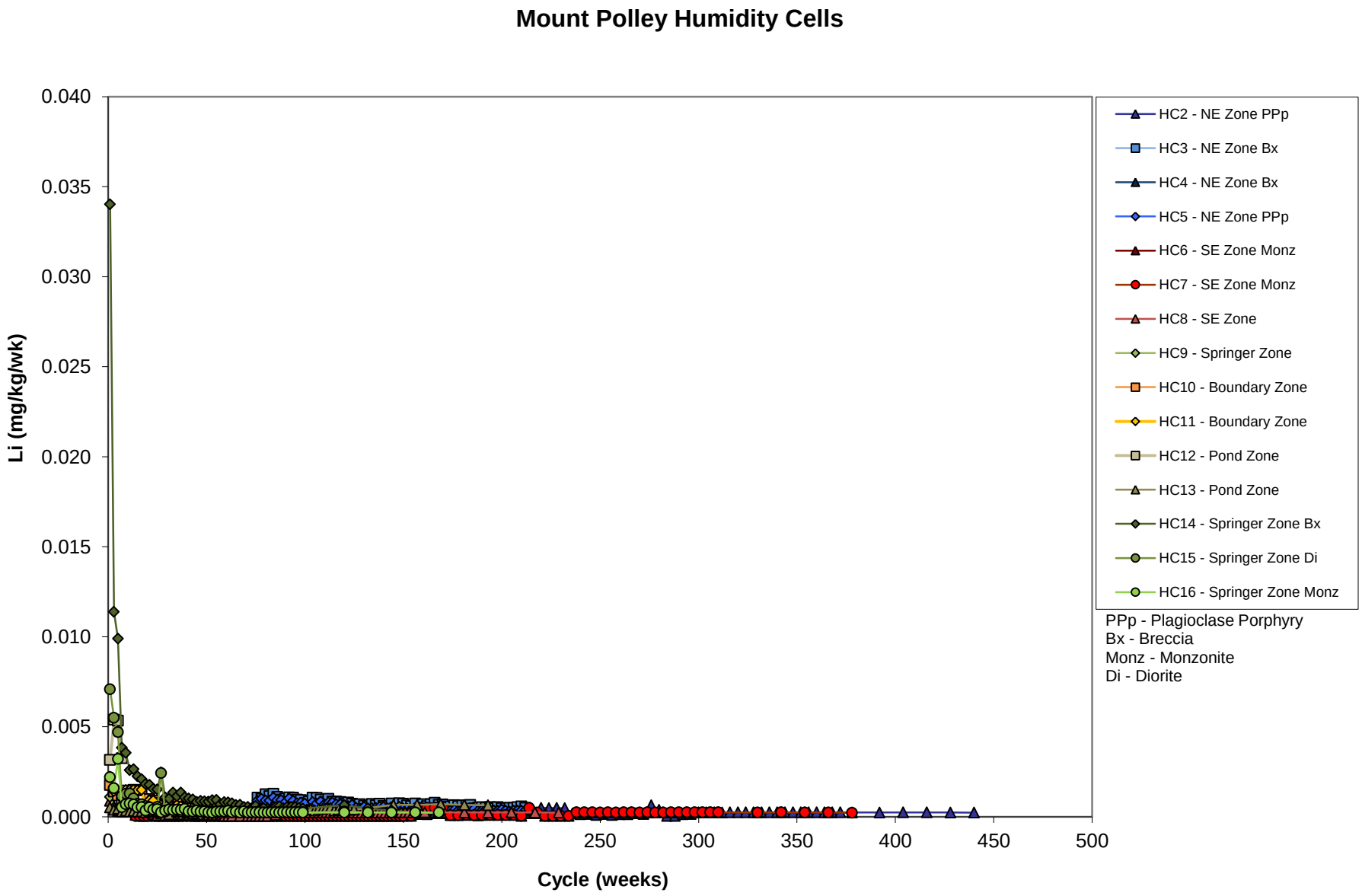

Mount Polley Humidity Cells
Cr (mg/kg/wk)
0.0050
0.0040
0.0030
0.0020
0.0010
0.0000
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite


Mount Polley Humidity Cells
Co (mg/kg/wk)
0.010
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0.000
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

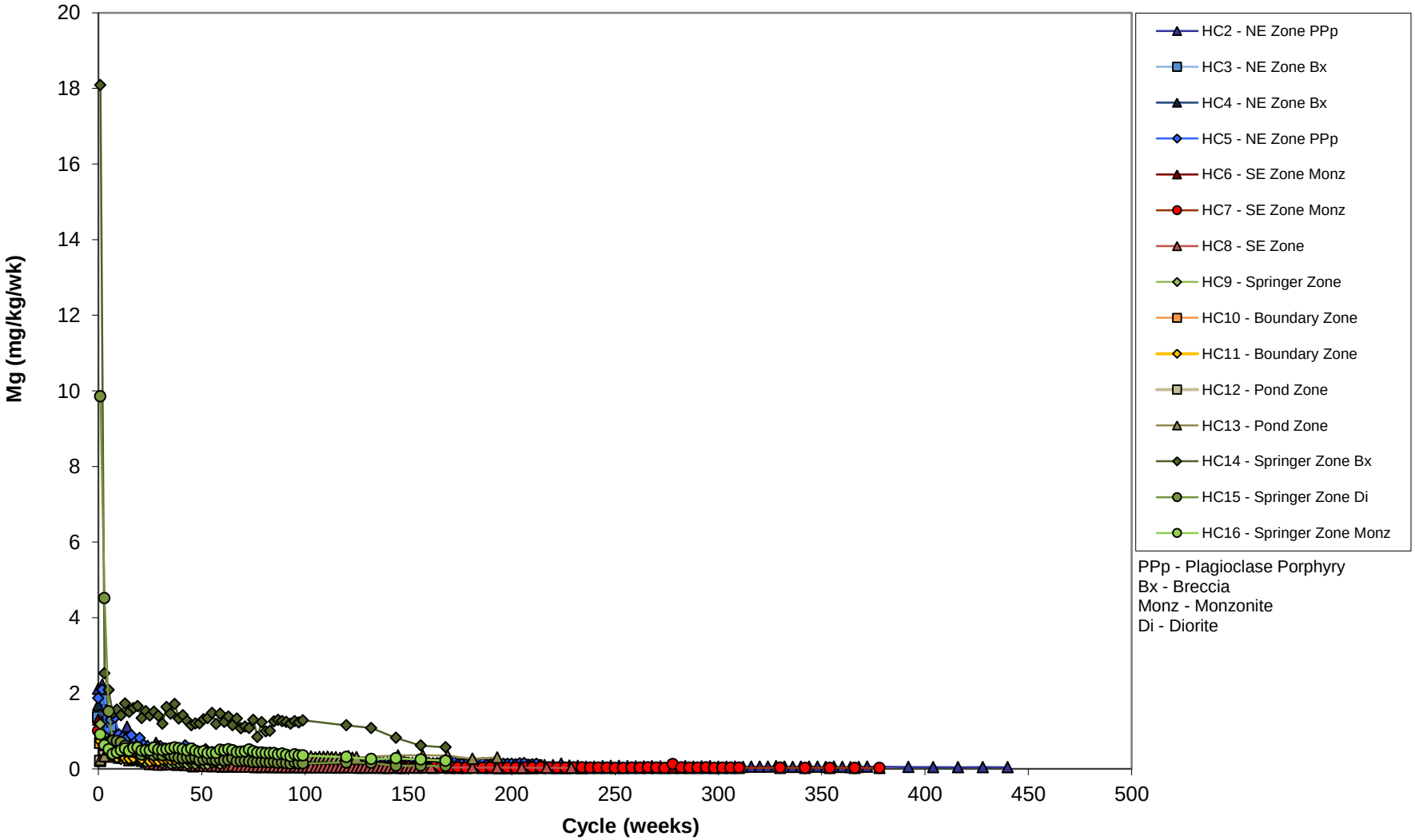

Mount Polley Humidity Cells
Cu (mg/kg/wk)
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

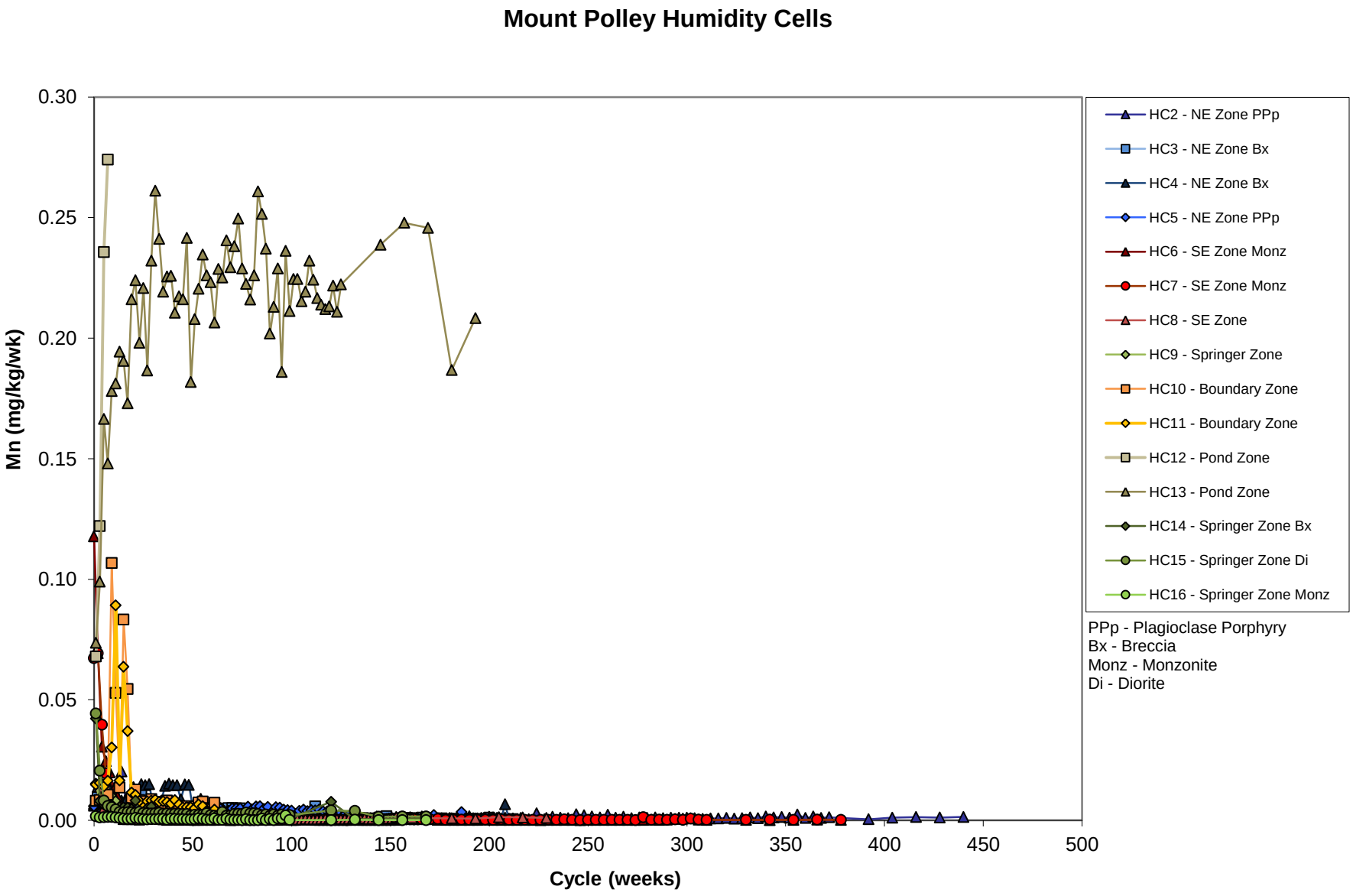

Mount Polley Humidity Cells
Fe (mg/kg/wk)
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

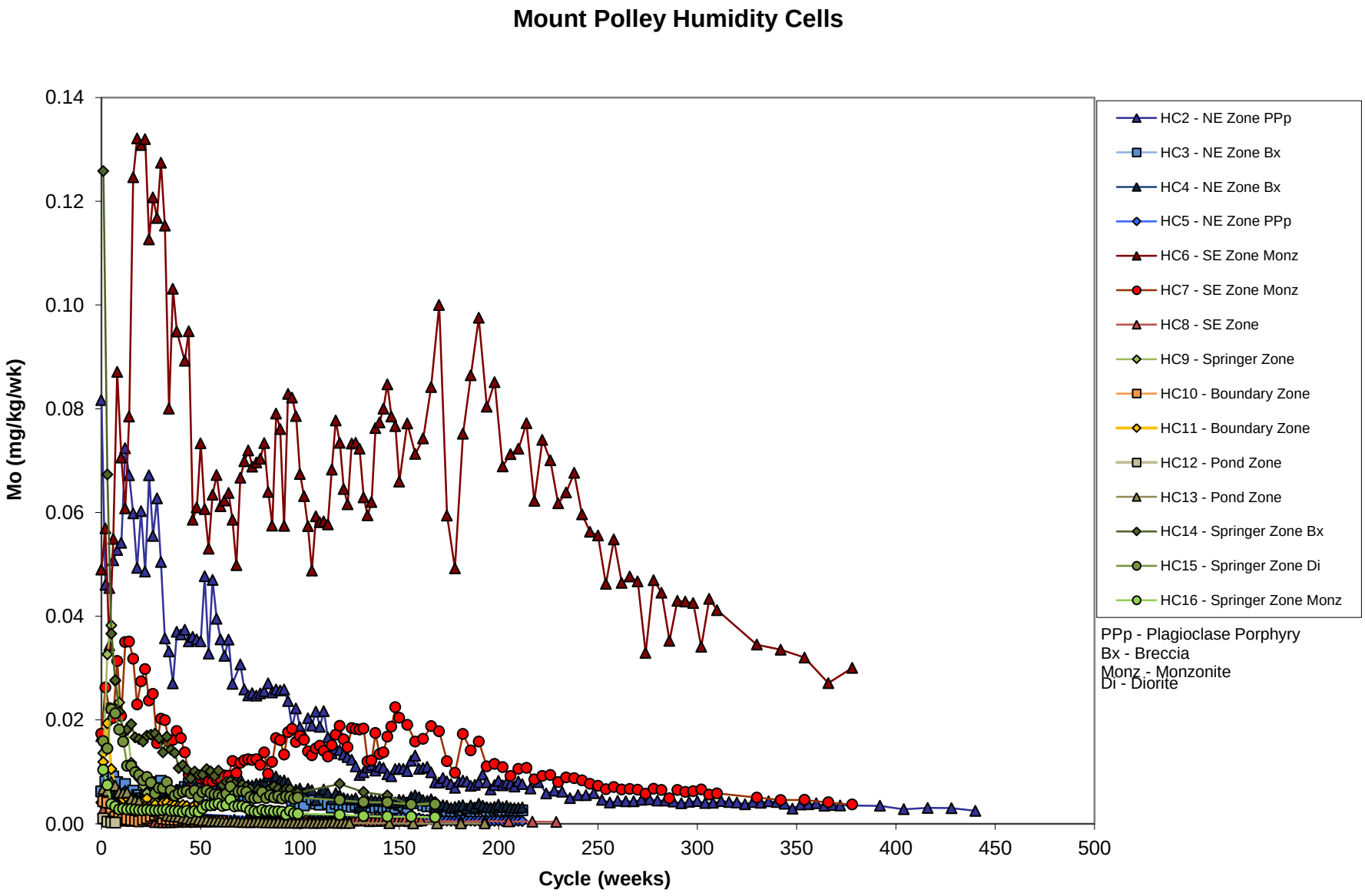

Mount Polley Humidity Cells
Pb (mg/kg/wk)
0.0020
0.0015
0.0010
0.0005
0.0000
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

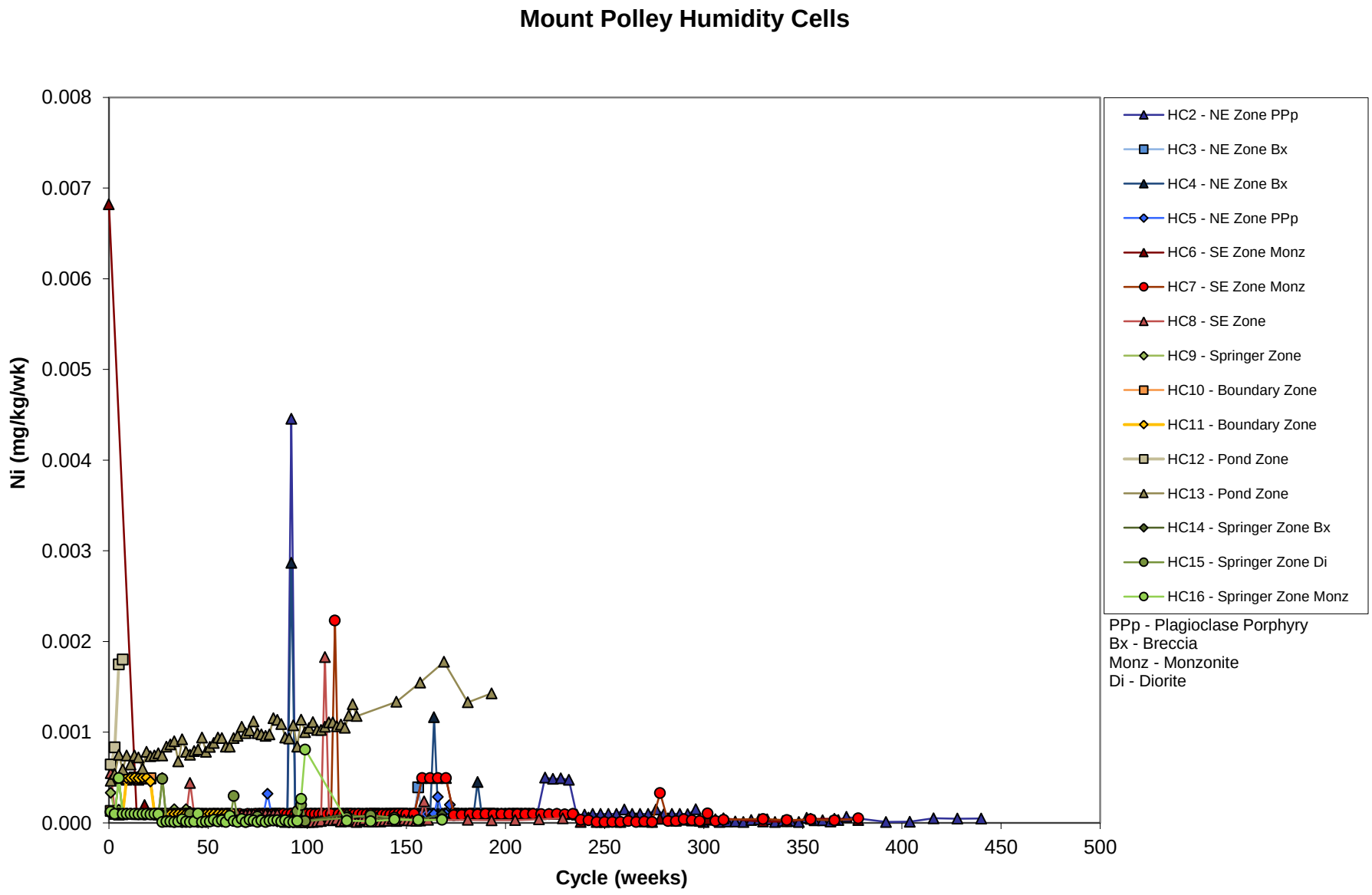

Mount Polley Humidity Cells
Li (mg/kg/wk)
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

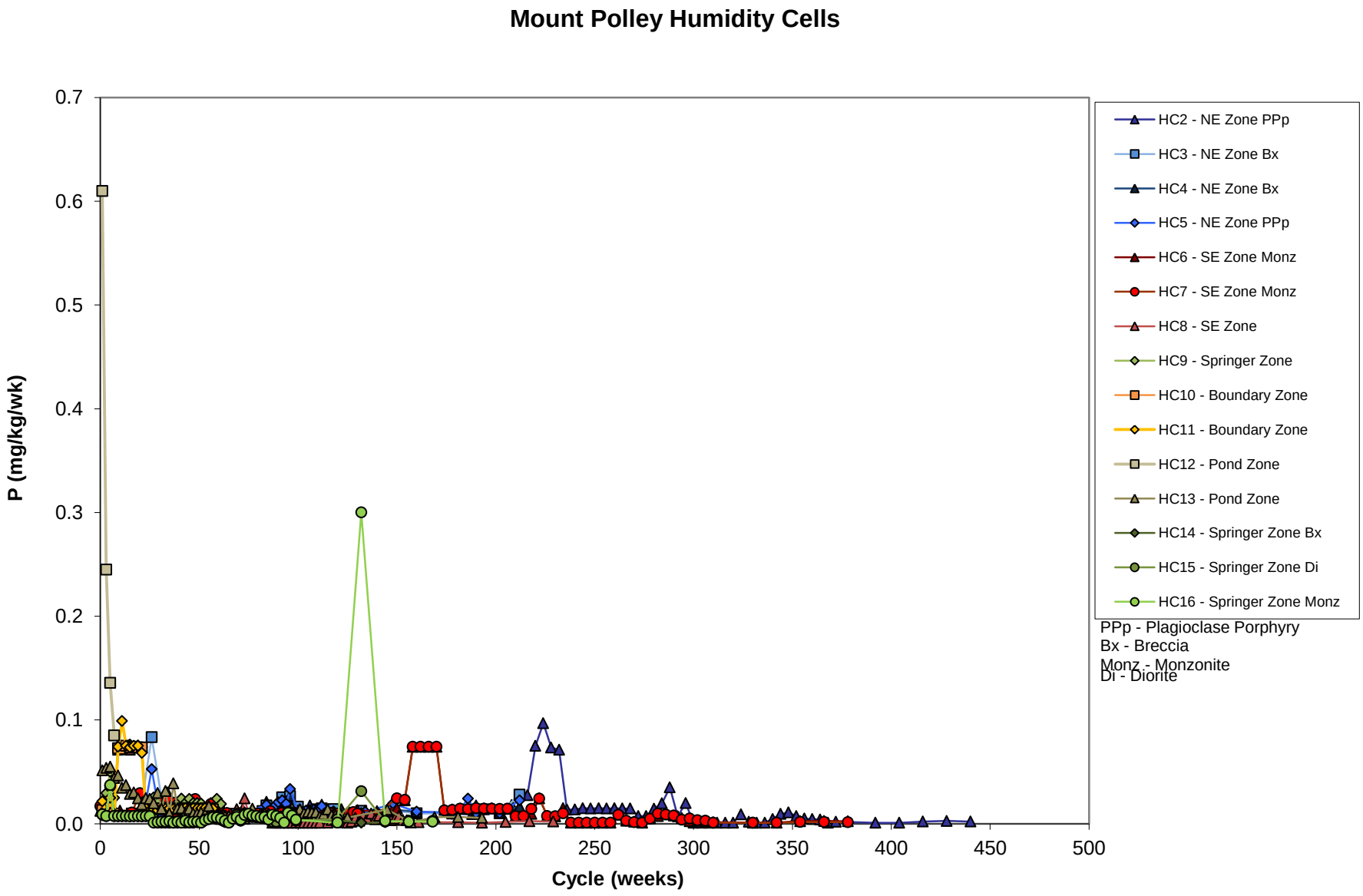
Mount Polley Humidity Cells

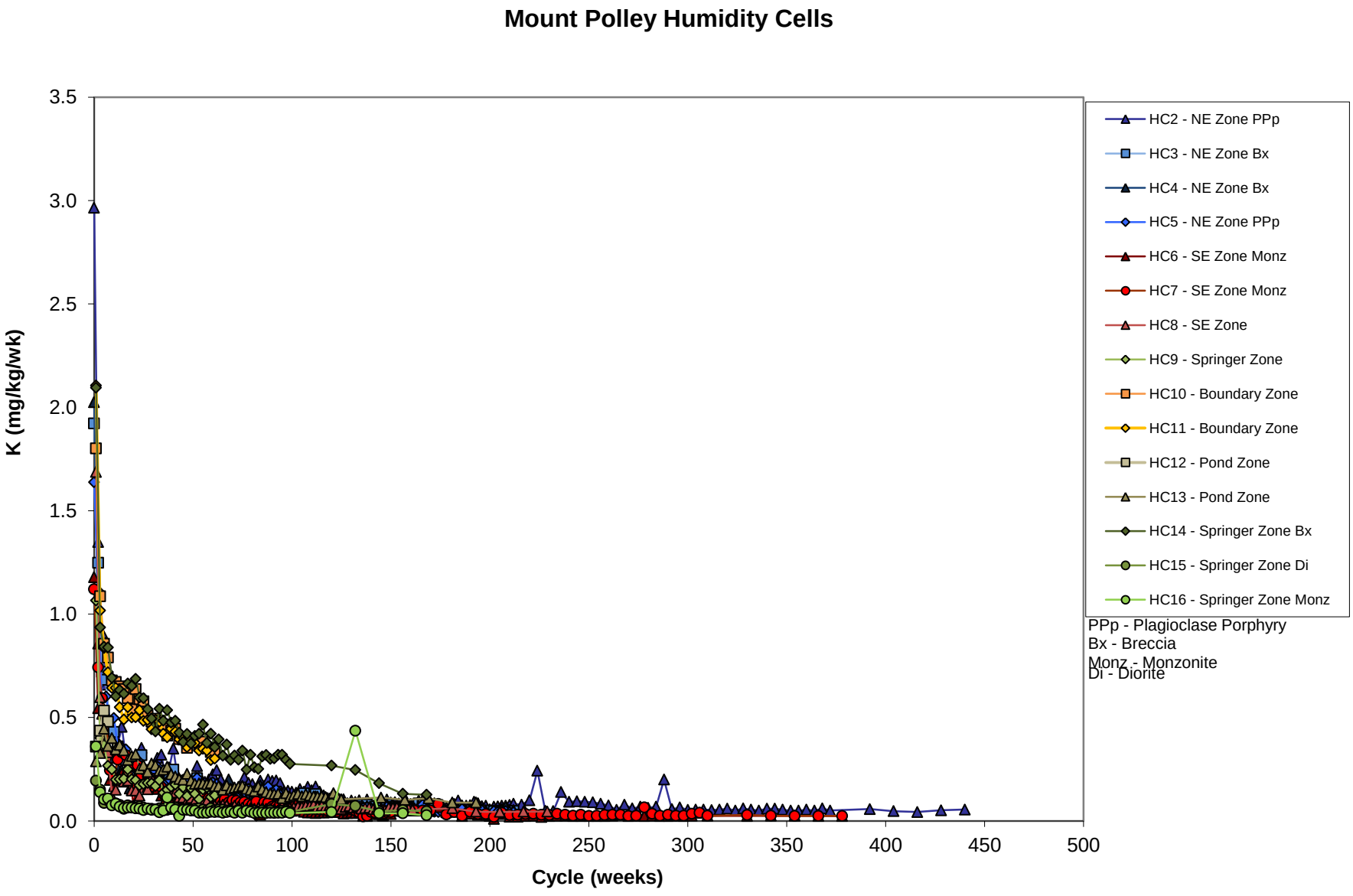


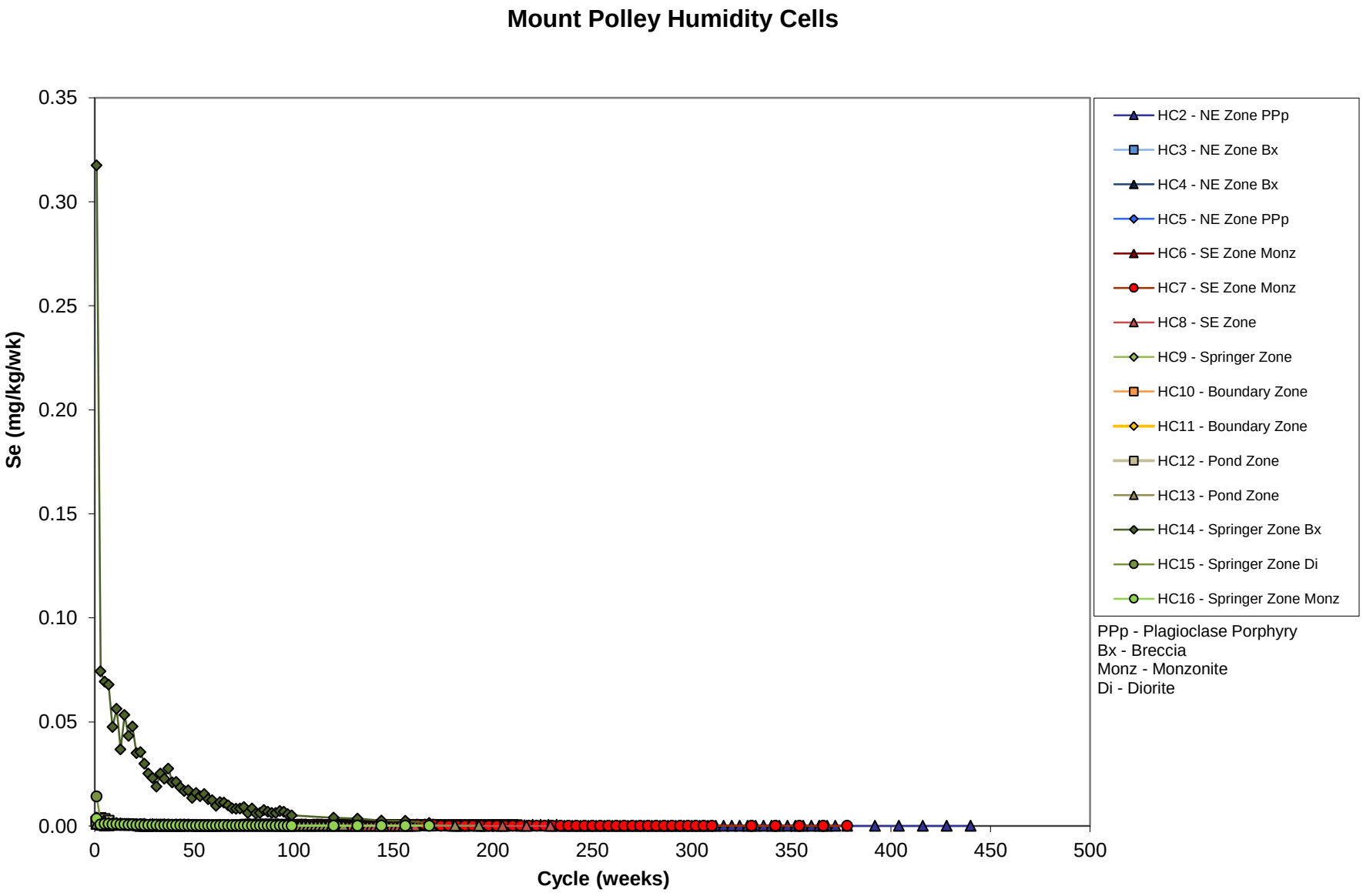

Mount Polley Humidity Cells
Mn (mg/kg/wk)
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

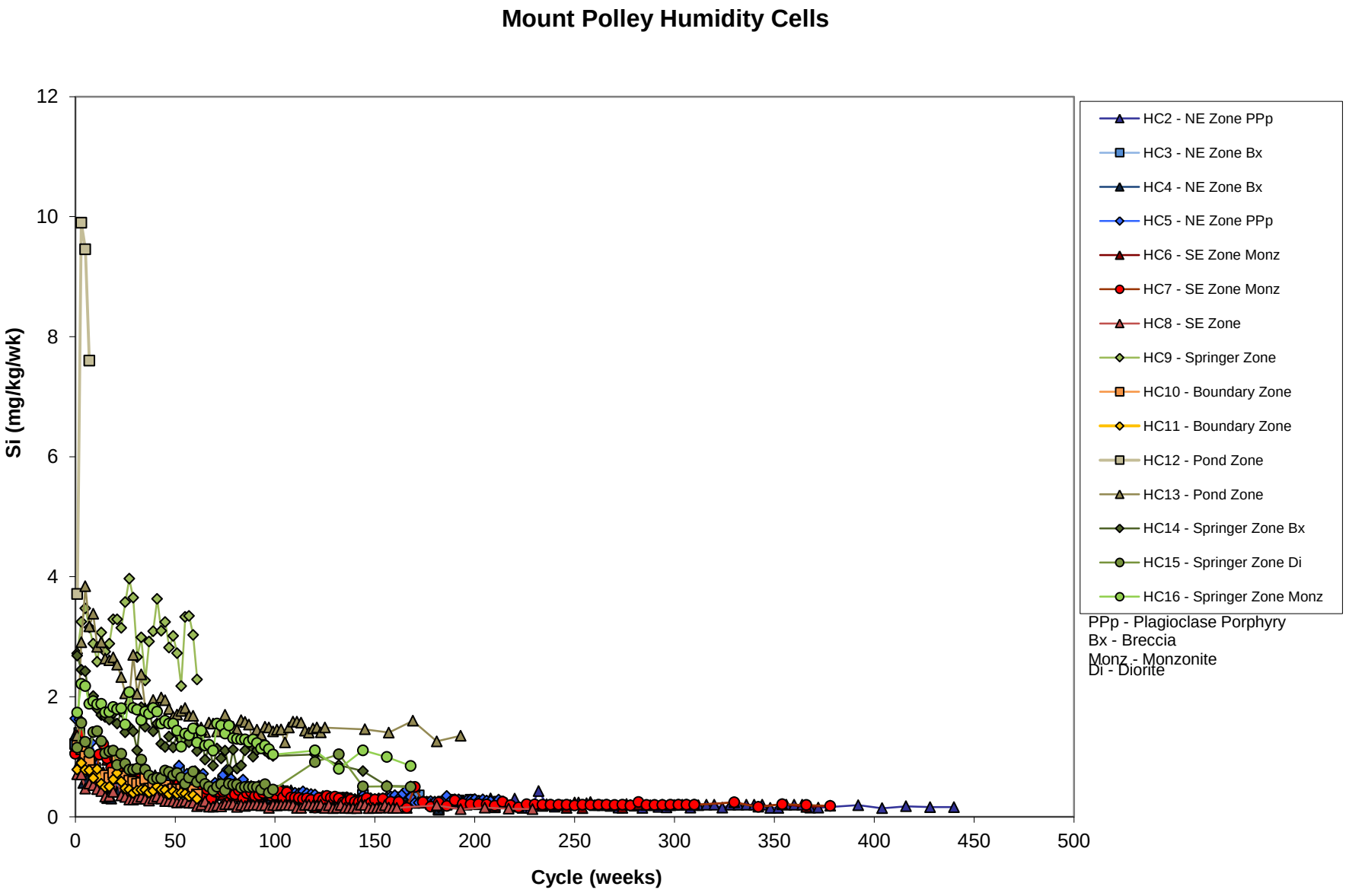

Mount Polley Humidity Cells
Mo (mg/kg/wk)
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

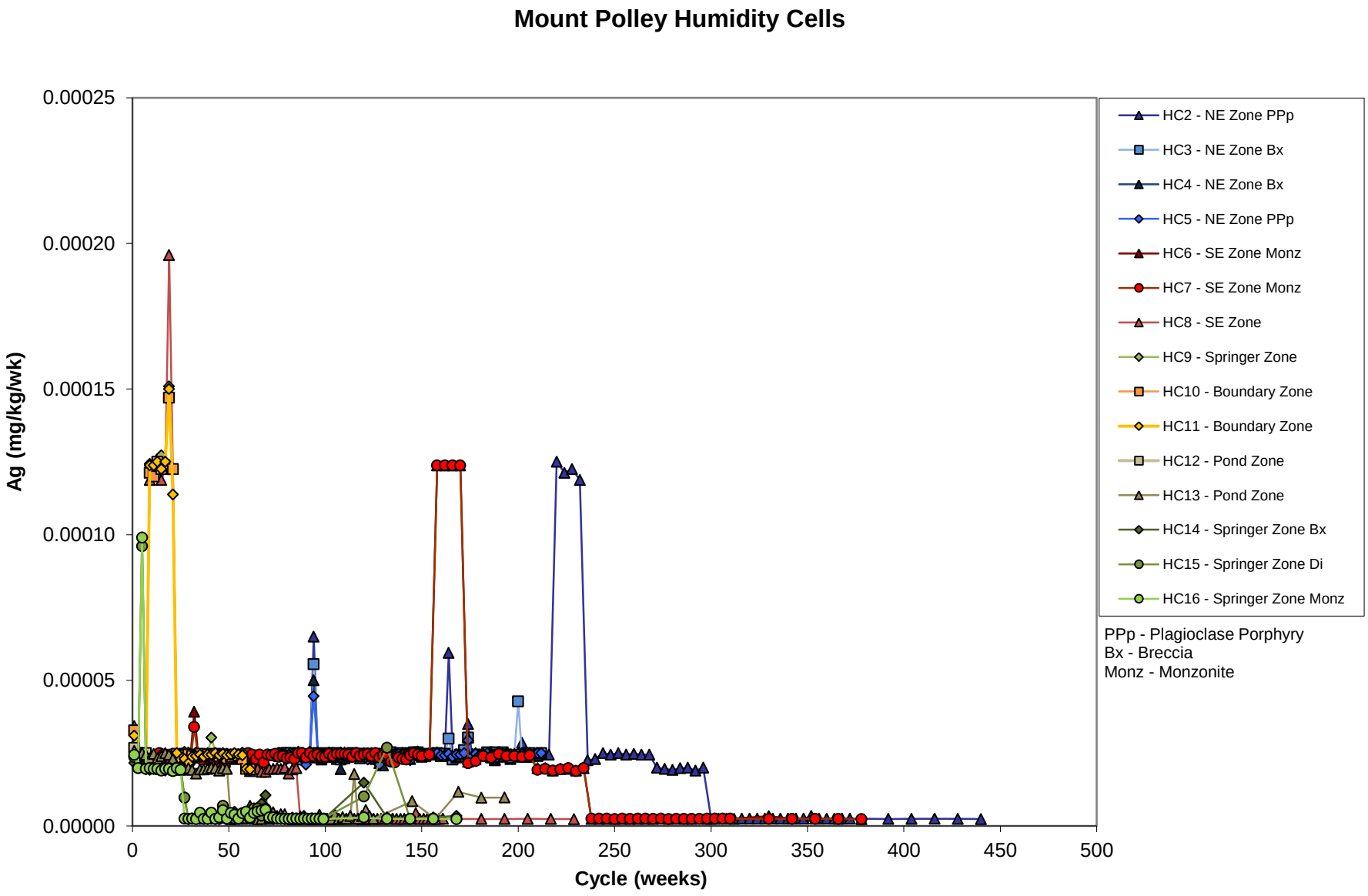

Mount Polley Humidity Cells
Ni (mg/kg/wk)
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0.000
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

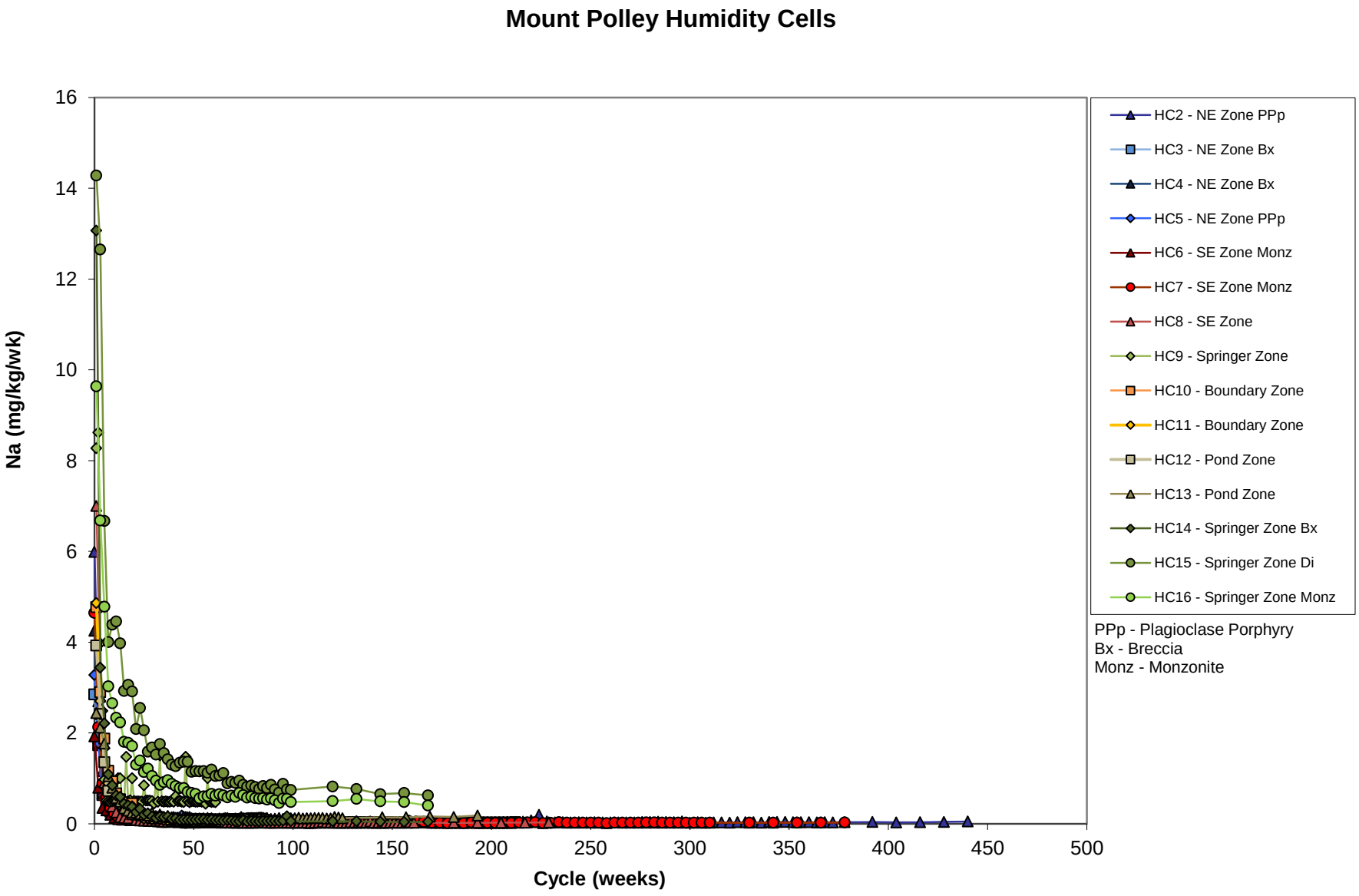

Mount Polley Humidity Cells
P (mg/kg/wk)
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

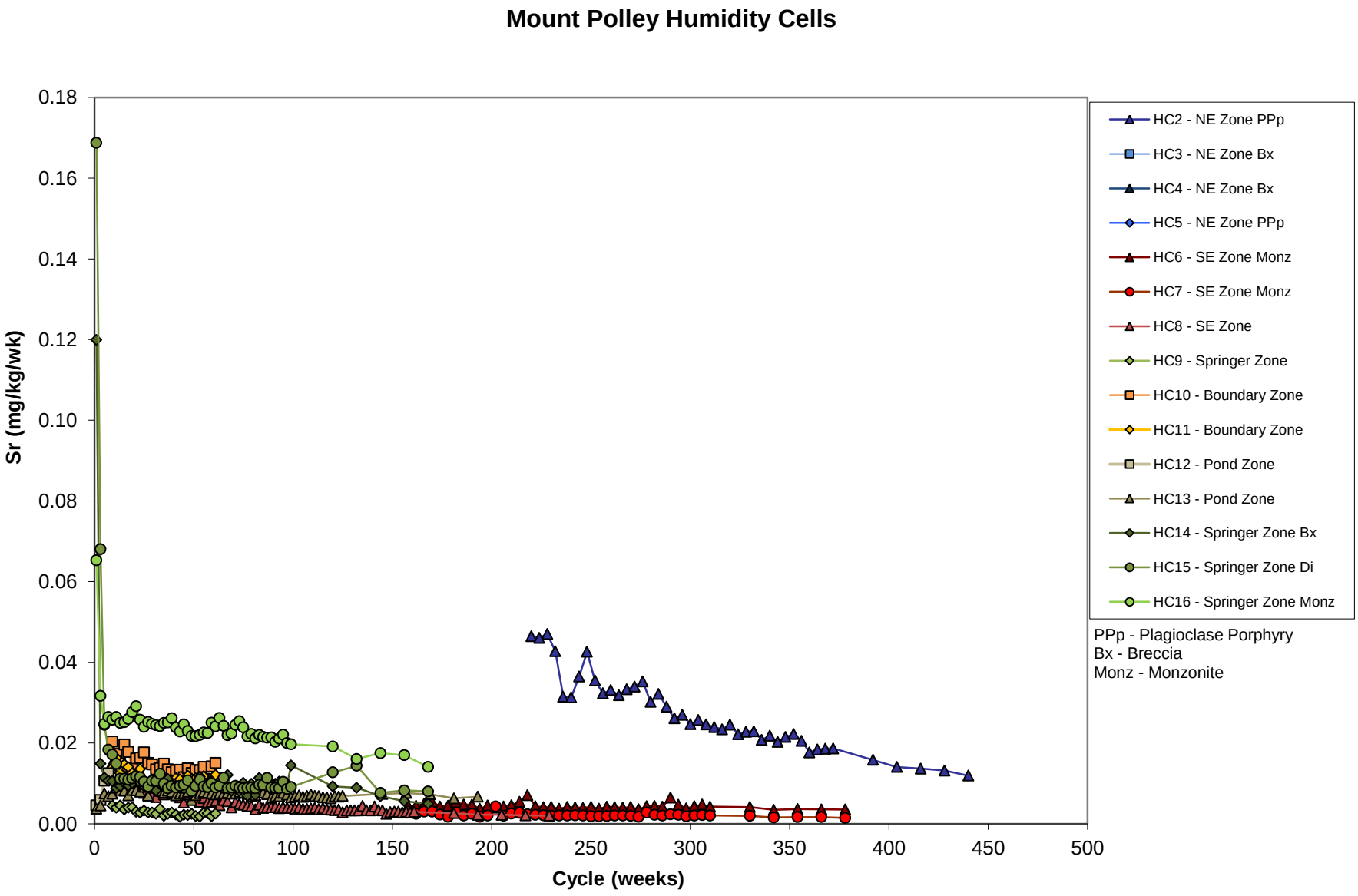

Mount Polley Humidity Cells
K (mg/kg/wk)
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

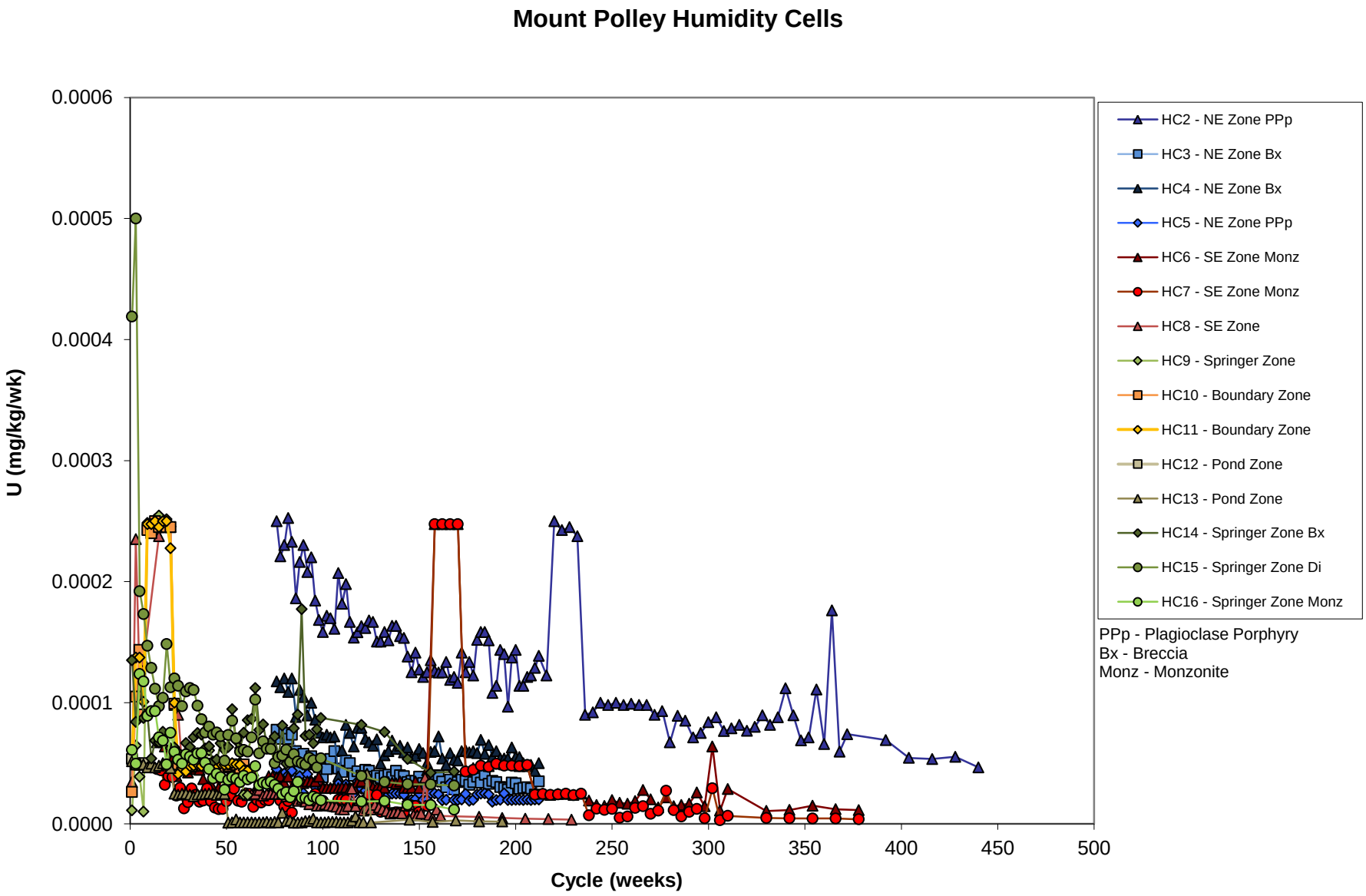

Mount Polley Humidity Cells
Se (mg/kg/wk)
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

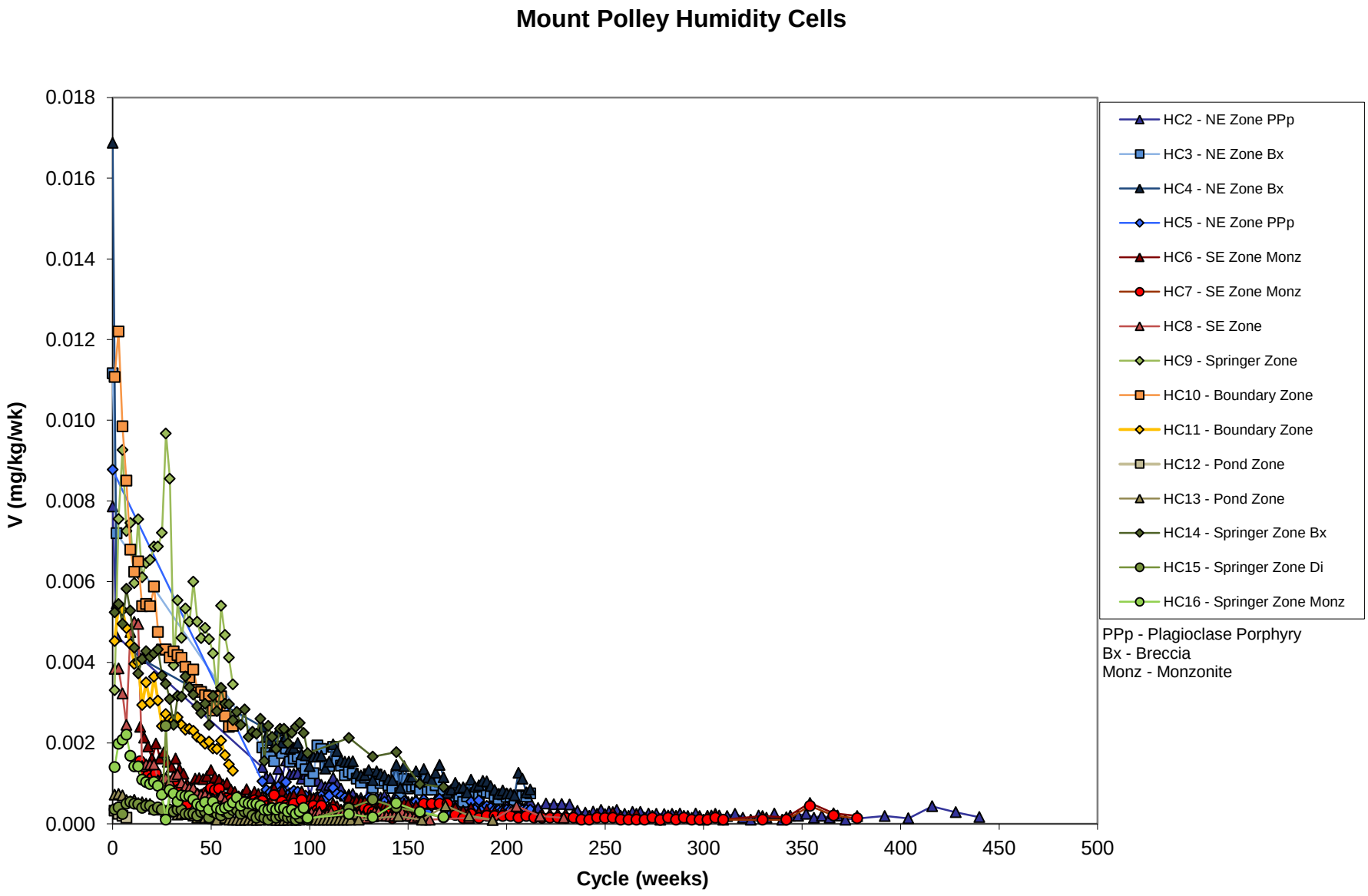

Mount Polley Humidity Cells
Si (mg/kg/wk)
Cycle (weeks)
0
2
4
6
8
10
12
0
50
100
150
200
250
300
350
400
450
500
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite
Di - Diorite

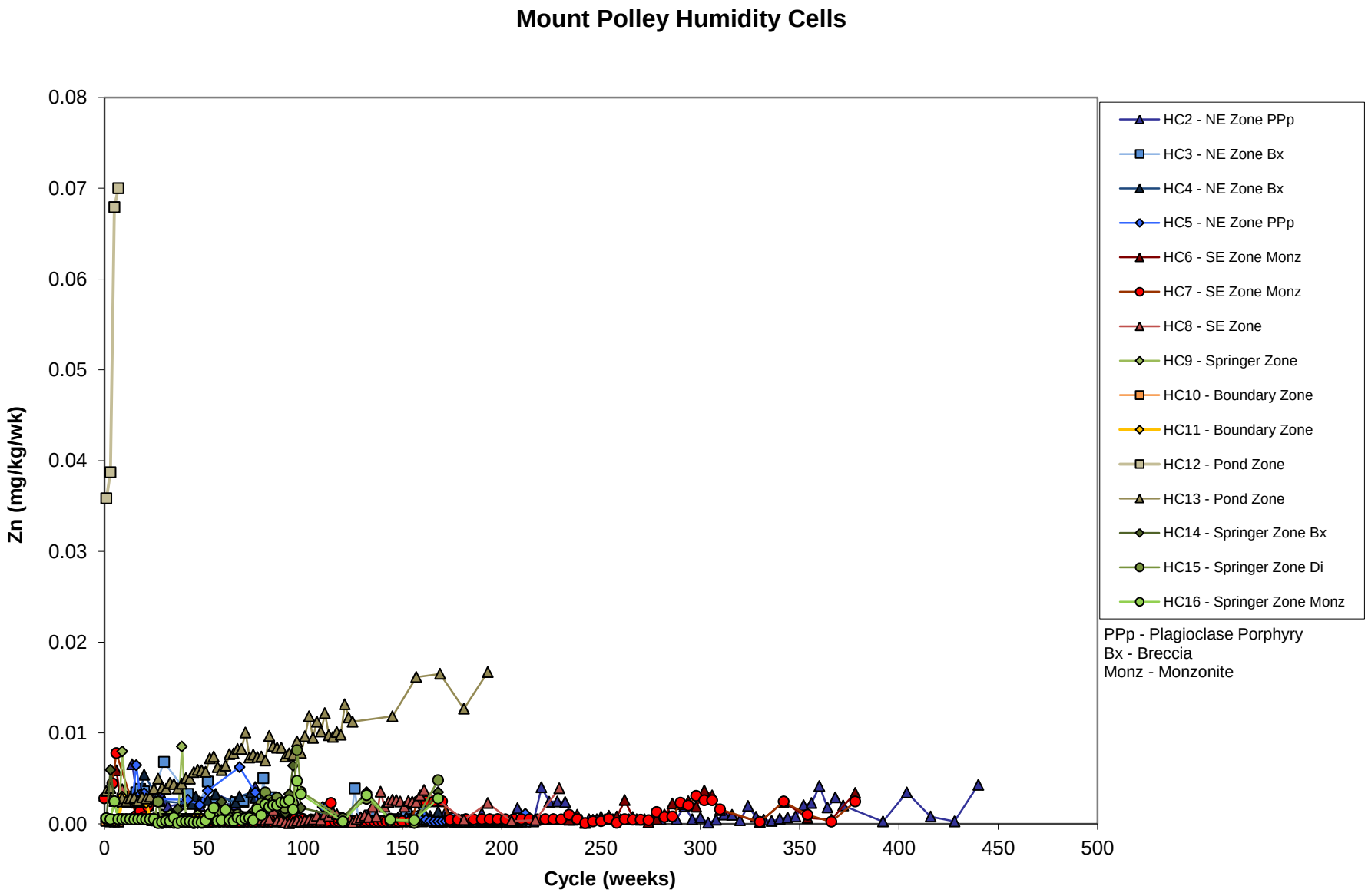

Mount Polley Humidity Cells
Ag (mg/kg/wk)
0.00025
0.00020
0.00015
0.00010
0.00005
0.00000
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite


Mount Polley Humidity Cells
Na (mg/kg/wk)
Cycle (weeks)
0
2
4
6
8
10
12
14
16
0
50
100
150
200
250
300
350
400
450
500
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite


Mount Polley Humidity Cells
Sr (mg/kg/wk)
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite


Mount Polley Humidity Cells
U (mg/kg/wk)
0.0006
0.0005
0.0004
0.0003
0.0002
0.0001
0.0000
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite


Mount Polley Humidity Cells
V (mg/kg/wk)
0.018
0.016
0.014
0.012
0.010
0.008
0.006
0.004
0.002
0.000
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite


Mount Polley Humidity Cells
Zn (mg/kg/wk)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
0
50
100
150
200
250
300
350
400
450
500
Cycle (weeks)
HC2 - NE Zone PPp
HC3 - NE Zone Bx
HC4 - NE Zone Bx
HC5 - NE Zone PPp
HC6 - SE Zone Monz
HC7 - SE Zone Monz
HC8 - SE Zone
HC9 - Springer Zone
HC10 - Boundary Zone
HC11 - Boundary Zone
HC12 - Pond Zone
HC13 - Pond Zone
HC14 - Springer Zone Bx
HC15 - Springer Zone Di
HC16 - Springer Zone Monz
PPp - Plagioclase Porphyry
Bx - Breccia
Monz - Monzonite