

March 21, 2012

1CI008.000

Environmental Technologist  
Mount Polley Mining Corporation  
Box 12  
Likely, B.C.  
V0L 1N0

**Attention: Colleen Hughes, CCEP**

Dear Colleen,

**2011 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.

**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 2011.

**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, 388 weeks of data were available for HC2.

<b>U.S. Offices:</b>		<b>Mexico Office:</b>		<b>Canadian Offices:</b>		<b>Group Offices:</b>
Anchorage	907.677.3520	Guadalupe,		Saskatoon	306.955.4778	Africa
Denver	303.985.1333	Zacatecas		Sudbury	705.682.3270	Asia
Elko	775.753.4151	52.492.927.8982		Toronto	416.601.1445	Australia
Fort Collins	970.407.8302			Vancouver	604.681.4196	Europe
Reno	775.828.6800			Yellowknife	867.873.8670	North America
Tucson	520.544.3688					South America

### Southeast Zone

Two HCTs were started on September 26, 2005 for the Southeast Zone, providing 326 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, 177 weeks of data were available for HC8.

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

### 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, 116 weeks of data were available for HC14, HC15 and HC 16.

### 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, 141 weeks of data were available for HC13.

### Summary

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

### Methods

#### 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 (Table 1).

### Results

#### Static Geochemical Characteristics of the Samples

Chemical characteristics of the samples are provided in Table 2. The samples have been 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.

### **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.

### **Major Ions**

In 2011, 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, appears to have been stable at approximately pH 5.6 since May 2010 and indicates that weak buffering by silicate minerals is probably occurring. In 2011, the pH of HC13 was relatively erratic, ranging between 5.3 and 6.0, but continued to average 5.6.

Leachate from Northeast Zone sample HC2 continued to be dominated by the 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 10 to 25 mg CaCO<sub>3</sub>/kg/wk. Alkalinity release rates were highest and most variable for HC14, ranging from 12 to 25 mg CaCO<sub>3</sub>/kg/wk in 2011. 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 2011 was stable for all Mt. Polley humidity cells. Sulphate release rates in HC2 had been increasing since about January 2009, but remained relatively stable in 2011 ranging from 5.3 to 8.7 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 14 mg/kg/wk in 2011. 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 2011 and were approximately 1.3 and 0.3 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 0.5 mg/kg/wk for HC16 to 0.8 mg/kg/wk for HC15 at the end of 2011.

### **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 leached 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) increased in 2011, coinciding with the continuing decrease in pH.

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 0.04 mg/kg/wk in 2011. 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 in HC2 have been relatively stable with release rates around 0.0036 mg/kg/wk at the end of 2011.

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 decreased to a release rate of approximately 0.006 mg/kg/wk in the latter part of 2011. Molybdenum release rates generally decreased for HC7 in 2011.

Arsenic release rates were high in leachate from HC16, increasing to 0.0035 mg/kg/wk in week 5. Since then, the release rate decreased and continues to do so, decreasing to 0.0004 mg/kg/wk at the end of 2011.

Selenium release rates from Springer Zone humidity cells continued to decrease in 2011. Release rates from HC14 decreased to approximately 0.005 mg/kg/wk at the end of 2011 (after 99 weeks) but are still high relative to the other humidity cells.

### **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.
- 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  $(\text{Ca}+\text{Mg})/\text{SO}_4$ . Previous conclusions about site specific NP/AP criteria remain valid based on data collected in 2011.

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. Leachate appears to have stabilized to conditions in which alkalinity and acidity are balanced while stable pyrite oxidation continues. However, due to the slightly acidic leachate pH, leaching of various metals parameters including Ba, Co, Cu, Mn, Ni and Zn is occurring at higher levels than other tests. The results indicate silicates are weakly reactive.

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.

## Conclusions and Recommendations

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

- Neutral pH weathering conditions consistent with the carbonate content of the rock.
- A site specific criterion for PAG rock of about 1.4 was suggested based on results from HC15.
- Time frames to generate ARD are of the order of decades but certainly shorter in the Springer Zone and the Southeast Zone where TIC is lower than in the Northeast Zone.
- Silicate minerals present in the HC13 sample are weakly reactive offsetting acidity from pyrite oxidation in a sample containing 0.2% sulphur.
- Relatively low contaminant leaching rates, with only molybdenum and selenium leaching at neutral pH. Release rates correlate with bulk characteristics for molybdenum. 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.

Yours truly,

**SRK Consulting (Canada) Inc.**



Christina James, M.A.Sc.  
Consultant (Geochemistry)



Stephen Day, P.Geo.  
Corporate Consultant (Geochemistry)  
Reviewer

## References

Sobek A A, Schuller W A, Freeman J R, and Smith R M., 1978. Field and laboratory methods applicable to overburden and minesoils. USEPA Report No. 600/2-78-054, 203 pp.

SRK Consulting. 2004. Mount Polley Northeast Zone Geochemical Characterization of Waste Rock. Report prepared for Imperial Metals Corporation. July 2004.

SRK Consulting. 2005. Southeast Zone Acid Base Accounting Results. Draft letter to Ron Martel, Mount Polley Mining Corporation, dated July 8, 2005.

**Table 1: Changes in Analytical Frequency Implemented in 2011**

Humidity Cell	pH, Conductivity, Sulphate		ORP, Acidity, Alkalinity		Metals	
	From	To	From	To	From	To
HC2	Weekly	Monthly	Bi-weekly	Monthly	Monthly	Quarterly
HC6	Weekly	Monthly	Bi-weekly	Monthly	Monthly	Quarterly
HC7	Weekly	Monthly	Bi-weekly	Monthly	Monthly	Quarterly
HC8	Weekly	Monthly	Weekly	Monthly	Monthly	Quarterly
HC13	Weekly	Monthly	Weekly	Monthly	Bi-weekly	Quarterly
HC14	Weekly	Monthly	Weekly	Monthly	Bi-weekly	Quarterly
HC15	Weekly	Monthly	Weekly	Monthly	Bi-weekly	Quarterly
HC16	Weekly	Monthly	Weekly	Monthly	Bi-weekly	Quarterly

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**Table 2: Humidity Cell Sample Characteristics**

HCT	Sample ID	Zone	Rock Type	Start Date	Status	Paste pH	Total S S, %	Sulphate S, %	Sulphide S, %	AP kg CaCO <sub>3</sub> /t	TIC		NP kg CaCO <sub>3</sub> /t	Fizz Rating	NP/AP	TIC/AP
											%C	kg CaCO <sub>3</sub> /t				
HC2	31576	NE	PPp	19-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	19-Jul-04	Stopped	8.3	0.45	<0.01	0.45	14	1.1	91	140	Moderate	10	6.4
HC4	31943	NE	Bx	19-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	19-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 3: 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

Notes: AP – Acid Potential determined from the sulphide content. NP – Neutralization Potential as determined by the standard Sobek method. TIC – Total Inorganic Carbon.

Zones: NE – Northeast Zone; SE – Southeast Zone, Springer – Springer Zone, Boundary – Boundary Zone Pond – Pond Zone.

Rock Types: PPp – Plagioclase Porphyry; Bx – Breccia; Monz – Monzonite, Di – Diorite.

"<" – indicates less than detection limit values.

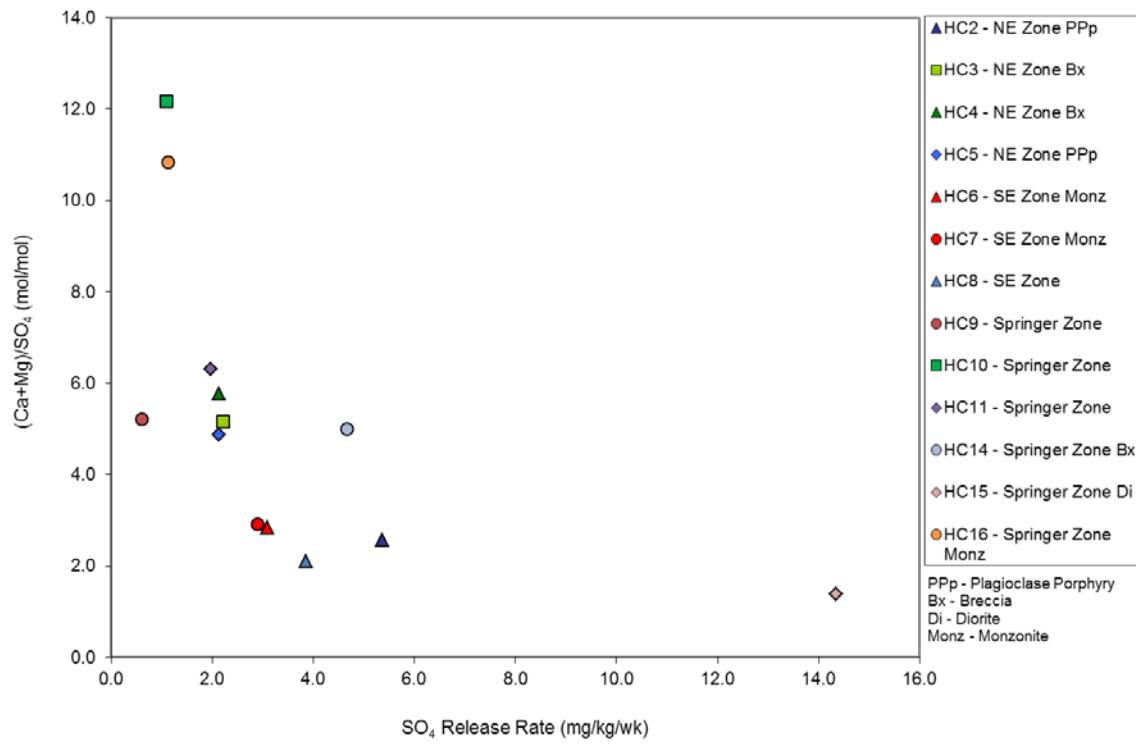
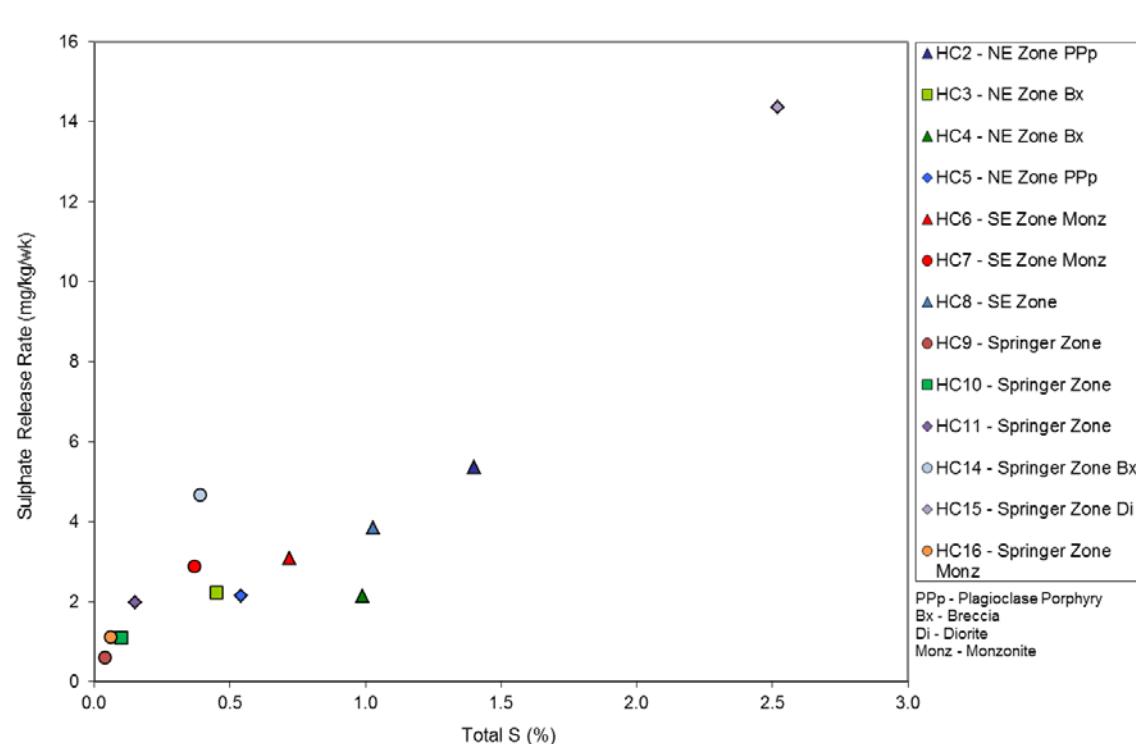
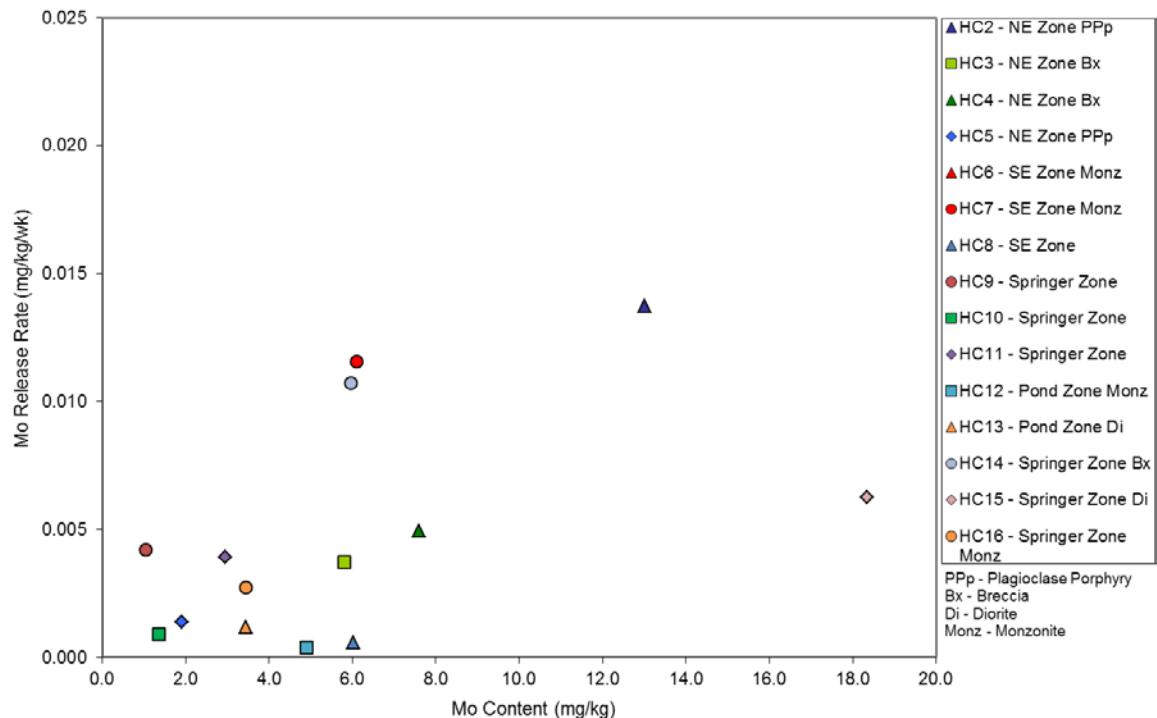


Figure 1: Relationship between Average Sulphate Release Rates and Molar (Ca+Mg)/SO<sub>4</sub>



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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**

## **Attachments**

## **Attachment A: Humidity Cell Results**

Project Name: Mt. Polley  
 Cantest Project No: 2-21-910

HC-12; Sample ID: 50033-1; Composite-4 (TIC NP Depleted)

Method:			pH Meter		EC Meter		ORP Meter		Turbidity	Titration using pH Meter & Calculation		Dissolved Metals by ICP-MS Method at Cantest																	
Sampling Date	Week No.	Volume (ml)	pH Input	EC Output (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO <sub>3</sub> /L) to pH 4.5		Total Alkalinity (mg CaCO <sub>3</sub> /L) to pH 8.3		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)	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)
Detection Limits			5	5	50	1	0.5	0.5	0.5	0.005	0.001	0.001	0.001	0.001	0.001	0.05	0.002	0.05	0.001	0.001	0.05	0.001	0.05	0.001	0.05	0.0005			
20-Apr-09	1	750	535	4.72	68	280	16	#N/A	9	1	0.1	0.0005	0.0065	0.032	-0.0002	-0.0002	0.3	0.0007	2.39	0.0003	0.002	0.071	0.06	-0.0002	0.0059	0.38	0.127	0.0019	0.0012
27-Apr-09	2	500	495	4.84	66	185	23	#N/A	8	1	0.092	0.0003	0.0032	0.051	-0.0002	-0.0002	0.04	0.0008	3.62	-0.0002	0.0043	0.09	0.05	-0.0002	0.011	0.7	0.249	0.0008	0.0017
4-May-09	3	500	490	4.76	71	210	26	#N/A	6	1	0.15	0.0003	0.0018	0.079	-0.0002	-0.0002	0.02	0.00023	6.7	-0.0002	0.01	0.171	0.08	-0.0002	0.011	1.33	0.486	0.0005	0.0036
11-May-09	4	500	485	4.76	77	210	29	#N/A	6	1	0.15	-0.0002	0.0012	0.077	-0.0002	-0.0002	-0.01	0.00021	7.15	-0.0002	0.011	0.186	0.1	-0.0002	0.0065	1.43	0.548	0.0004	0.0036
18-May-09	5	500	485	4.67	89	240	32	#N/A	5	1	0.15	-0.0002	0.0012	0.077	-0.0002	-0.0002	-0.01	0.00021	7.15	-0.0002	0.011	0.186	0.1	-0.0002	0.0065	1.43	0.548	0.0004	0.0036
25-May-09	6	500	495	4.69	81	240	28	#N/A	6	1	0.15	-0.0002	0.0012	0.077	-0.0002	-0.0002	-0.01	0.00021	7.15	-0.0002	0.011	0.186	0.1	-0.0002	0.0065	1.43	0.548	0.0004	0.0036
1-Jun-09	7	500	500	4.74	89	195	28	#N/A	6	1	0.15	-0.0002	0.0012	0.077	-0.0002	-0.0002	-0.01	0.00021	7.15	-0.0002	0.011	0.186	0.1	-0.0002	0.0065	1.43	0.548	0.0004	0.0036
8-Jun-09	8	500	500	4.71	103	230	37	#N/A	6	1																			

Note:

Terminated testing as per email from Ron Martel at Mt. Polley dated 8-Jun-09.

From: Ron Martel [mailto:martel@mountpolley.com]

Sent: Monday, June 08, 2009 12:06 PM

To: Ivy Rajan

Cc: Art Frye; Lee Ferreira; Melissa Darney

Subject: FW: NP Depletion Test on Pond Zone Composites and ABA from Springer

Hi Ivy,

Per Steve Day's comment " HC-12 has provided the result we were looking for which is that the silicates are not able to buffer acidity produced by rock with 0.5%.

This test could be stopped, but it is worth continuing HC-13 to see if the test stabilizes at net alkalinity."

Project Name: Mt. Pol  
 Cantest Project No: 2  
 HC-12; Sample ID: 50t

Method:																	
Sampling Date	Week No.	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)
Detection Limits																	
20-Apr-09	1	1.14	0.67	0.0037	6.94	-0.00005	7.34	0.0084	-0.0002	-0.00002	-0.0001	-0.0002	0.001	-0.0001	0.001	0.067	-0.002
27-Apr-09	2																
4-May-09	3	0.5	0.89	0.0077	20.2	-0.00005	4.93	0.012	-0.0002	-0.00002	-0.0001	-0.0002	0.0013	-0.0001	0.0005	0.079	-0.002
11-May-09	4																
18-May-09	5	0.28	1.1	0.0066	19.5	-0.00005	2.79	0.022	-0.0002	0.00005	-0.0001	-0.0002	0.0008	-0.0001	0.0004	0.14	-0.002
25-May-09	6																
1-Jun-09	7	0.17	0.96	0.0048	15.2	-0.00005	1.45	0.025	-0.0002	-0.00002	-0.0001	-0.0002	0.0006	-0.0001	0.0003	0.14	-0.002
8-Jun-09	8																

Ion Balance		
Anions	Cations	Balance %
0.35	0.51	-17.85% ICP-MS
0.56	0.50	5.96% ICP-MS
0.69	0.63	3.97% ICP-MS
0.60	0.61	-0.23% ICP-MS

Note:  
 Terminated testing as p

From: Ron Martel [mailto:  
 Sent: Monday, June 08, 2009 10:45 AM  
 To: Ivy Rajan  
 Cc: Art Frye; Lee Ferreira  
 Subject: FW: NP Depletions

Hi Ivy,  
 Per Steve Day's comment  
 This test could be stopped

Project Name: Mt. Polley  
Contest Project No: 2-21-9

HC-13; Sample ID: 50033-1; C

112-13, Sample 121-XXXX-1, Composite 3 (112-13-Deposited)

Method:	pH Meter		EC Meter		ORP Meter		Turbidity	Titration using pH Meter & Calculation	Dissolved Metals by ICP-MS Method at Cantest																								
	Week No.	Volume (mL)	pH (pH Units)	EC (mΩ/cm)	ORP (mV)	Turbidity		Sulfate (mg CaCO3/L)	Acidity (mg CaCO3/L)	Total Alkalinity (mg CaCO3/L)	to pH 4.5	to pH 6.3	to pH 4.5	AI (mM/L)	Sb (μM/L)	As (μM/L)	Ba (μM/L)	Br (μM/L)	Bi (μM/L)	B (mM/L)	Cd (mM/L)	Ca (mM/L)	Cr (mM/L)	Co (μM/L)	Cu (μM/L)	Fe (μM/L)	Pb (μM/L)	Li (mM/L)	Mg (mM/L)	Mn (mM/L)	Mo (mM/L)	N (mM/L)	
Sampling Date	20-Apr-09	1	750	515	6.82	41	280	50	4	#N/A	3	5	0.005	0.001	0.001	0.001	0.001	0.001	0.05	0.0002	0.0002	1.62	-0.0002	0.003	0.029	0.03	-0.0002	0.001	0.05	0.45	0.143	0.013	0.0005
Detection Limits	27-Apr-09	2	500	500	6.45	44	180	11	#N/A	3	5	0.005	0.002	0.001	0.008	-0.0002	-0.0002	0.24	-0.0004	1.62	-0.0002	0.003	0.029	0.03	-0.0002	0.0008	0.69	0.202	0.013	0.0005			
4-May-09	3	500	490	6.44	48	220	16	#N/A	3	4	0.004	-0.0002	0.001	0.011	-0.0002	-0.0002	0.06	-0.0004	2.4	-0.0002	0.0034	0.0065	0.06	-0.0002	0.0008	0.69	0.202	0.013	0.0005				
11-May-09	4	500	490	6.46	54	205	17	#N/A	2	4	0.021	-0.0002	0.001	0.016	-0.0002	-0.0002	0.02	-0.0004	3.96	-0.0002	0.0061	0.0068	0.02	-0.0002	0.0009	1.02	0.333	0.016	0.0005				
18-May-09	5	500	500	6.51	60	190	20	#N/A	2	4	0.018	-0.0002	0.0007	0.014	-0.0002	-0.0002	-0.01	-0.0004	3.36	-0.0002	0.005	0.0061	0.03	-0.0002	0.0006	0.87	0.302	0.015	0.0005				
25-May-09	6	500	500	6.35	50	200	16	#N/A	2	3	0.028	-0.0002	0.0007	0.018	-0.0002	-0.0002	-0.01	-0.0004	4.2	-0.0002	0.0061	0.0087	0.03	-0.0002	0.0007	1.06	0.383	0.013	0.0005				
1-Jun-09	7	500	490	6.28	52	175	13	#N/A	2	3	0.026	-0.0002	0.0007	0.017	-0.0002	-0.0002	-0.01	-0.0004	3.94	-0.0002	0.0058	0.0092	0.03	-0.0002	0.0006	0.98	0.366	0.012	0.0005				
8-Jun-09	8	500	490	6.26	56	200	19	#N/A	2	3	0.015	-0.0002	0.0007	0.019	-0.0002	-0.0002	-0.01	-0.0004	4.33	-0.0002	0.0066	0.0082	0.01	-0.0002	0.0007	1.11	0.418	0.013	0.0005				
15-Jun-09	9	500	465	6.14	54	195	18	#N/A	2	3	0.022	-0.0002	0.0006	0.018	-0.0002	-0.0002	-0.01	-0.0004	4.09	-0.0002	0.0063	0.0079	0.02	-0.0002	0.0006	0.98	0.397	0.01	0.0005				
22-Jun-09	10	500	490	6.47	53	165	16	#N/A	2	3	0.015	-0.0002	0.0007	0.019	-0.0002	-0.0002	-0.01	-0.0004	4.1	-0.0002	0.0075	0.0085	0.01	-0.0002	0.0005	0.95	0.441	0.0087	0.0005				
29-Jun-09	11	500	495	6.27	50	165	15	#N/A	2	3	0.012	-0.0002	0.0009	0.021	-0.0002	-0.0002	-0.01	-0.0004	4.57	-0.0002	0.0078	0.0092	-0.01	-0.0002	0.0007	1.15	0.487	0.007	0.0005				
6-Jul-09	12	500	475	5.92	48	150	17	#N/A	2	2	0.013	-0.0001	0.0009	0.017	-0.0001	-0.0001	-0.005	0.0003	3.56	-0.0002	0.006	0.0081	0.02	0.00014	0.0007	0.94	0.4	0.0066	0.0005				
13-Jul-09	13	500	468	6.08	49	170	16	#N/A	2	3	0.037	-0.0001	0.0008	0.018	-0.0001	-0.0001	-0.005	0.0003	3.98	0.0003	0.0072	0.011	0.07	0.0006	0.0007	1.08	0.46	0.0064	0.0005				
20-Jul-09	14	500	495	6.05	48	150	17	#N/A	2	2	0.018	-0.0001	0.0007	0.017	-0.0001	-0.0001	-0.005	0.0002	3.19	-0.0002	0.006	0.0085	0.03	-0.0005	0.0006	0.89	0.377	0.0049	0.0005				
27-Jul-09	15	500	480	6.17	48	190	19	#N/A	2	2	0.015	-0.0001	0.0007	0.019	-0.0002	-0.0002	-0.005	0.0003	4.33	-0.0002	0.0066	0.0082	0.01	-0.0002	0.0007	1.11	0.418	0.013	0.0005				
3-Aug-09	16	500	465	6.11	54	185	20	#N/A	2	2	0.017	-0.0001	0.0006	0.023	-0.0001	-0.0001	-0.005	0.0004	4.35	-0.0002	0.0056	0.008	0.07	-0.0002	0.0006	0.92	0.346	0.0089	0.0005				
10-Aug-09	17	500	500	6.03	45	195	17	#N/A	1	2	0.013	-0.0001	0.0007	0.016	-0.0002	-0.0002	-0.005	0.0004	3.45	-0.0002	0.0061	0.0081	0.03	-0.0002	0.0007	1.06	0.383	0.013	0.0005				
17-Aug-09	18	500	480	6.08	45	195	16	#N/A	2	2	0.015	-0.0002	0.0007	0.018	-0.0002	-0.0002	-0.005	0.0004	3.94	-0.0002	0.0058	0.0092	0.03	-0.0002	0.0006	0.98	0.366	0.012	0.0005				
24-Aug-09	19	500	490	6.12	43	185	16	#N/A	1	2	0.015	-0.0002	0.0007	0.019	-0.0002	-0.0002	-0.005	0.0004	4.1	-0.0002	0.0075	0.0085	0.01	-0.0002	0.0005	0.95	0.441	0.0087	0.0005				
31-Aug-09	20	500	470	6.11	48	195	15	#N/A	2	3	0.012	-0.0002	0.0009	0.021	-0.0002	-0.0002	-0.005	0.0004	4.57	-0.0002	0.0078	0.0092	-0.01	-0.0002	0.0007	1.15	0.487	0.007	0.0005				
7-Sep-09	21	500	460	6.00	58	195	19	#N/A	1	2	0.013	-0.0001	0.0009	0.017	-0.0001	-0.0001	-0.005	0.0003	3.56	-0.0002	0.006	0.0081	0.02	0.00014	0.0007	0.94	0.4	0.0066	0.0005				
14-Sep-09	22	500	485	6.14	44	195	15	#N/A	2	2	0.037	-0.0001	0.0008	0.018	-0.0001	-0.0001	-0.005	0.0003	3.98	0.0003	0.0072	0.011	0.07	0.0006	0.0007	1.08	0.46	0.0064	0.0005				
21-Sep-09	23	500	495	6.11	42	185	14	#N/A	2	3	0.018	-0.0001	0.0006	0.019	-0.0001	-0.0001	-0.005	0.0003	3.19	-0.0002	0.006	0.0085	0.03	-0.0005	0.0006	0.89	0.377	0.0049	0.0005				
28-Sep-09	24	500	495	6.09	42	190	13	#N/A	1	2	0.015	-0.0001	0.0007	0.019	-0.0002	-0.0002	-0.005	0.0003	4.1	-0.0002	0.0075	0.0085	0.01	-0.0002	0.0005	0.95	0.441	0.0087	0.0005				
5-Oct-09	25	500	480	6.16	45	205	14	#N/A	1	2	0.015	-0.0001	0.0006	0.016	-0.0002	-0.0002	-0.005	0.0004	4.35	-0.0002	0.0056	0.008	0.07	-0.0002	0.0006	0.92	0.346	0.0089	0.0005				
12-Oct-09	26	500	470	6.10	49	225	17	#N/A	2	2	0.013	-0.0001	0.0006	0.018	-0.0002	-0.0002	-0.005	0.0004	3.72	-0.0002	0.0079	0.015	0.07	0.0006	0.0007	1.08	0.46	0.0064	0.0005				
19-Oct-09	27	500	495	6.09	39	215	13	#N/A	2	2	0.018	-0.0001	0.0007	0.017	-0.0001	-0.0001	-0.005	0.0002	3.19	-0.0002	0.006	0.0085	0.03	-0.0005	0.0006	0.89	0.377	0.0049	0.0005				
26-Oct-09	28	500	490	6.02	41	200	15	#N/A	1	2	0.013	-0.0001	0.0009	0.02	-0.0001	-0.0001	-0.005	0.0003	3.57	-0.0002	0.0076	0.0084	0.02	-0.0005	0.0016	1.21	0.469	0.0051	0.0005				
3-Nov-09	29	500	470	5.97	48	180	15	#N/A	2	2	0.022	-0.0001	0.0007	0.022	-0.0001	-0.0001	-0.005	0.0003	4.37	-0.0002	0.0092	0.015	0.03	-0.0005	0.0003	1.04	0.544	0.0043	0.0005				
10-Nov-09	30	500	490	5.98	44	180	15	#N/A	1	2	0.017	-0.0001	0.0006	0.023	-0.0001	-0.0001	-0.005	0.0004	4.35	-0.0002	0.009	0.016	0.02	-0.0005	0.0012	1.12	0.536	0.0035	0.0005				
17-Nov-09	31	500	490	5.93	41	170	14	#N/A	2	2	0.013	-0.0001	0.0006	0.021	-0.0001	-0.0001	-0.005	0.0002	3	-0.0002	0.0076	0.015	0.03	-0.0005	0.0003	1.04	0.544	0.0043	0.0005				
24-Nov-09	32	500	480	5.93	41	170	14	#N/A	2	2	0.017	-0.0001	0.0006	0.023	-0.0001	-0.0001	-0.005	0.0004	4.35	-0.0002	0.009	0.016	0.02	-0.0005	0.0012	1.12	0.536	0.0035	0.0005				
31-Nov-09	33	500	450	5.87	45	170	17	#N/A	2	2	0.013	-0.0001	0.0006	0.021	-0.0001	-0.0001	-0.005	0.0002	3.72	-0.0002	0.0079	0.015	0.07	-0.0005	0.0006	0.86	0.452	0.0033	0.0005				
7-Dec-09	34	500	485	5.96	37	220	13	#N/A	2	3	0.013	-0.0001	0.0006	0.021	-0.0001	-0.0001	-0.005	0.0003	3.72	-0.0002	0.0098	0.0228	0.02	0.00014	0.0007	0.81	0.452	0.0033	0.0005				
14-Dec-09	35	500	460	5.80	37	220	13	#N/A	2	3	0.0085	-0.0004	0.0027	0.0261	0.0001	-0.000005	-0.05	0.000308	3.42	-0.0001	0.0102	0.024	0.008	0.000105	0.0007	0.8	0.45	0.0036	0.0005				
21-Dec-09	36	500	490	5.76	38	170	15	#N/A	2	2	0.004	-0.0004	0.0025	0.027	0.0002	-0.000005	-0.05	0.000308	3.74	-0.0002	0.0094	0.019	-0.01	-0.00005	0.0007	0.83	0.488	0.0018	0.0005				
28-Dec-09	37	500	495	5.88	37	175	13	#N/A	2	2	0.016	-0.0001	0.0004	0.02	-0.0001	-0.0001	-0.005	0.0003	3.54	-0.0002	0.0066	0.015	0.03	-0.00005	0.0007	0.84	0.461	0.0027	0.0005				
4-Jan-10	38	500	490	5.89	37	150	12	#N/A	2	2	0.018	-0.0001	0.0003	0.019	-0.0001	-0.0001	-0.005	0.0002	3.38	-0.0002	0.0076	0.015	0.03	-0.00005	0.0005	0.82	0.421	0.0022	0.0005				
11-Jan-10	39	500	490	5.92	36	160	12	#N/A	2	2	0.0065	-0.0001	0.0003	0.021	-0.0001	-0.0001	-0.005	0.0004	3.41	-0.0002	0.0092	0.016	-0.01	-0.00005	0.0004	0.77	0.439	0.002	0.0005				
18-Jan-10	40	500	495	5.94	38	155	13	#N/A	1	2	0.013</td																						

Project Name: Mt. Polley  
 Contest Project No: 2-21-910

HC-13; Sample ID: 50033-1; Composite-5 (TIC NP Depleted)

Sampling Date	Week No.	Method:	pH Meter				EC Meter		ORP Meter		Turbidity		Titration using pH Meter & Calculation		Dissolved Metals by ICP-MS Method at Contest																					
			pH Input	pH Units	pH	EC Input	EC (µS/cm)	ORP Input	ORP (mV)	Sulphate to pH 4.5	Total Alkalinity (mg CaCO <sub>3</sub> /L)	Acidity (mg CaCO <sub>3</sub> /L) to pH 8.3	Total Alkalinity (mg CaCO <sub>3</sub> /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)	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)				
Sampling Date	Week No.	Method:	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	0.00002	0.00019	0.0347	0.00003	-0.000005	-0.05	0.000051	3.61	-0.0001	0.0146	0.0603	0.007	0.000236	0.001	0.84	0.541	0.00055	0.00244
29-Nov-10	88	500	465	5.65	38	215	15	#N/A	1	2	0.015	0.00002	0.00019	0.0347	0.00003	-0.000005	-0.05	0.000051	3.61	-0.0001	0.0146	0.0603	0.007	0.000236	0.001	0.84	0.541	0.00055	0.00244							
6-Dec-10	86	500	500	5.55	37	210	13	#N/A	2	2	0.0131	0.00002	0.0002	0.0343	0.00004	-0.000005	-0.05	0.000054	3.57	-0.0001	0.0137	0.0584	0.007	0.000451	0.0009	0.78	0.51	0.00045	0.00234							
13-Dec-10	87	500	465	5.80	39	205	15	#N/A	1	2	0.0193	-0.00002	0.00018	0.0286	0.00004	-0.000005	-0.05	0.000046	2.63	-0.0001	0.0111	0.0482	0.017	0.000146	0.0008	0.62	0.412	0.00058	0.00192							
20-Dec-10	88	500	490	5.72	32	230	12	#N/A	2	2	0.0124	-0.00002	0.00015	0.0295	0.00004	-0.000005	-0.05	0.000045	2.76	-0.0001	0.0109	0.0532	0.005	0.00025	0.001	0.61	0.426	0.00042	0.00186							
27-Dec-10	89	500	490	5.74	42	265	15	#N/A	2	2	0.0147	-0.00002	0.00023	0.0324	0.00004	-0.000005	-0.05	0.000056	3.14	0.0003	0.0132	0.0667	0.006	0.000295	0.0009	0.71	0.487	0.00046	0.00229							
3-Jan-11	90	500	485	5.74	42	265	13	#N/A	2	2	0.0122	-0.00002	0.00014	0.0317	0.00004	-0.000005	-0.05	0.000052	3.09	-0.0001	0.0127	0.0646	0.004	0.000059	0.0008	0.63	0.449	0.00035	0.00209							
10-Jan-11	91	500	500	5.76	39	220	13	#N/A	2	2	0.0194	0.00003	0.00014	0.036	0.00005	-0.000005	-0.05	0.000048	3.18	-0.0001	0.00959	0.0459	0.001	0.000166	0.001	0.54	0.372	0.00044	0.00168							
17-Jan-11	92	500	470	5.62	40	210	13	#N/A	2	2	0.0155	0.00002	0.00016	0.0341	0.00005	-0.000005	-0.05	0.000058	3.22	-0.0001	0.0135	0.065	0.006	0.000299	0.001	0.71	0.492	0.00045	0.00237							
24-Jan-11	93	500	470	5.55	37	210	12	#N/A	2	2	0.0151	-0.00002	0.00013	0.0302	0.00005	-0.000005	-0.05	0.000049	3.05	-0.0001	0.0119	0.0614	0.006	0.000198	0.0008	0.62	0.431	0.00033	0.00204							
31-Jan-11	94	500	500	5.57	37	205	14	#N/A	2	2	0.0114	-0.00002	0.00013	0.0352	0.00005	-0.000005	-0.05	0.000061	3.18	-0.0001	0.0131	0.071	0.005	0.000117	0.0009	0.63	0.469	0.00042	0.00214							
7-Feb-11	95	500	500	5.64	36	210	16	#N/A	2	2	0.0122	-0.00002	0.00014	0.0317	0.00004	-0.000005	-0.05	0.000052	3.09	-0.0001	0.0127	0.0646	0.004	0.000059	0.0008	0.63	0.449	0.00035	0.00209							
14-Feb-11	96	500	495	5.72	36	220	15	#N/A	2	2	0.0149	-0.00002	0.00015	0.0333	0.00005	-0.000005	-0.05	0.000059	3.24	-0.0001	0.0136	0.0717	0.007	0.000061	0.0009	0.68	0.463	0.00038	0.00229							
21-Feb-11	97	500	480	5.63	38	210	11	#N/A	2	2	0.0132	0.00004	0.00013	0.0307	0.00004	-0.000005	-0.05	0.000048	2.68	-0.0001	0.0123	0.0662	0.004	0.000097	0.0007	0.61	0.435	0.00042	0.00207							
28-Feb-11	98	500	480	5.75	36	230	13	#N/A	2	2	0.0151	-0.00002	0.00011	0.0329	0.00005	-0.000005	-0.05	0.000047	3.06	-0.0001	0.0125	0.0665	0.004	0.00008	0.0009	0.64	0.443	0.00035	0.00207							
7-Mar-11	99	500	490	5.74	36	220	12	#N/A	2	2	0.0114	-0.00002	0.00013	0.0352	0.00005	-0.000005	-0.05	0.000061	3.18	-0.0001	0.0131	0.071	0.005	0.000117	0.0009	0.63	0.469	0.00042	0.00214							
14-Mar-11	100	500	480	5.79	36	205	14	#N/A	2	2	0.017	0.00003	0.00016	0.0334	0.00005	-0.000005	-0.05	0.000061	3.07	-0.0001	0.0128	0.0745	0.007	0.000146	0.001	0.65	0.453	0.00031	0.00224							
21-Mar-11	101	500	500	5.72	36	205	11	-1	1	-1	0.0122	-0.00002	0.00014	0.0317	0.00004	-0.000005	-0.05	0.000052	3.09	-0.0001	0.0127	0.0646	0.004	0.000059	0.0008	0.63	0.449	0.00035	0.00209							
28-Mar-11	102	500	495	5.70	36	210	13	-1	1	-1	0.0149	-0.00002	0.00015	0.0333	0.00005	-0.000005	-0.05	0.000059	3.24	-0.0001	0.0136	0.0717	0.007	0.000061	0.0009	0.68	0.463	0.00038	0.00229							
4-Apr-11	103	500	485	5.84	36	220	11	-1	1	-1	0.0132	0.00004	0.00013	0.0307	0.00004	-0.000005	-0.05	0.000048	2.68	-0.0001	0.0123	0.0662	0.004	0.000097	0.0007	0.61	0.435	0.00042	0.00207							
11-Apr-11	104	500	495	5.65	35	250	10	-1	2	-1	0.0151	-0.00002	0.00013	0.0324	0.00005	-0.000005	-0.05	0.000056	3.1	-0.0001	0.0128	0.0735	0.003	0.000069	0.001	0.63	0.442	0.00042	0.00226							
18-Apr-11	105	500	495	5.86	33	240	10	-1	1	-1	0.0114	-0.00002	0.00013	0.0352	0.00005	-0.000005	-0.05	0.000061	3.18	-0.0001	0.0131	0.071	0.005	0.000117	0.0009	0.63	0.469	0.00042	0.00214							
25-Apr-11	106	500	495	6.00	34	235	10	-1	1	-1	0.0125	-0.00002	0.00017	0.0319	0.00005	-0.000005	-0.05	0.000043	2.9	-0.0001	0.0125	0.0748	0.003	0.000349	0.0007	0.62	0.432	0.00044	0.00215							
1-May-11	107	500	495	5.95	32	285	10	-1	2	-1	0.0124	-0.00002	0.00012	0.0336	0.00005	-0.000005	-0.05	0.000051	2.88	-0.0001	0.0126	0.0761	0.004	0.000036	0.0008	0.58	0.424	0.00059	0.00217							
8-May-11	108	500	480	5.89	32	230	10	-1	1	-1	0.0127	-0.00002	0.00016	0.0326	0.00007	-0.000005	-0.05	0.000054	2.89	-0.0001	0.0124	0.0762	0.003	0.000028	0.001	0.59	0.435	0.00027	0.00214							
15-May-11	109	500	495	5.70	32	225	10	-1	1	-1	0.0127	-0.00002	0.00016	0.0326	0.00007	-0.000005	-0.05	0.000054	2.88	-0.0001	0.0124	0.0762	0.003	0.000028	0.001	0.59	0.435	0.00027	0.00214							
22-Jun-11	110	500	495	5.57	31	280	10	-1	1	-1	0.0127	-0.00002	0.00017	0.0319	0.00005	-0.000005	-0.05	0.000043	2.9	-0.0001	0.0125	0.0761	0.004	0.000036	0.0008	0.58	0.424	0.00059	0.00217							
29-Jun-11	111	500	495	5.88	32	270	10	-1	1	-1	0.0127	-0.00002	0.00016	0.0334	0.00005	-0.000005	-0.05	0.000061	3.07	-0.0001	0.0128	0.0745	0.007	0.000146	0.001	0.65	0.453	0.00031	0.00224							
6-Jul-11	112	500	490	5.90	32	240	10	-1	1	-1	0.0138	-0.00002	0.00013	0.0324	0.00005	-0.000005	-0.05	0.000052	3.1	-0.0001	0.0128	0.0735	0.003	0.000069	0.001	0.63	0.442	0.00042	0.00226							
13-Jul-11	113	500	490	5.89	32	290	11	-1	1	-1	0.0125	-0.00002	0.00017	0.0319	0.00005	-0.000005	-0.05	0.000043	2.9	-0.0001	0.0125	0.0748	0.003	0.000349	0.0007	0.62	0.432	0.00044	0.00215							
20-Jul-11	114	500	495	6.05	33	270	10	-1	2	1	0.0124	-0.00002	0.00012	0.0336	0.00005	-0.000005	-0.05	0.000051	2.88	-0.0001	0.0126	0.0761	0.004	0.000036	0.0008	0.58	0.424	0.00059	0.00217							
27-Jul-11	115	500	475	5.47	31	240	10	-1	1	-1	0.0127	-0.00002	0.00016	0.0326	0.00007	-0.000005	-0.05	0.000054	2.89	-0.0001	0.0124	0.0762	0.003	0.000028	0.001	0.59	0.435	0.00027	0.00214							
4-Aug-11	116	500	490	5.45	38	205	9	-1	1	-1	0.0127	-0.00002	0.00016	0.0326	0.00007	-0.000005	-0.05	0.000054	2.88	-0.0001	0.0124	0.0762	0.003	0.000028	0.001	0.59	0.435	0.00027	0.00214							
11-Aug-11	1																																			

Project Name: Mt. Pol  
 Contest Project No: 2-  
 HC-13; Sample ID: 500

Method:																	
Sampling Date	Week No.	P (mg/L)	K (mg/L)	Se (mg/L)	Si (mg/L)	Ag (mg/L)	Na (mg/L)	Sr (mg/L)	Tl (mg/L)	Th (mg/L)	Sn (mg/L)	Tl (mg/L)	U (mg/L)	V (mg/L)	Zn (mg/L)	Zr (mg/L)	
Detection Limits		0.15	0.1	0.0002	0.25	0.00025	0.05	0.001	0.0001	0.0005	0.0001	0.0002	0.0005	0.001	0.005	0.01	
20-Apr-09	1	0.1	0.56	0.0022	2.63	-0.00005	4.73	0.0072	-0.0002	-0.00002	-0.0001	-0.0002	0.001	-0.0001	0.001	0.007	-0.002
27-Apr-09	2																
4-May-09	3	0.11	0.67	0.0044	5.93	-0.00005	4.32	0.0092	-0.0002	-0.00002	-0.0001	-0.0002	0.002	-0.0001	0.0015	0.008	-0.002
11-May-09	4																
18-May-09	5	0.11	0.89	0.0046	7.68	-0.00005	3.53	0.015	-0.0002	-0.00002	-0.0001	-0.0002	0.0011	-0.0001	0.014	0.005	-0.002
25-May-09	6																
1-Jun-09	7	0.09	0.74	0.0028	6.47	-0.00005	2.14	0.014	-0.0002	-0.00002	-0.0001	-0.0002	0.0009	-0.0001	0.0012	0.005	-0.002
8-Jun-09	8																
15-Jun-09	9	0.1	0.86	0.0028	7.27	-0.00005	1.7	0.016	-0.0002	-0.00002	-0.0001	-0.0002	0.0013	-0.0001	0.0012	0.006	-0.002
22-Jun-09	10																
29-Jun-09	11	0.07	0.7	0.0027	5.72	-0.00005	1.14	0.018	-0.0002	-0.00002	-0.0001	-0.0002	0.0013	-0.0001	0.0012	0.005	-0.002
6-Jul-09	12																
13-Jul-09	13	0.08	0.79	0.0026	6.25	-0.00005	1.04	0.018	-0.0002	-0.00002	-0.0001	-0.0002	0.0002	-0.0001	0.0011	0.006	-0.002
20-Jul-09	14																
27-Jul-09	15	0.06	0.71	0.0021	5.49	-0.00005	0.71	0.017	-0.0002	-0.00002	-0.0001	-0.0002	0.0011	-0.0001	0.0011	0.006	-0.002
3-Aug-09	16																
10-Aug-09	17	0.06	0.59	0.0019	5.21	-0.00005	0.58	0.014	-0.0002	-0.00002	-0.0001	-0.0002	0.0016	-0.0001	0.001	0.005	-0.002
17-Aug-09	18																
24-Aug-09	19	0.05	0.64	0.0017	5.42	-0.00005	0.51	0.017	-0.0002	-0.00002	-0.0001	-0.0002	0.0006	-0.0001	0.001	0.006	-0.002
31-Aug-09	20																
7-Sep-09	21	0.04	0.7	0.0019	5.51	-0.00005	0.54	0.018	-0.0002	-0.00002	-0.0001	-0.0002	0.0006	-0.0001	0.0008	0.006	-0.002
14-Sep-09	22																
21-Sep-09	23	0.05	0.51	0.0018	4.7	-0.00004	0.44	0.016	-0.0002	-0.00002	-0.00005	-0.0001	0.0008	-0.00005	0.0007	0.006	-0.001
28-Sep-09	24																
5-Oct-09	25	0.05	0.56	0.0021	4.28	-0.00004	0.42	0.019	-0.0002	-0.00002	-0.00005	-0.0001	0.002	-0.00005	0.0008	0.008	-0.001
12-Oct-09	26																
19-Oct-09	27	0.04	0.48	-0.0002	3.95	-0.00004	0.37	0.014	-0.0002	-0.00002	-0.00005	-0.0001	0.001	-0.00005	0.0006	0.01	-0.001
26-Oct-09	28																
2-Nov-09	29	0.06	0.56	0.0017	5.45	-0.00004	0.49	0.018	-0.0002	-0.00002	-0.00005	-0.0001	0.001	-0.00005	0.0006	0.008	-0.001
9-Nov-09	30																
16-Nov-09	31	0.03	0.56	0.0014	4.26	-0.00004	0.36	0.02	-0.0002	-0.00002	-0.00005	-0.0001	0.0014	-0.00005	0.0007	0.008	-0.001
23-Nov-09	32																
30-Nov-09	33	0.07	0.54	0.0015	5.27	-0.00004	0.45	0.018	-0.0002	-0.00002	-0.00005	-0.0001	0.0009	-0.00005	0.0005	0.01	-0.001
7-Dec-09	34																
14-Dec-09	35	0.02	0.51	0.0016	3.72	-0.00004	0.32	0.016	-0.0002	-0.00002	-0.00005	-0.0001	0.0007	-0.00005	0.0005	0.009	-0.001
21-Dec-09	36																
28-Dec-09	37	0.08	0.54	0.0013	3.6	-0.00004	0.35	0.017	-0.0002	-0.00002	-0.00005	-0.0001	0.0006	-0.00005	0.0005	0.008	-0.001
4-Jan-10	38																
11-Jan-10	39	0.03	0.46	0.0014	3.97	-0.00004	0.29	0.016	-0.0002	-0.00002	-0.00005	-0.0001	0.0009	-0.00005	0.0005	0.009	-0.001
18-Jan-10	40																
25-Jan-10	41	0.03	0.43	0.0012	3.69	-0.00004	0.27	0.014	-0.0002	-0.00002	-0.00005	-0.0001	0.0009	-0.00005	0.0004	0.01	-0.001
1-Feb-10	42																
8-Feb-10	43	0.02	0.41	0.0012	4.01	-0.00004	0.26	0.015	-0.0002	-0.00002	-0.00005	-0.0001	0.0004	-0.00005	0.0003	0.01	-0.001
15-Feb-10	44																
22-Feb-10	45	0.03	0.42	0.0014	4.09	-0.00004	0.32	0.016	-0.0002	-0.00002	-0.00005	-0.0001	0.0006	-0.00005	0.0004	0.012	-0.001
1-Mar-10	46																
8-Mar-10	47	0.02	0.46	0.001	3.63	-0.00004	0.29	0.016	-0.0002	-0.00002	-0.00005	-0.0001	0.0003	-0.00005	0.0003	0.012	-0.001
15-Mar-10	48																
22-Mar-10	49	0.02	0.4	0.001	3.4	-0.00004	0.25	0.012	-0.0002	-0.00002	-0.00005	-0.0001	0.0004	-0.00005	0.0003	0.012	-0.001
29-Mar-10	50																
5-Apr-10	51	0.024	0.39	0.00105	3.7	-0.00005	0.25	0.0154	-0.00002	0.000008	-0.000005	-0.000001	-0.0005	-0.000002	0.0003	0.0124	-0.001
12-Apr-10	52																
19-Apr-10	53	0.019	0.37	0.00103	3.6	-0.00005	0.24	0.0154	-0.00002	0.000002	-0.000005	-0.000001	-0.0005	-0.000002	-0.0002	0.0147	-0.001
26-Apr-10	54																
3-May-10	55	0.035	0.37	0.00109	3.7	0.00007	0.25	0.016	-0.00002	0.000008	-0.000005	-0.000001	0.0049	0.000007	0.0007	0.0151	-0.001
10-May-10	56																
17-May-10	57	0.013	0.37	0.00106	3.5	-0.00005	0.27	0.016	-0.00002	0.000004	-0.000005	-0.000001	-0.0005	-0.000002	0.0003	0.013	-0.001
24-May-10	58																
31-May-10	59	0.015	0.38	0.00098	3.5	0.00006	0.25	0.0158	-0.00002	0.000007	-0.000005	-0.000001	-0.0005	-0.000002	0.0002	0.0123	-0.001
7-Jun-10	60																
14-Jun-10	61	0.014	0.34	0.00087	3	0.00004	0.21	0.0147	-0.00002	0.000006	-0.000005	-0.000001	-0.0005	-0.000002	-0.0001	0.0129	-0.001
21-Jun-10	62																
28-Jun-10	63	0.015	0.34	0.00096	3	-0.00005	0.23	0.0153	-0.00002	0.000007	-0.000005	-0.000002	-0.0005	-0.000002	-0.0002	0.0155	-0.001
5-Jul-10	64																
12-Jul-10	65	0.016	0.32	0.00093	3	-0.00005	0.25	0.0161	-0.00002	0.000006	-0.000005	-0.000001	-0.0005	-0.000002	-0.0002	0.0165	-0.001
19-Jul-10	66																
26-Jul-10	67	0.011	0.35	0.00101	3.2	-0.00005	0.26	0.0157	-0.00002	0.000007	-0.000005	-0.000004	-0.0005	-0.000002	-0.0002	0.0168	-0.001
2-Aug-10	68																
9-Aug-10	69	0.013	0.32	0.00088	3.2	0.00009	0.22	0.0153	-0.00002	0.000006	-0.000005	-0.000001	-0.0005	-0.000002	0.0002	0.0117	-0.001
16-Aug-10	70																
23-Aug-10	71	0.014	0.33	0.00087	2.9	-0.00005	0.24	0.0154	-0.00002	0.000006	-0.000005	-0.000001	-0.0005	-0.000003	-0.0002	0.0205	-0.001
30-Aug-10	72																
6-Sep-10	73	0.01	0.35	0.00092	3.3	0.00001	0.25	0.0169	-0.00002	0.000007	-0.000005	-0.000001	0.0009	-0.000002	0.0002	0.0155	-0.001
13-Sep-10	74																
20-Sep-10	75	0.014	0.35	0.00085	3.5	0.00007	0.25	0.016	-0.00002	0.000007	-0.000005	-0.000001	-0.0005	-0.000002	0.0002	0.0157	-0.001
27-Sep-10	76																
4-Oct-10	77	0.029	0.31	0.00074	3	0.00008											

Project Name: Mt. Pol  
 Cantest Project No: 2-  
 HC-13; Sample ID: 500

Method:																	
Sampling Date	Week No.	P (mg/L)	K (mg/L)	Se (mg/L)	Si (mg/L)	Ag (mg/L)	Na (mg/L)	Sr (mg/L)	Tl (mg/L)	Th (mg/L)	Sn (mg/L)	Tl (mg/L)	U (mg/L)	V (mg/L)	Zn (mg/L)	Zr (mg/L)	
Detection Limits		0.15	0.1	0.0001	0.25	0.00025	0.05	0.001	0.0001	0.0005	-0.00005	-0.00001	-0.0005	-0.00002	-0.0005	0.01	
29-Nov-10	85	0.016	0.33	0.0008	3.4	-0.00005	0.28	0.0167	-0.00002	0.000005	-0.00005	-0.00001	-0.0005	-0.00002	0.0184	-0.0001	
6-Dec-10	86																
13-Dec-10	87	0.014	0.3	0.00074	3.3	0.00007	0.27	0.0158	-0.00002	0.000007	-0.00005	-0.00001	0.0007	0.00002	-0.0002	0.018	-0.0001
20-Dec-10	88																
27-Dec-10	89	0.01	0.27	0.00063	2.5	0.00007	0.22	0.0131	-0.00002	0.000007	-0.00005	0.00003	-0.0005	-0.00002	0.0002	0.0171	-0.0001
3-Jan-11	90																
10-Jan-11	91	0.013	0.26	0.00061	2.9	-0.00005	0.22	0.0137	-0.00002	0.000008	-0.00005	0.00001	-0.0005	0.00004	-0.0002	0.0148	-0.0001
17-Jan-11	92																
24-Jan-11	93	0.02	0.28	0.00061	2.9	-0.00005	0.27	0.0145	-0.00002	0.000006	-0.00005	-0.00001	-0.0005	0.00005	-0.0002	0.0165	-0.0001
31-Jan-11	94																
7-Feb-11	95	0.014	0.22	0.00016	3	-0.00005	0.21	0.0152	-0.00002	0.000007	-0.00005	0.00003	-0.0005	0.00008	-0.0002	0.0151	-0.0001
14-Feb-11	96																
21-Feb-11	97	0.031	0.28	0.00066	3.1	0.00008	0.27	0.015	-0.00002	0.000007	-0.00005	0.00003	0.0007	0.00002	0.0003	0.0189	-0.0001
28-Feb-11	98																
7-Mar-11	99	0.021	0.24	0.00052	2.9	-0.00005	0.25	0.0133	-0.00002	0.000005	-0.00005	-0.00001	-0.0005	-0.00002	0.0005	0.0159	-0.0001
14-Mar-11	100																
21-Mar-11	101	0.028	0.25	0.0006	2.9	-0.00005	0.24	0.0136	-0.00002	0.000007	-0.00005	-0.00001	-0.0005	-0.00002	-0.0002	0.0193	-0.0001
28-Mar-11	102																
4-Apr-11	103	0.021	0.27	0.0006	3	-0.00005	0.27	0.0144	-0.00002	0.000007	-0.00005	0.00004	-0.0005	0.00003	-0.0002	0.0244	-0.0001
11-Apr-11	104																
18-Apr-11	105	0.023	0.24	0.00051	2.5	0.00008	0.23	0.0134	-0.00002	0.000018	-0.00005	0.00004	-0.0005	0.00003	-0.0002	0.0191	-0.0001
25-Apr-11	106																
2-May-11	107	0.022	0.26	0.00054	3	-0.00005	0.25	0.0139	-0.00002	0.000006	-0.00005	-0.00001	-0.0005	0.00003	-0.0002	0.0227	-0.0001
9-May-11	108																
16-May-11	109	0.022	0.25	0.0006	3.2	0.00006	0.25	0.0146	-0.00002	0.000006	-0.00005	-0.00001	-0.0005	-0.00002	-0.0002	0.0205	-0.0001
23-May-11	110																
30-May-11	111	0.014	0.24	0.00056	3.2	-0.00005	0.26	0.0139	-0.00002	0.000009	-0.00005	-0.00001	-0.0005	0.00002	-0.0002	0.0246	-0.0001
6-Jun-11	112																
13-Jun-11	113	0.019	0.24	0.00053	3.2	0.00007	0.26	0.0139	-0.00002	0.000007	-0.00005	0.00002	-0.0005	-0.00002	-0.0002	0.0199	-0.0001
20-Jun-11	114																
27-Jun-11	115	0.028	0.24	0.00052	2.9	0.000036	0.26	0.0132	-0.00002	0.000007	-0.00005	0.00001	-0.0005	0.00005	-0.0002	0.0193	-0.0001
4-Jul-11	116																
11-Jul-11	117	0.016	0.23	0.00049	2.8	-0.00005	0.23	0.0131	-0.00002	0.000006	-0.00005	0.00001	-0.0005	0.000012	-0.0002	0.0202	-0.0001
18-Jul-11	118																
25-Jul-11	119	0.017	0.22	0.00051	3	0.000007	0.24	0.0128	-0.00002	0.000006	-0.00005	0.00001	-0.0005	0.000002	-0.0002	0.02	-0.0001
1-Aug-11	120																
8-Aug-11	121	0.022	0.27	0.00057	3	0.000011	0.3	0.0138	-0.00002	0.000007	-0.00005	-0.00001	-0.0005	-0.000002	-0.0002	0.0266	-0.0001
15-Aug-11	122																
22-Aug-11	123	0.146	0.24	0.00053	2.9	0.00007	0.55	0.0138	-0.00002	0.000007	-0.00005	-0.00001	-0.0005	0.000085	0.0005	0.0241	-0.0001
29-Aug-11	124																
5-Sep-11	125	0.012	0.21	0.00056	3	0.00005	0.25	0.0139	-0.00002	0.000006	-0.00005	0.00001	-0.0005	-0.000002	-0.0002	0.0227	-0.0001
12-Sep-11	126																
19-Sep-11	127																
26-Sep-11	128																
3-Oct-11	129																
10-Oct-11	130																
17-Oct-11	131																
24-Oct-11	132																
31-Oct-11	133																
7-Nov-11	134																
14-Nov-11	135																
21-Nov-11	136																
28-Nov-11	137																
5-Dec-11	138																
12-Dec-11	139																
19-Dec-11	140																
26-Dec-11	141																

Ion Balance		
Anions	Cations	Balance %
0.35	0.29	9.59% ICP-MS
0.35	0.28	11.24% ICP-MS
0.29	0.22	14.57% ICP-MS
0.31	0.22	16.91% ICP-MS
0.29	0.25	6.72% ICP-MS
0.37	0.23	23.20% ICP-MS
0.27	0.26	2.18% ICP-MS
0.29	0.24	9.94% ICP-MS
0.25	0.24	2.14% ICP-MS
0.23	0.26	-5.38% ICP-MS
0.21	0.22	-2.23% ICP-MS
0.21	0.24	-7.26% ICP-MS
0.21	0.25	-8.37% ICP-MS
0.21	0.24	-7.72% ICP-MS
0.23	0.24	-2.71% ICP-MS
0.21	0.23	-5.56% ICP-MS
0.19	0.22	-7.41% ICP-MS
0.20	0.23	-6.25% ICP-MS
0.21	0.25	-8.56% ICP-MS
0.23	0.25	-5.14% ICP-MS
0.31	0.24	13.42% ICP-MS

Note:  
 Schedule change as per I  
 Sulphate (by Colourimetry)

Project Name: Mt. Polley

Contest Project No: 2-21-910

HC-14; Sample ID: 465240 (Springer Samples)

Method:				pH Meter	EC Meter	ORP Meter	Turbidity	Titration using pH Meter & Calculation				Dissolved Metals by ICP-MS Method at Contest																				
Sampling Date	Week No.	Volume (ml)	Input Output (pH Units)	pH	EC	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO <sub>3</sub> /L)		Total Alkalinity (mg CaCO <sub>3</sub> /L)		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)	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)	P (mg/L)	K (mg/L)
				5	5	0.5	50	1	0.5	0.5	0.5																					
Detection Limits				5	5	0.5	50	1	0.5	0.5	0.5																					
12-Oct-09	1	750	540	7.90	1124	165	628	#N/A	2	32	0.011	0.0003	-0.0002	0.014	-0.0001	-0.0001	0.047	0.0011	146	-0.0002	0.0016	0.015	-0.01	-0.0001	0.063	33.5	0.078	0.233	-0.0002	-0.015	3.88	
19-Oct-09	2	500	480	8.01	425	160	177	#N/A	1	45																						
26-Oct-09	3	500	495	8.21	177	150	37	#N/A	1	47	0.028	0.0005	0.0054	0.005	-0.0001	-0.0001	0.036	0.0002	19.9	-0.0002	0.0003	0.0045	0.04	-0.00005	0.023	5.11	0.016	0.136	-0.0002	-0.015	1.89	
2-Nov-09	4	500	495	8.19	145	155	27	#N/A	1	45																						
9-Nov-09	5	500	495	8.16	147	150	25	#N/A	-1	46	0.041	-0.0005	-0.0002	0.003	-0.0005	-0.0005	0.03	0.0001	18	-0.001	-0.0005	0.0071	-0.05	-0.00025	0.02	4.21	0.013	0.074	-0.001	-0.075	1.7	
16-Nov-09	6	500	485	8.23	134	145	21	#N/A	-1	42																						
23-Nov-09	7	500	485	8.24	130	135	20	#N/A	1	42	0.018	0.0004	-0.0002	0.0033	-0.0001	-0.0001	0.014	0.00012	18.4	-0.0002	0.0002	0.0037	0.04	-0.00005	0.0079	3.04	0.013	0.057	-0.0002	-0.015	1.73	
30-Nov-09	8	500	450	8.11	137	130	21	#N/A	1	46																						
7-Dec-09	9	500	480	8.21	130	120	18	#N/A	-1	44	0.027	0.0004	-0.0002	0.0035	-0.0001	-0.0001	0.009	0.00013	16.5	-0.0002	0.0002	0.0066	0.03	-0.00005	0.0074	3.26	0.013	0.045	-0.0002	-0.015	1.44	
14-Dec-09	10	500	485	8.20	130	125	17	#N/A	-1	44																						
21-Dec-09	11	500	490	8.25	125	130	16	#N/A	-1	41	0.018	0.0003	-0.0002	0.0026	-0.0001	-0.0001	0.008	0.00011	13.7	-0.0002	0.0002	0.0035	0.03	-0.00005	0.0053	2.89	0.0091	0.036	-0.0002	-0.015	1.23	
28-Dec-09	12	500	480	8.21	124	130	16	#N/A	-1	40																						
4-Jan-10	13	500	490	8.26	113	120	17	#N/A	-1	38	0.021	0.0003	-0.0002	0.0026	-0.0001	-0.0001	0.006	0.00012	14.7	-0.0002	0.0002	0.0041	0.02	-0.00005	0.0054	3.53	0.011	0.037	-0.0002	-0.015	1.29	
11-Jan-10	14	500	495	8.24	114	150	15	#N/A	-1	41																						
18-Jan-10	15	500	480	8.27	116	140	16	#N/A	-1	40	0.026	0.0004	-0.0002	0.0028	-0.0001	-0.0001	0.011	0.00012	16.5	-0.0002	0.0002	0.004	0.03	-0.00005	0.0047	3.13	0.011	0.04	-0.0002	-0.015	1.28	
25-Jan-10	16	500	495	8.17	113	140	16	#N/A	-1	38																						
1-Feb-10	17	500	475	8.06	114	145	16	#N/A	-1	39	0.018	0.0003	-0.0002	0.0027	-0.0001	-0.0001	0.009	0.00012	16.3	-0.0002	0.0002	0.0034	0.02	-0.00005	0.0044	3.38	0.011	0.035	-0.0002	-0.015	1.4	
8-Feb-10	18	500	490	8.16	117	145	16	#N/A	-1	38																						
15-Feb-10	19	500	480	8.19	116	150	18	#N/A	-1	40	0.027	0.0004	-0.0002	0.0026	-0.0001	-0.0001	0.005	0.00009	16.1	-0.0002	0.0002	0.0036	0.02	-0.00005	0.0038	3.46	0.0097	0.034	-0.0002	-0.015	1.36	
22-Feb-10	20	500	475	8.21	122	180	18	#N/A	-1	42																						
1-Mar-10	21	500	480	8.09	121	175	15	#N/A	1	42	0.075	0.0003	-0.0002	0.0037	-0.0001	-0.0001	0.007	0.00013	17.3	-0.0002	0.0004	0.011	0.11	0.00013	0.0037	2.8	0.017	0.033	-0.0002	-0.015	1.43	
8-Mar-10	22	500	495	8.23	115	200	18	#N/A	1	41																						
15-Mar-10	23	500	485	8.23	114	170	17	#N/A	1	41	0.028	0.0003	-0.0002	0.003	-0.0001	-0.0001	0.001	0.00011	16.7	-0.0002	0.0002	0.0035	0.02	-0.00005	0.0032	3.15	0.007	0.035	-0.0002	-0.015	1.23	
22-Mar-10	24	500	485	8.16	110	190	14	#N/A	1	38																						
29-Mar-10	25	500	490	8.25	114	150	15	#N/A	1	40	0.019	0.0003	-0.0002	0.0028	-0.0001	-0.0001	0.005	0.0001	15.8	-0.0002	0.0001	0.0031	0.02	-0.00005	0.0031	2.88	0.0067	0.035	-0.0002	-0.015	1.21	
5-Apr-10	26	500	470	8.25	115	180	15	#N/A	1	40																						
12-Apr-10	27	500	495	8.24	107	180	14	#N/A	1	38	0.031	-0.0005	0.0021	0.003	-0.0001	-0.001	-0.05	0.0001	15.4	-0.001	-0.0005	0.0036	0.024	-0.0002	-0.005	3.05	0.01	0.035	-0.001	-0.01	1.09	
19-Apr-10	28	500	490	8.22	106	145	15	#N/A	1	36																						
26-Apr-10	29	500	490	8.25	109	180	14	#N/A	1	39	0.0225	0.0003	0.0028	0.0024	-0.00001	-0.00005	-0.05	0.000108	15.1	-0.001	0.000167	0.0032	0.013	-0.000023	0.0022	2.87	0.0114	0.0336	0.00005	-0.002	1.01	
3-May-10	30	500	485	8.26	109	160	14	#N/A	1	38																						
10-May-10	31	500	480	8.20	100	175	13	#N/A	1	35	0.0127	0.00024	0.00175	0.0021	-0.00001	-0.00005	-0.05	0.000097	13.7	-0.001	0.000126	0.0038	0.008	-0.00067	0.0021	2.49	0.0067	0.0286	0.00004	-0.002	0.9	
17-May-10	32	500	485	8.08	113	170	14	#N/A	1	41																						
24-May-10	33	500	480	8.02	118	180	17	#N/A	1	42	0.0217	0.00033	0.00211	0.0029	-0.00001	-0.00005	-0.05	0.000099	17.8	-0.001	0.000149	0.0029	0.016	-0.000032	0.0028	3.41	0.006	0.0349	0.00004	-0.002	1.13	
31-May-10	34	500	480	8.19	91	160	11	#N/A	-1	34																						
7-Jun-10	35	500	500	8.10	108	185	12	#N/A	-1	41	0.0196	0.0003	0.00208	0.0027	-0.00001	-0.00005	-0.05	0.000087	14.8	-0.001	0.000133	0.0027	0.011	-0.000051	0.0023	2.91	0.0054	0.0285	0.00003	-0.002	0.97	
14-Jun-10	36	500	490	8.14	97	175	12	#N/A	1	46																						
21-Jun-10	37	500	500	8.08	113	160	11	#N/A	1	47	0.027	0.0004	0.00285	0.0029	-0.00001	-0.00005	-0.05	0.000093	17.2	-0.001	0.00014	0.0041	0.026	-0.000066	0.0027	3.43	0.0047	0.0273	-0.00002	0.003	1.07	
28-Jun-10	38	500																														

Project Name: Mt. Polley

Cantest Project No: 2-21-910

HC-14; Sample ID: 465240 (Springer Samples)

Sampling Date	Week No.	Method:		pH Meter	EC Meter	ORP Meter	Turbidity	Titration using pH Meter & Calculation				Dissolved Metals by ICP-MS Method at Cantest																				
		Input	Output	pH (mH Units)	EC (µS/cm)	ORP (mV)	Sulphate (mg/L)	Acidity (mg CaCO <sub>3</sub> /L) to pH 4.5 to pH 8.3	Total Alkalinity (mg CaCO <sub>3</sub> /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)	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)	P (mg/L)	K (mg/L)		
		5	5	0.5	0.5	50	1	0.5	0.5	0.5	0.005	0.001	0.001	0.001	0.001	0.0002	0.05	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.15	0.1		
21-Feb-11	72	500	485	8.06	99	175	4	#N/A	-1	38																						
26-Feb-11	73	500	485	8.02	92	170	6	#N/A	-1	34	0.0258	0.00017	0.0014	0.0027	-0.00001	-0.000005	-0.05	0.00006	13.8	-0.0001	0.00002	0.0023	0.01	0.000163	0.001	2.22	0.0016	0.0147	0.00007	0.016	0.61	
7-Mar-11	74	500	485	8.04	114	165	8	#N/A	1	42	0.0211	0.00022	0.00173	0.0028	-0.00001	-0.000005	-0.05	0.000066	14.4	-0.0001	0.000028	0.0025	0.009	0.00004	0.0012	2.59	0.0015	0.0135	0.00005	0.019	0.68	
14-Mar-11	75	500	500	8.00	106	170	8	#N/A	1	42	0.0267	0.00012	0.00103	0.0019	-0.00001	-0.000005	-0.05	0.000063	11.5	-0.0001	0.000032	0.0019	0.011	0.000031	0.0008	1.74	0.0028	0.0106	0.00006	0.014	0.51	
21-Mar-11	76	500	475	8.00	107	165	7	-1	-1	44																						
28-Mar-11	77	500	485	7.89	77	170	6	-1	-1	30																						
4-Apr-11	78	500	490	7.79	104	150	7	-1	-1	41																						
11-Apr-11	79	500	485	7.55	106	135	7	-1	2	43	0.0143	0.00021	0.00162	0.0024	-0.00001	-0.000005	-0.05	0.000055	15.7	-0.0001	0.000048	0.0023	0.006	0.000022	0.001	2.55	0.0011	0.0135	0.00003	0.014	0.66	
18-Apr-11	80	500	440	7.89	112	145	9	-1	-1	47																						
25-Apr-11	81	500	500	7.80	85	170	5	-1	-1	32																						
2-May-11	82	500	490	8.06	110	155	7	-1	2	45																						
9-May-11	83	500	475	7.98	93	200	6	-1	-1	37	0.029	0.00014	0.00127	0.002	-0.00001	-0.000005	-0.05	0.000056	13	-0.0001	0.000032	0.0021	0.014	0.000032	0.0008	2.11	0.0018	0.0117	0.00006	0.011	0.53	
16-May-11	84	500	485	8.02	108	170	7	-1	-1	44																						
23-May-11	85	500	490	8.10	113	150	8	-1	1	45	0.0154	0.00021	0.0018	0.0035	-0.00001	-0.000005	-0.05	0.000071	16.2	-0.0001	0.000057	0.0023	0.006	0.000054	0.0011	2.61	0.0012	0.014	0.00003	0.006	0.65	
30-May-11	86	500	475	8.06	104	150	6	-1	2	43																						
6-Jun-11	87	500	490	8.02	110	170	6	-1	-1	49	0.0133	0.0002	0.00153	0.0022	-0.00001	-0.000005	-0.05	0.000048	17.1	-0.0001	0.000032	0.002	0.004	0.000041	0.0012	2.65	0.0018	0.0147	0.00006	0.006	0.65	
13-Jun-11	88	500	485	8.00	110	155	6	-1	-1	43																						
20-Jun-11	89	500	475	7.98	111	150	8	-1	8	45	0.0173	0.00019	0.00145	0.0022	-0.00001	-0.000005	-0.05	0.000066	15.7	-0.0001	0.000037	0.0024	0.009	0.000091	0.001	2.66	0.0022	0.0142	0.00004	0.005	0.63	
27-Jun-11	90	500	485	7.99	111	145	8	-1	3	46																						
4-Jul-11	91	500	480	7.99	112	150	6	-1	-1	44																						
11-Jul-11	92	500	500	8.04	104	170	6	-1	1	42	0.0147	0.0002	0.00146	0.0023	-0.00001	-0.000005	-0.05	0.000056	16.5	-0.0001	0.000024	0.002	0.005	0.000038	0.0011	2.58	0.0013	0.0128	-0.00002	0.013	0.63	
18-Jul-11	93	500	500	7.95	115	170	6	-1	-1	47	0.0095	0.00021	0.00166	0.0022	-0.00001	-0.000005	-0.05	0.000056	16.8	-0.0001	0.000035	0.0019	0.002	0.000014	0.0011	2.39	0.0011	0.0134	0.00007	0.006	0.64	
25-Jul-11	94	500	480	8.03	114	170	6	-1	1	50																						
1-Aug-11	95	500	500	8.00	110	170	7	-1	1	43	0.0144	0.00035	0.0022	0.0021	-0.00001	-0.000005	-0.05	0.000051	16.7	-0.0001	0.000186	0.0019	0.006	0.000073	0.0011	2.52	0.001	0.0134	0.00011	0.022	0.64	
8-Aug-11	96	500	500	8.04	114	170	5	-1	-1	47																						
15-Aug-11	97	500	500	8.04	121	170	8	-1	2	49	0.0133	0.00019	0.00146	0.0021	-0.00001	-0.000005	-0.05	0.000061	17	0.0002	0.000034	0.0019	0.007	0.000017	0.001	2.45	0.0011	0.0117	0.00052	0.022	0.59	
22-Aug-11	98	500	480	8.07	106	195	5	-1	-1	46																						
29-Aug-11	99	500	460	8.14	123	150	7	-1	-1	48	0.0102	0.00019	0.00124	0.0028	-0.00001	-0.000005	-0.05	0.000072	18.6	-0.0001	0.000025	0.0021	0.003	0.000012	0.001	2.79	0.0013	0.013	0.00005	0.006	0.6	
5-Sep-11	100	500	495	8.28	125	160	7	-1	-1	47																						
12-Sep-11	101	500	495																													
19-Sep-11	102	500	495																													
26-Sep-11	103	500	485																													
3-Oct-11	104	500	495	7.93	104	145	6	-0.5	-0.5	43																						
10-Oct-11	105	500	490																													
17-Oct-11	106	500	450																													
24-Oct-11	107	500	495																													
31-Oct-11	108	500	500								7.56	79	240	5	-1	2	24															
7-Nov-11	109	500	495																													
14-Nov-11	110	500	475																													
21-Nov-11	111	500	490																													
28-Nov-11	112	500	480								7.78	80	240	8	-1	-1	29															
5-Dec-11	113	500	495																													
12-Dec-11	114	500	470																													
19-Dec-11	115	500	490																													
26-Dec-11	116	500	495								7.89	123	140	6.76	-0.5	-1	51															

Project Name: Mt. Po  
 Contest Project No: 2  
 HC-14; Sample ID: 46

Method:															
Sampling Date	Week No.	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)
Detection Limits		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	1	0.588	4.97	-0.00004	24.2	0.222	-0.0002	-0.00002	-0.00005	-0.0001	0.0016	0.00025	0.0097	-0.001	-0.0001
19-Oct-09	2														
26-Oct-09	3	0.15	4.95	-0.00004	6.95	0.03	-0.0002	-0.00002	-0.00005	-0.0001	0.0015	0.00017	0.011	0.012	-0.0001
2-Nov-09	4														
9-Nov-09	5	0.14	4.9	-0.0002	4.47	0.023	-0.001	-0.0001	-0.00025	-0.0005	0.001	-0.00025	0.01	-0.005	-0.0005
16-Nov-09	6														
23-Nov-09	7	0.14	3.89	-0.00004	2.25	0.022	-0.0002	-0.00002	0.00013	-0.0001	0.001	0.00018	0.012	-0.001	-0.0001
30-Nov-09	8														
7-Dec-09	9	0.099	4.19	-0.00004	1.77	0.022	-0.0002	-0.00002	-0.00005	-0.0001	0.0008	0.00019	0.011	-0.001	-0.0001
14-Dec-09	10														
21-Dec-09	11	0.115	3.67	-0.00004	1.28	0.018	-0.0002	-0.00002	-0.00005	-0.0001	0.0008	0.00011	0.0089	-0.001	-0.0001
28-Dec-09	12														
4-Jan-10	13	0.075	3.46	-0.00004	1.21	0.019	-0.0002	-0.00002	-0.00005	-0.0001	0.0005	0.00014	0.0076	-0.001	-0.0001
11-Jan-10	14														
18-Jan-10	15	0.111	3.46	-0.00004	0.92	0.021	-0.0002	-0.00002	-0.00005	-0.0001	0.0009	0.00014	0.0085	-0.001	-0.0001
25-Jan-10	16														
1-Feb-10	17	0.091	3.4	-0.00004	0.85	0.02	-0.0002	-0.00002	-0.00005	-0.0001	0.0006	0.00016	0.009	-0.001	-0.0001
8-Feb-10	18														
15-Feb-10	19	0.0996	3.59	-0.00004	0.77	0.021	-0.0002	-0.00002	-0.00005	-0.0001	0.0011	0.0001	0.0086	-0.001	-0.0001
22-Feb-10	20														
1-Mar-10	21	0.073	3.23	-0.00004	0.53	0.024	-0.0002	-0.00002	-0.00005	-0.0001	0.0012	0.00013	0.0088	-0.001	-0.0001
8-Mar-10	22														
15-Mar-10	23	0.073	3.61	-0.00004	0.67	0.021	-0.0002	-0.00002	-0.00005	-0.0001	0.0011	0.00013	0.0089	-0.001	-0.0001
22-Mar-10	24														
29-Mar-10	25	0.061	2.87	-0.00004	0.4	0.019	-0.0002	-0.00002	-0.00005	-0.0001	0.0004	0.00012	0.0075	-0.001	-0.0001
5-Apr-10	26														
12-Apr-10	27	0.0509	3.02	-0.00002	0.47	0.019	-0.001	-0.00005	-0.001	-0.005	0.0001	0.007	-0.005	-0.0005	
19-Apr-10	28														
26-Apr-10	29	0.0469	2.9	-0.00005	0.33	0.0201	-0.00002	0.000018	-0.00005	-0.00001	-0.0005	0.000136	0.0063	0.0004	-0.0001
3-May-10	30														
10-May-10	31	0.0394	2.3	-0.00005	0.26	0.0171	-0.00002	-0.00002	-0.00005	-0.00001	-0.0005	0.000132	0.0051	0.0004	-0.0001
17-May-10	32														
24-May-10	33	0.0524	3.8	-0.00005	0.33	0.0222	-0.00002	-0.00002	-0.00005	-0.00001	-0.0005	0.000149	0.0066	0.0005	-0.0001
31-May-10	34														
7-Jun-10	35	0.0453	3	-0.00005	0.29	0.0196	-0.00002	-0.00002	-0.00005	-0.00001	-0.0005	0.00015	0.0063	0.0006	-0.0001
14-Jun-10	36														
21-Jun-10	37	0.0551	3.6	-0.00005	0.32	0.0222	-0.00002	0.00004	-0.00005	0.00002	-0.0005	0.000147	0.0073	0.0032	-0.0001
28-Jun-10	38														
5-Jul-10	39	0.0427	2.9	-0.00005	0.23	0.0186	-0.00002	-0.00002	-0.00005	-0.00001	0.0012	0.000127	0.0069	0.0005	-0.0001
12-Jul-10	40														
19-Jul-10	41	0.0436	3.2	-0.00005	0.24	0.0193	-0.00002	-0.00002	-0.00005	-0.00001	0.0006	0.000132	0.0066	0.0003	-0.0001
26-Jul-10	42														
2-Aug-10	43	0.0381	2.5	-0.00005	0.17	0.0182	-0.00002	-0.00002	-0.00005	-0.00001	0.0009	0.000106	0.006	0.0005	-0.0001
9-Aug-10	44														
16-Aug-10	45	0.0361	2.5	-0.00005	0.19	0.0185	-0.00002	-0.00002	-0.00005	-0.00001	-0.0005	0.000114	0.0059	0.0002	-0.0001
23-Aug-10	46														
30-Aug-10	47	0.0346	2.7	0.000014	0.18	0.0188	-0.00002	0.00002	-0.00005	-0.00001	0.0006	0.000134	0.006	0.0001	-0.0001
6-Sep-10	48														
13-Sep-10	49	0.0281	2.4	-0.00005	0.17	0.017	-0.00002	-0.00002	-0.00005	0.00012	0.0011	0.000127	0.0051	0.0004	-0.0001
20-Sep-10	50														
27-Sep-10	51	0.0319	2.8	-0.00005	0.18	0.0187	-0.00002	0.00003	-0.00005	-0.00001	-0.0005	0.000128	0.0064	0.0009	-0.0001
4-Oct-10	52														
11-Oct-10	53	0.029	2.6	0.00001	0.19	0.0238	-0.00002	0.00002	-0.00005	0.00041	0.0007	0.000193	0.0057	0.0008	-0.0001
18-Oct-10	54														
25-Oct-10	55	0.031	2.8	-0.00005	0.2	0.0207	-0.00002	0.00004	-0.00005	0.00003	-0.0005	0.000139	0.0068	0.0012	-0.0001
1-Nov-10	56														
8-Nov-10	57	0.0259	2.5	-0.00005	0.17	0.0181	-0.00002	-0.00002	-0.00005	0.00001	-0.0005	0.000126	0.006	0.0008	-0.0001
15-Nov-10	58														
22-Nov-10	59	0.0255	2.8	0.00009	0.19	0.0215	-0.00002	0.00003	-0.00005	0.00002	0.0007	0.000155	0.0061	0.005	-0.0001
29-Nov-10	60														
6-Dec-10	61	0.0203	2.3	0.00009	0.16	0.0204	-0.00002	0.00003	-0.00005	0.00013	0.0024	0.00018	0.0054	0.0009	-0.0001
13-Dec-10	62														
20-Dec-10	63	0.0244	2.9	0.00008	0.17	0.0221	-0.00002	0.00002	-0.00005	0.00002	0.0006	0.000184	0.0059	0.0027	-0.0001
27-Dec-10	64														
3-Jan-11	65	0.0224	1.9	0.00012	0.14	0.0173	-0.00002	0.00001	-0.00005	0.00004	0.0012	0.000224	0.0049	0.0004	0.0002
10-Jan-11	66														
17-Jan-11	67	0.0207	2.5	0.00016	0.16	0.0252	-0.00002	0.00003	-0.00005	0.00001	-0.0005	0.000161	0.0059	0.0008	-0.0001
24-Jan-11	68														
31-Jan-11	69	0.017	1.7	0.00021	0.14	0.0163	-0.00002	0.00003	-0.00005	0.00002	0.0006	0.000164	0.0043	0.0007	-0.0001
7-Feb-11	70														
14-Feb-11	71	0.0166	2.3	-0.00005	0.12	0.0178	-0.00002	-0.00002	-0.00005	0.00006	0.0011	0.000131	0.0046	0.001	-0.0001

Ion Balance		
Anions	Cations	Balance %
13.72	11.07	10.70% ICP-MS
1.71	1.75	-1.14% ICP-MS
1.44	1.47	-1.07% ICP-MS
1.26	1.30	-1.57% ICP-MS
1.26	1.19	2.47% ICP-MS
1.15	1.00	7.17% ICP-MS
1.11	1.10	0.66% ICP-MS
1.12	1.14	-0.85% ICP-MS
1.11	1.15	-1.73% ICP-MS
1.18	1.15	1.26% ICP-MS
1.15	1.15	0.22% ICP-MS
1.17	1.14	1.39% ICP-MS
1.11	1.06	2.31% ICP-MS
1.05	1.06	-0.31% ICP-MS
1.07	1.02	2.49% ICP-MS
0.97	0.91	3.08% ICP-MS
1.19	1.20	-0.23% ICP-MS
1.07	1.01	3.12% ICP-MS
1.17	1.17	-0.08% ICP-MS
0.93	0.95	-1.34% ICP-MS
1.05	1.05	-0.26% ICP-MS
0.99	0.95	2.05% ICP-MS
1.03	0.89	7.12% ICP-MS
0.97	0.94	1.53% ICP-MS
0.91	0.88	1.28% ICP-MS
1.01	0.99	1.10% ICP-MS
1.11	0.99	5.71% ICP-MS
1.15	1.06	4.02% ICP-MS
1.01	0.95	3.00% ICP-MS
0.91	1.10	-9.79% ICP-MS
1.13	0.95	8.51% ICP-MS
1.09	1.16	-3.32% ICP-MS
0.97	0.92	2.77% ICP-MS
1.09		

Project Name: Mt. Po  
 Contest Project No: 2  
 HC-14; Sample ID: 46

Method:															
Sampling Date	Week No.	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)
Detection Limits		0.001	0.25	0.00025	0.05	0.001	0.001	0.0005	0.001	0.0005	0.001	0.0005	0.001	0.005	0.01
21-Feb-11	72														
26-Feb-11	73	0.0172	2	0.00006	0.12	0.0167	-0.00002	-0.00002	0.00002	-0.0005	0.000139	0.0046	0.0016	-0.0001	
7-Mar-11	74														
14-Mar-11	75	0.018	2.2	-0.00005	0.16	0.0202	-0.00002	-0.00002	0.00005	-0.00001	-0.0005	0.000144	0.0052	0.0027	-0.0001
21-Mar-11	76														
28-Mar-11	77	0.0129	1.6	-0.00005	0.1	0.0142	-0.00002	-0.00002	-0.00005	-0.00001	0.0006	0.000114	0.0032	0.0037	-0.0001
4-Apr-11	78														
11-Apr-11	79	0.0173	2.3	-0.00005	0.13	0.0204	-0.00002	-0.00002	-0.00005	-0.00001	-0.0005	0.000167	0.005	0.0047	-0.0001
18-Apr-11	80														
25-Apr-11	81	0.012	1.6	-0.00005	0.11	0.0142	-0.00002	0.00005	-0.00005	0.00005	-0.0005	0.000099	0.0043	0.0046	-0.0001
2-May-11	82														
9-May-11	83	0.0132	1.8	0.00006	0.11	0.0239	-0.00002	0.00003	-0.00005	0.00001	0.0007	0.000111	0.0039	0.0044	-0.0001
16-May-11	84														
23-May-11	85	0.0159	2.3	-0.00005	0.13	0.0202	-0.00002	0.00007	-0.00005	0.00002	-0.0005	0.000164	0.0049	0.0042	-0.0001
30-May-11	86														
6-Jun-11	87	0.014	2.5	-0.00005	0.12	0.0231	-0.00002	0.00003	-0.00005	0.00002	-0.0005	0.000184	0.0048	0.0041	-0.0001
13-Jun-11	88														
20-Jun-11	89	0.0132	2.1	0.00007	0.13	0.0204	-0.00002	-0.00002	-0.00005	-0.00001	-0.0005	0.000373	0.0042	0.003	-0.0001
27-Jun-11	90														
4-Jul-11	91	0.0129	2.3	-0.00005	0.13	0.0206	-0.00002	-0.00002	-0.00005	0.00003	-0.0005	0.000151	0.0047	0.0025	-0.0001
11-Jul-11	92														
18-Jul-11	93	0.0143	2.3	-0.00005	0.11	0.0209	-0.00002	0.00002	-0.00005	0.00002	-0.0005	0.000147	0.0048	0.0065	-0.0001
25-Jul-11	94														
1-Aug-11	95	0.0136	2.2	-0.00005	0.14	0.0203	-0.00002	-0.00002	0.00006	0.00001	-0.0005	0.000133	0.005	0.0128	-0.0001
8-Aug-11	96														
15-Aug-11	97	0.0112	2.1	-0.00005	0.33	0.0199	-0.00002	0.00003	-0.00005	-0.00001	-0.0005	0.000156	0.0045	0.0093	-0.0001
22-Aug-11	98														
29-Aug-11	99	0.011	2.2	0.00005	0.12	0.0314	-0.00002	-0.00002	-0.00005	-0.00001	-0.0005	0.00019	0.0038	0.0038	-0.0001
5-Sep-11	100														
12-Sep-11	101														
19-Sep-11	102														
26-Sep-11	103														
3-Oct-11	104														
10-Oct-11	105														
17-Oct-11	106														
24-Oct-11	107														
31-Oct-11	108														
7-Nov-11	109														
14-Nov-11	110														
21-Nov-11	111														
28-Nov-11	112														
5-Dec-11	113														
12-Dec-11	114														
19-Dec-11	115														
26-Dec-11	116														

Ion Balance		
Anions	Cations	Balance %
0.81	0.88	-4.64% ICP-MS
1.01	0.95	3.09% ICP-MS
0.72	0.73	-0.49% ICP-MS
1.00	1.00	-0.22% ICP-MS
0.74	0.75	-0.55% ICP-MS
0.87	0.83	1.87% ICP-MS
1.06	1.03	1.49% ICP-MS
1.11	1.08	1.33% ICP-MS
1.08	1.01	2.98% ICP-MS
1.00	1.04	-2.36% ICP-MS
1.07	1.04	1.35% ICP-MS
1.01	1.05	-1.98% ICP-MS
1.15	1.07	3.71% ICP-MS
1.10	1.16	-2.63% ICP-MS

Note:  
 Continue with testing until  
[Sulphate \(by Colourimet](#)

Project Name: Mt. Polley

Cantest Project No: 2-21-910

HC-15; Sample ID: 475695 (Springer Samples)

Sampling Date	Week No.	Method:		pH Meter	EC Meter	ORP Meter	Turbidity	Titration using pH Meter & Calculation				Dissolved Metals by ICP-MS Method at Cantest																			
		Input	Output	(pH Units)	(µS/cm)	(mV)	Sulphate (mg/L)	Acidity (mg CaCO <sub>3</sub> /L) to pH 4.5	Total Alkalinity (mg CaCO <sub>3</sub> /L) to pH 8.3	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)	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)	P (mg/L)	K (mg/L)	
		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	0.001	0.0005	0.001	0.15	0.1
12-Oct-09	1	750	590	7.64	1212	200	638	#/N/A	13	0.034	0.0002	-0.0002	0.0029	-0.0001	-0.0001	0.044	0.00006	219	-0.0002	0.0009	0.005	-0.01	-0.00005	0.012	16.7	0.075	0.027	-0.0002	-0.015	0.33	
19-Oct-09	2	500	490	8.05	704	195	392	#/N/A	1	20																					
26-Oct-09	3	500	500	8.32	530	165	284	#/N/A	#/N/A	23	0.048	0.0002	0.0004	0.0013	-0.0001	-0.0001	0.057	0.00004	86.5	-0.0002	0.0007	0.0037	-0.01	-0.0001	0.011	9.03	0.041	0.029	-0.0002	-0.015	0.3
2-Nov-09	4	500	490	8.11	486	140	227	#/N/A	1	30																					
9-Nov-09	5	500	480	8.25	292	166	128	#/N/A	1	25	0.075	-0.0005	-0.001	-0.001	-0.0005	-0.0005	0.03	-0.00005	40.7	-0.001	-0.0005	0.0029	-0.05	-0.00025	0.0098	3.16	0.017	0.046	-0.001	-0.075	0.18
16-Nov-09	6	500	500	8.42	222	145	76	#/N/A	#/N/A	26																					
23-Nov-09	7	500	495	8.31	205	140	66	#/N/A	#/N/A	27	0.12	0.0002	0.0003	0.0007	-0.0001	-0.0001	0.016	0.00001	30	-0.0002	0.0002	0.007	0.04	0.00011	0.0023	1.49	0.012	0.043	-0.0002	-0.015	0.2
30-Nov-09	8	500	475	8.26	212	135	75	#/N/A	1	30																					
7-Dec-09	9	500	490	8.31	194	120	65	#/N/A	#/N/A	29	0.11	0.0002	0.0003	0.001	-0.0001	-0.0001	0.013	-0.00001	26.4	-0.0002	0.0001	0.0061	0.03	0.00007	0.0026	1.5	0.011	0.037	-0.0002	-0.015	0.17
14-Dec-09	10	500	490	8.38	181	120	54	#/N/A	#/N/A	30																					
21-Dec-09	11	500	495	8.44	175	130	51	#/N/A	#/N/A	29	0.079	0.0002	0.0003	0.0006	-0.0001	-0.0001	0.013	0.00002	23.6	-0.0002	0.0001	0.0031	0.02	0.00018	0.0026	1.41	0.0092	0.032	-0.0002	-0.015	0.17
28-Dec-09	12	500	495	8.31	180	125	53	#/N/A	#/N/A	31																					
4-Jan-10	13	500	485	8.36	145	115	38	#/N/A	#/N/A	30	0.098	0.0001	0.0003	0.0006	-0.0001	-0.0001	0.008	0.00002	19	0.0002	-0.0001	0.0034	0.02	0.00007	0.0021	1.25	0.0071	0.023	-0.0002	-0.015	0.16
11-Jan-10	14	500	500	8.44	136	140	35	#/N/A	#/N/A	29																					
18-Jan-10	15	500	485	8.53	144	125	39	#/N/A	#/N/A	27	0.083	0.0001	0.0003	0.0004	-0.0001	-0.0001	0.011	-0.00001	18.8	-0.0002	-0.0001	0.0023	0.01	-0.00005	0.0015	0.97	0.0066	0.023	-0.0002	-0.015	0.12
25-Jan-10	16	500	495	8.31	150	135	34	#/N/A	#/N/A	29																					
1-Feb-10	17	500	495	8.29	137	150	36	#/N/A	-1	28	0.087	0.0001	0.0003	0.0005	-0.0001	-0.0001	0.009	-0.00001	18.2	-0.0002	-0.0001	0.0022	0.01	-0.00005	0.0014	1.03	0.0066	0.02	-0.0002	-0.015	0.15
8-Feb-10	18	500	495	8.36	149	150	38	#/N/A	#/N/A	30																					
15-Feb-10	19	500	495	8.43	132	145	36	#/N/A	#/N/A	27	0.11	0.0001	0.0003	0.0005	-0.0001	-0.0001	-0.005	-0.00001	18.1	-0.0002	-0.0001	0.0025	0.02	0.00005	0.0012	1	0.0066	0.019	-0.0002	-0.015	0.14
22-Feb-10	20	500	480	8.41	138	166	37	#/N/A	#/N/A	27																					
1-Mar-10	21	500	490	8.32	131	165	34	#/N/A	#/N/A	26	0.064	0.0001	0.0002	0.0005	-0.0001	-0.0001	0.007	-0.00001	18.3	-0.0002	-0.0001	0.0018	-0.01	-0.00005	0.0011	0.77	0.0064	0.017	-0.0002	-0.015	0.13
8-Mar-10	22	500	490	8.28	128	190	34	#/N/A	-1	26																					
15-Mar-10	23	500	500	8.34	135	175	35	#/N/A	#/N/A	26	0.077	0.0001	0.0002	0.0006	-0.0001	-0.0001	0.009	-0.00001	19.7	-0.0002	-0.0001	0.0023	0.02	0.00005	0.0009	0.9	0.0071	0.018	-0.0002	-0.015	0.14
22-Mar-10	24	500	495	8.27	128	165	35	#/N/A	-1	24																					
29-Mar-10	25	500	495	8.26	130	155	34	#/N/A	1	26	0.082	-0.0001	0.0003	0.0004	-0.0001	-0.0001	-0.005	-0.00001	18.4	-0.0002	-0.0001	0.0017	-0.01	-0.00005	0.0011	0.83	0.0061	0.016	-0.0002	-0.015	0.13
5-Apr-10	26	500	495	7.74	104	170	27	#/N/A	1	21																					
12-Apr-10	27	500	485	8.30	106	180	29	#/N/A	#/N/A	21	0.18	-0.0005	0.0003	-0.001	-0.0001	-0.001	-0.05	0.00001	15.7	-0.001	-0.0005	0.0032	0.047	-0.0002	-0.005	0.75	0.006	0.012	-0.001	-0.01	0.12
19-Apr-10	28	500	490	8.33	125	140	37	#/N/A	#/N/A	19																					
26-Apr-10	29	500	490	8.33	122	122	35	#/N/A	#/N/A	21	0.112	0.00007	0.00084	0.0004	-0.00001	-0.00005	-0.05	0.000005	17.6	-0.0001	0.000062	0.0021	0.018	0.000048	0.0006	0.78	0.0057	0.014	0.00004	-0.002	0.12
3-May-10	30	500	490	8.50	120	150	34	#/N/A	#/N/A	21																					
10-May-10	31	500	500	8.27	121	170	34	#/N/A	-1	21	0.0954	0.00008	0.00025	0.0005	-0.00001	-0.00005	-0.05	0.00001	16.9	-0.0001	0.000056	0.0018	0.012	0.000036	0.0008	0.72	0.0057	0.0137	0.00003	-0.002	0.11
17-May-10	32	500	490	8.58	119	165	33	#/N/A	#/N/A	20																					
24-May-10	33	500	500	8.51	131	180	40	#/N/A	#/N/A	21	0.113	0.00008	0.00029	0.0006	-0.00001	-0.00005	-0.05	0.000007	19.9	-0.0001	0.000067	0.0018	0.014	0.000053	0.0008	0.84	0.0062	0.016	-0.00002	-0.002	0.12
31-May-10	34	500	490	8.43	116	165	34	#/N/A	#/N/A	21																					
7-Jun-10	35	500	490	8.48	146	185	26	#/N/A	#/N/A	21	0.0984	0.00007	0.00024	0.0006	-0.00001	-0.00005	-0.05	0.000005	16.3	-0.0001	0.00006	0.0015	0.008	0.000049	0.0007	0.72	0.0055	0.0131	0.00004	-0.002	0.12
14-Jun-10	36	500	500	8.50	111	160	29	#/N/A	#/N/A	20																					
21-Jun-10	37	500	490	8.47	108	170	34	#/N/A	#/N/A	19	0.0946	0.00006	0.0004	0.0006	-0.00001	-0.00005	-0.05	0.000012	15.5	-0.0001	0.000069	0.0024	0.018	0.000058	0.0006	0.68	0.0057	0.011	-0.00002	-0.002	0.11
28-Jun-10	38	500	495	8.51	115	170	36	#/N/A	#/N/A	20																					
5-Jul-10	39	500	480	8.44	101	165	29	#/N/A	#/N/A	18	0.0797	0.00006	0.00024	0.0006	-0.00001	-0.00005	-0.05	0.000005	14.3	-0.0001	0.000047	0.0015	0.007	0.000							

Project Name: Mt. Polley

Contest Project No: 2-21-910

HC-15: Sample ID: 475695 (Springer Samples)

### Note:

Continue with testing until further notice from Ron Martel at Mt. Polley.

Sulphate (by Colourimetry), Acidity & Alkalinity (by PC Titrator) is now done by water lab at Maxxam from 21-Mar-11.

Project Name: Mt. Po  
 Cantest Project No: 2  
 HC-15; Sample ID: 47

Method:															
Sampling Date	Week No.	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)	Tl (mg/L)	U (mg/L)	V (mg/L)	Zn (mg/L)	Zr (mg/L)
Detection Limits															
12-Oct-09	1	0.024	1.95	-0.00004	24.2	0.286	-0.0002	-0.00002	-0.00005	-0.0001	0.001	0.00071	0.0006	-0.001	-0.0001
19-Oct-09	2														
26-Oct-09	3	0.0039	3.13	-0.00004	25.3	0.136	-0.0002	-0.00002	-0.00005	-0.0001	0.001	0.001	0.0008	-0.001	-0.0001
2-Nov-09	4														
9-Nov-09	5	0.001	2.6	-0.0002	13.9	0.051	-0.001	-0.0001	-0.00025	-0.0005	-0.001	0.0004	-0.0005	-0.005	-0.0005
16-Nov-09	6														
23-Nov-09	7	0.0019	2.15	-0.00004	8.09	0.037	-0.0002	-0.00002	0.00035	-0.0001	0.0022	0.00035	0.001	-0.001	-0.0001
30-Nov-09	8														
7-Dec-09	9	0.0018	2.88	-0.00004	8.95	0.035	-0.0002	-0.00002	-0.00005	-0.0001	0.0027	0.0003	0.0011	-0.001	-0.0001
14-Dec-09	10														
21-Dec-09	11	0.002	2.88	-0.00004	9	0.03	-0.0002	-0.00002	-0.00005	-0.0001	0.0008	0.00026	0.001	-0.001	-0.0001
28-Dec-09	12														
4-Jan-10	13	0.0012	2.6	-0.00004	8.2	0.023	-0.0002	-0.00002	-0.00005	-0.0001	0.0017	0.00023	0.001	-0.001	-0.0001
11-Jan-10	14														
18-Jan-10	15	0.0015	2.18	-0.00004	6.03	0.023	-0.0002	-0.00002	-0.00005	-0.0001	0.0014	0.0002	0.0008	-0.001	-0.0001
25-Jan-10	16														
1-Feb-10	17	0.0012	2.2	-0.00004	6.18	0.022	-0.0002	-0.00002	-0.00005	-0.0001	0.0013	0.00021	0.0009	-0.001	-0.0001
8-Feb-10	18														
15-Feb-10	19	0.0015	2.22	-0.00004	5.89	0.0226	-0.0002	-0.00002	-0.00005	0.0001	0.0021	0.0003	0.0009	-0.001	-0.0001
22-Feb-10	20														
1-Mar-10	21	0.001	1.76	-0.00004	4.26	0.024	-0.0002	-0.00002	-0.00005	-0.0001	0.0006	0.00023	0.0007	0.001	-0.0001
8-Mar-10	22														
15-Mar-10	23	0.0013	2.1	-0.00004	5.1	0.023	-0.0002	-0.00002	-0.00005	-0.0001	0.0012	0.00024	0.0008	-0.001	-0.0001
22-Mar-10	24														
29-Mar-10	25	0.001	1.78	-0.00004	4.16	0.021	-0.0002	-0.00002	-0.00005	-0.0001	0.0007	0.00023	0.0007	-0.001	-0.0001
5-Apr-10	26														
12-Apr-10	27	0.0008	1.62	-0.00002	3.28	0.019	-0.001	-0.00005	-0.001	-0.005	-0.005	0.0002	-0.005	-0.005	-0.0005
19-Apr-10	28														
26-Apr-10	29	0.00088	1.6	-0.000005	3.43	0.0216	-0.00002	-0.000002	-0.000005	0.00014	0.0013	0.00023	0.0007	-0.0001	-0.0001
3-May-10	30														
10-May-10	31	0.001	1.6	-0.000005	3.05	0.0211	-0.00002	-0.000002	-0.000005	0.00015	0.0007	0.00024	0.0006	0.0002	-0.0001
17-May-10	32														
24-May-10	33	0.00113	1.9	-0.000005	3.51	0.0247	-0.00002	-0.000002	0.000012	0.00018	0.001	0.00021	0.0007	0.0002	-0.0001
31-May-10	34														
7-Jun-10	35	0.00117	1.6	-0.000005	3.18	0.0202	-0.00002	-0.000002	-0.000005	0.00019	0.0005	0.000199	0.0007	0.0002	-0.0001
14-Jun-10	36														
21-Jun-10	37	0.00115	1.4	-0.000005	2.9	0.0179	-0.00002	-0.000002	-0.000005	0.00013	0.0014	0.000176	0.0005	0.0008	-0.0001
28-Jun-10	38														
5-Jul-10	39	0.00097	1.3	-0.000005	2.71	0.0195	-0.00002	-0.000002	-0.000005	0.00015	0.0006	0.000157	0.0005	0.0005	-0.0001
12-Jul-10	40														
19-Jul-10	41	0.00096	1.3	-0.000005	2.56	0.0181	-0.00002	-0.000002	-0.000005	0.00022	0.001	0.000162	0.0005	0.0004	-0.0001
26-Jul-10	42														
2-Aug-10	43	0.00104	1.3	-0.000005	2.75	0.0192	-0.00002	-0.000002	-0.000005	0.00018	0.0008	0.00015	0.0004	0.0004	-0.0001
9-Aug-10	44														
16-Aug-10	45	0.00102	1.6	-0.000005	2.85	0.0202	-0.00002	-0.000002	-0.000005	0.00016	-0.0005	0.000157	0.0006	0.0001	-0.0001
23-Aug-10	46														
30-Aug-10	47	0.00103	1.5	0.000014	2.76	0.0217	-0.00002	-0.000002	-0.000005	0.00018	-0.0005	0.000146	0.0006	0.0004	-0.0001
6-Sep-10	48														
13-Sep-10	49	0.00081	1.4	-0.000005	2.34	0.0164	-0.00002	-0.000002	-0.000005	0.00017	0.0012	0.000106	0.0003	0.0002	-0.0001
20-Sep-10	50														
27-Sep-10	51	0.0009	1.5	-0.000005	2.39	0.0192	-0.00002	-0.000002	-0.000005	0.00017	-0.0005	0.000151	0.0006	0.0004	-0.0001
4-Oct-10	52														
11-Oct-10	53	0.00084	1.3	-0.000005	2.31	0.0218	-0.00002	-0.000002	-0.000005	0.00034	-0.0005	0.00017	0.0005	0.0016	-0.0001
18-Oct-10	54														
25-Oct-10	55	0.00071	1.1	-0.000005	2.32	0.0184	-0.00002	-0.000002	-0.000005	0.00022	-0.0005	0.000141	0.0004	0.0018	-0.0001
1-Nov-10	56														
8-Nov-10	57	0.00069	1.3	-0.000005	2.25	0.0182	-0.00002	-0.000002	-0.000005	0.00017	-0.0005	0.000119	0.0006	0.0011	-0.0001
15-Nov-10	58														
22-Nov-10	59	0.00066	1.5	-0.000005	2.39	0.02	-0.00002	-0.000002	-0.000005	0.00022	0.0005	0.000122	0.0005	0.0028	-0.0001
29-Nov-10	60														
6-Dec-10	61	0.00067	1.2	-0.000005	2.19	0.0187	-0.00002	-0.000002	-0.000005	0.00023	0.0027	0.000124	0.0007	0.0013	-0.0001
13-Dec-10	62														
20-Dec-10	63	0.0006	1.3	0.000012	2.15	0.019	-0.00002	-0.000002	-0.000005	0.0003	0.001	0.000144	0.0007	0.0013	-0.0001
27-Dec-10	64														
3-Jan-11	65	0.00074	1.1	0.000012	2.26	0.023	-0.00002	-0.000006	0.000054	0.00034	0.0015	0.000207	0.0005	0.0006	0.002
10-Jan-11	66														
17-Jan-11	67	0.0005	1	0.000007	1.78	0.0176	-0.00002	-0.000002	0.000021	0.0002	-0.0005	0.000116	0.0006	0.002	0.0001
24-Jan-11	68														
31-Jan-11	69	0.00054	0.9	0.000012	1.88	0.0183	-0.00002	-0.000002	-0.000005	0.00025	0.0009	0.000139	0.0006	0.0016	-0.0001
7-Feb-11	70														
14-Feb-11	71	0.00051	1	-0.000005	1.8	0.0188	-0.00002	-0.000002	-0.000005	0.00024	-0.0005	0.000124	0.0004	0.0014	-0.0001

Ion Balance		
Anions	Cations	Balance %
13.55	13.18	1.40%
6.38	6.10	2.23%
3.17	2.87	4.86%
1.92	1.96	-1.26%
1.93	1.82	2.94%
1.64	1.68	-1.06%
1.39	1.41	-0.52%
1.35	1.28	2.90%
1.31	1.26	1.97%
1.29	1.24	1.91%
1.23	1.16	3.02%
1.25	1.27	-0.98%
1.23	1.16	2.70%
1.02	1.00	1.33%
1.15	1.09	2.56%
1.13	1.03	4.36%
1.25	1.21	1.61%
0.96	1.01	-2.51%
1.09	0.96	6.47%
0.96	0.88	4.48%
0.90	0.93	-1.41%
0.94	0.93	0.69%
1.07	0.99	3.53%
1.09	0.99	4.64%
0.86	0.83	1.65%
0.94	0.95	-0.64%
1.02	0.96	2.94%
0.98	0.84	7.77%
0.90	0.85	2.65%
0.96	0.94	0.93%
0.96	0.86	5.86%
0.74	0.95	-12.71%
1.15	1.09	2.93%
0.99	0.87	6.14%
0.99	0.88	5.87%
0.92	0.77	8.79%

Project Name: Mt. Po  
 Cantest Project No: 2  
 HC-15; Sample ID: 47

Method:															
Sampling Date	Week No.	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)
Detection Limits		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
21-Feb-11	72														
26-Feb-11	73	0.00055	1.1	-0.000005	1.94	0.0183	-0.00002	-0.000002	-0.000005	0.00019	0.0005	0.000126	0.0003	0.0016	0.0001
7-Mar-11	74														
14-Mar-11	75	0.00044	0.9	-0.000005	1.75	0.0179	-0.00002	-0.000002	-0.000005	0.0001	-0.0005	0.000102	0.0004	0.0012	-0.0001
21-Mar-11	76														
28-Mar-11	77	0.00047	1.1	-0.000005	1.63	0.0178	-0.00002	-0.000002	-0.000005	0.00009	-0.0005	0.00011	0.0003	0.0036	-0.0001
4-Apr-11	78														
11-Apr-11	79	0.00052	1.1	-0.000005	1.73	0.0185	-0.00002	-0.000002	-0.000005	0.0001	-0.0005	0.000116	0.0002	0.0046	-0.0001
18-Apr-11	80														
25-Apr-11	81	0.00054	1.1	-0.000005	1.67	0.0181	-0.00002	-0.000002	-0.000005	0.00024	-0.0005	0.000126	0.0004	0.0071	-0.0001
2-May-11	82														
9-May-11	83	0.00044	1	-0.000005	1.58	0.0199	-0.00002	-0.000002	-0.000005	0.00013	-0.0005	0.000105	0.0003	0.0053	-0.0001
16-May-11	84														
23-May-11	85	0.00048	1	-0.000005	1.68	0.0194	-0.00002	-0.000002	-0.000005	0.00012	-0.0005	0.000116	0.0004	0.0047	-0.0001
30-May-11	86														
6-Jun-11	87	0.00043	1	-0.000005	1.61	0.0231	-0.00002	0.000004	-0.000005	0.00015	-0.0005	0.000105	0.0004	0.0058	-0.0001
13-Jun-11	88														
20-Jun-11	89	0.00045	1	-0.000005	1.73	0.0181	-0.00002	-0.000002	-0.000005	0.00018	-0.0005	0.000101	0.0003	0.0039	-0.0001
27-Jun-11	90														
4-Jul-11	91	0.00043	1	-0.000005	1.54	0.018	-0.00002	-0.000002	-0.000005	0.00014	-0.0005	0.0001	0.0003	0.0035	-0.0001
11-Jul-11	92														
18-Jul-11	93	0.00043	0.9	-0.000005	1.37	0.0176	-0.00002	-0.000002	-0.000005	0.00015	-0.0005	0.000109	-0.0002	0.0045	-0.0001
25-Jul-11	94														
1-Aug-11	95	0.00046	1.1	-0.000005	1.8	0.0212	-0.00002	-0.000002	0.000007	0.00012	-0.0005	0.000107	0.0003	0.0046	-0.0001
8-Aug-11	96														
15-Aug-11	97	0.00041	0.8	-0.000005	1.51	0.0172	-0.00002	-0.000002	-0.000005	0.00013	0.0007	0.000093	0.0005	0.0162	-0.0001
22-Aug-11	98														
29-Aug-11	99	0.00034	0.9	-0.000005	1.49	0.0182	-0.00002	-0.000002	-0.000005	0.00013	-0.0005	0.000108	-0.0002	0.007	-0.0001
5-Sep-11	100														
12-Sep-11	101														
19-Sep-11	102														
26-Sep-11	103														
3-Oct-11	104														
10-Oct-11	105														
17-Oct-11	106														
24-Oct-11	107														
31-Oct-11	108														
7-Nov-11	109														
14-Nov-11	110														
21-Nov-11	111														
28-Nov-11	112														
5-Dec-11	113														
12-Dec-11	114														
19-Dec-11	115														
26-Dec-11	116														

Ion Balance		
Anions	Cations	Balance %
0.93	0.88	2.23% ICP-MS
0.95	0.77	10.33% ICP-MS
0.78	0.82	-2.53% ICP-MS
0.80	0.90	-5.42% ICP-MS
0.86	0.83	1.78% ICP-MS
0.80	0.83	-1.56% ICP-MS
0.85	0.88	-1.87% ICP-MS
0.76	0.81	-2.95% ICP-MS
0.82	0.84	-1.04% ICP-MS
0.74	0.81	-4.33% ICP-MS
0.76	0.79	-1.94% ICP-MS
1.05	0.96	4.79% ICP-MS
0.78	0.78	-0.14% ICP-MS
0.80	0.85	-3.05% ICP-MS

Note:  
 Continue with testing until  
[Sulphate \(by Colourimet](#)

Project Name: Mt. Polley

Cantest Project No: 2-21-910

HC-16; Sample ID: 480684 (Springer Samples)

Sampling Date	Week No.	Method:		pH Meter	EC Meter	ORP Meter	Turbidity	Titration using pH Meter & Calculation				Dissolved Metals by ICP-MS Method at Cantest																	
		Input	Output	(pH Units)	(µS/cm)	(mV)	Sulphate (mg/L)	Acidity (mg CaCO <sub>3</sub> /L) to pH 4.5	Total Alkalinity (mg CaCO <sub>3</sub> /L) to pH 8.3	Total Alkalinity (mg CaCO <sub>3</sub> /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)	Mn (mg/L)	Mo (mg/L)	Ni (mg/L)
		5	5	0.5	0.5	50	1	0.5	0.5	0.5	0.005	0.001	0.001	0.001	0.001	0.05	0.05	0.0002	0.05	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001
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	0.0027	0.017	-0.0002
19-Oct-09	2	500	490	8.82	144	150	31	#N/A	#N/A	33	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	0.0023	0.015	-0.0002
26-Oct-09	3	500	495	8.87	105	130	16	#N/A	#N/A	34	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	0.0026	0.0077	-0.001
2-Nov-09	4	500	490	8.70	90	125	7	#N/A	#N/A	37	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	0.0028	0.0068	-0.0002
16-Nov-09	6	500	475	8.68	73	135	5	#N/A	#N/A	34	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	0.0023	0.0059	-0.0002
23-Nov-09	7	500	490	8.60	76	130	2	#N/A	#N/A	35	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	0.0019	0.0056	-0.0002
30-Nov-09	8	500	465	8.56	87	130	3	#N/A	#N/A	38	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	0.0028	0.0056	-0.0002
7-Dec-09	9	500	495	8.59	74	125	3	#N/A	#N/A	35	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	0.0011	0.0055	-0.0002
14-Dec-09	10	500	485	8.61	73	125	-1	#N/A	#N/A	33	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	0.0013	0.0053	-0.0002
21-Dec-09	11	500	490	8.63	73	130	3	#N/A	#N/A	32	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	0.002	0.0055	-0.0002
28-Dec-09	12	500	485	8.54	74	125	3	#N/A	#N/A	32	0.125	0.00005	0.0027	0.0065	-0.00001	-0.00005	-0.05	0.000011	8.95	-0.0002	-0.0001	0.0029	0.02	0.00008	0.0008	0.99	0.0013	0.0054	-0.0002
4-Jan-10	13	500	490	8.57	74	115	3	#N/A	#N/A	33	0.151	-0.0002	0.0024	0.0073	-0.00001	-0.00005	-0.05	0.00002	9.39	-0.0001	-0.00005	0.0022	0.023	-0.00005	0.0005	1.13	0.0008	0.0052	-0.0002
11-Jan-10	14	500	485	8.46	69	145	4	#N/A	#N/A	32	0.134	0.00005	0.0016	0.0069	-0.00001	-0.00005	-0.05	0.000014	9.87	-0.0001	-0.00007	0.0023	0.01	0.00007	0.0007	1.15	0.0013	0.0053	-0.0002
18-Jan-10	15	500	475	8.53	72	125	4	#N/A	#N/A	31	0.135	0.00004	0.0015	0.0071	-0.00001	-0.00005	-0.05	0.000011	9.86	-0.0001	-0.00006	0.0024	0.01	0.00007	0.0007	1	0.0014	0.0059	-0.0002
25-Jan-10	16	500	490	8.46	74	135	4	#N/A	#N/A	32	0.143	0.00004	0.0016	0.0072	-0.00001	-0.00005	-0.05	0.000016	9.88	-0.0001	-0.00007	0.0024	0.01	0.00008	0.0008	1.13	0.0011	0.0055	-0.0002
1-Feb-10	17	500	490	8.35	71	145	4	#N/A	#N/A	31	0.145	0.00004	0.0016	0.0073	-0.00001	-0.00005	-0.05	0.000014	9.89	-0.0001	-0.00008	0.0024	0.01	0.00008	0.0008	1.13	0.0011	0.0055	-0.0002
8-Feb-10	18	500	485	8.35	72	145	4	#N/A	#N/A	31	0.159	0.00004	0.0017	0.007	-0.00001	-0.00005	-0.05	0.000014	9.92	-0.0001	-0.00009	0.0025	0.021	0.00009	0.0006	1.04	0.00114	0.00451	-0.0002
15-Feb-10	19	500	490	8.47	70	150	4	#N/A	#N/A	32	0.162	0.00004	0.0015	0.0075	-0.00001	-0.00005	-0.05	0.000012	9.93	-0.0001	-0.00009	0.0026	0.02	0.00007	0.0007	1.15	0.0013	0.0053	-0.0002
22-Feb-10	20	500	470	8.46	76	165	4	#N/A	#N/A	32	0.173	0.00004	0.0016	0.0076	-0.00001	-0.00005	-0.05	0.000014	9.94	-0.0001	-0.00009	0.0027	0.02	0.00008	0.0008	1.13	0.0013	0.0053	-0.0002
1-Mar-10	21	500	470	8.40	74	150	5	#N/A	#N/A	33	0.175	0.00004	0.0016	0.0077	-0.00001	-0.00005	-0.05	0.000012	9.95	-0.0001	-0.00009	0.0028	0.02	0.00009	0.0008	1.13	0.0013	0.0053	-0.0002
8-Mar-10	22	500	495	8.48	68	180	4	#N/A	#N/A	30	0.177	0.00004	0.0016	0.0078	-0.00001	-0.00005	-0.05	0.000013	9.96	-0.0001	-0.00009	0.0029	0.02	0.00008	0.0008	1.13	0.0013	0.0053	-0.0002
15-Mar-10	23	500	495	8.59	64	175	3	#N/A	#N/A	29	0.179	0.00004	0.0016	0.0079	-0.00001	-0.00005	-0.05	0.000014	9.97	-0.0001	-0.00009	0.0030	0.02	0.00008	0.0008	0.99	0.0013	0.0054	-0.0002
22-Mar-10	24	500	495	8.50	65	170	1	#N/A	#N/A	29	0.181	0.00004	0.0016	0.0080	-0.00001	-0.00005	-0.05	0.000015	9.98	-0.0001	-0.00009	0.0031	0.02	0.00008	0.0008	1.13	0.0013	0.0053	-0.0002
29-Mar-10	25	500	480	8.53	66	155	3	#N/A	#N/A	30	0.183	0.00004	0.0016	0.0081	-0.00001	-0.00005	-0.05	0.000016	9.99	-0.0001	-0.00009	0.0032	0.02	0.00008	0.0008	1.13	0.0013	0.0053	-0.0002
5-Apr-10	26	500	490	8.54	64	160	3	#N/A	#N/A	30	0.185	0.00004	0.0016	0.0082	-0.00001	-0.00005	-0.05	0.000017	9.99	-0.0001	-0.00009	0.0033	0.02	0.00008	0.0008	1.13	0.0013	0.0053	-0.0002
12-Apr-10	27	500	495	8.39	64	160	3	#N/A	#N/A	31	0.187	0.00004	0.0016	0.0083	-0.00001	-0.00005	-0.05	0.000018	9.99	-0.0001	-0.00009	0.0034	0.02	0.00008	0.0008	1.13	0.0013	0.0053	-0.0002
19-Apr-10	28	500	500	8.41	64	180	2	#N/A	#N/A	30	0.189	0.00004	0.0016	0.0084	-0.00001	-0.00005	-0.05	0.000019	9.99	-0.0001	-0.00009	0.0035	0.02	0.00008	0.0008	1.13	0.0013	0.0053	-0.0002
26-Apr-10	29	500	495	8.36	53	160	2	#N/A	#N/A	28	0.191	0.00004	0.0016	0.0085	-0.00001	-0.00005	-0.05	0.000020	9.99	-0.0001	-0.00009	0.0036	0.02	0.00008	0.0008	1.13	0.0013	0.0053	-0.0002
13-Aug-10	30	500	485	8.32	59	160	3	#N/A	#N/A	29	0.193	0.00004	0.0016	0.0086	-0.00001	-0.00005	-0.05	0.000021	9.99	-0.0001	-0.00009	0.0037	0.02	0.00008	0.0008	1.13	0.0013	0.0053	-0.0002
30-Aug-10	31	500	485	8.40	57	165	2	#N/A	#N/A	28	0.195	0.00004	0.0016	0.0087	-0.00001	-0.00005	-0.05	0.000022	9.99	-0.0001	-0.00009	0.0038	0.02	0.00008	0.0008	1.13	0.0013	0.0053	-0.0002
6-Sep-10	32	500	495	8.33	62	160	4	#N/A	#N/A	29	0.197	0.00004	0.0016	0.0088	-0.00001	-0.00005	-0.05	0.000023	9.99	-0.0001	-0.00009	0.0039	0.02	0.00008	0.0008	1.13	0.0013	0.0053	-0.0002
13-Sep-10	33	500	500	8.31	51	160	1	#N/A	#N/A	27	0.199	0.00004	0.0016	0.0089	-0.00001	-0.00005	-0.05	0.000024	9.99	-0.0001	-0.00009	0.0040	0.02	0.00008	0.0008	1.13	0.0013	0.0053	-0.0002
20-Sep-10	34	500	485	8.35	57	165	2</																						

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

Sampling Date	Week No.	Method:		pH Meter	EC Meter	ORP Meter	Turbidity	Titration using pH Meter & Calculation				Dissolved Metals by ICP-MS Method at Cantest																		
		Input	Output	(pH Units)	(µS/cm)	(mV)	Sulphate (mg/L)	Acidity (mg CaCO <sub>3</sub> /L) to pH 4.5	Total Alkalinity (mg CaCO <sub>3</sub> /L) to pH 8.3	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)	Mn (mg/L)	Mo (mg/L)	Ni (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	0.05	0.001	0.001	0.05	0.001	0.001	0.05	0.0005	0.001
21-Feb-11	72	500	490	8.12	69	170	-1	#N/A	-1	29																				
26-Feb-11	73	500	490	8.17	69	160	2	#N/A	-1	29	0.148	0.00002	0.0012	0.0058	-0.00001	-0.000005	-0.05	0.000018	9.89	-0.0001	0.00008	0.0008	0.005	0.000054	0.0005	1.04	0.00031	0.0064	0.00005	
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	0.0053	-0.00001	-0.000005	-0.05	0.000022	8.96	-0.0001	-0.00005	0.0006	0.002	0.000025	0.0005	0.93	0.00014	0.00523	-0.00002	
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	0.0055	-0.00001	-0.000005	-0.05	0.000013	8.95	-0.0001	0.000026	0.0008	0.004	0.000038	-0.0005	0.87	0.00085	0.00489	0.00005	
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	0.001	0.005	-0.00001	-0.000005	-0.05	0.000009	8.91	-0.0001	-0.00005	0.0005	0.002	0.000018	-0.0005	0.88	0.00019	0.00475	-0.00002	
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	0.0009	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	0.0002	0.00553	0.00005	
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	0.0009	0.0046	-0.00001	-0.000005	-0.05	0.000015	8.29	-0.0001	0.000008	0.0005	0.003	0.000025	-0.0005	0.84	0.00018	0.00486	0.00005	
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	0.001	0.0047	-0.00001	-0.000005	-0.05	-0.000005	8.55	-0.0001	0.000038	0.0006	0.002	0.000019	-0.0005	0.84	0.00132	0.00506	0.00006	
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	0.001	0.0044	-0.00001	-0.000005	-0.05	0.000013	8.3	-0.0001	0.000021	0.0005	0.001	0.000024	-0.0005	0.8	0.00015	0.00487	0.00003	
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	0.0008	0.005	-0.00001	-0.000005	-0.05	0.000008	9	-0.0001	0.00003	0.0005	0.003	0.000023	-0.0005	0.81	0.00116	0.00483	0.00006	
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	0.0008	0.0044	-0.00001	-0.000005	-0.05	0.000006	8.54	-0.0001	-0.000005	0.0005	0.002	0.000026	-0.0005	0.75	0.00017	0.00462	-0.00002	
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	0.0008	0.0047	-0.00001	-0.000005	-0.05	0.000013	7.74	-0.0001	0.000047	0.0005	-0.001	0.000013	-0.0005	0.67	0.00155	0.00359	-0.00002	
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	0.0008	0.0049	-0.00001	-0.000005	-0.05	0.000008	8.54	-0.0001	0.000042	0.0006	0.001	0.000007	-0.0005	0.77	0.00161	0.00499	0.00004	
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	0.0008	0.005	-0.00001	-0.000005	-0.05	0.00001	8.58	0.0001	0.000023	0.0022	0.004	0.000029	-0.0005	0.73	0.00413	0.00408	0.00054	
22-Aug-11	98	500	485	8.19	59	185	1	-1	2	54																				
29-Aug-11	99	500	470	8.26	58	160	3	-1	-1	24																				
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	1.59	-0.5	-1	25																			

**Note:**

Continue with testing until further notice from Ron Martel at Mt. Polley.

Sulphate (by Colorimetry), Acidity & Alkalinity (by PC Titrator) is now done by water lab at Maxxam from 21-Mar-11.

Project Name: Mt. Po  
 Cantest Project No: 2  
 HC-16; Sample ID: 48

Method:																	
Sampling Date	Week No.	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)
Detection Limits		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	1	-0.015	0.59	0.0058	2.84	-0.0004	15.8	0.107	-0.0002	-0.00002	-0.0001	-0.0001	0.0019	0.0001	0.0023	-0.001	-0.0001
19-Oct-09	2																
26-Oct-09	3	-0.015	0.28	0.0014	4.47	-0.0004	13.5	0.064	-0.0002	-0.00002	-0.00005	-0.0001	0.0016	0.0001	0.004	-0.001	-0.0001
2-Nov-09	4																
9-Nov-09	5	-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
16-Nov-09	6																
23-Nov-09	7	-0.015	0.22	0.0021	3.84	-0.0004	6.18	0.054	-0.0002	-0.00002	-0.00005	-0.0001	0.0017	0.00024	0.0045	-0.001	-0.0001
30-Nov-09	8																
7-Dec-09	9	-0.015	0.15	0.0015	3.89	-0.0004	5.36	0.052	-0.0002	-0.00002	-0.00005	-0.0001	0.0018	0.00018	0.0034	-0.001	-0.0001
14-Dec-09	10																
21-Dec-09	11	-0.015	0.17	0.0017	3.82	-0.0004	4.77	0.054	-0.0002	-0.00002	-0.00005	-0.0001	0.0014	0.00019	0.0029	-0.001	-0.0001
28-Dec-09	12																
4-Jan-10	13	-0.015	0.14	0.0013	3.84	-0.0004	4.56	0.051	-0.0002	-0.00002	-0.00005	-0.0001	0.0011	0.00019	0.0029	-0.001	-0.0001
11-Jan-10	14																
18-Jan-10	15	-0.015	0.13	0.0015	3.66	-0.0004	3.8	0.053	-0.0002	-0.00002	-0.00005	-0.0001	0.0014	0.00015	0.0023	-0.001	-0.0001
25-Jan-10	16																
1-Feb-10	17	-0.015	0.13	0.001	3.56	-0.0004	3.64	0.053	-0.0002	-0.00002	-0.00005	-0.0001	0.001	0.00014	0.0021	-0.001	-0.0001
8-Feb-10	18																
15-Feb-10	19	-0.015	0.13	0.0013	3.73	-0.0004	3.5	0.0564	-0.0002	-0.00002	-0.00005	-0.0001	0.0013	0.0001	0.002	-0.001	-0.0001
22-Feb-10	20																
1-Mar-10	21	-0.015	0.13	0.001	3.81	-0.0004	2.77	0.062	-0.0002	-0.00002	-0.00005	-0.0001	0.0018	0.00016	0.0022	-0.001	-0.0001
8-Mar-10	22																
15-Mar-10	23	-0.015	0.12	0.0011	3.65	-0.0004	2.82	0.052	-0.0002	-0.00002	-0.00005	-0.0001	0.0019	0.00012	0.0019	-0.001	-0.0001
22-Mar-10	24																
29-Mar-10	25	-0.015	0.11	0.0007	3.2	-0.0004	2.37	0.05	-0.0002	-0.00002	-0.00005	-0.0001	0.0009	0.00011	0.0015	-0.001	-0.0001
5-Apr-10	26																
12-Apr-10	27	-0.002	0.12	0.0008	4.19	-0.00005	2.46	0.051	-0.00002	-0.00002	-0.00005	-0.00001	0.0011	0.0001	0.0002	-0.0001	-0.0001
19-Apr-10	28																
26-Apr-10	29	0.003	0.11	0.00074	3.7	-0.00005	2.15	0.0505	-0.00002	-0.00002	-0.00005	-0.00001	0.0014	0.000117	0.0017	0.0004	-0.0001
3-May-10	30																
10-May-10	31	0.004	0.11	0.00075	3.6	-0.00005	1.92	0.0494	-0.00002	-0.00002	-0.00005	-0.00001	0.0011	0.000112	0.0015	0.0006	-0.0001
17-May-10	32																
24-May-10	33	0.004	0.09	0.0005	3.5	-0.00005	1.86	0.0526	-0.00002	-0.00002	-0.00005	-0.00001	0.0014	0.000115	0.0012	0.0006	-0.0001
31-May-10	34																
7-Jun-10	35	0.005	0.1	0.00064	3.5	-0.00009	1.84	0.05	-0.00002	-0.00002	-0.00005	-0.00001	0.0015	0.000116	0.0014	0.0013	-0.0001
14-Jun-10	36																
21-Jun-10	37	-0.002	0.23	0.00068	3.5	-0.00005	1.96	0.0512	-0.00002	-0.00002	-0.00005	0.0002	0.002	0.000119	0.0014	-0.0001	-0.0001
28-Jun-10	38																
5-Jul-10	39	0.004	0.13	0.00057	3.7	-0.00005	1.79	0.0533	-0.00002	-0.00002	-0.00005	-0.00001	0.0022	0.000103	0.0014	0.0005	-0.0001
12-Jul-10	40																
19-Jul-10	41	0.002	0.11	0.0005	3.5	-0.00009	1.66	0.0476	-0.00002	-0.00002	-0.00005	-0.00001	0.0021	0.00009	0.0012	0.0005	-0.0001
26-Jul-10	42																
2-Aug-10	43	0.006	0.05	0.0005	3.2	-0.00005	1.62	0.0471	-0.00002	-0.00002	-0.00005	-0.00001	0.0013	0.000077	0.001	0.0005	-0.0001
9-Aug-10	44																
16-Aug-10	45	0.003	0.11	0.00048	3.3	-0.00006	1.62	0.0508	-0.00002	-0.00002	-0.00005	-0.00001	0.0012	0.000085	0.0009	0.0003	-0.0001
23-Aug-10	46																
30-Aug-10	47	0.004	0.11	0.00045	3.2	-0.00001	1.45	0.0473	-0.00002	-0.00002	-0.00005	0.00001	0.0011	0.000079	0.0011	0.0003	-0.0001
6-Sep-10	48																
13-Sep-10	49	0.004	0.1	0.00044	3.1	-0.00005	1.36	0.0435	-0.00002	-0.00002	-0.00005	0.00004	0.0011	0.000056	0.0007	0.0003	-0.0001
20-Sep-10	50																
27-Sep-10	51	0.002	0.1	0.00039	2.9	-0.00009	1.33	0.0438	-0.00002	-0.00002	-0.00005	0.00003	0.001	0.000073	0.0011	0.0007	-0.0001
4-Oct-10	52																
11-Oct-10	53	0.007	0.08	0.00036	2.4	-0.00008	1.16	0.0453	-0.00002	-0.00002	-0.00005	0.00008	0.0007	0.000079	0.0008	0.0022	-0.0001
18-Oct-10	54																
25-Oct-10	55	0.009	0.08	0.00035	2.8	-0.00005	1.22	0.0457	-0.00002	-0.00002	-0.00005	0.00004	-0.0005	0.000075	0.0007	0.0035	-0.0001
1-Nov-10	56																
8-Nov-10	57	0.013	0.08	0.00037	2.8	-0.00009	1.26	0.0463	-0.00002	-0.00002	-0.00005	0.00002	-0.0005	0.000071	0.0008	0.0006	-0.0001
15-Nov-10	58																
22-Nov-10	59	0.012	0.09	0.00034	3	-0.00001	1.34	0.0511	-0.00002	-0.00002	-0.00005	0.00002	0.0005	0.000081	0.0009	0.0008	-0.0001
29-Nov-10	60																
6-Dec-10	61	0.01	0.09	0.00033	2.6	-0.00006	1.31	0.0508	-0.00002	-0.00002	-0.00005	0.00003	0.0028	0.000077	0.0011	0.0032	-0.0001
13-Dec-10	62																
20-Dec-10	63	0.006	0.09	0.00033	2.9	-0.00009	1.32	0.0529	-0.00002	-0.00002	-0.00005	0.00002	-0.0005	0.000077	0.0013	0.0008	-0.0001
27-Dec-10	64																
3-Jan-11	65	-0.002	0.08	0.0005	2.4	-0.00001	1.26	0.049	-0.00002	-0.00004	-0.00005	0.00003	0.0016	0.000096	0.0009	0.0006	-0.0001
10-Jan-11	66																
17-Jan-11	67	0.01	0.09	0.0003	2.5	-0.00001	1.21	0.0457	-0.00002	-0.00002	-0.00005	0.00003	-0.0005	0.000066	0.0011	0.0014	-0.0001
24-Jan-11	68																
31-Jan-11	69	0.013	0.09	0.00034	2.2	-0.00001	1.24	0.0447	-0.00002	-0.00002	-0.00005	0.00003	0.0011	0.000068	0.001	0.0008	-0.0001
7-Feb-11	70																
14-Feb-11	71	0.008	0.08	0.00031	3.2	-0.00006	1.22	0.0505	-0.00002	-0.00002	-0.00005	0.00002	-0.0005	0.000068	0.001	0.0012	-0.0001

Ion Balance		
Anions	Cations	Balance %
1.33	1.36	-0.91% ICP-MS
1.01	1.11	-4.36% ICP-MS
0.80	0.88	-4.78% ICP-MS
0.74	0.75	

Project Name: Mt. Po  
 Cantest Project No: 2  
 HC-16; Sample ID: 48

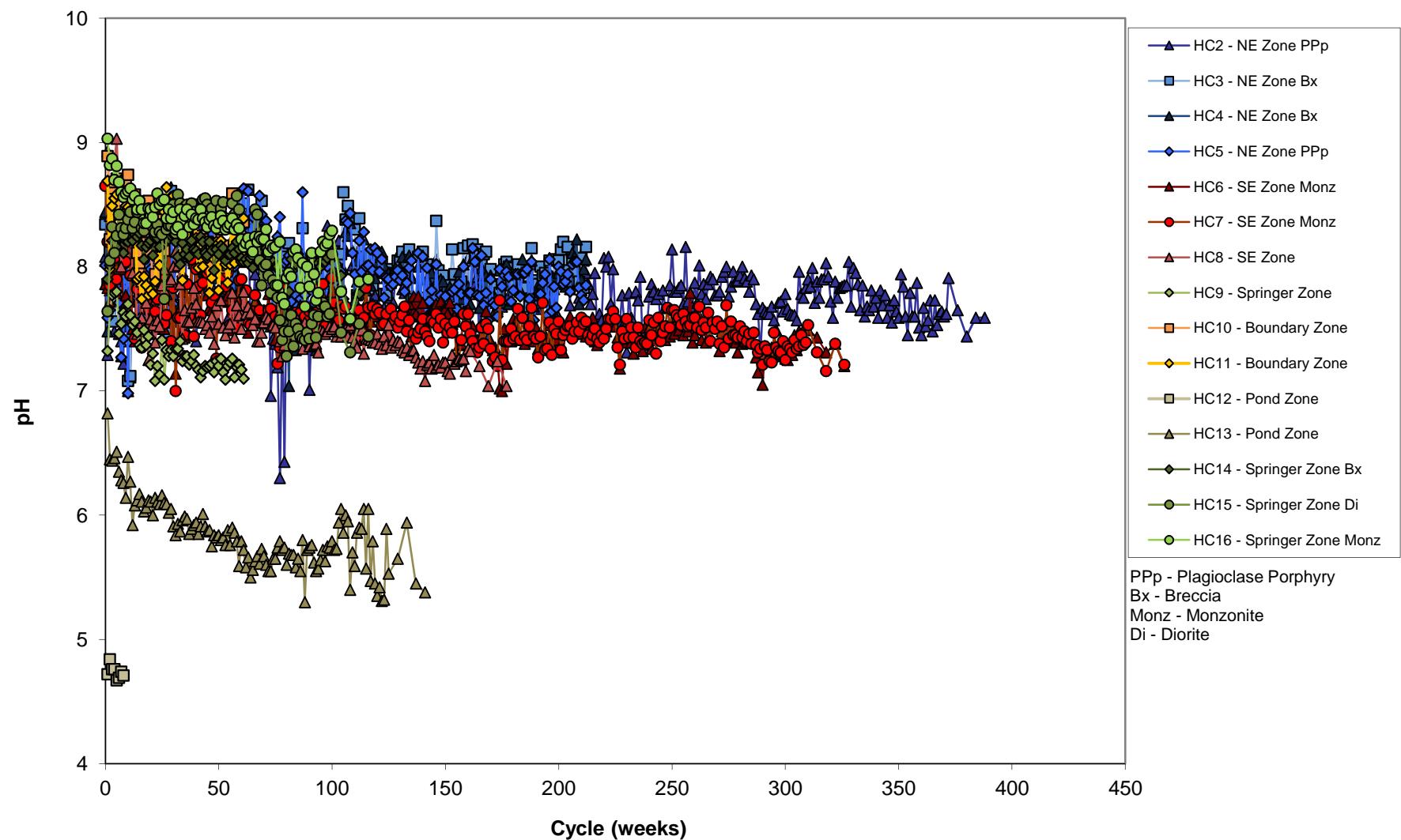
Method:																	
Sampling Date	Week No.	P (mg/L)	K (mg/L)	Se (mg/L)	Si (mg/L)	Ag (mg/L)	Na (mg/L)	Sr (mg/L)	Te (mg/L)	Tl (mg/L)	Th (mg/L)	Sn (mg/L)	Ti (mg/L)	U (mg/L)	V (mg/L)	Zn (mg/L)	Zr (mg/L)
Detection Limits		0.15	0.1	0.001	0.25	0.00025	0.05	0.001	0.001	0.0001	0.0005	0.001	0.001	0.0005	0.001	0.005	0.01
21-Feb-11	72																
26-Feb-11	73	0.017	0.1	0.00038	3.1	0.00006	1.39	0.0519	-0.00002	-0.000002	-0.000005	0.00001	-0.0005	0.000071	0.001	0.0013	-0.0001
7-Mar-11	74																
14-Mar-11	75	0.019	0.08	0.00034	2.8	-0.00005	1.27	0.0482	-0.00002	-0.000002	-0.000005	-0.00001	-0.0005	0.000065	0.0009	0.0008	-0.0001
<b>21-Mar-11</b>	<b>76</b>																
28-Mar-11	77	0.016	0.1	0.0003	3.1	-0.00005	1.18	0.0441	-0.00002	-0.000002	-0.000005	-0.00001	-0.0005	0.000059	0.0007	0.0032	-0.0001
4-Apr-11	78																
11-Apr-11	79	0.015	0.09	0.00028	2.7	-0.00005	1.23	0.0458	-0.00002	-0.000002	-0.000005	-0.00001	-0.0005	0.00005	0.0007	0.0019	-0.0001
18-Apr-11	80																
25-Apr-11	81	0.013	0.08	0.0003	2.7	-0.00005	1.18	0.044	-0.00002	-0.000002	-0.000005	0.00003	-0.0005	0.000054	0.0008	0.0044	-0.0001
2-May-11	82																
9-May-11	83	0.013	0.08	0.00026	2.6	-0.00005	1.12	0.0444	-0.00002	-0.000002	-0.000005	0.00002	-0.0005	0.000044	0.0007	0.0037	-0.0001
16-May-11	84																
23-May-11	85	0.008	0.08	0.00025	2.6	-0.00005	1.14	0.0434	-0.00002	-0.000002	-0.000005	0.00001	-0.0005	0.000054	0.0008	0.0041	-0.0001
30-May-11	86																
6-Jun-11	87	0.018	0.08	0.00026	2.6	0.00005	1.11	0.0444	-0.00002	-0.000002	-0.000005	0.00002	-0.0005	0.000072	0.0008	0.0042	-0.0001
13-Jun-11	88																
20-Jun-11	89	0.015	0.08	0.00024	2.6	-0.00005	1.13	0.0432	0.00002	-0.000002	-0.000005	0.00001	-0.0005	0.000043	0.0006	0.0047	-0.0001
27-Jun-11	90																
4-Jul-11	91	0.011	0.08	0.00023	2.5	0.00005	1.05	0.0414	-0.00002	-0.000002	-0.000005	0.00003	-0.0005	0.000043	0.0007	0.0048	-0.0001
11-Jul-11	92																
18-Jul-11	93	0.002	0.08	0.00025	2.3	-0.00005	0.92	0.0426	-0.00002	-0.000002	-0.000005	0.00001	-0.0005	0.000039	0.0005	0.0052	-0.0001
25-Jul-11	94																
1-Aug-11	95	0.021	0.08	0.00022	2.4	-0.00005	1.12	0.0446	-0.00002	-0.000002	-0.000005	0.00001	-0.0005	0.000045	0.0006	0.0031	-0.0001
8-Aug-11	96																
15-Aug-11	97	0.016	0.09	0.00023	2.3	-0.00005	1.12	0.0408	-0.00002	-0.000002	-0.000005	0.00002	0.0008	0.000043	0.0008	0.0096	-0.0001
22-Aug-11	98																
29-Aug-11	99	0.008	0.08	0.00016	2.2	-0.00005	1.02	0.0419	-0.00002	-0.000002	-0.000005	0.00002	-0.0005	0.000041	0.0003	0.0069	-0.0001
5-Sep-11	100																
12-Sep-11	101																
19-Sep-11	102																
26-Sep-11	103																
3-Oct-11	104																
10-Oct-11	105																
17-Oct-11	106																
24-Oct-11	107																
31-Oct-11	108																
7-Nov-11	109																
14-Nov-11	110																
21-Nov-11	111																
28-Nov-11	112																
5-Dec-11	113																
12-Dec-11	114																
19-Dec-11	115																
26-Dec-11	116																

Ion Balance		
Anions	Cations	Balance %
0.62	0.65	-2.24% ICP-MS
0.64	0.59	4.38% ICP-MS
0.57	0.58	-0.94% ICP-MS
0.59	0.58	1.03% ICP-MS
0.54	0.58	-3.57% ICP-MS
0.59	0.54	4.46% ICP-MS
0.59	0.55	2.71% ICP-MS
0.57	0.54	3.06% ICP-MS
0.50	0.58	-7.09% ICP-MS
0.50	0.54	-4.09% ICP-MS
0.52	0.49	2.80% ICP-MS
0.53	0.55	-2.36% ICP-MS
0.53	0.55	-1.58% ICP-MS
0.55	0.54	0.71% ICP-MS

Note:  
 Continue with testing until  
[Sulphate \(by Colourimet](#)

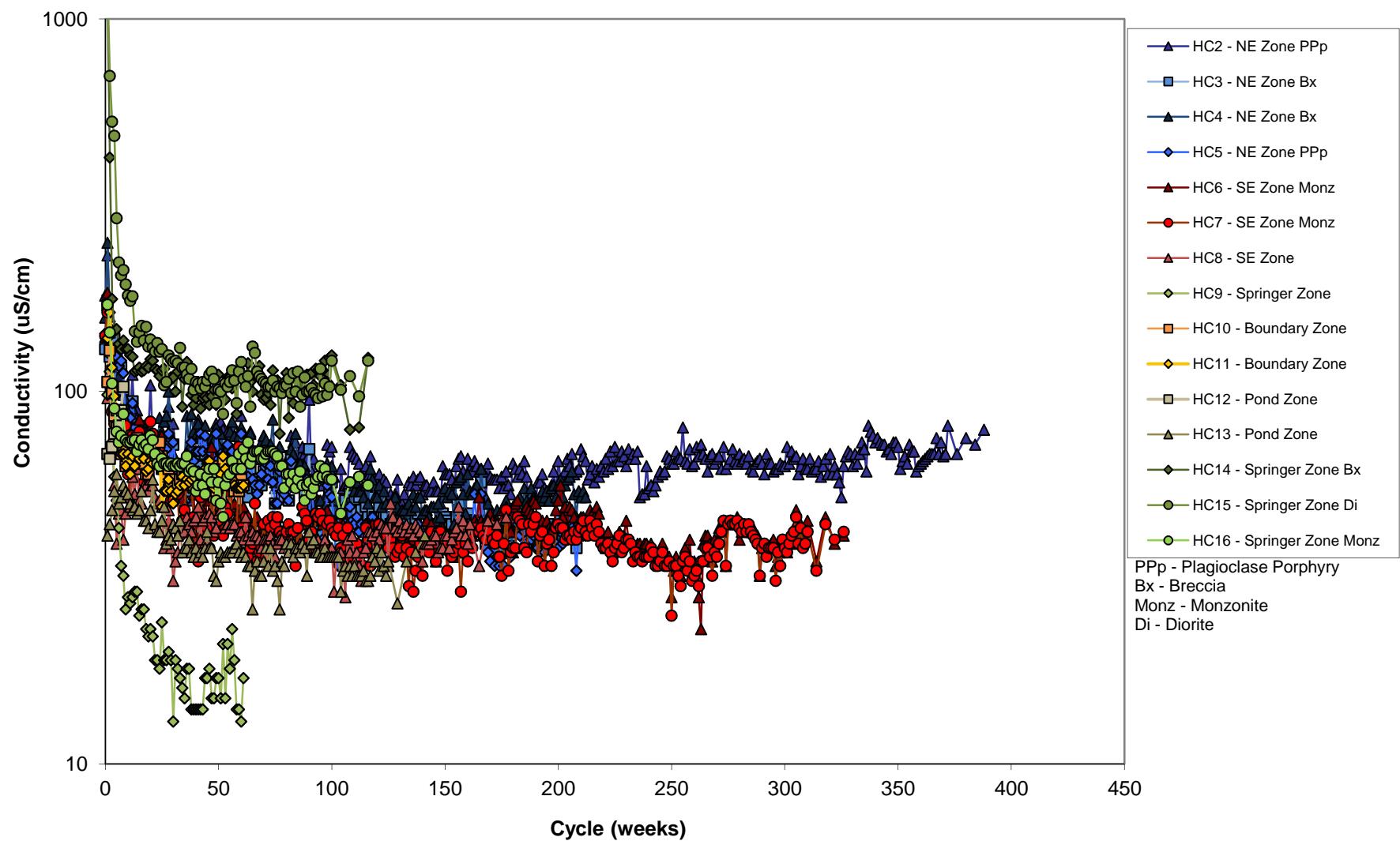
**Attachment B: Humidity Cell Loadings Graphs**

## Mount Polley Humidity Cells



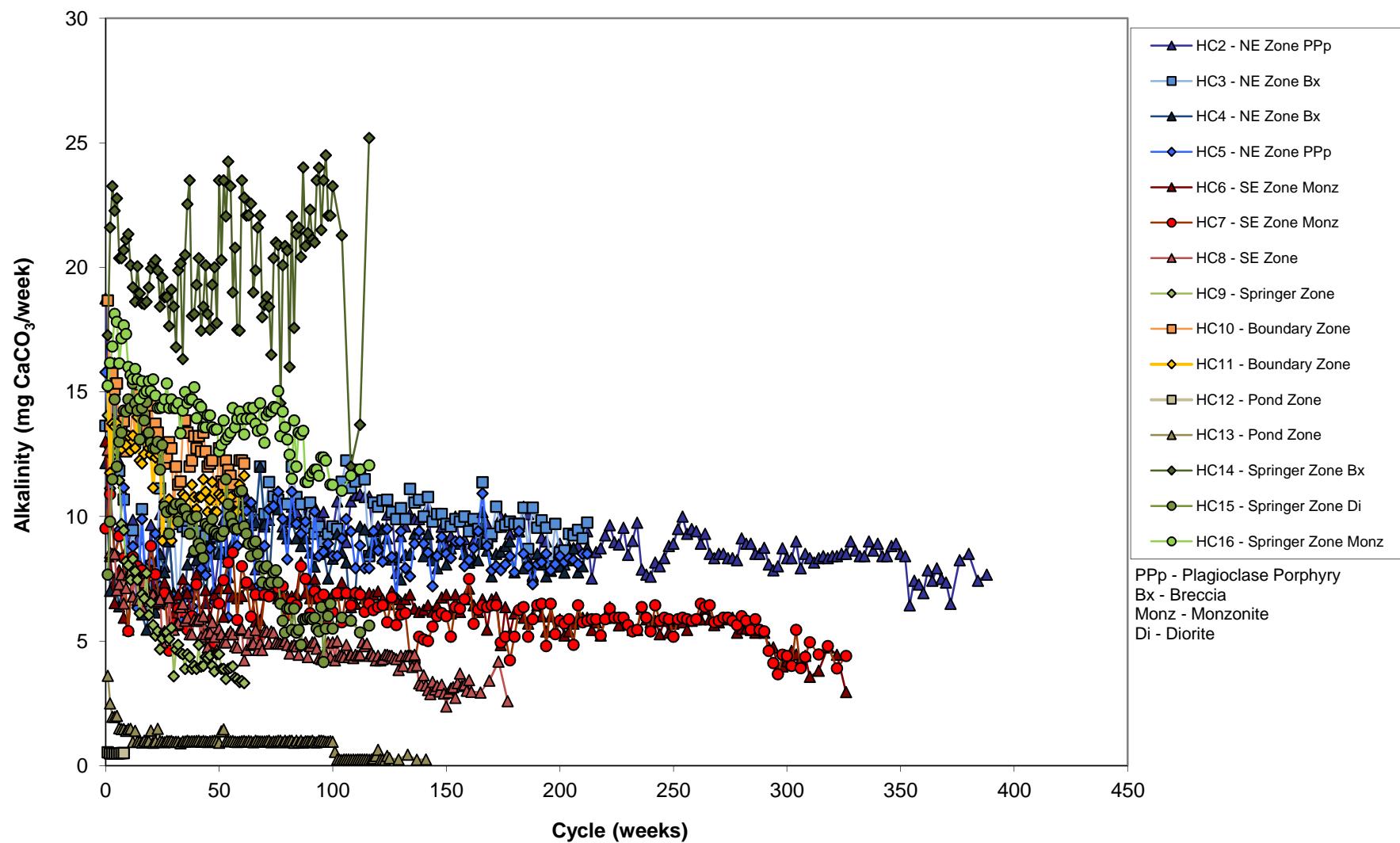
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## Mount Polley Humidity Cells



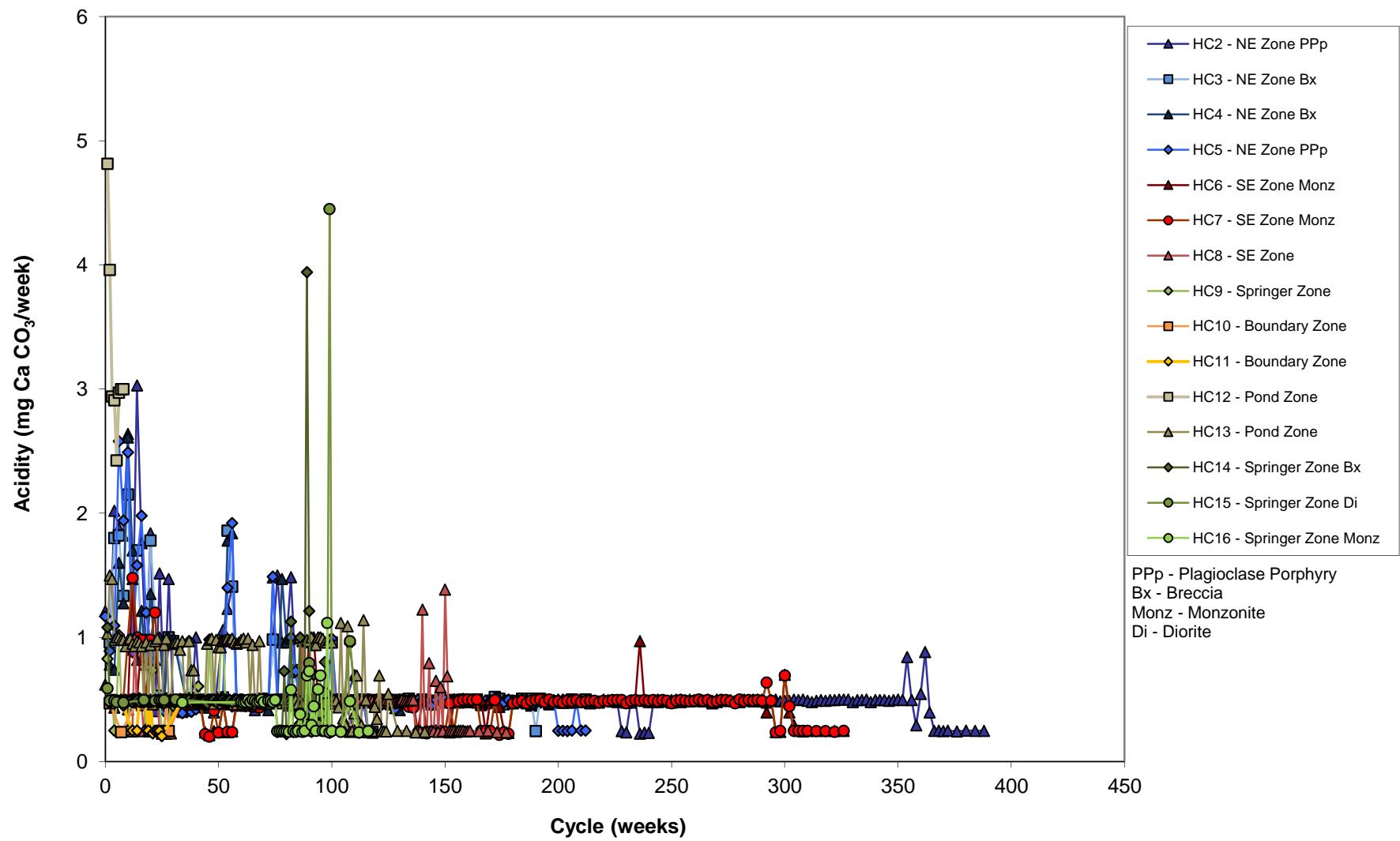
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### Mount Polley Humidity Cells



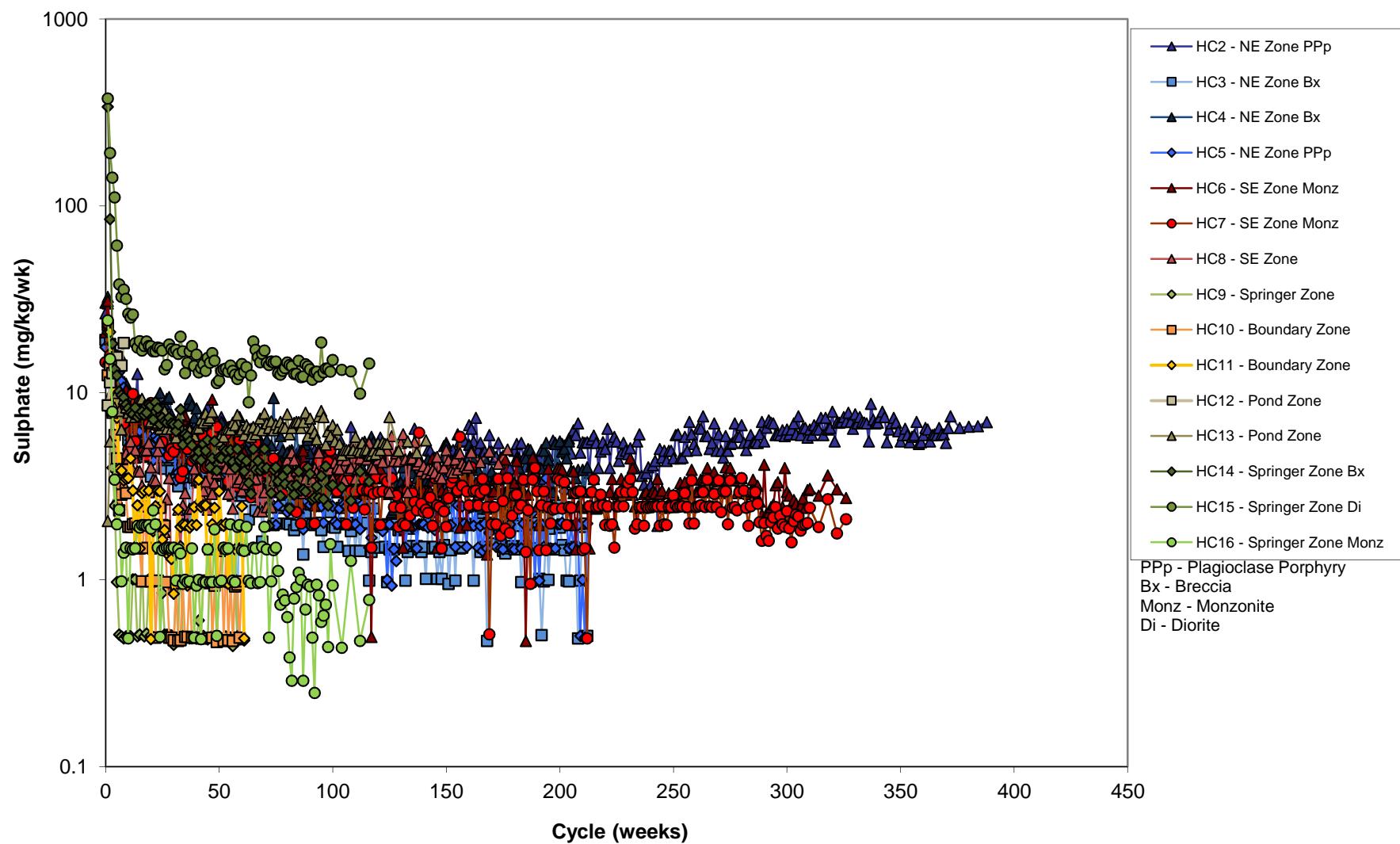
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### Mount Polley Humidity Cells



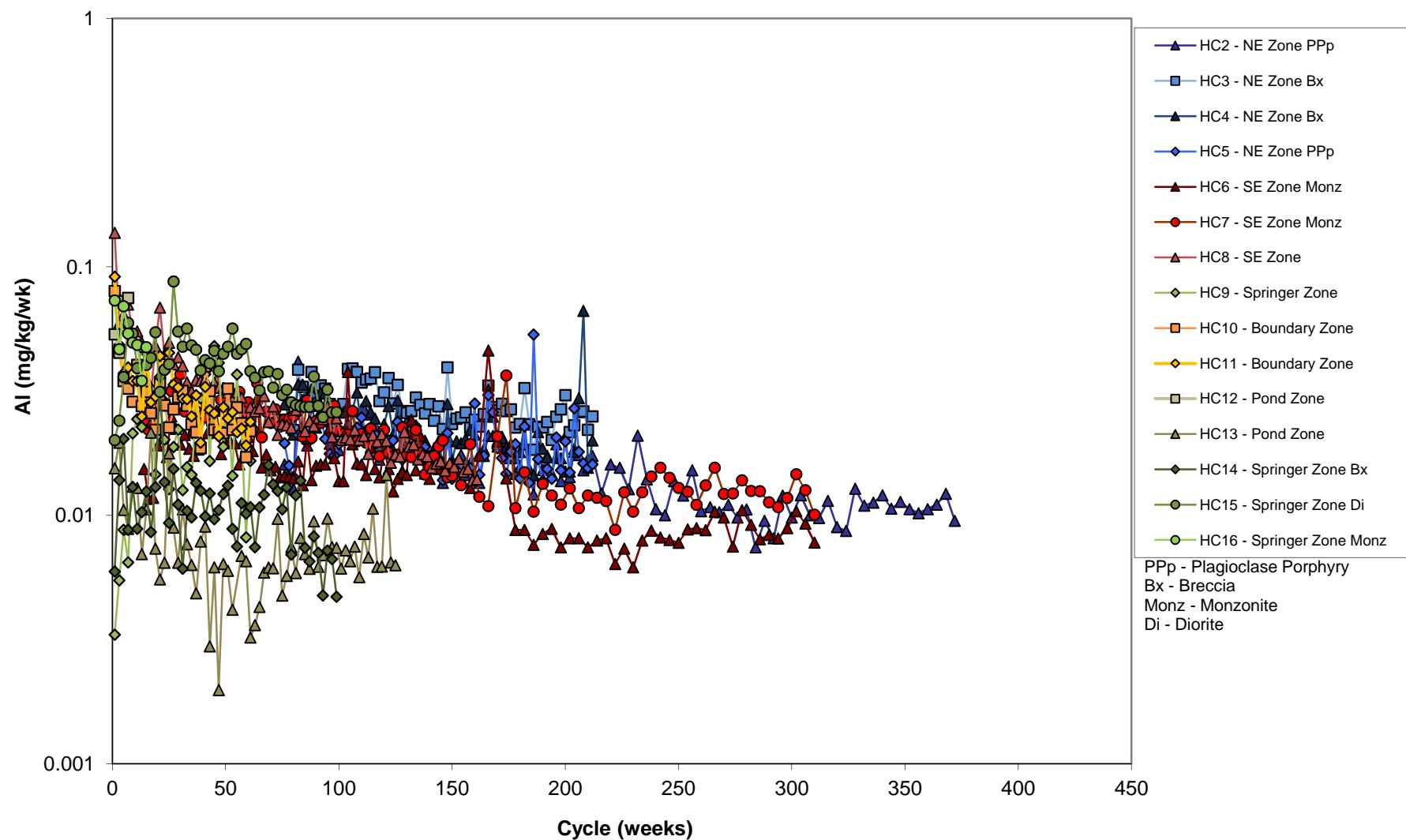
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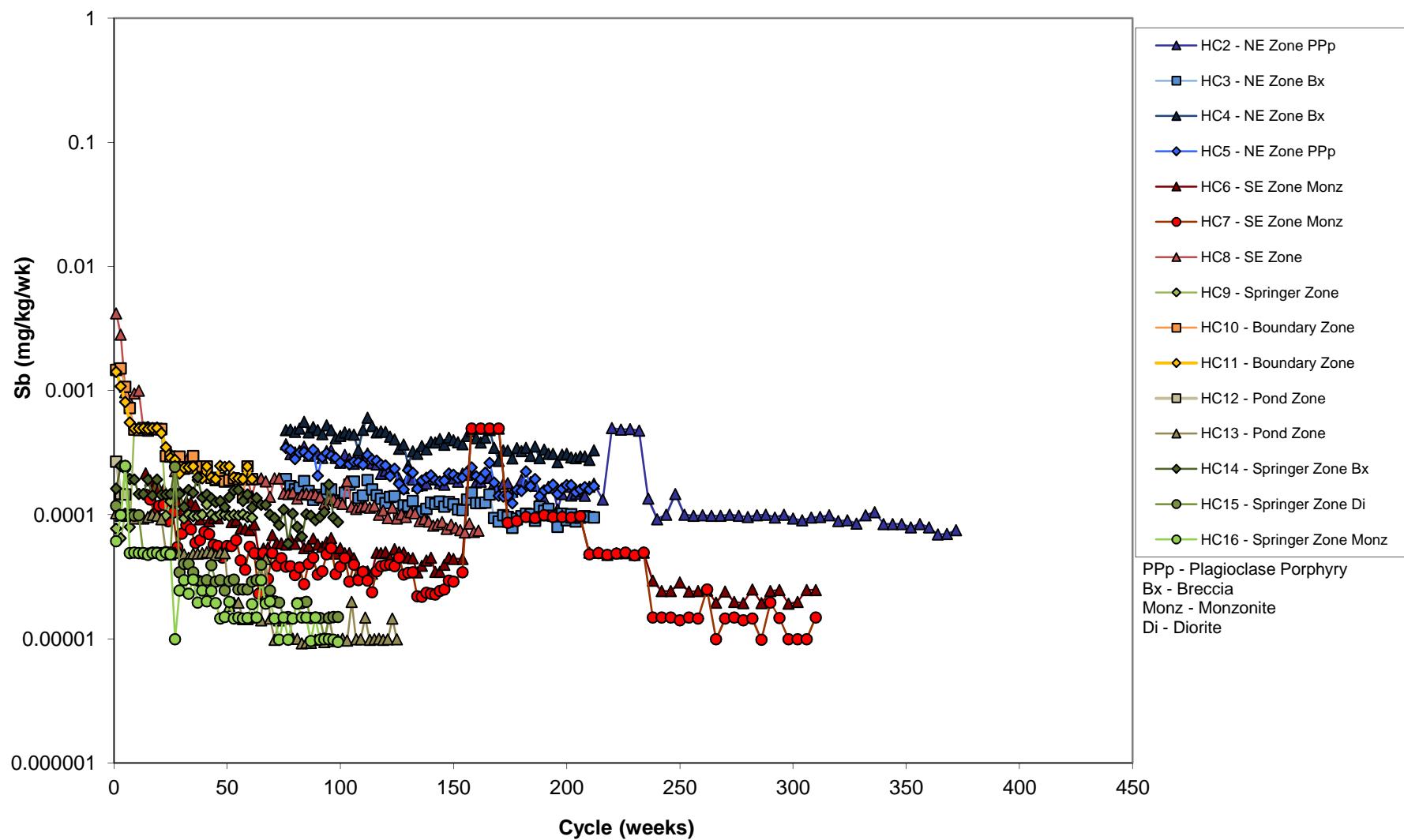
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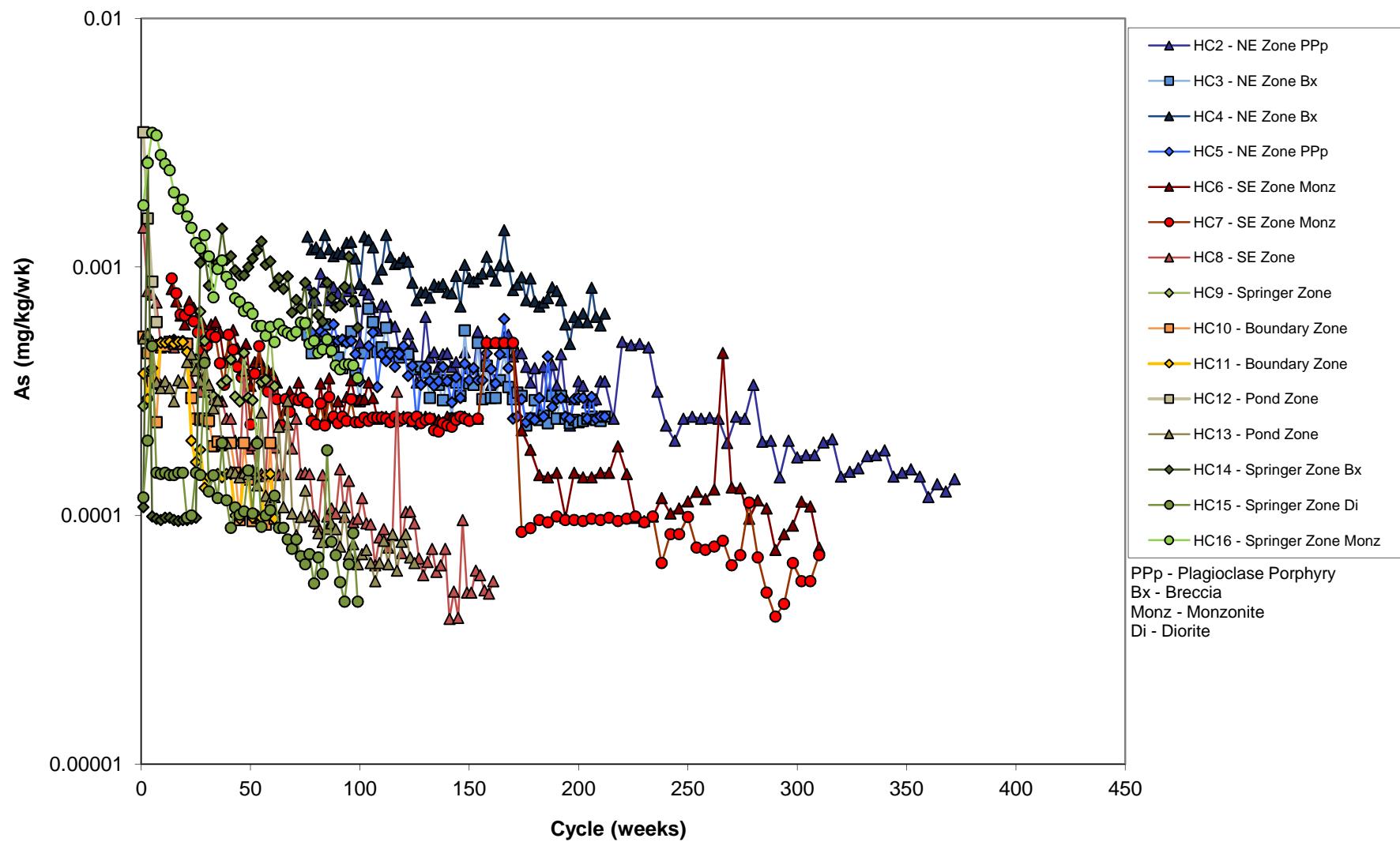
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### Mount Polley Humidity Cells



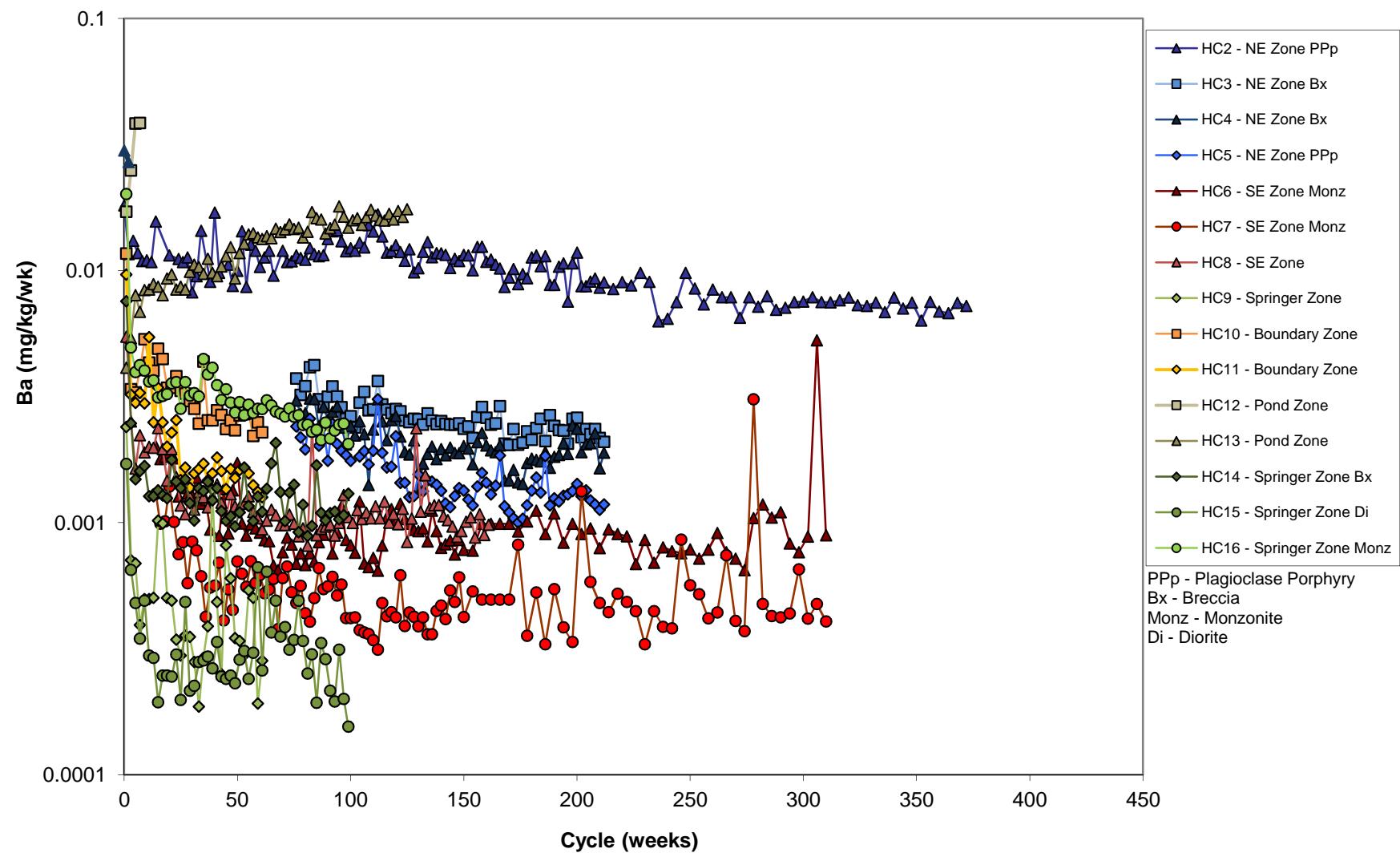
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### Mount Polley Humidity Cells



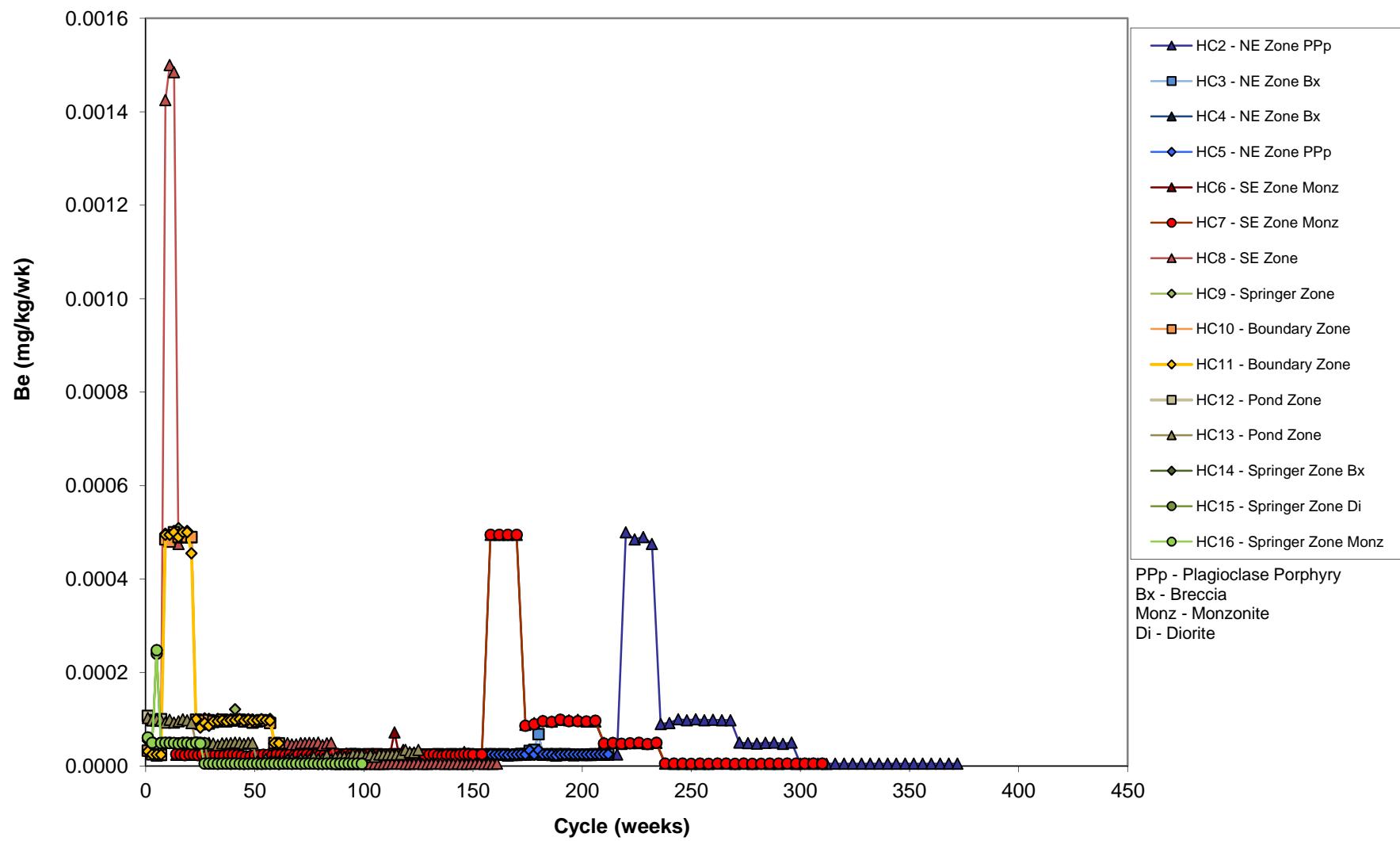
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### Mount Polley Humidity Cells



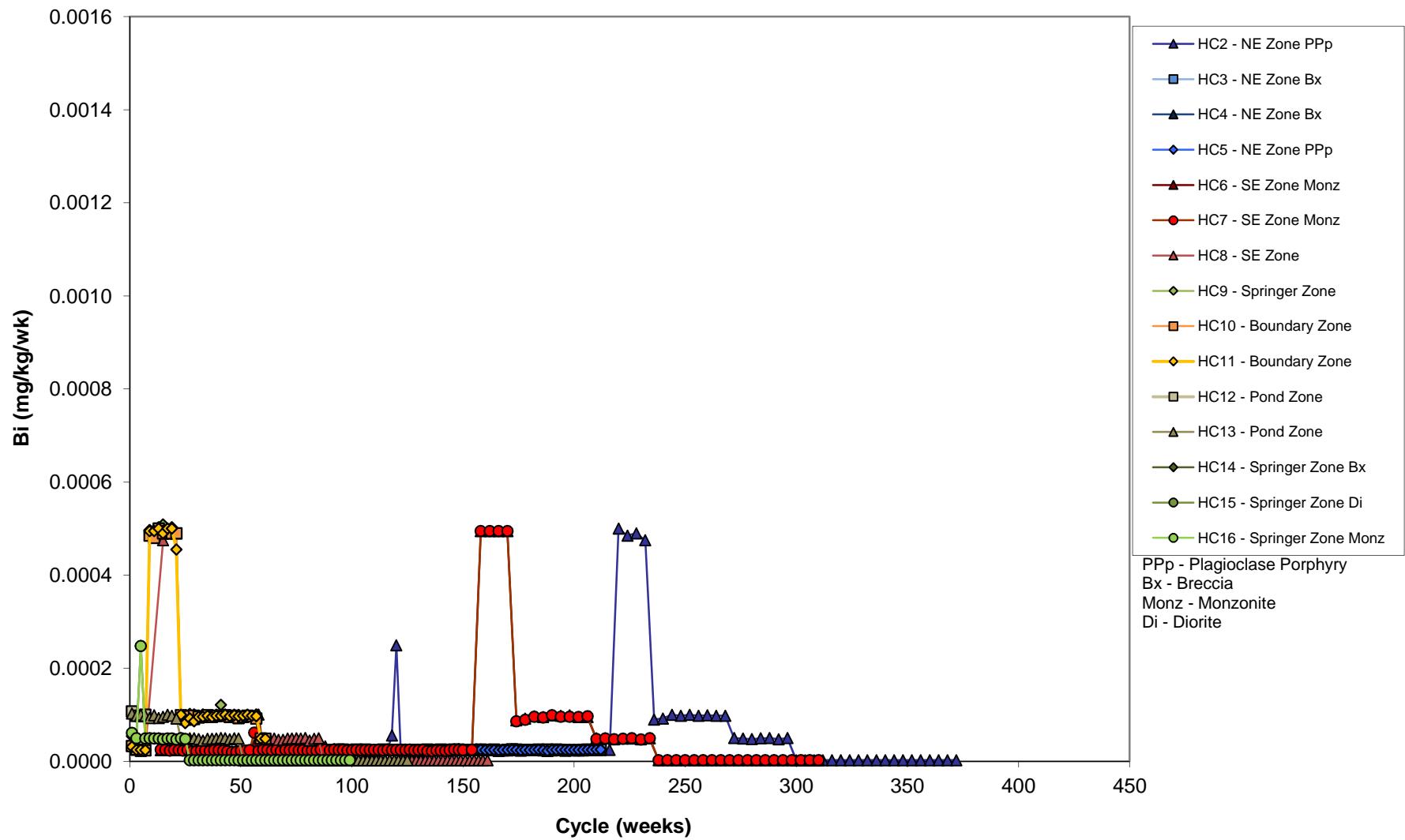
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### Mount Polley Humidity Cells



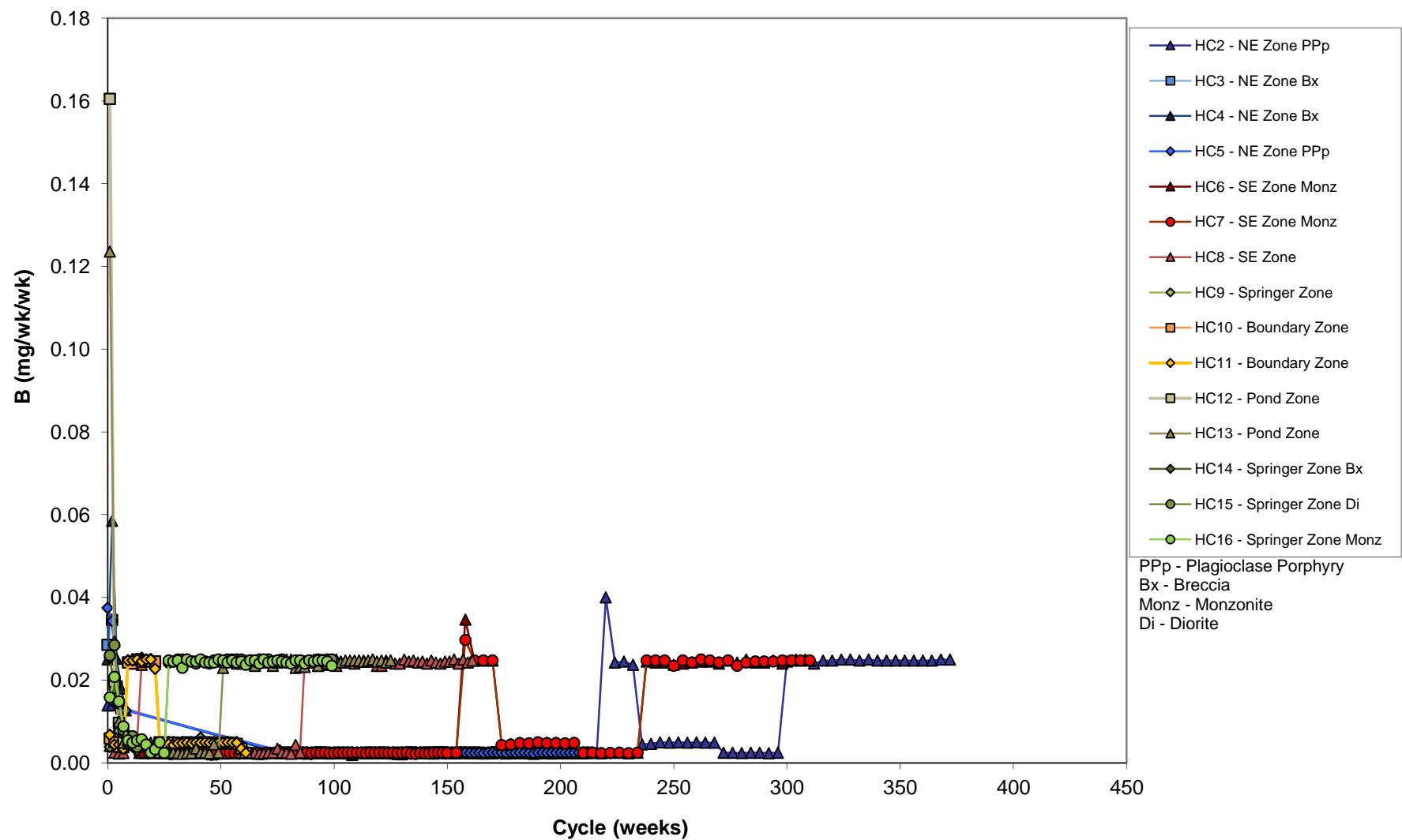
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## Mount Polley Humidity Cells



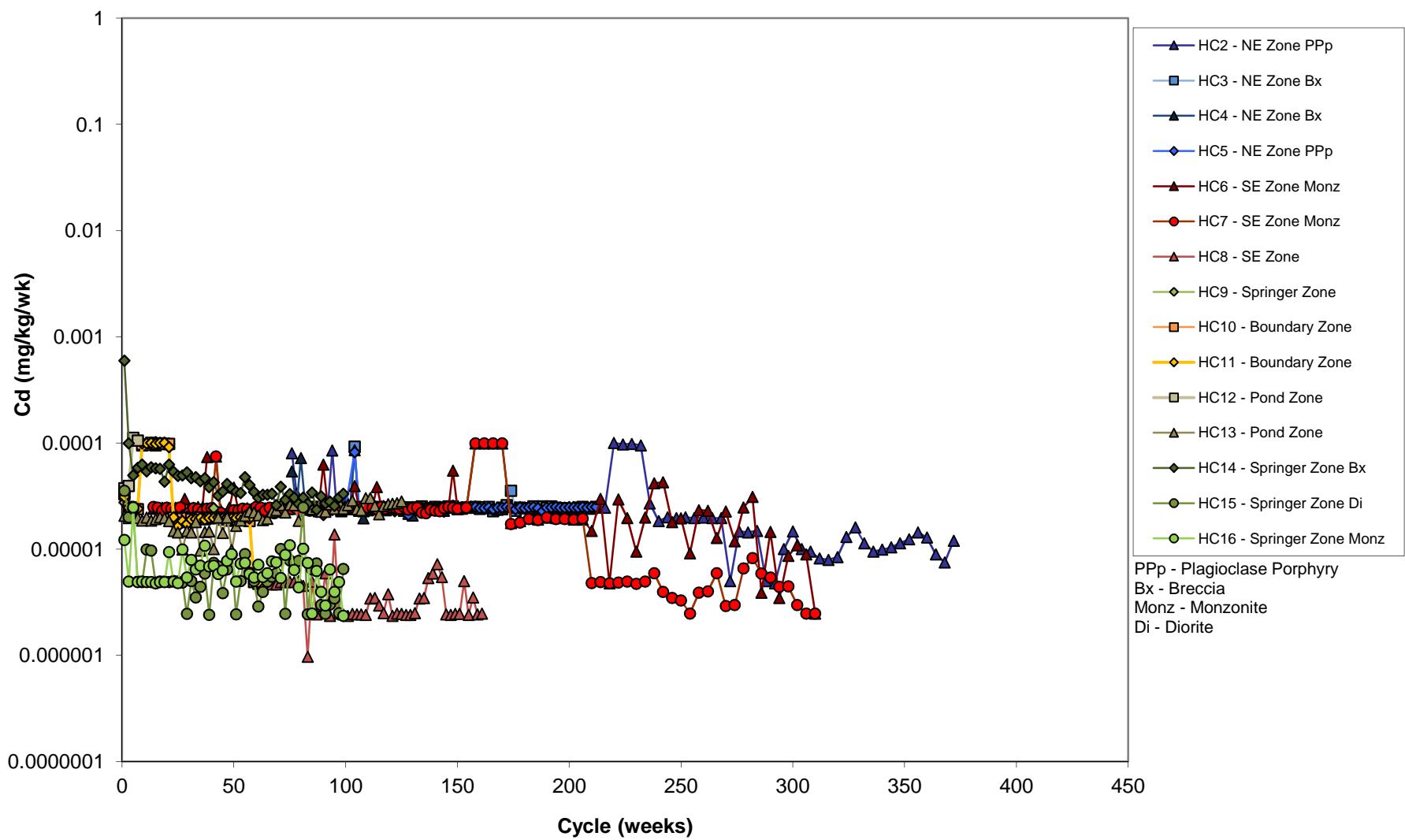
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### Mount Polley Humidity Cells



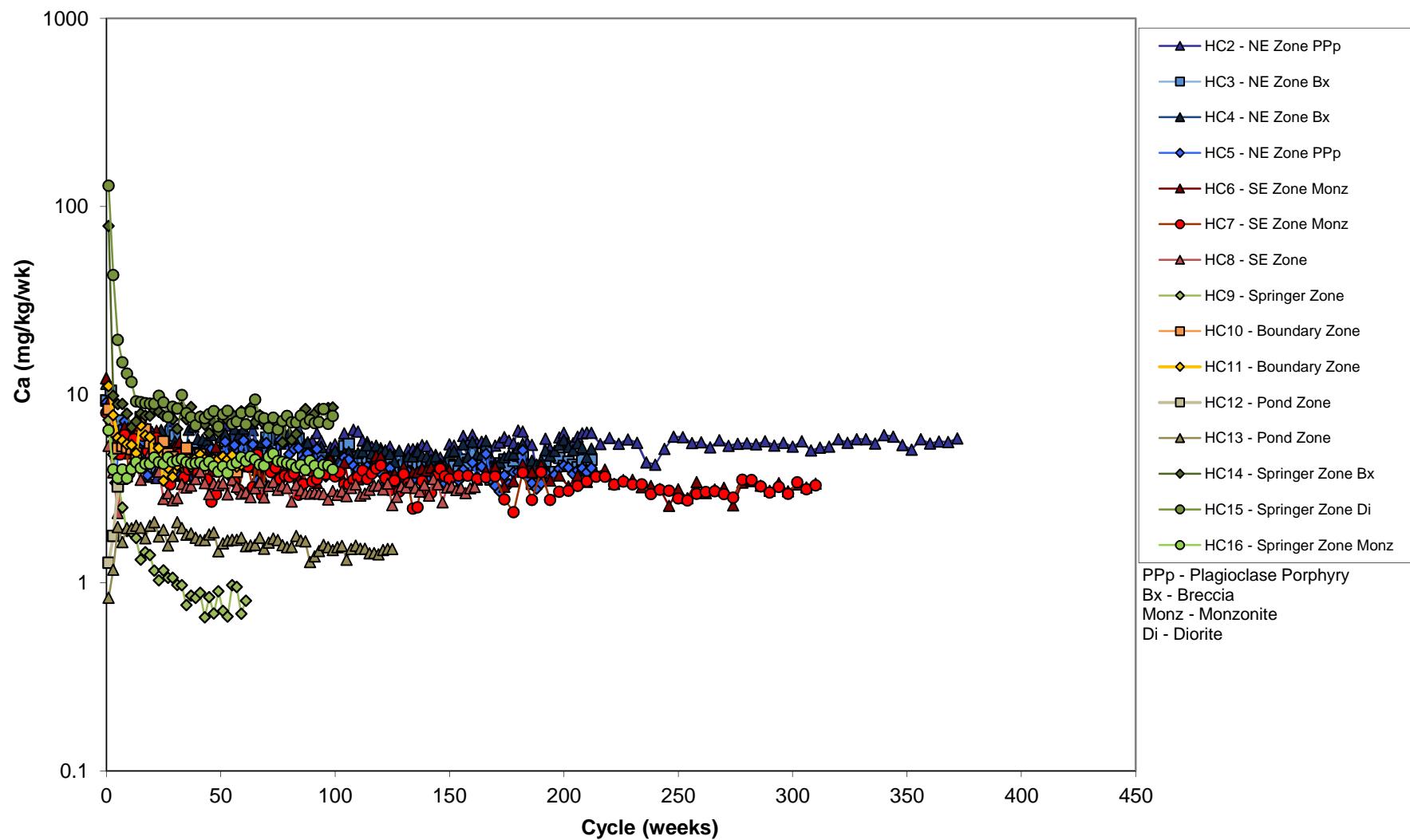
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### Mount Polley Humidity Cells



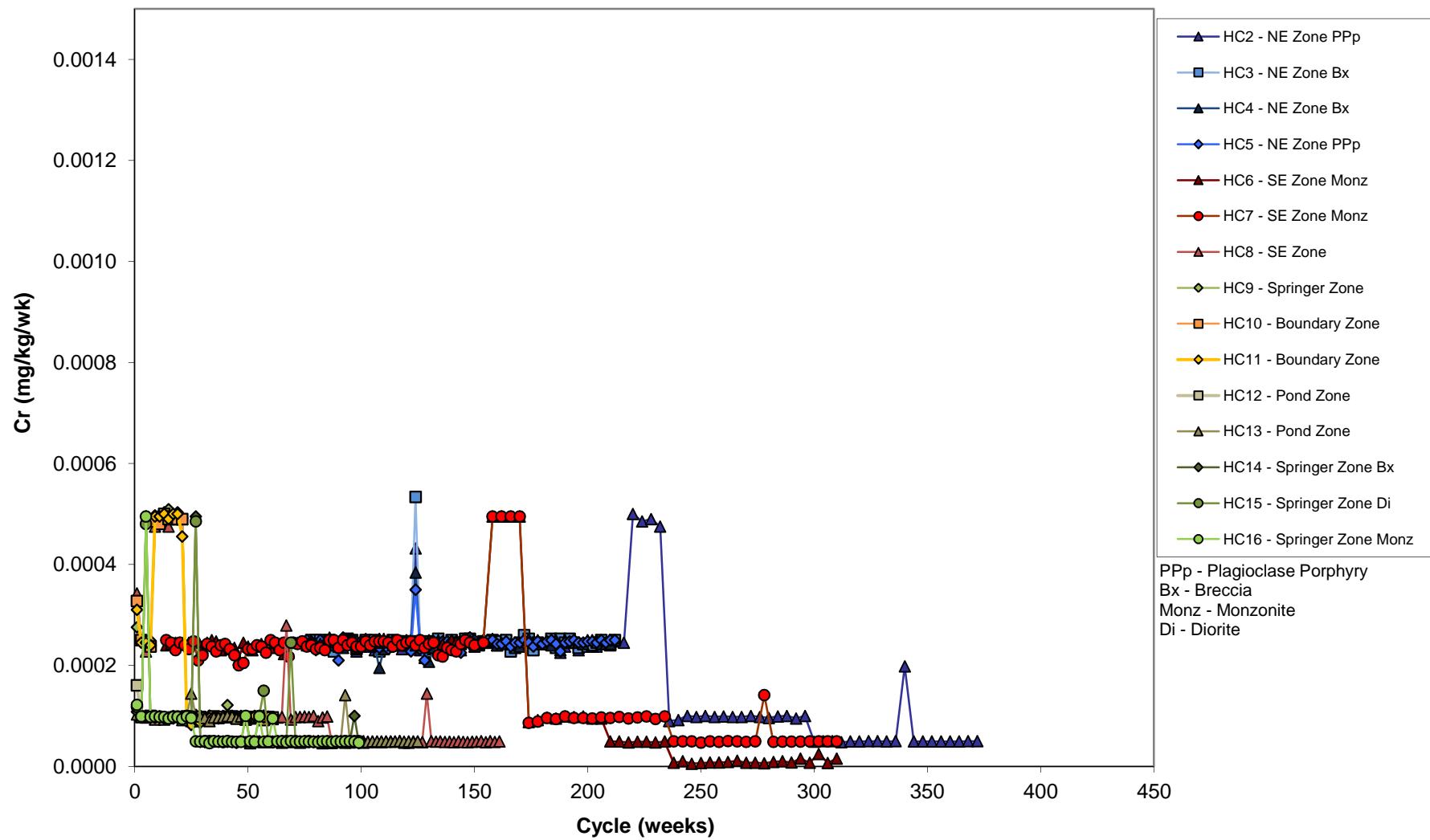
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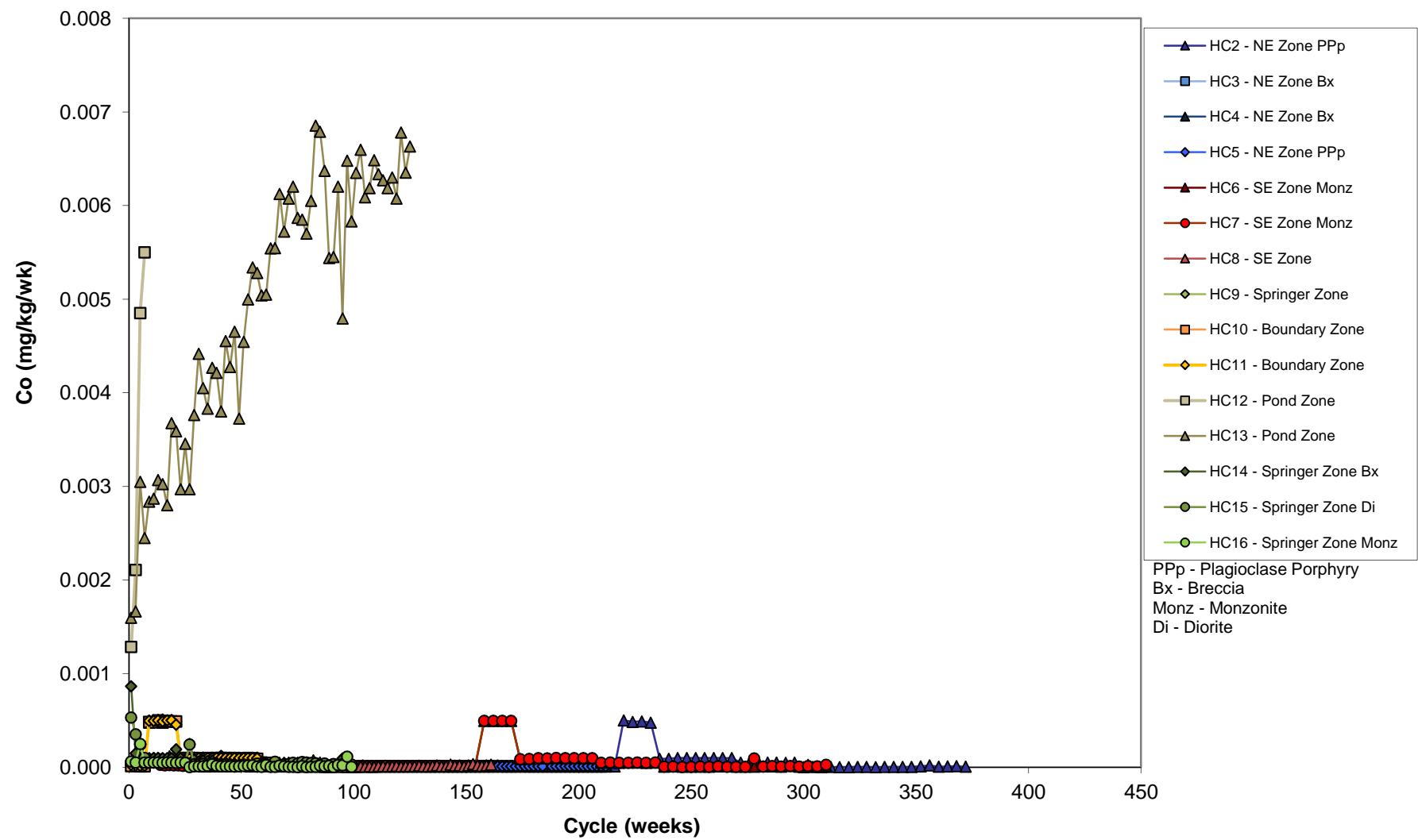
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### Mount Polley Humidity Cells



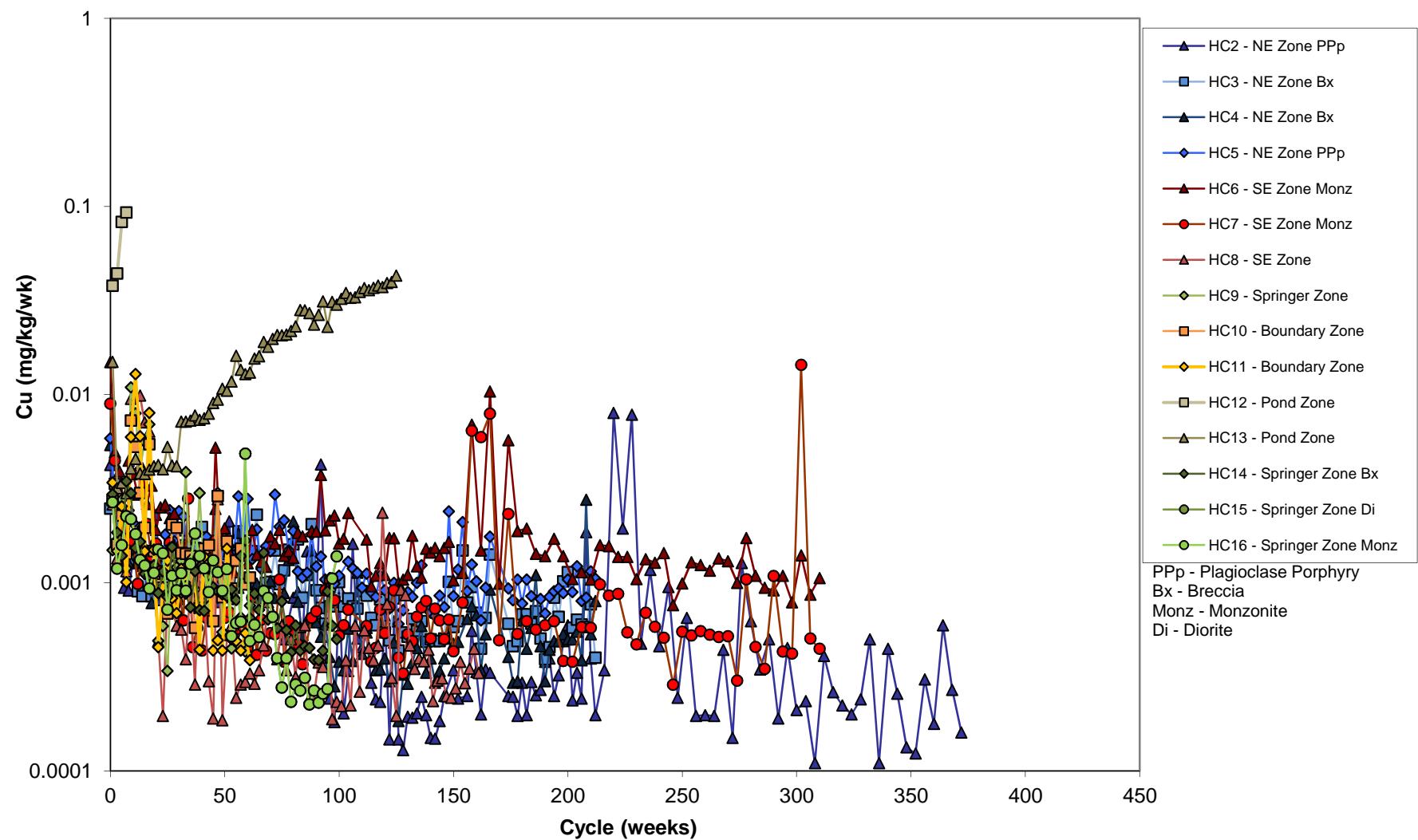
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### Mount Polley Humidity Cells



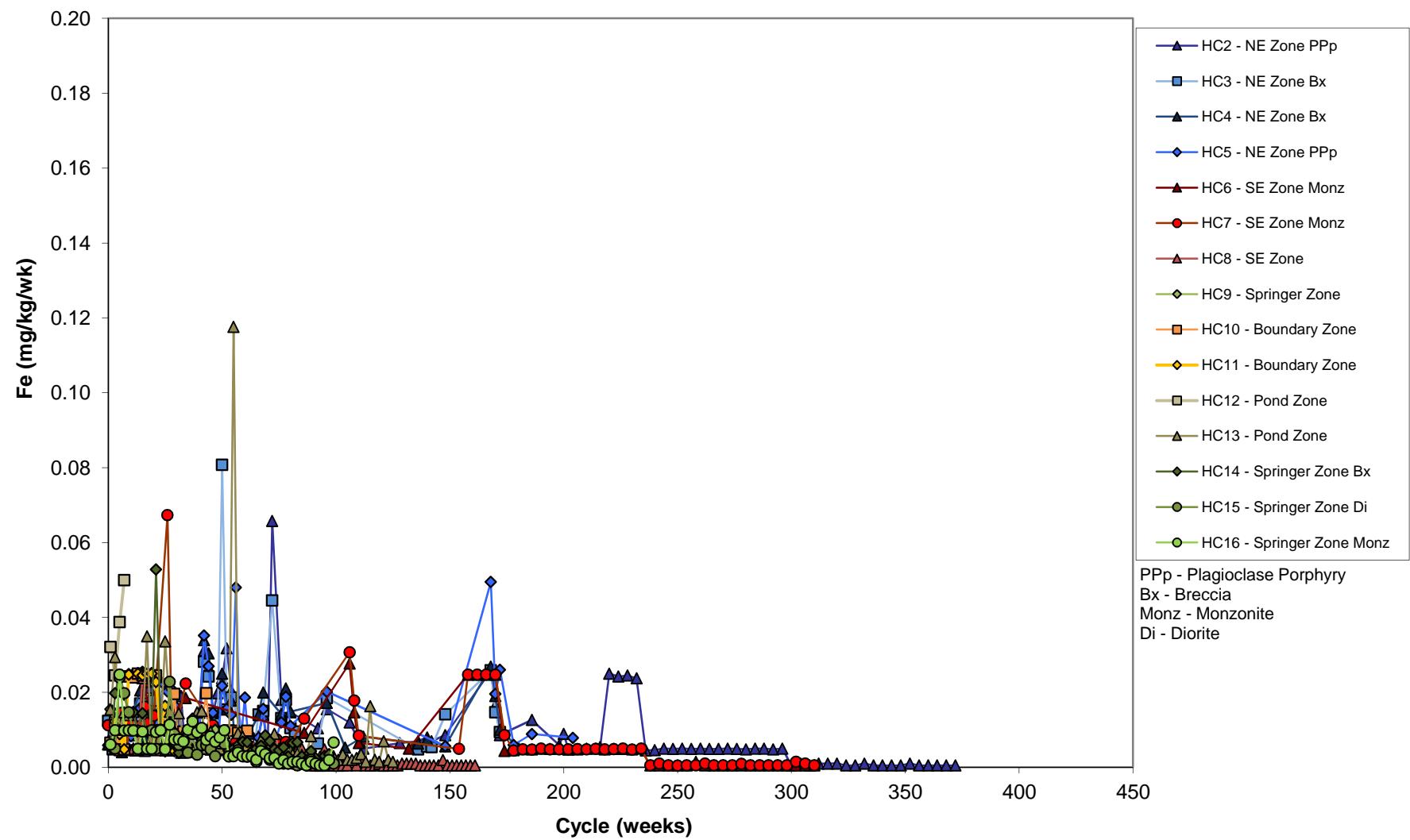
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### Mount Polley Humidity Cells



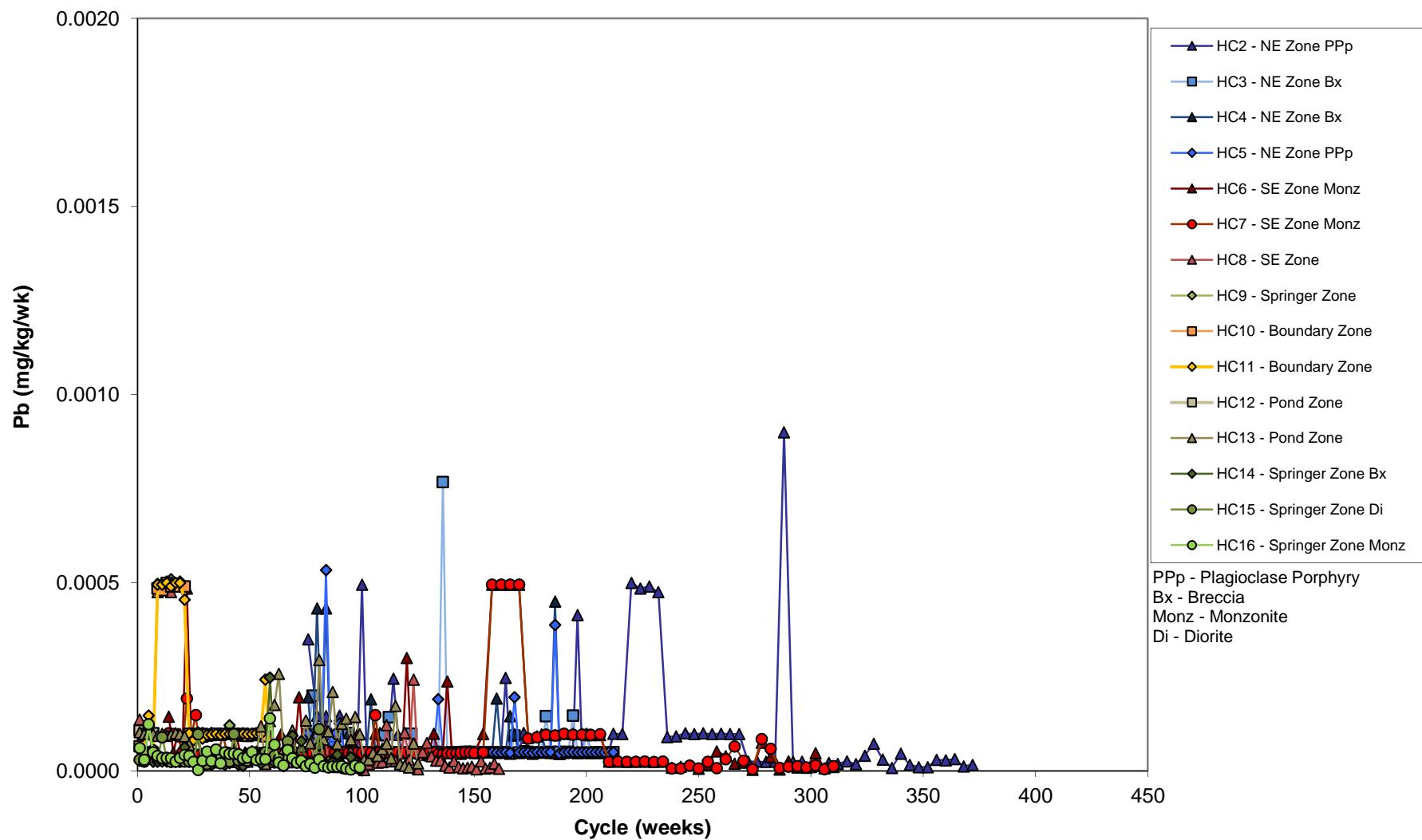
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### Mount Polley Humidity Cells



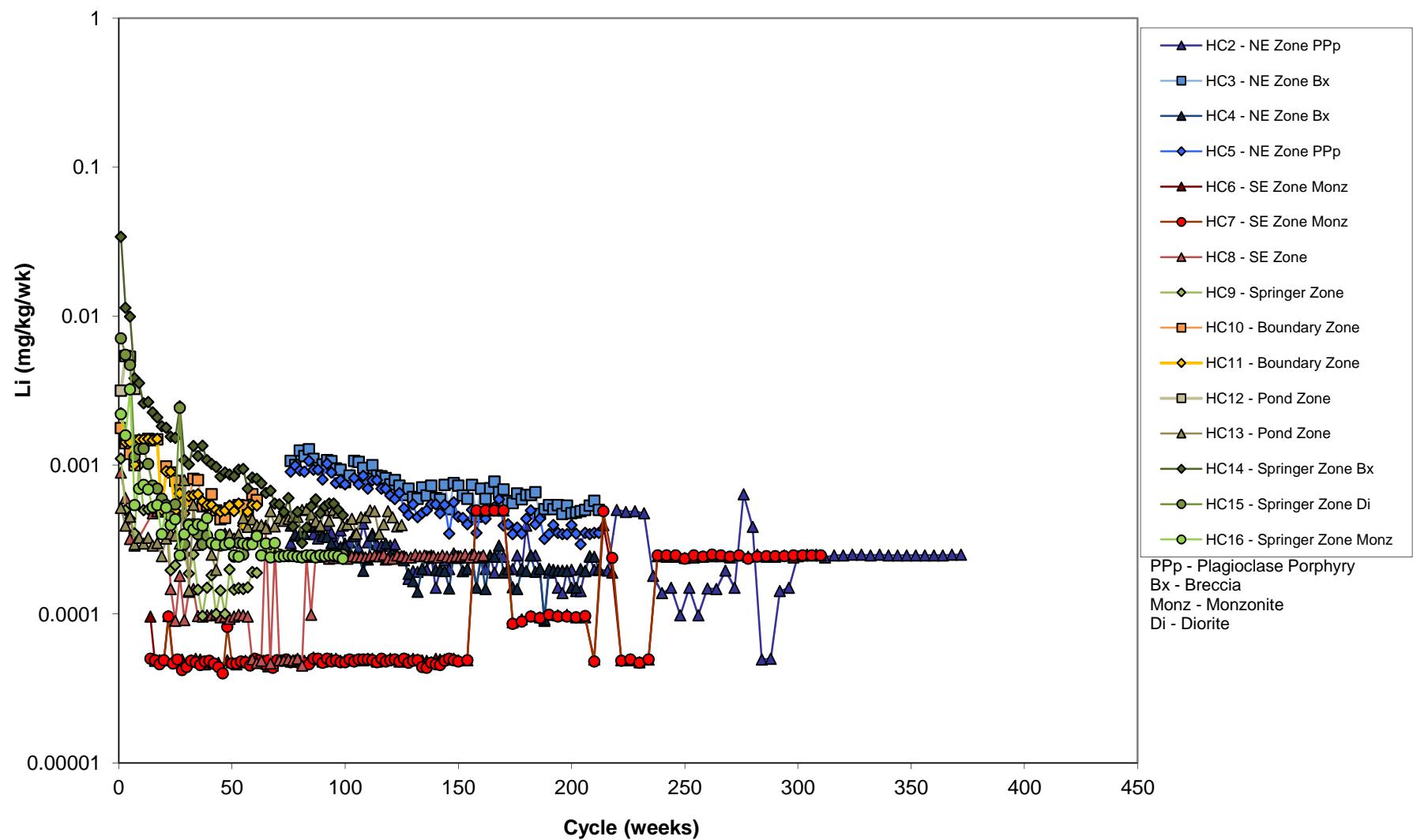
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### Mount Polley Humidity Cells



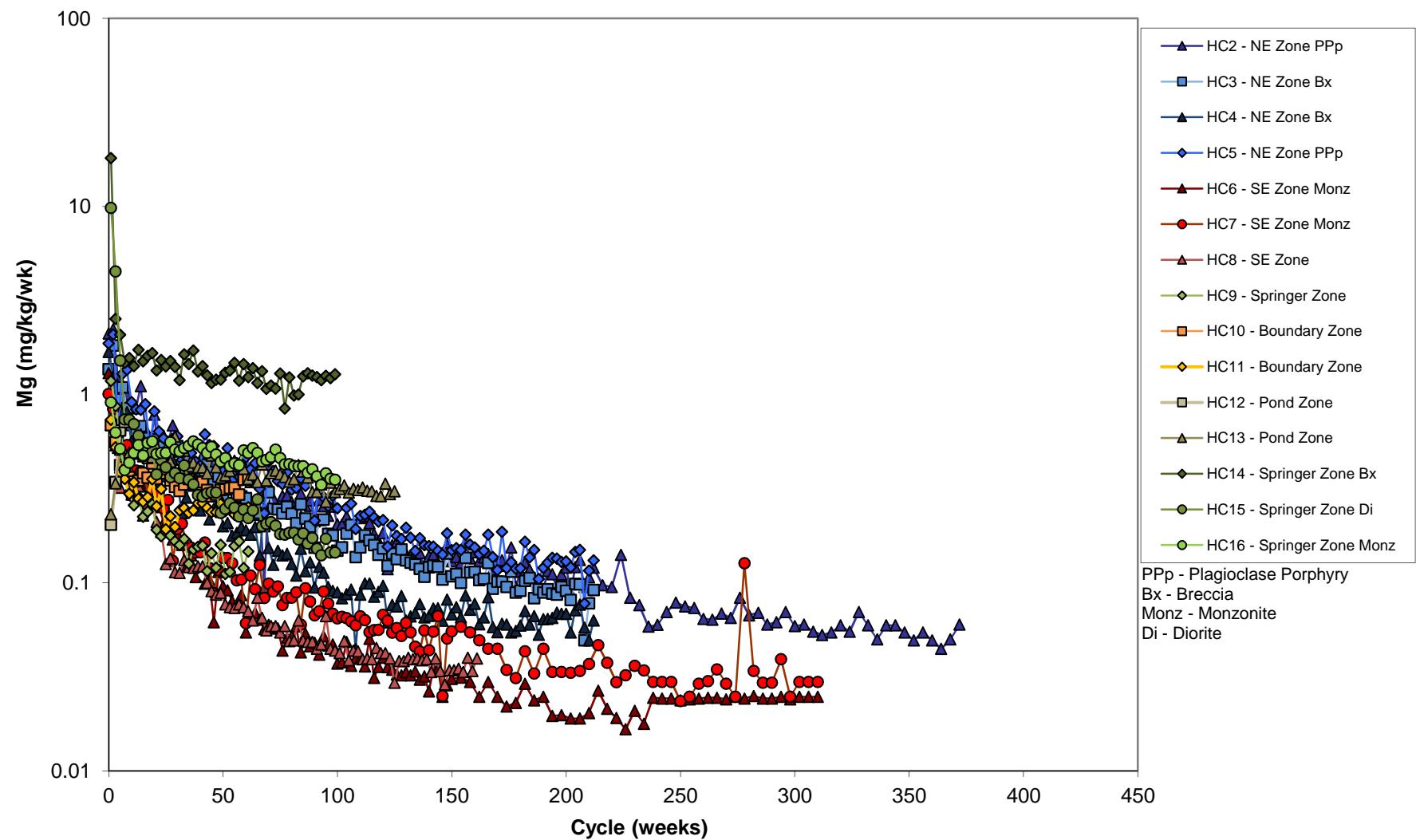
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## Mount Polley Humidity Cells



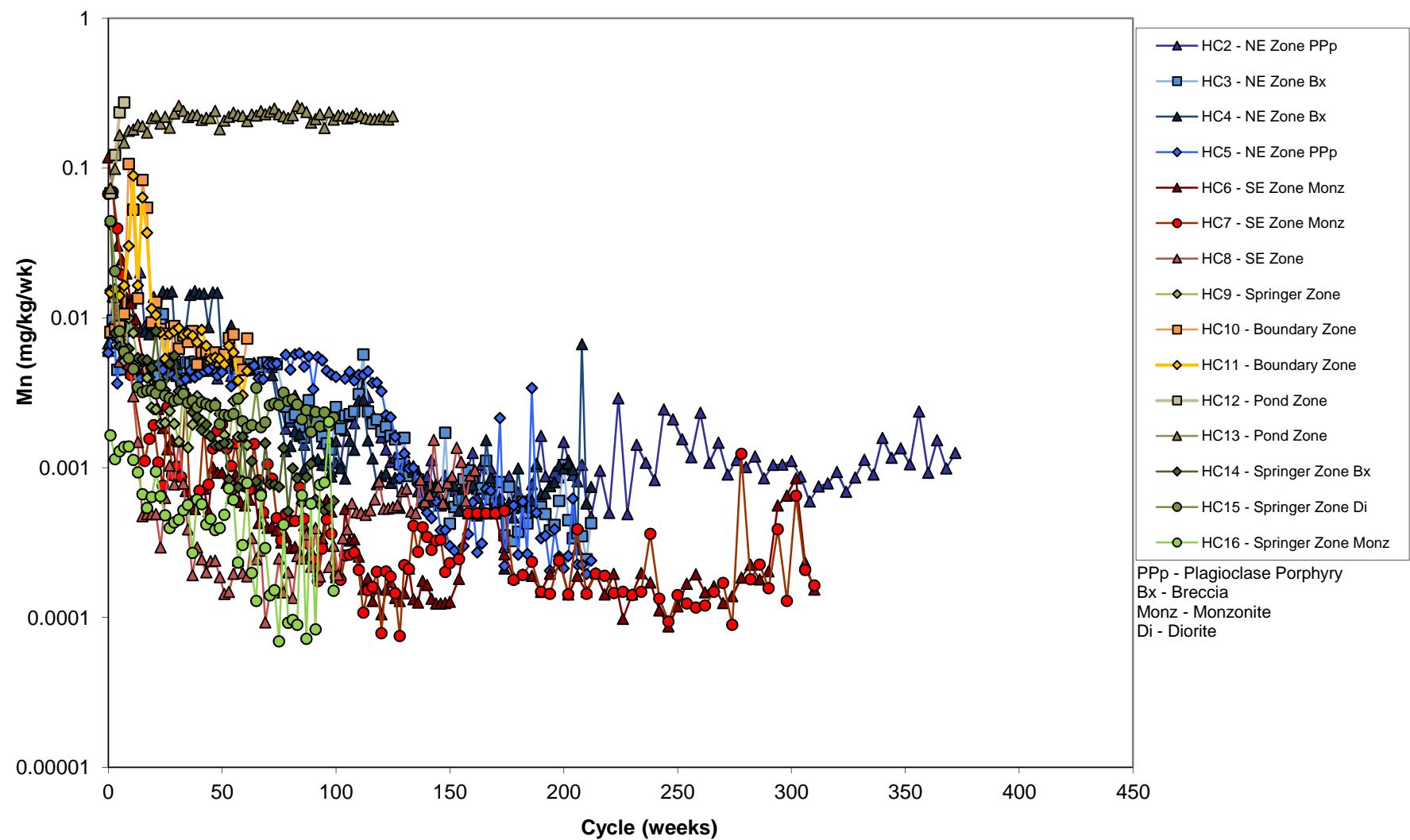
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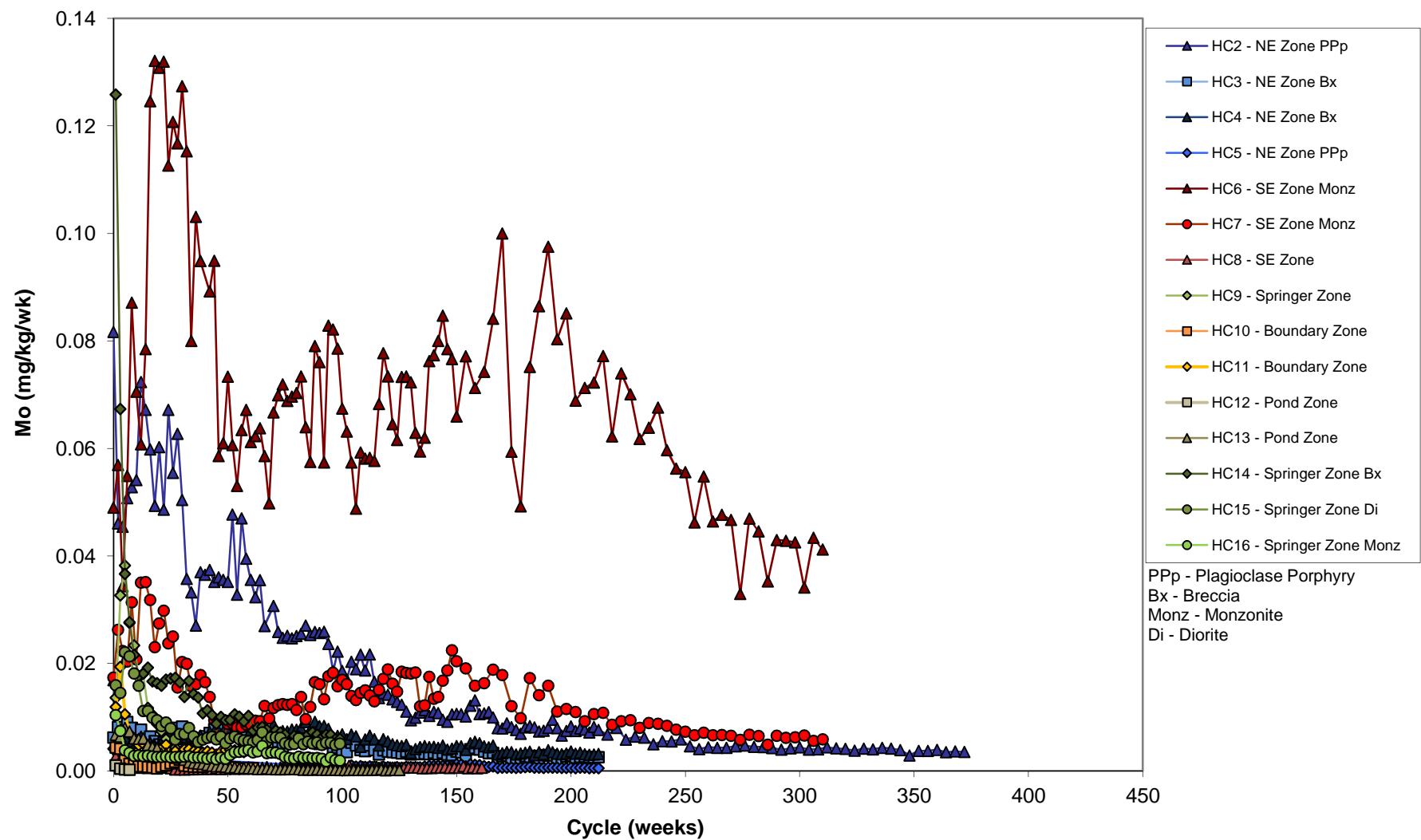
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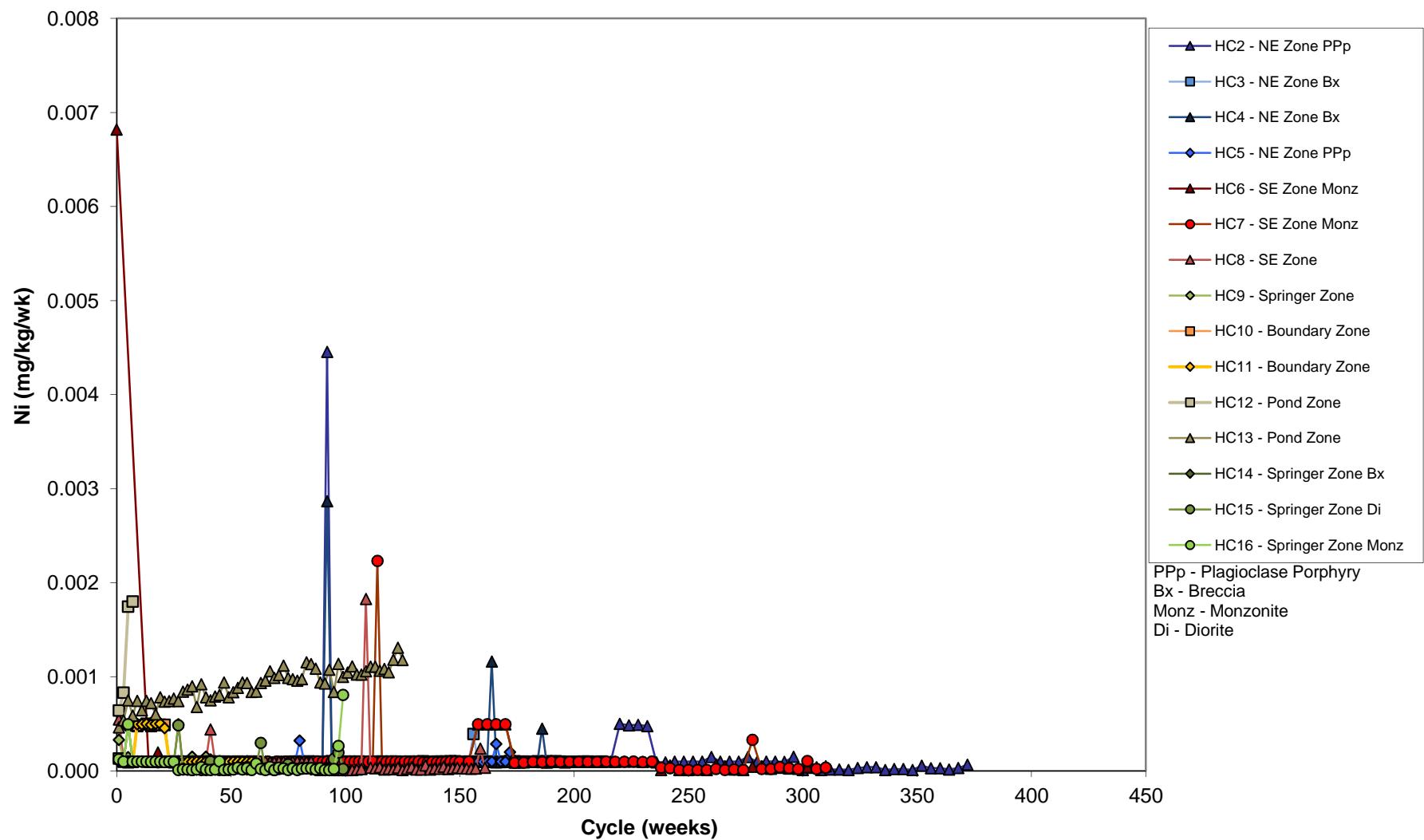
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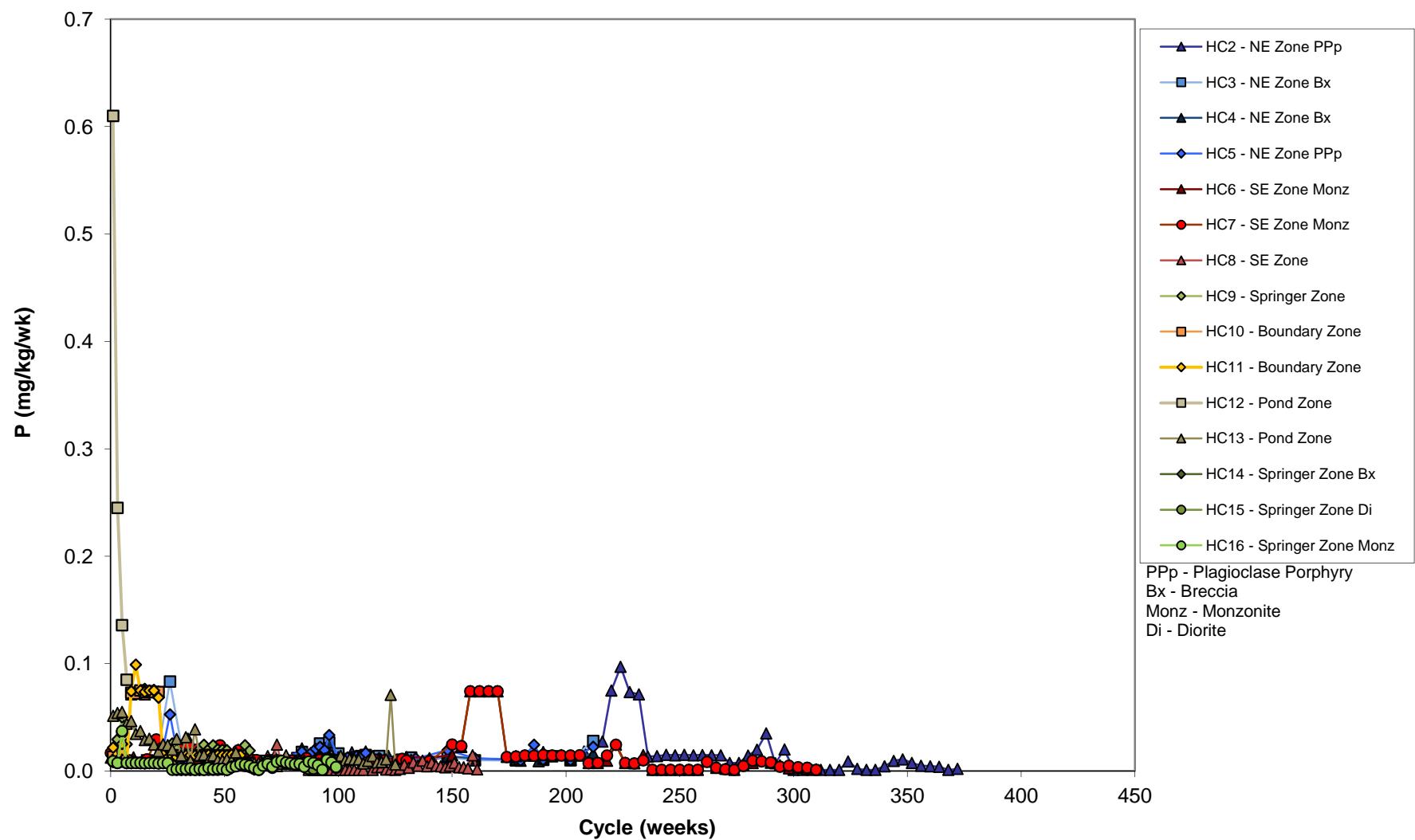
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### Mount Polley Humidity Cells



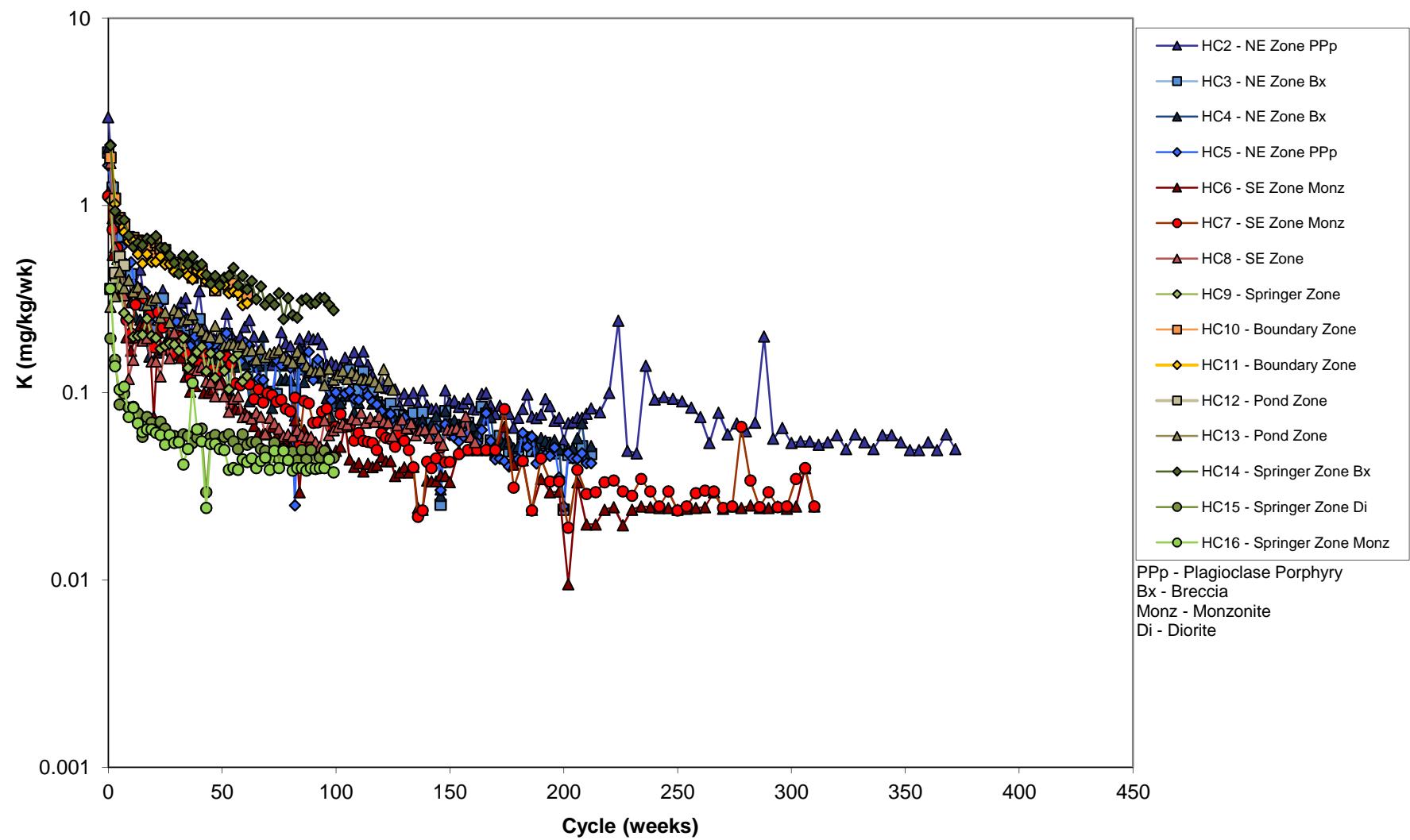
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## Mount Polley Humidity Cells



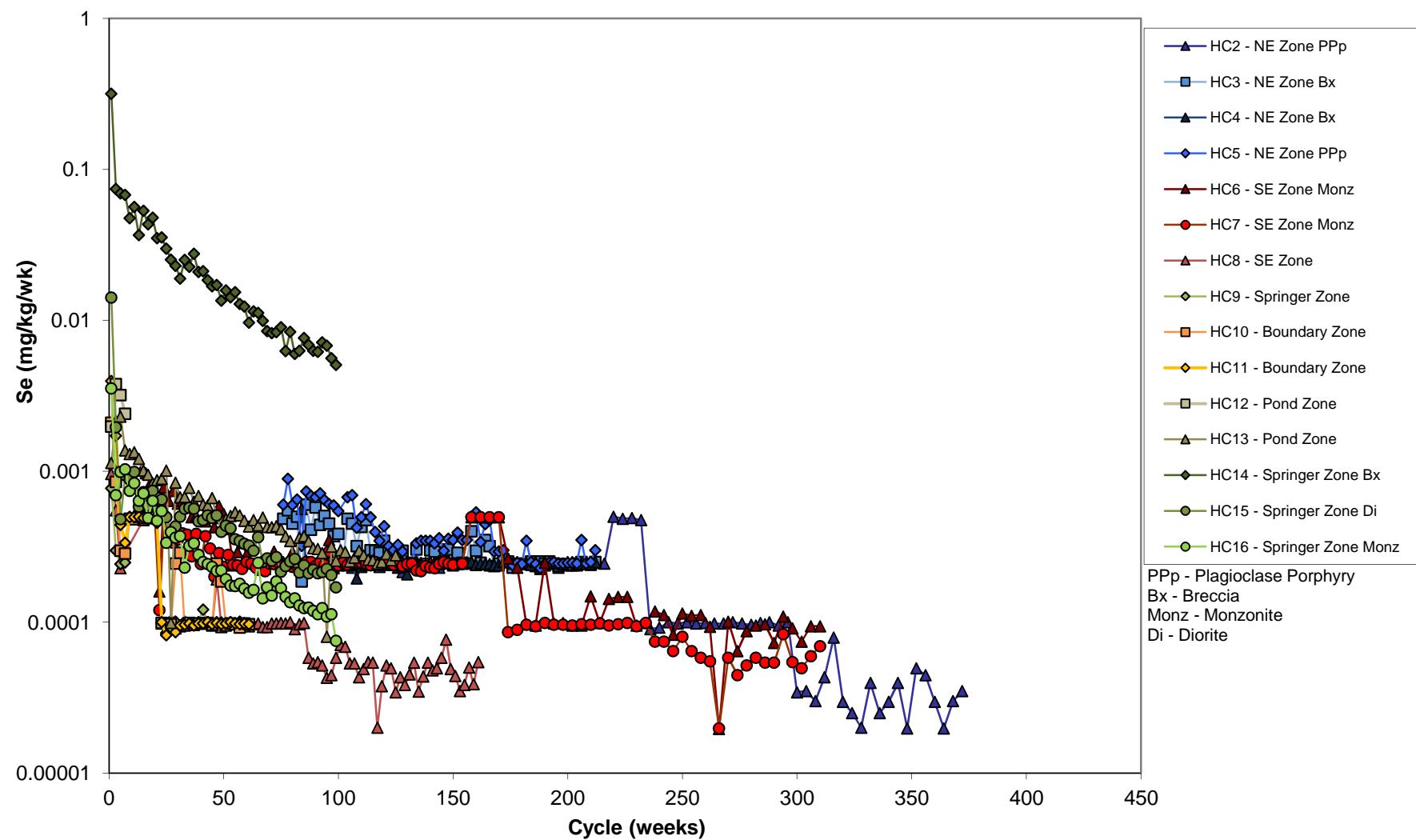
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### Mount Polley Humidity Cells



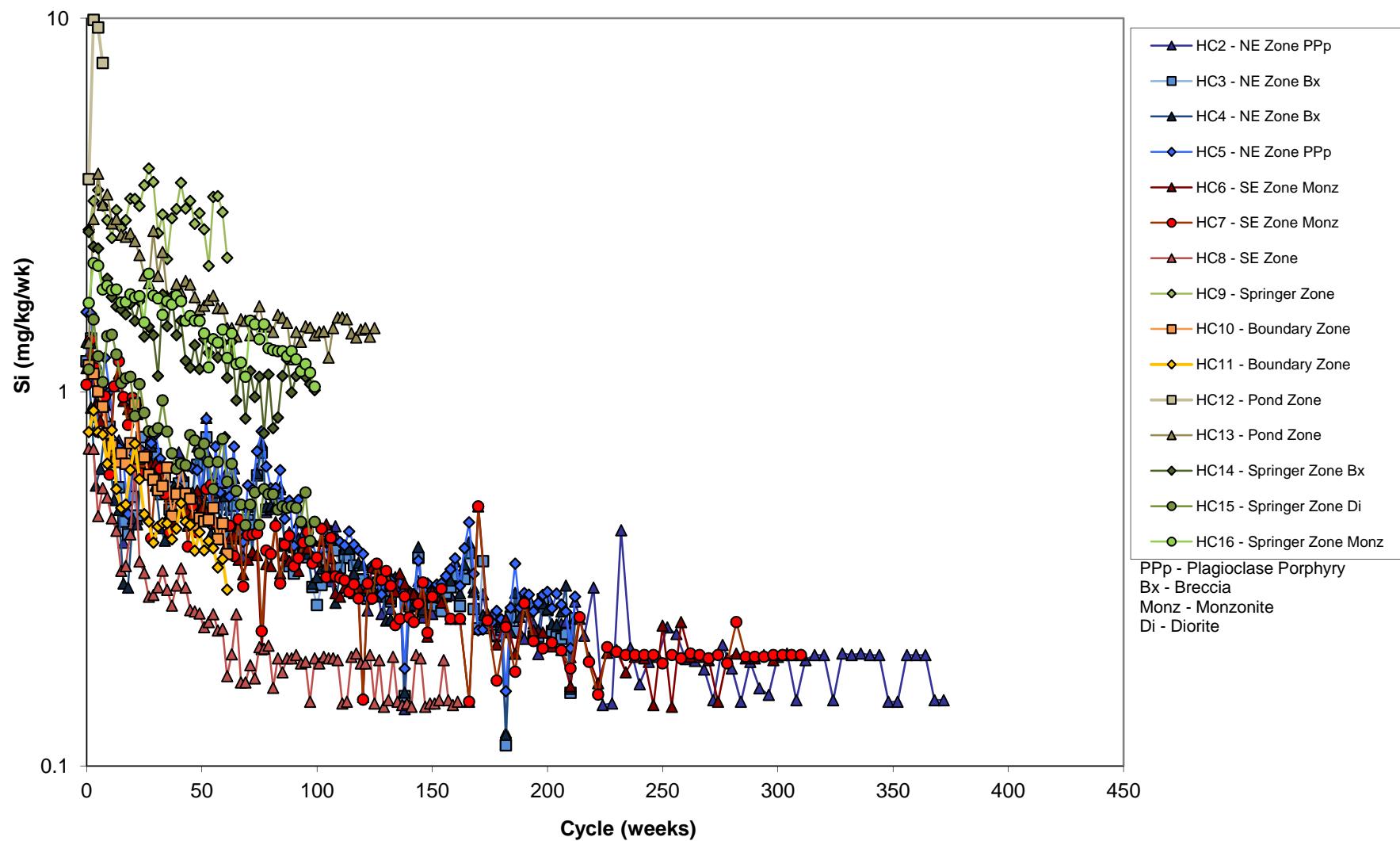
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### Mount Polley Humidity Cells



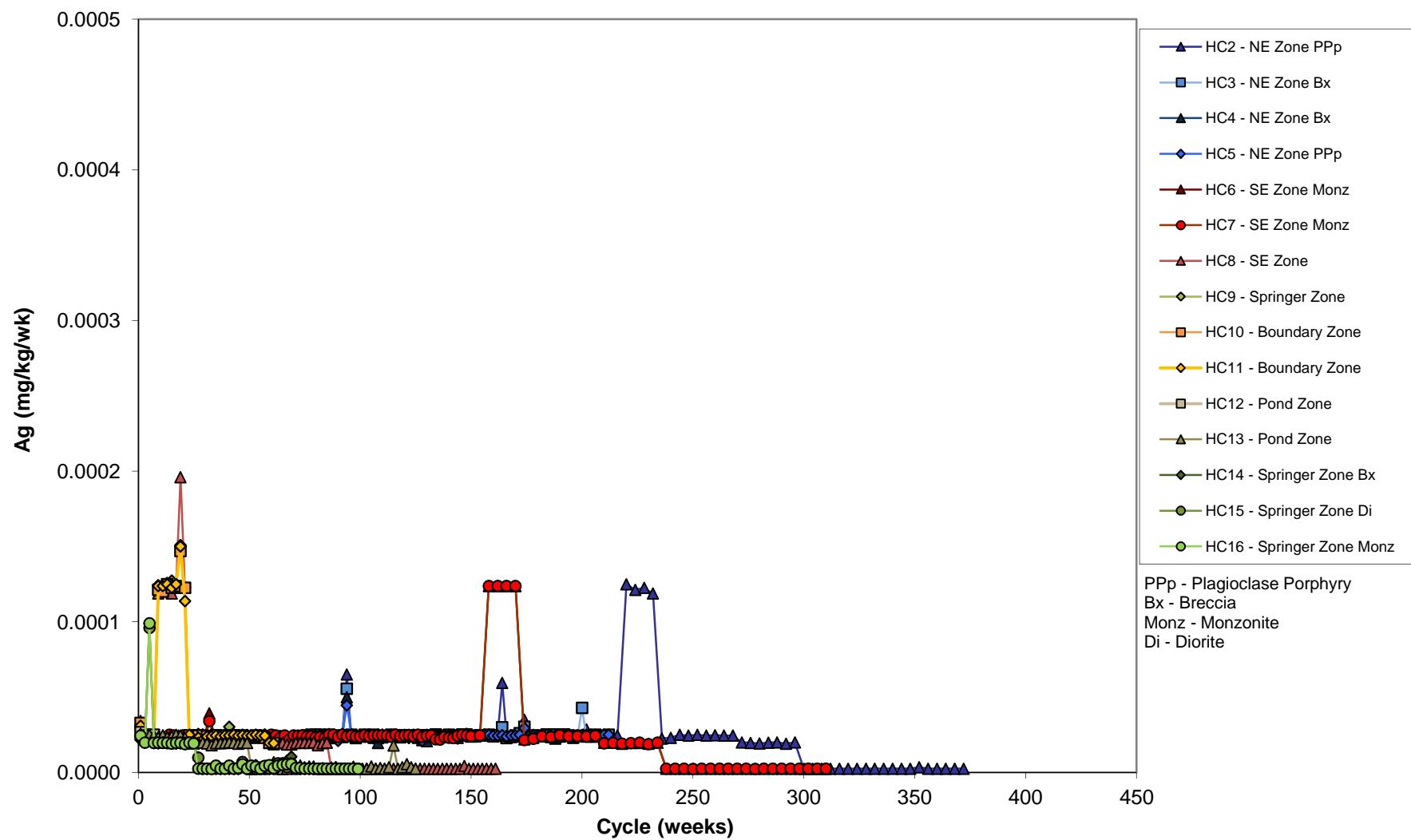
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### Mount Polley Humidity Cells



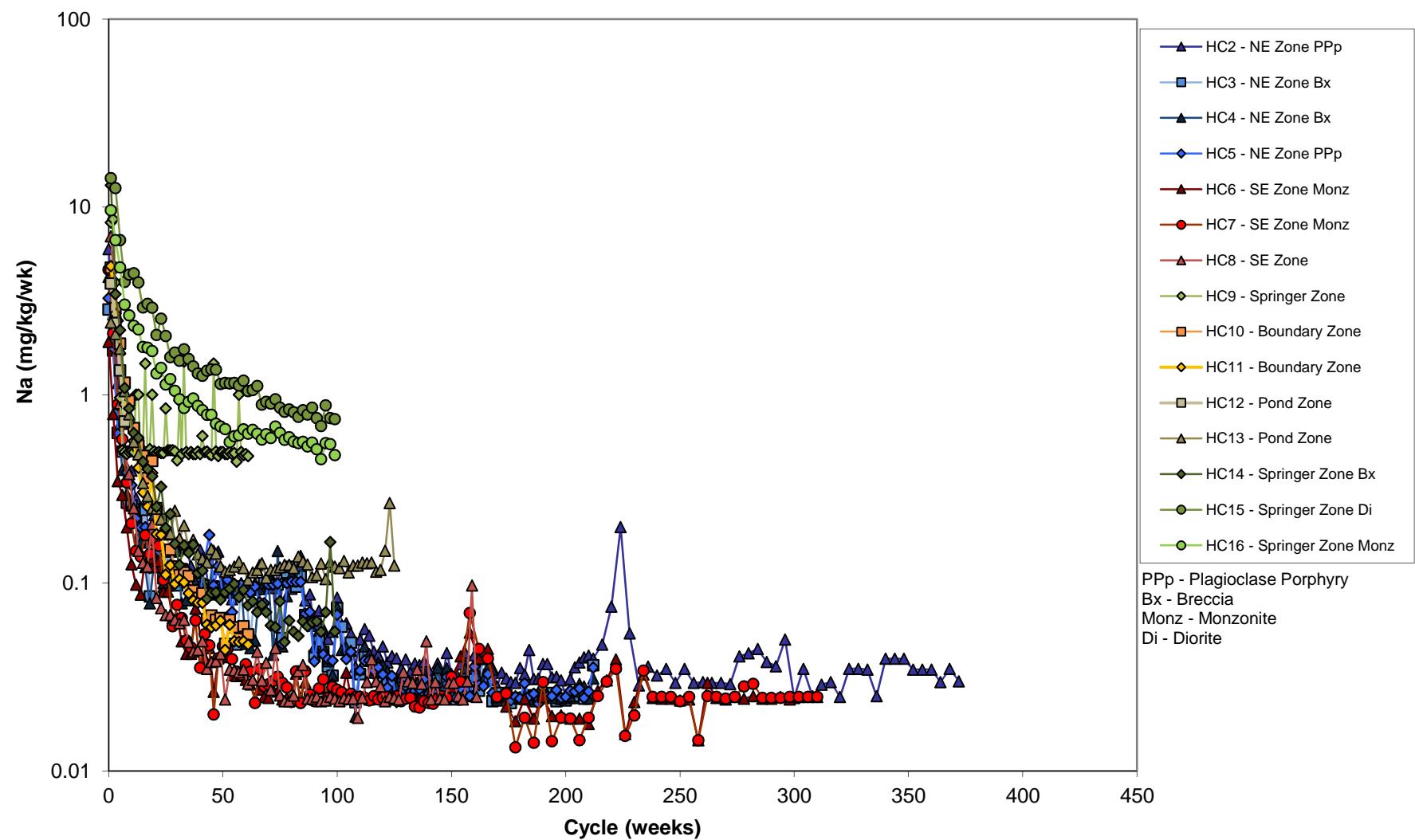
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### Mount Polley Humidity Cells



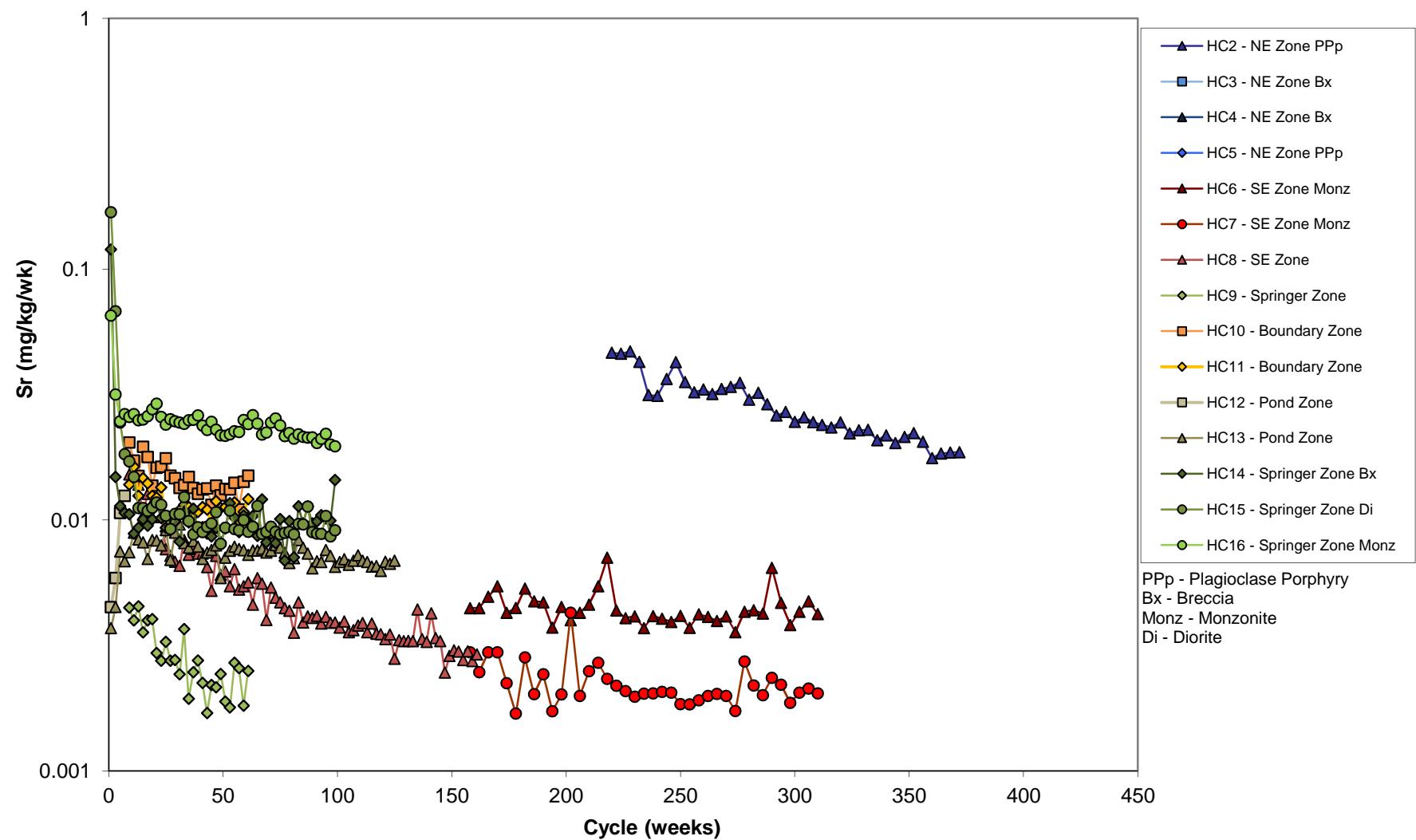
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### Mount Polley Humidity Cells



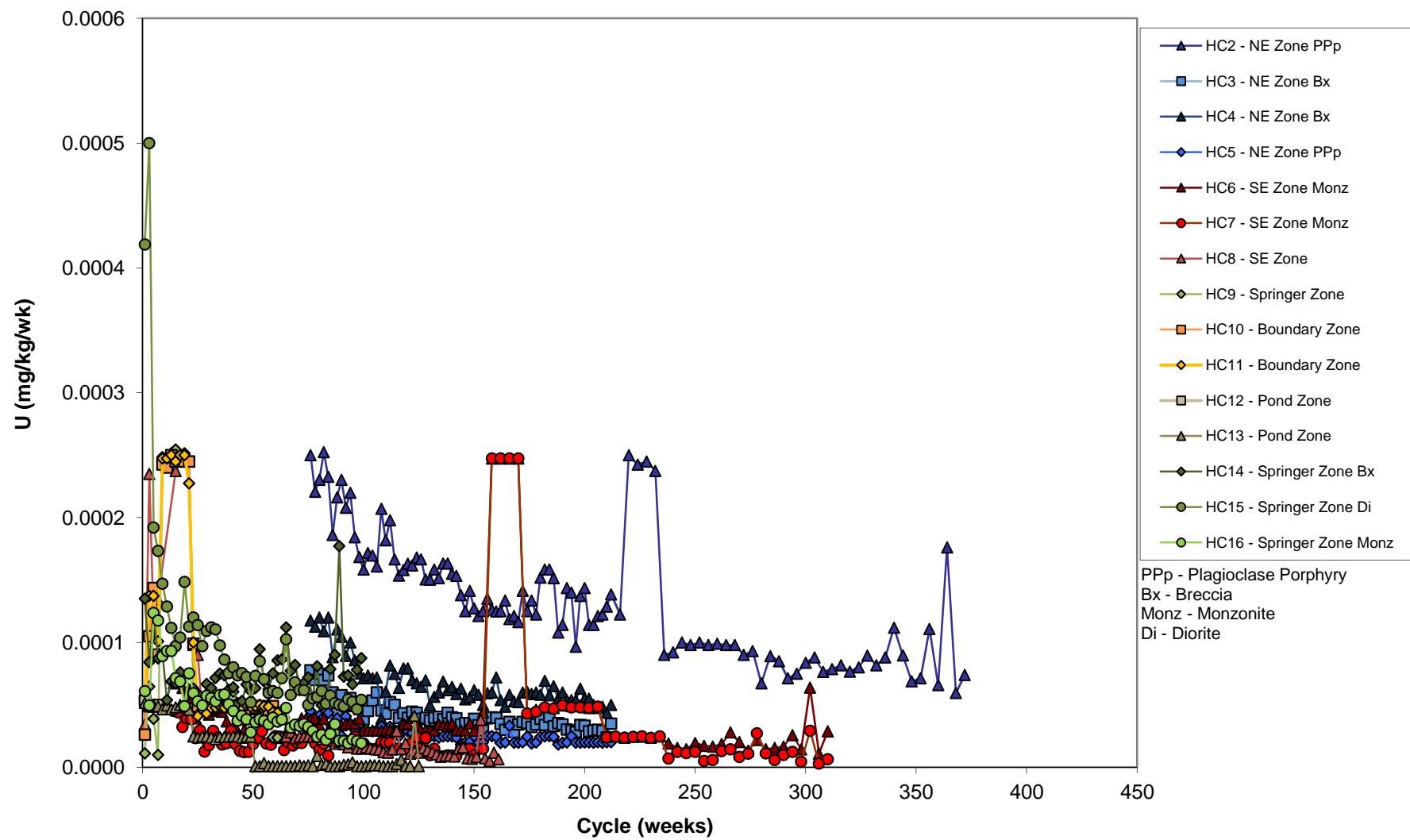
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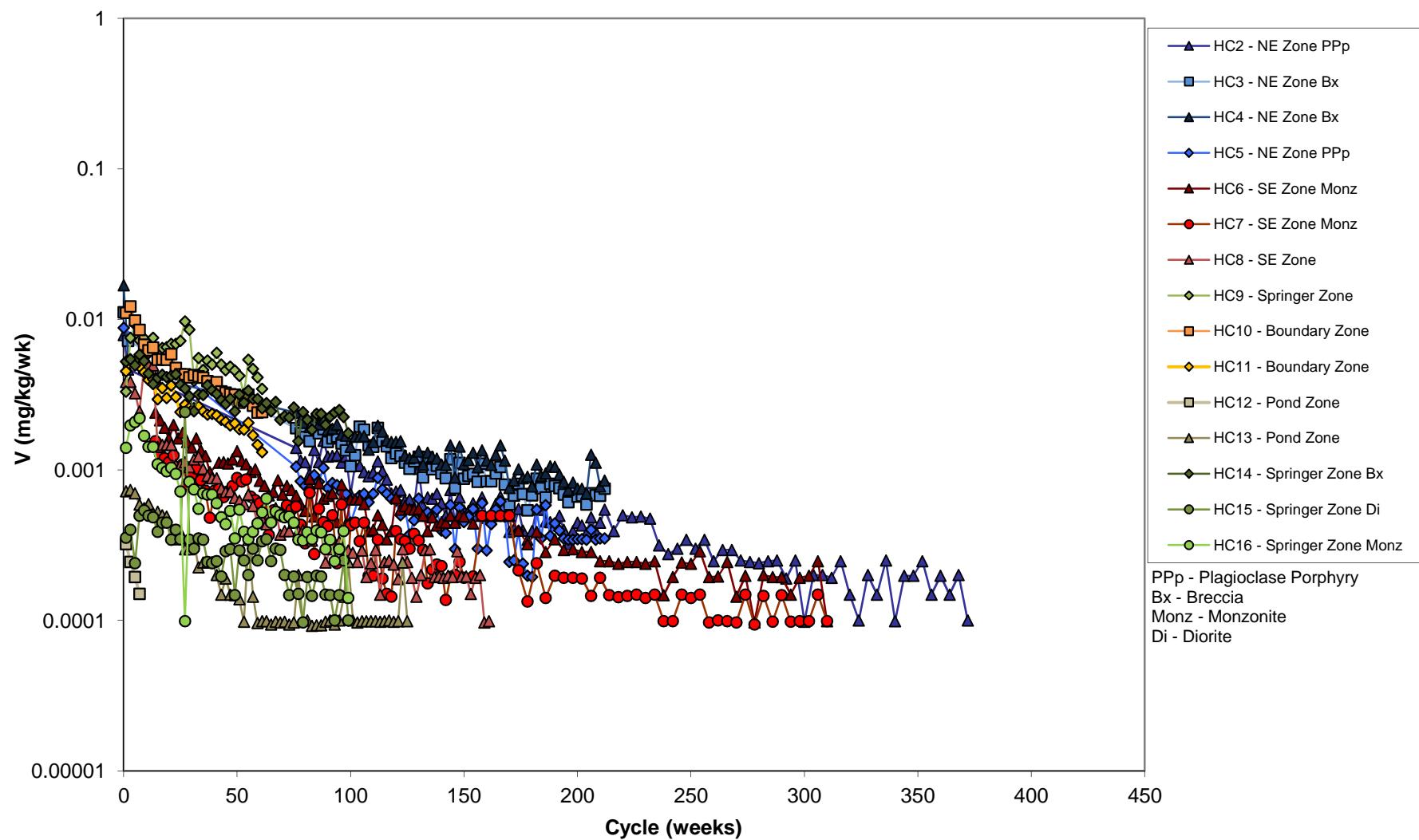
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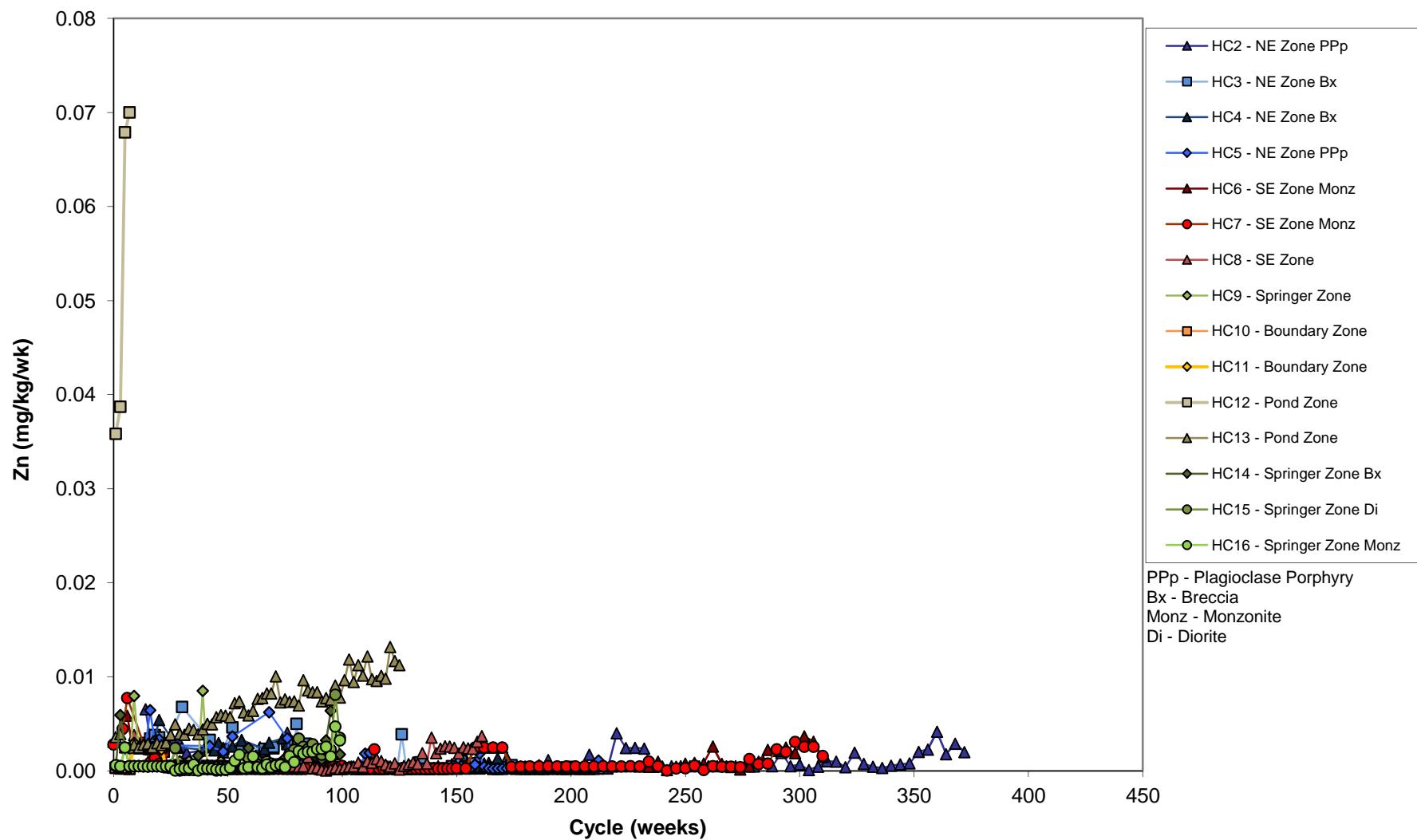
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### Mount Polley Humidity Cells



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## **Mount Polley Humidity Cells**



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