ALEXCO RESOURCE CORP.

Brewery Creek Mine

2010 ANNUAL WATER LICENSE REPORT

Submitted to the Yukon Water Board

Water Use License QZ96-007

2010 ANNUAL QUARTZ MINING LICENSE REPORT

Submitted to Yukon Government, Energy Mines and Resources

Yukon Quartz Mining License A99-001

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February 2010

Executive Summary

The Brewery Creek Mine, owned and operated by Alexco Resource Corp., is located in central Yukon approximately 55 kilometres east of Dawson City. The mine closure and reclamation objectives are outlined in the Class 'A' Water Use License QZ96-007, originally issued as QZ94-003 in August 1995, and in the Yukon Quartz Mining License A99-001, issued in 1999. This report summarizes the 2010 monitoring data and activities relevant to both the Water Use and Quartz Mining Licenses.

During 2010 no mining operations were conducted. The heap leach pad was detoxified in 2002 and drained down in 2003. Throughout 2010, all assays for total cyanide remained below 2.0 mg/l.

2010 was the first year of monitoring under Schedule B-2 of QZ96-007. This schedule calls for twice-annual sampling events for most water quality monitoring sites, with the exception of piezometers in the Blue WRSA. These piezometers, among others at the site, do not reach water and therefore though they are regularly monitored, they are not sampled.

During 2010, minor maintenance seeding and fertilization was completed, primarily in and around the reclaimed process ponds. The annual revegetation monitoring program was completed.

The large scale lysimeter constructed in the Blue WRSA was last monitored for chemistry and infiltration during 2009.

No direct surface release of heap solution was made in 2010. No land application of solution occurred in 2010.

Final reclamation of the ponds was completed in 2008 through removal of all liners, resloping and scarification of the edges and side slopes. Additional erosion control and maintenance seeding and fertilization were completed in 2010.

2010 is the first year of reduced monitoring under Schedule B-2 of QZ96-007. Whenever flow and climatic conditions permitted, all required monitoring was carried out.

There was no surface discharge of accumulated waters from any of the 6 pits (Pacific, Blue, Moosehead, Kokanee, South Golden and Lucky). Water that collects in the pits either evaporates or infiltrates into the ground.

Stream sediment sampling was last carried out in 2009. Benthic monitoring was also last conducted in 2009. These two events mark the end of the monitoring programs for both benthic and sediment monitoring at Brewery Creek.

A revegetation assessment was completed by Laberge Environmental Services in August 2009, and submitted as a part of the 2009 Annual Report.

SRK Consulting completed an independent analysis of the reclamation activities and remaining liabilities in August 2010. The inspection also served as the annual geotechnical inspection report. The next scheduled inspection is for August 2014, as required by QZ96-007. The geotechnical inspection report is attached as Appendix E.

No recordable spills occurred in 2010.

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1 INTRODUCTION

The Brewery Creek Mine, owned and operated by Alexco Resource Corp., is located in central Yukon approximately 55 kilometers east of Dawson City. The mine operated as a conventional open pit heap leach operation continuously from 1996 – 2001. The mine was permanently shut down in 2002. With the exception of some remaining site facilities, the mine has been fully reclaimed.

The mine operates under Class 'A' Water Use License QZ96-007, originally issued as QZ94-003 in August 1995 and under Quartz Mining License A99-001 issued in June 1999.

This report summarizes 2010 monitoring data and activities relevant to the Water Use and Quartz Mining Licenses.

2 2010 OVERVIEW OF ACTIVITIES

The following tasks and activities were completed in 2010:

January 2010

- Site visits for security and wildlife protection were conducted on a bi-weekly basis during the month.

February 2010

- Bi-weekly site visits for security and wildlife protection were conducted during.

March 2010

- Routine water quality monitoring was completed per the sites and conditions under Water License QZ96-007 and Quartz Mining License A99-001.
- Bi-weekly site visits for security and wildlife protection were conducted.

April 2010

- Bi-weekly site visits for security and wildlife protection were conducted.

May 2010

- Bi-weekly site visits for security and wildlife protection were conducted.

June 2010

- Routine water quality monitoring was completed per the sites and conditions under Water License QZ96-007 and Quartz Mining License A99-001.
- Bi-weekly site visits for security and wildlife protection were conducted.

July 2010

- Bi-weekly site visits for security and wildlife protection were conducted.

August 2010

- Bi-weekly site visits for security and wildlife protection were conducted.

September 2010

- Routine water quality monitoring was completed per the sites and conditions under Water License QZ96-007 and Quartz Mining License A99-001.
- SRK visited the Brewery Creek mine site on September 30, 2010 to complete a geotechnical inspection of the reclamation works.

October 2010

- Bi-weekly site visits for security and wildlife protection were conducted.
- A survey was conducted to identify location information for the Biological Treatment Cell and heap pond outflow points.

November 2010

- Bi-weekly site visits for security and wildlife protection were conducted.
- The Biological Treatment Cell and heap ponds were visited and sampled.

December 2010

- Bi-weekly site visits for security and wildlife protection were conducted.

3 WATER USE

In 2010, no water was withdrawn from Laura Creek or BC-23.

4 CLIMATE

2010 climate data was collected manually by site monitors during the period from May through to December. Due to the infrequent schedule for site monitoring, no temperature data was recorded during Jan – April. When site activity resumed in May, more continuous data became available and was subsequently analyzed.

Refer to Appendix A for a tabular summary of the 2010 climate monitoring data.

4.1.1 Temperature

August recorded the warmest day of the year with a high of 29.3°C. October recorded the coldest day with a minimum temperature of –10.3°C. No climate data was collected from January to April 2010, as weekly site visits have been discontinued and the site is now on a bi-annual monitoring program as per license conditions. Monthly climate data for 2010 is presented in Appendix A.

4.1.2 Precipitation

Average 2010 precipitation measured for all days where precipitation was measured at the mine site, was 4.56 mm (see Appendix A).

4.1.3 Snow Survey

The results of the annual Blue Pit and Blue WRSA snow monitoring survey are presented in Appendix B.

4.2 Water Quality and Hydrology

4.2.1 Water Quality Monitoring

Water quality sampling was performed as required by Schedule B of Water License QZ96-007. Appendix C presents a monthly summary of compliance sampling, including the results for bioassay testing.

Components and procedures of the Brewery Creek Mine (BCM) water quality sampling program are summarized below.

Water Quality Laboratories:

Maxxam Analytics
4606 Canada Way
Burnaby, BC
V5G 1K5

Sampling Equipment:

Bottles: Sterilized bottles are supplied by the principal laboratory, and are stored in coolers at the Access Consulting Group office. A running inventory of approximately 50 (1L) CN, 50 (1L) standard analytical, and 50 (250 ml) metals sample bottles are maintained on open shelves in the administration building warehouse at the mine property.

Gloves: Sampling gloves are often used when taking surface water samples. Either neoprene or rubber panner's gloves are used.

Groundwater Bailers: Single Sample ™ disposable polyethylene bailers, 0.75" to 1.5" diameter are used.

Sampling Procedure:

Surface Water Sampling:

Both the outside of cyanide sampling bottle, and the sampling glove, are rinsed prior to opening the sample bottle. The bottle is opened; care is taken to not touch bottle rim or inside of cap. If stream depth permits, bottle is submerged with top facing upstream and allowed to fill. For shallower sites,

the bottle is only partially submerged. Non-cyanide bottles and cap are rinsed twice with water from the sampling site. Rinse water is discarded downstream. Cyanide bottles are not rinsed prior to filling. The bottle is filled and tightly capped. Prior to capping total metals samples, a nitric acid preservative (supplied by the principal laboratory) is added to the bottle.

Groundwater Sampling, Using Bailers:

Water samples are collected and stored in high density plastic sample bottles. Each sample bottle is opened, and care is taken to not touch bottle rim or inside of cap. The bailer is emptied through the top of the bailer, into the bottle. Non-cyanide bottles and cap are rinsed twice with water from the sampling site. Rinse water is discarded on the ground. Cyanide bottles are not rinsed prior to filling. The bottle is filled, and cap is placed tightly on bottle.

Dissolved metals samples are filtered in the field using a disposable filter apparatus. The filter apparatus is attached to a sterile collection bottle. Once filtered, a nitric acid preservative is added to the filtrate, and the cap is placed tightly on the bottle.

Occasionally the principal laboratory performs the filtering and preserving of dissolved metals samples.

Dissolved metals samples are either filtered in the field using a disposable filter apparatus or filtered at the onsite mine environmental laboratory. The filter apparatus is attached to a sterile collection bottle. Once filtered, a nitric acid preservative is added to the filtrate, and the cap is placed tightly on the bottle.

Sample Labeling:

Sample bottles are labeled with the sample location, site name, date sampled, company name and parameters to be analyzed for.

Sample Storage and Shipping:

From the time of collection to chemical analysis, all water samples are maintained, to the extent possible, at or near 4°C in coolers containing one or more ice packs. All samples are submitted to the analytical laboratory for chemical analysis within the required holding times for parameters to be

analyzed. Typically, water samples are shipped either the day of, or the day following sampling. The coolers are delivered to the principal laboratory.

A Chain of Custody record accompanies all samples being shipped in order to ensure that the laboratory receives all samples, that the required analyses are completed, and to facilitate efficient sample tracking.

4.2.2 Surface Water Quality Results

2010 surface water quality results are provided in Appendix C, and include descriptions of surface water quality stations. Certain key parameters including total suspended solids (TSS), nitrogen species (ammonia), and selected metals are graphically compared to historical data.

TSS

Generally, water quality analysis over the past nearly 10 years shows significant fluctuations in total metals and TSS when compared to applicable WQ standards in the Water Use Licence. These fluctuations have been shown to exist during baseline, and were only further intensified after significant forest fire activity, particularly throughout the Laura Creek basin in 2004. The sampling results for TSS are evidence of the influence of the forest fires on water quality in the Laura Creek stations in 2005 through to 2008, during which time, TSS at stations BC-1, 2 and 3 were all elevated over historic levels. In 2010, TSS at BC-1 and BC-3, showed reductions in TSS and certain metals, including Aluminum, Iron and TSS (which were all below WQ standards within the WUL), suggesting the effects of the 2004 fire are now negligible.

The same trends with TSS and metals were not exhibited at station BC-2 during 2010. TSS for both June and September sampling events were above 200 mg/L and Aluminum and Iron were above WQ standards in June. This is likely as a result of increased flows resuspending residual sedimentation that has collected behind a v-notch weir (located at station BC-2). Refer following picture:

Reviewing WQ data downstream of BC-2 shows that this sediment drops out of suspension shortly thereafter, where at station BC-53, concentrations of TSS were shown to be half of that at BC-2 in June. By the time flows enter Lee Creek at station BC-34, concentrations of TSS were at 34 mg/L, below that of WQ standards in the WUL. Similar trends were noted during the September sampling event.

	TSS (mg/L)	
	June	**September**
BC-02	220	250
BC-53	110	24
BC-34	34	3

Arsenic and Zinc

Arsenic and zinc concentrations at stations BC-1, 2 and 3 are similar to levels experienced in the past several years. No significant trends either up or down appear in any of the stations for the parameters arsenic and zinc. Occasional spikes occur at various stations but these are not associated with any trends.

Copper and Lead

Copper and lead levels at most stations are within historic levels and there is evidence that past spikes have diminished.

Selenium

As per Clause 38 d) of the Water Use Licence, the maximum concentration of selenium is not to exceed 0.0038 mg/L at monitoring station BC-39. The Laura Creek AMP (2004) indicates the company will also use a site specific selenium objective of 0.0038 mg/L at BC-53. Selenium levels at stations BC-01 and BC-03 show consistent trends from previous years. There were higher spikes of selenium at BC-02 between 2004 and 2008. During sampling events at B-39 in both June and September of 2010, no flow was noted, and therefore no samples were collected.

Over a period of nearly ten years, concentrations of selenium observed at BC-39 range from below laboratory detection levels (<0.0004 mg/L) to 0.0038 mg/L. The average concentration of selenium during this time is approximately 0.0012 mg/L (where levels were below detectable levels, one half of the laboratory detection level was used to calculate an average). Concentrations of selenium observed at BC-53 range from below laboratory detection levels (<0.0004 mg/L) to 0.0051 mg/L. The average concentration of selenium during this time is approximately 0.0021 mg/L (where levels were below detectable levels, one half of the laboratory detection level was used to calculate an average).

		selenium
BC-39	Average	0.0017
	Minimum	<0.0004
	Maximum	0.0038
BC-53	Average	0.0021
	Minimum	<0.0004
	Maximum	0.0051

During June and September of 2009 and 2010, the selenium water quality objective of 0.0038 mg/L at BC-53 was not exceeded. Total selenium ranged from between 0.00152 and 0.00197 mg/L, with an average concentration of 0.00168 mg/L.

4.2.3 Groundwater Quality Results

Locations and descriptions of groundwater quality stations are given in Appendix C. Water quality sampling from the groundwater stations is required on a twice a year basis as per the Water Use License. There are 7 groundwater piezometers and 1 deep groundwater well (BC-23) located downgradient of the leach pad. It is important to note that some of these stations continue to be dry and no samples are obtained. This is recorded in the sampling results in Appendix C. Station BC-20 contains frozen water on a year round basis. This station historically collected water but it became permanently frozen a few years ago. Attempts are made each quarter to collect a sample and the condition is continuously noted. Antimony, arsenic, silver, lead, selenium and cadmium levels at BC-19 showed no increasing or decreasing trends in 2010. Copper, nickel, iron and zinc levels at BC-19 show a decreasing trend from previous years, particularly when compared to increasing trends exhibited in 2005 and 2006.

Arsenic, silver, lead, iron, selenium, and cadmium levels at BC-21 showed no increasing or decreasing trends in 2010 and are comparable to results from recent years. Antimony and nickel levels show variable concentrations, ranging from 0 mg/L to 0.0015 mg/L over the course of 10 years. Copper and zinc levels at BC-21 show a decreasing trend from previous years.

Selenium levels at BC-21 showed no increasing or decreasing trends in 2010 and are comparable to results from recent years. Arsenic at station BC-27 (Golden) showed significant variations between 2004 and 2010. Other parameters at BC-27 such as antimony, cadmium, copper, silver, lead and selenium exhibit the same or a decreasing trend from previous years.

4.2.4 In-Pit Monitoring Stations Water Quality Results

Mined out pits were used effectively as sediment control basins. Snow melt and precipitation run-off was directed to the closest inactive pit. Samples from all pits were taken from surface standing water within each pit.

In-pit samples were taken from the following pits.

The following points highlight noteworthy trends from water samples collected at in-pit monitoring stations: Pacific (BC-51), Blue (BC-12), Moosehead (BC-15), Kokanee Phase 3 (BC-10), Golden (BC-17), and Lucky (BC-18):

- Samples collected from the Kokanee Phase 3 and Golden pits (BC-10 and BC-17 respectively), show no abnormal values.

- Pacific Pit (BC-51) showed a lower pH, ranging from 3.27 in June to 3.35 in September.

- Blue Pit (BC-12) showed moderately low pH values, ranging from 6.38 in June to 7.59 in September. These pH values are considerably higher than historic levels in the Blue Pit and suggest pit chemistry is stable and not trending towards any ARD concerns.

- Neither the Pacific nor Blue Pits discharge to surface waters; water infiltrates through the pit bottoms.

- Previous years sampling in Moosehead (BC-15) showed higher levels of selenium. This trend appears to have reversed and selenium levels in Moosehead between 2009 and 2010 continued to be below 0.05 mg/l, with an average of 0.03mg/L in 2009 and an average of 0.0216mg/L in 2010. As is the case for all other pits, the water is contained in the pit and either exfiltrates or evaporates.

- The Lucky Pit (BC-18) has generally been dry during the scheduled sampling events and this continued in 2010 where no water was found during either of the sampling events.

Overall, the results of pit water sampling indicate no significant trends or changes from previous years.

4.2.5 Monitoring Conformance

Throughout the year certain monitoring stations or frequencies were not sampled due to various reasons. The following summarizes stations, frequencies or parameters that were not achieved in 2010:

BC-1: Flow measurements were not recorded in June 2010 due to instrumentation error.

BC-2: Flow measurements were not recorded in June 2010 due to very low water levels.

BC-3: Flow measurements were not recorded in June 2010 due to very low water levels.

BC-6: Flow measurements were not recorded in the open water season because of safety concerns with personnel entering this large fast moving water body during open water season. Multiple deep, high flowing channels in the water body increase the hazard of obtaining flow measurements.

BC-9: This in pit station is Fosters Pit and has not had any water for several years and this continued in 2010 and no samples were collected.

BC-11: This station is an intermittent seep at the toe of the Blue WRSA and there was no visible flow during the scheduled quarterly monitoring periods. No samples were collected here during the 2010 monitoring period as no water was ever found.

BC-13: This station is the Moosehead West Waste Dump and no longer exists and there is no visible flow to monitor.

BC-14: This station is the Moosehead East Waste Dump and no longer exists and there is no visible flow to monitor.

BC-16: This station is an intermittent surface flow below the Pacific Pit. No run-off water from the Pacific Pit was found in the months of June and September 2010.

BC-18: This station is water in the Lucky Pit. It is generally dry and no sample can be obtained. During the 2010 monitoring year this location was dry during each of the two semi-annually sampling periods.

BC-20: This station is a piezometer below the leach pad and similar to previous years no water is found in this piezometer.

BC-23: This station is a deep well below the process area. The pump installed in BC-23 stopped functioning in 2004. An attempt was made to remove the pump and discharge pipe using the company's crane. During this exercise, the discharge pipe broke approximately 20 feet below the casing elevation. Further attempts to remove the pipe and pump have not been successful. Consequently there are no samples reported for BC-23.

BC-24: This station is a piezometer below the leach pad and similar to previous years no water is found in this piezometer.

BC-25: This station is a piezometer below the leach pad and similar to previous years no water is found in this piezometer.

BC-26: This station is a piezometer below the leach pad and similar to previous years no water is found in this piezometer.

BC-37: Flow measurements were not recorded in June 2010 due to instrumentation error.

BC-39: No water was found at the station during the two sampling events in 2010. Water was last documented here in June 2009.

BC-68: This piezometer in the Blue WRSA has developed a blockage and attempts to sample the station in 2010 were unsuccessful.

4.2.6 Bioassay Monitoring

Bioassays were collected from station BC-28a for each of the monitoring sessions during 2010. Results were compliant on each occasion and are presented in Appendix C.

4.3 Hydrology

Stream flow measurements for stations situated along Laura Creek, Golden Creek, Lucky Creek, Lee Creek, and Pacific Creek were measured in 2010 during the regularly scheduled monitoring periods. All data are presented in Appendix D. Inspection of the discharge channel from the outflow of the Overflow Pond siphon pipe has demonstrated each year that the discharge water goes to ground and does not enter any receiving water directly. No direct surface water discharge was initiated in 2010 as the pond liners were removed in 2008 and the heap effluent meets water license criteria and now infiltrates into the ground within the reclaimed ponds. Daily flows at the "pumphouse" (BC-1) were not recorded on a daily basis during the year since no direct surface discharge was completed. Based on past experience, inspections and monitoring, it has been demonstrated that significant flows at BC-1 are evident and selenium criteria at BC-39 have been well under the license condition and therefore daily changes in the discharge rates to match BC-1 flows has never been necessary.

4.4 Sediment and Benthic Monitoring

Stream sediment sampling was last carried out in 2009. Benthic monitoring was also last conducted in 2009. These two events mark the end of the monitoring programs for both benthic and sediment monitoring at Brewery Creek.

4.5 Leak Detection and Recovery Systems

Monitoring of (LDRS) systems was discontinued in 2005, consistent with long-term closure plans and the fact the heap has been fully decommissioned and drained. The leak detection piping and collection system remains intact however.

4.6 Air Quality

No air quality monitoring for mercury emissions was conducted in 2010 due to the dismantling of the ADR facility in 2004 and the cessation of refining. No further air quality monitoring is anticipated.

4.7 Effects on Wildlife

4.7.1 Process-Related Mortalities

No wildlife process – related mortalities occurred during 2010. The fence constructed in June 2006 to prevent wildlife from entering the process ponds was removed in 2008 during the final reclamation of the ponds. There is no liner remaining on site to pose any wildlife entrampment risk.

4.8 Reclamation Activities Report

An inspection of the reclamation activities and remaining liabilities was completed by SRK Consulting and Yukon Government during August 2010. The SRK inspection serves as the annual geotechnical report as well as a status of the reclamation progress to date.

The only reclamation activities remaining at the site include dismantling the existing warehouse. No date has been set for this activity and the building is currently being used by True North for their exploration program.

5 REAGENT AND WASTE MANAGEMENT

5.1 Spill Occurrence and Response

No reportable spills occurred in 2010.

5.2 Reagent Storage and Handling

Other than some miscellaneous laboratory chemicals, there are no reagents or chemicals in storage at the Brewery Creek Mine. During the removal of the liner in the pregnant pond, approximately 70 bags of sludge/carbon was removed. This material was rebagged and shipped offsite in October 2009 for recovery of metals and final disposal.

6 WATER MANAGEMENT

6.1 Direct Release

No direct surface release of compliant solution was completed in 2010. Heap drainage is diverted into the barren pond (biological treatment cell) and overflows into the overflow pond where it infiltrates into the ground. The infiltrating water meets water license discharge criteria. Heap surface water is directed to the pregnant pond (now sediment settling pond) where it likewise infiltrates into the ground. All samples from BC-28a (heap effluent) were below 2.0 ppm total cyanide in 2010. The first sample from the heap below 2.0 ppm total cyanide was in February 2002. All samples subsequently taken have returned a total cyanide value below 2.0 ppm. This constitutes 92 consecutive months where the total cyanide from the heap has been less than 2.0 ppm. It is not expected that any direct surface water discharge will be required at Brewery Creek in the future and the long-term passive water management program as presented in the Decommissioning and Reclamation Plan has now been achieved.

Table 6-1 Solution Release 2010

Month	Process Solution Direct Release (m^3)	Fresh Water Direct Release (m^3)	Land App Release (m^3)	TOTAL (m^3)
January	0	0	0	0
February	0	0	0	0
March	0	0	0	0
April	0	0	0	0
May	0	0	0	0
June	0	0	0	0
July	0	0	0	0
August	0	0	0	0
September	0	0	0	0
October	0	0	0	0
November	0	0	0	0
December	0	0	0	0
Totals 2009	**0**	**0**	**0**	**0**
Totals To 2002 - 2009	**183,509**	**80,221**	**151,796**	**415,526**
Remaining Permitted	**n/a**	**n/a**	**248,204**	

6.2 Heap Cover Infiltration

The water license requires an annual update to the heap cover infiltration model. The ability of the lined process ponds to contain solution was critical to accurately tracking the solution inventory from the heap which forms the basis for the amount of water leaving the heap both from surface runoff and cover infiltration. Once the liners were removed in 2008 and the ponds no longer hold water but rather infiltrate into the ground, the ability to track the volume of water leaving the heap has been lost. Table 6-2 summarizes the annual heap infiltration calculations over the past 5 years. As shown, the rate of infiltration has been fairly consistent.

The average heap infiltration over the 5 year period when accurate heap discharge measurements were available is 22.1%. The lower infiltration recorded in 2008 was likely a result of lost solution inventory in the ponds after the liners were removed. The estimated heap cover infiltration that was modeled during the development of the Decommissioning and Reclamation Plan was 30%. The actual performance of the cover versus model estimates is better than expected and the overall conclusion is the heap cover is performing as expected and estimated in the DRP.

Table 6-2 Heap Infiltration Summary

Year	Heap Infiltration %
2004	21.1%
2005	24.1%
2006	27.3%
2007	24.1%
2008	13.7%
Average	22.1%

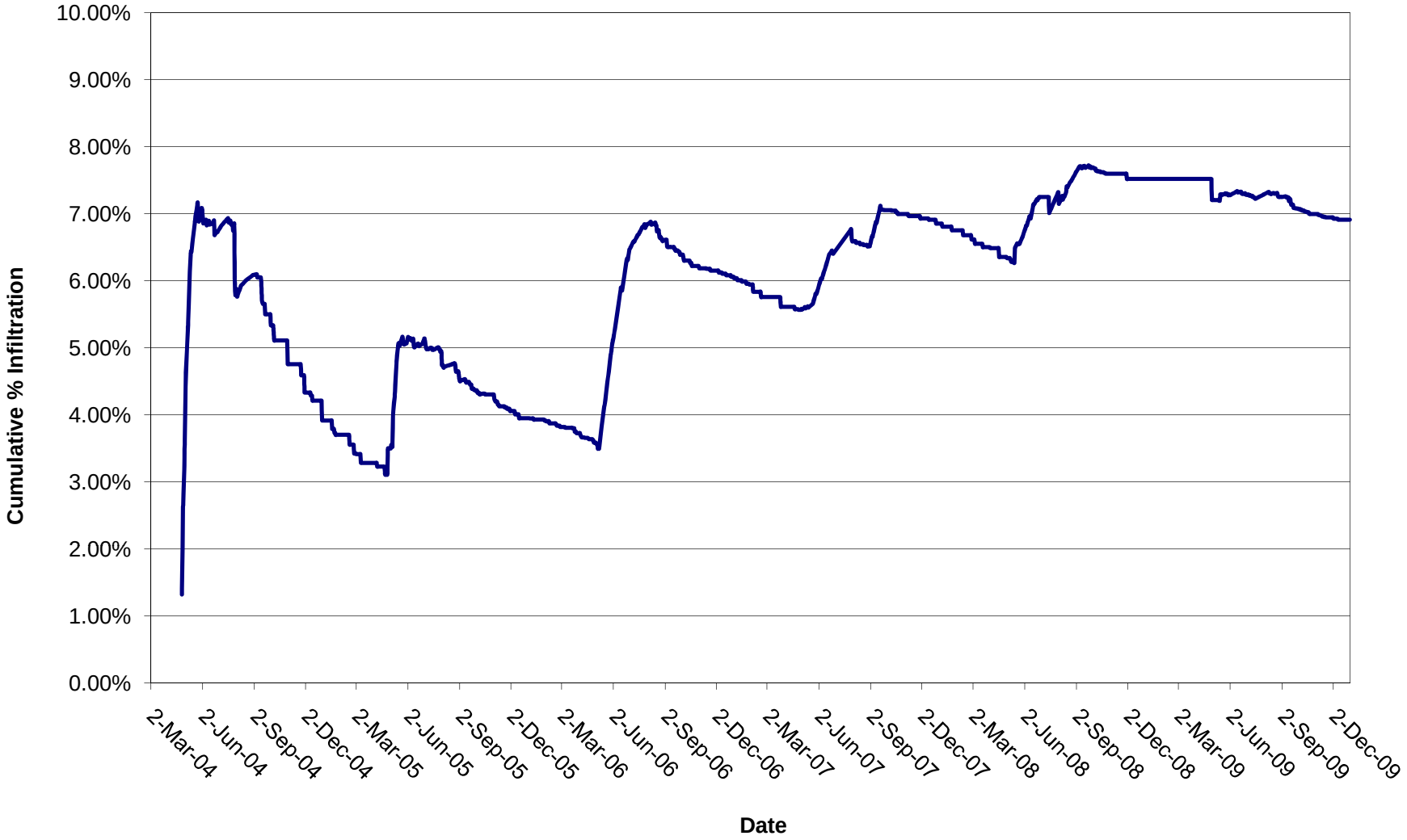
6.3 Blue WRSA Lysimeter

A large scale lysimeter was constructed in 2003 to measure and collect precipitation as it passes through the 0.5 meter soil cover. Water quality samples are collected and analyzed. These results are included in Appendix B. The water quality from the large scale lysimeter is consistent with predictions made by SRK Consulting and there is no evidence of metal leaching or transport from the Blue WRSA material within the lysimeter.

The lysimeter also provides a mechanism to measure the overall level of precipitation infiltrating through the soil cover. A tank installed at the base of the Blue WRSA captures and measures the volume of solution that has passed through the cover. Precipitation levels throughout the year are measured and the percent infiltration can be calculated. The cumulative infiltration through the Blue WRSA lysimeter over the period 2004 – 2009 is estimated at 6.9%. The infiltration during this period is significantly less than the predicted rates from the modeling. Figure 6-1 graphically presents the infiltration rates through the Blue WRSA cover.

Based on the water quality from the lysimeter and the infiltration rate through the cover, the remediation measures implemented in the Blue WRSA are demonstrated to be effective.

Figure 6.1 Blue WRSA Lysimeter



7 GEOTECHNICAL INVESTIGATION

Alexco Resources issued a report titled, Blue Zone Monitoring and Assessment Program (August 2005), as required by QML section 17.5.2. Section 3.1 of this report requires that Alexco conduct annual geotechnical inspections of the Blue WRSA and Pit for years 1-5 during mine reclamation. As a condition of the report, the next geotechnical investigation is scheduled to occur in 2014.

The 2010 geotechnical investigation and subsequent report was conducted by SRK Consulting on September 30, 2010. Results of this inspection are presented in Appendix E.

ALEXCO RESOURCE CORP.

Brewery Creek Mine

Appendix A – Climate Data

Brewery Creek Mine
Monitoring Pursuant to Water License QZ96-007

Climate Data - May 2010

Date	Temp (°C)		Precip (mm)	Evaporation (mm)
	Min	Max		
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27	5.6	24.3	0.0	110
28	4.4	25.2	0.0	97
29				
30				
31				

Brewery Creek Mine
Monitoring Pursuant to Water License QZ96-007

Climate Data - June 2010

Date	Temp (°C)		Precip (mm)	Evaporation (mm)
	Min	Max		
1	11.1	26.9	0.0	75
2	11.7	24.9	0.0	64
3	11.2	27.6	0.0	58
4	9.2	28.3	0.0	52
5				
6				
7	7.9	20.3	3.0	51
8	7.9	24.1	0.0	48
9	4.9	20.3	0.0	112
10	8.7	21.9	0.0	105
11	8.3	23.4	1.8	100
12	6.2	18.3	0.0	96
13	4.3	19.1	7.9	102
14	5.3	20.1	0.0	98
15	4.3	19.2	1.0	92
16	6.3	15.3	0.0	88
17	5.5	18.2	0.0	85
18	7.8	23.9	0.8	79
19	7.4	21.3	8.2	83
20				
21	8.5	23.9	0.0	74
22	9.1	20.3	1.0	75
23	7.8	19.8	8.2	82
24	6.4	20.0	0.8	80
25	6.6	21.3	0.0	76
26				
27				
28	6.8	24.9	3.0	67
29	9.3	21.4	5.5	68
30	12.6	22.1	0.0	63

Monthly Min. Temp.	4.3	°C
Monthly Max. Temp.	28.3	°C
Average Precipitation	1.6	mm

Brewery Creek Mine
Monitoring Pursuant to Water License QZ96-007

Climate Data - July 2010

Date	Temp (°C)		Precip (mm)	Evaporation (mm)
	Min	Max		
1	9.7	20.5	0.0	62
2	10.4	22.9	0.0	56
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21	6.9	27.5	36.0	45
22	10.6	21.5	15.0	56
23				
24				
25				
26	7.9	20.4	24.0	74
27				
28	9.3	25.0	7.0	73
29	11.0	21.3	0.0	68
30	9.7	22.9	0.0	64
31				

Monthly Min. Temp.	6.9	°C
Monthly Max. Temp.	27.5	°C
Average Precipitation	10.3	mm

Brewery Creek Mine
Monitoring Pursuant to Water License QZ96-007

Climate Data - August 2010

Date	Temp (°C)		Precip (mm)	Evaporation (mm)
	Min	Max		
1				
2	8.7	26.1	0.0	52
3	9.1	27.2	0.0	49
4	11.6	29.1	0.0	44
5				
6				
7				
8				
9	6.8	29.3	18.0	114
10				
11	7.9	21.9	6.0	115
12				
13				
14				
15				
16	5.9	26.2	0.0	97
17	7.3	24.9	0.0	95
18	8.5	26.4	12.5	105
19				
20	3.4	18.9	2.6	102
21				
22	2.9	17.9	0.0	98
23				
24				
25				
26				
27				
28				
29				
30				
31				

Monthly Min. Temp.	2.9	°C
Monthly Max. Temp.	29.3	°C
Average Precipitation	3.9	mm

Brewery Creek Mine
Monitoring Pursuant to Water License QZ96-007

Climate Data - September 2010

Date	Temp (°C)		Precip (mm)	Evaporation (mm)
	Min	Max		
1				
2				
3				
4				
5				
6				
7				
8				
9	1.1	18.7	20.0	96
10	6.9	14.4	0.5	94
11				
12				
13	2.2	15.9	0.0	90
14				
15	0.9	16.4	0.0	88
16				
17	1.1	16.2	0.0	84
18				
19				
20	0.8	15.0	0.0	78
21				
22	-4.0	11.6	0.0	76
23				
24				
25				
26				
27	-6.0	3.8		50
28	-10.1	-1.8	0.0	
29	-5.4	2.2		
30	1.3	6.4	0.0	

Precip measured by collecting snow in 4" cylinder, melting snow, then pouring into a 1" colunm

Monthly Min. Temp.	-10.1	°C
Monthly Max. Temp.	18.7	°C
Average Precipitation	2.3	mm

Brewery Creek Mine
Monitoring Pursuant to Water License QZ96-007

Climate Data - November 2010

Date	Temp (°C)		Precip (mm)	Evaporation (mm)
	Min	Max		
1	-8.5	-0.7	24.0	Frozen
2	-2.5	2.2	0.0	
3	-4.1	2.0	0.0	
4	-4.2	5.5	0.0	
5	-3.0	4.9	0.0	
6	-4.4	-0.7	0.0	
7				
8	-5.2	-0.8	0.0	
9	-5.0	-3.8	0.0	
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

Precip measured by collecting snow in 4" cylinder, melting snow, then pouring into a 1" colunm

Monthly Min. Temp.	-8.5	°C
Monthly Max. Temp.	5.5	°C
Average Precipitation	3.0	mm

Brewery Creek Mine
Monitoring Pursuant to Water License QZ96-007

Climate Data - October 2010

Date	Temp (°C)		Precip (mm)	Evaporation (mm)
	Min	Max		
1				Frozen
2				
3	0.0	11.3	0.0	
4				
5	0.1	8.7	0.0	
6				
7	-6.0	2.4	22.0	
8	-5.4	2.7	0.0	
9				
10				
11				
12				
13	-7.2	1.2	48.0	
14				
15				
16	-10.3	2.8	0.0	
17				
18	-8.1	1.1	15.0	
19	-2.4	2.4	3.0	
20	-7.5	3.1	0.0	
21				
22				
23				
24				
25	-9.2	0.4	0.0	
26	-4.1	-1.8	0.0	
27				
28	-7.2	-0.8	0.0	
29	-4.2	0.0	0.0	
30				
31				

Precip measured by collecting snow in 4" cylinder, melting snow, then pouring into a 1" colunm

Monthly Min. Temp.	-10.3	°C
Monthly Max. Temp.	11.3	°C
Average Precipitation	6.8	mm

Brewery Creek Mine
Monitoring Pursuant to Water License QZ96-007

Climate Data - December 2010

Date	Temp (°C)		Precip (mm)	Evaporation (mm)
	Min	Max		
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				
31				

Precip measured by collecting snow in 4" cylinder, melting snow, then pouring into a 1" colunm

ALEXCO RESOURCE CORP.

Brewery Creek Mine

Appendix B – Snow Survey Memo and Data

J.Gibson Env. Consulting
Box 20913 Whitehorse YT
Y1A 6P2

April 3, 2010

Alexco Resources
c/o Access Consulting Group
Whitehorse Yukon

Attention: Durand Cornett
Dave Petkovich

RE: Brewery Creek Snow Survey Data – March 26, 2010

Attached are the snow survey data results from measurements on the Brewery Creek Heap Leach Pad and Blue Waste Rock Dump taken March 26, 2010.

Surveys were done using Mt Rose snow sampling equipment in accordance with procedures outlined in B.C. Ministry of Environment's *Snow Survey Sampling Guide*.

Survey data for snow depth, snow water equivalent, snow density, site aspect and site notes are contained in Tables 1 and 2 for the Heap Leach Pad and Table 3 for Blue Waste Rock Dump.

Heap Leach Pad

Snow survey measurements were taken at 12 predetermined sites (LP # 1-12). Sites were located with GPS.

All sites were exposed / open to wind effect – except for grass, there is no vegetation.

Snow depths ranged from 18 cm at LP-3 to 81 cm at LP-10, with a mean of 42.2 cm.

Snow water equivalent values range from 20 mm at LP-3 to 210 mm at LP-10 with a mean of 109 mm.

Snow density ranged from 11.1% at LP-3 to 28.0% at LP-1 with a mean of 22.9%. With the exception of LP-1 at 28%, LP-3 at 11.1% and LP-4 at 15.4%, all density values fall within 5 percent (+/-) of the mean density.

All parameters are highly influenced by wind effect with stations near the pad crest subject to scouring and those in sheltered locations or down slope subject to deposition.

The lower snow depths and surface hard pan at stations subject to wind scouring made obtaining snow core lengths difficult and increased the margin for error.

The mean core length was 83% of the mean snow depth.

Blue Waste Rock Dump

Snow survey measurements were taken at 10 predetermined sites (Blue #1-10). Sites were located with GPS.

All sites had southern aspect and were exposed to wind effect. Except for grass, there is no vegetation.

Snow depths ranged from 22 cm at Blue #2 to 48 cm at Blue # 6 with a mean of 33.5 cm.

Snow water equivalent ranged from 30 mm at Blue # 4 to 110 mm at Blue # 7 with a mean of 74 mm.

Snow density ranged from 13.0% at Blue # 4 to 28.6% at Blue # 1 with a mean of 22.0%. Seven of the 10 measured density values fall with 5%(+/-) of the mean density.

The mean core length was 79% of the mean snow depth.

As with the Leap Pad, all stations were highly influenced by wind effect.

John Gibson

Table 1. Alexco Resources - Brewery Creek. Leach Pad Snow Survey Data March 26, 2010

	STATION					
	LP-1	**LP-2**	**LP-3**	**LP-4**	**LP-5**	**LP-6**
Snow Depth (cm)	25	28	18	26	61	71
Snow Water Equivalent (mm)	70	70	20	40	160	180
Snow Density (%)	28.0	25.0	11.1	15.4	26.2	25.4
Aspect	North	North	South West	North	South West	North
Site Notes	Exposed Near pad crest High Wind effect Grass exposed Surface crust Surf Temp -8 C	Exposed Near pad crest High Wind effect Grass exposed Surface crust 0-15 cm depth 15-28 cm granular	Exposed High Wind effect Grass exposed Surface crust near Heap Crest	1/4 down North slope Exposed Surface crust 0-15 cm depth 15-26 cm granular Wind effect	2/3 down NW slope Exposed Surface Crust Wind effect	Exposed Wind effect Near pad crest 10 cm fresh wind blown snow 10-14 cm crust 20-26 cm crust 32-43 cm crust 43-71 cm granular

Table 2. Alexco Resources - Brewery Creek. Leach Pad Snow Survey Data March 26, 2010

	STATION					
	LP-7	**LP-8**	**LP-9**	**LP-10**	**LP-11**	**LP-12**
Snow Depth (cm)	37	44	65	81	42	48
Snow Water Equivalent (mm)	90	100	180	210	100	90
Snow Density (%)	24.3	22.7	27.7	25.9	23.8	18.8
Aspect	North	North East	North	North	North	North
Site Notes	Sheltered 0-9 cm fresh snow 9-10 cm crust 10-37 granular	Sheltered 0-4 cm fresh snow 4-9 cm crust 9-44 cm granular	2/3 down slope Exposed Wind effect 0-3 cm fresh snow same as LP-10 Slope - 18%	1/3 down slope Exposed Wind effect 0-6 cm fresh snow 6-13 cm crust 13-36 cm granular 36-56 cm crust 56-81 cm granular	20 m downslope of pad crest Exposed Wind effect 0-5 cm crust 11-15 cm crust 15-42 cm granular Surf Temp -10.5 C	Sheltered Minor wind effect

Table 3. Alexco Resources - Brewery Creek. Blue Waste Rock Snow Survey Data March 26, 2010

	STATION				
	BLUE 1	**BLUE 2**	**BLUE 3**	**BLUE 4**	**BLUE 5**
Snow Depth (cm)	28	22	34	23	24
Snow Water Equivalent (mm)	80	60	70	30	50
Snow Density (%)	28.6	27.3	20.6	13.0	20.8
Aspect	South	South	South	South	South
Site Notes	1/3 downslope Grass exposed 0-16 cm crust 16-28 cm granular Wind effect Surf temp -4.2 C Slope 16%	1/3 downslope Grass exposed 0-16 cm crust 16-22 cm granular Wind effect	1/2 downslope Grass exposed 0-16 cm crust 16-34 cm granular Wind effect	1/2 downslope Grass exposed 0-16 cm crust 16-23cm granular Wind effect	1/2 downslope Grass exposed 0-16 cm crust 16-24cm granular Wind effect

	STATION				
	BLUE 6	**BLUE 7**	**BLUE 8**	**BLUE 9**	**BLUE 10**
Snow Depth (cm)	48	43	40	44	29
Snow Water Equivalent (mm)	100	110	80	100	60
Snow Density (%)	20.8	25.6	20	22.7	20.6
Aspect	South	South	South	South	South
Site Notes	2/3 downslope 0-6cm fresh snow 6-8cm crust 8-48 granular Surf Temp -4 C Exposed Minor wind effect	2/3 downslope 0-3cm fresh snow 3-5 cm crust 16-25 cm crust 25-43 cm granular Exposed Minor wind effect	2/3 downslope 0-3cm fresh snow 3-5 cm crust 16-25 cm crust 25-40 cm granular Exposed Minor wind effect	2/3 downslope 0-5cm crust 23-30 cm crust 30-44cm granular Minor wind effect sheltered by bench	On bench 0-8 cm crust 8-29cm granular Exposed wind effect

ALEXCO RESOURCE CORP.

Brewery Creek Mine

Appendix C – Water Quality Data

ALEXCO RESOURCE CORP.

Brewery Creek Mine

Appendix C-1 – Water Quality Data: Tabular Presentation

		Station Name	BC-01	BC-02	BC-03	BC-04	BC-05	BC-06	BC-9	BC-10	BC-12	BC-13
		Description	Laura Creek, 50m u/s from Ditch Road	Carolyn Creek, u/s from Laura Creek	Laura Creek, above confluence w/ Carolyn Creek	Lucky Creek d/s from Lucky Pit	Pacific Creek u/s from confluence w/ Lee Creek	South Klondike R. d/s from confluence w/ Lee Creek	Upper Fosters Pit and Dump	Kokanee Pit and Dump	Blue Pit	Moosehead West Waste Dump
		Sample Date	15-Jun-2010	15-Jun-2010	15-Jun-2010	14-Jun-2010	14-Jun-2010	14-Jun-2010		14-Jun-2010	14-Jun-2010	
Flow	Flow	L/s		7	2	1	177					
pH-F	pH, in-field	pH units	7.84	7.58	7.89	7.49	7.99	8.69		8.51	6.38	
Cond-F	pH, Laboratory	µS/cm	427	510	510	507	460	336		333	1114	
Temp-F	Conductivity, in-field	C	6.1	3.4	3.4	4.2	1.9	6.3		12.2	15	
pH-L	Conductivity, Laboratory	pH units	8.1	7.9	8.2	8	8.1	8.1		8.1	7.1	
Cond-L	Temperature, in-field	µS/cm	456	508	483	523	482	370		348	1190	
Hard-T	Hardness calcualted from total metal scan	mg/L	232	240	247	270	255	188		171	691	
Hard-D	Hardness calculated from dissolved metal scan	mg/L										
Alk-T	Alkalinity, Total	mg/L	130	92	140	130	140	110		97	13	
Alk-OH	Alkalinity, Hydroxide OH	mg/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	
Alk-Carb	Alaklinity, Carbonate CO3	mg/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	
Alk-Bicrb	Alkalinity, Bicarbonate HCO3	mg/L	160	110	170	150	180	140		120	16	
TDS	Total Dissolved Solids	mg/L	290	340	310	350	300	220		210	1000	
TSS	Total Suspended Solids	mg/L	22	220	3	6	2	2		4	7	
Chloride	Chloride	mg/L	0.5	0.9	<0.5	<0.5	<0.5	<0.5		<0.5	0.6	
SO4-D	Sulphate, Dissolved	mg/L	110	160	120	150	110	81		83	630	
N-NO3	Nitrate Nitrogen, as N	mg/L	0.17	1.5	0.14	0.17	0.08	0.05		<0.02	0.13	
CN-T	Cyanide, Total	mg/L	0.0009	0.0023	0.0008	0.001	0.0007	0.0008				
CN-WAD	Cyanide, Weak Acid Dissociable.	mg/L	0.001	0.0019	0.0008	0.0007	<0.0005	0.001				
Ca-T	Calcium, total	mg/L	56.1	55.6	59.3	60.9	63.6	47		40.1	174	
Mg-T	Magnesium, total	mg/L	22.3	24.7	24.1	28.7	23.3	17.1		17.3	62.6	
Na-T	Sodium, total	mg/L	3.64	10.1	2.75	1.92	1.37	1.41		0.59	1.17	
K-T	Potassium, total	mg/L	1.24	1.03	1.33	1.08	0.78	0.59		1.54	2.23	
Cu-T	Copper, total	mg/L	0.00175	0.00608	0.00107	0.00099	0.00144	0.0014		0.00066	0.0427	
As-T	Arsenic, total	mg/L	0.00443	0.00303	0.00256	0.00317	0.00058	0.00028		0.012	0.00085	
Sb-T	Antimony, total	mg/L	0.00416	0.0011	0.00544	0.0036	0.00051	0.00025		0.0946	0.0371	
Hg-T	Mercury, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001	
Zn-T	Zinc, total	mg/L	0.0035	0.0136	0.0026	0.0118	0.0067	0.0047		0.0011	0.188	
Se-T	Selenium, total	mg/L	0.00194	0.00348	0.00181	0.00404	0.00178	0.00159		0.00419	0.00144	
Pb-T	Lead, total	mg/L	0.000324	0.00257	0.000042	0.000102	0.000051	0.000048	Dry - No Water	0.000092	0.000047	Dry - No Water
Al-T	Aluminum, total	mg/L	0.241	1.36	0.037	0.0887	0.0266	0.0249	Found	0.0153	0.402	Found
Bi-T	Bismuth, total	mg/L	<0.000005	0.000006	<0.000005	<0.000005	<0.000005	<0.000005		<0.000005	<0.000005	
Cd-T	Cadmium, total	mg/L	0.00005	0.000158	0.000036	0.000152	0.000044	0.000071		0.000041	0.0025	
Cr-T	Chromium, total	mg/L	0.0005	0.0024	0.0002	0.0002	0.0002	0.0002		0.0002	<0.0001	
Fe-T	Iron, total	mg/L	0.522	3.79	0.137	0.444	0.104	0.061		0.014	0.695	
Mn-T	Manganese, total	mg/L	0.0382	0.308	0.0409	0.127	0.0133	0.00564		0.00303	1.41	
Mo-T	Molybdenum, total	mg/L	0.0028	0.00034	0.00242	0.0028	0.00336	0.00135		0.00345	0.00074	
Ni-T	Nickel, total	mg/L	0.00246	0.00578	0.00237	0.0077	0.00358	0.00191		0.00098	0.112	
Ag-T	Silver, total	mg/L	0.000006	0.000011	<0.000005	<0.000005	<0.000005	<0.000005		<0.000005	<0.000005	
Ca-D	Calcium, dissolved	mg/L										
Mg-D	Magnesium, dissolved	mg/L										
Na-D	Sodium, dissolved	mg/L										
K-D	Potassium, dissolved	mg/L										
Cu-D	Copper, dissolved	mg/L										
As-D	Arsenic, dissolved	mg/L										
Sb-D	Antimony, dissolved	mg/L										
Hg-D	Mercury, dissolved	mg/L										
Zn-D	Zinc, dissolved	mg/L										
Se-D	Selenium, dissolved	mg/L										
Pb-D	Lead, dissolved	mg/L										
Al-D	Aluminum, dissolved	mg/L										
Bi-D	Bismuth, dissolved	mg/L										
Cd-D	Cadmium, dissolved	mg/L										
Cr-D	Chromium, dissolved	mg/L										
Fe-D	Iron, dissolved	mg/L										
Mn-D	Manganese, dissolved	mg/L										
Mo-D	Molybdenum, dissolved	mg/L										
Ni-D	Nickel, dissolved	mg/L										
Ag-D	Silver, dissolved	mg/L										
S-D	Sulphur, Dissolved	mg/L										

		Station Name	BC-14	BC-15	BC-16	BC-17	BC-18	BC-19	BC-20	BC-21	BC-22	BC-23
		Description	Moosehead East Waste Dump	Moosehead Pit discharge	Pacific Gulch	Golden Pit and Dump	Lucky Pit and Dump	Piezometer RC94-843	Piezonmeter RC94-844	Piezometer RC95-1354	Piezometer RC95-1357	Piezometer RC95-1370
		Sample Date		14-Jun-2010		14-Jun-2010		15-Jun-2010		14-Jun-2010	15-Jun-2010	
Flow	Flow	L/s										
pH-F	pH, in-field	pH units		8.13		8.16		7.22		7.25	6.16	
Cond-F	pH, Laboratory	µS/cm		735		642		356		291	1292	
Temp-F	Conductivity, in-field	C		12.1		11.9		4.5		4	4.4	
pH-L	Conductivity, Laboratory	pH units		8.1		8.2		8		6.8	7.1	
Cond-L	Temperature, in-field	µS/cm		778		656		704		309	1310	
Hard-T	Hardness calcualted from total metal scan	mg/L		417		352						
Hard-D	Hardness calculated from dissolved metal scan	mg/L						320		113	682	
Alk-T	Alkalinity, Total	mg/L		98		160		240		9.7	130	
Alk-OH	Alkalinity, Hydroxide OH	mg/L		<0.5		<0.5		<0.5		<0.5	<0.5	
Alk-Carb	Alaklinity, Carbonate CO3	mg/L		<0.5		<0.5		<0.5		<0.5	<0.5	
Alk-Bicrb	Alkalinity, Bicarbonate HCO3	mg/L		120		190		290		12	160	
TDS	Total Dissolved Solids	mg/L		590		460		450		220	1100	
TSS	Total Suspended Solids	mg/L		1		1		23		21	13	
Chloride	Chloride	mg/L		<0.5		<0.5		0.7		68	1.5	
SO4-D	Sulphate, Dissolved	mg/L		270		190		160		15	590	
N-NO3	Nitrate Nitrogen, as N	mg/L		0.23		<0.02		0.11		0.62	3.52	
CN-T	Cyanide, Total	mg/L						<0.0005		<0.0005	<0.0005	
CN-WAD	Cyanide, Weak Acid Dissociable.	mg/L						<0.0005		<0.0005	<0.0005	
Ca-T	Calcium, total	mg/L		90.8		84.5						
Mg-T	Magnesium, total	mg/L		46.3		34.3						
Na-T	Sodium, total	mg/L		0.35		1.4						
K-T	Potassium, total	mg/L		0.92		1.34						
Cu-T	Copper, total	mg/L		0.00024		0.00028						
As-T	Arsenic, total	mg/L		0.0513		0.0254						
Sb-T	Antimony, total	mg/L		0.0059		0.0613						
Hg-T	Mercury, total	mg/L		<0.00001		<0.00001						
Zn-T	Zinc, total	mg/L		0.0011		0.0019						
Se-T	Selenium, total	mg/L		0.0195		0.00314						
Pb-T	Lead, total	mg/L		0.000052		0.000217						
Al-T	Aluminum, total	mg/L		0.0085		0.013						
Bi-T	Bismuth, total	mg/L		<0.000005		<0.000005						
Cd-T	Cadmium, total	mg/L		0.000119		0.000031						
Cr-T	Chromium, total	mg/L		<0.0001		<0.0001						
Fe-T	Iron, total	mg/L		0.005		0.056						
Mn-T	Manganese, total	mg/L		0.00172		0.0181						
Mo-T	Molybdenum, total	mg/L		0.00098		0.00589						
Ni-T	Nickel, total	mg/L		0.0007		0.00056						
Ag-T	Silver, total	mg/L		<0.000005		<0.000005						
Ca-D	Calcium, dissolved	mg/L						67.7		27.6	175	
Mg-D	Magnesium, dissolved	mg/L						36.6		10.8	59.4	
Na-D	Sodium, dissolved	mg/L						8.98		5.81	17.7	
K-D	Potassium, dissolved	mg/L						2.2		2.04	3.97	
Cu-D	Copper, dissolved	mg/L						0.00514		0.00237	0.00606	
As-D	Arsenic, dissolved	mg/L						0.00081		0.00208	0.00037	
Sb-D	Antimony, dissolved	mg/L						0.00062		0.00078	0.00039	
Hg-D	Mercury, dissolved	mg/L						<0.00001		<0.00001	<0.00001	
Zn-D	Zinc, dissolved	mg/L						0.0259		0.0276	0.322	
Se-D	Selenium, dissolved	mg/L						0.00105		0.00047	0.0697	
Pb-D	Lead, dissolved	mg/L						0.000095		0.000097	0.000191	
Al-D	Aluminum, dissolved	mg/L						0.0042		0.0106	0.274	
Bi-D	Bismuth, dissolved	mg/L						<0.000005		<0.000005	<0.000005	
Cd-D	Cadmium, dissolved	mg/L						0.000383		0.000633	0.00969	
Cr-D	Chromium, dissolved	mg/L						<0.0001		<0.0001	0.0002	
Fe-D	Iron, dissolved	mg/L						0.005		0.004	0.005	
Mn-D	Manganese, dissolved	mg/L						0.041		0.153	0.623	
Mo-D	Molybdenum, dissolved	mg/L						0.00011		<0.00005	0.00021	
Ni-D	Nickel, dissolved	mg/L						0.00363		0.031	0.0988	
Ag-D	Silver, dissolved	mg/L						<0.000005		<0.000005	<0.000005	
S-D	Sulphur, Dissolved	mg/L						52		<10	197	

Dry - No Water Found

Dry - No Water Found - Pit Continues to Hold No Water as Per 2009

Dry - No Water Found

Capping Frozen on Pipe - Not Possible to Obtain a Sample

Piezometer Not Functioning - Not Possible to Obtain a Sample

		Station Name	BC-24	BC-25	BC-26	BC-27	BC-28	BC-28a	BC-31	BC-34	BC-39	BC-51W
		Description	Piezometer RC951400	Piezometer RC96-1608	Piezometer RC97-2024	Piezometer RC97-2026	Overflow Pond Decant	Discharge from heap	Golden Creek above confluence w/ South Klondike R.	Lee Creek at Ditch Road	Laura Creek in side channel of South Klondike River	Pacific Pit - west side
		Sample Date				14-Jun-2010		15-Jun-2010	14-Jun-2010	14-Jun-2010		14-Jun-2010
Flow	Flow	L/s							1251			
pH-F	pH, in-field	pH units				7.82		7.69	8.71	7.33		3.35
Cond-F	pH, Laboratory	µS/cm				691		3792	372	403		546
Temp-F	Conductivity, in-field	C				6		5.2	3.7	6.4		14.1
pH-L	Conductivity, Laboratory	pH units				8		8	8.1	8.1		3.4
Cond-L	Temperature, in-field	µS/cm				728		3750	396	382		553
Hard-T	Hardness calcualted from total metal scan	mg/L						1100	206	189		152
Hard-D	Hardness calculated from dissolved metal scan	mg/L				367						
Alk-T	Alkalinity, Total	mg/L				170		120	120	110		<0.5
Alk-OH	Alkalinity, Hydroxide OH	mg/L				<0.5		<0.5	<0.5	<0.5		<0.5
Alk-Carb	Alaklinity, Carbonate CO3	mg/L				<0.5		<0.5	<0.5	<0.5		<0.5
Alk-Bicrb	Alkalinity, Bicarbonate HCO3	mg/L				200		150	150	140		<0.5
TDS	Total Dissolved Solids	mg/L				520		3100	250	260		270
TSS	Total Suspended Solids	mg/L				19		1	3	10		3
Chloride	Chloride	mg/L				0.8		27	<0.5	<0.5		<0.5
SO4-D	Sulphate, Dissolved	mg/L				190		650	84	86		200
N-NO3	Nitrate Nitrogen, as N	mg/L				<0.02		321	0.14	0.08		0.16
CN-T	Cyanide, Total	mg/L				0.0008		0.625	0.0007			
CN-WAD	Cyanide, Weak Acid Dissociable.	mg/L				<0.0005		0.129	0.0007			
Ca-T	Calcium, total	mg/L						331	48.6	46.6		32.9
Mg-T	Magnesium, total	mg/L						66.5	20.5	17.6		16.9
Na-T	Sodium, total	mg/L						431	1.49	1.17		0.57
K-T	Potassium, total	mg/L						5.5	0.7	0.57		1.5
Cu-T	Copper, total	mg/L						0.0017	0.00206	0.00199		0.291
As-T	Arsenic, total	mg/L						0.304	0.0006	0.00031		0.0115
Sb-T	Antimony, total	mg/L						1.77	0.00064	0.00028		0.00372
Hg-T	Mercury, total	mg/L						<0.00005	<0.00001	<0.00001		<0.00001
Zn-T	Zinc, total	mg/L						0.0083	0.0036	0.008		0.27
Se-T	Selenium, total	mg/L	Piezometer Not Functioning - Not Possible to Obtain a Sample	Piezometer Not Functioning - Not Possible to Obtain a Sample	Piezometer Not Functioning - Not Possible to Obtain a Sample			0.151	0.00145	0.00173	Dry - No Water Found - Creek Contained Water in June 2009	0.00331
Pb-T	Lead, total	mg/L						0.00021	0.000061	0.000108		0.000121
Al-T	Aluminum, total	mg/L					Not Active	0.01	0.0471	0.0618		3.9
Bi-T	Bismuth, total	mg/L						<0.00003	<0.000005	<0.000005		<0.000005
Cd-T	Cadmium, total	mg/L						0.00023	0.000052	0.000101		0.00333
Cr-T	Chromium, total	mg/L						<0.0005	0.0002	0.0002		0.0019
Fe-T	Iron, total	mg/L						0.223	0.127	0.144		4.38
Mn-T	Manganese, total	mg/L						0.0215	0.00931	0.0109		1.32
Mo-T	Molybdenum, total	mg/L						0.0224	0.00136	0.00139		0.00009
Ni-T	Nickel, total	mg/L						0.0077	0.00236	0.0026		0.0988
Ag-T	Silver, total	mg/L						<0.00003	<0.000005	0.000008		0.000027
Ca-D	Calcium, dissolved	mg/L				87.7						
Mg-D	Magnesium, dissolved	mg/L				36						
Na-D	Sodium, dissolved	mg/L				1.86						
K-D	Potassium, dissolved	mg/L				1.45						
Cu-D	Copper, dissolved	mg/L				0.00111						
As-D	Arsenic, dissolved	mg/L				0.13						
Sb-D	Antimony, dissolved	mg/L				0.00068						
Hg-D	Mercury, dissolved	mg/L				<0.00001						
Zn-D	Zinc, dissolved	mg/L				0.0064						
Se-D	Selenium, dissolved	mg/L				<0.00004						
Pb-D	Lead, dissolved	mg/L				0.000134						
Al-D	Aluminum, dissolved	mg/L				0.0041						
Bi-D	Bismuth, dissolved	mg/L				<0.000005						
Cd-D	Cadmium, dissolved	mg/L				0.000074						
Cr-D	Chromium, dissolved	mg/L				<0.0001						
Fe-D	Iron, dissolved	mg/L				1.31						
Mn-D	Manganese, dissolved	mg/L				0.233						
Mo-D	Molybdenum, dissolved	mg/L				0.014						
Ni-D	Nickel, dissolved	mg/L				0.00324						
Ag-D	Silver, dissolved	mg/L				<0.000005						
S-D	Sulphur, Dissolved	mg/L				78						

		Station Name	BC-01	BC-02	BC-03	BC-04	BC-05	BC-06	BC-9	BC-10	BC-12
		Description	Laura Creek, 50m u/s from Ditch Road	Carolyn Creek, u/s from Laura Creek	Laura Creek, above confluence w/ Carolyn Creek	Lucky Creek d/s from Lucky Pit	Pacific Creek u/s from confluence w/ Lee Creek	South Klondike R. d/s from confluence w/ Lee Creek	Upper Fosters Pit and Dump	Kokanee Pit and Dump	Blue Pit
		Smpl Date	1-Sep-2010	1-Sep-2010	1-Sep-2010	2-Sep-2010	2-Sep-2010	2-Sep-2010	31-Aug-2010	31-Aug-2010	31-Aug-2010
pH-L	pH, Laboratory	pH units	8.22	7.95	8.22	8.17	8.2	8.17		8.27	7.59
Cond-L	Conductivity, Laboratory	µS/cm	436	475	456	547	440	422		428	1190
Hard-T	Hardness calcualted from total metal scan	mg/L	218	233	233	293	236	228		213	730
Hard-D	Hardness calculated from dissolved metal scan	mg/L									
Alk-T	Alkalinity, Total	mg/L	130	96	130	130	130	120		120	41
Alk-OH	Alkalinity, Hydroxide OH	mg/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5
Alk-Carb	Alaklinity, Carbonate CO3	mg/L	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5
Alk-Bicrb	Alkalinity, Bicarbonate HCO3	mg/L	150	120	160	160	160	150		150	51
TDS	Total Dissolved Solids	mg/L	290	330	300	400	330	290		260	1000
TSS	Total Suspended Solids	mg/L	13	250	6	4	1	2		2	3
Chloride	Chloride	mg/L	<0.5	1	<0.5	<0.5	1.1	<0.5		0.8	<0.5
SO4-D	Sulphate, Dissolved	mg/L	110	150	110	160	99	95		120	660
N-NO3	Nitrate Nitrogen, as N	mg/L	0.15	0.25	0.16	0.12	0.07	0.09		<0.02	0.03
CN-T	Cyanide, Total	mg/L	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005			
CN-WAD	Cyanide, Weak Acid Dissociable.	mg/L	0.001	0.0016	0.0008	0.0007	0.0009	0.0007			
Ca-T	Calcium, total	mg/L	54.4	54.3	56.5	65.4	58.8	56.8		47.3	184
Mg-T	Magnesium, total	mg/L	20	23.7	22.4	31.5	21.8	20.8		22.9	65.9
Na-T	Sodium, total	mg/L	3.24	7.69	2.79	2.2	1.51	1.6		0.8	1.29
K-T	Potassium, total	mg/L	1.12	0.97	1.23	1.13	0.68	0.69		1.6	2.81
Cu-T	Copper, total	mg/L	0.00126	0.00229	0.00136	0.00078	0.00184	0.00133		0.00032	0.00308
As-T	Arsenic, total	mg/L	0.0038	0.00153	0.00241	0.00234	0.00057	0.00025		0.0146	0.00082
Sb-T	Antimony, total	mg/L	0.00339	0.00115	0.00413	0.00327	0.00059	0.00029		0.17	0.0686
Hg-T	Mercury, total	mg/L	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001	<0.00001		<0.00001	<0.00001
Zn-T	Zinc, total	mg/L	0.0007	0.0017	0.0025	0.01	0.0105	0.0054		0.0003	0.134
Se-T	Selenium, total	mg/L	0.0015	0.00286	0.00142	0.00302	0.00178	0.00196		0.00515	0.00068
Pb-T	Lead, total	mg/L	0.000025	0.00037	0.000015	0.000012	<0.000005	<0.000005		0.00001	<0.000005
Al-T	Aluminum, total	mg/L	0.0356	0.123	0.0336	0.0383	0.027	0.0072		0.01	0.0159
Bi-T	Bismuth, total	mg/L	<0.000005	<0.000005	<0.000005	<0.000005	<0.000005	<0.000005	Dry - No Water Found	<0.000005	<0.000005
Cd-T	Cadmium, total	mg/L	0.000021	0.000022	0.000035	0.000155	0.000061	0.000084		0.000018	0.00161
Cr-T	Chromium, total	mg/L	0.0002	0.0004	0.0001	0.0002	0.0001	<0.0001		<0.0001	<0.0001
Fe-T	Iron, total	mg/L	0.115	0.601	0.094	0.25	0.107	0.02		0.006	0.027
Mn-T	Manganese, total	mg/L	0.0189	0.0309	0.0301	0.182	0.0121	0.00227		0.00202	1.21
Mo-T	Molybdenum, total	mg/L	0.00256	0.00061	0.00218	0.00281	0.00298	0.00146		0.00402	0.00231
Ni-T	Nickel, total	mg/L	0.00211	0.00263	0.00328	0.00785	0.00431	0.00213		0.00036	0.0939
Ag-T	Silver, total	mg/L	<0.000005	0.000007	<0.000005	<0.000005	<0.000005	<0.000005		<0.000005	<0.000005
Ca-D	Calcium, dissolved	mg/L									
Mg-D	Magnesium, dissolved	mg/L									
Na-D	Sodium, dissolved	mg/L									
K-D	Potassium, dissolved	mg/L									
Cu-D	Copper, dissolved	mg/L									
As-D	Arsenic, dissolved	mg/L									
Sb-D	Antimony, dissolved	mg/L									
Hg-D	Mercury, dissolved	mg/L									
Zn-D	Zinc, dissolved	mg/L									
Se-D	Selenium, dissolved	mg/L									
Pb-D	Lead, dissolved	mg/L									
Al-D	Aluminum, dissolved	mg/L									
Bi-D	Bismuth, dissolved	mg/L									
Cd-D	Cadmium, dissolved	mg/L									
Cr-D	Chromium, dissolved	mg/L									
Fe-D	Iron, dissolved	mg/L									
Mn-D	Manganese, dissolved	mg/L									
Mo-D	Molybdenum, dissolved	mg/L									
Ni-D	Nickel, dissolved	mg/L									
Ag-D	Silver, dissolved	mg/L									
S-D	Sulphur, Dissolved	mg/L									

		Station Name	BC-13	BC-14	BC-15	BC-16	BC-17	BC-18	BC-19	BC-20	BC-21
		Description	Moosehead West Waste Dump	Moosehead East Waste Dump	Moosehead Pit discharge	Pacific Gulch	Golden Pit and Dump	Lucky Pit and Dump	Piezometer RC94-843	Piezonmeter RC94-844	Piezometer RC95-1354
		Smpl Date			31-Aug-2010		31-Aug-2010		1-Sep-2010		31-Aug-2010
pH-L	pH, Laboratory	pH units			8.18		8.32		7.9		6.75
Cond-L	Conductivity, Laboratory	µS/cm			1020		735		698		301
Hard-T	Hardness calcualted from total metal scan	mg/L			596		409				
Hard-D	Hardness calculated from dissolved metal scan	mg/L							377		104
Alk-T	Alkalinity, Total	mg/L			120		170		230		7.9
Alk-OH	Alkalinity, Hydroxide OH	mg/L			<0.5		<0.5		<0.5		<0.5
Alk-Carb	Alaklinity, Carbonate CO3	mg/L			<0.5		2.1		<0.5		<0.5
Alk-Bicrb	Alkalinity, Bicarbonate HCO3	mg/L			140		210		280		9.6
TDS	Total Dissolved Solids	mg/L			800		530		480		200
TSS	Total Suspended Solids	mg/L			<1		<1		10		4
Chloride	Chloride	mg/L			<0.5		<0.5		1.2		67
SO4-D	Sulphate, Dissolved	mg/L			440		220		170		16
N-NO3	Nitrate Nitrogen, as N	mg/L			0.11		<0.02		0.02		0.68
CN-T	Cyanide, Total	mg/L							<0.0005		<0.0005
CN-WAD	Cyanide, Weak Acid Dissociable.	mg/L							<0.0005		0.0006
Ca-T	Calcium, total	mg/L			130		94.7				
Mg-T	Magnesium, total	mg/L			65.9		42				
Na-T	Sodium, total	mg/L			0.49		1.58				
K-T	Potassium, total	mg/L			1.23		1.67				
Cu-T	Copper, total	mg/L			0.00023		0.00037				
As-T	Arsenic, total	mg/L			0.0556		0.0306				
Sb-T	Antimony, total	mg/L			0.00501		0.0585				
Hg-T	Mercury, total	mg/L			<0.00001		<0.00001				
Zn-T	Zinc, total	mg/L			0.0003		0.0017				
Se-T	Selenium, total	mg/L			0.0237		0.00251				
Pb-T	Lead, total	mg/L			0.000012		0.000034				
Al-T	Aluminum, total	mg/L			0.0118		0.0041				
Bi-T	Bismuth, total	mg/L	Dry - No Water Found	Dry - No Water Found	<0.000005	Dry - No Water Found	<0.000005	Dry - No Water Found		Capping Frozen on Pipe - Not Possible to Obtain a Sample	
Cd-T	Cadmium, total	mg/L			0.000027		0.000022				
Cr-T	Chromium, total	mg/L			<0.0001		<0.0001				
Fe-T	Iron, total	mg/L			0.009		0.006				
Mn-T	Manganese, total	mg/L			0.00043		0.0019				
Mo-T	Molybdenum, total	mg/L			0.00106		0.00555				
Ni-T	Nickel, total	mg/L			0.00067		0.00035				
Ag-T	Silver, total	mg/L			<0.000005		<0.000005				
Ca-D	Calcium, dissolved	mg/L							85.3		24.8
Mg-D	Magnesium, dissolved	mg/L							39.9		10.2
Na-D	Sodium, dissolved	mg/L							10.3		5.48
K-D	Potassium, dissolved	mg/L							2.39		1.9
Cu-D	Copper, dissolved	mg/L							0.00792		0.0024
As-D	Arsenic, dissolved	mg/L							0.00096		0.00188
Sb-D	Antimony, dissolved	mg/L							0.00145		0.00148
Hg-D	Mercury, dissolved	mg/L							<0.00001		<0.00001
Zn-D	Zinc, dissolved	mg/L							0.0303		0.0188
Se-D	Selenium, dissolved	mg/L							0.00184		0.00049
Pb-D	Lead, dissolved	mg/L							0.000073		0.000205
Al-D	Aluminum, dissolved	mg/L							0.0045		0.015
Bi-D	Bismuth, dissolved	mg/L							<0.000005		<0.000005
Cd-D	Cadmium, dissolved	mg/L							0.000394		0.000546
Cr-D	Chromium, dissolved	mg/L							0.0003		<0.0001
Fe-D	Iron, dissolved	mg/L							0.007		0.008
Mn-D	Manganese, dissolved	mg/L							0.0512		0.145
Mo-D	Molybdenum, dissolved	mg/L							0.00013		<0.00005
Ni-D	Nickel, dissolved	mg/L							0.00428		0.0338
Ag-D	Silver, dissolved	mg/L							<0.000005		<0.000005
S-D	Sulphur, Dissolved	mg/L							57		<10

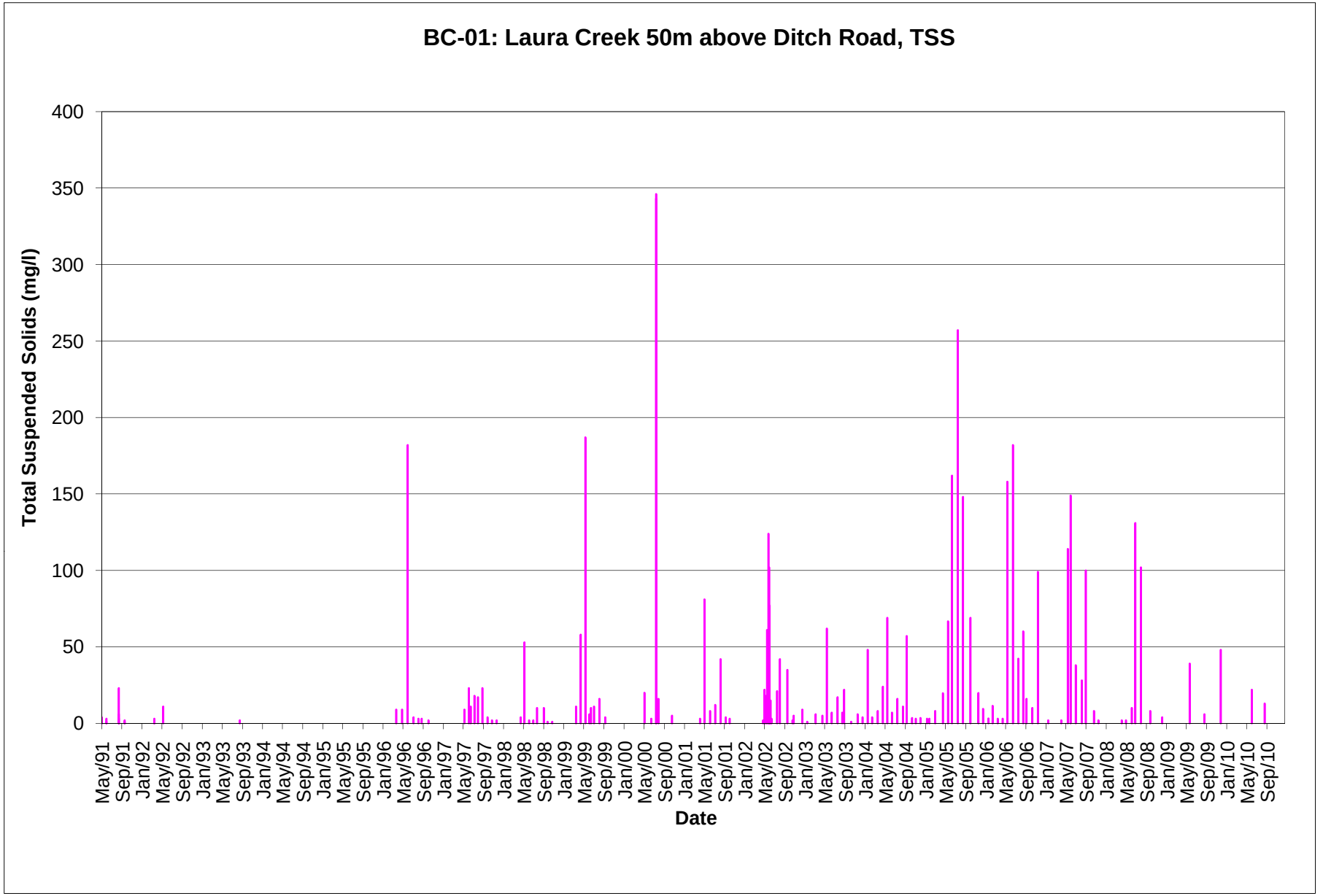
		Station Name	BC-22	BC-23	BC-24	BC-25	BC-26	BC-27	BC-28	BC-28a	BC-28a
		Description	Piezometer RC95-1357	Piezometer RC95-1370	Piezometer RC951400	Piezometer RC96-1608	Piezometer RC97-2024	Piezometer RC97-2026	Overflow Pond Decant	Discharge from heap	Discharge from heap
		Smpl Date	1-Sep-2010					31-Aug-2010	19-Oct-2010	1-Sep-2010	16-Sep-2010
pH-L	pH, Laboratory	pH units	7.13					8.11	7.75	8.08	7.94
Cond-L	Conductivity, Laboratory	µS/cm	1340					729	1650	3940	4190
Hard-T	Hardness calcualted from total metal scan	mg/L							441	1200	1320
Hard-D	Hardness calculated from dissolved metal scan	mg/L	719					402			
Alk-T	Alkalinity, Total	mg/L	120					160	44	130	140
Alk-OH	Alkalinity, Hydroxide OH	mg/L	<0.5					<0.5	<0.5	<0.5	<0.5
Alk-Carb	Alaklinity, Carbonate CO3	mg/L	<0.5					<0.5	<0.5	<0.5	<0.5
Alk-Bicrb	Alkalinity, Bicarbonate HCO3	mg/L	140					200	53	160	170
TDS	Total Dissolved Solids	mg/L	1100					540	1200	3400	3300
TSS	Total Suspended Solids	mg/L	16					34	9	<1	<1
Chloride	Chloride	mg/L	1.3					0.7	13	28	30
SO4-D	Sulphate, Dissolved	mg/L	640					220	270	860	850
N-NO3	Nitrate Nitrogen, as N	mg/L	3.5					0.16	127	337	366
CN-T	Cyanide, Total	mg/L	<0.0005					<0.0005	0.0435	0.956	0.75
CN-WAD	Cyanide, Weak Acid Dissociable.	mg/L	0.0005					0.0007	0.0094	0.069	0.0624
Ca-T	Calcium, total	mg/L							124	353	387
Mg-T	Magnesium, total	mg/L							31.7	78.3	84.9
Na-T	Sodium, total	mg/L							202	434	471
K-T	Potassium, total	mg/L							2.85	5.5	5.9
Cu-T	Copper, total	mg/L							0.00177	0.0015	0.0018
As-T	Arsenic, total	mg/L							0.00216	0.325	0.324
Sb-T	Antimony, total	mg/L							0.548	1.81	1.9
Hg-T	Mercury, total	mg/L							<0.00001	<0.00005	0.000046
Zn-T	Zinc, total	mg/L							0.0018	0.009	0.0101
Se-T	Selenium, total	mg/L							0.0691	0.167	0.183
Pb-T	Lead, total	mg/L							0.000088	<0.00003	0.00004
Al-T	Aluminum, total	mg/L		Piezometer Not Functioning - Not Possible to Obtain a Sample	Piezometer Not Functioning - Not Possible to Obtain a Sample	Piezometer Not Functioning - Not Possible to Obtain a Sample	Piezometer Not Functioning - Not Possible to Obtain a Sample		0.11	0.006	0.005
Bi-T	Bismuth, total	mg/L							<0.000005	<0.00003	<0.00003
Cd-T	Cadmium, total	mg/L							0.000008	0.00029	0.00027
Cr-T	Chromium, total	mg/L							0.0005	<0.0005	<0.0005
Fe-T	Iron, total	mg/L							0.107	0.26	0.298
Mn-T	Manganese, total	mg/L							0.00396	0.0264	0.0297
Mo-T	Molybdenum, total	mg/L							0.012	0.0203	0.0183
Ni-T	Nickel, total	mg/L							0.00138	0.009	0.0105
Ag-T	Silver, total	mg/L							0.000009	<0.00003	<0.00003
Ca-D	Calcium, dissolved	mg/L	177					94.9			
Mg-D	Magnesium, dissolved	mg/L	67.4					40			
Na-D	Sodium, dissolved	mg/L	20.6					2.13			
K-D	Potassium, dissolved	mg/L	4.24					1.59			
Cu-D	Copper, dissolved	mg/L	0.00743					0.00142			
As-D	Arsenic, dissolved	mg/L	0.00054					0.165			
Sb-D	Antimony, dissolved	mg/L	0.00117					0.00188			
Hg-D	Mercury, dissolved	mg/L	<0.00001					<0.00001			
Zn-D	Zinc, dissolved	mg/L	0.348					0.0078			
Se-D	Selenium, dissolved	mg/L	0.0828					0.00021			
Pb-D	Lead, dissolved	mg/L	0.000105					0.000073			
Al-D	Aluminum, dissolved	mg/L	0.308					0.0018			
Bi-D	Bismuth, dissolved	mg/L	<0.000005					<0.000005			
Cd-D	Cadmium, dissolved	mg/L	0.00949					0.000086			
Cr-D	Chromium, dissolved	mg/L	0.0004					<0.0001			
Fe-D	Iron, dissolved	mg/L	0.007					1.54			
Mn-D	Manganese, dissolved	mg/L	0.682					0.274			
Mo-D	Molybdenum, dissolved	mg/L	0.00022					0.0141			
Ni-D	Nickel, dissolved	mg/L	0.108					0.00401			
Ag-D	Silver, dissolved	mg/L	<0.000005					<0.000005			
S-D	Sulphur, Dissolved	mg/L	223					89			

		Station Name	BC-28a	BC-31	BC-31	BC-34	BC-39	BC-51W	BC-65	BC-66	BC-67
		Description	Discharge from heap	Golden Creek above confluence w/ South Klondike R	Golden Creek above confluence w/ South Klondike R	Lee Creek at Ditch Road	Laura Creek in side channel of South Klondike River	Pacific Pit - west side	Land Application Piezometer	Land Application Piezometer	Blue WRSA Piezometer
		Smpl Date	19-Oct-2010	2-Sep-2010	31-Aug-2010	31-Aug-2010		31-Aug-2010	31-Aug-2010	31-Aug-2010	31-Aug-2010
pH-L	pH, Laboratory	pH units	8	8.27	8.27	8.23		3.27	8.44	7.9	8.12
Cond-L	Conductivity, Laboratory	µS/cm	4280	443	443	436		915	335	213	560
Hard-T	Hardness calcualted from total metal scan	mg/L	1360	244	244	217		315			
Hard-D	Hardness calculated from dissolved metal scan	mg/L							162	91.3	311
Alk-T	Alkalinity, Total	mg/L	120	140	140	130		<0.5	140	96	270
Alk-OH	Alkalinity, Hydroxide OH	mg/L	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5	<0.5
Alk-Carb	Alaklinity, Carbonate CO3	mg/L	<0.5	<0.5	<0.5	<0.5		<0.5	3.3	<0.5	<0.5
Alk-Bicrb	Alkalinity, Bicarbonate HCO3	mg/L	150	170	170	160		<0.5	160	120	330
TDS	Total Dissolved Solids	mg/L	3000	310	310	310		620	210	140	310
TSS	Total Suspended Solids	mg/L	<1	4	4	3		3	21	11	1100
Chloride	Chloride	mg/L	34	<0.5	<0.5	<0.5		<0.5	0.6	0.7	<0.5
SO4-D	Sulphate, Dissolved	mg/L	750	96	96	100		380	43	11	50
N-NO3	Nitrate Nitrogen, as N	mg/L	383	0.16	0.16	0.12		<0.02	0.12	0.57	0.03
CN-T	Cyanide, Total	mg/L	0.84	<0.0005	<0.0005	<0.0005			<0.0005	<0.0005	<0.0005
CN-WAD	Cyanide, Weak Acid Dissociable.	mg/L	0.0318	0.0009	0.0009	0.0007			0.0006	0.0007	0.0005
Ca-T	Calcium, total	mg/L	392	59.2	59.2	52.9		69.5			
Mg-T	Magnesium, total	mg/L	91.5	23.3	23.3	20.7		34.4			
Na-T	Sodium, total	mg/L	536	1.63	1.63	1.3		0.97			
K-T	Potassium, total	mg/L	6.3	0.75	0.75	0.63		1.53			
Cu-T	Copper, total	mg/L	0.0016	0.00178	0.00178	0.00186		0.429			
As-T	Arsenic, total	mg/L	0.34	0.00054	0.00054	0.00024		0.00816			
Sb-T	Antimony, total	mg/L	1.89	0.00065	0.00065	0.00033		0.00205			
Hg-T	Mercury, total	mg/L	<0.00005	<0.00001	<0.00001	<0.00001		<0.00001			
Zn-T	Zinc, total	mg/L	0.0045	0.0027	0.0027	0.0067		0.589			
Se-T	Selenium, total	mg/L	0.2	0.00179	0.00179	0.00215		0.00431			
Pb-T	Lead, total	mg/L	<0.00003	0.000013	0.000013	0.000009		0.000219			
Al-T	Aluminum, total	mg/L	0.009	0.0258	0.0258	0.0105		6.13			
Bi-T	Bismuth, total	mg/L	<0.00003	<0.000005	<0.000005	<0.000005	Dry - No Water Found - Water Last Seen in June 2009	<0.000005			
Cd-T	Cadmium, total	mg/L	0.00017	0.000051	0.000051	0.000302		0.00634			
Cr-T	Chromium, total	mg/L	0.0007	<0.0001	<0.0001	<0.0001		0.0026			
Fe-T	Iron, total	mg/L	0.301	0.068	0.068	0.024		4.67			
Mn-T	Manganese, total	mg/L	0.0171	0.0115	0.0115	0.00161		3.07			
Mo-T	Molybdenum, total	mg/L	0.0235	0.00141	0.00141	0.00164		0.00007			
Ni-T	Nickel, total	mg/L	0.0078	0.0022	0.0022	0.00253		0.192			
Ag-T	Silver, total	mg/L	<0.00003	<0.000005	<0.000005	<0.000005		0.000013			
Ca-D	Calcium, dissolved	mg/L							50	26.6	76.8
Mg-D	Magnesium, dissolved	mg/L							8.93	6.05	29
Na-D	Sodium, dissolved	mg/L							5.83	6.4	2.45
K-D	Potassium, dissolved	mg/L							1.84	1.77	1.72
Cu-D	Copper, dissolved	mg/L							0.00051	0.00452	0.0011
As-D	Arsenic, dissolved	mg/L							0.00129	0.00335	0.00124
Sb-D	Antimony, dissolved	mg/L							0.00585	0.0358	0.0031
Hg-D	Mercury, dissolved	mg/L							<0.00001	<0.00001	<0.00001
Zn-D	Zinc, dissolved	mg/L							0.0017	0.0136	0.0086
Se-D	Selenium, dissolved	mg/L							0.00023	0.00071	0.00004
Pb-D	Lead, dissolved	mg/L							0.000067	0.000204	0.000046
Al-D	Aluminum, dissolved	mg/L							0.0115	0.0414	0.0047
Bi-D	Bismuth, dissolved	mg/L							<0.000005	<0.000005	<0.000005
Cd-D	Cadmium, dissolved	mg/L							0.000014	0.000198	0.000049
Cr-D	Chromium, dissolved	mg/L							<0.0001	0.0006	<0.0001
Fe-D	Iron, dissolved	mg/L							0.011	0.044	0.006
Mn-D	Manganese, dissolved	mg/L							0.00216	0.00448	0.304
Mo-D	Molybdenum, dissolved	mg/L							0.00072	0.00667	0.00024
Ni-D	Nickel, dissolved	mg/L							0.00075	0.00313	0.00207
Ag-D	Silver, dissolved	mg/L							<0.000005	0.000006	<0.000005
S-D	Sulphur, Dissolved	mg/L							15	<10	17

ALEXCO RESOURCE CORP.

Brewery Creek Mine

Appendix C-2 – Water Quality Data: Graphical Presentation


BC-01: Laura Creek 50m above Ditch Road, TSS
Total Suspended Solids (mg/l)
400
350
300
250
200
150
100
50
0
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
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Sep/95
Jan/96
May/96
Sep/96
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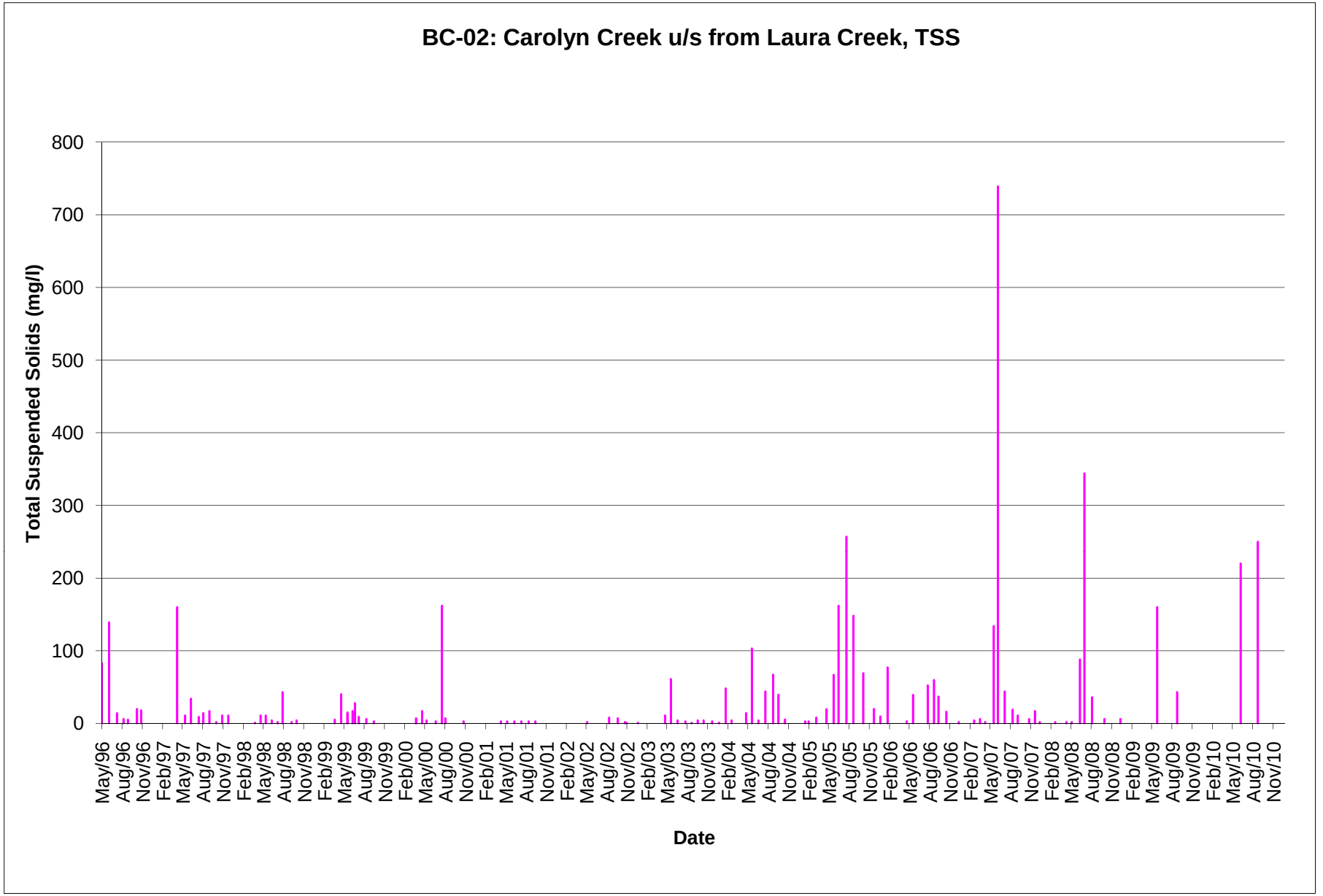
May/10
Sep/10
Date


BC-02: Carolyn Creek u/s from Laura Creek, TSS
Total Suspended Solids (mg/l)
800
700
600
500
400
300
200
100
0
May/96
Aug/96
Nov/96
Feb/97
May/97
Aug/97
Nov/97
Feb/98
May/98
Aug/98
Nov/98
Feb/99
May/99
Aug/99
Nov/99
Feb/00
May/00
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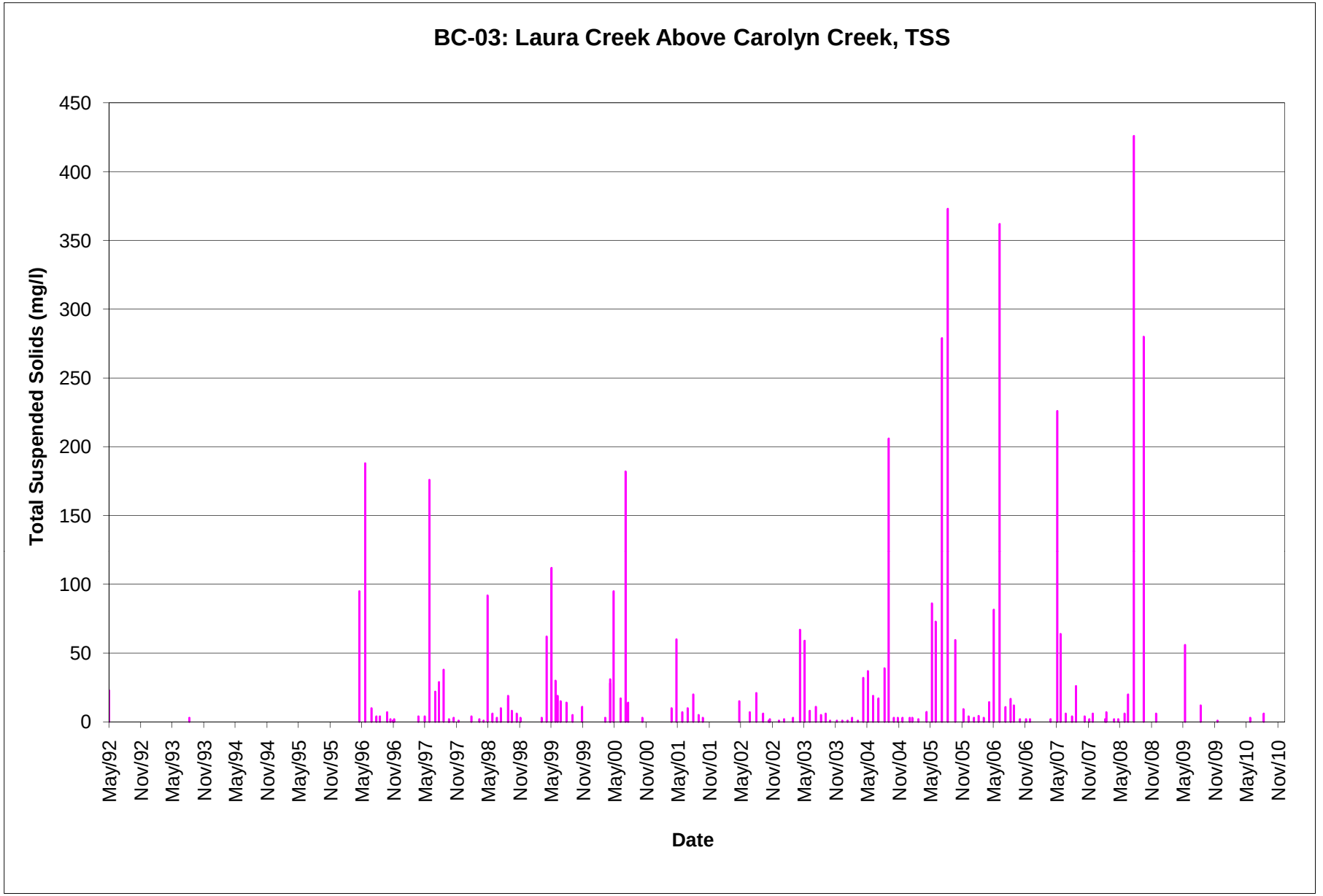
Nov/10
Date


BC-03: Laura Creek Above Carolyn Creek, TSS
Total Suspended Solids (mg/l)
450
400
350
300
250
200
150
100
50
0
May/92
Nov/92
May/93
Nov/93
May/94
Nov/94
May/95
Nov/95
May/96
Nov/96
May/97
Nov/97
May/98
Nov/98
May/99
Nov/99
May/00
Nov/00
May/01
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May/02
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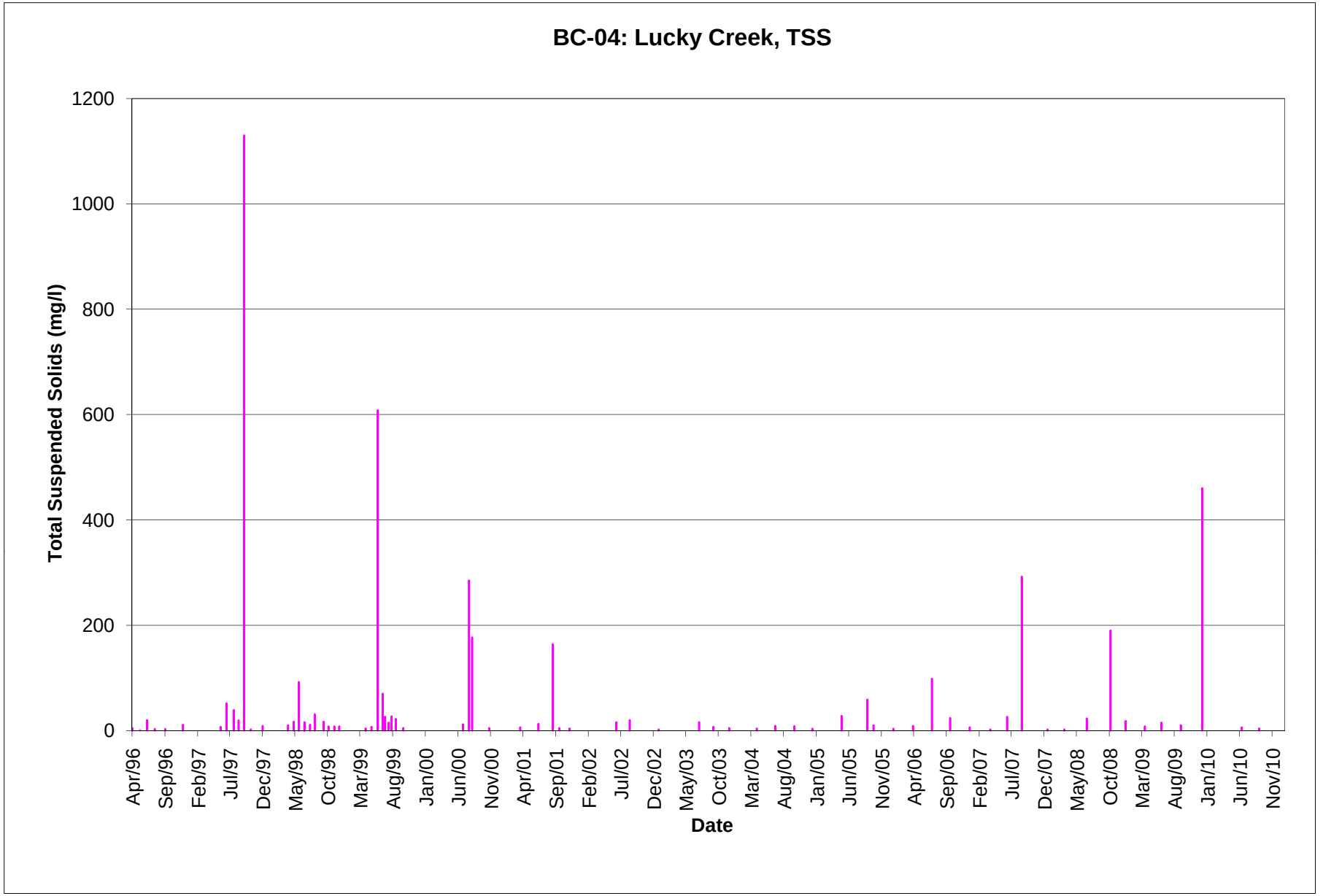
May/10
Nov/10
Date


BC-04: Lucky Creek, TSS
Total Suspended Solids (mg/l)
1200
1000
800
600
400
200
0
Apr/96
Sep/96
Feb/97
Jul/97
Dec/97
May/98
Oct/98
Mar/99
Aug/99
Jan/00
Jun/00
Nov/00
Apr/01
Sep/01
Feb/02
Jul/02
Dec/02
May/03
Oct/03
Mar/04
Aug/04
Jan/05
Jun/05
Nov/05
Apr/06
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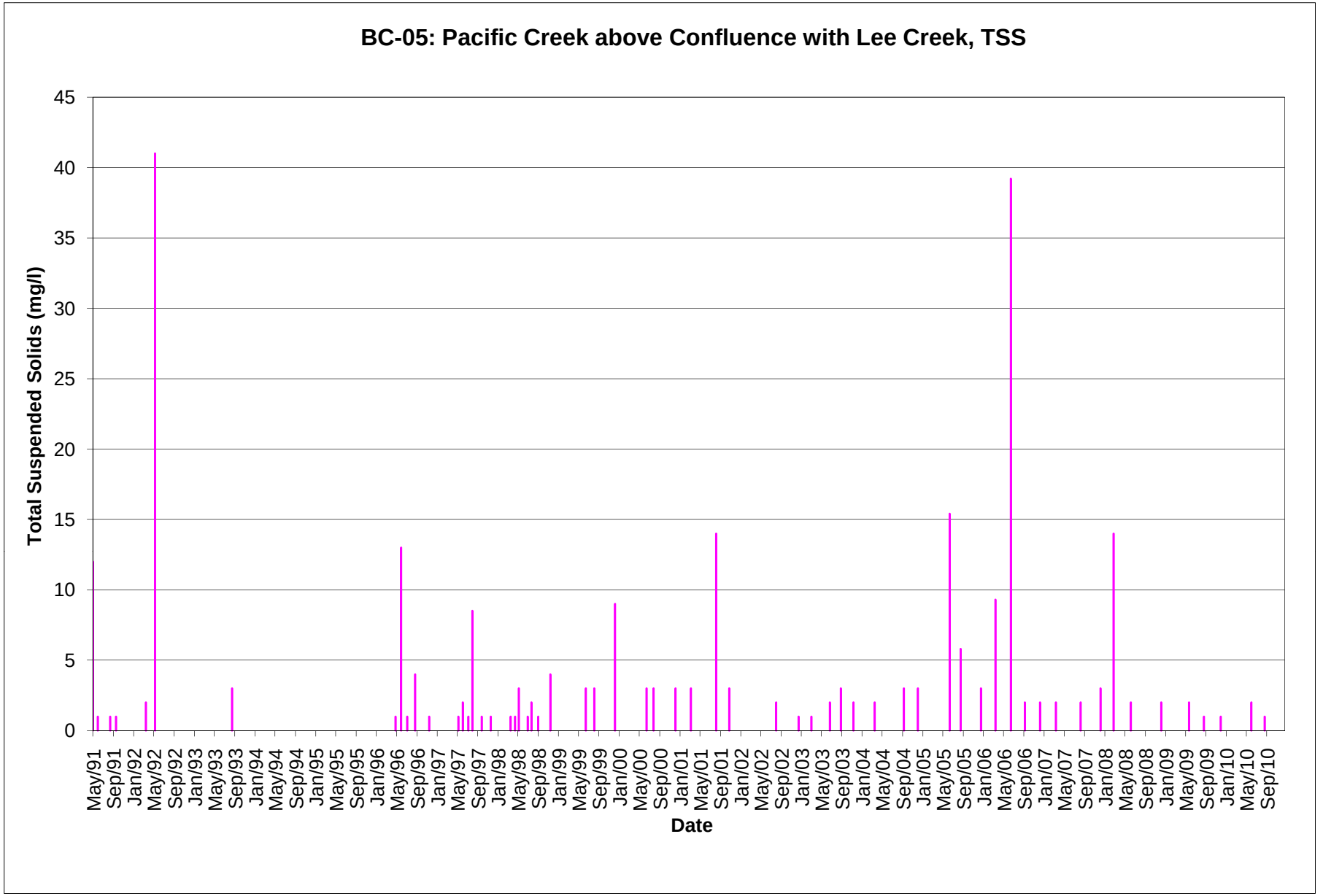
Mar/09
Aug/09
Jan/10
Jun/10
Nov/10
Date


BC-05: Pacific Creek above Confluence with Lee Creek, TSS
Total Suspended Solids (mg/l)
45
40
35
30
25
20
15
10
5
0
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
May/96
Sep/96
Jan/97
May/97
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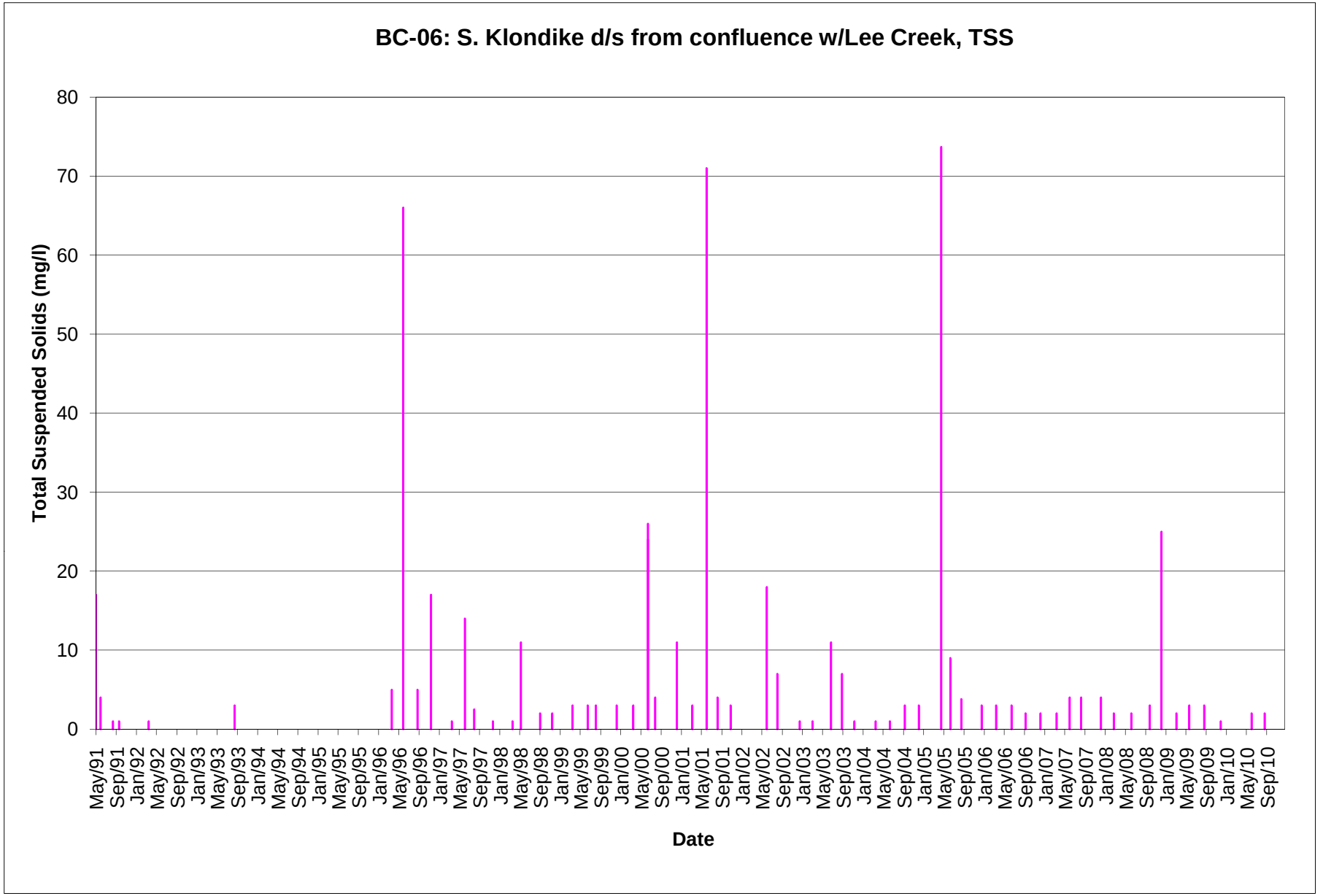
May/10
Sep/10
Date


BC-06: S. Klondike d/s from confluence w/Lee Creek, TSS
Total Suspended Solids (mg/l)
0
10
20
30
40
50
60
70
80
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
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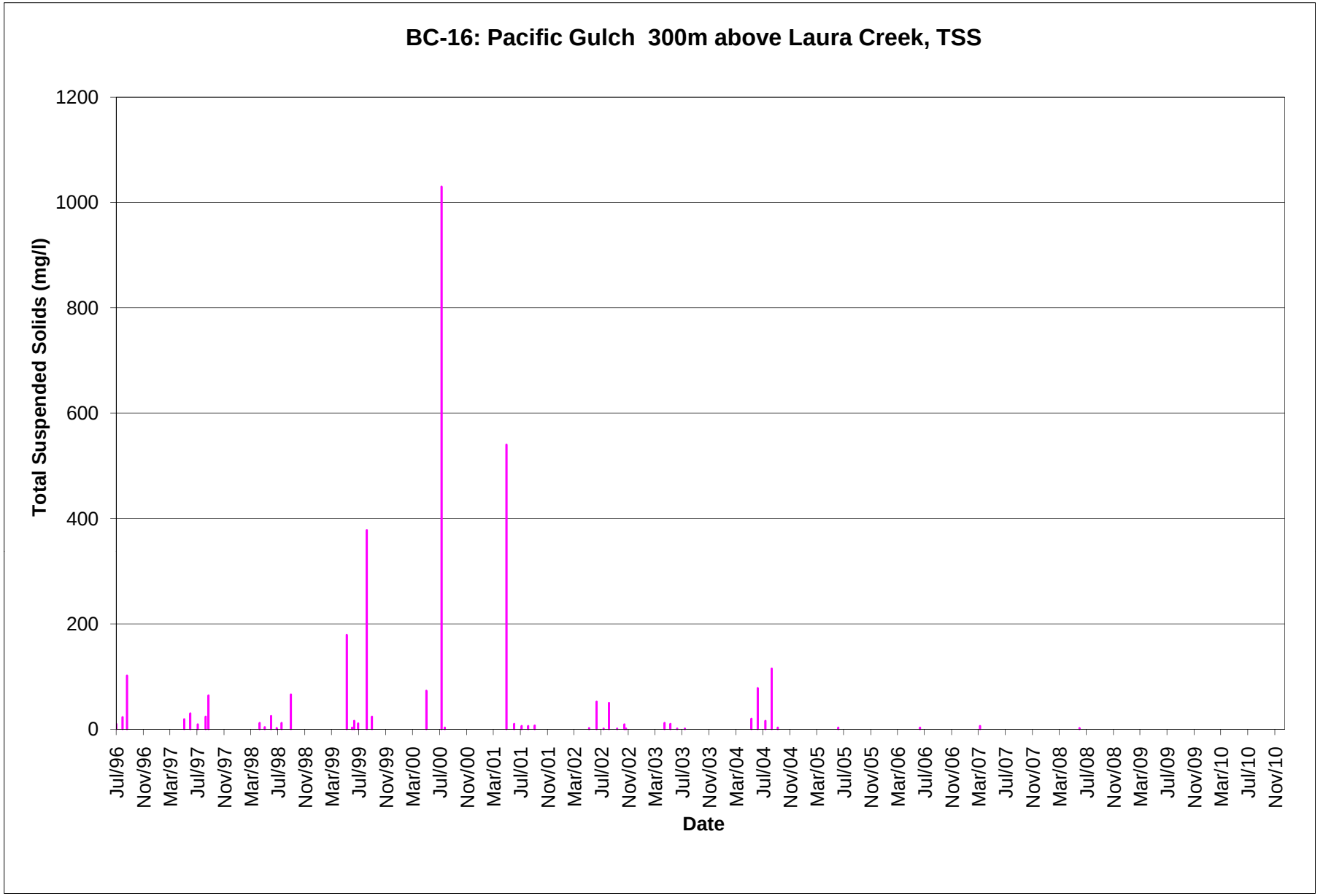
Sep/10
Date


BC-16: Pacific Gulch 300m above Laura Creek, TSS
Total Suspended Solids (mg/l)
1200
1000
800
600
400
200
0
Jul/96
Nov/96
Mar/97
Jul/97
Nov/97
Mar/98
Jul/98
Nov/98
Mar/99
Jul/99
Nov/99
Mar/00
Jul/00
Nov/00
Mar/01
Jul/01
Nov/01
Mar/02
Jul/02
Nov/02
Mar/03
Jul/03
Nov/03
Mar/04
Jul/04
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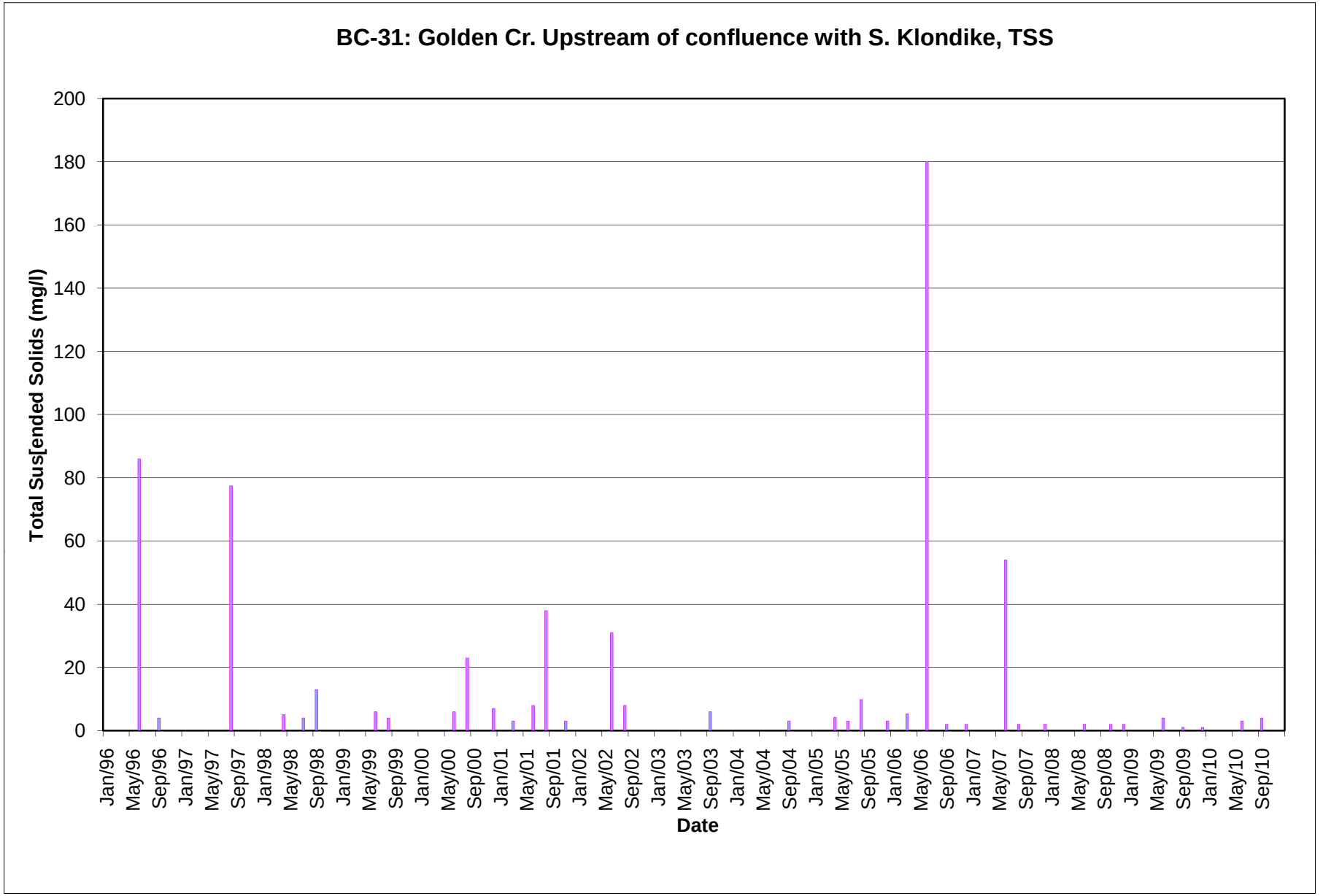
Mar/10
Jul/10
Nov/10
Date


BC-31: Golden Cr. Upstream of confluence with S. Klondike, TSS
Total Sus[ended Solids (mg/l)
200
180
160
140
120
100
80
60
40
20
0
Jan/96
May/96
Sep/96
Jan/97
May/97
Sep/97
Jan/98
May/98
Sep/98
Jan/99
May/99
Sep/99
Jan/00
May/00
Sep/00
Jan/01
May/01
Sep/01
Jan/02
May/02
Sep/02
Jan/03
May/03
Sep/03
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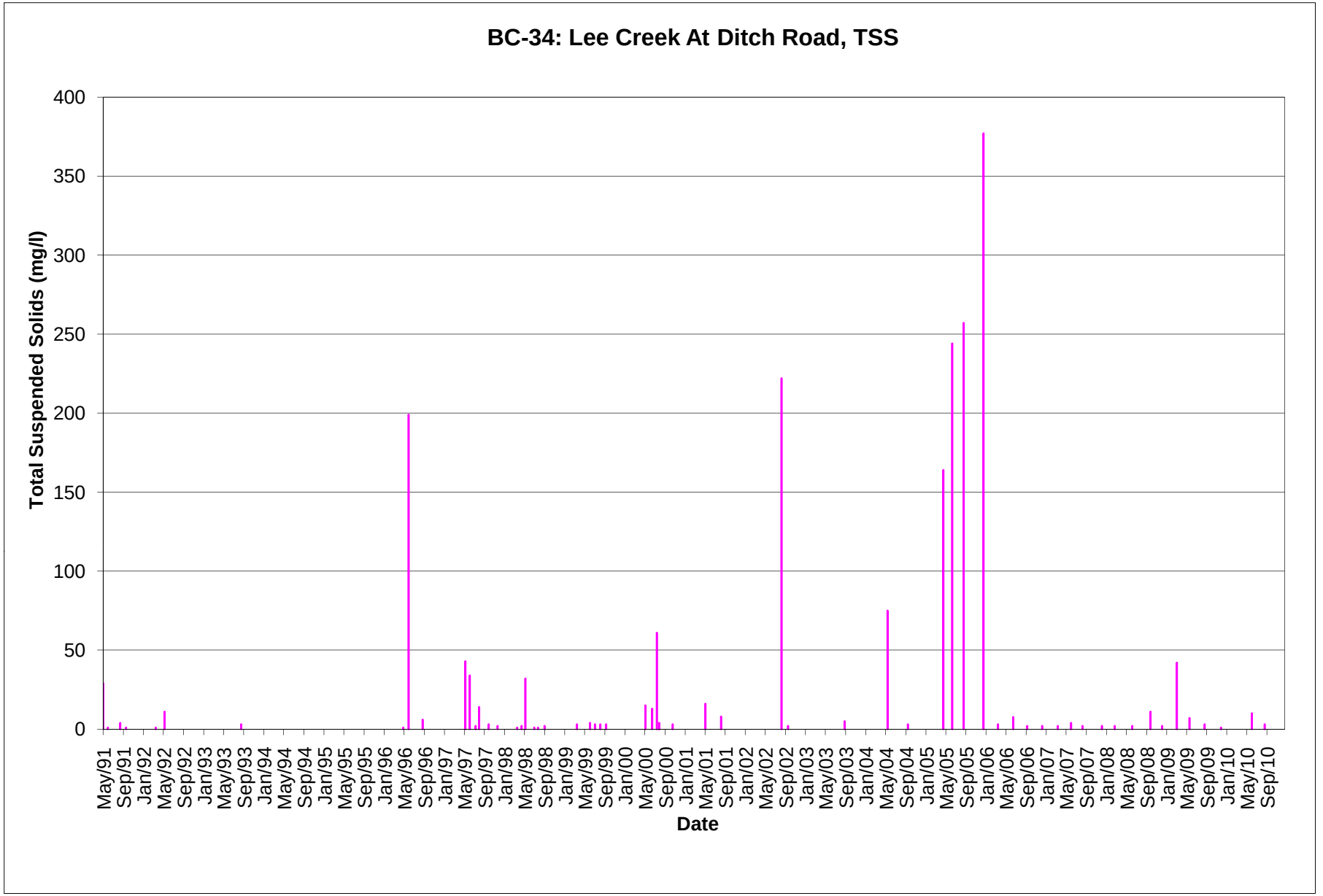
May/10
Sep/10
Date


BC-34: Lee Creek At Ditch Road, TSS
Total Suspended Solids (mg/l)
400
350
300
250
200
150
100
50
0
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
May/96
Sep/96
Jan/97
May/97
Sep/97
Jan/98
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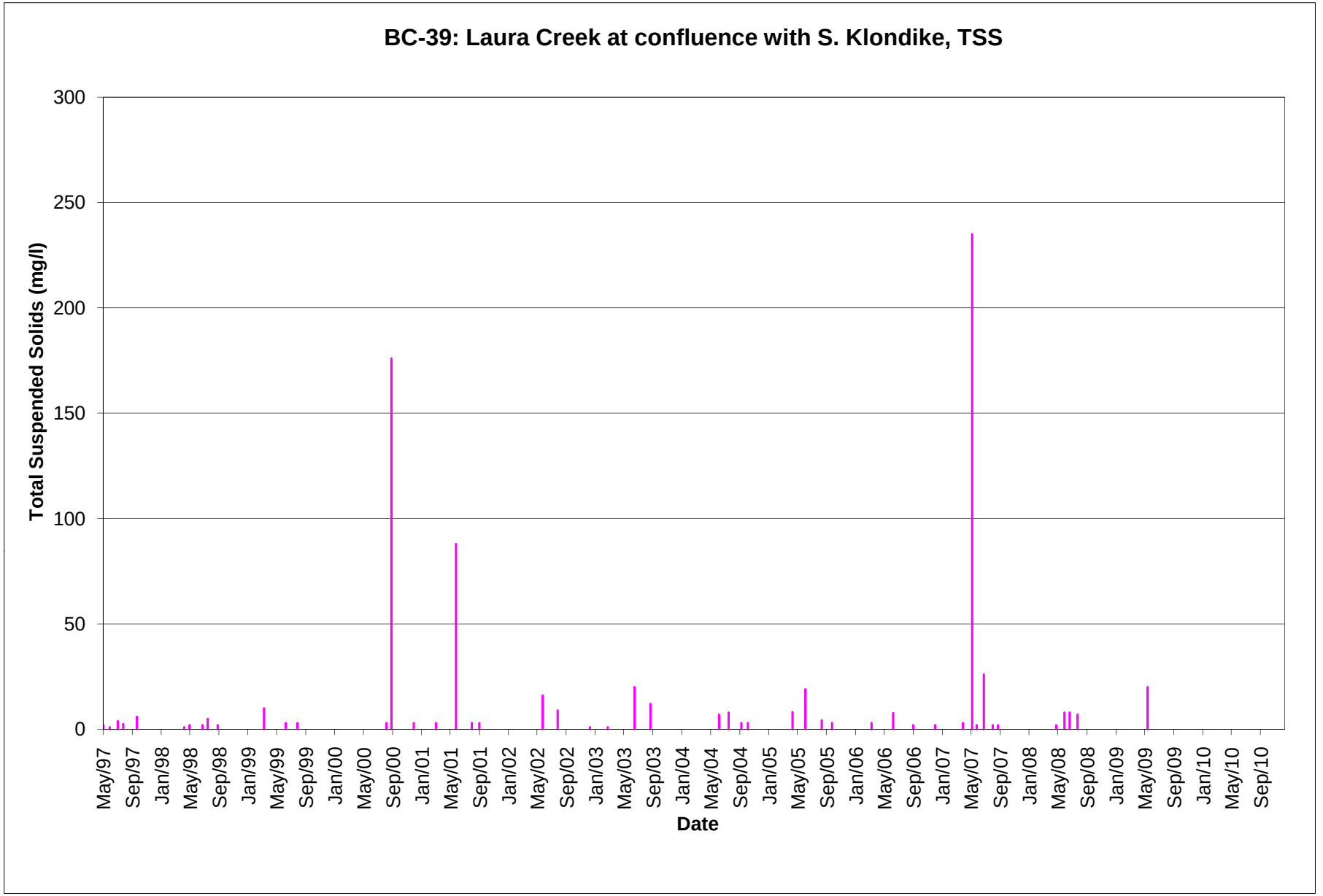
Jan/10
May/10
Sep/10
Date


BC-39: Laura Creek at confluence with S. Klondike, TSS
Total Suspended Solids (mg/l)
300
250
200
150
100
50
0
May/97
Sep/97
Jan/98
May/98
Sep/98
Jan/99
May/99
Sep/99
Jan/00
May/00
Sep/00
Jan/01
May/01
Sep/01
Jan/02
May/02
Sep/02
Jan/03
May/03
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Jan/04
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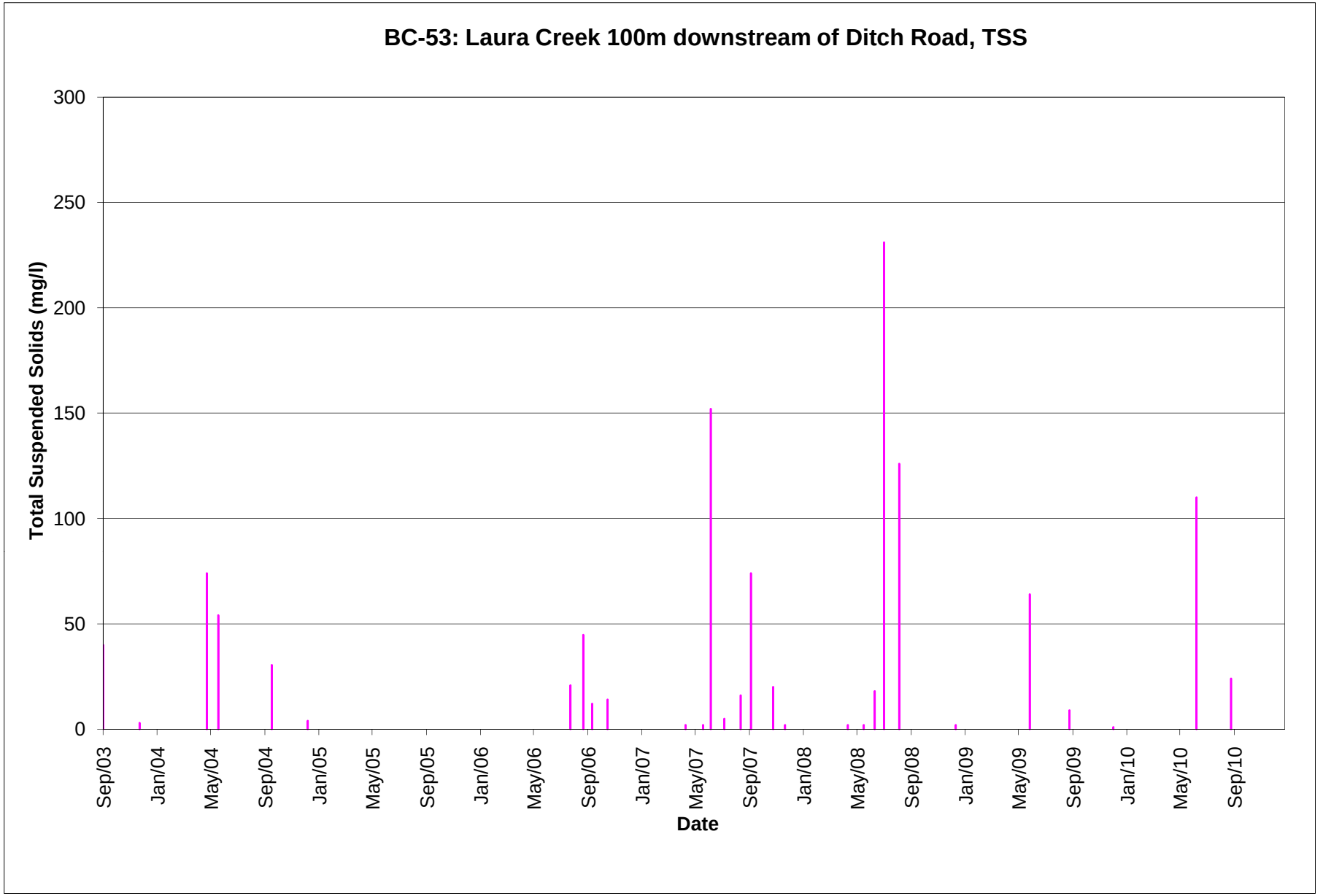
Sep/10
Date


BC-53: Laura Creek 100m downstream of Ditch Road, TSS
Total Suspended Solids (mg/l)
300
250
200
150
100
50
0
Sep/03
Jan/04
May/04
Sep/04
Jan/05
May/05
Sep/05
Jan/06
May/06
Sep/06
Jan/07
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Sep/07
Jan/08
May/08
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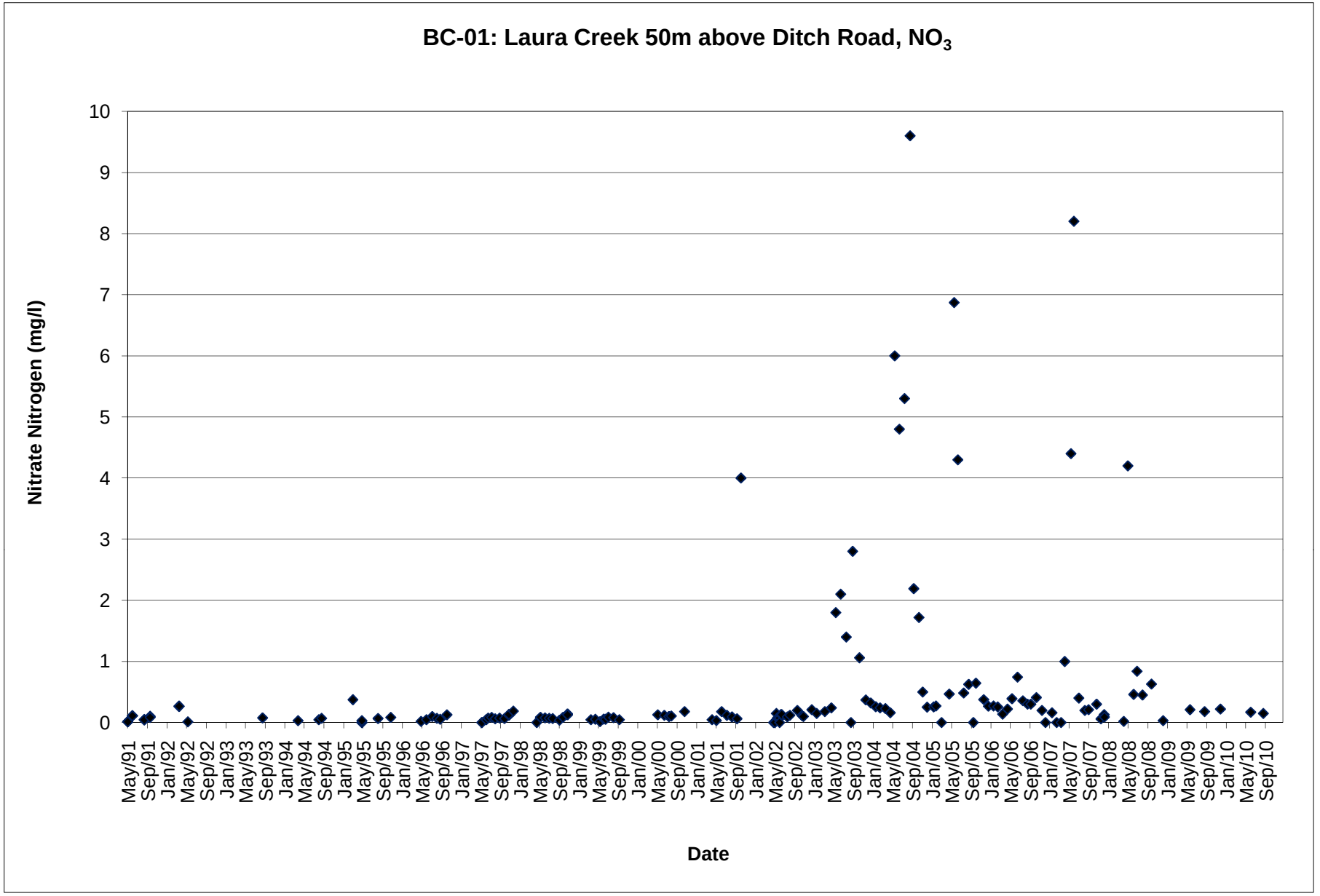
Jan/09
May/09
Sep/09
Jan/10
May/10
Sep/10
Date


BC-01: Laura Creek 50m above Ditch Road, NO3
Nitrate Nitrogen (mg/l)
10
9
8
7
6
5
4
3
2
1
0
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
May/96
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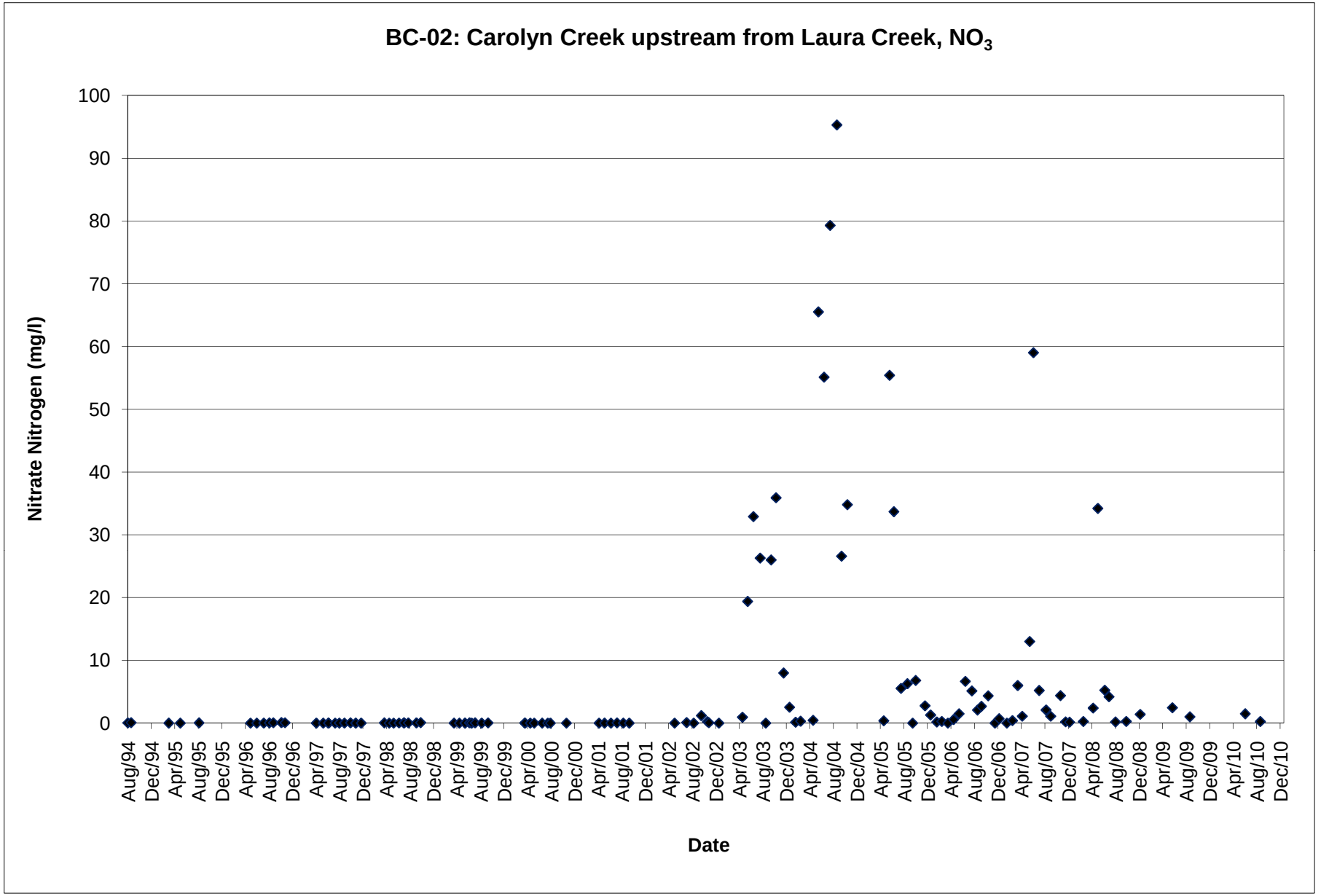
Date


BC-02: Carolyn Creek upstream from Laura Creek, NO3
Nitrate Nitrogen (mg/l)
100
90
80
70
60
50
40
30
20
10
0
Aug/94
Dec/94
Apr/95
Aug/95
Dec/95
Apr/96
Aug/96
Dec/96
Apr/97
Aug/97
Dec/97
Apr/98
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Dec/98
Apr/99
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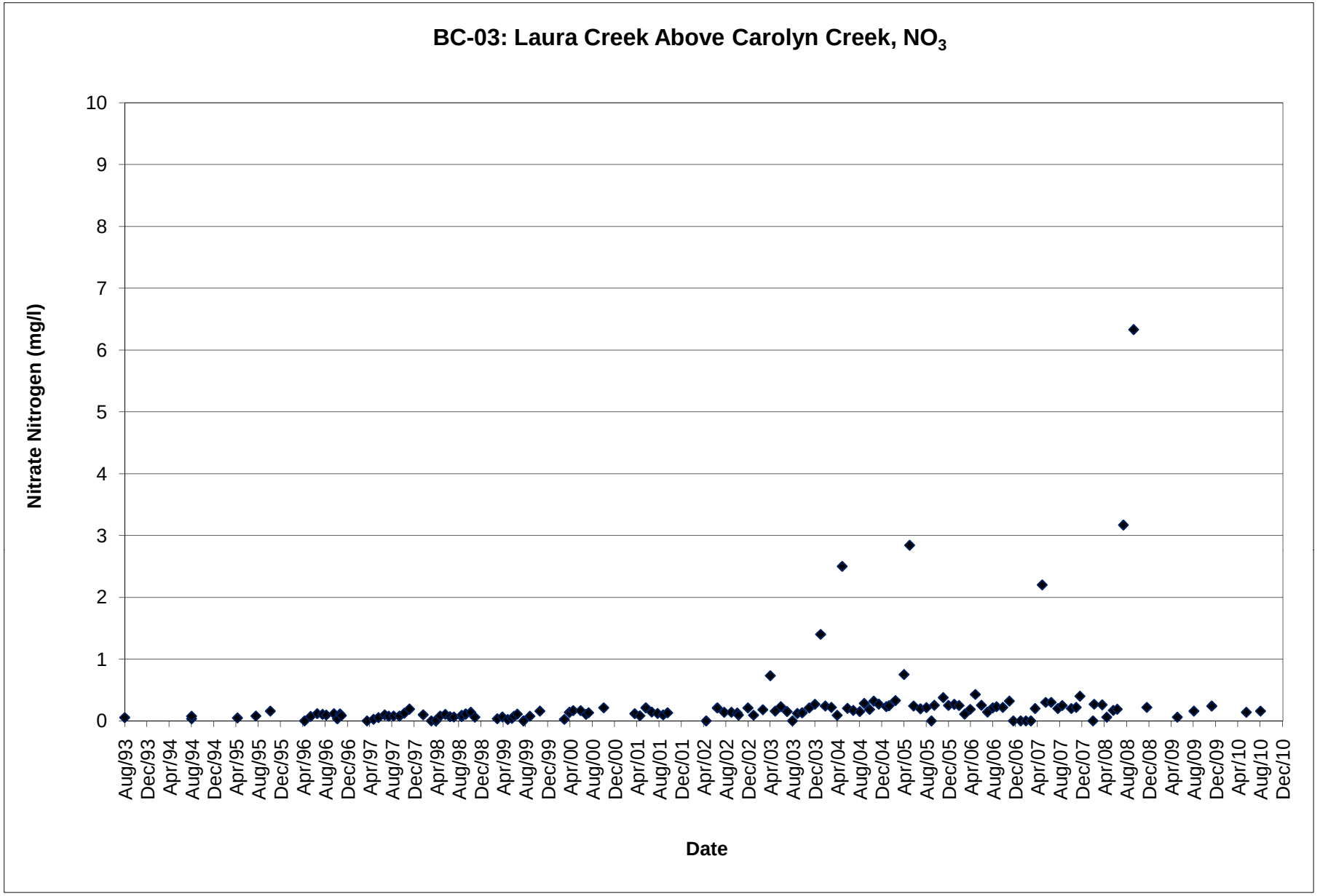
Dec/10
Date


BC-03: Laura Creek Above Carolyn Creek, NO3
Nitrate Nitrogen (mg/l)
10
9
8
7
6
5
4
3
2
1
0
Aug/93
Dec/93
Apr/94
Aug/94
Dec/94
Apr/95
Aug/95
Dec/95
Apr/96
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Apr/97
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Dec/97
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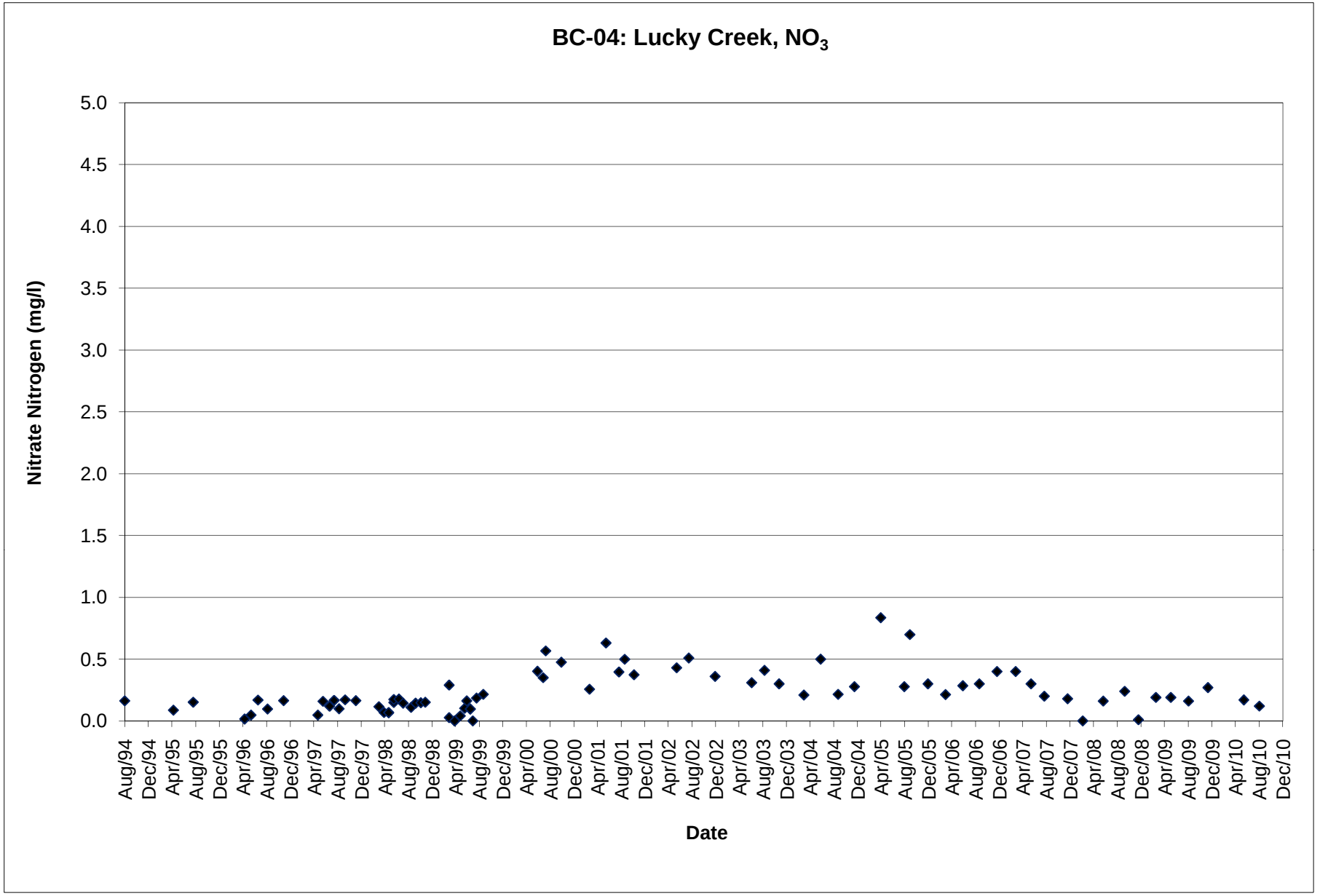
Dec/10
Date


BC-04: Lucky Creek, NO3
Nitrate Nitrogen (mg/l)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Aug/94
Dec/94
Apr/95
Aug/95
Dec/95
Apr/96
Aug/96
Dec/96
Apr/97
Aug/97
Dec/97
Apr/98
Aug/98
Dec/98
Apr/99
Aug/99
Dec/99
Apr/00
Aug/00
Dec/00
Apr/01
Aug/01
Dec/01
Apr/02
Aug/02
Dec/02
Apr/03
Aug/03
Dec/03
Apr/04
Aug/04
Dec/04
Apr/05
Aug/05
Dec/05
Apr/06
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Dec/06
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Apr/08
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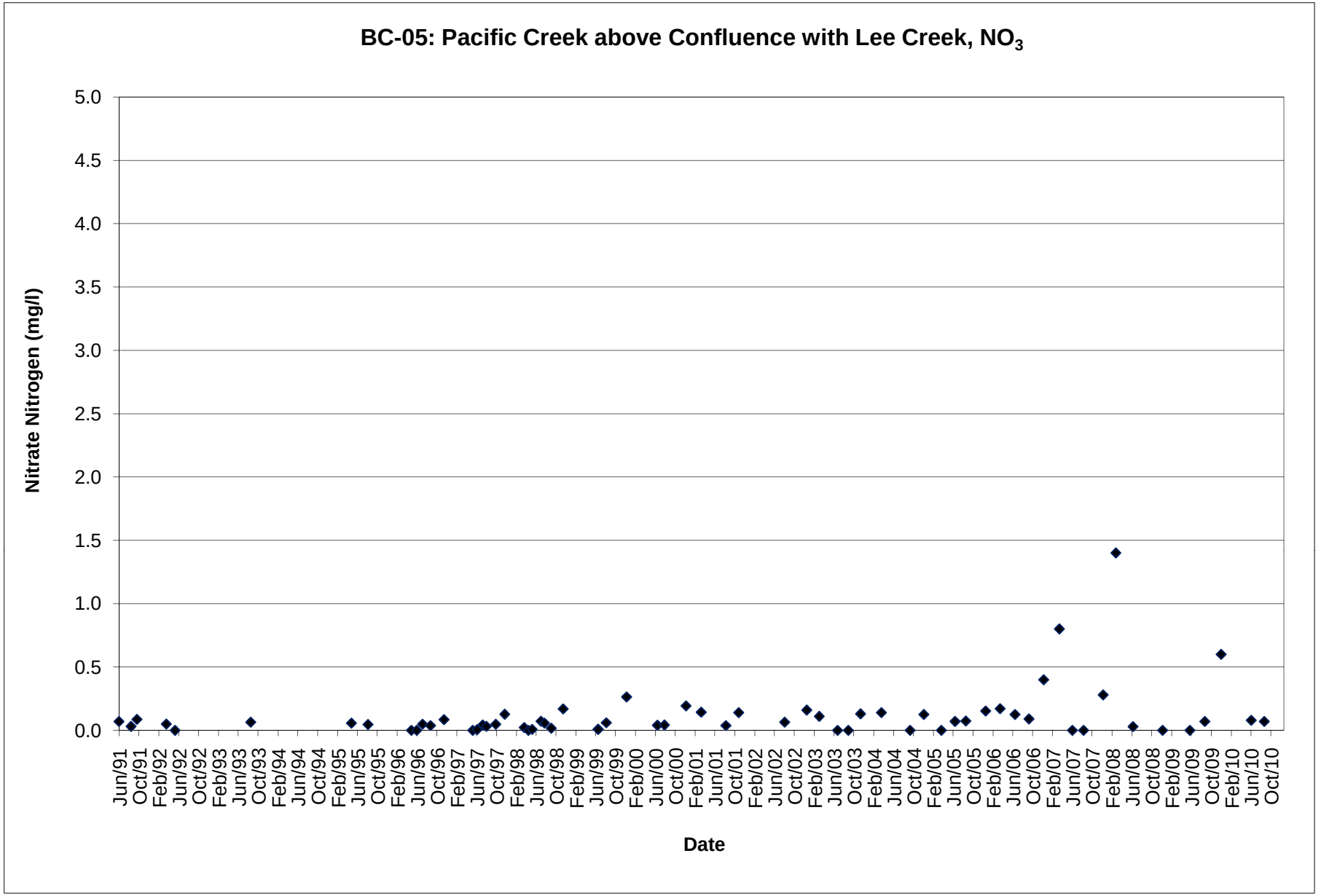
Apr/09
Aug/09
Dec/09
Apr/10
Aug/10
Dec/10
Date


BC-05: Pacific Creek above Confluence with Lee Creek, NO3
Nitrate Nitrogen (mg/l)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jun/91
Oct/91
Feb/92
Jun/92
Oct/92
Feb/93
Jun/93
Oct/93
Feb/94
Jun/94
Oct/94
Feb/95
Jun/95
Oct/95
Feb/96
Jun/96
Oct/96
Feb/97
Jun/97
Oct/97
Feb/98
Jun/98
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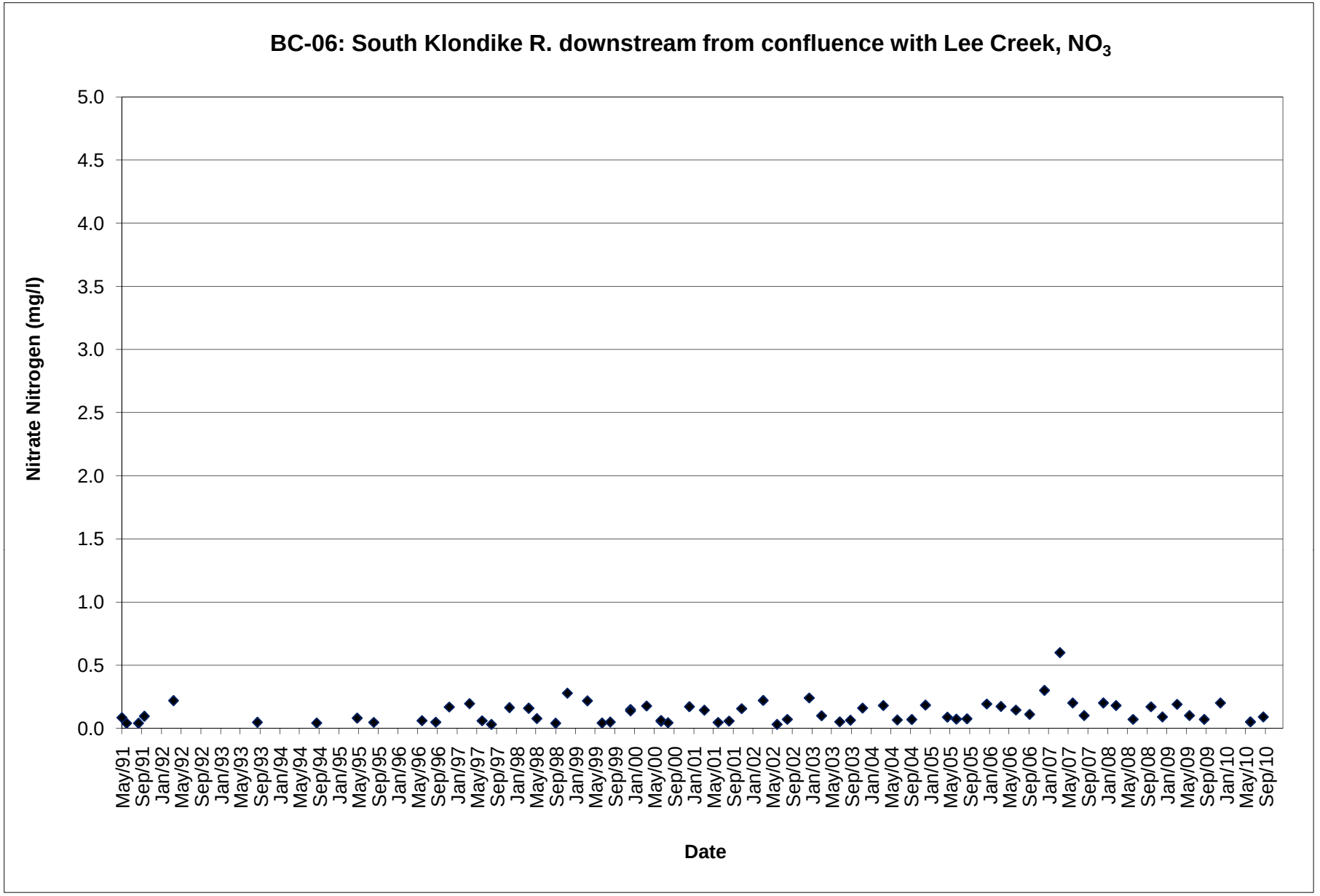
Feb/09
Jun/09
Oct/09
Feb/10
Jun/10
Oct/10
Date


BC-06: South Klondike R. downstream from confluence with Lee Creek, NO3
Nitrate Nitrogen (mg/l)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
May/96
Sep/96
Jan/97
May/97
Sep/97
Jan/98
May/98
Sep/98
Jan/99
May/99
Sep/99
Jan/00
May/00
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Jan/07
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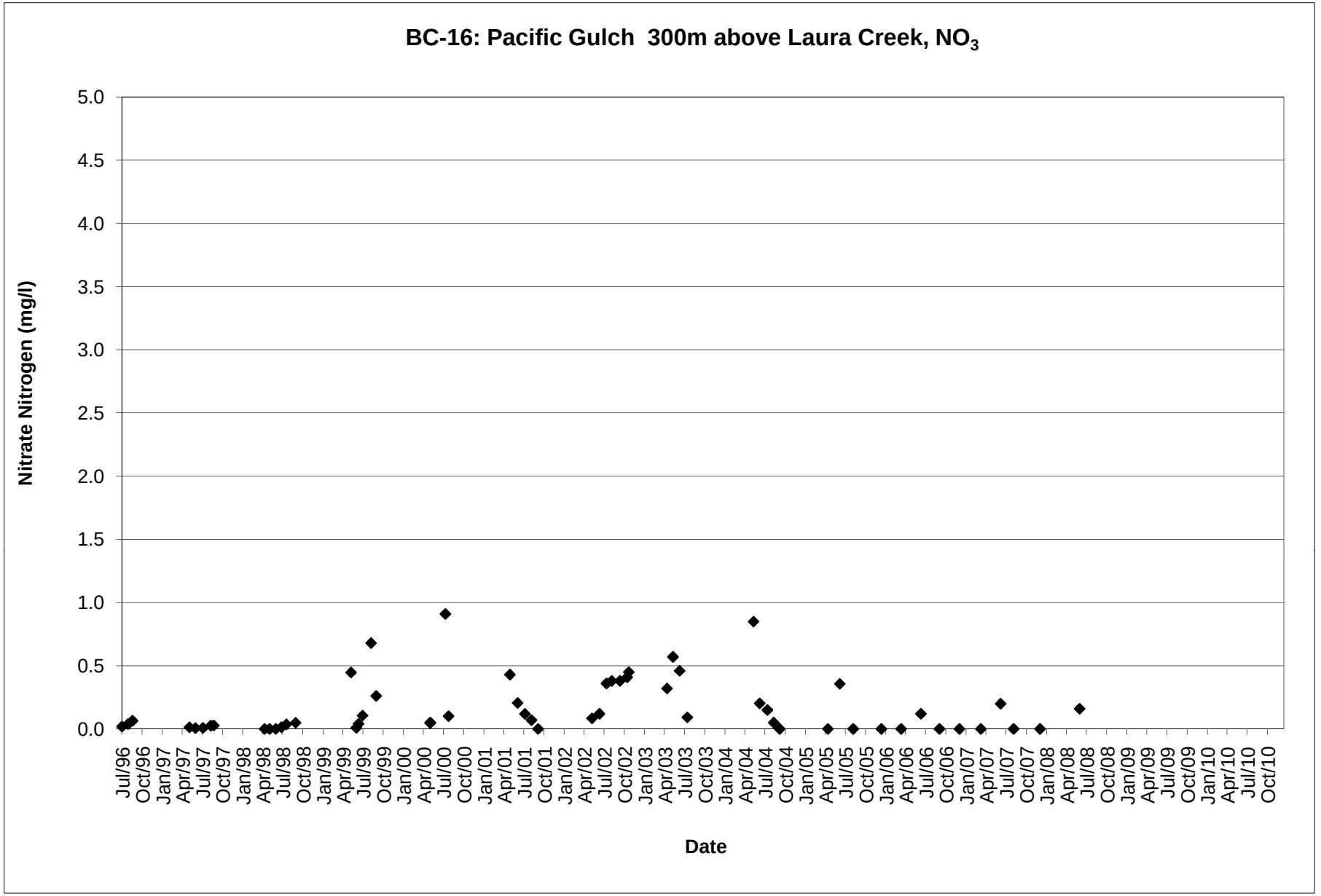
Jan/08
May/08
Sep/08
Jan/09
May/09
Sep/09
Jan/10
May/10
Sep/10
Date


BC-16: Pacific Gulch 300m above Laura Creek, NO3
Nitrate Nitrogen (mg/l)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
Jul/96
Oct/96
Jan/97
Apr/97
Jul/97
Oct/97
Jan/98
Apr/98
Jul/98
Oct/98
Jan/99
Apr/99
Jul/99
Oct/99
Jan/00
Apr/00
Jul/00
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Jan/01
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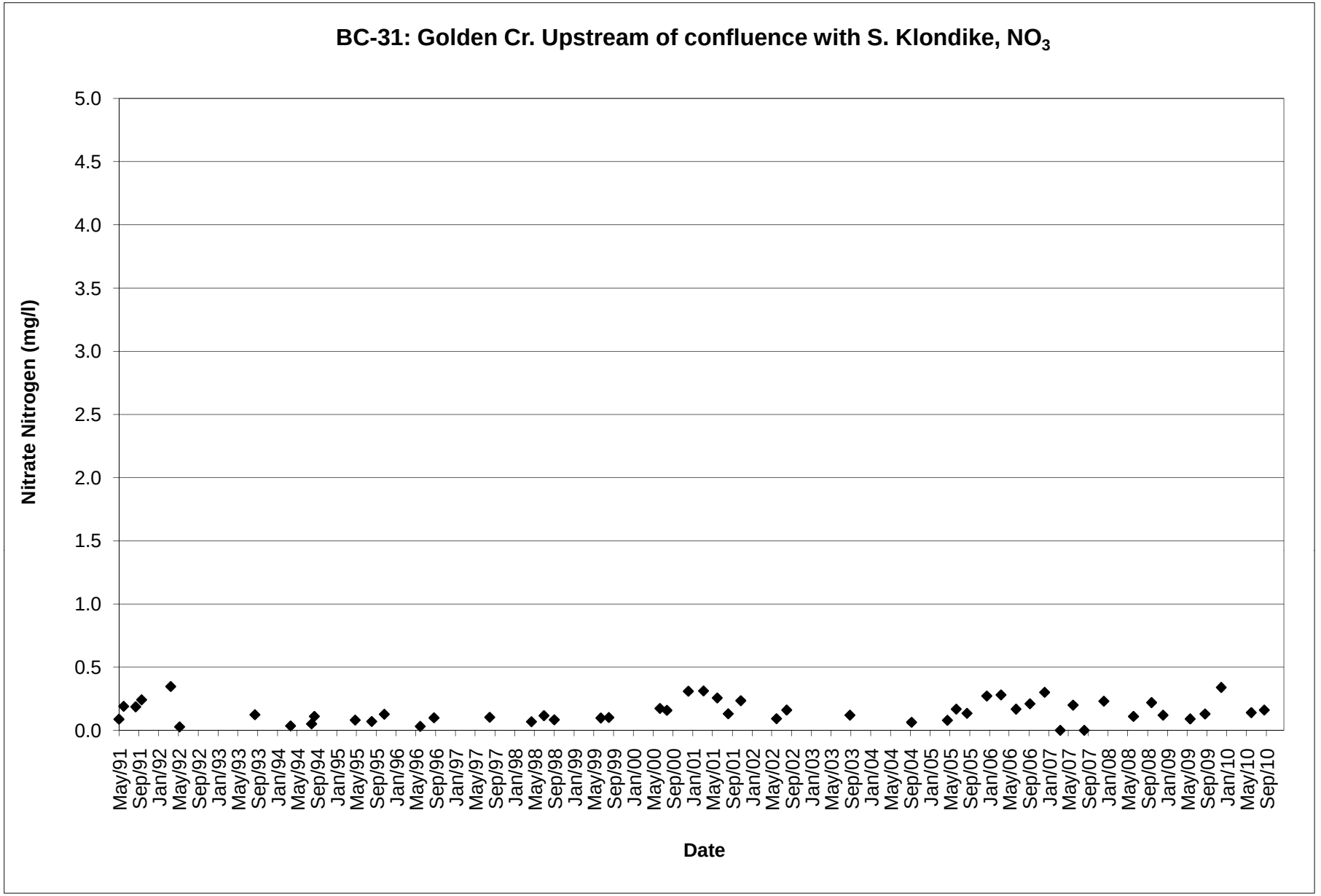
Jul/09
Oct/09
Jan/10
Apr/10
Jul/10
Oct/10
Date


BC-31: Golden Cr. Upstream of confluence with S. Klondike, NO3
Nitrate Nitrogen (mg/l)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
May/96
Sep/96
Jan/97
May/97
Sep/97
Jan/98
May/98
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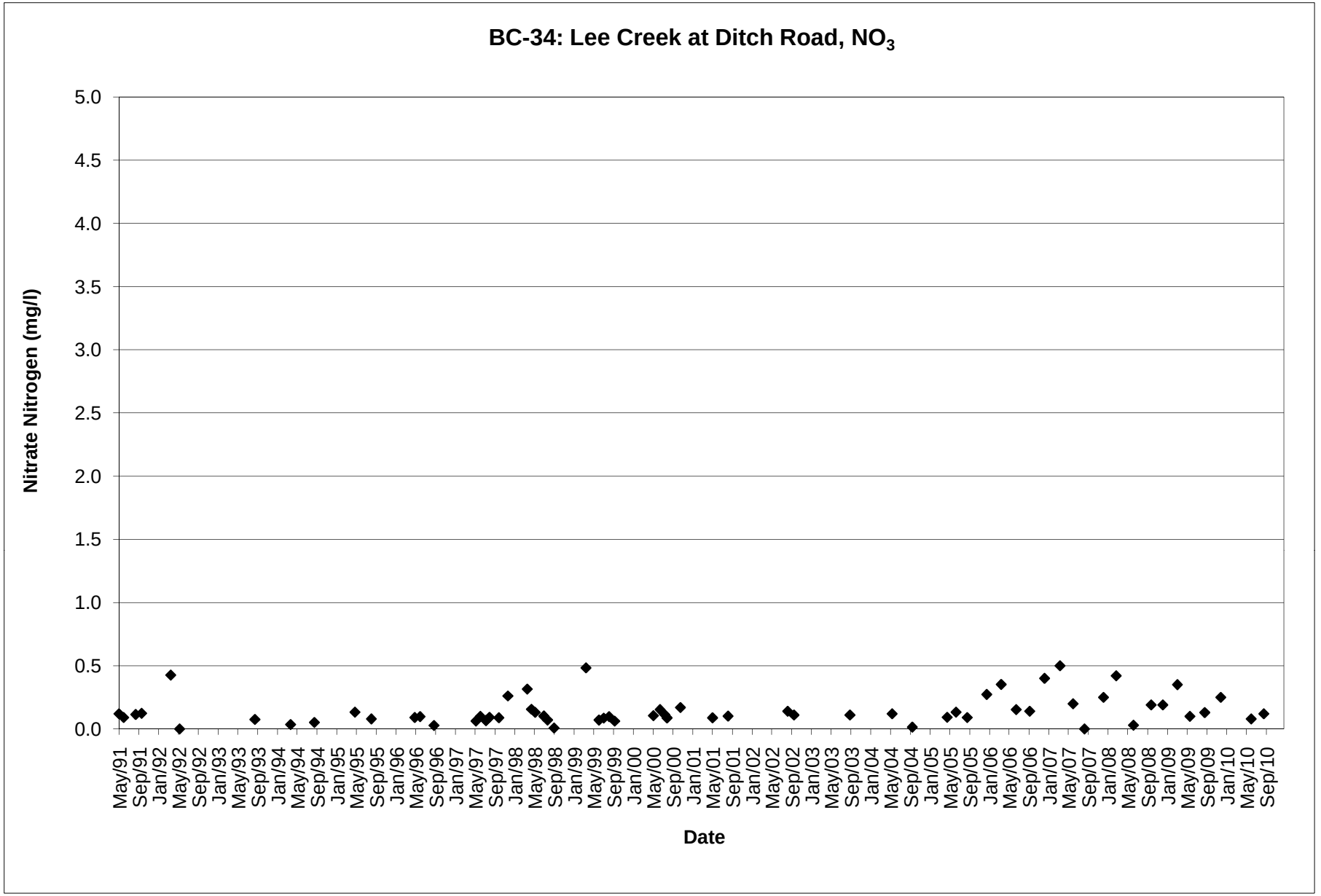
May/09
Sep/09
Jan/10
May/10
Sep/10
Date


BC-34: Lee Creek at Ditch Road, NO3
Nitrate Nitrogen (mg/l)
5.0
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
May/96
Sep/96
Jan/97
May/97
Sep/97
Jan/98
May/98
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Jan/05
May/05
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Jan/06
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Jan/08
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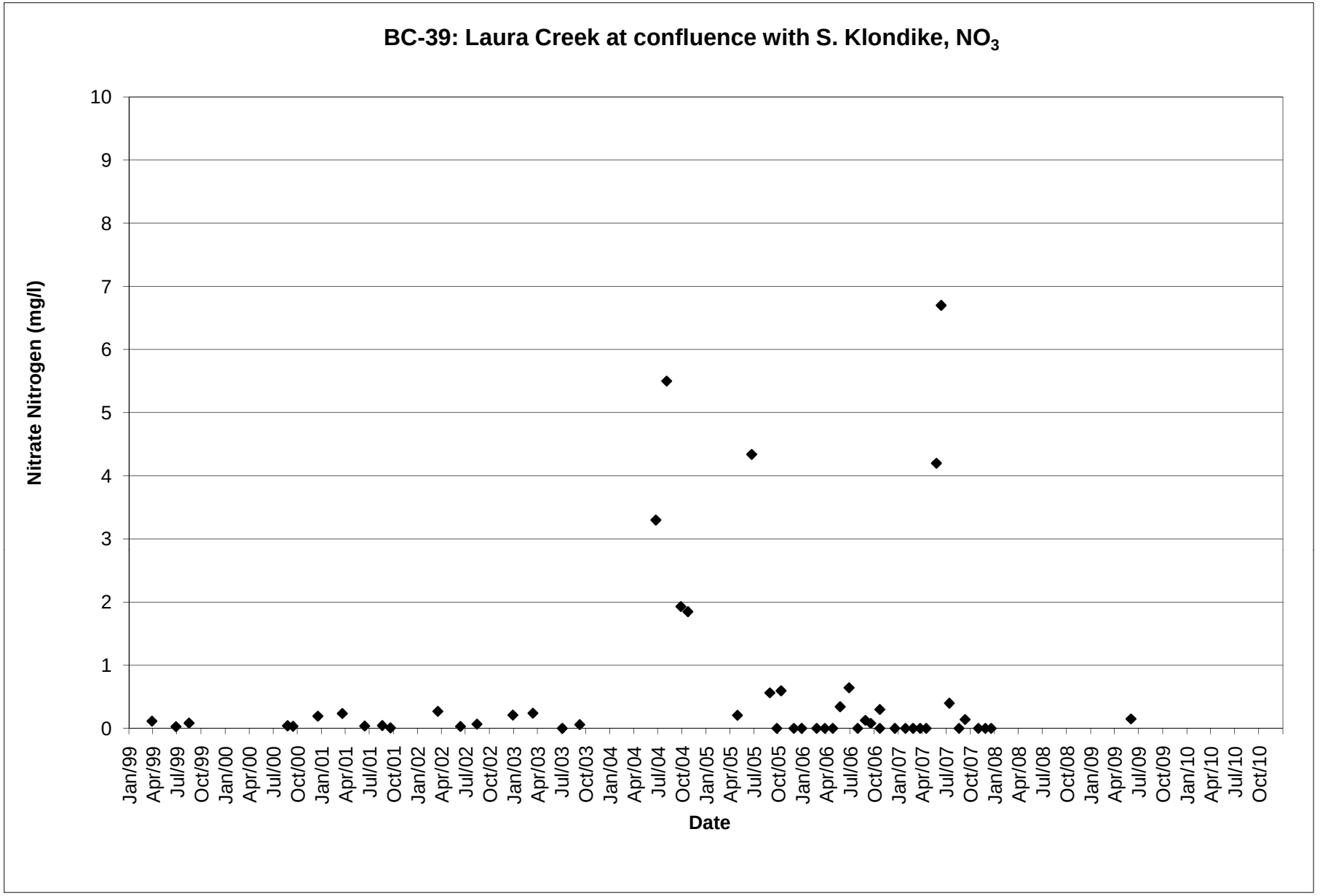
Jan/09
May/09
Sep/09
Jan/10
May/10
Sep/10
Date


BC-39: Laura Creek at confluence with S. Klondike, NO3
Nitrate Nitrogen (mg/l)
10
9
8
7
6
5
4
3
2
1
0
Jan/99
Apr/99
Jul/99
Oct/99
Jan/00
Apr/00
Jul/00
Oct/00
Jan/01
Apr/01
Jul/01
Oct/01
Jan/02
Apr/02
Jul/02
Oct/02
Jan/03
Apr/03
Jul/03
Oct/03
Jan/04
Apr/04
Jul/04
Oct/04
Jan/05
Apr/05
Jul/05
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Jan/06
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Jan/09
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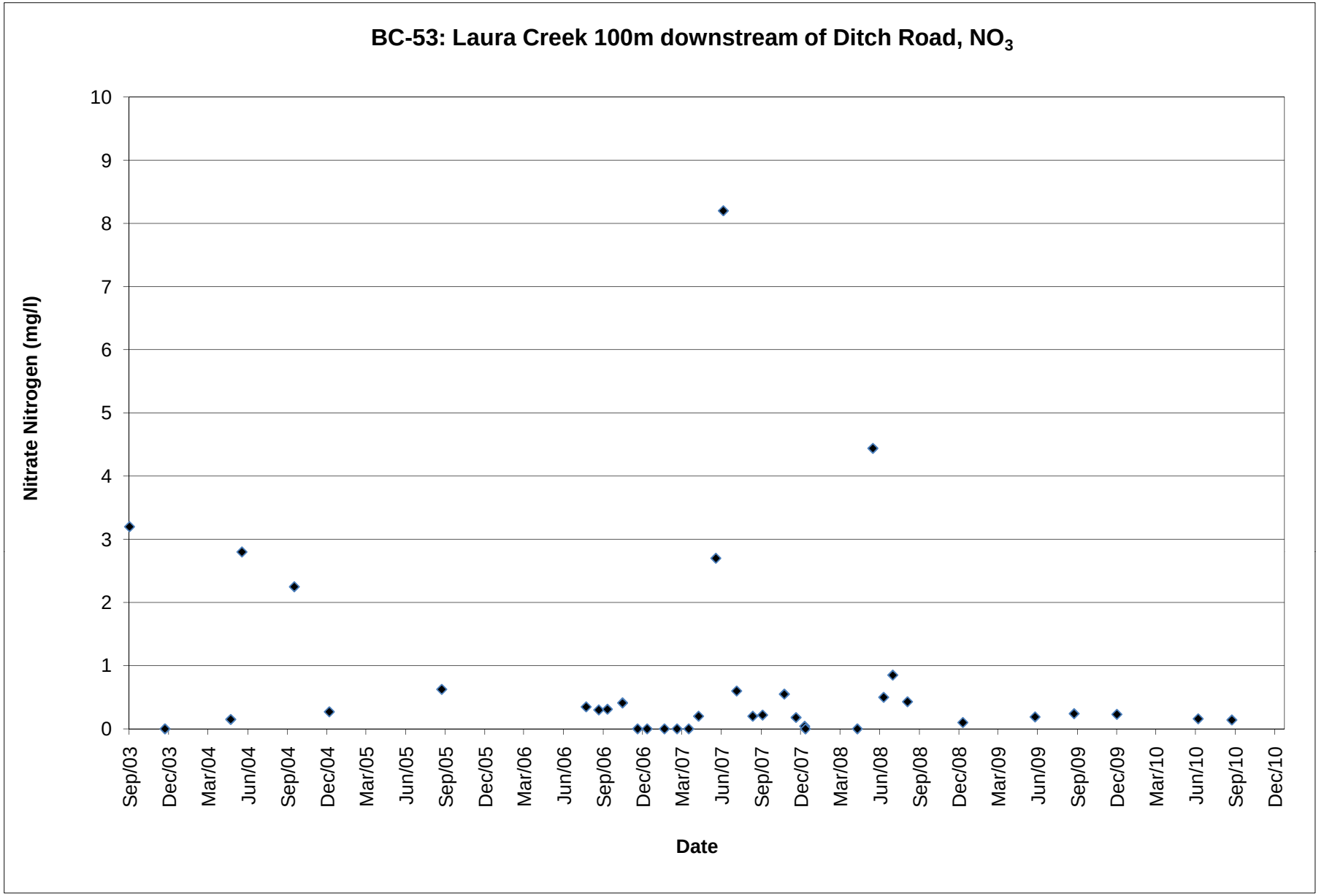
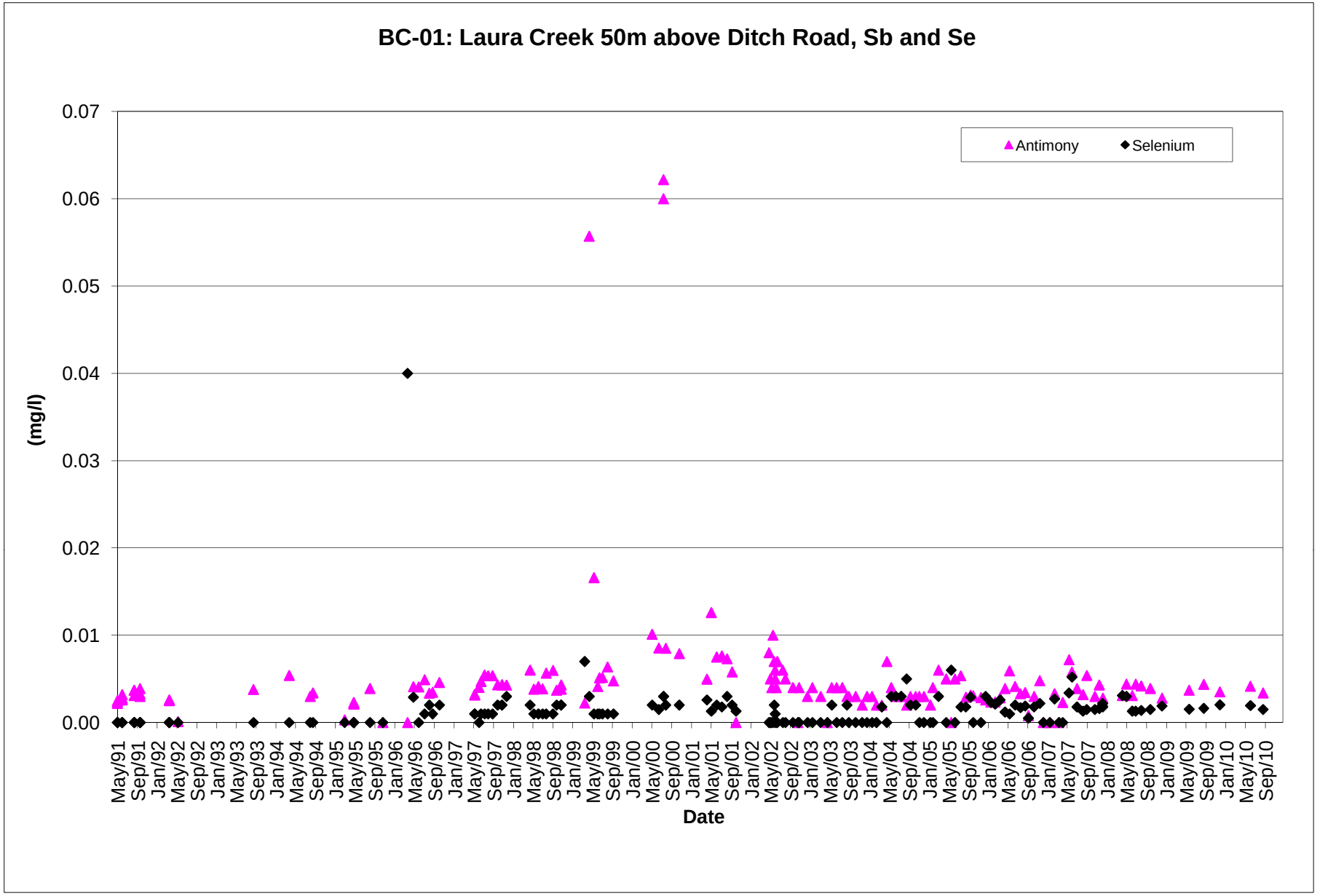
Jul/09
Oct/09
Jan/10
Apr/10
Jul/10
Oct/10
Date


BC-53: Laura Creek 100m downstream of Ditch Road, NO3
Nitrate Nitrogen (mg/l)
10
9
8
7
6
5
4
3
2
1
0
Sep/03
Dec/03
Mar/04
Jun/04
Sep/04
Dec/04
Mar/05
Jun/05
Sep/05
Dec/05
Mar/06
Jun/06
Sep/06
Dec/06
Mar/07
Jun/07
Sep/07
Dec/07
Mar/08
Jun/08
Sep/08
Dec/08
Mar/09
Jun/09
Sep/09
Dec/09
Mar/10
Jun/10
Sep/10
Dec/10
Date


BC-01: Laura Creek 50m above Ditch Road, Sb and Se
Antimony
Selenium
(mg/l)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
May/96
Sep/96
Jan/97
May/97
Sep/97
Jan/98
May/98
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Sep/99
Jan/00
May/00
Sep/00
Jan/01
May/01
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Jan/02
May/02
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Jan/03
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Jan/06
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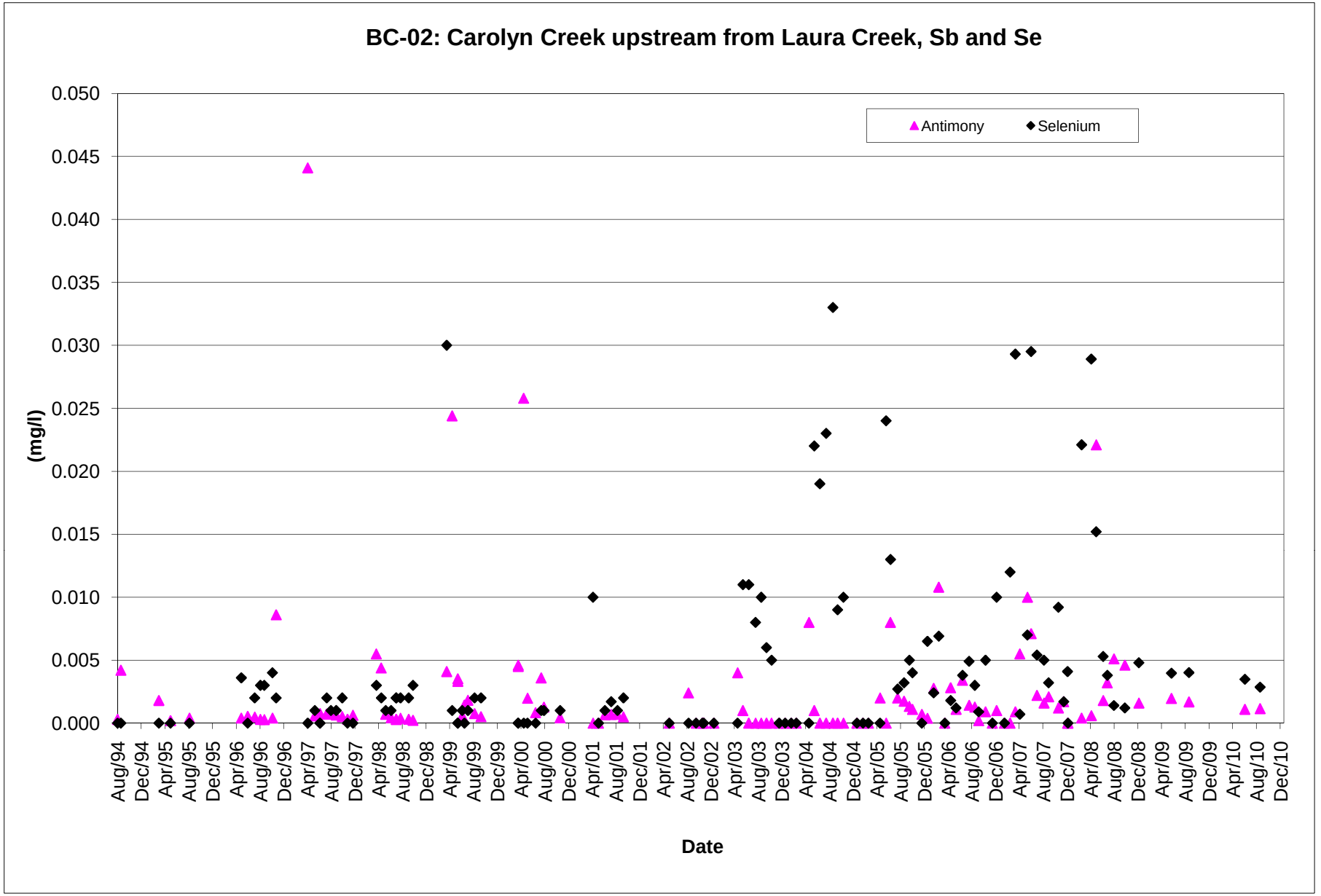
Sep/09
Jan/10
May/10
Sep/10
Date


BC-02: Carolyn Creek upstream from Laura Creek, Sb and Se
Antimony
Selenium
(mg/l)
0.050
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Aug/94
Dec/94
Apr/95
Aug/95
Dec/95
Apr/96
Aug/96
Dec/96
Apr/97
Aug/97
Dec/97
Apr/98
Aug/98
Dec/98
Apr/99
Aug/99
Dec/99
Apr/00
Aug/00
Dec/00
Apr/01
Aug/01
Dec/01
Apr/02
Aug/02
Dec/02
Apr/03
Aug/03
Dec/03
Apr/04
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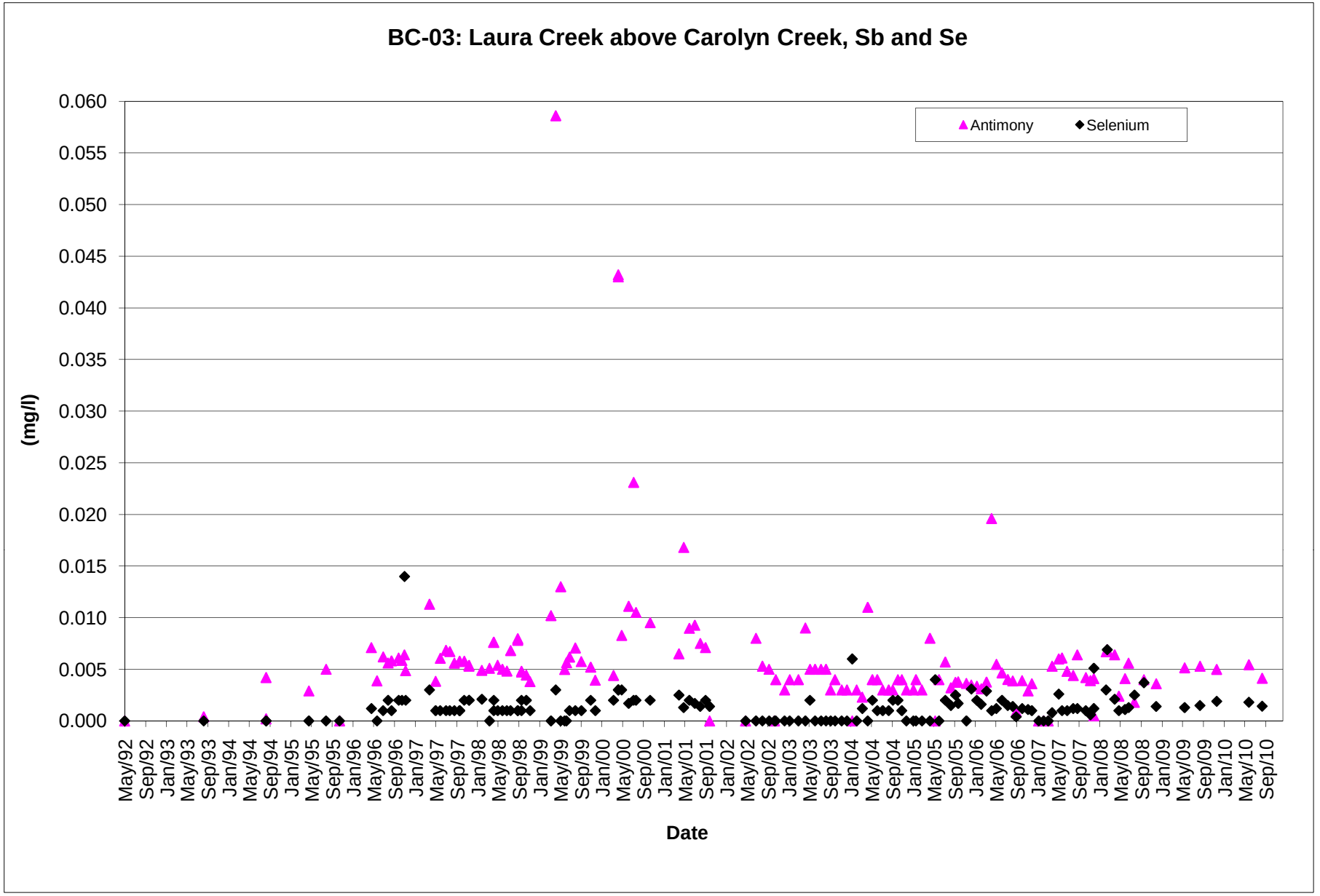
Dec/09
Apr/10
Aug/10
Dec/10
Date


BC-03: Laura Creek above Carolyn Creek, Sb and Se
Antimony
Selenium
(mg/l)
0.060
0.055
0.050
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
May/96
Sep/96
Jan/97
May/97
Sep/97
Jan/98
May/98
Sep/98
Jan/99
May/99
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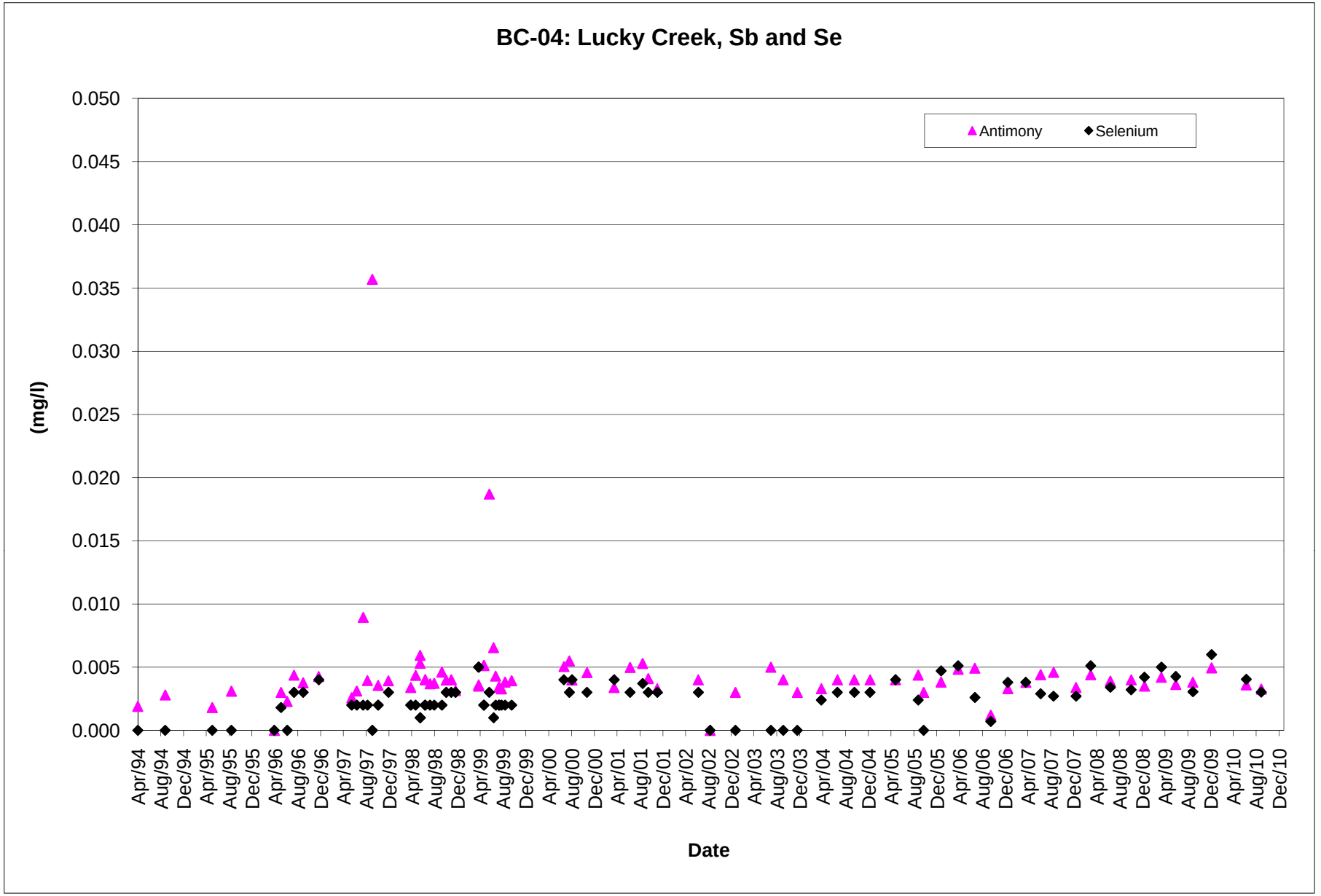
May/09
Sep/09
Jan/10
May/10
Sep/10
Date


BC-04: Lucky Creek, Sb and Se
Antimony
Selenium
(mg/l)
0.050
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Apr/94
Aug/94
Dec/94
Apr/95
Aug/95
Dec/95
Apr/96
Aug/96
Dec/96
Apr/97
Aug/97
Dec/97
Apr/98
Aug/98
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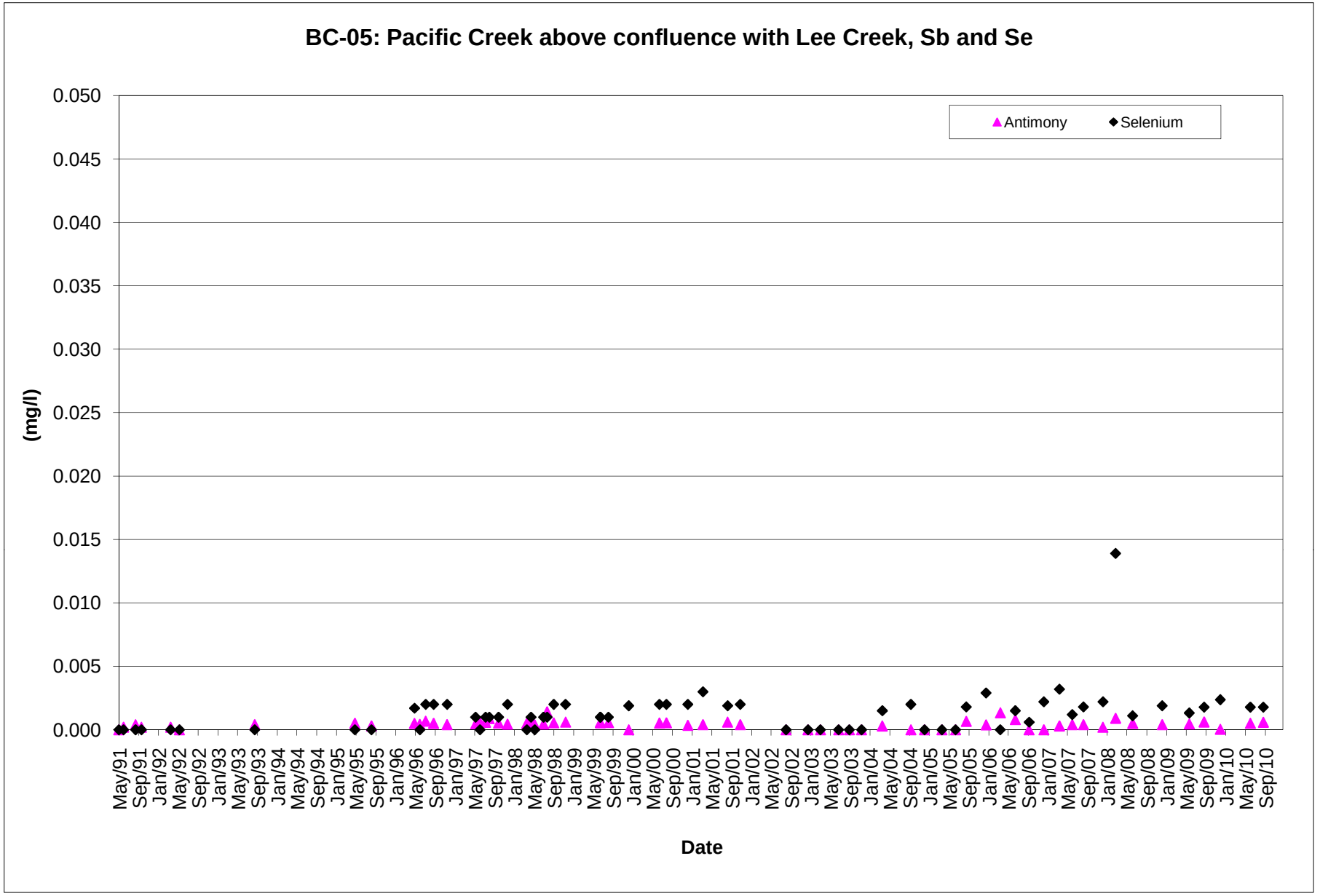
Apr/10
Aug/10
Dec/10
Date


BC-05: Pacific Creek above confluence with Lee Creek, Sb and Se
Antimony
Selenium
(mg/l)
0.050
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
May/96
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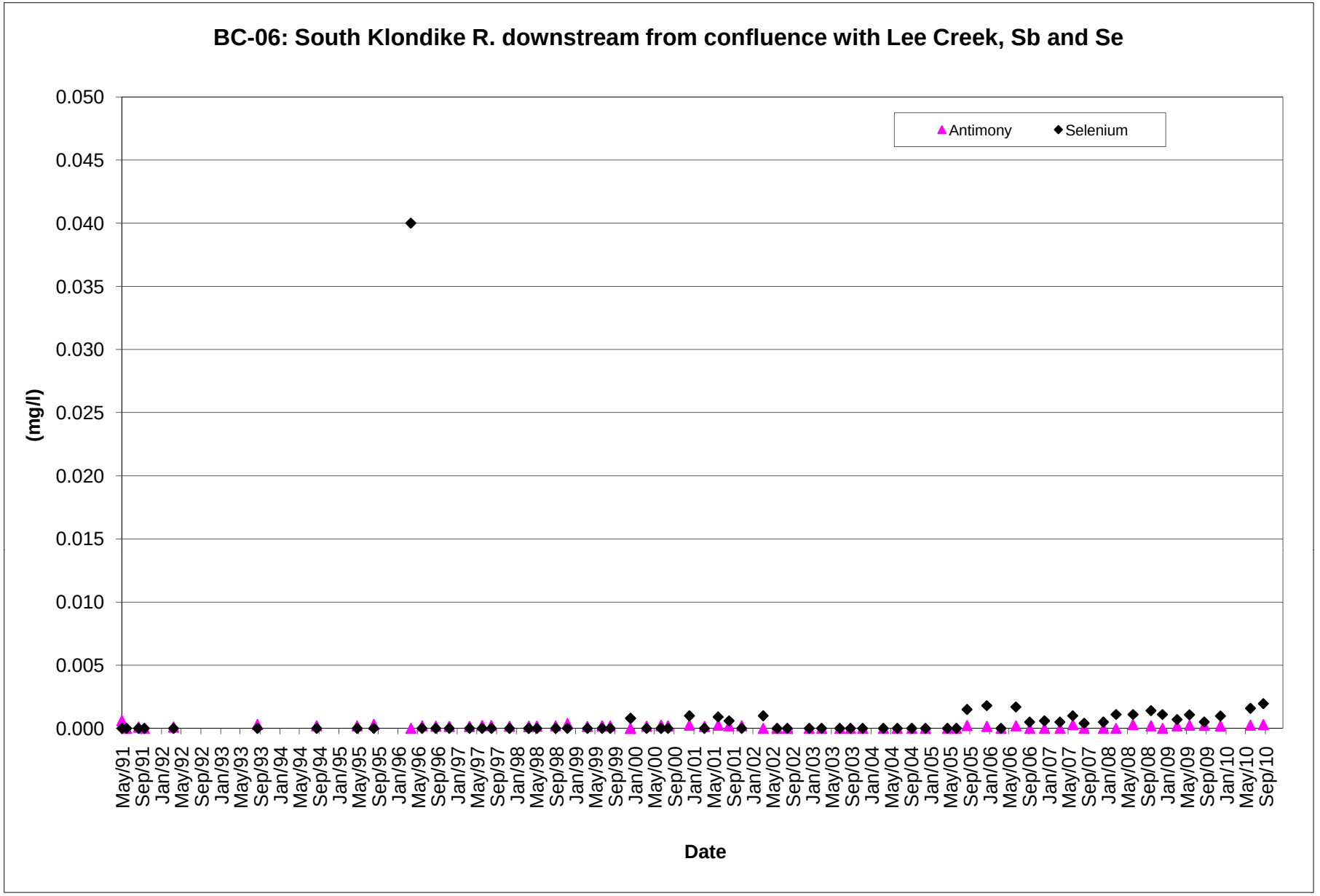
Jan/10
May/10
Sep/10
Date


BC-06: South Klondike R. downstream from confluence with Lee Creek, Sb and Se
Antimony
Selenium
(mg/l)
0.050
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
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May/94
Sep/94
Jan/95
May/95
Sep/95
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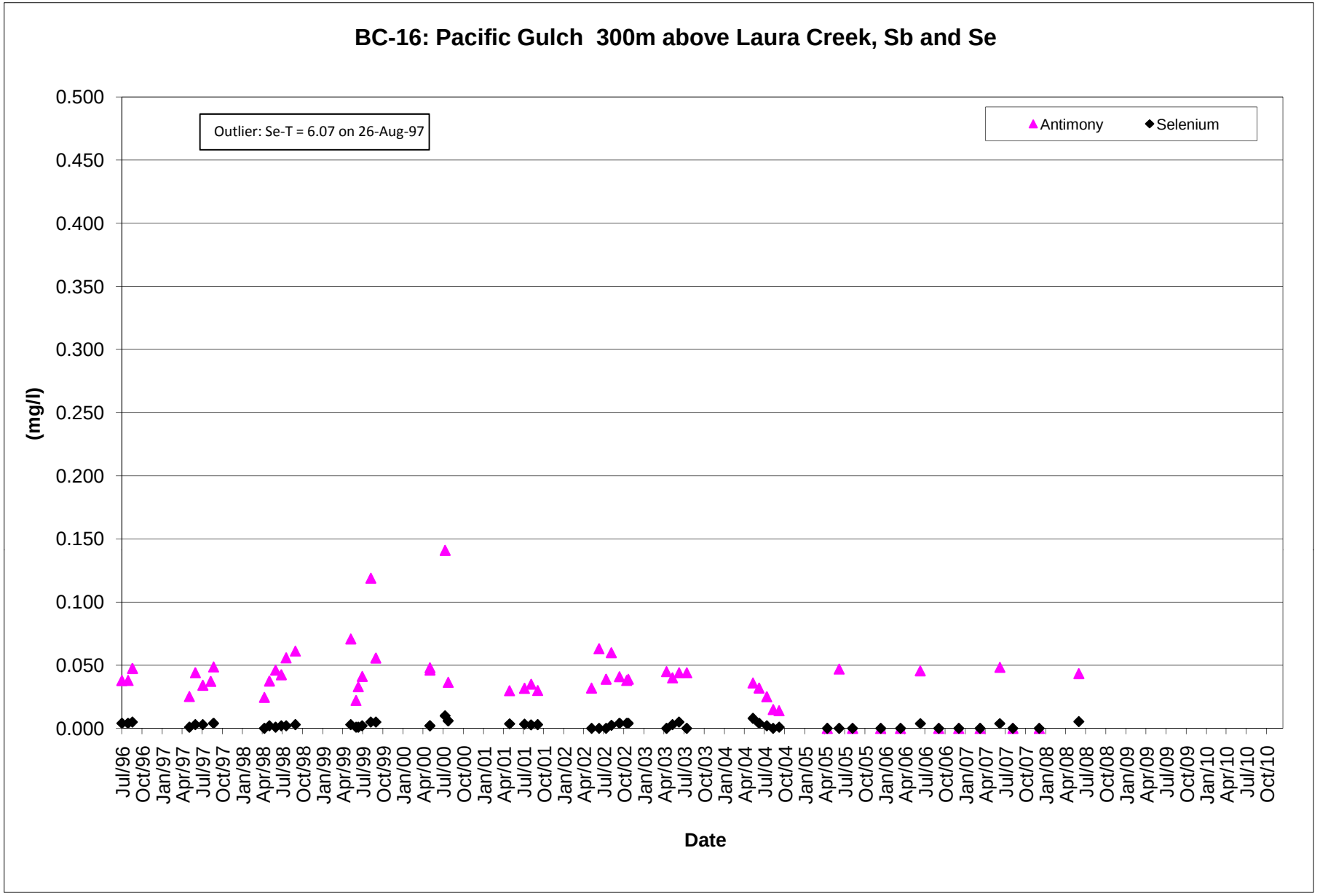
May/10
Sep/10
Date


BC-16: Pacific Gulch 300m above Laura Creek, Sb and Se
Outlier: Se-T = 6.07 on 26-Aug-97
Antimony
Selenium
(mg/l)
0.500
0.450
0.400
0.350
0.300
0.250
0.200
0.150
0.100
0.050
0.000
Jul/96
Oct/96
Jan/97
Apr/97
Jul/97
Oct/97
Jan/98
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Jul/99
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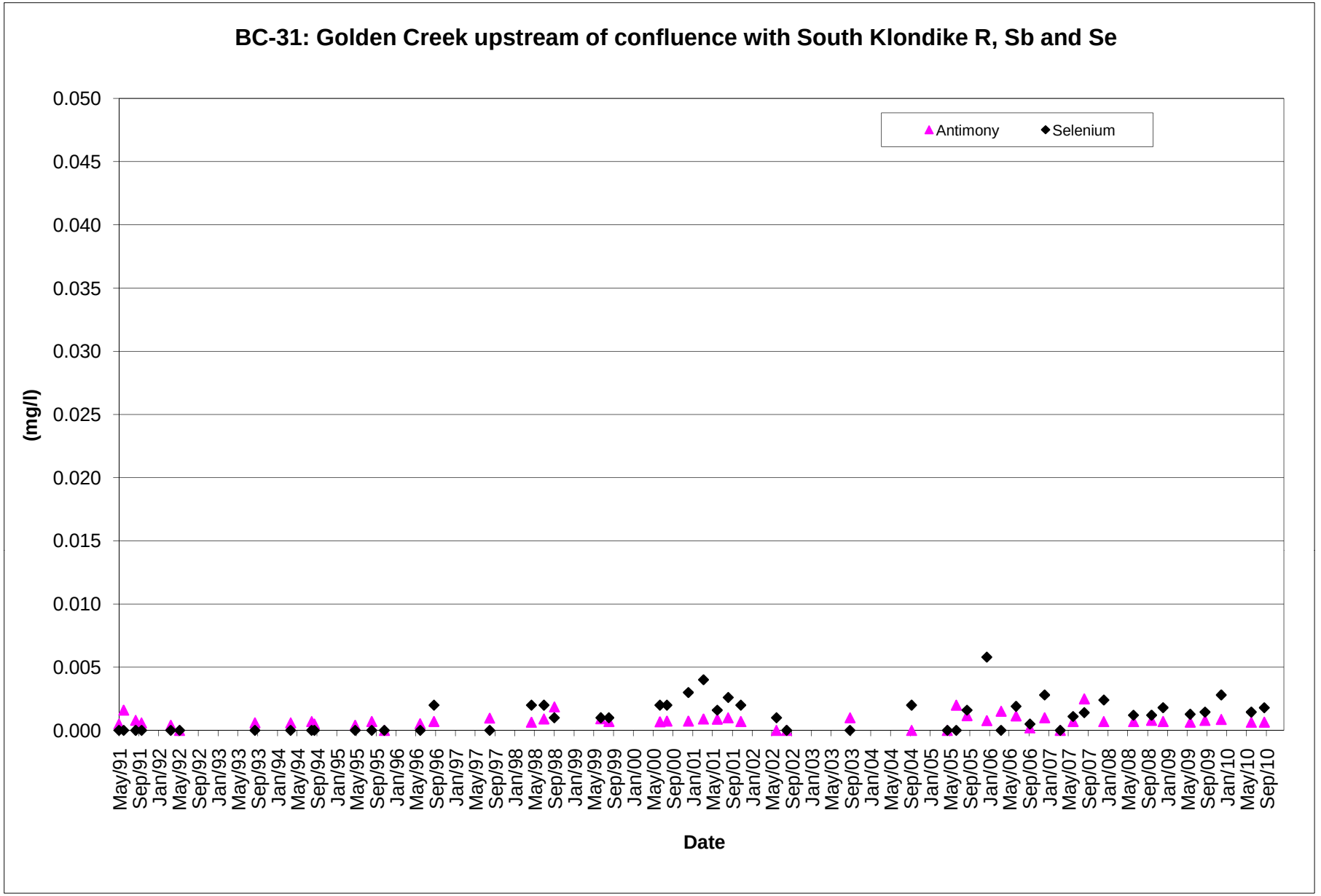
Jul/10
Oct/10
Date


BC-31: Golden Creek upstream of confluence with South Klondike R, Sb and Se
Antimony
Selenium
(mg/l)
0.050
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
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May/94
Sep/94
Jan/95
May/95
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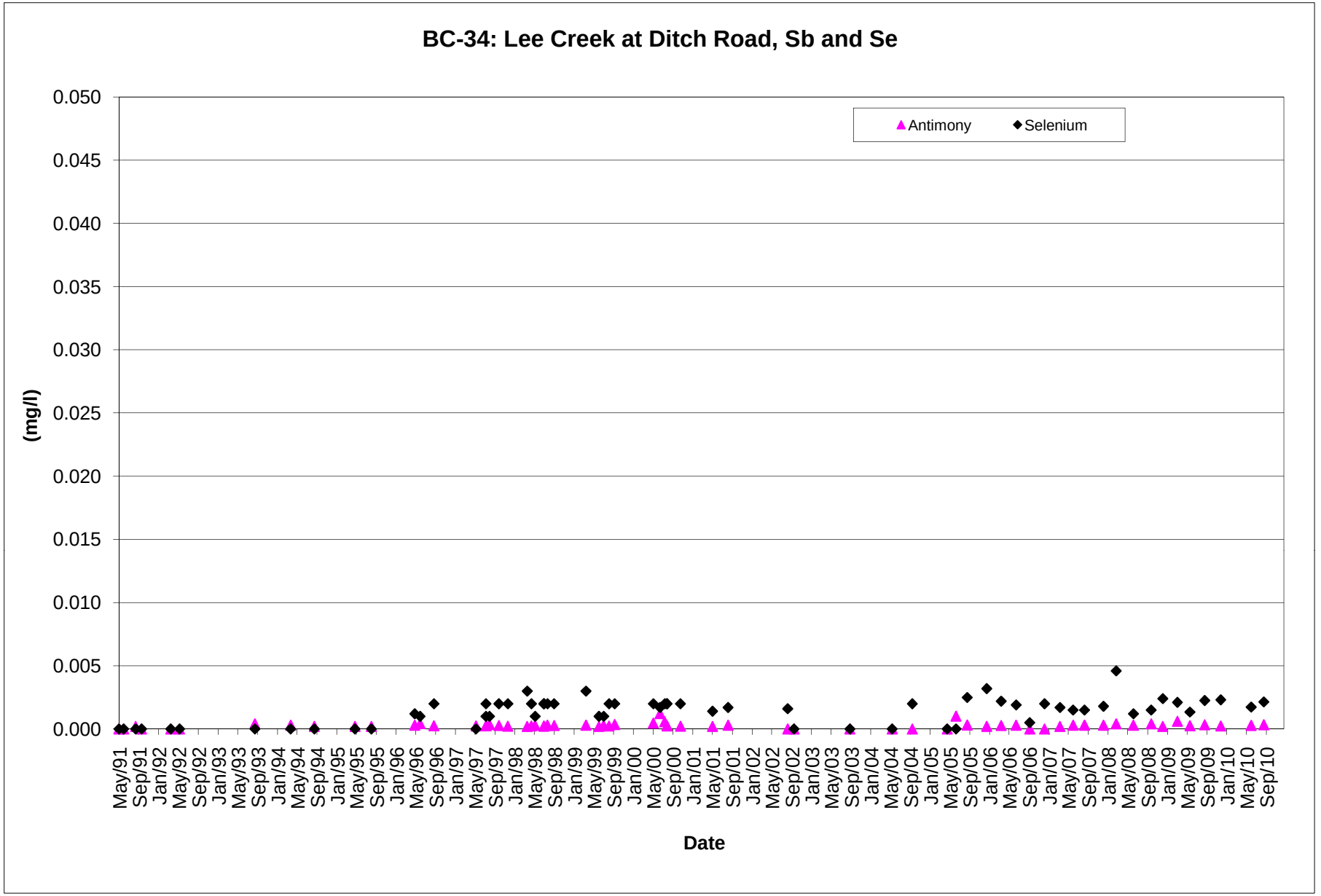
Jan/10
May/10
Sep/10
Date


BC-34: Lee Creek at Ditch Road, Sb and Se
Antimony
Selenium
(mg/l)
0.050
0.045
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
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Jan/98
May/98
Sep/98
Jan/99
May/99
Sep/99
Jan/00
May/00
Sep/00
Jan/01
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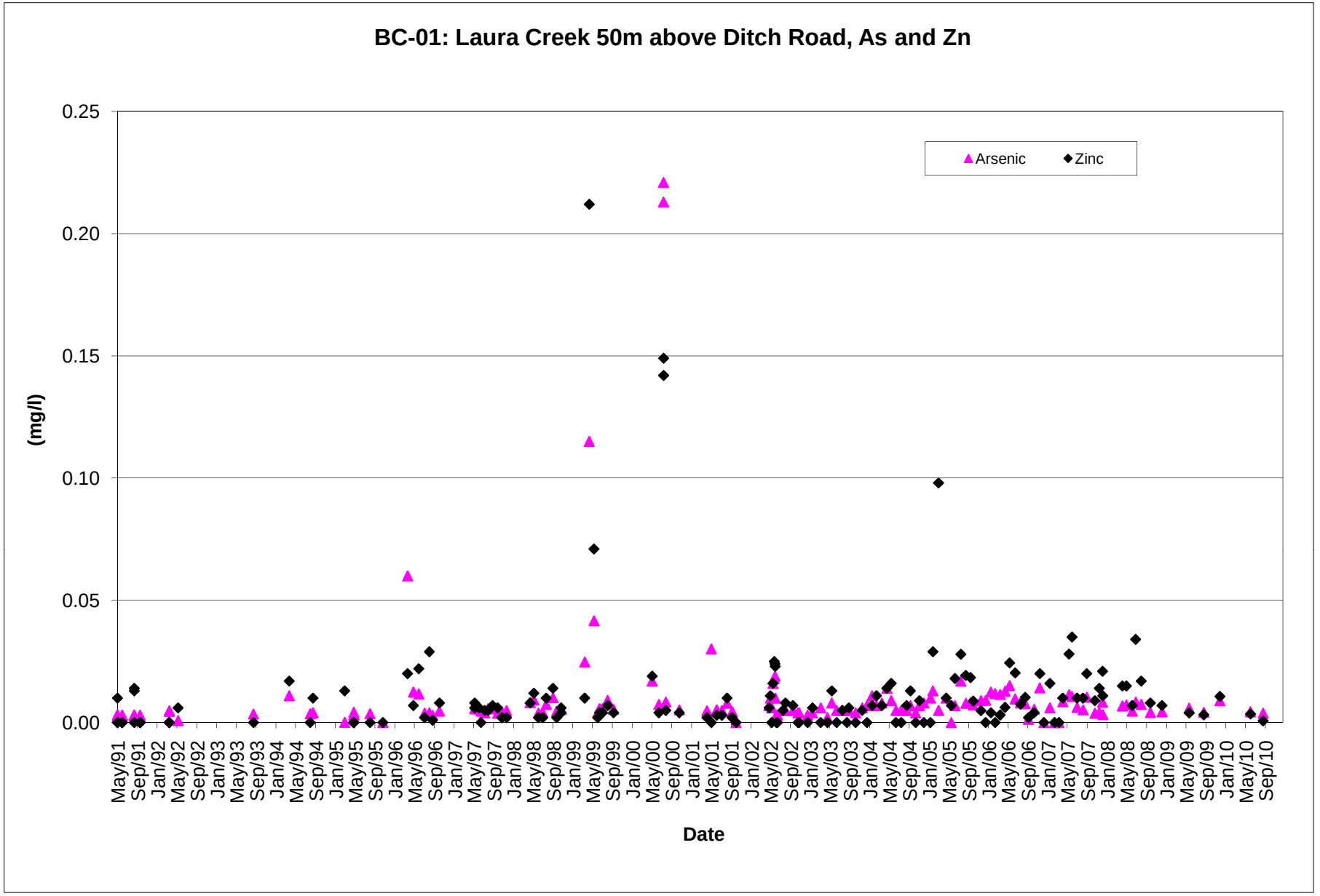
May/10
Sep/10
Date


BC-01: Laura Creek 50m above Ditch Road, As and Zn
Arsenic
Zinc
(mg/l)
0.25
0.20
0.15
0.10
0.05
0.00
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
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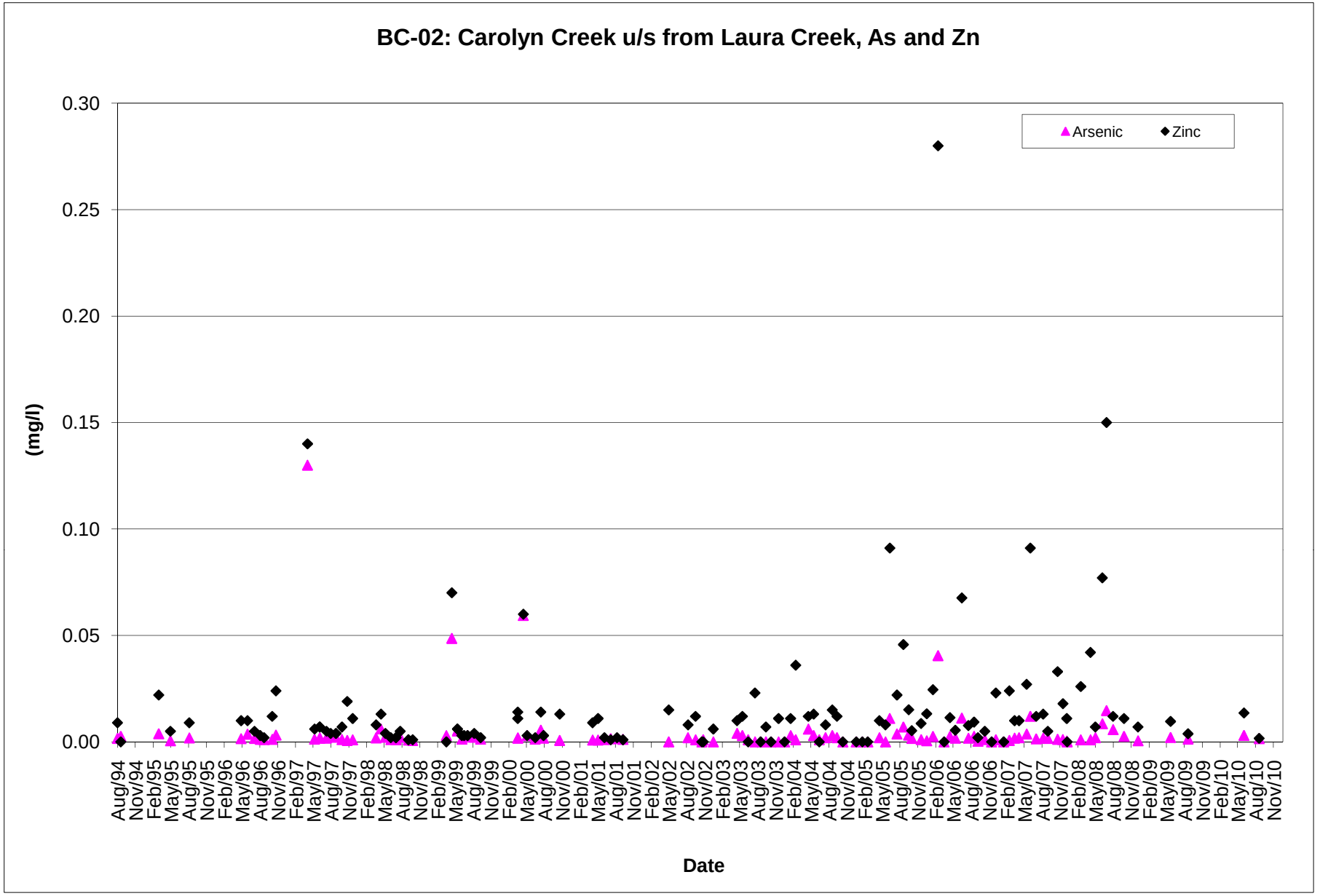
May/10
Sep/10
Date


BC-02: Carolyn Creek u/s from Laura Creek, As and Zn
Arsenic
Zinc
(mg/l)
0.30
0.25
0.20
0.15
0.10
0.05
0.00
Aug/94
Nov/94
Feb/95
May/95
Aug/95
Nov/95
Feb/96
May/96
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Nov/96
Feb/97
May/97
Aug/97
Nov/97
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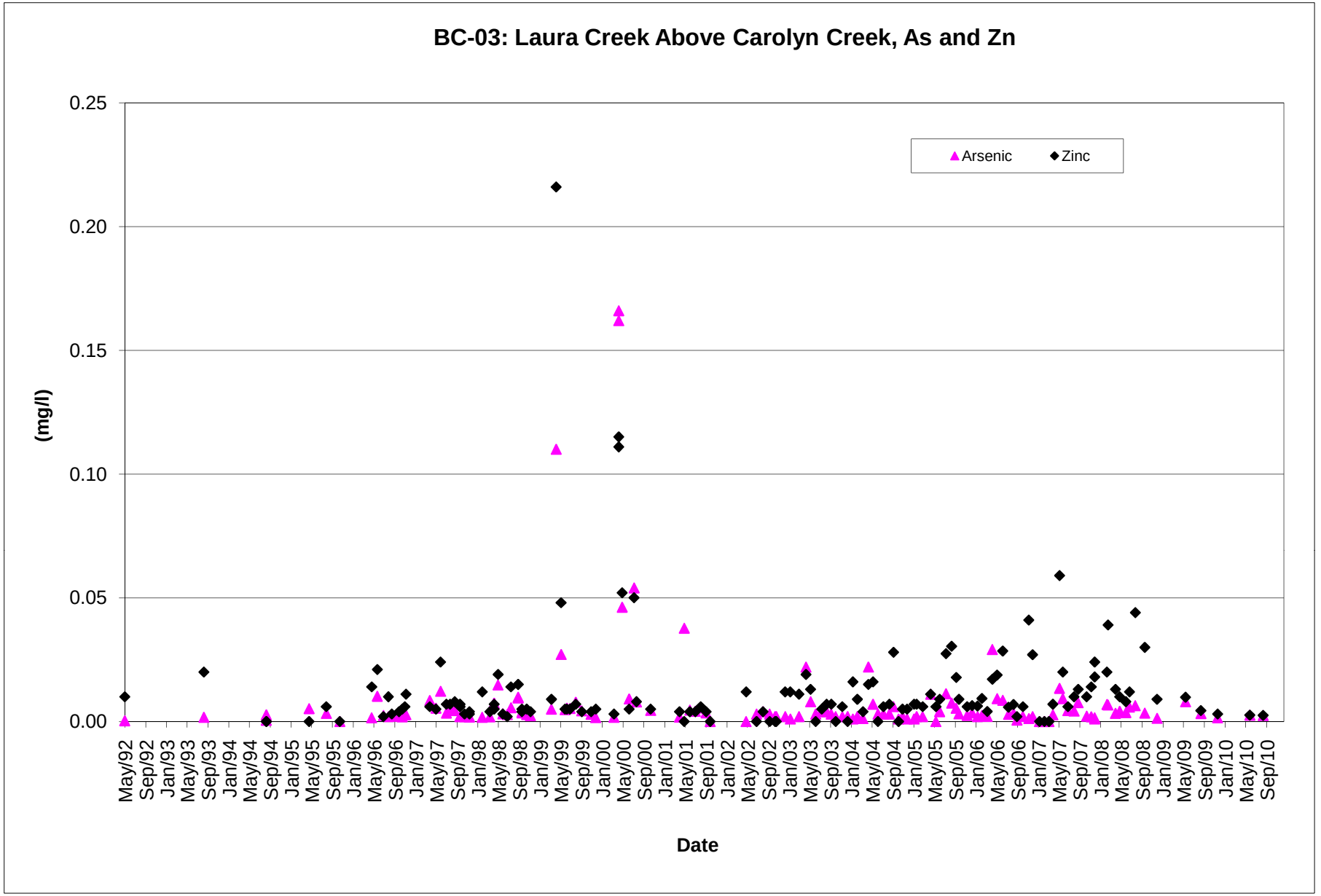
Feb/10
May/10
Aug/10
Nov/10
Date


BC-03: Laura Creek Above Carolyn Creek, As and Zn
Arsenic
Zinc
(mg/l)
0.25
0.20
0.15
0.10
0.05
0.00
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
May/96
Sep/96
Jan/97
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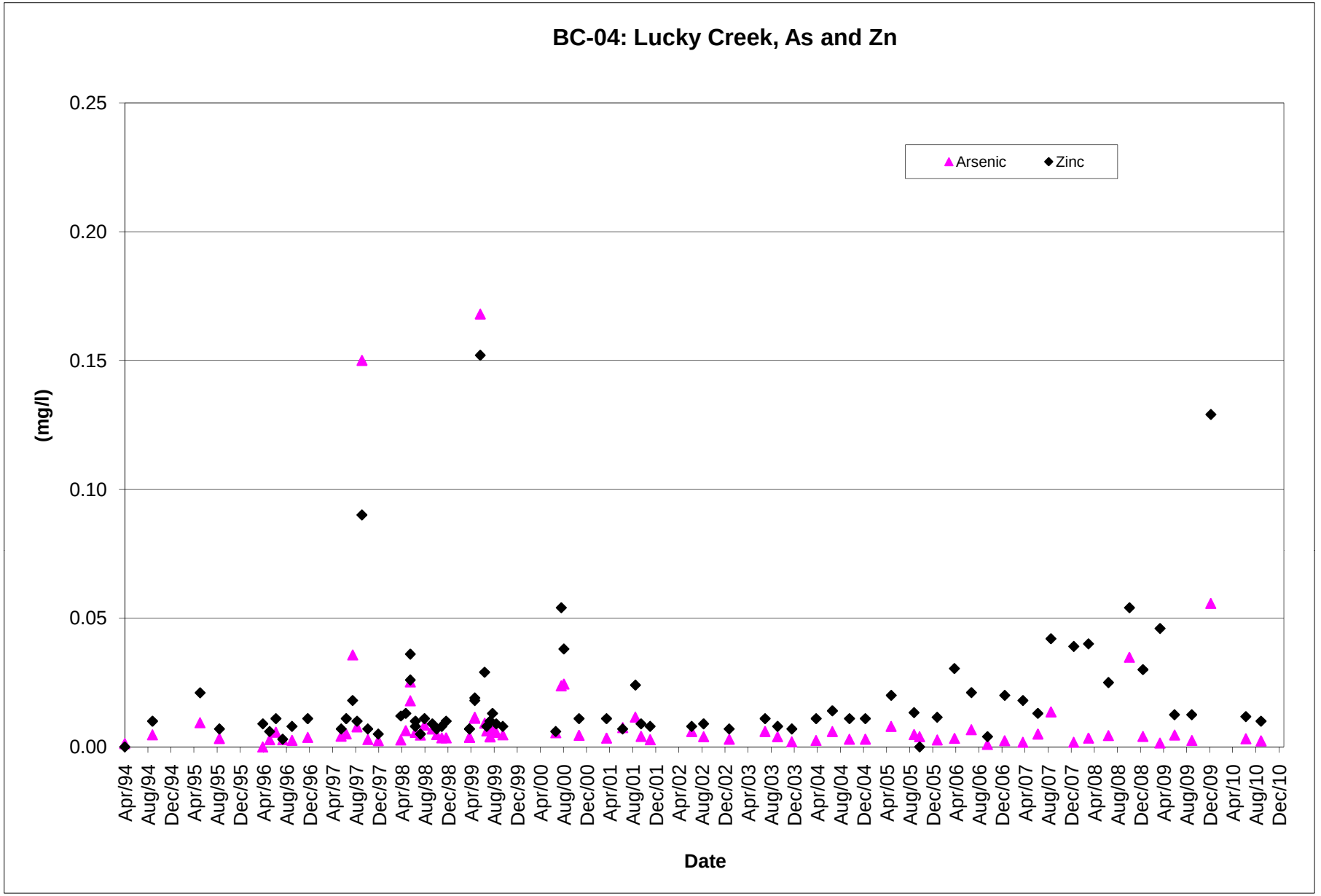
Jan/10
May/10
Sep/10
Date


BC-04: Lucky Creek, As and Zn
0.25
0.20
0.15
0.10
0.05
0.00
(mg/l)
Arsenic
Zinc
Apr/94
Aug/94
Dec/94
Apr/95
Aug/95
Dec/95
Apr/96
Aug/96
Dec/96
Apr/97
Aug/97
Dec/97
Apr/98
Aug/98
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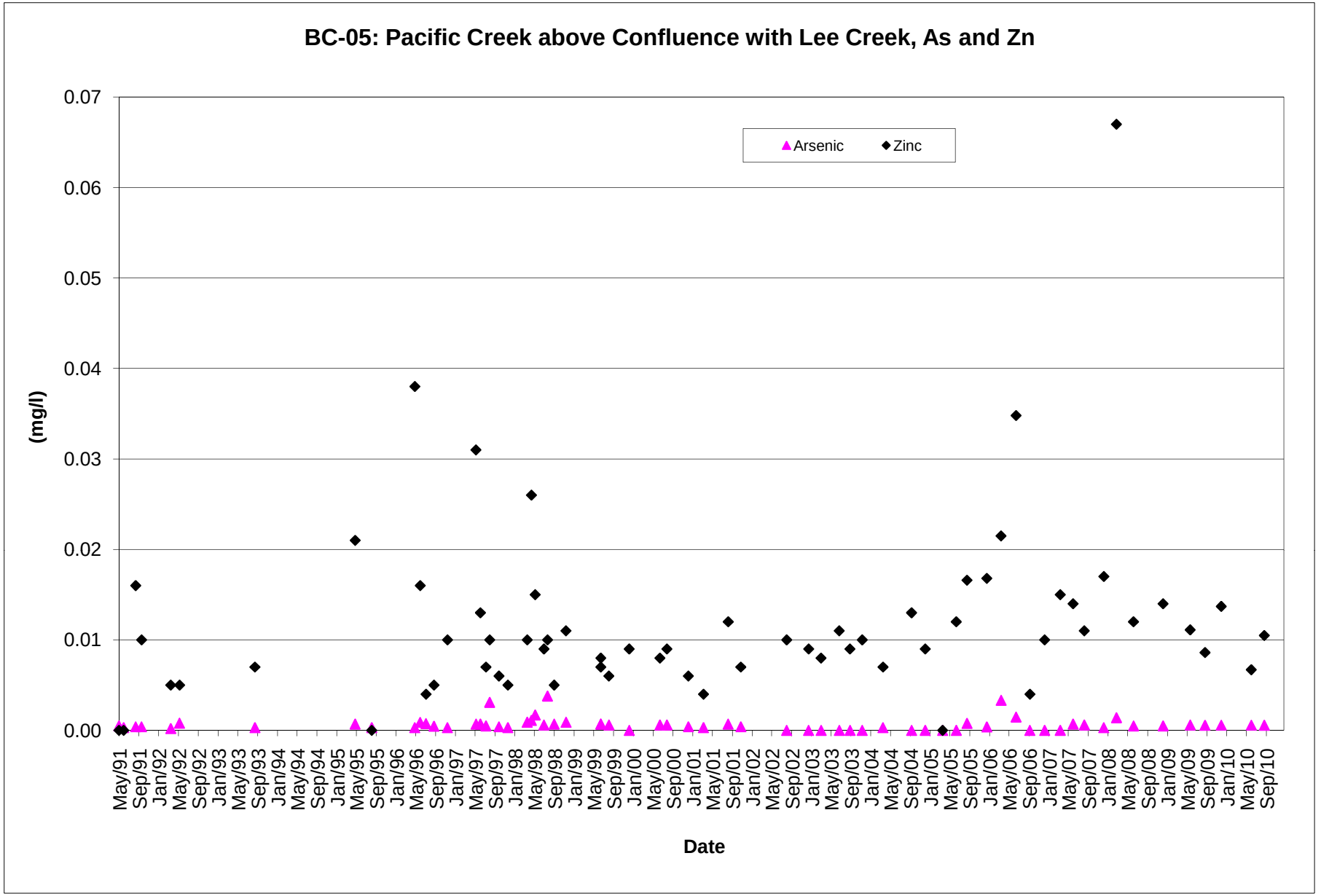
Apr/10
Aug/10
Dec/10
Date


BC-05: Pacific Creek above Confluence with Lee Creek, As and Zn
Arsenic
Zinc
(mg/l)
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
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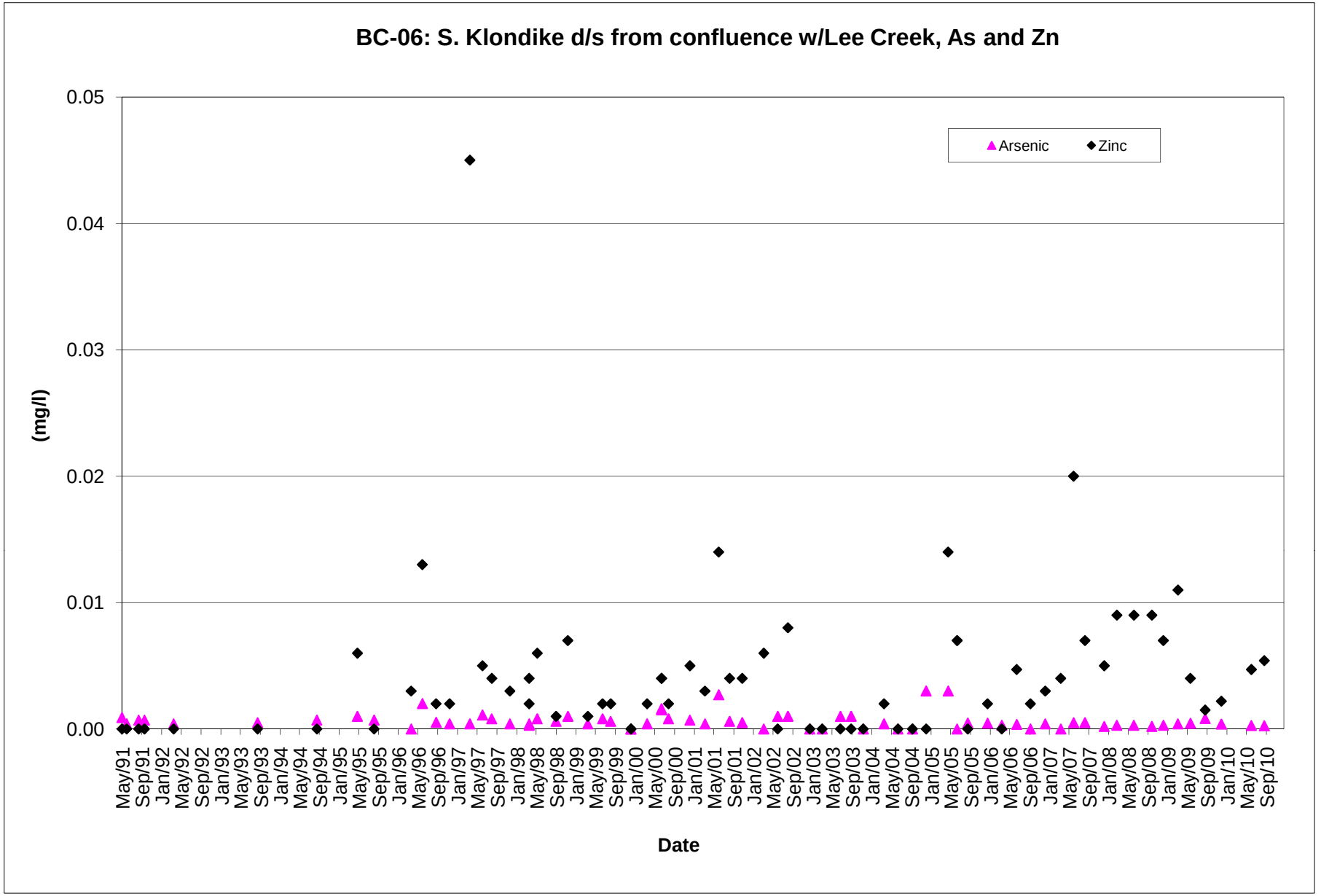
Sep/10
Date


BC-06: S. Klondike d/s from confluence w/Lee Creek, As and Zn
Arsenic
Zinc
0.05
0.04
0.03
0.02
0.01
0.00
(mg/l)
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
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Jan/97
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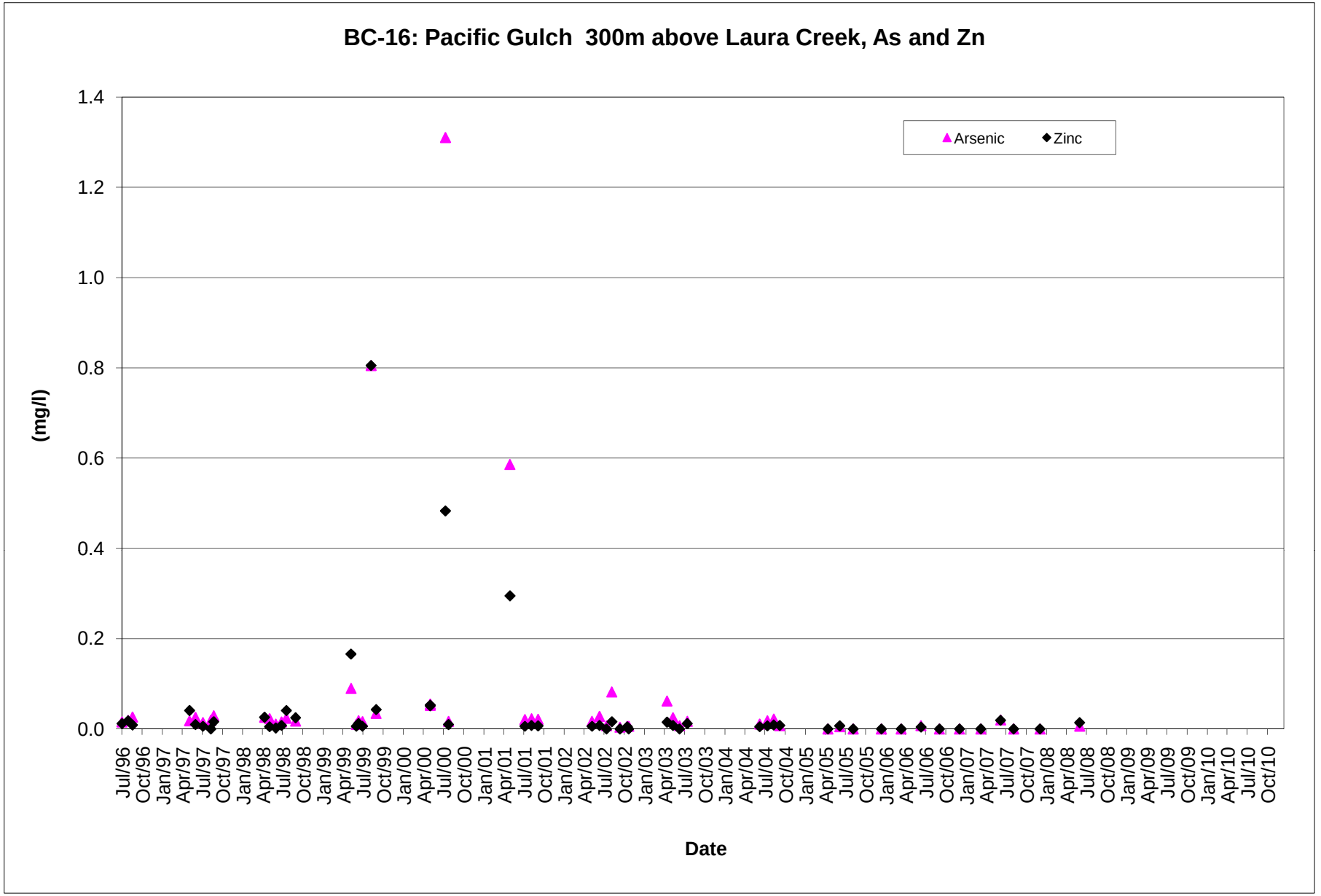
Jan/10
May/10
Sep/10
Date


BC-16: Pacific Gulch 300m above Laura Creek, As and Zn
Arsenic
Zinc
(mg/l)
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
Jul/96
Oct/96
Jan/97
Apr/97
Jul/97
Oct/97
Jan/98
Apr/98
Jul/98
Oct/98
Jan/99
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Oct/99
Jan/00
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Jul/00
Oct/00
Jan/01
Apr/01
Jul/01
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Jan/02
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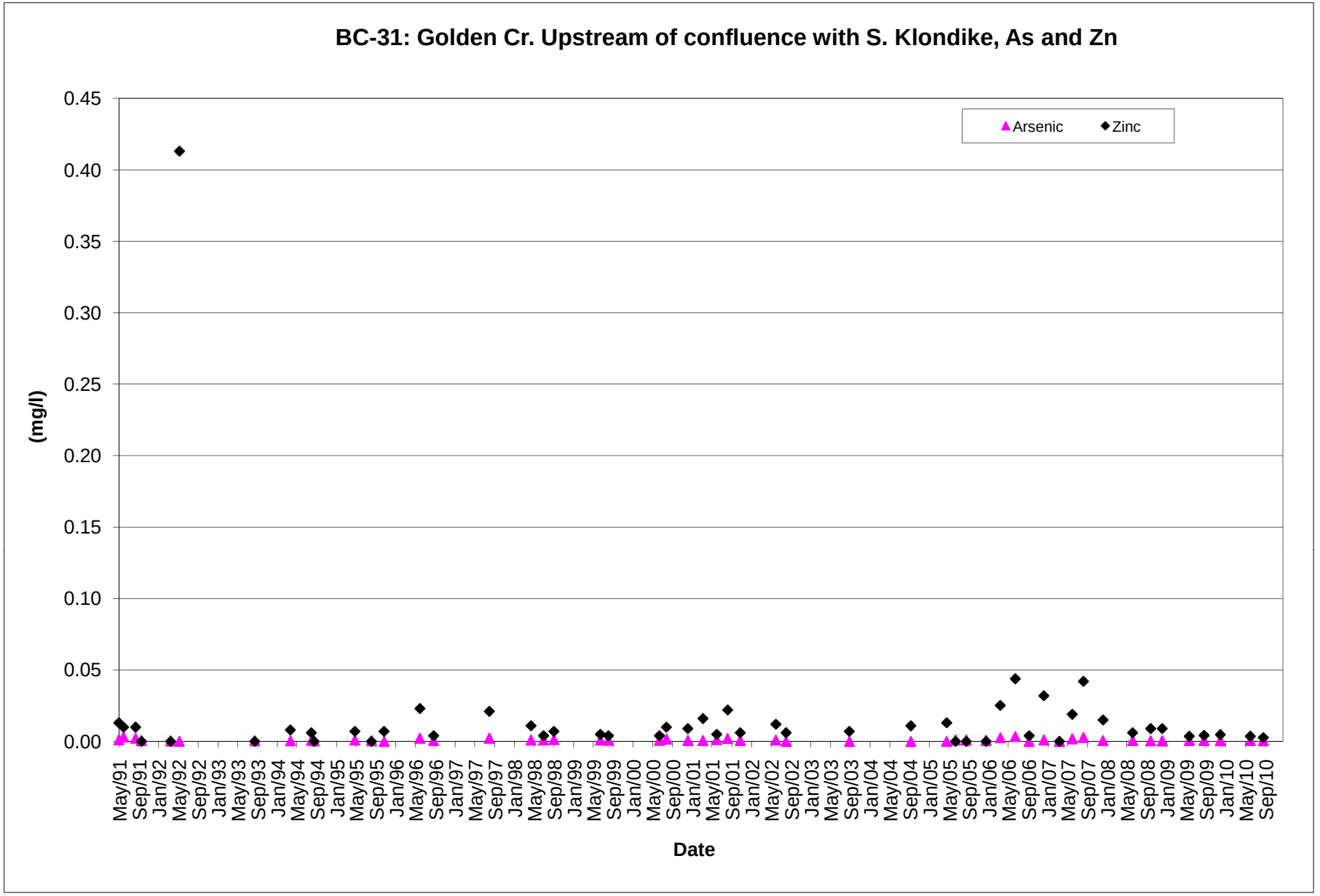
Jan/10
Apr/10
Jul/10
Oct/10
Date


BC-31: Golden Cr. Upstream of confluence with S. Klondike, As and Zn
Arsenic
Zinc
(mg/l)
0.45
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
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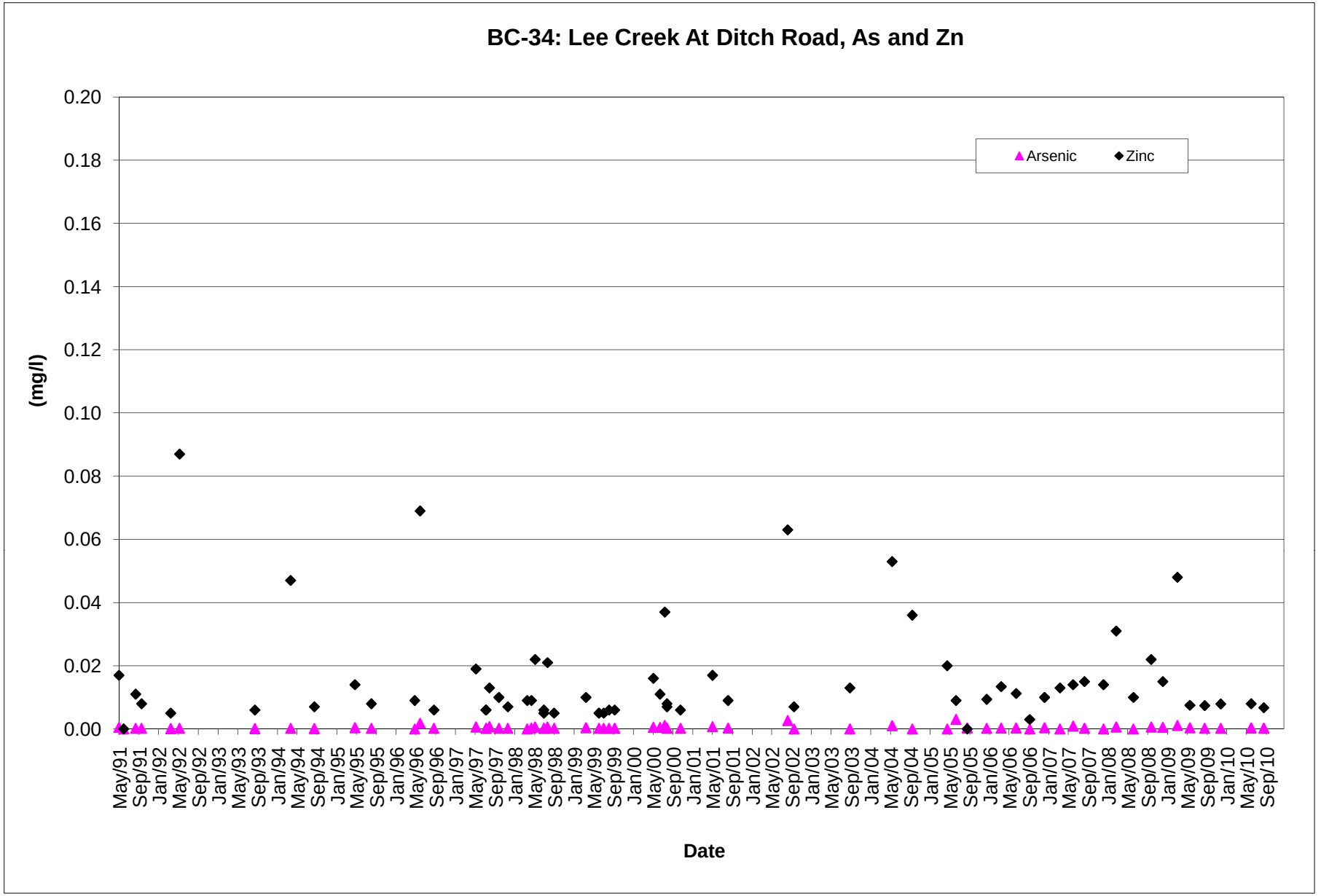
Jan/10
May/10
Sep/10
Date


BC-34: Lee Creek At Ditch Road, As and Zn
Arsenic
Zinc
(mg/l)
0.20
0.18
0.16
0.14
0.12
0.10
0.08
0.06
0.04
0.02
0.00
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
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Jan/01
May/01
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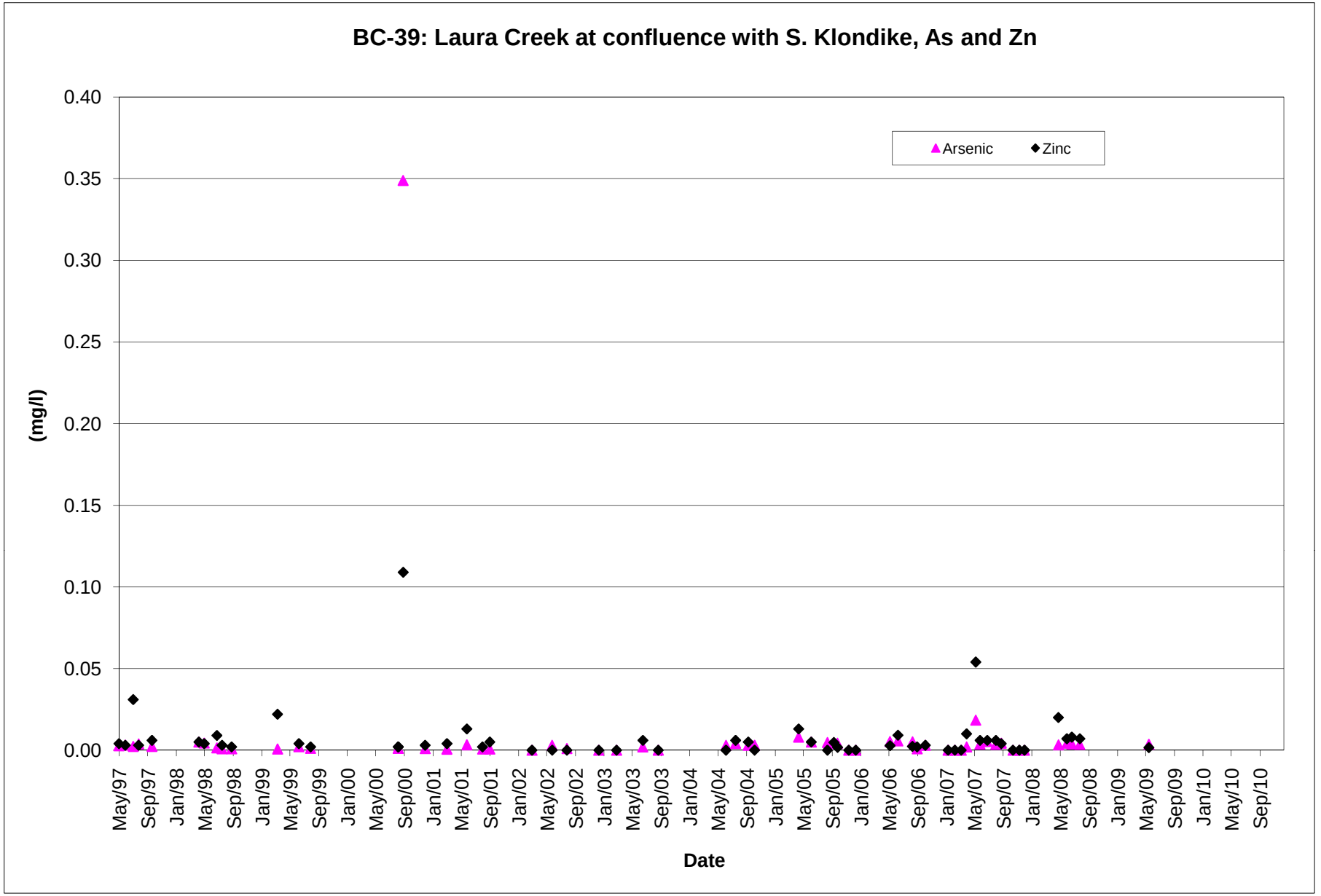
Jan/10
May/10
Sep/10
Date


BC-39: Laura Creek at confluence with S. Klondike, As and Zn
Arsenic
Zinc
(mg/l)
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.00
May/97
Sep/97
Jan/98
May/98
Sep/98
Jan/99
May/99
Sep/99
Jan/00
May/00
Sep/00
Jan/01
May/01
Sep/01
Jan/02
May/02
Sep/02
Jan/03
May/03
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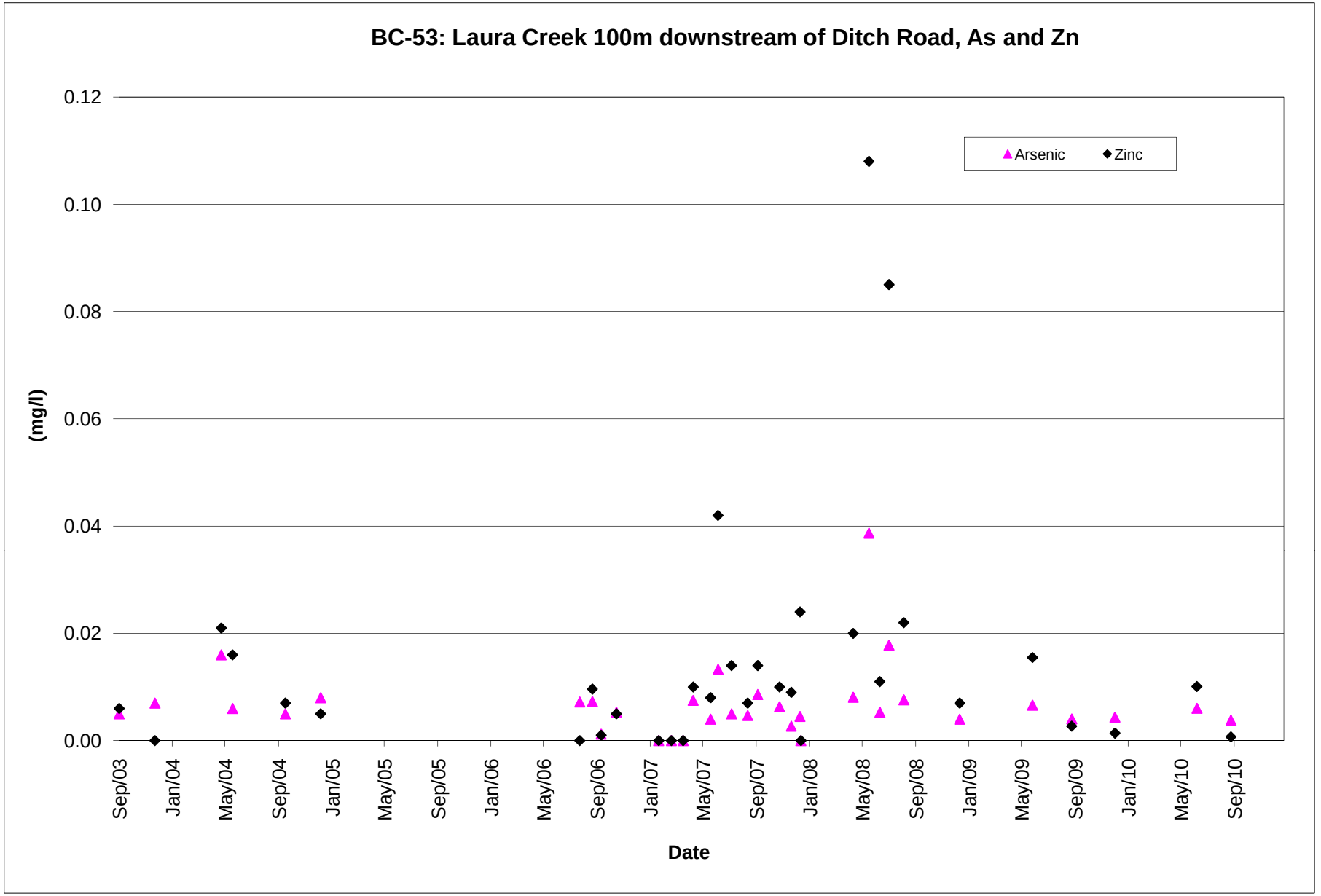
Jan/10
May/10
Sep/10
Date


BC-53: Laura Creek 100m downstream of Ditch Road, As and Zn
0.12
0.10
0.08
0.06
0.04
0.02
0.00
(mg/l)
Arsenic
Zinc
Sep/03
Jan/04
May/04
Sep/04
Jan/05
May/05
Sep/05
Jan/06
May/06
Sep/06
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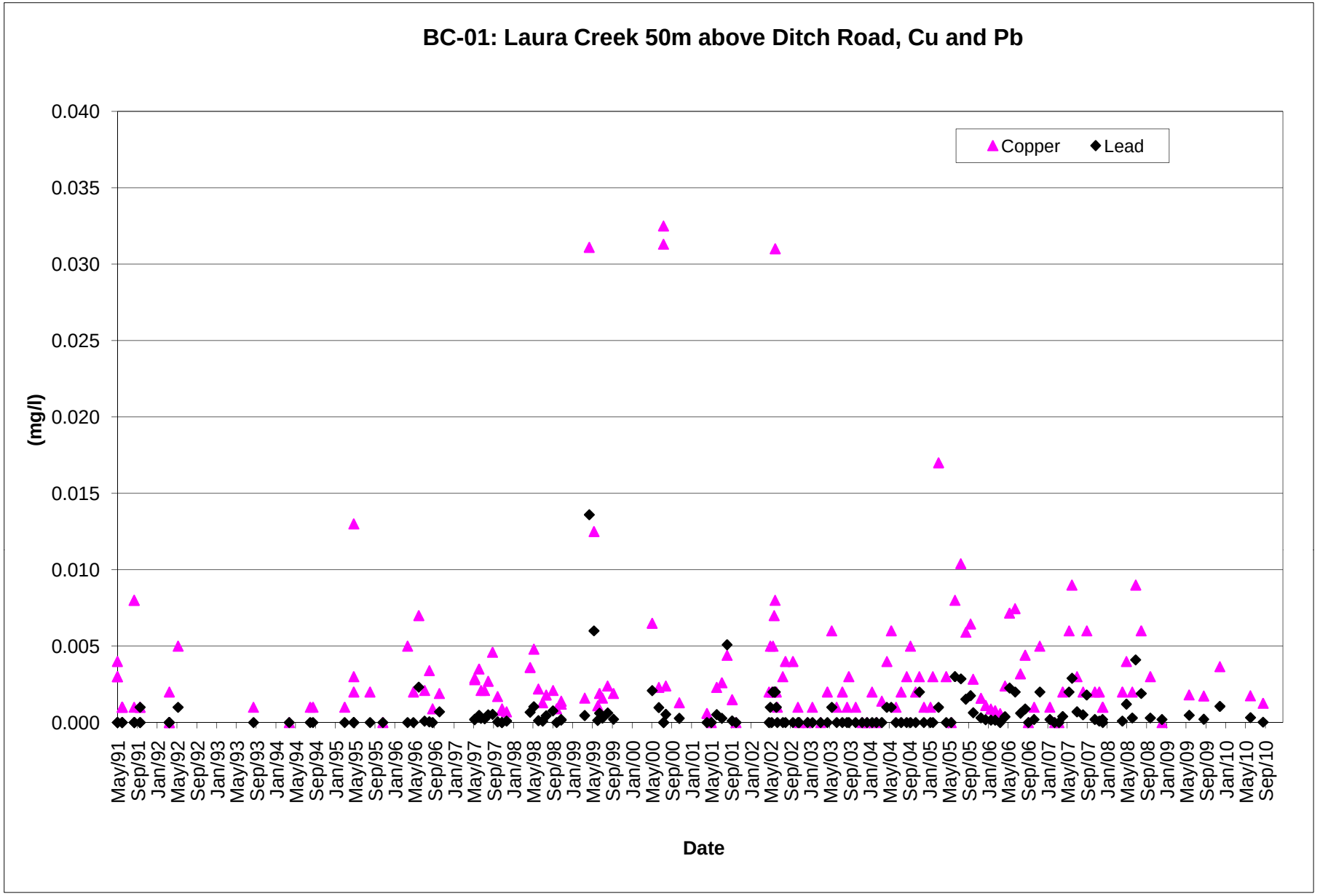
Sep/09
Jan/10
May/10
Sep/10
Date


BC-01: Laura Creek 50m above Ditch Road, Cu and Pb
Copper
Lead
(mg/l)
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
May/96
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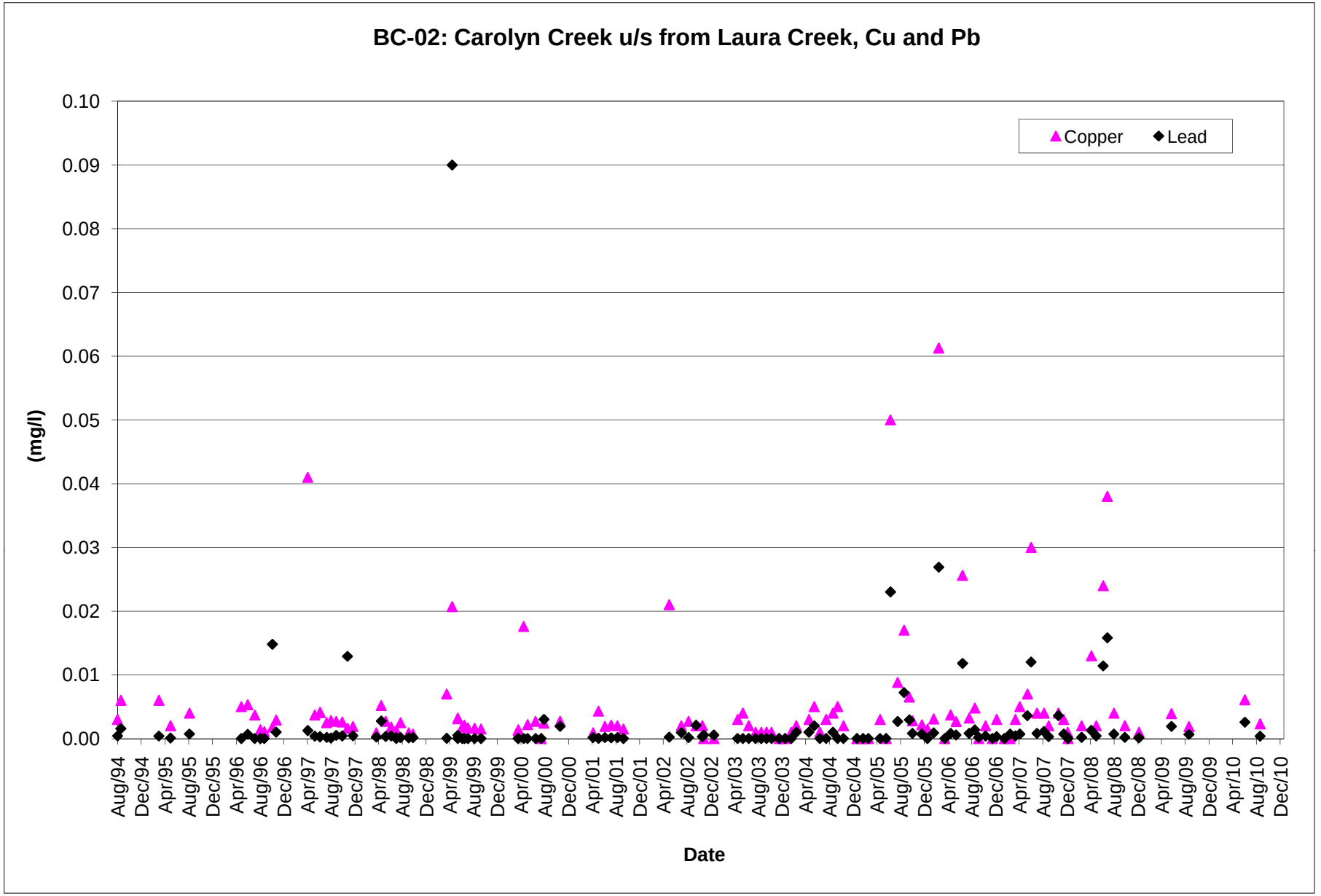
Sep/10
Date


BC-02: Carolyn Creek u/s from Laura Creek, Cu and Pb
Copper
Lead
(mg/l)
0.10
0.09
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
Aug/94
Dec/94
Apr/95
Aug/95
Dec/95
Apr/96
Aug/96
Dec/96
Apr/97
Aug/97
Dec/97
Apr/98
Aug/98
Dec/98
Apr/99
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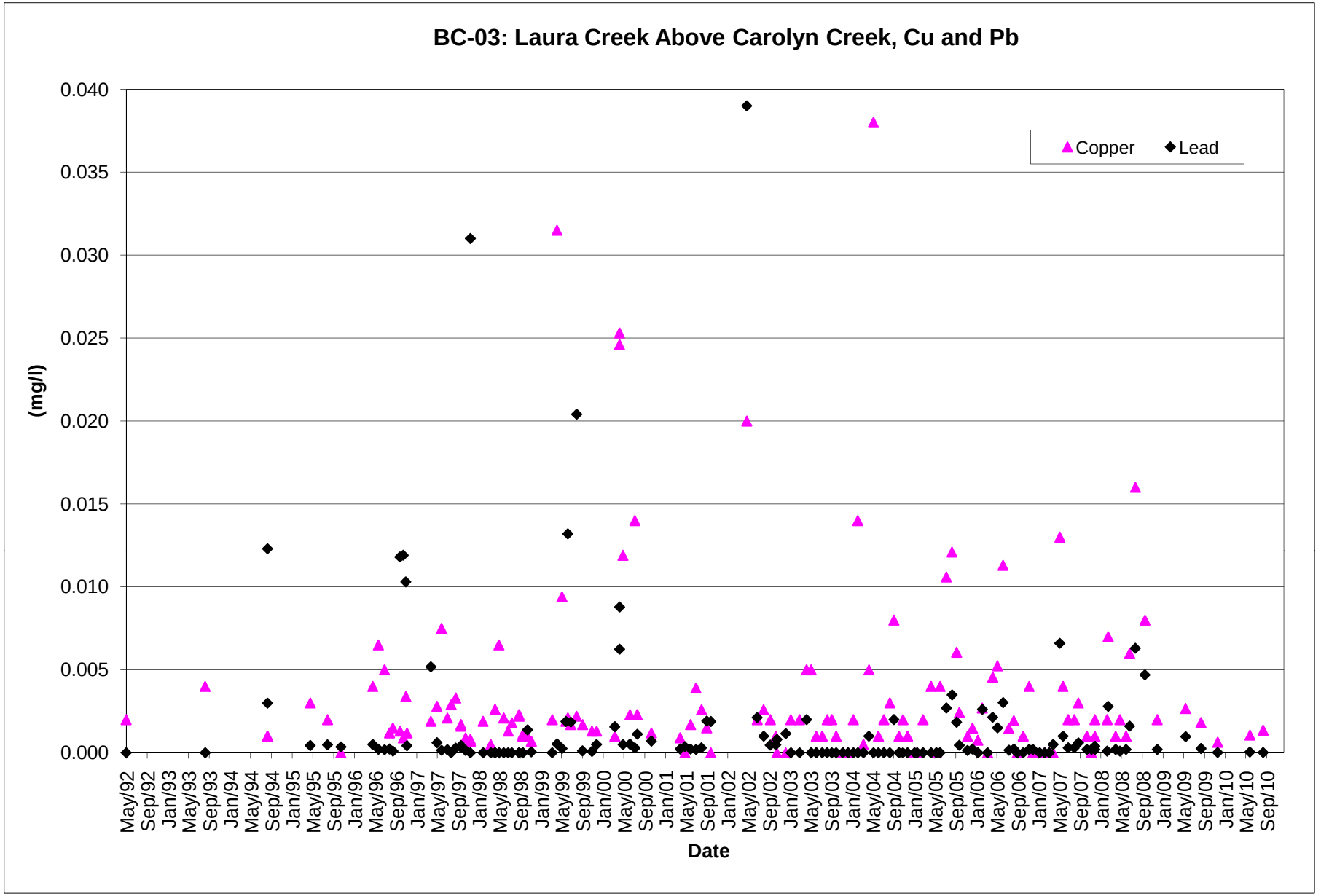
Dec/10
Date


BC-03: Laura Creek Above Carolyn Creek, Cu and Pb
Copper
Lead
(mg/l)
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
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May/95
Sep/95
Jan/96
May/96
Sep/96
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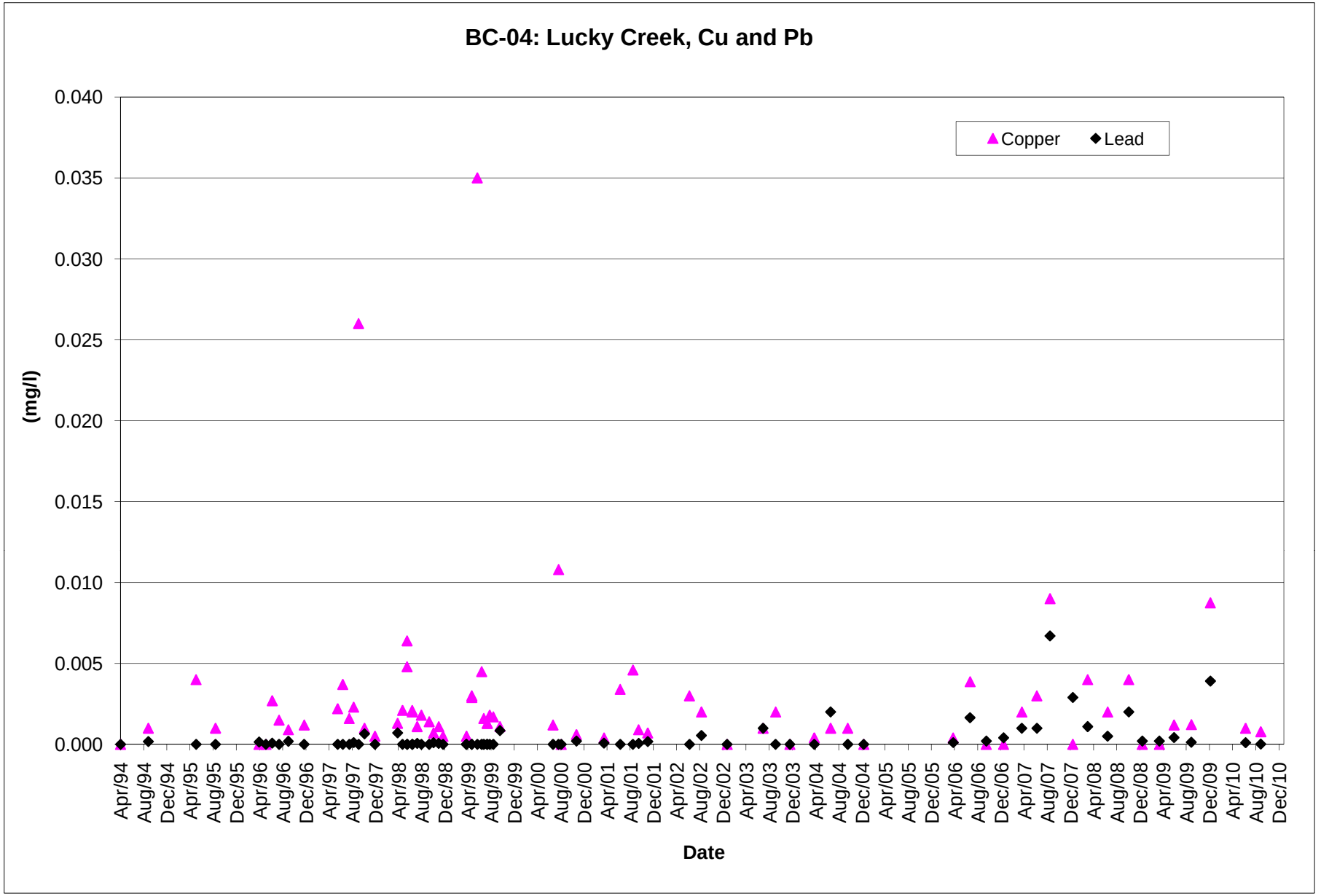
Sep/10
Date


BC-04: Lucky Creek, Cu and Pb
Copper
Lead
(mg/l)
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
Apr/94
Aug/94
Dec/94
Apr/95
Aug/95
Dec/95
Apr/96
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Apr/97
Aug/97
Dec/97
Apr/98
Aug/98
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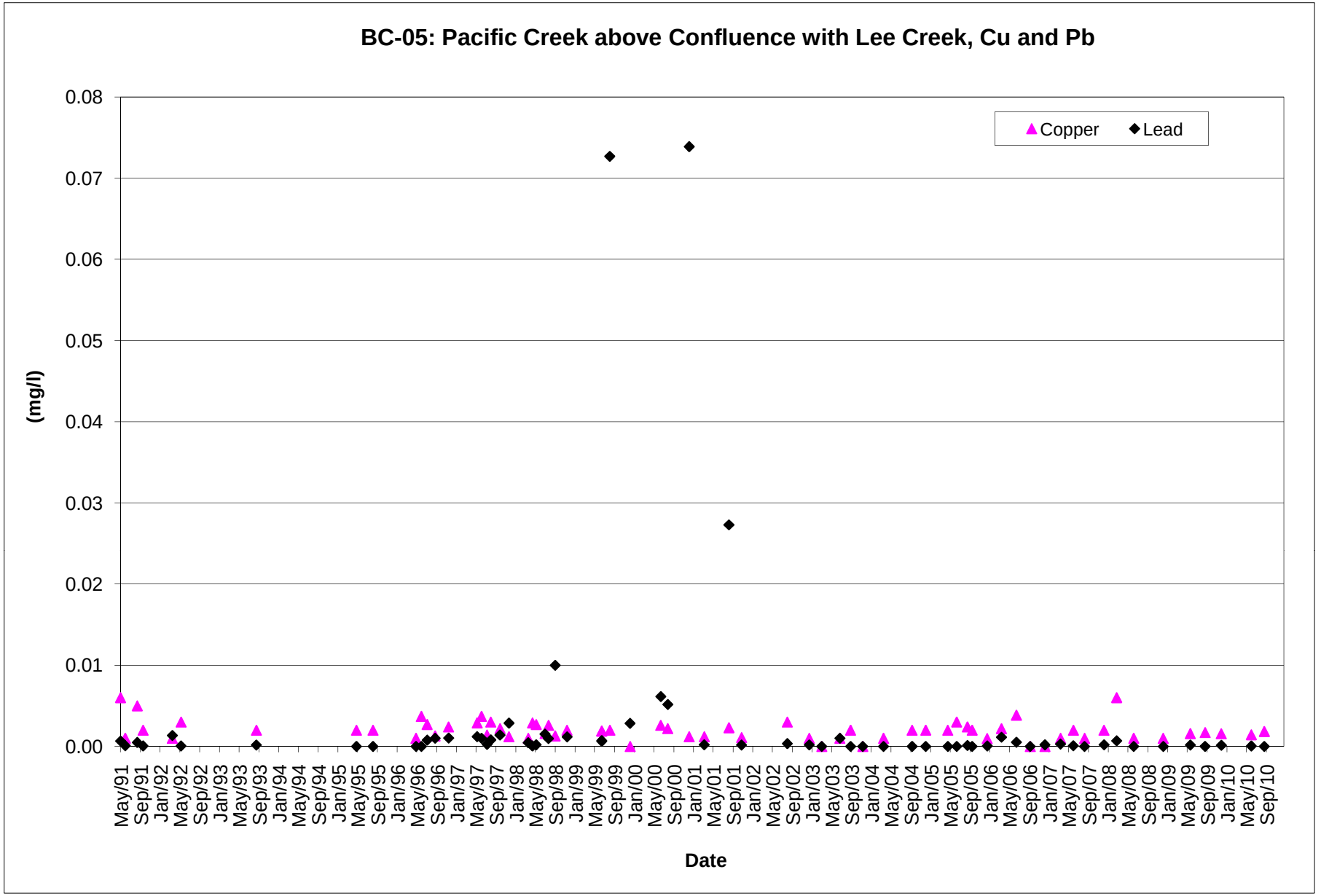
Dec/10
Date


BC-05: Pacific Creek above Confluence with Lee Creek, Cu and Pb
Copper
Lead
(mg/l)
0.08
0.07
0.06
0.05
0.04
0.03
0.02
0.01
0.00
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
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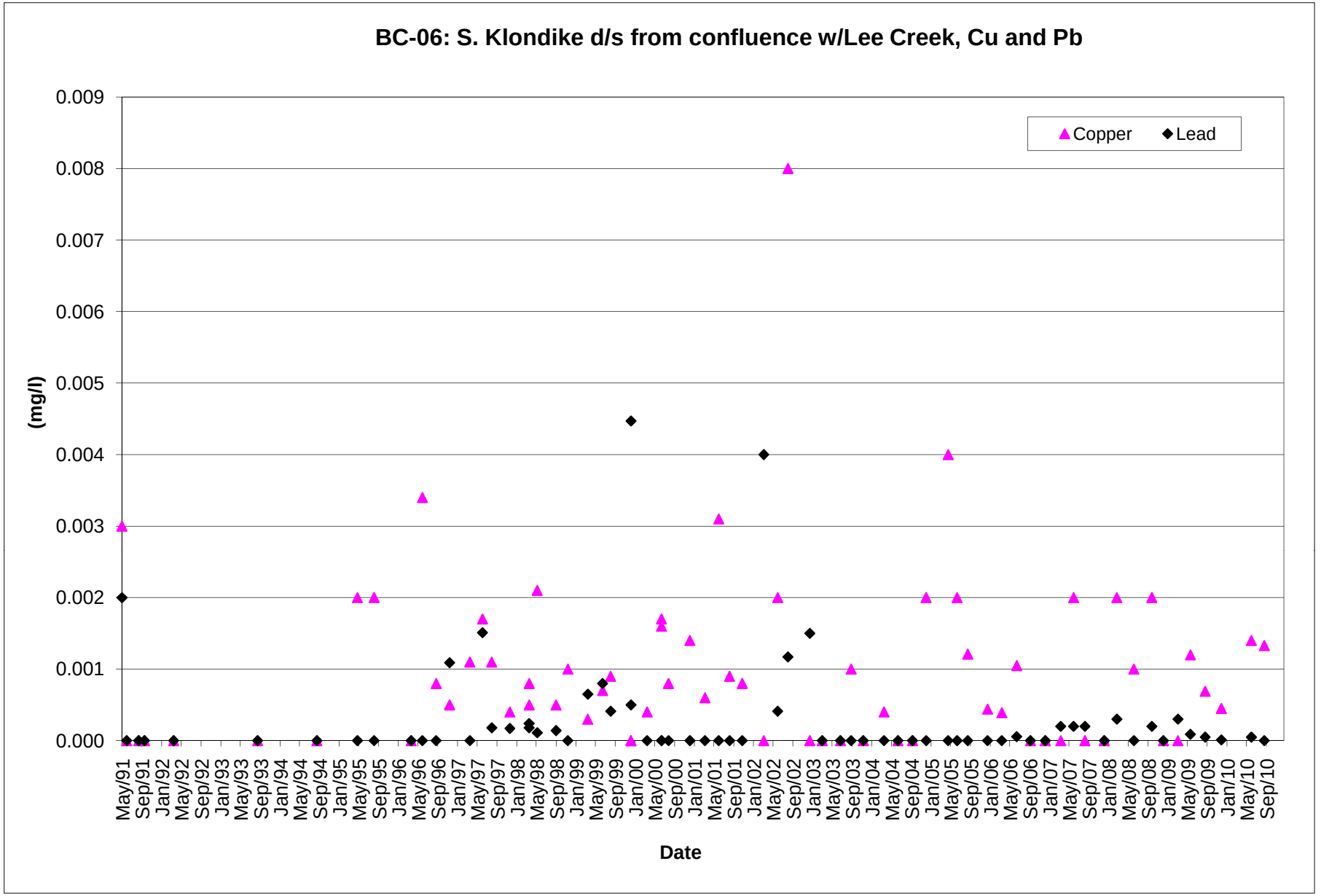
May/10
Sep/10
Date


BC-06: S. Klondike d/s from confluence w/Lee Creek, Cu and Pb
Copper
Lead
(mg/l)
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0.000
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
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Sep/00
Jan/01
May/01
Sep/01
Jan/02
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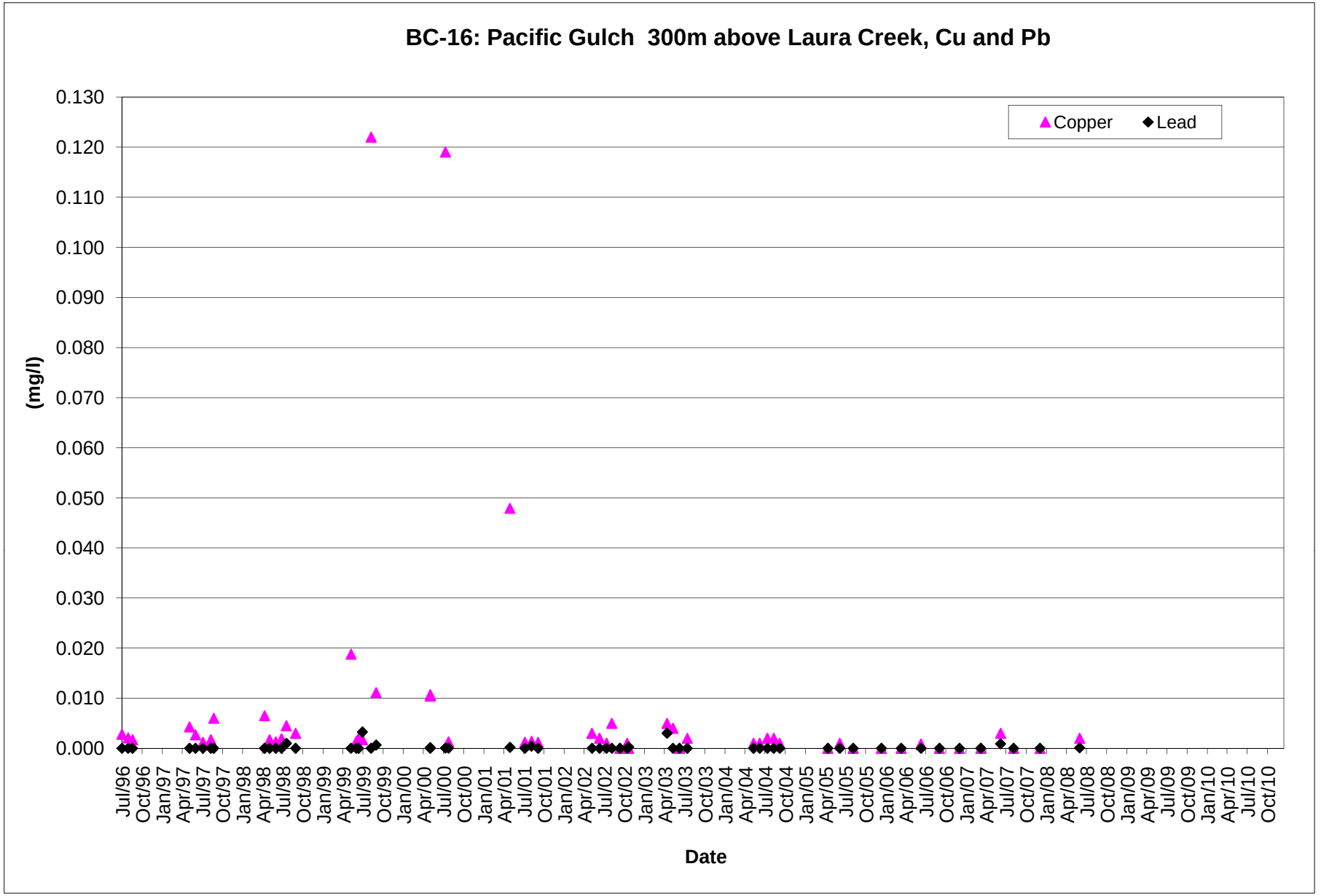
May/10
Sep/10
Date


BC-16: Pacific Gulch 300m above Laura Creek, Cu and Pb
Copper
Lead
(mg/l)
0.130
0.120
0.110
0.100
0.090
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
Jul/96
Oct/96
Jan/97
Apr/97
Jul/97
Oct/97
Jan/98
Apr/98
Jul/98
Oct/98
Jan/99
Apr/99
Jul/99
Oct/99
Jan/00
Apr/00
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Oct/00
Jan/01
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Jan/02
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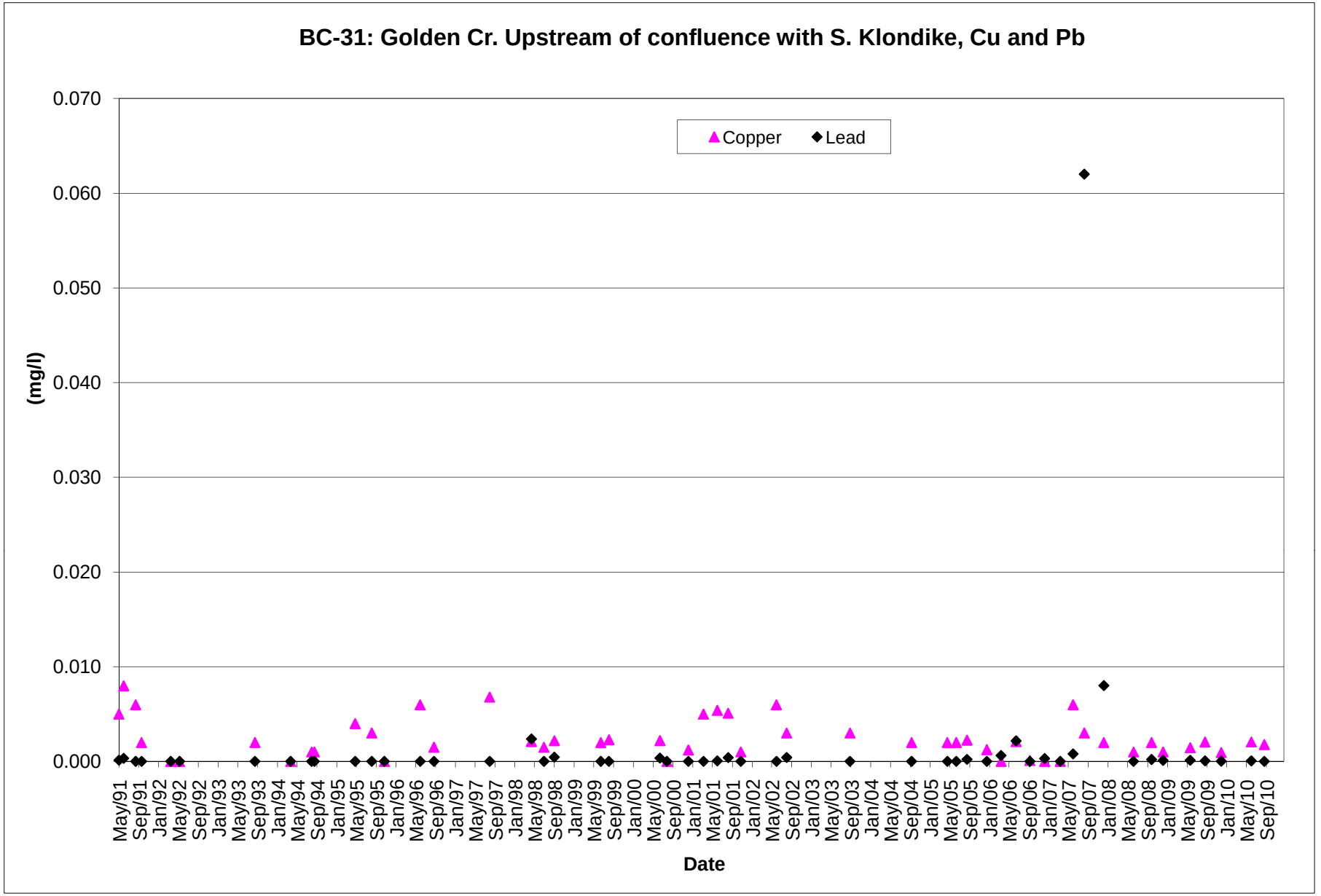
Oct/09
Jan/10
Apr/10
Jul/10
Oct/10
Date


BC-31: Golden Cr. Upstream of confluence with S. Klondike, Cu and Pb
Copper
Lead
(mg/l)
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
May/96
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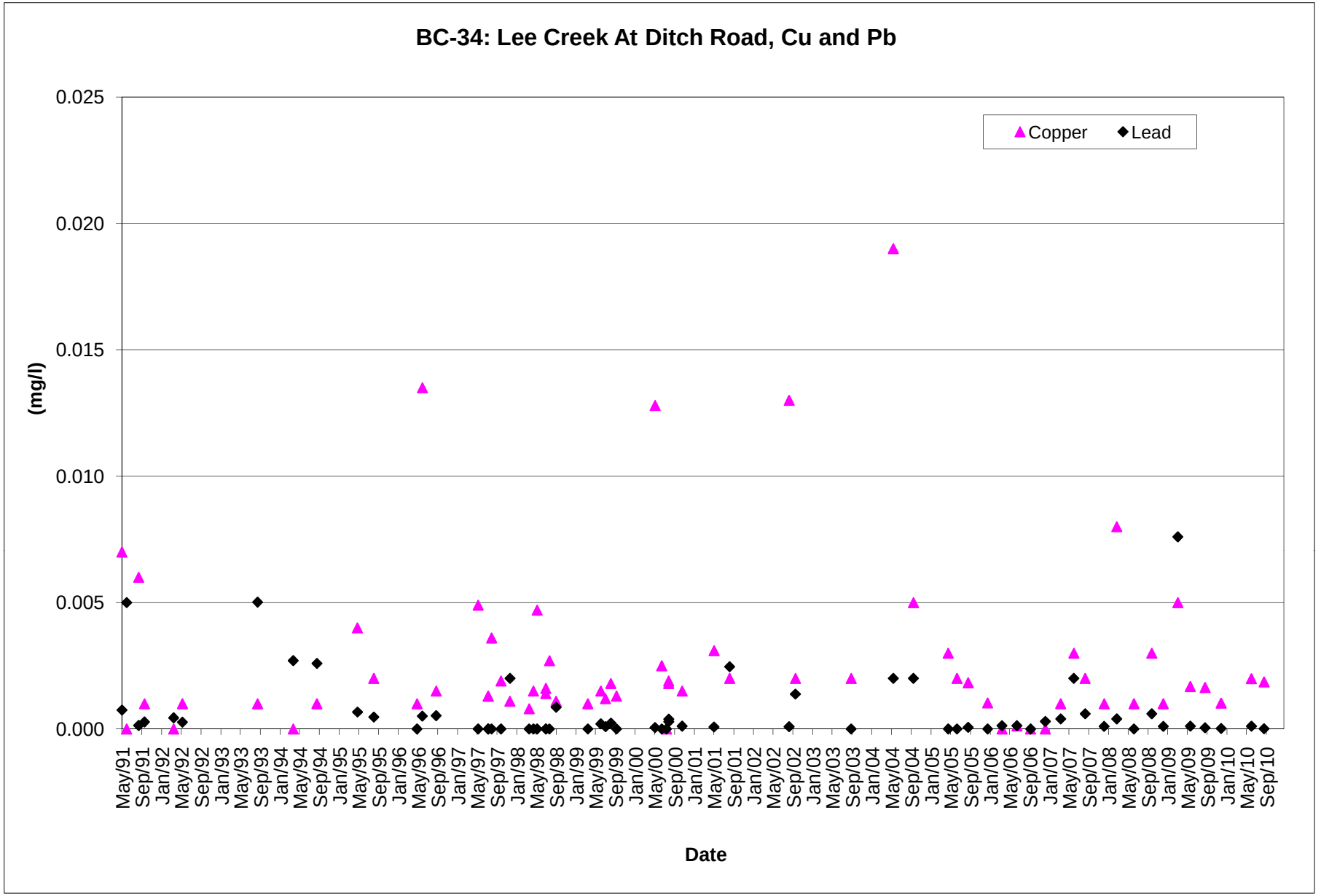
Sep/09
Jan/10
May/10
Sep/10
Date


BC-34: Lee Creek At Ditch Road, Cu and Pb
Copper
Lead
(mg/l)
0.025
0.020
0.015
0.010
0.005
0.000
May/91
Sep/91
Jan/92
May/92
Sep/92
Jan/93
May/93
Sep/93
Jan/94
May/94
Sep/94
Jan/95
May/95
Sep/95
Jan/96
May/96
Sep/96
Jan/97
May/97
Sep/97
Jan/98
May/98
Sep/98
Jan/99
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Jan/00
May/00
Sep/00
Jan/01
May/01
Sep/01
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May/03
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Jan/04
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Jan/05
May/05
Sep/05
Jan/06
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May/08
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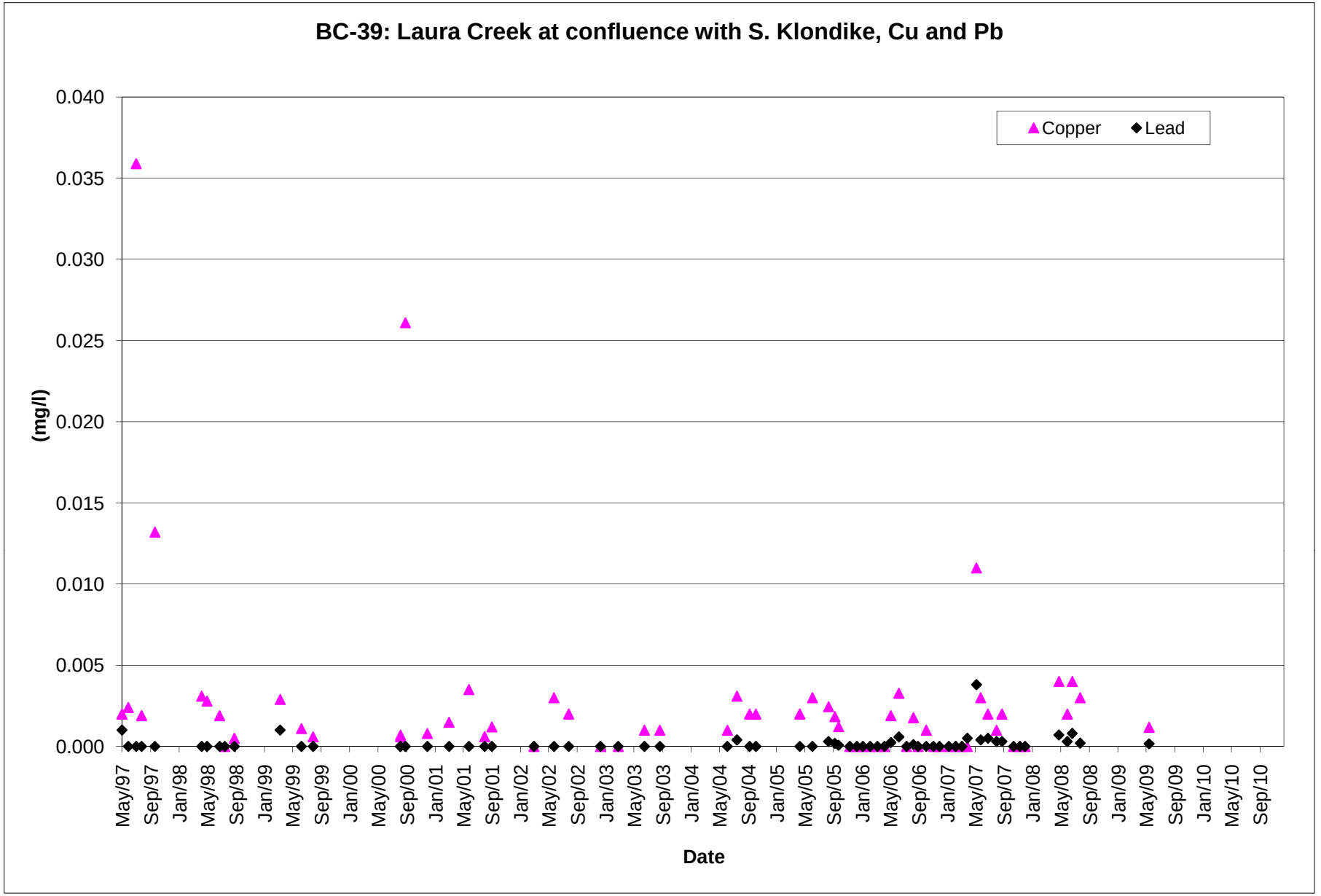
Jan/09
May/09
Sep/09
Jan/10
May/10
Sep/10
Date


BC-39: Laura Creek at confluence with S. Klondike, Cu and Pb
Copper
Lead
(mg/l)
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
May/97
Sep/97
Jan/98
May/98
Sep/98
Jan/99
May/99
Sep/99
Jan/00
May/00
Sep/00
Jan/01
May/01
Sep/01
Jan/02
May/02
Sep/02
Jan/03
May/03
Sep/03
Jan/04
May/04
Sep/04
Jan/05
May/05
Sep/05
Jan/06
May/06
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May/08
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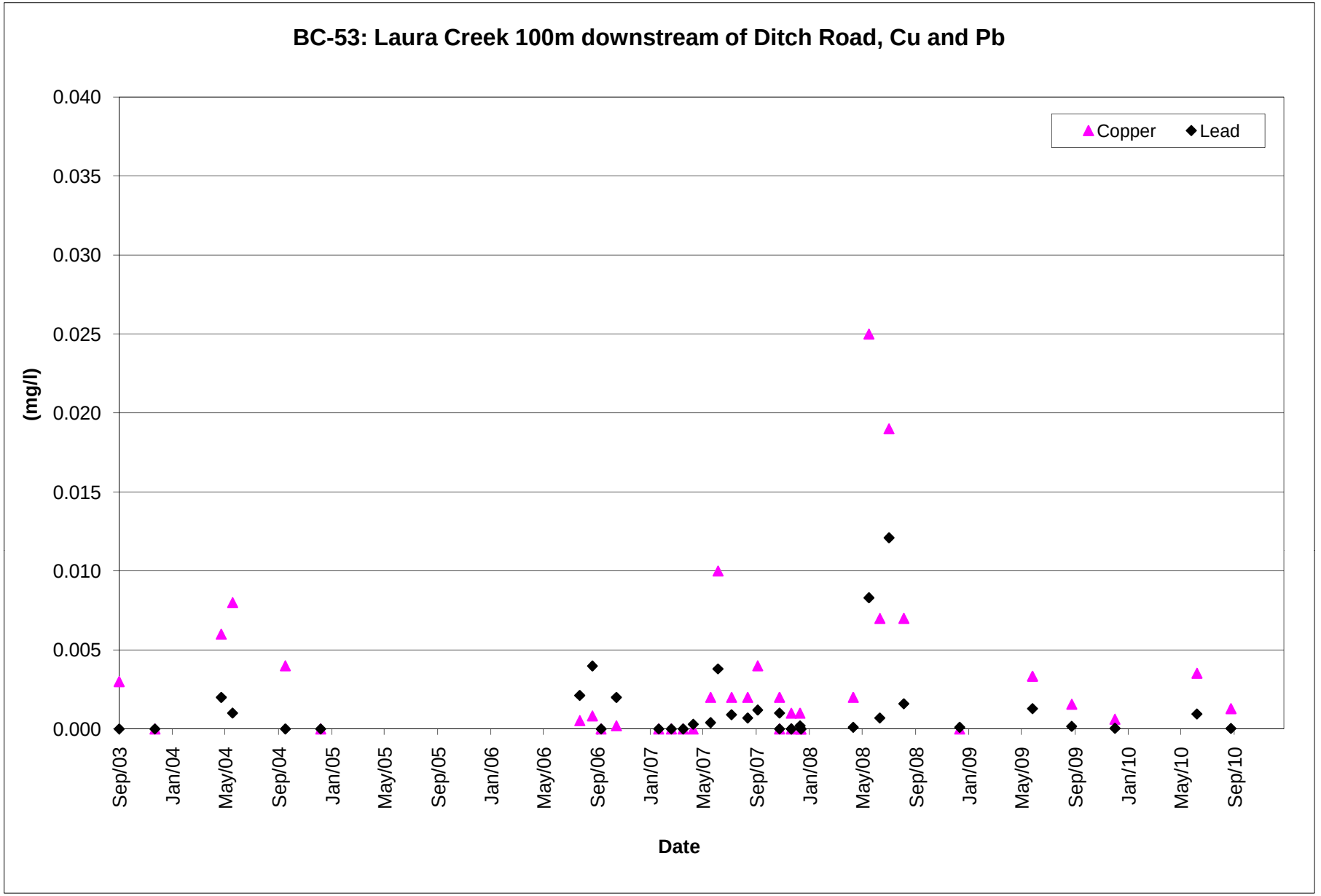
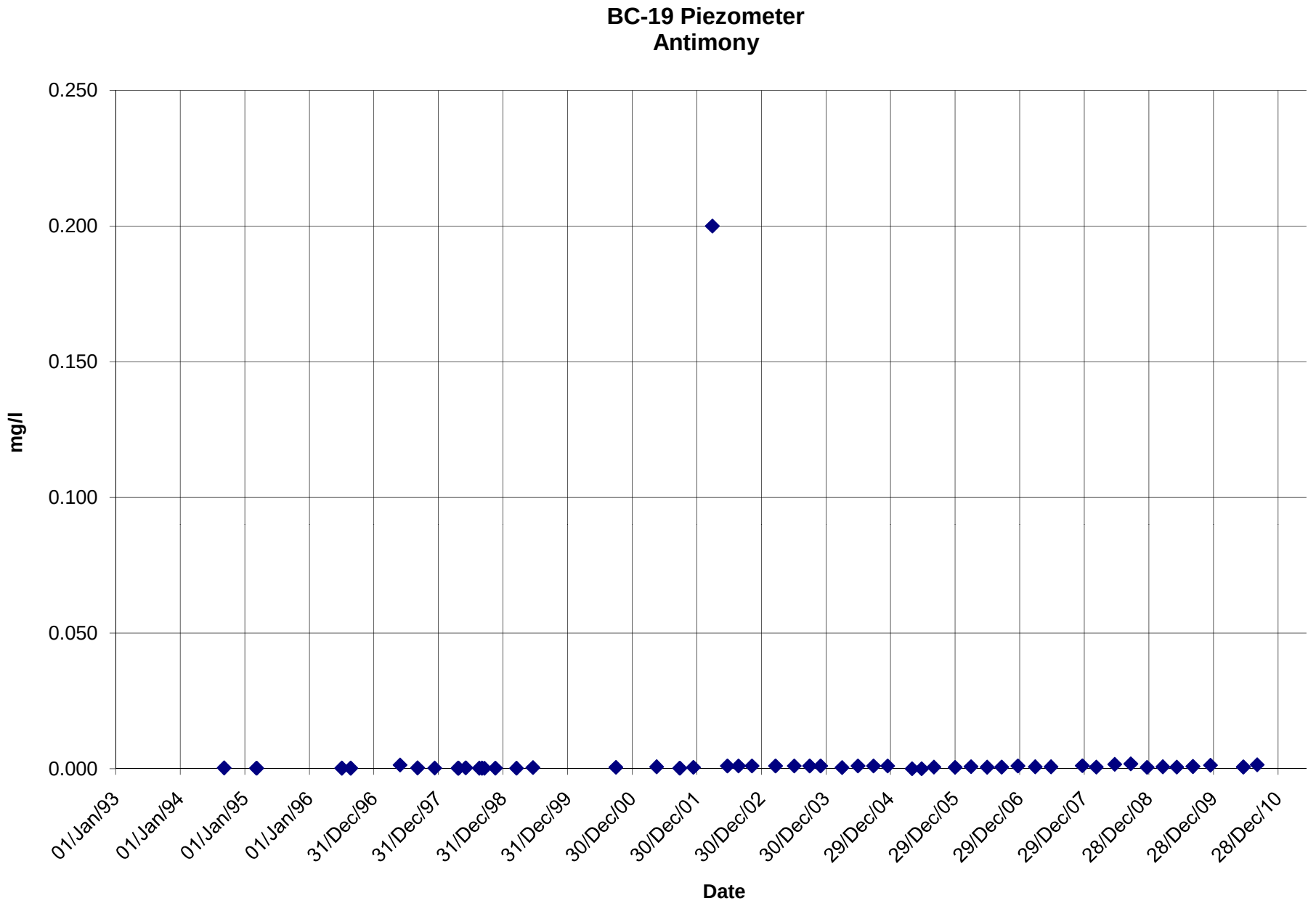
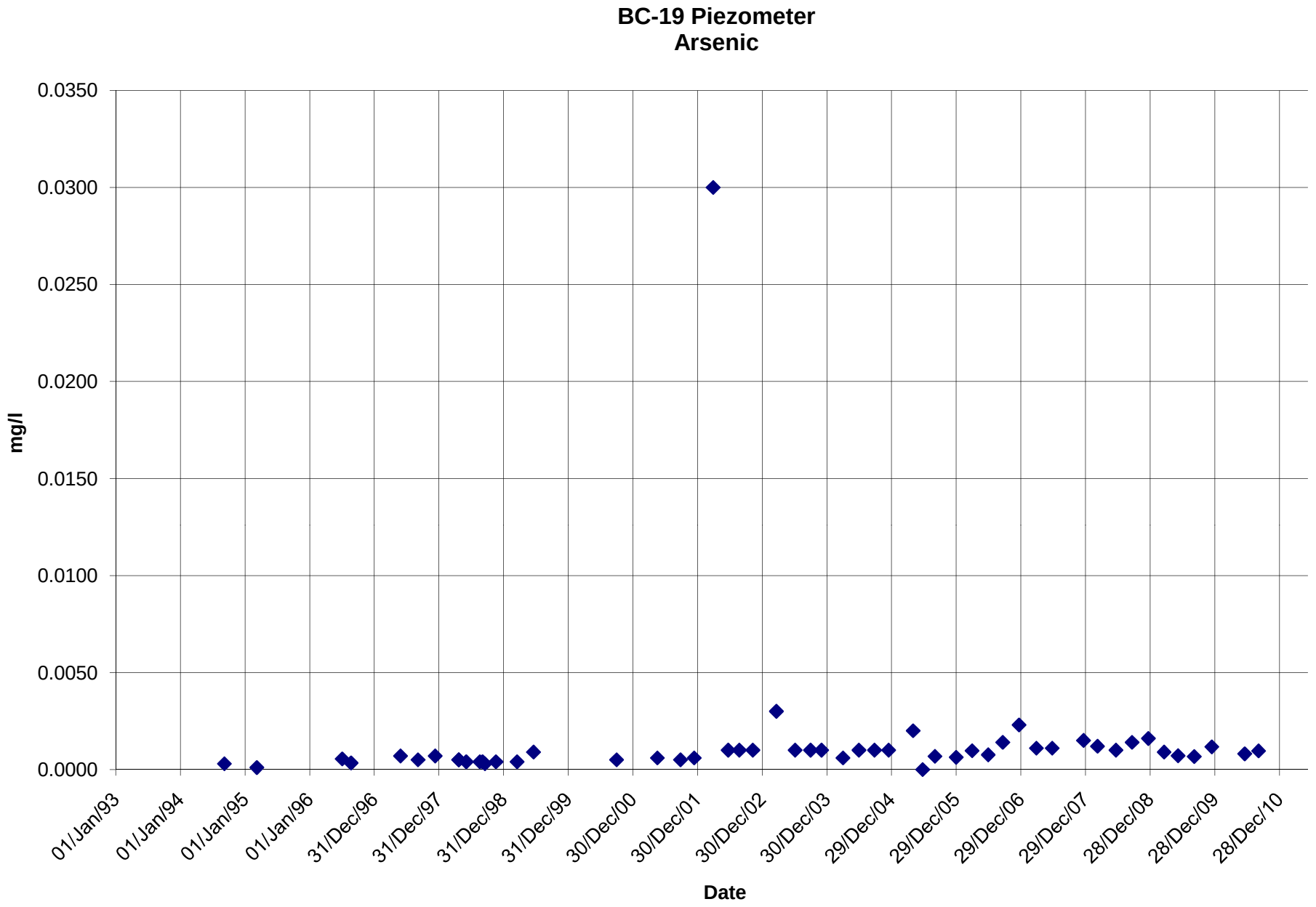
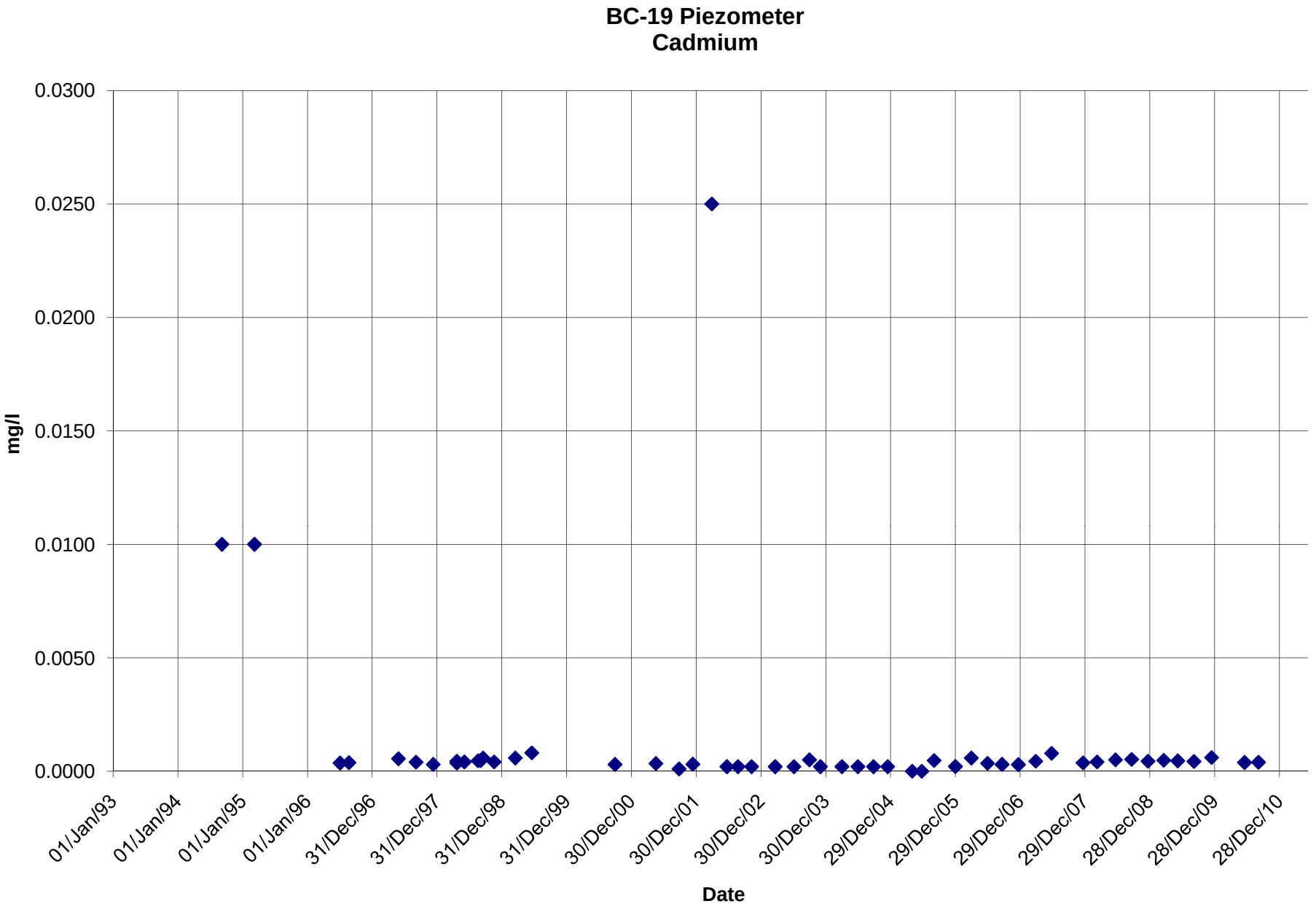
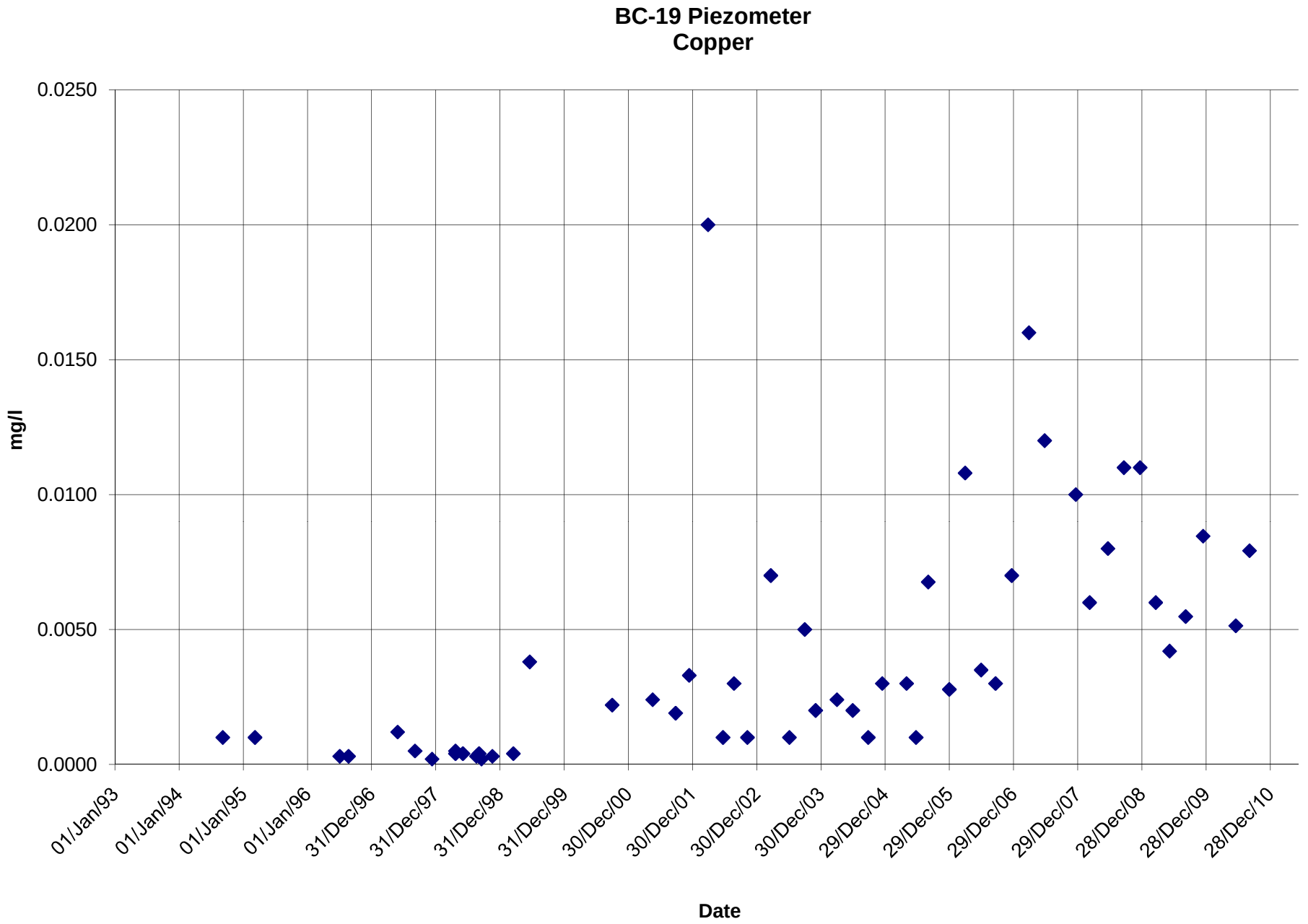
May/09
Sep/09
Jan/10
May/10
Sep/10
Date


BC-53: Laura Creek 100m downstream of Ditch Road, Cu and Pb
0.040
0.035
0.030
0.025
0.020
0.015
0.010
0.005
0.000
(mg/l)
Copper
Lead
Sep/03
Jan/04
May/04
Sep/04
Jan/05
May/05
Sep/05
Jan/06
May/06
Sep/06
Jan/07
May/07
Sep/07
Jan/08
May/08
Sep/08
Jan/09
May/09
Sep/09
Jan/10
May/10
Sep/10
Date


BC-19 Piezometer
Antimony
0.250
0.200
0.150
0.100
0.050
0.000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-19 Piezometer
Arsenic
0.0350
0.0300
0.0250
0.0200
0.0150
0.0100
0.0050
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-19 Piezometer
Cadmium
0.0300
0.0250
0.0200
0.0150
0.0100
0.0050
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-19 Piezometer
Copper
0.0250
0.0200
0.0150
0.0100
0.0050
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
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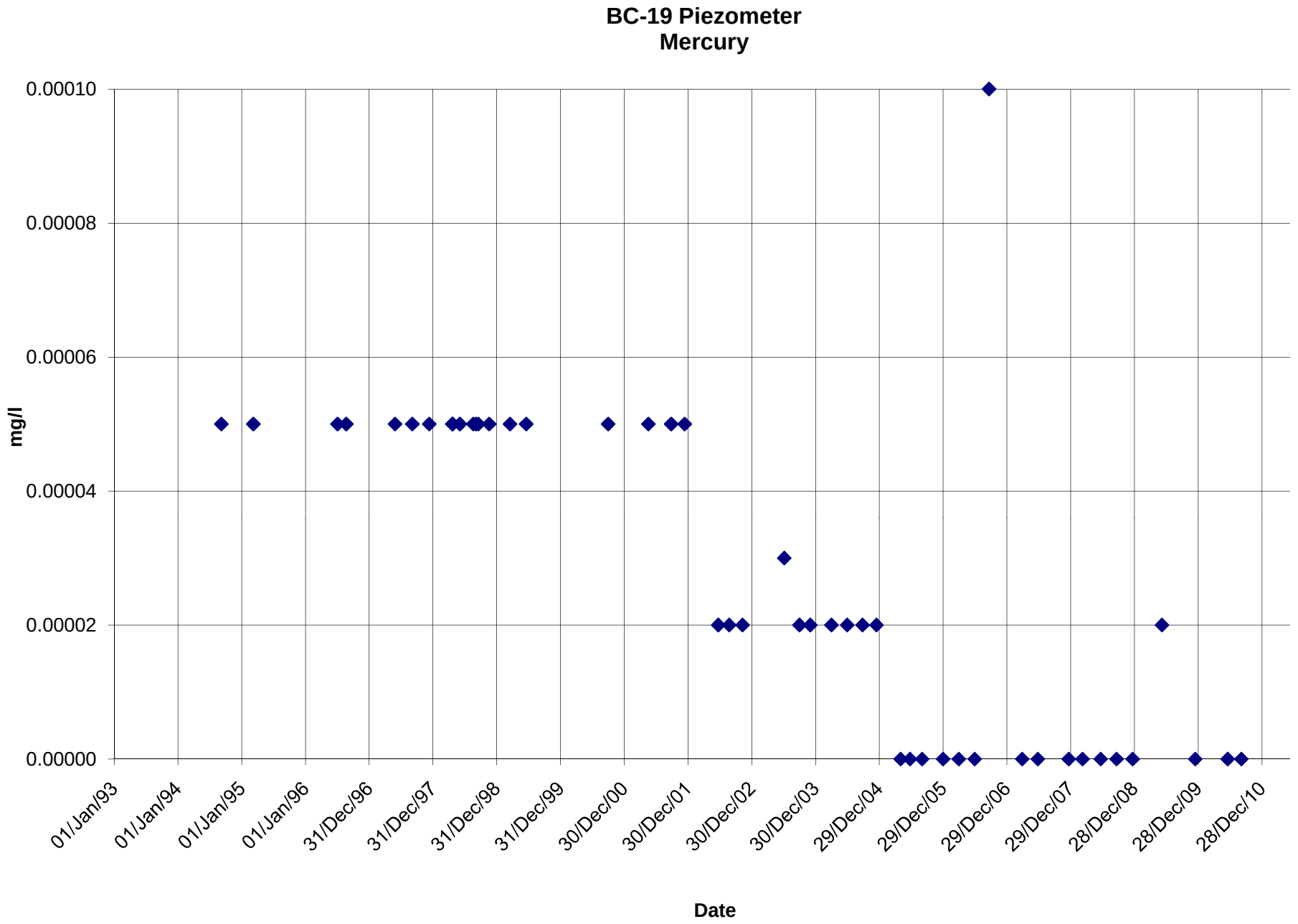
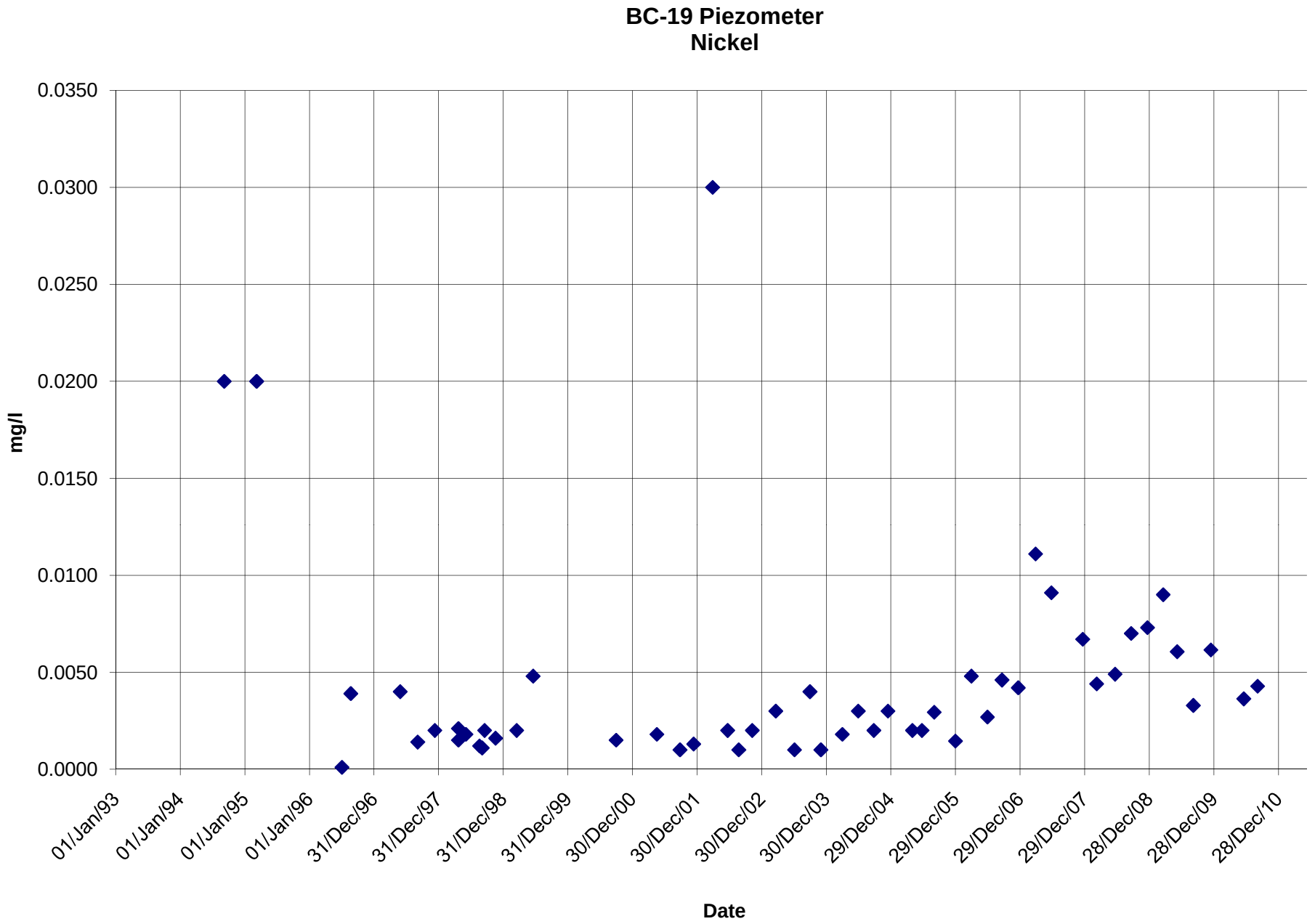
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-19 Piezometer
Mercury
0.00010
0.00008
0.00006
0.00004
0.00002
0.00000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-19 Piezometer
Nickel
0.0350
0.0300
0.0250
0.0200
0.0150
0.0100
0.0050
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
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29/Dec/04
29/Dec/05
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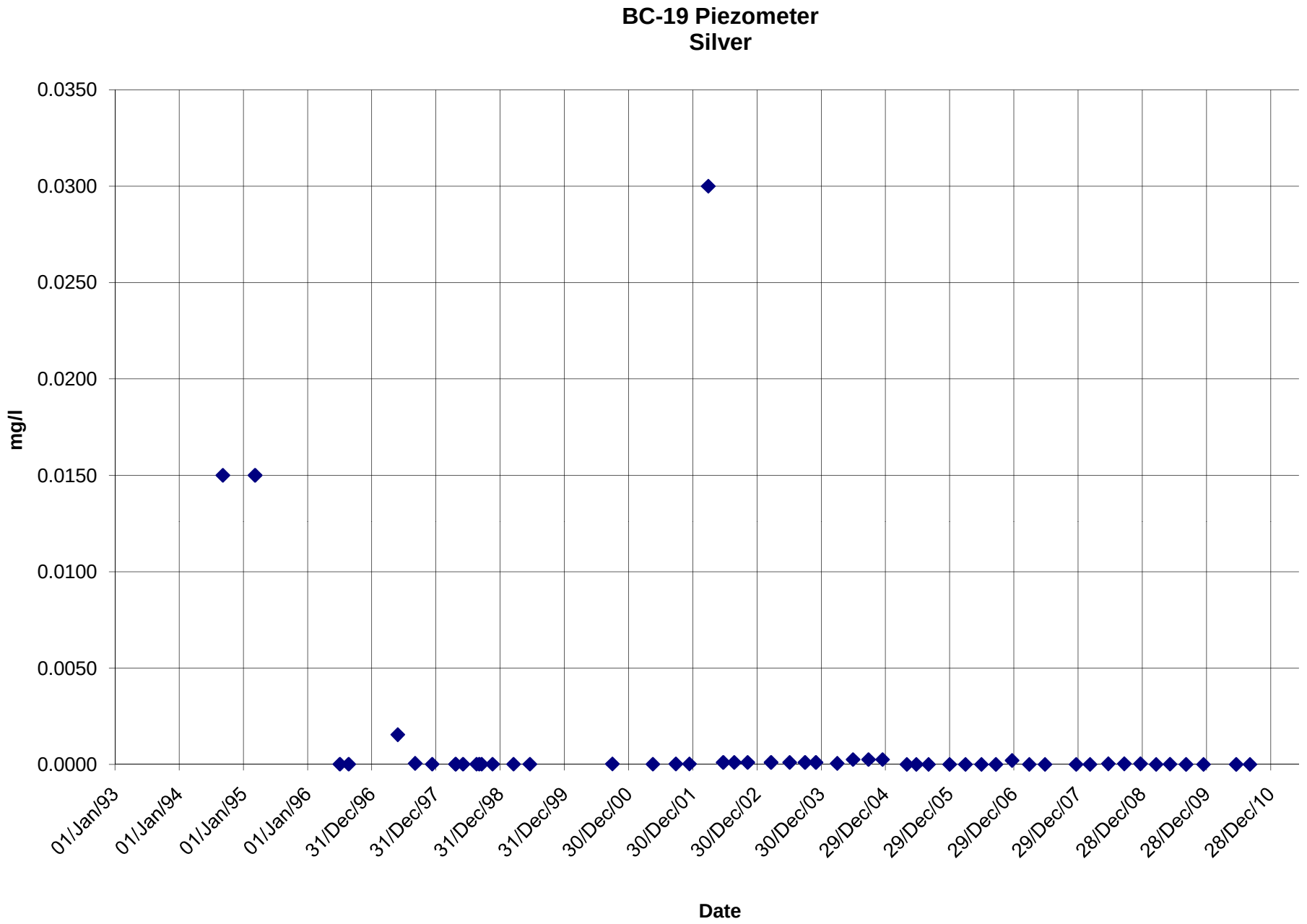
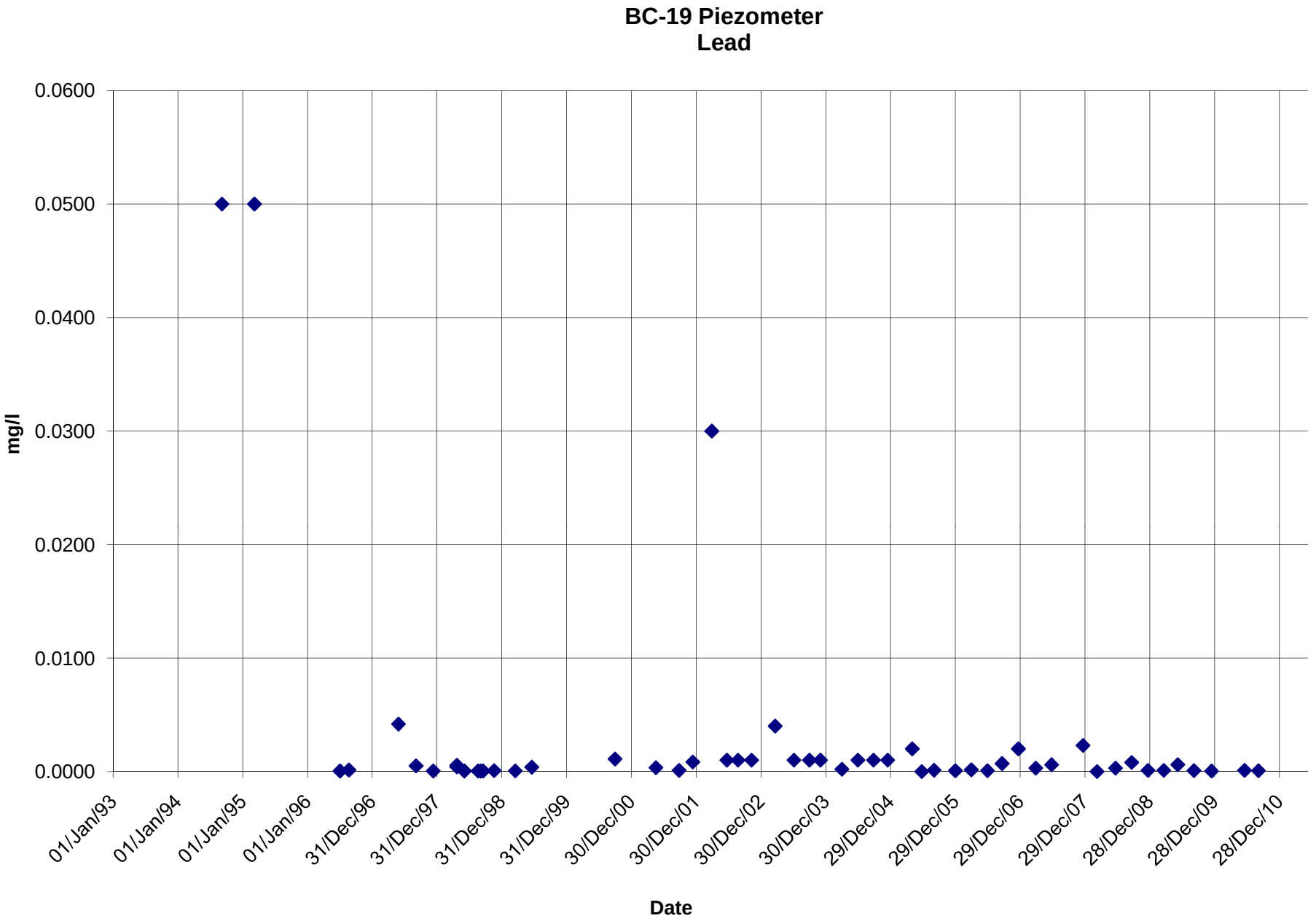
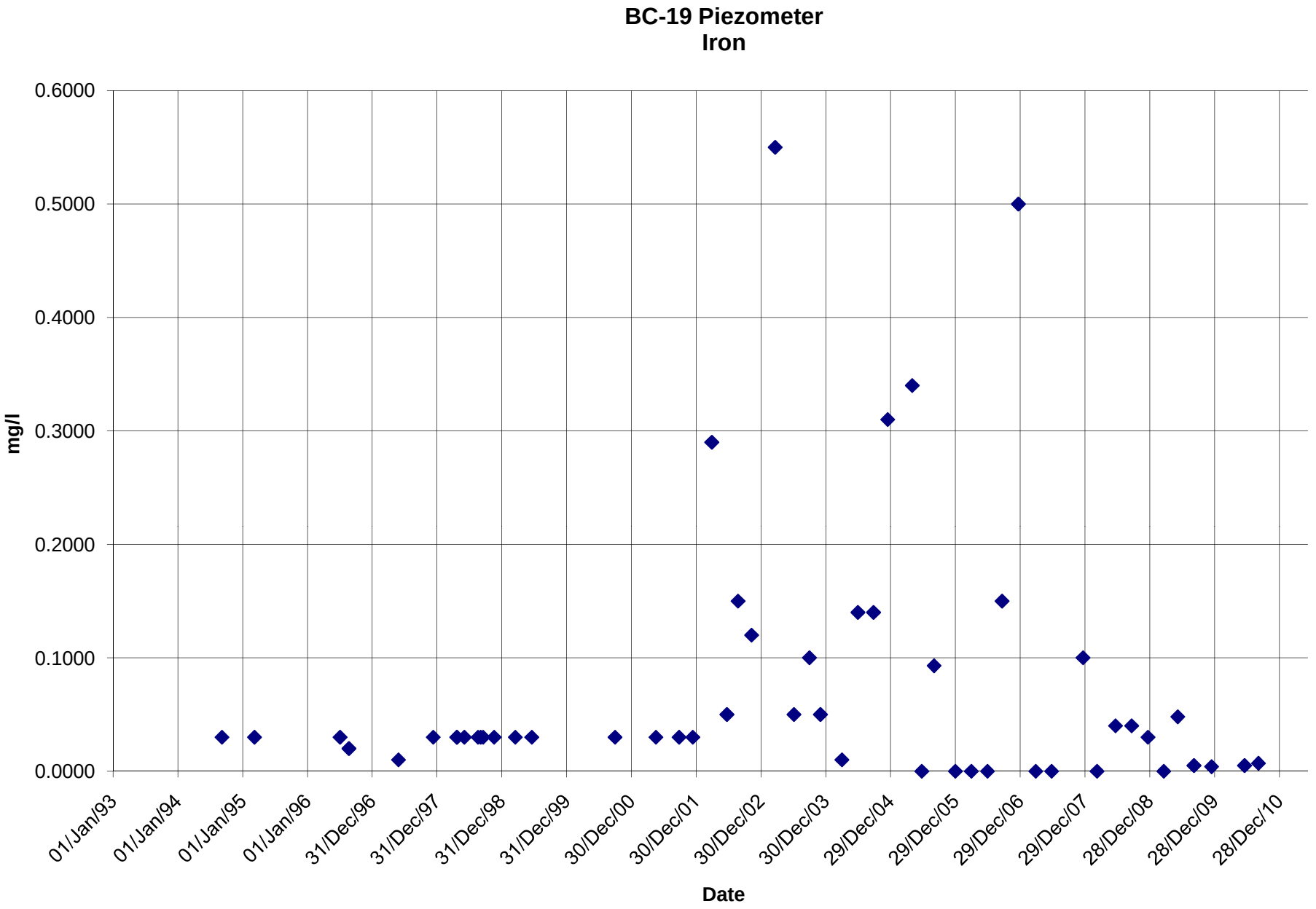
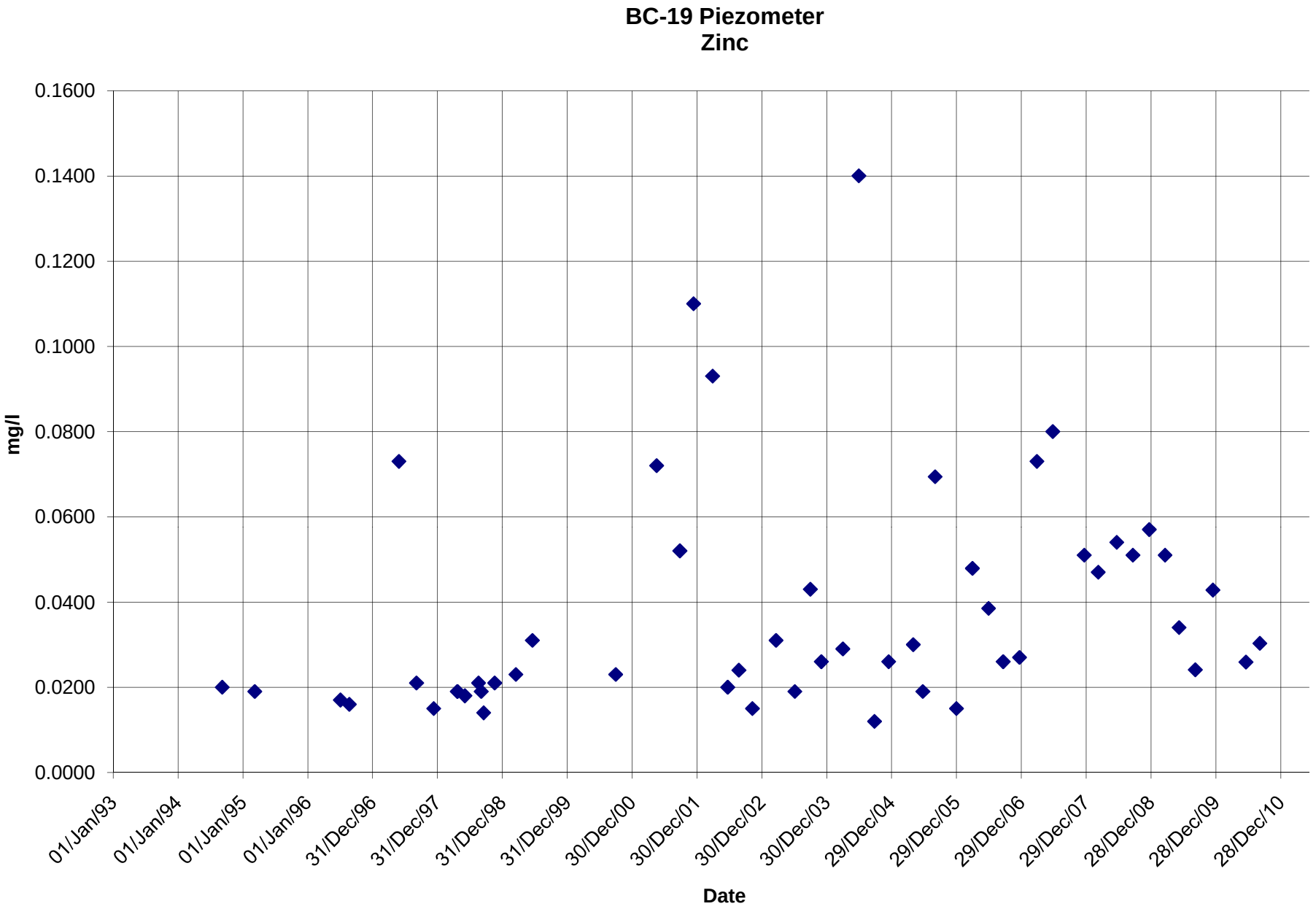
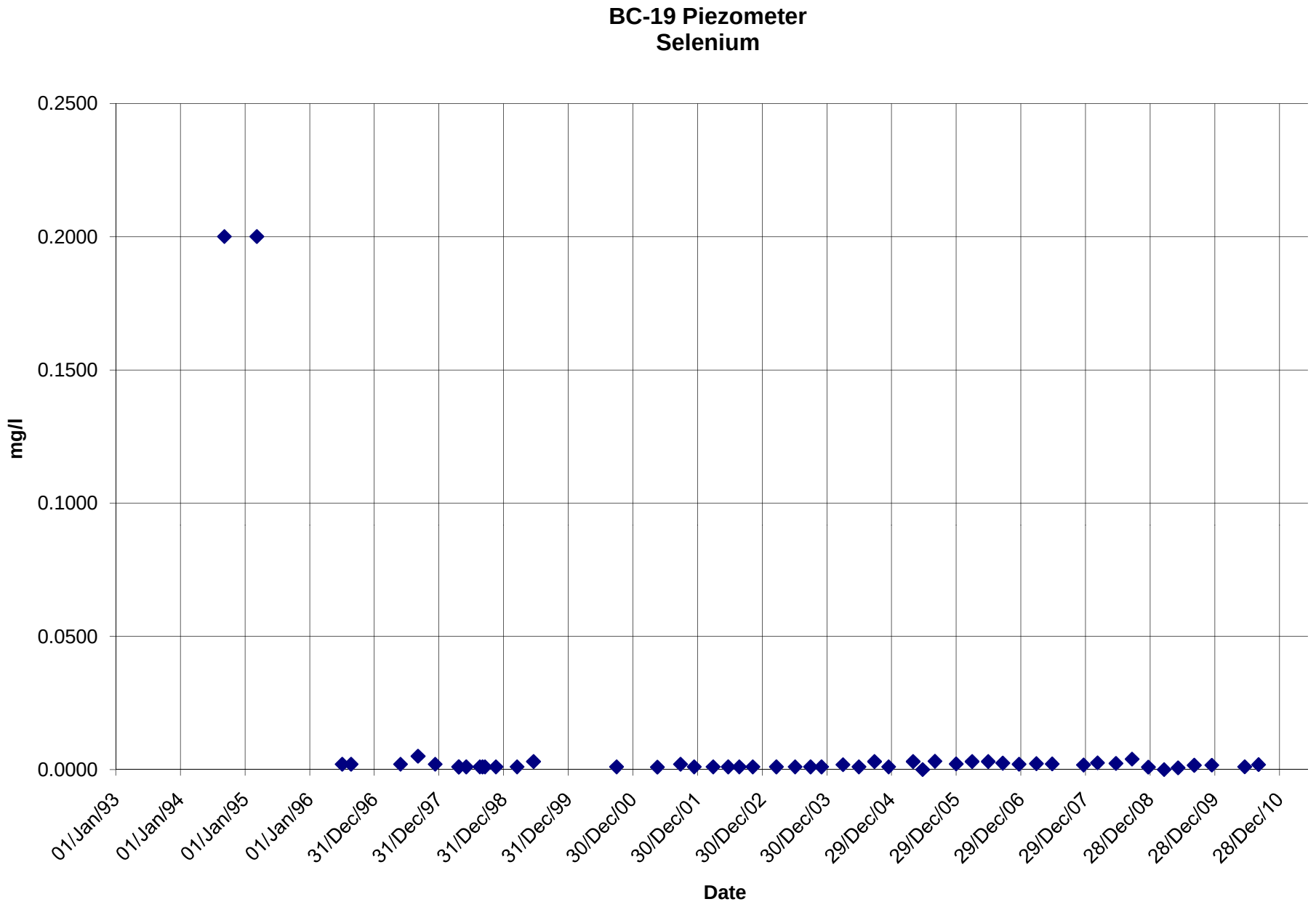
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date

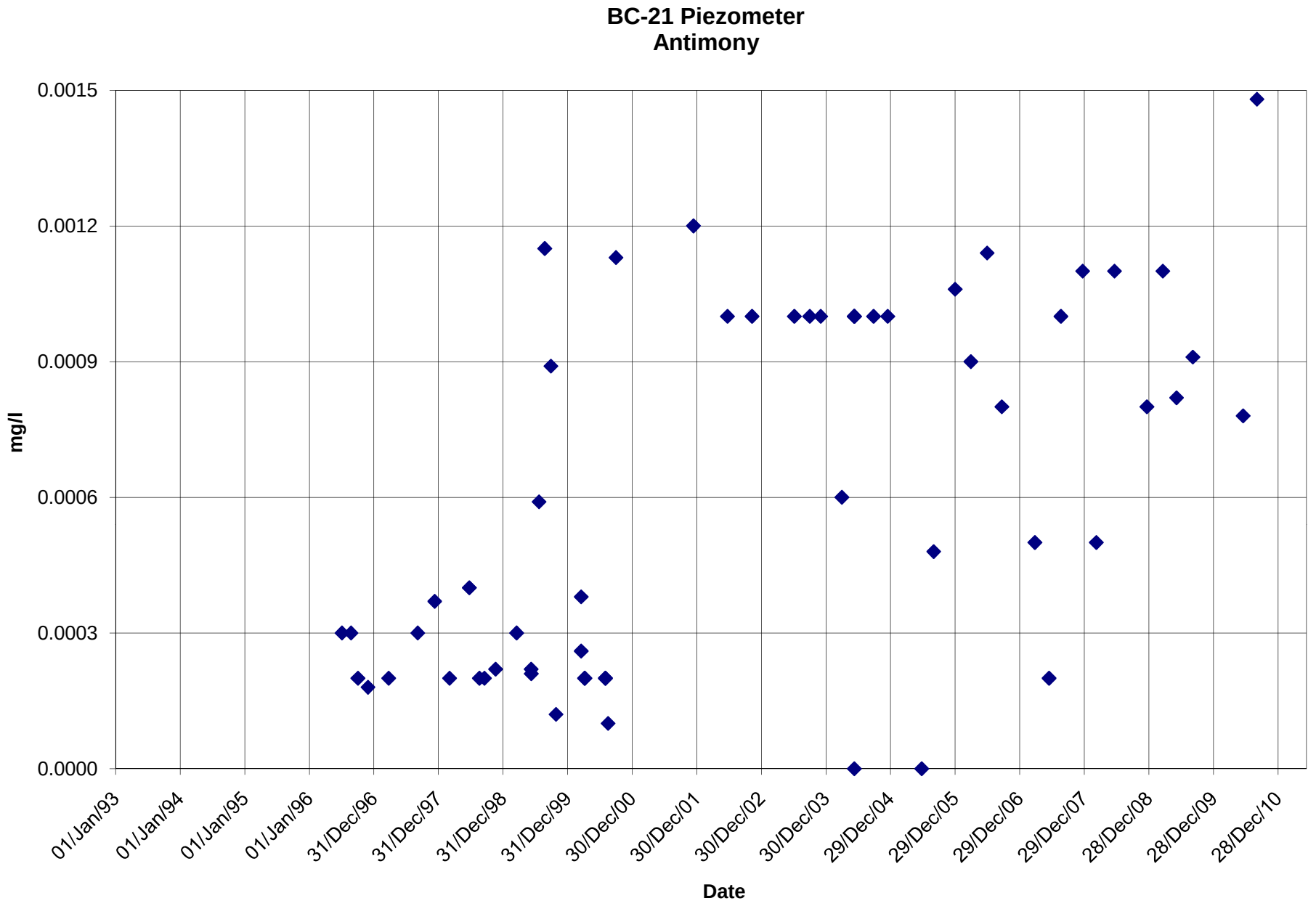

BC-19 Piezometer
Silver
0.0350
0.0300
0.0250
0.0200
0.0150
0.0100
0.0050
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date

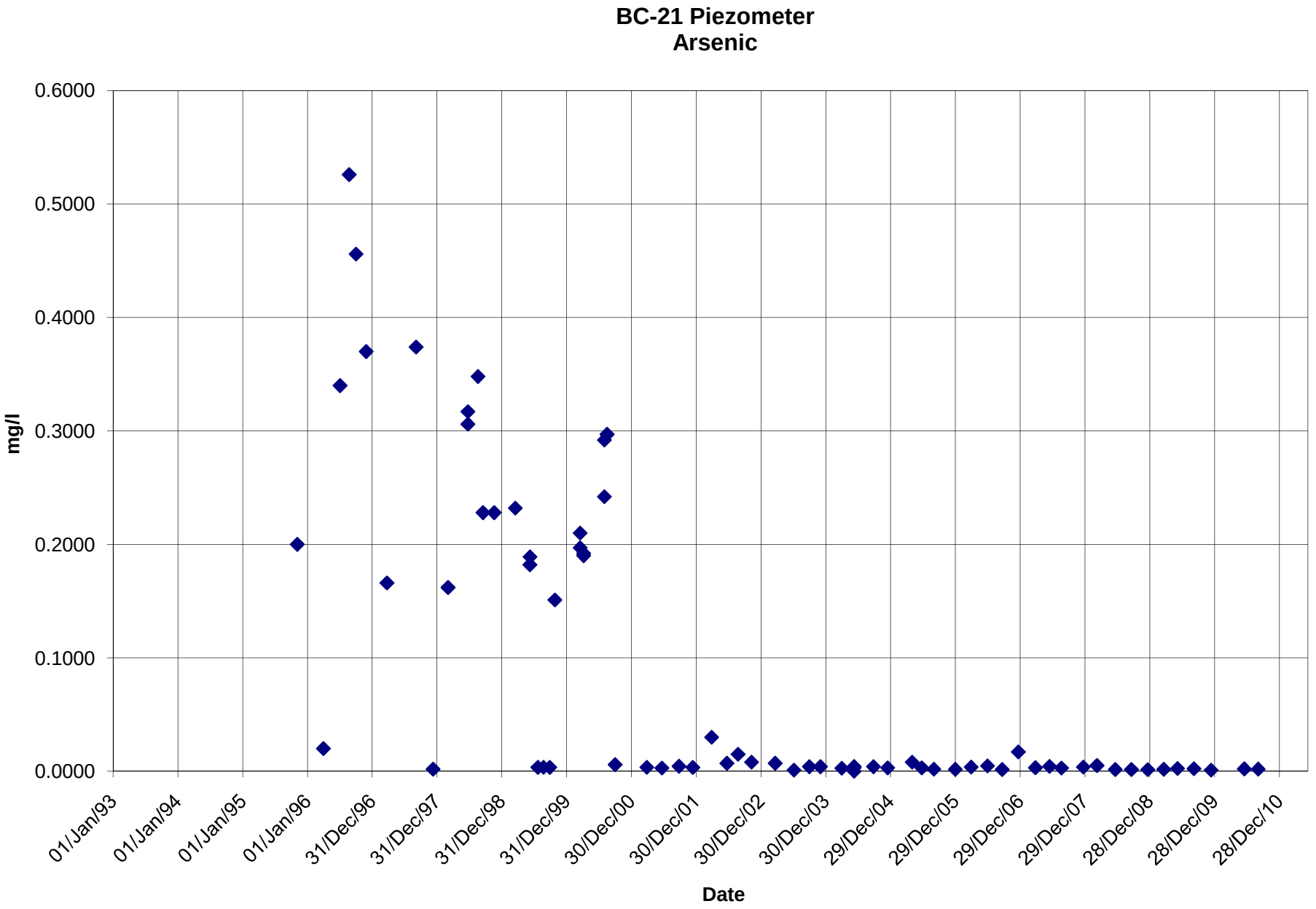

BC-19 Piezometer
Lead
0.0600
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date

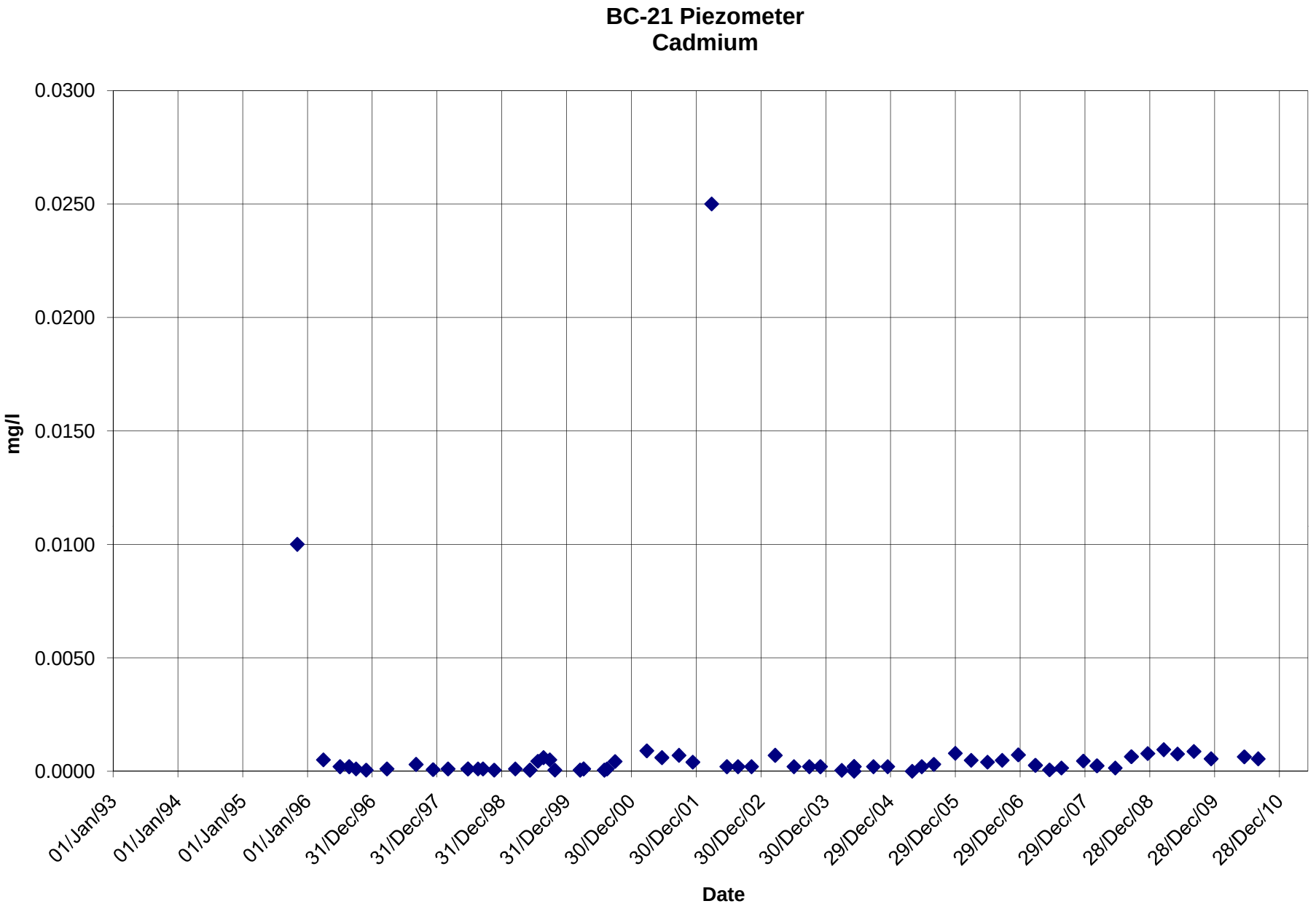

BC-19 Piezometer
Iron
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date

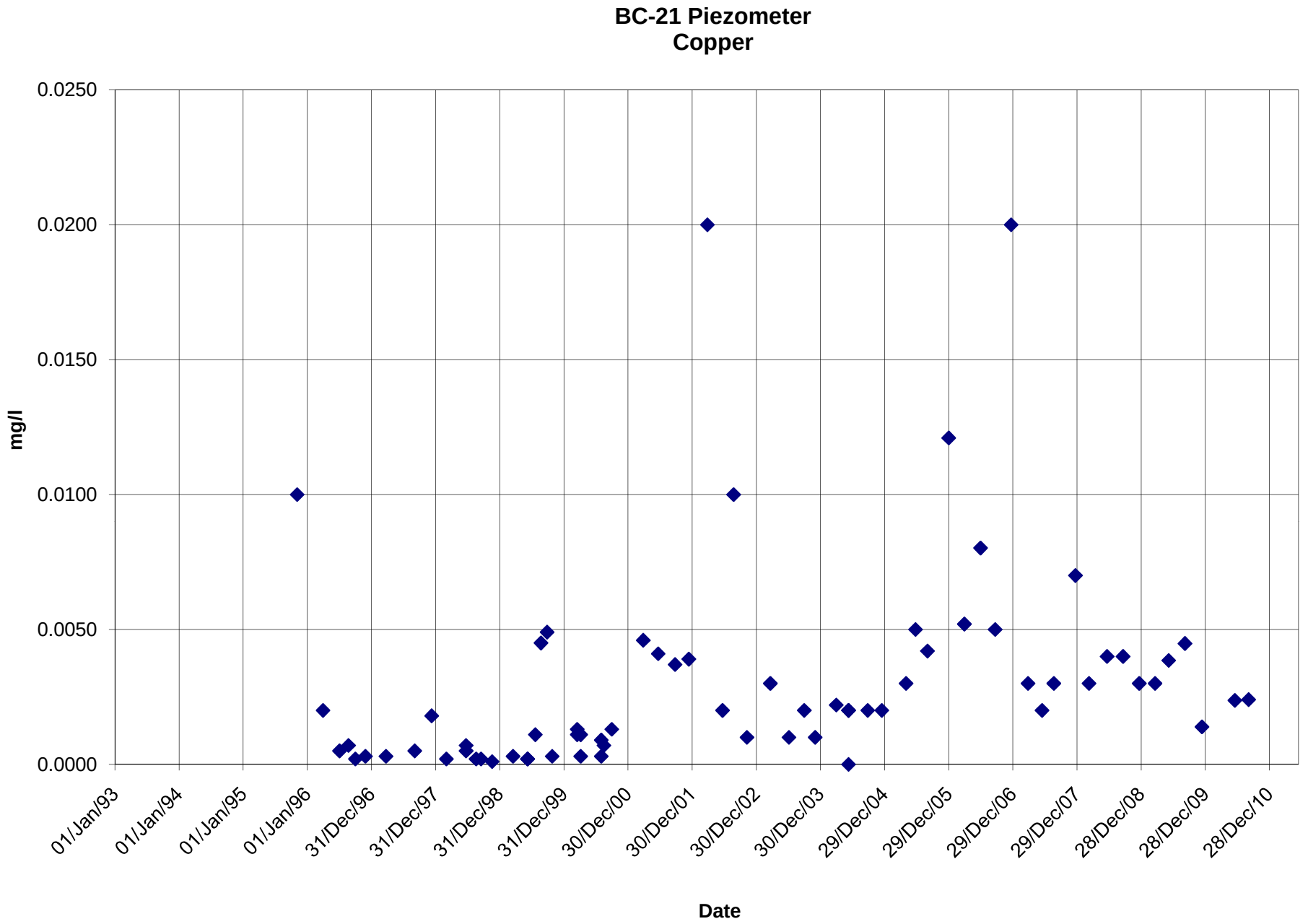

BC-19 Piezometer
Zinc
0.1600
0.1400
0.1200
0.1000
0.0800
0.0600
0.0400
0.0200
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date

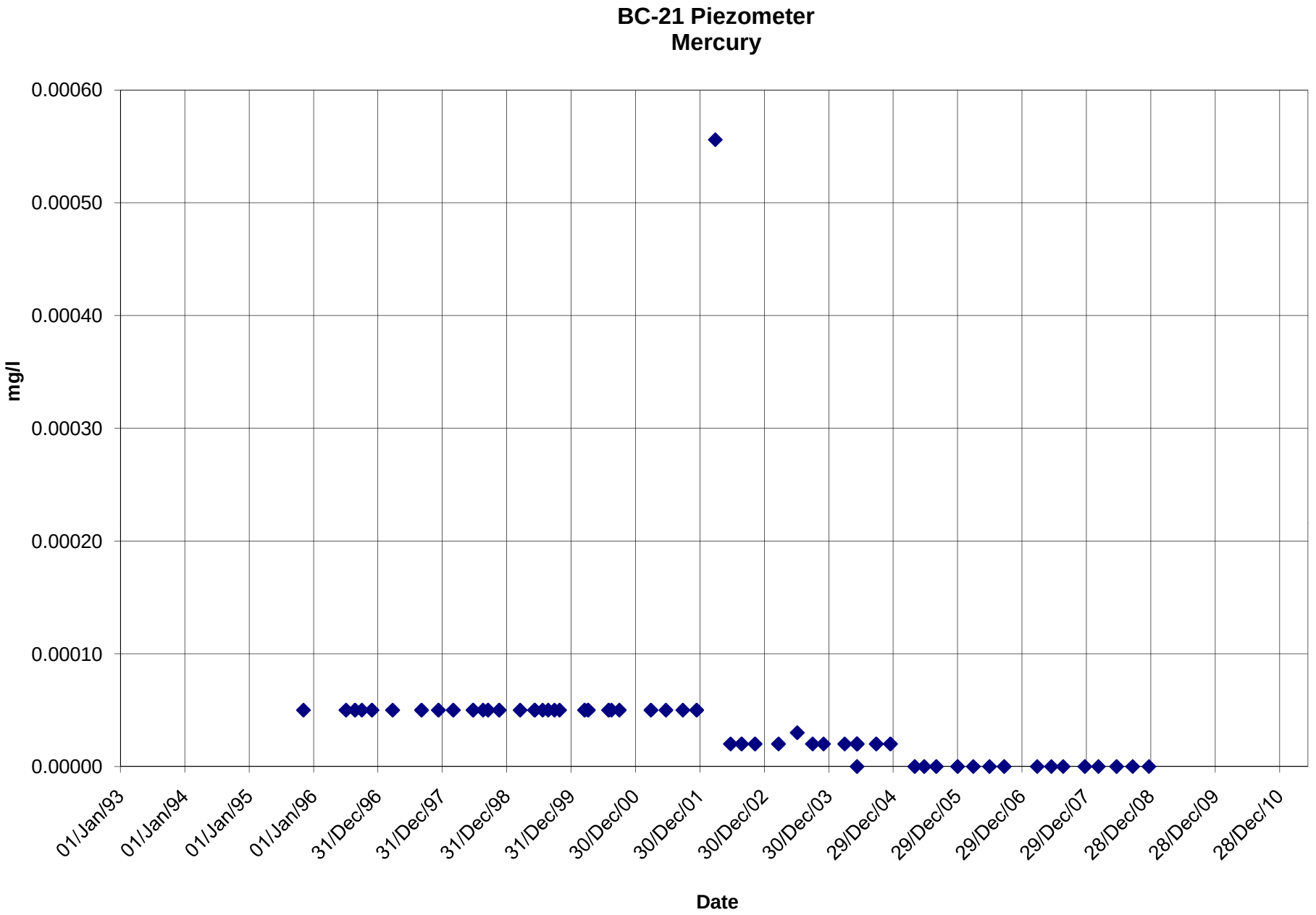

BC-19 Piezometer
Selenium
0.2500
0.2000
0.1500
0.1000
0.0500
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date

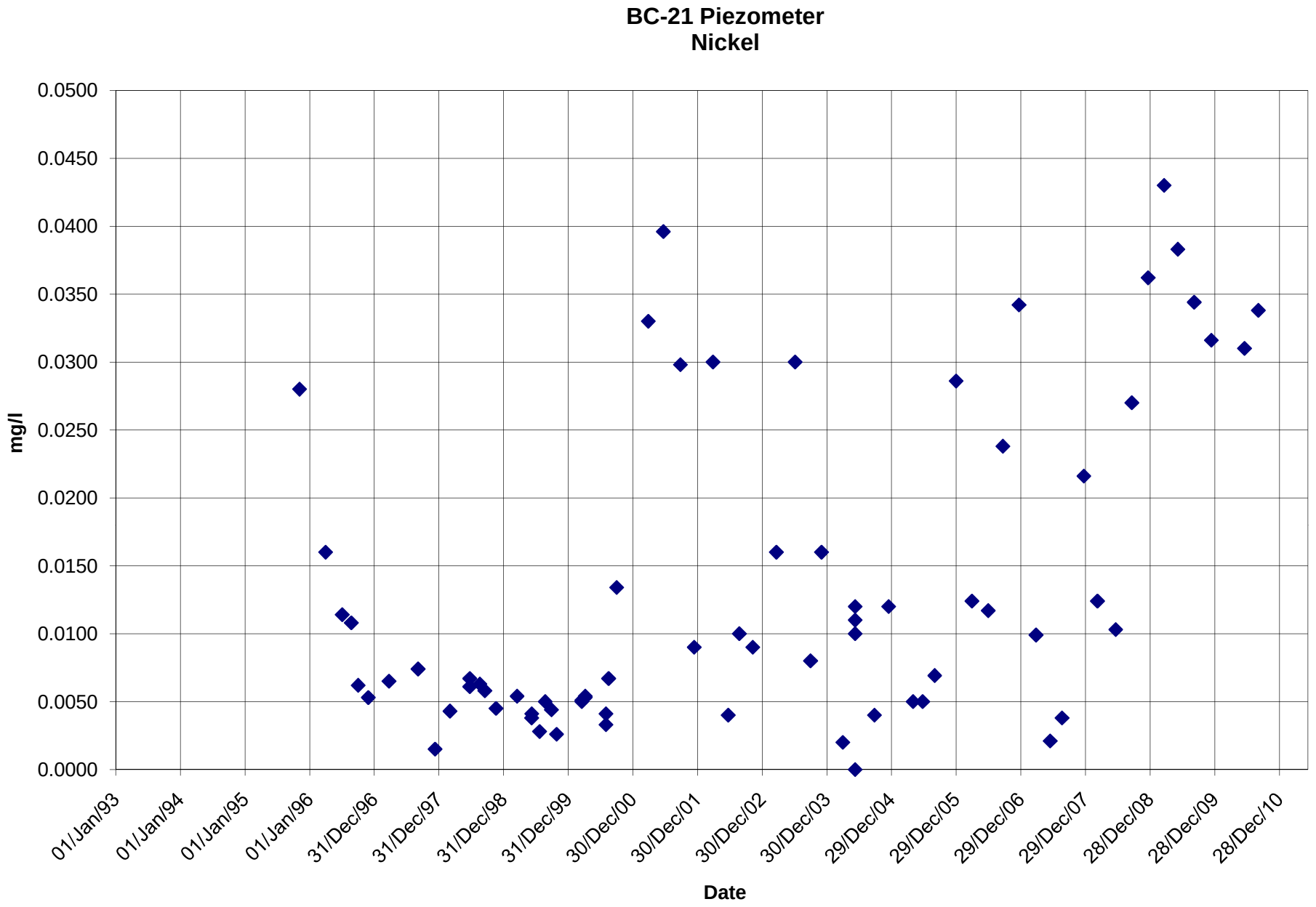

BC-21 Piezometer
Antimony
0.0015
0.0012
0.0009
0.0006
0.0003
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date

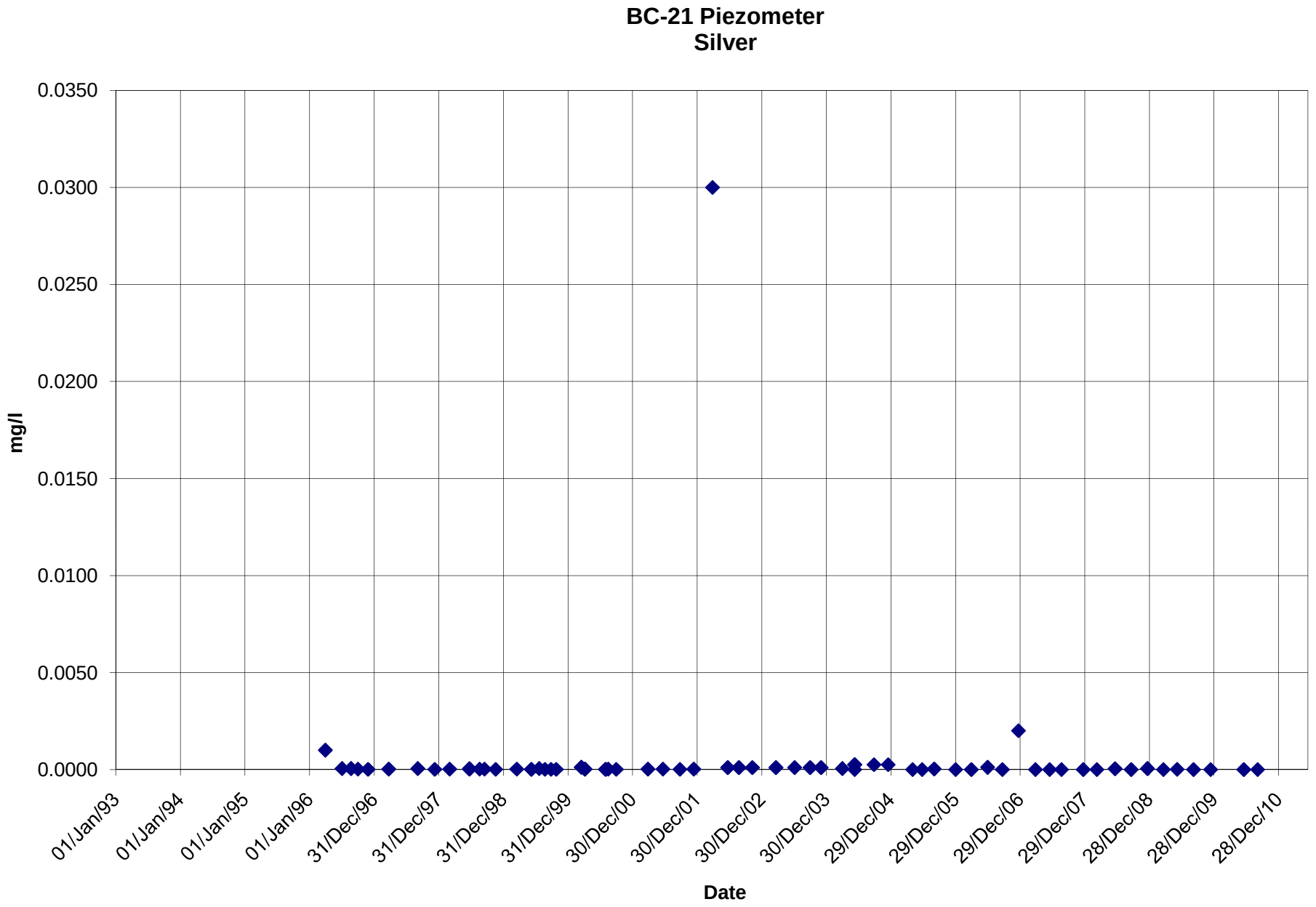

BC-21 Piezometer
Arsenic
0.6000
0.5000
0.4000
0.3000
0.2000
0.1000
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date

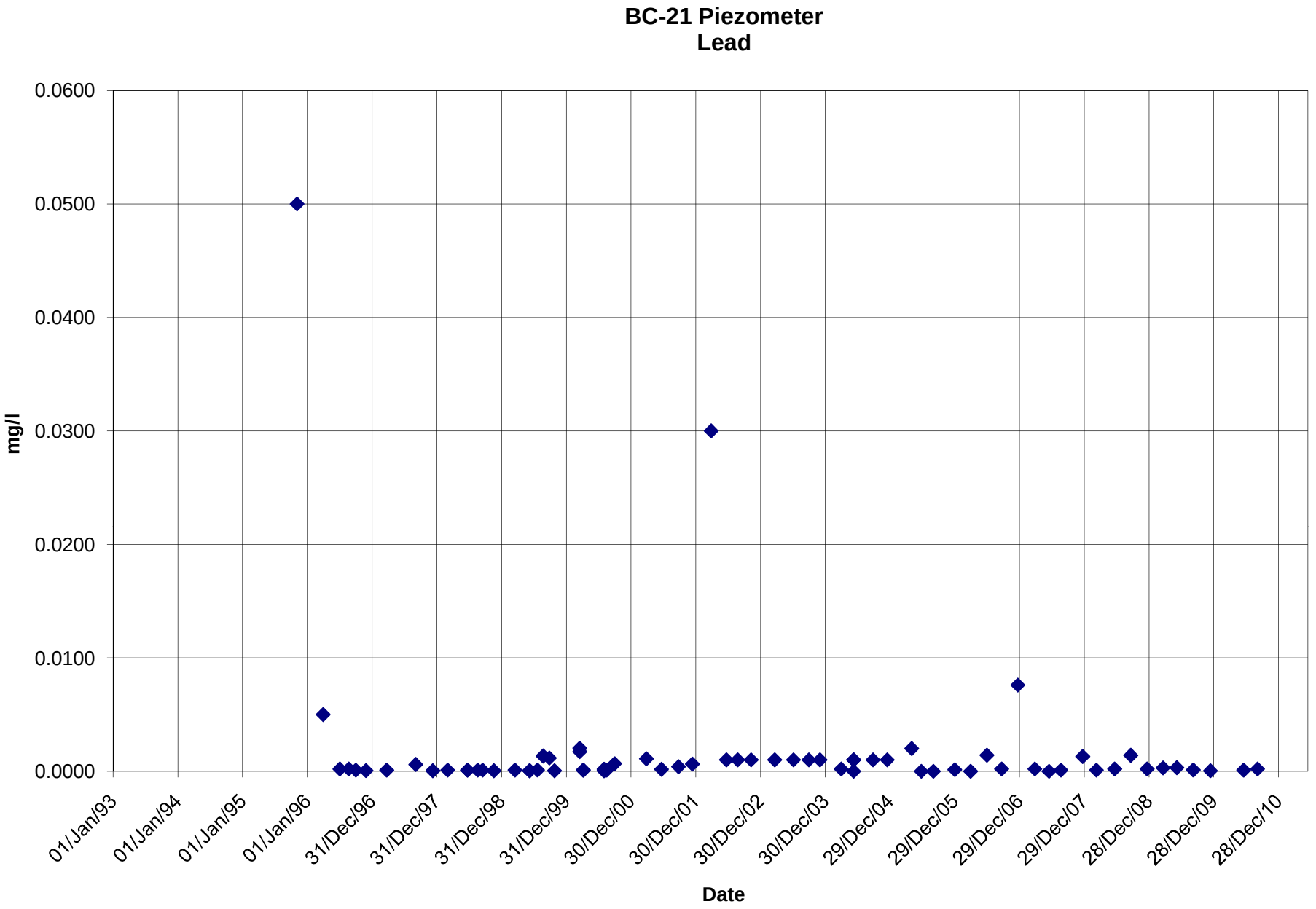

BC-21 Piezometer
Cadmium
0.0300
0.0250
0.0200
0.0150
0.0100
0.0050
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-21 Piezometer
Copper
0.0250
0.0200
0.0150
0.0100
0.0050
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-21 Piezometer
Mercury
0.00060
0.00050
0.00040
0.00030
0.00020
0.00010
0.00000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-21 Piezometer
Nickel
0.0500
0.0450
0.0400
0.0350
0.0300
0.0250
0.0200
0.0150
0.0100
0.0050
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-21 Piezometer
Silver
0.0350
0.0300
0.0250
0.0200
0.0150
0.0100
0.0050
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-21 Piezometer
Lead
0.0600
0.0500
0.0400
0.0300
0.0200
0.0100
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
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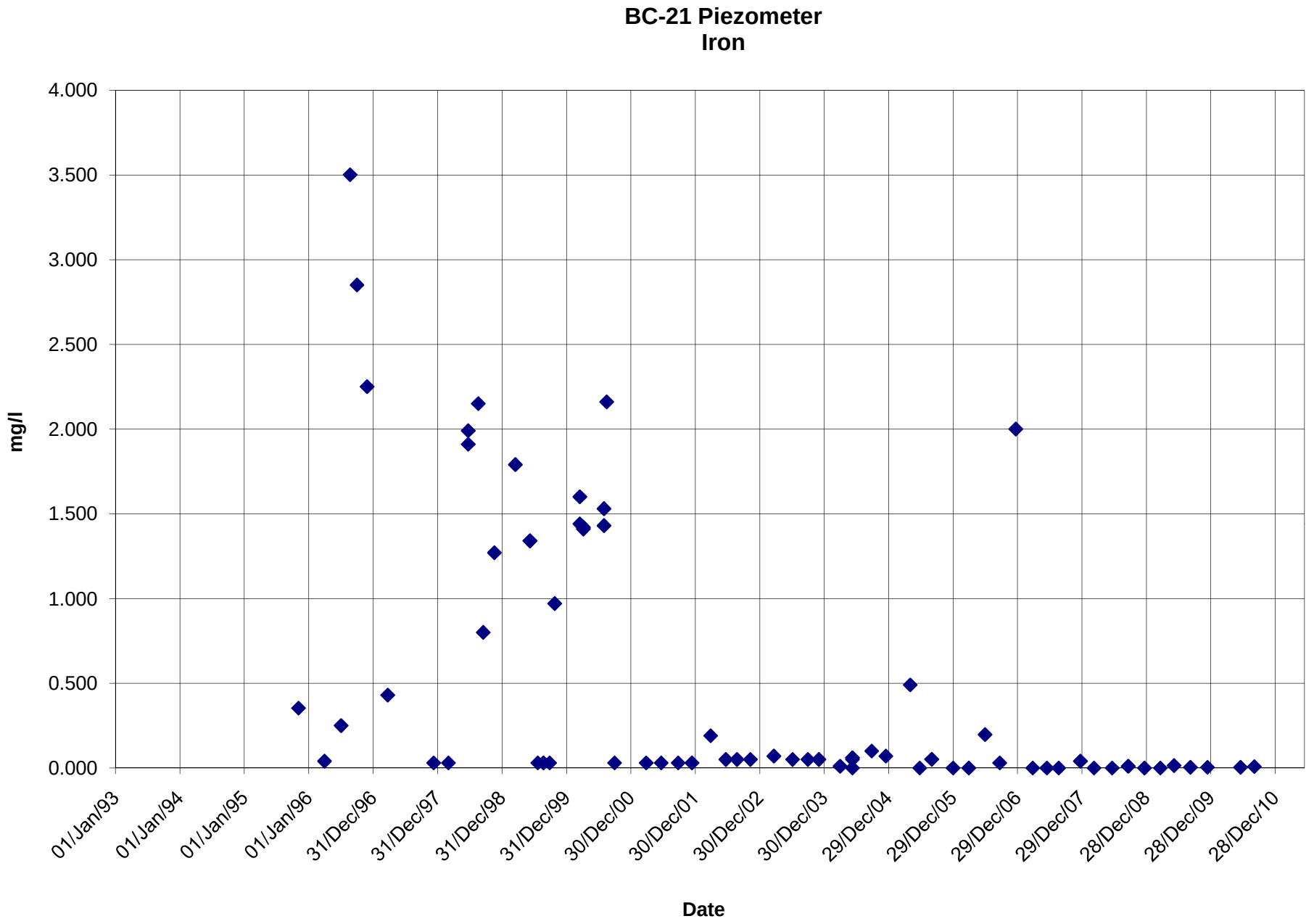
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-21 Piezometer
Iron
4.000
3.500
3.000
2.500
2.000
1.500
1.000
0.500
0.000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
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29/Dec/05
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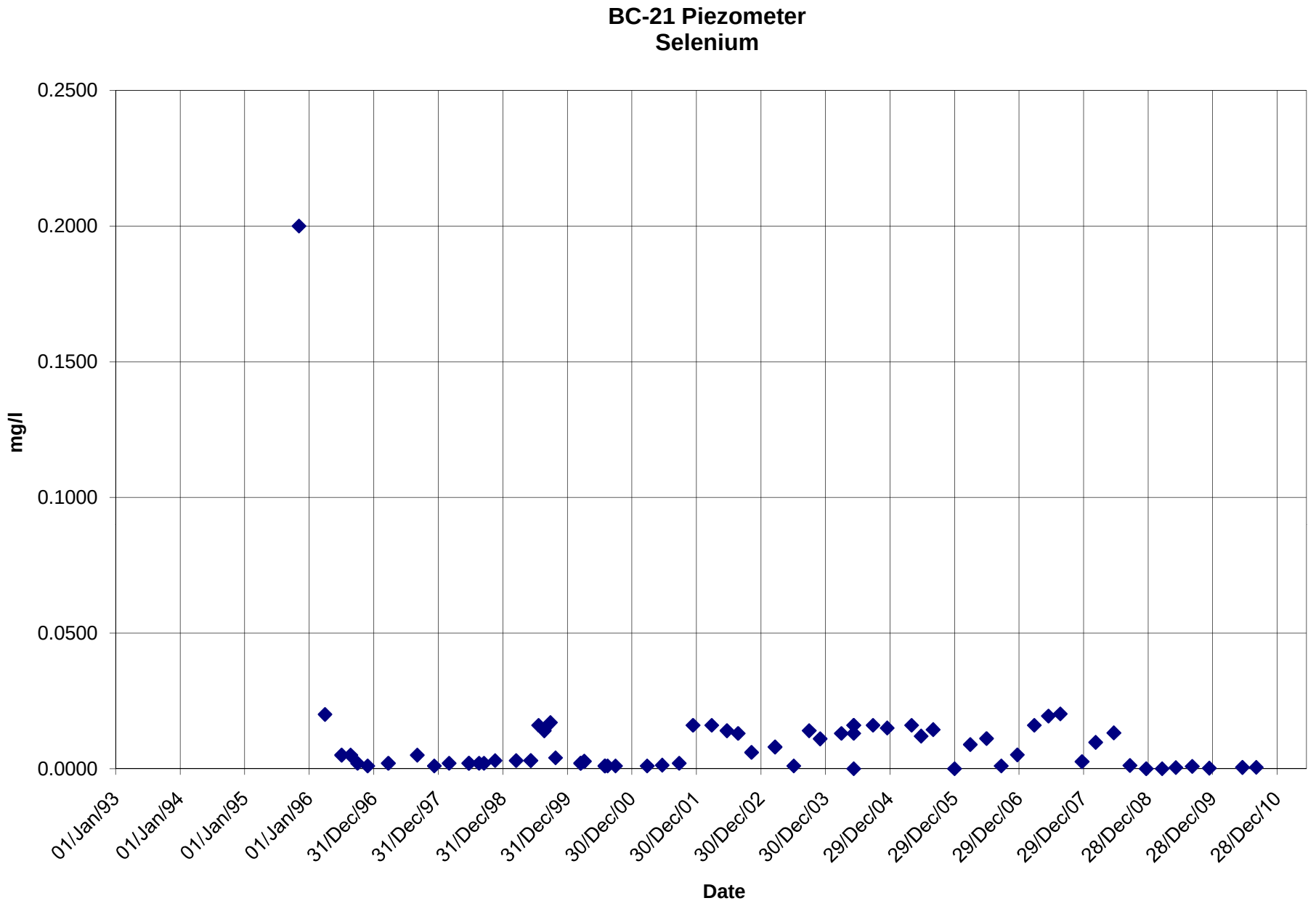
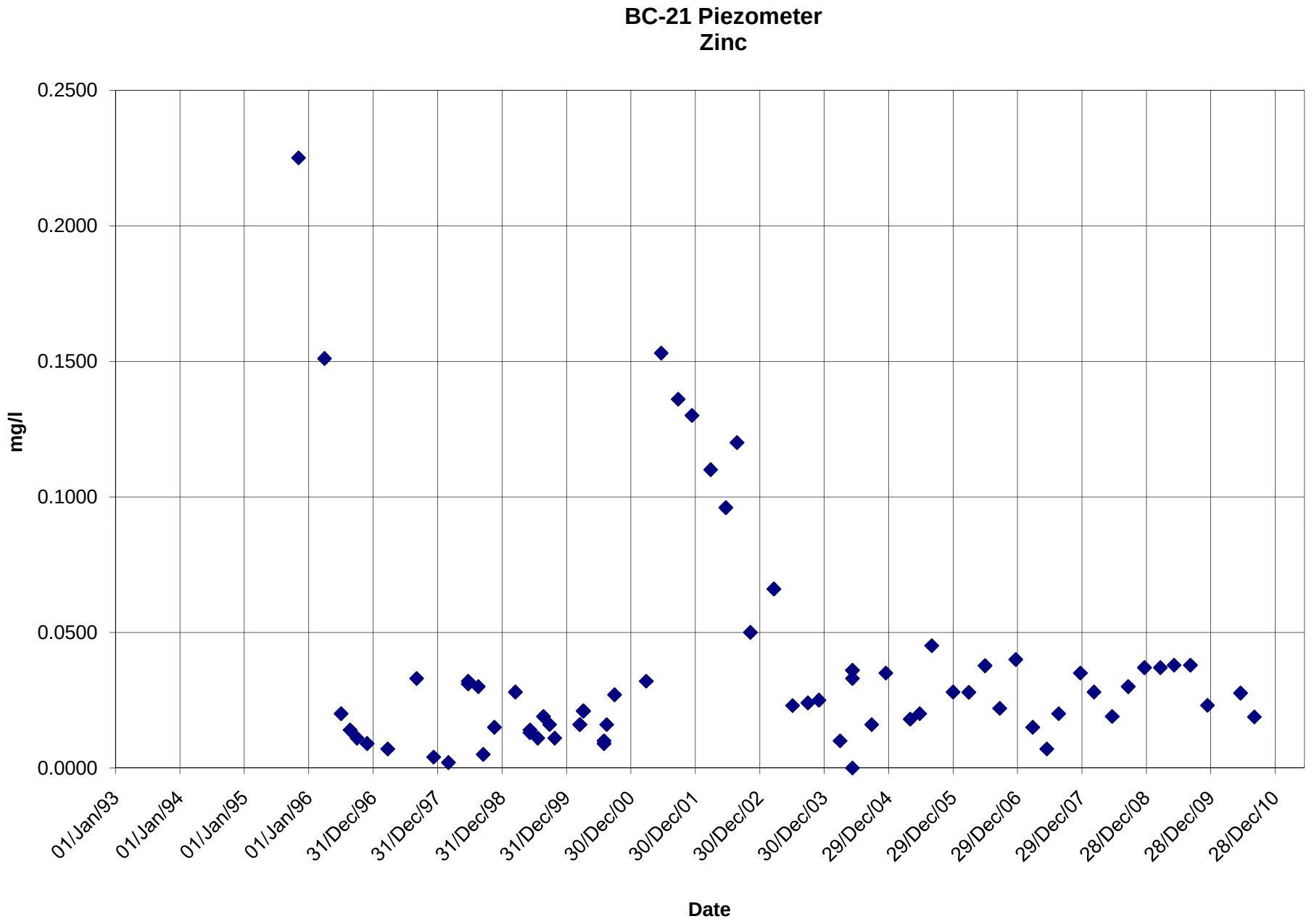
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-21 Piezometer
Selenium
0.2500
0.2000
0.1500
0.1000
0.0500
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-21 Piezometer
Zinc
0.2500
0.2000
0.1500
0.1000
0.0500
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
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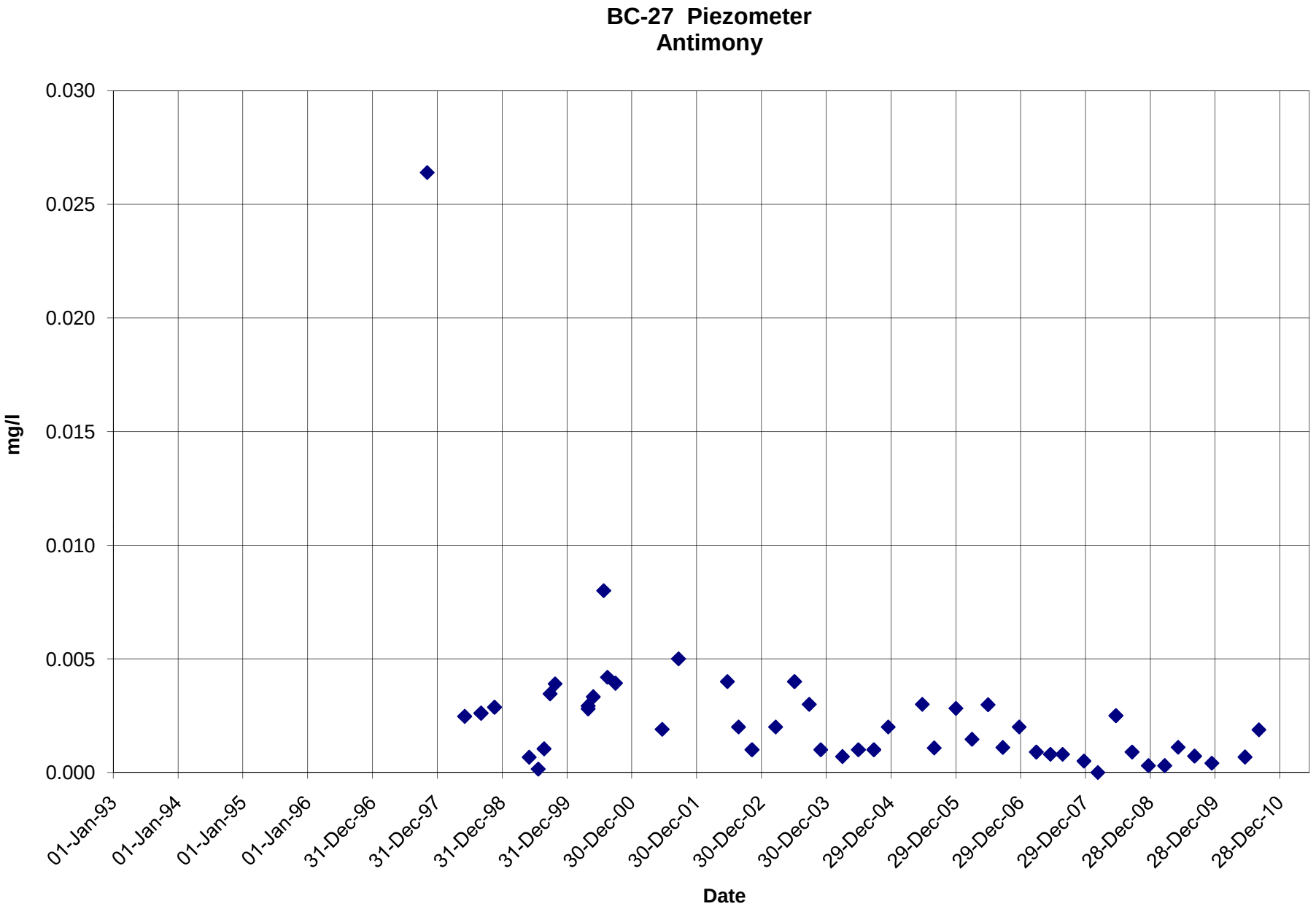
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-27 Piezometer
Antimony
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0.025
0.020
0.015
0.010
0.005
0.000
mg/l
01-Jan-93
01-Jan-94
01-Jan-95
01-Jan-96
31-Dec-96
31-Dec-97
31-Dec-98
31-Dec-99
30-Dec-00
30-Dec-01
30-Dec-02
30-Dec-03
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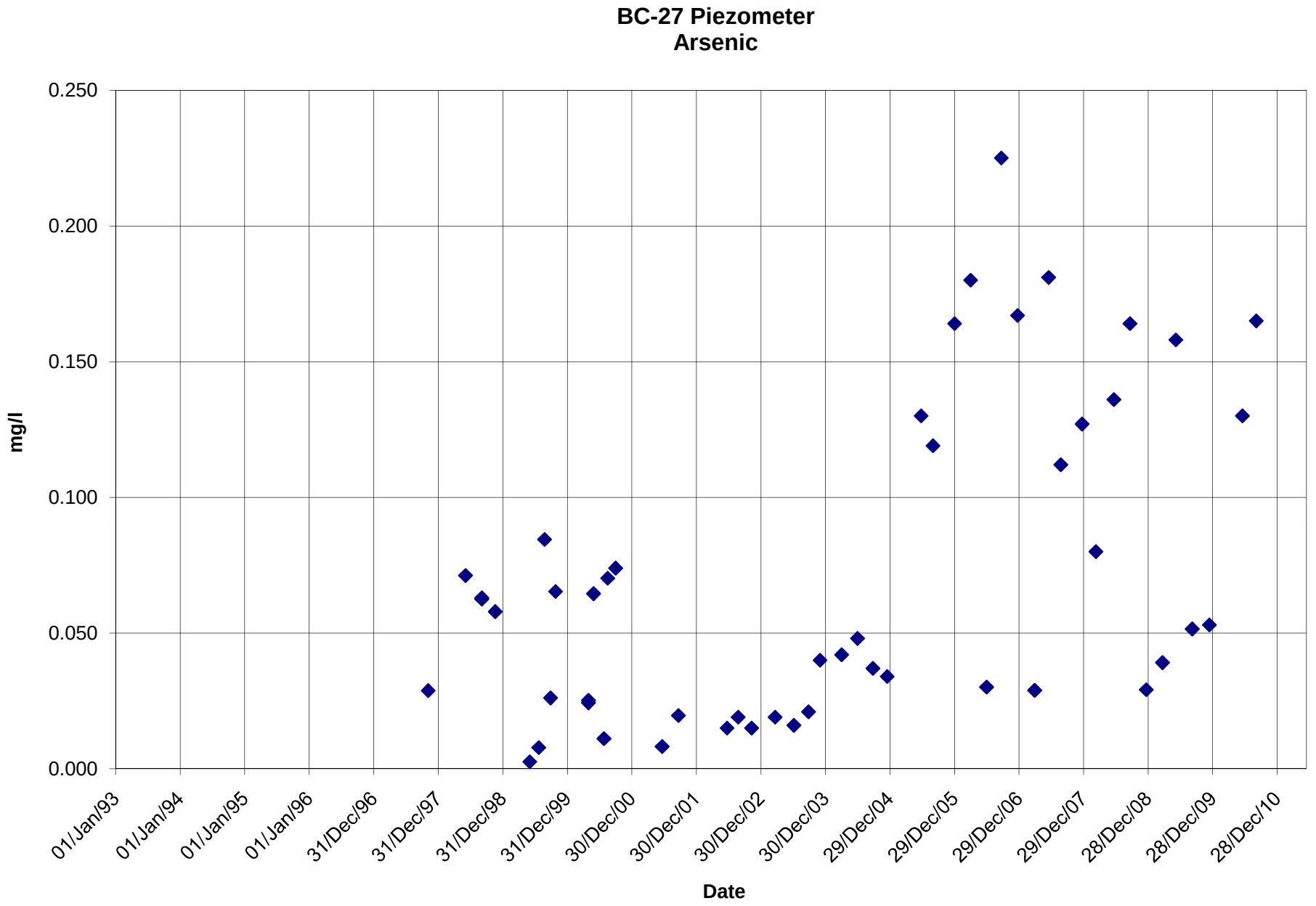
29-Dec-06
29-Dec-07
28-Dec-08
28-Dec-09
28-Dec-10
Date


BC-27 Piezometer
Arsenic
0.250
0.200
0.150
0.100
0.050
0.000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
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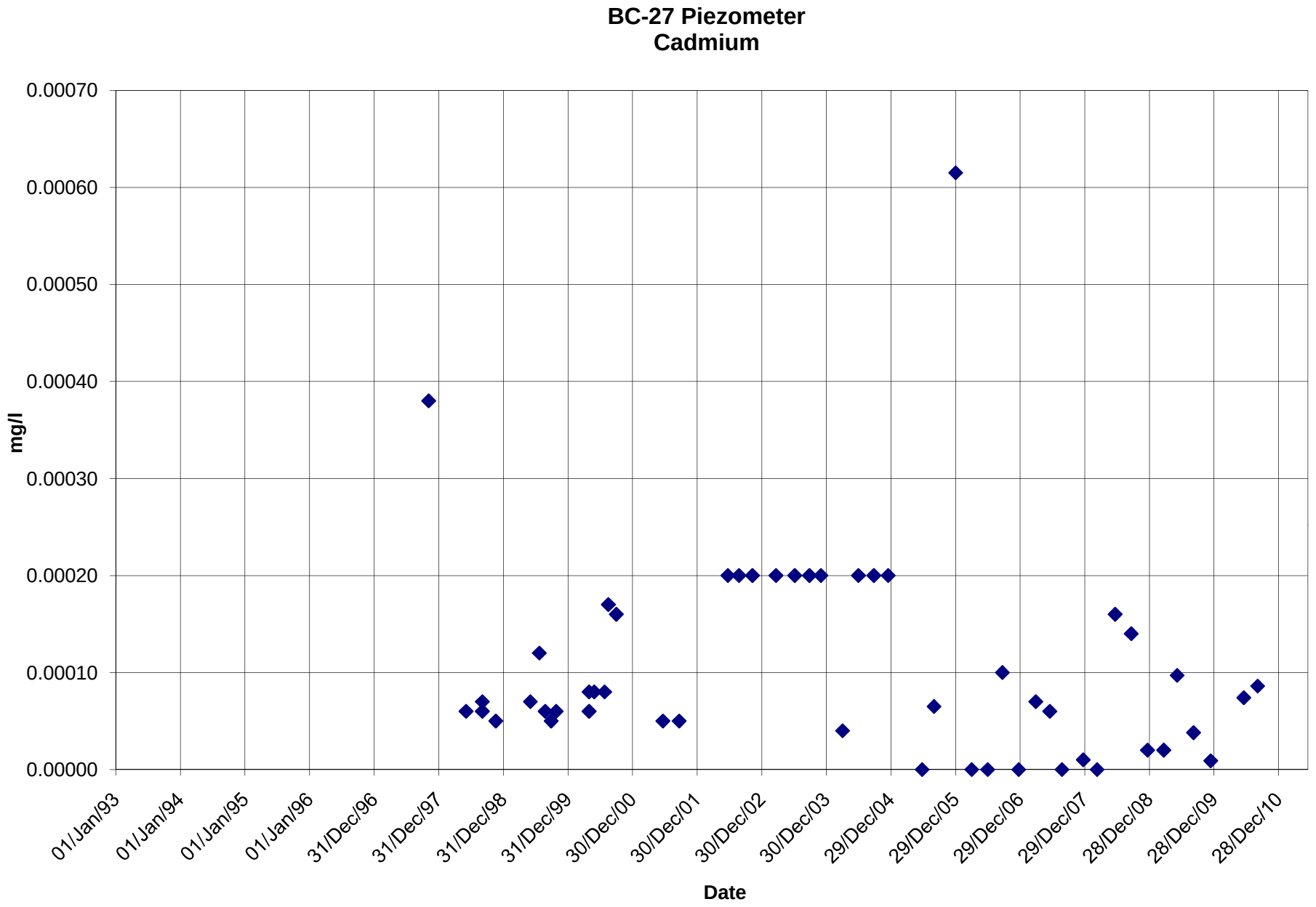
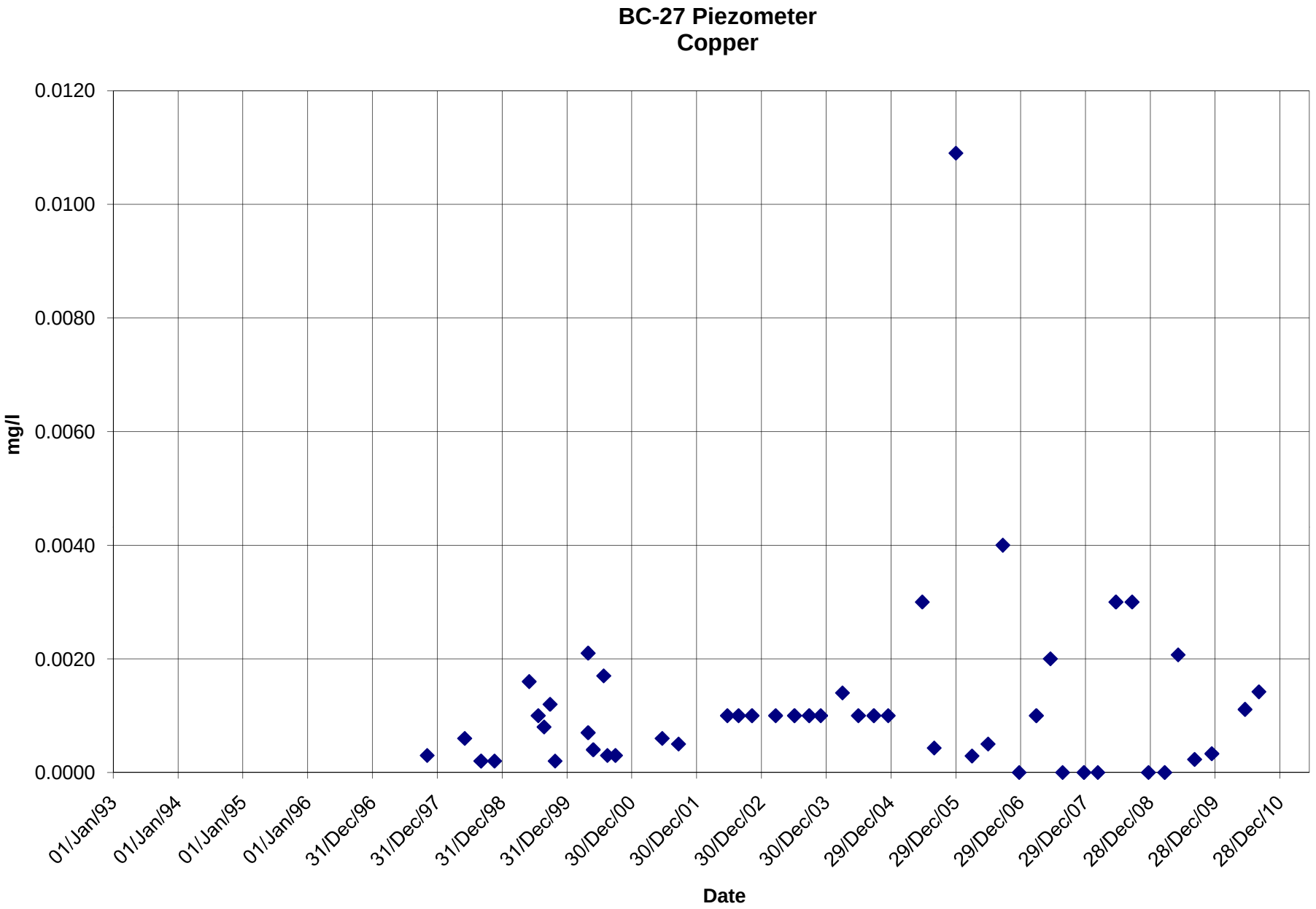
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-27 Piezometer
Cadmium
0.00070
0.00060
0.00050
0.00040
0.00030
0.00020
0.00010
0.00000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-27 Piezometer
Copper
0.0120
0.0100
0.0080
0.0060
0.0040
0.0020
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
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29/Dec/05
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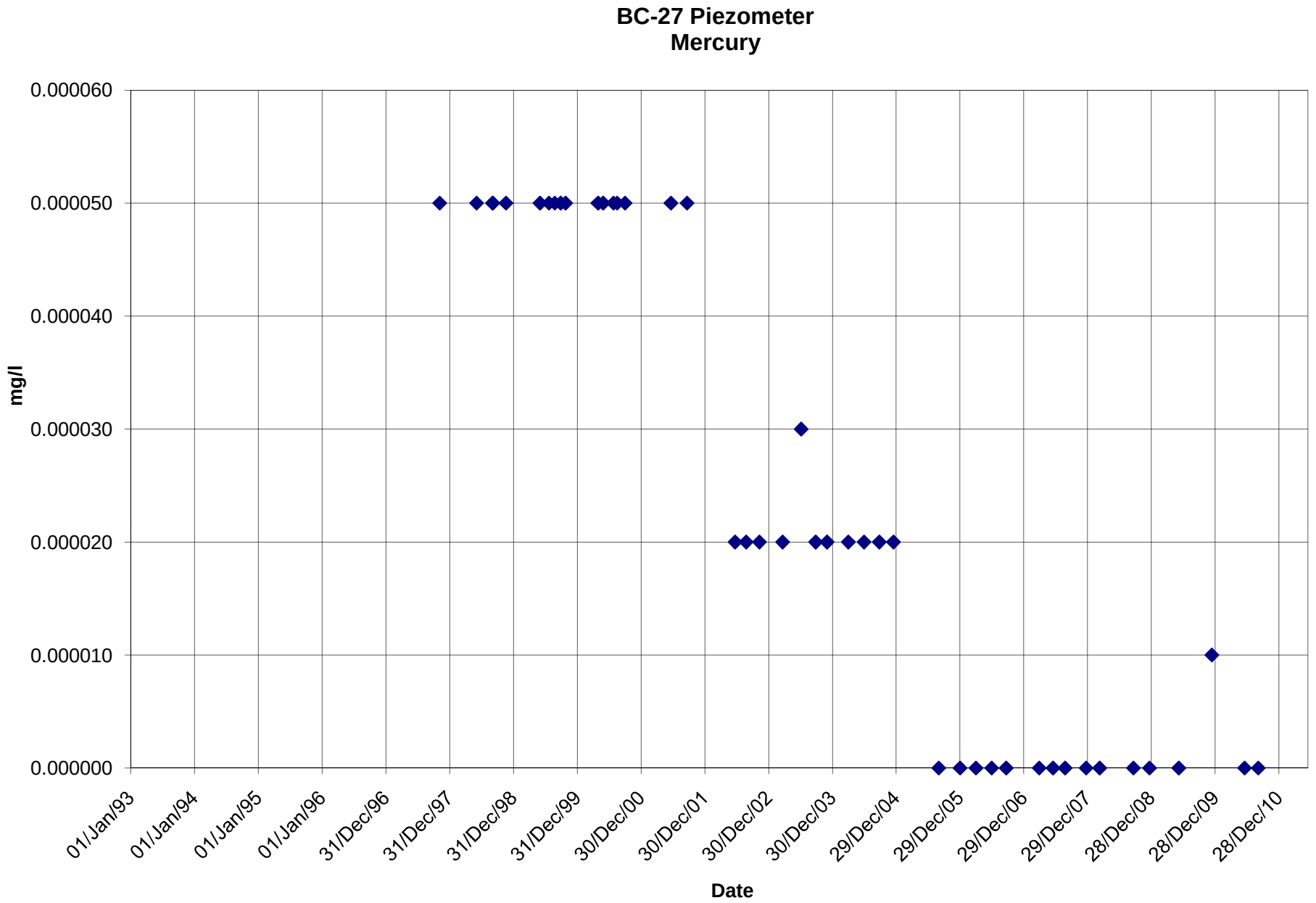
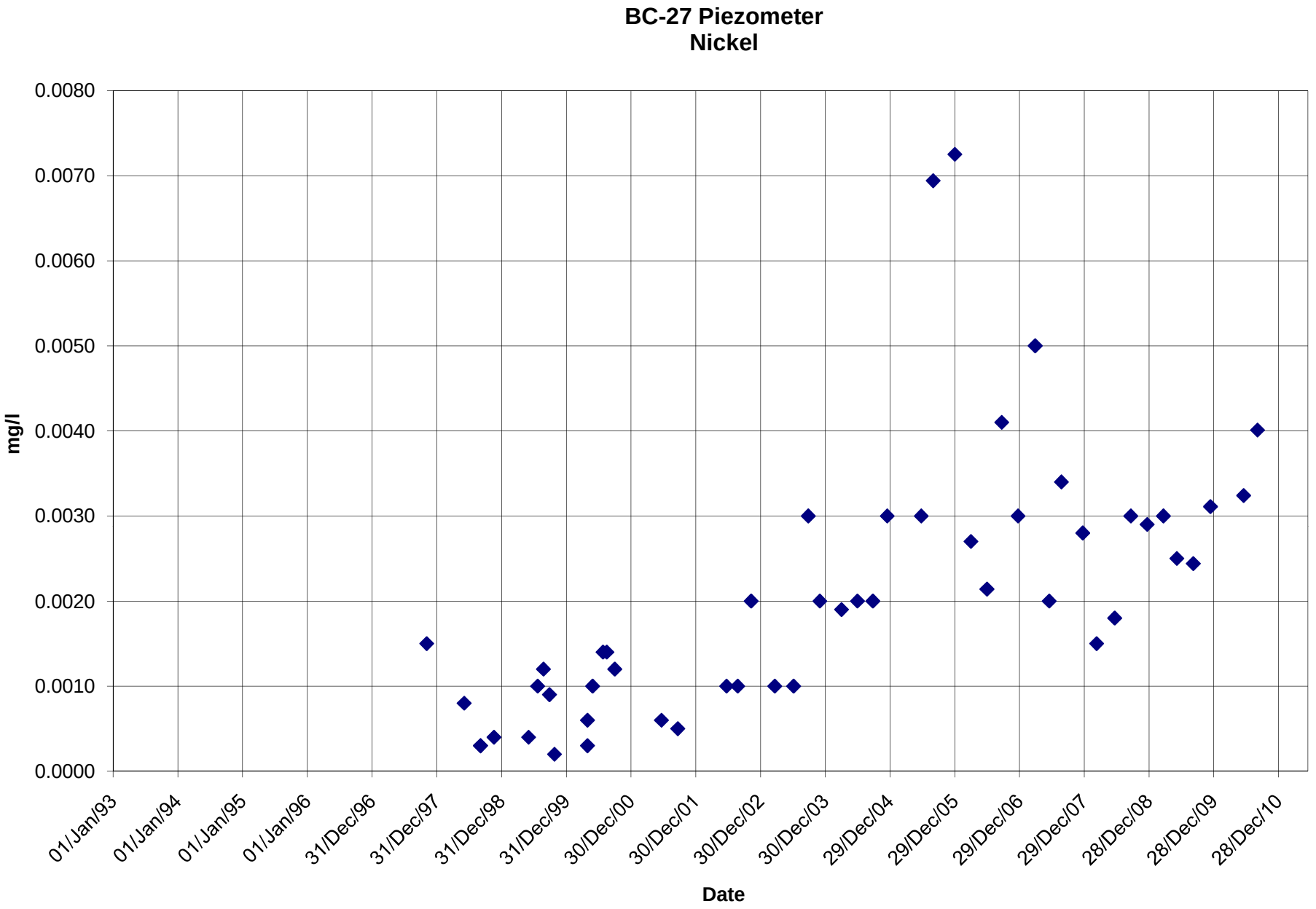
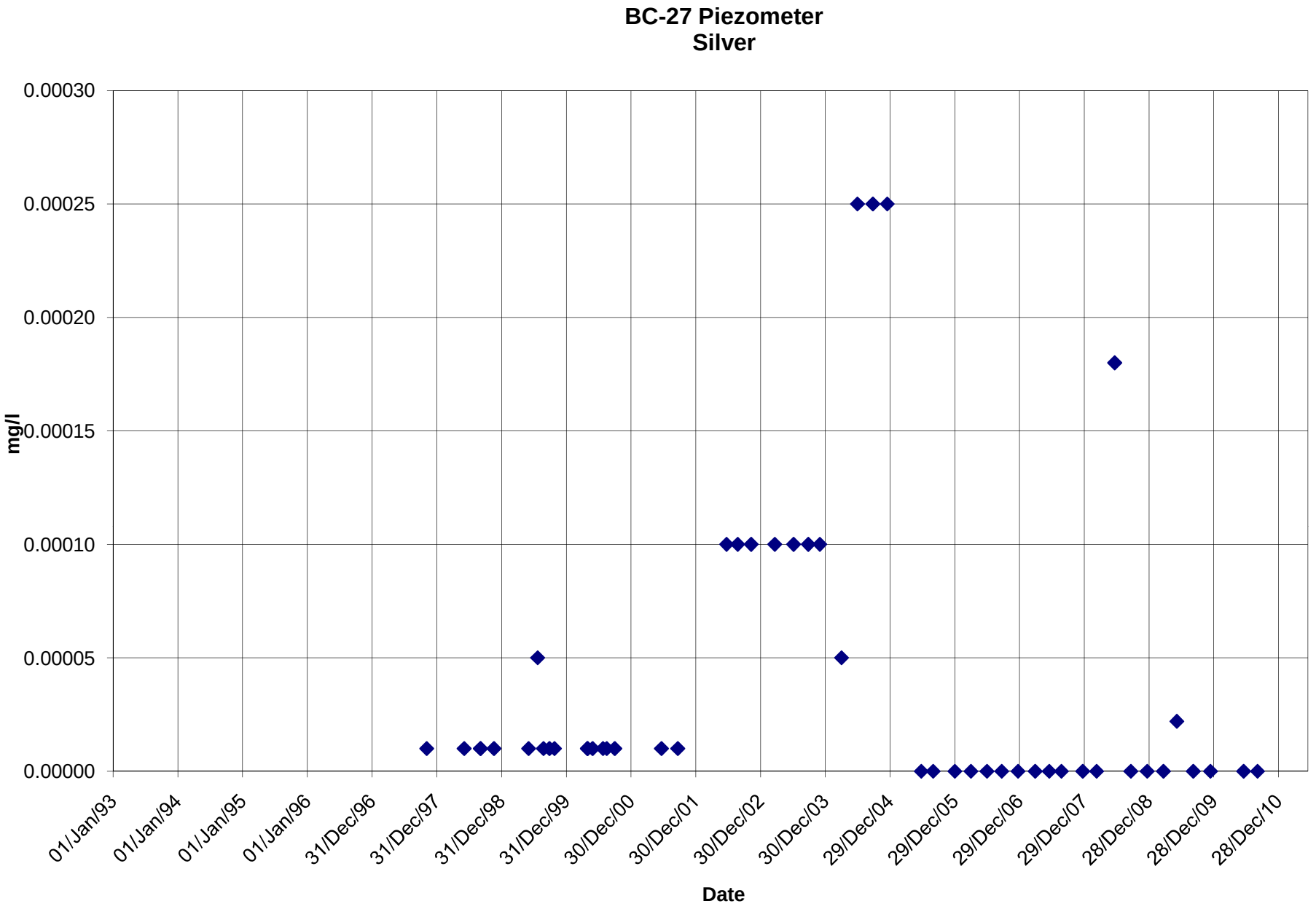
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-27 Piezometer
Mercury
0.000060
0.000050
0.000040
0.000030
0.000020
0.000010
0.000000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-27 Piezometer
Nickel
0.0080
0.0070
0.0060
0.0050
0.0040
0.0030
0.0020
0.0010
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-27 Piezometer
Silver
0.00030
0.00025
0.00020
0.00015
0.00010
0.00005
0.00000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
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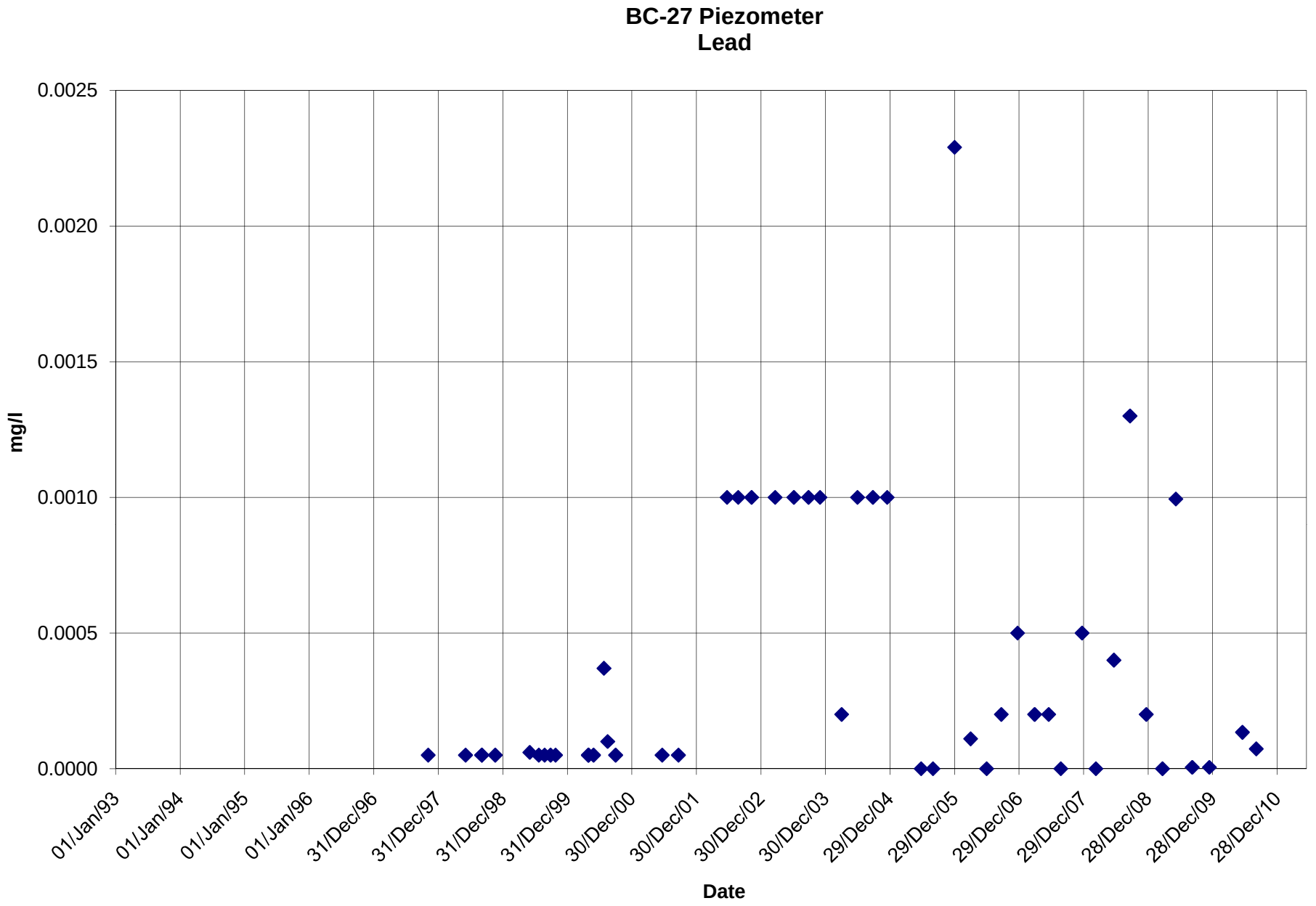
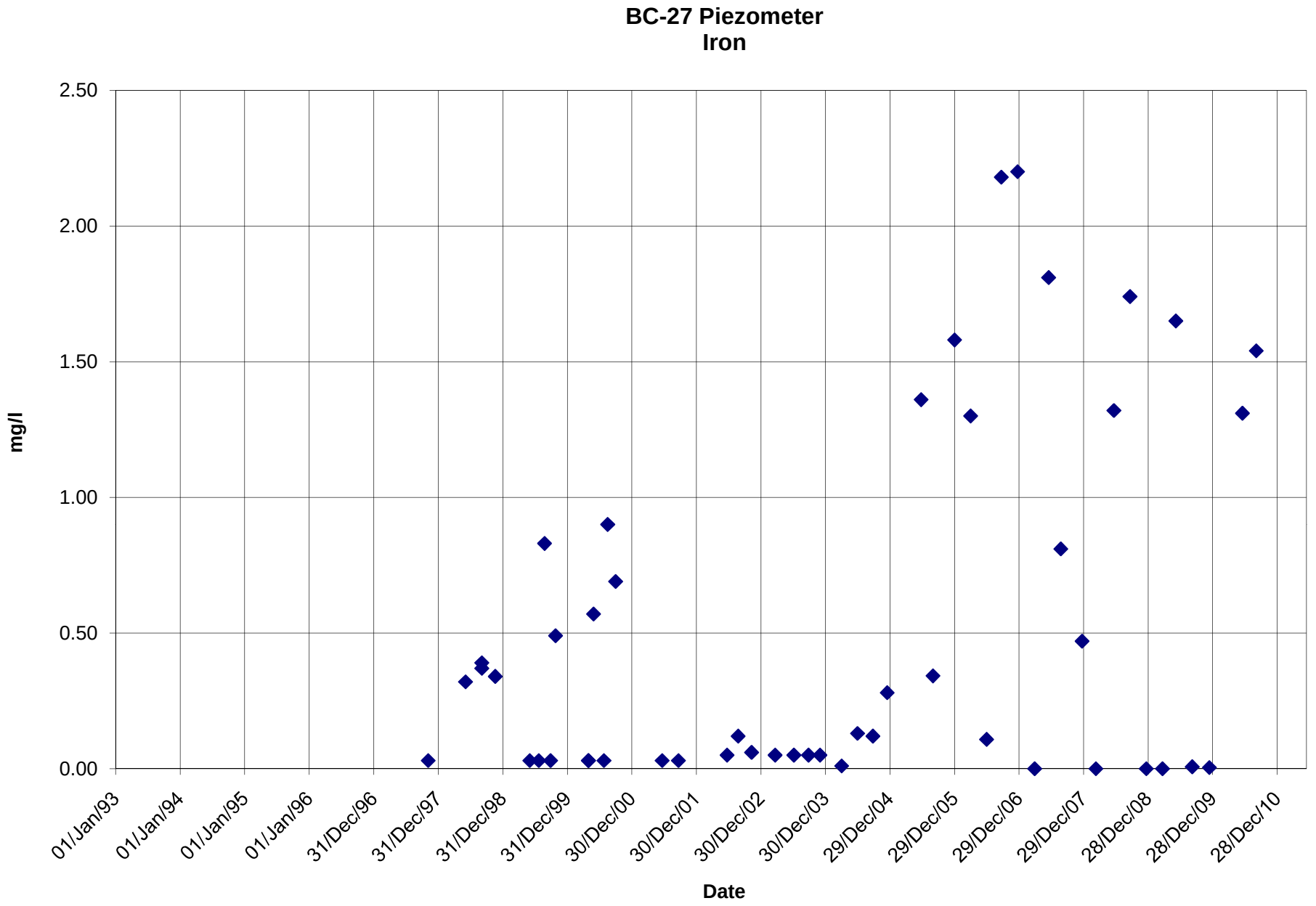
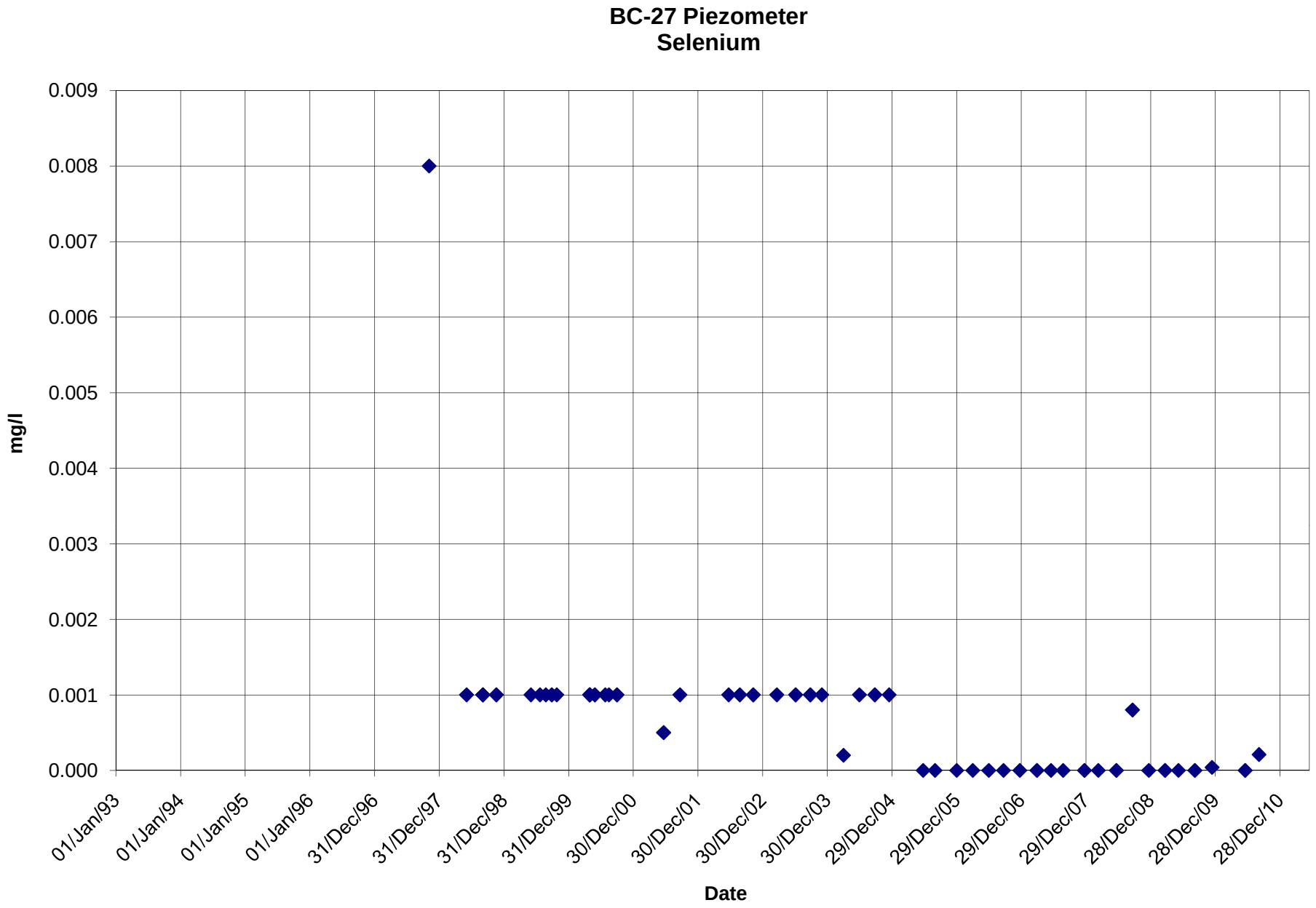
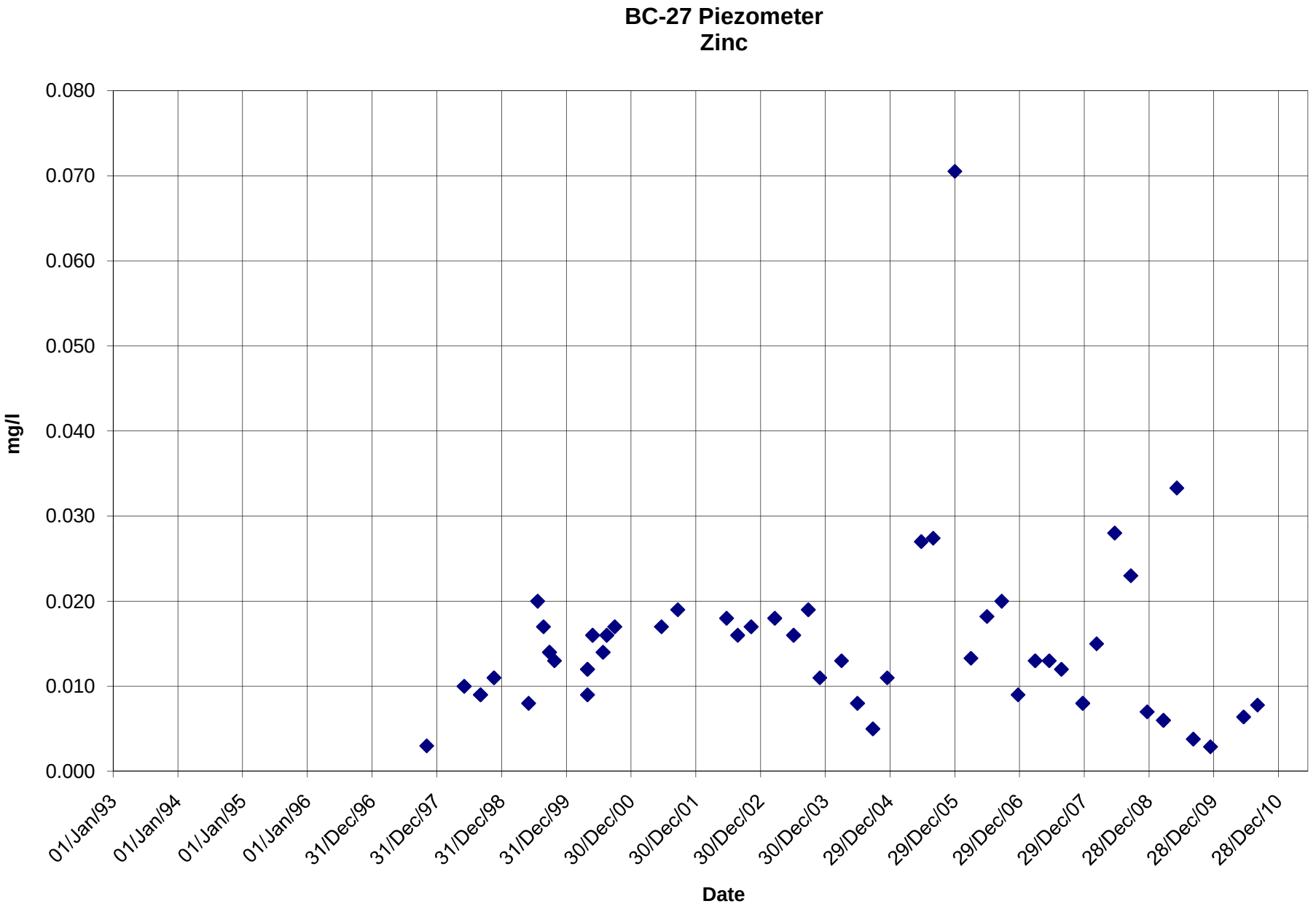
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-27 Piezometer
Lead
0.0025
0.0020
0.0015
0.0010
0.0005
0.0000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-27 Piezometer
Iron
2.50
2.00
1.50
1.00
0.50
0.00
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-27 Piezometer
Selenium
mg/l
0.009
0.008
0.007
0.006
0.005
0.004
0.003
0.002
0.001
0.000
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
29/Dec/04
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC-27 Piezometer
Zinc
0.080
0.070
0.060
0.050
0.040
0.030
0.020
0.010
0.000
mg/l
01/Jan/93
01/Jan/94
01/Jan/95
01/Jan/96
31/Dec/96
31/Dec/97
31/Dec/98
31/Dec/99
30/Dec/00
30/Dec/01
30/Dec/02
30/Dec/03
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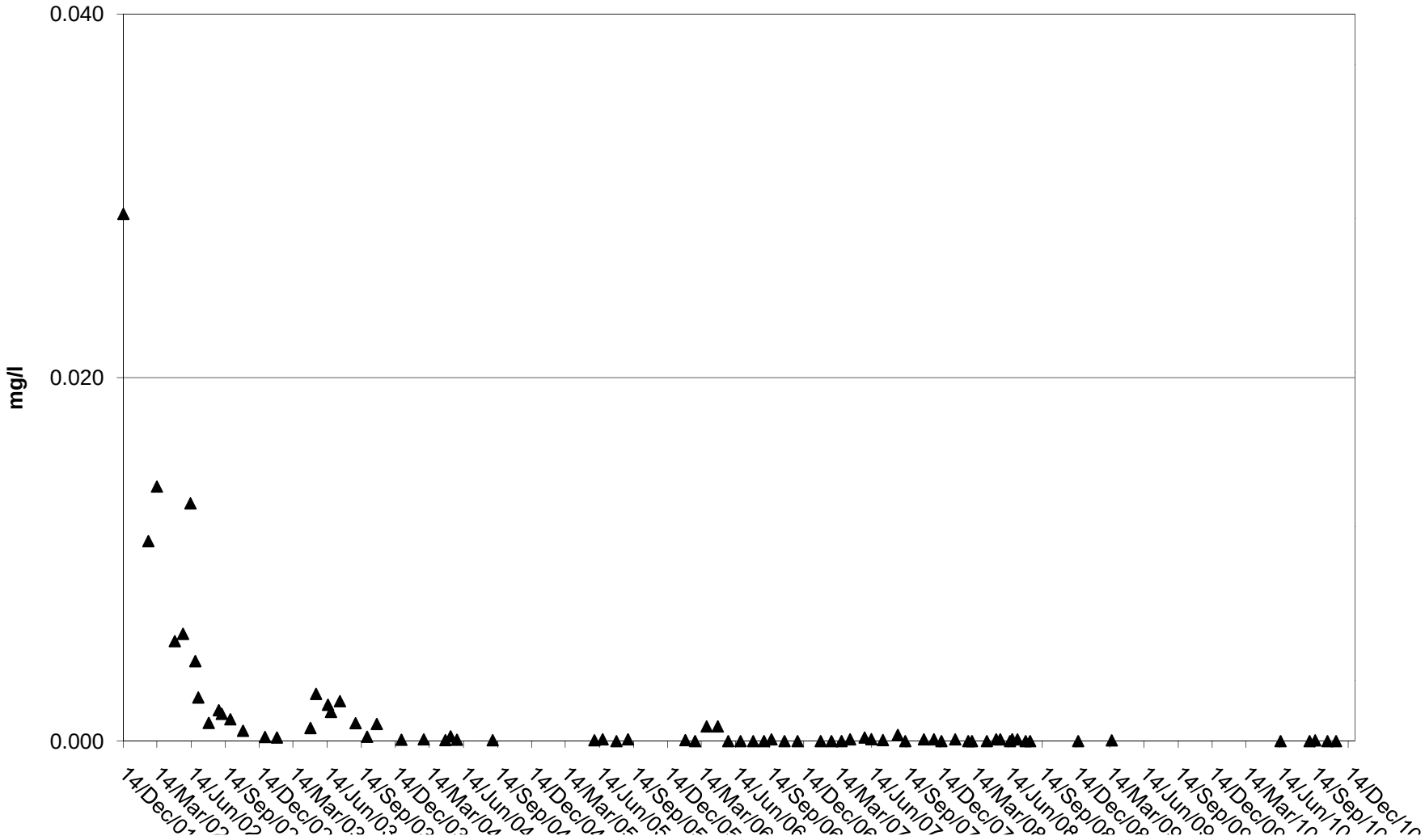
29/Dec/05
29/Dec/06
29/Dec/07
28/Dec/08
28/Dec/09
28/Dec/10
Date


BC 28a (Heap Effluent)
Mercury
0.040
0.020
0.000
mg/l
14/Dec/01
14/Mar/02
14/Jun/02
14/Sep/02
14/Dec/02
14/Mar/03
14/Jun/03
14/Sep/03
14/Dec/03
14/Mar/04
14/Jun/04
14/Sep/04
14/Dec/04
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14/Dec/08
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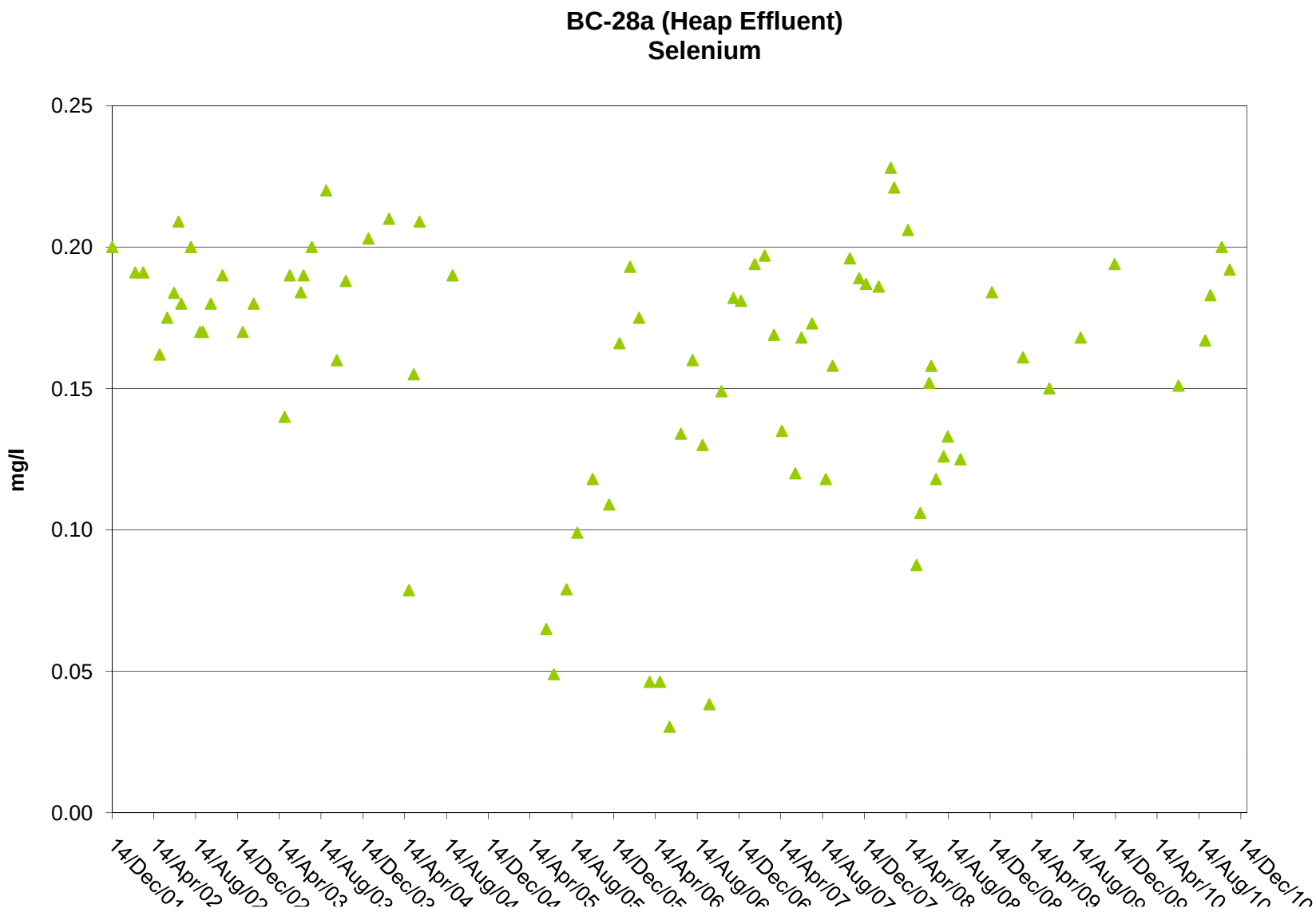
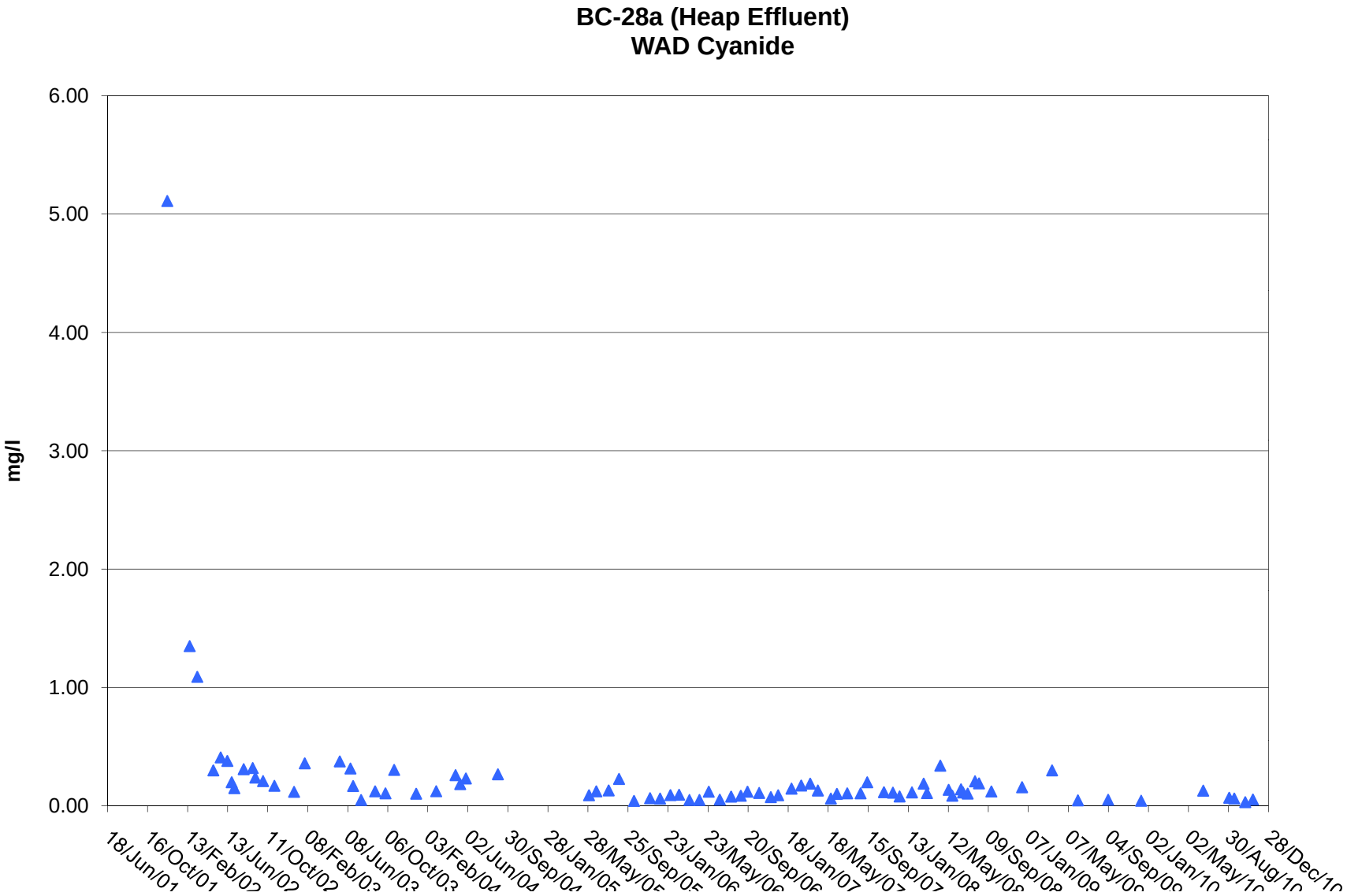
14/Jun/10
14/Sep/10
14/Dec/10

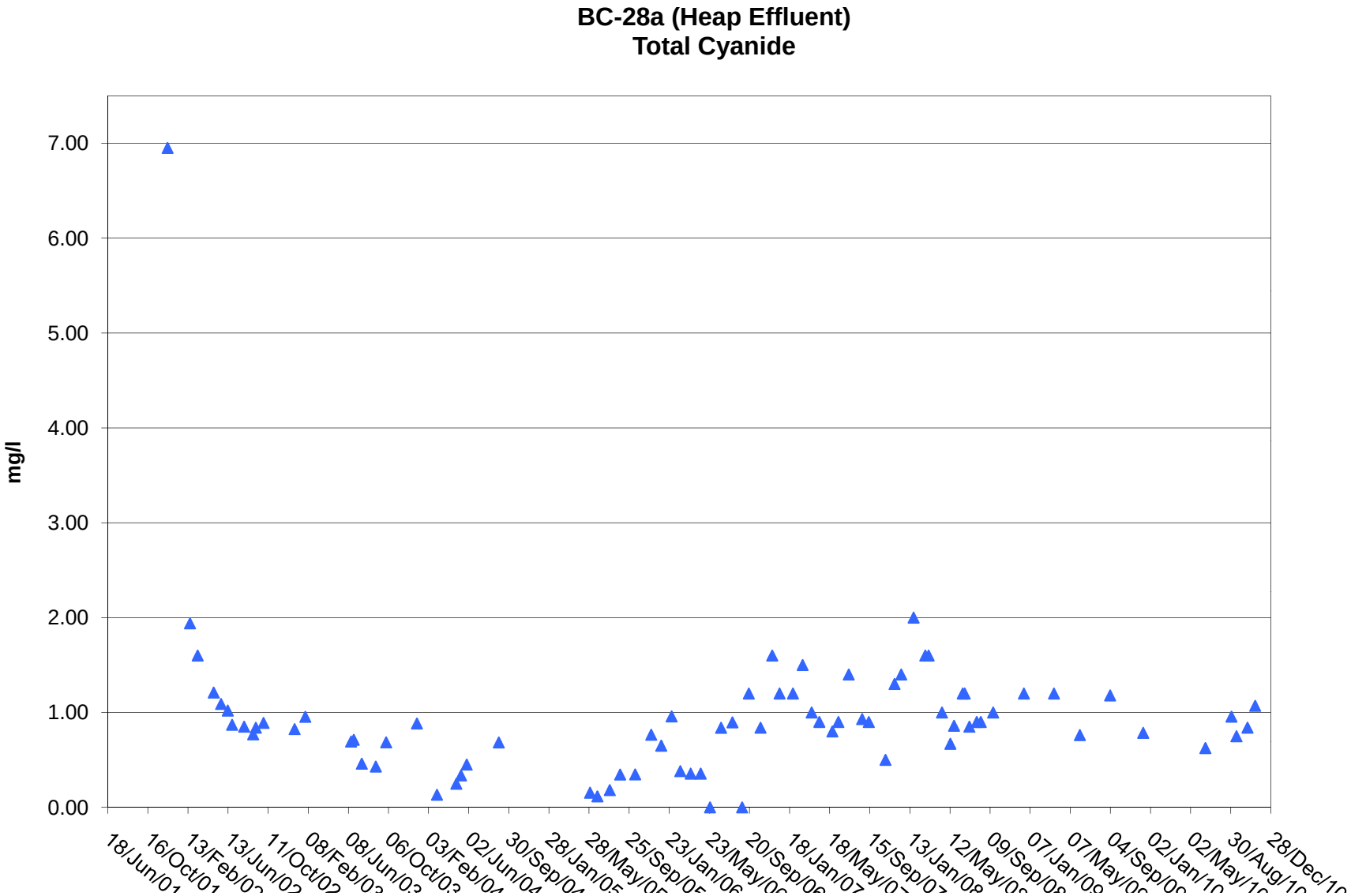
Brewery Creek Mine



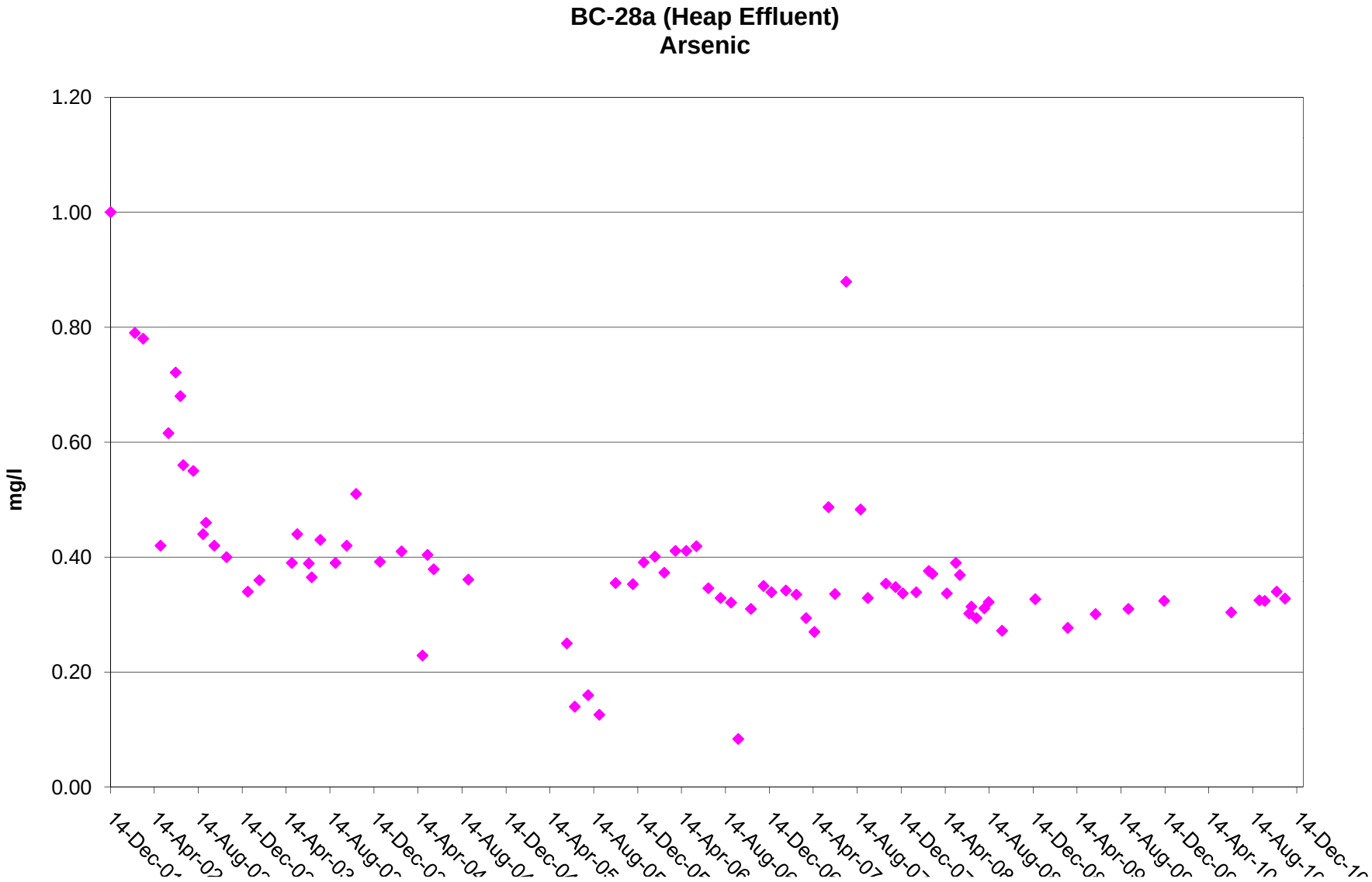
Brewery Creek Mine



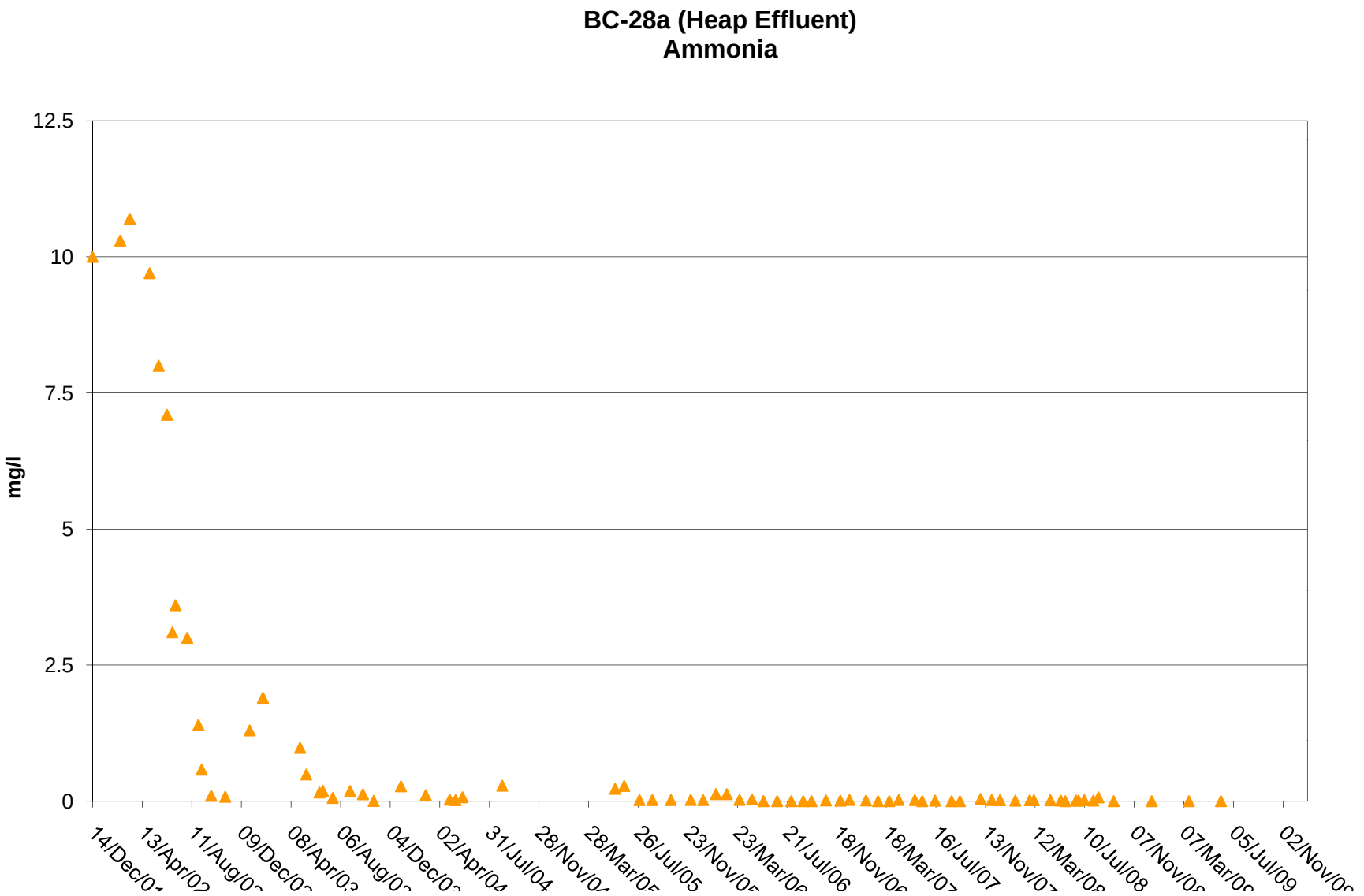
Brewery Creek Mine



Brewery Creek Mine



Brewery Creek Mine



ALEXCO RESOURCE CORP.

Brewery Creek Mine

Appendix C-3 – Water Quality Data: Bioassays

FILE:ACCESS/1006076.RTT

DATE: 29 June 2010

TO: Brad Thrall
Access Consulting Group
#3 Calcite Business Centre
151 Industrial Road
Whitehorse, Yukon
Y1A 2V3

REPORT ON: RAINBOW TROUT BIOASSAY RESULTS

SAMPLE DESCRIPTION:

IRC Sample ID No.:	1006076
Sample Name:	**BC28a** **ALEX-09-BCM-01**
Date collected:	15 June 2010
Date, time received:	17 June 2010; 0915 hrs
Collection Method:	Grab
Amount, Container:	2 x 20 L plastic container
Physical description:	Clear, colourless liquid
Date, time tested:	17 June 2010; 1055 hrs

RAINBOW TROUT 96 HR RESULTS:
The 96 hour (static) LT_{50} was greater than 96 hours.
0% trout mortality in 100% concentration.

The LT_{50} is defined as the median lethal time or the time at which there is 50% fish mortality. Results are calculated using the method described by Stephan (Methods for calculating an LC_{50} in: Aquatic Toxicology and Hazard Evaluation, American Society for Testing and Materials, 1977).

The method used for this test was as per the IRC laboratory "Standard Operating Procedure for Rainbow Trout Holding and Testing" RTver5. This procedure follows the "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout" EPS 1/RM/13, Second Edition – December 2000. Test volume was 10 litres with 10 fish in each test vessel. Aeration was by forced air, through airstones at a rate of approximately 6.5 ± 1ml/L/min. The sample was not pH adjusted or filtered prior to testing.

The initial dissolved oxygen level was 8.6 mg/L at 7.0°C, the conductivity was 3750 µS/cm and the initial pH was 7.8. After pre-aerating the sample for 30 minutes and warming the sample to 14.0°C, the dissolved oxygen level was 8.9 mg/L. As the dissolved oxygen level was greater than 70% saturation and less than 100% saturation the test was initiated at this time. The set up technicians were CW and DW.

Please call should you have any questions.

IRC Integrated Resource Consultants Inc.

Lisa Hedderson
Laboratory Biologist
b129.1
enclosure

FILE:ACCESS/1006076.RTT

RAW DATA

TEST CONCENTRATION		HOURS 0	6.0	24	48	72	96
100%	Percent Survival	100%	100%	100%	100%	100%	100%
	Dissolved Oxygen (mg/L)	8.9		7.7	7.5	6.9	7.7
	Temperature (°C)	14.0		15.0	15.0	14.0	14.5
	pH	7.8		7.9	7.8	7.8	7.7
	Conductivity (µS/cm)	3750					3820
	Symptoms	1	1	1	1	1	1
	Loading Density (g/L)	0.33	0.33	0.33	0.33	0.33	0.33
CONTROL	Percent Survival	100%	100%	100%	100%	100%	100%
	Dissolved Oxygen (mg/L)	8.1		7.5	8.8	7.0	7.7
	Temperature (°C)	14.5		14.5	15.0	14.5	14.5
	pH	7.8		7.4	7.4	7.4	7.7
	Conductivity (µS/cm)	51					58
	Symptoms	1	1	1	1	1	1
	Loading Density (g/L)	0.33	0.33	0.33	0.33	0.33	0.33
	Technician	DW	CW	DW	DW	DW	DC

KEY TO SYMPTOMS:

1 = no apparent effect
2 = fish showing signs of stress
3 = loss of equilibrium

TEST FISH STOCK INFORMATION:

Date received:	3 June 2010	
Source:	Fraser Valley Trout Farm	
Species:	*Oncorhynchus mykiss* (Rainbow Trout)	
Fork Length:	Mean:	34.6 mm ± 1.4 mm
	Range:	32.0 mm – 37.0 mm
Wet weight:	Mean:	0.33 g ± 0.07 g
	Range:	0.23 g – 0.46 g
Condition Factor (100xWt/length^{3}cm):	0.79	

Acclimation History	
Acclimation temperature:	14.5 to 15.5°CELSIUS
Treatments:	None
Water:	Dechlorinated tap water
Feeding:	Nutra 2000 fry feed
Mortality:	1.02%

RAINBOW TROUT REFERENCE TOXICANT DATA

Stock Arrival Date (y/m/d)	Test Date (y/m/d)	Toxicant	LC50 (mg/L)	95% Confidence Interval
09.02.25	09.03.11	Phenol	9.10	7.36 to 10.97
09.03.05	09.03.20	"	9.80	8.47 to 11.33
09.03.17	09.03.31	"	11.06	4.86 to 17.26
09.04.01	09.04.07	"	9.80	7.87 to 11.99
09.04.07	09.04.20	"	11.40	8.00 to 12.00
09.05.13	09.06.08	"	10.94	8.00 to 12.00
09.05.22	09.06.04	"	8.42	8.00 to 12.00
09.06.10	09.07.13	"	11.40	8.00 to 12.00
09.07.15	09.07.24	"	10.15	8.00 to 12.00
09.07.22	09.08.06	"	11.40	8.00 to 12.00
09.08.05	09.08.20	"	10.21	8.68 to 11.95
09.08.19	09.09.15	"	8.65	7.04 to 10.25
09.09.16	09.10.13	"	10.23	8.00 to 12.00
09.10.06	09.10.27	"	10.17	8.16 to 12.36
09.10.15	09.10.29	"	12.00	8.00 to 18.00
09.11.04	09.11.16	"	14.10	11.86 to 16.57
09.11.17	09.12.04	"	10.60	8.95 to 12.51
09.12.02	09.12.17	"	9.39	8.00 to 12.00
09.12.16	09.12.29	"	9.40	7.94 to 11.03
10.02.04	10.02.22	"	9.80	8.00 to 12.00
10.02.24	10.03.17	"	9.39	8.00 to 12.00
10.03.18	10.03.25	"	12.71	10.69 to 15.00
10.03.25	10.04.07	"	10.43	7.43 to 13.87
10.04.07	10.04.21	"	12.63	12.00 to 18.00
10.04.21	10.05.07	"	10.94	8.00 to 12.00
10.05.23	10.06.02	"	10.23	8.00 to 12.00
10.06.03	10.06.24	"	10.56	8.00 to 12.00
LAB GEOMETRIC MEAN ± 2 standard deviations:				10.87 mg/L ± 3.308
Warning Limits:				7.559 g/L to 14.175 mg/L

CONTROL/DILUTION WATER QUALITY:

Hardness: 13 mg/L

Total Residual Chlorine: 4 µg/L

FILE:ACCESS/1009015.RTT

DATE: 21 September 2010

TO: Brad Thrall
Access Consulting Group
#3 Calcite Business Centre
151 Industrial Road
Whitehorse, Yukon
Y1A 2V3

REPORT ON: RAINBOW TROUT BIOASSAY RESULTS

SAMPLE DESCRIPTION:

IRC Sample ID No.:	1009015
Sample Name:	**BC28a Bioassay** **ALEX-10-BCM-01**
Date collected:	1 September 2010
Date, time received:	4 September 2010; 1045 hrs
Collection Method:	Grab
Amount, Container:	1 x 20 L plastic container
Physical description:	Clear, pale green liquid
Date, time tested:	4 September 2010; 1355 hrs

RAINBOW TROUT 96 HR RESULTS:
The 96 hour (static) LT_{50} was less than 20 hours.
80% trout mortality in the undiluted sample.

The LT_{50} is defined as the median lethal time or the time at which there is 50% fish mortality. Results are calculated using the method described by Stephan (Methods for calculating an LC_{50} in: Aquatic Toxicology and Hazard Evaluation, American Society for Testing and Materials, 1977).

The method used for this test was as per the IRC laboratory "Standard Operating Procedure for Rainbow Trout Holding and Testing" RTver5. This procedure follows the "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout" EPS 1/RM/13, Second Edition – December 2000. Test volume was 16 litres with 10 fish in each test vessel. Aeration was by forced air, through airstones at a rate of approximately 6.5 ± 1ml/L/min. The sample was not pH adjusted or filtered prior to testing.

The initial dissolved oxygen level was 11.4 mg/L at 7.0°C, the conductivity was 3860 µS/cm and the initial pH was 7.6. After pre-aerating the sample for 120 minutes and warming the sample to 14.0°C, the dissolved oxygen level was 10.6 mg/L. Although the dissolved oxygen level was greater than 100% saturation the maximum aeration time had been reached so the test was initiated at this time. The set up technician was DC.

Please call should you have any questions.

IRC Integrated Resource Consultants Inc.

Carolyn Wilson
Laboratory Biologist
b129.1
enclosure

FILE:ACCESS/1009015.RTT

RAW DATA

TEST CONCENTRATION		HOURS 0	20	24	48	72	96
100%	Percent Survival	100%	20%	20%	20%	20%	20%
	Dissolved Oxygen (mg/L)	10.6		9.8	9.9	9.8	9.5
	Temperature (°C)	14.0		14.5	14.5	14.5	14.5
	pH	7.6		8.0	8.1	8.1	8.1
	Conductivity (µS/cm)	3860					3850
	Symptoms	1	2	2	2	2	2
	Loading Density (g/L)	0.40	0.08	0.08	0.08	0.08	0.08
CONTROL	Percent Survival	100%	100%	100%	100%	100%	100%
	Dissolved Oxygen (mg/L)	10.1		9.1	9.4	9.8	9.2
	Temperature (°C)	14.5		14.5	14.5	14.5	14.5
	pH	7.3		7.4	7.4	7.8	7.8
	Conductivity (µS/cm)	46					47
	Symptoms	1	1	1	1	1	1
	Loading Density (g/L)	0.40	0.40	0.40	0.40	0.40	0.40
	Technician	DC	DC	DC	LH	CW	LH

KEY TO SYMPTOMS:

1 = no apparent effect
2 = fish showing signs of stress
3 = loss of equilibrium

TEST FISH STOCK INFORMATION:

Date received:	21 August 2010	
Source:	Miracle Springs Trout Hatchery	
Species:	*Oncorhynchus mykiss* (Rainbow Trout)	
Fork Length:	Mean:	42.8 mm ± 2.8 mm
	Range:	38.0 mm – 47.0 mm
Wet weight:	Mean:	0.65 g ± 0.13 g
	Range:	0.47 g – 0.89 g
Condition Factor (100xWt/length^{3}cm):	0.83	

Acclimation History	
Acclimation temperature:	15.5 to 17.0°CELSIUS
Treatments:	None
Water:	Dechlorinated tap water
Feeding:	Nutra 2000 fry feed
Mortality:	1.68%

RAINBOW TROUT REFERENCE TOXICANT DATA

Stock Arrival Date (y/m/d)	Test Date (y/m/d)	Toxicant	LC50 (mg/L)	95% Confidence Interval
09.03.17	09.03.31	Phenol	11.06	4.86 to 17.26
09.04.01	09.04.07	"	9.80	7.87 to 11.99
09.04.07	09.04.20	"	11.40	8.00 to 12.00
09.05.13	09.06.08	"	10.94	8.00 to 12.00
09.05.22	09.06.04	"	8.42	8.00 to 12.00
09.06.10	09.07.13	"	11.40	8.00 to 12.00
09.07.15	09.07.24	"	10.15	8.00 to 12.00
09.07.22	09.08.06	"	11.40	8.00 to 12.00
09.08.05	09.08.20	"	10.21	8.68 to 11.95
09.08.19	09.09.15	"	8.65	7.04 to 10.25
09.09.16	09.10.13	"	10.23	8.00 to 12.00
09.10.06	09.10.27	"	10.17	8.16 to 12.36
09.10.15	09.10.29	"	12.00	8.00 to 18.00
09.11.04	09.11.16	"	14.10	11.86 to 16.57
09.11.17	09.12.04	"	10.60	8.95 to 12.51
09.12.02	09.12.17	"	9.39	8.00 to 12.00
09.12.16	09.12.29	"	9.40	7.94 to 11.03
10.02.04	10.02.22	"	9.80	8.00 to 12.00
10.02.24	10.03.17	"	9.39	8.00 to 12.00
10.03.18	10.03.25	"	12.71	10.69 to 15.00
10.03.25	10.04.07	"	10.43	7.43 to 13.87
10.04.07	10.04.21	"	12.63	12.00 to 18.00
10.04.21	10.05.07	"	10.94	8.00 to 12.00
10.05.23	10.06.02	"	10.23	8.00 to 12.00
10.06.03	10.06.24	"	10.56	8.00 to 12.00
10.07.15	10.07.29	"	11.40	8.00 to 12.00
10.07.21	10.08.09	"	9.39	8.00 to 12.00
LAB GEOMETRIC MEAN ± 2 standard deviations:				10.97 mg/L ± 3.208
Warning Limits:				7.764 g/L to 14.479 mg/L

CONTROL/DILUTION WATER QUALITY:

Hardness: 22 mg/L

Total Residual Chlorine: 7 µg/L

FILE:ACCESS/1009085.RTT

DATE: 23 September 2010

TO: Brad Thrall
Access Consulting Group
#3 Calcite Business Centre
151 Industrial Road
Whitehorse, Yukon
Y1A 2V3

REPORT ON: RAINBOW TROUT BIOASSAY RESULTS

SAMPLE DESCRIPTION:

IRC Sample ID No.:	1009085
Sample Name:	**BC28a Bioassay** **ALEX-10-BCM-01**
Date collected:	16 September 2010
Date, time received:	17 September 2010; 1250 hrs
Collection Method:	Grab
Amount, Container:	1 x 20 L plastic container
Physical description:	Clear, light green liquid
Date, time tested:	17 September 2010; 1450 hrs

RAINBOW TROUT 96 HR RESULTS:
The 96 hour (static) LT_{50} was greater than 96 hours.
0% trout mortality in the undiluted sample.

The LT_{50} is defined as the median lethal time or the time at which there is 50% fish mortality. Results are calculated using the method described by Stephan (Methods for calculating an LC_{50} in: Aquatic Toxicology and Hazard Evaluation, American Society for Testing and Materials, 1977).

The method used for this test was as per the IRC laboratory "Standard Operating Procedure for Rainbow Trout Holding and Testing" RTver5. This procedure follows the "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout" EPS 1/RM/13, Second Edition – December 2000. Test volume was 15 litres with 10 fish in each test vessel. Aeration was by forced air, through airstones at a rate of approximately 6.5 ± 1ml/L/min. The sample was not pH adjusted or filtered prior to testing.

The initial dissolved oxygen level was 10.0 mg/L at 11.5°C, the conductivity was 4100 µS/cm and the initial pH was 7.6. After pre-aerating the sample for 30 minutes and warming the sample to 14.0°C, the dissolved oxygen level was 10.0 mg/L. As the dissolved oxygen level was greater than 70% saturation and less than 100% saturation the test was initiated at this time. The set up technicians were DC and CW

Please call should you have any questions.

IRC Integrated Resource Consultants Inc.

Carolyn Wilson
Laboratory Biologist
b129.1
enclosure

RAW DATA

TEST CONCENTRATION		HOURS 0	1	24	48	72	96
100%	Percent Survival	100%	100%	100%	100%	100%	100%
	Dissolved Oxygen (mg/L)	10.0		8.8	8.7	9.5	9.6
	Temperature (°C)	14.0		14.5	14.0	14.5	14.5
	pH	7.5		7.5	8.0	8.1	8.0
	Conductivity (µS/cm)	4110					4120
	Symptoms	1	1	2	2	1,2	1,2
	Loading Density (g/L)	0.50	0.50	0.50	0.50	0.50	0.50
CONTROL	Percent Survival	100%	100%	100%	100%	100%	100%
	Dissolved Oxygen (mg/L)	9.5		8.8	8.7	9.4	9.6
	Temperature (°C)	14.5		14.5	14.0	14.5	14.5
	pH	7.5		7.5	7.5	7.6	7.5
	Conductivity (µS/cm)	50					55
	Symptoms	1	1	1	1	1	1
	Loading Density (g/L)	0.50	0.50	0.50	0.50	0.50	0.50
	Technician	CW	DC	DC	DC	KA	KA

KEY TO SYMPTOMS:

1 = no apparent effect
2 = fish showing signs of stress
3 = loss of equilibrium

TEST FISH STOCK INFORMATION:

Date received:	25 August 2010	
Source:	Miracle Springs Trout Hatchery	
Species:	*Oncorhynchus mykiss* (Rainbow Trout)	
Fork Length:	Mean:	43.5 mm ± 3.8 mm
	Range:	40.0 mm – 49.0 mm
Wet weight:	Mean:	0.75 g ± 0.15 g
	Range:	0.56 g – 0.91 g
Condition Factor (100xWt/length^{3}cm):	0.92	

Acclimation History	
Acclimation temperature:	15.0 to 16.0°CELSIUS
Treatments:	None
Water:	Dechlorinated tap water
Feeding:	Nutra 2000 fry feed
Mortality:	0.46%

RAINBOW TROUT REFERENCE TOXICANT DATA

Stock Arrival Date (y/m/d)	Test Date (y/m/d)	Toxicant	LC50 (mg/L)	95% Confidence Interval
09.04.01	09.04.07	Phenol	9.80	7.87 to 11.99
09.04.07	09.04.20	"	11.40	8.00 to 12.00
09.05.13	09.06.08	"	10.94	8.00 to 12.00
09.05.22	09.06.04	"	8.42	8.00 to 12.00
09.06.10	09.07.13	"	11.40	8.00 to 12.00
09.07.15	09.07.24	"	10.15	8.00 to 12.00
09.07.22	09.08.06	"	11.40	8.00 to 12.00
09.08.05	09.08.20	"	10.21	8.68 to 11.95
09.08.19	09.09.15	"	8.65	7.04 to 10.25
09.09.16	09.10.13	"	10.23	8.00 to 12.00
09.10.06	09.10.27	"	10.17	8.16 to 12.36
09.10.15	09.10.29	"	12.00	8.00 to 18.00
09.11.04	09.11.16	"	14.10	11.86 to 16.57
09.11.17	09.12.04	"	10.60	8.95 to 12.51
09.12.02	09.12.17	"	9.39	8.00 to 12.00
09.12.16	09.12.29	"	9.40	7.94 to 11.03
10.02.04	10.02.22	"	9.80	8.00 to 12.00
10.02.24	10.03.17	"	9.39	8.00 to 12.00
10.03.18	10.03.25	"	12.71	10.69 to 15.00
10.03.25	10.04.07	"	10.43	7.43 to 13.87
10.04.07	10.04.21	"	12.63	12.00 to 18.00
10.04.21	10.05.07	"	10.94	8.00 to 12.00
10.05.23	10.06.02	"	10.23	8.00 to 12.00
10.06.03	10.06.24	"	10.56	8.00 to 12.00
10.07.15	10.07.29	"	11.40	8.00 to 12.00
10.07.21	10.08.09	"	9.39	8.00 to 12.00
10.08.25	10.09.20	"	8.02	6.472 to 9.634
LAB GEOMETRIC MEAN ± 2 standard deviations:				10.97 mg/L ± 3.208
Warning Limits:				7.764 g/L to 14.479 mg/L

CONTROL/DILUTION WATER QUALITY:

Hardness: 18 mg/L

Total Residual Chlorine: 16 µg/L

FILE:ACCESS/1009086.RTT

DATE: 23 September 2010

TO: Brad Thrall
Access Consulting Group
#3 Calcite Business Centre
151 Industrial Road
Whitehorse, Yukon
Y1A 2V3

REPORT ON: RAINBOW TROUT BIOASSAY RESULTS

SAMPLE DESCRIPTION:

IRC Sample ID No.:	1009086
Sample Name:	**BTC** **ALEX-10-BCM-01**
Date collected:	16 September 2010
Date, time received:	17 September 2010; 1250 hrs
Collection Method:	Grab
Amount, Container:	1 x 20 L plastic container
Physical description:	Cloudy, light green liquid
Date, time tested:	17 September 2010; 1450 hrs

RAINBOW TROUT 96 HR RESULTS:
The 96 hour (static) LT_{50} was greater than 96 hours.
0% trout mortality in the undiluted sample.

The LT_{50} is defined as the median lethal time or the time at which there is 50% fish mortality. Results are calculated using the method described by Stephan (Methods for calculating an LC_{50} in: Aquatic Toxicology and Hazard Evaluation, American Society for Testing and Materials, 1977).

The method used for this test was as per the IRC laboratory "Standard Operating Procedure for Rainbow Trout Holding and Testing" RTver5. This procedure follows the "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout" EPS 1/RM/13, Second Edition – December 2000. Test volume was 15 litres with 10 fish in each test vessel. Aeration was by forced air, through airstones at a rate of approximately 6.5 ± 1ml/L/min. The sample was not pH adjusted or filtered prior to testing.

The initial dissolved oxygen level was 9.7 mg/L at 11.5°C, the conductivity was 2280 µS/cm and the initial pH was 8.9. After pre-aerating the sample for 30 minutes and warming to 14.0°C, the dissolved oxygen level was 10.0 mg/L. As the dissolved oxygen level was greater than 70% saturation and less than 100% saturation the test was initiated at this time. The set up technicians were DC and CW

Please call should you have any questions.

IRC Integrated Resource Consultants Inc.

Carolyn Wilson
Laboratory Biologist
b129.1
enclosure

FILE:ACCESS/1009086.RTT

RAW DATA

TEST CONCENTRATION		HOURS 0	1	24	48	72	96
100%	Percent Survival	100%	100%	100%	100%	100%	100%
	Dissolved Oxygen (mg/L)	10.0		8.6	8.6	9.4	9.5
	Temperature (°C)	14.0		14.0	14.0	14.5	14.5
	pH	8.8		7.3	7.3	7.4	7.3
	Conductivity (µS/cm)	2270					2300
	Symptoms	1	1	2	2	2	2
	Loading Density (g/L)	0.50	0.50	0.50	0.50	0.50	0.50
CONTROL	Percent Survival	100%	100%	100%	100%	100%	100%
	Dissolved Oxygen (mg/L)	9.6		8.4	8.4	9.1	9.1
	Temperature (°C)	14.5		14.0	14.0	14.5	14.5
	pH	7.5		7.5	7.6	7.6	7.5
	Conductivity (µS/cm)	51					56
	Symptoms	1	1	1	1	1	1
	Loading Density (g/L)	0.50	0.50	0.50	0.50	0.50	0.50
	Technician	CW	DC	DC	DC	KA	KA

KEY TO SYMPTOMS:

1 = no apparent effect
2 = fish showing signs of stress
3 = loss of equilibrium

TEST FISH STOCK INFORMATION:

Date received:	25 August 2010	
Source:	Miracle Springs Trout Hatchery	
Species:	*Oncorhynchus mykiss* (Rainbow Trout)	
Fork Length:	Mean:	43.9 mm ± 3.5 mm
	Range:	38.0 mm – 48.0 mm
Wet weight:	Mean:	0.76 g ± 0.15 g
	Range:	0.51 g – 0.90 g
Condition Factor (100xWt/length^{3}cm):	0.89	

Acclimation History	
Acclimation temperature:	15.0 to 16.0°CELSIUS
Treatments:	None
Water:	Dechlorinated tap water
Feeding:	Nutra 2000 fry feed
Mortality:	0.46%

RAINBOW TROUT REFERENCE TOXICANT DATA

Stock Arrival Date (y/m/d)	Test Date (y/m/d)	Toxicant	LC50 (mg/L)	95% Confidence Interval
09.04.01	09.04.07	Phenol	9.80	7.87 to 11.99
09.04.07	09.04.20	"	11.40	8.00 to 12.00
09.05.13	09.06.08	"	10.94	8.00 to 12.00
09.05.22	09.06.04	"	8.42	8.00 to 12.00
09.06.10	09.07.13	"	11.40	8.00 to 12.00
09.07.15	09.07.24	"	10.15	8.00 to 12.00
09.07.22	09.08.06	"	11.40	8.00 to 12.00
09.08.05	09.08.20	"	10.21	8.68 to 11.95
09.08.19	09.09.15	"	8.65	7.04 to 10.25
09.09.16	09.10.13	"	10.23	8.00 to 12.00
09.10.06	09.10.27	"	10.17	8.16 to 12.36
09.10.15	09.10.29	"	12.00	8.00 to 18.00
09.11.04	09.11.16	"	14.10	11.86 to 16.57
09.11.17	09.12.04	"	10.60	8.95 to 12.51
09.12.02	09.12.17	"	9.39	8.00 to 12.00
09.12.16	09.12.29	"	9.40	7.94 to 11.03
10.02.04	10.02.22	"	9.80	8.00 to 12.00
10.02.24	10.03.17	"	9.39	8.00 to 12.00
10.03.18	10.03.25	"	12.71	10.69 to 15.00
10.03.25	10.04.07	"	10.43	7.43 to 13.87
10.04.07	10.04.21	"	12.63	12.00 to 18.00
10.04.21	10.05.07	"	10.94	8.00 to 12.00
10.05.23	10.06.02	"	10.23	8.00 to 12.00
10.06.03	10.06.24	"	10.56	8.00 to 12.00
10.07.15	10.07.29	"	11.40	8.00 to 12.00
10.07.21	10.08.09	"	9.39	8.00 to 12.00
10.08.25	10.09.20	"	8.02	6.472 to 9.634
LAB GEOMETRIC MEAN ± 2 standard deviations:				10.97 mg/L ± 3.265
Warning Limits:				7.650 g/L to 14.180 mg/L

CONTROL/DILUTION WATER QUALITY:

Hardness: 18 mg/L

Total Residual Chlorine: 16 µg/L

ALEXCO RESOURCE CORP.

Brewery Creek Mine

Appendix D – Hydrology Data

BC-5 June 14, 2010

Bank	Distance (m)	Depth of Channel (m)	Velocity (m/s)	Section Width (m)	Area (m^2)	Q (m^3/sec)
RHB (m)	1.80					
	1.90	0.26	0.12	0.15	0.039	0.00468
	2.10	0.5	0.17	0.2	0.1	0.017
	2.30	0.52	0.26	0.2	0.104	0.02704
	2.50	0.53	0.28	0.2	0.106	0.02968
	2.70	0.53	0.21	0.15	0.0795	0.016695
	2.80	0.51	0.38	0.1	0.051	0.01938
	2.90	0.5	0.19	0.15	0.075	0.01425
	3.10	0.47	0.23	0.15	0.0705	0.016215
	3.20	0.25	0.25	0.1	0.025	0.00625
	3.30	0.45	0.14	0.15	0.0675	0.00945
	3.50	0.4	0.13	0.25	0.1	0.013
	3.80	0.15	0.11	0.225	0.03375	0.0037125
LHB (m)	3.95					
				Total Discharge =	0.1773525	m^3/sec

BC-31 June 14, 2010

Bank	Distance (m)	Depth of Channel (m)	Velocity (m/s)	Section Width (m)	Area (m^2)	Q (m^3/sec)
LHB (m)	1.40					
	1.70	0.38	0.9	0.3	0.114	0.1026
	2.00	0.39	1.04	0.3	0.117	0.12168
	2.30	0.49	1.15	0.25	0.1225	0.140875
	2.50	0.45	1.17	0.2	0.09	0.1053
	2.70	0.41	0.95	0.25	0.1025	0.097375
	3.00	0.4	1.08	0.3	0.12	0.1296
	3.30	0.36	0.99	0.3	0.108	0.10692
	3.60	0.32	0.96	0.3	0.096	0.09216
	3.90	0.33	0.98	0.3	0.099	0.09702
	4.20	0.29	0.71	0.3	0.087	0.06177
	4.50	0.28	0.62	0.3	0.084	0.05208
	4.80	0.28	0.68	0.3	0.084	0.05712
	5.10	0.27	0.45	0.3	0.081	0.03645
	5.40	0.25	0.51	0.35	0.0875	0.044625
	5.80	0.16	0.1	0.35	0.056	0.0056
RHB (m)	6.10					
				Total Discharge =	1.251175	m^3/sec

BC-34 June 14, 2010

Bank	Distance (m)	Depth of Channel (m)	Velocity (m/s)	Section Width (m)	Area (m^2)	Q (m^3/sec)
LHB (m)	3.20					
	3.40	0.06	0.11	0.5	0.03	0.0033
	4.20	0.22	0.6	0.8	0.176	0.1056
	5.00	0.27	0.84	0.8	0.216	0.18144
	5.80	0.36	0.67	0.8	0.288	0.19296
	6.60	0.36	1.37	0.8	0.288	0.39456
	7.40	0.45	1.49	0.8	0.36	0.5364
	8.20	0.42	1.44	0.8	0.336	0.48384
	9.00	0.45	1.25	0.8	0.36	0.45
	9.80	0.39	1.14	0.8	0.312	0.35568
	10.60	0.44	0.8	0.8	0.352	0.2816
	11.40	0.48	1.06	0.8	0.384	0.40704
	12.20	0.5	1.19	0.8	0.4	0.476
	13.00	0.47	1.13	0.8	0.376	0.42488
	13.80	0.23	0.51	0.65	0.1495	0.076245
RHB (m)	14.30					
				Total Discharge =	4.369545	m^3/sec

BC-34 August 31, 2010 (17:12) (AA Meter)

Bank	Distance (m)	Depth of Channel (m)	Depth of Measurement (m)	Revs	Time (s)	Velocity (m/s)	Section Width (m)	Area (m^2)	Q (m^3/sec)
RHB (m)	1.60								
	2.00	0.04	0.02	6.75	30	0.16025	0.7	0.028	0.004487
	3.00	0.18	0.11	31	30	0.721233333	1	0.18	0.129822
	4.00	0.22	0.13	37	30	0.860033333	1	0.22	0.189207333
	5.00	0.29	0.17	51	30	1.1839	1	0.29	0.343331
	6.00	0.32	0.19	52	30	1.207033333	1	0.32	0.386250667
	7.00	0.32	0.19	60	30	1.3921	1	0.32	0.445472
	8.00	0.28	0.17	47	30	1.091366667	1	0.28	0.305582667
	9.00	0.33	0.20	40	30	0.929433333	1	0.33	0.306713
	10.00	0.39	0.23	37	30	0.860033333	1	0.39	0.335413
	11.00	0.4	0.24	22	30	0.513033333	1	0.4	0.205213333
	12.00	0.1	0.06	8.5	30	0.200733333	0.7	0.07	0.014051333
LHB (m)	12.40								
							Total Discharge =	2.665543333	m^3/sec

BC-37 September 1, 2010 (13:15) (AA Meter)

Bank	Distance (m)	Depth of Channel (m)	Depth of Measurement (m)	Revs	Time (s)	Velocity (m/s)	Section Width (m)	Area (m^2)	Q (m^3/sec)
RHB (m)	0.60								
	0.80	0.08	0.05	0	30	0.0041	0.3	0.024	0.0000984
	1.20	0.16	0.10	4	30	0.096633333	0.35	0.056	0.005411467
	1.50	0.27	0.16	4	30	0.096633333	0.3	0.081	0.0078273
	1.80	0.41	0.25	5.5	30	0.131333333	0.3	0.123	0.016154
	2.10	0.33	0.20	3.75	30	0.09085	0.3	0.099	0.00899415
	2.40	0.18	0.11	14.25	30	0.33375	0.3	0.054	0.0180225
	2.70	0.16	0.10	16	30	0.374233333	0.3	0.048	0.0179632
	3.00	0.16	0.10	13.5	30	0.3164	0.3	0.048	0.0151872
	3.30	0.16	0.10	6.75	30	0.16025	0.3	0.048	0.007692
	3.60	0.11	0.07	3.5	30	0.085066667	0.275	0.03025	0.002573267
	3.85	0.12	0.07	0	30	0.0041	0.2	0.024	0.0000984
LHB (m)	4.00								
							Total Discharge =	0.100021883	m^3/sec

BC-31 September 2, 2010 (12:15) (AA Meter)

Bank	Distance (m)	Depth of Channel (m)	Depth of Measurement (m)	Revs	Time (s)	Velocity (m/s)	Section Width (m)	Area (m^2)	Q (m^3/sec)
RHB (m)	0.90								
	1.10	0.44	0.26	26	30	0.605566667	0.3	0.132	0.0799348
	1.50	0.45	0.27	27	30	0.6287	0.4	0.18	0.113166
	1.90	0.5	0.30	22	30	0.513033333	0.4	0.2	0.102606667
	2.30	0.44	0.26	31	30	0.721233333	0.4	0.176	0.126937067
	2.70	0.4	0.24	29	30	0.674966667	0.4	0.16	0.107994667
	3.10	0.38	0.23	26	30	0.605566667	0.4	0.152	0.092046133
	3.50	0.35	0.21	26	30	0.605566667	0.4	0.14	0.084779333
	3.90	0.32	0.19	22	30	0.513033333	0.4	0.128	0.065668267
	4.30	0.33	0.20	18.5	30	0.432066667	0.4	0.132	0.0570328
	4.70	0.31	0.19	11.5	30	0.270133333	0.4	0.124	0.033496533
	5.10	0.22	0.13	12.25	30	0.287483333	0.3	0.066	0.0189739
LHB (m)	5.30								
							Total Discharge =	0.882636167	m^3/sec

BC-3 September 1, 2010 (10:30) (Pygmy Meter)

Bank	Distance (m)	Depth of Channel (m)	Depth of Measurement (m)	Revs	Time (s)	Velocity (m/s)	Section Width (m)	Area (m^2)	Q (m^3/sec)
LHB (m)	1.30								
	1.38	0.29	0.17	50	30	0.4994	0.08	0.0232	0.01158608
	1.46	0.28	0.17	56	30	0.55826	0.08	0.0224	0.012505024
	1.54	0.26	0.16	57	30	0.56807	0.08	0.0208	0.011815856
	1.62	0.27	0.16	55	30	0.54845	0.08	0.0216	0.01184652
	1.70	0.24	0.14	55	30	0.54845	0.08	0.0192	0.01053024
	1.78	0.23	0.14	51	30	0.50921	0.08	0.0184	0.009369464
	1.86	0.22	0.13	46	35	0.395694286	0.08	0.0176	0.006964219
	1.94	0.1	0.06	42	30	0.42092	0.08	0.008	0.00336736
	2.02	0.05	0.03	26	30	0.26396	0.08	0.004	0.00105584
RHB (m)	2.10								
								Total Discharge =	0.079040603 m^3/sec

BC-5 September 1, 2010 (13:15) (Pygmy Meter)

Bank	Distance (m)	Depth of Channel (m)	Depth of Measurement (m)	Revs	Time (s)	Velocity (m/s)	Section Width (m)	Area (m^2)	Q (m^3/sec)
LHB (m)	0.50								
	0.60	0.12	0.07	4	30	0.04814	0.15	0.018	0.00086652
	0.80	0.12	0.07	31	30	0.31301	0.2	0.024	0.00751224
	1.00	0.12	0.07	34	30	0.34244	0.2	0.024	0.00821856
	1.20	0.16	0.10	34	30	0.34244	0.2	0.032	0.01095808
	1.40	0.2	0.12	38	30	0.38168	0.2	0.04	0.0152672
	1.60	0.22	0.13	39	30	0.39149	0.2	0.044	0.01722556
	1.80	0.26	0.16	31	30	0.31301	0.2	0.052	0.01627652
	2.00	0.31	0.19	32	30	0.32282	0.2	0.062	0.02001484
	2.20	0.36	0.22	32	30	0.32282	0.2	0.072	0.02324304
	2.40	0.4	0.24	28	30	0.28358	0.175	0.07	0.0198506
RHB (m)	2.55								
								Total Discharge =	0.13943316 m^3/sec

ALEXCO RESOURCE CORP.

Brewery Creek Mine

Appendix E – Brewery Creek Geotechnical Inspection Memo

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Memo

To:	Brad Thrall	**Date:**	November 16, 2010
cc:	Daryl Hockley	**From:**	Peter Mikes, P.Eng.
Subject:	Brewery Creek Geotechnical Inspection, August 2010	**Project #:**	1CA009.004

The undersigned visited the Brewery Creek mine site on September 30, 2010 to complete a geotechnical inspection of the reclamation works. The site tour was completed with the guidance of Jeff Stephenson, the site caretaker. Photographs from the site visit have been appended to this report. The attached Figure 1 notes the approximate location of each photo.

The previous SRK site visit was completed in September 2008 by Daryl Hockley. The focus of earlier annual geotechnical inspections reports has been on the followings earth structures:

- Ore on Pad
- Leach pad containment dyke
- Process Ponds
- External waste dumps
- Water retaining structures

This approach has been followed for the organization of the following sections. However, the water-retaining structures (Canadian Pit east siltation structure) was not inspected during the site visits as no issues have been raised from past inspections.

Ore on Pad

No ore has been added to the Brewery Creek leaching pad since mining ceased in September 2000. Cyanide addition to the ore ceased in January 2002. All cells have been regraded, covered and revegetated.

The September 2004 inspection noted no signs of instability or distress. The inspection recommended the inspection of the heap leach was not required as part of the annual geotechnical inspection. As such, the area was inspected only briefly, with no signs of instability or distress observed.

Leach Pad Containment Dyke

Only the western portion of the leach pad containment dike was inspected during the site visit. It was observed to be in good condition, with no signs of settlement, erosion or displacement. Since the last SRK site visit, the construction of a breach and additional ditching was completed between the heap leach pad and the former Pregnant Pond (Photos 24-28). The breach consists of a rip-rap lined channel approximately 5m wide at the site of the former Emergency Spillway.

Photo 26 notes cracks present at the outside crest of the dyke, immediately north of the beach, and above the former Pregnant Pond area. As the dyke has been breached, there is no significant consequence of further cracking or sloughing of the slope and no further action is recommended.

Process Ponds

At the time of inspection the Process Ponds were still retaining water with rip-rapped outfalls located at the south end of the Overflow Pond and at the north end of the former Pregnant Pond. The crest of the berm around the process ponds were inspected during the site visit. Previous investigation reports noted minor settlement cracks in the berm of the upper pond. No cracks were observed during this site visit, but as the exact location of the cracks was not known, their status is uncertain.

Since the last site inspection by SRK the final re-grading of the pond area was completed, with liners removed and /or partially buried, with the exception of some scrap liner panels laid out on the west side of the Overflow Pond.

External Dumps

Canadian and Blue Dumps

Both the Canadian and Blue Dumps have been regraded and covered, with healthy grass vegetation throughout. During the site visit, the toe of the Blue dump was inspected. Rip-rap was placed at the outfall of the surface runoff drainage ditch that runs along the toe of the dump. Photographs of this area are shown in Photos 2 to 8 in Appendix 1.

Gullies are present at the base of the dump just above the access road that runs along the toe of the Blue Dump. Most gullies are showing signs of infilling and/or vegetation growth militating against future propagation of the gully.

In the ditch outlet area, the channel makes an approximate 120 degree turn before being released into an area of treed vegetation. Rip-rap was placed along the outside bank in this area in two locations approximately 10m apart to direct flow around the corner. The rip-rap has an average diameter of approximately 20 cm was placed in a 30cm layer over lengths 15m and 5m. No rip-rap was placed at the base of the channel or further upstream where signs of erosion are present (Photo 8).

As rip-rap placement is not continuous, it is recommended that this area should continue to be monitored after each freshet to determine if any further remedial works/rip-rap placement is required.

The overflow outfall from the Blue Pit was also lined with rip-rap in 2009 (Photos 9-12). Rip-rap across the former access road has approximate dimensions of 12 m with and 0.3 m thick. On the downstream bank of the outfall, rip-rap was placed to fill a previously eroded area.

Possible sinkhole cracking was observed across the main haul road just west of the Pacific Pit overflow (Photos 22-23) north of the Blue Dump. The holes were first observed onsite about 1 year ago. At this location, two cracks approximately 2m apart are orientated across the haul road. At the widest, a hole in the east crack measures approximately 15cm. It is possible that this movement may be caused groundwater flow from the Pacific Pit washing away fines. A risk of a slope failure this location is low there would be no significant consequences. It is recommended that this are should be monitored after each freshet (after water levels in the Pacific Pit have fallen).

Lucky Dump

Movement of the Lucky Haul Road was noted in the 2003 inspection, and Viceroy undertook a program to stabilize the affected area in 2004. The program consisted of removing waste from the crest of the road in the area where cracks were noted. Approximately 8,000 m^3 of material was reportedly moved and redistributed to the west of the area of concern.

Since that time, photo hub stations have been established at each location and for photographs have been taken by Access Consulting on a monthly basis for the past year. Photographs from the stations taken during the site inspection were compared to past photographs taken during site visits by SRK.

Slope movement has been observed in two locations below the Lucky Haul Road. These areas are noted in photos 14 to 19 in the attached appendix. Comparisons to previous photographs taken by SRK found it difficult to determine if there have been any changes to the slope. This was due to the recent snowfall and the large distance from the hub to and slopes. The larger western location (photos 14-15) was also difficult to inspect with the snow and vegetation making inspection for cracking impractical.

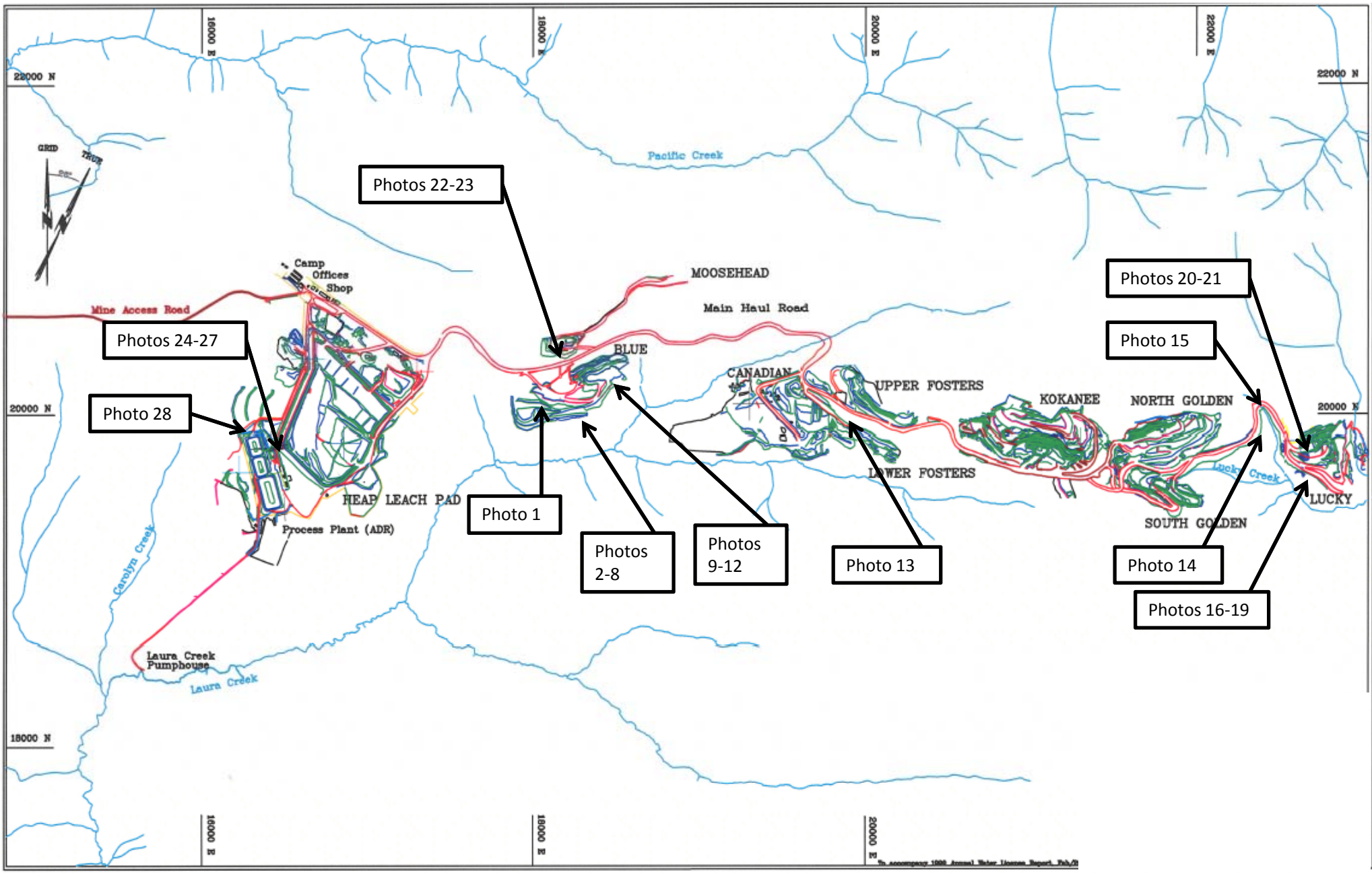
The second location (photos 16-19) is located between the Lucky Haul Road and the Bohemian Access Trail. The scarp in this area is up to 1 m in height. No sign of ground movement was observed near the base of the slope. The slope appeared to be steeper at its base compared to the top, but due to unfamiliarity with the site, it was not possible to determine if bulging was occurring.

Photos 20 to 21 are taken of the sinkhole area on the Lucky dump where differential settlement has occurred. No signs of imminent failure or significant distress were observed. Due to recent snowfall and vegetation, inspection of ground conditions in this area was difficult. The sinkhole, measuring 1m by 1m on the surface was filled with rock in 2009, but was said to be approximately 2m deep.

Conclusions and Recommendations

The September 2010 geotechnical inspection found no signs of imminent failure or significant distress in any of the earth structures that were examined. Similar to the conclusions of the 2008 inspection, tension cracks in the berm near the Heap Leach Dyke, and tension cracks and sinkholes in the Lucky Dump and Lucky Haul Road areas are still worthy of further monitoring.

Consideration should be given to the establishment of settlement pins at the slope failure locations near the Lucky Haul Road. Expanding on the monitoring program consisting of a collection of a photographic record, field measurements may then be taken to track the distance between the pins versus time, observing for any change in movement. Monitoring should be completed over a period of two years. Three pins are recommended at each location, placed in a triangular shape to be able to measure movement in multiple directions.



SRK Consulting
Engineers and Scientists
VANCOUVER

ALEXCO

Photograph Locations

Job No: 1CS019.012.002
Filename: BCPhotoLocationFigure1.ppt

Brewery Creek – 2010 Geotech. Inspection

Date: Nov. 2010
Approved:
Figure: 1

Photo 1: View of vegetative growth on the Blue Dump looking west.

Photo 2: View of gullies at the toe of the Blue Dump. Vegetative growth is occurring within the rills indicating the gullies are stabilizing.

Photo 3: View of the toe of the Blue Dump looking east.

Photo 4: Rip-rap placed in 2009 near the outlet of the surface runoff collection ditch at the toe of the Blue Dump (1 of 2 locations). The outside bank was armoured for approx. 15m with a 30 cm thick layer with an average diameter of approx. 20cm.

Photo 5: View of outfall looking downstream (south). Runoff is directed into the trees. No signs of erosion were visible downstream of the outfall.

Photo 6: View looking upstream from 1st rip-rap location to the 2nd location approx 10m away. Photo taken from near the same location as Photo 5.

Photo 7: View of rip-rap placement on the outside bank of the surface collection ditch.

Photo 8: View of the eroded runoff collection ditch upstream of the 2nd rip-rap location.

Photo 9: View of the former road leading down to the Blue Pit outfall (looking east).

Photo 10: View of rip-rap placement at the Blue Pit outfall placed in 2009.

Photo 11: View looking the bank from the Blue Pit outfall.

Photo 12: View looking up the bank of the outfall towards the Blue Pit.

Photo 13: View of the Canadian and Blue Dumps taken from the Main Haul Road.

Photo 14: Taken from “Photo Hub #1”, view of the slope instability below the Lucky Dump haul road.

Photo 15: View of the slope instability below the Lucky Dump haul road taken from just east of the haul road crossing of Lucky Creek. Due to the snowfall/excessive vegetation, an inspection for tension cracks or recent ground movements could not be completed.

Photo 16: View of the second failure location by the Lucky Dump haul road above the Bohemian Access Trail, taken from “Photo Hub #4”.

Photo 17: View of the scarp at the second failure location. The scarps are up to 1 m in height.

Photo 18: Second view of the scarp at the second failure location.

Photo 19: View of the slope above the Bohemian Access Trail.

Photo 20: View of the "saddle area" of the Lucky WRSA where large differential settlements have occurred. Differential Settlement of approximately 0.5 m has occurred in the snowy area near the center of the photograph.

Photo 21: View of the sinkhole location in the 'saddle area' of the Lucky WRSA. The sinkhole has been filled with rock, measures 1m by 1m at surface and is said to have been approximately 2m deep.

Photo 22: View of the Main Haul Road looking west towards the Pacific Pit overflow location.

Photo 23: View of possible sinkhole cracking across the access road approx. 10m east of the Pacific Pit overflow. Photo taken looking towards the north side of the road.

Photo 24: View of breach completed in 2009 of the heap leach pad dyke at the former emergency spillway location.

Photo 25: View of the rip-rap lined channel below the breach leading to the former Pregnant Pond.

Photo 26: View of Tension cracks by the heap leach dyke near the breach location.

Photo 27: View of the heap leach breach leading into the former Pregnant Pond.

Photo 28: View of the overflow channel on the west side of the former Pregnant Pond to the south.