Cumberland Gap National Historic Site Stream Monitoring Program

Report on Conditions

July 1991 through December 1992

Prepared by:

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1. Introduction - purpose and scope

The following report contains all water and sediment data collected by CUGA during the period of July 1, 1991 to December 31, 1992. The background for the CUGA stream monitoring program is provided and the area of the data collection sites is described. An assessment of the water and sediment quality and trends is provided as well as an explanation of factors that may be influencing the quality. A brief discussion on the quality of the data is included.

2. Site Description

In 1940, Cumberland Gap National Historical Park was established as a public park in order to preserve the historic value of the area that includes Cumberland Gap and the Wilderness Road passing through the Gap. Wilderness Road was one of the first pathways through the Appalachian Mountains during the time of westward expansion and was made famous by frontiersmen like Daniel Boone (Restoration of Cumberland Gap and the Wilderness Road, 1990).

2.1 Size and location

Cumberland Gap National Historical Park is located in the southeastern part of Kentucky and overlaps into both Virginia and Tennessee. Containing 20,271 acres of land, Cumberland Gap is the nation's second largest historical park. Accessible by US 58 from the east and by US 25E, the park is fairly remote from large population centers such as Lexington, Kentucky or Knoxville, Tennessee (Restoration of Cumberland Gap and the Wilderness Road, 1990).

2.2 Topography and geology

The historical park is located in the Cumberland Mountains that travel northeast to southwest and are approximately 150 miles long and 25 miles wide (Krakow, 1987). Cumberland Gap was originally cut by a stream that was later diverted northward to the Cumberland River. Wind and weather continued to enlarge the Gap and today the Gap is approximately 500 feet deep and ranges in width from 0.3 mile at its narrowest point

along the Virginia-Kentucky line to 0.6 mile near the town of Cumberland Gap (Restoration of Cumberland Gap and the Wilderness Road, 1990).

Nearly vertical mountainsides have been created in places due to a differential erosion pattern. Dropping from a steep ridge at an elevation of 2,500 feet, the southern slopes of Cumberland Mountain to the northeast of the Gap possess the bedding predominant in the geology of the area. Highway 25E travels across primarily shales but an extensive outcrop of limestone lies just about the road and runs from the entrance of Cudjo Caverns to the saddle of the Gap. To the northwest, the mountain slopes off gently and ends in valleys 1,300 feet below (Restoration of Cumberland Gap and the Wilderness Road, 1990).

Around the US 25E and US 58 intersection is a well drained Jefferson class of stony fine sandy loam containing numerous large sandstone rocks ranging from 3 to 10 inches in diameter. Motevallo shaly silt loam soils can be found about 500 feet west along US 25E. The shallow depth of these soils (roughly 15 inches) coupled with the steep slope contribute to a very erodable condition. The remaining distance to the saddle of the Gap is rough and stony limestone with limestone outcrops covering 35 to 90 percent of the surface. The west side of the Gap contains very stony and loamy soils of the Jefferson Variant. The sandstone bedrock can be covered by a few inches or more than 60 inches of soil (Restoration of Cumberland Gap and the Wilderness Road, 1990).

2.3 Land use

The mineral resources of the Cumberland Gap region are of little commercial value. Coal, oil, and gas have not been found in the quantity and quality that would encourage mining. The US. Department of Agriculture, Soil Conservation Service (SCS) has determined that the most feasible use for much of the soil is for forest and no soils in the area have been classified as prime or unique farmlands. One area that parallels Davis Branch contains Pope sandy loam soils that are well-drained and usually deeper than 60 inches and would make fair cropland and pasture use (Restoration of Cumberland Gap

and the Wilderness Road, 1990). However, due to the great natural beauty, historical significance, and physical charm of the Gap region, it is the ideal park site.

2.4 Climate

Cumberland Gap has a moderate climate with the average yearly temperature at Middlesboro, Kentucky of 59.9°F. The monthly temperature averages range from 38.1°F in January to 75.5°F in July. Precipitation is fairly well distributed through the year with an average annual 50 inches. Monthly averages range from 2.64 inches in October to 5.20 inches in March. Three to six times a year the Cumberland Gap will receive a covering of 3 to 6 inches of snow. Mid-April to mid-October mark the freeze-free period lasting about 180 days (Restoration of Cumberland Gap and the Wilderness Road, 1990). Figures 1 and 2 illustrate temperature and precipitation, respectively, for the Cumberland Gap area during the period covered by this report.

2.5 Surface-water hydrology

Gap Creek originates in Cudjo Caverns, flows under US 25E, through the towns of Cumberland Gap, Kentucky and Tiprell, Tennessee and then into the Powell River, 10 miles south. On the west side of the Gap, Davis Branch flows south, draining a complete watershed within the park before flowing into the Yellow Creek on the east side of Middlesboro, Kentucky (Restoration of Cumberland Gap and the Wilderness Road, 1990).

2.6 Water use

The blackside dace, a federally listed threatened species, inhabits Davis Branch. Because of the threatened fish, good water quality is important for this stream. Gap Creek, on the other hand, is used for human consumption. The water rights at the mouth of Cudjo Caverns are owned by Lincoln Memorial University who pumps the water to the LMU campus in Harrogate, Tennessee and sells water to the town of Cumberland Gap (Restoration of Cumberland Gap and the Wilderness Road, 1990).

Figure 1: Monthly Average Air Temperature for Cumberland Gap Area

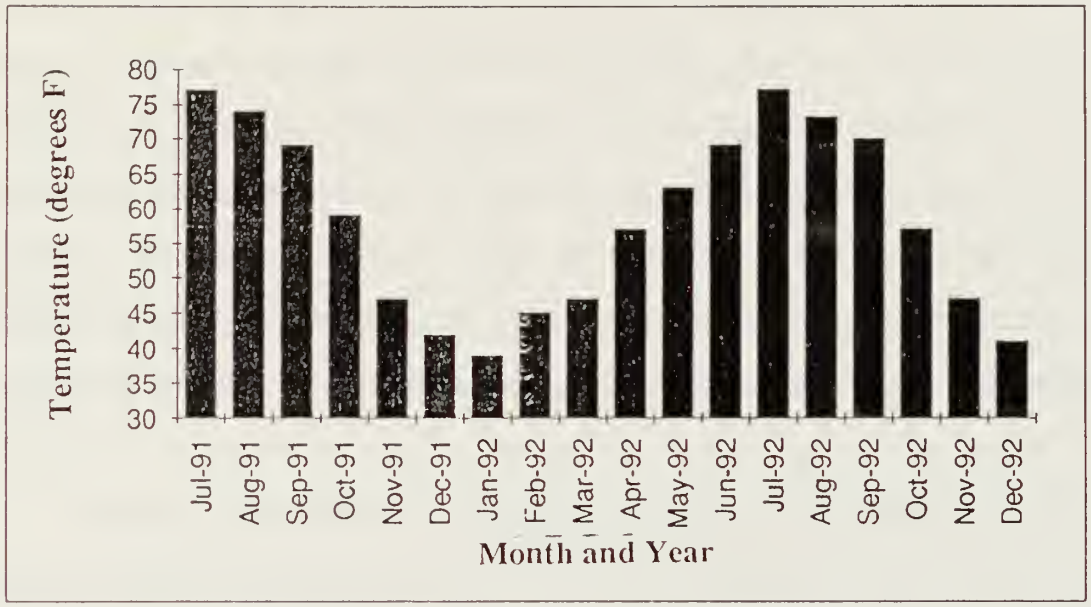
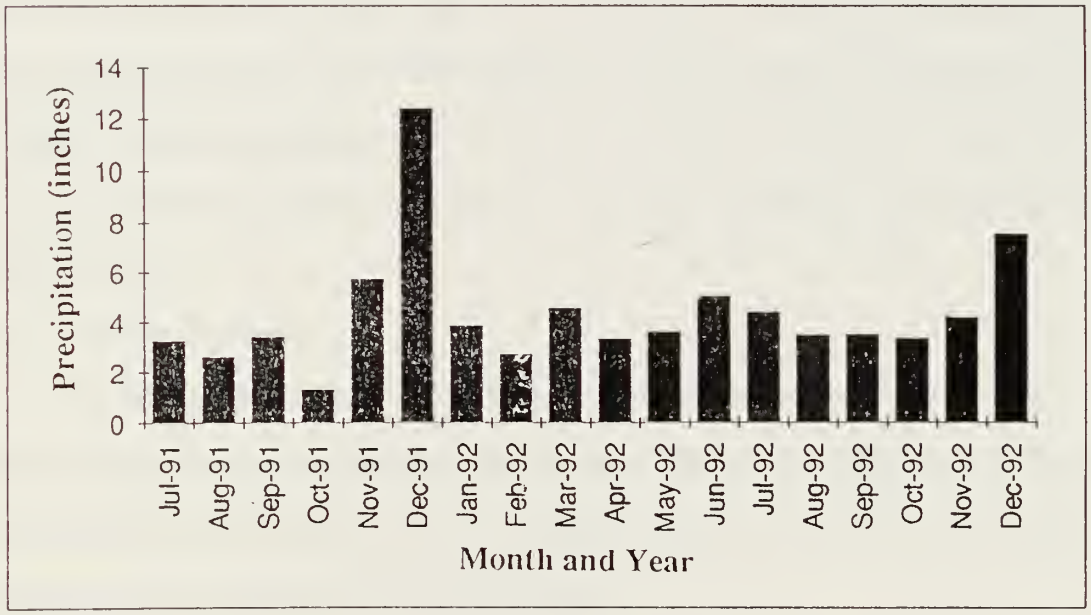


Figure 2: Monthly Precipitation for Cumberland Gap Area



2.7 Tunnel and highway construction project

The path that U.S. Highway 25E takes through the park interferes with the historical Wilderness Road. Therefore, a new highway is being built to the south of the original, away from the Gap, so that the Wilderness Road can be restored to appear as it did during the American western expansion. The new highway will include two tunnels through Cumberland Mountain . The twin tunnels will be slightly less than one mile in length and shall each carry two lanes of traffic (Plummer, 1989). The material removed from the tunnels is mostly sandstone, shale, and limestone and should be available for use as fill material within the park (Restoration of Cumberland Gap and the Wilderness Road, 1990).

The new construction for the highway and the tunnels can possibly have a negative impact on the surface streams of the area. Little Yellow Creek, for example, receives 350 gpm of water discharge from the tunnel construction. Two permits are required by Kentucky for this surface discharge including a water withdrawal permit and a Kentucky Pollutant Discharge Elimination System (KPDES) permit. The first requires daily monitoring of water (gpd) and the second requires bi-monthly measurement of flow, total suspended sediment, total iron, oil/grease, and pH. A water monitoring program is in effect to ensure compliance with the state and federal regulations and to maintain the quality of water in Cumberland Gap and the surrounding areas (Nodvin and Rhodes, March 1993).

3. Quality Criteria

Collecting data on stream and sediment properties and chemical constituents is a futile exercise unless the data can be compared to a list of acceptable levels for human health, recreation, and aquatic life. This report compares the collected data to both Federal and State adopted criteria and standards.

3.1 State and federal water quality criteria and standards

The Federal government sets water-quality criteria for freshwater aquatic life as well as standards for drinking water. The criteria are provided as a guide to the known effects of the constituents but are not legally enforceable. Table 1 provides a partial listing of Federal water-quality criteria for freshwater aquatic life. Criteria in this table are divided into acute toxicity and chronic toxicity. Acute toxicity is the short-term concentration that will probably cause unacceptable effects in the biota, often resulting in organism death. Chronic toxicity is the long-term concentration that will probably cause unacceptable effects on the biota, including bioaccumulation and reduction in population viability (Smoot and others, 1991).

On the other hand, standards are developed through rule making agencies at the state and federal level. A listing of selected Federal drinking-water standards is given in Table 2. The maximum contaminant level goal (MCLG) is set with an adequate margin of safety for human health at a level of no known or anticipated adverse effects. Since this goal is not always obtainable, the maximum contaminant level (MCL) is set as close to the MCLG as is feasible. The secondary maximum contaminant level (SMCL) is a drinking water goal set as a guideline for the states. Only the MCL is an enforceable standard (Smoot and others, 1991).

States use the Federal guidelines to develop their own criteria for surface water-quality. Tables 3 and 4 provide a list of selected Kentucky and Tennessee surface water-quality criteria respectively. These minimum criteria are set to protect human health and welfare as well as to protect and enhance the quality of water.

All measured properties and constituents from the Cumberland Gap streams were compared to federal and state water quality criteria and standards. Significant findings are discussed.

Table 1: Selected Federal Water Quality Criteria for Freshwater Aquatic Life[1]

Constituent or Property	Aquatic life acute[2]	Aquatic life chronic[3]
Alkalinity (mg/L as $CaCO_3$)		> 20
Ammonia, total (mg/L)	Criteria pH and temperature dependent	
Arsenic, total trivalent (ug/L as As)	360	190
Cadmium, total (ug/L as Cd)	3.9*	1.1*
Chromium, total (ug/L as Cr)		
Chromium, hexavalent	16	11
Chromium, trivalent	1,700*	210*
Copper, total (ug/L as Cu)	18*	12*
Cyanide, total (mg/L as Cn)	0.022	0.0052
Dissolved oxygen (mg/L)	> 3.0 - 4.0	> 5.5
Iron, total (ug/L as Fe)		1,000
Lead, total (ug/L as Pb)	82*	3.2*
Mercury, total (ug/L as Hg)	2.4	0.012
Nickel, total (ug/L as Ni)	1,800*	96*
pH (standard units)		6.5 - 9.0
Temperature (degrees Celsius)	Species dependent criteria	
Zinc, total (ug/L as Zn)	320*	47

[1] [Smoot and others, 1991]

[2] Highest 1-hour average concentration that should not cause unacceptable toxicity to aquatic organisms during short-term exposure.

[3] Highest 4-day average concentration that should not cause unacceptable toxicity to aquatic organisms during long-term exposure.

* Hardness level of 100 mg/L used to calculate criteria.

Table 2: Selected Federal Drinking Water Standards[1]

Constituent or Property	MCL	MCLG	PMCL	PMCLG	SMCL
Arsenic, total (ug/L as As)	50			50	
Barium, total (ug/L as Ba)	1,000			1,500	
Cadmium, total (ug/L as Cd)	10			5	
Chloride, dissolved (mg/L as Cl)					250
Chromium, total (ug/L as Cr)	50			120	
Copper, total (ug/L as Cu)			1,300	1,300	1,000
Dissolved solids, total (mg/L)					500
Fluoride, dissolved (mg/L as F)	4	4			2
Iron, total (ug/L as Fe)					300
Lead, total (ug/L as Pb)	50		5	0	
Manganese, total (ug/L as Mn)					50
Mercury, total (ug/L as Hg)	2			3	
Nitrogen, total nitrate (mg/L)	10			10	
Nitrite, total nitrite (mg/L)				1	
pH (standard units)					6.5 - 8.5
Sulfate, dissolved (mg/L as SO_4)					250
Zinc, total (ug/L as Zn)					5,000

[1][Smoot and others, 1991]

MCL - Maximum Contaminant Level
MCLG - Maximum Contaminant Level Goal
SMCL - Secondary MCL
PMCL - Proposed MCL
PMCLG - Proposed MCLG

Table 3: Selected Kentucky Surface Water Quality Criteria[1]

Constituent or Property	Domestic water supply	Warmwater aquatic habitat [2]	Coldwater aquatic habitat	Recreational waters
Ammonia, total un-ionized (mg/L)		0.05		
Arsenic, total (ug/L as As)		50		
Barium, total (ug/L as Ba)	1000			
Beryllium, total (ug/L as Be)		11 (soft)		
		1,100 (hard)		
Cadmium, total (ug/L as Cd)		4 (soft)		
		12 (hard)		
Chloride, dissolved (mg/L as Cl)	250	600		
Chromium, total (ug/L as Cr)	50	100		
Copper, total (ug/L as Cr)	1000			
Cyanide, total (ug/L as Cn)		5		
Dissolved oxygen (mg/L)		< 4	< 5	
Dissolved solids, total (mg/L)	750			
Fecal coliform bacteria (colonies/100 mL)	2,000			200*
				1,000**
Fluoride, dissolved (mg/L as F)	1			
Iron, total (ug/L as Fe)		1,000		
Lead, total (ug/L as Pb)	50			
Manganese, total (ug/L as Mn)	50			
Mercury, total (ug/L as Hg)		0.2		
Nitrogen, total nitrate (mg/L as N)	10			
pH (standard units)		6.0 - 9.0		6.0 - 9.0*
Selenium, total (ug/L as Se)	10			
Silver, total (ug/L as Ag)	50			
Sulfate, dissolved (mg/L as SO_4)	250			
Temperature (degrees Celsius)		< 31.7	***	
Zinc, total (ug/L as Zn)		47		

[1] [Smoot and others, 1991]

[2] warmwater aquatic habitat criteria apply where none established for coldwater aquatic habitat.

* primary contact recreation

** secondary contact recreation

*** not to exceed natural seasonal variations

(soft) water has an equivalent concentration of calcium carbonate of 0 to 75 milligrams per liter

(hard) water has an equivalent concentration of calcium carbonate of over 75 milligrams per liter

Table 4: Selected Tennessee Surface Water Quality Criteria[1]

Constituent or Property	Domestic water supply	Freshwater fish and aquatic life Maximum Concentration	Continuous Concentration	Recreation
Arsenic, total (ug/L)	50	360	190	
Arsenic (III) (ug/L)				
Cadmium (ug/L) **	10	4*	1*	
Chromium, total (ug/L)	50		100	
Copper (ug/L) **		18*	12*	
Dissolved oxygen (mg/L)			> 5.0	
Lead (ug/L) **	50	82*	3*	
Mercury (ug/L)	2	2.4	0.012	0.2
Nickel (ug/L) **		1400	160	10
pH (standard units)			6.5 - 8.5	6.0 - 9.0
Temperature (degrees Celsius)			< 30.5	< 30.5
Zinc (ug/L) **		117*	106*	1

[1] [Rules of Tennessee Department of Environment and Conservation, 1991]

* Dissolved

** Expressed as a function of total hardness of 100 mg/L.

3.2 Stream sediment quality criteria

Neither State nor Federal guidelines exist for stream sediment constituents and properties that may negatively impact the water quality and aquatic life. As in previous reports, "Guidelines for the Pollution classification of Great Lakes harbor sediments" (U.S. EPA, 1977) will be used for a qualitative discussion of the stream sediment data. Table 5 provides these guidelines.

4. Selection of constituents and properties for analysis

Standard suites of analyses are provided by many contract laboratories that use the inductively coupled plasma analysis (ICP) and the directly coupled plasma (DCP) machines that can simultaneously analyze for a dozen or more elements. However, the results produced are not necessarily useful to the goals of a monitoring program. In fact, extraneous data can be detrimental since there are additional costs involved in maintaining the database.

The data being collected for the Cumberland Gap stream monitoring program includes over 50 field and laboratory measurements. This report will assess the need for these measurements and provide suggestions on constituents that can be discontinued.

4.1 Basis for selection

Table 6 lists the properties and constituents that are currently being analyzed and compares them to the Federal and State level criteria. If a constituent is not included in the Federal or Kentucky or Tennessee water-quality criteria, then it may be possible to drop this element from the stream monitoring program. From this comparison, it appears that cobalt, germanium, lithium, silicon, and strontium do not provide helpful information.

Other properties and constituents that do not appear on the criteria lists and yet are still useful include acidity, carbonate and bicarbonate, Eh, flow rate, potassium, total organic carbon, and turbulence. Flow rate and turbidity help to explain the condition of the stream when the data was collected. For example, a high flow rate and a high

Table 5: Guidelines for the Pollutional Classification of Great Lakes Harbor Sediments Established by the U.S. Environmental Protection Agency, Region V. (1977)

Parameter	Nonpolluted	Moderately Polluted	Heavily Polluted
Volatile Solids (%)	< 5	5 - 8	> 8
COD (mg/kg dry weight)	< 40,000	50,000 - 80,000	> 80,000
TKN (mg/kg dry weight)	< 1,000	1,000 - 2,000	> 2,000
Oil and Grease (Hexane solubles, mg/kg dry weight)	< 1,000	1,000 - 2,000	> 2,000
Lead (mg/kg dry weight)	< 40	40 - 60	> 60
Zinc (mg/kg dry weight)	< 90	90 - 200	> 200
Ammonia (mg/kg dry weight)	< 75	75 - 200	> 200
Cyanide (mg/kg dry weight)	< 0.10	0.10 - 0.25	> 0.25
Phosphorous (mg/kg dry weight)	< 420	420 - 650	> 650
Iron (mg/kg dry weight)	< 17,000	17,000 - 25,000	> 25,000
Nickel (mg/kg dry weight)	< 20	20 - 50	> 50
Manganese (mg/kg dry weight)	< 300	300 - 500	> 500
Arsenic (mg/kg dry weight)	< 3	3 - 8	> 8
Cadmium (mg/kg dry weight)	*	*	> 6
Chromium (mg/kg dry weight)	< 25	25 - 75	> 75
Barium (mg/kg dry weight)	< 20	20 - 60	> 60
Copper (mg/kg dry weight)	< 25	25 - 50	> 75
Mercury (mg/kg dry weight)	*	1.0	> 1.0
Total PCBs (mg/kg dry weight)	*	10.0	> 10.0

* Lower limits not established

Table 6: Selection of Physical Properties and Constituents for Analysis

Constituent	National Water Quality Assessment Program Variable[1]	Federal Water Quality Criteria [2]	Kentucky Water Quality Criteria[1]	Tennessee Water Quality Criteria [3]
Acidity				
Alkalinity	●	●		
Aluminum	●	●		
Arsenic	●	●	●	●
Barium	●	●	●	
Bicarbonate (HCO3)				
Boron	●			
Bromide	●			
Cadmium	●	●	●	●
Calcium	●			
Carbonate (CO3)				
Chloride	●	●	●	
Chromium	●	●	●	●
Cobalt				
Color		●		●
Conductivity	●			
Copper	●	●	●	●
Dissolved oxygen	●	●	●	●
EH				
Flow rate				
Fluoride	●	●	●	●
Germanium				
Hardness				●
Iron	●	●	●	
Lead	●	●	●	●
Lithium				
Magnesium	●			
Manganese	●	●	●	
Mercury	●	●	●	●
Molybdenum	●			
Nickel	●	●		●
Nitrate (NO3)	●	●	●	
Nitrite (NO2)	●	●		
Oil and Grease		●		
pH	●	●	●	●
Phosphate (PO4)	●			
Phosphorus	●	●		
Potassium				
Suspended Sediment	●	●		
Silicon				
Sodium	●			
Strontium				
Sulfate (SO4)	●		●	
Temperature	●	●	●	●
Titanium				
Total Dissolved Solids	●	●		●
Total Organic Carbon				
Turbidity				
Vanadium	●			
Zinc	●	●	●	●

[1] [Smoot and Others, 1991]
[2] [U.S. EPA Health and Ecological Criteria Division]
[3] [Rules of Tennessee Department of Environment and Conservation, 1991]

turbidity would explain a high value for suspended sediment. Acidity is a measure of the capacity of a water to neutralize a strong base and total organic carbon can have significant effects on the chemical properties of the aqueous system (Hem, 1985). The redox potential (Eh) provides a means of evaluating the chemical equilibrium status of multivalent elements. Finally, potassium, carbonate, and bicarbonate are needed for a anion-cation balance as well as being used in Piper plots and Stiff diagrams to illustrate the water type.

4.2 Censored values

The concentration of a constituent is below the detection limit when the laboratory techniques and equipment can not accurately determine the concentration. The data are referred to as censored. For this report, all censored data is set at the detection limit since it is reasonable to assume that all naturally occurring elements are present in natural waters. Although this assumption may overestimate the concentration of these constituents, the practice of setting censored values to zero is inaccurate and misleading.

5. Data collection and quality analysis

A description of sample collection, analysis methods, and data quality analysis is included in this report.

5.1 Sampling locations/frequency

The locations of the sampling sites can be found in Appendix A. The frequency of sampling changed on August 17, 1992. Table 7 illustrates the sampling sites and frequencies for before and after this date. Currently, one site is sampled daily, ten sites are sampled bi-weekly, eight sites are samples quarterly, and 16 sites are sampled during storm events. Storm events are defined according to the following chart (Nodvin and Rhodes, March 1993).

Amount (in)	Amount (cm)	Time Period (hours)
1.0	2.54	1
1.3	3.30	2
1.6	4.06	4
1.7	4.32	8
1.8	4.57	16
1.9	4.83	24

Table 7: Sampling Sites and Frequency

Sampling Frequency	Sampling Sites [1]							
Prior to August 17, 1992 Biweekly	TC10 GC3	YC5 GC4	YC5A GC7	YC12 STOR1	RR1 988	DB5	DB10	TD1
Quarterly	YC1	YC6	DR9	GC5				
Since August 17, 1992 Daily	TC10							
Biweekly	YC5 GC4	YC5A GC7	YC12	RR1	DB5	DB10	TD1	GC3
Quarterly	MF2	MF5	SH10	ST5	ST10	988	STOR1	LH5
For storm events	YC5 GC7	YC5A 988	YC12 ST10	TC10 LH5	RR1 TD1	DB5 STOR1	GC3 DB10	GC4 DR9
Quarterly sediment samples	TC10 GC3	YC5 GC7	YC5A	DB5	DB10	TD1	ST10	LH5

[1]Sampling site locations shown in Appendix A.

As shown on Table 7, sediment sampling is done quarterly. The top 1 to 2 cm of recently deposited material is collected with a stainless steel spoon and bucket. Composite samples from at least three areas of a site are stored in pre-cleaned borosilicate glass freezer jars with Teflon-lined lids (Nodvin and Rhodes, March 1993).

5.2 Sample analysis methods

A Hydrolab is used on-site when the samples are taken to measure temperature, pH, Eh, dissolved oxygen, and conductance in the stream. A portable flowmeter, Marsh-McBirney Flomate 201D, is used to estimate the flowrate and a portable turbidimeter, H. F. Scientific DRT-15 C, measures the turbidity. Oil and grease testing using Freon 113 extraction and infrared absorbance readings is done at the park laboratory (U. S. EPA method 413.2). Tennessee Tech performs the remaining analyses off-site. Levels of major ions and cations are determined with an ion chromatograph (EPA Method #300.1) while an ICP is used to measure the levels of dissolved metals (EPA Method #200.7) (Nodvin and Rhodes, March 1993). Appendix B includes specific methods used for sample parameters.

5.3 Data quality analysis

Data provided by CUGA and TNTECH were subjected to data quality analyses by Nodvin and Rhodes for the periods of July through September and October through December, 1992. The third and fourth quarterly reports for 1992 may be referred to for a description of the following methods.

5.3.1 Anion-cation balance

A cation-anion balance can be used to check the accuracy in the concentrations reported for major constituents. If the data is without serious errors, the sum of the cations (milliequivalents/liter) should equal the sum of the anions (milliequivalents/liter) within a few percent of the total of cations and anions (Hem, 1985).

Major cations include cadmium (Ca^{2+}), magnesium (Mg^{2+}), sodium (Na^{+}), potassium (K^{+}), ammonium (NH^{+}), and hydrogen ion (H^{+}) and major ions include chloride (Cl^{-}), fluoride (F^{-}), nitrite (NO_2^{-}), nitrate (NO_3^{-}), and sulfate (SO_4^{2-}). Depending on the pH level, the samples may also include significant levels of hydroxyl (OH^{-}), carbonate (CO_3^{2-}), and bicarbonate (HCO_3^{-}). Organic acids also may contribute to anionic charge in solution (Nodvin and Rhodes, March 1993).

Samples with an absolute value of ion difference exceeding 15% should be reanalyzed (Hillman, Potter, and Simon, 1986). The percentage of samples that have fallen into this category for the last few quarters is roughly 6 to 10%. As suggested by Nodvin and Rhodes, Tennessee Tech should perform an anion-cation balance and reanalyze any sample whose absolute value of ion difference falls outside 15% (Nodvin and Rhodes, March and April, 1993).

5.3.2 Conductivity balance

Another method to check the quality of reported values is a conductivity balance. All major ions measured are assigned a conductance which are then summed and compared to the total specific conductance measured. The Third Quarter Report for 1992 reported measured conductance values systematically 20-30% lower than calculated values. However, the Fourth Quarter Report for 1992 reported measured conductance values systematically 20-40% higher than calculated values. It has been suggested that the Hydrolab be calibrated with a conductance standard prior to field use and perhaps undergo a more thorough examination (Nodvin and Rhodes, April 1993).

6. Water Quality Conditions

This report includes an assessment of water quality conditions for the Cumberland Gap National Historical Site area. Specific properties and chemical constituents are described and discussed below.

6.1 Temperature and dissolved oxygen

The temperature of streamwater usually follows the temperature of the air. Therefore, the water warms during the day, cools at night, and even shows a seasonal temperature pattern. Figure 3 illustrates the seasonal temperature pattern for Davis Branch. While the Federal criteria for water temperature are species dependent, the Kentucky criteria require 31.7°C or lower for warmwater habitat. On the other hand, coldwater habitat temperatures should not exceed natural seasonal variations (Smoot and others, 1991).

For the time period covered by this annual report, no sampling site had a water temperature greater than 31.7°C. In fact, the temperatures ranged from 1.0°C to only 25.6 °C.

Oxygen enters the water by diffusion from the air and is also produced by aquatic plants through photosynthesis. Aquatic organisms consume oxygen during respiration and bacteria consume oxygen during the decomposition of organic material. Nitrifying bacteria also use oxygen during the oxidation of ammonia and nitrite (nitrification). The minimum level of oxygen set by the Kentucky surface water-quality criteria is 4.0 mg/L for warmwater habitat and 5.0 mg/L for coldwater habitat. The Federal minimum level for chronic conditions is 5.5 mg/L.

The solubility of oxygen in water decreases as the temperature increases. Figure 4 plots dissolved oxygen versus temperature to illustrate this point. Therefore, streams contain less dissolved oxygen during the warmer summer months despite the additional photosynthesis. In addition, the low streamflows and high organic loadings during the summer may deplete the oxygen in the stream. Figure 5 shows both temperature and dissolved oxygen over time. Dissolved oxygen concentrations may also vary throughout the day, being higher late in the day and lower at night and early morning. These variations are largely due to algae and other plants that produce oxygen in sunlight

Figure 3: Monthly Average Water Temperature for Site DB5

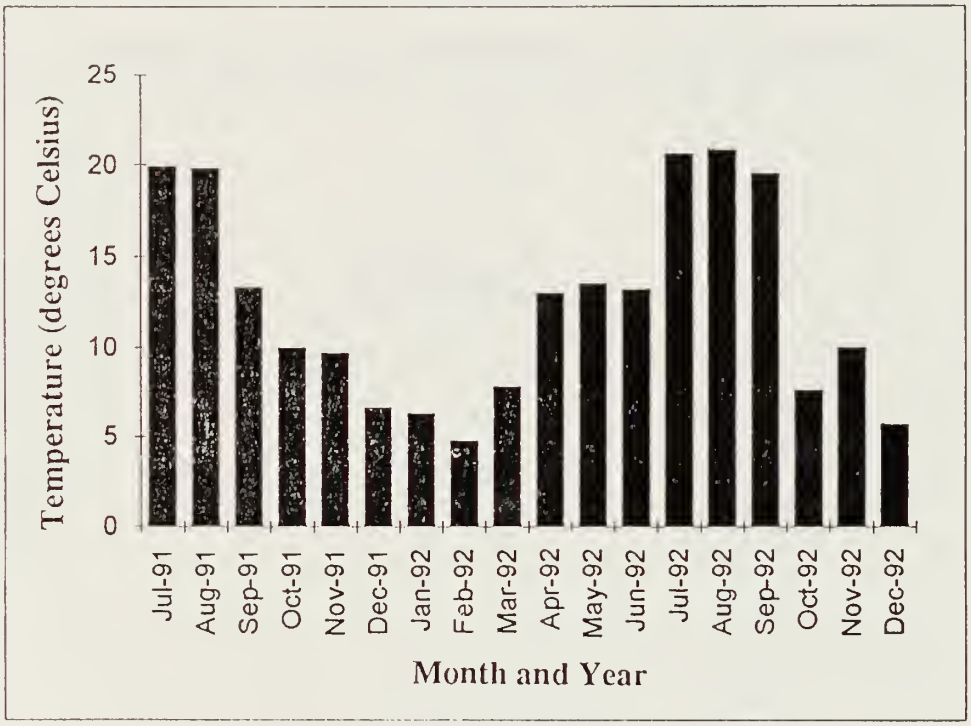


Figure 4: Dissolved Oxygen versus Water Temperature for Site DB10

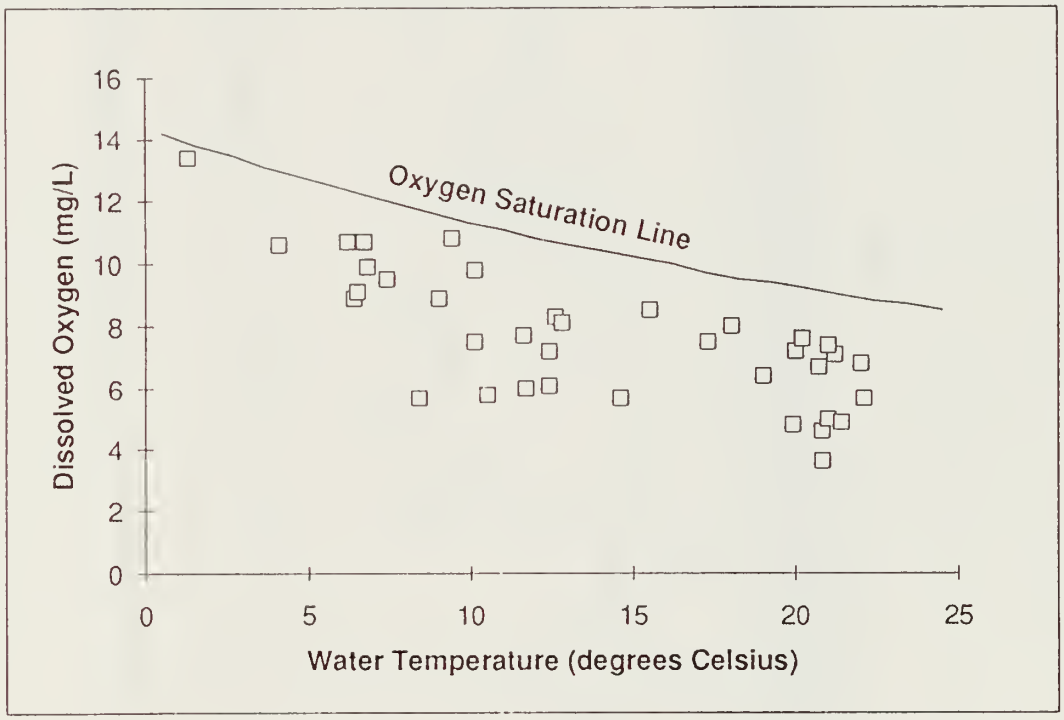
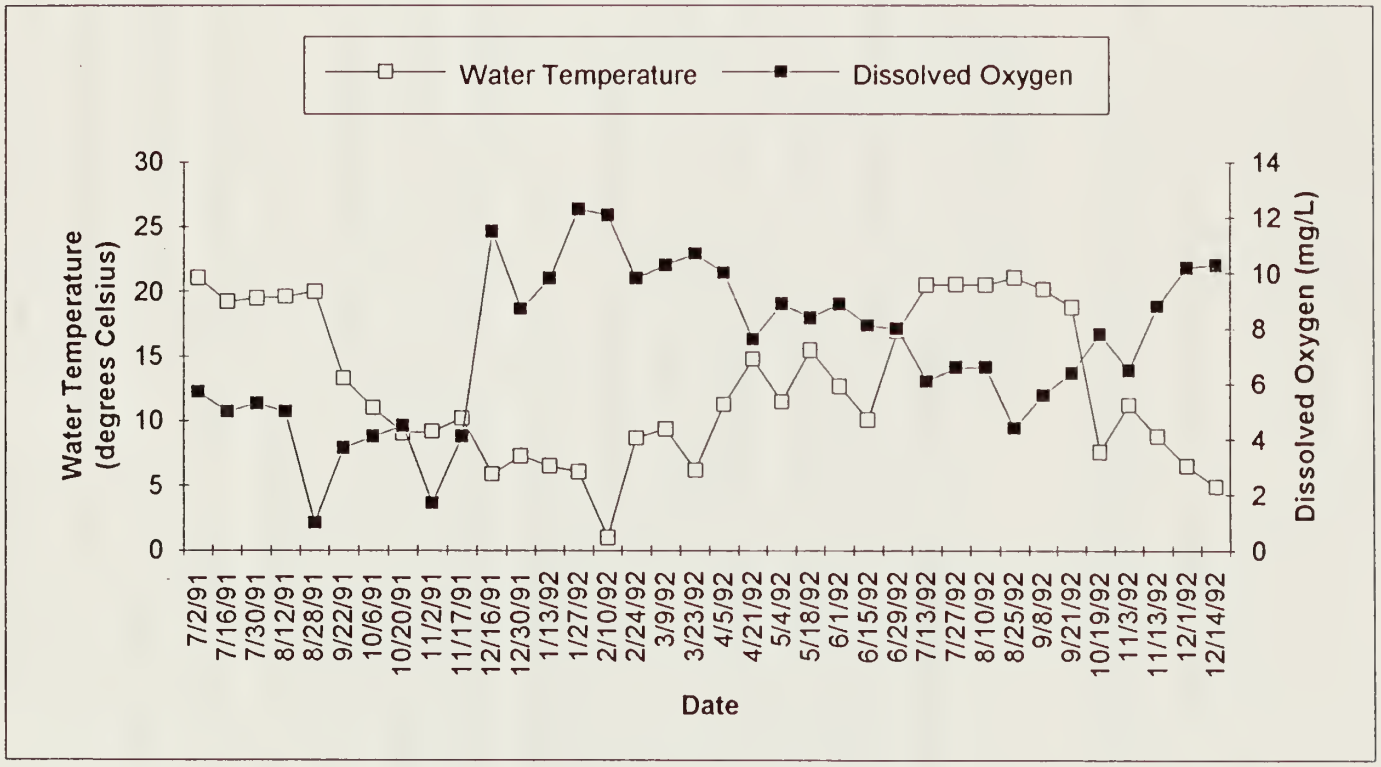


Figure 5: Water Temperature and Dissolved Oxygen for Site DB5



through photosynthesis and consume oxygen at night (Smoot and others, 1991). Figure 6 illustrates increasing amounts of oxygen as the day progresses.

Of the approximately 800 samples analyzed for dissolved oxygen, 12 samples (1.5%) contained less than 4.0 mg/L of dissolved oxygen while 34 (4.2%) had less than 5.0 mg/L and 52 (6.5%) had less than 5.5 mg/L of dissolved oxygen. Even the sites that dipped below the criteria for dissolved oxygen often met the criteria with the following sample. Many of the violations occurred during the early morning hours, before 10:00 AM.

6.2 pH, alkalinity, and acidity

The hydrogen ion activity can be described with pH, which is defined as $-\log[H^+]$. The pH of a solution can range from very acidic, pH=0, to very alkaline, pH=14. Natural water usually has a pH of 6.0 to 8.5 while pure water is neutral at a pH of 7.0 (Hem, 1985). Freshwater fish receive adequate protection in water with a pH in the range of 6.5 to 9.0 (U.S. Environmental Protection Agency, 1986a).

Figure 7 illustrates the pH conditions for several sites by providing the range of pH for each month over the year. The samples tested for pH can be classified into two groups. The samples taken from Tunnel Creek are distinctly different from the samples taken from the remaining creeks. Of approximately 115 samples analyzed for pH from Tunnel Creek, 49 samples (42.6%) had pH over 9.0 and another 10 samples (8.7%) had pH less than 6.5. On the other hand, the remaining streams had only 2 samples (0.29%) with a pH over 9.0 and 40 samples (5.8%) under 6.5. Of the samples from other creeks with a pH under 6.5, 67.5% had pH between 6.0 and 6.5. Clearly, Tunnel Creek has a larger problem with pH than all the other streams combined. However, an important consideration is that sampling of Tunnel Creek takes place downstream from where pH regulation is performed. Sulfuric acid and occasionally sodium hydroxide are added in an attempt to control the pH of this stream during construction. The distribution of pH

Figure 6: Dissolved Oxygen for Site DB5

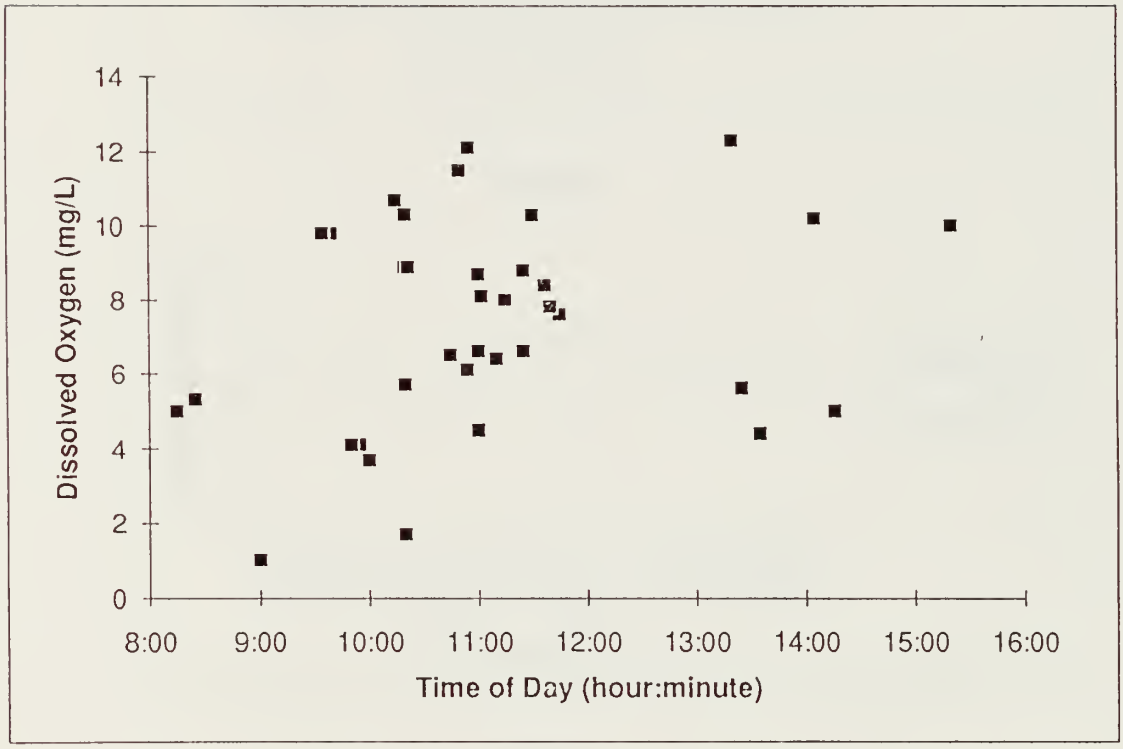
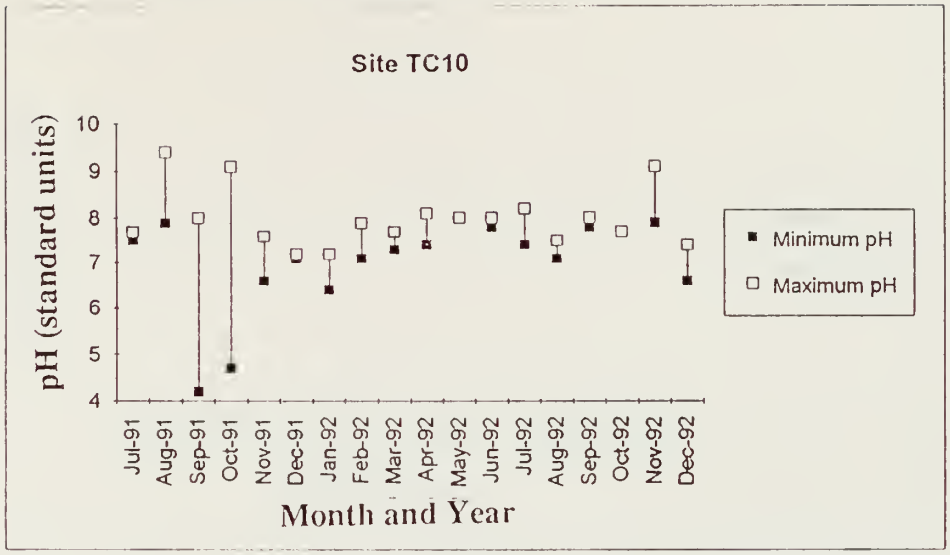


Figure 7: Range of pH for Major Sites



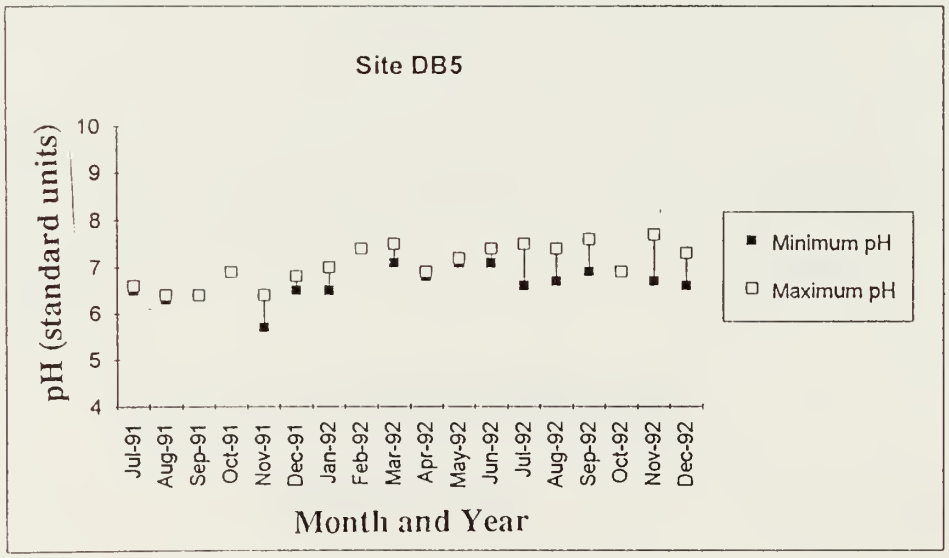
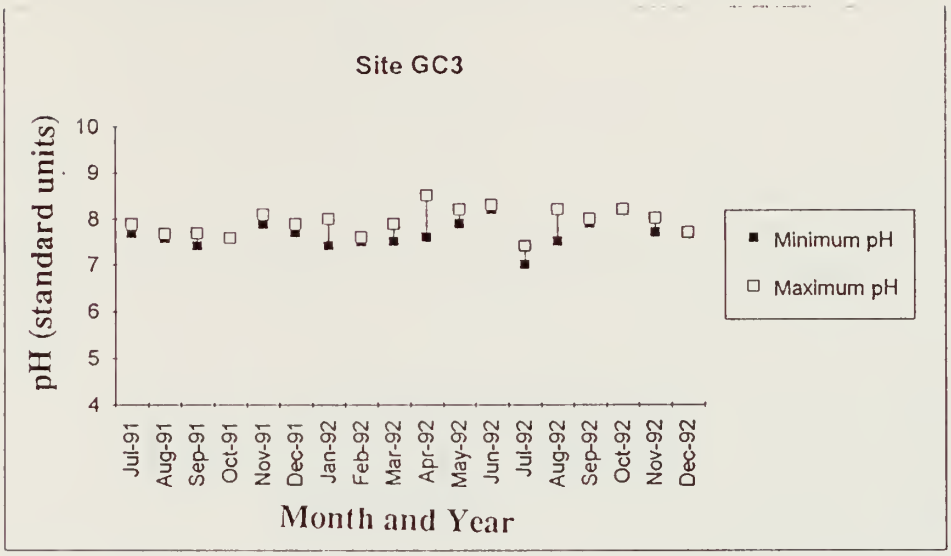
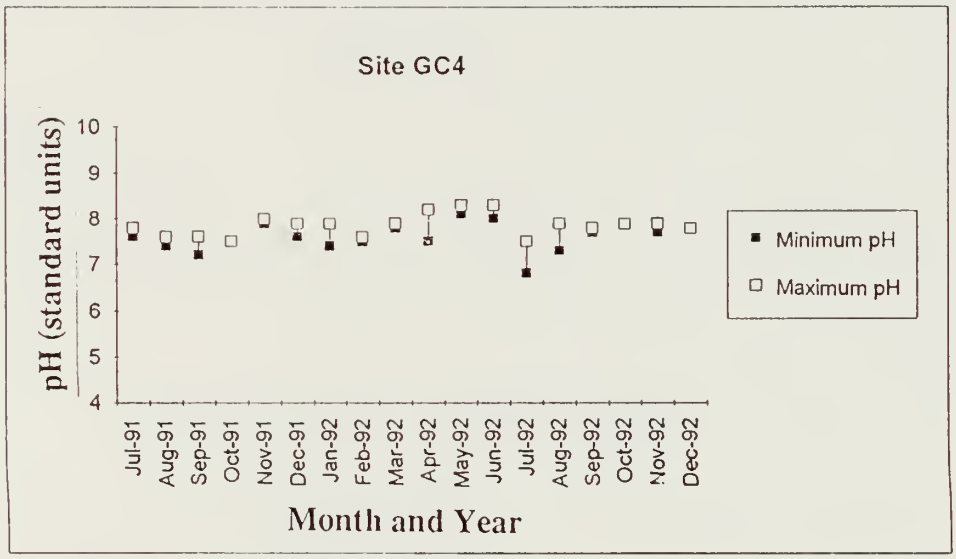


Figure 7: Range of pH for Major Sites





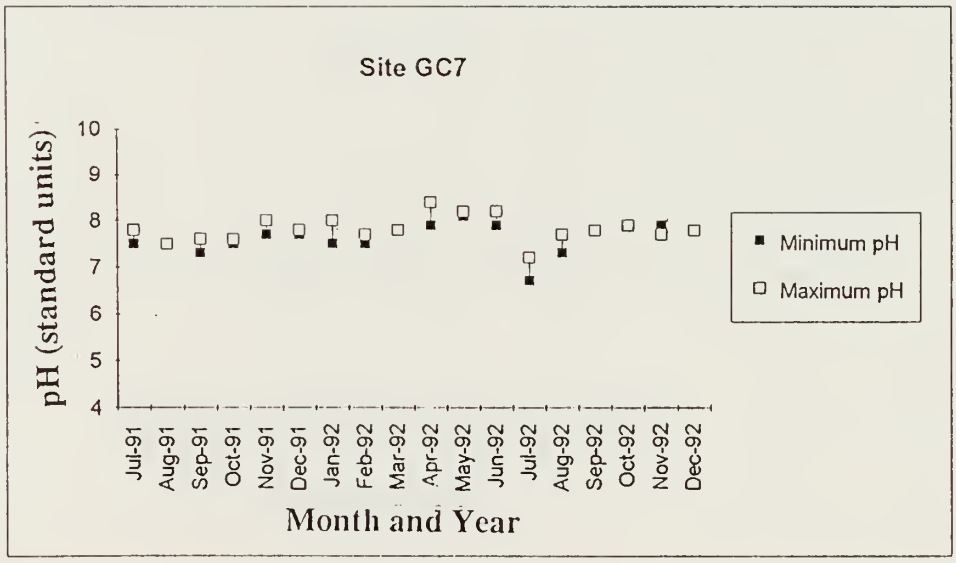
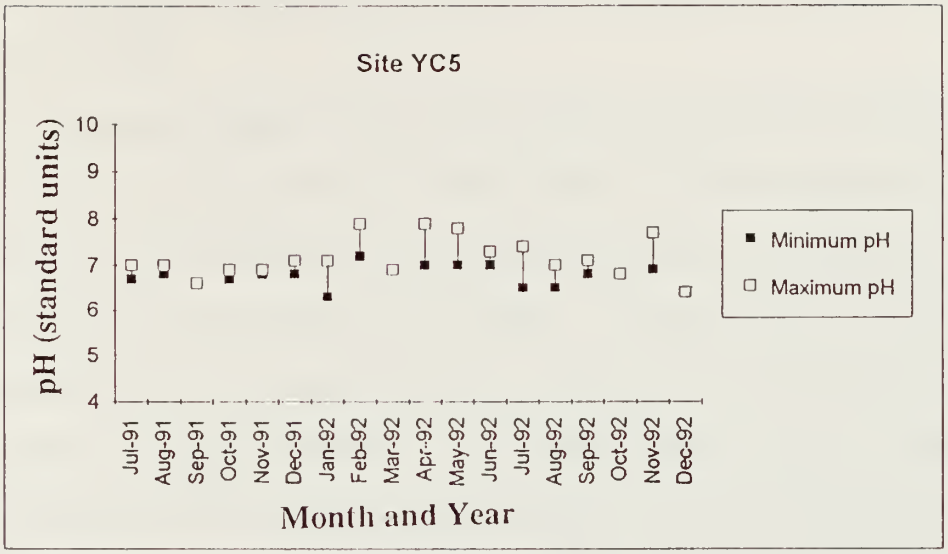
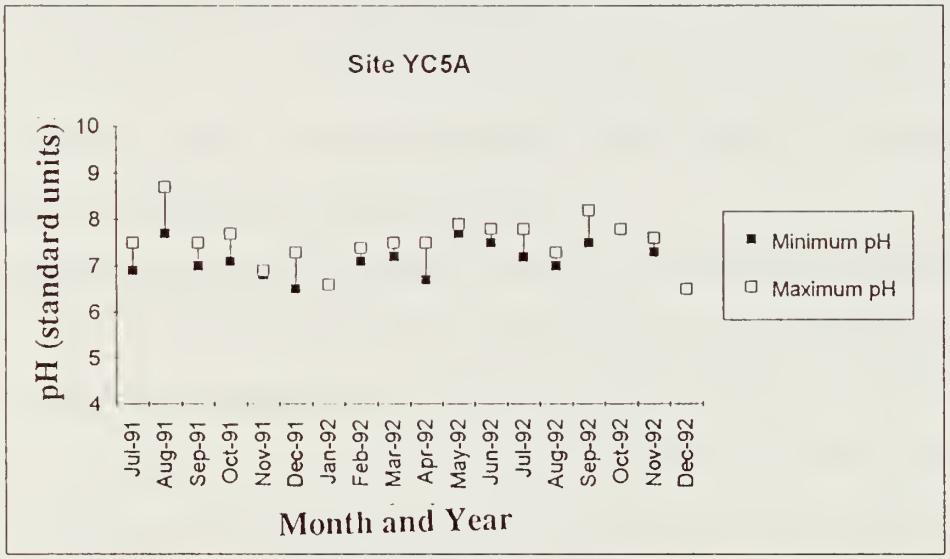
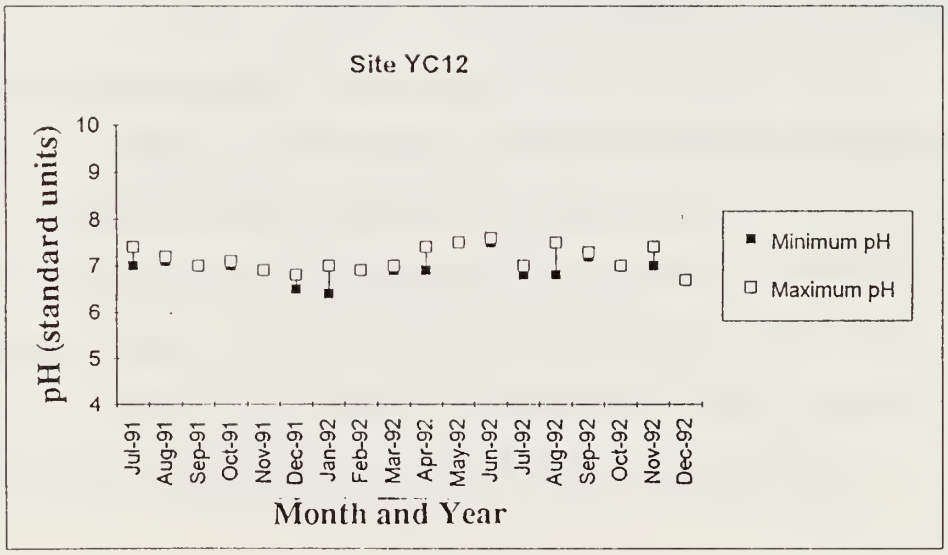


Figure 7: Range of pH for Major Sites







values at the major sites is illustrated in Figure 8. Note the wider variation in values for the Tunnel Creek site.

The boxplots included in this report are based on the boxplots developed by J. W. Tukey and are sometimes referred to as Tukey boxplots. The box illustrates the interquartile range and is drawn from the 25th percentile to the 75th percentile with a horizontal line drawn across the box at the median. An upper whisker or vertical line is drawn from the box to the upper adjacent value. This value is the largest data value less than or equal to the upper quartile plus 1.5 times the interquartile range. A similar verticle line is drawn from the box to the lower adjacent value, the smallest data value greater than or equal to the lower quartile minus 1.5 times the interquartile range. Mild outliers are values that are 1.5 to 3.0 times the interquartile range and are plotted by an asterisk. Extreme outliers are values that are greater than 3.0 times the interquartile and are plotted by a circle (Smoot and others, 1991).

Alkalinity is a measure of a water's capacity to neutralize acids. Contributions to alkalinity include carbonates, bicarbonates, and hydroxides. The Federal water-quality criterion for alkalinity in chronic states is set at a minimum of 20 mg/L as $CaCO_3$. Acidity, on the other hand, is a measure of a water's capacity to neutralize bases.

Over 20% of the samples fell under the minimum of 20 mg/L as $CaCO_3$ for alkalinity. One possibility for these low values is a shortage of carbonate minerals, limiting the buffering capacity of the streams (Smoot, and others, 1991).

6.3 Major cations and anions, and related water-quality characteristics

All naturally occurring water contains dissolved chemicals from the material that the water is traveling over or through, from natural weathering, and possibly from point and nonpoint sources. The dissolved chemicals include cations like calcium, magnesium, sodium, and potassium that are positively charged and anions like bicarbonate, chloride, sulfate, and nitrate that are negatively charged (Smoot and others, 1991).

EXPLANATION

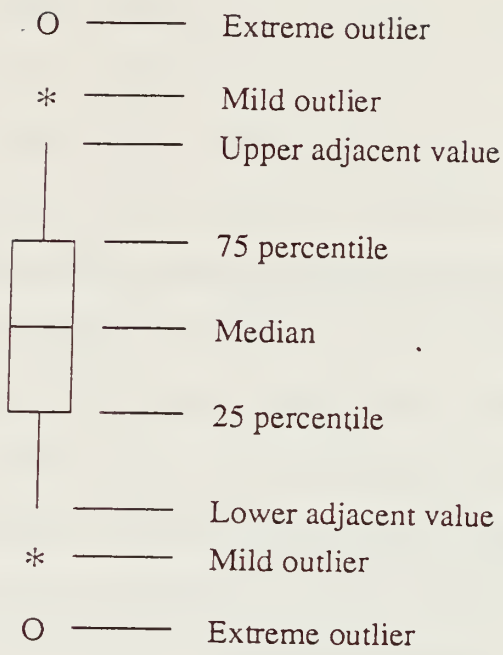
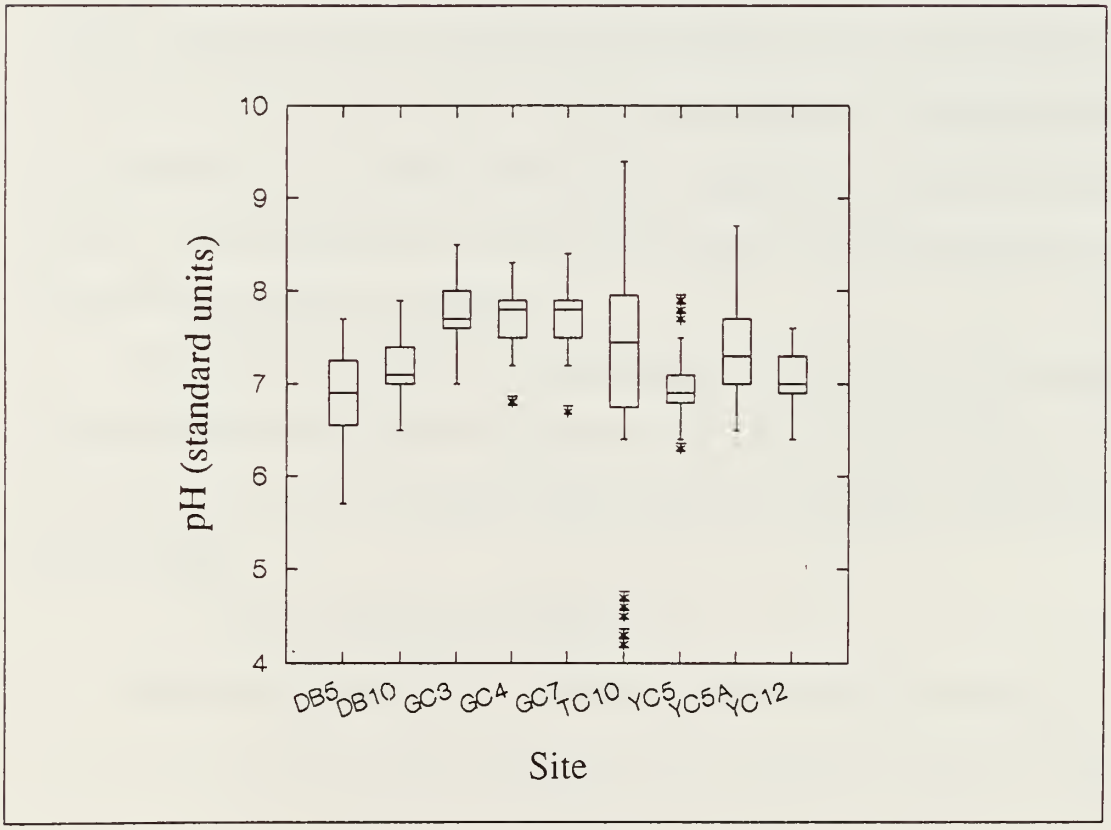


Figure 8: Distribution of pH for Major Sites



6.3.1 Specific conductance and dissolved solids

The ability to conduct an electrical current is known as specific conductance, the reciprocal of resistance. The current is carried through the water by ions; the higher the number of ions, the larger the specific conductance. Specific conductance (microsiemens/cm) can be used to estimate dissolved-solids concentration (milligrams/liter) by multiplying by 0.6 (Smoot and others, 1991).

The specific conductance in natural surface water ranges widely from 50 microsiemens/cm to 50,000 microsiemens/cm depending on the amount of solutes in precipitation and the solubility of the matrix (Hem, 1985). Specific conductance in the samples analyzed for this report varied from 1 µS/cm to 984 µS/cm with over 95% of the samples falling below 500 µS/cm. The distribution of specific conductance for major sites is shown in Figure 9.

The concentration of total dissolved solids depends to some extent on the flowrate. High flows dilute the dissolved-solids concentration of the base-flow water (Smoot and others, 1991). Figure 10 shows decreasing specific conductivity with increasing flow rates. Specific conductance is compared to total dissolved solids in Figure 11. Notice that specific conductance increases with increasing amounts of total dissolved solids present in the sample.

For samples analyzed, total dissolved solids ranged from 6 mg/L to 672 mg/L. The distribution of total dissolved solids for major sites is illustrated in Figure 12. Sites such as GC4, RR1, and TD1 appear to have higher medians and less variation than the remaining sites.

6.3.2 Calcium and magnesium

Calcium and magnesium are both common alkaline-earth metals that are essential to plant and animal life. These two elements are two of the major cations in natural

EXPLANATION

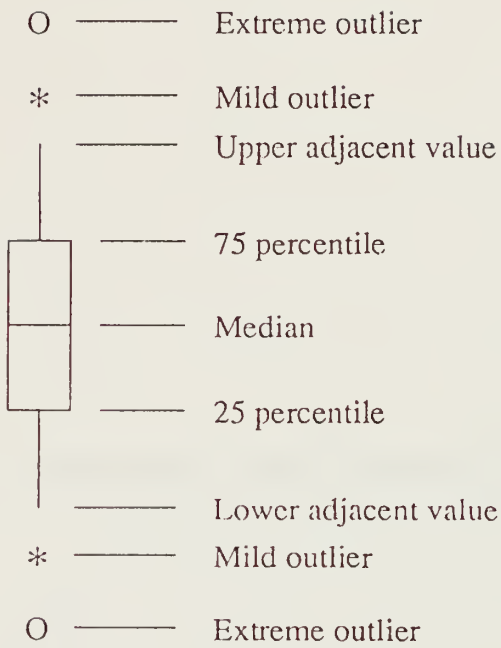


Figure 9: Distribution of Specific Conductance for Major Sites

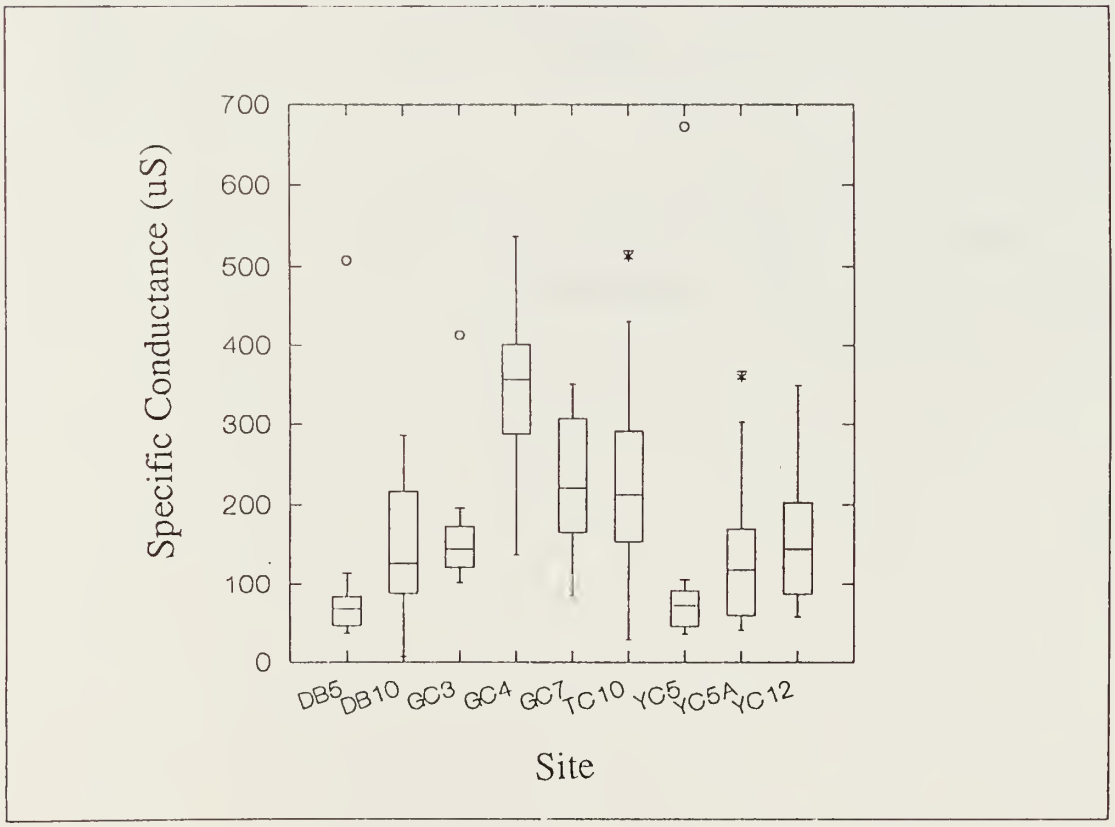


Figure 10: Specific Conductance versus Flowrate for Site DB10

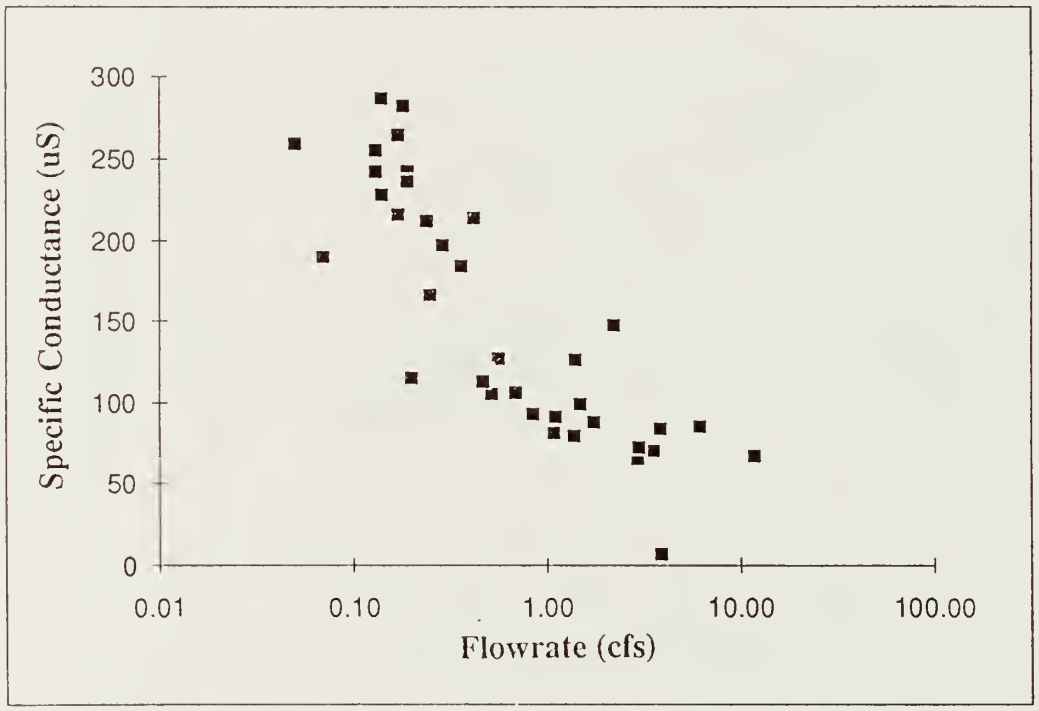
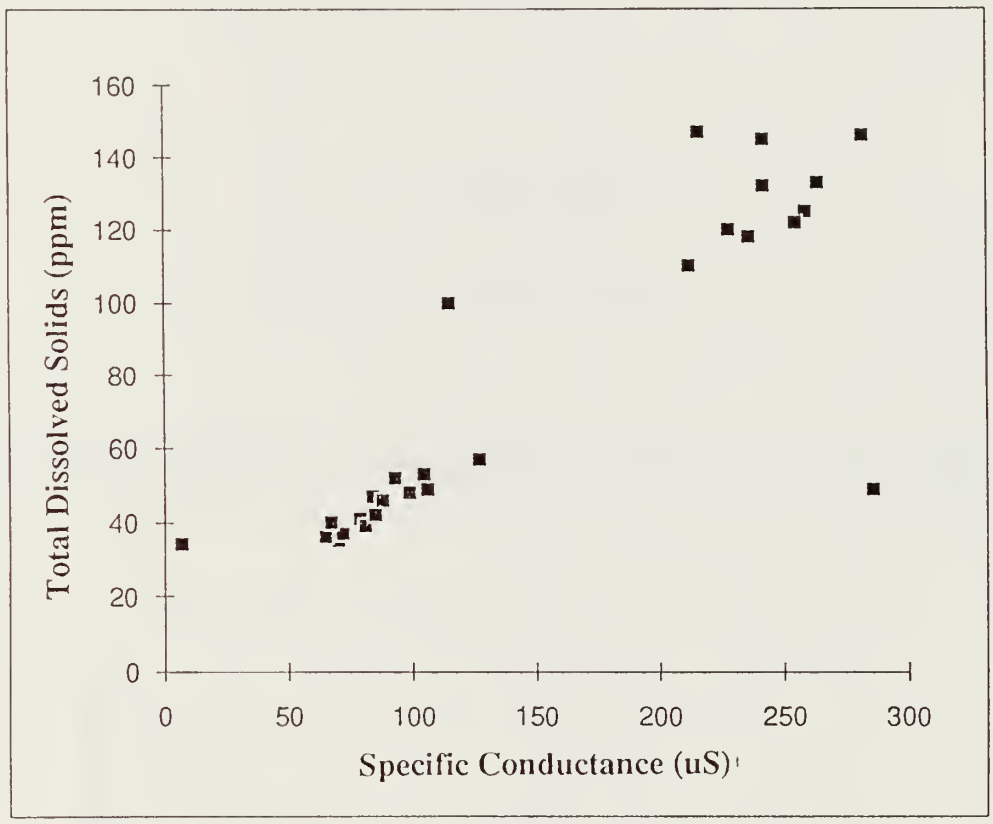


Figure 11: Total Dissolved Solids versus Specific Conductance for Site DB10



EXPLANATION

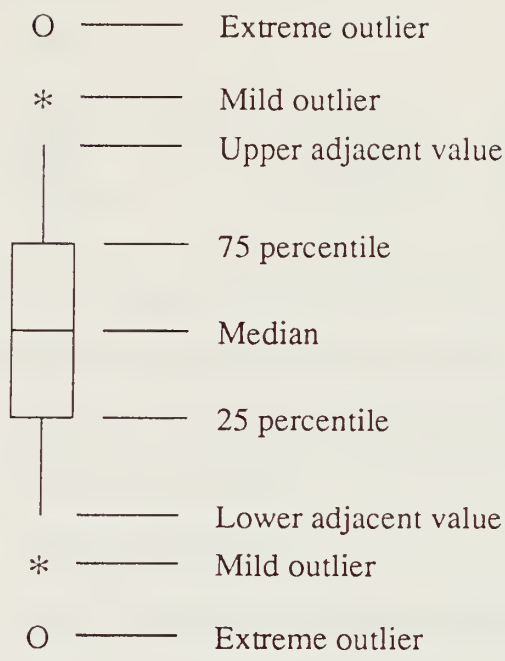
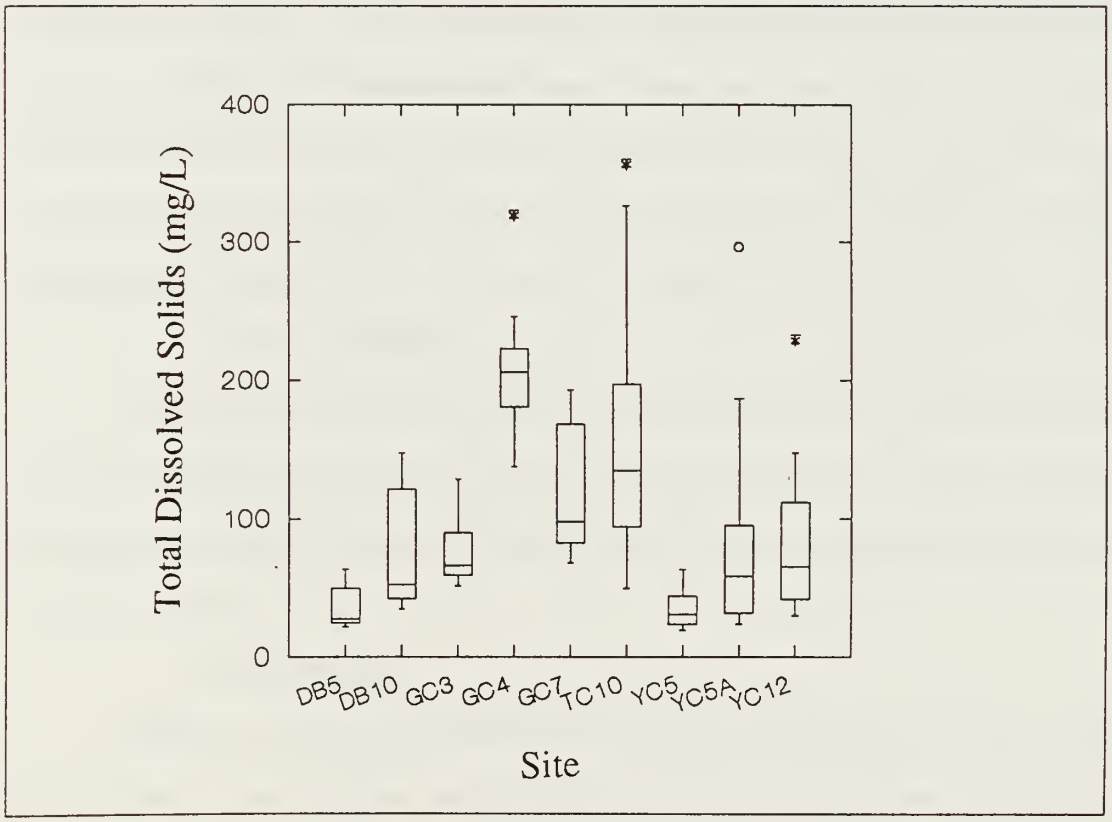


Figure 12: Distribution of Total Dissolved Solids for Major Sites



waters and are often responsible for water hardness. The following table describes hardness levels (Hem, 1985):

soft	< 60	mg/L as $CaCO_3$
moderately hard	61 - 120	mg/L as $CaCO_3$
hard	121 - 180	mg/L as $CaCO_3$
very hard	> 180	mg/L as $CaCO_3$

Hardness may become a problem for ordinary domestic purposes when it exceeds 100 mg/L as $CaCO_3$ because of increased soap consumption and other reasons (Hem, 1985). Of the samples analyzed for hardness, 47.3% were soft, 31.7% moderately hard, 13.4% hard, and only 7.6% were very hard.

6.3.3 Sodium and chloride

Natural surface water will contain both sodium and chloride although the concentration of either can vary widely. Human influences on the concentration include salts used for de-icing roadways, disposal of oil brines, effluents from industry, and domestic sewage. Limits on the sodium concentration are not set by either the Federal or the Kentucky criteria . However, chloride has a criterion of 250 mg/L for domestic-water supply and 600 mg/L for warmwater habitat (Smoot and others, 1991). The Tennessee criteria does not set a limit for chloride or sodium concentrations. All samples analyzed for chloride were well below 250 mg/L. In fact, the highest value found was 75 mg/L and most samples contained less than 10 mg/L of chloride.

6.3.4 Potassium

Potassium is found in natural water but at a much lower concentration than sodium and high concentrations are rare. This element is needed by plants and animals. One sample contained 81 mg/L of potassium but the majority of those analyzed were less than 3 or 4 mg/L.

6.3.5 Sulfate

Sulfur, also essential to plant and animal life, is found in natural water as sulfate. Kentucky sets a limit of sulfate at 250 mg/L for domestic-water supply, the same

concentration as the Federal SMCL. No samples tested for sulfate exceeded the 250 mg/L criteria limit.

6.3.6 Bromide and fluoride

Small concentrations of bromide and fluoride can often be found in natural surface water. Human inputs to the bromide concentration include a gasoline additive called ethylene dibromide, fumigants, and fire-retardant agents. Naturally occurring brines may also add bromide to surface water. Bromide is not found as a criterion on the Kentucky, Tennessee, or Federal list. However, it is a concern to human health because of its role in forming brominated trihalomethane (THM) organic compounds (Smoot and others, 1991). Almost all of the samples tested below the reporting limit of 0.1 or 0.2 mg/L for bromide. A few samples were analyzed at 0.3 mg/L.

Fluoride, on the other hand, can be beneficial to humans and other animals in the formation of bones and teeth. However, higher concentrations may cause dental fluorosis so the Federal MCL sets a limit of 4.0 mg/L. The Kentucky criterion for fluoride is even stricter at 1 mg/L. Only 12 samples (1.5%) had fluoride concentrations greater than 1 mg/L and all fell well under 4.0 mg/L.

6.4 Suspended sediment

Although suspended sediment is not found on the criteria lists affecting Cumberland Gap, there are reasons why it is a concern to the water quality. Suspended sediment can sorb and transport metals, organic compounds such as pesticides, and nutrients. High concentrations of suspended sediment can also damage the biological community in the stream as well as make the water unsuitable for recreational activities. The amount of suspended sediment depends on topography, land use, plant cover, the type of soil, and the form and intensity of precipitation (Smoot and others, 1991). During our study period, suspended sediment concentration ranged from less than 0.20 mg/L to almost 8,000 mg/L. Figure 13 illustrates the variability of suspended sediment at several sites.

EXPLANATION

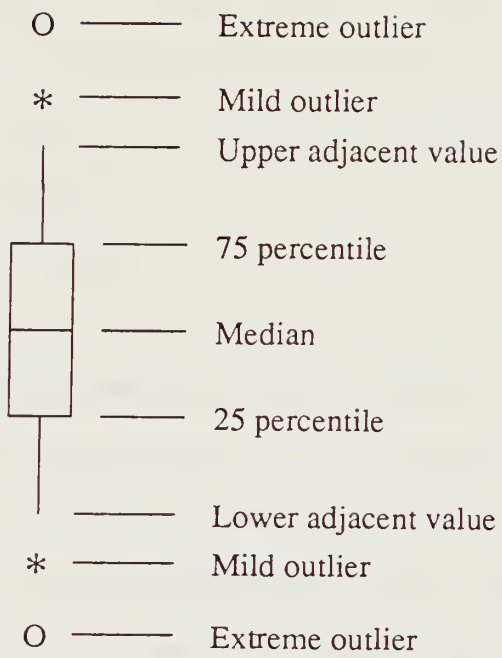
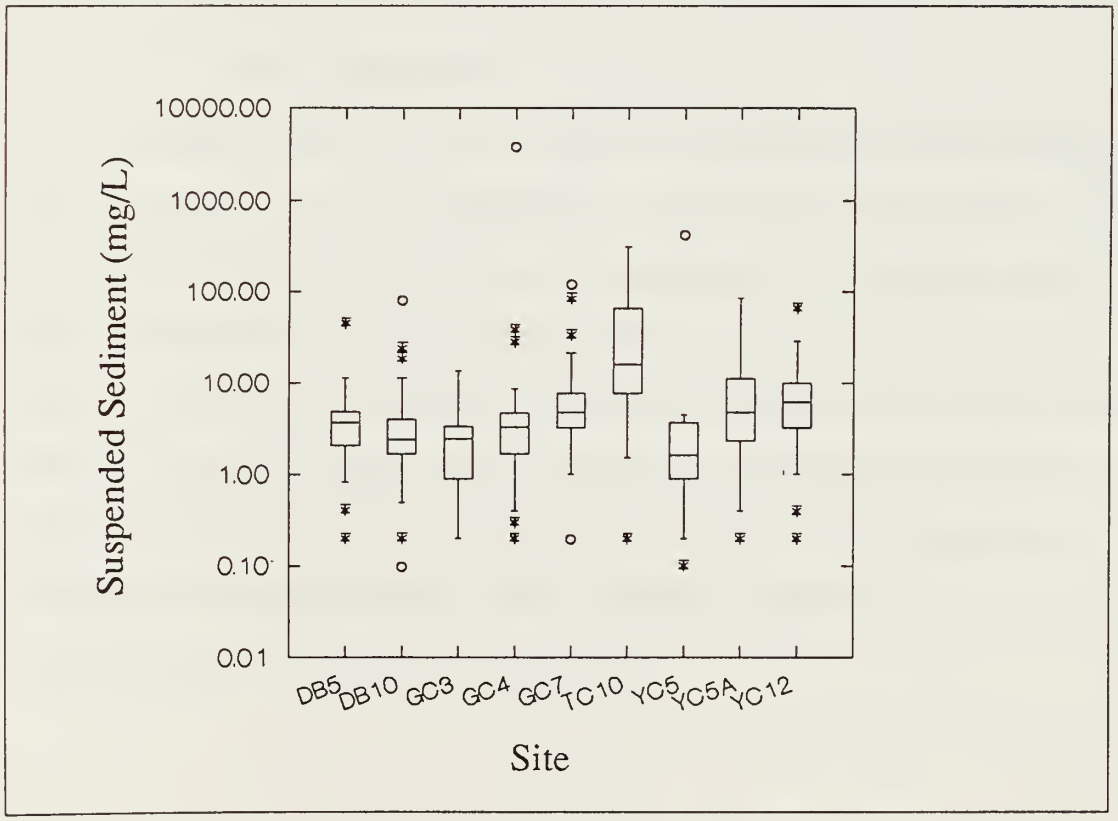


Figure 13: Distribution of Suspended Sediment for Major Sites



6.5 Nutrients

Nitrogen, phosphorus, potassium, and various trace elements are needed by all plants to grow and thrive. Potassium is not often the limit to plant growth but the normally low concentrations of dissolved nitrate and phosphate may limit the growth rate of plants (Smoot and others, 1991).

6.5.1 Nitrogen

Nitrate is the form of nitrogen most easily used by plants. Other forms include nitrite, ammonia, and organic nitrogen. Sources of nitrogen include the mineralization of soil organic matter and human input such as fertilizers, wastewater, landfill leachate, septic tanks, and feedlot runoff (Smoot and others, 1991).

Total nitrate concentration has been set at 10 mg/L as N by Kentucky for water-supply and the Federal MCL. A proposed MCL goal is set at only 1.0 mg/L as N for nitrite. Only 6 samples (less than 1%) were tested as being over 10 mg/L as N for nitrate. Likewise, only 11 samples (less than 1.5%) were tested as being over 1 mg/L as N for nitrite.

6.5.2 Phosphorus

Phosphorus may be found in surface water as simple ionic orthophosphate or as bound phosphate, which may be released by bacterial action. Concentrations in solution are usually low, fewer than a few tenths of a milligram per liter in natural water (Hem, 1985). Phosphorus enters the streams from decaying plant and animal material, fertilizers, breakdown of soil minerals, synthetic detergents, sewage, and septic tanks. Criteria are not set for phosphorus but the concentration is of importance since this element commonly limits plant growth (Smoot and others, 1991). The levels of phosphorus in most of the samples for this period were very low, although several samples did show a concentration over 1 mg/L.

6.6 Color

Water color, from the leaching of organic material, may be used to evaluate the physical condition of a stream but has no chemical significance. Color can range from a pale yellow to a dark brown but the color number has no direct connection with the amount of organic matter in the water. A color level of 10 units is barely noticeable (Hem, 1985). Color levels found in the samples for this time period ranged from 1 to almost 9000 units.

6.7 Organic carbon and oxygen demand

Organic material can be found in all natural water. Organics include natural compounds like amino acids and protein, carbohydrates, and alcohols as well as synthetic substances like pesticides, polychlorinated biphenyls, and other chemicals. The concentrations of organic compounds found in natural water are usually small but may have important effects on the aqueous system and on human health. Total organic carbon (TOC), biochemical oxygen demand (BOD), and chemical oxygen demand (COD) may be used to measure the amount of organic carbon (Smoot and others, 1991). This study measured only TOC and the levels found varied from less than 1 mg/L to over 25 mg/L total organic carbon.

6.8 Major metals, trace elements, inorganic compounds

Metals including cadmium, copper, lead, and mercury do not degrade and are toxic to organisms in high concentrations. Sources of metals include rocks and oils, decaying plants and animals, precipitation, urban runoff, wastewater, paints, and fertilizers. The concentration of metals in the water is usually much lower than the concentration found in the bottom sediments, although the metals can be transported through the water on suspended particles (Smoot and others, 1991).

Trace elements are the substances that are present in natural water in very small concentrations, usually less than 1.0 mg/L. These trace elements are frequently found in concentrations lower than can accurately be measured (Hem, 1985).

6.8.1 Aluminum

Aluminum can be found in all soils, plants, and animals as well as many silicate minerals. The concentration usually found in natural water is less than a few tenths or hundredths of a milligram per liter. The exception is when the pH is less than 4.0, then aluminum concentrations can reach several hundred to several thousand milligrams per liter. Aluminum salts can be toxic but the toxic concentration varies with pH, turbidity, and hardness (Hem, 1985). Aluminum concentrations for the samples analyzed were found to range from less than 0.01 mg/L to over 8.5 mg/L. However, most samples contained less than 0.10 mg/L of aluminum and only 3.4% had concentrations over 1.0 mg/L. The distribution of total aluminum at major sites is shown in Figure 14.

6.8.2 Iron

Natural waters usually contain small concentrations of iron, which is needed for plant and animal metabolism. However, large concentrations of iron will taste bad and stain laundry and plumbing fixtures. Due to the taste problem and staining, the Federal SMCL has a limit of 300 µg/L. Warmwater habitats should contain less than 1,000 µg/L of iron according to the Kentucky criteria (Smoot and others, 1991). Iron concentration in our samples ranged from less than 10 µg/L to 21,000 µg/L. Only 13 samples (1.6%) were found to contain over 1,000 µg/L of iron. On the other hand, over 10% of the samples contained more than 300 µg/L of iron. Total iron distribution is illustrated in Figure 15.

6.8.3 Manganese

Manganese is also needed by plants and animals but does not occur naturally as a metal. Instead, manganese can be found in various salts and minerals. Black oxide stains can occur when manganese is present in water supplies so Kentucky criteria sets a limit of 50 µg/L for domestic water supply. The Federal SMCL is also set at 50 µg/L (Smoot and others, 1991). Over 260 samples (almost 33%) contained levels of manganese in excess

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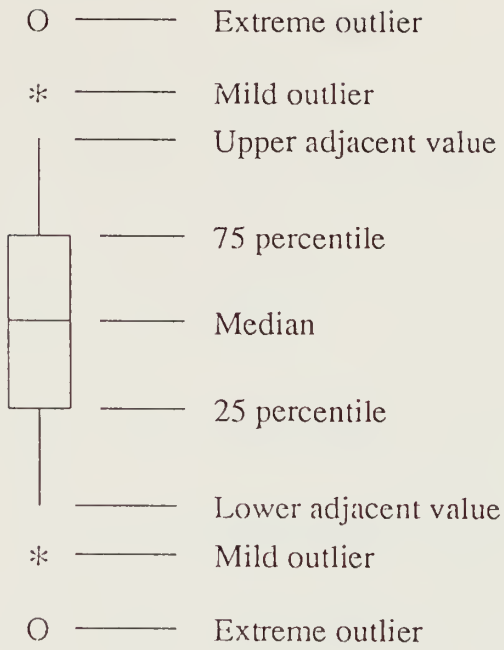
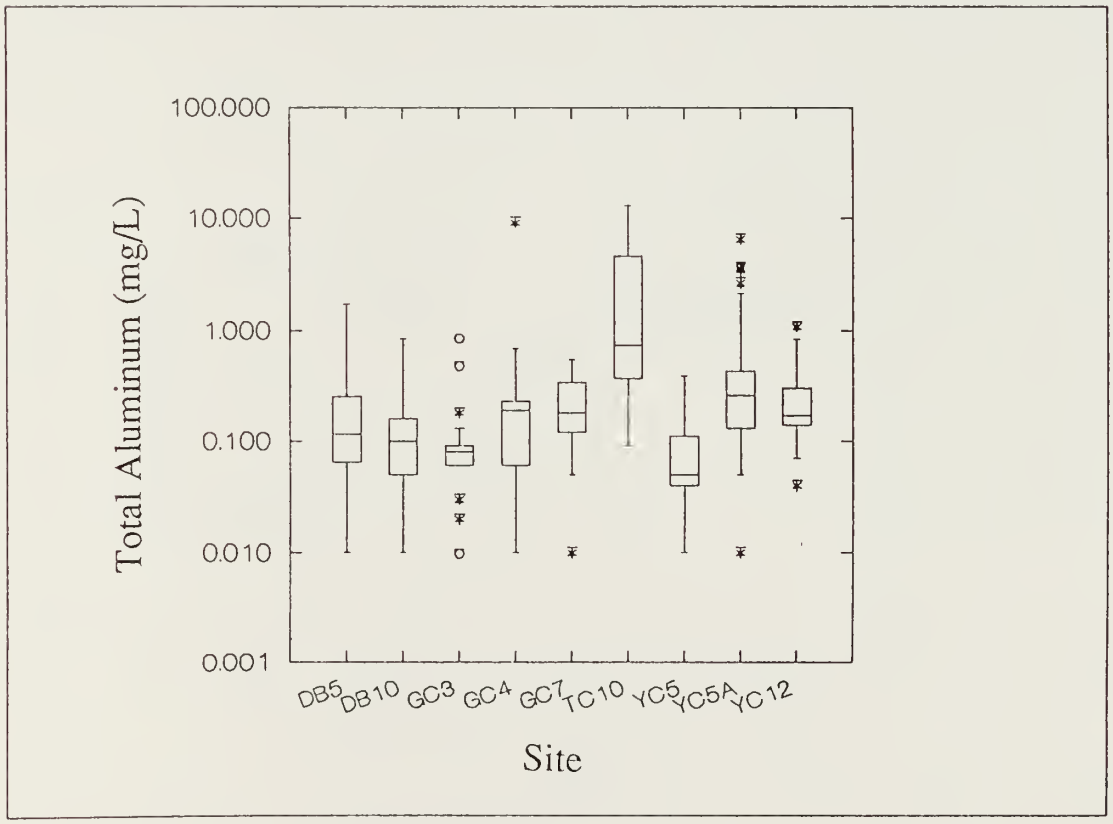


Figure 14: Distribution of Total Aluminum for Major Sites



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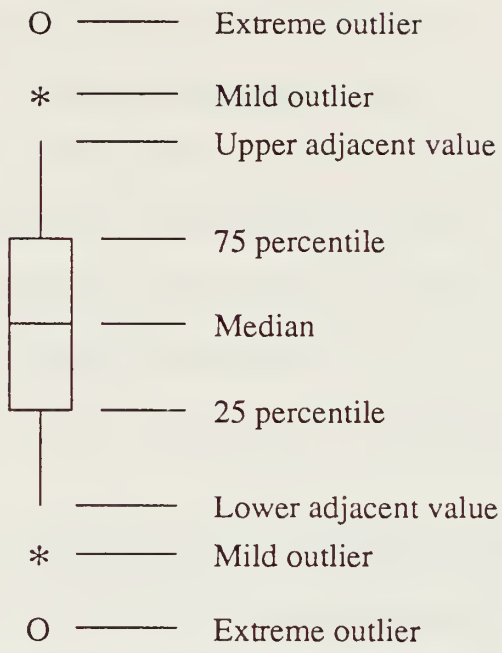
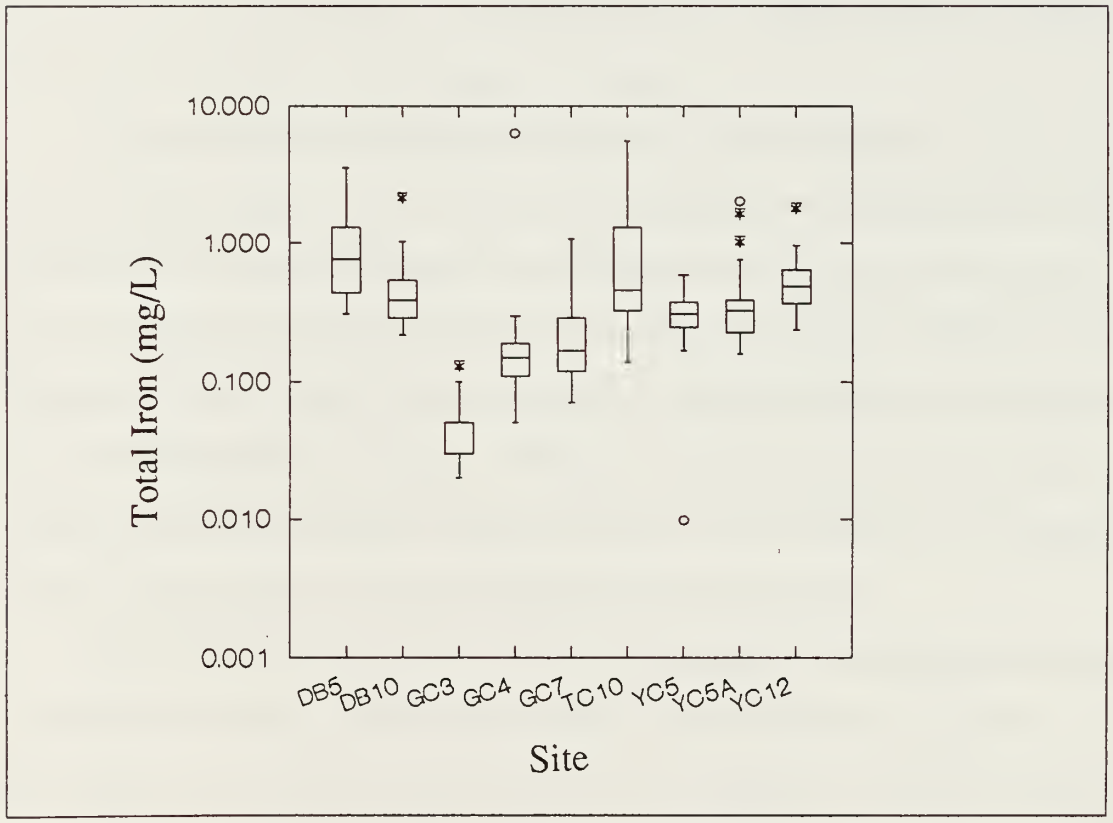


Figure 15: Distribution of Total Iron for Major Sites



of 50 μg/L. The range was from less than 10 μg/L to over 4,000 μg/L of manganese. The distribution of total manganese is shown in Figure 16.

6.8.4 Alkaline earth metals - barium

Barium sources include igneous and carbonate sedimentary rocks and can be found in most natural water in low concentrations. Barium is an undesirable impurity in drinking water and both the Kentucky criterion for domestic water supply and the Federal MCL set a limit of 1,000 μg/L (Smoot and others, 1991). The levels of barium in the samples collected are very low. They range from less than 10 μg/L to only 150 μg/L of barium.

6.8.5 Transition metals - vanadium, chromium, molybdenum, nickel

Vanadium can be found in plants, coal, and petroleum. Combustion can release vanadium into the environment which can then accumulate in certain organs of animals. The concentration of this element in surface water is low, usually less than 10 μg/L (Hem, 1985). The great majority of samples tested for vanadium contained less than 10 μg/L but a few samples ranged as high as 150 μg/L.

The low solubility of chromium usually keeps the concentration in natural water to under 10 μg/L (Hem, 1985). Human activity including metal plating, paints, dyes, and photography can increase the natural concentration (Smoot and others, 1991). The surface water-quality criterion for domestic water supply is 50 μg/L in Kentucky and Tennessee while the continuous level allowed for warmwater habitats is 100 μg/L in both states. The Federal MCL is 50 μg/L. While the concentration of chromium in the samples ranged from less than 10 μg/L to 120 μg/L, only 12 samples (1.5%) exceeded the 50 μg/L criteria and only 1 sample exceeded the 100 μg/L criteria.

Molybdenum is added to the environment through the combustion of fossil fuels. Although a rare element, molybdenum is need by plants and animals. Limits on molybdenum have not been set and its effects are not completely understood. Natural streams that are not strongly effected by pollution usually contain less than 1 μg/L of

EXPLANATION

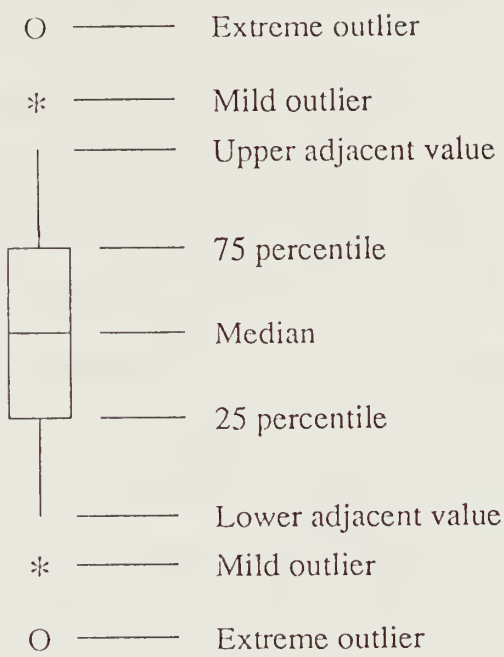
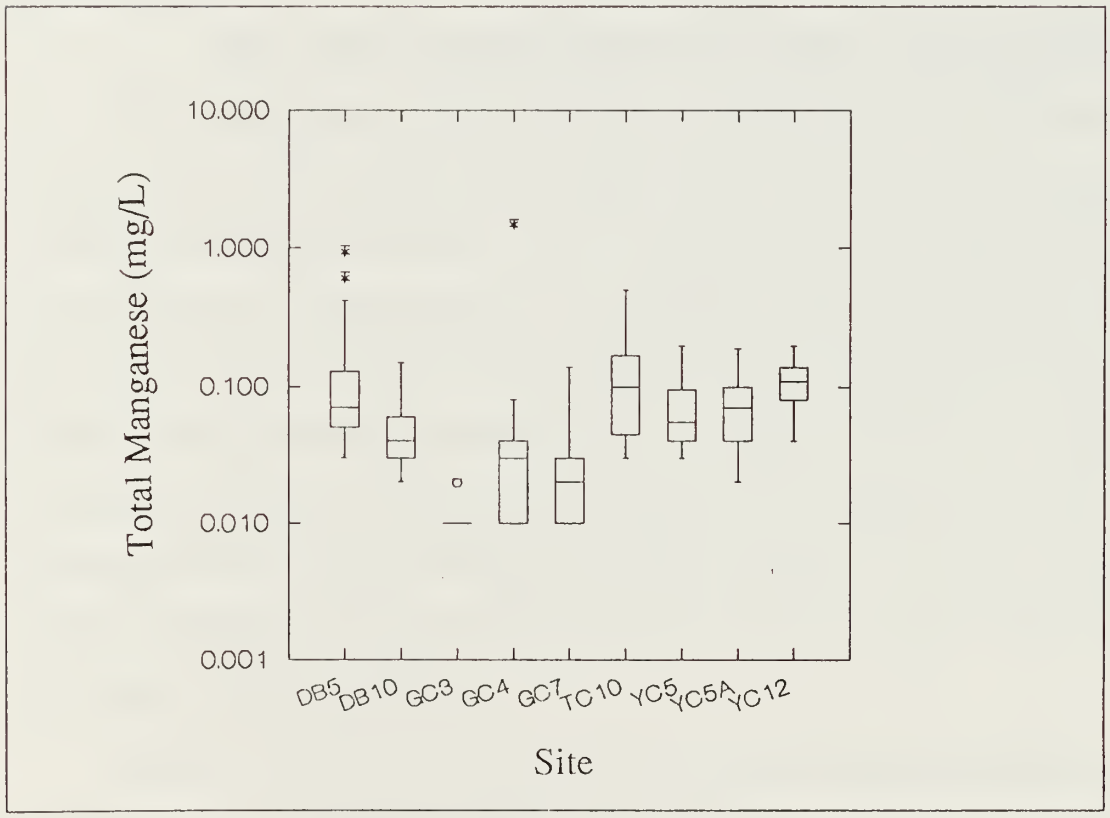


Figure 16: Distribution of Total Manganese for Major Sites



Molybdenum (Hem, 1985). Most of the samples analyzed contained undetectable amounts of molybdenum. Several samples did contain detectable amounts up to 50 µg/L and 1 sample even contained 340 µg/L of molybdenum.

Nickel is naturally found in ore, minerals, and soil but enters the aquatic environment mostly from mine wastes, electroplating wastes, and atmospheric emissions (Hem, 1985). A Federal drinking water standard is not set for nickel, nor does the Kentucky surface water-quality criteria set a limit. The Federal water-quality criteria lists 1,800 µg/L for acute conditions and 96 µg/L for chronic conditions. The Tennessee surface water-quality criteria sets limits of 1,400 µg/L and 160 µg/L for maximum concentrations and continuous concentrations respectively. All of the limits set for nickel are for a total hardness of 100 mg/L as $CaCO_3$. All but two samples had concentrations of nickel well below 96 µg/L. The remaining two samples contained 120 µg/L and 2,440 µg/L of nickel.

6.8.6 Other metallic elements- zinc, mercury, copper, cadmium, lead

Zinc, a nutritional requirement for plants and animals, is commonly found in limestone and other sedimentary rocks. Negative health effects from consuming zinc is unlikely so no drinking water limits are set. However, many people can taste zinc at concentrations over 5 mg/L (Hem, 1985). Warmwater aquatic habitat has a limit of 47 µg/L of zinc in Kentucky. The Federal water-quality criteria limits zinc to 320 µg/L and 47 µg/L for acute and chronic conditions while the Tennessee criteria lists 117 µg/L and 106 µg/L for maximum concentrations and continuous concentrations of zinc. The concentration of zinc ranged from less than 10 µg/L to 960 µg/L. A total of 36 samples (4.5%) contained concentrations of zinc over 47 µg/L. However, only 8 samples (1%) were in excess of 106 µg/L of zinc.

Mercury, found in electrical devices, thermometers, fungicides, dental fillings, drugs, paints, and in discharge from pulp mills, usually has a very low concentration in filtered stream water (Smoot and others, 1991). The Federal MCL and Tennessee

domestic water supply criteria list 2 μg/L as the limit for mercury. For freshwater aquatic life, the Federal water-quality criteria gives limits of 2.4 and 0.012 μg/L for acute and chronic conditions, the same limits given in the Tennessee surface water-quality criteria. The Kentucky surface water-quality criterion for warmwater aquatic habitat is 0.2 μg/L. Almost all of the samples analyzed for mercury contained less than the detectable limit but several samples (less than 1%) contained up to 100 μg/L of mercury.

The concentration of cadmium normally found in natural surface water is very low although mining and industrial wastes can raise the concentration. Cadmium can accumulate in plants and is considered toxic (Hem, 1985). Drinking water supplies have a limit of 10 μg/L in the Tennessee criteria and the Federal MCL. Kentucky warmwater habitat criteria list 4 μg/L for soft water and 12 μg/L for hard water. For a total hardness of 100 mg/L as $CaCO_3$, the Federal water-quality criteria for freshwater life have a limit of 3.9 μg/L and 1.1 μg/L for acute and chronic conditions while Tennessee sets these limits at 4.0 μg/L and 1.0 μg/L. The levels of cadmium found in the samples ranged from less than detectable to 60 μg/L. Only 27 samples (3.4%) tested above detection limits and almost 90% of those were at 10 μg/L of cadmium.

Copper is a required element for plants and animals due to its role in the synthesis of chlorophyll and production of hemoglobin. Although copper is not known to harm human health, it can adversely affect aquatic life (Smoot and others, 1991). Therefore, the Federal and Tennessee criteria for aquatic life are 18 μg/L for acute conditions and 12 μg/L for chronic conditions. Kentucky does not set a limit on copper for aquatic life but the criteria for domestic water supply is 1000 μg/L. The Federal SMCL is also set at 1000 μg/L. No samples were found to be over 1000 μg/L. In fact, the concentration of copper ranged from less than detectable to 490 μg/L. Over 95% of the samples contained less than 10 μg/L of copper and another 4.3% ranged between 10 μg/L and 50 μg/L.

Leaded gasoline and coal burning are commonly thought to be the main mechanisms for the dispersal of lead into the environment. Sedimentary rock also

contains lead but the solubility and natural mobility are low (Hem, 1985). The Federal MCL, and Kentucky's and Tennessee's criterion for domestic water supply are set at 50 µg/L of lead. The Tennessee concentration limits for aquatic life are set at 82 µg/L and 3 µg/L for maximum and continuous concentrations while the Federal criteria are 82 µg/L and 3.2 µg/L. The range of lead in the samples is from less than detectable to 210 µg/L. While most lead concentrations were found to be very low, 16% of the samples contained over 50 µg/L and almost 6% contained over 80 µg/L of lead.

6.8.7 Nonmetallic elements - arsenic

Arsenic, a component in pesticides, can enter streams from agriculture draining. This element is very toxic to animals, including humans (Hem, 1985). The domestic water supply criterion is 50 µg/L for Tennessee, the same value as the Federal MCL and the Kentucky warmwater habitat criterion. However, the Federal and Tennessee criteria for aquatic life are 360 µg/L and 190 µg/L for maximum (acute) and continuous (chronic) concentrations respectively. All but 10 samples (1.5%) contained less than detectable amounts of arsenic. The detectable amounts ranged up to 220 µg/L of arsenic.

6.8.8 Boron

Small concentrations of boron are needed for plant growth but large amounts can have an adverse impact. A few tenths of a milligram per liter of boron is expected in surface water (Hem, 1985). Almost every sample contained less than 0.20 mg/L of boron but one sample had a concentration of 2.80 mg/L.

6.9 Oil and grease

The amount of oil and grease in the samples ranged from below detectable to 95 mg/L. However, most samples contained less than a two milligrams per liter.

7. Streambed-Sediment Chemistry

Streambed-sediment chemistry data is compared to the "Guidelines for the Pollution classification of Great Lakes harbor sediments (U.S. EPA, 1977)." Table 5 provides these guidelines. This report compared these established guidelines to the data

collected for each site's sediment. A summary of findings can be found in Table 8. Each oval indicates a sediment sample that exceeded the guidelines. Any site not specifically listed in the table was found to be nonpolluted for all listed constituents. All sites were considered nonpolluted with respect to cadmium, chromium, copper, iron, lead, nickel, phosphorus, and oil and grease.

Site ST5 was found to be moderately polluted with zinc and site TD1 was heavily polluted with mercury. Several sites were polluted with respect to arsenic, manganese, and especially barium.

8. Trend Analysis

Appendix C contains scatter plots of important properties and constituents over the time period covered by this report. A more conclusive analysis of possible trends would need to encompass a longer time period, including historical data from before the present construction began.

9. Discussion and Conclusions

This report presents the water quality and streambed-sediment quality for major stream sites in the Cumberland Gap National Historic Park. For a more complete evaluation of the factors that may be influencing the quality, more information needs to be collected/compiled for each sampling site. Pertinent information would include watershed area and characteristics of the watershed such as slopes and a breakdown of the land use and land cover. Potential point and nonpoint sources of pollution in each watershed could also be helpful in explaining water quality conditions.

However, even without specific site information, general conclusions can be suggested. The distribution of pH in water samples in Figure 8 shows a wide range of pH and five mild outliers in the low end of the pH scale for site TC10. Both sulfuric acid and sodium hydroxide are added to Tunnel Creek in attempts to neutralize the pH and such additions help to explain the wide variations that Figure 8 shows. The remaining sites have a tighter range

Table 8: Streambed Sediment Pollution Classification by Chemical Constituent and Site[1]

	Arsenic	Barium	Cadmium	Chromium	Copper	Iron	Lead	Manganese	Mercury	Nickel	Oil & Grease	Phosphorus	Zinc
DB5		0000											
DB6		00											
DB8	0												
DB10		00											
DR9		00000						0					
GC3	0	0000											
GC5		0											
GC7		000000						0●					
LH5		0											
SB9	0												
SB11		0											
SR10		0											
ST5		0						0					0
ST10		0											
STOR1		0											
TC10	00	000						0					
TD1	0	00000●●						000●	●				
YC5		0						0					
YC5A	0	00											

0 Moderately polluted ● Heavily polluted

[1] Based on Guidelines for the Pollution Classification of Great Lakes harbor sediments (U.S. EPA, 1977).

of pH although there is a decreasing variation in pH for Davis Branch between site DB5 to DB10.

The distributions of specific conductance in water samples in Figure 9 show significant site-to-site variation. The sites further downstream have a higher specific conductance range than upstream sites. For example, values for site DB10 on Davis Branch range wider than the upstream site DB5. Gap Creek and Yellow Creek show the same pattern. The distribution of total dissolved solids in Figure 12 shows a similar pattern. Figure 11 illustrates that total dissolved solids and specific conductance are closely related. As the amount of total dissolved solids increases, so does the specific conductance. The outlying point on Figure 11 is possibly due to a measurement error .

Figure 10 clearly illustrates the relationship of decreasing specific conductance with increasing flowrate due to dilution. Sites located further downstream appear to have a wider variation in total dissolved solids and specific conductance. This may be due to the increased residence time of water in the streambed, thereby allowing for more dissolution of minerals.

Suspended sediment concentration ranges widely for the streams shown in Figure13. Precipitation intensity, land use, plant cover, topography, and flowrate can all affect the suspended sediment concentration in a stream. These variables may help explain why the suspended sediment concentration may vary from site to site.

The extremely high data point for suspended sediment concentration shown for site GC4 could be expected during very high flowrate conditions. However, Figure 17 shows suspended sediment concentration versus flowrate for site GC4 and the extremely high suspended sediment sample is not associated with an extremely high flowrate. Possible explanations would include an error in sampling analysis, or recording of this suspended sediment concentration value.

Figure 17: Suspended Sediment versus Flowrate for Site GC4

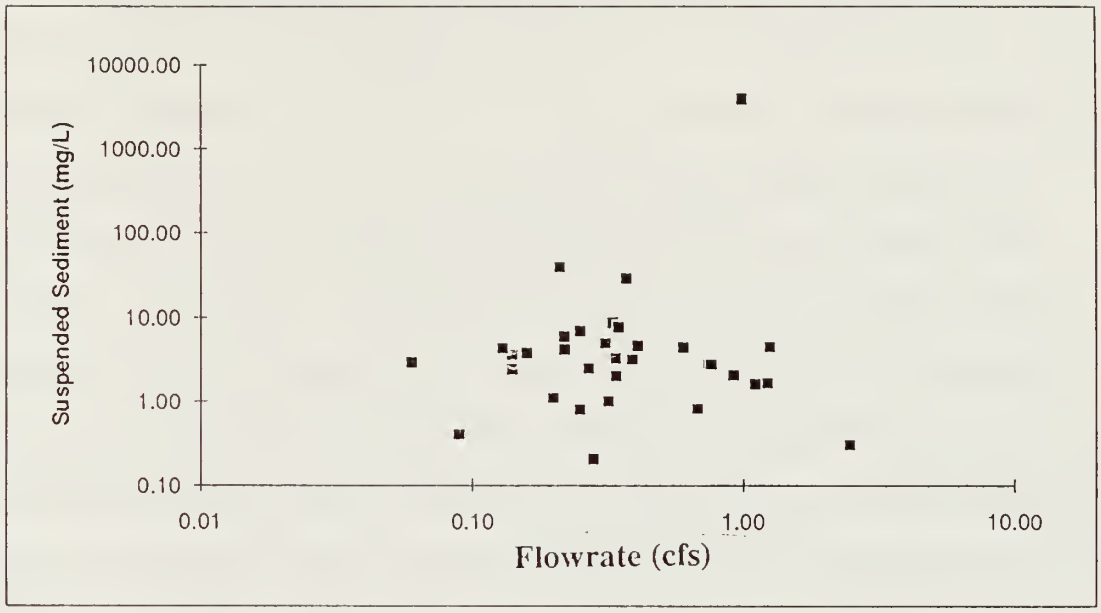
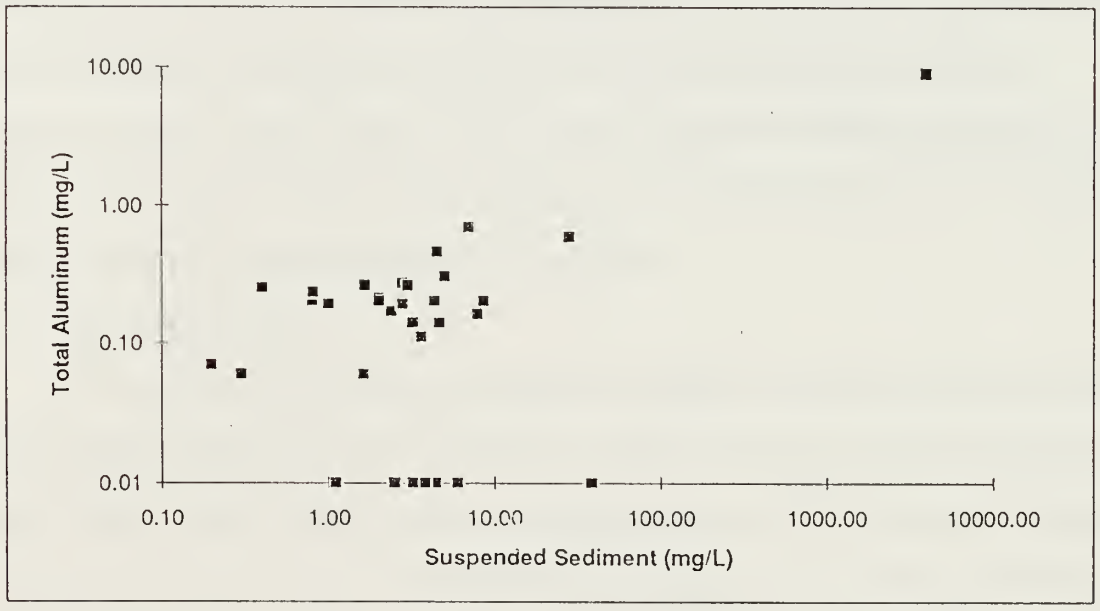


Figure 18: Total Aluminum versus Suspended Sediment for Site GC4



One check on the validity of this high suspended sediment concentration value is to look for associated high levels of total metal concentrations. Figures 18, 19, and 20 show total aluminum, total manganese, and total iron varying with suspended sediment concentration respectively for Site GC4. All three metals have a high concentration point that falls roughly in line with the remaining data. The high suspended sediment concentration value is indeed associated with high levels of total aluminum, total manganese, and total iron. The distribution of total aluminum, total iron, and total manganese as shown in Figures 14, 15, and 16 respectively, show the corresponding outliers for site GC4. There is no definite explanation for these extremely high levels in one sample for site GC4 but a it is probable that the sample was disturbed in some way. Perhaps the sampler disturbed the bottom of the stream while taking the sample and the streambed sediment was stirred up.

The distribution of total aluminum concentration in Figure 14 also shows a wide range for site TC10 on Tunnel Creek. This is also the site that had the widely ranging pH in Figure 8. A relationship between dissolved aluminum concentration and pH is illustrated in Figure 21. The initial decrease in dissolved aluminum concentration with increasing pH is probably a decrease in uncomplexed aluminum while, beginning at about pH=6, the increase on aluminum concentration with increasing pH is aluminum complexes such as $AlOH^{2+}$ (Hem, 1985). Thus, a stream with widely ranging pH and an aluminum-rich streambed or suspended sediment, such as Tunnel Creek, can be expected to have a widely ranging concentration of aluminum.

10. Recommendations

The water monitoring program currently in place is to ensure compliance with the state and federal regulations and to maintain the quality of water in Cumberland Gap and the surrounding areas. However, not all of the data that are currently being collected may be needed to meet these goals. As stated earlier, cobalt, germanium, lithium, silicon, and strontium analysis do not appear to provide necessary information and probably should be

Figure 19: Total Manganese versus Suspended Sediment for Site GC4

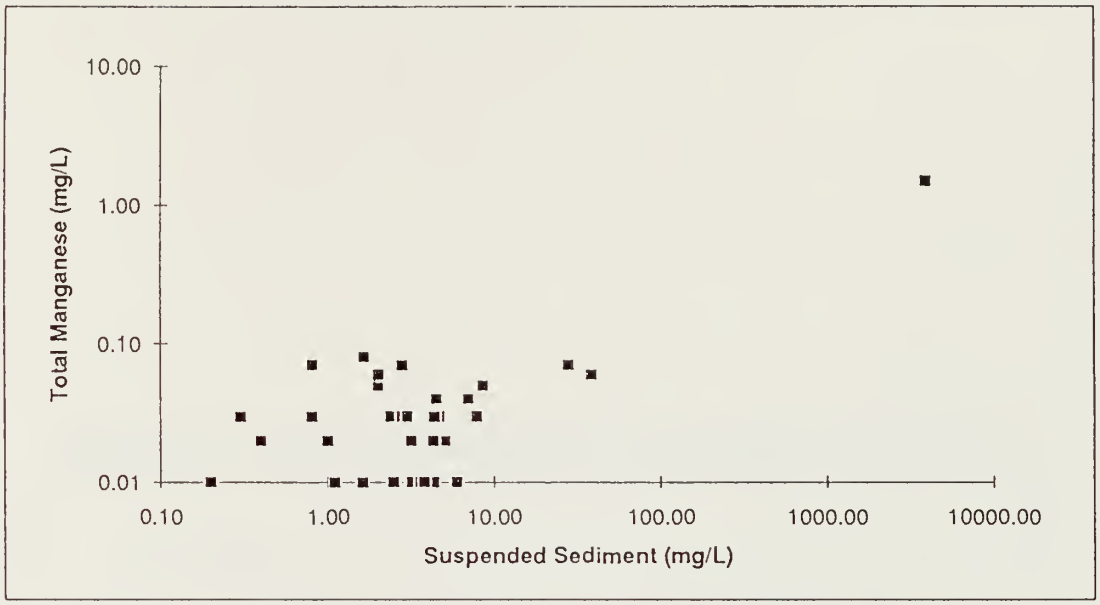


Figure 20: Total Iron versus Suspended Sediment for Site GC4

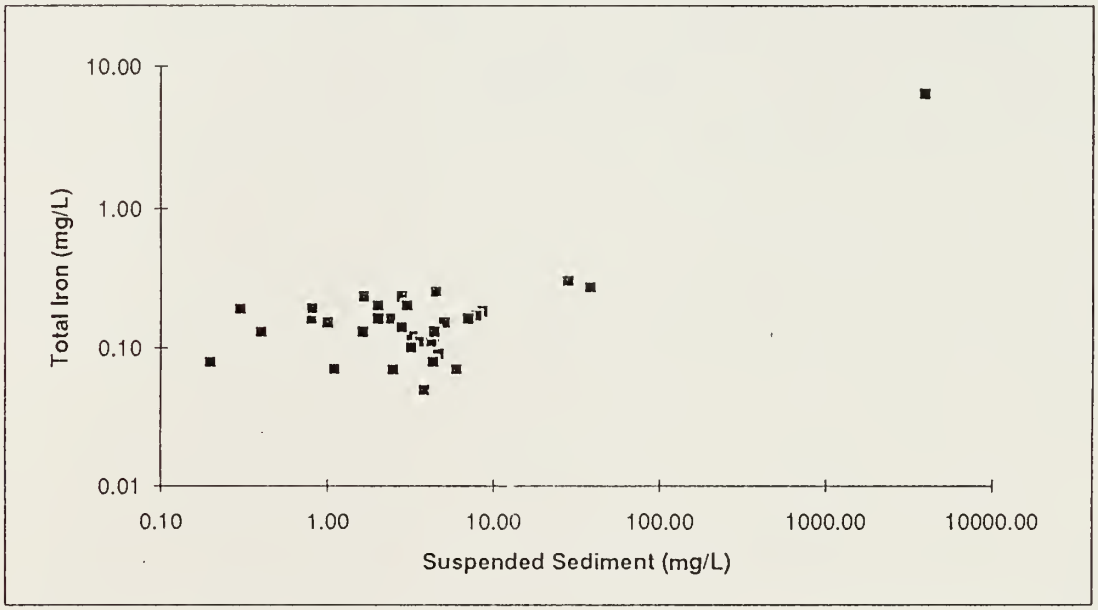
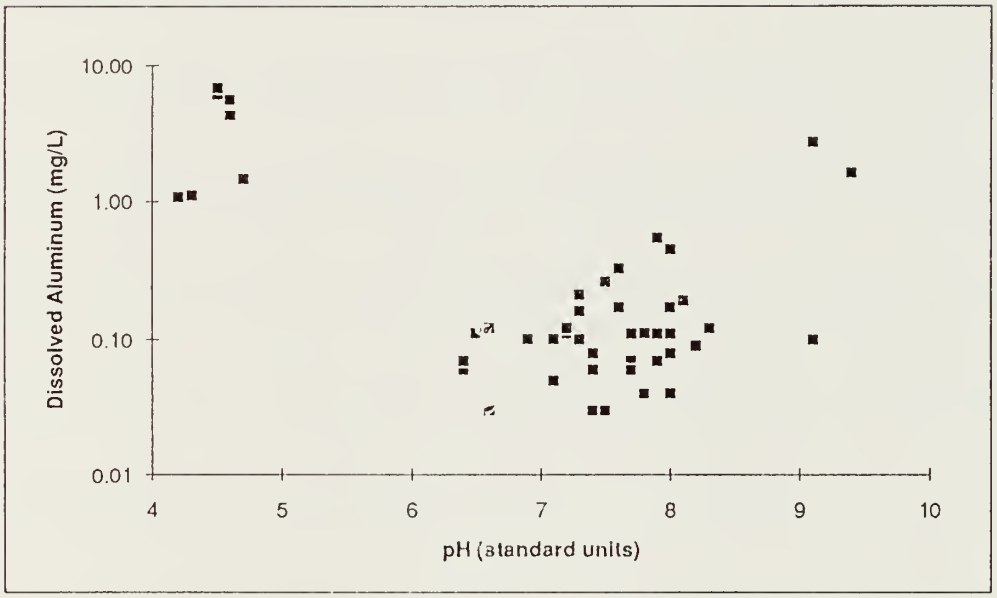


Figure 21: Dissolved Aluminum versus pH for Site TC10



evaluated for removal from the program. On the other hand, ancillary data that would prove useful in interpreting the water quality conditions and trends would include specific site information as discussed, as well as any historical water quality information.

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Appendices

Appendix A: Location of Sampling Sites

Appendix B: Tennessee Tech Sample Analysis Methods

Appendix C: Water Quality Trend Graphs

Appendix D: Water Quality Data

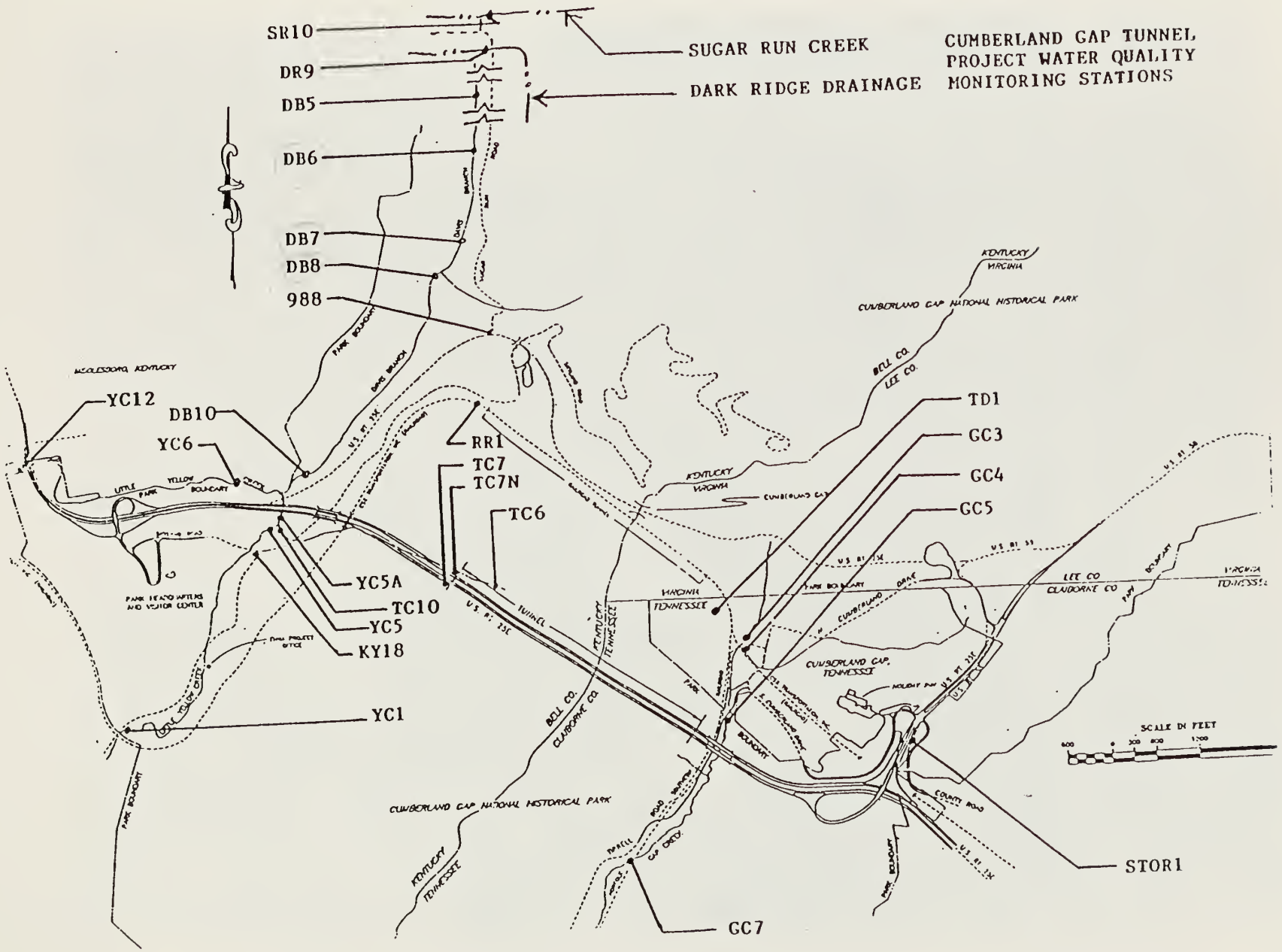
Appendix E: Sediment Chemistry Data

Appendix F: Climate Data

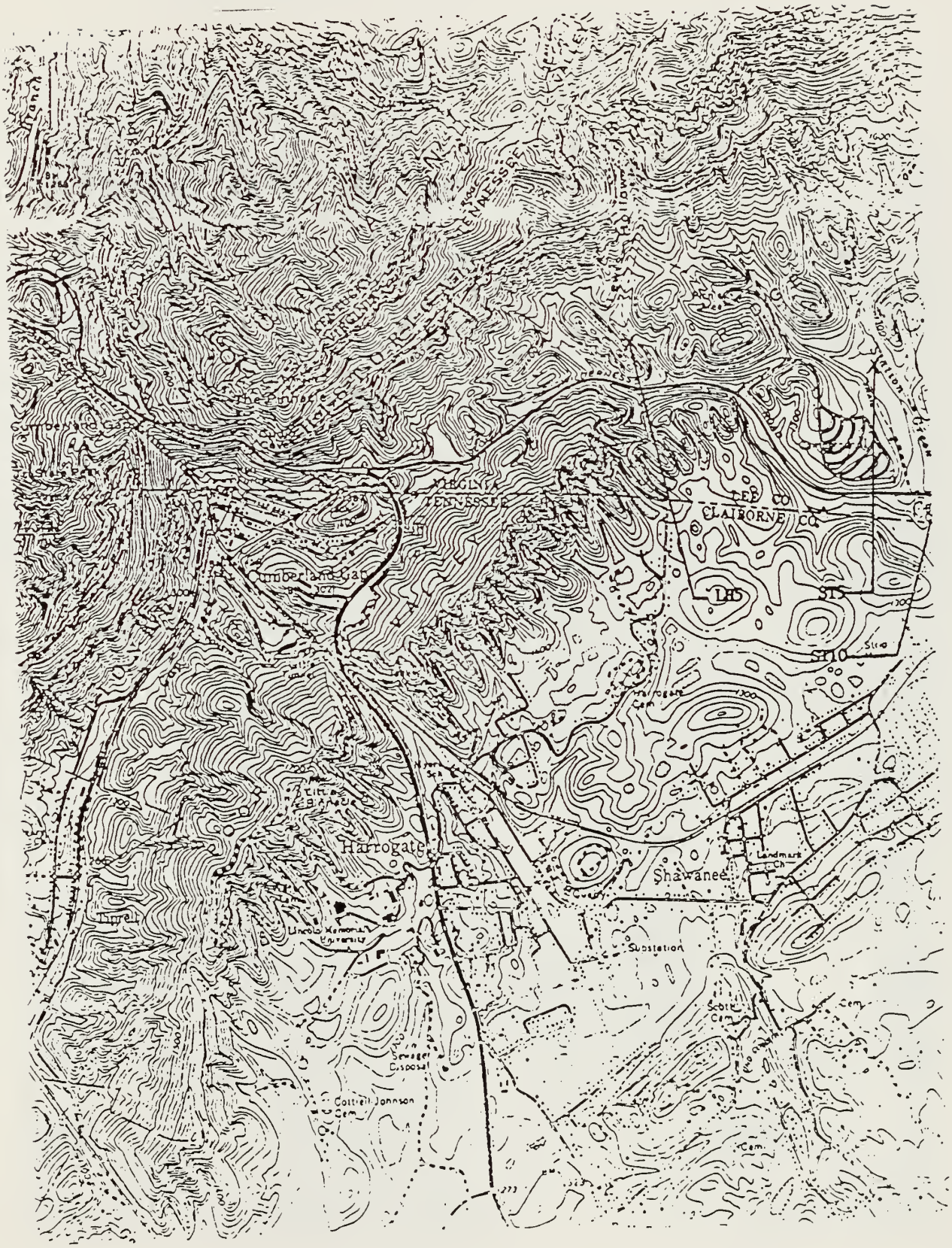
Appendix A

Location of Sampling Sites

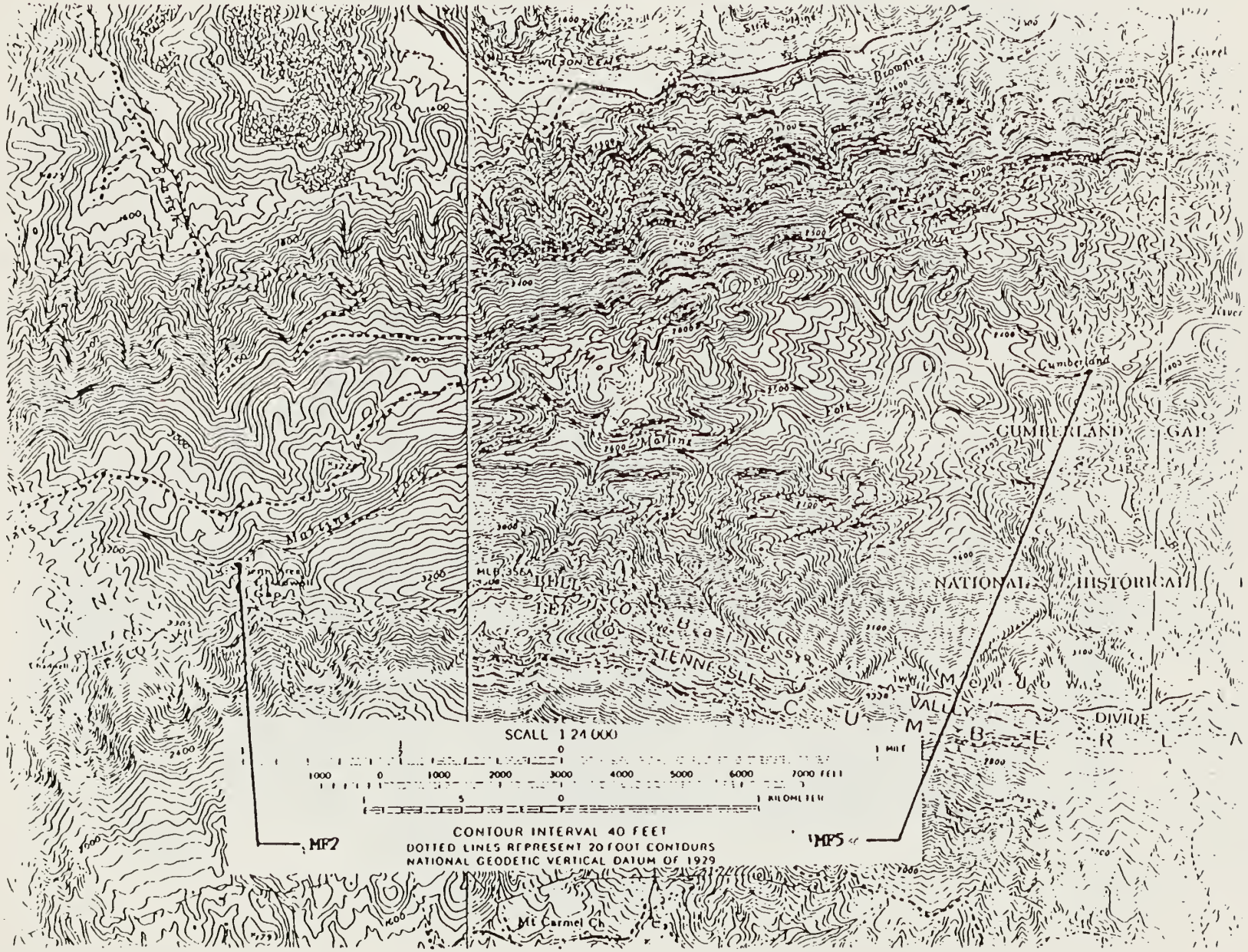
Location Map for the Major Sampling Sites



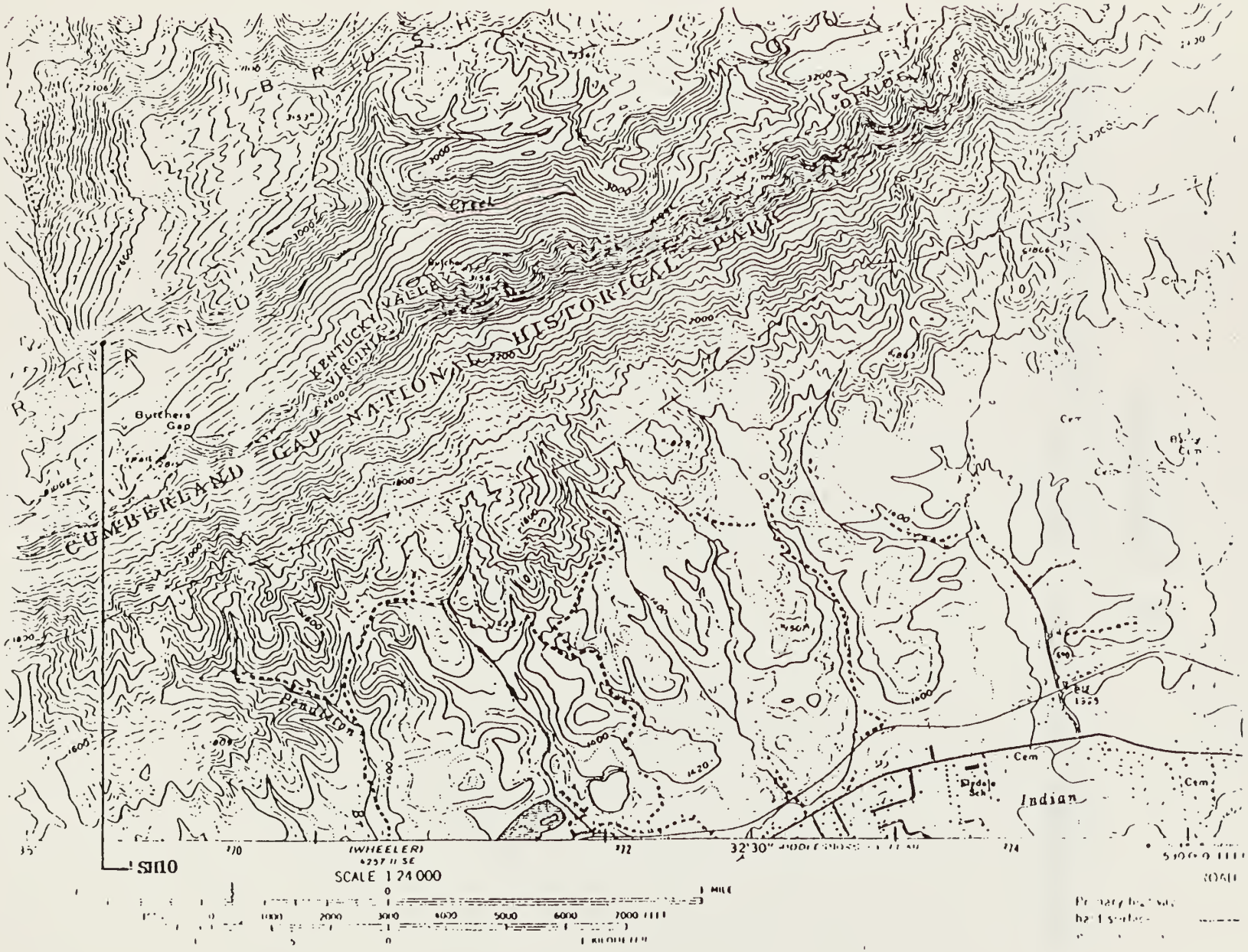
Location Map for Sampling Sites LH5, ST5, and ST10



Location Map for Sampling Sites MF2 and MF5



Location Map for Sampling Site SH10



Appendix B
Tennessee Tech Sample Analysis Methods

Regular Sample Parameters

Name	Method
Acidity	Titrimetric/Potentiometric, EPA 305.1
Alkalinity, as CaCO3	Titrimetric/Potentiometric, EPA 310.1
Aluminum, dissolved	ICP, EPA 200.7
Aluminum, total	ICP, EPA 200.7
Boron, dissolved	ICP, EPA 200.7
Bromide	IC, EPA 300.1
Calcium, dissolved	ICP, EPA 200.7
Cations/Anion Ratio	Calculation
Chloride	IC, EPA 300.1
Chromium, dissolved	ICP, EPA 200.7
Cobalt, dissolved	ICP, EPA 200.7
Color, Platnum-Cobalt Method	Visual Comparison, EPA 110.2
Copper, disolved	ICP, EPA 200.7
Fluoride	IC, EPA 300.1
Hardness, calculation	ICP, EPA 200.7
Iron, dissolved	ICP, EPA 200.7
Iron, total	ICP, EPA 200.7
Lead, dissolved	ICP, EPA 200.7
Magnesium, dissolved	ICP, EPA 200.7
Manganese, dissolved	ICP, EPA 200.7
Manganese, total	ICP, EPA 200.7
Nickle, dissolved	ICP, EPA 200.7
Nitrate	IC, EPA 300.1
Nitrite	IC, EPA 300.1
pH	Electrometric, EPA 150.1
Phosphate, ortho	IC, EPA 300.1
Phosphorus, dissolved	ICP, EPA 200.7
Potassium, dissolved	ICP, EPA 200.7
Silicon, dissolved	ICP, EPA 200.7
Sodium, dissolved	ICP, EPA 200.7
Sulfate	IC, EPA 300.1
Titanium, dissolved	ICP, EPA 200.7
Total Anions	Calculation
Total Cations	Calculation
Total Dissolved Solids	Calculation
Total Suspended Solids	Gravimetric, EPA 160.2
Zinc, dissolved	ICP, EPA 200.7

Storm and Quarterly Sample Parameters

Name	Method
Acidity	Titrimetric/Potentiometric, EPA 305.1
Alkalinity, as CaCO3	Titrimetric/Potentiometric, EPA 310.1
Aluminum, dissolved	ICP, EPA 200.7
Aluminum, total	ICP, EPA 200.7
Arsenic, dissolved	ICP, EPA 200.7
Barium, dissolved	ICP, EPA 200.7
Boron, dissolved	ICP, EPA 200.7
Bromide	IC, EPA 300.1
Cadmium, dissolved	ICP, EPA 200.7
Calcium, dissolved	ICP, EPA 200.7
Cation/Anion Ratio	Calculation
Chloride	IC, EPA 300.1
Chromium, dissolved	ICP, EPA 200.7
Cobalt, dissolved	ICP, EPA 200.7
Color. Platnum-Cobalt Method	Visual Comparison, EPA 110.2
Copper, disolved	ICP, EPA 200.7
Fluoride	IC, EPA 300.1
Germanium, dissolved	ICP, EPA 200.7
Hardness, calculation	ICP, EPA 200.7
Iron, dissolved	ICP, EPA 200.7
Iron, total	ICP, EPA 200.7
Lead, dissolved	ICP, EPA 200.7
Lithium, dissolved	ICP, EPA 200.7
Magnesium, dissolved	ICP, EPA 200.7
Manganese, dissolved	ICP, EPA 200.7
Manganese, total	ICP, EPA 200.7
Mercury, dissolved	ICP, EPA 200.7
Molybdenum, dissolved	ICP, EPA 200.7
Nickle, dissolved	ICP, EPA 200.7
Nitrate	IC, EPA 300.1
Nitrite	IC, EPA 300.1
pH	Electrometric, EPA 150.1
Phosphate, ortho	IC, EPA 300.1
Phosphorus, dissolved	ICP, EPA 200.7
Potassium, dissolved	ICP, EPA 200.7
Silicon, dissolved	ICP, EPA 200.7
Sodium, dissolved	ICP, EPA 200.7
Strontium, dissolved	ICP, EPA 200.7
Sulfate	IC, EPA 300.1
Titanium, dissolved	ICP, EPA 200.7
Total Anions	Calculation
Total Cations	Calculation
Total Dissolved Solids	Calculation
Total Organic Carbon	Persulfate-Ultraviolet Oxidation, EPA 415.2
Total Suspended Solids	Gravimetric, EPA 160.2
Vanadium, dissolved	ICP, EPA 200.7
Zinc, dissolved	ICP, EPA 200.7

Rain Sample Parameters

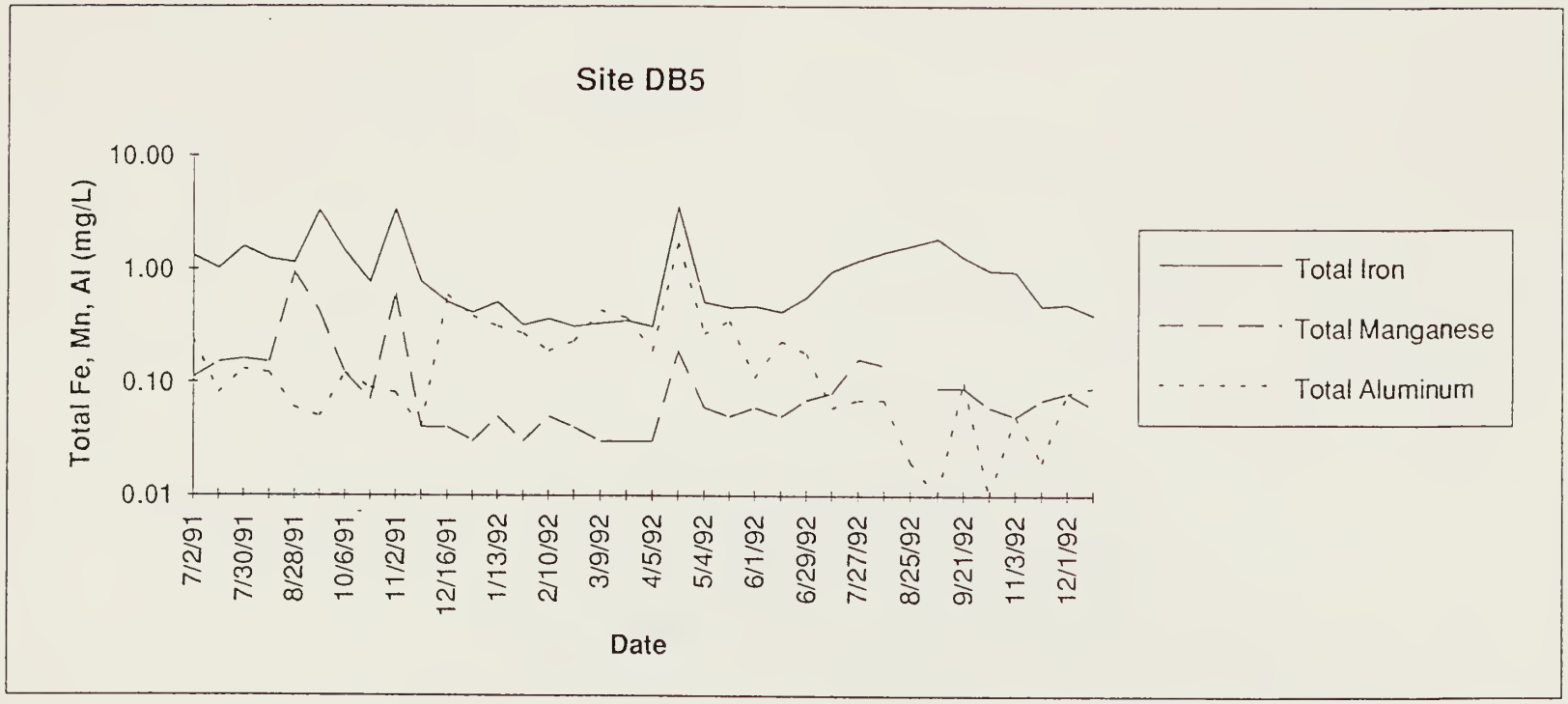
Name	Method
Ammonia, nitrogen	Auto-Analyzer Automated Phenate, EPA 350.1
Calcium, total	ICP, EPA 200.7
Chloride	IC, EPA 300.1
Magnesium, total	ICP, EPA 200.7
Nitrate	IC, EPA 300.1
pH	Electrometric, EPA 150.1
Phosphate, ortho	IC, EPA 300.1
Potassium, total	ICP, EPA 200.7
Sodium, total	ICP, EPA 200.7
Specific Conductance	Electrometric, EPA 120.1
Sulfate	IC, EPA 300.1

Sediment Sample Parameters

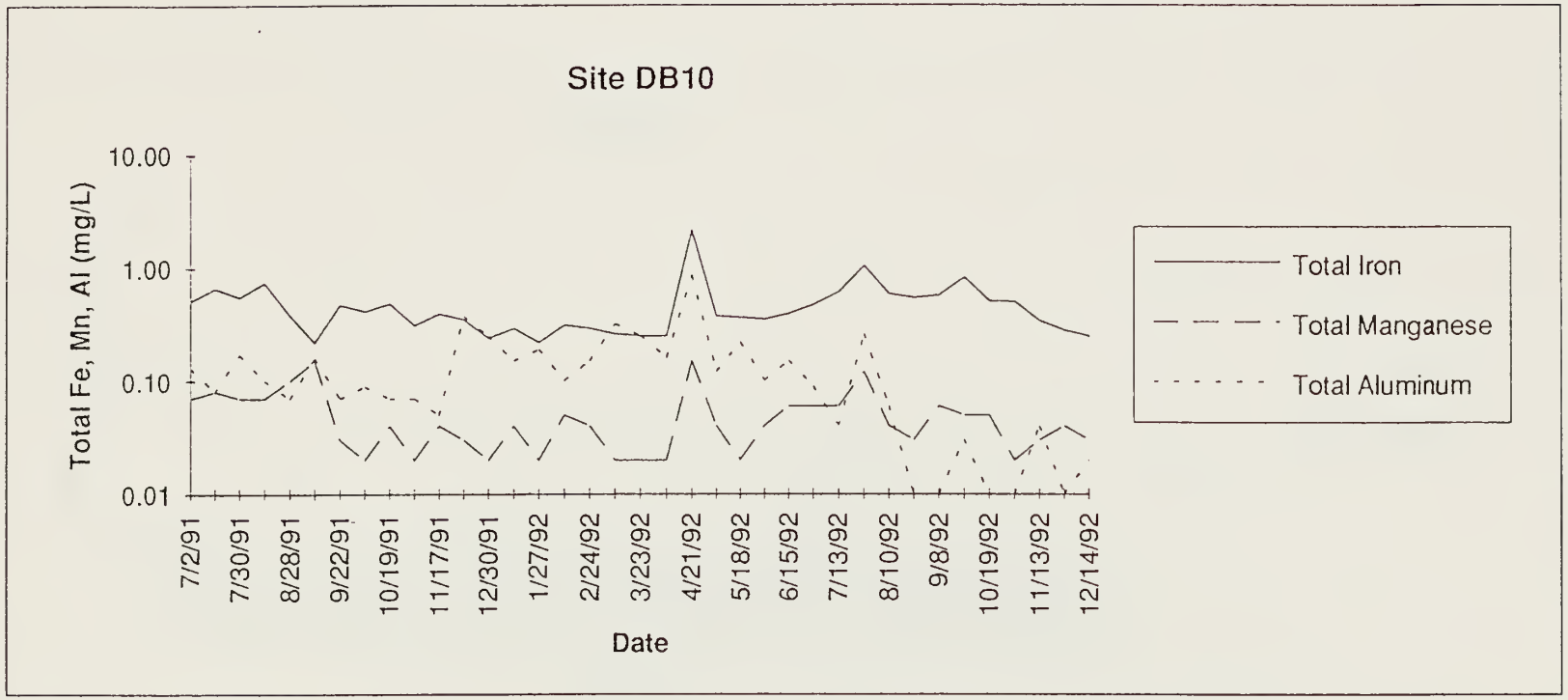
Name	Method
Aluminum, dissolved	ICP, EPA 200.7
Arsenic, dissolved	ICP, EPA 200.7
Barium, dissolved	ICP, EPA 200.7
Boron, dissolved	ICP, EPA 200.7
Bromide	IC, EPA 300.1
Cadmium, dissolved	ICP, EPA 200.7
Calcium, dissolved	ICP, EPA 200.7
Chloride	IC, EPA 300.1
Chromium, dissolved	ICP, EPA 200.7
Cobalt, dissolved	ICP, EPA 200.7
Copper, disolved	ICP, EPA 200.7
Fluoride	IC, EPA 300.1
Germanium, dissolved	ICP, EPA 200.7
Iron, dissolved	ICP, EPA 200.7
Lead, dissolved	ICP, EPA 200.7
Lithium, dissolved	ICP, EPA 200.7
Magnesium, dissolved	ICP, EPA 200.7
Manganese, dissolved	ICP, EPA 200.7
Mercury, dissolved	ICP, EPA 200.7
Molyebdinum, dissolved	ICP, EPA 200.7
Neutralization Potential	Method developed by Berea KY Lab
Nickel, dissolved	ICP, EPA 200.7
Nitrate	IC, EPA 300.1
Nitrite	IC, EPA 300.1
pH	Electrometric, EPA 150.1
Phosphate, ortho	IC, EPA 300.1
Phosphorus, dissolved	ICP, EPA 200.7
Potassium, dissolved	ICP, EPA 200.7
Potential Acidity	Method developed by Berea KY Lab
Silicon, dissolved	ICP, EPA 200.7
Sodium, dissolved	ICP, EPA 200.7
Strontium, dissolved	ICP, EPA 200.7
Sulfate	IC, EPA 300.1
Sulfer, total	ICP, EPA 200.7
Titanium, dissolved	ICP, EPA 200.7
Total Carbon	Persulfate-Ultraviolet Oxidation, EPA 415.2
Total Organic Carbon	Persulfate-Ultraviolet Oxidation, EPA 415.2
Vanadium, dissolved	ICP, EPA 200.7
Zinc, dissolved	ICP, EPA 200.7

Appendix C
Water Quality Trend Graphs

Total Iron, Manganese, and Aluminum for Major Sites



Total Iron, Manganese, and Aluminum for Major Sites



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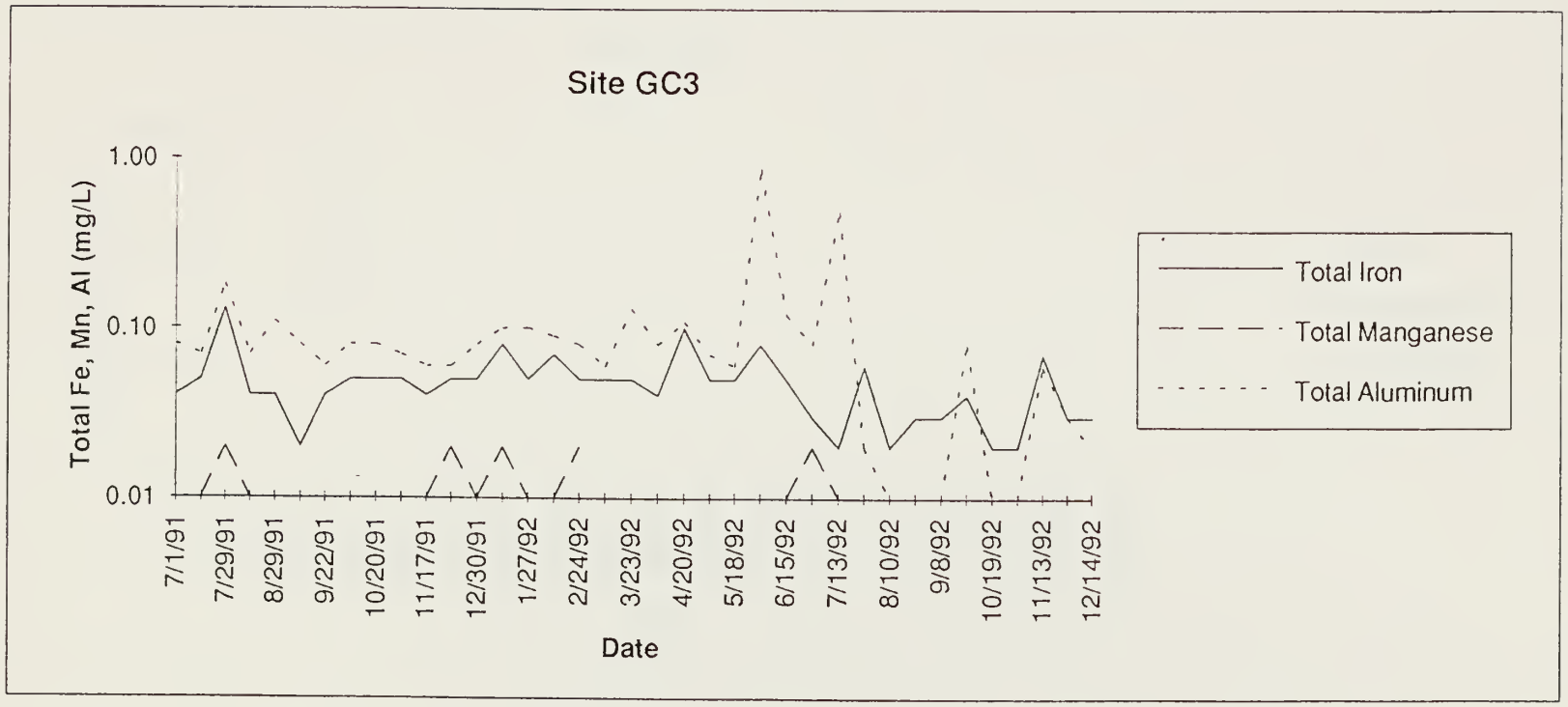

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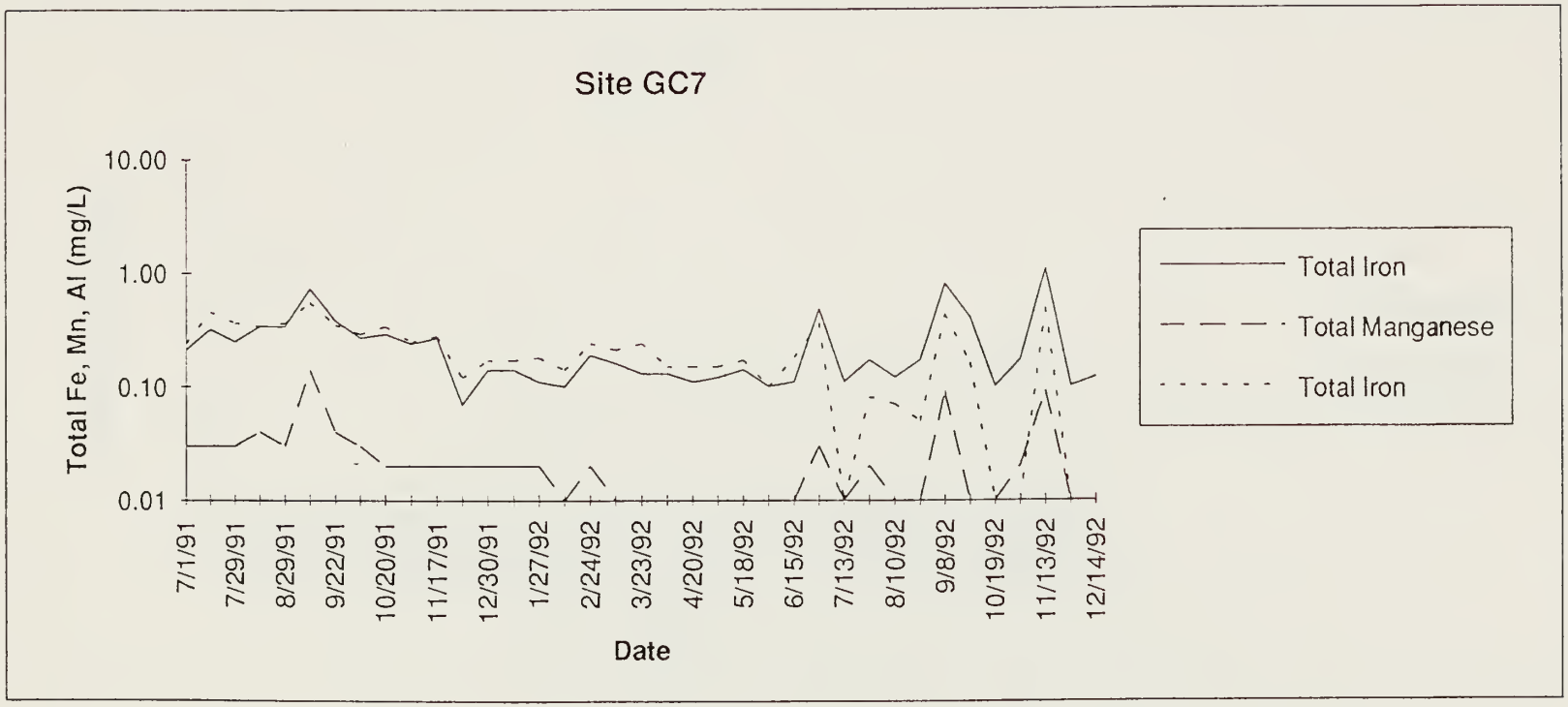

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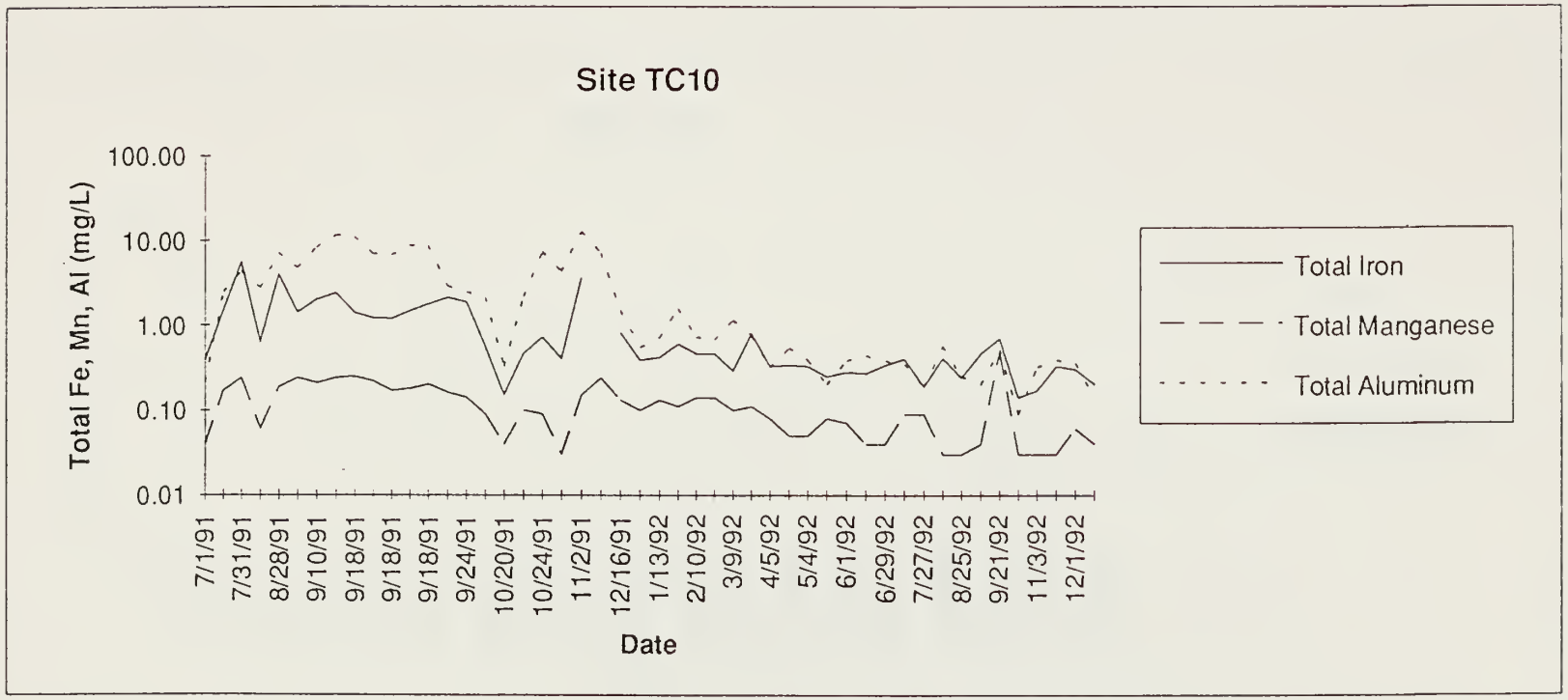

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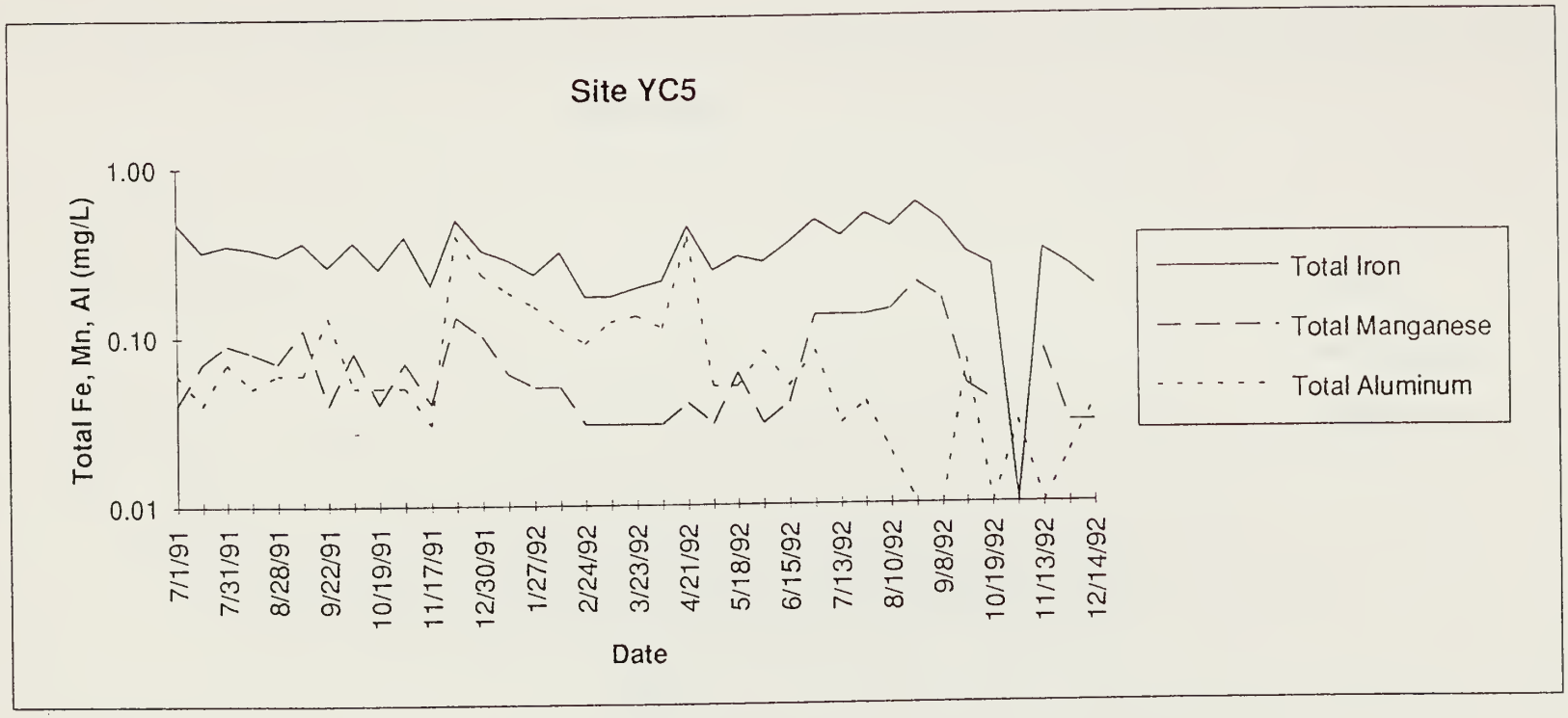
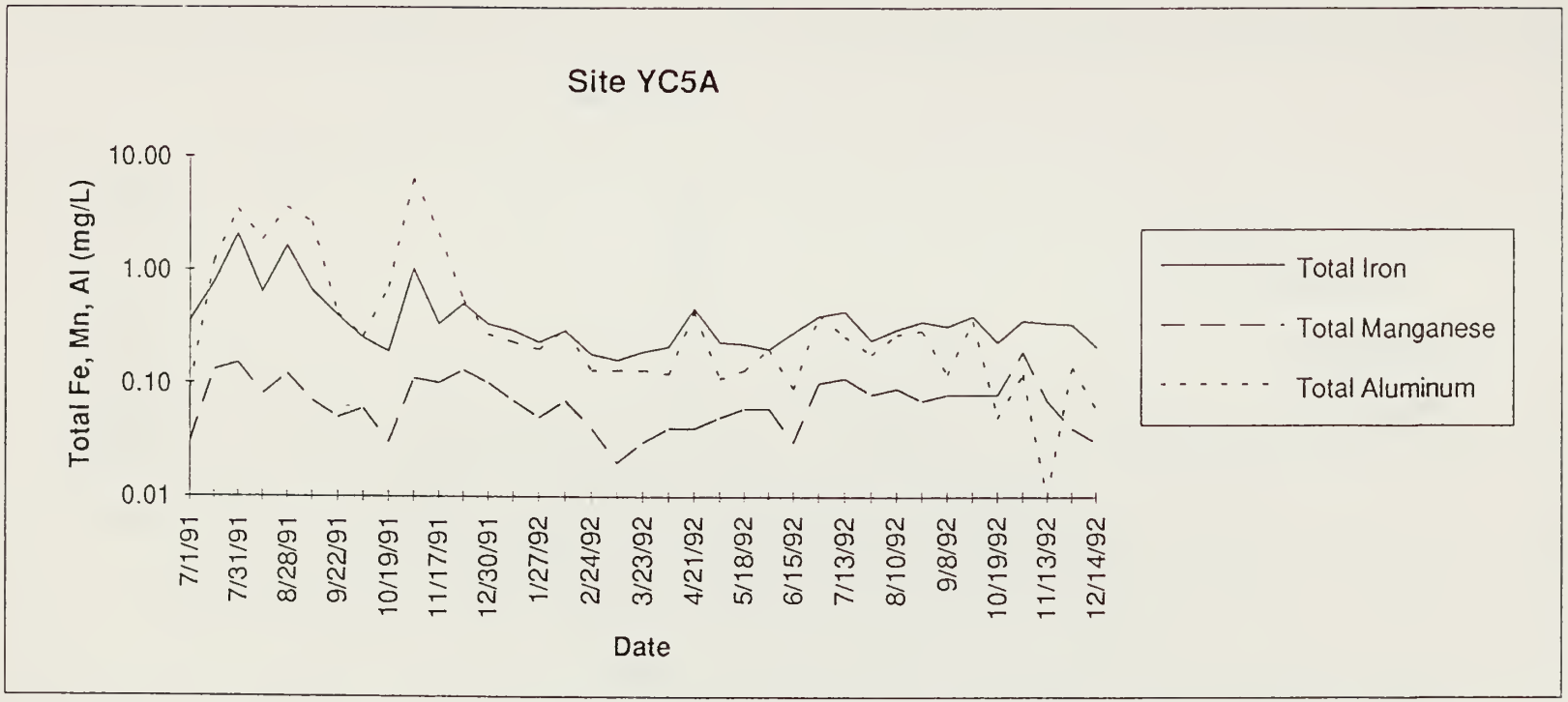
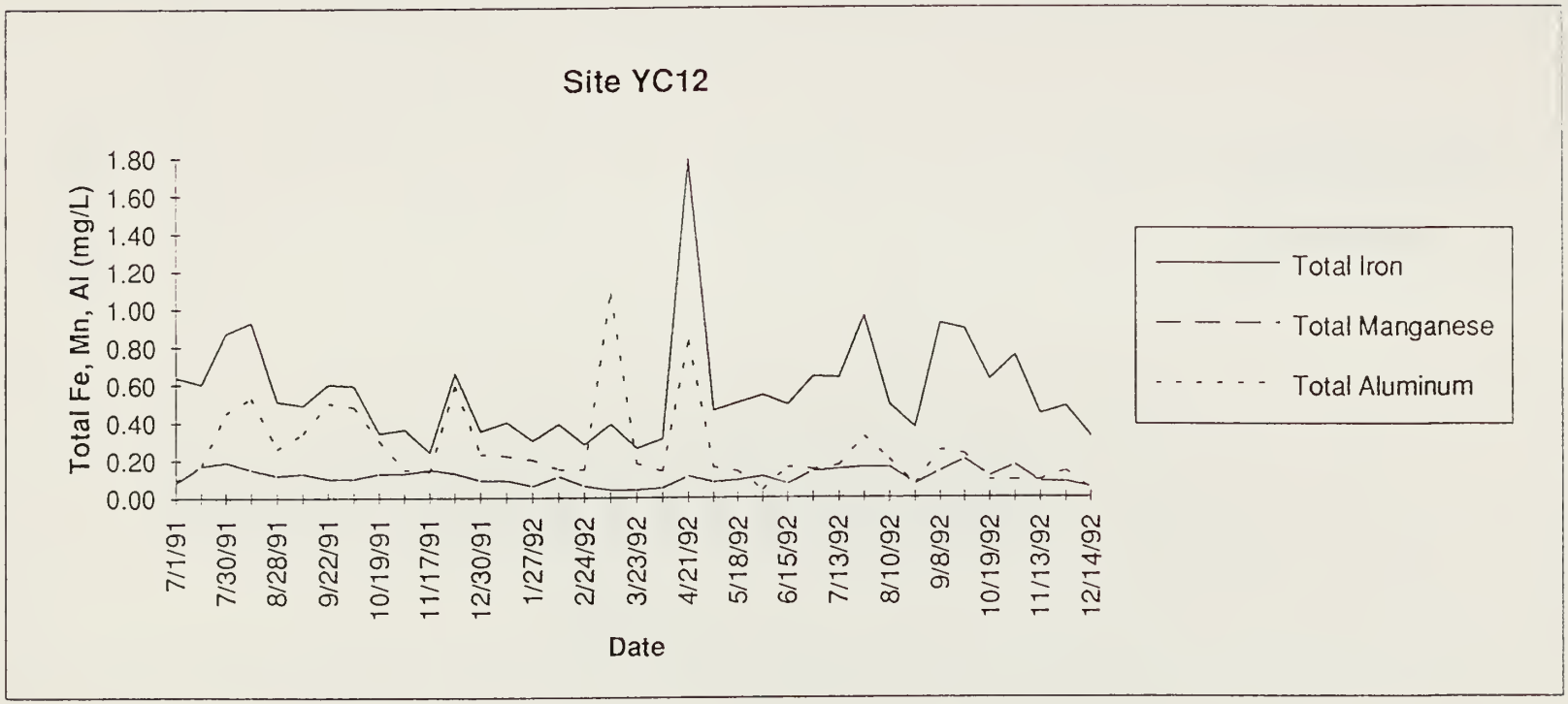


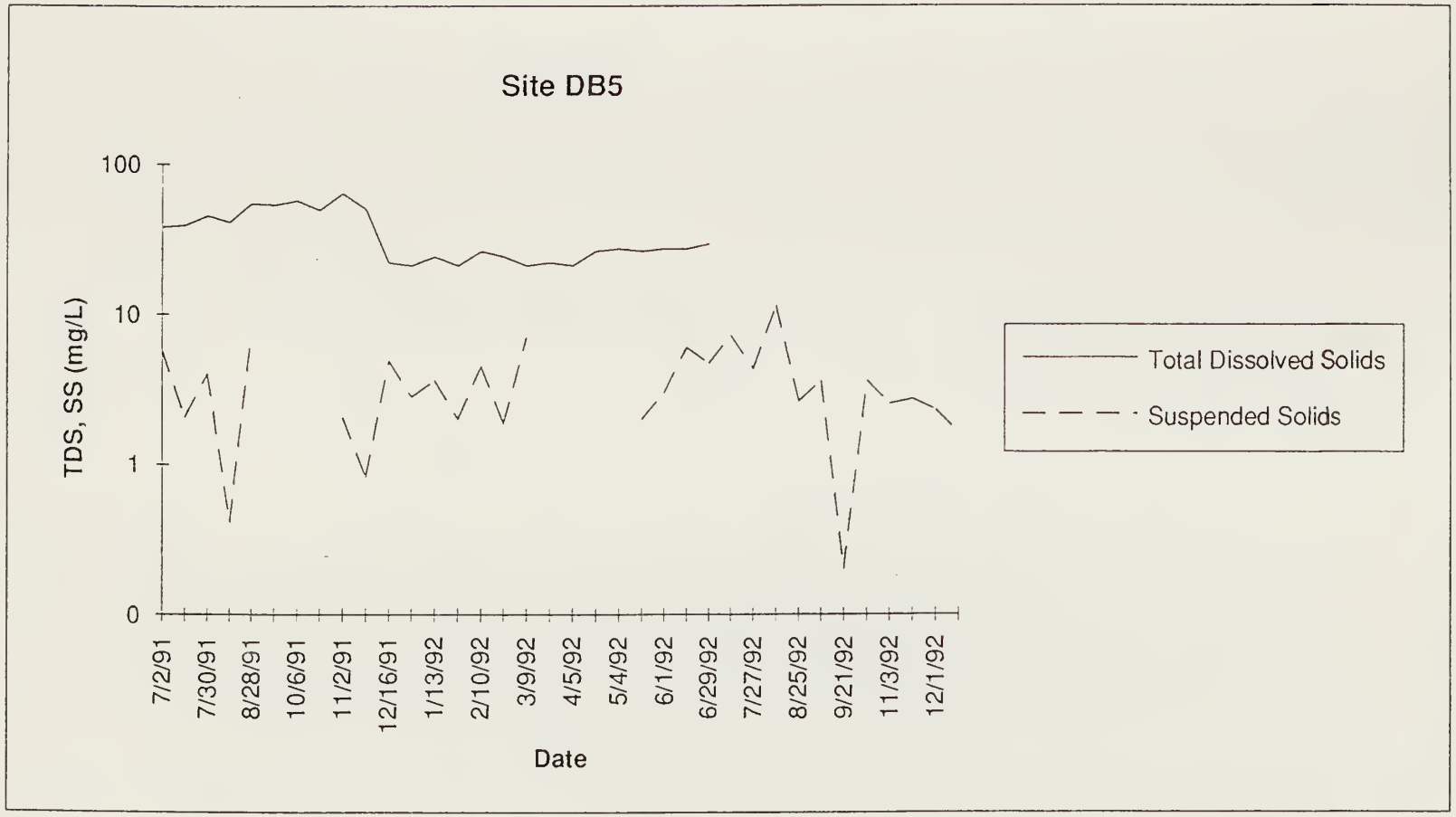
Total Iron, Manganese, and Aluminum for Major Sites



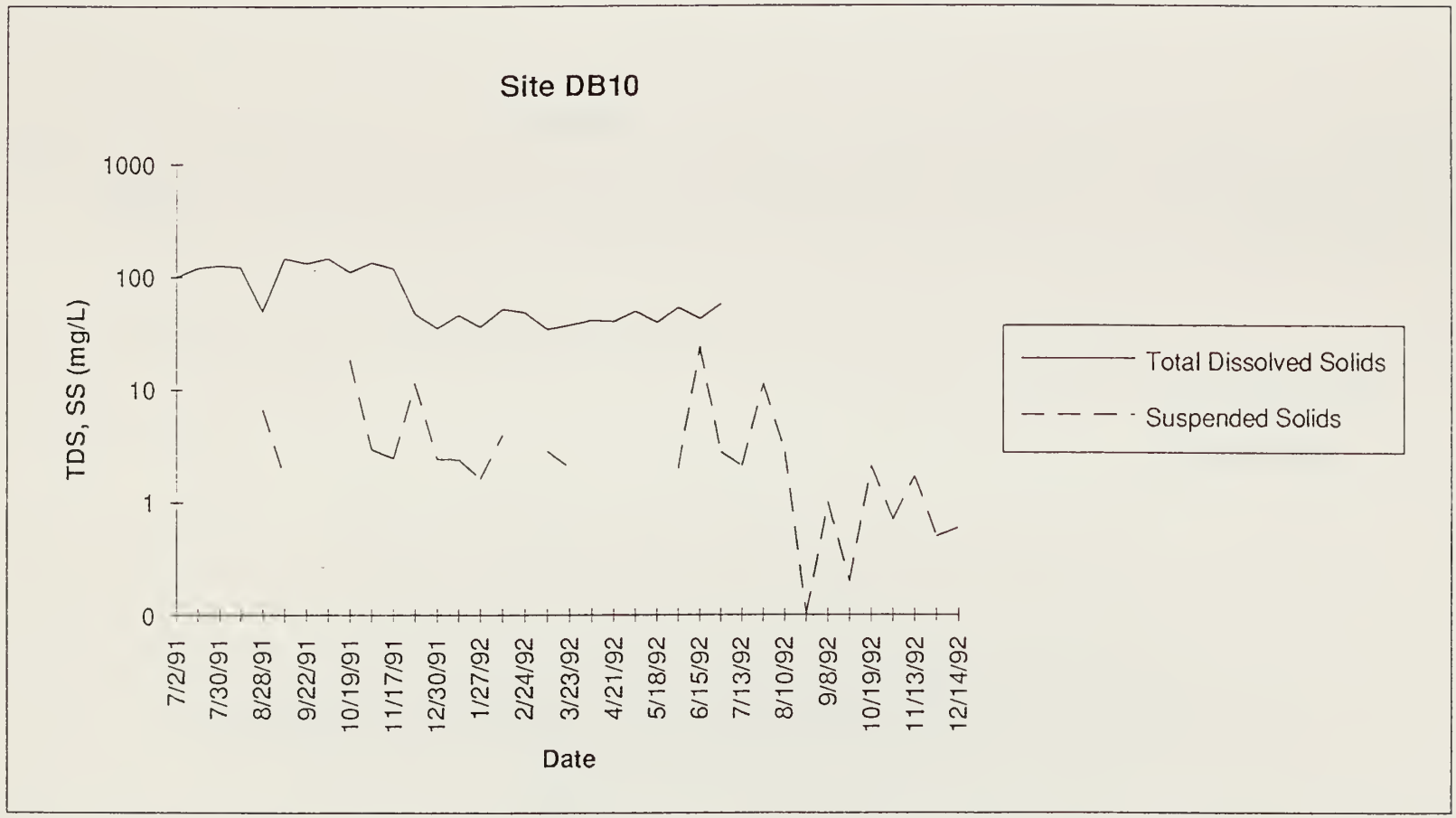
Total Iron, Manganese, and Aluminum for Major Sites



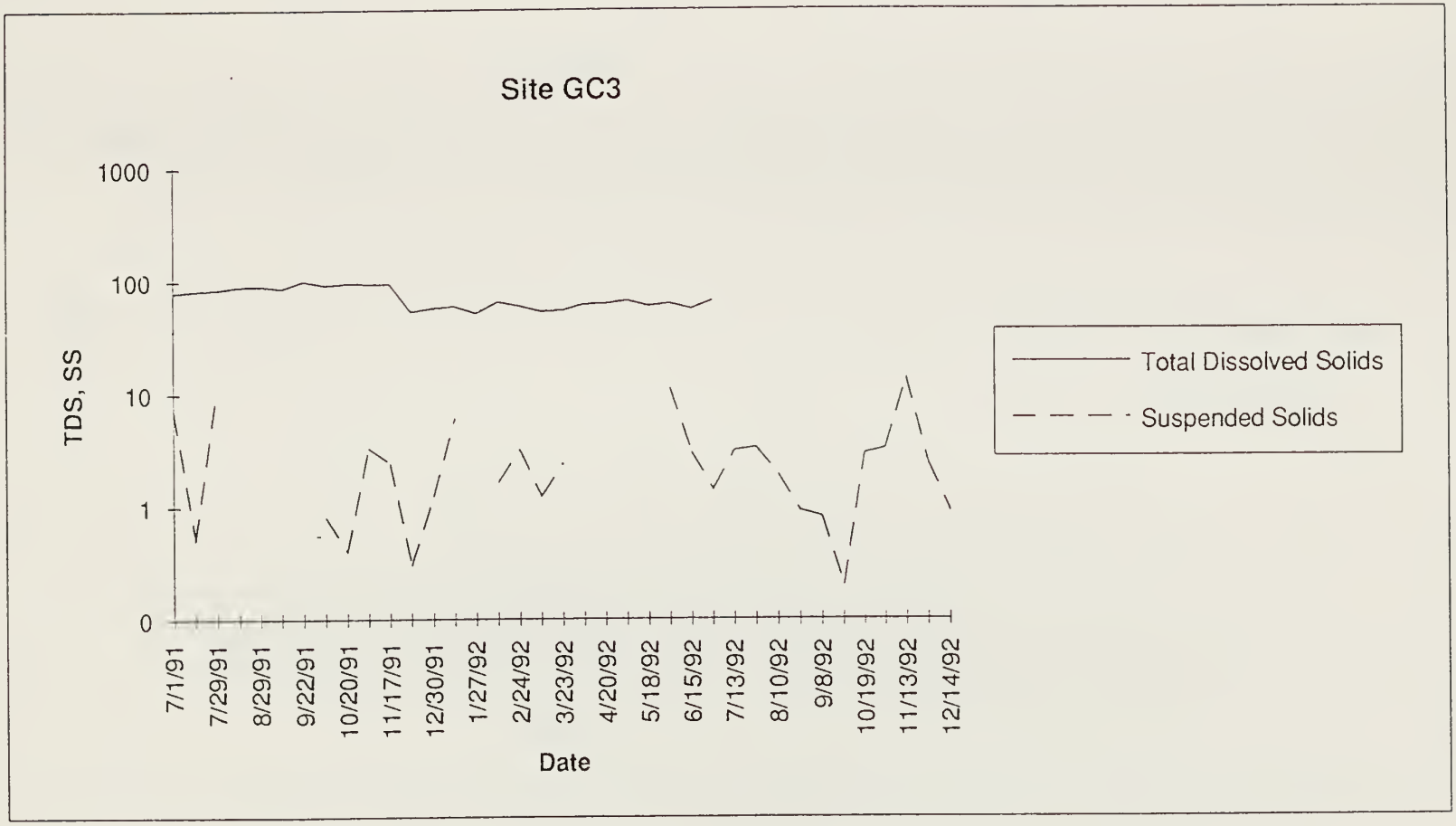
Total Dissolved Solids and Suspended Solids for Major Sites



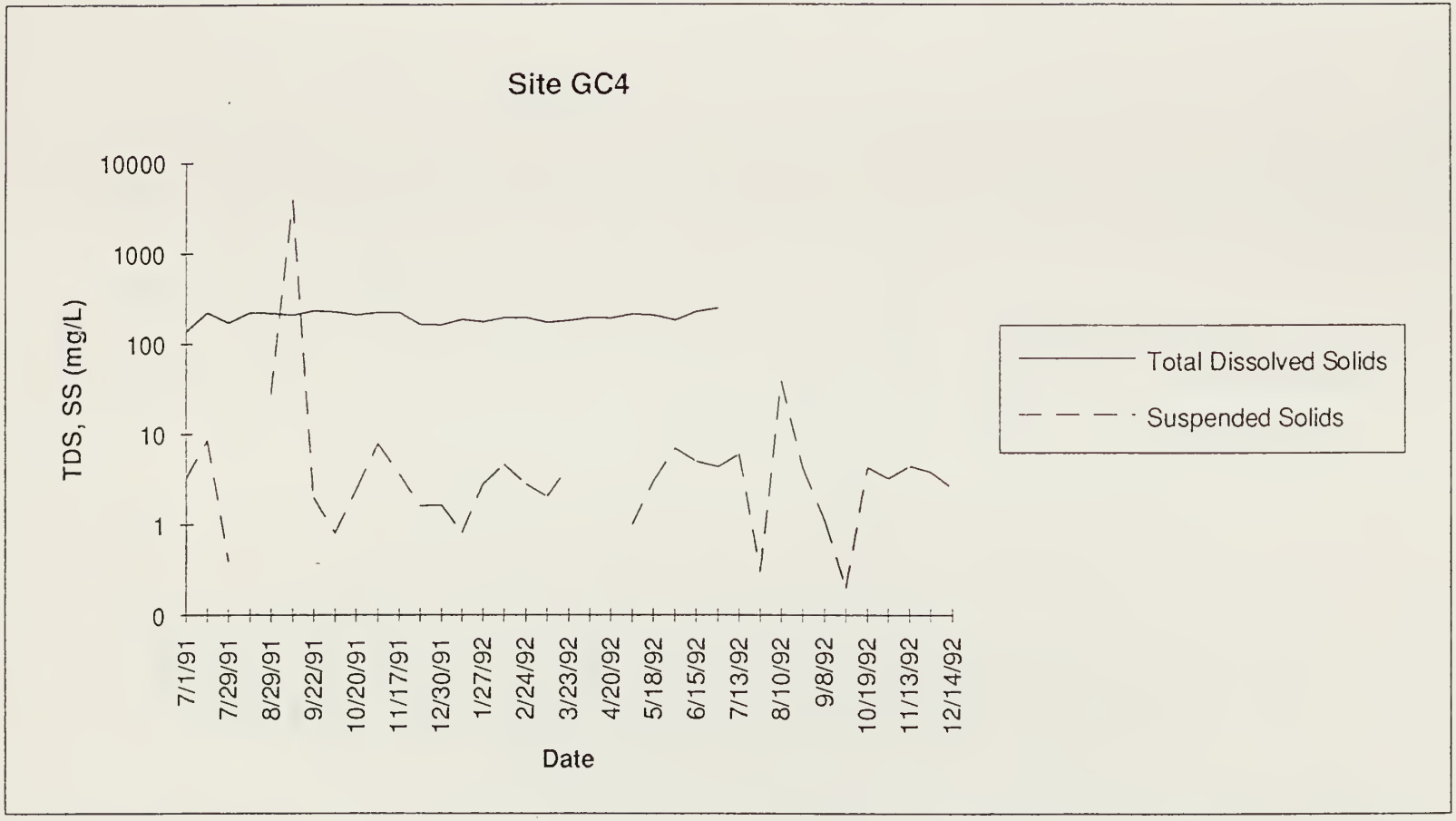
Total Dissolved Solids and Suspended Solids for Major Sites



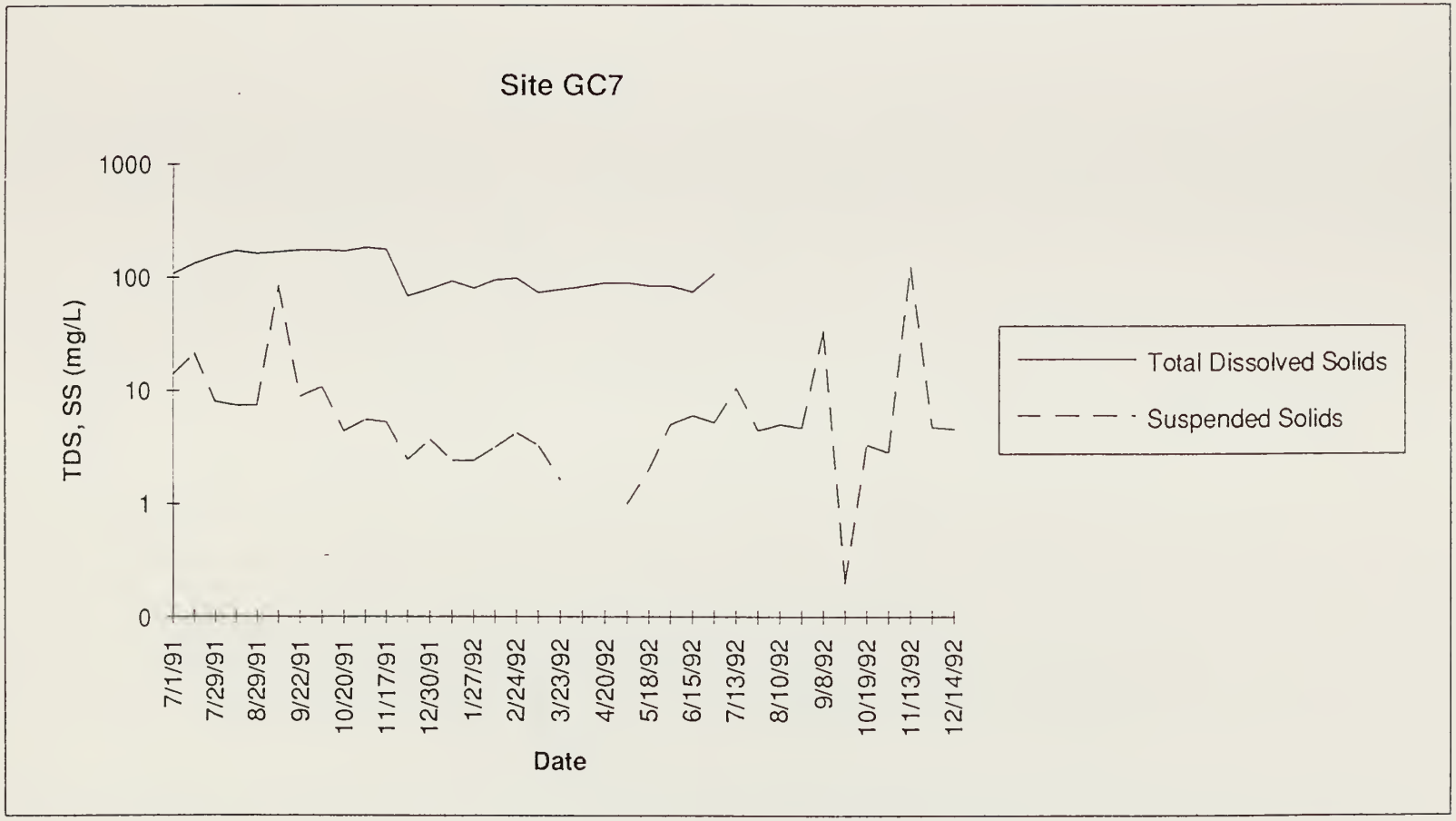
Total Dissolved Solids and Suspended Solids for Major Sites



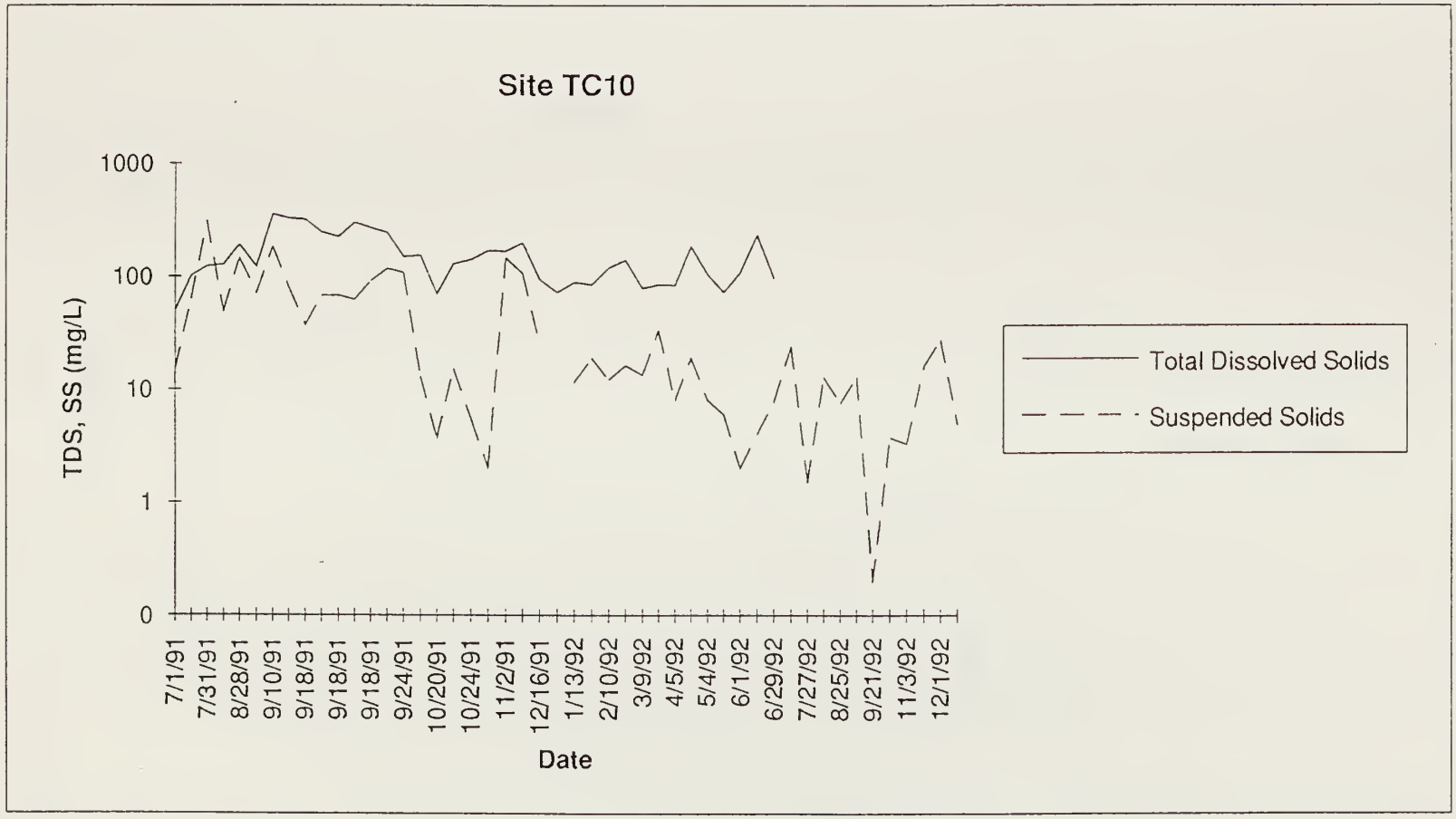
Total Dissolved Solids and Suspended Solids for Major Sites



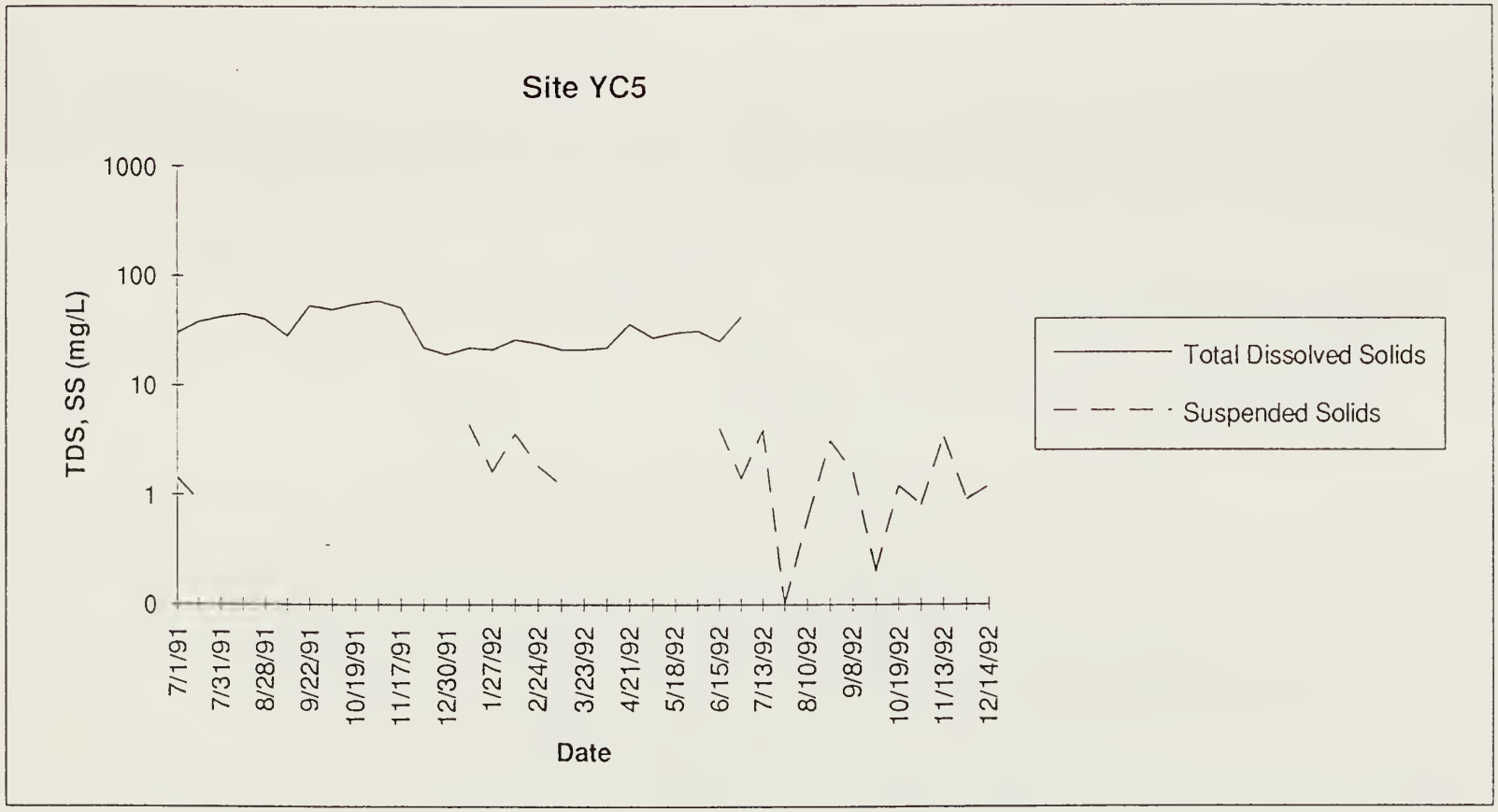
Total Dissolved Solids and Suspended Solids for Major Sites



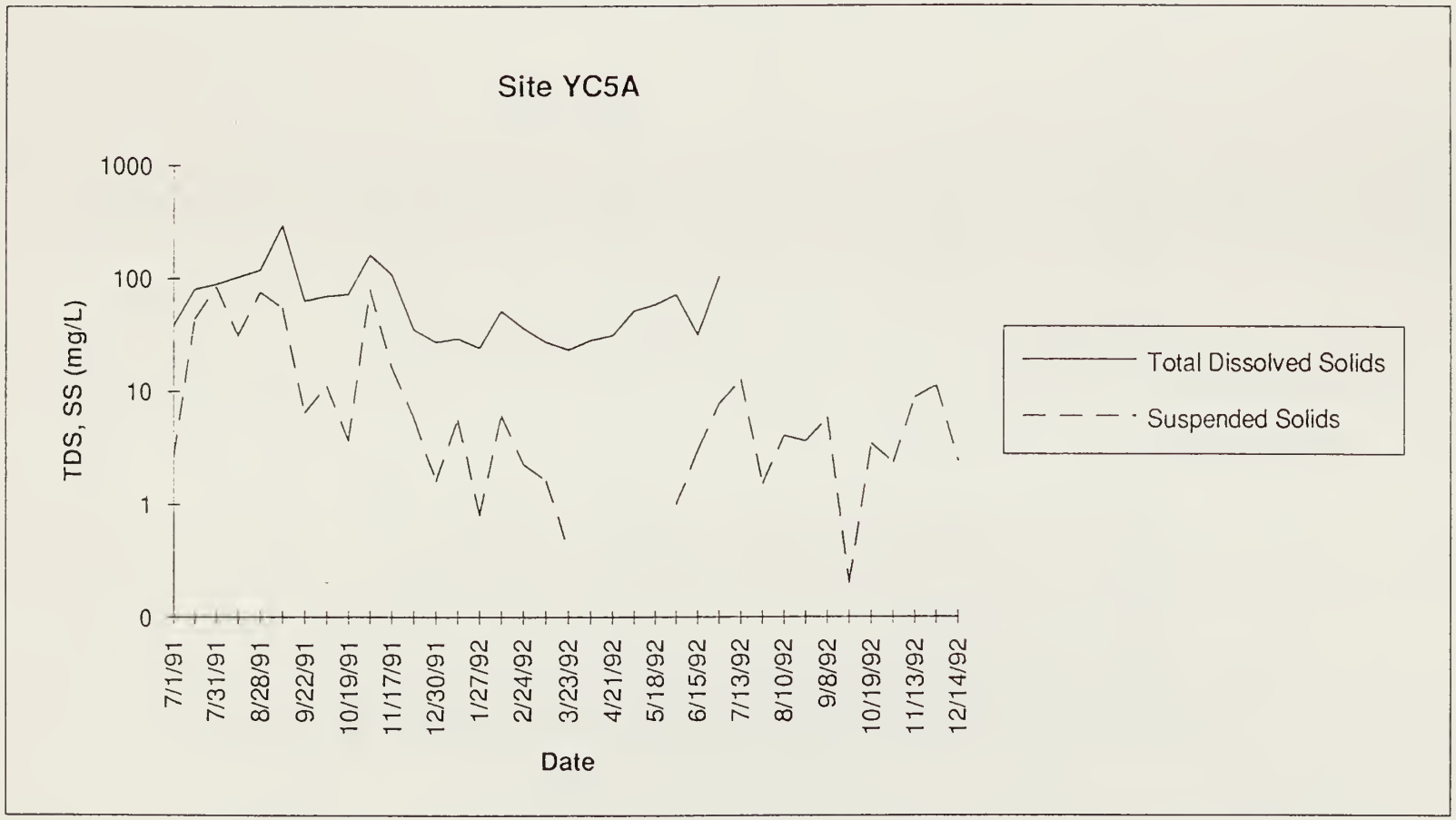
Total Dissolved Solids and Suspended Solids for Major Sites



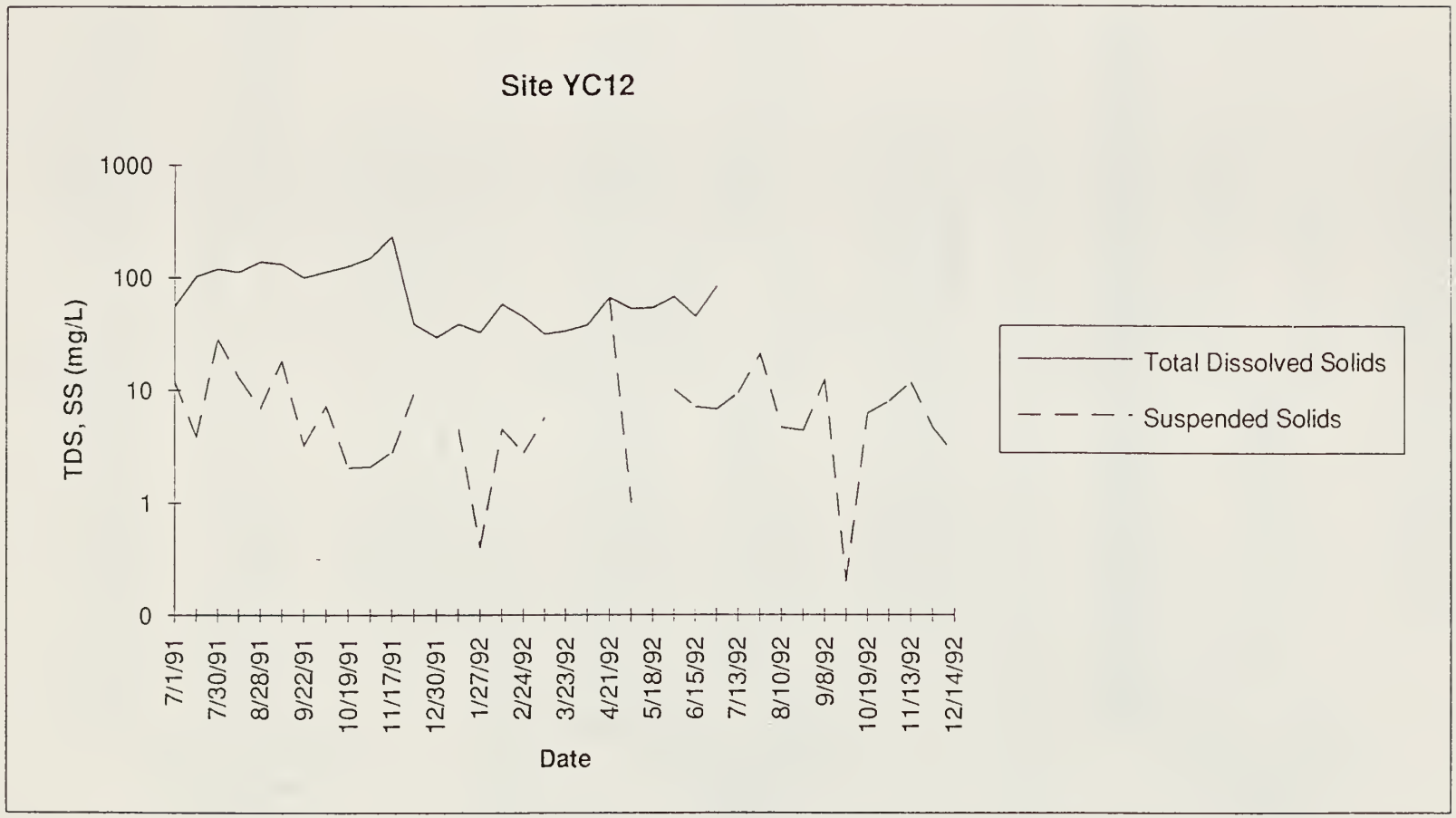
Total Dissolved Solids and Suspended Solids for Major Sites



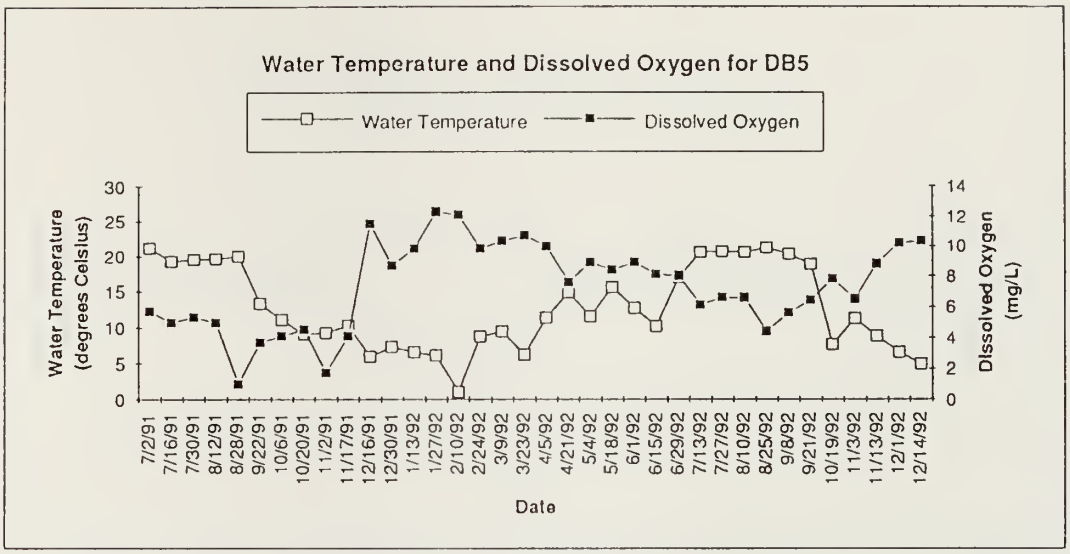
Total Dissolved Solids and Suspended Solids for Major Sites

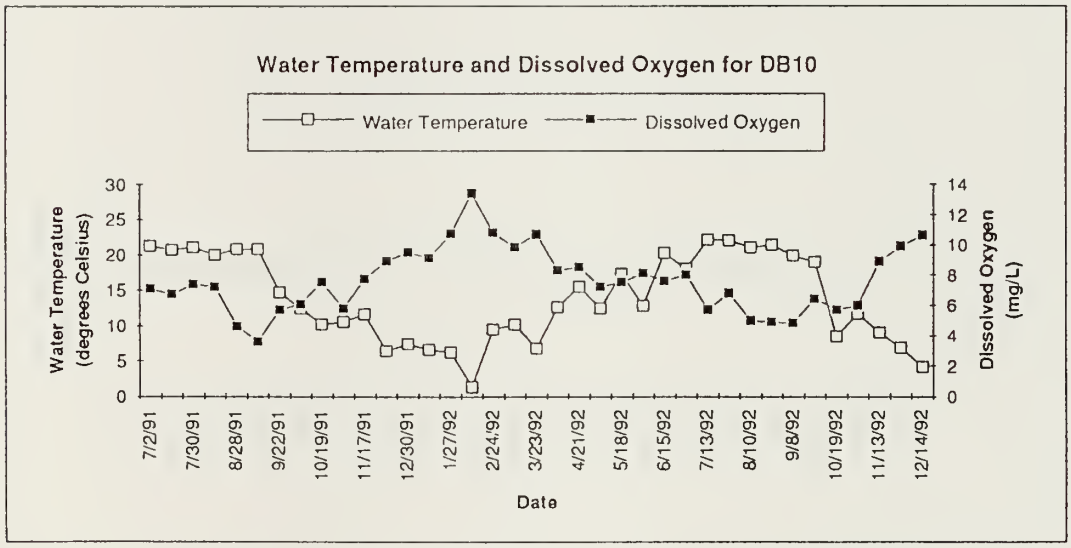


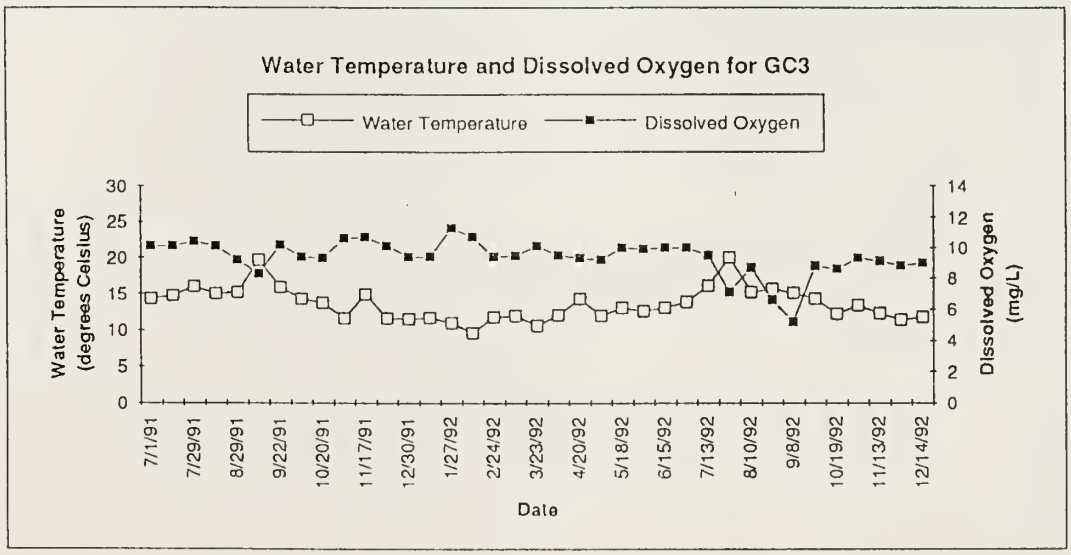
Total Dissolved Solids and Suspended Solids for Major Sites



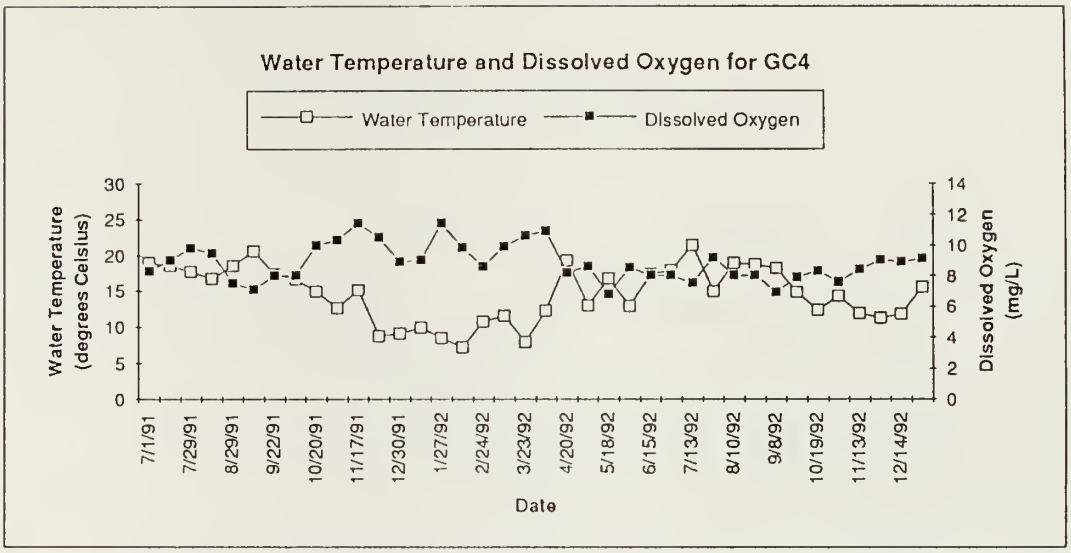
Water Temperature and Dissolved Oxygen for Major Sites

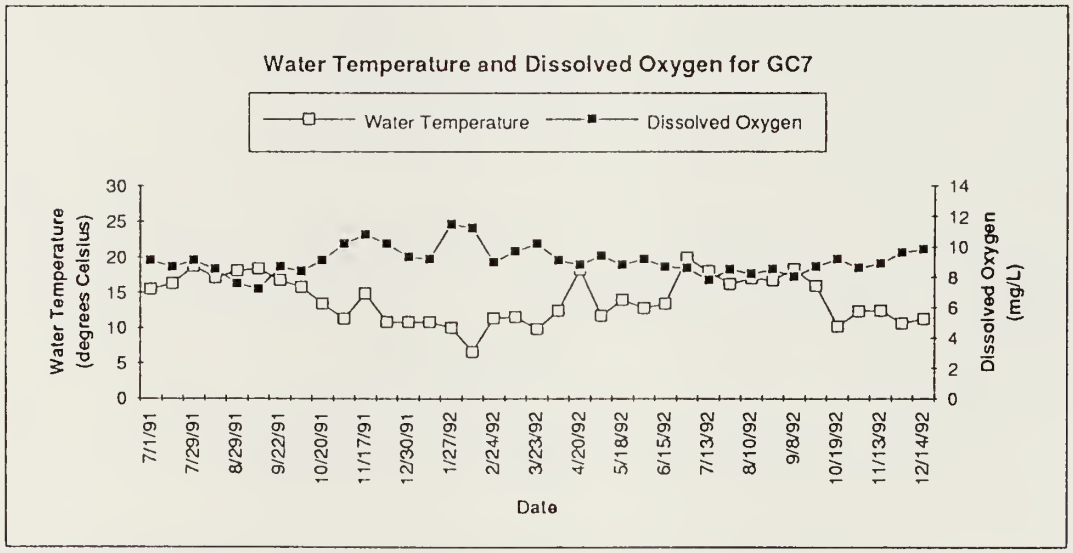


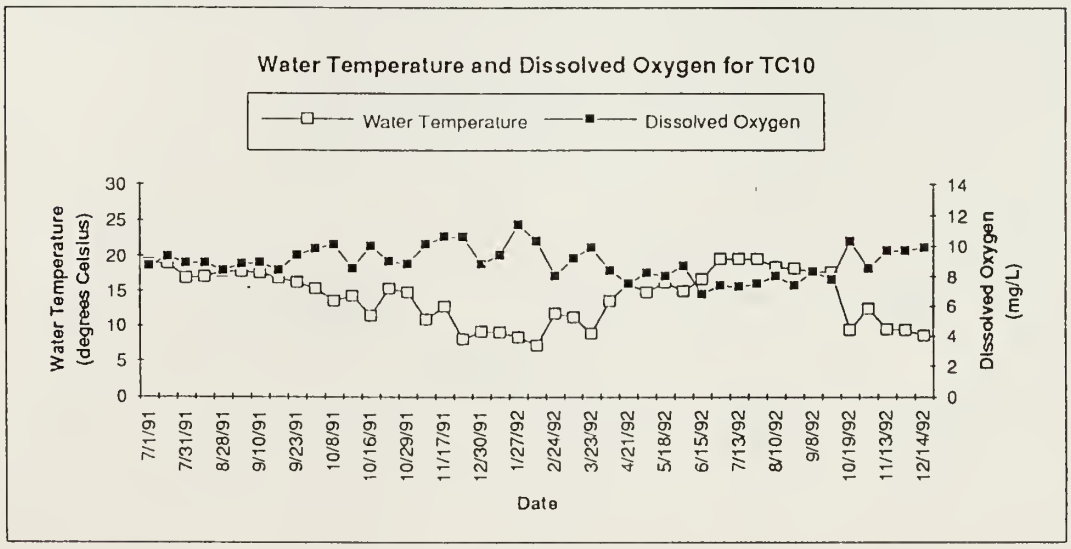




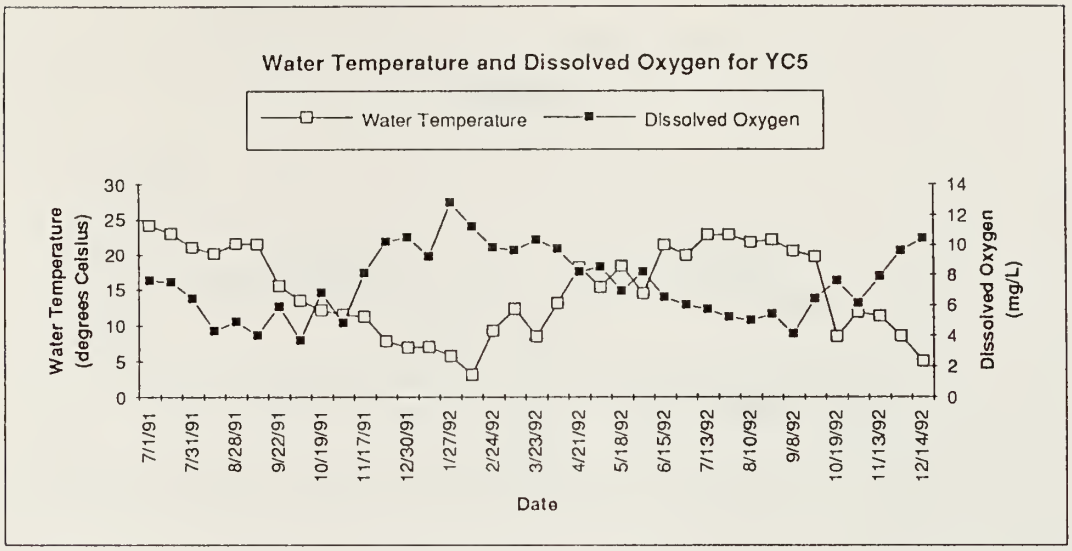
Water Temperature and Dissolved Oxygen for Major Sites

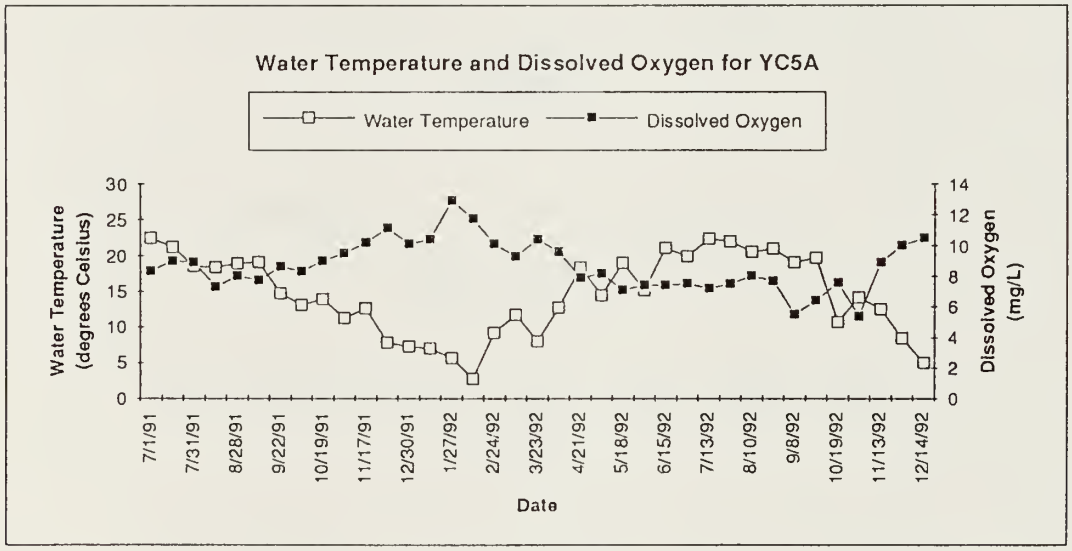


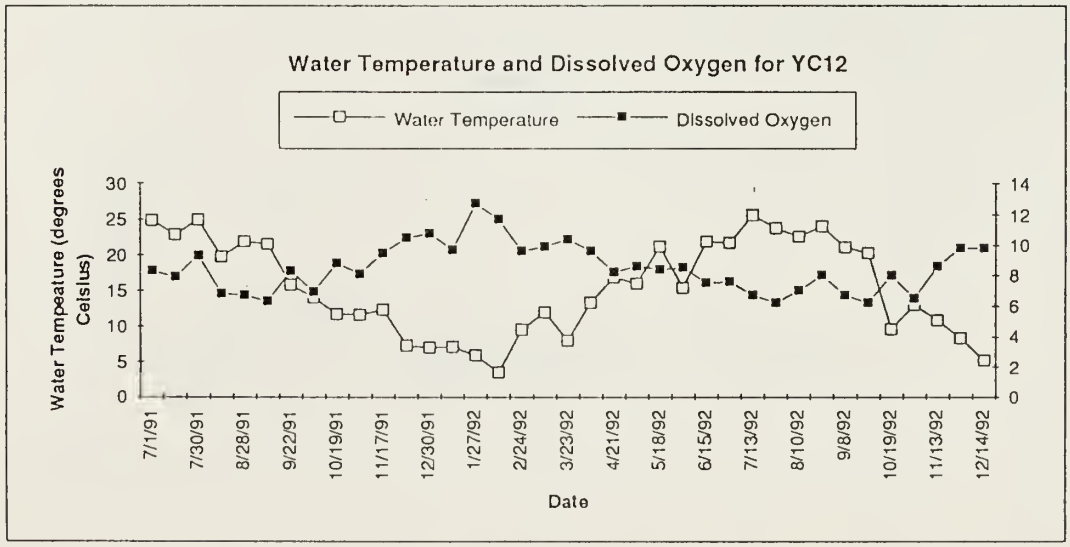




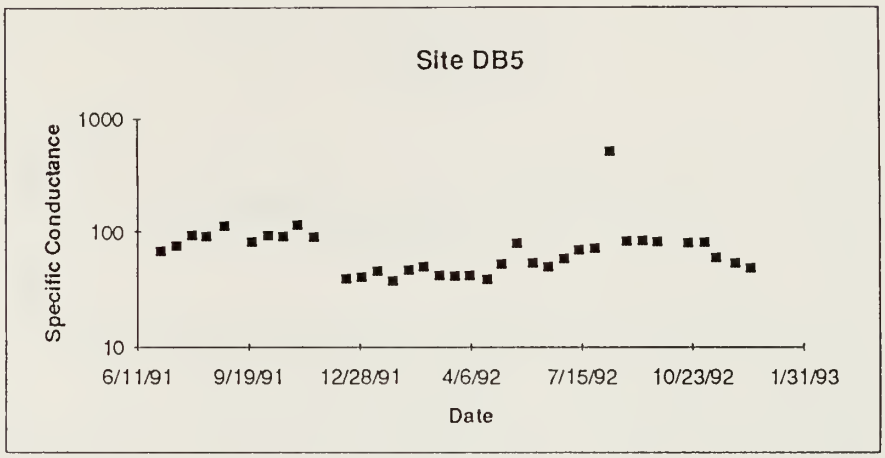
Water Temperature and Dissolved Oxygen for Major Sites

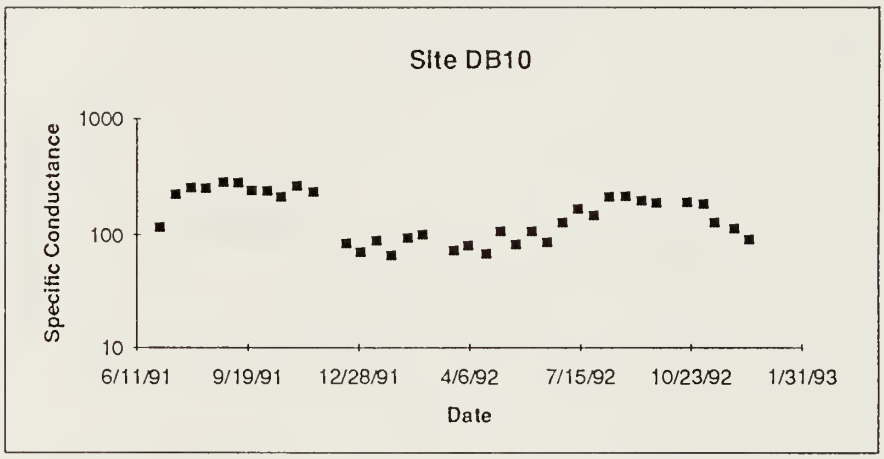


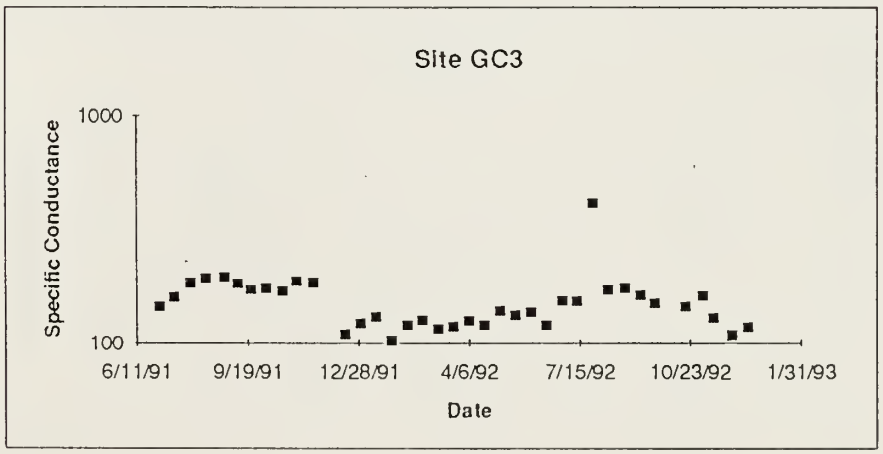




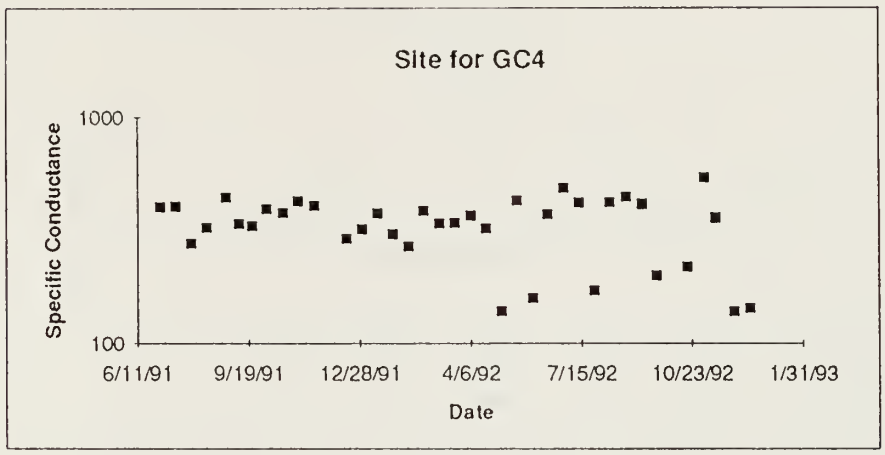
Temporal Variation in Specific Conductance for Major Sites

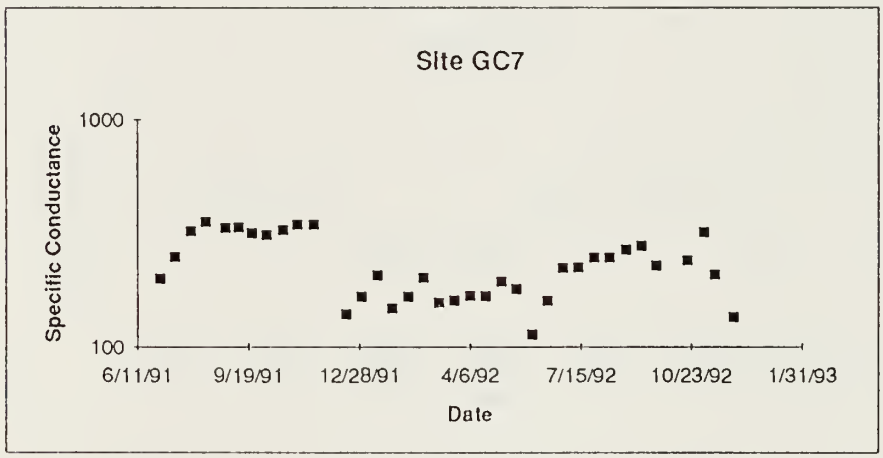


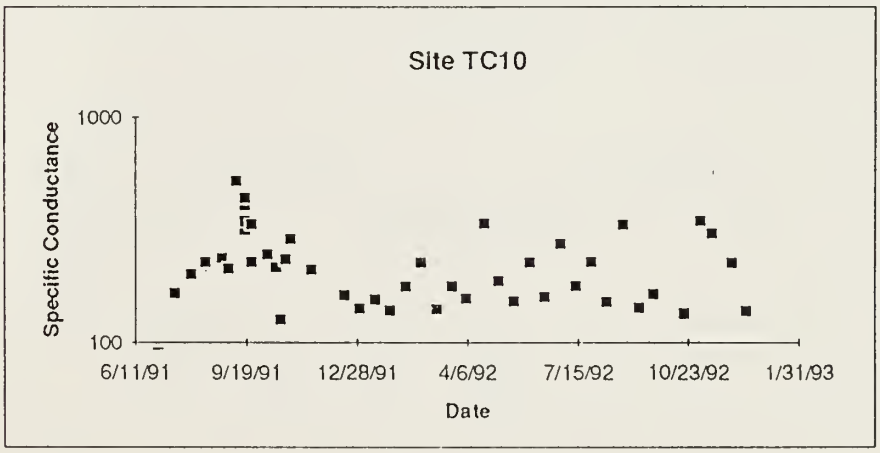




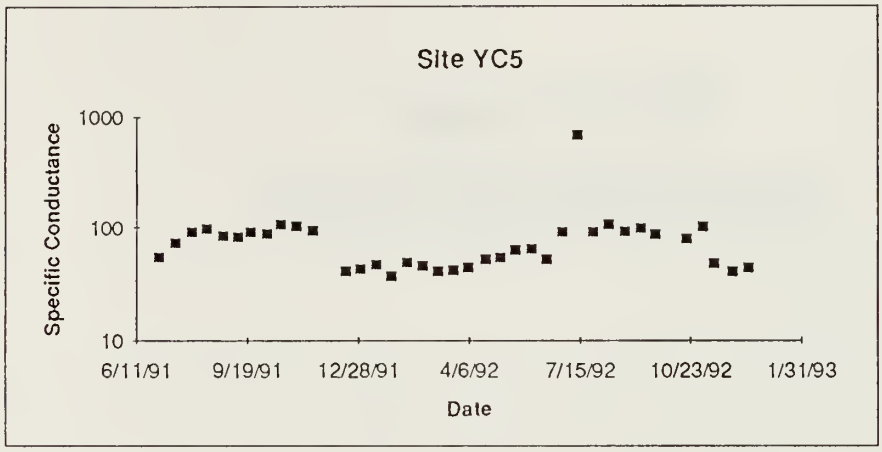
Temporal Variation in Specific Conductance for Major Sites

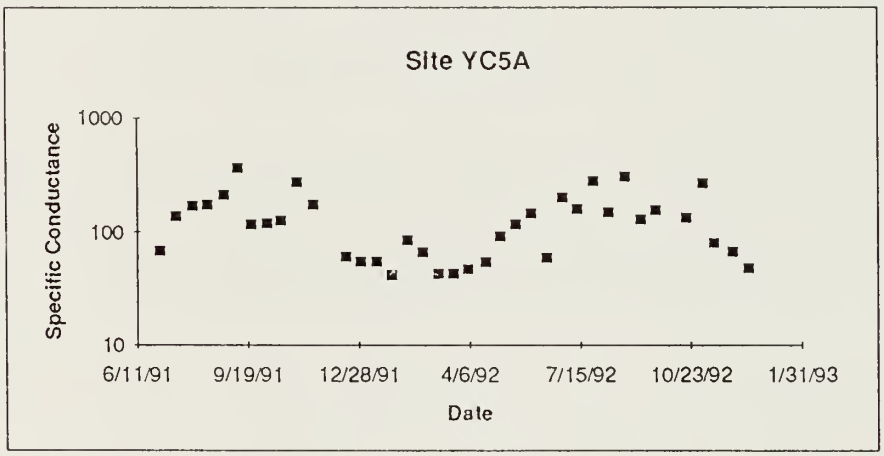


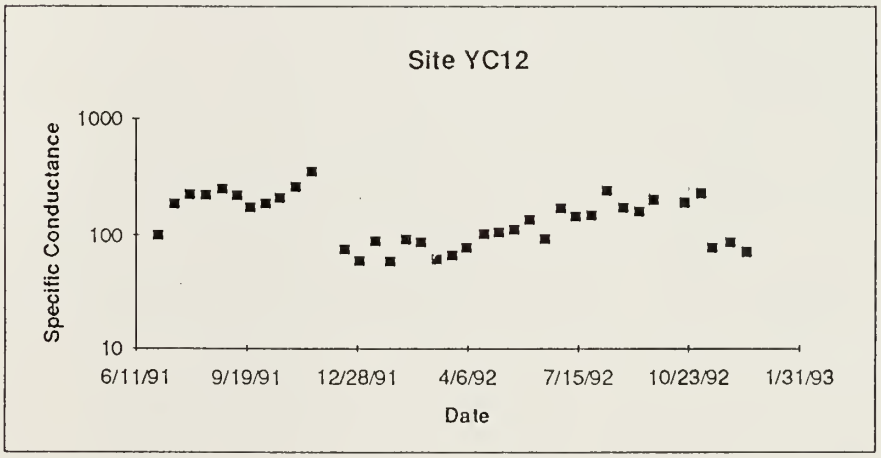




Temporal Variation in Specific Conductance for Major Sites







Appendix D
Water Quality Data

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
988	2/24/92	0945	9.6	7.3	9.7	2	0.02	643	365	4.64	174	329	17	bdl	142.0	bdl	bdl
988	3/9/92	1025	10.6	7.4	8.4	5	0.01	596	343	bdl	165	297	20	0.50	138.0	bdl	bdl
988	3/23/92	1025	6.9	7.1	11.0	12	0.02	605	298	6.03	180	312	30	bdl	1.0	bdl	bdl
988	4/5/92	1530	12.1	7.3	7.9	3	0.02	587	328	bdl	168	317	31	0.50	174.0	bdl	bdl
988	5/4/92	1030	12.2	8.2	8.4	6	bdl	654	336	4.00	209	340	27	bdl	156.0	bdl	bdl
988	5/18/92	1147	16.5	8.5	7.4	4	bdl	702	261	1.00	194	369	11	bdl	165.0	bdl	bdl
988	6/1/92	1033	13.3	8.3	8.2	4	bdl	717	343	2.00	206	365	11	< 0.02	173.0	bdl	bdl
988	6/15/92	1116	16.7	8.5	7.5	5	bdl	700	362	7.00	219	361	25	bdl	168.0	bdl	bdl
988	6/29/92	1128	17.5	8.2	8.0	7	bdl	728	423	5.84	213	392	18	bdl	179.0	bdl	bdl
988	7/13/92	1102	20.4	8.2	8.2	13		733	403	24.60	222		10		132.0	< 0.1	
988	7/27/92	1140	20.1	7.4	5.7	50	0.01	855	261	4.50	283		45	< 0.02	171.0	< 0.1	
988	8/10/92	1113	20.4	7.4	6.5	6	bdl	777	271	7.00	242		20	< 0.02	178.0	< 0.1	
988	8/25/92	1348	21.3	8.0	5.8	5		783	380	8.50	242	499	10		165.0	< 0.1	3.85
988	10/16/92	1230	15.5	8.0	5.9	3		866	460	17.90	288		10		180.0	< 0.1	3.90
988	11/13/92	1135	10.7	7.1	8.6	3	0.06	746	588	2.90	255		15		160.0	< 0.1	
988s	12/1/91	1405	12.7	9.0	9.6	102	bdl	210	343	100.86	66	105	512	0.30	66.0	bdl	bdl
988s	8/28/92	1105	19.3	7.7	6.3	13	0.12	984	390	10.90	425	628	20		152.0	< 0.1	4.59
988s	9/18/92	2100	19.2	7.7	5.9	19		910	448	< 0.20	356		20		154.0	< 0.1	
988s	10/5/92	1125	15.8	7.5	7.6	9	0.20	955	380	3.70	364		20		160.0	< 0.1	
988s	12/17/92	1100	10.7	7.5	8.7	13	0.28	605	458	20.00	200		bdl		96.0	< 0.1	
9B10s	8/28/92	1030	19.2	7.5	6.9	130	5.50	101	388	75.10	34	62	45	bdl	31.4	< 0.1	13.00
BFP	1/13/92						bdl			18.50	93	164	95	< 0.02	14.0	bdl	< 1.00
DB10	7/2/91	1040	21.2	7.0	7.1	3	0.20	115	299	1.75	82	100	49	< 0.02	69.0	bdl	bdl
DB10	7/16/91	1005	20.7	7.1	6.7	4	0.14	228	265	bdl	97	120	31	< 0.02	93.0	bdl	bdl
DB10	7/30/91	1220	21.0	7.2	7.4	4	0.05	259	335	4.40	109	125	48	< 0.02	90.0	bdl	bdl
DB10	8/12/91	1437	20.0	7.1	7.2	5	0.13	255	308	bdl	100	122	31	< 0.02	90.0	bdl	bdl
DB10	8/28/91	1005	20.8	6.9	4.6	3	0.14	286	310	6.67	43	49	48	< 0.02	42.0	bdl	bdl
DB10	9/10/91	1050	20.8	7.0	3.6	8	0.18	282	317	1.66	132	146	58	< 0.02	114.0	bdl	bdl
DB10	9/22/91	1015	14.6	6.6	5.7	3	0.13	242	331	bdl	119	132	12	bdl	103.0	bdl	bdl
DB10	10/6/91	1055	12.4	7.0	6.1	1	0.19	242	344	bdl	122	145	39	< 0.02	98.0	bdl	bdl
DB10	10/19/91	0910	10.1	7.6	7.5	2	0.24	212	375	18.45	94	110	20	< 0.02	81.0	bdl	bdl
DB10	11/2/91	1045	10.5	7.2	5.8	4	0.17	264	330	2.93	115	133	20	3.00	102.0	bdl	bdl
DB10	11/17/91	1010	11.6	7.0	7.7	3	0.19	236	289	2.46	99	118	24	< 0.02	93.0	bdl	bdl
DB10	12/17/91	1100	6.4	6.5	8.9	7	3.85	84	344	11.40	31	47	47	< 0.02	28.0	bdl	bdl
DB10	12/30/91	1115	7.4	6.8	9.5	9	3.56	70	350	2.43	24	35	25	0.80	17.0	bdl	bdl
DB10	1/13/92	1020	6.5	6.7	9.1	6	1.75	88	406	2.39	35	46	43	< 0.02	24.0	bdl	< 1.00

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
DB10	1/27/92	1345	6.2	6.6	10.7	5	2.94	65	320	1.63	24	36	14	1.20	16.0	bdl	bdl
DB10	2/10/92	1125	1.3	7.0	13.4	2	0.85	93	308	3.94	39	52	19	1.00	29.0	bdl	bdl
DB10	2/24/92	1005	9.4	7.3	10.8	4	1.48	99	370	bdl	33	48	29	2.30	27.0	bdl	bdl
DB10	3/9/92	1045	10.1	7.1	9.8	17	3.92	7	367	2.84	24	34	51	0.80	16.0	bdl	bdl
DB10	3/23/92	1040	6.7	7.0	10.7	7	2.99	72	301	2.01	25	37	49	bdl	17.0	bdl	bdl
DB10	4/5/92	1555	12.6	7.4	8.3	6	1.38	79	328	bdl	27	41	37	bdl	24.0	bdl	bdl
DB10	4/21/92	1215	15.5	6.7	8.5	70	11.84	67	298	82.00	28	40	348	bdl	21.0	bdl	3.00
DB10	5/4/92	1050	12.4	7.7	7.2	8	0.69	106	336	bdl	37	49	42	bdl	31.0	bdl	bdl
DB10	5/18/92	1257	17.3	7.9	7.5	6	1.09	81	347	bdl	29	39	31	bdl	22.0	bdl	bdl
DB10	6/1/92	1044	12.8	7.7	8.1	4	0.52	105	354	2.00	38	53	27	< 0.02	33.0	bdl	bdl
DB10	6/15/92	1257	20.2	7.5	7.6	4	6.19	85	381	24.00	32	42	29	bdl	22.0	bdl	bdl
DB10	6/29/92	1301	18.0	7.7	8.0	5	0.56	127	403	2.78	43	57	36	bdl	38.0	bdl	bdl
DB10	7/13/92	1200	22.1	7.0	5.7	4	0.25	166	423	2.10	67		20		59.4	< 0.1	
DB10	7/27/92	1230	22.0	7.0	6.8	46	2.21	147	294	11.30	64		45	< 0.02	81.0	< 0.1	
DB10	8/10/92	1301	21.0	7.1	5.0	3	0.42	214	259	2.80	87		25	< 0.02	72.8	< 0.1	
DB10	8/25/92	1310	21.4	7.5	4.9	3	0.17	216	404	0.10	92	147	20		76.9	< 0.1	8.27
DB10	9/8/92	1020	19.9	7.5	4.8	2	0.29	197	408	1.00	81		15		74.7	< 0.1	
DB10	9/21/92	1040	19.0	7.3	6.4	4	0.07	190	419	< 0.20	82		30		64.2	bdl	
DB10	10/19/92	1105	8.4	7.2	5.7	1		193	490	2.10	80		15		67.0	< 0.1	3.30
DB10	11/3/92	1005	11.7	7.5	6.0	1	0.36	184	403	0.70	68		40	bdl	60.0	< 0.1	
DB10	11/13/92	1030	9.0	7.0	8.9	4	1.40	126	416	1.70	48		15		38.0	< 0.1	
DB10	12/1/92	1435	6.8	7.4	9.9	2	0.47	113	481	0.50	39		10		32.0	< 0.1	
DB10	12/14/92	1030	4.1	6.8	10.6	5	1.11	91	478	0.60	35		20		26.0	< 0.1	
DB10s	11/22/91	1025	12.9	7.2	7.4	39	bdl	140	383	37.97	49	71	163	< 0.02	39.0	bdl	bdl
DB10s	12/1/91	1245	12.3	7.1	9.6	44	bdl	60	393	61.46	23	32	225	< 0.02	15.0	bdl	bdl
DB10s	12/2/91	1100	13.3	6.4	8.1	130	bdl	55	525	136.16	21	29	524	0.20	12.0	bdl	bdl
DB10s	9/18/92	2115	18.8	7.6	4.8	22		178	452	< 0.20	71		35	5.20	47.7	< 0.1	
DB10s	10/5/92	1020	14.4	7.3	8.5	9	2.30	179	402	5.90	68		25	1.50	48.0	< 0.1	
DB10s	12/17/92	1110	9.6	7.7	9.4	60		71	461	58.00	27		20	1.10	13.0	< 0.1	
DB5	7/2/91	1020	21.1	6.5	5.7	15	0.04	67	346	5.71	31	38	106	< 0.02	28.0	bdl	bdl
DB5	7/16/91	0815	19.2	6.6	5.0	13	0.08	74	366	2.05	34	39	96	3.00	31.0	bdl	bdl
DB5	7/30/91	0825	19.5	6.5	5.3	10	0.26	93	406	3.99	39	45	119	< 0.02	36.0	bdl	bdl
DB5	8/12/91	1416	19.6	6.4	5.0	10	0.03	90	331	0.41	33	41	101	< 0.02	33.0	bdl	bdl
DB5	8/28/91	0900	20.0	6.3	1.0	6	bdl	111	300	7.35	45	54	150	< 0.02	48.0	bdl	3.00
DB5	9/22/91	1000	13.3	6.4	3.7	12	bdl	82	342	bdl	44	53	220	bdl	42.0	bdl	bdl
DB5	10/6/91	0955	11.0	6.9	4.1	6	0.04	92	364	3.96	45	57	149	< 0.02	41.0	bdl	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
DB5	10/20/91	1100	9.1	6.9	4.5	6	0.05	91	351	bdl	39	49	46	< 0.02	37.0	bdl	bdl
DB5	11/2/91	1020	9.2	6.4	1.7	22	bdl	114	401	2.05	49	63	227	< 0.02	54.0	bdl	bdl
DB5	11/17/91	0950	10.2	5.7	4.1	7	0.04	90	437	0.82	41	50	56	< 0.02	41.0	bdl	bdl
DB5	12/16/91	1050	5.9	6.5	11.5	10	1.28	39	337	4.87	15	22	66	< 0.02	9.0	bdl	bdl
DB5	12/30/91	1100	7.3	6.8	8.7	8	1.48	40	352	2.81	13	21	50	bdl	8.0	bdl	bdl
DB5	1/13/92	0940	6.5	6.5	9.8	7	1.06	45	426	3.62	17	24	68	< 0.02	8.0	bdl	< 1.00
DB5	1/27/92	1320	6.1	7.0	12.3	6	1.03	37	333	2.00	13	21	36	bdl	7.0	bdl	bdl
DB5	2/10/92	1055	1.0	7.4	12.1	2	0.28	46	301	4.49	18	26	30	3.00	12.0	bdl	bdl
DB5	2/24/92	0935	8.7	7.4	9.8	5	0.75	49	327	1.85	16	24	48	bdl	12.0	bdl	bdl
DB5	3/9/92	1020	9.4	7.5	10.3	23	1.75	41	332	7.01	13	21	92	bdl	8.0	bdl	bdl
DB5	3/23/92	1015	6.2	7.1	10.7	17	3.07	41	284	bdl	14	22	73	0.30	8.0	bdl	bdl
DB5	4/5/92	1520	11.3	6.8	10.0	5	0.55	41	330	bdl	14	21	60	bdl	8.0	bdl	bdl
DB5	4/21/92	1145	14.8	6.9	7.6	67	9.86	38	290	45.00	16	26	925	bdl	14.0	bdl	7.00
DB5	5/4/92	1020	11.5	7.2	8.9	8	0.51	52	322	bdl	19	27	71	bdl	15.0	bdl	bdl
DB5	5/18/92	1137	15.5	7.1	8.4	11	0.53	79	293	2.00	17	26	58	bdl	12.0	bdl	bdl
DB5	6/1/92	1022	12.7	7.1	8.9	8	0.62	53	341	3.00	20	27	48	bdl	15.0	bdl	bdl
DB5	6/15/92	1102	10.1	7.4	8.1	9	< 1.03	49	327	6.00	19	27	54	bdl	14.0	bdl	bdl
DB5	6/29/92	1115	16.9	7.1	8.0	10	0.74	58	354	4.66	21	29	63	bdl	18.0	bdl	bdl
DB5	7/13/92	1054	20.5	7.5	6.1	11	0.06	69	427	7.20	25		40		20.7	< 0.1	
DB5	7/27/92	1125	20.6	6.6	6.6	11	0.18	72	308	4.30	27		40	< 0.02	23.8	< 0.1	
DB5	8/10/92	1100	20.5	6.7	6.6	6	0.10	509	82	11.30	29		45	< 0.02	29.2	< 0.1	
DB5	8/25/92	1335	21.1	7.4	4.4	10	0.03	83	394	2.60	31	52	40	bdl	31.4	< 0.1	5.57
DB5	9/8/92	1325	20.2	7.6	5.6	11	0.03	84	427	3.60	35		35		33.2	< 0.1	
DB5	9/21/92	1110	18.8	6.9	6.4	9	0.19	81	452	< 0.20	34		45		30.5		
DB5	10/19/92	1140	7.6	6.9	7.8	4		80	446	3.60	36		30	bdl	32.0	< 0.1	3.80
DB5	11/3/92	1045	11.2	7.7	6.5	6	0.23	81	384	2.50	32		45		29.0	< 0.1	
DB5	11/13/92	1125	8.8	6.7	8.8	8	0.64	60	388	2.70	24		20		19.0	< 0.1	
DB5	12/1/92	1405	6.5	7.3	10.2	5	0.32	53	482	2.30	20		10		16.0	< 0.1	
DB5	12/14/92	1130	4.9	6.6	10.3	19	0.58	48	436	1.60	19		10		14.0	< 0.1	
DB5s	12/2/91	1020	13.2	6.2	8.9	94	bdl	32	537	113.39	12	19	477	< 0.02	7.0	1.2	bdl
DB5s	10/5/92	1115	14.4	6.8	8.0	25	0.77	59	359	13.60	24		40		20.0	< 0.1	
DB5s	12/17/92	1040	9.4	7.5	9.0	48	15.10	39	455	42.70	12		25		5.3	< 0.1	
DB6	7/2/91	0910	20.0	6.8	6.6	11	0.08	62	352	5.96	27	33	44	< 0.02	24.0	bdl	bdl
DB6	7/16/91	0915	18.9	6.7	8.0	7	0.02	60	326	11.34	26	32	47	< 0.02	25.0	bdl	bdl
DB6	7/30/91	0915	19.0	6.6	8.0	3	0.04	72	343	13.76	29	34	119	< 0.02	27.0	bdl	bdl
DB6	8/12/91	1348	19.0	6.6	7.9	7	0.08	74	314	bdl	29	35	23	< 0.02	27.0	bdl	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
DB6	8/28/91	0950	19.6	6.3	5.3	6	bdl	68	331	8.35	26	32	49	< 0.02	27.0	bdl	bdl
DB6	9/22/91	0910	13.3	6.6	7.2	6	bdl	57	320	bdl	25	32	2	bdl	24.0	bdl	bdl
DB6	10/6/91	1030	10.9	6.7	7.9	32	0.09	15	360	3.82	29	41	76	< 0.02	26.0	bdl	bdl
DB6	10/20/91	1515	11.5	6.9	8.3	5	0.10	71	343	14.71	28	38	19	< 0.02	27.0	bdl	bdl
DB6	11/2/91	1010	9.9	6.8	7.5	6	bdl	79	347	4.06	34	41	41	< 0.02	33.0	bdl	bdl
DB6	11/17/91	0936	10.4	6.8	8.5	6	bdl	72	319	34.45	29	38	74	< 0.02	31.0	bdl	bdl
DB6	12/16/91	1015	6.0	6.7	10.7	9	bdl	37	367	0.40	13	21	48	< 0.02	10.0	bdl	bdl
DB6	12/30/91	1615	7.6	6.7	9.7	5	1.50	40	436	3.20	12	20	35	0.30	8.0	bdl	bdl
DB6s	12/2/91	1000	12.9	6.7	9.3	96	bdl	32	611	441.44	12	18	554	< 0.02	7.0	2.0	bdl
DB7	7/2/91	0845	19.9	7.0	6.0	10	0.07	63	319	33.81	27	33	60	< 0.02	24.0	bdl	bdl
DB7	7/16/91	0855	18.9	6.6	5.5	6	0.02	63	338	11.40	27	33	60	< 0.02	26.0	bdl	bdl
DB7	7/30/91	0900	19.0	6.6	7.4	4	0.06	72	355	9.01	29	36	52	< 0.02	26.0	bdl	bdl
DB7	8/12/91	1334	18.7	6.6	7.4	10	0.06	74	328	10.10	29	35	53	< 0.02	27.0	bdl	bdl
DB7	8/28/91	0940	19.2	6.3	3.9	6	bdl	71	330	10.00	28	34	65	< 0.02	28.0	bdl	1.00
DB7	9/22/91	0900	13.6	6.8	6.3	6	bdl	61	249	26.00	28	38	19	bdl	bdl	bdl	bdl
DB7	10/6/91	1020	11.1	6.8	5.5	15	0.05	30	364	16.60	29	42	104	< 0.02	26.0	bdl	bdl
DB7	10/20/91	1430	11.1	6.9	8.0	5	0.15	72	318	bdl	29	38	22	< 0.02	27.0	bdl	bdl
DB7	11/2/91	1000	10.3	6.7	5.8	8	bdl	75	337	5.35	32	39	100	< 0.02	31.0	bdl	bdl
DB7	11/17/91	0925	10.2	6.6	5.6	5	bdl	74	255	6.46	29	37	46	< 0.02	29.0	bdl	bdl
DB7	12/17/91	1005	6.1	6.8	10.8	9	bdl	37	358	bdl	13	23	48	< 0.02	13.0	bdl	bdl
DB7	12/30/91	1605	7.6	6.8	9.4	6	1.67	38	440	2.42	12	21	32	1.10	8.0	bdl	bdl
DB7s	12/2/91	1010	13.0	6.4	9.3	95	bdl	37	588	513.45	14	20	442	< 0.02	7.0	1.4	bdl
DB8	7/2/91	0830	19.9	7.6	7.8	5	0.22	72	243	11.20	33	40	51	< 0.02	27.0	bdl	bdl
DB8	7/16/91	0840	18.9	6.8	7.9	10	0.02	82	331	0.99	35	43	22	< 0.02	29.0	bdl	bdl
DB8	7/30/91	0845	19.0	6.7	8.2	3	0.05	87	385	2.01	35	41	28	< 0.02	28.0	bdl	bdl
DB8	8/12/91	1322	19.2	6.7	7.9	10	0.06	88	323	1.21	34	41	17	< 0.02	29.0	bdl	bdl
DB8	8/28/91	0920	19.7	6.1	3.7	6	bdl	99	288	7.74	38	45	83	< 0.02	32.0	bdl	bdl
DB8	9/22/91	0850	14.0	6.9	6.2	6	bdl	79	271	bdl	34	46	5	bdl	28.0	bdl	bdl
DB8	10/6/91	1010	11.0	6.7	8.7	2	0.08	71	365	3.42	33	39	69	< 0.02	28.0	bdl	bdl
DB8	10/20/91	1345	10.8	6.9	8.7	5	0.22	76	317	bdl	31	39	7	< 0.02	27.0	bdl	bdl
DB8	11/2/91	0950	10.2	6.9	6.8	6	bdl	84	290	4.84	35	44	52	6.00	29.0	bdl	bdl
DB8	11/17/91	0910	10.9	6.9	8.0	4	bdl	79	282	6.93	30	39	28	< 0.02	24.0	bdl	bdl
DB8	12/17/91	1000	6.2	7.1	10.3	8	bdl	39	386	bdl	14	22	53	< 0.02	9.0	bdl	bdl
DB8	12/30/91	1555	7.6	6.8	10.0	5	2.30	39	435	4.88	12	22	30	0.80	7.0	bdl	bdl
DB8s	12/1/91	1350	12.3	6.3	9.3	32	bdl	35	428	182.92	13	19	295	< 0.02	6.0	1.8	bdl
DB8s	12/2/91	1020	12.8	6.0	9.3	97	bdl	34	539	448.26	12	19	507	< 0.02	7.0	2.4	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
DR9	7/2/91	0955	19.2	6.6	7.7	8	0.02	81	357	3.60	38	45	52	< 0.02	33.0	bdl	bdl
DR9	7/15/91	1110	19.0	6.7	7.7	7	0.01	82	337	5.16	36	42	19	< 0.02	35.0	bdl	bdl
DR9	7/29/91	1340	21.9	6.7	7.1	8	0.01	98	346	2.05	40	46	42	< 0.02	37.0	bdl	bdl
DR9	8/12/91	1115	18.8	6.7	7.6	3	0.01	103	316	3.91	42	48	16	< 0.02	40.0	bdl	bdl
DR9	8/28/91	0845	20.2	6.6	4.1	7	0.04	102	357	4.35	107	137	31	< 0.02	104.0	bdl	1.00
DR9	9/11/91	0900	20.1	6.5	5.2	4	0.01	98	361	45.20	45	58	34	< 0.02	43.0	bdl	bdl
DR9	9/22/91	0950	14.5	6.6	6.9	7	0.01	14	318	6.38	43	48	45	bdl	41.0	bdl	bdl
DR9	10/6/91	0945	12.1	6.9	6.7	10	0.01	90	356	21.32	49	55	74	< 0.02	44.0	bdl	bdl
DR9	10/20/91	1015	10.2	7.4	8.2	2	0.01	104	317	20.64	44	54	19	< 0.02	44.0	bdl	bdl
DR9	11/2/91	1005	10.8	6.6	5.9	12	0.01	97	402	4.45	41	48	47	< 0.02	40.0	bdl	bdl
DR9	11/17/91	0935	10.9	5.7	5.6	3	0.01	102	451	12.99	50	56	75	< 0.02	49.0	bdl	bdl
DR9	12/17/91	1040	8.4	6.5	9.9	5	0.29	56	359	2.82	20	31	31	< 0.02	16.0	bdl	bdl
DR9	12/30/91	1045	8.8	6.6	9.6	3	0.30	53	354	1.22	18	26	10	1.10	14.0	bdl	bdl
DR9	1/13/92	0930	8.4	6.3	11.2	4	0.21	58	475	4.25	22	30	31	< 0.02	17.0	bdl	< 1.00
DR9	1/27/92	1310	7.6	7.3	11.9	3	0.19	48	335	6.80	18	26	11	0.85	14.0	bdl	bdl
DR9	2/10/92	1045	3.1	7.6	11.6	2	0.05	58	292	4.15	26	36	10	0.80	21.0	bdl	bdl
DR9	2/24/92	0925	9.0	7.6	9.7	4	0.15	70	332	2.35	25	34	37	bdl	20.0	bdl	bdl
DR9	3/9/92	1010	10.4	7.8	9.1	4	0.19	55	362	2.87	20	28	55	0.80	16.0	bdl	bdl
DR9	3/23/92	1005	8.0	7.3	10.2	10	0.33	54	307	0.79	20	28	38	0.50	15.0	bdl	bdl
DR9	4/5/92	1500	12.0	6.8	8.8	4	0.08	60	344	bdl	20	29	40	bdl	18.0	bdl	bdl
DR9	4/21/92	1138	14.8	6.8	9.3	26	0.45	77	304	23.00	32	41	131	bdl	31.0	bdl	1.00
DR9	5/4/92	1005	11.9	7.4	8.8	5	0.04	73	274	1.00	28	35	38	14.03	23.0	bdl	bdl
DR9	5/18/92	1121	15.0	7.5	8.5	8	0.11	74	262	3.00	28	37	24	bdl	24.0	bdl	bdl
DR9	6/1/92	1006	13.0	7.6	8.8	5	0.05	74	324	2.00	28	37	24	< 0.02	24.0	bdl	bdl
DR9	6/15/92	1047	15.4	7.5	8.6	6	0.09	73	348	3.00	30	36	24	bdl	24.0	bdl	bdl
DR9	6/29/92	1100	16.2	7.4	7.5	6	0.09	86	358	4.18	32	40	43	bdl	28.0	bdl	bdl
DR9	7/13/92	1035	20.0	7.7	6.1	8	0.04	5	422	37.40	33	bdl	25		31.7	< 0.1	
DR9	7/27/92	1110	19.7	7.2	6.8	5	0.05	99	298	1.40	41		10	24.71	40.5	< 0.1	
DR9	8/10/92	1045	19.3	7.1	6.0	17	0.01	106	291	36.20	42		30	< 0.02	38.8	< 0.1	
DR9	11/13/92	1110	10.9	6.9	9.1	6	0.37	79	404	6.30	31		10		25.0	< 0.1	
DR9s	12/1/91	1325	12.2	6.4	9.4	18	12.51	46	425	33.00	17	24	80	< 0.02	12.0	bdl	bdl
DR9s	12/2/91	1010	13.2	6.1	9.8	29	bdl	43	547	16.16	16	22	103	< 0.02	9.0	bdl	bdl
DR9s	10/5/92	1055	15.1	7.2	8.0	11	0.83	102	402	8.10	40		20		36.0	< 0.1	
GC3	7/1/91	0930	14.3	7.7	10.1	1	2.52	145	272	7.15	78	79	6	< 0.02	73.0	bdl	bdl
GC3	7/15/91	1000	14.7	7.7	10.1	4	1.11	160	267	0.51	82	82	2	< 0.02	80.0	bdl	bdl
GC3	7/29/91	1125	16.0	7.9	10.4	15	1.11	185	275	11.19	84	84	38	< 0.02	83.0	bdl	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
GC3	8/12/91	1030	15.0	7.7	10.1	6	0.46	194	249	bdl	91	89	4	< 0.02	85.0	bdl	bdl
GC3	8/29/91	0835	15.2	7.6	9.2	5	0.56	196	331	3.72	89	91	8	< 0.02	90.0	bdl	bdl
GC3	9/10/91	0920	19.7	7.4	8.3	95	0.07	184	295	bdl	84	86	10	< 0.02	84.0	bdl	bdl
GC3	9/22/91	1425	15.9	7.7	10.2	1	0.38	173	268	bdl	98	100	5	bdl	90.0	bdl	bdl
GC3	10/5/91	1100	14.3	7.6	9.4	5	0.57	176	299	0.81	91	92	17	< 0.02	90.0	bdl	bdl
GC3	10/20/91	1620	13.7	7.6	9.3	1	0.78	171	247	0.40	96	95	5	4.00	91.0	bdl	bdl
GC3	11/2/91	1440	11.6	7.9	10.6	2	0.64	188	369	3.28	99	94	5	13.00	90.0	bdl	bdl
GC3	11/17/91	1515	14.9	8.1	10.7	1	0.34	186	343	2.43	91	94	5	< 0.02	94.0	bdl	bdl
GC3	12/16/91	1035	11.6	7.7	10.1	5	20.90	109	338	0.30	49	53	15	< 0.02	46.0	bdl	bdl
GC3	12/30/91	1010	11.5	7.9	9.4	2	13.36	122	348	1.22	53	57	4	0.50	51.0	bdl	bdl
GC3	1/13/92	1400	11.7	8.0	9.4	3	5.51	131	363	5.99	56	59	25	< 0.02	54.0	bdl	<1.00
GC3	1/27/92	1105	11.0	7.4	11.3	2	8.50	102	331	bdl	40	51	4	bdl	48.0	bdl	bdl
GC3	2/10/92	0955	9.6	7.6	10.7	4	3.16	120	294	1.62	63	64	3	bdl	59.0	bdl	bdl
GC3	2/24/92	0835	11.8	7.5	9.4	4	6.76	126	408	3.17	55	59	17	bdl	52.0	bdl	bdl
GC3	3/9/92	0935	11.9	7.9	9.5	4	10.94	115	358	1.21	49	53	15	bdl	47.0	bdl	bdl
GC3	3/23/92	0900	10.6	7.5	10.1	2	11.40	118	381	2.40	50	54	20	bdl	48.0	bdl	bdl
GC3	4/6/92	1410	12.0	8.5	9.5	3	8.43	125	314	bdl	59	61	20	bdl	55.0	bdl	bdl
GC3	4/20/92	1530	14.3	7.6	9.3	3	2.98	120	270	2.00	58	62	32	bdl	59.0	bdl	< 1.00
GC3	5/4/92	0840	11.9	8.2	9.2	4	4.28	139	319	bdl	67	66	37	bdl	58.0	bdl	bdl
GC3	5/18/92	0932	13.0	7.9	10.0	2	4.10	133	301	bdl	57	59	8	bdl	54.0	bdl	bdl
GC3	6/1/92	0913	12.6	8.3	9.9	6	4.14	137	369	11.00	58	62	11	bdl	58.0	bdl	bdl
GC3	6/15/92	1000	13.0	8.2	10.0	3	9.34	120	369	3.00	55	56	24	bdl	48.0	bdl	bdl
GC3	6/29/92	1002	13.8	8.3	10.0	3	7.49	154	386	1.38	60	66	3	bdl	65.0	bdl	bdl
GC3	7/13/92	1303	16.1	7.0	9.5	3	1.60	154	348	3.10	77		< 1		65.1	< 0.1	
GC3	7/27/92	1443	20.0	7.4	7.1	22	0.31	414	279	3.30	87		< 1	< 0.02	77.9	< 0.1	
GC3	8/10/92	1015	15.2	7.5	8.7	2	1.11	173	277	1.90	86		15	< 0.02	76.9	< 0.1	
GC3	8/25/92	1015	15.6	8.2	6.6	2	1.24	176	377	0.90	88	128	10		84.8	< 0.1	4.35
GC3	9/8/92	1135	15.1	8.0	5.2	2	1.24	163	340	0.80	75		< 1		73.7	< 0.1	
GC3	9/21/92	1220	14.3	7.9	8.8	2	4.10	150	404	< 0.20	81		10		70.5		
GC3	10/19/92	1405	12.2	8.2	8.6	2		145	377	2.90	74		5		66.0	< 0.1	1.80
GC3	11/3/92	1120	13.4	8.0	9.3	2	1.00	162	342	3.20	80		10	bdl	74.0	< 0.1	
GC3	11/13/92	1330	12.3	7.7	9.1	7	10.20	129	380	13.50	62		10		54.0	< 0.1	
GC3	11/30/92	1500	11.4	7.9	8.8	2	4.30	108	547	2.40	48		10		44.0	< 0.1	
GC3	12/14/92	1350	11.8	7.7	9.0	2	4.90	117	407	0.90	56		5		49.0	< 0.1	
GC3s	11/22/91	1220	12.6	7.4	6.6	13	bdl	246	402	5.35	109	126	57	< 0.02	106.0	bdl	bdl
GC3s	12/1/91	1300	12.8	7.7	9.2	42	bdl	152	354	31.82	65	72	164	< 0.02	63.0	bdl	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
GC3s	12/2/91	1505	13.0	8.4	8.4	89	bdl	122	412	46.47	50	56	182	< 0.02	46.0	bdl	bdl
GC3s	8/28/92	1125	15.7	7.8	7.3	4	1.50	208	328	1.40	93	144	10		95.4	< 0.1	12.40
GC3s	9/18/92	1910	16.7	7.6	5.4	5	1.60	216	412	< 0.20	107		20		92.7	< 0.1	
GC3s	10/5/92	1405	14.1	7.8	9.0	3	2.90	155	353	0.60	78		10		69.0	< 0.1	
GC3s	12/17/92	0935	12.0	8.0	9.0	21	16.00	132	526	30.00	68		15		57.0	< 0.1	
GC4	7/1/91	0915	19.0	7.6	8.3	4	0.34	394	257	3.23	135	137	15	< 0.02	115.0	bdl	bdl
GC4	7/15/91	1015	18.5	7.6	9.0	14	0.33	398	272	8.58	202	223	20	< 0.02	181.0	bdl	bdl
GC4	7/29/91	1100	17.7	7.8	9.8	4	0.09	273	279	0.40	162	170	16	< 0.02	142.0	bdl	bdl
GC4	8/12/91	1025	16.7	7.6	9.5	3	0.12	320	247	bdl	202	223	20	< 0.02	172.0	bdl	bdl
GC4	8/29/91	0820	18.5	7.4	7.5	7	0.37	435	338	28.02	200	219	84	< 0.02	181.0	bdl	bdl
GC4	9/10/91	0925	20.6	7.2	7.1	200	0.99	333	287	3897.29	155	208	1650	< 0.02	176.0	bdl	bdl
GC4	9/22/91	1435	17.3	7.6	8.0	15	0.34	327	281	2.01	221	232	38	bdl	174.0	bdl	bdl
GC4	10/5/91	1050	16.6	7.5	8.0	7	0.25	387	305	0.80	218	226	28	< 0.02	178.0	bdl	bdl
GC4	10/20/91	1615	14.9	7.5	10.0	4	0.14	372	251	2.39	168	208	10	< 0.02	172.0	bdl	bdl
GC4	11/2/91	1445	12.6	7.9	10.3	2	0.35	419	376	7.84	218	221	25	< 0.02	178.0	bdl	bdl
GC4	11/17/91	1520	15.1	8.0	11.4	2	0.14	401	348	3.62	196	223	8	< 0.02	177.0	bdl	bdl
GC4	12/16/91	1045	8.7	7.6	10.5	11	1.11	288	346	1.62	144	164	31	< 0.02	123.0	bdl	bdl
GC4	12/30/91	1000	9.1	7.9	8.9	3	1.23	317	389	1.65	136	161	17	bdl	125.0	bdl	bdl
GC4	1/13/92	1410	9.9	7.9	9.0	4	0.68	370	357	0.81	168	184	38	< 0.02	140.0	bdl	< 1.00
GC4	1/27/92	1110	8.4	7.4	11.4	4	0.75	301	331	2.80	146	173	6	1.40	139.0	bdl	bdl
GC4	2/10/92	1005	7.2	7.5	9.8	4	0.41	266	309	4.63	188	192	8	0.50	154.0	bdl	bdl
GC4	2/24/92	0845	10.7	7.6	8.6	6	0.76	381	385	2.78	168	192	33	bdl	143.0	bdl	bdl
GC4	3/9/92	0940	11.5	7.9	9.9	2	0.92	336	349	2.03	153	170	36	0.50	130.0	bdl	bdl
GC4	3/23/92	0905	7.9	7.8	10.6	26	1.26	339	386	4.48	160	178	54	0.80	126.0	bdl	bdl
GC4	4/6/92	1420	12.2	8.2	10.9	4	0.75	363	313	bdl	174	193	44	0.30	150.0	bdl	bdl
GC4	4/20/92	1535	19.2	7.5	8.2	4	0.48	319	269	bdl	177	189	20	bdl	149.0	bdl	1.00
GC4	5/4/92	0830	12.9	8.1	8.6	5	0.32	137	343	1.00	212	211	31	bdl	163.0	bdl	bdl
GC4	5/18/92	0942	16.7	8.3	6.8	9	0.06	422	306	3.00	184	206	19	bdl	163.0	bdl	bdl
GC4	6/1/92	0921	12.8	8.3	8.5	8	0.25	157	3371	7.00	176	183	23	< 0.02	141.0	bdl	bdl
GC4	6/15/92	1012	17.3	8.3	8.0	7	0.31	368	368	5.00	211	226	31	bdl	174.0	bdl	bdl
GC4	6/29/92	0951	17.9	8.0	8.0	5	0.13	479	374	4.33	223	246	16	bdl	183.0	bdl	bdl
GC4	7/13/92	1306	21.4	6.8	7.5	4	0.22	412	377	6.00	218		< 1		145.0	< 0.1	
GC4	7/27/92	1450	14.9	7.5	9.2	6	2.47	170	282	0.30	174		10	< 0.02	140.0	< 0.1	
GC4	8/10/92	1009	18.9	7.3	8.0	19	0.21	415	286	38.20	266		25	< 0.02	174.0	< 0.1	
GC4	8/25/92	1005	18.7	7.9	8.0	7	0.22	439	359	4.20	218	319	50		179.0	< 0.1	4.67
GC4	9/8/92	1145	18.2	7.7	6.9	3	0.20	408	354	1.10	189		< 1		164.0	< 0.1	

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
GC4	9/21/92	1235	14.8	7.8	7.9	3	0.28	197	396	< 0.20	98		10		85.3		
GC4	10/19/92	1420	12.3	7.9	8.3	4		216	394	4.30	135		5	5.00	100.0	< 0.1	1.70
GC4	11/3/92	1125	14.3	7.8	7.6	3	0.39	537	363	3.20	176		10		210.0	< 0.1	
GC4	11/13/92	1345	.11.9	7.7	8.4	7	0.60	356	371	4.40	218		10	3.70	170.0	< 0.1	
GC4	11/30/92	1450	11.2	7.9	9.0	4	0.16	137	556	3.80	88		5		79.0	< 0.1	
GC4	12/14/92	1405	11.8	7.8	8.9	2	0.27	142	418	2.50	140		5		120.0	< 0.1	
GC4s	11/22/91	1235	13.1	7.4	6.1	200	bdl	297	406	61.06	123	166	770	0.50	101.0	bdl	bdl
GC4s	12/1/91	1315	12.9	7.5	6.6	200	bdl	160	368	235.96	64	83	1020	< 0.02	56.0	bdl	bdl
GC4s	12/2/91	1455	14.1	8.4	9.1	182	bdl	144	407	111.45	59	73	720	< 0.02	50.0	bdl	bdl
GC4s	8/28/92	1130	19.7	7.7	7.3	30	1.40	431	333	17.00	187	290	30		140.0	< 0.1	25.60
GC4s	9/18/92	1920	19.5	7.5	7.3	80	5.00	302	431	< 0.20	139		25	3.10	96.3	< 0.1	
GC4s	10/5/92	1415	15.5	7.8	7.6	4	0.64	306	358	3.00	120		15		98.0	< 0.1	
GC5	7/1/91	0900	15.4	7.4	9.2	4	2.10	204	229	4.94	108	110	10	< 0.02	97.0	bdl	bdl
GC5	7/15/91	0945	16.3	7.5	8.8	190	1.49	247	287	168.40	124	133	660	< 0.02	113.0	bdl	bdl
GC5	7/15/91	0945	16.3	7.5	8.8	190	1.49	247	287	168.40	123	136	660	< 0.02	120.0	bdl	bdl
GC5	7/29/91	1050	18.8	7.7	9.4	8	1.43	315	289	5.19	151	155	30	< 0.02	123.0	bdl	bdl
GC5	8/12/91	1015	17.2	7.5	8.9	5	1.40	353	223	1.61	157	173	23	< 0.02	133.0	bdl	bdl
GC5	8/29/91	0805	17.3	7.4	7.7	6	1.22	339	341	2.49	150	166	20	< 0.02	136.0	bdl	bdl
GC5	9/10/91	0905	19.7	7.2	7.1	200	3.40	334	294	3974.79	163	291	1660	< 0.02	312.0	bdl	bdl
GC5	9/22/91	1420	18.0	7.5	9.4	14	1.05	308	264	5.24	165	187	45	bdl	136.0	bdl	bdl
GC5	10/5/91	1035	16.1	7.6	8.8	9	1.18	324	293	3.58	162	181	43	< 0.02	141.0	bdl	bdl
GC5	10/20/91	1530	15.5	7.4	8.6	5	1.01	313	300	3.97	163	178	8	< 0.02	137.0	bdl	bdl
GC5	11/2/91	1435	12.7	7.9	10.3	4	0.85	340	364	bdl	166	175	17	< 0.02	138.0	bdl	bdl
GC5	11/17/91	1505	15.8	8.0	11.0	4	0.81	336	343	4.74	152	173	26	< 0.02	141.0	bdl	bdl
GC5	12/16/91	1025	11.2	7.6	10.2	7	49.62	140	349	3.65	65	69	25	< 0.02	57.0	bdl	bdl
GC5	12/30/91	0945	11.0	7.9	91.0	3	15.73	163	374	2.06	69	76	5	1.00	66.0	bdl	bdl
GC5	1/13/92	1350	11.2	8.0	9.4	5	7.70	182	384	2.41	74	87	34	0.30	76.0	bdl	< 1.00
GC5	1/27/92	1055	10.6	7.5	11.9	3	11.64	144	339	3.26	69	80	4	bdl	69.0	bdl	bdl
GC5	2/10/92	0950	8.3	7.5	11.1	5	4.11	45	312	0.82	90	92	11	bdl	77.0	bdl	bdl
GC5	2/24/92	0910	11.5	7.7	9.9	6	7.50	187	390	3.23	68	83	20	bdl	72.0	bdl	bdl
GC5	3/9/92	0930	11.8	7.9	10.1	6	14.54	158	361	2.85	63	71	25	bdl	62.0	bdl	bdl
GC5	3/23/92	0945	10.4	7.8	10.2	8	14.54	159	380	5.19	66	70	26	bdl	55.0	bdl	bdl
GC5	4/6/92	1440	12.4	8.4	9.2	3	11.44	173	309	bdl	77	80	43	bdl	67.0	bdl	bdl
GC5	4/20/92	1520	16.5	7.7	9.4	5	3.00	162	267	bdl	73	84	14	bdl	76.0	bdl	< 1.00
GC5	5/4/92	0900	12.0	8.2	9.9	4	3.81	186	330	bdl	79	86	32	bdl	78.0	bdl	bdl
GC5	5/18/92	1031	14.1	8.3	9.2	4	4.50	177	328	bdl	77	81	8	bdl	68.0	bdl	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
GC5	6/1/92	0942	13.0	8.4	9.4	4	4.52	178	381	4.00	72	79	11	bdl	70.0	bdl	bdl
GC5	6/15/92	0952	13.4	8.1	9.1	4	11.22	158	375	5.00	68	72	18	bdl	60.0	bdl	bdl
GC5	6/29/92	0920	19.5	8.1	9.6	4	3.15	217	438	2.37	100	103	9	bdl	86.0	bdl	bdl
GC5	7/13/92	1335	18.2	6.8	8.4	3	2.05	219	356	2.70	103		10		83.1	< 0.1	
GC5	7/27/92	1418	17.3	7.4	9.1	19	2.43	40	281	7.00	121		10	< 0.02	102.0	< 0.1	
GC5	8/10/92	0133	16.7	7.1	8.7	8	1.01	251	287	11.90	120		20	< 0.02	100.0	< 0.1	
GC5s	12/2/91	1445	16.0	8.5	7.2	200	bdl	54	399	78.30	67	77	354	< 0.02	55.0	bdl	bdl
GC7	7/1/91	0844	15.5	7.5	9.1	16	2.28	198	158	13.83	106	108	33	< 0.02	95.0	bdl	bdl
GC7	7/15/91	0930	16.3	7.6	8.7	34	1.57	246	278	21.28	125	132	119	< 0.02	111.0	bdl	bdl
GC7	7/29/91	0930	18.7	7.8	9.1	19	1.45	318	294	7.95	151	154	65	< 0.02	125.0	bdl	bdl
GC7	8/12/91	0935	17.1	7.5	8.5	4	1.40	350	271	7.39	158	171	12	< 0.02	133.0	bdl	bdl
GC7	8/29/91	0745	18.1	7.5	7.6	20	1.01	330	336	7.35	144	160	66	< 0.02	136.0	bdl	bdl
GC7	9/10/91	0900	18.3	7.3	7.2	104	5.36	332	298	83.92	157	167	335	< 0.02	126.0	bdl	bdl
GC7	9/22/91	1415	16.7	7.6	8.7	21	0.99	312	252	8.79	165	174	98	bdl	139.0	bdl	bdl
GC7	10/5/91	1015	15.7	7.6	8.4	27	1.10	307	286	10.77	164	174	118	< 0.02	140.0	bdl	bdl
GC7	10/20/91	1455	13.4	7.5	9.1	10	1.25	322	304	4.36	140	169	29	< 0.02	140.0	bdl	bdl
GC7	11/2/91	1430	11.2	7.7	10.2	10	0.87	341	355	5.49	172	181	40	< 0.02	144.0	bdl	bdl
GC7	11/17/91	1450	14.8	8.0	10.8	10	0.92	340	350	5.23	156	175	57	< 0.02	144.0	bdl	bdl
GC7	12/16/91	1015	10.8	7.7	10.2	8	25.30	139	385	2.44	64	68	20	7.80	56.0	bdl	bdl
GC7	12/30/91	0930	10.8	7.8	9.3	3	16.95	165	376	3.66	70	78	11	0.80	66.0	bdl	bdl
GC7	1/13/92	1340	10.8	8.0	9.2	8	7.97	205	385	2.41	78	92	35	0.90	80.0	bdl	< 1.00
GC7	1/27/92	1045	10.0	7.5	11.5	5	12.31	147	346	2.39	69	79	11	1.10	68.0	bdl	bdl
GC7	2/10/92	0945	6.5	7.5	11.2	6	4.44	165	318	3.12	93	94	11	0.40	78.0	bdl	bdl
GC7	2/24/92	0900	11.3	7.7	9.0	8	7.70	200	388	4.19	93	98	40	0.50	76.0	bdl	bdl
GC7	3/9/92	0920	11.5	7.8	9.7	6	14.79	156	361	3.23	66	73	37	1.10	62.0	bdl	bdl
GC7	3/23/92	0935	9.8	7.8	10.2	7	14.50	159	394	1.63	74	77	37	1.40	62.0	bdl	bdl
GC7	4/6/92	1430	12.4	8.4	9.1	3	11.92	167	308	bdl	78	82	39	bdl	70.0	bdl	bdl
GC7	4/20/92	1500	18.2	7.9	8.8	7	4.09	167	276	bdl	77	89	19	0.50	80.0	bdl	< 1.00
GC7	5/4/92	0855	11.7	8.1	9.4	4	4.43	192	346	1.00	80	88	31	bdl	80.0	bdl	bdl
GC7	5/18/92	1018	13.9	8.2	8.8	7	4.60	179	332	2.00	79	83	14	bdl	70.0	bdl	bdl
GC7	6/1/92	0934	12.8	8.2	9.2	10	4.22	113	396	5.00	75	83	25	< 0.02	72.0	bdl	bdl
GC7	6/15/92	0939	13.4	7.9	8.7	8	10.51	159	408	6.00	71	74	29	bdl	60.0	bdl	bdl
GC7	6/29/92	0855	19.9	8.0	8.6	7	2.62	220	459	5.16	103	106	18	bdl	86.0	bdl	bdl
GC7	7/13/92	1324	18.0	6.7	7.8	9	2.08	222	394	10.50	105		10		83.5	< 0.1	
GC7	7/27/92	0915	16.2	7.2	8.5	9	2.70	244	312	4.40	127		10	< 0.02	105.0	< 0.1	
GC7	8/10/92	1026	17.0	7.3	8.2	6	1.17	245	287	5.00	117		10	< 0.02	104.0	< 0.1	

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
GC7	8/25/92	0950	16.7	7.7	8.5	12	0.98	264	270	4.60	128	193	10		116.0	< 0.1	4.09
GC7	9/8/92	1300	18.2	7.8	8.0	65	0.99	274	429	33.40	140		10	bdl	185.0	< 0.1	
GC7	9/21/92	1240	15.9	7.8	8.7	7	4.70	226	428	< 0.20	108		10	1.50	88.7	bdl	
GC7	10/19/92	1430	10.1	7.9	9.2	3		238	415	3.30	115		10		93.0	< 0.1	1.80
GC7	11/3/92	1140	12.3	7.9	8.6	6	1.80	315	377	2.80	151		10	0.80	120.0	< 0.1	
GC7	11/13/92	1355	12.4	7.7	8.9	134	8.30	207	367	123.00	93		30	2.50	78.0	< 0.1	
GC7	11/30/92	1445	10.6	7.8	9.6	5	3.70	135	563	4.70	77		5		66.0	< 0.1	
GC7	12/14/92	1430	11.2	7.8	9.8	5	5.40	84	433	4.50	86		5		70.0	< 0.1	
GC7s	12/1/91	1445	12.6	7.5	9.0	200	bdl	156	332	387.31	65	79	1430	< 0.02	58.0	bdl	bdl
GC7s	12/2/91	1430	14.0	9.1	8.7	200	bdl	165	364	127.84	72	80	600	< 0.02	58.0	bdl	bdl
GC7s	8/28/92	1145	19.3	7.6	7.2	95	5.00	400	355	87.20	163	259	30		112.0	< 0.1	6.77
GC7s	9/18/92	1945	19.5	7.5	6.8	200	8.60	324	438	0.20	143		40	21.00	86.7	< 0.1	
GC7s	10/5/92	1430	16.0	7.7	8.5	9	4.30	340	377	5.70	164		10		120.0	< 0.1	
GC7s	12/17/92	0950	11.2	7.7	9.0	31	34.50	175	530	37.50	87		15		65.0	< 0.1	
KY18	2/24/92	1110	10.5	7.1	9.6	3	0.03	165	379	5.38	91	96	56	bdl	90.0	bdl	bdl
KY18	3/9/92	0900	9.0	7.9	8.9	7	0.01	179	298	1.22	82	85	52	0.60	74.0	bdl	bdl
KY18	3/23/92	1155	8.2	7.2	6.9	17	bdl	170	254	0.41	84	86	48	bdl	73.0	bdl	bdl
KY18	6/1/92	1339	15.3	7.4	7.7	30	bdl	238	359	48.00	142	133	321	bdl	142.0	bdl	bdl
KY18	6/15/92	1356	19.4	7.7	7.0	40	bdl	136	290	7.00	156	145	123	bdl	155.0	bdl	bdl
KY18s	12/1/91	1135	12.6	7.1	8.1	14	2.73	42	332	bdl	60	70	95	< 0.02	54.0	bdl	bdl
LH5	5/4/92	0950	11.4	7.7	7.4	6	bdl	126	416	8.00	55	59	36	bdl	46.0	bdl	bdl
LH5	6/29/92	1220	17.8	7.7	7.0	10	0.10	19	477	15.92	57	66	43	bdl	53.0	bdl	bdl
LH5	8/25/92	1115	19.4	7.6	6.2	10	bdl	155	384	6.20	73	108	15	bdl	67.6	< 0.1	3.04
LH5	10/16/92	1035	13.3	7.4	6.6	4		156	467	4.50	77		5		69.0	< 0.1	2.50
LH5s	10/5/92	1510	15.3	7.4	8.2	7	1.00	154	434	5.10	77		10		70.0	< 0.1	
MF2	1/7/92	1210	7.4	4.6	9.4	1	bdl	20	562	0.40	4	8	18	< 0.02	1.0	3.0	< 1.00
MF2	5/3/92	1350	11.9	5.4	7.7	1	bdl	20	523	bdl	5	8	26	0.61	1.0	3.0	bdl
MF2	8/21/92	1300	15.4	5.7	5.7	4	0.02	16	493	3.30	1	6	50		0.7	< 0.1	12.80
MF2	10/16/92	1350	12.3	5.3	7.7	4	bdl	17	560	4.10	4		5		0.3	1.7	1.80
MF5	1/7/92	1100	6.1	4.4	10.1	1	bdl	21	559	1.63	4	9	5	< 0.02	1.0	3.8	< 1.00
MF5	5/3/92	1245	12.7	5.1	8.4	3	bdl	19	540	bdl	5	10	35	0.61	1.0	4.0	bdl
MF5	8/21/92	1430	16.4	4.9	7.5	1	0.78	20	532	1.60	1	6	20		< 0.1	< 0.1	3.07
MF5	10/16/92	1445	13.3	4.7	7.8	2		18	573	1.60	4		20		< 0.1	3.1	3.10
RR1	7/1/91	1020	20.1	7.3	6.4	18	0.15	137	150	44.41	63	81	128	< 0.02	42.0	bdl	bdl
RR1	7/16/91	1320	18.0	7.3	9.7	84	0.16	154	291	129.18	73	93	541	< 0.02	45.0	bdl	bdl
RR1	7/29/91	1430	17.2	7.1	9.1	7	0.12	174	286	15.58	62	86	30	< 0.02	43.0	bdl	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
RR1	8/12/91	1505	16.3	7.0	9.4	bdl	0.04	171	202	2.06	64	85	3	< 0.02	42.0	bdl	bdl
RR1	8/28/91	1150	17.2	7.2	8.6	27	0.13	175	231	8.02	62	87	57	4.00	44.0	bdl	bdl
RR1	9/10/91	1405	17.1	6.9	9.4	26	0.01	165	274	20.28	63	89	72	< 0.02	44.0	bdl	bdl
RR1	9/22/91	1345	14.8	7.4	10.0	11	0.11	143	335	2.78	63	78	9	bdl	44.0	bdl	bdl
RR1	10/6/91	1130	11.4	7.1	10.0	4	0.06	144	318	5.16	61	82	36	< 0.02	44.0	bdl	bdl
RR1	10/20/91	1700	11.5	7.8	9.7	7	0.05	156	221	6.11	61	81	10	< 0.02	48.0	bdl	bdl
RR1	11/2/91	1145	10.2	7.5	10.2	2	0.12	156	204	7.56	65	81	39	< 0.02	47.0	bdl	bdl
RR1	11/17/91	1045	12.0	6.5	7.3	5	0.35	142	349	3.65	62	82	40	< 0.02	45.0	bdl	bdl
RR1	12/16/91	1120	6.8	7.4	11.3	43	0.42	54	326	39.65	60	82	170	< 0.02	42.0	bdl	bdl
RR1	12/30/91	1320	8.0	7.3	9.9	4	0.25	163	272	3.58	59	84	5	1.20	41.0	bdl	bdl
RR1	1/13/92	1125	8.0	6.9	10.0	3	0.46	62	380	14.72	59	87	54	0.30	43.0	bdl	< 1.00
RR1	1/27/92	1435	7.6	6.2	10.8	4	0.16	149	299	5.73	70	95	10	0.85	40.0	bdl	bdl
RR1	2/10/92	1330	6.2	8.1	10.0	4	0.03	146	185	6.35	66	93	20	1.00	45.0	bdl	bdl
RR1	2/24/92	1055	10.4	6.9	8.3	36	0.21	179	347	58.27	64	91	239	bdl	42.0	bdl	bdl
RR1	3/9/92	0850	9.9	8.1	7.9	3	0.30	173	321	4.22	66	89	25	0.70	45.0	bdl	bdl
RR1	3/23/92	1145	7.4	7.3	9.8	4	0.24	173	301	8.13	64	92	45	1.20	37.0	bdl	bdl
RR1	4/6/92	1230	9.7	8.1	8.8	2	0.22	187	305	2.00	62	101	44	bdl	40.0	bdl	bdl
RR1	4/21/92	1445	13.8	7.9	8.4	56	1.32	168	279	45.00	66	98	294	0.50	55.0	bdl	2.00
RR1	5/4/92	1205	14.0	8.6	7.8	26	0.08	195	307	2.30	58	85	86	bdl	38.0	bdl	bdl
RR1	5/18/92	1339	15.8	7.7	9.8	25	0.33	202	255	14.00	65	97	105	bdl	37.0	bdl	bdl
RR1	6/1/92	1327	13.7	7.6	10.5	13	0.03	201	379	8.00	62	102	46	< 0.02	42.0	bdl	bdl
RR1	6/15/92	1344	16.9	7.8	8.6	5	0.26	204	401	5.00	81	104	14	bdl	49.0	bdl	bdl
RR1	6/29/92	1430	1.0	8.0	9.0	9	0.21	209	399	6.03	67	103	25	bdl	43.0	bdl	bdl
RR1	7/13/92	0931	17.1	8.0	8.0	5	0.16	206	391	5.80	68		10		37.8	< 0.1	
RR1	7/27/92	1015	18.6	7.1	8.2	85	0.36	245	293	88.20	108		26	< 0.02	56.7	< 0.1	
RR1	8/10/92	1354	17.8	6.8	8.0	16	0.15	194	269	16.80	74		15	< 0.02	38.4	< 0.1	
RR1	8/25/92	1400	19.0	7.6	6.6	10	0.13	192	253	6.20	68	115	< 1		33.6	< 0.1	5.49
RR1	9/8/92	0900	16.9	6.9	7.0	3	0.07	188	398	3.60	64		10		30.8	< 0.1	
RR1	9/21/92	0955	16.9	7.4	7.2	7	0.07	201	330	< 0.20	72		10	35.00	35.1	bdl	
RR1	10/19/92	1015	8.3	7.1	8.7	10		188	392	17.80	68		10		34.0	< 0.1	1.30
RR1	11/3/92	0915	11.0	7.7	7.6	6	0.09	212	271	6.40	75		10	bdl	32.0	< 0.1	
RR1	11/13/92	0945	9.1	7.0	8.9	6	0.26	213	475	6.20	91		15	2.50	57.0	< 0.1	
RR1	12/1/92	1345	7.9	7.6	11.1	7	0.22	198	533	7.60	74		5		50.0	< 0.1	
RR1	12/14/92	1010	5.9	6.6	9.9	10	0.13	204	492	9.40	76		5		39.0	< 0.1	
RR1s	12/2/91	1125	13.3	6.8	8.8	110	bdl	92	503	110.28	38	49	469	0.20	31.0	bdl	bdl
RR1s	8/28/92	1000	17.9	7.5	7.9	14	0.20	237	229	12.80	96	152	10		53.4	< 0.1	7.13

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
RR1s	10/5/92	0910	14.3	6.7	8.4	8	0.28	217	436	8.30	91		20		60.0	< 0.1	
RR1s	12/17/92	1355	9.4	7.8	9.7	16	2.60	151	462	9.70	58		10	1.30	38.0	< 0.1	
SB8	12/17/91									26.93	259	318	616	< 0.02	102.0	bdl	0.01
SB8	1/13/92									129.07	96	138	46	< 0.02	18.0	bdl	< 1.00
SB8W	12/17/91									82.57	96	151	262	< 0.02	35.0	bdl	bdl
SB8W	12/30/91	1400	12.0	6.5	3.6	bdl	bdl	469	200	30.04	227	268	430	bdl	86.0	bdl	bdl
SB8W	1/13/92									28.17	217	264	460	< 0.02	79.0	bdl	< 1.00
SH10	1/7/92	1315	5.3	4.7	10.7	1	bdl	21	555	bdl	5	10	14	< 0.02	1.0	3.0	< 1.00
SH10	5/3/92	1535	13.9	5.6	8.8	1	bdl	19	510	bdl	5	9	18	bdl	1.0	3.4	bdl
SH10	8/21/92	1200	16.1	6.1	8.1	1	0.52	18	464	1.40	2	8	10		0.3	2.4	2.57
SH10	10/16/92	1310	12.7	7.1	7.7	1		19	481	2.10	9		10	bdl	< 0.1	2.4	2.20
SR10	7/2/91	0940	19.3	6.6	8.1	5	0.45	25	351	bdl	8	13	11	< 0.02	6.0	bdl	bdl
SR10	7/15/91	1050	18.8	6.4	8.7	4	0.22	25	332	1.90	8	15	8	< 0.02	7.0	bdl	bdl
SR10	7/29/91	1330	20.7	6.6	8.4	7	0.28	27	343	5.62	9	14	36	< 0.02	6.0	bdl	bdl
SR10	8/12/91	1100	18.4	6.5	8.5	7	0.19	28	307	5.44	10	16	7	< 0.02	7.0	bdl	bdl
SR10	8/28/91	0830	19.3	7.5	8.0	3	0.18	1	348	2.46	9	16	8	< 0.02	8.0	bdl	bdl
SR10	9/11/91	0850	19.3	6.8	7.6	3	0.17	27	376	1.27	11	16	9	< 0.02	8.0	bdl	bdl
SR10	9/22/91	0955	13.3	6.6	10.2	4	0.16	29	323	bdl	10	17	8	bdl	7.0	bdl	bdl
SR10	10/20/91	1300	9.6	7.2	10.2	5	0.15	26	377	4.93	8	14	5	< 0.02	7.0	bdl	bdl
SR10	11/2/91	0955	9.8	6.7	9.8	3	0.14	25	421	11.44	9	14	31	< 0.02	7.0	bdl	bdl
SR10	11/17/91	0925	9.5	5.2	10.1	2	0.04	24	474	5.37	9	16	36	< 0.02	10.0	bdl	bdl
SR10	12/17/91	1030	6.6	6.8	11.5	1	5.71	24	379	0.40	10	16	5	< 0.02	6.0	1.6	bdl
SR10	12/30/91	1035	7.4	6.5	10.6	4	5.62	24	427	bdl	9	13	5	bdl	3.0	bdl	bdl
SR10	1/13/92	0920	6.9	6.3	10.5	3	2.61	23	475	2.83	7	13	19	< 0.02	3.0	1.4	< 1.00
SR10s	12/2/91	1000	13.2	6.1	10.0	58	bdl	125	508	216.37	10	15	345	< 0.02	4.0	6.8	bdl
ST10	5/4/92	0940	11.9	8.1	8.3	5	bdl	212	403	bdl	99	99	28	bdl	88.0	bdl	bdl
ST10	6/29/92	1021	16.1	8.0	9.0	6	0.99	217	449	3.65	52	58	20	bdl	49.0	bdl	bdl
ST10	8/25/92	1055	18.4	7.7	5.6	2	0.01	310	311	2.00	162	231	10		145.0	< 0.1	3.62
ST10	10/16/92	1045	12.7	7.7	7.0	2		303	460	3.10	156		10		150.0	< 0.1	2.60
ST10s	10/5/92	1500	15.1	7.4	8.8	9	3.30	186	404	2.40	95		20		81.0	< 0.1	
ST5	5/4/92	0940	11.7	7.8	7.7	5	1.39	131	388	bdl	59	63	62	bdl	51.0	bdl	bdl
ST5	6/29/92	1035	16.9	7.7	8.0	5	0.88	128	469	2.65	102	103	16	bdl	93.0	bdl	bdl
ST5	8/25/92	1102	18.9	7.5	7.7	2	0.09	199	362	1.40	107	144	10		89.7	< 0.1	4.41
ST5	10/16/92	1100	12.9	7.5	6.9	1		160	472	2.20	86		10		73.0	< 0.1	2.50
STOR1	2/3/92	0855	8.3	6.5	7.2	2	0.01	130	347	0.82	64	72	43	bdl	56.0	bdl	bdl
STOR1	2/10/92	1025	7.4	7.3	9.8	4	0.01	142	306	7.63	67	78	31	bdl	58.0	bdl	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
STOR1	4/6/92	1455	11.2	8.2	7.5	6	0.01	226	337	bdl	99	113	50	bdl	81.0	bdl	bdl
STOR1	4/20/92	1600	14.4	7.7	8.6	5	bdl	201	257	1.00	87	101	23	bdl	92.0	bdl	< 1.00
STOR1	5/4/92	0910	11.7	7.8	7.2	8	bdl	253	340	bdl	100	114	37	bdl	102.0	bdl	bdl
STOR1	5/18/92	1104	14.1	7.7	5.7	9	bdl	384	318	6.00	154	177	25	bdl	137.0	bdl	bdl
STOR1	6/1/92	0951	14.2	7.8	6.6	3	bdl	451	399	1.00	204	222	10	bdl	149.0	bdl	bdl
STOR1	6/15/92	0903	13.7	7.6	7.2	2	0.15	417	499	2.00	184	196	12	bdl	140.0	bdl	bdl
STOR1	6/29/92	1011	15.1	7.7	10.0	3	0.01	535	437	2.31	231	286	13	bdl	165.0	bdl	bdl
STOR1	7/13/92	1344	18.7	6.6	6.1	4		558	394	2.50	249	bdl	10		170.0	< 0.1	
STOR1	7/27/92	1433	21.1	6.8	4.0	111		442	303	58.00	209		25	< 0.02	147.0	< 0.1	
STOR1	8/10/92	0950	20.4	6.7	4.0	7		498	350	10.10	247		10	< 0.02	183.0	< 0.1	
STOR1	8/25/92	0940	19.8	7.2	5.9	7		546	239	4.50	283	370	20		171.0	< 0.1	5.13
STOR1	10/16/92	1020	15.5	7.0	2.3	9		447	484	9.00	217		10		180.0	< 0.1	3.20
STOR1	11/13/92	1410	13.7	7.5	6.7	5	0.02	423	384	10.20	26		10	bdl	170.0	< 0.1	
STOR1s	8/28/92	1155	18.3	7.3	6.3	40	0.11	580	351	24.70	249	390	30		148.0	< 0.1	9.13
STOR1s	9/18/92	2000	18.1	7.1	5.8	28		485	421	< 0.20	221		25		130.0	< 0.1	
STOR1s	10/5/92	1445	16.2	7.4	5.8	23	0.05	492	394	21.50	229		15		140.0	< 0.1	
STOR1s	12/17/92	1000	11.6	7.7	8.3	39	1.90	226	531	36.80	100		15		69.0	< 0.1	
TC10	7/1/91	1420	18.9	7.7	8.7	15	1.08	89	243	14.78	40	49	34	< 0.02	39.0	bdl	bdl
TC10	7/16/91	1340	19.0	7.5	9.3	78	0.86	163	276	62.91	79	101	293	< 0.02	56.0	bdl	bdl
TC10	7/31/91	0850	16.9	7.6	8.9	51	0.41	198	355	310.78	90	123	1285	< 0.02	82.0	bdl	bdl
TC10	8/13/91	0901	17.1	9.4	8.9	30	0.60	225	217	48.79	75	128	7	< 0.02	38.0	bdl	bdl
TC10	8/28/91	1105	17.8	7.9	8.4	156	0.92	234	250	145.57	70	191	606	< 0.02	61.0	bdl	bdl
TC10	9/3/91	1250	17.8	7.3	8.8	79	0.90	211	308	71.44	82	122	348	< 0.02	34.0	bdl	bdl
TC10	9/10/91	1310	17.6	8.0	8.9	170	0.89	513	264	182.51	241	356	64	< 0.02	41.0	bdl	bdl
TC10	9/18/91	0530	17.2	4.2	8.6	88	0.93	403	460	80.21	213	326	416	bdl	bdl	11.9	bdl
TC10	9/18/91	0700	17.0	4.3	8.4	46	0.93	399	513	36.65	215	317	194	bdl	bdl	bdl	bdl
TC10	9/18/91	0800	16.9	4.6	8.5	92	0.88	309	512	67.27	165	246	355	bdl	bdl	6.0	bdl
TC10	9/18/91	0900	16.9	4.6	8.4	75	0.91	311	514	67.27	148	223	359	bdl	bdl	49.4	bdl
TC10	9/18/91	1000	17.0	4.5	8.4	69	1.04	341	523	62.08	189	299	290	bdl	bdl	68.4	bdl
TC10	9/18/91	1045	17.1	4.5	8.6	93	0.95	430	bdl	91.08	169	268	496	bdl	bdl	78.0	bdl
TC10	9/23/91	1600	16.3	7.3	9.4	200	1.19	329	288	116.80	159	244	485	0.40	32.0	bdl	bdl
TC10	9/24/91	0800	15.4	6.5	9.8	104	0.95	225	307	106.91	87	149	439	0.40	24.0	bdl	bdl
TC10	10/8/91	1505	13.6	6.9	10.1	10	0.68	243	177	13.10	79	153	59	8.00	5.0	1.0	bdl
TC10	10/20/91	1710	14.3	8.3	8.5	34	0.75	125	297	3.65	47	69	5	< 0.02	44.0	bdl	bdl
TC10	10/16/91	1040	11.4	6.4	10.0	12	0.97	213	324	15.26	79	129	44	9.00	5.0	bdl	bdl
TC10	10/24/91	1350	15.4	4.7	9.0	20	0.83	231	482	5.50	82	140	112	10.00	1.0	1.0	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
TC10	10/29/91	1000	14.8	9.1	8.8	18	0.73	283	342	2.00	88	168	87	19.00	39.0	bdl	bdl
TC10	11/2/91	1355	10.9	7.6	10.1	106	1.06	29	288	145.09	79	167	497	34.00	29.0	bdl	bdl
TC10	11/17/91	1110	12.8	6.6	10.6	17	0.63	208	294	106.41	89	197	380	< 0.02	17.0	bdl	bdl
TC10	12/16/91	1410	8.1	7.1	10.6	27	2.40	160	277	25.42	63	94	114	0.60	27.0	bdl	bdl
TC10	12/30/91	1410	9.2	7.2	8.8	15	1.94	140	245	bdl	53	72	43	0.70	35.0	bdl	bdl
TC10	1/13/92	1055	9.1	7.2	9.4	27	1.74	153	323	11.51	55	88	85	4.20	31.0	bdl	< 1.00
TC10	1/27/92	1415	8.3	6.4	11.4	17	1.91	137	293	18.87	55	84	85	< 0.02	21.0	bdl	bdl
TC10	2/10/92	1340	7.2	7.9	10.3	18	1.45	175	188	12.16	78	118	63	0.20	32.0	bdl	bdl
TC10	2/24/92	1035	11.8	7.1	8.0	26	1.34	223	327	16.26	81	139	89	1.00	28.0	bdl	bdl
TC10	3/9/92	0840	11.2	7.7	9.2	11	2.27	139	321	13.32	50	78	66	0.30	31.0	bdl	bdl
TC10	3/23/92	1120	8.9	7.3	9.9	42	1.64	176	276	33.44	59	84	193	0.60	48.0	bdl	bdl
TC10	4/5/92	1645	13.6	7.4	8.4	10	1.58	155	306	8.00	52	83	63	0.50	44.0	bdl	bdl
TC10	4/21/92	1455	16.1	8.1	7.5	16	2.21	331	237	19.00	98	183	56	0.50	80.0	bdl	< 1.00
TC10	5/4/92	1230	14.8	8.0	8.2	18	1.07	185	281	8.00	74	104	43	bdl	30.0	bdl	bdl
TC10	5/18/92	0850	16.3	8.0	8.0	9	1.57	150	341	6.00	46	72	19	bdl	43.0	bdl	bdl
TC10	6/1/92	1304	15.0	8.0	8.7	10	1.34	223	377	2.00	71	108	14	< 0.02	36.0	bdl	bdl
TC10	6/15/92	0835	16.7	7.8	6.8	3	1.77	157	452	4.00	156	231	17	bdl	19.0	bdl	bdl
TC10	6/29/92	1402	19.6	8.0	7.4	11	1.10	269	422	7.75	58	96	49	bdl	53.0	bdl	bdl
TC10	7/13/92	1010	19.6	8.2	7.3	20	0.28	176	391	24.10	68		15		55.5	< 0.1	
TC10	7/27/92	1050	19.6	7.4	7.5	9	0.58	224	281	1.50	83		16	< 0.02	44.2	< 0.1	
TC10	8/10/92	0905	18.4	7.1	8.0	23	0.91	149	390	12.80	75		20	< 0.02	52.9	< 0.1	
TC10	8/25/92	0925	18.2	7.5	7.4	3	2.00	328	298	7.50	109	181	< 1	0.70	13.3	< 0.1	4.19
TC10	9/8/92	0910	17.8	7.8	8.3	21	2.00	141	389	12.90	52		10	bdl	53.6	< 0.1	
TC10	9/21/92	0930	17.7	8.0	7.8	27	1.80	162	458	< 0.20	57		15		52.8	bdl	
TC10	10/19/92	0945	9.4	7.7	10.3	2		133	526	3.70	42		5		48.0	< 0.1	1.50
TC10	11/3/92	0845	12.5	7.9	8.5	7	1.40	340	319	3.30	bdl		10	0.07	30.0	< 0.1	
TC10	11/13/92	0920	9.5	9.1	9.7	35	1.40	299	411	16.00	105		10	2.00	30.0	< 0.1	
TC10	12/1/92	1305	9.4	7.4	9.7	29	1.30	222	569	27.30	88		5		44.0	< 0.1	
TC10	12/14/92	0900	8.6	6.6	9.9	12	1.60	136	585	4.90	58		5		54.0	< 0.1	
TC10s	11/22/91	0930	14.1	9.5	7.9	200	2.84	324	425	190.86	177	259	3440	< 0.02	220.0	bdl	bdl
TC10s	12/1/91	1055	12.8	7.9	9.7	200	15.41	173	379	615.77	73	91	2150	< 0.02	54.0	bdl	bdl
TC10s	12/2/91	1150	13.7	9.5	8.9	200	21.29	114	382	246.32	43	58	1150	< 0.02	27.0	bdl	bdl
TC10s	8/28/92	0900	19.1	8.2	8.0	86	2.60	489	387	82.40	199	339	20		55.8	< 0.1	5.20
TC10s	9/18/92	2025	19.4	8.4	7.4	20	2.72	341	391	< 0.20	116		10	2.60	35.9	< 0.1	
TC10s	10/5/92	0940	14.3	7.6	8.9	170	1.40	217	339	122.00	68		20	1.30	79.0	< 0.1	
TC10s	12/17/92	1310	12.0	9.4	9.4	95	7.50	154	444	154.00	160		10		41.0	< 0.1	

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
TC6s	12/1/91	0945	12.7	8.4	8.1	6	bdl	29	387	17.62	7	13	30	0.70	1.0	5.0	bdl
TC7	7/1/91	1500	14.5	7.5	9.8	200	0.71	99	223	1646.02	58	73	8575	< 0.02	79.0	bdl	bdl
TC7	7/16/91	1120	14.6	7.5	10.4	200	0.75	106	240	506.77	55	63	1800	< 0.02	62.0	bdl	bdl
TC7	7/31/91	1115	14.6	8.3	10.1	43	0.54	114	305	29.44	44	54	199	< 0.02	42.0	bdl	bdl
TC7	8/13/91	0934	14.5	10.6	9.8	200	0.59	786	151	418.28	170	212	34	< 0.02	207.0	bdl	bdl
TC7	8/28/91	1430	16.5	10.2	8.7	200	0.35	370	147	1232.68	88	142	4625	20.00	127.0	bdl	bdl
TC7	9/23/91	1500	19.2	10.4	7.0	200	bdl	931	166	607.91	241	344	1380	95.00	341.0	bdl	bdl
TC7	10/8/91	1410	14.5	11.9	8.4	200	0.08	170	159	240.21	284	418	660	18.00	371.0	bdl	bdl
TC7	10/24/91	1420	18.1	11.8	6.5	200	0.01	174	207	223.97	282	363	985	60.00	488.0	bdl	bdl
TC7	11/17/91	1315	14.6	9.5	6.4	11	0.35	147	258	18.59	58	86	72	1.00	71.0	bdl	bdl
TC7	12/16/91	1420	8.5	11.5	10.8	200	0.34	293	174	562.33	205	308	1740	< 0.02	283.0	bdl	bdl
TC7	12/30/91	1330	11.3	9.9	9.5	188	0.36	157	224	258.30	66	82	435	3.30	70.0	bdl	bdl
TC7	1/13/92	1300	12.3	11.8	9.0	200	0.43	6	347	2129.58	203	336	1420	1.00	320.0	bdl	4.00
TC7	2/10/92	1305	9.2	11.1	10.9	200	0.33	1	33	725.14	283	343	3690	bdl	296.0	bdl	bdl
TC7	3/9/92	1135	13.4	12.1	8.7	200	0.95	175	173	4557.54	344	416	110	25.80	423.0	bdl	bdl
TC7	4/6/92	1315	12.6	11.7	8.5	200	0.21	913	131	2733.00	155	371	7400	bdl	372.0	bdl	bdl
TC7	5/18/92	1416	16.3	12.2	9.3	200	0.38	122	113	1501.00	199	300	2440	bdl	253.0	bdl	bdl
TC7	6/1/92	1412	15.8	12.5	8.1	200	0.04	bdl	195	7732.70	564	672	1000	bdl	707.0	bdl	bdl
TC7	6/15/92	1514	17.5	11.7	8.8	200	0.09	798	267	4204.90	141	228	< 100	bdl	172.0	bdl	bdl
TC7	7/27/92	1145	16.4	7.8	8.8	70	0.44	155	205	5.80	60		10	< 0.02	64.4	< 0.1	
TC7N	7/1/91	1515	20.9	11.1	1.3	167	0.03	623	52	152.72	68	138	674	< 0.02	95.0	bdl	bdl
TC7N	7/16/91	1130	20.5	9.1	1.2	55	0.01	192	146	32.89	27	111	205	< 0.02	57.0	bdl	bdl
TC7N	7/31/91	1121	20.0	10.8	2.0	184	0.02	637	152	217.31	102	160	900	< 0.02	69.0	bdl	bdl
TC7N	8/13/91	0940	19.3	9.5	4.3	80	0.03	96	190	59.04	46	147	55	< 0.02	55.0	bdl	bdl
TC7N	8/28/91	1440	20.1	10.0	4.2	200	0.10	8	104	903.24	76	205	2280	15.00	147.0	bdl	1.00
TC7N	9/11/91	0930	14.7	9.9	8.5	200	1.69	100	180	286.22	77	87	1110	55.00	68.0	bdl	bdl
TC7N	9/23/91	1515	14.5	10.1	10.3	200	1.64	171	165	1907.74	180	217	5000	13.00	231.0	bdl	bdl
TC7N	10/8/91	1430	14.3	10.1	8.8	180	0.28	215	235	286.58	50	107	97	9.00	82.0	bdl	bdl
TC7N	10/24/91	1430	16.1	10.0	6.1	200	0.54	146	267	369.91	56	80	790	18.00	75.0	bdl	bdl
TC7N	11/2/91	1515	12.6	11.5	9.1	200	0.34	120	205	267.23	96	255	4750	50.00	371.0	bdl	bdl
TC7N	11/17/91	1321	13.5	8.3	10.2	16	0.55	110	273	25.82	41	70	88	0.80	64.0	bdl	bdl
TC7N	12/16/91	1430	11.7	9.9	3.8	200	0.75	105	285	2523.53	63	81	8925	4.20	66.0	bdl	bdl
TC7N	12/30/91	1340	11.9	7.7	8.1	156	0.73	96	198	137.72	37	57	460	1.70	50.0	bdl	bdl
TC7N	1/13/92	1305	12.4	10.4	6.8	200	0.48	174	288	710.48	49	111	1840	4.00	102.0	bdl	2.00
TC7N	2/10/92	1315	11.3	10.5	7.1	200	0.93	290	55	820.56	73	122	2755	bdl	117.0	bdl	bdl
TC7N	3/9/92	1145	13.5	9.4	9.6	121	0.92	116	291	101.36	40	54	386	bdl	47.0	bdl	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
TC7N	4/6/92	1325	12.5	10.7	8.1	200	0.34	170	183	1138.00	48	63	3450	bdl	42.0	bdl	bdl
TC7N	5/4/92	1150	13.7	11.1	8.8	200	0.80	250	205	224.00	85	120	1370	bdl	106.0	bdl	bdl
TC7N	5/18/92	1430	15.1	10.6	9.3	200	0.65	157	237	285.00	22	48	820	bdl	32.0	bdl	bdl
TC7N	6/1/92	1422	14.1	10.3	9.0	200	0.72	168	291	6972.00	35	58	1000	bdl	38.0	bdl	bdl
TC7N	6/15/92	1524	16.3	11.0	8.0	200	0.62	344	276	3894.40	101	140	< 100	bdl	88.0	bdl	bdl
TC7N	7/27/92	1140	16.5	8.3	8.9	148	0.82	115	201	5.50	37		10	< 0.02	44.7	< 0.1	
TC7NP	10/8/91	1455	13.7	7.3	10.4	5	0.35	62	317	4.33	28	33	26	< 0.02	25.0	bdl	bdl
TC7NP	10/24/91	1445	15.0	8.5	5.8	2	0.25	72	340	3.00	31	39	11	< 0.02	28.0	bdl	bdl
TC7NP	11/17/91	1330	13.8	7.9	10.6	2	0.10	36	302	5.17	14	21	17	1.20	18.0	bdl	bdl
TC7NP	12/16/91	1445	9.4	9.4	10.4	14	0.47	18	298	0.40	12	20	5	2.40	6.0	bdl	bdl
TC7NP	12/30/91	1345	11.0	7.9	8.2	5	0.41	113	255	bdl	7	13	5	0.80	6.0	bdl	bdl
TC7NP	1/13/92	1315	11.9	9.4	8.4	2	bdl	28	322	11.95	13	21	20	0.90	8.0	bdl	< 1.00
TC7NP	2/10/92	1320	11.7	8.7	8.8	8	0.08	25	143	5.96	10	18	23	bdl	8.0	bdl	bdl
TC7NP	3/9/92	1150	12.7	9.2	9.5	16	0.18	28	303	2.85	8	14	30	bdl	6.0	3.4	bdl
TC7NP	4/6/92	1340	12.4	9.6	7.0	6	0.19	30	235	bdl	8	14	33	bdl	3.0	bdl	bdl
TC7NP	6/1/92	1435	15.1	10.3	7.7	200	1.73	160	290	1690.00	34	61	1000	bdl	40.0	bdl	bdl
TC7NP	6/15/92	1528	17.4	11.6	5.0	200	1.88	647	250	4534.80	114	166	< 100	bdl	125.0	bdl	bdl
TC7NPs	12/1/91	1005	12.1	5.7	11.0	10	6.47	27	380	3.20	8	13	12	< 0.02	2.0	4.2	bdl
TC7NPs	12/2/91	1350	13.8	9.8	7.3	12	8.72	41	327	4.53	8	14	36	0.90	2.0	5.0	bdl
TC7Ns	12/1/91	0955	13.0	7.2	8.4	9	0.98	100	258	14.31	37	53	20	< 0.02	43.0	bdl	bdl
TC7Ns	12/2/91	1405	13.7	11.7	9.2	200	0.68	610	254	4820.45	158	203	1655	5.20	193.0	bdl	bdl
TC7s	12/1/91	0900	13.5	8.8	9.5	180	5.41	266	376	321.77	128	152	610	0.60	131.0	bdl	bdl
TC7s	12/2/91	1340	14.2	11.7	9.1	200	1.14	360	252	221.08	56	81	790	0.60	66.0	bdl	bdl
TC8	10/24/91	1450	17.8	8.1	6.0	2	0.25	73	355	2.00	32	39	8	< 0.02	28.0	bdl	bdl
TD1	7/1/91	0940	15.2	7.3	7.4	7	0.04	256	276	10.62	145	137	24	< 0.02	139.0	bdl	bdl
TD1	7/15/91	1030	16.0	7.6	8.5	10	0.06	262	251	18.98	143	139	29	< 0.02	139.0	bdl	bdl
TD1	7/29/91	1300	17.3	7.4	8.2	11	0.08	300	291	10.56	143	139	48	< 0.02	137.0	bdl	bdl
TD1	8/12/91	1050	15.9	7.4	8.2	5	0.02	301	264	2.24	148	141	28	< 0.02	137.0	bdl	bdl
TD1	8/29/91	0850	15.8	7.3	7.3	4	0.02	314	338	25.14	147	149	64	4.00	146.0	bdl	bdl
TD1	9/3/91	1320	16.7	7.2	7.2	8	0.02	289	272	4.83	148	146	43	< 0.02	143.0	bdl	bdl
TD1	9/10/91	0940	16.5	7.2	5.8	33	0.05	309	286	34.48	148	149	133	< 0.02	147.0	bdl	bdl
TD1	9/22/91	1445	17.6	6.4	6.7	6	0.05	280	263	15.53	150	143	73	bdl	135.0	bdl	bdl
TD1	10/5/91	1200	15.2	7.6	7.3	10	0.06	264	320	8.78	160	152	48	< 0.02	140.0	bdl	bdl
TD1	10/20/91	1555	13.2	7.2	8.0	8	0.03	263	308	7.12	154	149	5	< 0.02	137.0	bdl	bdl
TD1	11/2/91	1455	12.1	7.6	8.0	2	0.01	308	273	5.20	167	161	170	5.00	155.0	bdl	bdl
TD1	11/17/91	1530	12.6	7.5	7.1	2	0.09	306	136	8.35	149	164	54	< 0.02	184.0	bdl	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
TD1	12/16/91	1100	12.7	7.8	10.0	16	0.82	208	307	3.22	103	101	37	< 0.02	97.0	bdl	bdl
TD1	12/30/91	1020	12.0	7.9	9.2	2	0.41	230	352	1.21	107	109	17	0.50	109.0	bdl	bdl
TD1	1/13/92	1415	10.7	8.0	8.6	3	0.11	163	356	3.22	115	115	35	0.50	109.0	bdl	< 1.00
TD1	1/27/92	1115	11.5	7.4	7.2	4	0.26	209	329	3.21	103	112	8	1.10	116.0	bdl	bdl
TD1	2/10/92	1015	8.3	7.5	9.8	3	0.35	211	298	7.17	115	114	21	0.20	112.0	bdl	bdl
TD1	2/24/92	0825	12.9	6.6	7.6	3	0.26	255	504	11.00	120	122	42	0.85	121.0	bdl	bdl
TD1	3/9/92	0950	13.3	7.9	7.6	2	0.20	241	349	3.63	119	113	30	2.30	109.0	bdl	bdl
TD1	3/23/92	0850	10.6	8.1	7.5	8	0.42	8	385	3.19	113	108	28	0.50	103.0	bdl	bdl
TD1	4/6/92	1400	12.8	8.5	7.8	4	0.25	238	308	bdl	123	124	34	bdl	127.0	bdl	bdl
TD1	4/20/92	1550	16.4	7.5	7.9	3	0.06	223	270	bdl	129	123	21	bdl	122.0	bdl	< 1.00
TD1	5/4/92	0825	12.9	7.9	7.9	3	0.08	263	273	2.00	124	120	26	bdl	120.0	bdl	bdl
TD1	5/18/92	1045	15.3	8.1	7.8	5	0.07	271	298	5.00	121	119	7	bdl	120.0	bdl	bdl
TD1	6/1/92	0833	13.5	7.9	8.3	4	0.06	277	388	10.00	129	127	16	< 0.02	38.0	bdl	bdl
TD1	6/15/92	1027	15.3	8.0	7.0	5	0.07	298	341	8.00	142	138	18	bdl	135.0	bdl	bdl
TD1	6/29/92	0937	16.3	7.8	6.3	6	0.04	340	304	8.35	163	158	25	bdl	146.0	bdl	bdl
TD1	7/13/92	1251	20.9	7.0	6.6	7	0.01	348	402	8.10	178	bdl	10		130.0	< 0.1	
TD1	7/27/92	1520	18.7	7.1	4.4	7	0.01	327	269	3.30	173		10	< 0.02	158.0	< 0.1	
TD1	8/10/92	1005	18.1	7.0	5.0	7	0.02	328	313	10.40	176		15	< 0.02	163.0	< 0.1	
TD1	8/25/92	1030	17.7	7.5	4.6	5		325	231	2.00	164	243	10	bdl	165.0	< 0.1	1.38
TD1	9/8/92	1120	17.8	7.4	3.9	12	0.02	336	302	5.60	164		15		170.0	< 0.1	
TD1	9/21/92	1205	18.5	7.3	5.4	4	0.05	335	430	< 0.20	171		10		118.0	bdl	
TD1	10/19/92	1330	12.2	7.1	8.2	10		190	466	5.90	174		10		140.0	< 0.1	1.60
TD1	11/3/92	1100	13.3	7.5	4.7	2	bdl	319	353	1.90	157		5		160.0	< 0.1	
TD1	11/13/92	1305	11.1	7.2	6.2	4	0.09	316	436	42.00	166		10	2.50	150.0	< 0.1	
TD1	11/30/92	1515	9.4	7.7	5.9	2	0.01	316	550	1.40	160		10		150.0	< 0.1	
TD1	12/14/92	1330	9.4	7.3	5.2	6	0.03	299	440	5.30	150		5	bdl	140.0	< 0.1	
TD1s	11/22/91	1250	12.4	7.4	5.8	30	bdl	321	316	17.13	153	173	63	< 0.02	128.0	bdl	bdl
TD1s	12/1/91	1430	12.5	7.5	8.5	16	0.46	251	260	12.03	108	120	89	< 0.02	102.0	bdl	bdl
TD1s	12/2/91	1520	16.5	8.6	9.2	77	7.01	70	417	70.98	94	100	359	< 0.02	96.0	bdl	bdl
TD1s	8/28/92	1115	18.2	7.4	5.0	8	0.05	348	348	10.50	168	237	10		141.0	< 0.1	15.20
TD1s	9/18/92	1855	17.7	7.3	5.7	8	0.03	344	428	< 0.20	221		15	12.20	148.0	< 0.1	
TD1s	10/5/92	1345	15.1	7.6	6.0	7	0.10	346	414	6.70	177		10		160.0	< 0.1	
TD1s	12/17/92	1145	9.8	7.5	7.4	10	0.60	311	496	8.90	160		10	1.30	130.0	< 0.1	
TNN	3/9/92	1330	19.8	10.5	6.9	140	bdl	153	188	41.19	113	314	255	bdl	324.0	bdl	bdl
YC1	7/1/91	1440	25.0	6.7	7.7	2	1.49	47	279	bdl	22	28	34	< 0.02	15.0	bdl	bdl
YC1	7/16/91	1455	bdl	bdl	bdl	bdl	bdl	bdl	bdl	0.46	19	26	11	< 0.02	16.0	bdl	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
YC1	7/29/91	1500	22.3	6.8	8.1	2	0.22	70	343	bdl	30	33	25	< 0.02	27.0	bdl	bdl
YC1	8/13/91	0914	19.1	7.1	6.9	2	0.20	74	315	bdl	25	32	23	< 0.02	29.0	bdl	bdl
YC1	8/28/91	1510	22.0	7.7	5.9	2	0.18	62	229	4.19	23	28	26	< 0.02	23.0	bdl	bdl
YC1	9/10/91	1440	21.4	6.5	7.3	4	0.44	54	319	8.80	24	28	18	< 0.02	23.0	bdl	bdl
YC1	9/22/91	1125	14.8	6.8	7.8	1	0.25	58	329	bdl	28	33	4	bdl	26.0	bdl	bdl
YC1	10/6/91	0850	6.4	7.7	7.0	2	0.51	6	358	2.55	37	45	57	< 0.02	30.0	bdl	bdl
YC1	10/19/91	1230	12.2	7.7	7.5	1	0.25	64	363	bdl	29	34	11	< 0.02	28.0	bdl	bdl
YC1	11/2/91	1125	10.5	6.9	6.2	1	0.25	74	314	2.81	37	40	34	< 0.02	35.0	bdl	bdl
YC1	11/17/91	1130	11.8	6.7	8.4	3	0.22	70	326	3.63	30	34	88	< 0.02	28.0	bdl	bdl
YC1	12/17/91	1215	8.5	6.4	10.2	12	15.51	39	356	bdl	13	25	61	< 0.02	7.0	bdl	bdl
YC1	12/30/91	1505	6.9	7.1	9.9	7	14.00	38	356	bdl	12	19	39	0 80	6.0	bdl	bdl
YC1	1/13/92	1130	7.0	7.1	9.9	5	5.94	39	357	3.20	14	21	53	< 0.02	7.0	bdl	< 1.00
YC1	1/27/92	1505	5.6	6.7	17.8	4	9.04	34	291	2.40	13	21	23	bdl	6.0	bdl	bdl
YC1	2/10/92	1400	bdl	7.0	11.8	4	1.52	40	185	2.00	16	22	19	bdl	8.0	bdl	bdl
YC1	2/24/92	1120	9.2	7.3	9.9	2	5.41	42	369	0.90	15	22	28	bdl	7.0	bdl	bdl
YC1	3/9/92	1300	14.1	7.4	7.7	5	16.91	42	311	3.26	14	22	31	bdl	6.0	bdl	bdl
YC1	3/23/92	1200	9.2	7.0	8.9	5	12.53	40	265	bdl	14	21	35	bdl	6.0	bdl	bdl
YC1	4/5/92	1430	12.6	7.1	8.7	3	6.89	44	391	bdl	13	22	31	bdl	8.0	bdl	bdl
YC1	4/21/92	1540	19.0	7.2	9.1	21	11.43	40	278	4.00	16	22	51	bdl	6.0	bdl	2.00
YC1	5/4/92	1135	16.0	7.2	8.0	5	1.67	47	320	bdl	17	23	31	bdl	9.0	bdl	bdl
YC1	5/18/92	0828	19.5	7.0	5.7	2	0.69	56	355	bdl	21	27	11	bdl	15.0	bdl	bdl
YC1	6/1/92	1354	15.7	7.4	7.7	2	0.41	60	399	1.00	22	28	17	bdl	17.0	bdl	bdl
YC1	6/15/92	1754	22.5	7.5	6.6	2	1.96	46	431	3.00	18	24	31	bdl	10.0	bdl	bdl
YC1	6/29/92	1456	20.7	7.0	5.0	2	0.21	52	414	3.90	20	25	22	bdl	15.0	bdl	bdl
YC1	7/13/92	0900	22.8	7.4	5.9	2	0.32	59	446	2.20	22				15.5	< 0.1	
YC1	7/27/92	0945	22.7	6.5	5.7	2	0.24	70	336		29		20	< 0.02	22.3	< 0.1	
YC1	8/10/92	1405	21.1	6.6	6.0	4	0.22	83	286	2.50	34		20	< 0.02	32.9	< 0.1	
YC12	7/1/91	1315	24.9	7.0	8.3	7	2.97	99	270	11.92	47	55	47	< 0.02	39.0	bdl	bdl
YC12	7/16/91	1040	22.9	7.2	7.9	9	1.05	188	286	3.81	87	103	33	< 0.02	72.0	bdl	bdl
YC12	7/30/91	1345	25.0	7.4	9.3	27	1.55	225	267	28.46	99	118	110	< 0.02	65.0	bdl	bdl
YC12	8/13/91	0828	19.8	7.2	6.8	16	1.00	221	354	12.90	87	112	15	< 0.02	76.0	7.0	bdl
YC12	8/28/91	1035	21.9	7.1	6.7	7	1.04	250	265	6.85	90	137	52	4.00	62.0	bdl	bdl
YC12	9/10/91	1115	21.6	7.0	6.3	17	1.46	218	284	18.04	98	130	92	< 0.02	53.0	bdl	bdl
YC12	9/22/91	1040	15.8	7.0	8.3	13	0.92	173	309	3.19	63	98	62	bdl	58.0	bdl	bdl
YC12	10/6/91	1120	14.0	7.1	6.9	7	1.27	186	330	7.18	71	111	97	< 0.02	63.0	bdl	bdl
YC12	10/19/91	1100	11.7	7.0	8.8	4	0.82	209	307	2.02	82	124	12	6.00	38.0	bdl	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
YC12	11/2/91	1115	11.6	6.9	8.1	2	0.97	261	297	2.07	102	147	28	19.00	46.0	bdl	bdl
YC12	11/17/91	1040	12.3	6.9	9.5	3	1.06	349	296	2.80	122	229	23	< 0.02	38.0	bdl	bdl
YC12	12/17/91	1120	7.3	6.5	10.5	10	22.56	74	318	9.27	27	38	88	0.90	17.0	bdl	bdl
YC12	12/30/91	1140	7.0	6.8	10.8	8	25.18	59	337	bdl	20	29	40	1.00	13.0	bdl	bdl
YC12	1/13/92	1040	7.1	7.0	9.7	7	9.68	88	346	4.46	29	38	64	1.40	18.0	bdl	< 1.00
YC12	1/27/92	1405	5.9	6.4	12.7	6	14.09	58	304	0.40	22	32	17	bdl	12.0	bdl	bdl
YC12	2/10/92	1145	3.5	6.9	11.7	6	4.52	92	303	4.44	42	57	20	bdl	27.0	bdl	bdl
YC12	2/24/92	1020	9.5	6.9	9.6	6	10.64	86	329	2.74	30	44	31	bdl	18.0	bdl	bdl
YC12	3/9/92	1110	11.9	7.0	9.9	10	27.05	61	338	5.63	21	31	51	bdl	12.0	bdl	bdl
YC12	3/23/92	1100	8.0	6.9	10.4	6	28.76	66	284	bdl	23	33	37	bdl	13.0	bdl	bdl
YC12	4/5/92	1620	13.3	6.9	9.6	5	10.57	77	288	bdl	25	37	39	bdl	13.0	bdl	bdl
YC12	4/21/92	1525	16.9	7.4	8.2	101	bdl	101	274	65.00	43	65	399	bdl	50.0	bdl	6.00
YC12	5/4/92	1125	16.0	7.5	8.6	8	3.81	106	283	1.00	39	52	37	bdl	22.0	bdl	bdl
YC12	5/18/92	1324	21.2	7.5	8.4	7	2.04	112	316	bdl	40	53	35	bdl	32.0	bdl	bdl
YC12	6/1/92	1244	15.4	7.6	8.5	7	2.67	135	349	10.00	49	66	40	bdl	38.0	bdl	bdl
YC12	6/15/92	1311	21.9	7.5	7.5	7	4.63	93	386	7.00	35	44	46	bdl	25.0	bdl	bdl
YC12	6/29/92	1336	21.8	7.5	7.6	9	1.40	171	456	6.64	62	81	51	bdl	53.0	bdl	bdl
YC12	7/13/92	1223	25.6	7.0	6.7	13	1.49	145	384	9.30	57		30		47.0	< 0.1	
YC12	7/27/92	1305	23.8	6.8	6.2	42	5.54	149	304	20.60	59		40	< 0.02	48.2	< 0.1	
YC12	8/10/92	1330	22.7	6.8	7.0	9	1.25	244	268	4.60	95		25	< 0.02	48.6	< 0.1	
YC12	8/25/92	1320	24.1	7.5	8.0	7	1.18	172	374	4.30	76	65	15		< 0.10	73.6	6.71
YC12	9/8/92	1050	21.1	7.3	6.7	13	1.14	161	383	12.30	65		10		62.2	< 0.1	
YC12	9/21/92	1100	20.3	7.2	6.2	16	1.90	202	441	< 0.20	78		20		62.9	bdl	
YC12	10/19/92	1125	9.6	7.0	8.0	2		192	490	6.10	65		10		52.0	< 0.1	2.50
YC12	11/3/92	1025	13.0	7.4	6.5	10	1.50	229	384	7.80	90		20		69.0	< 0.1	
YC12	11/13/92	1050	10.9	7.0	8.6	7	16.70	77	407	11.50	30		20	bdl	16.0	< 0.1	
YC12	11/30/92	1450	8.3	7.2	9.8	5	5.60	87	449	4.60	36		15		20.0	< 0.1	
YC12	12/14/92	1050	5.2	6.7	9.8	2		72	456	2.60	27		15	bdl	19.0	< 0.1	
YC12s	11/22/91	1055	13.3	7.6	6.7	200	bdl	186	396	60.67	72	96	247	0.60	56.0	bdl	bdl
YC12s	12/1/91	1230	12.5	7.5	8.1	100	bdl	101	370	94.29	39	52	426	< 0.02	35.0	bdl	bdl
YC12s	12/2/91	1110	12.9	6.6	8.7	97	bdl	154	512	106.08	22	30	411	< 0.02	16.0	bdl	bdl
YC12s	8/28/92	1045	20.1	7.4	6.6	71	12.50	239	391	59.20	94	150	50		56.8	< 0.1	5.64
YC12s	10/5/92	1040	15.0	7.3	7.3	30	5.50	226	416	20.90	91		30	0.17	63.0	< 0.1	
YC12s	12/17/92	1130	7.8	7.8	10.0	70		67	479	37.20	27		35		15.0	< 0.1	
YC1s	11/22/91	1005	13.1	7.3	6.4	32	bdl	103	425	6.51	46	53	81	< 0.02	32.0	bdl	bdl
YC1s	12/1/91	1155	12.3	6.1	8.4	22	25.07	38	387	33.98	15	20	146	< 0.02	6.0	2.4	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
YC1s	12/2/91	1200	12.4	7.4	8.2	35	bdl	36	480	18.67	13	19	127	< 0.02	7.0	bdl	bdl
YC5	7/1/91	1340	24.2	6.7	7.6	8	1.50	54	270	1.42	26	30	23	< 0.02	17.0	bdl	bdl
YC5	7/16/91	1410	23.0	6.9	7.5	2	0.47	72	262	0.88	32	38	15	15.25	25.0	bdl	bdl
YC5	7/31/91	0910	21.0	7.0	6.4	3	0.25	90	375	bdl	39	42	30	< 0.02	31.0	bdl	bdl
YC5	8/13/91	0854	20.1	7.0	4.3	2	0.50	97	333	bdl	41	45	30	< 0.02	34.0	bdl	bdl
YC5	8/28/91	1120	21.6	6.8	4.9	6	0.33	84	298	430.00	33	40	32	< 0.02	bdl	1.8	bdl
YC5	9/10/91	1350	21.5	6.6	4.0	6	0.23	82	329	bdl	24	28	31	< 0.02	31.0	bdl	bdl
YC5	9/22/91	1100	15.5	6.6	5.9	1	0.24	90	335	bdl	45	53	14	bdl	37.0	bdl	bdl
YC5	10/6/91	1150	13.5	6.7	3.7	2	1.24	87	330	4.10	43	49	62	< 0.02	33.0	bdl	bdl
YC5	10/19/91	1515	12.1	6.9	6.8	1	0.29	105	338	bdl	49	55	11	< 0.02	42.0	bdl	bdl
YC5	11/2/91	1400	11.5	6.9	4.8	2	0.14	101	384	1.62	48	59	51	2.00	42.0	bdl	bdl
YC5	11/17/91	1105	11.2	6.8	8.1	2	0.22	93	310	bdl	41	51	36	< 0.02	45.0	bdl	bdl
YC5	12/17/91	1155	7.8	6.8	10.2	12	14.20	40	308	0.80	15	22	60	0.50	10.0	bdl	bdl
YC5	12/30/91	1430	6.9	7.1	10.5	6	14.30	42	350	bdl	13	19	37	bdl	5.0	bdl	bdl
YC5	1/13/92	1105	7.0	7.1	9.2	5	5.82	46	343	4.43	15	22	51	0.90	8.0	bdl	< 1.00
YC5	1/27/92	1422	5.7	6.3	12.8	4	10.85	36	300	1.62	13	21	17	bdl	5.0	bdl	bdl
YC5	2/10/92	1350	3.1	7.9	11.2	4	1.95	48	191	3.64	17	26	20	bdl	10.0	bdl	bdl
YC5	2/24/92	1045	9.2	7.2	9.8	3	8.07	45	330	1.83	17	24	25	bdl	8.0	bdl	bdl
YC5	3/9/92	1125	12.3	6.9	9.6	8	18.54	40	356	1.22	14	21	27	bdl	6.0	bdl	bdl
YC5	3/23/92	1115	8.4	6.9	10.3	6	18.56	41	309	bdl	14	21	34	bdl	6.0	bdl	bdl
YC5	4/5/92	1630	13.1	7.0	9.7	4	8.65	43	317	bdl	15	22	36	bdl	6.0	bdl	bdl
YC5	4/21/92	1510	18.2	7.9	8.2	47	13.66	51	241	4.00	23	36	70	bdl	26.0	bdl	1.00
YC5	5/4/92	1215	15.4	7.8	8.5	7	1.96	53	287	bdl	21	27	41	bdl	11.0	bdl	bdl
YC5	5/18/92	0908	18.3	7.0	6.9	3	1.17	62	353	bdl	24	30	17	bdl	15.0	bdl	bdl
YC5	6/1/92	1258	14.5	7.3	8.2	2	1.22	64	403	bdl	25	31	18	bdl	17.0	bdl	bdl
YC5	6/15/92	1326	21.4	7.2	6.5	3	3.03	51	420	4.00	20	25	34	bdl	10.0	bdl	bdl
YC5	6/29/92	1351	19.9	7.0	6.0	5	0.37	91	449	1.41	34	42	20	bdl	25.0	bdl	bdl
YC5	7/13/92	0957	22.8	7.4	5.7	3	1.06	673	418	3.90	29		20		20.2	< 0.1	
YC5	7/27/92	1035	22.8	6.5	5.2	6	0.59	90	322	< 0.10	39		20	< 0.02	32.5	< 0.1	
YC5	8/10/92	1340	21.8	6.5	5.0	2	0.37	106	287	0.60	42		20	< 0.02	36.8	< 0.1	
YC5	8/25/92	1430	22.1	7.0	5.4	1	0.51	92	368	3.10	41	63	20		38.8	< 0.1	23.20
YC5	9/8/92	0930	20.5	6.8	4.1	1	0.25	98	448	1.60	44		15		29.5	< 0.1	
YC5	9/21/92	1020	19.7	7.1	6.4	2	0.36	86	445	< 0.20	40		30		2.0	bdl	
YC5	10/19/92	1030	8.4	6.8	7.6	bdl		78	481	1.20	34		20	bdl	25.0	< 0.1	3.70
YC5	11/3/92	0940	11.9	7.7	6.1	1	0.61	102	357	0.80	45		45	bdl	37.0	< 0.1	
YC5	11/13/92	1010	11.3	6.9	7.9	2	5.50	47	413	3.35	17		15		12.0	< 0.1	

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
YC5	11/30/92	1505	8.5	7.5	9.6	2	3.30	40	472	0.90	16		10		8.6	< 0.1	
YC5	12/14/92	0930	5.0	6.4	10.4	3	8.80	43	516	1.20	17		15		8.1	< 0.1	
YC5A	7/1/91	1400	22.5	6.9	8.3	4	1.83	67	308	2.59	32	38	22	< 0.02	25.0	bdl	bdl
YC5A	7/16/91	1425	21.2	7.3	9.0	49	1.39	137	273	43.47	66	80	184	< 0.02	49.0	bdl	bdl
YC5A	7/31/91	0920	18.5	7.5	8.9	46	0.60	169	357	84.66	71	88	487	< 0.02	55.0	bdl	bdl
YC5A	8/13/91	0844	18.4	8.7	7.3	34	0.60	173	259	30.88	62	102	139	< 0.02	37.0	bdl	bdl
YC5A	8/28/91	1130	18.9	7.7	8.0	85	0.80	211	258	75.43	64	118	367	6.00	45.0	bdl	bdl
YC5A	9/10/91	1330	19.1	7.5	7.7	62	1.49	360	280	54.51	208	297	242	< 0.02	34.0	bdl	bdl
YC5A	9/22/91	1110	14.7	7.0	8.6	16	0.67	115	317	6.39	50	63	53	bdl	47.0	bdl	bdl
YC5A	10/6/91	1200	13.1	7.1	8.3	6	1.21	118	302	11.14	51	69	51	< 0.02	42.0	bdl	bdl
YC5A	10/19/91	1500	13.9	7.7	9.0	6	0.76	125	333	3.64	38	72	13	5.00	38.0	bdl	bdl
YC5A	11/2/91	1410	11.3	6.9	9.5	63	1.07	268	369	78.87	80	160	279	16.00	30.0	bdl	bdl
YC5A	11/17/91	1055	12.6	6.8	10.2	5	0.95	172	275	16.22	70	108	66	< 0.02	14.0	bdl	bdl
YC5A	12/17/91	1200	7.8	6.5	11.1	16	14.84	60	343	5.87	21	35	64	1.40	11.0	bdl	bdl
YC5A	12/30/91	1420	7.3	7.3	10.1	7	14.90	54	329	1.60	17	27	49	bdl	11.0	bdl	bdl
YC5A	1/13/92	1000	7.0	6.6	10.4	5	7.53	54	417	5.60	20	29	48	0.90	11.0	bdl	< 1.00
YC5A	1/27/92	1330	5.6	6.6	12.9	7	12.43	41	326	0.80	15	24	17	1.00	6.0	bdl	bdl
YC5A	2/10/92	1115	2.7	7.1	11.7	6	2.90	84	305	6.11	36	51	32	bdl	17.0	bdl	bdl
YC5A	2/24/92	0955	9.2	7.4	10.1	5	6.66	65	332	2.26	25	36	27	0.60	11.0	bdl	bdl
YC5A	3/9/92	1030	11.7	7.5	9.3	9	20.85	42	348	1.62	17	27	29	0.60	7.0	bdl	bdl
YC5A	3/23/92	1030	8.0	7.2	10.4	7	22.94	42	289	0.40	16	23	31	1.00	6.0	bdl	bdl
YC5A	4/5/92	1540	12.7	7.5	9.6	4	10.56	46	316	bdl	18	28	34	0.60	8.0	bdl	bdl
YC5A	4/21/92	1200	18.4	6.7	7.9	21	15.17	53	294	4.00	23	31	76	0.40	12.0	bdl	3.00
YC5A	5/4/92	1035	14.5	7.7	8.2	7	4.23	91	347	bdl	37	51	34	bdl	17.0	bdl	bdl
YC5A	5/18/92	1239	19.0	7.9	7.1	3	1.77	116	279	bdl	40	58	8	bdl	31.0	bdl	bdl
YC5A	6/1/92	1230	15.2	7.8	7.4	4	1.64	145	354	1.00	52	71	15	< 0.02	31.0	bdl	bdl
YC5A	6/15/92	1220	21.1	7.5	7.4	3	3.62	58	440	3.00	24	31	27	bdl	14.0	bdl	bdl
YC5A	6/29/92	1290	19.9	7.8	7.5	9	1.53	199	425	7.70	66	103	25	bdl	41.0	bdl	bdl
YC5A	7/13/92	1116	22.4	7.8	7.2	15	1.40	159	374	12.60	66		15		36.6	< 0.1	
YC5A	7/27/92	1540	22.0	7.2	7.5	5	1.12	275	254	1.50	114		15	< 0.02	41.3	< 0.1	
YC5A	8/10/92	1130	20.5	7.3	8.0	12	1.04	149	271	4.00	35		10	< 0.02	45.4	< 0.1	
YC5A	8/25/92	1415	21.0	7.0	7.7	6	0.74	303	259	3.60	117	187	15		11.8	< 0.1	4.81
YC5A	9/8/92	0945	19.1	7.5	5.5	8	1.18	129	410	5.80	51		10		47.7	< 0.1	
YC5A	9/21/92	1300	19.7	8.2	6.4	21		153	410	< 0.20	40		20	3.00	48.9	bdl	
YC5A	10/19/92	1450	10.7	7.8	7.6	3		133	436	3.40	48		10	0.60	49.0	< 0.1	2.60
YC5A	11/3/92	1200	14.2	7.3	5.4	4		264	369	2.30	95		bdl	1.40	30.0	< 0.1	

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
YC5A	11/13/92	1425	12.5	7.6	8.9	9		79	361	8.75	23		20	1.20	10.0	< 0.1	
YC5A	11/30/92	1420	8.4	7.3	10.0	14		66	483	11.10	37		10	0.50	15.0	< 0.1	
YC5A	12/14/92	0945	5.0	6.5	10.5	3	6.30	47	490	2.40	17		15	1.50	10.0	< 0.1	
YC5As	11/22/91	1310	13.2	7.7	6.1	200	bdl	224	321	118.27	80	135	293	1.40	47.0	bdl	bdl
YC5As	12/1/91	1105	12.6	7.8	9.8	200	bdl	125	377	227.94	53	68	1355	0.50	37.0	bdl	bdl
YC5As	12/2/91	1040	12.4	6.3	8.5	139	bdl	37	538	37.45	13	20	173	0.20	8.0	bdl	bdl
YC5As	8/28/92	0930	19.7	8.2	6.9	95	7.10	319	348	51.70	127	213	20		48.6	< 0.1	9.31
YC5As	9/18/92	2040	19.6	8.0	4.2	13	bdl	240	417	< 0.20	86		20		32.0	< 0.1	
YC5As	10/5/92	1135	14.6	7.8	6.4	34		140	364	15.20	63		20	1.50	47.0	< 0.1	
YC5As	12/17/92	1340	7.4	8.0	9.7	9		35	469	14.40	13		10	bdl	6.2	< 0.1	
YC5s	11/22/91	1115	12.9	7.5	6.4	36	bdl	112	411	3.65	48	57	92	0.40	38.0	bdl	bdl
YC5s	12/1/91	1120	12.3	7.1	9.4	16	bdl	50	354	17.21	19	26	110	< 0.02	9.0	bdl	bdl
YC5s	12/2/91	1140	12.4	6.8	8.1	52	bdl	38	413	32.48	13	19	145	0.30	7.0	bdl	bdl
YC5s	8/28/92	0915	20.5	7.6	6.1	13	3.40	77	393	5.90	31	588	30		27.6	< 0.1	7.30
YC5s	9/18/92	2130	19.4	7.4	4.7	7		106	470	< 0.20	48		30	42.00	38.1	< 0.1	
YC5s	10/5/92	1005	14.4	7.3	7.5	5	1.30	85	390	3.00	37		35	bdl	22.0	< 0.1	
YC5s	12/17/92	1335	7.4	8.0	10.2	6		38	485	20.50	13		10		5.0	< 0.1	
YC6	7/1/91	1300	22.7	7.0	7.1	6	2.50	90	233	50.40	42	49	57	< 0.02	35.0	bdl	bdl
YC6	7/16/91	1020	19.6	7.1	7.9	10	1.24	160	280	6.32	80	92	28	< 0.02	57.0	bdl	bdl
YC6	7/30/91	1300	20.0	7.0	9.4	9	1.13	205	334	8.07	89	111	60	< 0.02	51.0	bdl	bdl
YC6	8/13/91	0815	18.7	7.5	7.2	19	1.16	199	354	4.00	75	106	91	< 0.02	57.0	bdl	bdl
YC6	8/28/91	1020	19.9	8.8	6.0	9	1.22	203	159	7.91	70	115	63	5.00	52.0	bdl	bdl
YC6	9/10/91	1100	19.2	8.9	7.3	30	1.68	223	175	17.02	103	143	10	< 0.02	58.0	bdl	bdl
YC6	9/22/91	1025	14.5	7.0	9.1	16	0.95	149	312	1.62	66	89	69	bdl	60.0	bdl	bdl
YC6	10/6/91	1105	12.6	7.2	6.6	6	0.93	159	330	3.18	73	101	70	< 0.02	60.0	bdl	bdl
YC6	10/19/91	1018	11.1	7.1	8.1	4	1.10	162	271	2.82	63	91	12	< 0.02	42.0	bdl	bdl
YC6	11/2/91	1100	11.4	7.0	7.1	2	0.76	247	263	2.01	94	140	24	7.00	41.0	bdl	bdl
YC6	11/17/91	1020	12.6	6.9	9.0	3	0.92	220	262	4.05	76	139	20	0.40	32.0	bdl	bdl
YC6	12/17/91	1110	7.3	6.4	10.6	9	21.10	62	314	3.78	23	34	69	1.10	14.0	bdl	bdl
YC6	12/30/91	1130	7.0	6.8	9.7	6	18.29	53	333	1.62	17	26	46	1.00	11.0	bdl	bdl
YC6	1/13/92	1030	6.9	6.7	10.0	7	9.47	67	376	3.22	26	36	66	1.40	16.0	bdl	< 1.00
YC6	1/27/92	1350	5.8	6.5	12.5	5	14.01	57	314	2.01	19	29	20	bdl	9.0	bdl	bdl
YC6	2/10/92	1135	3.0	7.0	12.3	4	4.37	91	306	3.61	39	54	27	bdl	24.0	bdl	bdl
YC6	2/24/92	1010	9.3	6.9	9.8	6	9.30	76	310	2.30	26	39	28	bdl	16.0	bdl	bdl
YC6	3/9/92	1100	11.8	7.2	9.7	10	28.75	53	339	2.45	19	29	34	bdl	12.0	bdl	bdl
YC6	3/23/92	1050	7.9	7.0	10.3	7	32.51	57	286	bdl	21	30	33	bdl	11.0	bdl	bdl

bdl = below detection limit

Site	Date	Time	Temp	pH	Dissolved Oxygen	Turbidity	Flow Rate	Specific Conductance	EH	Total Suspended Sediment	Hardness	Total Dissolved Solids	Color	Oil & Grease	Alkalinity	Acidity	Total Organic Carbon
			deg C	su	ppm	ntu	cfs	uS		ppm	ppm	ppm	Pt-Co	ppm	ppm CaCO3	ppm CaCO3	ppm
YC6	4/5/92	1608	13.0	7.1	8.6	5	11.40	67	299	bdl	24	35	40	bdl	12.0	bdl	bdl
YC6	4/21/92	1225	17.0	6.7	7.7	72	bdl	95	298	52.00	38	56	220	bdl	25.0	bdl	6.00
YC6	5/4/92	1165	14.1	7.4	8.1	9	4.42	93	305	bdl	37	50	37	bdl	20.0	bdl	bdl
YC6	5/18/92	1309	18.5	7.5	8.5	5	3.59	104	267	bdl	37	51	24	bdl	30.0	bdl	bdl
YC6	6/1/92	1055	13.9	7.4	8.4	7	3.82	120	322	4.00	43	57	38	bdl	32.0	bdl	bdl
YC6	6/15/92	1129	16.7	8.1	8.3	5	0.86	89	387	5.00	34	44	40	bdl	26.0	bdl	bdl
YC6	6/29/92	1312	19.0	7.5	8.9	6	2.80	165	353	3.78	58	80	37	bdl	48.0	bdl	bdl
YC6	7/13/92	1210	22.0	7.0	6.7	13	1.78	147	381	9.10	58		20		47.7	< 0.1	
YC6	7/27/92	1245	22.6	7.3	7.0	165	4.63	163	278	13.40	149		30	< 0.02	51.3	< 0.1	
YC6	8/10/92	1320	20.4	6.9	6.0	11	1.50	164	276	5.80	67		30	< 0.02	54.0	< 0.1	
YC6s	11/22/91	1040	13.1	7.6	6.4	200	bdl	173	384	68.66	65	107	234	0.50	49.0	bdl	bdl
YC6s	12/2/91	1105	12.7	6.5	8.9	90	bdl	50	521	88.93	18	26	326	0.30	13.0	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
988	2/24/92	59.39	5.93	58.97	2.40	1.19	54.26	8.40	< 0.02	66.76	86.62	bdl	1.07	0.90	< 0.20	< 0.2	bdl	bdl
988	3/9/92	56.72	5.50	51.53	2.63	1.15	49.27	7.99	< 0.02	53.15	84.18	bdl	1.00	0.88	< 0.20	< 0.2	bdl	bdl
988	3/23/92	62.36	5.47	58.59	3.00	1.15	44.89	6.49	< 0.02	54.69	90.28	bdl	0.93	0.80	0.20	< 0.2	bdl	bdl
988	4/5/92	57.67	5.73	55.59	2.31	1.04	48.07	6.54	< 0.02	52.01	106.14	bdl	0.97	0.93	< 0.20	< 0.2	bdl	bdl
988	5/4/92	73.31	6.30	59.21	2.19	1.14	51.71	5.49	< 0.02	63.54	95.16	bdl	0.92	0.81	0.20	< 0.2	bdl	bdl
988	5/18/92	66.09	6.93	59.13	2.81	1.02	82.19	5.12	< 0.02	63.98	100.65	bdl	0.99	0.97	0.20	< 0.2	bdl	bdl
988	6/1/92	70.52	6.97	60.44	3.15	1.07	58.50	4.12	< 0.02	74.54	105.53	bdl	0.97	0.91	< 0.20	< 0.2	bdl	bdl
988	6/15/92	76.19	6.87	62.42	3.11	1.15	59.63	4.23	< 0.02	63.23	102.48	bdl	0.94	0.81	< 0.20	< 0.2	bdl	bdl
988	6/29/92	73.05	7.18	60.13	3.28	1.11	90.00	4.11	< 0.02	63.33	bdl	bdl	1.06	0.96	< 0.20	< 0.2	bdl	< 0.50
988	7/13/92	77.60	6.69	69.90	2.30		66.70	< 0.02	4.47	58.50	81.00				< 0.10	0.3	< 0.30	
988	7/27/92	101.00	7.44	88.50	15.40		92.50	13.50	1.18	54.40	104.31				< 0.10	0.3	< 0.30	
988	8/10/92	88.70	5.01	73.20	2.90		72.10	8.90	< 0.02	55.10	108.58				< 0.10	0.3	< 0.30	
988	8/25/92	84.30	7.64	74.10	2.90		91.00	9.57	< 0.02	64.20	100.65				< 0.10	0.9	< 0.30	< 0.10
988	10/16/92	99.96	9.21		3.42		160.00	14.00	< 0.02	67.00	109.80				< 0.10	0.3	< 0.30	< 0.10
988	11/13/92	89.76	7.60	57.00	4.30		130.00	10.40	< 0.02	3.20	97.60				0.30	< 0.1	< 0.30	
988s	12/1/91	22.05	1.75	11.65	4.69	0.84	19.34	2.60	0.25	7.14	40.26	bdl	0.75	0.89	0.24	< 0.2	bdl	bdl
988s	8/28/92	155.00	9.17	53.40	14.20		181.00	25.20	1.82	36.00	92.72				< 0.10	< 0.1	< 0.30	< 0.10
988s	9/18/92	126.00	9.96	47.20	9.80		196.00	21.40	0.59	36.10	93.94				< 0.10	0.2	< 0.30	
988s	10/5/92	131.00	8.84	58.00	10.50		210.00	1.10	< 0.02	28.00	97.60				1.30	< 0.1	< 0.30	
988s	12/17/92	72.00	6.01	39.00	6.00	5.93	110.00	7.40	< 0.02	bdl	58.56		5.54	0.94	< 0.10	< 0.1	< 0.30	< 0.10
9B10s	8/28/92	10.70	1.72	2.60	1.50		10.80	0.58	< 0.02	2.30	19.15				< 0.10	< 0.1	< 0.30	< 0.10
BFP	1/13/92	34.52	1.35	8.44	5.54	0.87	98.60	0.74	0.28	1.01	8.54	bdl	0.85	0.98	< 0.20	< 0.2	bdl	< 0.07
DB10	7/2/91	25.85	4.00	7.55	1.89	1.08	11.24	0.16	< 0.02	10.29	42.09	bdl	0.89	0.82	< 0.20	< 0.2	bdl	bdl
DB10	7/16/91	30.82	4.52	9.52	2.06	1.00	10.97	0.12	< 0.02	12.55	56.73	bdl	0.88	0.88	0.64	< 0.2	bdl	bdl
DB10	7/30/91	35.60	4.54	8.87	2.29	1.05	14.75	0.17	< 0.02	11.19	54.90	bdl	0.84	0.80	< 0.20	< 0.2	bdl	bdl
DB10	8/12/91	32.04	4.56	9.67	2.18	1.02	13.12	0.11	< 0.02	11.47	54.90	bdl	0.85	0.84	< 0.20	< 0.2	bdl	bdl
DB10	8/28/91	12.60	2.61	1.89	2.15	1.09	3.04	0.06	< 0.02	2.46	25.62	bdl	0.90	0.83	< 0.20	< 0.2	bdl	bdl
DB10	9/10/91	43.07	5.59	8.76	2.97	1.14	11.79	0.05	< 0.02	13.94	69.54	bdl	0.92	0.81	0.57	< 0.2	bdl	bdl
DB10	9/22/91	39.00	4.96	8.06	2.30	1.07	11.50	bdl	< 0.02	10.71	62.83	bdl	0.86	0.80	< 0.20	< 0.2	bdl	bdl
DB10	10/6/91	39.80	5.06	9.59	3.05	1.08	22.50	bdl	< 0.02	13.51	59.78	bdl	0.91	0.84	< 0.20	< 0.2	bdl	bdl
DB10	10/19/91	30.24	4.24	7.72	2.70	1.08	12.73	bdl	< 0.02	8.51	49.41	bdl	0.86	0.80	< 0.20	< 0.2	bdl	< 0.07
DB10	11/2/91	37.45	5.06	8.42	2.98	1.10	14.27	bdl	< 0.02	11.03	62.22	bdl	0.91	0.83	< 0.20	< 0.2	bdl	bdl
DB10	11/17/91	31.93	4.52	7.75	2.33	1.00	12.03	0.03	< 0.02	9.82	56.73	bdl	0.86	0.86	< 0.20	< 0.2	bdl	bdl
DB10	12/17/91	8.79	1.99	3.00	1.07	0.93	11.62	0.11	< 0.02	3.07	17.08	bdl	0.94	1.01	< 0.20	< 0.2	bdl	< 0.07
DB10	12/30/91	6.30	1.71	2.33	0.92	0.85	9.83	0.09	< 0.02	2.39	10.37	bdl	0.79	0.93	< 0.20	< 0.2	bdl	bdl
DB10	1/13/92	10.06	2.07	2.36	1.11	0.94	11.68	0.10	< 0.02	3.46	14.64	bdl	0.85	0.90	< 0.20	< 0.2	bdl	< 0.07

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
DB10	1/27/92	6.28	1.73	2.66	1.02	0.88	10.22	0.06	< 0.02	2.98	9.76	bdl	0.80	0.91	< 0.20	< 0.2	bdl	bdl
DB10	2/10/92	11.36	2.41	3.61	1.12	0.97	11.93	0.06	< 0.02	4.23	17.69	bdl	0.84	0.87	< 0.20	< 0.2	bdl	bdl
DB10	2/24/92	9.37	2.19	3.49	1.05	1.06	11.11	0.06	< 0.02	4.42	16.47	bdl	1.01	0.95	< 0.20	< 0.2	bdl	bdl
DB10	3/9/92	6.40	1.69	2.26	1.01	1.06	9.59	0.06	< 0.02	2.45	9.76	bdl	0.95	0.89	< 0.20	< 0.2	bdl	bdl
DB10	3/23/92	6.71	1.81	2.77	0.89	1.07	9.81	0.06	< 0.02	2.97	10.37	bdl	0.95	0.88	< 0.20	< 0.2	bdl	bdl
DB10	4/5/92	7.57	1.89	2.73	0.92	0.89	10.15	0.08	< 0.02	3.16	14.64	bdl	0.90	1.01	< 0.20	< 0.2	bdl	bdl
DB10	4/21/92	7.53	1.95	2.56	1.35	0.92	9.86	0.25	< 0.02	2.66	12.81	bdl	0.82	0.89	< 0.20	< 0.2	bdl	bdl
DB10	5/4/92	10.99	2.25	2.90	1.26	0.95	9.78	0.05	< 0.02	3.75	18.91	bdl	0.86	0.91	< 0.20	< 0.2	bdl	bdl
DB10	5/18/92	7.65	2.14	2.36	1.32	1.01	8.30	0.06	< 0.02	2.25	13.42	bdl	0.85	0.85	< 0.20	< 0.2	bdl	bdl
DB10	6/1/92	10.79	2.40	3.55	1.35	0.96	10.21	0.16	< 0.02	4.52	20.13	bdl	0.90	0.94	< 0.20	< 0.2	bdl	bdl
DB10	6/15/92	9.08	2.11	1.95	1.61	1.01	11.88	0.12	< 0.02	1.15	13.42	bdl	0.85	0.84	< 0.20	< 0.2	bdl	bdl
DB10	6/29/92	12.61	2.74	3.78	1.41	0.97	10.09	0.24	< 0.02	4.08	bdl	bdl	0.87	0.89	< 0.20	< 0.2	bdl	< 0.50
DB10	7/13/92	21.00	3.48	4.60	1.50		10.10	< 0.02	0.24	4.60	36.00				< 0.10	< 0.1	< 0.30	
DB10	7/27/92	20.80	2.97	8.10	2.30		11.10	0.51	< 0.02	4.50	49.41				< 0.10	< 0.1	< 0.30	
DB10	8/10/92	28.60	3.62	7.70	1.50		14.10	0.40	< 0.02	8.00	44.41				< 0.10	< 0.1	< 0.30	
DB10	8/25/92	29.80	4.36	7.50	1.80		16.10	0.28	< 0.02	9.60	46.91				< 0.10	< 0.1	< 0.30	< 0.10
DB10	9/8/92	25.60	4.19	6.20	1.90		14.80	0.39	< 0.02	7.00	45.57				< 0.10	< 0.1	< 0.30	
DB10	9/21/92	25.00	4.16	8.35	3.98		18.20	0.72	< 0.02	7.39	39.16				< 0.10	bdl	< 0.30	
DB10	10/19/92	24.61	4.38	6.93	1.89		16.00	0.35	< 0.02	7.10	40.87				< 0.10	< 0.1	< 0.30	< 0.10
DB10	11/3/92	20.93	3.80	7.73	3.36		14.00	0.40	< 0.10	6.70	36.60				< 0.10	< 0.1	< 0.30	
DB10	11/13/92	14.29	3.10	4.40	1.70		14.00	0.50	< 0.02	3.70	23.18				< 0.10	< 0.1	< 0.30	
DB10	12/1/92	11.00	2.60	4.20	1.00		13.00	0.56	< 0.02	4.50	19.52				< 0.10	< 0.1	< 0.30	
DB10	12/14/92	9.70	2.54	3.70	2.20	0.91	11.00	0.58	< 0.02	4.00	15.86		0.87	0.95	< 0.10	< 0.1	< 0.30	
DB10s	11/22/91	14.33	2.87	5.41	3.45	0.94	16.85	0.66	< 0.02	4.95	23.79	bdl	0.81	0.87	< 0.20	< 0.2	bdl	bdl
DB10s	12/1/91	6.15	1.40	1.60	1.34	0.93	9.52	bdl	0.14	1.60	9.15	bdl	0.82	0.88	< 0.20	< 0.2	bdl	bdl
DB10s	12/2/91	5.24	1.29	1.13	1.39	0.88	9.17	0.09	< 0.02	1.13	7.32	bdl	bdl	0.83	< 0.20	< 0.2	bdl	bdl
DB10s	9/18/92	22.80	3.32	6.90	3.40		20.80	1.08	< 0.02	4.50	29.10				< 0.10		< 0.30	
DB10s	10/5/92	21.45	3.60	7.17	2.17		24.00	0.70	< 0.02	5.70	29.28				< 0.10	< 0.1	< 0.30	
DB10s	12/17/92	7.90	1.80	2.70	1.70	0.73	12.00	0.54	< 0.02	3.20	7.93		0.61	0.84	< 0.10	< 0.1	< 0.30	< 0.10
DB5	7/2/91	6.36	3.26	1.79	1.64	1.05	5.30	0.19	< 0.02	1.33	17.08	bdl	0.87	0.83	< 0.20	< 0.2	bdl	bdl
DB5	7/16/91	7.09	3.49	1.73	1.75	1.04	4.15	0.19	< 0.02	1.11	18.91	bdl	0.83	0.79	< 0.20	< 0.2	bdl	bdl
DB5	7/30/91	8.67	3.91	1.66	1.94	1.07	6.00	0.13	< 0.02	1.08	21.96	bdl	0.88	0.82	< 0.20	< 0.2	bdl	bdl
DB5	8/12/91	6.30	3.78	1.82	2.04	0.96	5.27	0.11	< 0.02	1.02	20.13	bdl	0.82	0.85	< 0.20	< 0.2	bdl	bdl
DB5	8/28/91	9.80	4.33	1.72	2.79	1.16	5.30	bdl	< 0.02	1.29	29.28	bdl	1.04	0.89	< 0.20	< 0.2	bdl	bdl
DB5	9/22/91	8.51	4.02	1.40	4.09	1.13	7.00	bdl	< 0.02	1.05	25.62	bdl	0.94	0.83	< 0.20	< 0.2	bdl	bdl
DB5	10/6/91	9.75	4.45	1.57	3.97	1.12	11.51	bdl	< 0.02	1.59	25.01	bdl	1.00	0.89	< 0.20	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
DB5	10/20/91	8.35	4.07	2.02	3.05	1.00	7.66	bdl	< 0.02	1.23	22.57	bdl	0.85	0.85	< 0.20	< 0.2	bdl	< 0.07
DB5	11/2/91	8.20	5.50	2.02	4.80	1.06	7.00	bdl	< 0.02	1.36	32.94	bdl	0.95	0.90	< 0.20	< 0.2	bdl	bdl
DB5	11/17/91	8.61	4.37	2.06	2.68	1.05	6.29	bdl	< 0.02	1.17	25.01	bdl	0.90	0.86	< 0.20	< 0.2	bdl	bdl
DB5	12/16/91	2.76	1.58	1.05	0.93	0.93	6.60	0.06	< 0.02	0.87	5.49	bdl	0.80	0.85	< 0.20	< 0.2	bdl	< 0.07
DB5	12/30/91	2.21	1.50	0.97	0.84	0.83	6.79	bdl	< 0.02	0.85	4.88	bdl	0.76	0.92	< 0.20	< 0.2	bdl	bdl
DB5	1/13/92	3.30	1.78	0.78	1.00	0.94	7.55	0.59	< 0.02	0.91	4.88	bdl	0.77	0.82	< 0.20	< 0.2	bdl	< 0.07
DB5	1/27/92	2.23	1.54	1.05	0.88	0.89	7.42	bdl	< 0.02	0.94	4.27	bdl	0.80	0.89	< 0.20	< 0.2	bdl	bdl
DB5	2/10/92	3.62	2.05	1.46	1.01	0.95	7.26	bdl	< 0.02	0.91	7.32	bdl	0.78	0.82	< 0.20	< 0.2	bdl	bdl
DB5	2/24/92	3.04	1.89	1.25	0.93	1.00	7.02	bdl	< 0.02	0.87	7.32	bdl	0.92	0.91	< 0.20	< 0.2	bdl	bdl
DB5	3/9/92	2.46	1.53	1.02	0.94	1.05	6.84	bdl	< 0.02	0.82	4.88	bdl	0.93	0.88	< 0.20	< 0.2	bdl	bdl
DB5	3/23/92	2.37	1.64	1.17	0.91	1.00	7.07	bdl	< 0.02	0.82	4.88	bdl	0.86	0.86	< 0.20	< 0.2	bdl	bdl
DB5	4/5/92	2.44	1.63	1.26	1.03	0.90	6.87	bdl	< 0.02	0.84	4.88	bdl	0.76	0.85	< 0.20	< 0.2	bdl	bdl
DB5	4/21/92	2.76	1.73	0.90	1.18	0.98	7.41	0.05	< 0.02	0.69	8.54	bdl	0.99	1.01	< 0.20	< 0.2	bdl	bdl
DB5	5/4/92	3.79	2.17	1.19	1.28	0.98	6.45	bdl	< 0.02	0.87	9.15	bdl	0.84	0.86	< 0.20	< 0.2	bdl	bdl
DB5	5/18/92	3.17	2.01	1.23	1.23	0.98	6.94	0.06	< 0.02	0.83	7.32	bdl	0.83	0.85	< 0.20	< 0.2	bdl	bdl
DB5	6/1/92	3.86	2.17	1.29	1.25	0.98	6.37	0.06	< 0.02	0.81	9.15	bdl	0.82	0.84	< 0.20	< 0.2	bdl	bdl
DB5	6/15/92	3.65	2.09	1.28	1.24	1.02	6.57	0.05	< 0.02	0.90	8.54	bdl	0.87	0.86	< 0.20	< 0.2	bdl	bdl
DB5	6/29/92	4.25	2.37	1.28	1.25	1.02	5.84	0.09	< 0.02	0.78	bdl	bdl	0.86	0.86	< 0.20	< 0.2	bdl	< 0.50
DB5	7/13/92	5.10	2.93	1.80	1.40		5.60	< 0.02	0.30	0.90	13.00				< 0.10	< 0.1	< 0.30	
DB5	7/27/92	5.40	3.26	1.60	1.50		6.10	0.14	< 0.02	1.00	14.52				< 0.10	< 0.1	< 0.30	
DB5	8/10/92	6.18	3.20	1.70	1.40		4.60	0.16	< 0.02	1.00	17.81				< 0.10	< 0.1	< 0.30	
DB5	8/25/92	6.15	3.81	1.80	1.60		5.30	0.12	< 0.02	1.00	19.00				< 0.10	< 0.1	< 0.30	< 0.10
DB5	9/8/92	7.32	4.03	1.80	1.70		5.10	0.32	< 0.02	0.70	20.25				< 0.10	< 0.1	< 0.30	
DB5	9/21/92	7.29	3.86	1.75	3.62		5.41	0.30	< 0.02	0.74	18.61				< 0.10	bdl	< 0.30	
DB5	10/19/92	7.45	4.11	1.57	1.83		5.40	< 0.05	< 0.02	0.70	19.52				< 0.10	< 0.1	< 0.30	< 0.10
DB5	11/3/92	6.69	3.72	1.87	2.90		5.70	< 0.10	< 0.10	0.80	17.69				< 0.10	< 0.1	< 0.30	
DB5	11/13/92	4.88	2.90	1.50	1.40		6.50	0.20	< 0.02	0.80	11.59				< 0.10	< 0.1	< 0.30	
DB5	12/1/92	3.90	2.50	1.50	1.30		7.10	< 0.05	< 0.02	1.60	9.76				< 0.10	< 0.1	< 0.30	
DB5	12/14/92	3.90	2.36	1.30	2.10	0.51	7.10	0.42	< 0.02	1.20	8.54		0.47	0.92	< 0.10	< 0.1	< 0.30	
DB5s	12/2/91	1.99	1.13	0.57	1.25	0.93	6.52	0.04	< 0.02	0.64	4.27	bdl	0.84	0.90	< 0.20	< 0.2	bdl	bdl
DB5s	10/5/92	5.09	2.78	1.51	1.48		5.60	< 0.20	< 0.02	0.90	12.20				< 0.10	< 0.1	< 0.30	
DB5s	12/17/92	2.20	1.60	0.70	1.30	0.32	8.40	0.45	< 0.02	1.20	3.23		0.32	1.00	< 0.10	< 0.1	< 0.30	< 0.10
DB6	7/2/91	5.80	2.78	1.44	1.42	1.04	4.39	0.18	< 0.02	0.92	14.64	bdl	0.84	0.81	< 0.20	< 0.2	bdl	bdl
DB6	7/16/91	5.75	2.71	1.26	1.56	1.01	3.23	0.16	< 0.02	0.93	15.25	bdl	0.83	0.82	< 0.20	< 0.2	bdl	bdl
DB6	7/30/91	6.65	2.82	1.29	1.75	1.05	3.58	0.14	< 0.02	0.99	21.96	bdl	0.84	0.80	< 0.20	< 0.2	bdl	bdl
DB6	8/12/91	6.49	2.92	1.39	1.90	1.01	3.97	0.14	< 0.02	0.91	16.47	bdl	0.81	0.80	< 0.20	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
DB6	8/28/91	5.99	2.60	1.09	1.94	1.05	2.86	0.07	< 0.02	0.97	16.47	bdl	0.90	0.86	< 0.20	< 0.2	bdl	bdl
DB6	9/22/91	5.66	2.50	0.98	1.71	1.03	5.20	bdl	< 0.02	0.97	14.64	bdl	0.91	0.89	< 0.20	< 0.2	bdl	bdl
DB6	10/6/91	6.63	2.84	1.06	2.64	1.06	10.96	bdl	< 0.02	0.97	15.86	bdl	1.03	0.98	< 0.20	< 0.2	bdl	bdl
DB6	10/20/91	6.41	2.93	1.47	2.87	0.99	5.84	0.43	< 0.02	1.03	16.47	bdl	0.85	0.85	< 0.20	< 0.2	bdl	< 0.07
DB6	11/2/91	7.52	3.50	1.29	3.32	1.07	4.10	bdl	< 0.02	1.26	20.13	bdl	0.87	0.81	< 0.20	< 0.2	bdl	bdl
DB6	11/17/91	6.54	3.04	1.42	2.75	0.99	4.01	0.20	< 0.02	1.07	18.91	bdl	0.87	0.87	< 0.20	< 0.2	bdl	bdl
DB6	12/16/91	2.48	1.43	0.88	0.95	0.84	6.45	0.03	< 0.02	0.84	6.10	bdl	0.85	1.01	< 0.20	< 0.2	bdl	< 0.07
DB6	12/30/91	2.26	1.39	0.92	0.84	0.81	6.65	bdl	< 0.02	0.83	4.88	bdl	0.77	0.96	< 0.20	< 0.2	bdl	bdl
DB6s	12/2/91	2.10	1.10	0.59	1.12	0.87	6.30	0.08	< 0.02	0.69	4.27	bdl	0.78	0.91	< 0.20	< 0.2	bdl	bdl
DB7	7/2/91	5.89	2.77	1.46	1.52	1.02	4.23	0.16	< 0.02	0.96	14.64	bdl	0.81	0.80	< 0.20	< 0.2	bdl	bdl
DB7	7/16/91	6.04	2.74	1.34	1.64	1.02	3.31	0.13	< 0.02	1.01	15.86	bdl	0.83	0.81	< 0.20	< 0.2	bdl	bdl
DB7	7/30/91	6.70	2.77	1.28	1.81	1.05	5.28	0.16	< 0.02	1.06	15.86	bdl	0.87	0.83	< 0.20	< 0.2	bdl	bdl
DB7	8/12/91	6.51	2.88	1.43	1.97	1.02	4.13	0.11	< 0.02	0.98	16.47	bdl	0.82	0.81	< 0.20	< 0.2	bdl	bdl
DB7	8/28/91	6.22	2.69	1.16	2.07	1.06	2.64	0.05	< 0.02	1.02	17.08	bdl	0.88	0.83	< 0.20	< 0.2	bdl	bdl
DB7	9/22/91	6.24	2.68	1.03	2.01	1.07	9.00	bdl	< 0.02	0.92	15.86	bdl	1.05	0.98	< 0.20	< 0.2	bdl	bdl
DB7	10/6/91	6.69	2.69	0.99	3.00	1.02	10.96	bdl	< 0.02	1.35	15.86	bdl	1.02	1.00	< 0.20	< 0.2	bdl	bdl
DB7	10/20/91	6.48	2.93	1.53	3.04	1.01	5.76	0.11	< 0.02	1.12	16.47	bdl	0.84	0.83	< 0.20	< 0.2	bdl	< 0.07
DB7	11/2/91	7.04	3.19	1.26	3.39	1.08	4.10	0.03	< 0.02	1.20	18.91	bdl	0.87	0.81	< 0.20	< 0.2	bdl	bdl
DB7	11/17/91	6.46	2.97	1.49	2.87	1.01	3.81	0.21	< 0.02	1.13	17.69	bdl	0.83	0.83	< 0.20	< 0.2	bdl	bdl
DB7	12/17/91	2.59	1.43	0.89	0.89	0.85	6.50	0.03	< 0.02	0.87	7.93	bdl	0.98	1.15	< 0.20	< 0.2	bdl	< 0.07
DB7	12/30/91	2.22	1.35	0.91	0.82	0.80	7.06	0.80	< 0.02	0.85	4.88	bdl	0.83	1.04	< 0.20	< 0.2	bdl	bdl
DB7s	12/2/91	2.81	1.03	0.65	1.10	0.87	7.23	0.07	< 0.02	1.02	4.27	bdl	0.78	0.90	< 0.20	< 0.2	bdl	bdl
DB8	7/2/91	8.23	2.94	1.65	1.48	1.05	6.86	0.18	< 0.02	1.80	16.47	bdl	0.86	0.83	< 0.20	< 0.2	bdl	bdl
DB8	7/16/91	8.96	2.98	1.75	1.66	0.96	7.27	0.14	< 0.02	2.61	17.69	bdl	0.83	0.86	< 0.20	< 0.2	bdl	bdl
DB8	7/30/91	8.84	2.93	1.58	1.77	1.21	6.02	0.15	< 0.02	2.20	17.08	bdl	0.97	0.80	< 0.20	< 0.2	bdl	bdl
DB8	8/12/91	8.48	2.96	1.75	1.99	1.01	6.17	0.16	< 0.02	2.15	46.36	bdl	0.83	0.83	< 0.20	< 0.2	bdl	bdl
DB8	8/28/91	9.42	3.15	1.73	2.04	1.09	5.35	0.07	< 0.02	2.77	19.52	bdl	0.87	0.80	< 0.20	< 0.2	bdl	bdl
DB8	9/22/91	8.39	2.96	1.48	1.87	1.04	11.50	bdl	< 0.02	2.58	17.08	bdl	1.01	0.97	< 0.20	< 0.2	bdl	bdl
DB8	10/6/91	8.03	2.89	1.25	2.71	1.03	4.99	bdl	< 0.02	2.34	17.08	bdl	0.83	0.80	< 0.20	< 0.2	bdl	bdl
DB8	10/20/91	7.30	2.86	1.60	2.75	1.01	6.37	bdl	< 0.02	1.79	16.47	bdl	0.83	0.83	< 0.20	< 0.2	bdl	< 0.07
DB8	11/2/91	8.45	3.18	1.50	2.84	1.05	8.00	0.09	< 0.02	2.23	17.69	bdl	0.88	0.84	< 0.20	< 0.2	bdl	bdl
DB8	11/17/91	7.01	2.83	1.62	2.56	0.92	4.97	2.47	< 0.02	2.06	14.64	bdl	0.75	0.81	< 0.20	< 0.2	bdl	bdl
DB8	12/17/91	3.07	1.42	1.04	1.02	0.94	6.59	bdl	< 0.02	0.88	5.49	bdl	0.81	0.87	< 0.20	< 0.2	bdl	< 0.07
DB8	12/30/91	2.34	1.37	0.92	0.84	0.79	8.71	0.05	< 0.02	0.95	4.27	bdl	0.83	1.05	< 0.20	< 0.2	bdl	bdl
DB8s	12/1/91	2.71	1.06	0.60	1.05	0.81	6.86	bdl	< 0.02	0.80	3.66	bdl	0.69	0.86	< 0.20	< 0.2	bdl	bdl
DB8s	12/2/91	2.13	1.06	0.58	1.13	0.91	6.55	0.09	< 0.02	0.74	4.27	bdl	0.85	0.94	< 0.20	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
DR9	7/2/91	11.07	2.31	2.47	1.40	1.08	4.07	0.08	< 0.02	3.56	20.13	bdl	0.88	0.81	< 0.20	< 0.2	bdl	bdl
DR9	7/15/91	10.40	2.17	1.94	1.35	0.98	3.31	0.09	< 0.02	2.65	21.35	bdl	0.85	0.87	< 0.20	< 0.2	bdl	bdl
DR9	7/29/91	11.56	2.39	1.97	1.79	0.95	3.33	0.10	< 0.02	3.27	22.57	bdl	0.79	0.83	0.90	< 0.2	bdl	bdl
DR9	8/12/91	12.14	2.57	2.12	1.65	1.00	3.59	0.06	< 0.02	2.82	24.40	bdl	0.84	0.84	< 0.20	< 0.2	bdl	bdl
DR9	8/28/91	34.17	5.12	10.86	2.43	1.06	13.97	0.06	< 0.02	14.57	63.44	bdl	0.95	0.90	0.56	< 0.2	bdl	bdl
DR9	9/11/91	12.94	2.74	1.73	1.99	1.00	11.00	bdl	< 0.02	2.49	26.23	bdl	0.98	0.98	< 0.20	< 0.2	bdl	bdl
DR9	9/22/91	12.72	2.64	1.95	1.76	1.00	2.62	bdl	< 0.02	2.74	25.01	bdl	0.80	0.81	< 0.20	< 0.2	bdl	bdl
DR9	10/6/91	14.55	2.74	2.14	2.10	1.02	4.81	bdl	< 0.02	3.36	26.84	bdl	0.83	0.82	< 0.20	< 0.2	bdl	bdl
DR9	10/20/91	13.13	2.64	2.48	1.72	1.02	5.41	bdl	< 0.02	3.48	26.84	bdl	0.91	0.90	< 0.20	< 0.2	bdl	0.09
DR9	11/2/91	12.29	2.42	2.01	2.11	1.03	3.78	bdl	< 0.02	3.00	24.40	bdl	0.87	0.85	< 0.20	< 0.2	bdl	bdl
DR9	11/17/91	14.92	2.72	1.85	1.74	1.01	3.70	bdl	< 0.02	2.66	29.89	bdl	0.87	0.86	< 0.20	< 0.2	bdl	bdl
DR9	12/17/91	5.61	1.27	1.77	0.82	0.90	8.25	0.03	< 0.02	2.48	9.76	bdl	0.92	1.02	< 0.20	< 0.2	bdl	< 0.07
DR9	12/30/91	4.88	1.20	1.64	0.70	0.82	5.93	bdl	< 0.02	2.42	8.54	bdl	0.78	0.95	< 0.20	< 0.2	bdl	bdl
DR9	1/13/92	6.27	1.39	1.66	0.87	0.94	5.55	0.13	< 0.02	2.99	10.37	bdl	0.84	0.90	< 0.20	< 0.2	bdl	< 0.07
DR9	1/27/92	4.83	1.20	1.77	0.72	0.88	5.76	0.12	< 0.02	2.64	8.54	bdl	0.84	0.95	< 0.20	< 0.2	bdl	bdl
DR9	2/10/92	7.39	1.60	3.50	1.03	1.02	5.45	0.19	< 0.02	3.29	12.81	bdl	0.81	0.80	< 0.20	< 0.2	bdl	bdl
DR9	2/24/92	7.02	1.54	2.20	0.85	1.01	5.70	0.40	< 0.02	3.47	12.20	bdl	0.92	0.91	< 0.20	< 0.2	bdl	bdl
DR9	3/9/92	5.72	1.25	1.73	0.82	1.10	5.70	bdl	< 0.02	2.43	9.76	bdl	1.00	0.90	< 0.20	< 0.2	bdl	bdl
DR9	3/23/92	5.58	1.29	1.93	0.75	1.13	5.75	bdl	< 0.02	2.46	9.15	bdl	0.92	0.86	< 0.20	< 0.2	bdl	bdl
DR9	4/5/92	5.48	1.30	1.87	0.81	0.88	5.32	bdl	< 0.02	2.82	10.98	bdl	0.87	0.99	< 0.20	< 0.2	bdl	bdl
DR9	4/21/92	9.38	1.93	2.05	1.00	0.89	5.99	0.06	< 0.02	2.66	18.91	bdl	0.83	0.93	< 0.20	< 0.2	bdl	bdl
DR9	5/4/92	8.13	1.69	2.08	1.11	1.06	4.93	bdl	< 0.02	2.95	bdl	bdl	0.88	0.83	< 0.20	< 0.2	bdl	bdl
DR9	5/18/92	8.21	1.73	2.39	1.22	0.95	5.46	0.07	< 0.02	2.88	14.64	bdl	0.80	0.84	< 0.20	< 0.2	bdl	bdl
DR9	6/1/92	8.12	1.75	2.13	1.07	1.01	5.41	0.11	< 0.02	3.07	14.64	bdl	0.87	0.87	< 0.20	< 0.2	bdl	bdl
DR9	6/15/92	8.61	1.79	2.17	1.10	1.08	5.17	bdl	< 0.02	2.68	14.64	bdl	0.87	0.81	< 0.20	< 0.2	bdl	bdl
DR9	6/29/92	9.13	2.01	2.21	1.13	1.03	4.86	0.08	< 0.02	3.08	bdl	bdl	0.88	0.85	< 0.20	< 0.2	bdl	< 0.50
DR9	7/13/92	9.96	2.04	2.60	1.20		3.90	< 0.02	0.31	3.00	19.34				< 0.10	< 0.1	0.30	
DR9	7/27/92	12.20	2.66	2.70	1.30		5.00	0.12	< 0.02	3.00					< 0.10	< 0.1	< 0.30	
DR9	8/10/92	12.30	2.73	2.30	1.40		3.50	0.11	< 0.02	2.70	23.67				< 0.10	< 0.1	< 0.30	
DR9	11/13/92	8.71	2.20	2.40	0.10		6.30	0.30	< 0.02	2.60	15.25				< 0.10	< 0.1	< 0.30	
DR9s	12/1/91	4.64	1.05	1.12	0.94	0.93	6.66	bdl	< 0.02	1.50	7.32	bdl	0.84	0.90	< 0.20	< 0.2	bdl	bdl
DR9s	12/2/91	4.11	0.98	0.94	0.94	0.86	6.52	bdl	< 0.02	1.25	5.49	bdl	0.72	0.84	< 0.20	< 0.2	bdl	bdl
DR9s	10/5/92	11.91	2.59	2.61	2.15		6.60	0.20	< 0.02	2.70	21.96				< 0.10	< 0.1	< 0.30	
GC3	7/1/91	26.55	2.72	1.02	0.90	1.05	7.33	0.13	< 0.02	0.88	44.53	bdl	0.89	0.85	< 0.20	< 0.2	bdl	bdl
GC3	7/15/91	27.87	2.94	1.05	0.79	1.00	6.17	0.13	< 0.02	0.85	48.80	bdl	0.86	0.86	< 0.20	< 0.2	bdl	bdl
GC3	7/29/91	28.02	3.15	1.09	0.92	1.01	6.05	0.12	< 0.02	0.82	50.63	bdl	0.87	0.87	< 0.20	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
GC3	8/12/91	30.55	3.52	1.35	0.92	0.99	6.35	0.14	< 0.02	0.96	51.85	bdl	0.81	0.82	< 0.20	< 0.2	bdl	bdl
GC3	8/29/91	29.78	3.49	1.29	0.93	1.06	6.38	0.13	< 0.02	0.88	54.90	bdl	0.93	0.88	< 0.20	< 0.2	bdl	bdl
GC3	9/10/91	27.55	3.53	1.35	1.38	0.98	7.02	0.17	< 0.02	0.96	51.24	bdl	0.86	0.87	< 0.20	< 0.2	bdl	bdl
GC3	9/22/91	33.06	3.69	1.43	0.89	1.08	11.50	0.11	< 0.02	0.92	54.90	bdl	0.92	0.85	< 0.20	< 0.2	bdl	bdl
GC3	10/5/91	30.24	3.68	1.43	1.04	1.01	6.68	0.14	< 0.02	1.06	54.90	bdl	0.87	0.86	< 0.20	< 0.2	bdl	bdl
GC3	10/20/91	32.01	3.76	1.57	1.07	1.09	6.94	0.11	< 0.02	1.24	55.51	bdl	0.90	0.83	0.67	< 0.2	bdl	0.09
GC3	11/2/91	33.25	3.74	1.30	0.94	1.14	6.66	0.10	< 0.02	0.95	54.90	bdl	0.91	0.80	< 0.20	< 0.2	bdl	bdl
GC3	11/17/91	30.25	3.64	1.49	0.94	1.02	6.80	0.10	< 0.02	1.18	57.34	bdl	0.92	0.90	0.69	< 0.2	bdl	bdl
GC3	12/16/91	16.69	1.65	0.76	0.93	0.93	6.53	0.32	< 0.02	0.78	28.06	bdl	0.82	0.88	< 0.20	< 0.2	bdl	< 0.07
GC3	12/30/91	17.85	2.01	0.74	0.72	0.91	6.84	0.19	< 0.02	0.78	31.11	bdl	0.82	0.90	< 0.20	< 0.2	bdl	bdl
GC3	1/13/92	18.90	2.00	0.55	0.81	0.97	6.83	0.19	< 0.02	0.90	32.94	bdl	0.88	0.91	< 0.20	< 0.2	bdl	< 0.07
GC3	1/27/92	12.94	1.72	0.67	0.63	0.76	7.30	0.21	< 0.02	0.91	29.28	bdl	0.88	1.15	< 0.20	< 0.2	bdl	bdl
GC3	2/10/92	21.12	2.27	0.92	0.81	0.82	6.29	0.17	< 0.02	0.84	35.99	bdl	0.70	0.85	< 0.20	< 0.2	bdl	bdl
GC3	2/24/92	18.68	2.01	0.79	0.73	1.16	7.03	0.38	0.07	1.02	31.72	bdl	1.03	0.89	< 0.20	< 0.2	bdl	bdl
GC3	3/9/92	16.40	1.76	0.62	0.76	1.08	7.09	0.22	< 0.02	0.78	28.67	bdl	1.00	0.93	< 0.20	< 0.2	bdl	bdl
GC3	3/23/92	16.81	1.77	0.69	0.72	1.04	6.78	0.22	< 0.02	0.83	29.28	bdl	0.95	0.92	< 0.20	< 0.2	bdl	bdl
GC3	4/6/92	20.09	1.98	0.71	0.75	1.05	6.46	0.20	< 0.02	0.82	33.55	bdl	0.91	0.87	< 0.20	< 0.2	bdl	bdl
GC3	4/20/92	19.31	2.18	0.80	0.82	0.91	6.32	0.16	< 0.02	0.85	35.99	bdl	0.85	0.93	< 0.20	< 0.2	bdl	bdl
GC3	5/4/92	22.97	2.21	0.72	0.90	1.09	6.54	0.18	< 0.02	0.92	35.38	bdl	0.88	0.80	< 0.20	< 0.2	bdl	bdl
GC3	5/18/92	19.09	2.10	0.73	0.85	0.99	6.45	0.23	< 0.02	0.82	32.94	bdl	0.87	0.88	< 0.20	< 0.2	bdl	bdl
GC3	6/1/92	19.55	2.16	0.79	0.94	0.96	6.02	0.21	< 0.02	1.07	35.38	bdl	0.87	0.91	< 0.20	< 0.2	bdl	bdl
GC3	6/15/92	18.85	1.82	0.65	0.88	1.07	6.43	0.28	< 0.02	0.71	29.28	bdl	0.88	0.82	< 0.20	< 0.2	bdl	bdl
GC3	6/29/92	20.00	2.41	0.91	0.87	0.92	5.91	0.23	< 0.02	0.77	bdl	bdl	0.89	0.96	< 0.20	< 0.2	bdl	< 0.50
GC3	7/13/92	26.90	2.40	0.80	0.60		6.50	< 0.02	0.21	1.20	39.71				< 0.10	< 0.1	< 0.30	
GC3	7/27/92	28.80	3.01	1.00	0.80		6.90	0.21	< 0.02	0.80	47.46				< 0.10	< 0.1	< 0.30	
GC3	8/10/92	29.30	3.08	1.00	0.90		6.10	0.19	< 0.02	0.90	46.91				< 0.10	< 0.1	< 0.30	
GC3	8/25/92	30.00	3.12	1.10	0.50		7.10	0.20	< 0.02	1.10	51.73				< 0.10	< 0.1	< 0.30	< 0.10
GC3	9/8/92	25.60	2.75	0.82	0.70		6.90	0.47	< 0.02	0.60	44.96				0.20	< 0.1	< 0.30	
GC3	9/21/92	28.00	2.77	0.96	2.43		6.37	0.44	< 0.02	0.83	43.01				0.30	bdl	< 0.30	
GC3	10/19/92	24.93	2.82	1.21	0.71		7.40	0.34	< 0.02	0.60	40.26				< 0.10	< 0.1	< 0.30	< 0.10
GC3	11/3/92	26.91	3.17	1.36	0.77		6.80	0.30	< 0.10	0.80	45.14				< 0.10	< 0.1	< 0.30	
GC3	11/13/92	20.93	2.30	1.00	0.80		7.60	0.40	< 0.02	0.60	32.94				< 0.10	< 0.1	< 0.30	
GC3	11/30/92	16.00	1.90	0.60	0.67		7.90	0.60	< 0.02	1.20	26.84				< 0.10	< 0.1	< 0.30	
GC3	12/14/92	19.00	2.19	0.76	1.80	1.21	8.00	0.66	< 0.02	1.30	29.89		1.19	0.99	< 0.10	< 0.1	< 0.30	
GC3s	11/22/91	36.62	3.98	4.01	1.97	0.96	18.21	0.52	< 0.02	3.88	64.66	bdl	0.89	0.93	0.61	< 0.2	bdl	bdl
GC3s	12/1/91	21.76	2.21	0.96	1.07	0.85	10.69	bdl	0.41	1.11	38.43	bdl	0.80	0.94	< 0.20	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
GC3s	12/2/91	16.55	1.70	0.74	1.00	0.81	8.92	0.51	< 0.02	0.93	28.06	bdl	0.75	0.93	< 0.20	< 0.2	bdl	bdl
GC3s	8/28/92	32.70	2.74	1.90	0.50		8.90	0.30	< 0.02	1.50	58.19				0.10	< 0.1	< 0.30	< 0.10
GC3s	9/18/92	36.90	3.51	3.00	3.30		12.00	0.71	< 0.02	1.90	56.55				0.20	bdl	< 0.30	
GC3s	10/5/92	26.60	2.89	1.18	1.15		7.90	0.50	< 0.02	1.20	42.09				< 0.10	< 0.1	< 0.30	
GC3s	12/17/92	23.00	2.30	0.90	1.90	1.43	10.00	0.63	< 0.02	1.20	34.77		1.39	0.97	< 0.10	< 0.1	< 0.30	< 0.10
GC4	7/1/91	42.34	7.01	4.21	1.69	1.14	17.45	0.10	< 0.02	3.86	70.15	bdl	0.92	0.80	< 0.20	< 0.2	bdl	bdl
GC4	7/15/91	55.72	15.08	8.57	2.68	1.07	37.10	bdl	< 0.02	9.93	110.41	bdl	0.96	0.90	0.11	< 0.2	bdl	bdl
GC4	7/29/91	47.47	10.27	5.71	2.05	1.08	24.45	0.07	< 0.02	6.72	86.62	bdl	0.93	0.86	0.53	< 0.2	bdl	bdl
GC4	8/12/91	56.33	14.69	9.24	2.77	1.05	38.68	0.12	< 0.02	11.62	104.92	bdl	0.92	0.88	< 0.20	< 0.2	bdl	bdl
GC4	8/29/91	53.83	15.79	7.52	2.42	1.14	35.30	0.06	< 0.02	10.03	110.41	bdl	1.03	0.91	0.16	< 0.2	bdl	bdl
GC4	9/10/91	47.72	7.92	5.68	6.89	1.05	33.77	2.61	0.35	15.06	107.36	bdl	1.21	1.15	0.27	< 0.2	bdl	bdl
GC4	9/22/91	59.30	17.38	8.44	2.52	1.47	43.60	0.07	< 0.02	9.69	106.14	bdl	1.22	0.83	< 0.20	< 0.2	bdl	bdl
GC4	10/5/91	60.66	16.05	7.80	2.51	1.11	38.03	0.10	< 0.02	10.18	108.58	bdl	0.93	0.84	< 0.20	< 0.2	bdl	bdl
GC4	10/20/91	50.16	10.21	9.03	2.50	0.97	38.04	0.03	< 0.02	9.10	104.92	bdl	0.98	1.01	0.20	< 0.2	bdl	0.09
GC4	11/2/91	59.49	16.61	9.67	2.43	1.22	32.58	bdl	< 0.02	8.98	108.58	bdl	0.97	0.80	0.20	< 0.2	bdl	bdl
GC4	11/17/91	52.62	15.64	8.32	2.13	1.08	45.00	bdl	< 0.02	8.33	107.97	bdl	1.01	0.94	0.23	< 0.2	bdl	bdl
GC4	12/16/91	42.88	8.67	6.82	2.61	1.03	32.00	0.30	< 0.02	6.55	75.03	bdl	0.91	0.89	< 0.20	< 0.2	bdl	< 0.07
GC4	12/30/91	41.06	8.04	6.46	2.28	0.93	29.02	0.21	< 0.02	8.47	76.25	bdl	0.88	0.94	0.67	< 0.2	bdl	bdl
GC4	1/13/92	50.02	10.25	6.49	2.30	1.06	33.14	0.15	< 0.02	9.65	85.40	bdl	0.93	0.88	< 0.20	< 0.2	bdl	< 0.07
GC4	1/27/92	43.90	8.75	6.60	2.06	0.99	30.22	0.41	< 0.02	9.52	84.79	bdl	0.96	0.97	< 0.20	< 0.2	bdl	bdl
GC4	2/10/92	55.49	11.90	5.48	1.81	1.10	30.04	0.22	< 0.02	8.13	93.94	bdl	0.91	0.83	< 0.20	< 0.2	bdl	bdl
GC4	2/24/92	50.72	9.82	7.57	2.16	1.23	34.99	0.15	< 0.02	11.92	87.23	bdl	1.12	0.91	< 0.20	< 0.2	bdl	bdl
GC4	3/9/92	46.04	8.93	6.40	2.25	1.25	29.92	0.12	< 0.02	9.55	79.30	bdl	1.12	0.89	< 0.20	< 0.2	bdl	bdl
GC4	3/23/92	48.81	8.95	7.20	2.10	1.23	32.07	0.20	< 0.02	11.96	76.86	bdl	1.06	0.86	< 0.20	< 0.2	bdl	bdl
GC4	4/6/92	52.35	10.27	6.36	2.05	1.10	32.68	0.18	< 0.02	11.10	91.50	bdl	1.00	0.91	0.73	< 0.2	bdl	bdl
GC4	4/20/92	51.71	11.49	5.66	2.10	1.09	31.72	bdl	< 0.02	9.25	90.89	bdl	0.95	0.88	< 0.20	< 0.2	bdl	bdl
GC4	5/4/92	64.29	12.30	5.93	2.10	1.23	32.49	0.08	< 0.02	10.03	99.43	bdl	0.98	0.80	< 0.20	< 0.2	bdl	bdl
GC4	5/18/92	54.74	11.50	6.57	2.35	1.06	35.94	0.11	< 0.02	11.20	99.43	bdl	0.98	0.93	0.64	< 0.2	bdl	bdl
GC4	6/1/92	52.21	10.82	6.35	2.33	1.13	27.69	0.28	< 0.02	10.79	86.01	bdl	0.94	0.83	< 0.20	< 0.2	bdl	bdl
GC4	6/15/92	63.08	12.84	8.67	3.28	1.11	38.05	0.55	< 0.02	10.21	106.14	bdl	0.93	0.84	< 0.20	< 0.2	bdl	bdl
GC4	6/29/92	64.14	15.00	8.59	3.02	1.16	50.00	0.41	< 0.02	11.60	bdl	bdl	1.04	0.89	0.32	< 0.2	bdl	< 0.50
GC4	7/13/92	61.60	15.50	6.90	2.30		32.50	< 0.02	0.09	8.50	88.45				< 0.10	< 0.1	< 0.30	
GC4	7/27/92	52.40	10.50	5.80	2.20		27.10	0.36	< 0.02	7.00	85.40				< 0.10	< 0.1	< 0.30	
GC4	8/10/92	60.10	16.00	5.70	1.80		30.20	0.11	< 0.02	6.80	106.14				< 0.10	< 0.1	< 0.30	
GC4	8/25/92	60.80	16.00	6.60	1.90		44.30	0.22	< 0.02	9.80	109.19				< 0.10	< 0.1	< 0.30	< 0.10
GC4	9/8/92	51.30	14.80	5.30	1.80		36.90	0.33	< 0.02	6.60	100.04				0.30	< 0.1	< 0.30	

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
GC4	9/21/92	32.00	4.39	1.91	3.95		12.50	0.47	< 0.02	1.78	52.03				0.20		< 0.30	
GC4	10/19/92	39.27	8.86	3.01	1.19		22.00	0.30	< 0.02	3.80	61.00				< 0.10	< 0.1	< 0.30	< 0.10
GC4	11/3/92	70.30	0.12	10.00	3.58		63.00	0.70		14.00	128.10				< 0.10	< 0.1	< 0.30	
GC4	11/13/92	61.53	16.00	8.40	3.10		53.00	0.70	< 0.02	10.00	103.70				< 0.10	< 0.1	< 0.30	
GC4	11/30/92	27.00	5.00	2.20	1.10		17.00	0.67	< 0.02	3.00	48.19				< 0.10	< 0.1	< 0.30	
GC4	12/14/92	42.00	8.77	4.40	81.00	5.07	30.00	0.58	< 0.02	6.00	73.20		3.70	0.63	< 0.10	< 0.1	< 0.30	
GC4s	11/22/91	37.29	6.75	7.23	4.75	0.97	48.00	0.79	< 0.02	7.14	61.61	bdl	0.96	0.99	0.30	< 0.2	bdl	bdl
GC4s	12/1/91	18.18	3.60	4.17	2.93	0.90	18.81	0.30	< 0.02	3.44	34.16	bdl	0.83	0.92	0.69	< 0.2	bdl	bdl
GC4s	12/2/91	16.62	3.30	3.31	2.63	0.93	15.07	0.22	< 0.02	2.97	30.50	bdl	0.81	0.88	< 0.20	< 0.2	bdl	bdl
GC4s	8/28/92	54.50	12.30	8.00	6.00		53.40	2.59	0.08	12.90	85.40				0.20	< 0.1	< 0.30	< 0.10
GC4s	9/18/92	41.60	8.45	5.40	8.10		38.60	1.35	< 0.02	6.50	58.74				0.30		< 0.30	
GC4s	10/5/92	38.63	5.78	2.89	0.65		21.00	0.40	< 0.02	3.40	59.78				< 0.10	< 0.1	< 0.30	
GC5	7/1/91	34.84	4.97	3.34	1.42	1.06	11.25	0.27	0.16	2.73	59.17	bdl	0.86	0.81	< 0.20	< 0.2	bdl	bdl
GC5	7/15/91	37.97	6.64	4.40	1.73	1.04	16.55	0.58	< 0.02	4.81	68.93	bdl	0.90	0.86	0.58	< 0.2	bdl	bdl
GC5	7/15/91	37.31	6.66	4.64	1.77	1.03	16.54	0.58	< 0.02	4.86	73.20	bdl	0.94	0.91	0.57	< 0.2	bdl	bdl
GC5	7/29/91	46.23	8.39	5.31	2.10	1.11	22.48	0.44	< 0.02	6.07	75.03	bdl	0.90	0.81	< 0.20	< 0.2	bdl	bdl
GC5	8/12/91	47.43	9.24	6.68	2.47	1.02	27.57	0.69	< 0.02	8.21	81.13	bdl	0.88	0.86	0.20	< 0.2	bdl	bdl
GC5	8/29/91	45.09	9.02	6.60	2.44	1.08	23.69	0.88	< 0.02	6.76	82.96	bdl	0.94	0.87	0.20	< 0.2	bdl	bdl
GC5	9/10/91	48.70	9.51	8.03	6.44	1.05	48.20	1.61	0.07	11.94	190.32	bdl	1.80	1.72	0.25	< 0.2	bdl	bdl
GC5	9/22/91	48.94	10.29	8.39	2.59	1.13	34.60	1.12	< 0.02	8.87	82.96	bdl	0.98	0.86	< 0.20	< 0.2	bdl	bdl
GC5	10/5/91	47.80	10.26	9.10	2.84	1.03	28.31	1.66	< 0.02	8.37	86.01	bdl	0.88	0.85	0.20	< 0.2	bdl	bdl
GC5	10/20/91	47.56	10.45	9.84	2.82	1.12	27.31	1.19	0.03	6.66	83.57	bdl	0.90	0.80	0.21	< 0.2	0.94	< 0.07
GC5	11/2/91	49.28	10.32	7.86	2.43	1.17	26.74	1.03	< 0.02	6.00	84.18	bdl	0.94	0.81	0.21	< 0.2	0.58	bdl
GC5	11/17/91	44.15	9.88	8.68	2.51	1.03	27.18	1.03	< 0.02	6.13	86.01	bdl	0.91	0.88	0.29	< 0.2	0.86	bdl
GC5	12/16/91	21.61	2.52	1.28	1.03	0.96	9.58	0.30	< 0.02	1.36	34.77	bdl	0.82	0.85	< 0.20	< 0.2	bdl	< 0.07
GC5	12/30/91	22.56	3.00	1.55	0.94	0.88	10.81	0.23	< 0.02	1.79	40.26	bdl	0.82	0.92	< 0.20	< 0.2	bdl	bdl
GC5	1/13/92	23.34	3.63	2.08	1.24	0.87	13.81	0.29	< 0.02	2.47	46.36	bdl	0.88	1.01	< 0.20	< 0.2	bdl	< 0.07
GC5	1/27/92	22.55	3.08	2.01	1.04	0.94	11.66	0.28	< 0.02	2.34	42.09	bdl	0.90	0.96	< 0.20	< 0.2	bdl	bdl
GC5	2/10/92	29.68	3.76	2.69	1.15	1.03	11.27	0.41	< 0.02	2.53	46.97	bdl	0.83	0.81	< 0.20	< 0.2	bdl	bdl
GC5	2/24/92	21.14	3.59	2.59	1.08	1.00	12.85	0.39	< 0.02	3.06	43.92	bdl	1.03	1.03	< 0.20	< 0.2	bdl	bdl
GC5	3/9/92	20.67	2.70	1.41	0.97	1.04	10.32	0.26	< 0.02	1.73	37.82	bdl	0.99	0.95	< 0.20	< 0.2	bdl	bdl
GC5	3/23/92	21.66	2.74	1.60	0.91	1.01	10.20	0.29	< 0.02	1.96	33.55	bdl	0.84	0.83	< 0.20	< 0.2	bdl	bdl
GC5	4/6/92	25.52	3.11	1.86	1.11	1.05	10.57	0.32	< 0.02	1.95	40.87	bdl	0.88	0.84	< 0.20	< 0.2	bdl	bdl
GC5	4/20/92	23.26	3.51	2.24	1.13	0.89	10.52	0.50	< 0.02	2.40	46.36	bdl	0.87	0.97	< 0.20	< 0.2	bdl	bdl
GC5	5/4/92	25.60	3.56	2.03	1.14	1.00	9.92	0.43	< 0.02	2.00	47.58	bdl	0.91	0.91	< 0.20	< 0.2	bdl	bdl
GC5	5/18/92	25.19	3.35	1.99	1.31	1.04	9.54	1.67	< 0.02	1.84	41.48	bdl	0.87	0.84	< 0.20	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
GC5	6/1/92	22.97	3.32	2.05	1.18	0.93	9.76	0.50	< 0.02	2.04	42.70	bdl	0.85	0.92	< 0.20	< 0.2	bdl	bdl
GC5	6/15/92	22.40	2.70	1.57	1.20	1.04	9.51	0.35	< 0.02	1.66	36.60	bdl	0.89	0.85	< 0.20	< 0.2	bdl	bdl
GC5	6/29/92	32.43	4.42	2.84	1.39	1.11	12.56	0.58	< 0.02	2.74	bdl	bdl	0.90	0.81	< 0.20	< 0.2	bdl	< 0.50
GC5	7/13/92	33.90	4.51	3.80	1.40		12.50	< 0.02	0.44	3.10	50.69				< 0.10	< 0.1	< 0.30	
GC5	7/27/92	38.80	5.90	3.90	1.60		15.90	0.54	0.31	3.80	62.22				< 0.10	< 0.1	< 0.30	
GC5	8/10/92	37.60	6.16	6.20	1.40		13.20	1.09	< 0.02	4.60	61.00				< 0.10	< 0.1	< 0.30	
GC5s	12/2/91	20.72	2.84	1.69	1.78	0.91	16.95	0.42	< 0.02	1.48	33.55	bdl	0.81	0.90	< 0.20	< 0.2	bdl	bdl
GC7	7/1/91	34.23	4.81	2.92	1.51	1.08	10.92	0.39	< 0.02	2.21	57.95	bdl	0.87	0.81	< 0.20	< 0.2	bdl	bdl
GC7	7/15/91	38.44	6.78	4.19	1.75	1.04	17.27	0.47	< 0.02	4.00	67.71	bdl	0.88	0.85	0.56	< 0.2	bdl	bdl
GC7	7/29/91	46.40	8.34	4.53	2.00	1.10	22.90	0.29	< 0.02	5.12	76.25	bdl	0.90	0.82	0.63	< 0.2	bdl	bdl
GC7	8/12/91	47.81	9.19	5.87	2.54	1.02	27.79	0.44	< 0.02	7.09	81.13	bdl	0.87	0.85	0.20	< 0.2	bdl	bdl
GC7	8/29/91	43.27	8.64	5.74	2.07	1.06	23.38	0.57	< 0.02	5.52	82.96	bdl	0.96	0.90	0.20	< 0.2	bdl	bdl
GC7	9/10/91	47.10	9.39	7.13	2.99	1.15	28.40	0.74	< 0.02	5.89	76.86	bdl	0.93	0.80	0.22	< 0.2	bdl	bdl
GC7	9/22/91	49.01	10.07	7.78	2.60	1.12	21.99	0.91	< 0.02	8.37	84.79	bdl	0.91	0.81	< 0.20	< 0.2	bdl	bdl
GC7	10/5/91	48.95	9.97	6.89	2.60	1.07	26.05	0.61	< 0.02	6.06	85.40	bdl	0.89	0.83	0.22	< 0.2	bdl	bdl
GC7	10/20/91	47.23	5.05	2.01	3.00	0.83	29.83	1.45	< 0.02	7.20	85.40	bdl	0.88	1.06	0.20	< 0.2	0.69	< 0.07
GC7	11/2/91	51.45	10.29	8.17	2.61	1.19	27.61	0.68	< 0.02	5.59	87.84	bdl	0.96	0.81	0.20	< 0.2	0.37	bdl
GC7	11/17/91	45.88	9.90	8.37	2.33	1.03	27.19	0.80	< 0.02	6.13	87.84	bdl	0.90	0.88	0.28	< 0.2	bdl	bdl
GC7	12/16/91	21.39	2.47	1.34	1.20	0.97	9.65	0.33	< 0.02	1.36	34.16	bdl	0.82	0.85	< 0.20	< 0.2	bdl	< 0.07
GC7	12/30/91	22.81	3.12	1.66	1.04	0.90	11.50	0.27	< 0.02	1.79	40.26	bdl	0.82	0.91	< 0.20	< 0.2	bdl	bdl
GC7	1/13/92	24.60	3.93	2.45	1.34	0.91	14.68	0.32	< 0.02	2.74	48.80	bdl	0.90	1.00	< 0.20	< 0.2	bdl	< 0.07
GC7	1/27/92	22.37	3.18	1.84	1.03	0.93	12.20	0.26	< 0.02	2.06	41.48	bdl	0.89	0.96	< 0.20	< 0.2	bdl	bdl
GC7	2/10/92	30.63	3.87	2.68	1.20	1.06	11.74	0.48	< 0.02	2.45	47.58	bdl	0.84	0.80	< 0.20	< 0.2	bdl	bdl
GC7	2/24/92	30.67	3.85	2.59	1.20	1.25	14.82	0.46	< 0.02	3.84	46.36	bdl	1.04	0.83	< 0.20	< 0.2	bdl	bdl
GC7	3/9/92	21.47	2.90	1.48	1.05	1.09	10.97	0.27	< 0.02	1.74	37.82	bdl	1.00	0.92	< 0.20	< 0.2	bdl	bdl
GC7	3/23/92	24.09	3.09	2.04	1.11	1.22	10.89	0.31	< 0.02	1.96	37.82	bdl	1.00	0.82	< 0.20	< 0.2	bdl	bdl
GC7	4/6/92	25.78	3.23	1.92	1.02	1.07	10.57	0.32	< 0.02	1.92	42.70	bdl	0.91	0.85	< 0.20	< 0.2	bdl	bdl
GC7	4/20/92	24.53	3.81	2.53	1.26	0.92	11.49	0.44	< 0.02	2.46	48.80	bdl	0.88	0.96	< 0.20	< 0.2	bdl	bdl
GC7	5/4/92	25.78	3.73	2.02	1.16	1.02	10.56	0.37	< 0.02	1.93	48.80	bdl	0.95	0.93	< 0.20	< 0.2	bdl	bdl
GC7	5/18/92	25.91	3.47	2.04	1.25	1.00	10.51	0.45	< 0.02	2.08	42.70	bdl	0.84	0.84	< 0.20	< 0.2	bdl	bdl
GC7	6/1/92	24.11	3.51	2.02	1.23	0.98	11.15	0.57	< 0.02	2.02	43.92	bdl	0.89	0.91	< 0.20	< 0.2	bdl	bdl
GC7	6/15/92	23.44	2.90	1.62	1.20	1.07	10.22	0.46	< 0.02	1.49	36.60	bdl	0.88	0.82	< 0.20	< 0.2	bdl	bdl
GC7	6/29/92	32.05	4.78	3.01	1.80	1.13	13.64	0.43	< 0.02	2.54	bdl	bdl	0.90	0.80	< 0.20	< 0.2	bdl	< 0.50
GC7	7/13/92	34.20	4.67	3.80	1.30		13.00	< 0.02	0.50	3.30	50.94				< 0.10	< 0.1	< 0.30	
GC7	7/27/92	39.60	6.88	3.30	1.50		15.50	0.68	< 0.02	3.20	64.05				< 0.10	< 0.1	< 0.30	
GC7	8/10/92	37.90	6.04	3.60	1.20		13.00	0.54	< 0.02	0.60	63.44				< 0.10	< 0.1	< 0.30	

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
GC7	8/25/92	40.20	6.60	4.40	1.40		19.30	0.79	< 0.02	4.20	70.76				< 0.10	< 0.1	< 0.30	< 0.10
GC7	9/8/92	40.60	9.27	5.00	2.30		44.20	1.65	< 0.02	3.60	112.85				0.30	< 0.1	< 0.30	
GC7	9/21/92	34.30	5.30	3.58	4.76		18.00	0.80	< 0.02	3.87	54.11				0.30		< 0.30	
GC7	10/19/92	35.43	6.36	4.80	1.52		18.00	1.00	< 0.02	4.00	56.73				< 0.10	< 0.1	< 0.30	< 0.10
GC7	11/3/92	45.85	8.89	6.45	2.54		29.00	0.80		5.70	73.20				< 0.10	< 0.1	< 0.30	
GC7	11/13/92	28.93	5.10	2.80	1.60		20.00	0.90	< 0.02	2.40	47.58				< 0.10	< 0.1	< 0.30	
GC7	11/30/92	24.00	4.10	2.00	1.30		15.00	0.88	< 0.02	2.60	40.26				< 0.10	< 0.1	< 0.30	
GC7	12/14/92	27.00	4.43	2.30	4.20	1.91	17.00	0.79	< 0.02	2.80	42.70		1.85	0.97	< 0.10	< 0.1	< 0.30	
GC7s	12/1/91	19.62	3.12	2.32	2.34	0.92	16.93	bdl	0.38	2.21	35.38	bdl	0.85	0.93	0.68	< 0.2	bdl	bdl
GC7s	12/2/91	23.14	2.48	2.51	2.14	1.07	13.97	0.43	< 0.02	1.42	35.38	bdl	0.86	0.80	< 0.20	< 0.2	bdl	bdl
GC7s	8/28/92	50.00	9.25	7.60	5.70		61.60	3.95	0.40	8.10	68.32				0.20	< 0.1	< 0.30	< 0.10
GC7s	9/18/92	44.20	7.87	6.10	8.00		55.60	2.72	0.36	4.50	52.89				0.30		< 0.30	
GC7s	10/5/92	48.63	10.20	6.01	3.15		42.00	0.70	< 0.02	5.00	73.20				0.50	< 0.1	< 0.30	
GC7s	12/17/92	28.00	4.30	2.00	3.70	1.94	22.00	0.95	< 0.02	2.20	39.65		1.84	0.95	< 0.10	< 0.1	< 0.30	< 0.10
KY18	2/24/92	32.33	2.20	0.97	1.38	1.10	8.43	0.16	< 0.02	1.23	54.90	bdl	0.98	0.89	< 0.20	< 0.2	bdl	bdl
KY18	3/9/92	29.35	1.88	0.81	1.15	1.22	10.67	0.89	< 0.02	0.76	45.14	bdl	1.05	0.86	< 0.20	< 0.2	bdl	bdl
KY18	3/23/92	29.87	1.98	0.83	1.12	1.16	11.09	bdl	< 0.02	0.84	44.53	bdl	0.97	0.83	< 0.20	< 0.2	bdl	bdl
KY18	6/1/92	50.05	3.28	0.88	1.36	1.09	1.28	0.03	< 0.02	0.60	86.62	bdl	0.89	0.82	< 0.20	< 0.2	bdl	bdl
KY18	6/15/92	55.76	3.49	0.86	1.38	1.16	0.79	0.16	< 0.02	0.82	94.55	bdl	0.93	0.81	0.64	< 0.2	bdl	bdl
KY18s	12/1/91	20.77	1.58	0.52	2.11	0.91	15.12	bdl	< 0.02	0.80	32.94	bdl	0.87	0.96	< 0.20	< 0.2	bdl	bdl
LH5	5/4/92	17.33	2.74	1.01	1.14	1.02	11.07	bdl	< 0.02	0.60	28.06	bdl	0.87	0.85	< 0.20	< 0.2	bdl	< 0.50
LH5	6/29/92	17.51	3.08	1.19	1.28	0.96	11.96	0.09	< 0.02	1.29	bdl	bdl	0.91	0.95	< 0.20	< 0.2	bdl	< 0.50
LH5	8/25/92	23.10	3.81	1.40	1.20		9.80	0.14	< 0.02	0.80	41.24				< 0.10	< 0.1	< 0.30	< 0.10
LH5	10/16/92	24.24	4.08	1.23	1.35		11.00	0.25	< 0.02	0.50	42.09				< 0.10	< 0.1	< 0.30	< 0.10
LH5s	10/5/92	24.93	3.59	0.78	1.33		8.20	0.30	< 0.02	0.60	42.70				< 0.10	< 0.1	< 0.30	
MF2	1/7/92	0.93	0.41	0.29	0.35	0.72	3.60	0.27	< 0.02	0.47	0.61	bdl	0.68	0.94	< 0.20	< 0.2	bdl	< 0.07
MF2	5/3/92	1.05	0.40	0.31	0.47	0.84	3.37	0.22	< 0.02	0.43	bdl	bdl	0.68	0.81	< 0.20	< 0.2	bdl	< 0.50
MF2	8/21/92	< 0.01	0.34	0.40	0.50		3.70	0.28	< 0.02	0.60	0.43				< 0.10	< 0.1	< 0.30	< 0.10
MF2	10/16/92	1.00	0.42	0.27	0.42		4.00	0.33	< 0.02	0.40	0.18				< 0.10	< 0.1	< 0.30	< 0.10
MF5	1/7/92	0.59	0.43	0.27	0.36	0.74	4.35	0.06	< 0.02	0.52	0.61	bdl	0.77	1.03	< 0.20	< 0.2	bdl	< 0.07
MF5	5/3/92	1.01	0.38	0.34	0.45	0.88	5.43	0.09	< 0.02	0.41	bdl	bdl	0.89	1.01	< 0.20	< 0.2	bdl	< 0.50
MF5	8/21/92	> 0.01	0.30	0.30	0.30		3.90	0.22	< 0.02	0.50					< 0.10	< 0.1	< 0.30	< 0.10
MF5	10/16/92	0.84	0.42	0.23	0.64		3.90	< 0.05	< 0.02	0.60					< 0.10	< 0.1	< 0.30	< 0.10
RR1	7/1/91	17.72	4.41	6.86	1.84	1.00	14.14	0.09	< 0.02	10.73	25.62	bdl	0.80	0.80	< 0.20	< 0.2	bdl	bdl
RR1	7/16/91	18.01	4.60	6.77	2.20	1.09	18.65	0.13	< 0.02	11.72	27.45	bdl	0.88	0.81	< 0.20	< 0.2	bdl	bdl
RR1	7/29/91	17.17	4.39	6.95	2.73	0.96	18.41	0.14	< 0.02	11.36	26.23	bdl	0.83	0.87	0.44	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
RR1	8/12/91	17.60	4.50	6.40	1.81	0.99	18.38	0.12	< 0.02	10.85	25.62	bdl	0.85	0.86	< 0.20	< 0.2	bdl	bdl
RR1	8/28/91	16.82	4.59	6.28	2.15	0.99	20.25	0.15	< 0.02	10.51	26.84	bdl	0.91	0.92	< 0.20	< 0.2	bdl	bdl
RR1	9/10/91	16.77	4.80	5.40	2.07	0.94	21.60	0.13	< 0.02	12.29	26.84	bdl	0.93	0.98	< 0.20	< 0.2	bdl	bdl
RR1	9/22/91	17.39	4.53	5.49	1.67	0.97	12.94	0.11	< 0.02	10.00	26.84	bdl	0.80	0.82	< 0.20	< 0.2	bdl	bdl
RR1	10/6/91	16.81	4.24	5.51	1.93	0.94	16.39	0.09	< 0.02	11.45	26.84	bdl	0.87	0.92	< 0.20	< 0.2	bdl	bdl
RR1	10/20/91	17.26	4.17	5.48	1.70	0.99	15.12	0.17	< 0.02	9.10	29.28	bdl	0.90	0.90	0.84	< 0.2	bdl	0.07
RR1	11/2/91	18.66	4.25	5.35	1.81	1.06	14.41	0.09	< 0.02	8.97	28.67	bdl	0.89	0.84	< 0.20	< 0.2	bdl	bdl
RR1	11/17/91	17.78	4.13	5.32	1.74	0.95	15.27	0.10	< 0.02	11.60	27.45	bdl	0.87	0.91	< 0.20	< 0.2	bdl	bdl
RR1	12/16/91	17.66	3.54	5.05	1.37	0.92	23.12	0.09	< 0.02	6.72	25.62	bdl	0.86	0.93	< 0.20	< 0.2	2.00	< 0.07
RR1	12/30/91	17.05	6.76	5.48	1.29	0.88	23.36	0.09	< 0.02	9.24	25.01	bdl	0.86	0.97	< 0.20	< 0.2	bdl	bdl
RR1	1/13/92	16.70	3.85	5.79	1.52	0.93	23.40	0.10	< 0.02	11.32	26.23	bdl	0.95	1.02	< 0.20	< 0.2	bdl	< 0.07
RR1	1/27/92	20.16	4.40	6.57	1.74	1.02	23.85	0.16	< 0.02	13.76	24.40	bdl	0.91	0.89	1.28	< 0.2	bdl	bdl
RR1	2/10/92	18.47	4.44	6.50	1.64	0.91	23.66	0.11	< 0.02	12.19	27.45	bdl	0.88	0.96	< 0.20	< 0.2	bdl	bdl
RR1	2/24/92	17.33	4.60	6.41	1.66	1.03	23.01	0.14	< 0.02	12.73	25.62	bdl	0.99	0.96	< 0.20	< 0.2	bdl	bdl
RR1	3/9/92	20.01	3.68	5.86	1.46	1.16	22.77	0.11	< 0.02	9.72	27.45	bdl	1.06	0.92	< 0.20	< 0.2	bdl	bdl
RR1	3/23/92	18.70	3.86	7.29	1.32	1.09	25.14	0.24	< 0.02	13.20	23.18	bdl	1.00	0.92	< 0.20	< 0.2	bdl	bdl
RR1	4/6/92	16.52	4.81	9.21	2.17	0.98	28.51	0.97	< 0.02	14.58	24.40	bdl	0.96	0.98	0.67	< 0.2	bdl	bdl
RR1	4/21/92	20.17	3.35	7.78	1.55	0.90	22.51	0.18	< 0.02	11.90	33.55	bdl	0.90	1.01	< 0.20	< 0.2	bdl	bdl
RR1	5/4/92	16.04	4.24	6.90	1.56	0.85	27.38	0.14	< 0.02	6.84	23.18	bdl	0.78	0.92	< 0.20	< 0.2	bdl	bdl
RR1	5/18/92	17.21	5.01	8.85	2.16	0.96	26.31	0.27	< 0.02	15.53	22.57	bdl	0.89	0.92	1.05	< 0.2	bdl	bdl
RR1	6/1/92	16.26	4.79	8.30	1.92	0.87	25.52	0.27	< 0.02	20.60	25.62	bdl	0.96	1.10	< 0.20	< 0.2	bdl	bdl
RR1	6/15/92	24.02	4.75	7.56	1.84	1.08	26.40	0.14	< 0.02	12.10	29.89	bdl	0.92	0.86	0.84	< 0.2	bdl	bdl
RR1	6/29/92	18.25	5.02	8.19	2.10	0.97	27.59	0.20	< 0.02	16.24	bdl	bdl	0.96	0.99	0.72	< 0.2	bdl	< 0.50
RR1	7/13/92	19.00	5.05	9.00	1.80		22.10	< 0.02	0.31	< 0.10	23.06				< 0.10	< 0.1	< 0.30	
RR1	7/27/92	29.60	8.37	8.80	2.20		38.10	0.29	< 0.02	13.00	34.59				< 0.10	< 0.1	< 0.30	
RR1	8/10/92	19.10	5.34	8.40	1.70		22.80	0.16	< 0.02	11.90	23.42				< 0.10	< 0.1	< 0.30	
RR1	8/25/92	17.80	5.66	9.50	2.10		29.90	0.28	< 0.02	16.00	20.50				0.10	< 0.1	< 0.30	< 0.10
RR1	9/8/92	16.80	5.35	9.00	2.00		27.80	0.49	< 0.02	14.20	18.78				0.30	< 0.1	< 0.30	
RR1	9/21/92	18.50	6.17	8.71	5.28		34.20	0.44	< 0.02	15.30	21.41				0.30	bdl	< 0.30	
RR1	10/19/92	16.98	6.16	9.04	1.65		32.00	0.35	< 0.02	16.00	20.74				< 0.10	< 0.1	< 0.30	< 0.10
RR1	11/3/92	17.46	7.71	9.07	1.82		40.00	0.40	< 0.10	15.00	19.52				< 0.10	< 0.1	< 0.30	
RR1	11/13/92	27.60	5.30	6.60	1.60		31.00	0.90	< 0.02	7.30	34.77				< 0.10	< 0.1	< 0.30	
RR1	12/1/92	22.00	5.00	8.50	1.30		31.00	0.48	< 0.02	11.00	30.50				< 0.10	< 0.1	< 0.30	
RR1	12/14/92	21.00	5.48	8.80	5.00	2.03	36.00	0.91	< 0.02	15.00	23.79		1.97	0.97	< 0.10	< 0.1	< 0.30	
RR1s	12/2/91	11.68	1.37	1.47	1.42	0.87	12.47	0.39	< 0.02	1.65	18.91	bdl	0.82	0.95	< 0.20	< 0.2	bdl	bdl
RR1s	8/28/92	27.00	6.83	6.40	1.40		43.00	0.64	< 0.02	12.80	32.57				< 0.10	< 0.1	< 0.30	< 0.10

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
RR1s	10/5/92	27.12	5.75	6.86	1.65		35.00	0.30	< 0.02	8.20	36.60				< 0.10	< 0.1	< 0.30	
RR1s	12/17/92	19.00	2.70	6.00	2.40	1.44	19.00	0.52	< 0.02	9.80	23.18		1.51	0.96	< 0.10	< 0.1	< 0.30	< 0.10
SB8	12/17/91	63.41	14.23	6.19	3.69	1.18	145.00	0.15	< 0.02	5.84	62.22	bdl	1.03	0.88	< 0.20	< 0.2	bdl	0.16
SB8	1/13/92	31.91	1.85	4.81	3.82	0.93	76.47	1.10	0.46	0.94	10.98	bdl	0.81	0.87	< 0.20	< 0.2	bdl	< 0.07
SB8W	12/17/91	25.70	1.41	5.30	3.96	1.20	74.00	1.21	0.16	1.59	21.35	bdl	1.26	1.05	< 0.20	< 0.2	bdl	< 0.07
SB8W	12/30/91	54.38	12.91	5.80	3.45	1.12	121.00	bdl	< 0.02	1.64	52.46	bdl	0.91	0.81	0.27	< 0.2	bdl	bdl
SB8W	1/13/92	50.30	12.27	5.24	3.15	1.13	122.33	0.91	< 0.02	1.91	48.09	bdl	0.95	0.84	0.92	< 0.2	bdl	< 0.07
SH10	1/7/92	0.84	0.48	0.29	0.37	0.75	4.84	0.18	< 0.02	0.46	0.61	bdl	0.78	1.04	< 0.20	< 0.2	bdl	bdl
SH10	5/3/92	1.01	0.47	0.31	0.52	0.83	4.32	bdl	< 0.02	0.42	0.61	bdl	0.74	0.89	< 0.20	< 0.2	bdl	< 0.50
SH10	8/21/92	0.10	0.50	0.60	0.70		4.70	0.33	< 0.02	0.80	0.18				0.10	< 0.1	< 0.30	< 0.10
SH10	10/16/92	2.53	0.71	1.26	0.60		4.60	< 0.05	< 0.02	0.40					< 0.10	< 0.1	< 0.30	< 0.10
SR10	7/2/91	1.78	0.90	0.43	0.89	0.86	2.71	0.08	< 0.02	0.37	3.66	bdl	0.69	0.80	< 0.20	< 0.2	bdl	bdl
SR10	7/15/91	1.70	0.86	0.55	0.90	0.83	3.60	0.13	< 0.02	0.56	4.27	bdl	0.83	1.00	< 0.20	< 0.2	bdl	bdl
SR10	7/29/91	2.02	0.88	0.44	1.03	0.86	3.51	0.12	< 0.02	0.52	3.66	bdl	0.72	0.84	< 0.20	< 0.2	bdl	bdl
SR10	8/12/91	2.41	0.97	0.55	0.95	1.01	3.56	0.13	< 0.02	0.60	4.27	bdl	0.83	0.82	< 0.20	< 0.2	bdl	bdl
SR10	8/28/91	1.91	0.99	0.51	1.17	0.93	3.56	0.07	< 0.02	0.49	4.88	bdl	0.88	0.95	< 0.20	< 0.2	bdl	bdl
SR10	9/11/91	2.49	1.03	0.47	1.15	1.05	3.47	0.06	< 0.02	0.52	4.88	bdl	0.88	0.83	< 0.20	< 0.2	bdl	bdl
SR10	9/22/91	2.30	1.03	0.68	0.97	0.99	5.40	0.06	< 0.02	0.46	4.27	bdl	0.93	0.93	< 0.20	< 0.2	bdl	bdl
SR10	10/20/91	1.73	0.92	0.45	0.97	0.83	3.54	bdl	< 0.02	0.45	4.27	bdl	0.80	0.97	< 0.20	< 0.2	bdl	< 0.07
SR10	11/2/91	1.98	0.96	0.46	1.05	0.91	3.24	bdl	< 0.02	0.46	4.27	bdl	0.78	0.86	< 0.20	< 0.2	bdl	bdl
SR10	11/17/91	2.02	0.90	0.55	0.89	0.94	3.25	bdl	< 0.02	0.42	6.10	bdl	1.01	1.08	< 0.20	< 0.2	bdl	bdl
SR10	12/17/91	2.13	0.85	0.49	0.70	1.05	5.02	0.16	< 0.02	0.56	3.66	bdl	0.96	0.91	< 0.20	< 0.2	bdl	< 0.07
SR10	12/30/91	2.03	0.81	0.39	0.60	0.85	5.08	bdl	< 0.02	0.57	1.83	bdl	0.71	0.84	< 0.20	< 0.2	bdl	bdl
SR10	1/13/92	1.50	0.78	0.34	0.72	0.84	5.16	0.15	< 0.02	0.67	1.83	bdl	0.85	1.00	< 0.20	< 0.2	bdl	< 0.07
SR10s	12/2/91	2.17	0.82	0.47	1.01	0.97	5.90	0.03	< 0.02	0.58	2.44	bdl	0.82	0.84	< 0.20	< 0.2	bdl	bdl
ST10	5/4/92	33.30	3.82	1.83	1.16	1.08	10.83	bdl	< 0.02	1.60	53.68	bdl	0.89	0.82	< 0.20	< 0.2	bdl	< 0.50
ST10	6/29/92	15.24	3.16	1.08	1.26	0.99	8.62	0.14	< 0.02	0.58	bdl	bdl	0.89	0.90	< 0.20	< 0.2	bdl	< 0.50
ST10	8/25/92	61.30	5.21	3.30	1.60		10.60	0.24	< 0.02	3.30	88.00				< 0.10	< 0.1	< 0.30	< 0.10
ST10	10/16/92	54.01	5.06	2.95	1.43		10.00	0.28	< 0.02	2.70	91.50				< 0.10	< 0.1	< 0.30	< 0.10
ST10s	10/5/92	32.00	3.47	1.69	1.57		8.90	0.40	< 0.02	1.40	49.41				< 0.10	< 0.1	< 0.30	
ST5	5/4/92	17.85	3.38	4.48	1.20	1.02	10.38	bdl	< 0.02	0.60	31.11	bdl	0.87	0.85	< 0.20	< 0.2	bdl	< 0.50
ST5	6/29/92	34.25	3.75	1.95	1.19	1.17	10.11	0.15	< 0.02	1.74	bdl	bdl	0.89	0.83	< 0.20	< 0.2	bdl	< 0.50
ST5	8/25/92	33.90	5.35	1.60	1.40		10.60	0.24	< 0.02	0.90	55.00				< 0.10	< 0.1	< 0.30	< 0.10
ST5	10/16/92	26.18	4.89	1.47	1.45		11.00	< 0.05	< 0.02	0.60	44.53				< 0.10	< 0.1	< 0.30	< 0.10
STOR1	2/3/92	19.52	3.48	2.95	1.55	0.96	13.09	0.37	< 0.02	0.88	35.38	bdl	0.81	0.85	0.51	< 0.2	bdl	bdl
STOR1	2/10/92	20.51	3.74	3.35	1.73	0.96	15.68	0.48	< 0.02	1.39	34.16	bdl	0.83	0.86	0.50	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
STOR1	4/6/92	31.03	4.96	5.33	2.76	1.06	21.88	0.78	< 0.02	3.44	49.41	bdl	0.88	0.83	0.41	< 0.2	bdl	bdl
STOR1	4/20/92	27.59	4.31	3.30	1.82	0.90	13.54	0.76	< 0.02	1.37	56.12	bdl	0.85	0.95	< 0.20	< 0.2	bdl	bdl
STOR1	5/4/92	31.83	4.99	3.71	2.19	0.96	16.00	0.74	< 0.02	1.60	62.22	bdl	0.89	0.93	0.34	< 0.2	bdl	bdl
STOR1	5/18/92	49.78	7.03	6.41	4.17	0.99	30.51	1.94	< 0.02	6.74	83.57	bdl	0.89	0.90	0.31	< 0.2	bdl	bdl
STOR1	6/1/92	64.89	9.89	8.74	4.43	1.10	47.74	2.92	0.11	6.76	90.89	bdl	0.89	0.80	0.24	< 0.2	bdl	bdl
STOR1	6/15/92	59.19	8.48	7.30	2.98	1.11	40.46	2.36	< 0.02	2.82	85.40	bdl	0.89	0.80	0.17	< 0.2	bdl	bdl
STOR1	6/29/92	75.26	10.19	12 24	3.81	1.10	90.00	4.62	< 0.02	4.76	bdl	bdl	1.00	0.91	< 0.20	< 0.2	bdl	< 0.50
STOR1	7/13/92	81.00	11.30	12.30	4.10		60.50	< 0.02	2.96	8.80	103.70		bdl		< 0.10	< 0.1	< 0.30	
STOR1	7/27/92	88.00	9.48	7.90	4.10		61.10	1.22	0.10	9.60	89.67				< 0.10	< 0.1	< 0.30	
STOR1	8/10/92	80.50	11.00	9.50	3.80		54.10	1.29	0.08	4.90	111.63				bdl	< 0.1	< 0.30	
STOR1	8/25/92	93.00	12.20	9.60	4.80		63.60	1.26	< 0.02	13.80	104.00				0.10	< 0.1	< 0.30	< 0.10
STOR1	10/16/92	69.69	10.50	6.93	5.23		8.30	1.80	0.43	6.20	109.80				0.20	< 0.1	< 0.30	< 0.10
STOR1	11/13/92	8.74	1.09	4.50	5.20		39.00	1.20	< 0.02	4.20	103.70				0.20	< 0.1	< 0.30	
STOR1s	8/28/92	76.20	14.20	10.10	9.40		111.00	3.37	< 0.02	17.00	90.28				0.20	< 0.1	< 0.30	< 0.10
STOR1s	9/18/92	68.80	11.80	10.10	11.50		166.00	4.95	< 0.02	11.30	79.30				0.40	bdl	< 0.30	
STOR1s	10/5/92	73.29	11.00	7.62	7.94		85.00	0.30	< 0.02	12.00	85.40				0.30	< 0.1	< 0.30	
STOR1s	12/17/92	32.00	5.30	4.80	4.80	2.25	40.00	1.20	< 0.02	1.70	42.09		2.31	1.03	0.50	< 0.1	< 0.30	< 0.10
TC10	7/1/91	12.71	2.00	2.16	1.70	0.95	6.82	bdl	< 0.02	0.50	23.79	bdl	0.80	0.84	< 0.20	< 0.2	bdl	bdl
TC10	7/16/91	25.24	3.46	2.11	1.82	0.97	35.41	bdl	< 0.02	0.88	34.16	bdl	0.95	0.98	0.78	< 0.2	bdl	bdl
TC10	7/31/91	30.65	2.71	3.46	2.68	1.02	38.95	0.16	< 0.02	0.87	50.02	bdl	1.10	1.08	0.77	< 0.2	bdl	bdl
TC10	8/13/91	24.58	1.24	11.27	6.15	1.06	56.06	0.41	0.04	0.86	23.18	bdl	0.90	0.84	0.32	< 0.2	bdl	bdl
TC10	8/28/91	23.64	1.93	11.20	6.41	1.93	45.17	1.72	0.18	1.43	37.21	bdl	2.69	0.98	0.72	< 0.2	bdl	bdl
TC10	9/3/91	26.67	3.54	4.76	3.61	0.86	61.41	0.44	< 0.02	0.78	20.74	bdl	0.83	0.96	< 0.20	< 0.2	bdl	bdl
TC10	9/10/91	93.48	1.28	8.87	7.64	1.03	21.50	1.02	0.18	1.20	25.01	bdl	0.99	0.96	0.23	< 0.2	bdl	bdl
TC10	9/18/91	55.83	2.88	4.51	4.08	1.04	23.48	1.42	0.17	1.63	bdl	bdl	1.13	1.08	0.45	< 0.2	bdl	bdl
TC10	9/18/91	55.83	3.07	3.89	3.65	1.09	22.80	0.93	0.12	1.39	bdl	bdl	1.14	1.05	0.42	< 0.2	bdl	bdl
TC10	9/18/91	48.84	2.78	3.41	3.16	0.99	17.26	0.86	0.13	1.33	bdl	bdl	1.01	1.02	0.54	< 0.2	bdl	bdl
TC10	9/18/91	45.67	2.47	3.95	3.58	0.96	15.34	0.91	0.13	1.61	bdl	bdl	0.96	1.00	0.48	< 0.2	bdl	bdl
TC10	9/18/91	58.24	2.22	8.37	6.27	1.01	20.49	1.60	0.18	1.81	bdl	bdl	1.01	1.00	0.39	< 0.2	bdl	bdl
TC10	9/18/91	47.70	2.67	4.43	3.94	1.00	19.30	0.86	0.12	1.40	bdl	bdl	1.10	1.10	0.52	< 0.2	bdl	bdl
TC10	9/23/91	60.66	1.48	6.39	5.30	0.97	14.55	0.42	0.11	1.10	19.52	bdl	0.97	1.00	0.44	< 0.2	bdl	bdl
TC10	9/24/91	32.00	1.59	7.80	4.68	0.92	83.00	1.66	0.11	1.09	82.35	bdl	0.91	0.99	< 0.20	< 0.2	bdl	bdl
TC10	10/8/91	27.83	1.92	7.56	4.91	0.84	100.80	0.97	< 0.17	1.20	3.05	bdl	0.94	1.11	< 0.20	< 0.2	bdl	bdl
TC10	10/20/91	14.89	2.08	4.66	3.69	1.04	16.41	0.27	0.02	0.78	26.84	bdl	0.92	0.89	0.94	< 0.2	bdl	< 0.07
TC10	10/16/91	27.85	2.12	5.85	4.25	0.99	80.00	0.85	0.14	0.84	3.05	bdl	0.91	0.92	< 0.20	< 0.2	bdl	< 0.07
TC10	10/24/91	26.26	1.76	9.28	4.42	0.89	87.20	0.92	0.20	2.11	0.61	bdl	0.79	0.88	0.69	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
TC10	10/29/91	27.59	0.95	21.48	11.03	1.01	79.68	1.88	0.23	1.40	23.79	bdl	0.81	0.80	0.29	< 0.2	bdl	bdl
TC10	11/2/91	29.53	1.05	15.66	9.28	0.90	90.80	0.91	0.19	1.48	17.69	bdl	0.87	0.97	0.59	< 0.2	bdl	bdl
TC10	11/17/91	32.34	1.65	15.66	8.80	0.82	122.00	0.74	0.22	1.41	10.37	bdl	0.88	1.07	0.60	< 0.2	bdl	bdl
TC10	12/16/91	20.85	2.34	3.22	2.86	0.90	46.00	0.28	0.05	1.10	16.47	bdl	0.88	0.98	< 0.20	< 0.2	bdl	< 0.07
TC10	12/30/91	17.07	2.27	2.41	2.10	0.89	26.04	0.22	< 0.02	0.61	21.35	bdl	0.83	0.93	< 0.20	< 0.2	bdl	bdl
TC10	1/13/92	17.91	2.27	2.83	2.48	0.85	42.01	0.23	< 0.02	0.63	18.91	bdl	0.92	1.09	< 0.20	< 0.2	bdl	0.09
TC10	1/27/92	18.09	2.09	3.25	2.60	0.93	42.41	0.16	< 0.02	0.70	12.81	bdl	0.89	0.96	< 0.20	< 0.2	bdl	bdl
TC10	2/10/92	27.73	1.86	6.48	4.85	0.98	54.80	0.38	< 0.02	1.05	19.52	bdl	0.85	0.87	1.12	< 0.2	bdl	bdl
TC10	2/24/92	28.53	2.11	7.18	5.08	1.00	74.14	0.92	< 0.06	1.20	17.08	bdl	0.99	1.00	< 0.20	< 0.2	bdl	bdl
TC10	3/9/92	16.72	1.92	3.15	2.81	1.11	32.72	0.70	0.06	0.68	18.91	bdl	1.11	1.00	< 0.20	< 0.2	bdl	bdl
TC10	3/23/92	19.44	2.21	5.05	3.33	1.06	24.88	0.51	0.05	0.72	29.78	bdl	0.95	0.90	< 0.20	< 0.2	bdl	bdl
TC10	4/5/92	17.92	1.72	4.20	3.15	0.96	28.16	0.26	0.05	0.87	26.84	bdl	0.98	1.02	< 0.20	< 0.2	bdl	bdl
TC10	4/21/92	36.45	1.47	10.38	6.61	0.93	78.80	0.92	0.31	1.88	48.80	bdl	1.08	1.17	0.99	< 0.2	bdl	bdl
TC10	5/4/92	26.74	1.58	5.34	4.38	1.03	45.33	0.42	0.08	0.71	18.30	bdl	0.83	0.80	< 0.20	< 0.2	bdl	bdl
TC10	5/18/92	15.95	1.47	5.03	4.07	0.96	19.11	0.21	0.06	0.66	26.23	bdl	0.87	0.90	< 0.20	< 0.2	bdl	bdl
TC10	6/1/92	25.00	1.90	4.92	4.04	0.90	48.07	0.47	0.07	0.81	21.96	bdl	0.84	0.93	< 0.20	0.1	2.00	bdl
TC10	6/15/92	59.08	1.91	11.78	7.66	1.09	130.48	2.04	< 0.02	2.01	11.59	bdl	0.89	0.81	0.56	< 0.2	bdl	bdl
TC10	6/29/92	20.10	1.63	1.89	3.98	0.89	33.00	0.42	0.26	1.28	bdl	bdl	0.97	1.09	0.86	< 0.2	bdl	< 0.50
TC10	7/13/92	24.30	1.78	5.20	3.90		21.80	0.53	0.45	1.40	34.00				0.10	< 0.1	< 0.30	
TC10	7/27/92	30.40	1.81	8.60	6.80		48.60	0.40	0.26	0.90	26.96				< 0.10	< 0.1	< 0.30	
TC10	8/10/92	25.50	2.00	6.00	3.10		24.80	0.28	< 0.02	1.10	50.51				< 0.10	< 0.1	< 0.30	
TC10	8/25/92	41.50	1.20	8.90	6.00		105.00	3.05	< 0.02	1.80	8.11				0.20	< 0.1	< 0.30	< 0.10
TC10	9/8/92	17.50	1.95	4.10	3.60		10.80	0.68	< 0.02	0.70	32.70				0.30	< 0.1	< 0.30	
TC10	9/21/92	19.00	2.22	6.14	2.06		19.00	0.82	< 0.02	0.84	32.21				0.30	bdl	< 0.30	
TC10	10/19/92	14.04	1.70	< 0.02	5.02		18.00	0.15	< 0.02	0.90	29.28				0.10	< 0.1	< 0.30	< 0.10
TC10	11/3/92	0.01	< 0.01	11.00	8.43		95.00	1.10	0.40	1.80	18.30				0.20	< 0.1	< 0.30	
TC10	11/13/92	39.91	1.30	8.30	7.90		99.00	1.60	0.27	1.10	18.30				0.20	< 0.1	< 0.30	
TC10	12/1/92	32.00	2.00	3.80	3.50		58.00	0.58	0.35	1.60	26.84				< 0.10	< 0.1	< 0.30	
TC10	12/14/92	19.00	2.39	3.10	2.50	1.35	14.00	0.60	0.30	1.40	32.94		1.43	1.06	< 0.10	< 0.1	< 0.30	
TC10s	11/22/91	55.50	3.39	12.14	11.18	1.32	44.00	2.41	0.34	2.00	134.20	bdl	1.40	1.06	0.54	< 0.2	bdl	bdl
TC10s	12/1/91	23.17	2.97	2.02	2.95	0.85	28.62	bdl	0.29	0.99	32.94	bdl	0.79	0.93	0.66	< 0.2	bdl	bdl
TC10s	12/2/91	13.06	1.62	1.41	2.41	0.75	21.01	0.27	< 0.02	1.56	16.47	bdl	0.71	0.95	0.89	< 0.2	bdl	bdl
TC10s	8/28/92	77.70	1.27	12.50	9.00		176.00	1.60	< 0.02	4.20	34.04				1.10	< 0.1	< 0.30	< 0.10
TC10s	9/18/92	43.60	1.73	13.10	4.70		115.00	1.60	0.58	0.70	21.90				0.30		< 0.30	
TC10s	10/5/92	22.70	2.69	7.12	5.94		33.00	0.30	< 0.02	1.20	48.19				< 0.10	< 0.1	< 0.30	
TC10s	12/17/92	60.00	1.80	5.30	2.90	3.45	17.00	0.42	< 0.02	0.60	25.01		1.20	0.35	< 0.10	< 0.1	< 0.30	< 0.10

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
TC6s	12/1/91	0.92	0.88	0.37	0.95	0.75	6.89	bdl	< 0.02	0.56	0.61	bdl	0.68	0.90	< 0.20	< 0.2	bdl	bdl
TC7	7/1/91	19.24	2.14	1.53	1.65	1.06	4.87	bdl	0.11	0.59	48.19	bdl	1.17	1.10	< 0.20	< 0.2	bdl	bdl
TC7	7/16/91	18.78	1.82	1.21	1.28	0.99	4.61	0.08	< 0.02	0.61	37.82	bdl	0.94	0.95	< 0.20	< 0.2	bdl	bdl
TC7	7/31/91	13.86	1.88	2.27	2.12	1.00	8.30	0.19	< 0.02	0.59	25.62	bdl	0.86	0.85	< 0.20	< 0.2	bdl	bdl
TC7	8/13/91	65.63	0.44	6.25	5.58	1.07	13.88	0.13	< 0.02	0.59	126.27	bdl	1.04	0.97	0.23	< 0.2	bdl	bdl
TC7	8/28/91	32.89	0.93	8.01	5.75	1.05	20.29	0.29	0.08	0.94	77.47	bdl	1.18	1.13	0.27	< 0.2	bdl	bdl
TC7	9/23/91	95.20	0.26	16.33	13.03	0.53	36.63	0.37	0.07	1.18	208.01	bdl	0.58	1.09	0.37	< 0.2	bdl	bdl
TC7	10/8/91	112.36	0.13	46.97	28.84	0.50	34.92	1.93	0.42	1.69	226.31	bdl	0.41	0.81	0.51	< 0.2	bdl	bdl
TC7	10/24/91	87.50	0.14	11.84	60.09	0.68	102.68	0.42	0.24	3.57	297.68	bdl	0.56	0.83	1.35	< 0.2	bdl	bdl
TC7	11/17/91	17.12	3.60	5.78	4.15	1.11	14.09	0.21	< 0.02	0.61	43.31	bdl	1.08	0.97	0.40	< 0.2	bdl	bdl
TC7	12/16/91	77.35	0.45	19.78	12.39	0.62	38.00	1.41	0.07	1.27	172.63	bdl	0.65	1.04	< 0.20	< 0.2	bdl	0.10
TC7	12/30/91	21.36	2.51	3.83	2.97	1.54	9.48	0.33	< 0.02	1.06	42.70	bdl	1.37	0.89	0.97	< 0.2	bdl	bdl
TC7	1/13/92	73.96	0.30	25.05	12.32	0.61	43.16	1.06	0.52	2.00	195.20	bdl	0.69	1.14	0.50	< 0.2	bdl	< 0.07
TC7	2/10/92	111.18	0.08	25.37	18.19	0.52	31.71	0.65	0.38	2.35	180.56	bdl	0.40	0.77	0.64	< 0.2	bdl	bdl
TC7	3/9/92	131.47	0.41	24.03	21.88	0.50	14.22	2.46	1.29	2.43	bdl	bdl	0.43	0.86	0.80	< 0.2	bdl	bdl
TC7	4/6/92	42.42	0.18	62.68	17.47	0.78	41.65	1.52	0.69	2.51	226.92	bdl	0.88	1.13	0.80	< 0.2	bdl	bdl
TC7	5/18/92	75.62	0.14	37.12	20.27	0.51	28.40	4.11	2.17	2.83	154.33	bdl	0.41	0.80	0.69	< 0.2	bdl	bdl
TC7	6/1/92	220.02	0.03	53.53	35.30	0.47	4.73	5.18	4.20	0.67	431.27	bdl	0.38	0.81	0.01	< 0.2	bdl	bdl
TC7	6/15/92	50.40	0.03	28.48	15.35	0.61	37.95	0.64	1.25	1.78	104.92	bdl	0.50	0.82	0.58	< 0.2	bdl	bdl
TC7	7/27/92	20.90	1.83	5.50	4.20		7.90	0.34	< 0.02	0.70	51.48				< 0.10	< 0.1	< 0.30	
TC7N	7/1/91	61.22	21.73	0.03	3.00	0.97	23.83	1.13	0.17	1.03	57.95	bdl	0.78	0.80	< 0.20	< 0.2	bdl	bdl
TC7N	7/16/91	8.24	1.00	27.30	10.06	1.02	28.48	0.93	0.46	2.36	34.77	bdl	0.83	0.81	0.42	< 0.2	bdl	bdl
TC7N	7/31/91	28.62	3.14	23.33	9.33	1.47	47.57	0.55	0.14	1.48	42.09	bdl	0.97	0.66	0.35	< 0.2	bdl	bdl
TC7N	8/13/91	15.14	1.23	29.02	13.39	1.04	52.28	1.72	0.51	1.45	33.55	bdl	0.85	0.82	0.32	< 0.2	bdl	bdl
TC7N	8/28/91	27.93	0.59	30.45	16.16	0.95	34.77	1.11	2.21	4.74	89.67	bdl	1.00	1.05	0.34	< 0.2	bdl	bdl
TC7N	9/11/91	27.56	1.36	4.94	4.02	1.93	7.02	0.12	< 0.02	0.92	41.48	bdl	1.34	0.70	0.82	< 0.2	bdl	bdl
TC7N	9/23/91	69.86	0.20	6.28	5.70	0.46	8.35	1.30	0.10	0.81	140.91	bdl	0.45	1.00	0.36	< 0.2	bdl	bdl
TC7N	10/8/91	15.91	0.90	18.09	9.11	1.19	13.60	1.55	0.23	1.82	38.43	bdl	1.00	0.84	0.57	< 0.2	bdl	bdl
TC7N	10/24/91	18.63	0.95	6.37	3.46	1.01	6.93	0.54	0.23	1.23	45.75	bdl	0.97	0.96	0.87	< 0.2	bdl	bdl
TC7N	11/2/91	35.94	0.27	1.47	8.08	0.45	5.16	0.74	0.54	1.74	226.31	bdl	1.04	2.30	0.41	< 0.2	bdl	bdl
TC7N	11/17/91	12.97	1.24	5.92	3.48	1.00	8.53	0.34	0.06	0.63	39.04	bdl	1.07	1.06	< 0.20	< 0.2	bdl	bdl
TC7N	12/16/91	23.39	0.51	4.28	3.17	1.48	9.66	0.42	0.12	0.81	40.26	bdl	1.27	0.86	< 0.20	< 0.2	bdl	0.12
TC7N	12/30/91	13.13	0.89	3.92	2.16	0.81	6.64	0.35	0.07	0.69	30.50	bdl	0.82	1.01	< 0.20	< 0.2	bdl	bdl
TC7N	1/13/92	17.62	0.56	12.39	7.49	0.85	13.90	0.55	0.20	1.52	62.22	bdl	1.00	1.18	1.26	< 0.2	bdl	< 0.07
TC7N	2/10/92	27.17	0.30	10.76	7.91	0.55	9.83	0.18	0.06	0.98	71.37	bdl	0.55	1.01	1.15	< 0.2	bdl	bdl
TC7N	3/9/92	13.23	1.12	2.71	2.73	1.20	5.27	0.27	0.06	0.60	28.67	bdl	1.10	0.92	< 0.20	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
TC7N	4/6/92	16.40	0.75	2.72	3.15	1.00	10.64	0.42	0.21	1.24	25.62	bdl	0.82	0.82	1.17	< 0.2	0.42	bdl
TC7N	5/4/92	30.23	5.47	bdl	5.89	1.02	13.97	0.10	0.22	1.29	64.66	bdl	1.02	0.99	1.19	< 0.2	bdl	bdl
TC7N	5/18/92	6.88	0.53	6.59	5.77	0.86	6.45	0.61	0.32	1.24	19.52	bdl	0.70	0.81	< 0.20	< 0.2	bdl	bdl
TC7N	6/1/92	11.89	0.82	4.30	4.44	0.58	10.24	0.84	0.35	1.80	23.18	bdl	0.52	0.90	1.10	< 0.2	bdl	bdl
TC7N	6/15/92	37.43	0.07	10.69	6.39	0.81	27.76	3.71	0.65	3.79	53.68	bdl	0.67	0.83	0.84	< 0.2	bdl	bdl
TC7N	7/27/92	13.30	1.00	5.30	4.60		7.00	0.41	0.04	0.80	27.27				< 0.10	< 0.1	< 0.30	
TC7NP	10/8/91	8.06	1.72	0.73	1.17	0.88	4.20	0.12	< 0.02	0.84	15.25	bdl	0.75	0.85	< 0.20	< 0.2	bdl	bdl
TC7NP	10/24/91	9.82	1.54	1.68	1.49	0.93	6.49	0.21	0.06	0.47	17.08	bdl	0.77	0.83	< 0.20	< 0.2	bdl	bdl
TC7NP	11/17/91	4.18	0.68	1.03	0.78	0.95	1.28	0.26	0.02	0.42	10.98	bdl	0.94	0.98	< 0.20	< 0.2	bdl	bdl
TC7NP	12/16/91	3.12	0.63	0.55	0.78	1.10	8.00	0.07	< 0.02	0.49	3.66	bdl	1.12	1.02	< 0.20	< 0.2	bdl	< 0.07
TC7NP	12/30/91	1.87	0.55	0.54	0.62	0.79	3.24	0.05	< 0.02	0.45	3.66	bdl	0.75	0.95	< 0.20	< 0.2	bdl	bdl
TC7NP	1/13/92	3.94	0.57	0.50	0.68	1.13	6.88	0.25	< 0.02	0.46	4.88	bdl	1.08	0.95	< 0.20	< 0.2	bdl	0.22
TC7NP	2/10/92	3.18	0.42	0.78	0.72	0.94	5.00	0.08	< 0.02	0.45	4.88	bdl	0.89	0.95	< 0.20	< 0.2	bdl	bdl
TC7NP	3/9/92	2.12	0.53	0.44	0.72	1.04	bdl	bdl	< 0.02	0.50	3.66	bdl	0.97	0.93	< 0.20	< 0.2	bdl	bdl
TC7NP	4/6/92	1.59	0.69	0.41	0.72	0.79	5.37	bdl	< 0.02	0.54	1.83	bdl	0.73	0.94	< 0.20	< 0.2	bdl	bdl
TC7NP	6/1/92	11.41	0.64	4.38	4.70	0.82	11.73	1.13	0.26	1.09	24.40	bdl	0.78	0.96	0.31	< 0.2	bdl	bdl
TC7NP	6/15/92	42.73	0.06	11.22	6.58	0.89	29.03	4.09	0.69	3.93	76.25	bdl	0.86	0.96	0.83	< 0.2	bdl	bdl
TC7NPs	12/1/91	1.33	0.80	0.39	0.94	0.78	6.47	bdl	0.03	0.55	1.22	bdl	0.73	0.93	< 0.20	< 0.2	bdl	bdl
TC7NPs	12/2/91	1.39	0.73	0.44	0.95	0.66	6.57	0.07	< 0.02	0.53	1.22	bdl	0.62	0.94	< 0.20	< 0.2	bdl	bdl
TC7Ns	12/1/91	11.64	1.72	3.04	2.46	0.85	8.09	0.15	0.03	0.52	26.23	bdl	0.81	0.95	< 0.20	< 0.2	bdl	bdl
TC7Ns	12/2/91	59.60	0.18	19.00	8.40	0.53	8.57	0.59	0.40	1.21	117.73	bdl	0.43	0.80	0.74	< 0.2	bdl	bdl
TC7s	12/1/91	43.45	4.26	1.76	2.11	1.07	29.76	0.41	0.03	0.95	79.97	bdl	1.12	1.04	0.30	< 0.2	bdl	bdl
TC7s	12/2/91	18.83	1.59	5.03	3.82	0.95	11.92	0.67	0.54	1.74	40.26	bdl	0.93	0.97	0.92	< 0.2	bdl	bdl
TC8	10/24/91	9.97	1.53	1.70	1.53	0.98	5.12	0.18	0.23	1.13	17.08	bdl	0.79	0.81	1.01	< 0.2	bdl	bdl
TD1	7/1/91	51.28	3.97	0.87	0.81	1.07	7.51	0.08	< 0.02	0.62	84.79	bdl	0.89	0.83	< 0.20	< 0.2	bdl	bdl
TD1	7/15/91	49.97	4.34	1.30	0.83	1.05	9.36	0.11	< 0.02	0.96	84.79	bdl	0.89	0.85	0.58	< 0.2	bdl	bdl
TD1	7/29/91	49.84	4.21	1.58	1.16	1.05	10.00	0.08	< 0.02	1.23	83.57	bdl	0.89	0.84	0.69	< 0.2	bdl	bdl
TD1	8/12/91	51.07	4.77	1.48	0.85	1.04	10.07	0.09	< 0.02	0.82	83.57	bdl	0.85	0.81	0.20	< 0.2	bdl	bdl
TD1	8/29/91	50.80	4.77	1.99	0.75	1.06	14.04	0.08	< 0.02	1.05	89.06	bdl	0.94	0.89	0.54	< 0.2	bdl	bdl
TD1	9/3/91	51.10	4.90	1.92	0.86	1.02	11.97	0.08	< 0.02	1.10	87.23	bdl	0.87	0.86	0.52	< 0.2	bdl	bdl
TD1	9/10/91	50.02	5.19	1.92	1.51	1.03	12.44	0.08	< 0.02	1.57	89.67	bdl	0.91	0.88	0.53	< 0.2	bdl	bdl
TD1	9/22/91	51.68	4.77	2.00	1.02	1.11	10.82	0.10	< 0.02	1.21	82.35	bdl	0.88	0.80	< 0.20	< 0.2	bdl	bdl
TD1	10/5/91	56.13	4.68	1.76	1.14	1.23	14.90	0.10	< 0.02	1.06	85.40	bdl	0.98	0.80	< 0.20	< 0.2	bdl	bdl
TD1	10/20/91	53.34	4.80	1.96	1.56	1.15	14.86	0.14	< 0.02	1.17	83.57	bdl	0.93	0.81	0.20	< 0.2	bdl	< 0.07
TD1	11/2/91	58.39	4.84	2.17	1.09	1.18	12.50	0.03	< 0.02	1.69	94.55	bdl	0.98	0.82	0.54	< 0.2	bdl	bdl
TD1	11/17/91	50.28	5.43	3.05	1.11	1.06	7.54	0.08	< 0.02	1.67	112.24	bdl	1.08	1.03	0.28	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
TD1	12/16/91	37.01	2.44	0.68	0.99	1.01	8.40	0.14	< 0.02	0.73	59.17	bdl	0.85	0.84	< 0.20	< 0.2	bdl	0.10
TD1	12/30/91	37.95	2.79	0.65	0.83	0.93	8.60	0.56	< 0.02	0.79	66.49	bdl	0.85	0.92	< 0.20	< 0.2	bdl	bdl
TD1	1/13/92	40.76	2.99	1.19	1.08	1.04	10.32	0.12	< 0.02	0.88	66.49	bdl	0.89	0.85	< 0.20	< 0.2	bdl	< 0.07
TD1	1/27/92	36.19	2.93	0.93	0.98	0.92	9.12	0.35	< 0.02	0.94	70.76	bdl	0.92	1.00	< 0.20	< 0.2	bdl	bdl
TD1	2/10/92	40.26	3.32	1.87	1.21	0.96	8.43	0.54	< 0.02	0.86	68.32	bdl	0.82	0.85	< 0.20	< 0.2	bdl	bdl
TD1	2/24/92	42.46	3.22	1.52	1.15	1.17	9.10	0.53	< 0.02	0.99	73.81	bdl	1.04	0.88	< 0.20	< 0.2	bdl	bdl
TD1	3/9/92	42.73	2.86	0.77	0.90	1.22	8.80	0.18	< 0.02	0.81	66.49	bdl	1.00	0.82	< 0.20	< 0.2	bdl	bdl
TD1	3/23/92	40.76	2.61	0.74	0.85	1.22	8.03	0.19	< 0.02	0.92	62.83	bdl	0.99	0.81	< 0.20	< 0.2	bdl	bdl
TD1	4/6/92	44.00	2.95	0.82	0.85	1.10	8.30	0.10	< 0.02	0.77	77.47	bdl	0.99	0.90	< 0.20	< 0.2	bdl	bdl
TD1	4/20/92	45.90	3.32	1.48	0.94	1.10	7.73	0.14	< 0.02	0.82	74.42	bdl	0.90	0.82	< 0.20	< 0.2	bdl	bdl
TD1	5/4/92	44.16	3.33	1.16	1.03	1.08	7.62	0.14	< 0.02	0.80	73.20	bdl	0.91	0.84	< 0.20	< 0.2	bdl	bdl
TD1	5/18/92	42.88	3.30	1.60	1.05	1.01	7.40	0.18	< 0.02	0.80	73.20	bdl	0.86	0.85	< 0.20	< 0.2	bdl	bdl
TD1	6/1/92	45.20	3.61	2.47	1.53	1.09	19.55	0.24	< 0.02	1.86	75.64	bdl	0.90	0.83	0.68	< 0.2	bdl	bdl
TD1	6/15/92	50.12	3.86	1.76	1.40	1.12	9.67	0.28	< 0.02	1.25	82.35	bdl	0.93	0.83	0.61	< 0.2	bdl	bdl
TD1	6/29/92	56.85	4.81	2.60	1.24	1.16	13.95	0.75	< 0.02	1.71	bdl	bdl	0.94	0.81	0.56	< 0.2	bdl	< 0.50
TD1	7/13/92	63.70	4.66	2.90	1.00		11.60	< 0.02	2.96	1.80	103.70		bdl		< 0.10	< 0.1	< 0.30	
TD1	7/27/92	61.10	4.82	2.70	1.10		10.60	0.12	< 0.02	1.80	96.38				< 0.10	< 0.1	< 0.30	
TD1	8/10/92	61.70	5.24	2.70	0.90		8.00	0.09	< 0.02	1.70	99.43				< 0.10	< 0.1	< 0.30	
TD1	8/25/92	57.70	4.79	2.90	0.70		9.20	0.14	< 0.02	2.10	100.65				< 0.10	< 0.1	< 0.30	< 0.10
TD1	9/8/92	57.40	4.95	2.90	1.00		10.80	0.29	< 0.02	1.60	103.70				0.30	< 0.1	< 0.30	
TD1	9/21/92	59.70	5.37	3.07	4.91		13.20	0.33	< 0.02	1.83	71.98				0.30		< 0.30	
TD1	10/19/92	60.43	5.67	2.77	0.86		15.00	0.27	< 0.02	1.50	85.40				0.10	< 0.1	1.00	< 0.10
TD1	11/3/92	53.87	5.45	3.12	1.11		12.00	0.40		1.80	97.60				< 0.10	< 0.1	< 0.30	
TD1	11/13/92	57.30	5.60	2.80	1.10		23.00	0.40	< 0.02	2.30	91.50				0.20	< 0.1	< 0.30	
TD1	11/30/92	56.00	5.50	2.40	0.99		21.00	0.54	< 0.02	2.00	91.50				< 0.10	< 0.1	< 0.30	
TD1	12/14/92	53.00	5.32	2.60	4.80	3.31	19.00	0.54	< 0.02	2.10	85.40		3.29	0.99	0.50	< 0.1	< 0.30	
TD1s	11/22/91	51.39	5.50	2.18	2.21	0.97	41.00	0.57	< 0.02	2.31	78.08	bdl	0.92	0.94	0.26	< 0.2	bdl	bdl
TD1s	12/1/91	36.59	3.61	1.15	1.80	0.86	22.53	bdl	0.62	1.30	62.22	bdl	0.84	0.97	0.25	< 0.2	bdl	bdl
TD1s	12/2/91	32.79	2.26	0.66	1.18	0.98	10.73	0.25	< 0.02	1.24	58.56	bdl	0.92	0.94	0.66	< 0.2	bdl	bdl
TD1s	8/28/92	59.50	4.78	2.80	0.90		24.20	0.93	< 0.02	2.90	86.01				0.20	< 0.1	< 0.30	< 0.10
TD1s	9/18/92	61.30	5.21	2.80	5.00		23.20	0.62	< 0.02	2.10	90.28				0.30		< 0.30	
TD1s	10/5/92	61.25	5.87	2.83	1.01		23.00	0.30	< 0.02	1.90	97.60				0.30	< 0.1	< 0.30	
TD1s	12/17/92	56.00	5.30	1.90	4.50	3.42	31.00	0.77	< 0.02	2.10	79.30		3.34	0.98	0.50	< 0.1	< 0.30	< 0.10
TNN	3/9/92	42.58	0.06	53.99	23.20	0.37	21.14	4.53	1.45	3.04	197.64	bdl	0.42	1.14	0.60	< 0.2	bdl	bdl
YC1	7/1/91	5.01	2.03	1.00	1.31	1.11	7.04	0.06	< 0.02	0.99	9.15	bdl	0.92	0.82	< 0.20	< 0.2	bdl	bdl
YC1	7/16/91	4.80	1.63	0.83	1.08	0.99	5.23	0.05	< 0.02	1.11	9.76	bdl	0.90	0.90	< 0.20	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
YC1	7/29/91	8.15	2.16	0.65	1.18	1.06	3.68	bdl	< 0.02	0.46	16.47	bdl	0.86	0.81	< 0.20	< 0.2	bdl	bdl
YC1	8/13/91	6.21	2.19	0.85	1.31	0.82	3.33	bdl	< 0.02	0.51	17.69	bdl	0.80	0.97	< 0.20	< 0.2	bdl	bdl
YC1	8/28/91	6.31	1.60	0.79	1.07	1.00	2.61	bdl	< 0.02	0.44	14.03	bdl	0.85	0.85	< 0.20	< 0.2	bdl	bdl
YC1	9/10/91	6.48	1.79	0.54	1.23	1.05	2.40	bdl	< 0.02	0.37	14.03	bdl	0.86	0.81	< 0.20	< 0.2	bdl	bdl
YC1	9/22/91	7.80	1.97	0.57	1.06	1.02	5.30	bdl	< 0.02	0.40	15.86	bdl	0.91	0.89	< 0.20	< 0.2	bdl	bdl
YC1	10/6/91	10.25	2.55	0.63	1.88	1.01	10.96	bdl	< 0.02	0.74	18.30	bdl	0.93	0.91	< 0.20	< 0.2	bdl	bdl
YC1	10/19/91	8.32	2.01	0.73	1.51	1.03	3.43	bdl	< 0.02	0.55	17.08	bdl	0.85	0.83	< 0.20	< 0.2	bdl	< 0.07
YC1	11/2/91	10.38	2.53	0.68	1.87	1.12	2.95	bdl	< 0.02	0.60	21.35	bdl	0.89	0.80	< 0.20	< 0.2	bdl	bdl
YC1	11/17/91	7.86	2.41	0.66	1.12	0.90	3.29	0.03	< 0.02	0.67	17.08	bdl	0.75	0.83	< 0.20	< 0.2	bdl	bdl
YC1	12/17/91	2.26	1.59	0.50	0.91	0.87	7.55	5.00	< 0.02	0.49	4.27	bdl	1.02	1.17	< 0.20	< 0.2	bdl	< 0.07
YC1	12/30/91	2.00	1.47	0.49	0.83	0.75	7.70	0.06	< 0.02	0.53	3.66	bdl	0.74	0.99	< 0.20	< 0.2	bdl	bdl
YC1	1/13/92	2.68	1.61	0.46	0.93	0.90	8.54	0.06	< 0.02	0.67	4.27	bdl	0.87	0.96	< 0.20	< 0.2	bdl	< 0.07
YC1	1/27/92	2.26	1.60	0.75	0.96	0.82	8.48	0.12	< 0.02	0.73	3.66	bdl	0.76	0.93	< 0.20	< 0.2	bdl	bdl
YC1	2/10/92	3.53	1.67	0.68	0.96	0.90	8.28	0.05	< 0.02	0.54	4.88	bdl	0.76	0.84	< 0.20	< 0.2	bdl	bdl
YC1	2/24/92	3.05	1.68	0.69	0.87	1.01	8.89	bdl	< 0.02	0.53	4.27	bdl	0.90	0.89	< 0.20	< 0.2	bdl	bdl
YC1	3/9/92	2.84	1.58	0.67	0.95	1.05	9.27	0.09	0.04	0.64	3.66	bdl	0.97	0.92	< 0.20	< 0.2	bdl	bdl
YC1	3/23/92	2.63	1.68	0.63	0.81	1.02	8.95	bdl	< 0.02	0.48	3.66	bdl	0.93	0.91	< 0.20	< 0.2	bdl	bdl
YC1	4/5/92	2.54	1.64	0.79	1.11	0.85	9.08	0.05	< 0.02	0.66	4.88	bdl	0.87	1.02	< 0.20	< 0.2	bdl	bdl
YC1	4/21/92	3.17	1.72	0.72	0.94	0.88	9.04	bdl	< 0.02	0.50	3.66	bdl	0.72	0.81	< 0.20	< 0.2	bdl	bdl
YC1	5/4/92	3.79	1.81	0.61	1.03	0.98	8.49	bdl	< 0.02	0.47	5.49	bdl	0.82	0.85	< 0.20	< 0.2	bdl	bdl
YC1	5/18/92	5.05	2.02	0.79	1.23	0.95	7.86	0.05	< 0.02	0.57	9.15	bdl	0.82	0.86	< 0.20	< 0.2	bdl	bdl
YC1	6/1/92	5.66	1.86	0.63	1.02	0.98	7.58	0.06	< 0.02	0.49	10.37	bdl	0.89	0.90	< 0.20	< 0.2	bdl	bdl
YC1	6/15/92	3.94	1.83	0.84	1.14	1.01	8.39	bdl	< 0.02	0.71	6.10	bdl	0.85	0.84	< 0.20	< 0.2	bdl	bdl
YC1	6/29/92	4.79	1.72	0.50	0.86	0.95	6.12	0.09	< 0.02	0.73	bdl	bdl	0.86	0.90	< 0.20	< 0.2	bdl	< 0.50
YC1	7/13/92	5.65	1.99	0.90	1.10		6.40	< 0.02	0.22	0.60	9.46				< 0.10	< 0.1	< 0.30	
YC1	7/27/92	7.87	2.20	0.80	1.10		8.00	0.21	< 0.02	0.60	13.60				< 0.10	< 0.1	< 0.30	
YC1	8/10/92	9.37	2.52	0.70	1.10		6.00	0.13	< 0.02	< 0.10	20.07				< 0.10	< 0.1	< 0.30	
YC12	7/1/91	13.40	2.99	2.19	1.56	1.03	10.38	0.05	< 0.02	1.89	23.79	bdl	0.87	0.85	< 0.20	< 0.2	bdl	bdl
YC12	7/16/91	27.24	4.30	2.91	1.92	0.96	24.96	0.05	< 0.02	2.26	43.92	bdl	0.89	0.92	< 0.20	< 0.2	bdl	bdl
YC12	7/30/91	32.90	3.81	3.19	2.03	1.03	37.68	0.15	< 0.02	3.10	39.65	bdl	0.92	0.89	0.77	< 0.2	bdl	bdl
YC12	8/13/91	28.82	3.45	6.33	3.30	0.98	24.94	0.14	< 0.02	3.18	17.69	bdl	0.86	0.88	0.73	< 0.2	bdl	bdl
YC12	8/28/91	30.32	3.30	6.97	4.35	0.96	53.90	0.53	0.04	2.91	37.82	bdl	0.96	1.00	0.66	< 0.2	bdl	bdl
YC12	9/10/91	33.61	3.08	5.17	4.21	1.10	50.66	0.82	0.05	1.92	32.33	bdl	0.95	0.86	< 0.20	< 0.2	bdl	bdl
YC12	9/22/91	20.99	2.28	9.72	6.46	0.98	22.87	0.34	< 0.02	2.41	35.38	bdl	0.79	0.81	0.65	< 0.2	bdl	bdl
YC12	10/6/91	23.08	2.81	10.18	6.25	1.01	31.20	0.49	< 0.02	2.39	38.43	bdl	0.88	0.87	0.28	< 0.2	bdl	bdl
YC12	10/19/91	26.92	3.45	7.06	3.86	1.02	57.00	0.32	< 0.02	2.35	23.18	bdl	0.93	0.92	< 0.20	< 0.2	bdl	< 0.07

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
YC12	11/2/91	35.21	3.13	8.47	5.61	1.03	63.67	0.91	0.12	2.87	28.06	bdl	0.88	0.85	0.63	< 0.2	bdl	bdl
YC12	11/17/91	43.84	2.76	12.22	7.00	0.85	135.00	0.86	0.11	2.60	23.18	bdl	0.95	1.12	0.46	< 0.2	bdl	bdl
YC12	12/17/91	6.93	2.03	1.39	1.20	0.87	13.46	0.11	< 0.02	1.17	10.37	bdl	0.82	0.95	< 0.20	< 0.2	bdl	< 0.07
YC12	12/30/91	4.54	1.80	1.01	0.99	0.80	9.80	0.06	< 0.02	1.02	7.93	bdl	0.77	0.96	< 0.20	< 0.2	bdl	bdl
YC12	1/13/92	7.68	2.10	1.04	1.22	0.93	12.97	0.09	< 0.02	1.25	10.98	bdl	0.86	0.92	< 0.20	< 0.2	bdl	< 0.07
YC12	1/27/92	5.37	1.90	1.27	0.99	0.85	12.46	0.07	< 0.02	1.39	7.32	bdl	0.81	0.95	< 0.20	< 0.2	bdl	bdl
YC12	2/10/92	12.30	2.41	2.61	1.89	0.98	19.74	0.10	< 0.02	1.58	16.47	bdl	0.89	0.91	< 0.20	< 0.2	bdl	bdl
YC12	2/24/92	8.30	2.22	1.99	1.37	1.03	16.57	0.08	< 0.02	1.66	10.98	bdl	0.97	0.94	< 0.20	< 0.2	bdl	bdl
YC12	3/9/92	5.04	1.87	1.15	1.05	0.95	11.24	1.33	< 0.02	1.10	7.32	bdl	0.93	0.97	< 0.20	< 0.2	bdl	bdl
YC12	3/23/92	5.65	1.99	1.41	1.06	1.05	12.07	0.06	< 0.02	1.15	7.93	bdl	0.96	0.91	< 0.20	< 0.2	bdl	bdl
YC12	4/5/92	6.66	1.97	1.77	1.24	0.88	15.17	0.06	< 0.02	1.14	7.93	bdl	0.80	0.91	< 0.20	< 0.2	bdl	bdl
YC12	4/21/92	12.92	2.25	2.71	2.10	0.90	15.42	0.20	< 0.02	1.54	30.50	bdl	1.04	1.15	< 0.20	< 0.2	bdl	bdl
YC12	5/4/92	11.69	2.37	2.19	1.87	1.03	18.53	0.14	< 0.02	1.29	13.42	bdl	0.86	0.84	< 0.20	< 0.2	bdl	bdl
YC12	5/18/92	11.81	2.41	2.70	2.04	0.97	13.34	0.12	< 0.02	1.58	19.52	bdl	0.85	0.87	< 0.20	< 0.2	bdl	bdl
YC12	6/1/92	14.97	2.58	2.86	2.06	0.95	19.55	0.24	< 0.02	1.86	23.18	bdl	0.90	0.94	< 0.20	< 0.2	bdl	bdl
YC12	6/15/92	9.94	2.35	1.86	1.51	1.04	11.95	0.08	< 0.02	1.33	15.25	bdl	0.88	0.85	< 0.20	< 0.2	bdl	bdl
YC12	6/29/92	19.21	3.06	3.93	2.75	0.97	19.36	0.31	< 0.02	2.32	bdl	bdl	0.89	0.91	< 0.20	< 0.2	bdl	< 0.50
YC12	7/13/92	18.20	2.82	3.30	2.20		14.00	0.10	0.23	1.90	28.67				< 0.10	< 0.1	< 0.30	
YC12	7/27/92	19.50	2.57	4.10	3.10		16.20	0.35	0.04	1.90	29.40				< 0.10	< 0.1	< 0.30	
YC12	8/10/92	33.70	2.70	7.90	3.60		26.50	0.63	0.04	1.00	29.65				< 0.10	< 0.1	< 0.30	
YC12	8/25/92	25.80	2.76	4.50	3.20		25.80	0.31	< 0.02	2.10					0.10	< 0.1	< 0.30	< 0.10
YC12	9/8/92	21.60	2.62	4.80	3.70		15.50	0.44	< 0.02	1.70	37.94				0.30	< 0.1	< 0.30	
YC12	9/21/92	25.40	3.49	6.22	3.81		25.90	0.73	0.19	2.52	38.37				0.30	bdl	< 0.30	
YC12	10/19/92	21.69	2.68	10.00	5.94		36.00	0.62	< 0.02	2.00	31.72				< 0.10	< 0.1	< 0.30	< 0.10
YC12	11/3/92	29.38	4.06	6.24	5.11		29.00	0.40	< 0.10	2.40	42.09				< 0.10	< 0.1	< 0.30	
YC12	11/13/92	8.25	2.34	1.50	1.30		15.00	0.30	< 0.02	0.70	9.76				< 0.10	< 0.1	< 0.30	
YC12	11/30/92	10.00	2.40	1.70	1.30		20.00	0.44	< 0.02	1.50	12.20				< 0.10	< 0.1	< 0.30	
YC12	12/14/92	6.90	2.31	1.70	2.10	0.67	10.00	0.55	< 0.02	1.60	11.59		0.64	0.96	< 0.10	< 0.1	< 0.30	
YC12s	11/22/91	22.20	3.49	4.21	4.86	0.87	25.86	0.72	0.11	3.69	34.16	bdl	0.79	0.90	0.76	< 0.2	bdl	bdl
YC12s	12/1/91	11.65	1.86	1.44	1.87	0.74	13.55	0.20	< 0.02	1.40	21.35	bdl	0.75	1.01	< 0.20	< 0.2	bdl	bdl
YC12s	12/2/91	5.35	1.46	0.86	1.36	0.90	8.57	0.35	< 0.02	0.78	9.76	bdl	0.84	0.93	< 0.20	< 0.2	bdl	bdl
YC12s	8/28/92	33.10	2.76	5.00	3.40		44.20	1.10	< 0.02	3.60	34.65				< 0.10	< 0.1	< 0.30	< 0.10
YC12s	10/5/92	29.20	4.41	5.15	3.72		33.00	0.50	< 0.02	2.90	38.43				< 0.10	< 0.1	< 0.30	
YC12s	12/17/92	7.50	1.90	0.98	1.70	0.63	14.00	0.45	< 0.02	1.90	9.15		0.65	1.03	< 0.10	< 0.1	< 0.30	< 0.10
YC1s	11/22/91	12.91	3.06	0.91	2.51	1.03	13.46	bdl	< 0.02	0.95	19.52	bdl	0.83	0.81	< 0.20	< 0.2	bdl	bdl
YC1s	12/1/91	3.48	1.18	0.43	1.15	0.91	8.23	bdl	< 0.02	0.60	3.66	bdl	0.75	0.83	< 0.20	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
YC1s	12/2/91	2.12	1.41	0.49	1.02	0.84	6.86	0.04	< 0.02	0.51	4.27	bdl	0.76	0.90	< 0.20	< 0.2	bdl	bdl
YC5	7/1/91	6.14	2.36	0.69	1.07	1.07	8.13	bdl	< 0.02	0.49	10.37	bdl	0.86	0.80	< 0.20	< 0.2	bdl	bdl
YC5	7/16/91	8.32	2.58	0.80	1.15	0.97	9.39	0.17	< 0.02	0.57	15.25	bdl	0.86	0.88	< 0.20	< 0.2	bdl	bdl
YC5	7/31/91	10.45	2.87	0.80	1.44	1.06	7.61	0.05	< 0.02	0.60	18.91	bdl	0.86	0.81	< 0.20	< 0.2	bdl	bdl
YC5	8/13/91	11.28	3.01	0.94	1.53	0.99	7.80	bdl	< 0.02	0.60	20.74	bdl	0.80	0.81	< 0.20	< 0.2	bdl	bdl
YC5	8/28/91	8.80	2.46	0.75	1.50	0.95	bdl	7.65	< 0.02	0.52	18.30	bdl	0.88	0.92	< 0.20	< 0.2	bdl	bdl
YC5	9/10/91	6.48	2.70	0.54	1.23	1.05	8.11	0.05	< 0.02	0.56	18.91	bdl	0.86	0.81	< 0.20	< 0.2	bdl	bdl
YC5	9/22/91	12.24	3.24	0.93	1.74	1.03	12.60	bdl	< 0.02	0.61	22.57	bdl	0.93	0.91	< 0.20	< 0.2	bdl	bdl
YC5	10/6/91	12.19	2.95	0.85	2.45	1.07	9.68	bdl	< 0.02	1.12	20.13	bdl	0.86	0.80	< 0.20	< 0.2	bdl	bdl
YC5	10/19/91	13.90	3.41	1.11	2.40	1.08	9.15	bdl	< 0.02	0.87	25.62	bdl	0.89	0.82	< 0.20	< 0.2	bdl	< 0.07
YC5	11/2/91	13.47	3.29	1.15	2.51	1.12	13.00	bdl	< 0.02	0.75	25.62	bdl	1.02	0.91	< 0.20	< 0.2	bdl	bdl
YC5	11/17/91	11.83	2.78	0.95	1.65	0.98	7.10	bdl	< 0.02	0.60	27.45	bdl	0.97	0.99	< 0.20	< 0.2	bdl	bdl
YC5	12/17/91	2.87	1.65	0.60	0.98	0.91	7.88	0.05	< 0.02	0.53	6.10	bdl	0.88	0.97	< 0.20	< 0.2	bdl	< 0.07
YC5	12/30/91	2.24	1.54	0.51	0.85	0.75	8.33	0.05	< 0.02	0.54	3.05	bdl	0.68	0.90	< 0.20	< 0.2	bdl	bdl
YC5	1/13/92	2.67	1.72	0.52	0.96	0.85	9.12	0.06	< 0.02	0.57	4.88	bdl	0.85	1.00	< 0.20	< 0.2	bdl	< 0.07
YC5	1/27/92	2.42	1.00	0.64	0.86	0.96	9.02	0.43	< 0.02	0.70	3.05	bdl	0.90	0.94	< 0.20	< 0.2	bdl	bdl
YC5	2/10/92	3.46	1.98	0.93	1.13	0.80	9.82	bdl	< 0.02	0.66	6.10	bdl	0.74	0.93	< 0.20	< 0.2	bdl	bdl
YC5	2/24/92	3.60	1.76	0.81	0.94	1.03	9.83	bdl	< 0.02	0.61	4.88	bdl	0.93	0.90	< 0.20	< 0.2	bdl	bdl
YC5	3/9/92	2.58	1.62	0.61	0.89	1.01	9.32	bdl	< 0.02	0.54	3.66	bdl	0.96	0.95	< 0.20	< 0.2	bdl	bdl
YC5	3/23/92	2.59	1.74	0.65	0.93	0.98	9.41	0.05	< 0.02	0.53	3.66	bdl	0.91	0.93	< 0.20	< 0.2	bdl	bdl
YC5	4/5/92	2.79	1.77	0.69	0.87	0.84	9.72	bdl	< 0.02	0.57	3.66	bdl	0.77	0.92	< 0.20	< 0.2	bdl	bdl
YC5	4/21/92	6.20	1.70	1.14	1.30	1.03	9.43	bdl	< 0.02	0.54	15.86	bdl	1.20	1.17	< 0.20	< 0.2	bdl	bdl
YC5	5/4/92	4.94	2.05	0.74	1.09	1.01	9.70	bdl	< 0.02	0.55	6.71	bdl	0.83	0.82	< 0.20	< 0.2	bdl	bdl
YC5	5/18/92	5.71	2.18	0.85	1.24	0.97	9.64	0.06	< 0.02	0.64	9.15	bdl	0.83	0.86	< 0.20	< 0.2	bdl	bdl
YC5	6/1/92	6.23	2.08	0.77	1.11	0.99	9.34	0.07	< 0.02	0.57	10.37	bdl	0.88	0.88	< 0.20	< 0.2	bdl	bdl
YC5	6/15/92	4.42	1.93	0.76	1.03	1.01	8.95	0.05	< 0.02	0.54	6.10	bdl	0.81	0.81	< 0.20	< 0.2	bdl	bdl
YC5	6/29/92	8.66	2.90	0.89	1.21	0.97	11.89	0.19	< 0.02	0.71	bdl	bdl	0.87	0.90	< 0.20	< 0.2	bdl	< 0.50
YC5	7/13/92	7.25	2.64	1.00	1.10		8.70	< 0.02	0.61	0.90	12.32				< 0.10	< 0.1	< 0.30	
YC5	7/27/92	10.40	3.05	1.10	1.40		7.80	0.14	< 0.02	1.00	19.83				< 0.10	< 0.1	< 0.30	
YC5	8/10/92	11.60	3.07	1.00	1.30		17.90	0.39	0.12	1.30	22.45				< 0.10	< 0.1	< 0.30	
YC5	8/25/92	11.40	2.96	0.90	1.40		6.50	0.18	< 0.02	0.70	23.67				< 0.10	< 0.1	< 0.30	< 0.10
YC5	9/8/92	12.60	3.04	1.00	1.70		7.20	0.45	< 0.02	0.60	18.00				< 0.10	< 0.1	< 0.30	
YC5	9/21/92	11.40	2.89	0.83	2.67		10.40	0.30	0.23	0.71	17.57				< 0.10		< 0.30	
YC5	10/19/92	9.00	2.90	0.94	1.40		9.00	< 0.05	< 0.02	0.50	15.25				< 0.10	< 0.1	< 0.30	< 0.10
YC5	11/3/92	12.27	3.56	1.05	2.62		8.20	< 0.10	< 0.10	0.70	22.57				< 0.10	< 0.1	< 0.30	
YC5	11/13/92	3.29	2.10	0.75	1.00		7.50	< 0.10	< 0.02	0.30	7.32				< 0.10	< 0.1	< 0.30	

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
YC5	11/30/92	3.10	2.00	0.75	0.84		7.60	< 0.05	< 0.02	0.70	5.25				< 0.10	< 0.1	< 0.30	
YC5	12/14/92	3.30	2.00	0.84	1.60	0.42	7.90	< 0.05	< 0.02	0.70	4.94		0.35	0.83	< 0.10	< 0.1	< 0.30	
YC5A	7/1/91	8.72	2.30	1.18	1.27	1.02	8.31	bdl	< 0.02	0.48	15.25	bdl	0.84	0.82	< 0.20	< 0.2	bdl	bdl
YC5A	7/16/91	20.30	3.14	1.46	1.38	0.92	25.57	bdl	< 0.02	0.53	29.89	bdl	0.88	0.96	< 0.20	< 0.2	bdl	bdl
YC5A	7/31/91	22.85	2.88	2.58	2.28	0.98	26.75	0.10	< 0.02	0.61	33.55	bdl	0.91	0.93	< 0.20	< 0.2	bdl	bdl
YC5A	8/13/91	19.51	1.99	6.80	4.22	1.00	43.92	0.28	< 0.02	0.95	22.57	bdl	0.94	0.94	0.75	< 0.2	bdl	bdl
YC5A	8/28/91	20.94	2.07	9.35	5.47	0.92	51.22	1.35	0.14	0.32	27.45	bdl	0.93	1.01	0.73	< 0.2	bdl	bdl
YC5A	9/10/91	79.07	1.63	7.90	6.63	1.10	17.40	0.80	0.10	0.95	20.74	bdl	1.00	0.90	0.20	< 0.2	bdl	bdl
YC5A	9/22/91	16.13	2.15	3.25	3.39	1.03	10.28	0.14	< 0.02	0.59	28.67	bdl	0.84	0.81	< 0.20	< 0.2	bdl	bdl
YC5A	10/6/91	15.87	2.47	4.20	3.56	0.99	16.97	0.20	< 0.02	0.83	25.62	bdl	0.82	0.83	< 0.20	< 0.2	bdl	bdl
YC5A	10/19/91	11.20	1.74	9.06	5.38	1.05	20.21	0.46	0.08	0.91	23.18	bdl	0.88	0.84	0.32	< 0.2	bdl	< 0.07
YC5A	11/2/91	29.21	1.41	15.48	8.32	0.96	64.16	0.78	0.11	1.21	18.30	bdl	0.88	0.92	0.54	< 0.2	bdl	bdl
YC5A	11/17/91	23.59	2.46	4.77	3.44	0.88	61.00	0.30	0.03	0.65	8.54	bdl	0.79	0.90	< 0.20	< 0.2	bdl	bdl
YC5A	12/17/91	5.50	1.65	1.06	1.30	0.79	16.39	0.11	< 0.02	0.59	6.71	bdl	0.84	1.06	< 0.20	< 0.2	bdl	< 0.07
YC5A	12/30/91	4.00	1.62	0.73	1.01	0.71	10.73	0.07	< 0.02	0.56	6.71	bdl	0.74	1.04	< 0.20	< 0.2	bdl	bdl
YC5A	1/13/92	4.89	1.78	0.72	1.13	0.94	11.93	0.09	< 0.02	0.63	6.71	bdl	0.88	0.96	< 0.20	< 0.2	bdl	< 0.07
YC5A	1/27/92	3.07	1.61	0.77	0.99	0.80	10.78	0.06	< 0.02	0.71	3.66	bdl	0.76	0.96	< 0.20	< 0.2	bdl	bdl
YC5A	2/10/92	10.67	2.05	2.09	1.92	0.91	22.12	0.09	< 0.02	0.67	10.37	bdl	0.81	0.89	< 0.20	< 0.2	bdl	bdl
YC5A	2/24/92	6.56	1.91	2.28	1.24	1.18	14.94	0.09	< 0.02	0.72	6.71	bdl	0.97	0.82	< 0.20	< 0.2	bdl	bdl
YC5A	3/9/92	4.03	1.60	1.68	0.91	1.19	12.50	0.06	< 0.02	0.72	4.27	bdl	1.07	0.90	< 0.20	< 0.2	bdl	bdl
YC5A	3/23/92	3.28	1.71	1.33	0.84	1.09	9.80	0.06	< 0.02	0.65	3.66	bdl	0.89	0.82	< 0.20	< 0.2	bdl	bdl
YC5A	4/5/92	4.30	1.75	1.22	1.32	0.87	12.33	0.06	< 0.02	0.79	4.88	bdl	0.79	0.91	< 0.20	< 0.2	bdl	bdl
YC5A	4/21/92	6.12	1.70	1.07	1.28	0.87	12.13	0.06	< 0.02	0.66	7.32	bdl	0.76	0.87	< 0.20	< 0.2	bdl	bdl
YC5A	5/4/92	11.38	2.01	2.95	1.98	1.11	20.96	0.09	< 0.02	0.60	10.37	bdl	0.88	0.80	< 0.20	< 0.2	bdl	bdl
YC5A	5/18/92	12.90	1.87	3.67	2.77	1.04	17.22	0.17	0.04	0.76	18.91	bdl	0.89	0.86	< 0.20	< 0.2	bdl	bdl
YC5A	6/1/92	17.13	2.05	2.78	2.57	0.94	26.16	0.23	< 0.02	0.82	18.91	bdl	0.82	0.88	< 0.20	< 0.2	bdl	bdl
YC5A	6/15/92	6.31	1.94	1.22	1.32	1.00	10.69	0.08	< 0.02	0.62	8.54	bdl	0.83	0.83	< 0.20	< 0.2	bdl	bdl
YC5A	6/29/92	22.43	2.05	4.57	3.92	0.93	43.00	0.39	0.24	1.42	bdl	bdl	0.93	1.00	0.77	< 0.2	bdl	< 0.50
YC5A	7/13/92	22.50	2.33	4.10	2.50		31.80	0.32	0.32	1.60	22.00				< 0.10	< 0.1	< 0.30	
YC5A	7/27/92	41.80	2.33	7.20	5.50		75.50	0.40	0.17	1.00	25.19				< 0.10	< 0.1	< 0.30	
YC5A	8/10/92	19.40	2.28	5.20	2.80		16.30	0.26	0.07	1.60	28.30				< 0.10	< 0.1	< 0.30	
YC5A	8/25/92	44.60	1.25	7.30	6.20		112.00	1.44	0.54	1.30	7.20				0.20	< 0.1	< 0.30	< 0.10
YC5A	9/8/92	16.40	2.31	3.20	2.90		12.70	0.60	0.21	0.60	29.10				0.30	< 0.1	< 0.30	
YC5A	9/21/92	18.90	2.65	4.84	3.00		18.50	0.50	0.22	0.88	30.44				0.30	bdl	< 0.30	
YC5A	10/19/92	15.44	2.38	6.63	5.02		15.00	< 0.05	< 0.02	1.20	29.89				0.10	< 0.1	< 0.30	< 0.10
YC5A	11/3/92	33.75	2.46	7.94	7.09		72.00	0.70	0.40	1.70	18.30				< 0.10	< 0.1	< 0.30	

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
YC5A	11/13/92	5.53	2.13	0.88	1.10		11.00	< 0.10	< 0.02	0.30	6.10				< 0.10	< 0.1	< 0.30	
YC5A	11/30/92	12.00	1.90	1.30	1.80		28.00	0.44	< 0.02	1.00	9.15				< 0.10	< 0.1	< 0.30	
YC5A	12/14/92	3.60	2.00	0.72	1.70	0.43	7.80	0.88	< 0.02	0.70	6.10		0.40	0.93	< 0.10	< 0.1	< 0.30	
YC5As	11/22/91	26.34	3.01	5.84	5.86	0.88	64.00	0.88	0.13	1.22	28.67	bdl	0.94	1.07	0.20	< 0.2	bdl	bdl
YC5As	12/1/91	16.80	2.27	1.47	2.26	0.80	22.60	0.22	< 0.02	0.75	22.57	bdl	0.73	0.92	< 0.20	< 0.2	bdl	bdl
YC5As	12/2/91	2.39	1.38	0.50	1.05	0.80	7.01	0.04	< 0.02	0.51	4.88	bdl	0.75	0.94	< 0.20	< 0.2	bdl	bdl
YC5As	8/28/92	48.30	1.47	6.80	5.70		99.80	0.97	< 0.02	1.20	29.65				0.50	< 0.1	< 0.30	< 0.10
YC5As	9/18/92	31.50	1.85	7.90	3.20		70.10	1.91	0.41	1.10	19.52				0.30		< 0.30	
YC5As	10/5/92	19.25	3.61	2.22	2.63		24.00	1.20	< 0.02	1.50	28.67				< 0.10	< 0.1	< 0.30	
YC5As	12/17/92	2.20	1.76	0.64	1.70	0.35	7.50	0.49	< 0.02	0.90	3.78		0.31	0.90	< 0.10	< 0.1	< 0.30	< 0.10
YC5s	11/22/91	13.92	2.92	0.93	2.82	0.98	13.51	0.03	< 0.02	0.90	23.18	bdl	0.85	0.86	< 0.20	< 0.2	bdl	bdl
YC5s	12/1/91	4.67	1.40	0.52	1.27	0.89	10.68	0.04	< 0.02	0.68	5.49	bdl	0.81	0.91	< 0.20	< 0.2	bdl	bdl
YC5s	12/2/91	2.28	1.44	0.53	1.04	0.89	6.85	0.05	< 0.02	0.54	4.27	bdl	0.78	0.88	< 0.20	< 0.2	bdl	bdl
YC5s	8/28/92	9.81	1.53	0.20	1.10		10.30	63.70	< 0.02	< 0.10	16.84				0.50	< 0.1	< 0.30	< 0.10
YC5s	9/18/92	14.40	2.89	0.70	2.90		9.30	0.33	< 0.02	0.60	23.24				0.30	bdl	< 0.30	
YC5s	10/5/92	9.88	3.09	bdl	1.54		15.00	0.21	< 0.02	0.80	13.42				< 0.10	< 0.1	< 0.30	
YC5s	12/17/92	2.20	1.77	0.63	1.60	0.34	9.10	< 0.05	< 0.02	0.90	3.05		0.31	0.94	< 0.10	< 0.1	< 0.30	< 0.10
YC6	7/1/91	11.81	2.73	1.93	1.37	1.03	9.42	0.06	< 0.02	1.48	21.35	bdl	0.87	0.85	< 0.20	< 0.2	bdl	bdl
YC6	7/16/91	25.09	3.96	2.47	1.64	1.03	24.91	0.06	< 0.02	1.56	34.77	bdl	0.88	0.85	< 0.20	< 0.2	bdl	bdl
YC6	7/30/91	29.32	3.52	3.00	1.81	1.02	43.04	0.25	< 0.02	2.24	31.11	bdl	0.94	0.92	< 0.20	< 0.2	bdl	bdl
YC6	8/13/91	24.26	2.79	6.75	3.82	0.98	32.03	0.35	< 0.02	2.48	34.77	bdl	0.86	0.88	0.74	< 0.2	bdl	bdl
YC6	8/28/91	22.91	1.90	9.37	5.69	1.03	38.77	1.30	0.16	2.20	31.72	bdl	0.92	0.89	0.32	< 0.2	bdl	bdl
YC6	9/10/91	33.68	1.83	8.86	7.43	1.19	52.47	1.22	0.09	1.92	35.38	bdl	0.95	0.80	0.45	< 0.2	bdl	bdl
YC6	9/22/91	21.87	2.48	4.77	4.25	1.02	20.50	0.18	< 0.02	1.53	36.60	bdl	0.91	0.89	0.67	< 0.2	bdl	bdl
YC6	10/6/91	24.02	2.91	6.65	4.44	1.04	26.79	0.22	< 0.02	2.12	36.60	bdl	0.89	0.86	< 0.20	< 0.2	bdl	bdl
YC6	10/19/91	20.17	2.81	5.83	3.60	1.03	31.47	0.31	0.03	1.95	25.62	bdl	0.89	0.87	0.82	< 0.2	bdl	< 0.07
YC6	11/2/91	32.55	2.72	9.33	5.55	1.04	62.21	0.78	0.08	2.38	25.01	bdl	0.88	0.85	0.55	< 0.2	bdl	bdl
YC6	11/17/91	25.61	2.68	7.27	4.60	0.86	76.00	0.37	0.03	1.68	19.52	bdl	0.95	1.11	0.57	< 0.2	bdl	bdl
YC6	12/17/91	5.70	1.85	1.41	1.35	0.89	12.66	0.27	< 0.02	1.01	8.54	bdl	0.83	0.94	< 0.20	< 0.2	bdl	< 0.07
YC6	12/30/91	3.81	1.66	0.93	0.92	0.79	9.36	0.08	< 0.02	0.94	6.71	bdl	0.78	0.98	< 0.20	< 0.2	bdl	bdl
YC6	1/13/92	6.76	1.99	0.99	1.18	0.96	12.45	0.08	< 0.02	1.08	9.76	bdl	0.89	0.93	< 0.20	< 0.2	bdl	< 0.07
YC6	1/27/92	4.37	1.74	1.32	0.98	0.82	11.87	0.48	< 0.02	1.05	5.49	bdl	0.77	0.94	< 0.20	< 0.2	bdl	bdl
YC6	2/10/92	11.43	2.30	2.53	1.87	0.94	19.68	0.09	< 0.02	1.30	14.64	bdl	0.84	0.90	< 0.20	< 0.2	bdl	bdl
YC6	2/24/92	6.90	2.01	1.77	1.23	1.04	15.14	0.07	< 0.02	1.25	9.76	bdl	1.01	0.97	< 0.20	< 0.2	bdl	bdl
YC6	3/9/92	4.35	1.72	1.03	1.02	1.00	11.04	0.05	< 0.02	0.86	7.32	bdl	1.03	1.02	< 0.20	< 0.2	bdl	bdl
YC6	3/23/92	4.96	1.89	1.29	1.02	1.06	11.89	0.05	< 0.02	0.96	6.71	bdl	0.97	0.92	< 0.20	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Ca	Mg	Na	K	Major Cations	SO4	NO3	NO2	Cl	HCO3	CO3	Major Anions	Anion/ Cation	F	Br	PO4	As
		ppm	ppm	ppm	ppm	meq	ppm	ppm	ppm	ppm	ppm	ppm	meq	ratio	ppm	ppm	ppm	ppm
YC6	4/5/92	6.14	1.93	1.61	1.15	0.90	13.87	0.06	< 0.02	0.99	7.32	bdl	0.80	0.89	< 0.20	< 0.2	bdl	bdl
YC6	4/21/92	11.32	2.07	3.39	1.90	0.91	18.75	0.22	< 0.02	2.47	15.25	bdl	0.83	0.92	< 0.20	< 0.2	bdl	bdl
YC6	5/4/92	11.02	2.26	2.15	1.88	1.04	18.33	0.10	< 0.02	1.17	12.20	bdl	0.87	0.84	< 0.20	< 0.2	bdl	bdl
YC6	5/18/92	11.02	2.21	2.63	2.01	0.99	12.99	0.12	< 0.02	1.34	18.30	bdl	0.87	0.88	< 0.20	< 0.2	bdl	bdl
YC6	6/1/92	12.89	2.43	2.51	1.85	0.96	16.38	0.12	< 0.02	1.64	19.52	bdl	0.86	0.90	< 0.20	< 0.2	bdl	bdl
YC6	6/15/92	9.44	2.24	3.07	1.31	1.09	8.67	0.15	< 0.02	2.68	15.86	bdl	0.89	0.82	< 0.20	< 0.2	bdl	bdl
YC6	6/29/92	18.54	2.72	3.69	2.70	0.96	22.48	0.29	0.07	1.82	bdl	bdl	0.90	0.94	< 0.20	< 0.2	bdl	< 0.50
YC6	7/13/92	18.90	2.71	3.40	2.40		14.30	0.24	0.26	1.70	29.10				< 0.10	< 0.1	< 0.30	
YC6	7/27/92	22.10	2.66	4.70	3.80		21.50	0.48	0.08	1.90	31.29				< 0.10	< 0.1	< 0.30	
YC6	8/10/92	21.90	2.91	4.80	2.60		15.20	0.49	0.09	2.10	39.04				< 0.10	< 0.1	< 0.30	
YC6s	11/22/91	19.99	3.12	4.60	4.39	0.57	42.00	0.65	0.07	3.60	29.89	bdl	0.64	1.11	0.73	< 0.2	bdl	bdl
YC6s	12/2/91	4.24	1.41	0.77	1.25	0.83	8.47	0.08	< 0.02	0.74	7.93	bdl	0.79	0.95	< 0.20	< 0.2	bdl	bdl

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
988	2/24/92	0.14	0.14	bdl	bdl	0.03	bdl	0.04	bdl	0.03	bdl	0.03	1.05	0.07	1.50	bdl	bdl	bdl	0.06	0.07	0.03	0.16
988	3/9/92	0.17	0.02	bdl	bdl	0.02	0.01	0.04	bdl	0.05	bdl	0.01	0.10	0.08	1.50	bdl	0.03	bdl	0.01	0.09	0.06	0.24
988	3/23/92	0.25	0.12	bdl	bdl	0.04	bdl	0.04	bdl	0.06	bdl	0.02	0.97	0.09	1.80	bdl	0.01	bdl	0.03	0.08	0.06	0.35
988	4/5/92	0.13	0.13	bdl	bdl	0.03	bdl	0.04	bdl	0.04	bdl	0.02	1.00	0.06	10.00	bdl	0.01	bdl	0.02	0.11	0.04	0.17
988	5/4/92	0.08	0.01	bdl	bdl	bdl	bdl	0.02	bdl	bdl	bdl	bdl	bdl	0.04	1.43	bdl	0.01	bdl	bdl	0.07	0.01	0.12
988	5/18/92	0.08	0.02	bdl	bdl	bdl	bdl	0.02	< 0.20	0.01	bdl	bdl	0.03	0.05	1.70	bdl	0.03	bdl	bdl	0.09	0.02	0.18
988	6/1/92	0.28	0.03	bdl	bdl	0.01	bdl	0.04	bdl	0.03	bdl	bdl	0.04	0.04	1.84	bdl	0.02	bdl	bdl	0.05	0.03	0.13
988	6/15/92	0.14	0.03	bdl	bdl	0.01	bdl	0.03	bdl	0.03	bdl	0.01	0.07	0.05	1.99	bdl	bdl	bdl	bdl	0.12	0.04	0.34
988	6/29/92	0.17	0.02	0.15	bdl	bdl	bdl	0.03	< 0.07	0.04	0.04	bdl	bdl	0.04	2.11	0.20	0.02	0.02	bdl	0.13	0.05	0.28
988	7/13/92	< 0.01	< 0.01			< 0.01	< 0.01	0.02	bdl	0.01		< 0.01	< 0.05	< 0.05	2.10		< 0.01		0.01	0.08	0.02	0.08
988	7/27/92	0.08	0.03			< 0.01	< 0.01	0.09	bdl	0.04		< 0.01	< 0.06	< 0.05	4.00		< 0.01		0.01	0.71	0.08	0.08
988	8/10/92	< 0.01	0.02			< 0.01	< 0.01	0.02		0.01		< 0.01	< 0.05	< 0.06	1.90		< 0.01		0.01	0.06	0.01	0.02
988	8/25/92	< 0.01	< 0.01	0.06	< 0.01	< 0.01	< 0.01	0.01	< 0.10	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	2.00	0.17	< 0.01	< 0.01	0.01	0.12	0.02	< 0.01
988	10/16/92	< 0.01	0.03	0.07	< 0.01	< 0.01	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	1.99	0.22	< 0.01	0.05	0.02	0.11	0.01	< 0.01
988	11/13/92	< 0.01	0.03			< 0.01	< 0.01	0.01		0.02		< 0.01	< 0.05	0.05	2.35		< 0.01		< 0.01	0.05	0.03	< 0.01
988s	12/1/91	0.52	0.04	bdl	bdl	0.02	bdl	0.19	bdl	0.01	bdl	bdl	0.19	0.02	2.20	bdl	0.01	bdl	bdl	0.94	0.06	1.81
988s	8/28/92	< 0.01	0.05	0.10		< 0.01	< 0.01	0.01	< 0.10	0.01		< 0.01	< 0.05	< 0.05	4.50	0.57	< 0.01	0.03	< 0.01	0.24	0.01	0.02
988s	9/18/92	< 0.01	0.05			0.01	< 0.01	0.04		0.02		< 0.01	< 0.05	< 0.05	4.70		< 0.01		< 0.01	0.18	0.02	0.45
988s	10/5/92	< 0.01	0.03			< 0.01	< 0.01	0.04		0.06		< 0.01	< 0.05	< 0.05	3.84		< 0.01		< 0.01	0.17	0.06	0.11
988s	12/17/92	0.01	0.03	0.04	< 0.01	< 0.01	< 0.01	< 0.10	< 0.10	0.02	< 0.10	< 0.01	< 0.10	0.09	2.60	0.35	< 0.01	< 0.01	< 0.01	0.29	0.03	0.37
9B10s	8/28/92	0.03	0.01	0.03		< 0.01	< 0.01	0.21	< 0.10	0.04		< 0.01	< 0.05	< 0.05	2.60	0.04	< 0.01	< 0.01	< 0.01	1.72	0.43	0.30
BFP	1/13/92	0.11	0.07	0.02	bdl	0.02	bdl	0.05	bdl	0.05	0.02	0.01	0.53	0.03	6.00	0.09	0.01	bdl	bdl	0.45	0.06	1.09
DB10	7/2/91	0.08	0.06	bdl	bdl	< 0.01	bdl	0.36	bdl	0.07	bdl	bdl	0.72	0.05	3.20	bdl	bdl	bdl	bdl	0.51	0.07	0.13
DB10	7/16/91	0.05	0.04	bdl	bdl	0.01	bdl	0.46	bdl	0.08	bdl	0.01	0.43	0.01	3.00	bdl	bdl	bdl	bdl	0.66	0.08	0.08
DB10	7/30/91	0.10	bdl	bdl	bdl	bdl	0.01	0.30	bdl	0.06	bdl	bdl	0.05	0.02	2.90	bdl	0.01	bdl	0.01	0.55	0.07	0.17
DB10	8/12/91	0.06	0.05	bdl	bdl	0.02	bdl	0.50	bdl	0.07	bdl	0.01	0.54	0.05	3.00	bdl	bdl	bdl	0.01	0.74	0.07	0.10
DB10	8/28/91	0.03	bdl	0.03	bdl	bdl	bdl	0.18	bdl	0.09	0.01	bdl	0.44	bdl	3.00	0.07	bdl	bdl	bdl	0.38	0.10	0.07
DB10	9/10/91	0.14	0.01	bdl	bdl	bdl	bdl	0.29	bdl	0.14	bdl	0.01	0.13	0.06	3.10	bdl	0.03	bdl	0.01	0.22	0.15	0.16
DB10	9/22/91	0.09	0.10	bdl	bdl	0.04	0.02	0.32	bdl	0.03	bdl	0.03	1.04	0.10	2.50	bdl	bdl	bdl	0.04	0.47	0.03	0.07
DB10	10/6/91	0.12	0.01	bdl	bdl	0.01	bdl	0.34	bdl	0.02	bdl	bdl	bdl	0.05	2.80	bdl	0.04	bdl	0.02	0.41	0.02	0.09
DB10	10/19/91	0.06	0.05	0.03	bdl	0.02	bdl	0.35	0.01	0.03	0.01	0.01	0.52	0.05	2.60	0.09	bdl	0.01	0.02	0.48	0.04	0.07
DB10	11/2/91	0.10	0.01	bdl	bdl	bdl	< 0.03	0.23	bdl	0.03	bdl	bdl	< 0.01	0.04	3.20	bdl	bdl	bdl	< 0.01	0.31	0.02	0.07
DB10	11/17/91	0.05	0.04	bdl	bdl	0.02	bdl	0.29	bdl	0.04	bdl	0.01	0.35	0.07	2.90	bdl	bdl	bdl	bdl	0.39	0.04	0.05
DB10	12/17/91	0.10	0.01	0.03	bdl	0.03	0.01	0.14	bdl	0.03	bdl	0.01	0.12	0.04	2.80	0.03	bdl	bdl	0.03	0.35	0.03	0.37
DB10	12/30/91	0.10	0.01	bdl	bdl	0.01	bdl	0.13	bdl	0.02	bdl	bdl	0.02	bdl	2.90	bdl	bdl	bdl	bdl	0.24	0.02	0.25
DB10	1/13/92	0.10	0.01	0.02	bdl	bdl	bdl	0.19	bdl	0.04	bdl	bdl	bdl	bdl	2.90	0.03	bdl	bdl	bdl	0.29	0.04	0.15

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DB10	1/27/92	0.09	0.01	bdl	bdl	0.01	bdl	0.13	bdl	0.02	bdl	bdl	0.08	0.02	2.60	bdl	0.01	bdl	bdl	0.22	0.02	0.19
DB10	2/10/92	0.05	0.01	bdl	bdl	bdl	bdl	0.19	bdl	0.05	bdl	bdl	bdl	0.03	2.50	bdl	bdl	bdl	bdl	0.31	0.05	0.10
DB10	2/24/92	0.05	0.02	bdl	bdl	bdl	bdl	0.13	bdl	0.03	bdl	bdl	0.18	0.03	2.60	bdl	bdl	bdl	0.02	0.29	0.04	0.15
DB10	3/9/92	0.07	bdl	bdl	bdl	bdl	bdl	0.09	bdl	0.02	bdl	bdl	bdl	0.01	2.90	bdl	0.01	bdl	bdl	0.26	0.02	0.32
DB10	3/23/92	0.10	0.01	bdl	bdl	0.01	bdl	0.12	bdl	0.02	bdl	bdl	0.10	0.01	2.80	bdl	bdl	bdl	bdl	0.25	0.02	0.25
DB10	4/5/92	0.05	0.01	bdl	bdl	bdl	bdl	0.12	bdl	0.02	bdl	bdl	0.19	0.04	20.00	bdl	bdl	bdl	bdl	0.25	0.02	0.16
DB10	4/21/92	0.17	bdl	bdl	bdl	bdl	bdl	0.20	bdl	0.04	bdl	bdl	0.01	bdl	3.13	bdl	bdl	bdl	< 0.01	2.14	0.15	0.85
DB10	5/4/92	0.04	0.01	bdl	bdl	bdl	bdl	0.18	bdl	0.04	bdl	bdl	0.16	bdl	2.55	bdl	bdl	bdl	bdl	0.37	0.04	0.12
DB10	5/18/92	0.06	bdl	bdl	bdl	bdl	bdl	0.17	< 0.20	0.02	bdl	bdl	0.02	0.01	3.48	bdl	0.01	bdl	bdl	0.36	0.02	0.22
DB10	6/1/92	0.07	bdl	bdl	bdl	bdl	bdl	0.17	bdl	0.04	bdl	bdl	bdl	bdl	3.20	bdl	bdl	bdl	bdl	0.35	0.04	0.10
DB10	6/15/92	0.03	bdl	bdl	bdl	bdl	bdl	0.14	bdl	0.05	bdl	bdl	bdl	bdl	2.63	bdl	bdl	bdl	bdl	0.39	0.06	0.15
DB10	6/29/92	0.04	bdl	0.06	bdl	bdl	bdl	0.13	< 0.07	0.05	bdl	bdl	0.02	bdl	3.44	0.04	0.01	0.02	bdl	0.47	0.06	0.09
DB10	7/13/92	< 0.01	0.02			< 0.01	< 0.01	0.42		0.06		< 0.01	< 0.05	< 0.05	4.10		< 0.01		0.02	0.61	0.06	0.04
DB10	7/27/92	0.01	0.02			< 0.01	< 0.01	0.18		0.06		< 0.01	< 0.05	< 0.06	2.90		< 0.01		0.01	1.03	0.12	0.26
DB10	8/10/92	< 0.01	< 0.01			< 0.01	< 0.01	0.38		0.04		< 0.01	< 0.06	< 0.05	3.60		< 0.01		< 0.01	0.59	0.04	0.06
DB10	8/25/92	< 0.01	0.03	0.05	< 0.01	< 0.01	< 0.01	0.41	< 0.10	0.03	< 0.01	< 0.01	< 0.05	< 0.05	3.20	0.06	< 0.01	< 0.01	0.03	0.54	0.03	< 0.01
DB10	9/8/92	< 0.01	< 0.01			< 0.01	< 0.01	0.38		0.04		< 0.01	< 0.05	< 0.05	3.60		< 0.01		0.01	0.57	0.06	< 0.01
DB10	9/21/92	< 0.01	< 0.01			< 0.01	0.01	0.50		0.04		< 0.01	< 0.05	< 0.06	3.42		< 0.01		0.01	0.82	0.05	0.03
DB10	10/19/92	< 0.01	< 0.01	0.04	< 0.01	< 0.01	< 0.01	0.25	< 0.10	0.03	< 0.01	< 0.01	0.06	< 0.05	3.19	0.06	< 0.01	0.02	< 0.01	0.51	0.05	< 0.01
DB10	11/3/92	< 0.01	0.01			< 0.01	< 0.01	0.40		0.02		< 0.01	0.06	< 0.05	3.70		< 0.01		< 0.01	0.50	0.02	< 0.01
DB10	11/13/92	< 0.01	0.01			< 0.01	< 0.01	0.22		0.03		< 0.01	< 0.05	< 0.05	3.14		< 0.01		< 0.01	0.34	0.03	0.04
DB10	12/1/92	< 0.01	< 0.01			< 0.01	< 0.01	0.18		0.04		< 0.01	< 0.10	< 0.05	3.10		< 0.01		0.02	0.28	0.04	< 0.01
DB10	12/14/92	0.02	< 0.01			< 0.01	< 0.01	0.16		0.03		< 0.01	< 0.10	< 0.05	3.30		< 0.01		< 0.01	0.25	0.03	0.02
DB10s	11/22/91	0.16	0.05	bdl	bdl	0.03	bdl	0.29	bdl	0.07	bdl	0.01	0.33	0.08	2.40	bdl	0.01	bdl	0.01	1.01	0.14	0.90
DB10s	12/1/91	0.22	0.01	bdl	bdl	bdl	bdl	0.17	bdl	0.03	bdl	bdl	0.09	0.01	2.20	bdl	0.01	bdl	bdl	0.69	0.08	0.90
DB10s	12/2/91	0.35	0.01	bdl	bdl	0.04	0.05	0.31	bdl	0.04	bdl	bdl	0.02	0.05	2.20	bdl	0.01	bdl	0.01	2.13	0.13	2.50
DB10s	9/18/92	0.03	0.01			< 0.01	< 0.01	0.29		0.03		< 0.01	< 0.05	< 0.05	2.70		< 0.01		0.01	1.23	0.03	0.38
DB10s	10/5/92	< 0.01	< 0.01			< 0.01	< 0.01	0.21		0.05		< 0.01	< 0.05	< 0.05	2.93		< 0.01		< 0.01	0.57	0.05	0.30
DB10s	12/17/92	0.14	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.18	< 0.10	0.06	< 0.10	< 0.01	< 0.10	< 0.05	2.70	0.03	< 0.01	< 0.01	< 0.01	1.40	0.12	2.02
DB5	7/2/91	0.03	0.01	bdl	bdl	0.01	bdl	0.50	bdl	0.11	bdl	bdl	0.15	0.07	3.70	bdl	bdl	bdl	< 0.01	1.31	0.11	0.24
DB5	7/16/91	0.04	0.02	bdl	bdl	0.01	bdl	0.57	bdl	0.15	bdl	bdl	0.12	0.01	3.40	bdl	0.01	bdl	bdl	1.01	0.15	0.08
DB5	7/30/91	0.04	0.81	bdl	bdl	bdl	bdl	0.66	bdl	0.14	bdl	bdl	< 0.01	0.01	3.10	bdl	bdl	bdl	0.01	1.56	0.16	0.13
DB5	8/12/91	0.05	0.01	bdl	bdl	0.02	0.02	0.81	bdl	0.12	bdl	0.01	0.05	0.01	3.40	bdl	bdl	bdl	0.01	1.23	0.15	0.12
DB5	8/28/91	0.03	bdl	0.04	bdl	0.01	bdl	0.55	bdl	0.88	0.01	bdl	0.26	0.05	3.00	0.06	< 0.01	bdl	bdl	1.14	0.93	0.06
DB5	9/22/91	0.04	0.03	bdl	bdl	< 0.01	0.01	2.80	bdl	0.37	bdl	bdl	0.42	0.05	2.30	bdl	bdl	bdl	0.01	3.30	0.42	0.05
DB5	10/6/91	0.08	bdl	bdl	bdl	< 0.01	bdl	1.14	bdl	0.09	bdl	bdl	0.03	0.01	2.60	bdl	< 0.01	bdl	0.03	1.43	0.12	0.12

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DB5	10/20/91	0.04	0.02	0.03	bdl	0.02	0.04	0.49	0.02	0.05	bdl	0.01	0.12	0.03	3.20	0.06	0.01	bdl	bdl	0.76	0.07	0.09
DB5	11/2/91	0.06	0.02	bdl	bdl	bdl	< 0.02	2.38	bdl	0.54	bdl	bdl	0.38	0.01	3.70	bdl	bdl	bdl	< 0.01	3.36	0.61	0.08
DB5	11/17/91	0.03	0.01	bdl	bdl	0.01	0.01	0.62	bdl	0.04	bdl	bdl	0.13	0.04	3.30	bdl	bdl	bdl	bdl	0.77	0.04	0.04
DB5	12/16/91	0.13	0.01	0.02	bdl	0.02	0.01	0.21	bdl	0.04	bdl	0.01	0.09	0.03	3.20	0.02	0.01	bdl	0.06	0.51	0.04	0.59
DB5	12/30/91	0.15	0.01	bdl	bdl	0.02	bdl	0.21	bdl	0.03	bdl	bdl	0.04	0.04	3.40	bdl	0.01	bdl	bdl	0.41	0.03	0.38
DB5	1/13/92	0.10	0.01	0.02	bdl	bdl	bdl	0.24	bdl	0.05	bdl	bdl	bdl	bdl	3.40	0.02	bdl	bdl	0.01	0.51	0.05	0.31
DB5	1/27/92	0.12	0.01	bdl	bdl	0.02	0.04	0.21	bdl	0.03	bdl	bdl	0.03	0.06	3.10	bdl	0.01	bdl	0.01	0.32	0.03	0.27
DB5	2/10/92	0.07	bdl	bdl	bdl	bdl	bdl	0.22	bdl	0.05	bdl	bdl	bdl	0.02	3.10	bdl	bdl	bdl	bdl	0.36	0.05	0.19
DB5	2/24/92	0.08	bdl	bdl	bdl	bdl	bdl	0.16	bdl	0.04	bdl	bdl	0.07	bdl	3.20	bdl	bdl	bdl	bdl	0.31	0.04	0.23
DB5	3/9/92	0.09	bdl	bdl	bdl	0.01	bdl	0.16	bdl	0.03	bdl	0.01	0.03	bdl	3.30	bdl	0.02	bdl	bdl	0.33	0.03	0.43
DB5	3/23/92	0.14	0.01	bdl	bdl	bdl	bdl	0.17	bdl	0.02	bdl	bdl	0.13	0.01	3.30	bdl	0.01	bdl	0.01	0.35	0.03	0.37
DB5	4/5/92	0.07	0.01	bdl	bdl	bdl	bdl	0.16	bdl	0.03	bdl	bdl	0.08	bdl	20.00	bdl	bdl	bdl	bdl	0.31	0.03	0.19
DB5	4/21/92	0.30	0.01	bdl	bdl	bdl	bdl	0.34	bdl	0.09	bdl	bdl	0.02	0.01	3.59	bdl	0.01	bdl	0.02	3.57	0.19	1.71
DB5	5/4/92	0.06	bdl	bdl	bdl	bdl	bdl	0.20	bdl	0.05	bdl	bdl	0.03	bdl	3.32	bdl	0.02	bdl	bdl	0.51	0.06	0.27
DB5	5/18/92	0.11	bdl	bdl	bdl	bdl	bdl	21.00	< 0.20	0.04	bdl	bdl	bdl	bdl	3.84	bdl	0.01	bdl	bdl	0.46	0.05	0.35
DB5	6/1/92	0.09	bdl	bdl	bdl	bdl	bdl	0.24	bdl	0.06	bdl	bdl	bdl	0.01	3.85	bdl	0.01	bdl	bdl	0.47	0.06	0.11
DB5	6/15/92	0.08	bdl	bdl	bdl	bdl	bdl	0.21	bdl	0.05	bdl	bdl	bdl	bdl	3.89	bdl	bdl	bdl	bdl	0.42	0.05	0.23
DB5	6/29/92	0.06	bdl	0.06	bdl	bdl	bdl	0.23	< 0.07	0.07	bdl	bdl	0.02	bdl	4.01	0.02	bdl	0.01	bdl	0.56	0.07	0.18
DB5	7/13/92	0.01	< 0.01			< 0.01	< 0.01	0.36		0.08		< 0.01	< 0.05	< 0.05	4.90		< 0.01		0.01	0.96	0.08	0.06
DB5	7/27/92	< 0.01	< 0.01			< 0.01	0.01	0.53	bdl	0.14		< 0.01	< 0.05	< 0.06	4.00		< 0.01		0.01	1.19	0.16	0.07
DB5	8/10/92	< 0.01	< 0.01			< 0.01	< 0.01	0.69		0.13		< 0.01	< 0.06	< 0.06	4.20		< 0.01		0.01	1.41	0.14	0.07
DB5	8/25/92	< 0.01	0.01	0.04	< 0.01	< 0.01	< 0.01	0.93	< 0.10	0.11	< 0.01	< 0.01	< 0.05	< 0.05	3.90	0.03	< 0.01	< 0.01	0.04	1.61	bdl	0.02
DB5	9/8/92	< 0.01	< 0.01			< 0.01	< 0.01	1.19		0.08		< 0.01	< 0.05	< 0.05	4.30		< 0.01		< 0.01	1.86	0.09	< 0.01
DB5	9/21/92	0.04	< 0.01			< 0.01	< 0.01	0.81		0.08		< 0.01	< 0.05	< 0.05	4.20		< 0.01		0.01	1.28	0.09	0.10
DB5	10/19/92	< 0.01	< 0.01	0.03	< 0.01	< 0.01	< 0.01	0.19	< 0.10	0.06	< 0.01	< 0.01	0.08	< 0.05	4.02	0.04	< 0.01	0.02	< 0.01	0.97	0.06	< 0.01
DB5	11/3/92	0.03	0.01			< 0.01	< 0.01	0.48		0.05		< 0.01	< 0.05	< 0.05	4.61		< 0.01		< 0.01	0.95	0.05	0.05
DB5	11/13/92	< 0.01	0.01			< 0.01	< 0.01	0.26		0.07		< 0.01	< 0.05	< 0.05	3.84		< 0.01		< 0.01	0.47	0.07	0.02
DB5	12/1/92	< 0.01	< 0.01			< 0.01	< 0.01	0.26		0.77		< 0.01	< 0.10	< 0.05	3.70		< 0.01		0.03	0.49	0.08	0.08
DB5	12/14/92	< 0.01	< 0.01			< 0.01	0.01	0.20		0.06		0.02	< 0.10	< 0.05	3.70		< 0.01		< 0.01	0.39	0.06	0.09
DB5s	12/2/91	0.32	0.01	bdl	bdl	bdl	bdl	0.32	bdl	0.04	bdl	bdl	0.08	0.01	2.30	bdl	0.01	bdl	bdl	2.46	0.09	2.84
DB5s	10/5/92	0.04	< 0.01			< 0.01	< 0.01	0.44		0.13		< 0.01	< 0.05	0.06	3.62		< 0.01		< 0.01	0.98	0.13	0.50
DB5s	12/17/92	0.12	< 0.01	0.01	< 0.01	< 0.01	< 0.01	0.02	< 0.10	0.07	< 0.10	< 0.01	< 0.10	< 0.05	3.00	< 0.01	< 0.01	< 0.01	< 0.01	0.78	0.10	0.36
DB6	7/2/91	0.02	0.01	bdl	bdl	bdl	bdl	0.36	bdl	0.03	bdl	bdl	0.08	0.05	3.40	bdl	bdl	bdl	bdl	0.59	0.03	0.12
DB6	7/16/91	0.02	0.01	bdl	bdl	< 0.01	bdl	0.22	bdl	0.04	bdl	< 0.01	< 0.04	0.03	3.30	bdl	bdl	bdl	bdl	0.38	0.06	0.07
DB6	7/30/91	0.03	bdl	bdl	bdl	bdl	bdl	0.29	bdl	0.04	bdl	bdl	< 0.03	0.01	3.20	bdl	bdl	bdl	bdl	1.56	0.16	0.13
DB6	8/12/91	0.03	0.01	bdl	bdl	bdl	bdl	0.32	bdl	0.04	bdl	bdl	0.08	0.07	3.20	bdl	bdl	bdl	bdl	0.42	0.05	0.07

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DB6	8/28/91	0.01	bdl	0.03	bdl	bdl	bdl	0.20	bdl	0.06	bdl	bdl	bdl	bdl	3.20	0.04	bdl	bdl	bdl	0.41	0.08	0.04
DB6	9/22/91	0.02	0.02	bdl	bdl	bdl	bdl	0.40	bdl	0.08	bdl	0.01	0.22	0.02	2.60	bdl	bdl	bdl	0.01	0.36	0.06	0.04
DB6	10/6/91	0.04	bdl	bdl	bdl	< 0.01	bdl	0.35	bdl	0.02	bdl	bdl	0.03	bdl	2.90	bdl	< 0.02	bdl	0.02	0.61	0.06	0.06
DB6	10/20/91	0.02	0.01	0.02	bdl	0.01	< 0.04	0.12	bdl	0.02	bdl	bdl	0.13	0.02	2.90	0.05	bdl	bdl	< 0.04	0.22	0.03	0.04
DB6	11/2/91	0.03	0.01	bdl	bdl	< 0.01	< 0.02	0.18	bdl	0.03	bdl	bdl	< 0.07	bdl	3.30	bdl	bdl	bdl	< 0.01	0.28	0.04	0.04
DB6	11/17/91	0.02	0.01	bdl	bdl	bdl	bdl	0.11	bdl	0.01	bdl	bdl	0.07	0.02	3.20	bdl	bdl	bdl	bdl	0.37	0.16	0.08
DB6	12/16/91	0.08	0.01	0.02	bdl	0.01	bdl	0.12	bdl	0.02	bdl	bdl	0.07	0.01	3.00	0.02	bdl	bdl	0.01	0.42	0.03	0.55
DB6	12/30/91	0.10	bdl	bdl	bdl	bdl	bdl	0.13	bdl	0.02	bdl	bdl	0.04	0.05	3.20	bdl	0.01	bdl	bdl	0.30	0.02	0.37
DB6s	12/2/91	0.29	0.01	bdl	bdl	bdl	bdl	0.31	bdl	0.04	bdl	bdl	0.09	bdl	2.20	bdl	0.01	bdl	bdl	2.27	0.16	2.29
DB7	7/2/91	0.02	0.01	bdl	bdl	bdl	bdl	0.34	bdl	0.03	bdl	bdl	0.24	0.01	3.50	bdl	bdl	bdl	bdl	0.60	0.05	0.10
DB7	7/16/91	0.02	bdl	bdl	bdl	bdl	bdl	0.38	bdl	0.06	bdl	bdl	0.11	0.03	3.20	bdl	bdl	bdl	bdl	0.63	0.09	0.06
DB7	7/30/91	0.03	bdl	bdl	bdl	bdl	bdl	0.35	bdl	0.05	bdl	bdl	0.03	0.01	3.20	bdl	bdl	bdl	bdl	0.76	0.09	0.07
DB7	8/12/91	0.02	0.01	bdl	bdl	0.01	bdl	0.34	bdl	0.04	bdl	bdl	0.11	0.04	3.10	bdl	bdl	bdl	bdl	0.63	0.08	0.08
DB7	8/28/91	0.01	< 0.06	0.03	bdl	bdl	bdl	0.44	bdl	0.09	bdl	bdl	0.16	bdl	3.20	0.04	bdl	bdl	bdl	0.82	0.12	0.07
DB7	9/22/91	0.02	2.60	bdl	bdl	bdl	bdl	bdl	0.01	0.11	bdl	bdl	0.43	0.02	bdl	bdl	bdl	bdl	0.33	0.55	0.08	0.04
DB7	10/6/91	0.05	bdl	bdl	bdl	< 0.01	bdl	0.29	bdl	0.04	bdl	bdl	< 0.02	< 0.02	3.00	bdl	< 0.03	bdl	0.02	0.73	0.15	0.08
DB7	10/20/91	0.03	0.01	0.02	bdl	bdl	< 0.04	0.17	bdl	0.02	bdl	bdl	0.11	0.04	2.90	0.05	bdl	bdl	< 0.04	0.26	0.03	0.04
DB7	11/2/91	0.03	0.01	bdl	bdl	bdl	< 0.03	0.40	bdl	0.05	bdl	bdl	< 0.04	bdl	3.40	bdl	bdl	bdl	< 0.01	0.91	0.34	0.09
DB7	11/17/91	0.02	0.01	bdl	bdl	bdl	bdl	0.18	bdl	0.02	bdl	bdl	0.05	0.03	3.30	bdl	bdl	bdl	bdl	0.30	0.06	0.05
DB7	12/17/91	0.08	bdl	0.02	bdl	bdl	bdl	0.13	bdl	0.02	bdl	bdl	0.06	0.01	3.00	0.01	bdl	bdl	0.01	0.35	0.03	0.45
DB7	12/30/91	0.13	0.01	bdl	bdl	bdl	bdl	0.13	bdl	0.02	bdl	bdl	bdl	bdl	3.10	bdl	bdl	bdl	bdl	0.28	0.02	0.34
DB7s	12/2/91	0.32	0.01	bdl	bdl	bdl	bdl	0.26	bdl	0.04	bdl	bdl	0.04	0.02	2.10	bdl	0.04	bdl	bdl	1.78	0.16	2.31
DB8	7/2/91	0.03	0.01	bdl	bdl	bdl	bdl	0.21	bdl	0.02	bdl	bdl	0.13	0.04	3.30	bdl	bdl	bdl	bdl	0.42	0.04	0.09
DB8	7/16/91	0.02	0.01	bdl	bdl	bdl	bdl	0.15	bdl	0.04	bdl	bdl	0.24	< 0.01	3.10	bdl	bdl	bdl	bdl	0.22	0.04	0.05
DB8	7/30/91	0.04	bdl	bdl	bdl	bdl	bdl	0.22	bdl	0.03	bdl	bdl	0.02	0.01	3.00	bdl	bdl	bdl	bdl	0.32	0.04	0.07
DB8	8/12/91	0.03	0.01	bdl	bdl	bdl	bdl	0.23	bdl	0.03	bdl	bdl	0.16	0.02	3.00	bdl	bdl	bdl	bdl	0.31	0.04	0.06
DB8	8/28/91	0.02	bdl	0.03	bdl	0.01	bdl	0.74	bdl	0.18	0.01	0.01	0.50	0.07	3.20	0.04	bdl	bdl	< 0.01	1.20	0.18	0.06
DB8	9/22/91	0.02	0.02	bdl	bdl	bdl	bdl	0.33	bdl	0.07	bdl	bdl	0.39	bdl	2.60	bdl	bdl	bdl	0.01	0.43	0.07	0.04
DB8	10/6/91	0.04	bdl	bdl	bdl	< 0.01	bdl	0.34	bdl	0.05	bdl	bdl	0.01	< 0.01	2.90	bdl	< 0.02	bdl	0.02	0.45	0.06	0.05
DB8	10/20/91	0.02	0.02	0.02	bdl	0.02	0.01	0.31	bdl	0.04	bdl	0.01	0.17	0.05	2.80	0.05	bdl	bdl	0.02	0.31	0.03	0.04
DB8	11/2/91	0.03	0.01	bdl	bdl	bdl	< 0.03	0.31	bdl	0.05	bdl	bdl	< 0.02	bdl	3.30	bdl	bdl	bdl	< 0.01	0.54	0.07	0.04
DB8	11/17/91	0.02	0.01	bdl	bdl	0.01	bdl	0.23	bdl	0.03	bdl	bdl	0.12	0.02	3.20	bdl	bdl	bdl	bdl	0.30	0.03	0.03
DB8	12/17/91	0.09	0.01	0.01	bdl	bdl	bdl	0.13	bdl	0.02	bdl	bdl	< 0.02	0.01	2.90	0.02	bdl	bdl	0.01	0.33	0.03	0.42
DB8	12/30/91	0.09	0.01	bdl	bdl	0.02	bdl	0.12	bdl	0.02	bdl	bdl	bdl	0.04	3.10	bdl	bdl	bdl	bdl	0.25	0.02	0.31
DB8s	12/1/91	0.22	0.01	bdl	bdl	bdl	bdl	0.18	bdl	0.03	bdl	bdl	0.01	0.01	2.00	bdl	0.01	bdl	bdl	0.89	0.11	0.97
DB8s	12/2/91	0.28	0.01	bdl	bdl	bdl	bdl	0.27	bdl	0.04	bdl	bdl	0.03	0.01	2.10	bdl	0.01	bdl	bdl	2.14	0.13	2.42

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
DR9	7/2/91	0.05	0.02	bdl	bdl	< 0.02	bdl	0.14	bdl	0.07	bdl	< 0.01	0.26	0.05	2.90	bdl	bdl	bdl	bdl	0.26	0.08	0.16
DR9	7/15/91	0.03	0.01	bdl	bdl	bdl	bdl	0.15	bdl	0.07	bdl	bdl	0.04	< 0.02	2.80	bdl	bdl	bdl	bdl	0.27	0.08	0.08
DR9	7/29/91	0.08	bdl	bdl	bdl	bdl	bdl	0.17	bdl	0.12	bdl	bdl	< 0.07	0.01	3.10	bdl	0.01	bdl	bdl	0.30	0.13	0.07
DR9	8/12/91	0.04	0.02	bdl	bdl	bdl	bdl	0.23	bdl	0.14	bdl	bdl	0.27	0.04	2.90	bdl	bdl	bdl	bdl	0.39	0.14	0.11
DR9	8/28/91	0.06	0.03	0.05	bdl	0.01	bdl	bdl	bdl	0.06	0.02	0.01	0.32	0.06	3.10	0.10	0.01	0.01	bdl	0.43	0.05	0.12
DR9	9/11/91	0.07	0.01	bdl	bdl	bdl	bdl	0.25	bdl	0.13	bdl	bdl	0.04	0.03	2.90	bdl	0.02	bdl	0.01	0.48	0.16	0.07
DR9	9/22/91	0.04	0.03	bdl	bdl	bdl	bdl	0.20	bdl	0.07	bdl	bdl	0.48	0.07	2.40	bdl	bdl	bdl	0.01	0.42	0.17	0.09
DR9	10/6/91	0.07	bdl	bdl	bdl	bdl	0.01	0.28	bdl	0.12	bdl	bdl	< 0.06	0.02	2.70	bdl	bdl	bdl	0.01	0.58	0.27	0.12
DR9	10/20/91	0.04	0.02	0.03	0.01	0.01	0.01	0.12	bdl	0.09	bdl	bdl	0.19	0.05	2.60	0.08	bdl	bdl	< 0.01	0.25	0.09	0.09
DR9	11/2/91	0.04	bdl	bdl	bdl	< 0.01	< 0.03	0.11	bdl	0.13	bdl	bdl	< 0.06	bdl	2.80	bdl	bdl	bdl	< 0.01	0.65	0.35	0.12
DR9	11/17/91	0.04	0.02	bdl	bdl	0.01	bdl	0.20	bdl	0.29	bdl	bdl	0.22	0.03	3.00	bdl	bdl	bdl	< 0.01	0.73	0.30	0.23
DR9	12/17/91	0.08	0.01	0.02	bdl	bdl	bdl	0.10	bdl	0.02	bdl	bdl	0.14	0.03	2.20	0.02	bdl	bdl	0.02	0.18	0.02	0.22
DR9	12/30/91	0.06	0.01	bdl	bdl	0.01	bdl	0.08	bdl	0.01	bdl	bdl	0.05	0.02	2.20	bdl	bdl	bdl	bdl	0.15	0.02	0.17
DR9	1/13/92	0.08	bdl	0.01	bdl	bdl	bdl	0.12	bdl	0.03	bdl	bdl	0.04	bdl	2.30	0.03	bdl	bdl	0.01	0.14	0.03	0.13
DR9	1/27/92	0.08	0.01	bdl	bdl	bdl	bdl	0.09	bdl	0.02	bdl	bdl	0.02	0.02	2.10	bdl	bdl	bdl	bdl	0.18	0.02	0.17
DR9	2/10/92	0.07	bdl	bdl	bdl	bdl	bdl	0.18	bdl	0.06	bdl	0.01	0.40	0.04	2.30	bdl	bdl	bdl	bdl	0.24	0.06	0.12
DR9	2/24/92	0.06	0.01	bdl	bdl	bdl	bdl	0.12	bdl	0.03	bdl	bdl	0.18	bdl	2.30	bdl	bdl	bdl	bdl	0.13	0.04	0.14
DR9	3/9/92	0.07	bdl	bdl	bdl	bdl	bdl	0.08	bdl	0.01	bdl	bdl	0.01	0.02	2.30	bdl	0.01	bdl	0.01	0.28	0.03	0.36
DR9	3/23/92	0.12	0.01	bdl	bdl	bdl	bdl	0.11	bdl	0.02	bdl	bdl	0.09	0.04	2.30	bdl	bdl	bdl	0.01	0.15	0.02	0.19
DR9	4/5/92	0.05	0.01	bdl	bdl	bdl	bdl	0.08	bdl	0.02	bdl	bdl	0.11	0.01	20.00	bdl	bdl	bdl	bdl	0.17	0.02	0.13
DR9	4/21/92	0.11	bdl	bdl	bdl	0.01	bdl	0.11	bdl	0.02	bdl	bdl	bdl	0.02	2.51	bdl	0.01	bdl	0.02	0.58	0.04	0.78
DR9	5/4/92	0.06	bdl	bdl	bdl	bdl	bdl	0.13	bdl	0.05	bdl	bdl	bdl	bdl	2.63	bdl	bdl	bdl	bdl	0.22	0.05	0.19
DR9	5/18/92	0.08	bdl	bdl	bdl	bdl	bdl	0.11	< 0.20	0.03	bdl	bdl	bdl	0.01	2.79	bdl	bdl	bdl	bdl	0.20	0.04	0.22
DR9	6/1/92	0.08	bdl	bdl	bdl	bdl	bdl	0.14	bdl	0.04	bdl	bdl	0.02	bdl	2.77	bdl	0.01	bdl	bdl	0.20	0.04	0.13
DR9	6/15/92	0.07	bdl	bdl	bdl	bdl	bdl	0.11	bdl	0.04	bdl	bdl	bdl	bdl	2.86	bdl	bdl	bdl	bdl	0.18	0.04	0.12
DR9	6/29/92	0.06	bdl	0.06	bdl	bdl	bdl	0.11	< 0.07	0.05	bdl	bdl	bdl	bdl	2.98	0.04	0.01	0.01	bdl	0.19	0.05	0.14
DR9	7/13/92	0.01	< 0.01			< 0.01	< 0.01	0.15		0.11		< 0.01	< 0.05	< 0.05	3.40		< 0.01		0.02	0.42	0.15	0.11
DR9	7/27/92	< 0.01	< 0.01			< 0.01	< 0.01	0.08		0.08		< 0.01	< 0.05	< 0.06	3.40		< 0.01		0.01	0.23	0.10	0.02
DR9	8/10/92	< 0.01	< 0.01			< 0.01	< 0.01	0.19	bdl	0.14		< 0.01	< 0.06	< 0.05	3.30		< 0.01		0.01	0.54	0.18	0.07
DR9	11/13/92	< 0.01	0.01			< 0.01	< 0.01	0.08		0.04		< 0.01	< 0.05	< 0.05	2.61		< 0.01		< 0.01	0.20	0.05	0.03
DR9s	12/1/91	0.17	0.01	bdl	bdl	0.04	0.02	0.13	bdl	0.01	bdl	0.01	0.07	0.04	1.80	bdl	0.01	bdl	bdl	0.39	0.02	0.62
DR9s	12/2/91	0.21	0.01	bdl	bdl	0.01	bdl	0.14	bdl	0.01	bdl	bdl	0.10	0.02	1.80	bdl	0.01	bdl	bdl	0.42	0.03	0.72
DR9s	10/5/92	0.01	< 0.01			< 0.01	< 0.01	0.14		0.04		0.01	< 0.05	< 0.05	2.73		< 0.01		< 0.01	0.30	0.04	0.33
GC3	7/1/91	0.05	0.03	bdl	bdl	bdl	bdl	0.03	bdl	bdl	bdl	bdl	0.34	0.05	2.50	bdl	bdl	bdl	< 0.01	0.04	bdl	0.08
GC3	7/15/91	0.05	0.02	bdl	bdl	bdl	bdl	0.02	bdl	0.01	bdl	bdl	0.25	0.06	2.60	bdl	bdl	bdl	bdl	0.05	0.01	0.07
GC3	7/29/91	0.12	bdl	bdl	bdl	bdl	0.01	0.03	bdl	bdl	bdl	bdl	0.28	0.02	2.70	bdl	0.01	bdl	0.01	0.13	0.02	0.18

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
GC3	8/12/91	0.05	0.04	bdl	bdl	bdl	bdl	0.02	bdl	0.01	bdl	0.01	0.55	0.03	2.70	bdl	bdl	bdl	bdl	0.04	0.01	0.07
GC3	8/29/91	0.06	0.01	0.02	bdl	0.01	bdl	0.01	bdl	0.01	0.02	0.01	0.75	0.02	2.80	0.16	bdl	0.01	bdl	0.04	0.01	0.11
GC3	9/10/91	0.13	0.01	bdl	bdl	bdl	bdl	0.06	bdl	0.01	bdl	bdl	bdl	0.04	2.70	bdl	0.03	bdl	0.01	0.02	0.01	0.08
GC3	9/22/91	0.08	0.08	bdl	bdl	0.01	0.01	0.04	bdl	0.01	bdl	0.02	0.86	0.07	2.40	bdl	bdl	bdl	0.02	0.04	0.01	0.06
GC3	10/5/91	0.09	bdl	bdl	bdl	bdl	bdl	0.02	bdl	bdl	bdl	bdl	< 0.03	0.03	2.80	bdl	< 0.01	bdl	0.01	0.05	0.01	0.08
GC3	10/20/91	0.07	0.05	0.02	0.01	0.01	< 0.03	0.03	bdl	0.01	0.01	bdl	0.51	0.02	2.60	0.19	bdl	bdl	< 0.03	0.05	0.01	0.08
GC3	11/2/91	0.08	bdl	bdl	bdl	< 0.01	< 0.03	0.01	bdl	bdl	bdl	bdl	bdl	0.02	2.80	bdl	bdl	bdl	< 0.01	0.05	0.01	0.07
GC3	11/17/91	0.05	0.03	bdl	bdl	0.01	bdl	0.02	bdl	0.01	bdl	0.01	0.32	0.03	2.80	bdl	bdl	bdl	bdl	0.04	0.01	0.06
GC3	12/16/91	0.06	0.02	0.01	bdl	0.01	0.01	0.03	bdl	0.01	bdl	0.01	0.17	0.03	2.30	0.07	bdl	bdl	0.03	0.05	0.02	0.06
GC3	12/30/91	0.04	0.02	bdl	bdl	0.01	bdl	0.02	bdl	0.01	bdl	bdl	0.11	0.01	2.40	bdl	bdl	bdl	bdl	0.05	0.01	0.08
GC3	1/13/92	0.09	0.01	0.01	bdl	bdl	bdl	bdl	bdl	bdl	0.01	bdl	bdl	bdl	2.50	0.08	bdl	bdl	bdl	0.08	0.02	0.10
GC3	1/27/92	0.06	0.02	bdl	bdl	bdl	bdl	0.02	bdl	bdl	bdl	bdl	0.15	0.01	2.20	bdl	bdl	bdl	bdl	0.05	0.01	0.10
GC3	2/10/92	0.06	bdl	bdl	bdl	bdl	bdl	0.12	bdl	bdl	bdl	bdl	0.01	0.07	2.30	bdl	0.04	bdl	bdl	0.07	0.01	0.09
GC3	2/24/92	0.05	0.03	bdl	bdl	bdl	bdl	0.03	bdl	bdl	bdl	bdl	0.27	0.03	2.30	bdl	bdl	bdl	0.01	0.05	0.02	0.08
GC3	3/9/92	0.06	0.01	bdl	bdl	0.01	bdl	0.02	bdl	bdl	bdl	bdl	bdl	bdl	2.30	bdl	0.01	bdl	bdl	0.05	bdl	0.06
GC3	3/23/92	0.05	0.03	bdl	bdl	0.01	bdl	0.03	bdl	bdl	bdl	0.01	0.26	0.03	2.40	bdl	bdl	bdl	0.02	0.05	bdl	0.13
GC3	4/6/92	0.06	0.03	bdl	bdl	0.01	bdl	0.04	bdl	bdl	bdl	0.01	0.27	0.01	20.00	bdl	bdl	bdl	0.02	0.04	bdl	0.08
GC3	4/20/92	0.04	0.01	bdl	bdl	bdl	bdl	0.02	bdl	bdl	bdl	bdl	bdl	0.03	2.46	bdl	0.01	bdl	0.05	0.10	0.01	0.11
GC3	5/4/92	0.04	bdl	bdl	bdl	bdl	bdl	0.01	bdl	bdl	bdl	bdl	0.06	bdl	2.51	bdl	bdl	bdl	bdl	0.05	bdl	0.07
GC3	5/18/92	0.03	bdl	bdl	bdl	bdl	bdl	0.01	< 0.20	bdl	bdl	bdl	bdl	bdl	2.48	bdl	bdl	bdl	bdl	0.05	bdl	0.06
GC3	6/1/92	0.08	bdl	bdl	bdl	bdl	bdl	0.02	bdl	bdl	bdl	bdl	bdl	0.02	2.46	bdl	0.01	bdl	0.01	0.08	0.01	0.87
GC3	6/15/92	0.07	bdl	bdl	bdl	bdl	bdl	0.03	bdl	bdl	bdl	bdl	bdl	bdl	2.39	bdl	bdl	bdl	bdl	0.05	0.01	0.12
GC3	6/29/92	0.06	bdl	0.04	bdl	bdl	bdl	0.01	< 0.07	bdl	bdl	bdl	0.03	bdl	2.54	0.09	bdl	0.01	bdl	0.03	0.02	0.08
GC3	7/13/92	0.03	< 0.01			< 0.01	< 0.01	0.02		< 0.01		< 0.01	< 0.05	< 0.05	2.90		< 0.01		0.01	0.02	< 0.01	0.49
GC3	7/27/92	< 0.01	< 0.01			< 0.01	< 0.01	0.14		< 0.01		< 0.01	0.07	< 0.06	2.90		< 0.01		0.01	0.06	0.01	0.02
GC3	8/10/92	< 0.01	< 0.01			< 0.01	< 0.01	0.01		< 0.01		< 0.01	< 0.05	< 0.05	2.90		< 0.01		0.01	0.02	< 0.01	< 0.01
GC3	8/25/92	< 0.01	< 0.01	0.03	< 0.01	< 0.01	< 0.01	0.01	< 0.10	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	3.00	0.12	< 0.01	< 0.01	0.04	0.03	< 0.01	< 0.01
GC3	9/8/92	< 0.01	< 0.01			< 0.01	< 0.01	< 0.01		< 0.01		< 0.01	< 0.05	< 0.05	2.70		< 0.01		0.02	0.03	< 0.01	< 0.01
GC3	9/21/92	< 0.01	< 0.01			< 0.01	0.01	0.02		< 0.01		< 0.01	< 0.05	< 0.05	2.81		< 0.01		0.01	0.04	0.01	0.08
GC3	10/19/92	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	2.75	0.10	< 0.01	0.01	< 0.01	0.02	< 0.01	< 0.01
GC3	11/3/92	< 0.01	< 0.01			< 0.01	< 0.01	< 0.01		< 0.01		< 0.01	< 0.05	< 0.05	3.28		< 0.01		< 0.01	0.02	< 0.01	< 0.01
GC3	11/13/92	< 0.01	0.01			< 0.01	< 0.01	0.02		< 0.01		< 0.01	< 0.05	< 0.05	2.55		< 0.01		< 0.01	0.07	< 0.01	0.06
GC3	11/30/92	< 0.01	< 0.01			0.02	0.05	0.01		< 0.01		< 0.01	< 0.10	< 0.05	2.50		< 0.01		0.03	0.03	< 0.01	0.03
GC3	12/14/92	< 0.01	< 0.01			< 0.01	< 0.01	0.02		< 0.01		0.01	< 0.10	< 0.05	2.50		< 0.01		< 0.01	0.03	< 0.01	0.02
GC3s	11/22/91	0.16	0.10	bdl	bdl	0.03	bdl	0.08	bdl	0.01	bdl	0.02	0.86	0.10	3.20	bdl	0.01	bdl	0.02	0.29	0.02	0.48
GC3s	12/1/91	0.21	0.03	bdl	bdl	0.01	bdl	0.14	bdl	0.01	bdl	bdl	0.22	0.04	2.40	bdl	0.01	bdl	bdl	0.64	0.02	0.92

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
GC3s	12/2/91	0.20	0.02	bdl	bdl	0.02	bdl	0.16	bdl	0.01	bdl	bdl	0.13	0.01	2.30	bdl	0.01	bdl	bdl	0.95	0.03	1.41
GC3s	8/28/92	< 0.01	< 0.01	0.03		< 0.01	< 0.01	0.01	< 0.10	< 0.01		< 0.01	< 0.05	< 0.05	3.00	0.14	< 0.01	< 0.01	< 0.01	0.06	0.04	0.01
GC3s	9/18/92	< 0.01	0.01			0.01	< 0.01	0.06		< 0.01		< 0.01	< 0.05	< 0.05	3.20		< 0.01		0.01	0.17	< 0.01	0.11
GC3s	10/5/92	< 0.01	< 0.01			< 0.01	< 0.01	0.01		< 0.01		0.02	< 0.05	< 0.05	2.84		< 0.01		< 0.01	0.06	< 0.01	0.06
GC3s	12/17/92	0.07	< 0.01	0.01	< 0.01	< 0.01	< 0.01	0.08	< 0.10	< 0.01	< 0.10	< 0.01	< 0.10	< 0.05	2.60	0.08	< 0.01	< 0.01	< 0.01	0.56	0.02	0.75
GC4	7/1/91	0.11	0.11	bdl	bdl	bdl	bdl	0.03	bdl	0.02	bdl	0.02	0.34	0.16	2.80	bdl	bdl	bdl	bdl	0.12	0.01	0.14
GC4	7/15/91	0.10	0.08	bdl	bdl	bdl	bdl	0.06	bdl	0.04	bdl	0.01	0.75	0.10	3.30	bdl	bdl	bdl	bdl	0.18	0.05	0.20
GC4	7/29/91	0.13	0.02	bdl	bdl	bdl	bdl	0.03	bdl	0.02	bdl	bdl	bdl	0.04	2.70	bdl	0.03	bdl	bdl	0.13	0.02	0.25
GC4	8/12/91	0.11	0.11	bdl	bdl	0.01	bdl	0.06	bdl	0.04	bdl	0.02	1.16	0.11	3.50	bdl	bdl	bdl	0.02	0.19	0.04	0.23
GC4	8/29/91	0.11	0.06	0.05	0.01	0.01	bdl	0.08	bdl	0.04	0.04	0.02	1.26	0.12	3.20	0.17	0.01	0.03	bdl	0.30	0.07	0.59
GC4	9/10/91	0.41	0.02	bdl	bdl	bdl	0.01	0.23	bdl	0.08	bdl	0.01	0.03	0.05	1.10	bdl	0.02	bdl	0.02	6.43	1.48	9.10
GC4	9/22/91	0.14	0.15	bdl	bdl	0.02	0.02	0.08	bdl	0.03	bdl	0.03	1.64	0.21	2.90	bdl	bdl	bdl	0.04	0.20	0.05	0.21
GC4	10/5/91	0.14	0.02	bdl	bdl	bdl	bdl	0.03	bdl	0.02	bdl	0.01	0.03	0.06	3.00	bdl	0.03	bdl	0.01	0.16	0.03	0.20
GC4	10/20/91	0.11	0.10	0.05	0.01	0.02	< 0.03	0.08	bdl	0.02	0.02	0.01	1.01	0.13	2.70	0.20	bdl	0.01	0.01	0.16	0.03	0.17
GC4	11/2/91	0.14	0.02	bdl	bdl	< 0.01	< 0.03	0.04	bdl	0.01	bdl	0.01	bdl	0.06	3.10	bdl	bdl	bdl	< 0.01	0.17	0.03	0.16
GC4	11/17/91	0.08	0.08	bdl	bdl	0.02	bdl	0.05	bdl	0.02	bdl	0.01	0.59	0.07	2.90	bdl	0.01	bdl	bdl	0.11	0.01	0.11
GC4	12/16/91	0.10	0.06	0.03	bdl	0.01	0.01	0.08	bdl	0.05	0.01	0.01	0.43	0.08	2.60	0.15	bdl	0.01	0.03	0.13	0.01	0.06
GC4	12/30/91	0.09	0.05	bdl	bdl	0.02	bdl	0.09	bdl	0.08	bdl	bdl	0.31	0.02	2.70	bdl	bdl	bdl	bdl	0.23	0.08	0.26
GC4	1/13/92	0.17	0.01	0.04	0.01	bdl	0.01	0.04	bdl	0.06	0.03	bdl	bdl	0.02	2.70	0.15	bdl	0.02	0.01	0.19	0.07	0.23
GC4	1/27/92	0.09	0.07	bdl	bdl	bdl	bdl	0.05	bdl	0.03	bdl	0.01	0.59	0.06	2.30	bdl	bdl	bdl	0.01	0.14	0.03	0.19
GC4	2/10/92	0.12	0.01	bdl	bdl	bdl	bdl	0.04	bdl	0.03	bdl	0.01	0.01	0.10	2.60	bdl	0.02	bdl	bdl	0.09	0.03	0.14
GC4	2/24/92	0.12	0.11	bdl	bdl	bdl	bdl	0.10	bdl	0.07	bdl	0.02	0.94	0.10	2.80	bdl	bdl	bdl	0.04	0.23	0.07	0.27
GC4	3/9/92	0.12	0.01	bdl	bdl	bdl	bdl	0.03	bdl	0.06	bdl	bdl	bdl	0.01	2.50	bdl	0.02	bdl	bdl	0.16	0.06	0.20
GC4	3/23/92	0.20	0.10	bdl	bdl	0.04	bdl	0.07	bdl	0.04	bdl	0.03	0.94	0.17	2.80	bdl	0.01	bdl	0.04	0.25	0.04	0.46
GC4	4/6/92	0.10	0.10	bdl	bdl	0.01	bdl	0.06	bdl	0.02	bdl	0.12	0.81	0.07	20.00	bdl	0.01	bdl	0.04	0.20	0.03	0.20
GC4	4/20/92	0.09	0.02	bdl	bdl	0.01	bdl	0.04	bdl	0.01	bdl	0.01	0.02	0.05	2.87	bdl	0.03	bdl	0.06	0.14	0.02	0.20
GC4	5/4/92	0.08	0.01	bdl	bdl	bdl	bdl	0.04	bdl	0.01	bdl	0.01	0.11	0.03	2.65	bdl	0.05	bdl	bdl	0.15	0.02	0.19
GC4	5/18/92	0.07	0.02	bdl	bdl	bdl	bdl	0.04	< 0.20	0.02	bdl	bdl	bdl	0.03	2.97	bdl	0.02	bdl	bdl	0.20	0.03	0.26
GC4	6/1/92	0.16	0.01	bdl	bdl	bdl	bdl	0.02	bdl	0.03	bdl	bdl	bdl	0.03	2.90	bdl	0.02	bdl	bdl	0.16	0.04	0.69
GC4	6/15/92	0.19	0.02	bdl	bdl	0.01	bdl	0.03	bdl	0.02	bdl	bdl	bdl	0.04	3.13	bdl	0.04	bdl	bdl	0.15	0.02	0.30
GC4	6/29/92	0.14	0.02	0.14	bdl	0.01	bdl	0.04	< 0.07	0.02	bdl	0.01	bdl	0.05	3.14	0.20	0.04	0.02	bdl	0.12	0.02	0.20
GC4	7/13/92	< 0.01	< 0.01			< 0.01	< 0.01	0.02	bdl	0.01		< 0.01	< 0.05	< 0.05	3.60		< 0.01		0.01	0.07	0.01	0.01
GC4	7/27/92	< 0.01	0.01			< 0.01	< 0.01	0.02	bdl	0.02		< 0.01	< 0.05	< 0.06	3.20		< 0.01		0.01	0.19	0.03	0.06
GC4	8/10/92	< 0.01	0.02			< 0.01	< 0.01	0.03	bdl	0.02		< 0.01	< 0.05	< 0.06	3.60		< 0.01		0.01	0.27	0.06	< 0.01
GC4	8/25/92	< 0.01	< 0.01	0.06		< 0.01	< 0.01	0.02	< 0.10	< 0.01		< 0.01	< 0.05	< 0.05	3.60	0.15	< 0.01		0.03	0.11	0.01	< 0.01
GC4	9/8/92	< 0.01	0.01		< 0.01	< 0.01	< 0.01	< 0.01		0.01	< 0.01	< 0.01	< 0.05	< 0.05	3.90		< 0.01	< 0.01	0.02	0.07	0.01	< 0.01

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
GC4	9/21/92	< 0.01	< 0.01			< 0.01	0.02	0.02		< 0.01		< 0.01	< 0.05	0.12	2.93		< 0.01		0.01	0.08	0.01	0.07
GC4	10/19/92	< 0.01	< 0.01	0.03	< 0.01	< 0.01	< 0.01	< 0.01	< 0.10	< 0.01		< 0.01	< 0.05	< 0.05	3.02	0.12	< 0.01	0.04	< 0.01	0.08	< 0.01	< 0.01
GC4	11/3/92	< 0.01	0.03			< 0.01	< 0.01	0.01		0.01	< 0.01	< 0.01	0.05	< 0.05	3.78		< 0.01		< 0.01	0.10	0.02	< 0.01
GC4	11/13/92	< 0.01	0.03			< 0.01	< 0.01	0.07		0.02		< 0.01	< 0.05	< 0.05	3.17		< 0.01		0.02	0.13	0.03	< 0.01
GC4	11/30/92	< 0.01	< 0.01			< 0.01	< 0.01	0.02		< 0.01		< 0.01	< 0.10	< 0.05	2.60		< 0.01		0.03	0.05	< 0.01	< 0.01
GC4	12/14/92	< 0.01	< 0.01			< 0.01	< 0.01	0.02		< 0.01		0.03	< 0.10	< 0.05	2.70		< 0.01		< 0.01	0.07	< 0.01	< 0.01
GC4s	11/22/91	0.32	0.13	bdl	bdl	0.01	bdl	bdl	bdl	0.09	bdl	0.02	0.25	0.07	2.70	bdl	0.01	bdl	0.96	4.05	0.11	7.36
GC4s	12/1/91	0.48	0.04	bdl	bdl	0.07	0.03	0.38	bdl	0.04	bdl	0.01	0.19	0.07	2.40	bdl	0.02	bdl	0.01	2.23	0.21	2.71
GC4s	12/2/91	0.54	0.03	bdl	bdl	0.01	bdl	0.38	bdl	0.04	bdl	bdl	0.19	0.01	2.60	bdl	0.02	bdl	bdl	5.04	0.13	6.82
GC4s	8/28/92	< 0.01	0.04	0.06		< 0.01	< 0.01	0.06	< 0.10	0.01		< 0.01	0.12	< 0.05	2.70	0.21	< 0.01	0.05	0.01	0.37	0.04	0.10
GC4s	9/18/92	0.12	0.03			< 0.01	< 0.01	0.29		0.03		< 0.01	0.07	0.07	2.40		< 0.01		0.01	1.11	0.05	1.70
GC4s	10/5/92	< 0.01	0.01			< 0.01	0.01	0.03		< 0.01		< 0.01	< 0.05	< 0.05	3.13		< 0.01		< 0.01	0.14	< 0.01	0.07
GC5	7/1/91	0.07	0.05	bdl	bdl	bdl	bdl	0.04	bdl	0.02	bdl	0.01	0.52	0.04	2.70	bdl	bdl	bdl	bdl	0.12	0.02	0.14
GC5	7/15/91	0.27	0.05	bdl	bdl	0.02	bdl	0.16	bdl	0.04	bdl	0.01	0.60	0.11	3.10	bdl	0.01	bdl	bdl	2.18	0.11	2.78
GC5	7/15/91	0.28	0.05	bdl	bdl	0.01	bdl	0.07	bdl	0.05	bdl	0.01	0.65	0.06	3.20	bdl	0.01	bdl	bdl	2.16	0.10	2.85
GC5	7/29/91	0.13	0.02	bdl	bdl	bdl	bdl	0.03	bdl	0.02	bdl	0.01	0.13	0.04	2.80	bdl	0.03	bdl	0.01	0.14	0.09	0.07
GC5	8/12/91	0.10	0.09	bdl	bdl	0.03	0.03	0.06	bdl	0.04	bdl	0.02	1.18	0.12	3.10	bdl	0.01	bdl	0.03	0.18	0.04	0.20
GC5	8/29/91	0.09	0.07	0.04	0.01	0.02	bdl	0.06	bdl	0.03	0.03	0.02	1.08	< 0.01	3.00	0.18	0.01	0.03	0.01	0.15	0.03	0.19
GC5	9/10/91	0.25	0.03	bdl	bdl	bdl	bdl	0.12	bdl	0.10	bdl	0.01	0.02	0.06	1.70	bdl	0.04	bdl	0.01	6.39	1.97	7.45
GC5	9/22/91	0.12	0.13	bdl	bdl	0.01	0.01	0.05	bdl	0.03	bdl	0.03	1.57	0.14	2.70	bdl	bdl	bdl	0.04	0.20	0.04	0.20
GC5	10/5/91	0.14	0.02	bdl	bdl	bdl	bdl	0.04	bdl	0.02	bdl	0.01	0.30	0.04	3.00	bdl	0.02	bdl	0.01	0.19	0.03	0.20
GC5	10/20/91	0.11	0.09	0.04	bdl	0.04	0.01	0.07	bdl	0.03	0.01	0.02	1.12	0.11	2.70	0.22	0.01	bdl	bdl	0.18	0.03	0.20
GC5	11/2/91	0.13	0.02	bdl	bdl	bdl	< 0.03	0.05	bdl	0.02	bdl	bdl	0.22	0.07	2.80	bdl	0.02	bdl	< 0.01	0.15	0.03	0.15
GC5	11/17/91	0.08	0.08	bdl	bdl	0.03	0.01	0.06	bdl	0.03	bdl	0.01	0.74	0.08	2.90	bdl	0.01	bdl	0.01	0.18	0.02	0.18
GC5	12/16/91	0.08	0.03	0.01	bdl	0.01	bdl	0.04	bdl	0.01	bdl	0.01	0.25	0.03	2.30	0.08	bdl	bdl	0.03	0.09	0.01	0.10
GC5	12/30/91	0.06	0.03	bdl	bdl	0.03	0.01	0.05	bdl	0.01	bdl	bdl	0.21	0.05	2.40	bdl	bdl	bdl	bdl	0.09	0.01	0.13
GC5	1/13/92	0.11	bdl	0.02	0.01	bdl	bdl	0.02	bdl	0.01	0.01	bdl	bdl	bdl	2.40	0.10	bdl	bdl	0.01	0.10	0.01	0.12
GC5	1/27/92	0.06	0.04	bdl	bdl	0.01	bdl	0.02	bdl	0.01	bdl	0.01	0.35	0.05	2.20	bdl	bdl	bdl	0.01	0.07	0.02	0.12
GC5	2/10/92	0.08	bdl	bdl	bdl	bdl	bdl	0.03	bdl	0.01	bdl	bdl	0.02	0.06	2.30	bdl	0.02	bdl	bdl	0.06	0.01	0.10
GC5	2/24/92	0.06	0.04	bdl	bdl	< 0.03	bdl	0.03	bdl	0.01	bdl	bdl	0.38	0.02	2.40	bdl	bdl	bdl	0.01	0.11	0.02	0.15
GC5	3/9/92	0.07	0.01	bdl	bdl	bdl	bdl	0.05	bdl	0.01	bdl	bdl	bdl	0.08	2.30	bdl	0.01	bdl	bdl	0.08	0.01	0.10
GC5	3/23/92	0.06	0.04	bdl	bdl	0.01	bdl	0.03	bdl	0.01	bdl	0.01	0.34	0.04	2.40	bdl	bdl	bdl	0.02	0.08	0.01	0.18
GC5	4/6/92	0.07	0.04	bdl	bdl	bdl	bdl	0.04	bdl	0.01	bdl	0.01	0.39	0.01	20.00	bdl	0.01	bdl	0.01	0.12	0.01	0.15
GC5	4/20/92	0.06	0.01	bdl	bdl	bdl	bdl	0.02	bdl	bdl	bdl	bdl	0.06	0.02	2.48	bdl	0.02	bdl	0.04	0.07	0.01	0.11
GC5	5/4/92	0.04	bdl	bdl	bdl	bdl	bdl	0.04	bdl	bdl	bdl	bdl	0.11	bdl	2.65	bdl	0.01	bdl	bdl	0.07	0.01	0.10
GC5	5/18/92	0.05	bdl	bdl	bdl	bdl	bdl	0.03	< 0.20	bdl	bdl	bdl	0.06	0.02	2.57	bdl	bdl	bdl	0.01	0.08	0.01	0.11

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
GC5	6/1/92	0.08	0.01	bdl	bdl	bdl	bdl	0.02	bdl	0.01	bdl	bdl	bdl	0.01	2.51	bdl	0.01	bdl	bdl	0.07	0.01	0.10
GC5	6/15/92	0.08	bdl	bdl	bdl	bdl	bdl	0.03	bdl	bdl	bdl	bdl	bdl	0.01	2.56	bdl	0.01	bdl	bdl	0.08	0.01	0.15
GC5	6/29/92	0.15	0.01	0.06	bdl	bdl	bdl	0.07	< 0.07	0.01	bdl	bdl	0.12	0.03	2.85	0.12	0.01	0.02	bdl	0.09	0.02	0.15
GC5	7/13/92	< 0.01	< 0.01			< 0.01	< 0.01	0.01	bdl	0.01		< 0.01	< 0.05	< 0.05	3.10		< 0.01		0.01	0.02	0.01	0.03
GC5	7/27/92	< 0.01	0.01			< 0.01	< 0.01	0.02		0.02		< 0.01	0.07	< 0.05	3.10		< 0.01		0.01	0.19	0.03	0.07
GC5	8/10/92	< 0.01	0.02			< 0.01	< 0.01	0.03		0.01		< 0.01	0.15	< 0.05	3.20		< 0.01		0.01	0.11	0.01	0.06
GC5s	12/2/91	0.46	0.03	bdl	bdl	0.01	bdl	0.30	bdl	0.02	bdl	bdl	0.25	0.02	2.70	bdl	0.01	bdl	bdl	2.09	0.06	3.03
GC7	7/1/91	0.09	0.05	bdl	bdl	bdl	bdl	0.07	bdl	0.02	bdl	0.01	0.69	0.06	2.70	bdl	bdl	bdl	bdl	0.21	0.03	0.24
GC7	7/15/91	0.09	0.05	bdl	bdl	0.01	bdl	0.04	bdl	0.03	bdl	0.01	0.64	0.08	2.90	bdl	bdl	bdl	bdl	0.32	0.03	0.45
GC7	7/29/91	0.13	0.02	bdl	bdl	bdl	bdl	0.03	bdl	0.01	bdl	0.01	0.12	0.05	2.70	bdl	0.03	bdl	bdl	0.25	0.03	0.36
GC7	8/12/91	0.10	0.09	bdl	bdl	0.01	bdl	0.05	bdl	0.03	bdl	0.02	0.93	0.05	3.00	bdl	bdl	bdl	0.01	0.34	0.04	0.34
GC7	8/29/91	0.10	0.07	0.04	0.01	bdl	bdl	0.05	bdl	0.02	0.04	0.01	0.89	0.09	2.90	0.19	bdl	0.03	0.01	0.34	0.03	0.36
GC7	9/10/91	0.16	0.02	bdl	bdl	bdl	0.01	0.06	bdl	0.02	bdl	0.01	0.07	0.04	3.00	bdl	0.03	bdl	0.01	0.73	0.14	0.55
GC7	9/22/91	0.14	0.14	bdl	bdl	0.05	0.02	0.07	bdl	0.03	bdl	0.03	1.56	0.17	2.70	bdl	bdl	bdl	0.04	0.38	0.04	0.35
GC7	10/5/91	0.15	0.01	bdl	bdl	< 0.01	0.01	0.04	bdl	0.01	bdl	0.01	0.11	0.05	3.00	bdl	0.02	bdl	0.01	0.27	0.03	0.29
GC7	10/20/91	0.12	0.10	0.04	bdl	0.02	< 0.05	0.07	bdl	0.02	bdl	0.01	1.03	0.08	2.70	0.23	0.01	0.01	< 0.03	0.29	0.02	0.34
GC7	11/2/91	0.14	0.02	bdl	bdl	bdl	< 0.02	0.05	bdl	0.01	bdl	bdl	0.13	0.06	2.90	bdl	bdl	bdl	< 0.01	0.24	0.02	0.25
GC7	11/17/91	0.09	0.07	bdl	bdl	0.01	bdl	0.06	bdl	0.01	bdl	0.01	0.70	0.05	2.70	bdl	0.01	bdl	bdl	0.27	0.02	0.28
GC7	12/16/91	0.09	0.03	0.01	bdl	bdl	0.01	0.06	bdl	0.01	bdl	0.01	0.21	0.03	2.40	0.08	bdl	bdl	0.03	0.07	0.02	0.12
GC7	12/30/91	0.07	0.03	bdl	bdl	0.01	bdl	0.05	bdl	0.01	bdl	bdl	0.23	bdl	2.50	bdl	bdl	bdl	bdl	0.14	0.02	0.17
GC7	1/13/92	0.13	bdl	0.02	bdl	bdl	bdl	0.03	bdl	0.01	0.09	bdl	0.02	bdl	2.50	0.10	bdl	0.01	0.01	0.14	0.02	0.17
GC7	1/27/92	0.07	0.04	bdl	bdl	bdl	bdl	0.04	bdl	0.01	bdl	bdl	0.26	0.04	2.20	bdl	bdl	bdl	bdl	0.11	0.02	0.18
GC7	2/10/92	0.08	0.01	bdl	bdl	bdl	bdl	0.03	bdl	0.01	bdl	bdl	0.05	0.06	2.30	bdl	0.01	bdl	bdl	0.10	0.01	0.14
GC7	2/24/92	0.08	0.06	bdl	bdl	0.02	bdl	0.04	bdl	0.02	bdl	0.02	0.51	0.09	2.40	bdl	bdl	bdl	0.04	0.19	0.02	0.24
GC7	3/9/92	0.08	bdl	bdl	bdl	bdl	bdl	0.03	bdl	0.01	bdl	bdl	bdl	0.01	2.30	bdl	0.02	bdl	bdl	0.16	0.01	0.21
GC7	3/23/92	0.11	0.05	bdl	bdl	0.02	bdl	0.04	bdl	0.01	bdl	0.02	0.56	0.08	2.40	bdl	bdl	bdl	0.02	0.13	0.01	0.24
GC7	4/6/92	0.07	0.04	bdl	bdl	0.01	bdl	0.03	bdl	0.01	bdl	0.01	0.40	bdl	20.00	bdl	bdl	bdl	0.01	0.13	0.01	0.15
GC7	4/20/92	0.07	0.01	bdl	bdl	bdl	bdl	0.03	bdl	bdl	bdl	bdl	0.04	0.02	2.54	bdl	0.01	bdl	0.02	0.11	0.01	0.15
GC7	5/4/92	0.05	bdl	bdl	bdl	bdl	bdl	0.02	bdl	0.01	bdl	bdl	0.03	0.02	2.42	bdl	0.04	bdl	bdl	0.12	0.01	0.15
GC7	5/18/92	0.05	bdl	bdl	bdl	bdl	bdl	0.03	< 0.20	0.01	bdl	bdl	0.07	0.01	2.54	bdl	bdl	bdl	bdl	0.14	0.01	0.17
GC7	6/1/92	0.09	bdl	bdl	bdl	bdl	bdl	0.02	bdl	0.01	bdl	bdl	0.07	0.01	2.55	bdl	0.01	bdl	0.01	0.10	0.01	0.10
GC7	6/15/92	0.10	0.01	bdl	bdl	bdl	bdl	0.03	bdl	0.01	bdl	bdl	0.07	0.01	2.55	bdl	0.01	bdl	bdl	0.11	0.01	0.18
GC7	6/29/92	0.35	bdl	0.07	bdl	bdl	bdl	0.48	< 0.07	0.03	0.02	bdl	bdl	0.01	4.05	0.12	0.03	0.02	bdl	0.48	0.03	0.36
GC7	7/13/92	< 0.01	< 0.01			< 0.01	< 0.01	0.02		0.01		< 0.01	< 0.05	< 0.05	3.10		< 0.01		0.01	0.11	0.01	< 0.01
GC7	7/27/92	< 0.01	0.01			< 0.01	< 0.01	0.03		0.01		< 0.01	< 0.05	< 0.05	3.10		< 0.01		0.01	0.17	0.02	0.08
GC7	8/10/92	< 0.01	0.01			< 0.01	< 0.01	0.02		< 0.01		< 0.01	< 0.05	< 0.06	3.10		< 0.01		0.01	0.12	< 0.01	0.07

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
GC7	8/25/92	< 0.01	0.02	0.04	< 0.01	< 0.01	< 0.01	0.02	< 0.10	< 0.01	< 0.01	< 0.01	0.11	< 0.05	3.20	0.15	< 0.01	< 0.01	0.03	0.17	< 0.01	0.05
GC7	9/8/92	< 0.01	0.01			< 0.01	< 0.01	0.01		0.05		< 0.01	< 0.05	< 0.05	3.10		< 0.01		0.02	0.80	0.09	0.43
GC7	9/21/92	< 0.01	< 0.01			< 0.01	0.01	0.03		< 0.01		< 0.01	< 0.05	< 0.05	3.03		< 0.01		0.01	0.40	0.01	0.16
GC7	10/19/92	< 0.01	0.02	0.03	< 0.01	< 0.01	< 0.01	0.04	< 0.10	< 0.01	< 0.01	< 0.01	0.14	< 0.05	3.02	0.14	< 0.01	0.03	0.02	0.10	< 0.01	< 0.01
GC7	11/3/92	< 0.01	0.02			< 0.01	< 0.01	0.05		0.02		< 0.01	0.11	< 0.05	3.71		< 0.01		< 0.01	0.17	0.02	< 0.01
GC7	11/13/92	< 0.01	0.02			< 0.01	< 0.01	0.12		0.02		< 0.01	0.06	< 0.05	2.90		< 0.01		0.02	1.07	0.09	0.48
GC7	11/30/92	< 0.01	0.02			< 0.01	0.03	0.06		< 0.01		< 0.01	< 0.10	< 0.05	2.70		< 0.01		0.02	0.10	0.01	< 0.01
GC7	12/14/92	< 0.01	< 0.01			< 0.01	< 0.01	0.03		< 0.01		< 0.01	< 0.10	< 0.05	2.70		< 0.01		< 0.01	0.12	< 0.01	< 0.01
GC7s	12/1/91	0.49	0.03	bdl	bdl	0.02	bdl	0.38	bdl	0.04	bdl	0.01	0.20	0.03	2.50	bdl	0.02	bdl	bdl	2.81	0.24	11.76
GC7s	12/2/91	0.57	0.04	bdl	bdl	0.08	0.01	0.34	bdl	0.02	bdl	0.01	0.27	0.02	3.60	bdl	0.02	bdl	0.01	2.53	0.09	3.67
GC7s	8/28/92	< 0.01	0.04	0.05		< 0.01	0.01	0.05	0.10	0.03		< 0.01	< 0.05	< 0.05	2.70	0.24	< 0.01	0.03	0.01	0.88	0.09	0.36
GC7s	9/18/92	0.27	0.03			< 0.01	< 0.01	0.28		0.06		< 0.01	0.07	< 0.05	2.70		< 0.01		0.01	0.87	0.16	1.13
GC7s	10/5/92	< 0.01	0.01			< 0.01	< 0.01	0.02		0.03		0.03	< 0.05	< 0.05	3.32		< 0.01		< 0.01	0.09	0.03	< 0.01
GC7s	12/17/92	0.09	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.15	< 0.10	0.02	< 0.10	< 0.01	< 0.10	< 0.05	2.70	0.11	< 0.01	< 0.01	< 0.01	1.40	0.06	1.80
KY18	2/24/92	0.08	0.07	bdl	bdl	0.01	bdl	0.27	bdl	0.09	bdl	0.02	0.60	0.03	3.30	bdl	bdl	bdl	0.03	0.69	0.10	0.14
KY18	3/9/92	0.07	0.01	bdl	bdl	0.01	0.01	0.27	bdl	0.07	bdl	bdl	bdl	0.06	2.80	bdl	0.02	bdl	0.05	0.47	0.09	0.13
KY18	3/23/92	0.09	0.06	bdl	bdl	bdl	bdl	0.37	bdl	0.08	bdl	0.01	0.46	0.08	2.70	bdl	bdl	bdl	0.03	0.54	0.08	0.17
KY18	6/1/92	0.14	0.01	bdl	bdl	bdl	bdl	0.87	bdl	0.52	bdl	bdl	0.11	0.02	3.98	bdl	0.01	bdl	bdl	3.27	0.64	0.09
KY18	6/15/92	0.14	0.01	bdl	bdl	bdl	bdl	0.22	bdl	0.86	bdl	bdl	bdl	0.02	4.40	bdl	0.02	bdl	bdl	1.36	0.90	0.15
KY18s	12/1/91	0.22	0.03	bdl	bdl	0.04	bdl	0.18	bdl	0.02	bdl	0.01	0.21	0.01	2.20	bdl	0.01	bdl	bdl	0.48	0.02	0.80
LH5	5/4/92	0.07	bdl	0.03	bdl	bdl	bdl	0.07	< 0.07	bdl	bdl	bdl	bdl	0.03	2.59	0.05	0.01	bdl	bdl	0.20	0.01	0.31
LH5	6/29/92	0.09	bdl	0.09	bdl	bdl	bdl	0.04	< 0.07	bdl	bdl	bdl	bdl	bdl	2.98	0.05	bdl	0.01	bdl	0.22	0.02	0.33
LH5	8/25/92	< 0.01	0.01	0.05	< 0.01	< 0.01	< 0.01	0.03	< 0.10	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	3.40	0.06	< 0.01	< 0.01	0.01	0.08	< 0.01	0.45
LH5	10/16/92	< 0.01	< 0.01	0.05	< 0.01	< 0.01	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01	< 0.01	0.08	< 0.05	3.03	0.06	< 0.01	0.02	0.02	0.04	< 0.01	< 0.01
LH5s	10/5/92	< 0.01	< 0.01			< 0.01	< 0.01	0.05		< 0.01		< 0.01	< 0.05	< 0.05	2.95		< 0.01		< 0.01	0.11	< 0.01	0.13
MF2	1/7/92	0.04	bdl	0.02	bdl	bdl	bdl	0.07	bdl	0.02	bdl	bdl	bdl	0.01	1.30	0.01	bdl	bdl	bdl	0.03	0.02	0.06
MF2	5/3/92	0.05	bdl	0.02	0.01	bdl	bdl	0.01	< 0.07	0.02	bdl	bdl	0.01	bdl	1.42	0.01	bdl	bdl	bdl	0.02	0.03	0.09
MF2	8/21/92	0.03	< 0.01	0.03	< 0.01	< 0.01	0.01	0.02	< 0.10	0.04	< 0.01	< 0.01	< 0.05	< 0.05	1.70	0.01	< 0.01	< 0.01	0.02	0.06	0.04	0.10
MF2	10/16/92	0.03	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.02	< 0.10	0.03	< 0.01	< 0.01	< 0.05	< 0.05	1.65	< 0.01	< 0.01	< 0.01	0.02	0.04	0.03	0.04
MF5	1/7/92	0.15	bdl	0.02	bdl	bdl	bdl	0.07	bdl	0.03	bdl	bdl	0.02	bdl	43.80	0.01	bdl	bdl	bdl	0.03	0.03	0.16
MF5	5/3/92	0.16	bdl	0.02	0.01	bdl	bdl	0.04	< 0.07	0.03	bdl	bdl	0.05	bdl	1.33	0.01	bdl	bdl	bdl	0.06	0.03	0.19
MF5	8/21/92	0.11	< 0.01	0.03	< 0.01	< 0.01	< 0.01	0.08	< 0.10	0.04	< 0.01	< 0.01	< 0.05	< 0.05	1.70	< 0.01	< 0.01	< 0.01	0.03	0.10	0.04	0.15
MF5	10/16/92	0.11	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.04	< 0.10	0.07	< 0.01	< 0.01	0.05	< 0.05	1.73	< 0.01	< 0.01	< 0.01	0.01	0.09	0.08	1.00
RR1	7/1/91	0.08	0.02	bdl	bdl	0.01	bdl	0.07	bdl	0.15	bdl	0.01	0.30	0.01	3.50	bdl	bdl	bdl	< 0.01	1.47	0.27	0.50
RR1	7/16/91	0.83	0.02	bdl	bdl	0.01	bdl	2.18	bdl	0.29	bdl	0.01	0.46	0.08	4.60	bdl	0.04	bdl	bdl	6.35	0.42	1.53
RR1	7/29/91	0.15	bdl	bdl	bdl	bdl	0.01	0.11	bdl	0.13	bdl	0.01	< 0.03	0.02	3.60	bdl	0.01	bdl	0.01	0.36	0.15	0.27

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RR1	8/12/91	0.09	0.02	bdl	bdl	0.01	bdl	0.17	bdl	0.15	bdl	0.01	0.35	0.09	3.60	bdl	bdl	bdl	bdl	0.40	0.15	0.24
RR1	8/28/91	0.11	bdl	0.02	bdl	0.01	bdl	0.14	bdl	0.15	0.02	0.01	0.16	0.05	3.70	0.06	bdl	bdl	< 0.01	0.92	0.18	0.43
RR1	9/10/91	0.13	bdl	bdl	bdl	bdl	bdl	0.12	bdl	0.18	bdl	0.01	0.03	0.03	3.60	bdl	0.02	bdl	0.01	1.07	0.23	0.48
RR1	9/22/91	0.10	0.04	bdl	bdl	0.01	0.01	0.13	bdl	0.14	bdl	0.02	0.53	0.07	3.20	bdl	bdl	bdl	0.03	0.45	0.17	0.26
RR1	10/6/91	0.12	bdl	bdl	bdl	bdl	bdl	0.16	bdl	0.11	bdl	bdl	< 0.03	0.02	3.40	bdl	< 0.01	bdl	bdl	0.37	0.14	0.24
RR1	10/20/91	0.10	0.03	0.02	bdl	0.01	< 0.03	0.16	0.01	0.11	bdl	bdl	0.33	0.04	3.30	0.05	bdl	bdl	< 0.03	0.35	0.12	0.23
RR1	11/2/91	0.12	bdl	bdl	bdl	bdl	< 0.02	0.15	bdl	0.10	bdl	bdl	0.05	0.02	3.50	bdl	bdl	bdl	< 0.01	0.42	0.11	0.23
RR1	11/17/91	0.10	0.02	bdl	bdl	0.01	bdl	0.14	bdl	0.09	bdl	bdl	0.17	0.02	3.60	bdl	bdl	bdl	bdl	0.25	0.09	0.16
RR1	12/16/91	0.16	0.02	0.02	bdl	0.01	bdl	0.13	bdl	0.15	bdl	0.01	0.20	0.03	2.70	0.04	bdl	bdl	0.01	1.41	0.18	1.74
RR1	12/30/91	0.14	0.02	bdl	bdl	0.01	bdl	0.13	bdl	0.16	bdl	bdl	0.12	0.02	2.80	bdl	bdl	bdl	bdl	0.22	0.16	0.49
RR1	1/13/92	0.25	bdl	0.02	0.01	bdl	bdl	0.13	bdl	0.15	bdl	bdl	bdl	bdl	3.00	0.05	bdl	bdl	0.02	0.57	0.18	0.79
RR1	1/27/92	0.14	0.03	bdl	bdl	0.02	0.04	0.17	bdl	0.20	bdl	0.02	0.24	0.09	3.30	bdl	0.01	bdl	0.03	0.30	0.21	0.57
RR1	2/10/92	0.14	bdl	bdl	bdl	bdl	bdl	0.12	bdl	0.18	bdl	0.01	bdl	0.04	3.10	bdl	0.01	bdl	bdl	0.26	0.18	0.45
RR1	2/24/92	0.11	0.04	bdl	bdl	0.03	bdl	0.17	bdl	0.20	bdl	0.02	0.37	0.09	3.40	bdl	0.01	bdl	0.04	2.09	0.34	1.02
RR1	3/9/92	0.15	bdl	bdl	bdl	0.01	bdl	0.09	bdl	0.14	bdl	0.01	bdl	0.03	2.80	bdl	0.02	bdl	0.02	0.27	0.18	1.04
RR1	3/23/92	0.15	0.03	bdl	bdl	0.01	bdl	0.10	bdl	0.18	bdl	0.01	0.34	0.04	2.70	bdl	bdl	bdl	0.02	0.28	0.19	0.52
RR1	4/6/92	0.10	0.03	bdl	bdl	0.01	bdl	0.18	bdl	0.25	bdl	0.02	0.27	0.03	30.00	bdl	bdl	bdl	0.05	0.38	0.26	0.75
RR1	4/21/92	0.26	0.01	bdl	bdl	bdl	bdl	0.11	bdl	0.14	bdl	0.01	0.02	0.04	2.41	bdl	0.02	bdl	0.04	0.92	0.21	1.49
RR1	5/4/92	0.09	bdl	bdl	bdl	0.01	bdl	0.07	bdl	0.19	bdl	0.01	0.18	0.02	2.75	bdl	0.02	bdl	bdl	0.97	0.29	0.80
RR1	5/18/92	0.09	0.01	bdl	bdl	bdl	bdl	0.09	bdl	0.22	bdl	0.01	bdl	0.01	3.47	bdl	0.02	bdl	0.01	1.00	0.25	0.85
RR1	6/1/92	0.13	bdl	bdl	bdl	bdl	bdl	0.10	bdl	0.21	bdl	0.01	bdl	bdl	3.35	bdl	0.01	bdl	bdl	0.51	0.22	0.55
RR1	6/15/92	0.12	bdl	bdl	bdl	bdl	bdl	0.04	bdl	0.15	bdl	bdl	bdl	bdl	2.97	bdl	bdl	bdl	bdl	0.28	0.16	0.38
RR1	6/29/92	0.14	bdl	0.07	bdl	bdl	bdl	0.06	< 0.07	0.20	bdl	0.01	0.01	0.02	3.33	0.05	0.02	0.01	bdl	0.39	0.21	0.46
RR1	7/13/92	0.05	< 0.01			< 0.01	< 0.01	0.09		0.19		< 0.01	< 0.05	< 0.05	3.90		< 0.01		0.02	0.33	0.20	0.32
RR1	7/27/92	0.03	< 0.01			< 0.01	< 0.01	0.03		0.18		< 0.01	< 0.06	< 0.06	3.90		< 0.01		0.02	1.07	0.39	0.74
RR1	8/10/92	< 0.01	< 0.01			< 0.01	< 0.01	0.06		0.19		< 0.01	< 0.06	< 0.06	3.90		< 0.01		0.01	0.81	0.23	0.48
RR1	8/25/92	0.02	0.01	< 0.04	< 0.01	< 0.01	< 0.01	0.09	< 0.10	0.26	< 0.01	< 0.01	< 0.05	< 0.05	3.50	< 0.04	< 0.01	< 0.01	0.04	0.55	0.27	0.24
RR1	9/8/92	< 0.01	< 0.01			< 0.01	< 0.01	0.08		0.23		< 0.01	< 0.05	< 0.05	3.60		< 0.01		0.03	0.49	0.26	0.23
RR1	9/21/92	0.02	< 0.01			< 0.01	0.01	0.18		0.29		< 0.01	< 0.05	< 0.06	3.70		< 0.01		0.02	0.88	0.33	0.55
RR1	10/19/92	< 0.04	< 0.01	0.03	< 0.01	< 0.01	< 0.01	0.26	< 0.10	0.30	< 0.01	< 0.01	< 0.05	< 0.05	3.47	0.04	< 0.01	0.03	0.02	0.07	0.31	0.10
RR1	11/3/92	< 0.01	< 0.01			< 0.01	< 0.01	0.29		0.44		< 0.01	< 0.05	< 0.05	4.26		< 0.01		0.03	1.01	0.46	0.85
RR1	11/13/92	< 0.01	0.01			< 0.01	< 0.01	0.12		0.26		< 0.01	< 0.05	< 0.05	2.96		< 0.01		0.02	0.22	0.27	0.56
RR1	12/1/92	< 0.01	< 0.01			< 0.01	< 0.01	0.10		0.23		< 0.01	< 0.10	< 0.05	2.90		< 0.01		0.03	0.30	0.24	0.46
RR1	12/14/92	0.05	< 0.01			< 0.01	< 0.01	0.18		0.29		0.02	< 0.10	< 0.05	3.00		< 0.01		0.02	0.40	0.32	0.82
RR1s	12/2/91	0.52	0.02	bdl	bdl	0.01	bdl	0.32	bdl	0.02	bdl	bdl	0.10	0.02	2.20	bdl	0.03	bdl	bdl	1.43	0.12	2.36
RR1s	8/28/92	0.13	0.01	0.03		< 0.01	< 0.01	0.17	< 0.10	0.14		0.01	< 0.05	0.05	3.30	0.06	< 0.01	0.01	0.02	0.51	0.14	0.54

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
RR1s	10/5/92	< 0.01	< 0.01			< 0.01	< 0.01	0.11		0.27		0.03	< 0.05	0.07	3.06		< 0.01		< 0.01	0.31	0.28	0.48
RR1s	12/17/92	0.10	0.02	0.02	< 0.01	< 0.01	< 0.01	0.09	< 0.10	0.06	< 0.10	< 0.01	< 0.10	< 0.05	2.30	0.04	< 0.01	< 0.01	0.01	0.42	0.08	0.35
SB8	12/17/91	0.25	0.10	0.25	0.01	0.08	0.02	1.83	bdl	4.08	bdl	0.05	1.33	0.09	4.30	0.05	0.02	0.14	0.07	18.88	3.87	0.25
SB8	1/13/92	1.29	0.07	0.03	0.01	0.05	bdl	0.47	bdl	0.09	0.02	0.01	0.63	0.06	5.40	0.08	0.01	bdl	0.08	1.88	0.17	1.98
SB8W	12/17/91	4.48	0.05	0.02	bdl	0.02	bdl	0.33	bdl	0.05	0.01	0.01	0.34	0.03	4.70	0.07	0.01	bdl	0.05	1.14	0.07	5.42
SB8W	12/30/91	0.12	0.08	bdl	bdl	0.06	0.04	16.19	bdl	3.94	bdl	0.05	1.15	0.16	3.60	bdl	0.02	bdl	0.91	21.61	3.92	0.14
SB8W	1/13/92	0.13	0.13	0.04	bdl	0.02	bdl	18.20	0.01	3.95	0.06	0.05	1.74	0.13	4.00	0.11	0.01	0.07	0.02	19.21	3.79	0.10
SH10	1/7/92	0.12	bdl	0.02	< 0.07	bdl	bdl	0.03	bdl	0.03	bdl	bdl	0.02	0.01	1.50	0.01	bdl	bdl	bdl	0.02	0.03	0.13
SH10	5/3/92	0.08	bdl	0.02	0.01	bdl	bdl	0.02	< 0.07	0.03	bdl	bdl	0.03	bdl	1.55	0.01	0.01	bdl	bdl	0.02	0.04	0.10
SH10	8/21/92	0.04	< 0.01	0.03	< 0.01	< 0.01	0.01	0.02	< 0.10	0.03	< 0.01	< 0.01	< 0.05	< 0.05	1.90	0.01	< 0.01	< 0.01	0.03	0.04	0.03	0.08
SH10	10/16/92	0.09	< 0.01	0.02	< 0.01	< 0.01	0.49	< 0.01	< 0 10	0.04	< 0.01	< 0.01	< 0.05	< 0.05	1.78	0.01	< 0.01	< 0.01	< 0.02	0.02	0.04	0.04
SR10	7/2/91	0.01	bdl	bdl	bdl	bdl	bdl	0.02	bdl	bdl	bdl	bdl	< 0.02	< 0.01	2.60	bdl	bdl	bdl	bdl	0.08	0.01	0.06
SR10	7/15/91	0.02	bdl	bdl	bdl	bdl	bdl	0.03	bdl	0.01	bdl	bdl	0.06	0.05	2.70	bdl	bdl	bdl	bdl	0.08	0.01	0.05
SR10	7/29/91	0.02	0.01	bdl	bdl	bdl	bdl	0.03	bdl	bdl	bdl	bdl	0.08	bdl	2.80	bdl	0.01	bdl	bdl	0.09	0.01	0.06
SR10	8/12/91	0.02	bdl	bdl	bdl	0.01	0.02	0.03	bdl	bdl	bdl	bdl	0.03	0.04	2.70	bdl	bdl	bdl	bdl	0.07	0.01	0.04
SR10	8/28/91	0.02	bdl	0.02	bdl	bdl	bdl	0.03	bdl	bdl	bdl	bdl	bdl	bdl	2.80	0.01	bdl	bdl	< 0.01	0.07	0.01	0.04
SR10	9/11/91	0.02	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	0.03	0.01	2.80	bdl	0.01	bdl	0.01	0.04	0.01	0.06
SR10	9/22/91	0.02	0.01	bdl	bdl	bdl	0.01	0.02	bdl	0.01	bdl	0.01	0.16	0.04	2.40	bdl	bdl	bdl	0.01	0.03	0.01	0.02
SR10	10/20/91	0.01	bdl	0.02	bdl	bdl	< 0.03	0.02	bdl	bdl	bdl	< 0.01	0.02	bdl	2.50	0.01	bdl	bdl	< 0.04	0.04	0.01	0.02
SR10	11/2/91	0.01	bdl	bdl	bdl	bdl	< 0.03	0.02	bdl	bdl	bdl	bdl	< 0.02	< 0.01	2.80	bdl	bdl	bdl	< 0.01	0.05	0.02	0.06
SR10	11/17/91	0.02	bdl	bdl	bdl	bdl	bdl	0.02	bdl	bdl	bdl	bdl	< 0.02	0.01	2.60	bdl	bdl	bdl	bdl	0.05	0.01	0.02
SR10	12/17/91	0.14	0.01	0.02	bdl	0.02	bdl	0.22	bdl	0.02	bdl	bdl	0.05	0.01	2.20	0.01	bdl	bdl	0.03	0.17	0.02	0.14
SR10	12/30/91	0.03	0.01	bdl	bdl	bdl	bdl	0.02	bdl	bdl	bdl	bdl	0.02	0.01	2.20	bdl	bdl	bdl	bdl	0.02	0.03	0.03
SR10	1/13/92	0.04	bdl	0.02	bdl	bdl	bdl	0.01	bdl	bdl	bdl	bdl	bdl	bdl	2.20	0.01	bdl	bdl	0.03	0.05	0.01	0.03
SR10s	12/2/91	0.14	0.01	bdl	bdl	0.01	bdl	0.09	bdl	0.03	bdl	bdl	< 0.02	0.01	1.70	bdl	bdl	bdl	bdl	0.75	0.19	1.15
ST10	5/4/92	0.05	bdl	0.03	0.01	bdl	bdl	0.03	< 0.07	bdl	bdl	bdl	0.05	0.01	2.52	0.07	0.02	bdl	bdl	0.10	0.01	0.14
ST10	6/29/92	0.08	bdl	0.08	bdl	bdl	bdl	0.06	< 0.07	bdl	bdl	bdl	bdl	bdl	3.45	0.04	0.01	0.02	bdl	0.12	0.02	0.16
ST10	8/25/92	< 0.01	0.01	0.04	< 0.01	< 0.01	< 0.01	0.01	0.10	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	3.40	0.12	< 0.01	< 0.01	0.01	0.05	< 0.01	< 0.01
ST10	10/16/92	< 0.01	< 0.01	0.04	< 0.01	< 0.01	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	3.10	0.12	< 0.01	0.02	0.02	0.02	< 0.01	< 0.01
ST10s	10/5/92	< 0.01	0.01			< 0.01	< 0.01	0.10		< 0.01		< 0.01	< 0.05	< 0.05	3.36		< 0.01		< 0.01	0.24	< 0.01	0.30
ST5	5/4/92	0.04	bdl	0.03	0.01	bdl	bdl	0.03	< 0.07	bdl	bdl	bdl	bdl	0.02	2.72	0.05	0.01	bdl	bdl	0.09	0.01	0.12
ST5	6/29/92	0.12	0.05	0.08	bdl	0.01	bdl	0.05	< 0.07	0.01	bdl	0.01	0.54	0.02	3.26	0.08	bdl	0.01	0.03	0.15	0.02	0.22
ST5	8/25/92	< 0.01	0.01	0.05	< 0.01	< 0.01	< 0.01	0.03	< 0.10	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	3.60	0.06	< 0.01	< 0.01	0.02	0.06	< 0.01	< 0.01
ST5	10/16/92	< 0.01	< 0.01	0.04	< 0.01	< 0.01	< 0.01	< 0.01	< 0.10	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	3.27	0.06	< 0.01	0.02	0.02	0.03	< 0.01	< 0.01
STOR1	2/3/92	0.11	0.01	bdl	bdl	bdl	0.01	0.07	bdl	0.01	bdl	bdl	0.01	0.04	2.60	bdl	bdl	bdl	0.01	0.16	0.01	0.29
STOR1	2/10/92	0.11	0.01	bdl	bdl	bdl	bdl	0.06	bdl	0.01	bdl	bdl	0.03	0.04	2.50	bdl	bdl	bdl	bdl	0.19	0.01	0.40

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
STOR1	4/6/92	0.10	0.08	bdl	bdl	0.01	bdl	0.05	bdl	0.02	bdl	0.01	0.47	0.02	20.00	bdl	bdl	bdl	0.04	0.22	0.02	0.36
STOR1	4/20/92	0.07	0.02	bdl	bdl	bdl	bdl	0.05	bdl	0.01	bdl	bdl	0.09	0.03	2.62	bdl	0.02	bdl	0.05	0.14	0.02	0.23
STOR1	5/4/92	0.06	0.01	bdl	bdl	bdl	bdl	0.04	bdl	0.03	bdl	bdl	0.14	0.02	2.68	bdl	0.01	bdl	bdl	0.10	0.03	0.17
STOR1	5/18/92	0.05	0.02	bdl	bdl	bdl	bdl	0.03	< 0.20	0.08	bdl	bdl	0.06	0.02	2.39	bdl	0.02	bdl	bdl	0.16	0.10	0.18
STOR1	6/1/92	0.19	0.05	bdl	bdl	bdl	bdl	bdl	0.02	0.09	bdl	bdl	0.05	0.03	2.83	bdl	0.03	bdl	bdl	0.11	0.10	0.51
STOR1	6/15/92	0.15	0.03	bdl	bdl	0.01	bdl	0.06	bdl	0.02	bdl	0.01	0.05	0.09	2.87	bdl	0.03	bdl	bdl	0.09	0.02	0.25
STOR1	6/29/92	0.21	0.13	0.10	bdl	0.02	bdl	0.06	< 0.07	0.04	0.34	0.03	bdl	0.15	3.38	0.32	0.01	0.02	bdl	0.08	0.04	0.21
STOR1	7/13/92	< 0.01	0.03			< 0.01	< 0.01	0.09		0.16		< 0.01	0.16	< 0.05	3.50		< 0.01		0.03	0.14	0.03	< 0.01
STOR1	7/27/92	0.02	0.04			< 0.01	< 0.01	0.04		0.11		< 0.01	< 0.06	< 0.05	3.00		< 0.01		0.02	0.52	0.13	0.62
STOR1	8/10/92	< 0.01	0.03			< 0.01	< 0.01	0.02		0.16		< 0.01	< 0.05	< 0.06	3.20		< 0.01		< 0.01	0.31	0.17	< 0.01
STOR1	8/25/92	< 0.01	0.05	0.04	< 0.01	< 0.01	< 0.01	0.02	0.10	0.20	< 0.01	< 0.01	< 0.05	< 0.05	3.10	0.31	< 0.01	0.05	0.01	0.59	0.22	< 0.01
STOR1	10/16/92	< 0.01	0.04	0.03	< 0.01	< 0.01	< 0.01	0.03	< 0.10	0.12	< 0.01	< 0.01	< 0.05	< 0.05	2.74	0.30	< 0.01	0.05	0.05	0.24	0.13	< 0.01
STOR1	11/13/92	< 0.01	0.04			< 0.01	< 0.01	0.05		0.01		< 0.01	0.36	< 0.05	2.89		< 0.01		0.02	0.14	0.02	0.10
STOR1s	8/28/92	< 0.01	0.10	0.05		< 0.01	< 0.01	0.11	< 0.10	0.04		< 0.01	< 0.05	< 0.05	2.20	0.60	< 0.01	0.03	< 0.01	0.52	0.05	1.50
STOR1s	9/18/92	< 0.01	0.08			< 0.01	< 0.01	0.12		0.02		< 0.01	< 0.05	< 0.05	2.00		< 0.01		0.01	0.72	0.02	1.06
STOR1s	10/5/92	< 0.01	0.05			0.03	< 0.01	0.07		0.04		< 0.01	< 0.05	< 0.05	2.50		< 0.01		< 0.01	0.40	0.04	0.28
STOR1s	12/17/92	0.08	0.04	0.01	< 0.01	< 0.01	< 0.01	0.16	< 0.10	0.02	< 0.10	< 0.01	< 0.10	< 0.05	2.10	0.30	< 0.01	< 0.01	< 0.01	0.87	0.03	1.40
TC10	7/1/91	0.07	0.02	bdl	bdl	0.02	bdl	0.09	bdl	0.01	bdl	0.01	0.23	0.03	3.00	bdl	bdl	bdl	< 0.01	0.39	0.04	0.21
TC10	7/16/91	0.26	0.02	bdl	bdl	bdl	bdl	0.03	bdl	0.11	bdl	bdl	0.34	0.05	3.20	bdl	bdl	bdl	bdl	1.51	0.17	2.48
TC10	7/31/91	0.33	bdl	bdl	bdl	bdl	bdl	0.02	bdl	0.04	bdl	bdl	< 0.07	0.02	2.80	bdl	0.02	bdl	0.09	5.58	0.24	4.30
TC10	8/13/91	1.59	0.04	bdl	bdl	0.03	bdl	0.07	bdl	0.01	bdl	0.01	0.31	0.03	6.30	bdl	bdl	bdl	0.01	0.63	0.06	2.75
TC10	8/28/91	0.55	0.01	0.01	bdl	0.02	bdl	0.03	bdl	0.04	0.02	0.01	0.12	0.02	3.90	0.80	0.01	bdl	0.01	4.04	0.19	7.08
TC10	9/3/91	0.10	0.03	bdl	bdl	0.04	0.01	0.02	bdl	0.16	bdl	0.01	0.24	0.02	3.70	bdl	bdl	bdl	0.01	1.43	0.24	4.80
TC10	9/10/91	0.45	0.01	bdl	bdl	0.01	bdl	0.04	bdl	0.05	bdl	bdl	0.02	0.09	6.80	bdl	0.01	bdl	0.01	2.01	0.21	8.31
TC10	9/18/91	1.06	0.01	bdl	bdl	0.01	bdl	0.78	bdl	0.21	bdl	bdl	0.02	< 0.01	8.60	bdl	0.01	bdl	0.03	2.38	0.24	11.52
TC10	9/18/91	1.10	bdl	bdl	bdl	0.01	bdl	0.82	bdl	0.22	bdl	bdl	0.02	< 0.01	8.10	bdl	0.02	bdl	0.03	1.39	0.25	10.89
TC10	9/18/91	5.50	bdl	bdl	bdl	0.01	< 0.01	0.43	bdl	0.19	bdl	bdl	< 0.01	< 0.01	6.90	bdl	bdl	bdl	0.02	1.22	0.22	6.99
TC10	9/18/91	4.20	bdl	bdl	bdl	bdl	< 0.01	0.33	bdl	0.13	bdl	bdl	0.02	< 0.03	6.30	bdl	bdl	bdl	< 0.01	1.20	0.17	6.73
TC10	9/18/91	5.99	bdl	bdl	bdl	0.01	bdl	0.38	bdl	0.15	bdl	bdl	bdl	0.01	8.50	bdl	< 0.01	bdl	bdl	1.46	0.18	8.77
TC10	9/18/91	6.80	bdl	bdl	bdl	bdl	bdl	0.47	bdl	0.16	bdl	bdl	< 0.05	0.01	6.80	bdl	0.01	bdl	bdl	1.78	0.20	8.54
TC10	9/23/91	0.21	0.15	bdl	bdl	0.06	0.02	0.03	bdl	0.09	bdl	0.04	1.65	0.09	5.10	bdl	bdl	bdl	0.05	2.13	0.16	2.90
TC10	9/24/91	0.11	0.08	bdl	bdl	0.01	0.01	0.03	bdl	0.10	bdl	0.02	0.90	0.07	4.00	bdl	bdl	bdl	0.03	1.89	0.14	2.46
TC10	10/8/91	0.10	bdl	bdl	bdl	bdl	bdl	0.24	bdl	0.08	bdl	bdl	0.01	0.03	4.60	bdl	0.01	bdl	0.04	0.56	0.09	2.13
TC10	10/20/91	0.12	0.02	0.01	0.01	0.01	< 0.02	0.04	bdl	0.04	0.01	bdl	0.27	0.03	3.70	0.06	bdl	bdl	< 0.01	0.15	0.04	0.33
TC10	10/16/91	0.06	0.04	0.02	0.01	0.01	< 0.01	0.18	bdl	0.09	0.02	0.01	0.35	0.03	4.30	0.08	bdl	bdl	0.03	0.46	0.10	2.15
TC10	10/24/91	1.44	bdl	bdl	bdl	bdl	< 0.03	0.31	bdl	0.08	bdl	bdl	0.03	0.02	5.10	bdl	bdl	bdl	0.04	0.73	0.09	7.32

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
TC10	10/29/91	2.65	bdl	bdl	bdl	0.02	< 0.03	0.07	bdl	0.02	bdl	bdl	0.02	0.03	2.00	bdl	0.02	bdl	bdl	0.40	0.03	4.29
TC10	11/2/91	0.17	bdl	bdl	bdl	0.01	< 0.03	0.01	bdl	0.05	bdl	bdl	< 0.05	0.02	4.00	bdl	bdl	bdl	< 0.01	3.65	0.15	12.84
TC10	11/17/91	0.12	0.05	bdl	bdl	0.03	bdl	0.05	bdl	0.17	bdl	0.01	0.33	bdl	5.50	bdl	0.01	bdl	0.01	bdl	0.24	7.06
TC10	12/16/91	0.10	0.02	0.02	bdl	0.01	0.01	0.06	bdl	0.11	bdl	0.01	0.17	0.02	3.40	0.06	bdl	bdl	0.05	0.82	0.13	1.49
TC10	12/30/91	0.11	0.01	bdl	bdl	0.01	bdl	0.25	bdl	0.15	bdl	bdl	0.14	0.01	3.30	bdl	bdl	bdl	bdl	0.39	0.10	0.55
TC10	1/13/92	0.12	bdl	0.01	bdl	bdl	bdl	0.10	bdl	0.12	0.02	bdl	bdl	bdl	3.80	0.05	bdl	0.03	0.04	0.42	0.13	0.72
TC10	1/27/92	0.07	0.02	bdl	bdl	0.01	bdl	0.09	bdl	0.11	bdl	0.01	0.20	0.04	3.40	bdl	bdl	bdl	0.03	0.60	0.11	1.57
TC10	2/10/92	0.11	bdl	bdl	bdl	bdl	bdl	0.04	bdl	0.13	bdl	bdl	bdl	0.04	4.20	bdl	0.01	bdl	0.01	0.46	0.14	0.73
TC10	2/24/92	0.10	0.06	bdl	bdl	0.03	bdl	0.02	bdl	0.13	bdl	0.02	0.55	0.10	4.70	bdl	0.01	bdl	0.05	0.46	0.14	0.68
TC10	3/9/92	0.11	bdl	bdl	bdl	bdl	bdl	0.05	0.02	0.08	bdl	bdl	bdl	0.01	3.40	bdl	0.01	bdl	bdl	0.29	0.10	1.15
TC10	3/23/92	0.16	0.02	bdl	bdl	0.01	bdl	0.05	bdl	0.07	bdl	0.01	0.31	0.06	3.90	bdl	0.01	bdl	bdl	0.80	0.11	0.75
TC10	4/5/92	0.08	0.03	bdl	bdl	bdl	bdl	0.03	bdl	0.07	bdl	bdl	0.35	0.02	40.00	bdl	bdl	bdl	0.03	0.33	0.08	0.32
TC10	4/21/92	0.19	0.01	bdl	bdl	0.01	bdl	0.03	bdl	0.03	bdl	bdl	0.08	0.03	6.21	bdl	0.02	bdl	0.01	0.34	0.05	0.54
TC10	5/4/92	0.08	bdl	bdl	bdl	bdl	bdl	0.01	bdl	0.03	bdl	bdl	bdl	0.02	4.43	bdl	0.01	bdl	bdl	0.33	0.05	0.39
TC10	5/18/92	0.04	bdl	bdl	bdl	bdl	bdl	0.01	< 0.20	0.06	bdl	bdl	0.07	0.01	3.86	bdl	bdl	bdl	bdl	0.25	0.08	0.20
TC10	6/1/92	0.17	bdl	bdl	bdl	bdl	bdl	0.02	bdl	0.07	bdl	bdl	0.04	bdl	4.51	bdl	0.01	bdl	bdl	0.28	0.07	0.38
TC10	6/15/92	0.11	0.01	bdl	bdl	0.01	bdl	0.03	bdl	0.04	bdl	bdl	bdl	0.04	5.93	bdl	0.02	bdl	bdl	0.27	0.04	0.44
TC10	6/29/92	0.11	bdl	0.05	bdl	bdl	bdl	0.01	< 0.07	0.04	bdl	bdl	0.03	bdl	4.29	0.07	bdl	0.03	bdl	0.34	0.04	0.38
TC10	7/13/92	0.09	< 0.01			< 0.01	< 0.01	0.02	bdl	0.08		< 0.01	< 0.05	< 0.05	4.60		< 0.01		0.03	0.40	0.09	0.35
TC10	7/27/92	0.06	< 0.01			< 0.01	< 0.01	0.04		0.08		< 0.01	< 0.06	< 0.06	5.40		< 0.01		0.01	0.19	0.09	0.19
TC10	8/10/92	0.05	< 0.01			< 0.01	< 0.01	0.03	bdl	0.03		< 0.01	< 0.05	< 0.05	4.90		< 0.01		0.01	0.41	0.03	0.57
TC10	8/25/92	0.03	0.01	0.04	< 0.01	< 0.01	< 0.01	0.04	< 0.10	0.03	< 0.01	< 0.01	< 0.05	< 0.05	6.80	0.09	< 0.01	< 0.01	0.04	0.24	0.03	0.25
TC10	9/8/92	0.04	< 0.01			< 0.01	< 0.01	0.01		0.02		< 0.01	< 0.05	0.12	4.60		< 0.01		0.02	0.46	0.04	0.20
TC10	9/21/92	0.08	< 0.01			< 0.01	0.01	0.01		0.02		< 0.01	< 0.05	< 0.05	4.73		< 0.01		0.03	0.70	0.50	0.52
TC10	10/19/92	0.06	< 0.01	< 0.01	< 0.01	< 0.01	0.02	0.02	< 0.10	0.02	< 0.01	< 0.01	< 0.05	< 0.05	4.86	0.05	< 0.01	< 0.01	< 0.01	0.14	0.03	0.09
TC10	11/3/92	0.07	0.02			< 0.01	< 0.01	< 0.01		0.03		< 0.01	< 0.05	< 0.05	6.49		< 0.01		0.02	0.17	0.03	0.32
TC10	11/13/92	0.10	0.02			0.02	< 0.01	0.04		0.02		< 0.01	0.07	< 0.05	6.64		< 0.01		0.03	0.33	0.03	0.39
TC10	12/1/92	0.03	0.02			< 0.01	0.05	0.02		0.04		< 0.01	< 0.10	< 0.05	4.50		< 0.01		0.03	0.30	0.06	0.36
TC10	12/14/92	0.03	< 0.01			< 0.01	< 0.01	0.02		0.03		< 0.01	< 0.10	< 0.05	4.30		< 0.01		0.01	0.20	0.04	0.14
TC10s	11/22/91	3.77	0.16	bdl	bdl	0.04	bdl	1.88	bdl	0.08	bdl	0.03	1.38	0.10	1.17	bdl	0.25	bdl	0.04	19.36	0.43	27.10
TC10s	12/1/91	0.43	0.03	bdl	bdl	0.01	bdl	0.18	bdl	0.04	bdl	0.01	0.18	0.02	3.10	bdl	0.01	bdl	bdl	12.45	0.34	17.44
TC10s	12/2/91	0.58	0.02	bdl	bdl	bdl	bdl	0.13	bdl	0.02	bdl	bdl	0.11	0.01	2.60	bdl	0.02	bdl	bdl	5.58	0.18	8.49
TC10s	8/28/92	0.20	0.02	0.04		0.01	< 0.01	0.04	< 0.10	0.01		< 0.01	< 0.05	< 0.05	6.70	0.15	< 0.01	< 0.01	0.01	1.76	0.07	1.29
TC10s	9/18/92	0.16	0.02			0.01	< 0.01	0.04		0.01		< 0.01	< 0.05	< 0.05	6.10		< 0.01		< 0.01	0.30	0.01	0.41
TC10s	10/5/92	0.09	< 0.01			< 0.01	< 0.01	0.04		0.03		< 0.01	< 0.05	< 0.05	4.05		< 0.01		< 0.01	1.83	0.11	2.14
TC10s	12/17/92	0.08	< 0.01	0.03	< 0.01	< 0.01	< 0.01	0.07	< 0.10	0.03	< 0.10	< 0.01	< 0.10	< 0.05	7.50	0.14	< 0.01	< 0.01	0.01	3.00	0.14	4.10

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
TC6s	12/1/91	0.16	0.01	bdl	bdl	bdl	bdl	0.06	bdl	0.04	bdl	bdl	< 0.01	bdl	1.70	bdl	bdl	bdl	bdl	0.08	0.05	0.28
TC7	7/1/91	0.26	0.04	bdl	bdl	< 0.01	bdl	0.23	bdl	0.02	bdl	bdl	0.48	0.10	3.90	bdl	bdl	bdl	< 0.02	75.82	6.63	30.01
TC7	7/16/91	0.14	0.02	bdl	bdl	0.01	bdl	0.07	bdl	0.03	bdl	0.01	0.30	0.08	3.60	bdl	0.01	bdl	bdl	10.54	0.57	8.39
TC7	7/31/91	0.20	< 0.01	bdl	bdl	bdl	0.01	0.23	bdl	0.02	bdl	bdl	< 0.36	0.01	4.00	bdl	0.01	bdl	< 0.01	1.35	0.04	1.87
TC7	8/13/91	0.65	bdl	bdl	bdl	0.02	bdl	0.14	bdl	0.01	bdl	0.02	0.97	0.04	1.54	bdl	0.01	bdl	0.02	10.11	0.34	10.70
TC7	8/28/91	0.27	0.01	0.01	bdl	0.01	bdl	0.05	bdl	0.01	0.02	0.01	0.18	0.02	9.80	0.08	bdl	0.01	bdl	25.13	1.39	18.51
TC7	9/23/91	0.35	0.22	bdl	bdl	0.03	0.03	0.07	bdl	0.01	bdl	0.05	2.35	0.08	9.30	bdl	bdl	bdl	0.07	5.67	0.57	2.84
TC7	10/8/91	0.41	bdl	bdl	bdl	0.04	0.01	0.10	bdl	bdl	bdl	bdl	0.04	0.09	7.30	bdl	0.04	bdl	0.01	2.22	0.25	1.41
TC7	10/24/91	1.10	bdl	bdl	bdl	0.12	< 0.03	0.46	bdl	0.01	bdl	bdl	0.02	0.06	1.00	bdl	0.02	bdl	< 0.01	2.43	0.13	12.49
TC7	11/17/91	0.07	0.02	bdl	bdl	bdl	bdl	0.09	bdl	0.08	bdl	bdl	0.19	bdl	4.90	bdl	bdl	bdl	bdl	0.75	0.16	0.25
TC7	12/16/91	1.83	0.10	0.03	bdl	0.10	0.02	0.07	bdl	0.01	0.01	0.02	0.69	0.06	1.53	0.16	0.01	0.01	0.05	17.02	0.60	25.55
TC7	12/30/91	0.30	0.03	bdl	bdl	0.01	bdl	0.10	bdl	0.01	bdl	bdl	0.13	0.02	5.00	bdl	0.01	bdl	bdl	3.22	0.17	4.59
TC7	1/13/92	2.98	0.16	0.29	bdl	0.08	0.01	0.18	bdl	0.01	0.04	0.03	1.14	0.04	15.60	0.03	0.01	0.12	0.04	98.75	3.16	47.80
TC7	2/10/92	0.80	bdl	bdl	bdl	0.06	0.01	0.15	bdl	bdl	bdl	bdl	bdl	0.14	6.70	bdl	bdl	bdl	0.03	11.90	0.42	16.69
TC7	3/9/92	2.25	bdl	bdl	bdl	0.04	bdl	0.98	bdl	0.05	bdl	0.01	bdl	0.09	6.90	bdl	0.06	bdl	0.01	83.20	1.93	47.40
TC7	4/6/92	8.57	0.12	bdl	bdl	0.10	bdl	0.30	bdl	0.02	bdl	0.02	0.83	0.02	80.00	bdl	0.02	bdl	0.04	64.93	1.25	46.88
TC7	5/18/92	1.62	bdl	bdl	bdl	0.04	bdl	0.16	< 0.20	0.01	bdl	bdl	0.10	0.05	5.15	bdl	0.01	bdl	0.01	3.73	0.77	4.99
TC7	6/1/92	2.47	bdl	bdl	bdl	0.06	bdl	0.17	bdl	bdl	bdl	0.01	bdl	0.11	1.60	bdl	0.04	bdl	bdl	20.00	3.01	23.10
TC7	6/15/92	2.74	0.02	bdl	bdl	0.01	bdl	0.07	bdl	bdl	bdl	bdl	bdl	0.06	5.51	bdl	bdl	bdl	bdl	25.52	1.46	16.28
TC7	7/27/92	0.10	< 0.01			< 0.01	< 0.01	0.02		< 0.01		< 0.01	0.10	< 0.06	4.20		< 0.01		0.01	1.18	0.04	0.92
TC7N	7/1/91	bdl	0.07	bdl	bdl	bdl	0.01	bdl	bdl	0.87	bdl	2.44	0.12	0.03	4.70	bdl	bdl	bdl	0.72	2.47	0.13	1.49
TC7N	7/16/91	0.30	0.02	bdl	bdl	0.01	bdl	0.08	bdl	0.01	bdl	bdl	0.38	0.06	4.10	bdl	6.00	bdl	bdl	0.54	0.03	0.92
TC7N	7/31/91	2.09	0.02	bdl	bdl	0.01	0.01	3.16	bdl	0.42	bdl	0.01	0.01	0.02	6.30	bdl	0.11	bdl	0.02	9.07	0.70	8.51
TC7N	8/13/91	0.44	0.03	bdl	bdl	0.02	bdl	0.21	bdl	0.06	bdl	0.01	0.40	bdl	4.70	bdl	0.01	bdl	bdl	1.74	0.11	2.35
TC7N	8/28/91	0.73	0.04	0.10	bdl	0.03	bdl	0.12	bdl	0.01	0.03	0.01	0.45	0.06	5.20	0.02	0.01	0.10	0.12	14.55	0.55	13.40
TC7N	9/11/91	0.40	bdl	bdl	bdl	bdl	bdl	0.05	bdl	bdl	bdl	bdl	0.04	0.03	6.80	bdl	0.01	bdl	0.01	4.85	0.13	6.39
TC7N	9/23/91	0.76	0.16	bdl	bdl	0.02	0.02	0.05	bdl	0.01	bdl	0.03	1.70	0.06	8.00	bdl	bdl	bdl	0.05	22.20	0.37	21.92
TC7N	10/8/91	1.16	< 0.01	bdl	bdl	0.01	bdl	0.14	bdl	bdl	bdl	bdl	0.03	0.01	4.30	bdl	0.01	bdl	0.01	2.49	0.13	3.36
TC7N	10/24/91	0.91	bdl	bdl	bdl	bdl	< 0.03	0.07	bdl	bdl	bdl	bdl	0.04	bdl	3.80	bdl	bdl	bdl	< 0.01	3.40	0.14	6.80
TC7N	11/2/91	0.98	bdl	bdl	bdl	0.01	< 0.03	0.09	bdl	bdl	bdl	bdl	0.76	0.03	5.00	bdl	bdl	bdl	< 0.01	16.15	0.55	11.08
TC7N	11/17/91	0.66	0.02	bdl	bdl	0.01	0.01	0.05	bdl	0.03	bdl	bdl	0.03	0.01	4.00	bdl	bdl	bdl	bdl	0.61	0.08	1.09
TC7N	12/16/91	0.36	0.03	0.01	bdl	0.01	bdl	0.09	bdl	0.01	0.01	0.01	0.26	0.02	5.20	0.05	0.01	bdl	0.01	4.32	1.71	4.31
TC7N	12/30/91	0.15	0.02	bdl	bdl	0.03	0.01	0.09	bdl	0.03	bdl	bdl	0.10	0.04	4.00	bdl	0.01	bdl	bdl	3.37	0.10	6.17
TC7N	1/13/92	0.47	0.03	0.01	bdl	0.02	bdl	0.09	bdl	0.01	0.01	0.01	bdl	0.01	6.00	0.05	bdl	0.01	bdl	31.58	1.52	15.38
TC7N	2/10/92	0.73	bdl	bdl	bdl	0.01	bdl	0.06	bdl	bdl	bdl	bdl	bdl	0.06	6.60	bdl	< 0.05	bdl	0.01	11.58	0.75	14.64
TC7N	3/9/92	0.31	bdl	bdl	bdl	0.01	bdl	0.18	bdl	0.03	bdl	bdl	bdl	0.01	4.50	bdl	0.02	bdl	bdl	2.03	0.11	2.43

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
TC7N	4/6/92	0.64	0.04	bdl	bdl	0.01	bdl	0.19	bdl	0.01	bdl	0.01	0.34	0.03	50.00	bdl	0.02	bdl	0.02	14.25	0.34	9.00
TC7N	5/4/92	bdl	bdl	bdl	bdl	0.01	bdl	bdl	bdl	1.18	bdl	bdl	0.05	0.01	8.39	bdl	bdl	bdl	bdl	3.55	0.18	4.61
TC7N	5/18/92	0.37	bdl	bdl	bdl	bdl	bdl	0.03	< 0.20	bdl	bdl	bdl	0.01	bdl	4.24	bdl	bdl	bdl	bdl	1.65	0.15	1.02
TC7N	6/1/92	0.33	bdl	bdl	bdl	bdl	bdl	0.07	bdl	bdl	bdl	bdl	bdl	0.01	4.50	bdl	0.01	bdl	bdl	15.10	3.92	49.68
TC7N	6/15/92	1.29	0.02	bdl	bdl	bdl	bdl	0.05	bdl	bdl	bdl	0.02	bdl	0.01	5.07	bdl	bdl	bdl	bdl	36.44	1.87	13.11
TC7N	7/27/92	0.11	< 0.01			< 0.01	< 0.01	0.04		0.01		< 0.01	< 0.06	< 0.05	4.50		< 0.01		0.01	2.80	0.12	1.23
TC7NP	10/8/91	0.04	bdl	bdl	bdl	bdl	bdl	0.01	bdl	bdl	bdl	bdl	< 0.02	bdl	3.40	bdl	< 0.01	bdl	0.09	0.04	0.01	0.06
TC7NP	10/24/91	0.06	bdl	bdl	bdl	< 0.01	< 0.03	0.03	bdl	bdl	bdl	bdl	< 0.03	0.01	3.50	bdl	< 0.01	bdl	0.08	0.07	bdl	0.25
TC7NP	11/17/91	0.05	bdl	bdl	bdl	0.01	bdl	0.02	bdl	bdl	bdl	bdl	0.06	bdl	3.50	bdl	bdl	bdl	0.23	0.08	0.01	0.13
TC7NP	12/16/91	0.12	0.01	0.01	0.02	bdl	bdl	0.17	bdl	0.02	bdl	bdl	bdl	0.01	2.70	0.01	bdl	0.01	0.07	0.17	0.06	0.10
TC7NP	12/30/91	0.06	bdl	bdl	bdl	bdl	bdl	bdl	0.07	0.01	bdl	bdl	0.05	bdl	2.70	bdl	bdl	bdl	0.03	0.05	0.02	0.05
TC7NP	1/13/92	0.10	bdl	0.01	bdl	bdl	bdl	0.08	bdl	bdl	bdl	bdl	bdl	bdl	3.00	0.01	bdl	0.02	0.31	0.10	0.01	0.13
TC7NP	2/10/92	0.06	bdl	bdl	bdl	bdl	bdl	0.04	bdl	bdl	bdl	bdl	bdl	0.02	3.20	bdl	bdl	bdl	0.24	0.16	0.02	0.21
TC7NP	3/9/92	0.05	bdl	bdl	bdl	bdl	bdl	0.02	bdl	0.01	bdl	bdl	0.08	bdl	2.60	bdl	0.01	bdl	0.15	0.12	0.02	0.18
TC7NP	4/6/92	0.07	bdl	bdl	bdl	bdl	bdl	bdl	0.22	0.01	bdl	bdl	0.03	bdl	20.00	bdl	0.01	bdl	0.09	0.10	0.01	0.11
TC7NP	6/1/92	0.43	bdl	bdl	bdl	bdl	bdl	0.32	bdl	0.02	bdl	bdl	bdl	0.01	5.81	bdl	0.01	bdl	bdl	54.52	1.47	18.73
TC7NP	6/15/92	1.33	0.02	bdl	bdl	bdl	bdl	0.04	bdl	bdl	bdl	bdl	bdl	0.01	5.10	bdl	bdl	bdl	bdl	37.55	1.43	13.32
TC7NPs	12/1/91	0.13	bdl	bdl	bdl	bdl	bdl	0.03	bdl	0.03	bdl	bdl	0.01	bdl	1.60	bdl	bdl	bdl	0.03	0.35	0.04	0.24
TC7NPs	12/2/91	0.17	0.01	bdl	bdl	bdl	bdl	0.03	bdl	0.03	bdl	bdl	0.04	< 0.01	1.70	bdl	bdl	bdl	0.03	0.88	0.07	1.23
TC7Ns	12/1/91	0.08	0.01	bdl	bdl	0.01	bdl	0.09	bdl	0.05	bdl	bdl	0.10	0.02	3.90	bdl	bdl	bdl	bdl	0.54	0.07	0.25
TC7Ns	12/2/91	1.56	0.07	bdl	bdl	0.04	bdl	0.07	bdl	0.01	bdl	0.01	0.55	0.01	8.00	bdl	bdl	bdl	0.01	75.09	0.26	71.95
TC7s	12/1/91	0.24	0.05	bdl	bdl	0.09	0.03	0.09	bdl	0.02	bdl	0.01	0.53	0.07	3.50	bdl	0.01	bdl	0.01	4.53	0.28	4.81
TC7s	12/2/91	0.34	0.03	bdl	bdl	0.02	bdl	0.13	bdl	0.02	bdl	bdl	0.21	0.02	3.80	bdl	0.01	bdl	bdl	2.58	0.10	3.63
TC8	10/24/91	0.05	bdl	bdl	bdl	0.01	< 0.03	0.02	bdl	bdl	bdl	bdl	0.01	0.01	3.60	bdl	0.01	bdl	0.04	0.05	bdl	0.09
TD1	7/1/91	0.10	0.06	bdl	bdl	0.01	< 0.06	0.05	bdl	0.02	bdl	0.02	0.77	0.06	2.50	bdl	bdl	bdl	0.01	0.17	0.02	0.20
TD1	7/15/91	0.09	0.05	bdl	bdl	bdl	bdl	0.05	bdl	0.02	bdl	0.01	0.75	0.11	2.80	bdl	bdl	bdl	bdl	0.18	0.03	0.19
TD1	7/29/91	0.19	< 0.01	bdl	bdl	0.01	0.01	0.05	bdl	0.01	bdl	bdl	bdl	0.03	2.90	bdl	0.02	bdl	bdl	0.54	0.04	0.67
TD1	8/12/91	0.09	0.08	bdl	bdl	0.03	0.04	0.06	bdl	0.02	bdl	0.02	0.90	0.08	3.00	bdl	bdl	bdl	0.03	0.17	0.03	0.20
TD1	8/29/91	0.11	0.04	0.03	bdl	bdl	bdl	0.07	bdl	0.02	0.03	bdl	0.51	0.02	3.10	0.17	bdl	bdl	bdl	0.37	0.04	0.32
TD1	9/3/91	0.06	0.04	bdl	bdl	0.01	bdl	0.06	bdl	0.02	bdl	0.01	0.45	0.03	3.10	bdl	bdl	bdl	0.01	0.24	0.04	0.22
TD1	9/10/91	0.17	0.01	bdl	bdl	bdl	bdl	0.13	bdl	0.06	bdl	0.01	0.01	0.06	3.00	bdl	0.02	bdl	0.01	0.76	0.09	0.50
TD1	9/22/91	0.12	0.13	bdl	bdl	bdl	0.01	0.06	bdl	0.03	bdl	0.03	1.32	0.07	2.90	bdl	bdl	bdl	0.03	0.38	0.08	0.19
TD1	10/5/91	0.14	bdl	bdl	bdl	bdl	bdl	0.05	bdl	0.02	bdl	bdl	0.03	0.05	2.90	bdl	0.01	bdl	0.01	0.21	0.03	0.18
TD1	10/20/91	0.10	0.08	0.03	0.01	0.01	< 0.01	0.07	bdl	0.02	0.02	0.01	0.80	0.05	2.80	0.21	bdl	0.01	0.01	0.23	0.03	0.17
TD1	11/2/91	0.15	0.01	bdl	bdl	bdl	< 0.03	0.15	bdl	0.06	bdl	bdl	0.07	0.09	2.90	bdl	0.03	bdl	< 0.01	0.40	0.08	0.14
TD1	11/17/91	0.09	0.07	bdl	bdl	0.02	bdl	0.09	bdl	0.04	bdl	0.02	0.63	0.02	3.00	bdl	0.01	bdl	0.01	0.32	0.05	0.15

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
TD1	12/16/91	0.11	0.04	0.13	bdl	0.05	0.01	0.06	bdl	0.01	bdl	0.01	0.34	0.04	2.40	0.02	bdl	0.11	0.04	0.40	0.03	0.53
TD1	12/30/91	0.06	0.03	bdl	bdl	0.01	bdl	0.06	bdl	0.01	bdl	bdl	0.26	0.02	2.50	bdl	bdl	bdl	bdl	0.15	0.01	0.23
TD1	1/13/92	0.12	0.08	0.02	0.01	0.04	bdl	0.12	0.03	0.02	0.04	0.01	0.58	0.06	2.70	0.12	0.01	0.01	0.01	0.05	0.02	0.07
TD1	1/27/92	0.10	0.05	bdl	bdl	bdl	bdl	0.05	bdl	0.01	bdl	0.01	0.42	0.02	2.40	bdl	bdl	bdl	0.01	0.11	0.02	0.18
TD1	2/10/92	0.11	bdl	bdl	bdl	0.01	bdl	0.05	bdl	0.01	bdl	bdl	bdl	0.06	2.50	bdl	0.02	bdl	bdl	0.22	0.03	0.18
TD1	2/24/92	0.10	0.08	bdl	bdl	bdl	bdl	0.06	bdl	0.02	bdl	0.02	0.72	0.05	2.70	bdl	bdl	bdl	0.05	0.20	0.02	0.20
TD1	3/9/92	0.10	bdl	bdl	bdl	0.02	bdl	0.04	bdl	0.01	bdl	bdl	bdl	0.02	2.20	bdl	0.02	bdl	bdl	0.15	0.02	0.19
TD1	3/23/92	0.14	0.06	bdl	bdl	0.01	bdl	0.04	bdl	0.01	bdl	0.02	0.60	0.08	2.50	bdl	bdl	bdl	0.02	0.10	0.01	0.27
TD1	4/6/92	0.11	0.07	bdl	bdl	0.01	bdl	0.05	bdl	0.01	bdl	0.01	0.65	bdl	20.00	bdl	bdl	bdl	0.04	0.11	0.01	0.15
TD1	4/20/92	0.08	bdl	bdl	bdl	bdl	bdl	0.04	bdl	0.01	bdl	bdl	0.10	0.04	2.73	bdl	0.02	bdl	0.05	0.13	0.01	0.14
TD1	5/4/92	0.07	bdl	bdl	bdl	bdl	bdl	0.04	bdl	0.01	bdl	bdl	0.06	0.04	2.58	bdl	0.01	bdl	bdl	0.11	0.01	0.14
TD1	5/18/92	0.06	bdl	bdl	bdl	bdl	bdl	0.04	< 0.20	0.01	bdl	bdl	bdl	0.02	2.51	bdl	0.01	bdl	bdl	0.11	0.01	0.13
TD1	6/1/92	0.15	bdl	bdl	bdl	bdl	bdl	0.08	bdl	0.01	bdl	bdl	bdl	0.02	3.09	bdl	0.01	bdl	bdl	0.12	0.02	0.04
TD1	6/15/92	0.12	0.01	bdl	bdl	bdl	bdl	0.04	bdl	0.01	bdl	bdl	bdl	0.05	2.67	bdl	< 0.01	bdl	bdl	0.15	0.02	0.20
TD1	6/29/92	0.15	0.07	0.10	bdl	bdl	0.02	0.07	< 0.07	0.03	bdl	0.01	0.73	0.07	3.26	0.17	0.01	0.01	0.05	0.18	0.03	0.20
TD1	7/13/92	< 0.01	< 0.01			< 0.01	< 0.01	0.04		0.03		< 0.01	< 0.05	< 0.05	3.60		< 0.01		0.01	0.14	0.03	< 0.01
TD1	7/27/92	< 0.01	0.01			< 0.01	< 0.01	0.07		0.04		< 0.01	< 0.06	< 0.05	3.40		< 0.01		0.02	0.19	0.04	0.03
TD1	8/10/92	< 0.01	0.01			< 0.01	< 0.01	0.06		0.04		< 0.01	< 0.06	< 0.06	3.40		< 0.01		0.01	0.23	0.04	0.04
TD1	8/25/92	< 0.01	< 0.01	0.05	< 0.01	< 0.01	< 0.01	0.10	< 0.10	< 0.01	< 0.01	< 0.01	< 0.05	< 0.05	3.40	0.16	< 0.01	< 0.01	0.03	0.20	0.04	< 0.01
TD1	9/8/92	< 0.01	0.01			< 0.01	< 0.01	0.18		0.07		< 0.01	< 0.05	< 0.05	3.70		< 0.01		0.01	0.45	0.08	< 0.01
TD1	9/21/92	< 0.01	< 0.01			< 0.01	0.01	0.14		0.05		< 0.01	< 0.06	< 0.05	3.37		< 0.01		0.01	0.25	0.06	0.02
TD1	10/19/92	< 0.01	< 0.01	0.05	< 0.01	< 0.01	< 0.01	0.09	< 0.10	0.10	< 0.01	< 0.01	< 0.05	< 0.05	3.24	0.17	< 0.01	0.03	< 0.01	1.00	0.12	0.19
TD1	11/3/92	< 0.01	0.01			< 0.01	< 0.01	< 0.01		< 0.01		< 0.01	< 0.05	< 0.05	3.60		< 0.01		< 0.01	0.18	0.04	< 0.01
TD1	11/13/92	< 0.01	0.01			< 0.01	< 0.01	0.09		0.03		< 0.01	< 0.05	0.07	2.95		< 0.01		0.03	0.21	0.04	< 0.01
TD1	11/30/92	< 0.01	0.01			< 0.01	< 0.01	0.12		0.03		< 0.01	< 0.10	< 0.05	2.90		< 0.01		0.01	0.16	0.03	< 0.01
TD1	12/14/92	< 0.01	< 0.01			< 0.01	< 0.01	0.06		0.02		< 0.01	< 0.10	< 0.05	2.90		< 0.01		< 0.01	0.11	0.03	< 0.01
TD1s	11/22/91	0.21	0.14	bdl	bdl	0.02	bdl	0.20	bdl	0.03	bdl	0.03	1.29	0.09	2.90	bdl	bdl	bdl	0.03	0.40	0.05	0.42
TD1s	12/1/91	0.20	0.04	bdl	bdl	0.01	bdl	0.13	bdl	0.01	bdl	0.01	0.32	0.04	2.30	bdl	0.01	bdl	bdl	0.48	0.03	0.74
TD1s	12/2/91	0.47	0.04	bdl	bdl	0.07	0.05	0.30	bdl	0.01	bdl	0.01	0.34	0.07	2.50	bdl	0.02	bdl	0.02	2.17	0.05	3.19
TD1s	8/28/92	0.02	0.01	0.05		< 0.01	< 0.01	0.06	< 0.10	< 0.01		< 0.01	< 0.05	< 0.05	3.30	0.18	< 0.01	< 0.01	< 0.01	0.26	0.02	0.02
TD1s	9/18/92	0.02	0.01			< 0.01	< 0.01	0.11		0.01		< 0.01	< 0.05	< 0.05	3.30		< 0.01		0.01	0.28	0.01	0.13
TD1s	10/5/92	< 0.01	< 0.01			< 0.01	< 0.01	0.02		0.02		< 0.01	< 0.05	< 0.05	3.27		< 0.01		< 0.01	0.44	0.02	0.04
TD1s	12/17/92	< 0.01	0.02	0.03	< 0.01	< 0.01	< 0.01	0.05	< 0.10	0.01	< 0.10	< 0.01	< 0.10	< 0.05	2.60	0.17	< 0.01	< 0.01	< 0.01	0.19	0.01	0.08
TNN	3/9/92	1.07	0.01	bdl	bdl	0.02	bdl	0.13	bdl	bdl	bdl	bdl	bdl	0.05	4.30	bdl	0.01	bdl	bdl	0.70	0.03	1.63
YC1	7/1/91	0.03	0.01	bdl	bdl	< 0.02	bdl	0.39	bdl	0.01	bdl	< 0.01	0.12	0.01	2.20	bdl	bdl	bdl	bdl	0.48	0.02	0.04
YC1	7/16/91	0.02	bdl	bdl	bdl	< 0.01	bdl	0.19	bdl	0.01	bdl	< 0.01	0.05	0.02	2.70	bdl	bdl	bdl	bdl	0.22	0.02	0.04

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
YC1	7/29/91	0.03	bdl	bdl	bdl	bdl	bdl	0.12	bdl	0.07	bdl	bdl	< 0.02	0.02	3.00	bdl	bdl	bdl	0.01	0.23	0.08	0.06
YC1	8/13/91	0.04	0.01	bdl	bdl	bdl	bdl	0.16	bdl	0.07	bdl	bdl	0.14	< 0.01	3.10	bdl	bdl	bdl	< 0.01	0.21	0.07	0.04
YC1	8/28/91	0.04	bdl	0.02	bdl	< 0.01	bdl	0.12	bdl	0.05	bdl	< 0.01	bdl	bdl	3.20	0.04	bdl	bdl	bdl	0.19	0.06	0.04
YC1	9/10/91	0.05	bdl	bdl	bdl	bdl	bdl	0.13	bdl	0.06	bdl	bdl	< 0.07	0.01	3.10	bdl	< 0.01	bdl	bdl	0.17	0.06	0.03
YC1	9/22/91	0.03	0.02	bdl	bdl	bdl	bdl	0.12	bdl	0.02	bdl	0.01	0.24	0.03	2.80	bdl	bdl	bdl	0.01	0.15	0.03	0.03
YC1	10/6/91	0.05	bdl	bdl	bdl	bdl	bdl	0.14	bdl	0.06	bdl	bdl	0.03	bdl	3.20	bdl	< 0.01	bdl	0.01	0.21	0.07	0.04
YC1	10/19/91	0.02	0.01	0.02	bdl	bdl	bdl	0.10	bdl	0.02	bdl	bdl	0.15	0.03	3.00	0.06	bdl	bdl	bdl	0.13	0.02	0.04
YC1	11/2/91	0.03	0.01	bdl	bdl	< 0.01	< 0.03	0.17	bdl	0.05	bdl	bdl	0.06	< 0.02	3.50	bdl	bdl	bdl	bdl	0.23	0.07	0.03
YC1	11/17/91	0.03	0.03	bdl	bdl	0.02	bdl	0.12	bdl	0.02	bdl	0.01	0.26	< 0.03	3.50	bdl	bdl	bdl	bdl	0.27	0.17	0.04
YC1	12/17/91	0.08	0.01	0.02	bdl	0.03	bdl	0.23	bdl	0.15	bdl	0.01	0.09	0.04	2.30	0.02	bdl	bdl	0.02	0.52	0.15	0.41
YC1	12/30/91	0.04	bdl	bdl	bdl	bdl	bdl	0.17	bdl	0.11	bdl	bdl	0.02	bdl	2.20	bdl	bdl	bdl	bdl	0.34	0.11	0.24
YC1	1/13/92	0.06	bdl	0.02	0.01	bdl	bdl	0.16	0.01	0.07	bdl	bdl	bdl	bdl	2.30	0.02	bdl	bdl	0.01	0.28	0.07	0.16
YC1	1/27/92	0.05	0.01	bdl	bdl	0.03	0.04	0.14	bdl	0.06	bdl	0.01	0.06	0.09	2.30	bdl	0.01	bdl	0.01	0.25	0.06	0.16
YC1	2/10/92	0.04	bdl	bdl	bdl	bdl	bdl	0.16	bdl	0.04	bdl	bdl	0.04	0.02	2.40	bdl	bdl	bdl	bdl	0.22	0.04	0.09
YC1	2/24/92	0.03	0.01	bdl	bdl	0.01	bdl	0.12	bdl	0.03	bdl	bdl	0.02	0.07	2.30	bdl	bdl	bdl	0.02	0.18	0.03	0.08
YC1	3/9/92	0.06	bdl	bdl	bdl	bdl	bdl	0.11	bdl	0.02	bdl	bdl	bdl	bdl	2.40	bdl	bdl	bdl	bdl	0.16	0.02	0.07
YC1	3/23/92	0.04	0.01	bdl	bdl	bdl	bdl	0.11	bdl	0.03	bdl	bdl	bdl	0.04	2.30	bdl	bdl	bdl	bdl	0.22	0.03	0.12
YC1	4/5/92	0.03	0.01	bdl	bdl	bdl	bdl	0.10	bdl	0.03	bdl	bdl	0.02	bdl	20.00	bdl	bdl	bdl	bdl	0.20	0.03	0.09
YC1	4/21/92	0.06	bdl	bdl	bdl	bdl	bdl	0.18	bdl	0.03	bdl	bdl	0.07	0.02	2.13	bdl	bdl	bdl	0.03	0.36	0.04	0.27
YC1	5/4/92	0.01	bdl	bdl	bdl	bdl	bdl	0.17	bdl	0.03	bdl	bdl	bdl	bdl	2.04	bdl	0.01	bdl	bdl	0.26	0.04	0.04
YC1	5/18/92	0.02	bdl	bdl	bdl	bdl	bdl	17.00	< 0.20	0.06	bdl	bdl	bdl	bdl	2.28	bdl	bdl	bdl	bdl	0.31	0.06	0.05
YC1	6/1/92	0.03	bdl	bdl	bdl	bdl	bdl	0.18	bdl	0.04	bdl	bdl	bdl	0.01	2.28	bdl	0.01	bdl	0.01	0.31	0.03	0.07
YC1	6/15/92	0.02	bdl	bdl	bdl	bdl	bdl	0.25	bdl	0.03	bdl	bdl	0.05	bdl	1.80	bdl	bdl	bdl	bdl	0.32	0.04	0.05
YC1	6/29/92	0.02	bdl	0.05	bdl	bdl	bdl	0.21	< 0.07	0.10	bdl	bdl	bdl	0.01	2.64	0.03	0.02	bdl	bdl	0.41	0.10	0.06
YC1	7/13/92	0.02	< 0.01			< 0.01	< 0.01	0.23		0.10		< 0.01	< 0.05	< 0.05	2.50		< 0.01		0.02	0.35	0.11	0.04
YC1	7/27/92	< 0.01	< 0.01			< 0.01	0.01	0.22		0.08		< 0.01	< 0.05	< 0.06	2.70		< 0.01		0.02	0.39	0.09	0.02
YC1	8/10/92	< 0.01	< 0.01			< 0.01	< 0.01	0.11		0.09		< 0.01	< 0.06	< 0.06	3.30		< 0.01		0.01	0.23	0.16	0.01
YC12	7/1/91	0.04	0.02	bdl	bdl	0.01	bdl	0.44	bdl	0.08	bdl	bdl	0.14	0.03	2.40	bdl	bdl	bdl	< 0.01	0.64	0.08	0.09
YC12	7/16/91	0.09	0.03	bdl	bdl	0.02	bdl	0.12	bdl	0.16	bdl	0.01	0.54	0.05	2.80	bdl	bdl	bdl	bdl	0.60	0.17	0.17
YC12	7/30/91	0.16	0.01	bdl	bdl	bdl	bdl	0.06	bdl	0.13	bdl	bdl	< 0.02	0.02	2.40	bdl	3.01	bdl	bdl	0.87	0.19	0.45
YC12	8/13/91	0.15	0.05	bdl	bdl	bdl	bdl	0.12	bdl	0.13	bdl	0.01	0.48	0.03	3.30	bdl	bdl	bdl	bdl	0.93	0.15	0.53
YC12	8/28/91	0.13	0.04	0.04	bdl	bdl	bdl	0.11	bdl	0.12	0.02	0.01	0.71	0.05	3.40	0.11	bdl	bdl	0.02	0.51	0.12	0.26
YC12	9/10/91	0.23	0.09	bdl	bdl	0.02	0.01	0.08	bdl	0.12	bdl	0.03	0.98	0.13	2.60	bdl	bdl	bdl	0.03	0.49	0.13	0.34
YC12	9/22/91	0.18	0.06	bdl	bdl	0.02	0.01	0.13	bdl	0.08	bdl	0.01	0.59	0.04	2.80	bdl	bdl	bdl	0.02	0.60	0.10	0.50
YC12	10/6/91	0.20	bdl	bdl	bdl	bdl	bdl	0.17	bdl	0.08	bdl	bdl	0.02	0.03	2.90	bdl	bdl	bdl	0.01	0.59	0.10	0.48
YC12	10/19/91	0.07	0.04	0.03	bdl	0.01	bdl	0.10	0.01	0.12	0.02	0.01	0.55	0.06	3.20	0.11	bdl	bdl	0.01	0.34	0.13	0.30

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
YC12	11/2/91	0.10	0.01	bdl	bdl	bdl	< 0.03	0.10	bdl	0.12	bdl	bdl	0.01	0.05	4.00	bdl	bdl	bdl	< 0.01	0.36	0.13	0.15
YC12	11/17/91	0.09	0.05	bdl	bdl	0.02	bdl	0.07	bdl	0.14	bdl	0.01	0.51	0.04	5.00	bdl	bdl	bdl	bdl	0.24	0.15	0.14
YC12	12/17/91	0.08	0.01	0.03	bdl	bdl	bdl	0.25	bdl	0.13	bdl	bdl	0.13	0.02	2.50	0.03	bdl	bdl	0.02	0.66	0.13	0.59
YC12	12/30/91	0.08	0.01	bdl	bdl	bdl	bdl	0.21	bdl	0.09	bdl	bdl	0.01	bdl	2.50	bdl	bdl	bdl	bdl	0.35	0.09	0.23
YC12	1/13/92	0.09	0.01	0.02	bdl	bdl	bdl	0.24	bdl	0.09	bdl	bdl	0.01	bdl	2.60	0.03	bdl	bdl	bdl	0.40	0.09	0.22
YC12	1/27/92	0.05	0.01	bdl	bdl	bdl	bdl	0.18	bdl	0.06	bdl	bdl	0.11	0.03	2.40	bdl	0.01	bdl	bdl	0.30	0.06	0.20
YC12	2/10/92	0.05	bdl	bdl	bdl	bdl	bdl	0.25	bdl	0.11	bdl	bdl	bdl	0.03	2.70	bdl	< 0.01	bdl	bdl	0.39	0.11	0.15
YC12	2/24/92	0.04	0.02	bdl	bdl	bdl	bdl	0.15	bdl	0.06	bdl	bdl	0.13	0.04	2.50	bdl	bdl	bdl	bdl	0.28	0.06	0.15
YC12	3/9/92	0.06	bdl	bdl	bdl	bdl	bdl	0.12	bdl	0.04	bdl	bdl	0.08	0.02	2.40	bdl	0.02	bdl	bdl	0.39	0.04	1.08
YC12	3/23/92	0.05	0.01	bdl	bdl	bdl	bdl	0.15	bdl	0.04	bdl	bdl	0.11	0.07	2.40	bdl	bdl	bdl	bdl	0.26	0.04	0.18
YC12	4/5/92	0.05	0.01	bdl	bdl	bdl	bdl	0.17	bdl	0.05	bdl	bdl	0.26	0.01	20.00	bdl	bdl	bdl	bdl	0.31	0.05	0.14
YC12	4/21/92	0.15	bdl	bdl	bdl	bdl	bdl	0.19	bdl	0.06	bdl	bdl	0.11	0.02	2.88	bdl	0.01	bdl	0.05	1.79	0.11	0.83
YC12	5/4/92	0.03	bdl	bdl	bdl	bdl	bdl	0.21	bdl	0.08	bdl	bdl	0.04	bdl	2.60	bdl	0.01	bdl	bdl	0.46	0.08	0.16
YC12	5/18/92	0.05	bdl	bdl	bdl	bdl	bdl	0.21	< 0.20	0.09	bdl	bdl	bdl	0.01	3.13	bdl	bdl	bdl	bdl	0.50	0.09	0.14
YC12	6/1/92	0.08	bdl	bdl	bdl	bdl	bdl	0.08	bdl	0.10	bdl	bdl	bdl	0.01	3.09	bdl	0.01	bdl	bdl	0.54	0.11	0.04
YC12	6/15/92	0.04	0.01	bdl	bdl	bdl	bdl	0.14	bdl	0.07	bdl	bdl	0.05	bdl	2.58	bdl	0.02	bdl	bdl	0.49	0.07	0.16
YC12	6/29/92	0.07	bdl	0.08	bdl	bdl	bdl	0.18	< 0.07	0.14	bdl	bdl	bdl	0.01	3.68	0.08	0.01	bdl	bdl	0.64	0.14	0.15
YC12	7/13/92	0.03	< 0.01			< 0.01	< 0.01	0.21	bdl	0.14		< 0.01	< 0.05	< 0.05	3.30		< 0.01		0.01	0.63	0.15	0.17
YC12	7/27/92	< 0.01	< 0.01			< 0.01	< 0.01	0.14	bdl	0.10		< 0.01	< 0.05	< 0.06	3.10		< 0.01		0.01	0.96	0.16	0.32
YC12	8/10/92	< 0.01	< 0.01			< 0.01	< 0.01	0.07	bdl	0.04		< 0.01	< 0.06	< 0.05	5.00		< 0.01		< 0.01	0.49	0.16	0.20
YC12	8/25/92	< 0.01	0.01	0.03	< 0.01	< 0.01	< 0.01	0.08	0.10	0.07	< 0.01	< 0.01	< 0.05	< 0.05	4.30	0.07	< 0.01	< 0.01	< 0.01	0.37	0.07	0.07
YC12	9/8/92	< 0.01	< 0.01			< 0.01	< 0.01	0.15		0.12		< 0.01	< 0.05	< 0.05	4.20		< 0.01		0.02	0.92	0.14	0.25
YC12	9/21/92	< 0.01	< 0.01			< 0.01	< 0.01	0.34		0.18		< 0.01	< 0.05	< 0.05	4.03		< 0.01		0.01	0.89	0.20	0.23
YC12	10/19/92	< 0.01	< 0.01	0.03	< 0.01	< 0.01	< 0.01	0.17	< 0.10	0.11	< 0.01	< 0.01	< 0.05	< 0.05	4.52	< 0.08	< 0.01	0.02	< 0.01	0.62	0.11	0.09
YC12	11/3/92	< 0.01	0.02			< 0.01	< 0.01	0.27		0.16		< 0.01	< 0.05	< 0.05	4.96		< 0.01		< 0.01	0.75	0.17	0.09
YC12	11/13/92	< 0.01	0.01			< 0.01	< 0.01	0.21		0.07		< 0.01	< 0.05	< 0.05	2.70		< 0.01		0.02	0.44	0.08	0.09
YC12	11/30/92	< 0.01	< 0.01			< 0.01	0.02	0.30		0.07		< 0.01	< 0.10	< 0.05	2.80		< 0.01		0.03	0.48	0.08	0.14
YC12	12/14/92	0.02	< 0.01			< 0.01	< 0.01	0.21		0.05		< 0.01	< 0.10	< 0.05	2.60		< 0.01		< 0.01	0.32	0.05	0.04
YC12s	11/22/91	0.23	0.07	bdl	bdl	0.01	bdl	0.27	bdl	0.09	bdl	0.01	0.62	0.06	2.40	bdl	0.01	bdl	bdl	1.13	0.14	1.61
YC12s	12/1/91	0.30	0.02	bdl	bdl	0.01	bdl	0.21	bdl	0.05	bdl	bdl	0.11	0.02	2.20	bdl	0.01	bdl	bdl	0.91	0.10	1.24
YC12s	12/2/91	0.24	0.01	bdl	bdl	0.02	bdl	0.41	bdl	0.12	bdl	bdl	0.05	0.01	2.20	bdl	0.01	bdl	bdl	1.46	0.20	1.84
YC12s	8/28/92	0.04	0.02	0.03		< 0.01	< 0.01	0.13	< 0.10	0.08		< 0.01	< 0.05	< 0.05	2.90	0.80	< 0.01	< 0.01	0.01	2.07	0.14	2.25
YC12s	10/5/92	< 0.01	0.01			< 0.01	< 0.01	0.20		0.10		0.01	0.05	< 0.05	3.16		< 0.01		< 0.01	0.85	0.11	0.82
YC12s	12/17/92	0.07	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.18	< 0.10	0.07	< 0.10	< 0.01	< 0.10	< 0.05	2.50	0.02	< 0.01	< 0.01	< 0.01	1.20	0.20	0.35
YC1s	11/22/91	0.12	0.03	bdl	bdl	bdl	bdl	0.34	bdl	0.10	bdl	bdl	0.28	0.04	2.50	bdl	bdl	bdl	bdl	0.79	0.12	0.56
YC1s	12/1/91	0.15	0.01	bdl	bdl	0.04	0.04	0.16	bdl	0.06	bdl	bdl	0.03	0.05	1.80	bdl	bdl	bdl	0.01	0.13	0.06	0.13

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
YC1s	12/2/91	0.11	0.01	bdl	bdl	0.03	0.05	0.27	bdl	0.22	bdl	0.01	0.07	0.04	2.00	bdl	0.01	bdl	0.01	0.75	0.25	0.68
YC5	7/1/91	0.04	0.01	bdl	bdl	< 0.01	bdl	0.40	bdl	0.04	bdl	< 0.01	0.17	0.01	2.20	bdl	bdl	bdl	bdl	0.47	0.04	0.06
YC5	7/16/91	0.03	0.01	bdl	bdl	0.01	bdl	0.25	bdl	0.07	bdl	bdl	0.26	0.02	2.50	bdl	bdl	bdl	bdl	0.32	0.07	0.04
YC5	7/31/91	0.04	< 0.01	bdl	bdl	bdl	bdl	0.21	bdl	0.08	bdl	bdl	< 0.05	0.02	2.60	bdl	0.01	bdl	bdl	0.35	0.09	0.07
YC5	8/13/91	0.05	0.02	bdl	bdl	bdl	bdl	0.25	bdl	0.08	bdl	bdl	0.22	< 0.01	2.80	bdl	bdl	bdl	< 0.02	0.33	0.08	0.05
YC5	8/28/91	0.02	2.80	0.03	0.01	< 0.01	bdl	0.19	bdl	0.06	bdl	< 0.01	0.11	bdl	0.01	0.05	bdl	bdl	< 0.01	0.30	0.07	0.06
YC5	9/10/91	0.05	0.01	bdl	bdl	bdl	bdl	0.17	bdl	0.10	bdl	bdl	< 0.04	0.01	2.80	bdl	< 0.01	bdl	bdl	0.36	0.11	0.06
YC5	9/22/91	0.04	0.03	bdl	bdl	bdl	bdl	0.21	bdl	0.04	bdl	0.01	0.36	0.08	2.50	bdl	bdl	bdl	0.02	0.26	0.04	0.13
YC5	10/6/91	0.05	bdl	bdl	bdl	bdl	bdl	0.21	bdl	0.06	bdl	bdl	< 0.02	0.01	3.00	bdl	bdl	bdl	0.02	0.36	0.08	0.05
YC5	10/19/91	0.03	0.02	0.03	bdl	bdl	bdl	0.20	bdl	0.04	bdl	0.01	0.23	0.02	2.90	0.08	bdl	bdl	0.01	0.25	0.04	0.05
YC5	11/2/91	0.06	0.01	bdl	bdl	bdl	< 0.03	0.29	bdl	0.07	bdl	bdl	0.08	< 0.01	3.50	bdl	bdl	bdl	< 0.01	0.39	0.07	0.05
YC5	11/17/91	0.03	0.02	bdl	bdl	0.02	bdl	0.13	bdl	0.04	bdl	0.01	0.14	0.05	3.30	bdl	bdl	bdl	bdl	0.20	0.04	0.03
YC5	12/17/91	0.08	0.01	0.01	bdl	bdl	bdl	0.23	bdl	0.13	bdl	bdl	0.09	0.02	2.30	0.02	bdl	bdl	0.02	0.49	0.13	0.39
YC5	12/30/91	0.06	0.01	bdl	bdl	0.02	bdl	0.18	bdl	0.10	bdl	bdl	0.03	0.05	2.30	bdl	bdl	bdl	bdl	0.32	0.10	0.23
YC5	1/13/92	0.06	bdl	0.02	0.01	bdl	bdl	0.17	bdl	0.06	bdl	bdl	bdl	bdl	2.30	0.02	bdl	bdl	0.01	0.28	0.06	0.18
YC5	1/27/92	0.05	0.01	bdl	bdl	0.01	bdl	bdl	bdl	0.05	bdl	bdl	0.13	0.05	2.30	bdl	bdl	bdl	0.08	0.23	0.05	0.15
YC5	2/10/92	0.05	0.01	bdl	bdl	bdl	bdl	0.16	bdl	0.05	bdl	bdl	bdl	0.02	2.40	bdl	bdl	bdl	bdl	0.31	0.05	0.11
YC5	2/24/92	0.03	0.01	bdl	bdl	< 0.01	bdl	0.10	bdl	0.02	bdl	bdl	0.06	0.03	2.30	bdl	bdl	bdl	< 0.01	0.17	0.03	0.09
YC5	3/9/92	0.04	bdl	bdl	bdl	0.01	0.01	0.10	bdl	0.03	bdl	bdl	0.04	0.02	2.30	bdl	0.01	bdl	0.05	0.17	0.03	0.12
YC5	3/23/92	0.04	0.01	bdl	bdl	bdl	bdl	0.10	bdl	0.03	bdl	bdl	0.11	0.03	2.30	bdl	bdl	bdl	bdl	0.19	0.03	0.13
YC5	4/5/92	0.03	0.01	bdl	bdl	bdl	bdl	0.10	bdl	0.03	bdl	bdl	0.02	bdl	20.00	bdl	bdl	bdl	bdl	0.21	0.03	0.11
YC5	4/21/92	0.06	bdl	bdl	bdl	bdl	0.01	0.12	bdl	0.03	bdl	bdl	0.03	0.02	2.14	bdl	bdl	bdl	0.04	0.44	0.04	0.38
YC5	5/4/92	0.03	bdl	bdl	bdl	bdl	bdl	0.16	bdl	0.03	bdl	bdl	bdl	bdl	2.07	bdl	0.02	bdl	bdl	0.24	0.03	0.05
YC5	5/18/92	0.02	bdl	bdl	bdl	bdl	bdl	0.18	< 0.20	0.05	bdl	bdl	bdl	bdl	2.24	bdl	bdl	bdl	bdl	0.29	0.06	0.05
YC5	6/1/92	0.03	bdl	bdl	bdl	bdl	bdl	0.18	bdl	0.03	bdl	bdl	bdl	bdl	2.31	bdl	0.01	bdl	0.01	0.27	0.03	0.08
YC5	6/15/92	0.03	bdl	bdl	bdl	bdl	bdl	0.26	bdl	0.03	bdl	bdl	0.12	bdl	1.85	bdl	bdl	bdl	bdl	0.35	0.04	0.05
YC5	6/29/92	0.04	bdl	0.08	bdl	bdl	bdl	0.25	< 0.07	0.11	bdl	bdl	bdl	0.01	2.49	0.04	0.02	bdl	bdl	0.47	0.13	0.08
YC5	7/13/92	0.01	< 0.01			< 0.01	< 0.01	0.27		0.12		0.01	< 0.05	< 0.05	2.40		< 0.01		0.02	0.38	0.13	0.03
YC5	7/27/92	< 0.01	< 0.01			< 0.01	< 0.01	0.20		0.10		< 0.01	< 0.06	< 0.06	2.60		< 0.01		0.02	0.51	0.13	0.04
YC5	8/10/92	< 0.01	< 0.01			< 0.01	< 0.01	0.28		0.14		< 0.01	< 0.05	< 0.06	2.80		< 0.01		< 0.01	0.43	0.14	0.02
YC5	8/25/92	< 0.01	< 0.01	0.04	< 0.01	0.01	< 0.01	0.26	< 0.10	0.09	< 0.01	< 0.01	< 0.05	< 0.05	2.80	0.05	< 0.01	< 0.01	0.03	0.59	0.20	< 0.01
YC5	9/8/92	< 0.01	< 0.01			< 0.01	< 0.01	0.27		0.12		< 0.01	< 0.05	< 0.05	3.00		< 0.01		0.02	0.46	0.16	0.01
YC5	9/21/92	< 0.01	< 0.01			< 0.01	< 0.01	0.26		0.04		< 0.01	< 0.05	< 0.05	2.98		< 0.01		0.01	0.30	0.05	0.07
YC5	10/19/92	0.02	< 0.01	0.03	< 0.01	< 0.01	< 0.01	0.19	< 0.10	0.03	< 0.01	< 0.01	< 0.05	< 0.05	2.90	0.04	< 0.01	0.02	< 0.01	0.25	0.04	< 0.01
YC5	11/3/92	< 0.01	0.02			< 0.01	< 0.01	0.21		0.04		< 0.01	< 0.05	0.12	3.71		< 0.01		0.02	< 0.01	bdl	0.03
YC5	11/13/92	< 0.01	bdl			< 0.01	< 0.01	0.19		0.05		< 0.01	< 0.05	0.07	2.26		< 0.01		< 0.02	0.31	0.08	< 0.01

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
YC5	11/30/92	< 0.01	< 0.01			< 0.01	< 0.01	0.19		0.03		< 0.01	< 0.10	< 0.05	2.20		< 0.01		0.02	0.25	0.03	0.02
YC5	12/14/92	0.03	< 0.01			< 0.01	< 0.01	0.14		0.03		0.01	< 0.10	< 0.05	2.20		< 0.01		< 0.01	0.19	0.03	0.04
YC5A	7/1/91	0.05	0.02	bdl	bdl	< 0.01	bdl	bdl	bdl	0.03	bdl	bdl	0.30	0.04	2.60	bdl	bdl	bdl	0.23	0.35	0.03	0.09
YC5A	7/16/91	0.29	0.02	bdl	bdl	0.02	bdl	0.11	bdl	0.09	bdl	0.01	0.32	0.02	3.00	bdl	bdl	bdl	bdl	0.76	0.13	1.18
YC5A	7/31/91	0.32	bdl	bdl	bdl	bdl	bdl	0.07	bdl	0.05	bdl	bdl	0.04	0.03	2.80	bdl	0.01	bdl	0.01	2.05	0.15	3.42
YC5A	8/13/91	0.92	0.03	bdl	bdl	0.02	bdl	0.10	bdl	0.03	bdl	0.01	0.27	< 0.03	4.70	bdl	bdl	bdl	0.03	0.63	0.08	1.83
YC5A	8/28/91	0.46	0.02	0.01	0.01	0.01	bdl	0.04	bdl	0.04	0.01	bdl	0.50	0.01	3.70	0.07	bdl	bdl	bdl	1.63	0.12	3.56
YC5A	9/10/91	0.57	0.19	bdl	bdl	0.05	0.03	0.03	bdl	0.06	bdl	0.05	1.91	0.14	5.90	bdl	bdl	bdl	0.06	0.66	0.07	2.62
YC5A	9/22/91	0.13	0.04	bdl	bdl	0.04	0.01	0.09	bdl	0.05	bdl	0.02	0.44	0.08	3.10	bdl	bdl	bdl	0.02	0.39	0.05	0.41
YC5A	10/6/91	0.14	< 0.01	bdl	bdl	bdl	bdl	0.09	bdl	0.05	bdl	bdl	0.08	0.03	3.60	bdl	0.01	bdl	0.02	0.25	0.06	0.26
YC5A	10/19/91	0.44	0.02	0.01	0.01	0.01	bdl	0.08	bdl	0.03	0.02	bdl	0.19	0.01	3.20	0.05	bdl	bdl	0.01	0.19	0.03	0.70
YC5A	11/2/91	0.17	bdl	bdl	bdl	bdl	< 0.03	0.02	bdl	0.05	bdl	bdl	0.01	0.01	4.10	bdl	bdl	bdl	< 0.01	1.02	0.11	6.42
YC5A	11/17/91	0.10	0.03	bdl	bdl	0.02	bdl	0.07	bdl	0.09	bdl	0.01	0.28	0.06	4.20	bdl	bdl	bdl	0.01	0.33	0.10	2.12
YC5A	12/17/91	0.06	0.01	0.02	bdl	0.01	bdl	0.15	bdl	0.13	bdl	bdl	0.13	0.02	2.40	0.02	bdl	bdl	0.02	0.50	0.13	0.54
YC5A	12/30/91	0.04	bdl	bdl	bdl	0.01	bdl	0.14	bdl	0.09	bdl	bdl	0.02	bdl	2.40	bdl	bdl	bdl	bdl	0.33	0.10	0.27
YC5A	1/13/92	0.08	bdl	0.02	bdl	bdl	bdl	0.14	bdl	0.07	bdl	bdl	bdl	bdl	2.50	0.02	bdl	bdl	0.01	0.29	0.07	0.23
YC5A	1/27/92	0.06	0.01	bdl	bdl	0.01	bdl	0.14	bdl	0.05	bdl	bdl	0.11	0.05	2.30	bdl	bdl	bdl	0.01	0.23	0.05	0.20
YC5A	2/10/92	0.06	bdl	bdl	bdl	bdl	bdl	0.12	bdl	0.07	bdl	bdl	0.01	0.02	2.80	bdl	< 0.02	bdl	0.01	0.29	0.07	0.30
YC5A	2/24/92	0.04	0.01	bdl	bdl	bdl	bdl	0.09	bdl	0.03	bdl	bdl	0.08	0.05	2.40	bdl	bdl	bdl	bdl	0.18	0.04	0.13
YC5A	3/9/92	0.05	bdl	bdl	bdl	0.01	bdl	0.08	bdl	0.02	bdl	bdl	bdl	0.01	2.00	bdl	0.01	bdl	bdl	0.16	0.02	0.13
YC5A	3/23/92	0.04	0.01	bdl	bdl	bdl	bdl	0.10	bdl	0.03	bdl	bdl	0.06	0.03	2.30	bdl	bdl	bdl	0.01	0.19	0.03	0.13
YC5A	4/5/92	0.04	0.01	bdl	bdl	bdl	bdl	0.09	bdl	0.03	bdl	bdl	0.10	bdl	20.00	bdl	bdl	bdl	bdl	0.21	0.04	0.12
YC5A	4/21/92	0.05	bdl	bdl	bdl	bdl	bdl	0.11	bdl	0.03	bdl	bdl	0.04	0.01	2.17	bdl	bdl	bdl	0.04	0.46	0.04	0.43
YC5A	5/4/92	0.04	bdl	bdl	bdl	bdl	bdl	0.09	bdl	0.04	bdl	bdl	0.04	0.02	2.73	bdl	0.01	bdl	bdl	0.23	0.05	0.11
YC5A	5/18/92	0.06	bdl	bdl	bdl	bdl	bdl	0.07	< 0.20	0.05	bdl	bdl	bdl	bdl	3.25	bdl	bdl	bdl	bdl	0.22	0.06	0.13
YC5A	6/1/92	0.10	bdl	bdl	bdl	bdl	bdl	0.06	bdl	0.06	bdl	bdl	bdl	0.01	3.41	bdl	0.01	bdl	bdl	0.20	0.06	0.20
YC5A	6/15/92	0.04	bdl	bdl	bdl	bdl	bdl	0.13	bdl	0.03	bdl	bdl	0.09	bdl	2.06	bdl	0.01	bdl	bdl	0.28	0.03	0.09
YC5A	6/29/92	0.17	bdl	0.06	0.06	bdl	bdl	0.06	< 0.07	< 0.09	bdl	bdl	bdl	bdl	43.39	0.08	bdl	0.01	bdl	0.39	0.10	0.40
YC5A	7/13/92	0.07	< 0.01			< 0.01	< 0.01	0.14		0.09		< 0.01	< 0.05	< 0.05	3.90		< 0.01		0.01	0.43	0.11	0.26
YC5A	7/27/92	0.08	< 0.01			< 0.01	< 0.01	0.08		0.07		< 0.01	< 0.06	< 0.06	6.00		< 0.01		0.01	0.24	0.08	0.18
YC5A	8/10/92	0.01	< 0.01			< 0.01	< 0.01	0.06	bdl	0.07		< 0.01	< 0.06	< 0.06	4.30		< 0.01		< 0.01	0.30	0.09	0.27
YC5A	8/25/92	0.06	0.01	0.04	< 0.01	< 0.01	< 0.01	0.14	0.10	0.07	< 0.01	< 0.01	< 0.05	< 0.05	7.30	0.09	< 0.01	< 0.01	< 0.01	0.35	0.07	0.29
YC5A	9/8/92	0.08	< 0.01			< 0.01	< 0.01	0.28		0.08		< 0.01	< 0.05	< 0.05	4.20		< 0.01		0.02	0.32	0.08	0.12
YC5A	9/21/92	0.04	< 0.01			< 0.01	< 0.01	0.04		0.05		< 0.01	< 0.05	0.07	4.29		< 0.01		0.01	0.39	0.08	0.36
YC5A	10/19/92	0.04	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.05	< 0.10	0.07	< 0.01	< 0.01	< 0.05	< 0.05	4.36	0.06	< 0.01	0.01	< 0.01	0.23	0.08	0.05
YC5A	11/3/92	< 0.01	0.01			0.02	< 0.01	0.13		0.18		< 0.01	< 0.05	< 0.05	5.87		< 0.01		< 0.01	0.36	0.19	0.12

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
YC5A	11/13/92	< 0.01	bdl			< 0.01	< 0.01	19.00		0.04		< 0.01	< 0.05	< 0.05	2.39		< 0.01		< 0.01	0.34	0.07	< 0.01
YC5A	11/30/92	< 0.01	< 0.01			0.02	0.05	0.10		0.04		< 0.01	< 0.10	< 0.05	3.00		< 0.01		0.02	0.33	0.04	0.14
YC5A	12/14/92	0.02	< 0.01			< 0.01	< 0.01	0.14		0.03		< 0.01	< 0.10	< 0.05	2.30		< 0.01		< 0.01	0.21	0.03	0.06
YC5As	11/22/91	0.34	0.08	bdl	bdl	0.03	bdl	0.15	bdl	0.06	bdl	0.02	0.66	0.08	3.40	bdl	0.01	bdl	0.01	0.88	0.10	1.71
YC5As	12/1/91	0.32	0.02	bdl	bdl	0.05	0.02	0.17	bdl	0.06	bdl	bdl	0.24	0.05	2.60	bdl	0.01	bdl	0.02	2.03	0.22	2.61
YC5As	12/2/91	0.12	0.01	bdl	bdl	0.01	bdl	0.23	bdl	0.19	bdl	bdl	0.08	bdl	2.00	bdl	bdl	bdl	bdl	0.91	0.23	0.86
YC5As	8/28/92	0.06	0.02	0.03		0.01	0.01	0.06	< 0.10	0.02		< 0.01	< 0.05	0.08	4.50	0.10	< 0.01	< 0.01	< 0.01	1.21	0.07	0.70
YC5As	9/18/92	0.14	0.01			0.01	< 0.01	0.08		0.03		< 0.01	< 0.05	< 0.05	4.30		< 0.01		< 0.01	0.31	0.03	0.40
YC5As	10/5/92	< 0.01	< 0.01			< 0.01	< 0.01	0.08		0.11		0.01	< 0.05	< 0.05	3.42		< 0.01		< 0.01	0.62	0.13	0.65
YC5As	12/17/92	0.05	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.27	< 0.10	0.09	< 0.10	< 0.01	< 0.10	< 0.05	2.20	< 0.01	< 0.01	< 0.01	< 0.01	bdl	0.12	0.10
YC5s	11/22/91	0.15	0.03	bdl	bdl	bdl	bdl	0.23	bdl	0.08	bdl	bdl	0.32	0.03	2.50	bdl	bdl	bdl	bdl	0.58	0.10	0.63
YC5s	12/1/91	0.15	0.01	bdl	bdl	0.02	bdl	0.14	bdl	0.07	bdl	bdl	0.03	0.01	2.00	bdl	bdl	bdl	bdl	0.46	0.11	0.55
YC5s	12/2/91	0.11	0.01	bdl	bdl	0.01	bdl	0.29	bdl	0.21	bdl	bdl	0.03	0.01	2.10	bdl	0.01	bdl	bdl	0.82	0.23	0.76
YC5s	8/28/92	0.01	0.01	0.03		< 0.01	< 0.01	0.01	< 0.10	< 0.01		< 0.01	< 0.05	< 0.05	2.00	0.04	< 0.01	< 0.01	< 0.01	0.36	0.06	0.11
YC5s	9/18/92	0.06	0.01			< 0.01	< 0.01	0.20		0.06		< 0.01	< 0.05	< 0.05	2.70		< 0.01		0.01	0.36	0.06	0.22
YC5s	10/5/92	0.06	< 0.01			< 0.01	0.01	0.13		0.13		0.01	< 0.05	< 0.05	2.88		< 0.01		< 0.01	0.30	0.13	0.29
YC5s	12/17/92	< 0.01	< 0.01	0.02	< 0.01	< 0.01	< 0.01	0.21	< 0.10	0.07	< 0.10	< 0.01	< 0.10	< 0.05	2.20	< 0.01	< 0.01	< 0.01	< 0.01	0.43	0.12	0.05
YC6	7/1/91	0.04	0.02	bdl	bdl	0.01	bdl	0.40	bdl	0.08	bdl	0.01	0.25	0.01	2.40	bdl	bdl	bdl	bdl	0.55	0.08	0.09
YC6	7/16/91	0.12	0.02	bdl	bdl	0.01	bdl	0.11	bdl	0.19	bdl	0.01	0.46	0.02	3.00	bdl	bdl	bdl	bdl	0.56	0.20	0.33
YC6	7/30/91	0.18	bdl	bdl	bdl	bdl	bdl	0.08	bdl	0.16	bdl	bdl	0.03	0.05	2.40	bdl	0.01	bdl	bdl	0.60	0.17	0.83
YC6	8/13/91	0.45	0.04	bdl	bdl	0.03	0.02	0.15	bdl	0.13	bdl	0.01	0.44	0.03	3.80	bdl	bdl	bdl	0.01	0.79	0.15	0.90
YC6	8/28/91	0.91	0.02	0.02	bdl	0.01	bdl	0.17	bdl	0.05	0.01	0.01	0.52	bdl	5.90	0.08	bdl	bdl	bdl	0.57	0.08	1.22
YC6	9/10/91	1.91	0.08	bdl	bdl	0.02	0.01	0.12	bdl	0.05	bdl	0.02	0.91	0.06	4.20	bdl	bdl	bdl	0.03	0.62	0.08	2.42
YC6	9/22/91	0.15	0.06	bdl	bdl	0.01	0.01	0.12	bdl	0.09	bdl	0.02	0.61	0.07	3.00	bdl	bdl	bdl	0.02	0.49	0.11	0.39
YC6	10/6/91	0.16	< 0.01	bdl	bdl	0.01	bdl	0.19	bdl	0.10	bdl	bdl	< 0.03	0.01	3.30	bdl	< 0.02	bdl	0.01	0.54	0.11	0.33
YC6	10/19/91	0.08	0.03	0.02	bdl	0.03	bdl	0.28	bdl	0.11	0.02	0.01	0.30	0.06	2.70	0.08	bdl	bdl	0.02	0.47	0.12	0.28
YC6	11/2/91	0.09	0.01	bdl	bdl	bdl	< 0.02	0.16	bdl	0.14	bdl	bdl	< 0.02	0.05	4.10	bdl	bdl	bdl	bdl	0.39	0.15	0.18
YC6	11/17/91	0.07	0.03	bdl	bdl	0.02	bdl	0.15	bdl	0.15	bdl	0.01	0.34	0.03	4.00	bdl	0.01	bdl	0.01	0.32	0.15	0.53
YC6	12/17/91	0.10	0.01	0.02	bdl	0.01	bdl	0.24	bdl	0.12	bdl	bdl	0.11	0.04	2.50	0.03	bdl	bdl	0.02	0.52	0.13	0.40
YC6	12/30/91	0.07	0.01	bdl	bdl	0.01	bdl	0.21	bdl	0.09	bdl	bdl	0.04	bdl	2.40	bdl	bdl	bdl	bdl	0.37	0.09	0.25
YC6	1/13/92	0.11	0.01	0.02	bdl	bdl	bdl	0.25	bdl	0.08	bdl	bdl	0.10	bdl	2.60	0.03	bdl	bdl	0.01	0.38	0.08	0.24
YC6	1/27/92	0.07	bdl	bdl	bdl	bdl	bdl	0.18	bdl	0.05	bdl	bdl	0.11	0.05	2.40	bdl	0.01	bdl	bdl	0.28	0.06	0.21
YC6	2/10/92	0.05	bdl	bdl	bdl	bdl	bdl	0.26	bdl	0.09	bdl	bdl	bdl	0.04	2.80	bdl	bdl	bdl	bdl	0.39	0.10	0.18
YC6	2/24/92	0.04	0.01	bdl	bdl	0.01	bdl	0.15	bdl	0.05	bdl	bdl	0.10	0.06	2.40	bdl	bdl	bdl	0.02	0.25	0.05	0.13
YC6	3/9/92	0.06	bdl	bdl	bdl	bdl	bdl	0.11	bdl	0.03	bdl	bdl	0.03	0.02	2.40	bdl	bdl	bdl	0.02	0.22	0.03	0.20
YC6	3/23/92	0.05	0.01	bdl	bdl	bdl	bdl	0.12	bdl	0.04	bdl	bdl	0.09	0.06	2.40	bdl	bdl	bdl	bdl	0.22	0.04	0.17

bdl = below detection limit

Site	Date	Al	B	Ba	Cd	Cr	Cu	Fe	Hg	Mn	Mo	Ni	P	Pb	Si	Sr	Ti	V	Zn	Total Fe	Total Mn	Total Al
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
YC6	4/5/92	0.05	0.01	bdl	bdl	0.01	bdl	0.15	bdl	0.05	bdl	bdl	0.17	0.02	20.00	bdl	bdl	bdl	bdl	0.28	0.05	0.14
YC6	4/21/92	0.09	bdl	bdl	bdl	bdl	bdl	0.14	bdl	0.05	bdl	bdl	bdl	0.02	2.79	bdl	0.01	bdl	0.03	1.67	0.11	0.64
YC6	5/4/92	0.03	bdl	bdl	bdl	bdl	bdl	0.17	bdl	0.07	bdl	bdl	0.07	0.01	2.72	bdl	0.01	bdl	bdl	0.36	0.07	0.12
YC6	5/18/92	0.03	bdl	bdl	bdl	bdl	bdl	0.08	< 0.20	0.08	bdl	bdl	bdl	bdl	3.21	bdl	bdl	bdl	bdl	0.40	0.08	0.17
YC6	6/1/92	0.09	0.01	bdl	bdl	bdl	bdl	0.21	bdl	0.10	bdl	bdl	bdl	0.01	3.09	bdl	0.01	bdl	bdl	0.48	0.10	0.13
YC6	6/15/92	0.09	bdl	bdl	bdl	bdl	bdl	0.17	bdl	0.03	bdl	bdl	bdl	bdl	3.59	bdl	0.01	bdl	bdl	0.31	0.03	0.12
YC6	6/29/92	0.08	bdl	0.07	0.04	bdl	bdl	0.11	< 0.07	0.13	bdl	bdl	bdl	0.01	3.85	0.07	0.03	0.02	bdl	0.54	0.13	0.17
YC6	7/13/92	0.03	< 0.01			< 0.01	< 0.01	0.24		0.15		0.01	< 0.05	< 0.05	3.60		< 0.01		0.01	0.62	0.16	0.17
YC6	7/27/92	0.03	< 0.01			< 0.01	< 0.01	0.08		0.09		< 0.01	< 0.05	< 0.06	3.30		< 0.01		0.01	1.11	0.17	0.41
YC6	8/10/92	< 0.01	< 0.01			< 0.01	< 0.01	0.17		0.13		< 0.01	< 0.06	< 0.05	4.20		< 0.01		0.01	0.58	0.13	0.17
YC6s	11/22/91	0.25	0.06	bdl	bdl	0.01	bdl	0.25	bdl	0.09	bdl	0.01	0.48	0.06	2.80	bdl	0.01	bdl	bdl	1.20	0.15	1.68
YC6s	12/2/91	0.19	0.01	bdl	bdl	0.03	0.04	0.27	bdl	0.14	bdl	0.01	0.12	0.05	2.10	bdl	0.01	bdl	0.01	1.33	0.21	1.59

bdl = below detection limit

Appendix E
Sediment Chemistry Data

SITE	DATE	PASTE_PH	TOTAL_S	TOTAL_C	GE	CD	AS	HG	MO	LI	BA	SR	V	B	SI	ZN	P	FE	CU	MN	MG	NA	CO
		su	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SR10	7/12/90	6.30	0.010	0.78	bdl	0.20	< 0.5	< 0.5	0.10	0.20	4.8	1.2	bdl	0.31	16.0	7.00	9.0	137.0	2.30	84.0	40.00	3.0	1.00
YC5A	7/12/90	7.70	0.040	1.00	0.30	0.30	< 0.5	< 0.5	1.40	11.20	4.6	9.0	2.00	0.64	132.0	24.00	22.0	501.0	4.00	287.0	588.00	8.0	3.30
TC10	7/12/90	8.10	0.020	0.71	0.10	0.20	< 0.5	< 0.5	1.00	7.40	7.1	5.8	1.30	0.37	117.0	15.00	17.0	272.0	2.90	145.0	254.00	6.0	2.40
TD1	7/12/90	7.80	0.070	4.63	0.30	1.30	< 0.5	< 0.5	1.80	16.10	6.0	11.6	5.10	1.03	145.0	37.00	15.0	978.0	17.20	318.0	389.00	16.0	3.50
DB5	7/12/90	5.80	0.010	0.68	bdl	0.30	< 0.5	< 0.5	0.30	0.30	7.2	2.0	0.90	0.42	44.0	3.00	11.0	899.0	2.10	158.0	798.00	4.0	2.20
YC5	7/12/90	5.60	0.010	0.31	0.20	bdl	< 0.5	< 0.5	0.10	0.20	1.8	0.8	0.20	0.18	29.0	6.00	9.0	169.0	5.20	463.0	235.00	2.0	0.50
DB10	7/12/90	7.40	0.010	0.34	0.20	0.20	< 0.5	< 0.5	0.70	3.30	7.5	3.6	0.80	0.51	138.0	10.00	10.0	474.0	2.90	160.0	124.00	10.0	1.40
GC5	7/12/90	7.60	0.020	0.79	0.20	0.60	< 0.5	< 0.5	2.00	21.60	4.7	19.3	3.10	0.65	184.0	6.00	14.0	306.0	4.90	215.0	482.00	18.0	1.80
GC7	7/12/90	7.70	0.020	0.85	0.30	0.10	< 0.5	< 0.5	1.10	7.80	8.0	8.5	1.70	0.67	133.0	24.00	53.0	450.0	3.70	21.0	287.00	15.0	2.20
DB10	10/23/90	7.14	0.030	1.11	0.10	< 0.1	< 0.5	< 0.5	0.80	18.60	27.0	9.4	0.90	0.05	7.0	1.00	0.7	253.0	0.20	165.0	294.00	1.7	0.11
GC5.	10/23/90	7.18	0.060	1.71	0.10	0.20	< 0.5	< 0.5	1.00	27.40	21.0	15.0	2.00	0.08	7.0	2.10	2.5	348.0	0.50	91.0	403.00	1.8	0.18
SR10	10/23/90	5.69	0.020	0.85	bdl	0.10	< 0.5	< 0.5	0.10	1.30	25.0	2.1	0.30	0.04	3.4	0.90	0.3	149.0	0.10	104.0	7.00	0.9	0.12
DB5	10/23/90	4.96	0.030	1.20	bdl	0.10	0.5	< 0.5	0.10	1.00	24.0	2.3	0.30	0.03	3.2	0.40	0.3	340.0	0.20	135.0	7.00	0.6	0.11
YC5	10/23/90	9.61	0.040	0.65	0.20	0.20	0.5	< 0.5	0.60	13.60	40.0	11.5	1.00	0.15	104.1	0.80	5.7	212.0	0.20	162.0	173.00	1.6	0.12
TD1	10/23/90	7.26	0.100	6.90	0.30	1.20	0.8	< 0.5	1.90	60.00	2.0	36.6	5.00	0.16	10.2	3.20	0.7	797.0	1.30	394.0	536.00	3.0	0.41
YC5A	10/23/90	7.38	0.050	1.16	0.30	0.20	< 0.5	< 0.5	1.30	39.00	22.0	21.4	2.00	0.08	9.1	1.90	1.0	476.0	0.40	238.0	836.00	1.5	0.27
TC10	10/23/90	7.48	0.030	1.53	0.10	0.10	< 0.5	< 0.5	0.40	7.00	15.0	5.0	6.00	0.05	16.4	1.00	0.8	207.0	0.20	140.0	230.00	0.8	0.16
GC7	10/23/90	7.68	0.050	1.30	0.20	0.30	0.8	< 0.5	1.10	31.40	35.0	19.0	2.00	0.11	20.5	2.30	0.4	338.0	0.40	266.0	490.00	3.2	0.19
SR10	1/8/91	6.21	0.010	0.16	bdl	0.10	0.6	< 0.5	0.20	0.30	8.1	0.7	0.10	0.07	10.0	4.80	1.8	36.5	1.30	43.4	30.60	3.4	0.50
YC5A	1/8/91	6.21	0.010	0.16	bdl	0.10	0.6	< 0.5	0.20	0.30	8.1	0.7	0.10	0.21	113.0	8.10	12.7	115.6	2.90	70.2	64.30	4.2	0.81
DR9	1/8/91	6.77	0.010	0.39	0.10	0.10	1.2	< 0.5	0.20	3.90	30.5	4.4	0.60	0.23	76.4	5.00	2.0	209.9	2.00	155.1	101.40	7.5	1.45
GC3	1/8/91	7.89	0.080	3.44	bdl	0.10	< 0.5	< 0.5	0.30	98.50	12.4	42.9	3.00	0.26	21.5	1.90	0.7	2.2	0.20	51.8	340.50	22.0	0.78
GC7	1/8/91	7.75	0.040	0.90	bdl	0.20	1.0	< 0.5	0.10	33.80	23.6	16.8	1.00	0.58	67.4	15.30	32.8	259.0	4.30	152.1	627.80	13.1	1.58
TC10	1/8/91	7.83	0.040	1.02	0.10	< 0.1	< 0.5	< 0.5	0.10	46.20	23.8	20.8	1.00	0.50	115.5	34.80	10.4	312.1	3.10	281.7	851.30	10.7	3.43
TD1	1/8/91	7.49	0.070	2.80	0.20	0.90	< 0.5	< 0.5	0.20	87.40	52.2	43.6	3.00	0.79	105.9	26.40	3.9	474.6	3.50	223.1	610.40	29.0	2.93
DB10	1/8/91	7.62	0.020	0.53	0.30	0.10	< 0.5	< 0.5	0.40	11.10	15.3	5.1	0.60	0.24	56.7	7.20	4.0	220.1	2.30	118.8	174.40	8.2	1.09
DB6	1/8/91	6.48	0.010	0.32	0.10	< 0.1	0.8	< 0.5	0.10	0.80	16.0	1.7	0.20	0.11	18.4	3.30	2.3	148.9	2.10	143.5	61.80	2.7	0.91
DB7	1/8/91	6.18	0.010	0.23	0.10	0.10	< 0.5	< 0.5	< 0.1	0.50	8.8	1.0	0.20	0.05	12.3	2.60	2.5	113.0	2.60	53.2	34.40	2.8	0.54
DB8	1/8/91	6.19	0.010	0.30	0.04	< 0.1	< 0.5	< 0.5	< 0.1	0.60	11.1	1.1	0.10	0.11	16.9	3.70	1.7	127.9	1.60	114.2	29.50	3.0	0.77
DB5	1/8/91	5.82	bdl	0.11	bdl	< 0.1	< 0.5	< 0.5	< 0.1	0.30	7.2	0.8	0.20	0.05	10.8	1.80	1.7	110.6	1.30	35.2	32.30	2.6	0.31
YC5	1/8/91	6.53	0.010	0.06	bdl	< 0.1	< 0.5	< 0.5	< 0.1	0.10	2.7	0.4	< 0.1	0.01	9.9	2.40	3.4	45.4	12.20	21.5	13.40	2.2	0.20
DB5	4/29/91	5.80	0.004	0.55	bdl	0.02	< 0.5	0.58	0.10	0.56	14.4	1.5	0.30	0.96	15.6	2.20	18.3	217.6	2.70	25.4	166.90	5.1	0.90
DB6	4/29/91	6.74	0.004	0.35	bdl	0.06	< 0.5	< 0.5	bdl	0.57	13.4	1.3	0.30	1.03	18.6	2.50	22.0	141.7	1.00	25.4	262.90	5.2	1.00
DB7	4/29/91	6.42	0.010	0.29	bdl	bdl	< 0.5	< 0.5	bdl	0.55	9.4	1.0	0.17	0.79	13.6	2.40	13.8	97.1	1.20	15.1	123.60	4.0	1.00
DB8	4/29/91	6.44	0.010	0.22	bdl	bdl	< 0.5	< 0.5	bdl	0.37	7.2	0.7	0.10	0.59	12.8	3.10	11.6	82.0	2.00	10.3	122.70	4.0	0.70
DB10	4/29/91	7.70	0.010	0.31	bdl	bdl	< 0.5	< 0.5	0.40	7.91	8.8	4.3	0.53	4.32	37.8	6.40	55.4	163.3	1.50	71.7	170.40	10.6	2.40
YC5	4/29/91	6.83	0.010	0.05	0.02	bdl	< 0.5	< 0.5	bdl	0.11	3.0	0.3	0.08	0.30	7.0	1.60	5.8	47.1	1.70	7.3	39.60	3.8	0.30
YC5A	4/29/91	6.93	0.010	0.12	0.06	bdl	< 0.5	< 0.5	bdl	0.39	3.8	0.5	0.12	0.54	28.7	2.30	10.6	56.4	0.80	9.0	72.00	4.2	0.50
GC3	4/29/91	7.54	0.120	4.61	0.07	0.06	1.6	< 0.5	1.85	65.79	10.3	33.8	3.15	34.45	50.8	33.20	334.1	2.8	2.20	115.7	85.30	17.7	14.60
GC7	4/29/91	7.89	0.020	0.41	0.22	0.13	1.2	< 0.5	0.64	13.21	11.6	7.6	0.97	7.61	53.9	10.40	101.4	228.8	2.30	129.9	175.20	7.7	4.00
TD1	4/29/91	6.80	0.040	1.62	0.16	0.35	1.4	< 0.5	1.09	29.44	27.2	14.9	2.20	17.84	101.2	19.60	194.6	311.0	6.10	125.7	183.90	11.5	8.10
DR9	4/29/91	6.36	0.010	0.72	0.03	0.14	< 0.5	< 0.5	0.21	1.80	18.1	2.3	0.42	2.02	39.9	3.20	30.4	194.8	2.60	30.5	284.40	8.8	2.00
TC10	4/29/91	8.01	0.040	0.82	0.16	0.14	2.1	< 0.5	1.18	34.86	16.4	19.8	1.68	20.72	114.0	29.80	236.9	276.4	3.70	379.4	396.80	11.8	10.70

bdl = below detection limit

SITE	DATE	PASTE_PH	TOTAL_S	TOTAL_C	GE	CD	AS	HG	MO	LI	BA	SR	V	B	SI	ZN	P	FE	CU	MN	MG	NA	CO
		su	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
SR10	4/29/91	7.68	0.010	0.27	0.07	0.18	< 0.5	< 0.5	bdl	0.25	8.2	0.7	0.05	0.57	5.9	2.30	9.8	45.6	0.50	9.7	106.40	3.5	0.80
TC7N	7/14/91	10.18	0.310	2.65	0.11	bdl	< 0.5	0.82	1.94	64.40	4.3	34.2	2.36	28.70	756.0	10.40	262.0	44.1	1.60	29.0	372.00	75.0	9.50
SB1	7/14/91	7.90	0.210	3.88	0.15	bdl	< 0.5	0.58	1.69	58.09	15.4	32.6	2.06	25.50	179.0	32.50	262.0	23.3	4.00	179.0	575.00	28.0	9.90
COAL	7/14/91	5.91	6.190	69.35	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	0.50	21.0	0.20	25.0	189.0	bdl	10.0	23.00	8.0	0.53
STOCK	7/14/91	9.76	2.080	16.53	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	4.92	200.0	3.30	264.0	850.0	0.50	68.0	264.00	73.0	3.95
YC5	7/26/91	7.05	0.020	0.31	0.10	0.02	< 0.5	0.50	0.10	0.61	5.2	0.9	0.08	0.64	20.3	4.20	15.8	73.1	2.40	56.6	25.90	3.4	0.60
SB11	7/26/91	8.19	0.310	6.87	0.19	bdl	0.8	< 0.5	2.46	74.68	4.6	38.6	4.70	34.86	89.2	11.00	345.5	2.4	2.30	51.7	262.20	31.8	12.60
SB9	7/26/91	8.15	0.310	6.50	0.22	bdl	0.9	< 0.5	2.40	75.07	4.8	38.7	4.70	35.74	94.9	11.00	356.5	2.4	2.20	71.1	251.90	27.1	12.40
DB5	7/26/91	6.45	0.020	0.51	0.07	0.02	< 0.5	< 0.5	0.22	1.62	21.3	2.7	0.49	1.09	16.6	4.00	21.0	174.4	2.30	92.5	62.30	5.8	1.10
DR9	7/26/91	7.16	0.030	1.37	0.13	0.11	< 0.5	< 0.53	0.59	6.83	32.2	6.8	1.35	3.70	55.3	6.00	68.6	380.9	3.30	265.3	116.90	7.7	3.00
GC7	7/26/91	8.06	0.010	0.88	0.28	0.25	1.9	< 0.5	2.42	26.38	34.9	17.9	2.72	13.24	111.0	14.00	194.9	378.3	4.40	306.4	638.10	17.1	6.40
TC10	7/26/91	8.20	0.690	2.81	0.26	0.25	3.2	< 0.5	3.51	68.38	6.5	35.9	4.81	35.64	78.5	12.00	355.1	2.8	2.30	89.4	351.30	17.6	12.70
TD1	7/26/91	7.91	0.090	4.46	0.55	1.17	3.6	0.70	2.48	34.25	67.3	21.4	5.68	15.66	133.1	43.00	207.5	1379.1	16.50	349.6	497.50	18.0	7.80
DB7	7/26/91	7.05	< 0.01	0.33	0.03	0.01	2.5	< 0.5	0.18	0.76	19.5	1.8	0.26	1.00	17.1	3.20	23.4	122.7	1.90	142.4	42.20	3.5	1.10
GC3	7/26/91	7.73	0.020	0.38	0.27	0.13	< 0.5	< 0.5	2.25	26.62	18.4	15.2	2.73	7.61	122.3	9.30	104.0	247.3	3.90	39.5	215.80	8.8	3.30
DB6	7/26/91	7.02	0.010	0.36	0.04	0.03	1.1	< 0.5	0.43	2.54	21.1	2.8	0.40	1.14	18.4	2.70	26.7	190.3	2.00	143.8	50.80	4.3	1.20
DB8	7/26/91	6.40	0.020	0.43	bdl	0.10	0.8	< 0.5	0.14	0.65	15.1	1.1	0.31	0.98	20.0	4.90	23.3	197.1	2.20	127.5	31.50	4.6	1.50
YC5A	7/26/91	8.80	0.050	0.95	0.23	0.10	2.3	< 0.5	1.44	20.52	11.4	10.2	1.80	7.02	161.7	10.40	89.2	257.9	2.90	91.8	412.80	6.5	3.40
DB10	7/26/91	7.85	0.020	0.03	0.03	0.06	2.7	< 0.5	1.20	15.08	15.1	7.0	1.44	2.07	37.3	6.00	31.8	132.4	2.70	58.3	127.40	8.6	1.50
TD1	10/21/91	7.52	0.120	10.96	0.50	0.92	2.8	2.40	1.18	50.00	68.6	32.5	4.50	2.12	176.8	30.20	36.6	1668.1	9.20	605.1	766.10	44.5	4.00
SR10	10/21/91	6.39	0.010	0.22	bdl	bdl	< 0.5	< 0.5	0.06	0.40	9.5	0.8	0.10	0.07	8.9	3.50	2.0	42.0	2.80	41.2	27.40	7.6	0.20
DB5	10/21/91	6.61	0.020	0.37	0.08	0.24	2.4	< 0.5	0.02	0.80	20.2	2.0	0.20	0.28	23.6	6.70	4.3	239.7	2.30	178.0	58.60	8.2	0.90
DB6	10/21/91	6.92	0.020	0.34	0.02	bdl	2.3	0.60	bdl	0.80	22.9	2.3	0.28	0.41	28.6	5.30	7.0	435.7	2.70	131.7	51.50	7.0	0.70
DB7	10/21/91	5.86	0.020	0.42	bdl	0.02	0.9	< 0.5	bdl	0.60	14.3	1.2	0.30	0.28	15.0	3.30	4.9	288.7	0.80	76.1	33.80	7.7	1.00
DB8	10/21/91	6.51	0.020	0.37	bdl	bdl	3.8	< 0.5	0.02	0.80	16.0	1.4	0.20	0.28	21.5	5.40	5.9	363.9	4.90	96.0	36.80	7.2	0.60
DB10	10/21/91	7.17	0.020	0.25	0.04	bdl	2.7	< 0.5	bdl	0.80	9.4	1.1	0.18	0.19	29.1	2.10	4.7	260.5	bdl	96.0	25.50	9.8	0.50
TC10	10/21/91	8.10	0.020	0.76	0.38	0.14	7.2	< 0.5	1.42	62.20	9.0	34.1	2.44	0.64	479.0	10.10	27.0	379.4	0.70	111.3	1323.30	26.7	1.70
SB9	10/21/91	7.91	0.230	5.46	0.42	0.12	4.0	0.80	3.00	140.20	9.3	74.4	4.56	0.75	237.0	0.10	3.7	7.7	bdl	59.6	354.10	123.9	1.60
SB11	10/21/91	7.94	0.220	5.16	0.40	0.18	2.4	0.60	2.80	138.80	9.6	73.7	4.38	0.61	236.1	0.20	5.0	7.8	bdl	47.6	382.60	129.6	1.60
DR9	10/21/91	7.74	0.030	0.76	0.28	0.12	0.9	0.60	0.80	29.08	27.8	15.6	1.12	0.65	76.2	3.10	8.7	493.9	1.60	248.8	380.60	15.5	2.30
GC3	10/21/91	7.82	0.070	2.29	0.32	0.46	4.2	< 0.5	0.80	31.32	23.2	17.0	1.50	0.81	174.5	17.50	47.2	512.9	6.20	123.2	472.40	19.2	1.80
GC7	10/21/91	7.70	0.100	2.48	0.30	0.22	2.2	0.80	1.00	37.90	47.6	24.8	2.52	2.08	179.4	19.10	79.5	1258.0	7.60	522.9	896.80	44.8	4.10
YC5	10/21/91	6.21	0.020	0.14	0.12	0.04	0.7	< 0.5	0.16	0.32	4.0	0.6	0.06	0.06	11.9	2.50	11.3	85.3	1.30	16.2	11.90	6.8	0.20
YC5A	10/21/91	7.91	0.250	5.22	0.40	0.12	5.6	< 0.5	3.88	121.20	12.6	76.1	7.94	0.54	178.2	bdl	9.2	8.3	bdl	120.8	361.90	89.2	1.80
GC3	1/14/92	7.32	0.022	0.51	0.23	0.21	1.5	< 0.7	2.12	46.50	23.0	32.1	4.42	0.60	174.4	16.30	4.6	43.1	3.00	100.1	924.90	34.6	1.80
GC7	1/14/92	7.52	0.017	0.49	0.11	0.10	< 0.5	< 0.7	0.98	11.90	13.0	7.5	1.31	0.70	103.7	11.50	27.3	416.7	3.70	116.2	437.50	16.3	1.30
DB5	1/14/92	5.56	0.011	0.42	0.08	bdl	< 0.5	< 0.7	0.10	0.40	10.5	1.1	0.32	0.20	40.7	2.40	2.6	396.9	3.00	47.7	52.80	6.4	0.70
DB10	1/14/92	7.00	0.022	0.44	0.27	0.11	1.7	< 0.7	0.11	13.80	17.2	8.7	1.48	0.40	77.6	12.40	6.5	368.4	2.90	156.2	318.20	15.5	1.60
YC5	1/14/92	6.00	0.150	0.15	0.08	0.06	1.6	< 0.7	0.04	0.30	6.3	0.9	0.20	0.20	17.6	4.30	6.9	130.3	2.60	56.3	23.40	12.5	0.85
YC5A	1/14/92	7.23	0.100	0.12	0.06	0.12	2.2	< 0.7	0.11	0.60	4.0	1.2	0.25	0.20	115.8	4.00	9.8	209.7	2.10	41.8	25.70	6.7	0.50
DR9	1/14/92	6.67	0.018	0.73	0.09	bdl	2.3	< 0.7	0.54	4.60	24.6	4.8	1.00	0.40	77.6	4.80	5.6	402.8	2.80	184.1	90.30	12.2	2.00
TD1	1/14/92	7.24	0.041	2.08	0.20	0.32	2.4	< 0.7	2.12	48.40	21.6	30.0	4.47	0.60	84.8	10.00	4.5	33.6	0.80	159.3	445.80	27.5	2.10
SB11	1/14/92	7.60	0.147	4.03	0.23	0.09	2.2	< 0.7	2.28	52.40	7.8	30.3	4.63	0.40	105.3	1.20	2.9	22.4	1.00	52.3	226.00	47.1	1.00

bdl = below detection limit

SITE	DATE	PASTE_PH	TOTAL_S	TOTAL_C	GE	CD	AS	HG	MO	LI	BA	SR	V	B	SI	ZN	P	FE	CU	MN	MG	NA	CO
		su	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm
TC10	1/14/92	7.70	0.017	0.25	0.12	0.20	2.3	< 0.7	0.65	5.30	5.4	3.7	0.95	0.30	217.3	21.70	11.4	244.0	15.60	55.2	283.90	10.7	0.80
SB11	1/17/92	7.65	0.114	3.17	0.21	bdl	1.8	< 0.7	2.59	53.40	5.9	31.6	4.83	0.40	114.4	0.20	1.9	33.0	bdl	114.7	357.80	70.3	0.80
DB5	5/4/92	5.50	0.023	0.58	0.13	0.22	< 0.5	< 0.07	0.13	0.90	14.6	1.4	0.30	0.19	19.3	2.20	2.4	236.1	1.30	69.8	57.30	7.2	0.60
DB10	5/4/92	7.30	0.017	0.59	0.10	0.10	< 0.5	< 0.07	0.23	5.80	15.3	3.0	0.46	0.34	64.8	8.90	5.2	367.8	2.70	110.7	125.90	7.8	1.10
DR9	5/4/92	6.17	0.023	1.95	0.21	0.28	1.5	< 0.07	0.30	1.90	38.8	5.2	1.60	0.78	99.9	7.10	8.4	971.2	8.90	410.2	113.60	13.0	3.00
LH5	5/4/92	6.51	0.024	2.13	0.08	0.26	< 0.5	< 0.07	0.23	7.80	42.9	5.4	1.22	0.83	73.0	8.70	9.0	183.3	8.90	191.5	123.40	13.9	2.40
GC3	5/4/92	7.62	0.020	1.18	0.24	0.52	1.4	< 0.07	0.59	22.80	31.5	13.9	1.40	1.14	199.8	25.30	68.3	639.7	4.50	120.4	608.90	18.2	2.70
GC7	5/4/92	7.68	0.035	1.07	0.18	0.32	< 0.5	0.89	0.66	20.70	20.3	9.7	1.20	1.24	114.4	16.30	34.9	752.1	5.80	164.0	533.80	16.2	1.90
STOR1	5/4/92	7.57	0.062	3.47	0.10	0.30	< 0.5	< 0.07	0.24	4.70	30.9	3.4	1.00	0.88	91.1	8.30	41.7	389.4	2.60	191.4	77.30	10.7	2.00
ST5	5/4/92	6.61	0.012	1.25	0.24	0.31	1.2	0.72	0.80	33.70	31.7	18.4	1.60	1.43	228.0	100.40	15.5	653.3	6.70	404.3	699.10	32.0	7.40
ST10	5/4/92	6.75	0.017	0.93	0.10	0.21	< 0.5	< 0.07	0.16	4.40	23.8	3.1	0.80	0.71	86.0	6.90	56.6	315.7	1.70	200.3	86.80	9.6	1.50
TC10	5/4/92	7.55	0.023	0.63	0.17	0.18	1.8	< 0.07	0.28	5.00	10.4	3.1	1.90	0.76	834.3	18.20	38.6	661.4	3.70	83.6	175.10	11.9	0.90
TD1	5/4/92	7.92	0.053	4.13	0.31	0.52	1.5	0.80	1.07	50.50	39.8	19.6	2.10	0.91	137.4	21.50	17.6	557.4	4.60	162.5	432.00	15.9	2.40
YC5	5/4/92	6.61	0.012	0.32	0.10	bdl	0.5	< 0.07	bdl	0.79	11.4	1.2	0.20	0.25	47.1	7.20	8.2	237.9	4.80	155.1	39.20	4.4	0.90
YC5A	5/4/92	7.50	0.013	0.16	bdl	0.03	< 0.5	< 0.07	bdl	1.06	7.0	1.3	0.40	0.28	163.4	6.70	8.5	321.5	4.00	110.5	40.80	5.9	0.90
YC5A	5/24/92	8.34	0.130	3.30	0.16	bdl	< 0.5	< 0.07	7.11	128.00	35.0	40.0	9.30	30.00	229.0	11.80	312.0	4.2	1.40	92.1	438.00	76.0	7.24
TC10	5/24/92	8.41	0.130	2.77	0.33	bdl	< 0.5	< 0.07	6.25	126.00	31.0	40.0	9.50	31.00	251.0	12.10	319.0	3.8	1.30	79.4	455.00	96.0	7.40
SB11	5/24/92	8.38	0.160	3.54	0.49	bdl	< 0.5	< 0.07	6.33	126.00	25.0	39.0	9.80	31.00	170.0	12.30	316.0	3.0	1.40	46.5	289.00	92.0	7.09
YC5	8/25/92	5.80	0.019	5.70	< 0.1	< 0.01	< 0.1	< 0.1	< 0.01	< 0.1	1.7	0.2	< 0.01	0.15	23.3	1.80	1.4	49.4	0.20	16.2	5.50	1.7	0.12
YC5A	8/25/92	6.50	0.337	19.90	< 0.1	0.03	< 0.1	< 0.1	< 0.01	< 0.1	3.5	1.9	< 0.01	0.29	21.6	2.20	2.2	99.4	0.50	58.2	105.00	4.7	0.33
TC10	8/25/92	7.60	0.058	2.10	< 0.1	< 0.01	< 0.1	< 0.1	< 0.01	< 0.1	0.9	0.7	< 0.01	0.29	22.0	1.80	3.8	24.2	0.40	19.1	26.90	3.8	0.23
ST10	8/25/92	7.10	0.046	2.10	< 0.1	< 0.01	< 0.1	< 0.1	< 0.01	< 0.1	2.8	0.3	< 0.01	0.15	14.1	0.80	3.8	59.7	0.20	21.5	6.30	2.0	0.26
DB5	8/25/92	5.10	0.063	4.60	< 0.1	< 0.01	< 0.1	< 0.1	< 0.01	< 0.1	4.1	0.4	< 0.01	0.37	8.0	0.60	0.6	150.0	0.40	27.9	14.90	4.1	0.16
DB10	8/25/92	6.70	0.056	1.50	< 0.1	< 0.01	< 0.1	< 0.1	< 0.01	< 0.1	2.1	0.6	< 0.01	0.17	22.4	1.20	0.7	65.8	0.30	19.8	30.90	2.7	0.15
GC3	8/25/92	7.50	0.097	0.60	< 0.1	0.03	< 0.1	< 0.1	< 0.01	< 0.1	2.5	2.2	< 0.01	0.13	15.8	2.40	1.4	27.7	0.30	12.9	70.70	2.8	0.15
GC7	8/25/92	7.20	0.185	0.10	< 0.1	< 0.01	< 0.1	< 0.1	< 0.01	< 0.1	4.4	1.3	0.14	0.21	26.0	4.40	1.4	80.0	0.50	46.8	48.70	7.2	0.21
LH5	8/25/92	5.80	0.070	0.10	< 0.1	0.02	< 0.1	< 0.1	< 0.01	< 0.1	4.3	0.4	< 0.01	0.14	7.3	0.60	1.1	36.4	0.30	22.4	10.30	1.6	0.22
TD1	8/25/92	7.20	0.210	0.70	< 0.1	0.05	< 0.1	< 0.1	< 0.01	< 0.1	3.7	0.2	< 0.01	0.30	14.6	2.30	0.8	119.0	0.40	26.7	44.50	4.2	0.19
YC5	10/19/92	6.30	0.047	9.10	< 0.1	< 0.01	< 0.5	< 0.1	< 0.1	< 1	10.4	1.2	< 0.1	0.98	26.7	4.00	7.2	273.0	2.00	97.6	240.00	12.0	0.64
YC5A	10/19/92	7.20	0.117	3.20	< 0.1	< 0.01	< 0.5	< 0.1	< 0.1	< 1	12.0	26.1	2.69	0.33	323.0	3.80	< 0.5	< 0.1	< 0.1	12.7	540.00	69.0	0.49
TC10	10/19/92	7.30	0.491	3.20	0.29	< 0.01	< 0.5	< 0.1	< 0.1	< 1	31.9	18.3	< 0.1	1.05	230.0	3.10	4.8	270.0	3.80	12.7	540.00	60.0	1.41
DB5	10/19/92	5.80	0.638	6.70	< 0.1	< 0.01	< 0.5	< 0.1	< 0.1	< 1	23.5	3.0	< 0.1	1.16	43.2	3.70	2.4	42.6	2.00	115.0	130.00	16.0	1.22
DB10	10/19/92	6.80	0.729	< 2	< 0.1	0.01	< 0.5	< 0.1	< 0.1	< 1	25.7	4.2	< 0.1	1.59	158.0	9.30	< 0.5	56.8	2.80	194.0	240.00	23.0	1.65
GC3	10/19/92	7.10	0.044	3.80	< 0.1	0.05	< 0.5	< 0.1	< 0.1	< 1	26.8	24.3	< 0.1	1.27	190.0	2.40	29.0	168.0	1.80	138.0	630.00	24.0	1.63
GC7	10/19/92	7.60	0.160	5.30	< 0.1	0.02	< 0.5	< 0.1	< 0.1	< 1	22.9	11.3	< 0.1	1.43	141.0	1.20	19.0	454.0	2.70	203.0	640.00	25.0	1.72
TD1	10/19/92	7.50	0.136	< 2	< 0.1	0.07	< 0.5	< 0.1	< 0.1	< 1	53.6	17.6	< 0.1	4.34	181.0	2.40	140.0	156.0	5.90	254.0	600.00	50.0	2.67

bdl = below detection limit

SITE	DATE	AL	NI	CA	K	TI	CR	PB	CL	NO2	NO3	BR	PO4	SO4	TOC	OIL_GREASE	NEU_POT	POT_ACID	F	ACIDBASE
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
SR10	7/12/90	96.00	2.10	183	14.00	0.5	0.10	1.0	3.5	bdl	bdl	bdl	bdl	7.4	4.81	bdl	bdl	bdl	bdl	bdl
YC5A	7/12/90	166.00	4.80	3995	44.00	3.6	0.70	6.0	3.1	bdl	5.5	bdl	bdl	137.3	5.99	bdl	bdl	bdl	bdl	bdl
TC10	7/12/90	161.00	3.90	2597	35.00	1.9	0.50	5.1	2.5	bdl	16.7	bdl	bdl	52.3	1.94	bdl	bdl	bdl	bdl	bdl
TD1	7/12/90	305.00	4.10	6532	75.00	4.3	1.10	11.6	10.3	bdl	1.1	bdl	bdl	391.8	9.42	bdl	bdl	bdl	bdl	bdl
DB5	7/12/90	150.00	1.70	475	33.00	1.7	0.20	1.6	4.5	bdl	1.0	bdl	bdl	24.8	7.60	bdl	bdl	bdl	bdl	bdl
YC5	7/12/90	83.00	0.80	1646	11.00	0.3	bdl	3.0	0.2	bdl	0.2	bdl	bdl	76.4	3.17	bdl	bdl	bdl	bdl	bdl
DB10	7/12/90	139.00	2.00	1463	27.00	1.5	0.40	5.9	7.9	bdl	34.1	bdl	bdl	12.0	3.33	bdl	bdl	bdl	bdl	bdl
GC5	7/12/90	145.00	2.60	9093	70.00	3.3	0.80	10.6	9.7	bdl	bdl	bdl	bdl	31.0	2.34	bdl	bdl	bdl	bdl	bdl
GC7	7/12/90	149.00	2.80	3116	48.00	2.2	0.50	6.8	8.8	bdl	3.0	bdl	bdl	45.7	3.34	bdl	bdl	bdl	bdl	bdl
DB10	10/23/90	119.00	0.16	4514	3.70	0.3	0.06	1.1	13.6	bdl	1.0	bdl	bdl	40.2	13.50	bdl	18.68	bdl	bdl	bdl
GC5.	10/23/90	142.00	0.18	7475	5.30	0.3	0.09	2.0	11.9	bdl	0.7	bdl	bdl	414.5	10.40	bdl	24.60	bdl	bdl	bdl
SR10	10/23/90	136.00	0.21	415	3.20	0.1	0.02	0.2	12.5	bdl	0.6	bdl	bdl	16.0	9.60	bdl	5.58	8.00	bdl	bdl
DB5	10/23/90	129.00	0.17	363	3.30	0.1	0.02	0.2	10.7	bdl	1.0	bdl	bdl	36.7	7.70	bdl	2.00	12.45	bdl	bdl
YC5	10/23/90	552.00	0.15	3538	5.80	0.8	0.05	1.0	13.9	bdl	0.6	bdl	bdl	70.0	19.50	bdl	13.93	bdl	bdl	bdl
TD1	10/23/90	294.00	0.45	15186	0.80	0.5	0.19	2.0	15.7	bdl	1.9	bdl	bdl	413.3	19.10	bdl	90.43	bdl	bdl	bdl
YC5A	10/23/90	178.00	0.38	10661	5.30	0.5	0.13	1.1	21.0	bdl	2.7	bdl	bdl	323.0	11.60	bdl	30.13	bdl	bdl	bdl
TC10	10/23/90	196.00	0.23	2025	4.50	0.3	0.04	0.7	11.6	bdl	0.9	bdl	bdl	24.3	7.50	bdl	8.40	3.95	bdl	bdl
GC7	10/23/90	240.00	0.27	8669	11.40	0.4	0.10	1.2	14.6	bdl	2.3	bdl	bdl	51.4	bdl	bdl	35.13	bdl	bdl	bdl
SR10	1/8/91	49.00	1.11	102	10.30	0.1	bdl	0.8	14.9	bdl	0.2	bdl	bdl	3.2	3.59	bdl	0.08	0.31	bdl	bdl
YC5A	1/8/91	145.00	1.24	512	25.30	1.8	0.12	9.3	13.3	bdl	0.2	bdl	bdl	22.7	3.75	bdl	1.53	0.31	bdl	bdl
DR9	1/8/91	115.00	0.88	1081	40.70	0.7	0.23	34.2	13.2	bdl	0.3	bdl	bdl	7.4	9.29	bdl	2.68	0.31	bdl	bdl
GC3	1/8/91	10.00	0.88	16560	42.10	3.1	1.40	7.9	18.5	bdl	0.3	bdl	4.8	59.8	10.10	bdl	203.13	2.50	bdl	bdl
GC7	1/8/91	130.00	1.81	6627	45.20	2.8	0.70	13.4	12.9	bdl	0.2	bdl	bdl	27.4	10.50	bdl	47.00	1.25	bdl	bdl
TC10	1/8/91	177.00	7.34	8724	43.00	4.0	0.95	9.0	16.1	bdl	0.2	bdl	bdl	16.4	9.56	bdl	46.00	1.25	bdl	bdl
TD1	1/8/91	103.00	3.69	15746	174.30	4.4	1.44	8.6	129.1	bdl	0.2	bdl	bdl	124.7	21.60	bdl	32.25	2.19	bdl	bdl
DB10	1/8/91	105.00	1.35	2087	22.90	1.5	0.31	14.7	14.5	bdl	0.2	bdl	bdl	15.1	11.40	bdl	7.25	0.63	bdl	bdl
DB6	1/8/91	66.00	1.17	202	19.70	0.5	0.06	1.7	12.9	bdl	< 0.2	bdl	bdl	6.4	10.50	bdl	3.13	0.31	bdl	bdl
DB7	1/8/91	49.00	0.56	152	14.90	0.4	0.05	1.3	13.4	bdl	< 0.2	bdl	bdl	7.8	11.30	bdl	5.03	0.31	bdl	bdl
DB8	1/8/91	61.00	1.11	165	15.80	0.3	0.07	1.7	9.1	bdl	< 0.2	bdl	bdl	9.0	10.30	bdl	3.73	0.31	bdl	bdl
DB5	1/8/91	41.00	0.41	99	11.40	0.3	0.10	1.0	14.0	bdl	0.2	bdl	bdl	5.0	6.47	bdl	0.98	0.12	bdl	bdl
YC5	1/8/91	27.00	0.21	49	8.20	0.3	0.01	6.7	11.9	bdl	< 0.2	bdl	bdl	9.5	5.87	bdl	2.80	0.31	bdl	bdl
DB5	4/29/91	100.60	1.10	215	24.70	0.2	0.20	2.6	11.1	bdl	< 0.2	bdl	bdl	9.8	10.30	bdl	bdl	0.12	bdl	bdl
DB6	4/29/91	75.60	1.20	213	21.70	0.2	0.10	2.1	12.5	bdl	< 0.2	bdl	bdl	8.2	9.13	bdl	bdl	0.12	bdl	bdl
DB7	4/29/91	69.80	0.80	209	14.80	0.1	0.10	2.6	11.8	bdl	< 0.2	bdl	bdl	7.5	5.65	bdl	bdl	0.31	bdl	bdl
DB8	4/29/91	68.50	0.90	154	11.71	0.1	0.10	2.1	13.2	bdl	< 0.2	bdl	bdl	6.5	1.19	bdl	bdl	0.31	bdl	bdl
DB10	4/29/91	81.40	1.70	2464	21.75	0.4	0.30	13.9	16.5	bdl	< 0.2	bdl	bdl	27.3	7.98	bdl	5.15	0.31	bdl	bdl
YC5	4/29/91	34.10	0.40	68	7.80	0.1	0.10	1.5	12.7	bdl	< 0.2	bdl	bdl	10.8	2.39	bdl	0.50	0.31	bdl	bdl
YC5A	4/29/91	53.20	0.50	174	9.49	0.3	0.10	2.1	14.0	bdl	< 0.2	bdl	bdl	17.8	2.34	bdl	bdl	0.31	bdl	bdl
GC3	4/29/91	22.10	6.30	8517	55.78	0.3	1.10	7.1	12.5	bdl	0.3	bdl	bdl	206.9	2.86	bdl	385.00	3.75	bdl	bdl
GC7	4/29/91	112.40	2.20	4176	29.24	0.4	0.40	10.8	12.6	bdl	< 0.2	bdl	bdl	41.3	4.92	bdl	9.93	0.62	bdl	bdl
TD1	4/29/91	223.30	4.20	8715	46.49	0.4	0.90	21.9	9.7	bdl	< 0.2	bdl	bdl	50.1	7.44	bdl	27.88	1.25	bdl	bdl
DR9	4/29/91	132.90	1.10	667	30.30	0.3	0.30	3.8	12.2	bdl	< 0.2	bdl	bdl	10.5	8.94	bdl	1.25	0.31	bdl	bdl
TC10	4/29/91	175.90	8.20	9728	46.05	0.9	0.90	15.0	12.9	bdl	< 0.2	bdl	bdl	15.1	7.48	bdl	51.38	1.25	bdl	bdl

bdl = below detection limit

SITE	DATE	AL	NI	CA	K	TI	CR	PB	CL	NO2	NO3	BR	PO4	SO4	TOC	OIL_GREASE	NEU_POT	POT_ACID	F	ACIDBASE
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
SR10	4/29/91	73.40	1.20	100	9.05	0.1	bdl	1.1	11.9	bdl	< 0.2	bdl	bdl	3.8	9.36	bdl	0.48	0.31	bdl	bdl
TC7N	7/14/91	58.00	5.00	17032	191.00	6.0	1.70	7.1	43.2	0.9	2.7	< 0.2	bdl	1498.0	bdl	bdl	170.75	9.69	bdl	bdl
SB1	7/14/91	143.00	7.00	14940	111.00	1.0	1.40	7.6	6.4	< 0.2	< 0.2	< 0.2	bdl	111.0	bdl	bdl	94.50	6.56	bdl	bdl
COAL	7/14/91	32.00	0.47	324	30.00	0.5	0.30	0.4	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	4.08	158.75	bdl	bdl
STOCK	7/14/91	216.00	3.94	3057	234.00	1.3	0.89	6.4	bdl	bdl	bdl	bdl	bdl	bdl	bdl	bdl	36.08	58.44	bdl	bdl
YC5	7/26/91	53.30	1.10	185	9.89	0.3	0.50	8.4	12.1	< 0.2	< 0.2	bdl	bdl	23.6	10.70	bdl	3.50	0.62	bdl	bdl
SB11	7/26/91	16.00	5.50	18770	111.03	0.4	1.10	6.2	11.8	< 0.2	< 0.2	bdl	bdl	131.0	22.01	bdl	458.38	9.69	bdl	bdl
SB9	7/26/91	15.90	5.50	18717	112.43	0.4	1.10	5.3	11.5	< 0.2	< 0.2	bdl	bdl	156.9	19.06	bdl	474.50	9.69	bdl	bdl
DB5	7/26/91	110.70	1.30	350	25.46	0.2	0.60	2.7	18.3	< 0.2	< 0.2	bdl	bdl	8.7	15.64	bdl	3.93	0.62	bdl	bdl
DR9	7/26/91	211.70	1.80	1387	42.49	0.5	0.50	7.2	12.9	< 0.2	< 0.2	bdl	bdl	12.3	22.35	bdl	4.98	0.94	bdl	bdl
GC7	7/26/91	262.80	3.60	7280	80.65	0.6	0.90	14.5	47.5	< 0.2	< 0.2	bdl	bdl	33.9	24.56	bdl	35.50	0.31	bdl	bdl
TC10	7/26/91	16.10	5.70	18205	58.67	0.4	1.10	6.5	13.4	< 0.2	< 0.2	bdl	bdl	70.4	15.88	bdl	211.13	21.56	bdl	bdl
TD1	7/26/91	333.80	6.50	8101	70.20	1.0	1.20	16.2	11.4	< 0.2	< 0.2	bdl	bdl	109.2	13.69	bdl	28.33	2.81	bdl	bdl
DB7	7/26/91	56.70	1.60	216	14.77	0.2	0.50	4.9	14.0	< 0.2	< 0.2	bdl	bdl	7.7	17.63	bdl	1.55	0.31	bdl	bdl
GC3	7/26/91	117.90	2.00	4778	33.90	1.1	0.60	10.5	17.6	< 0.2	< 0.2	bdl	bdl	57.5	27.75	bdl	15.03	0.62	bdl	bdl
DB6	7/26/91	60.20	1.20	310	17.40	0.2	0.20	2.1	11.4	< 0.2	< 0.2	bdl	bdl	7.2	9.40	bdl	bdl	0.31	bdl	bdl
DB8	7/26/91	77.90	1.80	194	15.50	0.2	0.10	2.3	11.9	< 0.2	< 0.2	bdl	bdl	11.3	12.04	bdl	bdl	0.62	bdl	bdl
YC5A	7/26/91	387.10	2.10	3874	24.65	1.3	0.70	7.5	13.8	< 0.2	< 0.2	bdl	bdl	35.7	15.85	bdl	19.20	1.56	bdl	bdl
DB10	7/26/91	83.50	1.20	1297	14.14	0.4	0.60	21.0	14.5	< 0.2	< 0.2	bdl	bdl	25.9	12.11	bdl	4.65	0.62	bdl	bdl
TD1	10/21/91	482.30	4.80	15047	101.10	11.2	1.70	19.9	33.8	< 0.2	0.6	2.6	bdl	78.0	19.00	bdl	62.25	3.75	bdl	bdl
SR10	10/21/91	58.40	1.30	128	15.11	bdl	bdl	1.0	13.6	bdl	< 0.2	bdl	bdl	3.4	2.60	bdl	2.10	0.31	bdl	bdl
DB5	10/21/91	69.40	1.60	274	33.54	0.2	0.10	1.4	12.7	bdl	< 0.2	bdl	bdl	7.3	5.76	bdl	0.95	0.62	bdl	bdl
DB6	10/21/91	63.10	2.40	281	28.18	1.5	0.20	1.3	14.0	< 0.2	< 0.2	bdl	bdl	4.1	4.49	bdl	2.98	0.62	bdl	bdl
DB7	10/21/91	72.80	1.00	212	28.22	0.5	0.10	1.6	10.5	< 0.2	< 0.2	bdl	bdl	14.2	4.80	bdl	1.78	0.62	bdl	bdl
DB8	10/21/91	69.90	2.00	248	21.44	0.6	0.10	2.9	16.7	< 0.2	< 0.2	bdl	bdl	15.2	3.34	bdl	4.08	0.62	bdl	bdl
DB10	10/21/91	53.10	0.50	277	15.20	0.5	0.20	3.0	16.7	< 0.2	< 0.2	bdl	bdl	15.2	2.77	bdl	1.58	0.62	bdl	bdl
TC10	10/21/91	971.20	2.40	18274	54.56	15.0	2.10	13.1	12.9	< 0.2	bdl	bdl	bdl	56.5	0.96	bdl	68.63	0.62	bdl	bdl
SB9	10/21/91	44.80	1.70	39987	362.52	9.4	2.10	19.4	18.9	0.3	< 0.2	bdl	bdl	400.0	2.90	bdl	324.13	7.19	bdl	bdl
SB11	10/21/91	44.50	1.70	39778	301.92	9.8	2.10	19.6	57.9	< 0.2	bdl	bdl	bdl	330.8	4.16	bdl	278.38	6.88	bdl	bdl
DR9	10/21/91	193.30	1.60	8438	49.23	6.0	0.80	10.1	6.5	< 0.2	< 0.2	bdl	bdl	8.0	5.46	bdl	22.53	0.94	bdl	bdl
GC3	10/21/91	223.10	2.00	9344	54.93	6.9	0.80	20.9	6.6	< 0.2	< 0.2	bdl	bdl	42.4	3.44	bdl	19.25	2.19	bdl	bdl
GC7	10/21/91	520.40	3.60	10914	153.86	10.8	1.20	20.9	22.0	< 0.2	< 0.2	bdl	bdl	45.8	11.20	bdl	30.50	3.12	bdl	bdl
YC5	10/21/91	41.10	0.20	106	11.69	bdl	bdl	2.9	4.0	< 0.2	< 0.2	bdl	bdl	16.1	1.93	bdl	1.13	0.62	bdl	bdl
YC5A	10/21/91	45.10	1.70	38583	220.19	9.0	2.20	19.4	10.8	< 0.2	< 0.2	bdl	bdl	156.2	8.90	bdl	296.75	7.81	bdl	bdl
GC3	1/14/92	158.00	2.40	14970	98.00	5.0	1.10	10.4	9.8	< 0.2	< 0.2	bdl	bdl	21.5	6.00	bdl	15.15	0.69	bdl	bdl
GC7	1/14/92	136.00	1.30	3991	52.30	3.6	0.40	11.1	6.9	< 0.2	< 0.2	bdl	bdl	17.7	3.00	bdl	12.75	0.53	bdl	bdl
DB5	1/14/92	107.70	0.90	162	24.50	1.7	0.10	1.9	4.7	< 0.2	< 0.2	bdl	bdl	7.1	7.00	bdl	2.53	0.34	bdl	bdl
DB10	1/14/92	157.90	2.10	4428	37.10	3.1	0.50	19.7	6.5	< 0.2	< 0.2	bdl	bdl	18.9	12.00	bdl	7.65	0.69	bdl	bdl
YC5	1/14/92	73.20	0.60	109	14.80	0.6	0.10	2.9	7.9	< 0.2	< 0.2	bdl	bdl	10.3	5.00	bdl	bdl	0.47	bdl	bdl
YC5A	1/14/92	113.30	0.40	271	19.80	2.3	0.10	3.7	5.6	< 0.2	< 0.2	bdl	bdl	16.1	5.00	bdl	0.73	0.31	bdl	bdl
DR9	1/14/92	204.80	1.10	1684	47.90	2.2	0.30	5.1	11.8	< 0.2	0.5	bdl	bdl	16.1	14.00	bdl	3.93	0.56	bdl	bdl
TD1	1/14/92	23.70	2.20	15692	77.20	3.6	0.90	6.4	12.3	< 0.2	0.6	4.0	bdl	58.4	19.00	bdl	10.58	1.28	bdl	bdl
SB11	1/14/92	9.60	1.70	16602	109.70	2.9	1.30	6.5	27.1	< 0.2	< 0.2	bdl	bdl	91.1	27.00	bdl	235.50	4.59	bdl	bdl

bdl = below detection limit

SITE	DATE	AL	NI	CA	K	TI	CR	PB	CL	NO2	NO3	BR	PO4	SO4	TOC	OIL_GREASE	NEU_POT	POT_ACID	F	ACIDBASE
		ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	ppm	
TC10	1/14/92	379.70	0.90	2130	32.80	3.5	0.70	3.9	5.7	< 0.2	< 0.2	bdl	bdl	29.0	9.00	bdl	5.55	0.53	bdl	bdl
SB11	1/17/92	13.20	1.20	19210	170.10	3.6	1.10	7.4	31.9	< 0.2	0.6	bdl	bdl	106.3	13.00	bdl	182.38	3.56	bdl	bdl
DB5	5/4/92	92.70	0.90	207	30.00	0.7	0.10	2.0	10.3	< 0.2	< 0.2	bdl	bdl	8.4	9.00	bdl	1.85	0.72	bdl	bdl
DB10	5/4/92	111.60	1.40	1214	23.30	1.5	0.20	13.0	11.4	< 0.2	< 0.2	bdl	bdl	14.0	4.00	bdl	4.18	0.53	bdl	bdl
DR9	5/4/92	280.90	1.70	1117	72.80	2.6	0.30	6.7	11.9	< 0.2	< 0.2	bdl	bdl	10.2	22.00	bdl	3.93	0.72	bdl	bdl
LH5	5/4/92	251.90	3.30	1587	70.30	1.1	0.20	5.9	14.7	< 0.2	< 0.2	bdl	bdl	14.1	17.00	bdl	5.85	0.75	bdl	bdl
GC3	5/4/92	237.10	3.50	3968	75.40	3.1	0.60	20.8	14.8	< 0.2	< 0.2	bdl	bdl	28.3	8.00	bdl	14.98	0.32	bdl	bdl
GC7	5/4/92	173.80	2.00	3749	54.30	2.9	0.40	13.2	10.7	< 0.2	< 0.2	bdl	bdl	15.9	11.00	bdl	12.50	1.09	bdl	bdl
STOR1	5/4/92	252.00	3.60	1167	54.30	1.1	0.20	4.2	11.8	< 0.2	< 0.2	bdl	bdl	61.6	19.00	bdl	22.55	1.94	bdl	bdl
ST5	5/4/92	343.50	5.00	6032	171.20	3.2	0.50	20.7	8.4	< 0.2	< 0.2	bdl	bdl	8.9	18.00	bdl	0.78	0.38	bdl	bdl
ST10	5/4/92	204.70	2.30	1099	42.60	1.0	0.20	4.3	9.7	< 0.2	< 0.2	bdl	bdl	12.6	21.00	bdl	4.03	0.53	bdl	bdl
TC10	5/4/92	1.00	0.87	1281	60.50	7.8	6.40	4.8	9.4	< 0.2	< 0.2	bdl	bdl	66.4	10.00	bdl	3.73	0.72	bdl	bdl
TD1	5/4/92	268.50	2.40	8751	55.70	2.9	0.70	15.5	8.3	< 0.2	< 0.2	bdl	bdl	25.0	8.00	bdl	6.90	1.66	bdl	bdl
YC5	5/4/92	110.30	1.20	181	20.20	0.9	8.10	0.8	8.7	< 0.2	< 0.2	bdl	bdl	19.4	4.00	bdl	bdl	0.38	bdl	bdl
YC5A	5/4/92	249.70	0.69	246	25.20	2.4	1.00	4.0	10.6	< 0.2	< 0.2	bdl	bdl	27.1	8.00	bdl	0.98	0.41	bdl	bdl
YC5A	5/24/92	11.50	4.15	18805	127.00	0.7	1.31	4.2	12.3	bdl	0.5	< 0.5	bdl	195.0	bdl	bdl	136.13	4.06	bdl	bdl
TC10	5/24/92	11.60	4.28	19092	125.00	0.7	1.33	4.3	12.2	bdl	bdl	0.5	< 0.5	194.0	bdl	bdl	129.13	4.06	bdl	bdl
SB11	5/24/92	11.40	3.97	19045	126.00	0.7	1.31	3.8	15.6	bdl	0.3	< 0.5	bdl	183.0	bdl	bdl	172.38	5.00	bdl	bdl
YC5	8/25/92	38.40	0.19	52	2.50	0.1	bdl	0.9	33.4	bdl	0.8	< 0.1	< 0.3	4.0	29.80	bdl	bdl	0.59	bdl	bdl
YC5A	8/25/92	39.60	0.26	1270	8.60	bdl	< 0.01	0.9	97.1	7.1	1.1	16.5	< 0.3	935.0	26.60	bdl	bdl	10.50	bdl	bdl
TC10	8/25/92	28.20	0.10	465	5.30	0.7	0.72	bdl	12.1	bdl	0.6	< 0.1	< 0.3	153.0	15.40	bdl	bdl	1.44	bdl	bdl
ST10	8/25/92	35.70	0.28	107	3.80	bdl	< 0.01	0.5	9.5	bdl	0.5	< 0.1	< 0.3	27.0	15.40	bdl	bdl	1.44	bdl	bdl
DB5	8/25/92	35.60	0.23	71	5.20	bdl	< 0.01	0.7	30.2	bdl	bdl	< 0.1	< 0.3	87.1	19.20	bdl	bdl	1.97	bdl	bdl
DB10	8/25/92	27.20	0.16	490	3.40	0.1	< 0.01	1.9	23.4	bdl	bdl	< 0.1	< 0.3	91.4	18.10	bdl	bdl	1.76	bdl	bdl
GC3	8/25/92	21.20	0.18	1600	7.00	bdl	0.01	1.9	38.9	bdl	0.6	7.5	< 0.3	121.0	17.70	bdl	bdl	3.03	bdl	bdl
GC7	8/25/92	64.30	0.14	47	21.20	bdl	2.44	bdl	34.8	bdl	0.4	7.5	< 0.3	183.0	26.20	bdl	bdl	5.78	bdl	bdl
LH5	8/25/92	30.10	0.23	155	6.30	bdl	< 0.01	0.7	31.0	bdl	1.1	5.5	< 0.3	86.8	28.60	bdl	bdl	2.19	bdl	bdl
TD1	8/25/92	25.10	0.20	1540	5.00	bdl	< 0.01	0.8	25.3	bdl	0.6	14.2	< 0.3	245.0	10.00	bdl	bdl	6.56	bdl	bdl
YC5	10/19/92	85.40	0.80	240	21.00	0.2	0.16	4.5	2.3	bdl	bdl	< 0.1	< 0.3	4.2	20.00	bdl	3.50	1.52	0.9	2.0
YC5A	10/19/92	< 0.1	0.50	18000	220.00	0.4	< 0.1	< 0.5	1.7	bdl	0.3	< 0.1	< 0.3	43.0	27.00	bdl	90.00	3.66	< 0.1	86.3
TC10	10/19/92	348.00	0.90	8800	220.00	0.2	11.10	< 0.5	1.0	bdl	0.3	< 0.1	< 0.3	13.0	19.00	bdl	24.00	1.53	< 0.1	22.4
DB5	10/19/92	167.00	1.10	540	35.00	0.1	0.21	2.5	1.2	bdl	bdl	< 0.1	< 0.3	4.3	20.00	bdl	4.80	1.99	0.5	2.8
DB10	10/19/92	211.00	1.70	2200	36.00	< 0.1	< 0.1	24.0	1.0	bdl	bdl	< 0.1	< 0.3	5.0	19.00	bdl	5.60	2.28	0.4	3.3
GC3	10/19/92	154.00	1.90	7300	68.00	< 0.1	1.70	9.8	1.4	bdl	0.3	0.5	< 0.3	7.1	26.00	bdl	55.00	1.36	1.3	53.6
GC7	10/19/92	177.00	1.50	7300	7.10	< 0.1	< 0.1	28.1	0.9	bdl	bdl	< 0.1	< 0.3	4.3	20.00	bdl	29.00	5.00	0.3	24.0
TD1	10/19/92	319.00	2.40	11000	8.30	< 0.1	< 0.1	16.4	1.4	bdl	bdl	0.4	< 0.3	16.0	31.00	bdl	27.00	5.09	2.9	21.9

bdl = below detection limit

Appendix F

Climate Data

Date	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)	Average Temperature (degrees F)	Rain (inches)	Snow (inches)	High Humidity (%)	Low Humidity (%)
7/1/91	91	68	80			100	88
7/2/91	92	70	81	0.03		100	84
7/3/91	85	65	75	0.12		100	84
7/4/91	85	63	74	0.02		100	42
7/5/91	86	69	78	0.07		96	84
7/6/91	90	66	78			100	78
7/7/91	89	65	77			90	84
7/8/91	90	66	78	0.01		100	84
7/9/91	89	63	76			86	70
7/10/91	90	65	78	0.15		90	78
7/11/91	88	67	78	0.02		78	74
7/12/91	92	68	80	0.78		78	76
7/13/91	90	66	78	0.58		90	60
7/14/91	90	63	77			78	78
7/15/91	90	61	76			100	68
7/16/91	90	61	76			100	62
7/17/91	85	62	74	0.03		100	74
7/18/91	82	66	74	0.09		88	80
7/19/91	90	68	79			90	76
7/20/91	90	67	79			90	76
7/21/91	94	69	82			98	70
7/22/91	94	61	78			100	84
7/23/91	94	65	80			100	84
7/24/91	92	69	81	1.30		100	82
7/25/91	86	66	76			100	56
7/26/91	86	68	77			88	76
7/27/91	83	69	76			88	78
7/28/91	83	64	74			90	78
7/29/91	86	69	78	0.05		80	49
7/30/91	87	61	74			100	54
7/31/91	86	60	73			100	46
8/1/91	91	58	75			100	54
8/2/91	92	51	72			100	58
8/3/91	93	62	78			100	70
8/4/91	91	64	78			100	70
8/5/91	91	54	73			100	58
8/6/91	92	60	76			100	56
8/7/91	92	58	75			100	90
8/8/91	88	67	78	1.00		100	74
8/9/91	89	66	78	0.45		100	63
8/10/91	87	69	78			100	62
8/11/91	84	60	72			90	60
8/12/91	83	59	71			86	60
8/13/91	79	62	71			100	86
8/14/91	76	62	69			76	56

Date	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)	Average Temperature (degrees F)	Rain (inches)	Snow (inches)	High Humidity (%)	Low Humidity (%)
8/15/91	82	55	69	0.15		70	48
8/16/91	85	56	71			100	40
8/17/91	85	58	72			100	48
8/18/91	85	66	76	0.06		100	40
8/19/91	86	65	76	0.20		100	56
8/20/91	77	57	67	0.27		80	42
8/21/91	81	54	68			100	56
8/22/91	82	56	69			70	40
8/23/91	87	58	73			100	62
8/24/91	89	60	75			100	30
8/25/91	85	62	74	0.08		100	77
8/26/91	92	67	80	0.40		100	55
8/27/91	86	63	75			100	44
8/28/91	89	68	79			100	82
8/29/91	90	69	80			100	44
8/30/91	90	67	79			100	90
8/31/91	90	67	79			100	90
9/1/91	89	66	78	0.10		100	44
9/2/91	85	68	77			80	76
9/3/91	78	66	72	0.06		100	64
9/4/91	80	60	70			80	60
9/5/91	81	50	66	0.03		100	66
9/6/91	83	65	74	0.15		100	66
9/7/91	86	67	77	0.10		100	64
9/8/91	86	59	73			100	60
9/9/91	86	63	75			100	61
9/10/91	86	66	76	0.02		60	55
9/11/91	90	66	78			88	60
9/12/91	82	62	72				
9/13/91	93	65	79				
9/14/91	92	67	80	0.02			
9/15/91	92	66	79				
9/16/91	91	66	79	0.12			
9/17/91	92	67	80				
9/18/91	91	66	79	0.77			
9/19/91	75	52	64	0.48			
9/20/91	75	46	61				
9/21/91	75	43	59				
9/22/91	75	43	59				
9/23/91	72	56	64	0.02			
9/24/91	71	57	64	1.18			
9/25/91	65	52	59	0.36			
9/26/91	68	44	56				
9/27/91	70	39	55				
9/28/91	75	38	57				

Date	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)	Average Temperature (degrees F)	Rain (inches)	Snow (inches)	High Humidity (%)	Low Humidity (%)
9/29/91	80	44	62				
9/30/91	82	50	66				
10/1/91	77	52	65				
10/2/91	80	50	65				
10/3/91	80	53	67				
10/4/91	82	52	67				
10/5/91	68	50	59	0.23			
10/6/91	60	36	48	0.05		0	
10/7/91	62	30	46				
10/8/91	69	32	51				
10/9/91	71	35	53				
10/10/91	71	49	60				
10/11/91	73	45	59				
10/12/91	72	38	55				
10/13/91	71	37	54				
10/14/91	70	33	52				
10/15/91	69	49	59	1.02			
10/16/91	61	36	49				
10/17/91	68	29	49				
10/18/91	75	33	54				
10/19/91	78	40	59				
10/20/91	67	36	52				
10/21/91	71	36	54				
10/22/91	75	47	61				
10/23/91	78	49	64				
10/24/91	82	51	67	0.01			
10/25/91	82	52	67				
10/26/91	82	50	66				
10/27/91	80	52	66				
10/28/91	84	54	69				
10/29/91	82	54	68				
10/30/91	74	49	62				
11/1/91	77	46	62	0.05			
11/2/91	61	21	41			88	80
11/3/91	48	25	37				
11/4/91	45	20	33				
11/5/91	47	13	30				
11/6/91	55	24	40				
11/7/91	55	23	39				
11/8/91	54	31	43	0.12	1.0		
11/9/91	72	22	47				
11/10/91	41	31	36	0.01		100	100
11/11/91	47	28	38	0.15		98	32
11/12/91	51	26	39			98	50
11/13/91	60	35	48			86	40

Date	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)	Average Temperature (degrees F)	Rain (inches)	Snow (inches)	High Humidity (%)	Low Humidity (%)
11/14/91	57	30	44			86	40
11/15/91	72	32	52			100	21
11/16/91	68	51	60			100	60
11/17/91	72	65	69			100	88
11/18/91	67	48	58			92	42
11/19/91	72	52	62			68	54
11/20/91	73	56	65	0.16		80	54
11/21/91	65	57	61	0.44		100	56
11/22/91	71	51	61	2.75		100	70
11/23/91	62	48	55	0.02		72	56
11/24/91	60	31	46			72	35
11/25/91	41	22	32			60	36
11/26/91	44	17	31			80	40
11/27/91	45	17	31			80	24
11/28/91	63	37	50			76	48
11/29/91	68	42	55			68	38
11/30/91	68	47	58	1.01		100	40
12/1/91	63	55	59	4.05		100	100
12/2/91	68	54	61	2.20		100	100
12/3/91	72	39	56	1.00		100	68
12/4/91	40	24	32	0.03		100	68
12/5/91	35	16	26			100	88
12/6/91	54	28	41			100	80
12/7/91	56	29	43			100	70
12/8/91	61	36	49			80	60
12/9/91	65	40	53	0.92		100	100
12/10/91	57	33	45	0.08		98	27
12/11/91	57	29	43			90	86
12/12/91	57	40	49	0.01		94	44
12/13/91	59	51	55	0.85		86	46
12/14/91	60	49	55	1.28		100	80
12/15/91	53	20	37			80	36
12/16/91	43	19	31			98	58
12/17/91	55	28	42			98	42
12/18/91	48	22	35			70	30
12/19/91	48	13	31			60	20
12/20/91	51	20	36			60	20
12/21/91	50	29	40	0.15		70	30
12/22/91	48	41	45			98	66
12/23/91	59	46	53	0.65		96	68
12/24/91	57	36	47	0.34		98	66
12/26/91	54	21	38			100	60
12/27/91	56	30	43			100	62
12/28/91	53	37	45	0.75		100	100
12/29/91	48	42	45	0.04		100	100

Date	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)	Average Temperature (degrees F)	Rain (inches)	Snow (inches)	High Humidity (%)	Low Humidity (%)
12/30/91	44	36	40	0.01		100	100
12/31/91	53	27	40			100	56
1/1/92	54	26	40			100	52
1/2/92	63	35	49			100	60
1/3/92	61	28	45	0.98		100	50
1/4/92	55	46	51	0.05		100	90
1/5/92	48	25	37			100	48
1/6/92	46	35	41			100	15
1/7/92	56	25	41			100	87
1/8/92	54	25	40			100	67
1/9/92	55	30	43	0.05		100	80
1/10/92	45	24	35			100	65
1/11/92	49	24	37			100	60
1/12/92	50	24	37	0.03		100	40
1/13/92	41	39	40	0.16		100	72
1/14/92	55	32	44	0.48		100	70
1/15/92	42	25	34			100	66
1/16/92	38	22	30	0.01		90	70
1/17/92	41	18	30			80	66
1/18/92	39	22	31			94	62
1/19/92	36	12	24			100	62
1/20/92	39	20	30			80	68
1/21/92	58	16	37			84	68
1/22/92	59	26	43			82	56
1/23/92	56	41	49	1.01		100	80
1/24/92	38	28	33	0.09	1.0	100	70
1/25/92	50	19	35			90	60
1/26/92	49	33	41			48	37
1/27/92	52	28	40	0.00		48	30
1/28/92	60	36	48			60	38
1/29/92	62	27	45			50	39
1/30/92	60	26	43			90	40
1/31/92	59	26	43			80	50
2/1/92	52	33	43			90	50
2/2/92	59	19	39			40	20
2/3/92	61	21	41			90	40
2/4/92	78	19	49			80	40
2/5/92	67	22	45			36	20
2/6/92	61	24	43			78	12
2/7/92	59	24	42			68	34
2/8/92	37	23	30			54	42
2/9/92	41	14	28			38	21
2/10/92	54	17	36			50	16
2/11/92	56	31	44			52	20
2/12/92	56	32	44	0.07		60	40

Date	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)	Average Temperature (degrees F)	Rain (inches)	Snow (inches)	High Humidity (%)	Low Humidity (%)
2/13/92	50	40	45	0.18		62	50
2/14/92	56	42	49			68	60
2/15/92	62	50	56	0.75		70	58
2/16/92	62	41	52			100	40
2/17/92	55	28	42	0.01		70	46
2/18/92	54	46	50			100	60
2/19/92	63	36	50	0.04		70	38
2/20/92	51	38	45			70	38
2/21/92	66	29	48			54	32
2/22/92	68	27	48			70	20
2/23/92	68	37	53	0.22		100	50
2/24/92	68	37	53	0.18		70	50
2/25/92	62	40	51	0.10		100	60
2/26/92	52	35	44	1.00		100	50
2/27/92	54	28	41			80	34
2/28/92	66	28	47			90	20
2/29/92	65	37	51	0.15		100	20
3/1/92	67	23	45			35	20
3/2/92	73	27	50			30	20
3/3/92	76	23	50			70	20
3/4/92	74	45	60			80	24
3/5/92	75	44	60			80	30
3/6/92	73	55	64	0.91		100	30
3/7/92	72	53	63	0.09		100	30
3/8/92	70	43	57			100	28
3/9/92	70	37	54			78	36
3/10/92	79	55	67	1.07		100	66
3/11/92	33	21	27	0.03		28	22
3/12/92	40	20	30	0.03		100	40
3/13/92	39	25	32	0.04		100	36
3/14/92	49	23	36	0.01		100	44
3/15/92	49	29	39	0.01		40	34
3/16/92	53	18	36	0.00		70	20
3/17/92	70	30	50			64	20
3/18/92	72	42	57	0.57		100	54
3/19/92	57	43	50	0.57		100	60
3/20/92	58	34	46			48	34
3/21/92	57	30	44			80	24
3/22/92	55	37	46	0.22		100	72
3/23/92	46	31	39	0.16		60	30
3/24/92	57	22	40			72	20
3/25/92	61	29	45	0.05		100	50
3/26/92	61	41	51	0.20		72	40
3/27/92	58	34	46	0.05		66	38
3/28/92	58	25	42			56	25

Date	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)	Average Temperature (degrees F)	Rain (inches)	Snow (inches)	High Humidity (%)	Low Humidity (%)
3/29/92	62	33	48			68	30
3/30/92	57	46	52	0.40		100	70
3/31/92	56	37	47	0.14		72	32
4/1/92	64	31	48	0.03		100	60
4/2/92	44	30	37	0.07		100	60
4/3/92	46	23	35			76	20
4/4/92	61	24	43			56	30
4/5/92	60	30	45	0.03		98	20
4/6/92	60	29	45			70	20
4/7/92	64	42	53	0.08		74	48
4/8/92	68	41	55	0.02		76	54
4/9/92	81	41	61			100	22
4/10/92	82	45	64			100	21
4/11/92	80	50	65	0.22		74	40
4/12/92	76	50	63			72	44
4/13/92	71	36	54			100	36
4/14/92	77	61	69			100	60
4/15/92	81	49	65			90	26
4/16/92	82	56	69	0.05		100	26
4/17/92	82	57	70	1.12		100	68
4/18/92	81	49	65			100	50
4/19/92	84	49	67			100	50
4/20/92	83	40	62	0.06		100	38
4/21/92	77	60	69	1.37		100	40
4/22/92	78	44	61			100	68
4/23/92	81	39	60			100	14
4/24/92	81	49	65	0.05		100	28
4/25/92	80	47	64			100	32
4/26/92	56	41	49	0.08		100	65
4/27/92	53	41	47	0.03		100	68
4/28/92	57	40	49	0.04		100	50
4/29/92	67	32	50			100	20
4/30/92	71	47	59	0.08		100	38
5/1/92	81	42	62	0.00		84	28
5/2/92	81	50	66			100	48
5/3/92	84	56	70	0.35		70	20
5/4/92	77	39	58			72	18
5/5/92	76	38	57	0.18		100	36
5/6/92	56	42	49	0.10		100	44
5/7/92	54	37	46	0.22		100	77
5/8/92	51	44	48	0.67		72	42
5/9/92	81	50	66			72	42
5/10/92	81	50	66			100	42
5/11/92	82	48	65			100	26
5/12/92	82	49	66			100	26

Date	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)	Average Temperature (degrees F)	Rain (inches)	Snow (inches)	High Humidity (%)	Low Humidity (%)
5/13/92	79	59	69			100	48
5/14/92	81	57	69			98	38
5/15/92	82	56	69	0.08		100	40
5/16/92	83	57	70	0.35		76	42
5/17/92	85	55	70			72	30
5/18/92	85	56	71	0.20		100	40
5/19/92	79	61	70	0.02		100	50
5/20/92	76	62	69	0.06		100	60
5/21/92	80	54	67			100	40
5/22/92	85	47	66			90	20
5/23/92	85	46	66			80	20
5/24/92	84	54	69	0.07		80	40
5/25/92	68	51	60	0.01		100	60
5/26/92	63	48	56	0.02		100	45
5/27/92	70	43	57			100	80
5/28/92	68	47	58	0.42		100	80
5/29/92	64	51	58	0.47		100	72
5/30/92	65	54	60	0.36		80	50
5/31/92	67	46	57	0.01			
6/1/92	66	47	57			100	50
6/2/92	77	48	63			90	35
6/3/92	77	53	65	0.10		100	75
6/4/92	78	59	69	0.74		90	60
6/5/92	76	53	65	0.10		90	55
6/6/92	84	59	72			100	45
6/7/92	84	60	72	0.01		76	42
6/8/92	83	60	72	0.74		100	42
6/9/92	75	65	70	0.29		100	100
6/10/92	79	65	72	0.02		100	74
6/11/92	80	59	70	0.03		100	100
6/12/92	74	62	68	0.31		100	90
6/13/92	72	61	67			100	90
6/14/92	78	63	71	0.16		100	90
6/15/92	85	61	73			80	50
6/16/92	86	62	74	0.21		100	45
6/17/92	85	66	76			76	48
6/18/92	86	67	77	0.65		100	80
6/19/92	85	62	74	0.03		90	40
6/20/92	84	56	70			100	30
6/21/92	80	59	70			100	37
6/22/92	75	43	59			80	40
6/23/92	79	45	62			100	40
6/24/92	84	56	70	0.12		100	45
6/25/92	83	63	73	1.20		100	60
6/26/92	82	65	74	0.23		100	80

Date	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)	Average Temperature (degrees F)	Rain (inches)	Snow (inches)	High Humidity (%)	Low Humidity (%)
6/27/92	79	60	70	0.09		100	38
6/28/92	83	51	67			98	45
6/29/92	87	62	75			98	46
6/30/92	88	61	75			100	60
7/1/92	82	64	73	0.56		100	80
7/2/92	85	66	76			85	65
7/3/92	84	67	76	0.63		82	72
7/4/92	84	64	74			82	36
7/5/92	83	59	71	0.07		80	54
7/6/92	81	65	73	0.64		80	70
7/7/92	87	61	74			86	56
7/8/92	91	66	79			90	50
7/9/92	92	66	79			100	46
7/10/92	92	65	79			100	82
7/11/92	92	67	80			100	42
7/12/92	92	65	79	0.02		100	44
7/13/92	93	66	80			100	40
7/14/92	93	65	79	0.30		100	38
7/15/92	83	68	76	0.43		100	80
7/16/92	88	64	76			100	64
7/17/92	88	69	79	0.65		100	80
7/18/92	86	66	76	0.17		100	36
7/19/92	87	64	76			85	42
7/20/92	89	61	75			100	32
7/21/92	91	62	77			100	40
7/22/92	85	66	76	0.07		100	50
7/23/92	88	69	79			100	88
7/24/92	88	68	78	0.29		100	78
7/25/92	90	67	79	0.22		100	90
7/26/92	98	68	83			100	82
7/27/92	98	72	85	0.12		100	84
7/28/92	85	60	73	0.01		90	55
7/29/92	86	62	74			100	60
7/30/92	87	63	75			85	50
7/31/92	86	68	77	0.18		100	80
8/1/92	87	58	73	0.06		80	50
8/2/92	82	57	70			80	40
8/3/92	92	58	75			90	40
8/4/92	93	57	75			100	60
8/5/92	81	60	71	0.24		100	72
8/6/92			0			90	80
8/7/92	85	64	75	0.03		80	50
8/8/92	91	68	80	0.04		80	58
8/9/92	89	69	79	0.15		90	48
8/10/92	89	68	79	0.07		100	80

Date	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)	Average Temperature (degrees F)	Rain (inches)	Snow (inches)	High Humidity (%)	Low Humidity (%)
8/11/92	90	65	78			100	90
8/12/92	89	67	78	0.22		100	66
8/13/92	76	64	70	0.10		100	86
8/14/92	81	60	71	0.02		80	40
8/15/92	82	68	75	0.02		84	54
8/16/92	80	56	68			84	44
8/17/92	82	60	71	0.12		80	50
8/18/92	81	59	70	0.01		82	64
8/19/92	81	58	70	0.01		82	55
8/20/92	83	57	70			85	58
8/21/92	82	61	72	0.50		82	70
8/22/92	79	65	72	0.18		100	74
8/23/92	79	65	72	0.03		82	72
8/24/92	87	60	74			100	46
8/25/92	89	65	77			100	42
8/26/92	88	65	77	0.02		100	50
8/27/92	82	64	73			100	50
8/28/92	77	63	70	1.63		100	50
8/29/92	76	51	64			100	38
8/30/92	82	51	67			100	38
8/31/92	83	55	69			100	52
9/1/92	86	60	73			100	38
9/2/92	83	59	71			100	44
9/3/92	81	67	74			90	48
9/4/92	81	64	73			100	52
9/5/92	82	64	73			80	64
9/6/92	85	64	75			84	44
9/7/92	86	62	74			84	50
9/8/92	87	61	74	0.07		90	58
9/9/92	89	61	75			86	38
9/10/92	85	62	74	0.27		84	48
9/11/92	77	52	65			80	40
9/12/92	80	48	64			100	40
9/13/92	81	56	69			84	46
9/14/92	87	60	74			80	50
9/15/92	84	57	71	0.00		82	38
9/16/92	84	57	71			100	60
9/17/92	85	53	69			100	68
9/18/92	83	63	73	2.19		100	92
9/19/92	84	64	74	0.05		100	58
9/20/92	82	58	70			82	62
9/21/92	83	64	74	0.22		82	54
9/22/92	80	67	74	0.31		100	68
9/23/92	72	56	64	0.02		98	80
9/24/92	74	50	62			100	60

Date	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)	Average Temperature (degrees F)	Rain (inches)	Snow (inches)	High Humidity (%)	Low Humidity (%)
9/25/92	80	50	65			80	56
9/26/92	85	51	68	0.03		100	80
9/27/92	76	64	70	0.32		100	74
9/28/92	75	59	67			100	45
9/29/92	71	47	59			100	30
9/30/92	69	39	54			100	50
10/1/92	73	38	56			100	50
10/2/92	78	41	60			80	50
10/3/92	75	43	59			70	50
10/4/92	66	55	61	1.84		100	98
10/5/92	63	54	59	0.38		100	54
10/6/92	72	44	58			70	50
10/7/92	71	42	57			100	34
10/8/92	70	45	58	0.16		100	80
10/9/92	69	51	60	0.33		100	30
10/10/92	69	39	54			100	38
10/11/92	64	46	55			86	34
10/12/92	69	37	53			70	40
10/13/92	74	40	57			74	46
10/14/92	81	43	62			92	48
10/15/92	77	52	65			100	60
10/16/92	77	52	65	0.02		100	84
10/17/92	57	36	47	0.01		96	42
10/18/92	62	35	49			100	40
10/19/92	60	31	46			90	40
10/20/92	70	27	49			90	36
10/21/92	68	50	59			90	52
10/22/92	76	45	61			92	44
10/23/92	75	41	58			97	38
10/24/92	78	41	60			86	38
10/25/92	76	41	59			86	20
10/26/92	73	31	52			86	16
10/27/92	63	40	52	0.02		100	60
10/28/92	74	52	63			70	50
10/29/92	67	44	56			90	42
10/30/92	59	46	53	0.31		100	92
10/31/92	64	51	58	0.27		100	78
11/1/92	77	51	64			94	52
11/2/92	71	57	64	0.66		100	70
11/3/92	73	39	56			100	18
11/4/92	66	51	59	0.46		100	95
11/5/92	47	40	44	0.33		100	100
11/6/92	42	30	36	0.01		92	64
11/7/92	44	29	37			90	48
11/8/92	51	25	38			84	32

Date	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)	Average Temperature (degrees F)	Rain (inches)	Snow (inches)	High Humidity (%)	Low Humidity (%)
11/9/92	68	26	47			88	28
11/10/92	66	34	50			90	30
11/11/92	69	47	58			72	60
11/12/92	65	50	58	0.80		100	70
11/13/92	60	31	46	0.19		100	20
11/14/92	64	23	44			86	28
11/15/92	48	29	39	0.01		100	38
11/16/92	53	20	37			92	40
11/17/92	64	33	49			78	32
11/18/92	68	30	49			86	26
11/19/92	71	30	51			84	22
11/20/92	72	36	54			58	34
11/21/92	60	54	57	0.34		100	100
11/22/92	65	53	59	0.71		100	89
11/23/92	67	44	56			90	48
11/24/92	70	37	54	0.42		100	88
11/25/92	63	49	56	0.24		100	66
11/26/92	62	46	54			90	40
11/27/92	42	38	40			86	72
11/29/92	38	33	36			86	56
11/30/92	42	21	32			90	52
12/1/92	43	31	37	0.06	1.5	100	46
12/2/92	43	33	38	0.12		90	60
12/3/92	47	26	37			90	46
12/4/92	60	43	52	0.05		94	38
12/5/92	62	25	44	0.08		96	30
12/6/92	33	16	25			80	40
12/7/92	38	16	27	0.02	0.1	86	60
12/8/92	36	31	34			81	54
12/9/92	38	26	32			84	52
12/10/92	43	35	39	0.54		96	60
12/11/92	41	32	37	0.27	0.5	100	80
12/12/92	38	35	37			80	60
12/13/92	49	35	42			90	47
12/14/92	55	28	42			100	72
12/15/92	52	28	40			100	44
12/16/92	53	47	50	0.75		100	70
12/17/92	56	46	51	1.05		100	69
12/18/92	56	45	51			100	70
12/19/92	54	30	42			100	88
12/20/92	72	42	57	0.79		100	70
12/21/92	44	27	36	0.06		100	100
12/22/92	49	40	45	0.09		100	44
12/23/92	56	42	49	0.98			
12/24/92	50	25	38			100	60

Date	Maximum Temperature (degrees F)	Minimum Temperature (degrees F)	Average Temperature (degrees F)	Rain (inches)	Snow (inches)	High Humidity (%)	Low Humidity (%)
12/25/92	39	19	29	0.06		100	68
12/26/92	41	26	34	0.19		100	58
12/27/92	42	21	32	0.21		100	70
12/28/92	49	31	40	0.12		100	98
12/29/92	54	44	49			100	84
12/30/92	58	39	49			100	82
12/31/92	57	43	50			100	90